

SAR TEST REPORT



The following samples were submitted and identified on behalf of the client as:

Equipment Under Test	Notebook Computer
Brand Name	HP
Model No.	HSN-I22C
Company Name	HP Inc.
Company Address	1501 Page Mill Road, Palo Alto CA 94304 USA
Standards FCC ID	IEEE/ANSI C95.1-1992, IEEE 1528-2013, KDB616217D04v01r02,KDB865664D01v01r04, KDB865664D02v01r02,KDB941225D01v03r01, KDB941225D05v02r05,KDB941225D05Av01r02, KDB447498D01v06, KDB248227D01v02r02 B94HNI22CPD
Date of Receipt	Nov. 26, 2018
Date of Test(s)	Dec. 01, 2018 ~ Dec. 19, 2018
Date of Issue In the configuration tested, the EUT	Jan. 21, 2019 Complied with the standards specified above.

Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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Signed on behalf of SGS

Clerk / Ruby Ou	Asst. Supervisor / Afu Chen	Asst. Manager / John Yeh		
Kuby Ou	abr Chen	John Teh		
		Date: Jan. 21, 2019		

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Report No. : EN/2018/B0027 Page: 2 of 468

Revision History

Report Number	Revision	Description	Issue Date
EN/2018/B0027	Rev.00	Initial creation of document	Jan. 04, 2019
EN/2018/B0027	Rev.01	Modify FCC ID / Gain	Jan. 21, 2019

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1. General Information

1.1 Testing Laboratory

SGS Taiwan Ltd. Electronics & Communication Laboratory				
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Fax	+886-2-2298-0488			
Internet	http://www.tw.sgs.com/			

1.2 Details of Applicant

Company Name	HP Inc.
Company Address	1501 Page Mill Road, Palo Alto CA 94304 USA

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1.3 Description of EUT

Equipment Under Test	Notebook Computer				
Brand Name	HP				
Model No.	HSN-I22C				
Integrated Madula	WLAN Model N		lame : Intel lame : 8265NGW : B94-8265NGWR		
Integrated Module	WWAN Model N		lame : Fibocom lame : L850-GL : B94HNI22CPD		
Mode of Operation	 WCDMA ☐HSDPA ☐HSUPA HSPA+ ☐DC-HSDPA LTE FDD ☐LTE TDD WLAN802.11 a/b/g/n(20M/40M)/ac(20M/40M/80M) ☐Bluetooth 				
	WCDMA		1		
	LTE FDD		1		
Duty Cycle	LTE TDD		(0.633	
	WLAN802.11 a/b/g/n(20M/40M)/ ac(20M/40M/80M)			1	
	Bluetooth			1	
	WCDMA Band II		1850	_	1910
	WCDMA Band IV		1710	—	1755
	WCDMA Band V		824	—	849
	LTE FDD Band 2		1850	—	1910
TX Frequency Range (MHz)	LTE FDD Band 4		1710	_	1755
	LTE FDD Band 5		824	_	849
	LTE FDD Band 7		2500	_	2570
	LTE FDD Band 12		699	_	716
	LTE FDD Band 13		777	_	787

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	LTE FDD Band 17	704	_	716
	LTE FDD Band 26	814	_	849
	LTE FDD Band 30	2305	_	2315
	LTE TDD Band 38	2570	_	2620
	LTE TDD Band 41	2496	—	2690
	LTE FDD Band 66	1710	_	1780
	WLAN802.11 b/g/n(20M)	2412	_	2472
	WLAN802.11 n(40M)	2422	_	2462
	WLAN802.11 a/n(20M)/ac(20M) 5.2G	5180	_	5240
	WLAN802.11 n(40M)/ac(40M) 5.2G	5190	_	5230
TX Frequency Range (MHz)	WLAN802.11 ac(80M) 5.2G		5210	
	WLAN802.11 a/n(20M)/ac(20M) 5.3G	5260	_	5320
	WLAN802.11 n(40M)/ac(40M) 5.3G	5270	_	5310
	WLAN802.11 ac(80M) 5.3G	5290		
	WLAN802.11 a/n/ac(20M) 5.6G	5500	_	5720
	WLAN802.11 n/ac(40M) 5.6G	5510	_	5710
	WLAN802.11 ac(80M) 5.6G	5530	_	5690
	WLAN802.11 a/n(20M)/ac(20M) 5.8G	5745	_	5825
	WLAN802.11 n(40M)/ac(40M) 5.8G	5710	_	5795
	WLAN802.11 ac(80M) 5.8G		5775	
	Bluetooth	2402	_	2480
	WCDMA Band II	9262	_	9538
	WCDMA Band IV	1312	_	1513
	WCDMA Band V	4132	_	4233
Channel Number (ARFCN)	LTE FDD Band 2	18607	_	19193
	LTE FDD Band 4	19957	_	20393
	LTE FDD Band 5	20407	_	20643
	LTE FDD Band 7	20775	_	21425

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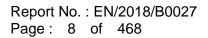
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	LTE FDD Band 12	23017	_	23173
	LTE FDD Band 13	23205	_	23255
	LTE FDD Band 17	23755	_	23825
	LTE FDD Band 26	26697	_	27033
	LTE FDD Band 30	27685	_	27735
	LTE TDD Band 38	37775	_	38225
	LTE TDD Band 41	39675	_	41565
	LTE FDD Band 66	131979	_	132665
	WLAN802.11 b/g/n(20M)	1	_	13
	WLAN802.11 n(40M)	3	_	11
	WLAN802.11 a/n(20M)/ac(20M) 5.2G	36	—	48
Channel Number (ARFCN)	WLAN802.11 n(40M)/ac(40M) 5.2G	38	—	46
	WLAN802.11 ac(80M) 5.2G		42	
	WLAN802.11 a/n(20M)/ac(20M) 5.3G	52	_	64
	WLAN802.11 n(40M)/ac(40M) 5.3G	54	_	62
	WLAN802.11 ac(80M) 5.3G		58	
	WLAN802.11 a/n/ac(20M) 5.6G	100	_	144
	WLAN802.11 n/ac(40M) 5.6G	102	_	142
	WLAN802.11 ac(80M) 5.6G	106	_	138
	WLAN802.11 a/n(20M)/ac(20M) 5.8G	149	_	165
	WLAN802.11 n(40M)/ac(40M) 5.8G	151	_	159
	WLAN802.11 ac(80M) 5.8G		155	
	Bluetooth	0	_	78

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AWAN

Max. SAR (1 g) (Unit: W/Kg)					
Band	Measured	Reported	Channel	Position	
WCDMA Band II	1.38	1.40	9262	Top side	
WCDMA Band IV	1.35	1.35	1513	Top side	
WCDMA Band V	1.38	1.39	4132	Top side	
LTE FDD Band 2	1.36	1.39	18900	Top side	
LTE FDD Band 4	1.34	1.35	20300	Top side	
LTE FDD Band 5	1.42	1.42	20450	Top side	
LTE FDD Band 7	1.36	1.37	20850	Top side	
LTE FDD Band 12	1.31	1.31	23095	Top side	
LTE FDD Band 13	1.30	1.32	23230	Top side	
LTE FDD Band 17	1.35	1.36	23800	Top side	
LTE FDD Band 26	1.31	1.38	26965	Top side	
LTE FDD Band 30	1.37	1.39	27710	Top side	
LTE TDD Band 38	1.19	1.28	37850	Top side	
LTE TDD Band 41	1.32	1.34	39750	Top side	
LTE FDD Band 66	1.34	1.34	132572	Top side	

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HOHG-BO

Max. SAR (1 g) (Unit: W/Kg)				
Band	Measured	Reported	Channel	Position
WCDMA Band II	1.26	1.28	9262	Top side
WCDMA Band IV	1.36	1.36	1513	Top side
WCDMA Band V	1.31	1.32	4132	Top side
LTE FDD Band 2	1.28	1.30	18700	Top side
LTE FDD Band 4	1.36	1.37	20300	Top side
LTE FDD Band 5	1.35	1.35	20450	Top side
LTE FDD Band 7	1.33	1.34	20850	Top side
LTE FDD Band 12	1.37	1.42	23060	Top side
LTE FDD Band 13	1.29	1.33	23230	Top side
LTE FDD Band 17	1.34	1.34	23780	Top side
LTE FDD Band 26	1.36	1.43	26865	Top side
LTE FDD Band 30	1.27	1.29	27710	Top side
LTE TDD Band 38	1.16	1.25	37850	Top side
LTE TDD Band 41	1.27	1.36	41490	Top side
LTE FDD Band 66	1.35	1.40	132322	Top side

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AWAN

	Max. SAR (1g) (Unit: W/Kg)							
Antenna	Band	Measured	Reported	Channel	Position			
	WLAN 802.11b	0.46	0.46	1	Top side			
	WLAN 802.11n(40M) 5.2G	0.47	0.47	46	Top side			
	WLAN 802.11a 5.3G	0.37	0.37	60	Top side			
Main	WLAN 802.11n(40M) 5.3G	0.41	0.41	54	Top side			
	WLAN 802.11n(40M) 5.6G	0.57	0.57	102	Top side			
	WLAN 802.11ac(80M) 5.6G	0.85	0.85	138	Top side			
	WLAN 802.11ac(80M) 5.8G	0.90	0.90	155	Top side			
	WLAN 802.11b	0.75	0.75	1	Top side			
	Bluetooth(GFSK)	0.15	0.15	39	Top side			
	WLAN 802.11n(40M) 5.2G	0.38	0.38	38	Top side			
Aux	WLAN 802.11a 5.3G	0.47	0.47	60	Top side			
	WLAN 802.11n(40M) 5.3G	0.41	0.41	54	Top side			
	WLAN 802.11ac(80M) 5.6G	0.90	0.90	138	Top side			
	WLAN 802.11ac(80M) 5.8G	0.78	0.78	155	Top side			

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HONG-BO

	Max. SAR	(1g) (Unit:	W/Kg)		
Antenna	Band	Measured	Reported	Channel	Position
	WLAN 802.11b	0.63	0.63	1	Top side
	WLAN 802.11n(40M) 5.2G	0.85	0.85	38	Top side
	WLAN 802.11a 5.3G	0.96	0.97	64	Top side
Main	WLAN 802.11n(40M) 5.3G	0.88	0.88	54	Top side
	WLAN 802.11n(40M) 5.6G	1.03	1.04	134	Top side
	WLAN 802.11ac(80M) 5.6G	0.92	0.92	138	Top side
	WLAN 802.11ac(80M) 5.8G	0.96	0.96	155	Top side
	WLAN 802.11b	1.19	1.19	1	Top side
	Bluetooth(GFSK)	0.27	0.27	39	Top side
	WLAN 802.11n(40M) 5.2G	0.92	0.94	46	Top side
Aux	WLAN 802.11a 5.3G	1.00	1.01	52	Top side
	WLAN 802.11n(40M) 5.3G	0.99	0.99	54	Top side
	WLAN 802.11ac(80M) 5.6G	0.91	0.92	106	Top side
	WLAN 802.11ac(80M) 5.8G	0.77	0.77	155	Top side

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Antenna Information WLAN

	Tablet mode										
Vendor		HONG-BO									
Antenna	Main						Aux				
Part Number	6036B0233101(260-27273)					6036B0233001(260-27272)					
Frequency	2.4	5.2	5.3	5.6	5.8	2.4 5.2 5.3 5.6 5.8				5.8	
Gain (dBi)	-2.89	-0.32	-1.11	-2.04	1.54	-1.07	-1.65	-1.65	-1.25	-0.03	

	NB mode										
Vendor		HONG-BO									
Antenna		Main						Aux			
Part Number	6036B0233101(260-27273)					6036B0233001(260-27272)					
Frequency	2.4	5.2	5.3	5.6	5.8	2.4 5.2 5.3 5.6 5.8				5.8	
Gain (dBi)	0.49	2.58	2.18	1.48	1.19	-1.13 1.32 1.99 1.89 1.89				1.89	

	Tablet mode										
Vendor		AWAN Corporation									
Antenna		Main					Aux				
Part Number	6036B0234201(ANP6Y-100280)))	6036B0234101(ANP6Y-100279))	
Frequency	2.4	5.2	5.3	5.6	5.8	2.4 5.2 5.3 5.6 5.			5.8		
Gain (dBi)	-3.21	0.29	-0.84	-0.18	-0.18	-3.68	-2.82	-2.44	-1.62	-1.27	

	NB mode										
Vendor		AWAN Corporation									
Antenna		Main Aux									
Part Number	6036B0234201(ANP6Y-100280) 6036B0234101(ANP6Y-10027				6Y-100279))					
Frequency	2.4	5.2	5.3	5.6	5.8	2.4 5.2 5.3 5.6 5.			5.8		
Gain (dBi)	-2.08	0.99	-0.17	-0.68	-1.44	0.18	-1.48	-1.36	0.25	0.44	

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WWAN

Vendor	Туре	Main /		Modulation	Frequency	Peak Antenna
venuoi	туре	Aux		Wodulation	(MHz)	Gain (dBi)
				WCDMA / HSPA Band II	1852.4 ~ 1907.6	-0.87
				WCDMA / HSPA Band IV	1712.4 ~ 1752.6	-0.9
				WCDMA / HSPA Band V	826.4 ~ 846.6	-1.73
				LTE Band 2	1850 ~ 1910	-0.87
				LTE Band 4	1710 ~ 1755	-0.66
				LTE Band 5	824 ~ 849	-1.73
				LTE Band 7	2503 ~ 2560	-0.53
	PIFA Main	6036B0232901	LTE Band 12	699 ~ 716	-1.14	
		IVIAILI	(ANP6Y-100277)	LTE Band 13	777 ~ 787	-0.23
				LTE Band 17	704 ~ 716	-1.14
				LTE Band 26	824 ~ 849	-1.77
				LTE Band 26 Part 90S	814.7 ~ 823.3	-1.79
				LTE Band 30	2305 ~ 2315	1.92
				LTE Band 38	2573 ~ 2610	0.03
				LTE Band 41	2496 ~ 2690	0.03
Awan				LTE Band 66	1710 ~ 1780	-0.66
Awan				WCDMA / HSPA Band II	1852.4 ~ 1907.6	0.76
				WCDMA / HSPA Band IV	1712.4 ~ 1752.6	N/A
				WCDMA / HSPA Band V	826.4 ~ 846.6	N/A
				LTE Band 2	1850 ~ 1910	0.76
				LTE Band 4	1710 ~ 1755	N/A
				LTE Band 5	824 ~ 849	N/A
				LTE Band 7	2503 ~ 2560	N/A
	PIFA	Aux	6036B0232801	LTE Band 12	699 ~ 716	N/A
	FILA	Aux	(ANP6Y-100278)	LTE Band 13	777 ~ 787	N/A
				LTE Band 17	704 ~ 716	N/A
				LTE Band 26	824 ~ 849	N/A
				LTE Band 26 Part 90S	814.7 ~ 823.3	-2.6
			LTE Band 30	2305 ~ 2315	1.23	
				LTE Band 38	2573 ~ 2610	-0.33
				LTE Band 41	2496 ~ 2690	-0.33
				LTE Band 66	1710 ~ 1780	N/A

Vendor	Туре	Main / Aux	Antenna Part No.	Modulation	Frequency (MHz)	Peak Antenna Gain (dBi)
		Лил	ratitio.	WCDMA / HSPA Band II	1852.4 ~ 1907.6	0.79
				WCDMA / HSPA Band IV	1712.4 ~ 1752.6	-0.27
				WCDMA / HSPA Band V	826.4 ~ 846.6	-2.06
				LTE Band 2	1850 ~ 1910	0.85
				LTE Band 4	1710 ~ 1755	-0.27
				LTE Band 5	824 ~ 849	-2.06
			LTE Band 7	2503 ~ 2560	1.25	
		Main	(0)(0)000000000000000000000000000000000	LTE Band 12	699 ~ 716	-0.63
	PIFA Main	6036B0233801 (260-27270)	LTE Band 13	777 ~ 787	0.01	
				LTE Band 17	704 ~ 716	-0.97
				LTE Band 26	824 ~ 849	-2.06
				LTE Band 26 Part90S	814.7 ~ 823.3	-2.06
				LTE Band 30	2305 ~ 2315	3.37
				LTE Band 38	2570 ~ 2620	2.96
				LTE Band 41	2496 ~ 2690	2.96
HONG-BO				LTE Band 66	1710 ~ 1780	-0.27
				WCDMA / HSPA Band II	1852.4 ~ 1907.6	0.97
				WCDMA / HSPA Band IV	1712.4 ~ 1752.6	N/A
				WCDMA / HSPA Band V	826.4 ~ 846.6	N/A
				LTE Band 2	1850 ~ 1910	0.97
				LTE Band 4	1710 ~ 1755	N/A
				LTE Band 5	824 ~ 849	N/A
				LTE Band 7	2503 ~ 2560	N/A
	PIFA	Aux	6036B0233901 (260-27271)	LTE Band 12	699 ~ 716	N/A
	PIFA	Aux	0030B0233901 (200-27271)	LTE Band 13	777 ~ 787	N/A
				LTE Band 17	704 ~ 716	N/A
				LTE Band 26	824 ~ 849	N/A
				LTE Band 26 Part90S	814.7 ~ 823.3	-5.57
				LTE Band 30	2305 ~ 2315	-1.28
				LTE Band 38	2570 ~ 2620	-4.32
				LTE Band 41	2496 ~ 2690	-0.95
				LTE Band 66	1710 ~ 1780	N/A

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WCDMA Band II / Band IV / Band V - HSDPA / HSUPA / HSPA+ / DC-HSDPA conducted power table (Full power): Unit: dBm

	Band		WCDMA I	
	TX Channel	9262	9400	9538
Fr	equency (MHz)	1852.4	1880	1907.6
Max. Rated Avg.	Power+Max. Tolerance (dBm)		24.50	
3GPP Rel 99	RMC 12.2Kbps	23.37	23.56	23.12
	HSDPA Subtest-1	23.21	23.53	23.09
3GPP Rel 5	HSDPA Subtest-2	22.26	22.59	22.06
JULE VELD	HSDPA Subtest-3	21.84	22.08	21.61
	HSDPA Subtest-4	21.59	21.83	21.35
	HSUPA Subtest-1	22.75	23.02	22.59
	HSUPA Subtest-2	23.26	23.49	23.09
3GPP Rel 6	HSUPA Subtest-3	21.75	21.96	21.55
	HSUPA Subtest-4	23.26	23.51	23.06
	HSUPA Subtest-5	22.28	22.49	22.08
3GPP Rel 7	HSPA+ Subtest-1	22.35	22.52	22.06
	DC-HSDPA Subtest-1	23.28	23.49	23.08
3GPP Rel 8	DC-HSDPA Subtest-2	22.31	22.47	22.03
JULL KELO	DC-HSDPA Subtest-3	21.84	22.04	21.55
	DC-HSDPA Subtest-4	21.79	22.02	21.61

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	Band	١		/		
	TX Channel	1312	1412	1513		
Fr	equency (MHz)	1712.4	1732.4	1752.6		
Max. Rated Avg.	Power+Max. Tolerance (dBm)		24.50			
3GPP Rel 99	RMC 12.2Kbps	23.09	23.12	23.31		
	HSDPA Subtest-1	23.04	23.03	23.28		
3GPP Rel 5	HSDPA Subtest-2	22.03	22.15	22.36		
JOFF Rei J	HSDPA Subtest-3	21.54	21.65	21.87		
	HSDPA Subtest-4	21.29	21.43	21.58		
	HSUPA Subtest-1	22.56	22.61	22.79		
	HSUPA Subtest-2	23.06	23.09	23.29		
3GPP Rel 6	HSUPA Subtest-3	21.55	21.61	21.76		
	HSUPA Subtest-4	23.07	23.09	23.28		
	HSUPA Subtest-5	22.09	22.11	22.28		
3GPP Rel 7	HSPA+ Subtest-1	22.00	22.06	22.25		
	DC-HSDPA Subtest-1	23.05	23.08	23.24		
3GPP Rel 8	DC-HSDPA Subtest-2	22.00	22.02	22.28		
JULE KELO	DC-HSDPA Subtest-3	21.53	21.57	21.80		
	DC-HSDPA Subtest-4	21.54	21.52	21.72		
	Band		WCDMA \	/		
	TX Channel	4132	4183	4233		
	equency (MHz)	826.4	836.6	846.6		
Max. Rated Avg.	Power+Max. Tolerance (dBm)		24.50			
3GPP Rel 99	RMC 12.2Kbps	23.55	23.38	23.43		
	HSDPA Subtest-1	23.52	23.34	23.42		
3GPP Rel 5	HSDPA Subtest-2	22.55	22.88	22.51		
JOFF Nel J	HSDPA Subtest-3	22.04	22.43	22.02		
	HSDPA Subtest-4	21.79	22.18	21.76		
	HSUPA Subtest-1	22.99	23.37	22.95		
	HSUPA Subtest-2	23.49	23.35	23.42		
3GPP Rel 6	HSUPA Subtest-3	21.99	22.41	21.97		
	HSUPA Subtest-4	23.47	23.35	23.37		
	HSUPA Subtest-5	22.49	22.88	22.41		
3GPP Rel 7	HSPA+ Subtest-1	22.54	22.36	22.34		
	DC-HSDPA Subtest-1	23.47	23.36	23.33		
	DC-HSDPA Subtest-2	22.50	22.32	22.35		
3GPP Rel 8	DC-HSDPA Subtest-3	21.95	21.82	21.84		
	DC-HSDPA Subtest-4	21.96	21.79	21.88		

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WCDMA Band II / Band IV / Band V - HSDPA / HSUPA / HSPA+ / DC-HSDPA conducted power table(Reduced power): Unit: dBm

	Band		WCDMA I	l
	TX Channel	9262	9400	9538
Fr	equency (MHz)	1852.4	1880	1907.6
Max. Rated Avg.	Power+Max. Tolerance (dBm)		19.00	
3GPP Rel 99	RMC 12.2Kbps 18.93 18.98			
	HSDPA Subtest-1	18.86	18.91	18.83
3GPP Rel 5	HSDPA Subtest-2	18.82	18.90	18.84
JULE NELD	HSDPA Subtest-3	18.84	18.92	18.82
	HSDPA Subtest-4	18.86	18.93	18.81
	HSUPA Subtest-1	18.87	18.96	18.85
	HSUPA Subtest-2	18.89	18.94	18.84
3GPP Rel 6	HSUPA Subtest-3	18.86	18.95	18.83
	HSUPA Subtest-4	18.89	18.97	18.82
	HSUPA Subtest-5	18.87	18.95	18.86
3GPP Rel 7	HSPA+ Subtest-1	18.84	18.94	18.84
	DC-HSDPA Subtest-1	18.89	18.91	18.87
3GPP Rel 8	DC-HSDPA Subtest-2	18.83	18.91	18.81
JOFF IVERO	DC-HSDPA Subtest-3	18.90	18.92	18.78
	DC-HSDPA Subtest-4	18.87	18.95	18.78

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	Band			/		
	TX Channel	1312	1412	1513		
Fr	equency (MHz)	1712.4	1732.4	1752.6		
Max. Rated Avg.	Power+Max. Tolerance (dBm)		20.00			
3GPP Rel 99	RMC 12.2Kbps	19.85	19.98	20.00		
	HSDPA Subtest-1	19.80	19.92	19.96		
3GPP Rel 5	HSDPA Subtest-2	19.79	19.89	19.97		
JOFF Nel J	HSDPA Subtest-3	19.78	19.91	19.99		
	HSDPA Subtest-4	19.81	19.92	19.99		
	HSUPA Subtest-1	19.82	19.91	19.98		
	HSUPA Subtest-2	19.80	19.92	19.99		
3GPP Rel 6	HSUPA Subtest-3	19.83	19.91	19.99		
	HSUPA Subtest-4	19.84	19.93	19.96		
	HSUPA Subtest-5	19.82	19.87	19.95		
3GPP Rel 7	HSPA+ Subtest-1	19.80	19.92	19.95		
	DC-HSDPA Subtest-1	19.83	19.93	19.99		
3GPP Rel 8	DC-HSDPA Subtest-2	19.75	19.92	19.96		
JGPP Relo	DC-HSDPA Subtest-3	19.82	19.92	19.94		
	DC-HSDPA Subtest-4	19.81	19.94	19.94		
	Band		WCDMA \	/		
	TX Channel	4132	4183	4233		
	equency (MHz)	826.4	836.6	846.6		
Max. Rated Avg.	Power+Max. Tolerance (dBm)		20.50			
3GPP Rel 99	RMC 12.2Kbps	20.48	20.33	20.44		
	HSDPA Subtest-1	20.36	20.21	20.26		
3GPP Rel 5	HSDPA Subtest-2	20.39	20.24	20.29		
JOFF Ner J	HSDPA Subtest-3	20.46	20.25	20.32		
	HSDPA Subtest-4	20.44	20.27	20.31		
	HSUPA Subtest-1	20.45	20.26	20.37		
	HSUPA Subtest-2	20.44	20.27	20.38		
3GPP Rel 6	HSUPA Subtest-3	20.45	20.28	20.40		
	HSUPA Subtest-4	20.43	20.26	20.41		
	HSUPA Subtest-5	20.46	20.32	20.42		
3GPP Rel 7	HSPA+ Subtest-1	20.40	20.23	20.43		
	DC-HSDPA Subtest-1	20.43	20.25	20.36		
3GPP Rel 8	DC-HSDPA Subtest-2	20.44	20.28	20.39		
JULL KELO	DC-HSDPA Subtest-3	20.39	20.25	20.34		
	DC-HSDPA Subtest-4	20.42	20.23	20.41		

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Sub-Test for HSDPA

SUB-TEST	β _c	β_d	β _d (SF)	β _c /β _d	β _{HS} (Note1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15	15/15	64	12/15	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Sub-Test for HSUPA

SUB-TEST	βc	βd	β₀ (SF)	β _o /β _d	β _{HS} (Note1)	β_{ec}	β _{ed} (Note 5) (Note 6)	β _{ed} (SF)	β _{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 6)	E-TFCI
1	11/15	15/15	64	11/15	22/15	209/225	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	<mark>9/15</mark>	64	15/9	30/15	30/15	β _{ed} 1: 47/15 β _{ed} 2: 47/15	4 4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	15/15	64	15/15	30/15	24/15	134/15	4	1	1.0	0.0	21	81

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				FDD Band 2				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed pe 3GPP(dB)
				1860	18700	22.93	24	0
			0	1880	18900	22.63	24	0
				1900	19100	22.23	24	0
				1860	18700	22.60	24	0
		1 RB	50	1880	18900	22.88	24	0
				1900	19100	22.56	24	0
				1860	18700	22.69	24	0
			99	1880	18900	22.92	24	0
				1900	19100	22.52	24	0
				1860	18700	22.10	23	0-1
	QPSK		0	1880	18900	22.45	23	0-1
				1900	19100	22.03	23	0-1
				1860	18700	22.13	23	0-1
		50 RB	25	1880	18900	22.37	23	0-1
				1900	19100	22.12	23	0-1
				1860	18700	22.29	23	0-1
			50	1880	18900	22.24	23	0-1
				1900	19100	22.09	23	0-1
				1860	18700	22.30	23	0-1
		100	ORB	1880	18900	22.47	23	0-1
20				1900	19100	22.38	23	0-1
20				1860	18700	22.44	23	0-1
			0	1880	18900	22.73	23	0-1
				1900	19100	22.26	23	0-1
				1860	18700	22.36	23	0-1
		1 RB	50	1880	18900	22.56	23	0-1
				1900	19100	22.36	23	0-1
				1860	18700	22.68	23	0-1
			99	1880	18900	22.30	23	0-1
				1900	19100	21.97	23	0-1
				1860	18700	21.13	22	0-2
	16-QAM		0	1880	18900	21.47	22	0-2
				1900	19100	21.07	22	0-2
				1860	18700	21.16	22	0-2
		50 RB	25	1880	18900	21.37	22	0-2
				1900	19100	21.14	22	0-2
				1860	18700	21.31	22	0-2
			50	1880	18900	21.24	22	0-2
				1900	19100	21.14	22	0-2
				1860	18700	21.30	22	0-2
		100)RB	1880	18900	21.46	22	0-2
			1900	19100	21.36	22	0-2	

LTE FDD Band 2 / Band 4 / Band 5 / Band 7 / Band 12 / Band 13 / Band 17 / Band 26 / Band 30 / Band 66 nowor table (Full nower):

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				FDD Band 2				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1857.5	18675	22.59	24	0
			0	1880	18900	22.87	24	0
				1902.5	19125	22.37	24	0
				1857.5	18675	22.46	24	0
		1 RB	36	1880	18900	22.79	24	0
				1902.5	19125	22.50	24	0
				1857.5	18675	22.75	24	0
			74	1880	18900	22.47	24	0
				1902.5	19125	22.10	24	0
				1857.5	18675	21.98	23	0-1
	QPSK		0	1880	18900	22.38	23	0-1
				1902.5	19125	21.94	23	0-1
				1857.5	18675	22.10	23	0-1
	36 RB	18	1880	18900	22.35	23	0-1	
			1902.5	19125	22.03	23	0-1	
				1857.5	18675	22.22	23	0-1
			37	1880	18900	22.16	23	0-1
				1902.5	19125	21.95	23	0-1
				1857.5	18675	22.21	23	0-1
		75RB		1880	18900	22.26	23	0-1
15				1902.5	19125	22.25	23	0-1
			0	1857.5	18675	22.39	23	0-1
				1880	18900	22.70	23	0-1
				1902.5	19125	22.20	23	0-1
				1857.5	18675	22.18	23	0-1
		1 RB	36	1880	18900	22.52	23	0-1
				1902.5	19125	22.27	23	0-1
			74	1857.5 1880	18675	22.63 22.26	23 23	0-1
			74	1902.5	18900 19125	22.20	23	0-1
				1902.5	18675	20.97	23	0-1
	16-QAM		0	1880	18900	20.97	22	0-2
			0	1902.5	19125	21.00	22	0-2
				1902.5	18675	21.00	22	0-2
		36 RB	18	1880	18900	21.04	22	0-2
			10	1902.5	19125	21.19	22	0-2
				1857.5	18675	21.04	22	0-2
			37	1880	18900	21.17	22	0-2
			57	1902.5	19125	21.12	22	0-2
			I	1857.5	18675	21.12	22	0-2
		75	RB	1880	18900	21.43	22	0-2
		10		1902.5	19125	21.40	22	0-2

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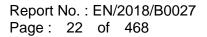
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				FDD Band 2				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1855	18650	22.42	24	0
			0	1880	18900	22.76	24	0
				1905	19150	22.31	24	0
				1855	18650	22.35	24	0
		1 RB	25	1880	18900	22.66	24	0
				1905	19150	22.46	24	0
				1855	18650	22.71	24	0
			49	1880	18900	22.27	24	0
				1905	19150	22.17	24	0
				1855	18650	21.77	23	0-1
	QPSK		0	1880	18900	22.23	23	0-1
				1905	19150	21.92	23	0-1
				1855	18650	21.90	23	0-1
	25 RB	12	1880	18900	22.26	23	0-1	
				1905	19150	21.88	23	0-1
				1855	18650	22.13	23	0-1
			25	1880	18900	22.03	23	0-1
				1905	19150	21.81	23	0-1
			-	1855	18650	22.09	23	0-1
		50RB		1880	18900	22.21	23	0-1
10				1905	19150	22.15	23	0-1
10			0	1855	18650	22.32	23	0-1
				1880	18900	22.51	23	0-1
				1905	19150	22.03	23	0-1
				1855	18650	22.12	23	0-1
		1 RB	25	1880	18900	22.41	23	0-1
				1905	19150	22.20	23	0-1
				1855	18650	22.42	23	0-1
			49	1880	18900	22.23	23	0-1
				1905	19150	21.90	23	0-1
				1855	18650	20.88	22	0-2
	16-QAM		0	1880	18900	21.26	22	0-2
				1905	19150	20.91	22	0-2
				1855	18650	21.00	22	0-2
		25 RB	12	1880	18900	21.04	22	0-2
				1905	19150	20.90	22	0-2
			6-	1855	18650	20.96	22	0-2
			25	1880	18900	21.06	22	0-2
				1905	19150	21.04	22	0-2
			חח	1855	18650	20.98	22	0-2
		50	RB	1880	18900	21.37	22	0-2
			-	1905	19150	21.12	22	0-2

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				FDD Band 2				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1852.5	18625	22.22	24	0
			0	1880	18900	22.60	24	0
				1907.5	19175	22.19	24	0
				1852.5	18625	22.22	24	0
		1 RB	12	1880	18900	22.45	24	0
				1907.5	19175	22.33	24	0
				1852.5	18625	22.62	24	0
			24	1880	18900	22.10	24	0
				1907.5	19175	22.12	24	0
				1852.5	18625	21.58	23	0-1
	QPSK		0	1880	18900	22.11	23	0-1
				1907.5	19175	21.86	23	0-1
				1852.5	18625	21.87	23	0-1
		12 RB	6	1880	18900	22.14	23	0-1
			1907.5	19175	21.75	23	0-1	
				1852.5	18625	22.08	23	0-1
			13	1880	18900	21.90	23	0-1
				1907.5	19175	21.68	23	0-1
				1852.5	18625	21.95	23	0-1
		25RB		1880	18900	22.17	23	0-1
5				1907.5	19175	22.04	23	0-1
5				1852.5	18625	22.12	23	0-1
			0	1880	18900	22.47	23	0-1
				1907.5	19175	21.87	23	0-1
				1852.5	18625	22.08	23	0-1
		1 RB	12	1880	18900	22.21	23	0-1
				1907.5	19175	22.01	23	0-1
				1852.5	18625	22.24	23	0-1
			24	1880	18900	22.14	23	0-1
				1907.5	19175	21.78	23	0-1
				1852.5	18625	20.75	22	0-2
	16-QAM		0	1880	18900	21.16	22	0-2
				1907.5	19175	20.83	22	0-2
				1852.5	18625	20.81	22	0-2
		12 RB	6	1880	18900	20.92	22	0-2
				1907.5	19175	20.73	22	0-2
				1852.5	18625	20.89	22	0-2
			13	1880	18900	21.01	22	0-2
				1907.5	19175	21.01	22	0-2
			1852.5	18625	20.86	22	0-2	
		25	RB	1880	18900	21.17	22	0-2
				1907.5	19175	20.95	22	0-2

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				FDD Band 2				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1851.5	18615	22.09	24	0
			0	1880	18900	22.49	24	0
				1908.5	19185	22.06	24	0
				1851.5	18615	22.06	24	0
		1 RB	7	1880	18900	22.24	24	0
				1908.5	19185	22.26	24	0
				1851.5	18615	22.51	24	0
			14	1880	18900	22.08	24	0
				1908.5	19185	22.00	24	0
				1851.5	18615	21.42	23	0-1
	QPSK		0	1880	18900	22.07	23	0-1
				1908.5	19185	21.70	23	0-1
				1851.5	18615	21.69	23	0-1
		8 RB	4	1880	18900	22.12	23	0-1
			1908.5	19185	21.59	23	0-1	
				1851.5	18615	21.87	23	0-1
			7	1880	18900	21.71	23	0-1
				1908.5	19185	21.54	23	0-1
				1851.5	18615	21.83	23	0-1
		15	RB	1880	18900	22.02	23	0-1
3				1908.5	19185	22.02	23	0-1
, C				1851.5	18615	21.92	23	0-1
			0	1880	18900	22.34	23	0-1
				1908.5	19185	21.80	23	0-1
				1851.5	18615	21.94	23	0-1
		1 RB	7	1880	18900	22.12	23	0-1
				1908.5	19185	21.89	23	0-1
				1851.5	18615	22.11	23	0-1
			14	1880	18900	21.93	23	0-1
				1908.5	19185	21.61	23	0-1
				1851.5	18615	20.70	22	0-2
	16-QAM		0	1880	18900	21.01	22	0-2
				1908.5	19185	20.76	22	0-2
				1851.5	18615	20.63	22	0-2
		8 RB	4	1880	18900	20.82	22	0-2
				1908.5	19185	20.56	22	0-2
			_	1851.5	18615	20.74	22	0-2
			7	1880	18900	20.90	22	0-2
				1908.5	19185	20.93	22	0-2
			חח	1851.5	18615	20.70	22	0-2
		15	RB	1880	18900	21.08	22	0-2
			-	1908.5	19185	20.82	22	0-2

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				FDD Band 2				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1850.7	18607	22.64	24	0
			0	1880	18900	22.91	24	0
				1909.3	19193	22.19	24	0
				1850.7	18607	22.59	24	0
		1 RB	2	1880	18900	22.88	24	0
				1909.3	19193	22.15	24	0
				1850.7	18607	22.62	24	0
			5	1880	18900	22.91	24	0
				1909.3	19193	22.18	24	0
				1850.7	18607	22.57	23	0-1
	QPSK		0	1880	18900	22.89	23	0-1
				1909.3	19193	22.11	23	0-1
				1850.7	18607	22.55	23	0-1
	3 RB	2	1880	18900	22.87	23	0-1	
				1909.3	19193	22.09	23	0-1
				1850.7	18607	22.56	23	0-1
			3	1880	18900	22.87	23	0-1
				1909.3	19193	22.09	23	0-1
			-	1850.7	18607	22.06	23	0-1
		66	RB	1880	18900	22.37	23	0-1
1.4				1909.3	19193	21.55	23	0-1
				1850.7	18607	22.22	23	0-1
			0	1880	18900	22.62	23	0-1
				1909.3	19193	21.83	23	0-1
				1850.7	18607	22.24	23	0-1
		1 RB	2	1880	18900	22.70	23	0-1
				1909.3	19193	21.68	23	0-1
				1850.7	18607	22.26	23	0-1
			5	1880	18900	22.76	23	0-1
				1909.3	19193	21.78	23	0-1
				1850.7	18607	22.15	23	0-1
	16-QAM		0	1880	18900	22.54	23	0-1
				1909.3	19193	21.61	23	0-1
			-	1850.7	18607	22.12	23	0-1
		3 RB	2	1880	18900	22.46	23	0-1
				1909.3	19193	21.54	23	0-1
			_	1850.7	18607	22.13	23	0-1
			3	1880	18900	22.47	23	0-1
				1909.3	19193	21.66	23	0-1
				1850.7	18607	21.11	22	0-2
		61	RB	1880	18900	21.43	22	0-2
				1909.3	19193	20.59	22	0-2

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				FDD Band 4				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1720	20050	23.37	24	0
			0	1732.5	20175	23.45	24	0
				1745	20300	23.79	24	0
				1720	20050	23.59	24	0
		1 RB	50	1732.5	20175	23.38	24	0
				1745	20300	23.57	24	0
				1720	20050	23.62	24	0
			99	1732.5	20175	23.55	24	0
				1745	20300	23.45	24	0
				1720	20050	22.77	23	0-1
	QPSK		0	1732.5	20175	22.45	23	0-1
				1745	20300	22.44	23	0-1
				1720	20050	22.65	23	0-1
		50 RB	25	1732.5	20175	22.44	23	0-1
				1745	20300	22.59	23	0-1
				1720	20050	22.49	23	0-1
			50	1732.5	20175	22.41	23	0-1
				1745	20300	22.80	23	0-1
			-	1720	20050	22.75	23	0-1
		100RB		1732.5	20175	22.55	23	0-1
20				1745	20300	22.77	23	0-1
20			0	1720	20050	22.89	23	0-1
				1732.5	20175	22.83	23	0-1
				1745	20300	22.62	23	0-1
				1720	20050	22.88	23	0-1
		1 RB	50	1732.5	20175	22.65	23	0-1
				1745	20300	22.79	23	0-1
				1720	20050	22.65	23	0-1
			99	1732.5	20175	22.55	23	0-1
				1745	20300	22.91	23	0-1
				1720	20050	21.82	22	0-2
	16-QAM		0	1732.5	20175	21.50	22	0-2
				1745	20300	21.48	22	0-2
				1720	20050	21.68	22	0-2
		50 RB	25	1732.5	20175	21.48	22	0-2
				1745	20300	21.61	22	0-2
			F 0	1720	20050	21.54	22	0-2
			50	1732.5	20175	21.44	22	0-2
				1745	20300	21.83	22	0-2
		100		1720	20050	21.76	22	0-2
		100)RB	1732.5	20175	21.59	22	0-2
	100		1745	20300	21.76	22	0-2	

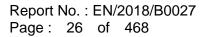
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				FDD Band 4				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
-				1717.5	20025	23.43	24	0
			0	1732.5	20175	23.36	24	0
				1747.5	20325	23.36	24	0
				1717.5	20025	23.46	24	0
		1 RB	36	1732.5	20175	23.27	24	0
				1747.5	20325	23.53	24	0
				1717.5	20025	23.18	24	0
			74	1732.5	20175	23.40	24	0
				1747.5	20325	23.68	24	0
				1717.5	20025	22.70	23	0-1
	QPSK		0	1732.5	20175	22.33	23	0-1
				1747.5	20325	22.29	23	0-1
				1717.5	20025	22.61	23	0-1
		36 RB	18	1732.5	20175	22.40	23	0-1
				1747.5	20325	22.42	23	0-1
				1717.5	20025	22.46	23	0-1
			37	1732.5	20175	22.36	23	0-1
				1747.5	20325	22.61	23	0-1
				1717.5	20025	22.69	23	0-1
		75RB		1732.5	20175	22.51	23	0-1
15				1747.5	20325	22.72	23	0-1
			0	1717.5	20025	22.71	23	0-1
				1732.5	20175	22.80	23	0-1
				1747.5	20325	22.60	23	0-1
				1717.5	20025	22.83	23	0-1
		1 RB	36	1732.5	20175	22.46	23	0-1
				1747.5	20325	22.72	23	0-1
				1717.5	20025	22.55	23	0-1
			74	1732.5	20175	22.38	23	0-1
				1747.5	20325	22.74	23	0-1
				1717.5	20025	21.65	22	0-2
	16-QAM		0	1732.5	20175	21.29	22	0-2
				1747.5	20325	21.42	22	0-2
				1717.5	20025	21.62	22	0-2
		36 RB	18	1732.5	20175	21.37	22	0-2
				1747.5	20325	21.42	22	0-2
			07	1717.5	20025	21.42	22	0-2
			37	1732.5	20175	21.24	22	0-2
				1747.5	20325	21.66	22	0-2
			סס	1717.5	20025	21.66	22	0-2
		/5	КĎ	1732.5	20175	21.42	22	0-2
		75RI		1747.5	20325	21.67	22	0-2

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				FDD Band 4				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1715	20000	23.39	24	0
			0	1732.5	20175	23.34	24	0
				1750	20350	23.29	24	0
				1715	20000	23.33	24	0
		1 RB	25	1732.5	20175	23.10	24	0
				1750	20350	23.39	24	0
				1715	20000	23.07	24	0
			49	1732.5	20175	23.36	24	0
				1750	20350	23.64	24	0
				1715	20000	22.62	23	0-1
	QPSK		0	1732.5	20175	22.25	23	0-1
				1750	20350	22.17	23	0-1
				1715	20000	22.50	23	0-1
		25 RB	12	1732.5	20175	22.24	23	0-1
				1750	20350	22.27	23	0-1
				1715	20000	22.35	23	0-1
			25	1732.5	20175	22.19	23	0-1
				1750	20350	22.43	23	0-1
			-	1715	20000	22.60	23	0-1
		50	RB	1732.5	20175	22.40	23	0-1
10				1750	20350	22.67	23	0-1
10				1715	20000	22.67	23	0-1
			0	1732.5	20175	22.62	23	0-1
				1750	20350	22.42	23	0-1
				1715	20000	22.69	23	0-1
		1 RB	25	1732.5	20175	22.34	23	0-1
				1750	20350	22.51	23	0-1
				1715	20000	22.51	23	0-1
			49	1732.5	20175	22.33	23	0-1
				1750	20350	22.64	23	0-1
				1715	20000	21.59	22	0-2
	16-QAM		0	1732.5	20175	21.08	22	0-2
				1750	20350	21.37	22	0-2
				1715	20000	21.41	22	0-2
		25 RB	12	1732.5	20175	21.31	22	0-2
				1750	20350	21.24	22	0-2
				1715	20000	21.40	22	0-2
			25	1732.5	20175	21.18	22	0-2
				1750	20350	21.63	22	0-2
				1715	20000	21.52	22	0-2
		50	RB	1732.5	20175	21.29	22	0-2
				1750	20350	21.60	22	0-2

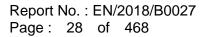
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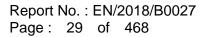


				FDD Band 4				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1712.5	19975	23.21	24	0
			0	1732.5	20175	23.26	24	0
				1752.5	20375	23.25	24	0
				1712.5	19975	23.31	24	0
		1 RB	12	1732.5	20175	23.03	24	0
				1752.5	20375	23.24	24	0
				1712.5	19975	22.98	24	0
			24	1732.5	20175	23.20	24	0
				1752.5	20375	23.60	24	0
				1712.5	19975	22.51	23	0-1
	QPSK		0	1732.5	20175	22.06	23	0-1
				1752.5	20375	22.09	23	0-1
				1712.5	19975	22.44	23	0-1
		12 RB	6	1732.5	20175	22.12	23	0-1
				1752.5	20375	22.25	23	0-1
				1712.5	19975	22.29	23	0-1
			13	1732.5	20175	22.12	23	0-1
				1752.5	20375	22.26	23	0-1
			-	1712.5	19975	22.45	23	0-1
		25RB		1732.5	20175	22.30	23	0-1
5				1752.5	20375	22.54	23	0-1
0				1712.5	19975	22.47	23	0-1
			0	1732.5	20175	22.59	23	0-1
				1752.5	20375	22.35	23	0-1
				1712.5	19975	22.57	23	0-1
		1 RB	12	1732.5	20175	22.23	23	0-1
				1752.5	20375	22.41	23	0-1
				1712.5	19975	22.49	23	0-1
			24	1732.5	20175	22.30	23	0-1
				1752.5	20375	22.59	23	0-1
				1712.5	19975	21.50	22	0-2
	16-QAM		0	1732.5	20175	20.88	22	0-2
				1752.5	20375	21.22	22	0-2
				1712.5	19975	21.39	22	0-2
		12 RB	6	1732.5	20175	21.22	22	0-2
				1752.5	20375	21.14	22	0-2
				1712.5	19975	21.26	22	0-2
			13	1732.5	20175	21.13	22	0-2
				1752.5	20375	21.53	22	0-2
				1712.5	19975	21.44	22	0-2
		25	RB	1732.5	20175	21.27	22	0-2
				1752.5	20375	21.48	22	0-2

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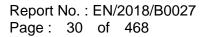
				FDD Band 4				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1711.5	19965	23.02	24	0
			0	1732.5	20175	23.07	24	0
				1753.5	20385	23.23	24	0
				1711.5	19965	23.28	24	0
		1 RB	7	1732.5	20175	22.88	24	0
				1753.5	20385	23.12	24	0
				1711.5	19965	22.89	24	0
			14	1732.5	20175	23.09	24	0
				1753.5	20385	23.47	24	0
				1711.5	19965	22.45	23	0-1
	QPSK		0	1732.5	20175	22.01	23	0-1
				1753.5	20385	22.02	23	0-1
				1711.5	19965	22.30	23	0-1
		8 RB	4	1732.5	20175	21.92	23	0-1
				1753.5	20385	22.05	23	0-1
			7	1711.5	19965	22.26	23	0-1
				1732.5	20175	22.01	23	0-1
				1753.5	20385	22.15	23	0-1
					19965	22.24	23	0-1
		15	RB	1732.5	20175	22.17	23	0-1
3				1753.5	20385	22.35	23	0-1
Ū				1711.5	19965	22.43	23	0-1
			0	1732.5	20175	22.46	23	0-1
				1753.5	20385	22.17	23	0-1
				1711.5	19965	22.55	23	0-1
		1 RB	7	1732.5	20175	22.14	23	0-1
				1753.5	20385	22.24	23	0-1
				1711.5	19965	22.28	23	0-1
			14	1732.5	20175	22.18	23	0-1
				1753.5	20385	22.43	23	0-1
				1711.5	19965	21.43	22	0-2
	16-QAM		0	1732.5	20175	20.78	22	0-2
				1753.5	20385	21.16	22	0-2
		0.00		1711.5	19965	21.21	22	0-2
		8 RB	4	1732.5	20175	21.15	22	0-2
				1753.5	20385	21.04	22	0-2
			-	1711.5	19965	21.06	22	0-2
			7	1732.5	20175	20.96	22	0-2
				1753.5	20385	21.37	22	0-2
		4 -	DD	1711.5	19965	21.35	22	0-2
		15	RB	1732.5	20175	21.25	22	0-2
l			-	1753.5	20385	21.46	22	0-2

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				FDD Band 4				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1710.7	19957	23.49	24	0
			0	1732.5	20175	23.32	24	0
				1754.3	20393	23.76	24	0
				1710.7	19957	23.47	24	0
		1 RB	2	1732.5	20175	23.30	24	0
				1754.3	20393	23.74	24	0
				1710.7	19957	23.51	24	0
			5	1732.5	20175	23.31	24	0
				1754.3	20393	23.78	24	0
				1710.7	19957	22.90	23	0-1
	QPSK		0	1732.5	20175	22.70	23	0-1
				1754.3	20393	22.94	23	0-1
				1710.7	19957	22.98	23	0-1
		3 RB	2	1732.5	20175	22.93	23	0-1
				1754.3	20393	22.95	23	0-1
				1710.7	19957	22.90	23	0-1
			3	1732.5	20175	22.83	23	0-1
				1754.3	20393	22.97	23	0-1
				1710.7	19957	22.50	23	0-1
		6F	RB	1732.5	20175	22.35	23	0-1
1.4				1754.3	20393	22.80	23	0-1
1.4				1710.7	19957	22.75	23	0-1
			0	1732.5	20175	22.46	23	0-1
				1754.3	20393	22.96	23	0-1
				1710.7	19957	22.71	23	0-1
		1 RB	2	1732.5	20175	22.48	23	0-1
				1754.3	20393	22.90	23	0-1
				1710.7	19957	22.76	23	0-1
			5	1732.5	20175	22.61	23	0-1
				1754.3	20393	22.99	23	0-1
				1710.7	19957	22.53	23	0-1
	16-QAM		0	1732.5	20175	22.31	23	0-1
				1754.3	20393	22.88	23	0-1
				1710.7	19957	22.51	23	0-1
		3 RB	2	1732.5	20175	22.40	23	0-1
				1754.3	20393	22.86	23	0-1
				1710.7	19957	22.57	23	0-1
			3	1732.5	20175	22.39	23	0-1
				1754.3	20393	22.82	23	0-1
				1710.7	19957	21.58	22	0-2
		6	RB	1732.5	20175	21.42	22	0-2
				1754.3	20393	21.79	22	0-2

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				FDD Band 5				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				829	20450	23.99	25	0
			0	836.5	20525	23.98	25	0
				844	20600	23.97	25	0
				829	20450	23.90	25	0
		1 RB	25	836.5	20525	23.95	25	0
				844	20600	23.78	25	0
				829	20450	23.96	25	0
			49	836.5	20525	23.93	25	0
				844	20600	23.95	25	0
				829	20450	23.06	24	0-1
	QPSK		0	836.5	20525	23.05	24	0-1
				844	20600	22.99	24	0-1
				829	20450	23.03	24	0-1
		25 RB	12	836.5	20525	23.04	24	0-1
				844	20600	23.00	24	0-1
			25	829	20450	23.08	24	0-1
				836.5	20525	23.06	24	0-1
				844	20600	23.09	24	0-1
				829	20450	23.06	24	0-1
		50RB		836.5	20525	23.04	24	0-1
10				844	20600	23.11	24	0-1
				829	20450	23.26	24	0-1
			0	836.5	20525	23.26	24	0-1
				844	20600	23.27	24	0-1
				829	20450	23.11	24	0-1
		1 RB	25	836.5	20525	23.23	24	0-1
				844	20600	23.08	24	0-1
			(-	829	20450	23.29	24	0-1
			49	836.5	20525	23.18	24	0-1
				844	20600	23.32	24	0-1
	40.000			829	20450	22.15	23	0-2
	16-QAM		0	836.5	20525	22.11	23	0-2
				844	20600	22.10	23	0-2
		05 55	10	829	20450	22.10	23	0-2
		25 RB	12	836.5	20525	22.11	23	0-2
				844	20600	22.06	23	0-2
			05	829	20450	22.15	23	0-2
			25	836.5	20525	22.16	23	0-2
				844	20600	22.17	23	0-2
		FO	ססו	829	20450	22.14	23	0-2
		500)RB	836.5	20525	22.13	23	0-2
				844	20600	22.15	23	0-2

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				FDD Band 5				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				826.5	20425	23.84	25	0
			0	836.5	20525	23.88	25	0
				846.5	20625	23.87	25	0
				826.5	20425	23.78	25	0
		1 RB	12	836.5	20525	23.79	25	0
				846.5	20625	23.63	25	0
				826.5	20425	23.87	25	0
			24	836.5	20525	23.84	25	0
				846.5	20625	23.96	25	0
				826.5	20425	22.90	24	0-1
	QPSK		0	836.5	20525	22.96	24	0-1
				846.5	20625	22.89	24	0-1
				826.5	20425	22.96	24	0-1
		12 RB	6	836.5	20525	22.94	24	0-1
				846.5	20625	22.98	24	0-1
			13	826.5	20425	22.91	24	0-1
				836.5	20525	22.99	24	0-1
				846.5	20625	23.07	24	0-1
				826.5	20425	23.01	24	0-1
		25	RB	836.5	20525	23.00	24	0-1
5				846.5	20625	22.91	24	0-1
-				826.5	20425	23.18	24	0-1
			0	836.5	20525	23.11	24	0-1
				846.5	20625	23.22	24	0-1
				826.5	20425	22.93	24	0-1
		1 RB	12	836.5	20525	23.21	24	0-1
				846.5	20625	22.95	24	0-1
				826.5	20425	23.15	24	0-1
			24	836.5	20525	23.02	24	0-1
				846.5	20625	23.16	24	0-1
	10.0			826.5	20425	22.11	23	0-2
	16-QAM		0	836.5	20525	21.91	23	0-2
				846.5	20625	21.91	23	0-2
		40.00	6	826.5	20425	21.97	23	0-2
		12 RB	6	836.5	20525	22.00	23	0-2
				846.5	20625	21.96	23	0-2
			10	826.5	20425	22.00	23	0-2
			13	836.5	20525	22.05	23	0-2
				846.5	20625	22.06	23	0-2
		0E	RB	826.5 836.5	20425 20525	22.08 22.05	23 23	0-2
		25						
				846.5	20625	21.96	23	0-2

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				FDD Band 5				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				825.5	20415	23.80	25	0
			0	836.5	20525	23.72	25	0
				847.5	20635	23.68	25	0
				825.5	20415	23.57	25	0
		1 RB	7	836.5	20525	23.62	25	0
				847.5	20635	23.48	25	0
				825.5	20415	23.68	25	0
			14	836.5	20525	23.64	25	0
				847.5	20635	23.82	25	0
				825.5	20415	22.81	24	0-1
	QPSK		0	836.5	20525	22.79	24	0-1
				847.5	20635	22.81	24	0-1
				825.5	20415	22.78	24	0-1
		8 RB	4	836.5	20525	22.75	24	0-1
				847.5	20635	22.82	24	0-1
			7	825.5	20415	22.82	24	0-1
				836.5	20525	22.84	24	0-1
				847.5	20635	22.92	24	0-1
				825.5	20415	22.86	24	0-1
		15	RB	836.5	20525	22.96	24	0-1
3				847.5	20635	22.75	24	0-1
-				825.5	20415	23.03	24	0-1
			0	836.5	20525	22.97	24	0-1
		1 RB		847.5	20635	23.19	24	0-1
			7	825.5	20415	22.88	24	0-1
				836.5	20525	23.04	24	0-1
				847.5	20635	22.92	24	0-1
				825.5	20415	23.07	24	0-1
			14	836.5	20525	22.90	24	0-1
				847.5	20635	23.07	24	0-1
	40.011			825.5	20415	21.99	23	0-2
	16-QAM		0	836.5	20525	21.78	23	0-2
				847.5	20635	21.87	23	0-2
		0.55		825.5	20415	21.82	23	0-2
		8 RB	4	836.5	20525	21.88	23	0-2
				847.5	20635	21.89	23	0-2
			7	825.5	20415	21.96	23	0-2
			7	836.5	20525	21.87	23	0-2
				847.5	20635	21.92	23	0-2
		4-	DD	825.5	20415	21.94	23	0-2
1		15	RB	836.5	20525	21.94	23	0-2
				847.5	20635	21.86	23	0-2

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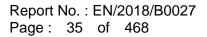
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				FDD Band 5				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				824.7	20407	23.89	25	0
			0	836.5	20525	23.90	25	0
				848.3	20643	23.97	25	0
				824.7	20407	23.92	25	0
		1 RB	2	836.5	20525	23.86	25	0
				848.3	20643	23.93	25	0
				824.7	20407	23.84	25	0
			5	836.5	20525	23.90	25	0
				848.3	20643	23.96	25	0
				824.7	20407	23.98	24	0-1
	QPSK		0	836.5	20525	23.93	24	0-1
				848.3	20643	23.84	24	0-1
				824.7	20407	23.95	24	0-1
		3 RB	2	836.5	20525	23.90	24	0-1
				848.3	20643	23.96	24	0-1
				824.7	20407	23.96	24	0-1
			3	836.5	20525	23.91	24	0-1
				848.3	20643	23.96	24	0-1
				824.7	20407	23.10	24	0-1
		61	RB	836.5	20525	22.97	24	0-1
1.4				848.3	20643	23.01	24	0-1
1.4				824.7	20407	23.34	24	0-1
			0	836.5	20525	23.18	24	0-1
				848.3	20643	23.21	24	0-1
				824.7	20407	23.35	24	0-1
		1 RB	2	836.5	20525	23.15	24	0-1
				848.3	20643	23.26	24	0-1
				824.7	20407	23.30	24	0-1
			5	836.5	20525	23.20	24	0-1
				848.3	20643	23.27	24	0-1
				824.7	20407	22.79	23	0-1
	16-QAM		0	836.5	20525	22.66	23	0-1
				848.3	20643	22.69	23	0-1
				824.7	20407	22.76	23	0-1
		3 RB	2	836.5	20525	22.68	23	0-1
				848.3	20643	22.70	23	0-1
				824.7	20407	22.73	23	0-1
			3	836.5	20525	22.72	23	0-1
				848.3	20643	22.71	23	0-1
				824.7	20407	22.20	23	0-2
		66	RB	836.5	20525	22.02	23	0-2
				848.3	20643	22.07	23	0-2

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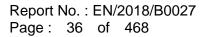


				FDD Band 7				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				2510	20850	23.50	24	0
			0	2535	21100	23.47	24	0
				2560	21350	23.23	24	0
				2510	20850	23.37	24	0
		1 RB	50	2535	21100	23.25	24	0
				2560	21350	23.11	24	0
				2510	20850	23.37	24	0
			99	2535	21100	23.19	24	0
				2560	21350	23.12	24	0
				2510	20850	22.52	23	0-1
	QPSK		0	2535	21100	22.35	23	0-1
				2560	21350	22.26	23	0-1
				2510	20850	22.45	23	0-1
		50 RB	25	2535	21100	22.34	23	0-1
				2560	21350	22.23	23	0-1
				2510	20850	22.51	23	0-1
			50	2535	21100	22.41	23	0-1
				2560	21350	22.36	23	0-1
		100RB		2510	20850	22.57	23	0-1
				2535	21100	22.51	23	0-1
20				2560	21350	22.37	23	0-1
20				2510	20850	22.60	23	0-1
			0	2535	21100	22.44	23	0-1
				2560	21350	22.35	23	0-1
			50	2510	20850	22.65	23	0-1
		1 RB		2535	21100	22.46	23	0-1
				2560	21350	22.33	23	0-1
				2510	20850	22.82	23	0-1
			99	2535	21100	22.71	23	0-1
				2560	21350	22.43	23	0-1
				2510	20850	21.50	22	0-2
	16-QAM		0	2535	21100	21.34	22	0-2
				2560	21350	21.24	22	0-2
				2510	20850	21.47	22	0-2
		50 RB	25	2535	21100	21.39	22	0-2
				2560	21350	21.24	22	0-2
				2510	20850	21.53	22	0-2
			50	2535	21100	21.48	22	0-2
				2560	21350	21.37	22	0-2
l				2510	20850	21.57	22	0-2
		100)RB	2535	21100	21.51	22	0-2
				2560	21350	21.35	22	0-2

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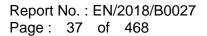
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				FDD Band 7				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				2507.5	20825	23.31	24	0
			0	2535	21100	23.00	24	0
				2562.5	21375	22.99	24	0
				2507.5	20825	23.22	24	0
		1 RB	36	2535	21100	23.18	24	0
				2562.5	21375	22.93	24	0
				2507.5	20825	23.41	24	0
			74	2535	21100	23.39	24	0
				2562.5	21375	23.15	24	0
				2507.5	20825	22.49	23	0-1
	QPSK		0	2535	21100	22.15	23	0-1
				2562.5	21375	22.11	23	0-1
				2507.5	20825	22.29	23	0-1
		36 RB	18	2535	21100	22.16	23	0-1
				2562.5	21375	22.07	23	0-1
				2507.5	20825	22.41	23	0-1
			37	2535	21100	22.23	23	0-1
				2562.5	21375	22.29	23	0-1
			-	2507.5	20825	22.54	23	0-1
		75	RB	2535	21100	22.37	23	0-1
15			-	2562.5	21375	22.26	23	0-1
10				2507.5	20825	22.43	23	0-1
			0	2535	21100	22.42	23	0-1
				2562.5	21375	22.15	23	0-1
				2507.5	20825	22.51	23	0-1
		1 RB	36	2535	21100	22.25	23	0-1
				2562.5	21375	22.31	23	0-1
				2507.5	20825	22.71	23	0-1
			74	2535	21100	22.61	23	0-1
				2562.5	21375	22.38	23	0-1
				2507.5	20825	21.32	22	0-2
	16-QAM		0	2535	21100	21.26	22	0-2
				2562.5	21375	21.21	22	0-2
				2507.5	20825	21.41	22	0-2
		36 RB	18	2535	21100	21.22	22	0-2
				2562.5	21375	21.19	22	0-2
				2507.5	20825	21.41	22	0-2
			37	2535	21100	21.27	22	0-2
				2562.5	21375	21.30	22	0-2
				2507.5	20825	21.55	22	0-2
		75	RB	2535	21100	21.35	22	0-2
				2562.5	21375	21.26	22	0-2

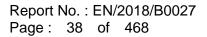
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				FDD Band 7						
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				2505	20800	23.24	24	0		
			0	2535	21100	22.86	24	0		
				2565	21400	22.83	24	0		
				2505	20800	23.06	24	0		
		1 RB	25	2535	21100	23.12	24	0		
				2565	21400	22.81	24	0		
				2505	20800	23.25	24	0		
			49	2535	21100	23.20	24	0		
				2565	21400	22.99	24	0		
				2505	20800	22.37	23	0-1		
	QPSK		0	2535	21100	22.12	23	0-1		
				2565	21400	22.01	23	0-1		
				2505	20800	22.15	23	0-1		
		25 RB	12	2535	21100	22.09	23	0-1		
				2565	21400	21.95	23	0-1		
				2505	20800	22.24	23	0-1		
			25	2535	21100	22.18	23	0-1		
				2565	21400	22.25	23	0-1		
				2505	20800	22.33	23	0-1		
		50	RB	2535	21100	22.27	23	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
10				2565	21400	22.21	23	0-1		
10				2505	20800	22.31	23	0-1		
			0	2535	21100	22.38	23	0-1		
				2565	21400	21.98	23	0-1		
				2505	20800	22.36	23	0-1		
		1 RB	25	2535	21100	22.10	23	0-1		
				2565	21400	22.13	23	0-1		
				2505	20800	22.54	23	-		
			49	2535	21100	22.52	23	0-1		
				2565	21400	22.36	23	0-1		
				2505	20800	21.15	22	0-2		
	16-QAM		0	2535	21100	21.16	22			
				2565	21400	21.07	22	0-2		
				2505	20800	21.27	22	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0		
		25 RB	12	2535	21100	21.06	22			
				2565	21400	21.11	22	0-2		
				2505	20800	21.37	22	0 0 0 0 0 0 0 0-1 0-2 0-2 0-2 0-2 0-2 0-2 0-2 <		
			25	2535	21100	21.14	22			
				2565	21400	21.09	22			
				2505	20800	21.34	22	0-2		
		50	RB	2535	21100	21.14	22	0-2		
			2565	21400	21.16	22	0-2			

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				FDD Band 7						
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				2502.5	20775	23.22	24	0		
			0	2535	21100	23.11	24	0		
				2567.5	21425	23.14	24	0		
				2502.5	20775	23.24	24	0		
		1 RB	12	2535	21100	23.11	24	0		
				2567.5	21425	23.04	24	0		
				2502.5	20775	23.32	24	0		
			24	2535	21100	23.18	24	0		
				2567.5	21425	23.04	24	0		
				2502.5	20775	22.42	23	0-1		
	QPSK		0	2535	21100	22.22	23	0-1		
				2567.5	21425	22.22	23	0-1		
				2502.5	20775	22.38	23	0-1		
		12 RB	6	2535	21100	22.21	23	0-1		
				2567.5	21425	22.23	23	0-1		
				2502.5	20775	22.40	23	Allow ed per 3GPP(dB) 0-1 0-2 0-2 0-2 0-2 0-2 0-2 0-2		
			13	2535	21100	22.25	23	0-1		
				2567.5	21425	22.20	23	0-1		
			-	2502.5	20775	22.39	23	0-1		
		25	RB	2535	21100	22.22	23	0 0		
5				2567.5	21425	22.26	23			
Ū,				2502.5	20775	22.42	23	-		
			0	2535	21100	22.24	23			
				2567.5	21425	22.25	23	-		
				2502.5	20775	22.41	23			
		1 RB	12	2535	21100	22.21	23			
				2567.5	21425	22.31	23			
				2502.5	20775	22.45	23			
			24	2535	21100	22.29	23			
				2567.5	21425	22.28	23	-		
				2502.5	20775	21.43	22			
	16-QAM		0	2535	21100	21.25	22			
				2567.5	21425	21.27	22	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
				2502.5	20775	21.42	22			
		12 RB	6	2535	21100	21.30	22			
				2567.5	21425	21.28	22			
				2502.5	20775	21.45	22	0-1 0-2 0-2		
			13	2535	21100	21.35	22			
				2567.5	21425	21.25	22	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
				2502.5	20775	21.41	22			
		25	RB	2535	21100	21.32	22			
				2567.5	21425	21.29	22	0-2		

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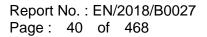
Report No. : EN/2018/B0027 Page: 39 of 468



FDD Band 12											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				704	23060	22.72	24	0			
			0	707.5	23095	22.84	24	0			
				711	23130	22.77	24	0			
				704	23060	22.69	24	0			
		1 RB	25	707.5	23095	22.68	24	0			
				711	23130	22.74	24	0			
				704	23060	22.59	24	0			
			49	707.5	23095	22.66	24	0			
				711	23130	22.67	24	0			
				704	23060	21.84	23	0-1			
	QPSK		0	707.5	23095	21.80	23	0-1			
				711	23130	21.79	23	0-1			
				704	23060	21.82	23	0-1			
		25 RB	12	707.5	23095	21.81	23	0-1			
				711	23130	21.83	23	0-1			
				704	23060	21.85	23	0-1			
			25	707.5	23095	21.82	23	0-1			
				711	23130	21.98	23	0-1			
			-	704	23060	21.88	23	0-1			
		50	RB	707.5	23095	21.93	23	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
10				711	23130	21.98	23				
				704	23060	21.89	23				
			0	707.5	23095	22.01	23				
				711	23130	21.92	23	0-1			
				704	23060	22.07	23				
		1 RB	25	707.5	23095	21.99	23	-			
				711	23130	22.05	23	-			
				704	23060	22.01	23				
			49	707.5	23095	22.11	23				
				711	23130	22.05	23				
				704	23060	20.89	22				
	16-QAM		0	707.5	23095	20.92	22				
				711	23130	20.93	22				
				704	23060	20.85	22				
		25 RB	12	707.5	23095	20.97	22				
				711	23130	20.91	22				
			a -	704	23060	20.97	22				
			25	707.5	23095	20.95	22				
				711	23130	21.03	22				
			DD	704	23060	21.02	22				
	50RB		кВ	707.5	23095	20.97	22	0-2			
				711	23130	21.02	22	0-2			

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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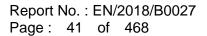




				FDD Band 12						
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				701.5	23035	22.55	24	0		
			0	707.5	23095	22.51	24	0		
				713.5	23155	22.50	24	0		
				701.5	23035	22.62	24	0		
		1 RB	12	707.5	23095	22.57	24	0		
				713.5	23155	22.62	24	0		
				701.5	23035	22.66	24	0		
			24	707.5	23095	22.67	24	0		
				713.5	23155	22.64	24	0		
				701.5	23035	21.63	23	0-1		
	QPSK		0	707.5	23095	21.65	23	0-1		
				713.5	23155	21.73	23	0-1		
				701.5	23035	21.73	23	0-1		
		12 RB	6	707.5	23095	21.75	23	0-1		
				713.5	23155	21.77	23	0-1		
				701.5	23035	21.73	23	0-1		
			13	707.5	23095	21.71	23	0-1		
				713.5	23155	21.85	23	0-1		
			-	701.5	23035	21.80	23	0-1		
		25	RB	707.5	23095	21.73	23	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
5				713.5	23155	21.87	23	0-1		
U				701.5	23035	21.70	23	0-1		
			0	707.5	23095	21.82	23	0-1		
				713.5	23155	21.89	23	0-1		
				701.5	23035	21.91	23	0-1		
		1 RB	12	707.5	23095	21.93	23	0-1		
				713.5	23155	22.03	23	0-1		
				701.5	23035	21.93	23	-		
			24	707.5	23095	21.98	23	0-1		
				713.5	23155	21.90	23	0-1		
				701.5	23035	20.84	22	0-2		
	16-QAM		0	707.5	23095	20.83	22			
				713.5	23155	20.89	22			
				701.5	23035	20.67	22			
		12 RB	6	707.5	23095	20.94	22	0 0		
				713.5	23155	20.84	22			
				701.5	23035	20.81	22			
			13	707.5	23095	20.81	22			
				713.5	23155	20.86	22			
				701.5	23035	20.87	22			
		25	RB	707.5	23095	20.82	22			
		2310		713.5	23155	20.84	22	0-2		

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				FDD Band 12						
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				700.5	23025	22.38	24	0		
			0	707.5	23095	22.34	24	0		
				714.5	23165	22.46	24	0		
				700.5	23025	22.55	24	0		
		1 RB	7	707.5	23095	22.44	24	0		
				714.5	23165	22.59	24	0		
				700.5	23025	22.50	24	0		
			14	707.5	23095	22.55	24	0		
				714.5	23165	22.47	24	0		
				700.5	23025	21.47	23	0-1		
	QPSK		0	707.5	23095	21.63	23	0-1		
				714.5	23165	21.63	23	0-1		
				700.5	23025	21.63	23	0-1		
		8 RB	4	707.5	23095	21.56	23	0-1		
				714.5	23165	21.56	23	0-1		
				700.5	23025	21.70	23	 Allow ed per 3GPP(dB) 0 0-1 0-1 0-1 0-1 0-1 0-1 		
			7	707.5	23095	21.60	23	0-1		
				714.5	23165	21.76	23	0-1		
			-	700.5	23025	21.62	23	0-1		
		15	RB	707.5	23095	21.57	23	0 0 0 0 0 0 0 0 0 0 0 0 0 0-1 0-2 0-2 0-2 0-2 0-2 0-2		
3				714.5	23165	21.70	23	0-1		
U		C		700.5	23025	21.56	23	0-1		
			0	707.5	23095	21.62	23	0-1		
				714.5	23165	21.79	23	0-1		
				700.5	23025	21.70	23	0-1		
		1 RB	7	707.5	23095	21.74	23	0-1		
				714.5	23165	21.99	23			
				700.5	23025	21.75	23	-		
			14	707.5	23095	21.86	23	0-1		
				714.5	23165	21.84	23			
				700.5	23025	20.70	22	0-2		
	16-QAM		0	707.5	23095	20.72	22			
				714.5	23165	20.79	22			
				700.5	23025	20.52	22			
		8 RB	4	707.5	23095	20.85	22			
				714.5	23165	20.76	22	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0-1 0-1		
				700.5	23025	20.74	22			
			7	707.5	23095	20.71	22			
				714.5	23165	20.74	22			
				700.5	23025	20.70	22			
		15	RB	707.5	23095	20.72	22			
				714.5	23165	20.69	22	0-2		

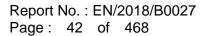
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				FDD Band 12						
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				699.7	23017	22.74	24	0		
			0	707.5	23095	22.75	24	0		
				715.3	23173	22.76	24	0		
				699.7	23017	22.64	24	0		
		1 RB	2	707.5	23095	22.73	24	0		
				715.3	23173	22.79	24	0		
				699.7	23017	22.79	24	0		
			5	707.5	23095	22.80	24	0		
				715.3	23173	22.77	24	0		
				699.7	23017	22.77	23	0-1		
	QPSK		0	707.5	23095	22.83	23	0-1		
				715.3	23173	22.78	23	0-1		
				699.7	23017	22.80	23	0-1		
		3 RB	2	707.5	23095	22.83	23	0-1		
				715.3	23173	22.71	23	0-1		
				699.7	23017	22.81	23	0-1		
			3	707.5	23095	22.79	23	0-1		
				715.3	23173	22.77	23	0-1		
			-	699.7	23017	21.79	23	0-1		
		66	RB	707.5	23095	21.85	23	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
1.4				715.3	23173	21.83	23			
			699.7	23017	22.08	23	0-1			
			0	707.5	23095	22.08	23	0-1		
				715.3	23173	22.15	23	0-1		
				699.7	23017	22.03	23	0-1		
		1 RB	2	707.5	23095	21.98	23	0-1		
				715.3	23173	22.06	23	0-1		
				699.7	23017	22.09	23	0-1		
			5	707.5	23095	22.02	23	0-1		
				715.3	23173	22.10	23			
				699.7	23017	21.84	22			
	16-QAM		0	707.5	23095	21.87	22			
				715.3	23173	21.89	22			
				699.7	23017	21.84	22	0-1 0-1		
		3 RB	2	707.5	23095	21.86	22			
				715.3	23173	21.87	22			
				699.7	23017	21.85	22	0 0 0 0-1		
			3	707.5	23095	21.87	22			
				715.3	23173	21.91	22			
				699.7	23017	20.87	22			
		66	RB	707.5	23095	20.93	22			
				715.3	23173	20.90	22	0-2		

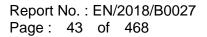
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				FDD Band 13				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
			0	782	23230	23.39	24	0
		1 RB	25	782	23230	23.44	24	0
			49	782	23230	23.43	24	0
	QPSK		0	782	23230	22.63	23	0-1
		25 RB	12	782	23230	22.38	23	0-1
			25	782	23230	22.46	23	0-1
10		50	RB	782	23230	22.55	23	0-1
10			0	782	23230	22.67	23	0-1
		1 RB	25	782	23230	22.75	23	0-1
			49	782	23230	22.79	23	0-1
	16-QAM		0	782	23230	21.64	22	0-2
		25 RB	12	782	23230	21.43	22	0-2
			25	782	23230	21.54	22	0-2
		50	RB	782	23230	21.61	22	0-2

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FDD Band 13											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				779.5	23205	23.37	24	0			
			0	782	23230	23.42	24	0			
				784.5	23255	23.43	24	0			
				779.5	23205	23.41	24	0			
		1 RB	12	782	23230	23.38	24	0			
				784.5	23255	23.37	24	0			
				779.5	23205	23.37	24	0			
			24	782	23230	23.43	24	0			
				784.5	23255	23.41	24	0			
				779.5	23205	22.41	23	0-1			
	QPSK		0	782	23230	22.37	23	0-1			
				784.5	23255	22.41	23	0-1			
				779.5	23205	22.50	23	0-1			
		12 RB	6	782	23230	22.30	23	0-1			
				784.5	23255	22.38		0-1			
				779.5	23205	22.37	23	0-1			
			13	782	23230	22.39	23	0-1			
				784.5	23255	22.38	23	0-1			
				779.5	23205	22.51		0-1			
		25	RB	782				3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0			
5				784.5							
-				779.5							
			0	782	23205 22.51 23 23230 22.36 23 23255 22.40 23 23205 22.65 23 23230 22.85 23 23255 22.70 23						
				784.5				-			
				779.5	23205						
		1 RB	12	782	23230			-			
				784.5	23255			-			
				779.5	23205						
			24	782	23230						
				784.5	23255						
				779.5	23205						
	16-QAM		0	782	23230	-					
				784.5	23255						
		10 55		779.5	23205						
		12 RB	6	782	23230						
				784.5	23255						
			10	779.5	23205						
			13	782	23230						
				784.5	23255		22.30 23 0- 22.38 23 0- 22.37 23 0- 22.39 23 0- 22.38 23 0- 22.39 23 0- 22.38 23 0- 22.38 23 0- 22.36 23 0- 22.40 23 0- 22.40 23 0- 22.65 23 0- 22.70 23 0- 22.75 23 0- 22.75 23 0- 22.75 23 0- 22.75 23 0- 22.67 23 0- 22.67 23 0- 22.67 23 0- 21.50 22 0- 21.43 22 0- 21.50 22 0- 21.57 22 0- 21.46 22 0-				
		05	DD	779.5	23205			0-2			
		25	RB	782	23230			0-2			
			-	784.5	23255	21.45	22	0-2			

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FDD Band 17											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				709	23780	23.08	24	0			
			0	710	23790	23.06	24	0			
				711	23800	22.97	24	0			
				709	23780	22.88	24	0			
		1 RB	25	710	23790	22.85	24	0			
				711	23800	22.85	24	0			
				709	23780	22.92	24	0			
			49	710	23790	22.85	24	0			
				711	23800	22.80	24	0			
				709	23780	22.00	23	0-1			
	QPSK		0	710	23790	22.00	23	0-1			
				711	23800	21.93	23	0-1			
				709	23780	21.97	23	0-1			
		25 RB	12	710	23790	21.96	23	0-1			
				711	23800	21.95	23	0-1			
				709	23780	22.06	23	0-1			
			25	710	23790	22.08	23	0-1			
				711	23800	22.03	23	0-1			
			-	709	23780	22.07	23	0-1			
		50	RB	710	23790	22.06	23	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0			
10				711	23800	22.08	23				
10				709	23780	22.20	23	0-1			
			0	710	23790	22.10	23				
				711	23800	22.06	23	0-1			
				709	23780	22.09	23				
		1 RB	25	710	23790	22.15	23	-			
				711	23800	22.15	23				
				709	23780	22.40	23				
			49	710	23790	22.34	23	-			
				711	23800	22.25	23				
				709	23780	21.10	22				
	16-QAM		0	710	23790	21.10	22				
				711	23800	21.00	22				
				709	23780	21.10	22				
		25 RB	12	710	23790	21.04	22				
				711	23800	21.01	22				
			05	709	23780	21.16	22				
			25	710	23790	21.15	22				
				711	23800	21.15	22				
		50PP		709	23780	21.11	22				
	50R	КB	710	23790	21.10	22	0-2				
			-	711	23800	21.16	22	0-2			

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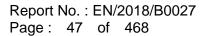
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				FDD Band 17					
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)	
				706.5	23755	22.89	24	0	
			0	710	23790	22.79	24	0	
				713.5	23825	22.83	24	0	
				706.5	23755	22.83	24	0	
		1 RB	12	710	23790	22.76	24	0	
				713.5	23825	22.89	24	0	
				706.5	23755	22.84	24	0	
			24	710	23790	22.90	24	0	
				713.5	23825	22.91	24	0	
				706.5	23755	21.92	23	0-1	
	QPSK		0	710	23790	21.87	23	0-1	
				713.5	23825	21.86	23	0-1	
				706.5	23755	21.95	23	0-1	
		12 RB	6	710	23790	21.83	23	0-1	
				713.5	23825	21.90	23	0-1	
				706.5	23755	21.95	23	0-1	
			13	710	23790	21.94	23	0-1	
				713.5	23825	22.00	23	0-1	
			-	706.5	23755	21.95	23	0-1	
		25	RB	710	23790	21.89	23	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0	
5				713.5	23825	21.92	23	0-1	
5				706.5	23755	22.34	23	0-1	
			0	710	23790	22.00	23	0-1	
				713.5	23825	22.22	23	0-1	
				706.5	23755	22.17	23	0-1	
		1 RB	12	710	23790	22.10	23	0-1	
				713.5	23825	22.31	23	0-1	
				706.5	23755	22.18	23	0-1	
			24	710	23790	22.11	23	0-1	
				713.5	23825	22.15	23	0-1	
				706.5	23755	20.97	22		
	16-QAM		0	710	23790	20.94	22		
				713.5	23825	20.89	22		
				706.5	23755	21.00	22	3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0	
		12 RB	6	710	23790	20.91	22		
				713.5	23825	20.97	22		
				706.5	23755	21.00	22	0 0-1 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 <t< td=""></t<>	
			13	710	23790	20.99	22		
				713.5	23825	21.02	22		
				706.5	23755	21.00	22		
		25RB		710	23790	20.96	22		
				713.5	23825	20.94	22	0-2	

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FDD Band 26											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				821.5	26765	22.91	24	0			
			0	831.5	26865	23.14	24	0			
				841.5	26965	22.95	24	0			
				821.5	26765	23.08	24	0			
		1 RB	36	831.5	26865	23.08	24	0			
				841.5	26965	22.98	24	0			
				821.5	26765	23.05	24	0			
			74	831.5	26865	23.04	24	0			
				841.5	26965	23.07	24	0			
				821.5	26765	22.07	23	0-1			
	QPSK		0	831.5	26865	22.07	23	0-1			
				841.5	26965	22.02	23	0-1			
				821.5	26765	22.16	23	0-1			
		36 RB	18	831.5	26865	22.15	23	0-1			
				841.5	26965	22.00	23	0-1			
				821.5	26765	22.19	23	0-1			
			37	831.5	26865	22.05	23	0-1			
				841.5	26965	21.99	23	0-1			
			-	821.5	26765	22.23	23	0-1			
		75	RB	831.5	26865	22.24	23	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
15				841.5	26965	22.11	23				
10				821.5	26765	22.01	23	0-1			
			0	831.5	26865	22.32	23	0-1			
				841.5	26965	22.34	23	0-1			
				821.5	26765	22.22	23	0-1			
		1 RB	36	831.5	26865	22.17	23	0-1			
				841.5	26965	22.18	23	0-1			
				821.5	26765	22.20	23	0-1			
			74	831.5	26865	22.15	23	0-1			
				841.5	26965	22.21	23	0-1			
				821.5	26765	21.14	22	0-2			
	16-QAM		0	831.5	26865	21.18	22	0-2			
				841.5	26965	21.09	22				
				821.5	26765	21.20	22	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
		36 RB	18	831.5	26865	21.22	22	0-2			
				841.5	26965	21.05	22				
				821.5	26765	21.30	22	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
			37	831.5	26865	21.12	22				
				841.5	26965	21.08	22				
				821.5	26765	21.35	22	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
		75	RB	831.5	26865	21.32	22				
					841.5	26965	21.19	22	0-2		

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FDD Band 26												
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)				
				819	26740	22.74	24	0				
			0	831.5	26865	23.00	24	0				
				844	26990	22.89	24	0				
				819	26740	23.04	24	0				
		1 RB	25	831.5	26865	22.98	24	0				
				844	26990	22.81	24	0				
				819	26740	22.95	24	0				
			49	831.5	26865	23.00	24	0				
				844	26990	23.01	24	0				
				819	26740	21.99	23	0-1				
	QPSK		0	831.5	26865	22.03	23	0-1				
				844	26990	21.94	23	0-1				
				819	26740	22.14	23	0-1				
		25 RB	12	831.5	26865	22.13	23	0-1				
				844	26990	21.96	23	0-1				
				819	26740	22.08	23	0-1				
			25	831.5	26865	21.99	23	0-1				
				844	26990	21.81	23	0-1				
			-	819	26740	22.04	23	0-1				
		50	RB	831.5	26865	22.21	23	0-1				
10				844	26990	22.02	23	0-1 0-1 0-1 0-1 0-1				
10				819	26740	21.94	23	0-1				
			0	831.5	26865	22.14	23					
				844	26990	22.18	23	0-1				
				819	26740	22.11	23					
		1 RB	25	831.5	26865	22.10	23	-				
				844	26990	22.08	23	0-1				
				819	26740	22.05	23	0-1				
			49	831.5	26865	22.02	23	0-1				
				844	26990	22.08	23	0-1				
				819	26740	20.96	22	0-2				
	16-QAM		0	831.5	26865	21.13	22	0-2				
				844	26990	20.95	22	0-2				
				819	26740	21.04	22	0-2				
		25 RB	12	831.5	26865	21.04	22	0-2				
				844	26990	20.98	22	0-2				
			05	819	26740	21.14	22	0-2				
			25	831.5	26865	20.99	22	0-2				
				844	26990	20.98	22	0-2				
		50	DD	819	26740	21.31	22	0-2				
	50R	КB	831.5	26865	21.18	22	0-2					
				844	26990	21.09	22	0-2				

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				FDD Band 26							
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				816.5	26715	22.63	24	0			
			0	831.5	26865	22.87	24	0			
				846.5	27015	22.72	24	0			
				816.5	26715	22.99	24	0			
		1 RB	12	831.5	26865	22.90	24	0			
				846.5	27015	22.77	24	0			
				816.5	26715	22.78	24	0			
			24	831.5	26865	22.86	24	0			
				846.5	27015	22.80	24	0			
				816.5	26715	21.79	23	0-1			
	QPSK		0	831.5	26865	22.01	23	0-1			
				846.5	27015	21.92	23	0-1			
				816.5	26715	22.03	23	0-1			
		12 RB	6	831.5	26865	21.95	23	0-1			
				846.5	27015	21.80	23	0-1			
				816.5	26715	21.90	23	ax. Allow ed per 3GPP(dB) 0 0			
			13	831.5	26865	21.84	23	0-1			
				846.5	27015	21.74	23				
				816.5	26715	21.94	23				
		25	RB	831.5	26865	22.06	23	0 0 0-1			
5			r	846.5	27015	21.93	23				
_		0	816.5	26715	21.91	23	-				
			0	831.5	26865	22.09	23				
				846.5	27015	22.00	23	-			
				816.5	26715	22.06	23				
		1 RB	12	831.5	26865	22.07	23	-			
				846.5	27015	22.06	23				
				816.5	26715	21.86	23	Allow ed per 3GPP(dB) 0 <td< td=""></td<>			
			24	831.5	26865	21.92	23				
				846.5	27015	21.94	23				
	40.0414		0	816.5	26715	20.88	22				
	16-QAM		0	831.5	26865	21.03	22				
				846.5	27015	20.90	22				
		10 00	e	816.5	26715	20.94	22				
		12 RB	6	831.5	26865	20.96	22				
				846.5 816.5	27015	20.88	22				
			13	816.5 831.5	26715	21.03 20.96	22 22	0-1 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2			
			13	831.5 846.5	26865 27015						
				846.5 816.5	27015	20.82 21.22	22 22				
		25	RB	831.5	26715	21.22	22				
	25R			846.5	20005	20.90	22				
					2/010	20.90	22	0-2			

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				FDD Band 26							
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				815.5	26705	22.46	24	0			
			0	831.5	26865	22.75	24	0			
				847.5	27025	22.61	24	0			
				815.5	26705	22.78	24	0			
		1 RB	7	831.5	26865	22.84	24	0			
				847.5	27025	22.57	24	0			
				815.5	26705	22.74	24	0			
			14	831.5	26865	22.79	24	0			
				847.5	27025	22.66	24	0			
				815.5	26705	21.59	23	0-1			
	QPSK		0	831.5	26865	21.88	23	0-1			
				847.5	27025	21.72	23	0-1			
				815.5	26705	21.90	23	0-1			
		8 RB	4	831.5	26865	21.92	23	0-1			
				847.5	27025	21.75	23	0-1			
				815.5	26705	21.80	23	Allow ed per 3GPP(dB) 0			
			7	831.5	26865	21.70	23	0-1			
				847.5	27025	21.70	23	0-1			
			-	815.5	26705	21.78	23	0-1			
		15	RB	831.5	26865	21.96	23	0 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-			
3				847.5	27025	21.89	23				
Ũ				815.5	26705	21.83	23	0-1			
			0	831.5	26865	21.89	23				
				847.5	27025	21.87	23	0-1			
				815.5	26705	21.85	23	0-1			
		1 RB	7	831.5	26865	22.04	23	-			
				847.5	27025	21.85	23				
				815.5	26705	21.77	23	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0-1 0-2 0-2 0-2 0-2 0			
			14	831.5	26865	21.78	23				
				847.5	27025	21.80	23				
				815.5	26705	20.84	22				
	16-QAM		0	831.5	26865	20.85	22				
				847.5	27025	20.86	22				
		0.55		815.5	26705	20.78	22				
		8 RB	4	831.5	26865	20.79	22				
				847.5	27025	20.80	22				
			-	815.5	26705	20.94	22	0-1 0-1 0-1 0-1 0-1 0-1 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2			
			7	831.5	26865	20.77	22				
				847.5	27025	20.72	22				
		4-	DD	815.5	26705	21.19	22				
	15R		κĎ	831.5	26865	20.94	22				
			-	847.5	27025	20.87	22	0-2			

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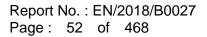


				FDD Band 26						
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				814.7	26697	22.92	24	0		
			0	831.5	26865	23.05	24	0		
				848.3	27033	23.08	24	0		
				814.7	26697	22.89	24	0		
		1 RB	2	831.5	26865	23.04	24	0		
				848.3	27033	23.07	24	0		
				814.7	26697	22.99	24	0		
			5	831.5	26865	23.05	24	0		
				848.3	27033	23.10	24	0		
				814.7	26697	22.90	23	0-1		
	QPSK		0	831.5	26865	22.89	23	0-1		
				848.3	27033	22.91	23	0-1		
				814.7	26697	22.88	23	0-1		
		3 RB	2	831.5	26865	22.98	23	0-1		
				848.3	27033	22.98	23	0-1		
				814.7	26697	22.91	23	 Allow ed per 3GPP(dB) 0 0<!--</td-->		
			3	831.5	26865	22.86	23	0-1		
				848.3	27033	22.99	23	0-1		
			-	814.7	26697	21.92	23	0-1		
		6F	RB	831.5	26865	22.06	23	0 0 0 0 0 0 0 0 0-1		
1.4				848.3	27033	22.10	23	0-1		
1.4				814.7	26697	22.27	23	0-1		
			0	831.5	26865	22.28	23			
				848.3	27033	22.38	23	0-1		
				814.7	26697	22.24	23	0-1		
		1 RB	2	831.5	26865	22.33	23	0-1		
				848.3	27033	22.46	23	0-1		
				814.7	26697	22.27	23	0-1		
			5	831.5	26865	22.41	23	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0-1		
				848.3	27033	22.49	23			
				814.7	26697	21.80	22			
	16-QAM		0	831.5	26865	21.94	22			
				848.3	27033	21.95	22			
				814.7	26697	21.77	22			
		3 RB	2	831.5	26865	21.99	22	0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1		
				848.3	27033	21.94	22			
				814.7	26697	21.79	22	0 0 0-1 0-1 0-1 0-1 0-1 0-1 0-1		
			3	831.5	26865	22.00	22			
		L		848.3	27033	21.95	22			
				814.7	26697	21.02	22			
	66		ΚB	831.5	26865	21.20	22			
				848.3	27033	21.20	22	0-2		

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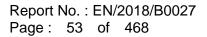
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				FDD Band 30					
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)	
			0	2310	27710	19.95	20	0	
		1 RB	25	2310	27710	19.89	20	0	
			49	2310	27710	19.87	20	0	
	QPSK		0	2310	27710	18.98	19	0-1	
		25 RB	12	2310	27710	18.99	19	0-1	
			25	2310	27710	18.89	19	0-1	
10		50	RB	2310	27710	18.93	19	0-1	
10			0	2310	27710	18.99	19	0-1	
		1 RB	25	2310	27710	18.84	19	0-1	
			49	2310	27710	18.93	19	0-1	
	16-QAM		0	2310	27710	17.90	18	0-2	
		25 RB	12	2310	27710	17.91	18	0-2	
			25	2310	27710	17.91	18	0-2	
	-	-	50	RB	2310	27710	17.93	18	0-2

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				FDD Band 30						
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				2307.5	27685	19.60	20	0		
			0	2310	27710	19.70	20	0		
				2312.5	27735	19.69	20	0		
				2307.5	27685	19.64	20	0		
		1 RB	12	2310	27710	19.65	20	0		
				2312.5	27735	19.63	20	0		
				2307.5	27685	19.74	20	0		
			24	2310	27710	19.63	20	0		
				2312.5	27735	19.70	20	0		
				2307.5	27685	18.78	19	0-1		
	QPSK		0	2310	27710	18.75	19	0-1		
				2312.5	27735	18.74	19	0-1		
				2307.5	27685	18.76	19	0-1		
		12 RB	6	2310	27710	18.73	19	0-1		
				2312.5	27735	18.79	19	0-1		
				2307.5	27685	18.81	19	0-1		
			13	2310	27710	18.73	19	0-1		
				2312.5	27735	18.81	19	0-1		
			-	2307.5	27685	18.76	19	0-1		
		25	RB	2310	27710	18.73	19	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
5				2312.5	27735	18.78	19	0-1		
U				2307.5	27685	18.94	19	0-1		
			0	2310	27710	18.91	19	0-1		
				2312.5	27735	18.89	19	0-1		
				2307.5	27685	18.98	19	0-1		
		1 RB	12	2310	27710	18.84	19	0-1		
				2312.5	27735	18.91	19	0-1		
				2307.5	27685	18.92	19	-		
			24	2310	27710	18.95	19			
				2312.5	27735	18.92	19			
				2307.5	27685	17.86	18	0-2		
	16-QAM		0	2310	27710	17.83	18			
				2312.5	27735	17.76	18			
				2307.5	27685	17.81	18			
		12 RB	6	2310	27710	17.79	18	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
				2312.5	27735	17.82	18			
				2307.5	27685	17.89	18			
			13	2310	27710	17.76	18			
				2312.5	27735	17.82	18			
				2307.5	27685	17.81	18			
	25	25	RB	2310	27710	17.79	18			
			2312.5	27735	17.82	18	0-2			

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				FDD Band 66							
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				1720	132072	23.18	24	0			
			0	1745	132322	23.69	24	0			
				1770	132572	23.71	24	0			
				1720	132072	23.52	24	0			
		1 RB	50	1745	132322	23.43	24	0			
				1770	132572	23.23	24	0			
				1720	132072	23.51	24	0			
			99	1745	132322	23.25	24	0			
				1770	132572	23.55	24	0			
				1720	132072	22.56	23	0-1			
	QPSK		0	1745	132322	22.34	23	0-1			
				1770	132572	22.38	23	0-1			
				1720	132072	22.50	23	0-1			
		50 RB	25	1745	132322	22.47	23	0-1			
				1770	132572	22.26	23	0-1			
				1720	132072	22.37	23	0-1			
			50	1745	132322	22.65	23	0-1			
				1770	132572	22.42	23	0-1			
			-	1720	132072	22.63	23	0-1			
		100)RB	1745	132322	22.64	23	4 0 4 0 4 0 4 0 4 0 4 0 3 0-1			
20				1770	132572	22.55	23	0-1			
20				1720	132072	22.72	23	0-1			
			0	1745	132322	22.66	23				
				1770	132572	22.76	23	0-1			
				1720	132072	22.72	23				
		1 RB	50	1745	132322	22.65	23	-			
				1770	132572	22.40	23	-			
				1720	132072	22.45	23				
			99	1745	132322	22.90	23	-			
				1770	132572	22.89	23				
			-	1720	132072	21.50	22				
	16-QAM		0	1745	132322	21.30	22				
				1770	132572	21.33	22				
				1720	132072	21.46	22				
		50 RB	25	1745	132322	21.42	22				
				1770	132572	21.17	22				
			50	1720	132072	21.31	22	0 0-1			
			50	1745	132322	21.58	22				
				1770	132572	21.35	22				
		100	חחי	1720	132072	21.62	22				
		100)RB	1745	132322	21.66	22				
				1770	132572	21.53	22	0-2			

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				FDD Band 66							
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				1717.5	132047	23.33	24	0			
			0	1745	132322	23.21	24	0			
				1772.5	132597	23.53	24	0			
				1717.5	132047	23.48	24	0			
		1 RB	36	1745	132322	23.24	24	0			
				1772.5	132597	23.07	24	0			
				1717.5	132047	23.11	24	0			
			74	1745	132322	23.61	24	0			
				1772.5	132597	23.52	24	0			
				1717.5	132047	22.36	23	0-1			
	QPSK		0	1745	132322	22.22	23	0-1			
				1772.5	132597	22.23	23	0-1			
				1717.5	132047	22.39	23	0-1			
		36 RB	18	1745	132322	22.28	23	0-1			
				1772.5	132597	22.19	23	0-1			
				1717.5	132047	22.26	23	0-1			
			37	1745	132322	22.62	23	0-1			
				1772.5	132597	22.27	23	0-1			
			-	1717.5	132047	22.45	23	0-1			
		75	RB	1745	132322	22.61	23	0 0			
15				1772.5	132597	22.40	23				
10				1717.5	132047	22.63	23	0-1			
			0	1745	132322	22.60	23				
				1772.5	132597	22.63	23	0-1			
				1717.5	132047	22.53	23				
		1 RB	36	1745	132322	22.61	23				
				1772.5	132597	22.32	23				
				1717.5	132047	22.42	23				
			74	1745	132322	22.73	23				
				1772.5	132597	22.78	23				
				1717.5	132047	21.37	22				
	16-QAM		0	1745	132322	21.28	22				
				1772.5	132597	21.19	22				
				1717.5	132047	21.36	22	0 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-			
		36 RB	18	1745	132322	21.32	22				
				1772.5	132597	21.14	22				
			e=	1717.5	132047	21.18	22				
			37	1745	132322	21.42	22	0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-2			
				1772.5	132597	21.25	22				
			DD	1717.5	132047	21.51	22				
		75	RB	1745	132322	21.57	22				
				1772.5	132597	21.48	22	0-2			

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				FDD Band 66						
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				1715	132022	23.18	24	0		
			0	1745	132322	23.03	24	0		
				1775	132622	23.33	24	0		
				1715	132022	23.39	24	0		
		1 RB	25	1745	132322	23.06	24	0		
				1775	132622	23.02	24	0		
				1715	132022	23.02	24	0		
			49	1745	132322	23.57	24	0		
				1775	132622	23.41	24	0		
				1715	132022	22.17	23	0-1		
	QPSK		0	1745	132322	22.18	23	0-1		
				1775	132622	22.07	23	0-1		
				1715	132022	22.21	23	0-1		
		25 RB	12	1745	132322	22.12	23	0-1		
				1775	132622	22.16	23	0-1		
				1715	132022	22.15	23	0-1		
			25	1745	132322	22.48	23	0-1		
				1775	132622	22.19	23	0-1		
			-	1715	132022	22.36	23	0-1		
		50	RB	1745	132322	22.55	23	0 0 0 0 0 0 0 0 0 0 0 0 0 0-1 0-2 0-2 0-2 0-2 0-2 0-2		
10			-	1775	132622	22.31	23	0-1		
10				1715	132022	22.57	23	0-1		
			0	1745	132322	22.50	23			
				1775	132622	22.54	23	0-1		
				1715	132022	22.50	23	0-1		
		1 RB	25	1745	132322	22.55	23	-		
				1775	132622	22.25	23	-		
				1715	132022	22.32	23			
			49	1745	132322	22.70	23	-		
				1775	132622	22.57	23			
			_	1715	132022	21.33	22			
	16-QAM		0	1745	132322	21.08	22			
				1775	132622	21.09	22			
				1715	132022	21.18	22	0-1 0-2 0-2 0-2		
		25 RB	12	1745	132322	21.17	22			
				1775	132622	21.07	22			
			05	1715	132022	21.11	22	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
			25	1745	132322	21.31	22			
				1775	132622	21.05	22			
		50RB		1715	132022	21.45	22			
		50	КB	1745	132322	21.46	22			
				1775	132622	21.28	22	0-2		

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				FDD Band 66				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1712.5	131997	23.04	24	0
			0	1745	132322	22.82	24	0
				1777.5	132647	23.20	24	0
				1712.5	131997	23.35	24	0
		1 RB	12	1745	132322	22.93	24	0
				1777.5	132647	22.81	24	0
				1712.5	131997	22.81	24	0
			24	1745	132322	23.53	24	0
				1777.5	132647	23.20	24	0
				1712.5	131997	22.02	23	0-1
	QPSK		0	1745	132322	22.12	23	0-1
				1777.5	132647	22.03	23	0-1
				1712.5	131997	22.07	23	0-1
		12 RB	6	1745	132322	21.95	23	0-1
				1777.5	132647	22.04	23	0-1
				1712.5	131997	21.94	23	 Allow ed per 3GPP(dB) 0 0-1 0-1 0-1 0-1 0-1
			13	1745	132322	22.32	23	0-1
				1777.5	132647	22.08	23	0-1
			-	1712.5	131997	22.23	23	0-1
		25	RB	1745	132322	22.43	23	0-1
5				1777.5	132647	22.28	23	0-1
5				1712.5	131997	22.51	23	0-1
			0	1745	132322	22.40	23	0-1
				1777.5	132647	22.49	23	0-1
				1712.5	131997	22.31	23	0-1
		1 RB	12	1745	132322	22.41	23	0-1
				1777.5	132647	22.07	23	0-1
				1712.5	131997	22.13	23	0-1
			24	1745	132322	22.58	23	0-1
				1777.5	132647	22.41	23	0-1
				1712.5	131997	21.16	22	0-2
	16-QAM		0	1745	132322	20.88	22	
				1777.5	132647	21.07	22	0-2
				1712.5	131997	21.08	22	0-2
		12 RB	6	1745	132322	21.11	22	0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-2
				1777.5	132647	20.97	22	
				1712.5	131997	20.99	22	0 0 0 0 0 0-1 0-1 0-1 0-1 0-1
			13	1745	132322	21.28	22	0-2
				1777.5	132647	20.88	22	0 0
				1712.5	131997	21.27	22	
		25	RB	1745	132322	21.43	22	
				1777.5	132647	21.21	22	0-2

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				FDD Band 66						
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				1711.5	131987	22.88	24	0		
			0	1745	132322	22.76	24	0		
				1778.5	132657	23.16	24	0		
				1711.5	131987	23.15	24	0		
		1 RB	7	1745	132322	22.72	24	0		
				1778.5	132657	22.72	24	0		
				1711.5	131987	22.79	24	0		
			14	1745	132322	23.32	24	0		
				1778.5	132657	23.16	24	0		
				1711.5	131987	21.82	23	0-1		
	QPSK		0	1745	132322	22.04	23	0-1		
				1778.5	132657	21.91	23	0-1		
				1711.5	131987	21.88	23	0-1		
		8 RB	4	1745	132322	21.74	23	0-1		
				1778.5	132657	21.90	23	0-1		
				1711.5	131987	21.81	23	 Allow ed per 3GPP(dB) 0 0-1 0-1 0-1 0-1 0-1 0-1 		
			7	1745	132322	22.20	23	0-1		
				1778.5	132657	22.03	23	0-1		
			-	1711.5	131987	22.13	23	0-1		
		15	RB	1745	132322	22.22	23	0 0 0 0 0 0 0 0 0 0 0 0 0 0-1 0-2 0-2 0-2 0-2 0-2		
3				1778.5	132657	22.18	23	0-1		
5				1711.5	131987	22.48	23	0-1		
			0	1745	132322	22.34	23	0-1		
				1778.5	132657	22.36	23	0-1		
				1711.5	131987	22.20	23	0-1		
		1 RB	7	1745	132322	22.29	23	0-1		
				1778.5	132657	21.90	23	0-1		
				1711.5	131987	22.04	23	0-1		
			14	1745	132322	22.40	23	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0		
				1778.5	132657	22.26	23	0-1		
				1711.5	131987	20.98	22	0-2		
	16-QAM		0	1745	132322	20.68	22			
				1778.5	132657	20.89	22			
				1711.5	131987	20.88	22			
		8 RB	4	1745	132322	20.92	22			
				1778.5	132657	20.91	22			
			_	1711.5	131987	20.96	22			
			7	1745	132322	21.23	22			
				1778.5	132657	20.85	22	0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1		
				1711.5	131987	21.16	22			
	15R		КB	1745	132322	21.28	22			
				1778.5	132657	21.03	22	0-2		

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				FDD Band 66						
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				1710.7	131979	23.38	24	0		
			0	1745	132322	23.46	24	0		
				1779.3	132665	23.69	24	0		
				1710.7	131979	23.37	24	0		
		1 RB	2	1745	132322	23.42	24	0		
				1779.3	132665	23.66	24	0		
				1710.7	131979	23.43	24	0		
			5	1745	132322	23.45	24	0		
				1779.3	132665	23.66	24	0		
				1710.7	131979	22.98	23	0		
	QPSK		0	1745	132322	22.97	23	0		
				1779.3	132665	22.87	23	0		
				1710.7	131979	22.99	23	0		
		3 RB	2	1745	132322	22.76	23	0		
				1779.3	132665	22.93	23	0		
				1710.7	131979	22.78	23	0		
			3	1745	132322	22.90	23	0		
				1779.3	132665	22.98	23	0		
			-	1710.7	131979	22.20	23	0-1		
		61	RB	1745	132322	22.29	23	0 0		
1.4				1779.3	132665	22.50	23	0-1		
1.4				1710.7	131979	22.69	23	0-1		
			0	1745	132322	22.85	23	0-1		
				1779.3	132665	22.97	23	0-1		
				1710.7	131979	22.55	23	0-1		
		1 RB	2	1745	132322	22.81	23	0-1		
				1779.3	132665	22.94	23	0-1		
				1710.7	131979	22.68	23	0-1		
			5	1745	132322	22.92	23	0-1		
				1779.3	132665	22.91	23			
				1710.7	131979	22.21	23	0-1		
	16-QAM		0	1745	132322	22.24	23			
				1779.3	132665	22.57	23	0-1		
				1710.7	131979	22.33	23	0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1		
		3 RB	2	1745	132322	22.36	23			
				1779.3	132665	22.64	23	0-1		
				1710.7	131979	22.28	23	3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0		
			3	1745	132322	22.41	23	0-1		
				1779.3	132665	22.58	23	0 0		
				1710.7	131979	21.22	22			
			RB	1745	132322	21.29	22			
				1779.3	132665	21.49	22	0-2		

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				TDD Band 38							
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				2580	37850	23.68	24	0			
			0	2595	38000	23.57	24	0			
				2610	38150	23.55	24	0			
				2580	37850	23.64	24	0			
		1 RB	50	2595	38000	23.54	24	0			
				2610	38150	23.52	24	0			
				2580	37850	23.62	24	0			
			99	2595	38000	23.58	24	0			
				2610	38150	23.51	24	0			
				2580	37850	22.58	23	0-1			
	QPSK		0	2595	38000	22.54	23	0-1			
				2610	38150	22.47	23	0-1			
				2580	37850	22.51	23	0-1			
		50 RB	25	2595	38000	22.53	23	0-1			
				2610	38150	22.48	23	0-1			
				2580	37850	22.51	23	0-1			
			50	2595	38000	22.55	23	0-1			
				2610	38150	22.49	23	0-1			
				2580	37850	22.54	23	0-1			
		100)RB	2595	38000	22.52	23	0-1			
20				2610	38150	22.50	23	0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1			
20				2580	37850	22.54	23				
			0	2595	38000	22.39	23				
				2610	38150	22.40	23				
				2580	37850	22.45	23				
		1 RB	50	2595	38000	22.36	23				
				2610	38150	22.44	23				
				2580	37850	22.45	23				
			99	2595	38000	22.52	23				
				2610	38150	22.45	23				
				2580	37850	21.54	22				
	16-QAM		0	2595	38000	21.42	22				
				2610	38150	21.32	22				
		F0 55	67	2580	37850	21.44	22				
		50 RB	25	2595	38000	21.37	22				
				2610	38150	21.42	22				
			50	2580	37850	21.45	22	Max. Allow ed per 3GPP(dB) 0 0			
			50	2595	38000	21.51	22				
				2610	38150	21.39	22				
		4.04	ססי	2580	37850	21.46	22				
		100)RB	2595	38000	21.48	22				
L				2610	38150	21.38	22	0-2			

LTE TDD Band 38 / Band 41 power table (Full power):

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				TDD Band 38				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				2577.5	37825	23.51	24	0
			0	2595	38000	23.42	24	0
				2612.5	38175	23.52	24	0
				2577.5	37825	23.47	24	0
		1 RB	36	2595	38000	23.41	24	0
				2612.5	38175	23.47	24	0
				2577.5	37825	23.55	24	0
			74	2595	38000	23.38	24	0
				2612.5	38175	23.45	24	0
				2577.5	37825	22.46	23	0-1
	QPSK		0	2595	38000	22.32	23	0-1
				2612.5	38175	22.42	23	0-1
				2577.5	37825	22.47	23	0-1
		36 RB	18	2595	38000	22.46	23	0-1
				2612.5	38175	22.41	23	0-1
				2577.5	37825	22.37	23	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
			37	2595	38000	22.45	23	0-1
				2612.5	38175	22.31	23	0-1
			-	2577.5	37825	22.46	23	0-1
		75	RB	2595	38000	22.33	23	0-1
15				2612.5	38175	22.28	23	0-1
15				2577.5	37825	22.37	23	0-1
			0	2595	38000	22.29	23	0-1
				2612.5	38175	22.26	23	0-1
				2577.5	37825	22.35	23	0-1
		1 RB	36	2595	38000	22.29	23	0-1
				2612.5	38175	22.24	23	0-1
				2577.5	37825	22.25	23	
			74	2595	38000	22.42	23	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0
				2612.5	38175	22.28	23	0-1
				2577.5	37825	21.39	22	0-2
	16-QAM		0	2595	38000	21.21	22	
				2612.5	38175	21.10	22	0-2
				2577.5	37825	21.40	22	0-1 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2
		36 RB	18	2595	38000	21.29	22	
				2612.5	38175	21.31	22	
				2577.5	37825	21.40	22	
			37	2595	38000	21.30	22	0 0 0-1 0-1 0-1 0-1 0-1 0-1 0-1
				2612.5	38175	21.31	22	0-2
			2577.5	37825	21.27	22		
		75RB		2595 2612.5	38000	21.31	22	
					38175	21.23	22	0-2

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				TDD Band 38				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				2575	37800	23.62	24	0
			0	2595	38000	23.50	24	0
				2615	38200	23.35	24	0
				2575	37800	23.53	24	0
		1 RB	25	2595	38000	23.48	24	0
				2615	38200	23.39	24	0
				2575	37800	23.47	24	0
			49	2595	38000	23.44	24	0
				2615	38200	23.32	24	0
				2575	37800	22.38	23	0-1
	QPSK		0	2595	38000	22.41	23	0-1
				2615	38200	22.30	23	0-1
				2575	37800	22.35	23	0-1
		25 RB	12	2595	38000	22.39	23	0-1
				2615	38200	22.33	23	0-1
				2575	37800	22.45	23	Allow ed per 3GPP(dB) 0
			25	2595	38000	22.46	23	
				2615	38200	22.30	23	0-1
				2575	37800	22.32	23	0-1
		50	RB	2595	38000	22.32	23	0-1
10				2615	38200	22.42	23	-
			0	2575	37800	22.32	23	0-1
			0	2595	38000	22.18	23	-
				2615	38200	22.22	23	0-1
				2575	37800	22.29	23	
		1 RB	25	2595	38000	22.18	23	-
				2615	38200	22.41	23	
				2575	37800	22.28	23	-
			49	2595	38000	22.33	23	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0-1 0-2 0-2
				2615	38200	22.42	23	
				2575	37800	21.34	22	-
	16-QAM		0	2595	38000	21.33	22	
				2615	38200	21.14	22	
				2575	37800	21.34	22	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		25 RB	12	2595	38000	21.33	22	
				2615	38200	21.26	22	
			a-	2575	37800	21.30	22	0 0
			25	2595	38000	21.47	22	
				2615	38200	21.18	22	3GPP(dB) 0
			DD	2575	37800	21.28	22	
		50RB		2595 2615	38000	21.29	22	
					38200	21.30	22	0-2

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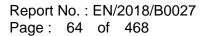
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				TDD Band 38				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				2572.5	37775	23.61	24	0
			0	2595	38000	23.44	24	0
				2617.5	38225	23.37	24	0
				2572.5	37775	23.59	24	0
		1 RB	12	2595	38000	23.36	24	0
				2617.5	38225	23.48	24	0
				2572.5	37775	23.59	24	0
			24	2595	38000	23.55	24	0
				2617.5	38225	23.31	24	0
				2572.5	37775	22.50	23	0-1
	QPSK		0	2595	38000	22.48	23	0-1
				2617.5	38225	22.36	23	0-1
				2572.5	37775	22.36	23	0-1
		12 RB	6	2595	38000	22.35	23	0-1
				2617.5	38225	22.32	23	0-1
				2572.5	37775	22.41	23	 Allow ed per 3GPP(dB) 0 0-1 0
			13	2595	38000	22.48	23	
				2617.5	38225	22.28	23	0-1
			-	2572.5	37775	22.35	23	0-1
		25	RB	2595	38000	22.37	23	0-1
5				2617.5	38225	22.43	23	
Ũ			13 RB 0	2572.5	37775	22.39	23	0-1
				2595	38000	22.24	23	
				2617.5	38225	22.23	23	0-1
				2572.5	37775	22.26	23	0-1
		1 RB	12	2595	38000	22.30	23	-
				2617.5	38225	22.41	23	-
				2572.5	37775	22.26	23	
			24	2595	38000	22.42	23	-
				2617.5	38225	22.37	23	
				2572.5	37775	21.40	22	
	16-QAM		0	2595	38000	21.23	22	
				2617.5	38225	21.12	22	
		· • ==	-	2572.5	37775	21.40	22	0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1
		12 RB	6	2595	38000	21.29	22	
				2617.5	38225	21.24	22	
			40	2572.5	37775	21.35	22	
			13	2595	38000	21.39	22	
			2617.5	38225	21.17	22		
		~-	חח	2572.5	37775	21.36	22	
		25RB		2595 2617.5	38000	21.40	22	
					38225	21.18	22	0-2

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				TDD Band 41				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				2506	39750	23.15	24	0
				2549.5	40185	23.21	24	0
			0	2593	40620	23.19	24	0
				2636.5	41055	23.32	24	0
				2680	41490	23.36	24	0
				2506	39750	23.10	24	0
				2549.5	40185	23.09	24	0
		1 RB	50	2593	40620	23.15	24	0
				2636.5	41055	23.24	24	0
				2680	41490	23.25	24	0
				2506	39750	23.11	24	0
				2549.5	40185	23.12	24	0
			99	2593	40620	23.26	24	0
				2636.5	41055	23.32	24	0
				2680	41490	23.23	24	+ Max. rance Bm) Allow ed per 3GPP(dB) 24 0 23 0-1 23 0-1 23 0-1 23 0-1 23 0-1 23 0-1 23 0-1 23 0-1 23 0-1 23
				2506	39750	22.19	23	0-1
				2549.5	40185	22.16	23	0-1
20	QPSK		0	2593	40620	22.13	23	0-1
				2636.5	41055	22.26	23	0-1
				2680	41490	22.34	23	0-1
				2506	39750	22.15	23	0-1
				2549.5	40185	22.14	23	0-1
		50 RB	25	2593	40620	22.11	23	0-1
				2636.5	41055	22.23	23	0-1
				2680	41490	22.30	23	0-1
				2506	39750	22.16	23	0-1
				2549.5	40185	22.12	23	0-1
			50	2593	40620	22.14	23	
				2636.5	41055	22.24	23	-
				2680	41490	22.29	23	0-1
				2506	39750	22.22	23	-
				2549.5	40185	22.14	23	-
		100)RB	2593	40620	22.24	23	0 0 0 0 0-1
				2636.5	41055	22.27	23	-
				2680	41490	22.45	23	0-1

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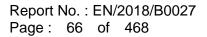


				TDD Band 41						
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				2506	39750	22.08	23	0-1		
				2549.5	40185	22.27	23	0-1		
			0	2593	40620	22.29	23	0-1		
				2636.5	41055	22.38	23	0-1		
				2680	41490	22.43	23	0-1		
				2506	39750	22.08	23	0-1		
				2549.5	40185	22.17	23	0-1		
		1 RB	50	2593	40620	22.25	23	0-1		
						2636.5	41055	22.34	23	0-1
				2680	41490	22.28	23	0-1		
				2506	39750	22.13	23	0-1		
				2549.5	40185	22.19	23	0-1		
			99	2593	40620	22.35	23	0-1		
				2636.5	41055	22.42	23	0-1		
				2680	41490	22.22	23	Max. Allow ed per 3GPP(dB) 0-1 0-1 0-1 0-1 0-1 0-1 0-1 0-1		
				2506	39750	21.24	22	0-2		
				2549.5	40185	21.25	22	0-2		
20	16-QAM		0	2593	40620	21.24	22	0-2		
				2636.5	41055	21.34	22	0-2		
				2680	41490	21.39	22	0-2		
				2506	39750	21.21	22	0-2		
				2549.5	40185	21.16	22	0-2		
		50 RB	25	2593	40620	21.27	22	0-2		
				2636.5	41055	21.31	22	0-2		
				2680	41490	21.35	22	0-2		
				2506	39750	21.22	22	0-2		
				2549.5	40185	21.15	22	0-2		
			50	2593	40620	21.30	22	0-2		
				2636.5	41055	21.29	22	0-2		
				2680	41490	21.35	22	0-2		
				2506	39750	21.24	22	0-2		
					40185	21.13	22	0-2		
		100)RB	2593	40620	21.23	22	0-2		
				2636.5	41055	21.28	22	-		
				2680	41490	21.33	22	0-2		

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				TDD Band 41				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				2503.5	39725	23.01	24	0
				2548.3	40173	23.13	24	0
			0	2593	40620	23.03	24	0
				2637.8	41068	23.16	24	0
				2682.5	41515	23.24	24	0
				2503.5	39725	23.05	24	0
				2548.3	40173	23.05	24	0
		1 RB	36	2593	40620	22.99	24	0
				2637.8	41068	23.04	24	0
				2682.5	41515		24	0
				2503.5	39725	23.08	24	0
				2548.3	40173	22.92	24	0
			74	2593	40620	23.19	24	0
				2637.8	41068	23.15	24	Max. mice m) NilFR Allow ed per 3GPP(dB) 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 5 0-1 6 0-1 7 0-1 8 0-1 8 0-1 8 0-1 8 0-1 8 0-1 8 0-1 8 0-1 8 0-1 8 0-1 8 0-1 8 0-1 8 0
				2682.5	41515	23.04	24	Hax. prance (Bm) Allow ed per 3GPP(dB) 24 0 23 0-1 23 0-1 23 0-1 23 0-1 23 0-1 23 0-1 23 0-1 23 0-1 23 0-1 23 0-1 23
				2503.5	39725	22.12	23	0-1
				2548.3	40173	22.05	23	0-1
15	QPSK		0	2593	40620	21.93	23	0-1
				2637.8	41068	22.22	23	0-1
				2682.5	41515	22.15	23	0-1
				2503.5	39725	22.02	23	0-1
				2548.3	40173	22.11	23	0-1
		36 RB	18	2593	40620	21.94	23	0-1
				2637.8	41068	22.02	23	0-1
			-	2682.5	41515	22.13	23	0-1
				2503.5	39725	22.08	23	0-1
				2548.3	40173	22.04	23	-
			37	2593	40620	22.07	23	-
				2637.8	41068	22.17	23	0-1
				2682.5	41515	22.18	23	0-1
				2503.5	39725	22.16	23	-
				2548.3	40173	22.04	23	0-1
		75	RB	2593	40620	22.17	23	
				2637.8	41068	22.22	23	-
				2682.5	41515	22.26	23	0-1

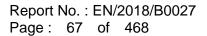
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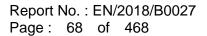




				TDD Band 41				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				2503.5	39725	21.97	23	0-1
				2548.3	40173	22.15	23	0-1
			0	2593	40620	22.12	23	0-1
				2637.8	41068	22.31	23	0-1
				2682.5	41515	22.22	23	0-1
				2503.5	39725	21.95	23	0-1
				2548.3	40173	22.10	23	0-1
		1 RB	36	2593	40620	22.10	23	0-1
				2637.8	41068	22.32	23	0-1
				2682.5	41515	22.22	23	0-1
				2503.5	39725	22.01	23	0-1
				2548.3	40173	22.08	23	0-1
			74	2593	40620	22.27	23	0-1
				2637.8	41068	22.40	23	0-1
				2682.5	41515	22.05	23	0-1
				2503.5	39725	21.05	22	0-2
				2548.3	40173	21.13	22	0-2
15	16-QAM		0	2593	40620	21.21	22	0-2
				2637.8	41068	21.29	22	0-2
				2682.5	41515	21.20	22	0-2
				2503.5	39725	21.00	22	0-2
				2548.3	40173	21.14	22	0-2
		36 RB	18	2593	40620	21.21	22	0-2
				2637.8	41068	21.19	22	0-2
				2682.5	41515	21.31	22	0-2
				2503.5	39725	21.07	22	0-2
				2548.3	40173	21.08	22	0-2
			37	2593	40620	21.19	22	0-2
				2637.8	41068	21.24	22	0-2
			2682.5	41515	21.29	22	0-2	
			2503.5	39725	21.04	22	0-2	
			2548.3	40173	21.10	22	0-2	
		75	RB	2593	40620	21.06	22	0-2
				2637.8	41068	21.08	22	0-2
			2682.5	41515	21.18	22	0-2	

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				TDD Band 41				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				2501	39700	22.95	24	0
				2547	40160	23.07	24	0
			0	2593	40620	22.98	24	0
				2639	41080	23.00	24	0
				2685	41540	23.15	24	0
				2501	39700	22.96	24	0
				2547	40160	22.84	24	0
		1 RB	25	2593	40620	22.90	24	0
				2639	41080	22.92	24	0
				2685	41540	22.85	24	0
				2501	39700	23.02	24	0
				2547	40160	22.87	24	0
			49	2593	40620	23.11	24	0
				2639	41080	23.10	24	0
				2685	41540	22.95	24	0
				2501	39700	21.93	23	0-1
				2547	40160	21.97	23	0-1
10	QPSK		0	2593	40620	21.89	23	0-1
				2639	41080	22.03	23	0-1
				2685	41540	22.07	23	0-1
				2501	39700	21.83	23	0-1
				2547	40160	21.97	23	0-1
		25 RB	12	2593	40620	21.80	23	0-1
				2639	41080	21.85	23	0-1
				2685	41540	160 23.07 620 22.98 080 23.00 540 23.15 700 22.96 160 22.84 620 22.90 080 23.02 160 22.84 620 22.90 080 22.92 540 22.85 700 23.02 160 22.87 620 23.11 080 23.10 540 22.95 700 21.93 160 21.97 620 21.89 080 22.03 540 22.07 700 21.83 160 21.83 160 21.80 080 21.99 700 21.90 160 21.86 620 21.97 080 22.09 540 22.09 540 22.10 700 <td>23</td> <td>0-1</td>	23	0-1
				2501	39700	21.90	23	0-1
				2547	40160	21.86	23	0-1
			25	2593	40620	21.97	23	0-1
				2639	41080	22.09	23	0-1
				2685	41540	22.10	23	0-1
				2501	39700		23	0-1
				2547	40160	21.92	23	0-1
		50	RB	2593	40620		23	0-1
				2639	41080		23	0-1
				2685	41540	22.07	23	0-1

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				TDD Band 41				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				2501	39700	21.83	23	0-1
				2547	40160	21.99	23	0-1
			0	2593	40620	21.94	23	0-1
				2639	41080	22.23	23	0-1
				2685	41540	22.04	23	0-1
				2501	39700	21.91	23	0-1
				2547	40160	21.96	23	0-1
		1 RB	25	2593	40620	22.01	23	0-1
				2639	41080	22.15	23	0-1
				2685	41540	22.02	23	0-1
				2501	39700	21.90	23	0-1
				2547	40160	21.94	23	0-1
			49	2593	40620	22.14	23	0-1
				2639	41080	22.34	23	0-1
				2685	41540	22.02	23	0-1
				2501	39700	20.84	22	0-2
				2547	40160	21.02	22	0-2
10	16-QAM		0	2593	40620	21.04	22	0-2
				2639	41080	21.27	22	0-2
				2685	41540	21.16	22	0-2
				2501	39700	20.85	22	0-2
				2547	40160	20.97	22	0-2
		25 RB	12	2593	40620	21.06	22	0-2
				2639	41080	21.13	22	0-2
				2685	41540	21.29	22	0-2
				2501	39700	20.95	22	0-2
				2547	40160	20.89	22	0-2
			25	2593	40620	21.17	22	0-2
			2639 41080 21.13 22 2685 41540 21.29 22 2501 39700 20.95 22 2547 40160 20.89 22 2593 40620 21.17 22 2639 41080 21.14 22	22	0-2			
				2685	41540	21.20	22	0-2
				2501	39700	20.85	22	0-2
				2547	40160	21.06	22	0-2
		50	RB	2593	40620	20.91	22	0-2
				2639	41080	21.03	22	0-2
				2685	41540	21.12	22	0-2

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	TDD Band 41											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)				
				2498.5	39675	23.29	24	0				
				2547.8	40148	23.32	24	0				
			0	2593	40620	23.29	24	0				
				2640.3	41093	23.30	24	0				
				2687.5	41565	23.32	24	0				
				2498.5	39675	23.26	24	0				
				2547.8	40148	23.27	24	0				
		1 RB	12	2593	40620	23.26	24	0				
				2640.3	41093	23.26	24	0				
				2687.5	41565	23.27	24	0				
				2498.5	39675	23.23	24	0				
				2547.8	40148	23.31	24	0				
			24	2593	40620	23.30	24	0				
				2640.3	41093	23.29	24	0				
				2687.5	41565	23.30	24	0				
				2498.5	39675	22.32	23	0-1				
				2547.8	40148	22.34	23	0-1				
5	QPSK		0	2593	40620	22.29	23	0-1				
				2640.3	41093	22.35	23	0-1				
				2687.5	41565	22.38	23	0-1				
				2498.5	39675	22.29	23	0-1				
				2547.8	40148	22.30	23	0-1				
		12 RB	6	2593	40620	22.28	23	0-1				
				2640.3	41093	22.33	23	0-1				
				2687.5	41565	22.37	23	0-1				
				2498.5	39675	22.29	23	0-1				
				2547.8	40148	22.31	23	0-1				
			13	2593	40620	22.29	23	0-1				
			2640.3	41093	22.34	23	0-1					
			2687.5	41565	22.38	23	0-1					
			2498.5	39675	22.26	23	0-1					
			2547.8	40148	22.27	23	0-1					
		25	RB	2593	40620	22.25	23	0-1				
				2640.3	41093	22.28	23	0-1				
				2687.5	41565	22.32	23	0-1				

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				TDD Band 41				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				2498.5	39675	22.13	23	0-1
				2547.8	40148	22.25	23	0-1
			0	2593	40620	22.23	23	0-1
				2640.3	41093	22.28	23	0-1
				2687.5	41565	22.25	23	0-1
				2498.5	39675	22.11	23	0-1
				2547.8	40148	22.21	23	0-1
		1 RB	12	2593	40620	22.20	23	0-1
				2640.3	41093	22.26	23	0-1
				2687.5	41565	22.21	23	0-1
				2498.5	39675	22.14	23	0-1
				2547.8	40148	22.25	23	0-1
			24	2593	40620	22.23	23	0-1
				2640.3	41093	22.27	23	0-1
				2687.5	41565	22.21	23	0-1
				2498.5	39675	21.31	22	0-2
				2547.8	40148	21.33	22	0-2
5	16-QAM		0	2593	40620	21.29	22	0-2
				2640.3	41093	21.37	22	0-2
				2687.5	41565	21.35	22	0-2
				2498.5	39675	21.30	22	0-2
				2547.8	40148	21.31	22	0-2
		12 RB	6	2593	40620	21.28	22	0-2
				2640.3	41093	21.36	22	0-2
				2687.5	41565	21.34	22	0-2
				2498.5	39675	21.33	22	0-2
				2547.8	40148	21.32	22	0-2
			13	2593	40620	21.29	22	0-2
			2640.3	41093	21.36	22	0-2	
			2687.5	41565	21.34	22	0-2	
			2498.5	39675	21.35	22	0-2	
			2547.8	40148	21.33	22	0-2	
		25	RB	2593	40620	21.32	22	0-2
				2640.3	41093	21.37	22	0-2
				2687.5	41565	21.41	22	0-2

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				FDD Band 2				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed pe 3GPP(dB)
				1860	18700	18.94	19	0
			0	1880	18900	18.84	19	0
				1900	19100	18.56	19	0
				1860	18700	18.86	19	0
		1 RB	50	1880	18900	18.90	19	0
				1900	19100	18.58	19	0
				1860	18700	18.92	19	0
			99	1880	18900	18.91	19	0
				1900	19100	18.42	19	0
				1860	18700	18.87	19	0
	QPSK		0	1880	18900	18.91	19	0
				1900	19100	18.53	19	0
				1860	18700	18.83	19	0
		50 RB	25	1880	18900	18.87	19	0
				1900	19100	18.61	19	0
				1860	18700	18.90	19	0
			50	1880	18900	18.78	19	0
				1900	19100	18.56	19	0
				1860	18700	18.86	19	0
		100)RB	1880	18900	18.89	19	0
				1900	19100	18.77	19	0
20				1860	18700	18.73	19	0
			0	1880	18900	18.63	19	0
				1900	19100	18.51	19	0
				1860	18700	18.76	19	
		1 RB	50	1880	18900	18.77	19	0
				1900	19100	18.48	19	0
				1860	18700	18.72	19	0
			99	1880	18900	18.77	19	0
				1900	19100	18.39	19	0
				1860	18700	18.76	19	0
	16-QAM		0	1880	18900	18.80	19	
				1900	19100	18.38	19	0
				1860	18700	18.66	19	0
		50 RB	25	1880	18900	18.67	19	Allow ed per 3GPP(dB)
			-	1900	19100	18.46	19	
				1860	18700	18.80	19	
			50	1880	18900	18.59	19	
				1900	19100	18.43	19	
			1	1860	18700	18.70	19	
		100)RB	1880	18900	18.86	19	
		100RB		1900	19100	18.55	19	

LTE FDD Band 2 / Band 4 / Band 5 / Band 7/ Band 12 / Band 13 / Band 17 / Band 26 / Band 66 nowar table (Poducod nowar):

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				FDD Band 2							
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				1857.5	18675	18.85	19	0			
			0	1880	18900	18.74	19	0			
				1902.5	19125	18.51	19	0			
				1857.5	18675	18.80	19	0			
		1 RB	36	1880	18900	18.74	19	0			
				1902.5	19125	18.44	19	0			
				1857.5	18675	18.85	19	0			
			74	1880	18900	18.70	19	0			
				1902.5	19125	18.20	19	0			
				1857.5	18675	18.75	19	0			
	QPSK		0	1880	18900	18.80	19	0			
				1902.5	19125	18.37	19	0			
				1857.5	18675	18.64	19	0			
		36 RB	18	1880	18900	18.79	19	0			
				1902.5	19125	18.44	19	0			
				1857.5	18675	18.70	19	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
			37	1880	18900	18.68	19				
				1902.5	19125	18.49	19	0			
			-	1857.5	18675	18.74	19	0			
		75	RB	1880	18900	18.73	19	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
15				1902.5	19125	18.61	19	0			
15				1857.5	18675	18.57	19	0			
			0	1880	18900	18.48	19	0			
				1902.5	19125	18.48	19	0			
				1857.5	18675	18.57	19	0			
		1 RB	36	1880	18900	18.61	19	0			
				1902.5	19125	18.28	19				
				1857.5	18675	18.60	19	0			
			74	1880	18900	18.71	19	-			
				1902.5	19125	18.19	19				
				1857.5	18675	18.60	19	0			
	16-QAM		0	1880	18900	18.76	19	0			
				1902.5	19125	18.33	19	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
				1857.5	18675	18.50	19	0			
		36 RB	18	1880	18900	18.53	19				
				1902.5	19125	18.24	19	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
				1857.5	18675	18.75	19				
			37	1880	18900	18.47	19				
				1902.5	19125	18.23	19				
				1857.5	18675	18.67	19				
			RB	1880 1902.5	18900	18.75	19				
					19125	18.33	19	0			

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				FDD Band 2				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1855	18650	18.82	19	0
			0	1880	18900	18.73	19	0
				1905	19150	18.43	19	0
				1855	18650	18.70	19	0
		1 RB	25	1880	18900	18.74	19	0
				1905	19150	18.51	19	0
				1855	18650	18.78	19	0
			49	1880	18900	18.88	19	0
				1905	19150	18.28	19	0
				1855	18650	18.76	19	0
	QPSK		0	1880	18900	18.86	19	0
				1905	19150	18.44	19	0
				1855	18650	18.79	19	Max. Nirrs Allow ed per 3GPP(dB) 0 0 0 </td
		25 RB	12	1880	18900	18.74	19	
				1905	19150	18.45	19	
				1855	18650	18.87	19	
			25	1880	18900	18.75	19	
				1905	19150	18.51	19	0
			-	1855	18650	18.76	19	
		50	RB	1880	18900	18.76	19	0
10				1905	19150	18.73	19	
			0	1855	18650	18.63	19	
				1880	18900	18.45	19	
				1905	19150	18.30	19	
				1855	18650	18.71	19	
		1 RB	25	1880	18900	18.74	19	-
				1905	19150	18.40	19	Allow ed per 3GPP(dB) 0
				1855	18650	18.66	19	
			49	1880	18900	18.57	19	
				1905	19150	18.27	19	
				1855	18650	18.55	19	
	16-QAM		0	1880	18900	18.74	19	
				1905	19150	18.26	19	-
				1855	18650	18.44	19	
		25 RB	12	1880	18900	18.46	19	3GPP(dB) 0 0 0 0 0 0 0 0 0
				1905	19150	18.39	19	
			05	1855	18650	18.58	19	0 0 0 0 0 0 0 0
			25	1880	18900	18.54	19	
				1905	19150	18.31	19	3GPP(dB) 0 0 0 0 0 0 0 0 0
l				1855	18650	18.51	19	
		50	RB	1880	18900	18.75	19	
			-	1905	19150	18.38	19	U

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				FDD Band 2				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1852.5	18625	18.83	19	0
			0	1880	18900	18.77	19	0
				1907.5	19175	18.41	19	0
				1852.5	18625	18.64	19	0
		1 RB	12	1880	18900	18.87	19	0
				1907.5	19175	18.40	19	0
				1852.5	18625	18.83	19	0
			24	1880	18900	18.86	19	0
				1907.5	19175	18.32	19	0
				1852.5	18625	18.83	19	0
	QPSK		0	1880	18900	18.69	19	0
				1907.5	19175	18.37	19	0
				1852.5	18625	18.62	19	0
		12 RB	6	1880	18900	18.67	19	0
				1907.5	19175	18.55	19	Max. Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0
				1852.5	18625	18.83	19	
			13	1880	18900	18.73	19	0
				1907.5	19175	18.46	19	0
				1852.5	18625	18.72	19	0
		25	RB	1880	18900	18.71	19	0
5				1907.5	19175	18.68	19	
Ū				1852.5	18625	18.56	19	-
			0	1880	18900	18.41	19	
				1907.5	19175	18.39	19	
				1852.5	18625	18.59	19	
		1 RB	12	1880	18900	18.64	19	
				1907.5	19175	18.35	19	
				1852.5	18625	18.64	19	
			24	1880	18900	18.68	19	Allow ed per 3GPP(dB) 3GPP(dB) 0 0
				1907.5	19175	18.21	19	
	40.011			1852.5	18625	18.61	19	
	16-QAM		0	1880	18900	18.66	19	
				1907.5	19175	18.18	19	-
			<u> </u>	1852.5	18625	18.44	19	
		12 RB	6	1880	18900	18.47	19	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
				1907.5	19175	18.28	19	
			10	1852.5	18625	18.77	19	
			13	1880	18900	18.45	19	
				1907.5	19175	18.30	19	
		05	DD	1852.5	18625	18.61	19	
		25	RB	1880 1907.5	18900	18.74	19	
				1907.5	19175	18.43	19	U

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				FDD Band 2				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1851.5	18615	18.90	19	0
			0	1880	18900	18.64	19	0
				1908.5	19185	18.46	19	0
				1851.5	18615	18.65	19	0
		1 RB	7	1880	18900	18.69	19	0
				1908.5	19185	18.38	19	0
				1851.5	18615	18.81	19	0
			14	1880	18900	18.71	19	0
				1908.5	19185	18.35	19	0
				1851.5	18615	18.79	19	0
	QPSK		0	1880	18900	18.88	19	0
				1908.5	19185	18.50	19	
				1851.5	18615	18.64	19	0
		8 RB	4	1880	18900	18.66	19	Max. prance Bm) Mirry Allow ed per 3GPP(dB) 19 0 19 0 19 0 19 0 19 0 19 0 19 0 19 0 19 0 19 0 19 0
				1908.5	19185	18.43	19	
				1851.5	18615	18.82	19 19 19	0
			7	1880	18900	18.64		0 0
				1908.5	19185	18.42		
				1851.5	18615	18.67	19	0
		15	RB	1880	18900	18.72	19	0
3				1908.5	19185	18.74	19	
			1851.5	18615	18.51	19		
			0	1880	18900	18.48	19	
				1908.5	19185	18.34	19	
				1851.5	18615	18.54	19	
		1 RB	7	1880	18900	18.74	19	
				1908.5	19185	18.26	19	
				1851.5	18615	18.61	19	
			14	1880	18900	18.55		
				1908.5	19185	18.22	19	
			-	1851.5	18615	18.69	19	
	16-QAM		0	1880	18900	18.65	19	
				1908.5	19185	18.32		-
				1851.5	18615	18.62	19	
		8 RB	4	1880	18900	18.45	19	
				1908.5	19185	18.34		3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0
			-	1851.5	18615	18.61		
			7	1880	18900	18.54		
				1908.5	19185	18.21		
			חח	1851.5	18615	18.67		
	15R		КB	1880	18900	18.64		
				1908.5	19185	18.49	19	0

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				FDD Band 2				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1850.7	18607	18.85	19	0
			0	1880	18900	18.73	19	0
				1909.3	19193	18.38	19	0
				1850.7	18607	18.68	19	0
		1 RB	2	1880	18900	18.83	19	0
				1909.3	19193	18.52	19	0
				1850.7	18607	18.76	19	0
			5	1880	18900	18.88	19	0
				1909.3	19193	18.36	19	0
				1850.7	18607	18.79	19	0
	QPSK		0	1880	18900	18.76	19	0
				1909.3	19193	18.45	19	0
				1850.7	18607	18.76	19	0
		3 RB	2	1880	18900	18.82	19	0
				1909.3	19193	18.41	19	0
				1850.7	18607	18.74	19	+ Max. Allow ed per 3GPP(dB) 9 0 <
			3	1880	18900	18.66	19	
				1909.3	19193	18.36	19	0
			-	1850.7	18607	18.79	19	0
		6F	RB	1880	18900	18.73	19	0
1.4				1909.3	19193	18.66	19	0
1				1850.7	18607	18.64	19	0
			0	1880	18900	18.44	19	
				1909.3	19193	18.37	19	0
				1850.7	18607	18.54	19	0
		1 RB	2	1880	18900	18.63	19	-
				1909.3	19193	18.44	19	
				1850.7	18607	18.65	19	
			5	1880	18900	18.64	19	
				1909.3	19193	18.20	19	
				1850.7	18607	18.62	19	
	16-QAM		0	1880	18900	18.72	19	
				1909.3	19193	18.22	19	-
				1850.7	18607	18.48	19	
		3 RB	2	1880	18900	18.47	19	
				1909.3	19193	18.40	19	
				1850.7	18607	18.68	19	
			3	1880	18900	18.39	19	0
				1909.3	19193	18.32	19	0
				1850.7	18607	18.52	19	0
	6RB		ΚB	1880 1909.3	18900	18.83	19	0
					19193	18.35	19	0

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				FDD Band 4				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1720	20050	19.79	20	0
			0	1732.5	20175	19.85	20	0
				1745	20300	19.98	20	0
				1720	20050	19.84	20	0
		1 RB	50	1732.5	20175	19.79	20	0
				1745	20300	19.72	20	0
				1720	20050	19.86	20	0
			99	1732.5	20175	19.88	20	0
				1745	20300	19.71	20	0
				1720	20050	19.92	20	0
	QPSK		0	1732.5	20175	19.78	20	0
				1745	20300	19.71	20	0
				1720	20050	19.86	20	Alax. Allow ed per 3GPP(dB) 0 0 </td
		50 RB	25	1732.5	20175	19.73	20	
				1745	20300	19.76	20	
				1720	20050	19.79	20	
			50	1732.5	20175	19.68	20	
				1745	20300	19.94	20	0
			-	1720	20050	19.83	20	0
		100)RB	1732.5	20175	19.87	20	0
20				1745	20300	19.92	20	0
20				1720	20050	19.57	20	0
			0	1732.5	20175	19.75	20	0
				1745	20300	19.92	20	0
				1720	20050	19.68	20	0
		1 RB	50	1732.5	20175	19.71	20	0
				1745	20300	19.68	20	0
				1720	20050	19.74	20	
			99	1732.5	20175	19.70	20	0
				1745	20300	19.58	20	
				1720	20050	19.75	20	
	16-QAM		0	1732.5	20175	19.66	20	
				1745	20300	19.64	20	
				1720	20050	19.78	20	
		50 RB	25	1732.5	20175	19.55	20	
				1745	20300	19.57	20	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
			_	1720	20050	19.74	20	
			50	1732.5	20175	19.60	20	
				1745	20300	19.86	20	
				1720	20050	19.73	20	
		100)RB	1732.5	20175	19.83	20	
				1745	20300	19.83	20	0

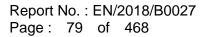
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				FDD Band 4				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1717.5	20025	19.58	20	0
			0	1732.5	20175	19.71	20	0
				1747.5	20325	19.91	20	0
				1717.5	20025	19.76	20	0
		1 RB	36	1732.5	20175	19.61	20	0
				1747.5	20325	19.56	20	0
				1717.5	20025	19.68	20	0
			74	1732.5	20175	19.75	20	0
				1747.5	20325	19.66	20	0
				1717.5	20025	19.77	20	0
	QPSK		0	1732.5	20175	19.55	20	0
				1747.5	20325	19.56	20	0
				1717.5	20025	19.70	20	0
		36 RB	18	1732.5	20175	19.59	20	0
				1747.5	20325	19.66	20	0
				1717.5	20025	19.71	20	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
			37	1732.5	20175	19.48	20	0
				1747.5	20325	19.82	20	0
			-	1717.5	20025	19.67	20	0
		75	RB	1732.5	20175	19.68	20	0
15				1747.5	20325	19.82	20	0
15			1717.5	20025	19.39	20	0	
			0	1732.5	20175	19.55	20	0
				1747.5	20325	19.88	20	0
				1717.5	20025	19.52	20	0
		1 RB	36	1732.5	20175	19.52	20	0
				1747.5	20325	19.61	20	0
				1717.5	20025	19.70	20	
			74	1732.5	20175	19.57	20	3GPP(dB) 0<
				1747.5	20325	19.52	20	
				1717.5	20025	19.55	20	
	16-QAM		0	1732.5	20175	19.44	20	
				1747.5	20325	19.49	20	-
				1717.5	20025	19.61	20	
		36 RB	18	1732.5	20175	19.47	20	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
				1747.5	20325	19.48	20	
			67	1717.5	20025	19.59	20	0 0
			37	1732.5	20175	19.40	20	
				1747.5	20325	19.65	20	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
				1717.5	20025	19.52	20	
	75F		KB	1732.5	20175	19.66	20	
				1747.5	20325	19.66	20	0

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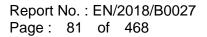
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				FDD Band 4				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1715	20000	19.68	20	0
			0	1732.5	20175	19.77	20	0
				1750	20350	19.84	20	0
				1715	20000	19.69	20	0
		1 RB	25	1732.5	20175	19.62	20	0
				1750	20350	19.67	20	0
				1715	20000	19.79	20	0
			49	1732.5	20175	19.80	20	0
				1750	20350	19.67	20	0
				1715	20000	19.78	20	0
	QPSK		0	1732.5	20175	19.71	20	0
				1750	20350	19.67	20	0
				1715	20000	19.76	20	0
		25 RB	12	1732.5	20175	19.63	20	Max. INFR Allow ed per 3GPP(dB) 0 0 0
				1750	20350	19.61	20	
				1715	20000	19.56	20	
			25	1732.5	20175	19.57	20	
				1750	20350	19.74	20	0
			-	1715	20000	19.67	20	0
		50	RB	1732.5	20175	19.81	20	0
10				1750	20350	19.77	20	0
10				1715	20000	19.36	20	0
			0	1732.5	20175	19.54	20	0
				1750	20350	19.77	20	
				1715	20000	19.59	20	0
		1 RB	25	1732.5	20175	19.63	20	0
				1750	20350	19.57	20	Max. ce IMPK Allow ed per 3GPP(dB) 0 <td< td=""></td<>
				1715	20000	19.58	20	
			49	1732.5	20175	19.64	20	
				1750	20350	19.46	20	
				1715	20000	19.70	20	
	16-QAM		0	1732.5	20175	19.43	20	
				1750	20350	19.42	20	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
				1715	20000	19.56	20	
		25 RB	12	1732.5	20175	19.40	20	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
				1750	20350	19.53	20	
				1715	20000	19.52	20	
			25	1732.5	20175	19.49	20	
				1750	20350	19.76	20	3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0
				1715	20000	19.57	20	
	50		RB	1732.5	20175	19.77	20	
				1750	20350	19.61	20	0

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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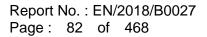


				FDD Band 4				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1712.5	19975	19.65	20	0
			0	1732.5	20175	19.73	20	0
				1752.5	20375	19.88	20	0
				1712.5	19975	19.80	20	0
		1 RB	12	1732.5	20175	19.58	20	0
				1752.5	20375	19.54	20	0
				1712.5	19975	19.66	20	0
			24	1732.5	20175	19.73	20	0
				1752.5	20375	19.65	20	0
				1712.5	19975	19.71	20	0
	QPSK		0	1732.5	20175	19.69	20	0
				1752.5	20375	19.65	20	0
				1712.5	19975	19.79	Power + Max. Tolerance (dBm) IVIPK Allow ed per 3GPP(dB) 20 0	
		12 RB	6	1732.5	20175	19.51	20	Hax. ance Bm) Allow ed per 3GPP(dB) 0 0
				1752.5	20375	19.72	20	
				1712.5	19975	19.56	20	0
			13	1732.5	20175	19.47	20	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
				1752.5	20375	19.80	20	0
			-	1712.5	19975	19.66	20	0
		25	RB	1732.5	20175	19.73	20	0
5				1752.5	20375	19.71	20	0
0				1712.5	19975	19.36		0
			0	1732.5	20175	19.53		
				1752.5	20375	19.83	20	0
				1712.5	19975	19.49	20	0
		1 RB	12	1732.5	20175	19.49	20	0
				1752.5	20375	19.49	20	0
				1712.5	19975	19.65		
			24	1732.5	20175	19.60	20	Max. ce Allow ed per 3GPP(dB) 0 0 0<
				1752.5	20375	19.45	20	0
				1712.5	19975	19.69	20	Allow ed per 3GPP(dB) 0
	16-QAM		0	1732.5	20175	19.60		0
				1752.5	20375	19.58	20	0
				1712.5	19975	19.73		
		12 RB	6	1732.5	20175	19.47		
				1752.5	20375	19.41	20	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
				1712.5	19975	19.60		
			13	1732.5	20175	19.54	20	
				1752.5	20375	19.64	20	
				1712.5	19975	19.69	20	
		25	RB	1732.5	20175	19.69	20	0
				1752.5	20375	19.64	20	0

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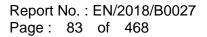


				FDD Band 4					
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)	
				1711.5	19965	19.64	20	0	
			0	1732.5	20175	19.70	20	0	
				1753.5	20385	19.77	20	0	
				1711.5	19965	19.73	20	0	
		1 RB	7	1732.5	20175	19.56	20	0	
				1753.5	20385	19.68	20	0	
				1711.5	19965	19.80	20	0	
			14	1732.5	20175	19.68	20	0	
				1753.5	20385	19.48	20	0	
				1711.5	19965	19.74	20	0	
	QPSK		0	1732.5	20175	19.69	20	0	
				1753.5	20385	19.64	20	0	
				1711.5	19965	19.67	20	0	
		8 RB	4	1732.5	20175	19.59	20	INFR Allow ed per 3GPP(dB) 0	
				1753.5	20385	19.62	20		
				1711.5	19965	19.75	20	0	
			7	1732.5	20175	19.48	20	0 0 0 0 0 0 0 0 0 0	
				1753.5	20385	19.74	20	0	
			-	1711.5	19965	19.71	20	3GPP(dB) 0<	
		15RB		1732.5	20175	19.73	20	0	
3				1753.5	20385	19.88	20	0	
Ű				1711.5	19965	19.44	20	0	
			0	1732.5	20175	19.66	20		
				1753.5	20385	19.85	20	0	
				1711.5	19965	19.51	20	0	
		1 RB	7	1732.5	20175	19.57	20	0	
				1753.5	20385	19.49	20	0	
				1711.5	19965	19.70	20		
			14	1732.5	20175	19.63	20	Alax. Nurrk Allow ed per 3GPP(dB) 3GPP(dB) 0 0 0	
				1753.5	20385	19.49	20		
				1711.5	19965	19.52	20	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	16-QAM		0	1732.5	20175	19.56	20		
				1753.5	20385	19.54	20	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
				1711.5	19965	19.55	20		
		8 RB	4	1732.5	20175	19.50	20		
				1753.5	20385	19.41	20	-	
				1711.5	19965	19.65	20		
			7	1732.5	20175	19.55	20		
				1753.5	20385	19.63	20		
				1711.5	19965	19.56	20		
		15	RB	1732.5	20175	19.71	20		
			1753.5	20385	19.65	20	0		

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				FDD Band 4						
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				1710.7	19957	19.60	20	0		
			0	1732.5	20175	19.71	20	0		
				1754.3	20393	19.75	20	0		
				1710.7	19957	19.69	20	0		
		1 RB	2	1732.5	20175	19.59	20	0		
				1754.3	20393	19.56	20	0		
				1710.7	19957	19.67	20	0		
			5	1732.5	20175	19.67	20	0		
				1754.3	20393	19.66	20	0		
				1710.7	19957	19.76	20	0		
	QPSK		0	1732.5	20175	19.60	20	0		
				1754.3	20393	19.64	20	0		
				1710.7	19957	19.76	20	0		
		3 RB	2	1732.5	20175	19.68	20	0		
				1754.3	20393	19.65	20	0		
				1710.7	19957	19.72	20	Allow ed per 3GPP(dB) 0		
			3	1732.5	20175	19.56	20	0		
				1754.3	20393	19.74	20	0		
				1710.7	19957	19.67	20	0		
		6F	RB	1732.5	20175	19.83	20	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0		
1.4				1754.3	20393	19.74	20	0		
1.4				1710.7	19957	19.40	20	0		
			0	1732.5	20175	19.60	20	0		
				1754.3	20393	19.74	20	0		
				1710.7	19957	19.58	20	0		
		1 RB	2	1732.5	20175	19.55	20	0		
				1754.3	20393	19.47	20	0		
				1710.7	19957	19.52	20	0		
			5	1732.5	20175	19.57	20	0		
				1754.3	20393	19.54	20	0		
				1710.7	19957	19.67	20	0		
	16-QAM		0	1732.5	20175	19.46	20	0		
				1754.3	20393	19.55	20	0		
				1710.7	19957	19.74	20	0		
		3 RB	2	1732.5	20175	19.38	20	0		
				1754.3	20393	19.42	20	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
				1710.7	19957	19.63	20	0		
			3	1732.5	20175	19.38	20	0		
				1754.3	20393	19.74	20	0		
				1710.7	19957	19.61	20	0		
		6	RB	1732.5	20175	19.75	20	0		
			1754.3	20393	19.72	20	0			

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				FDD Band 5				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				829	20450	21.00	21	0
			0	836.5	20525	20.90	21	0
				844	20600	20.87	21	0
				829	20450	20.86	21	0
		1 RB	25	836.5	20525	20.87	21	0
				844	20600	20.81	21	0
				829	20450	20.96	21	0
			49	836.5	20525	20.85	21	0
				844	20600	20.84	21	0
				829	20450	20.90	21	0
	QPSK		0	836.5	20525	20.88	21	0
				844	20600	20.82	21	0
				829	20450	20.89	21	0
		25 RB	12	836.5	20525	20.88	21	0
				844	20600	20.84	21	Alax. NuFR Allow ed per 3GPP(dB) 3GPP(dB) 0 0 0
				829	20450	20.92	21	
			25	836.5	20525	20.91	21	
				844	20600	20.96	21	0
			-	829	20450	20.91	21	0
		50	RB	836.5	20525	20.89	21	0
10				844	20600	20.92	21	0
10				829	20450	20.88	21	0
			0	836.5	20525	20.80	21	0
				844	20600	20.72	21	0
				829	20450	20.80	21	0
		1 RB	25	836.5	20525	20.84	21	
				844	20600	20.61	21	
				829	20450	20.89	21	
			49	836.5	20525	20.65	21	 Allow ed per 3GPP(dB) O O<!--</td-->
				844	20600	20.66	21	
				829	20450	20.86	21	
	16-QAM		0	836.5	20525	20.78	21	
				844	20600	20.69	21	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
				829	20450	20.85	21	
		25 RB	12	836.5	20525	20.82	21	
				844	20600	20.73	21	
				829	20450	20.75	21	0 0 0 0 0 0 0 0 0 0 0 0 0 0
			25	836.5	20525	20.82	21	
				844	20600	20.76	21	
				829	20450	20.71	21	0 0
		500	ORB	836.5	20525	20.79	21	
				844	20600	20.72	21	0

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FDD Band 5											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				826.5	20425	20.86	21	0			
			0	836.5	20525	20.76	21	0			
				846.5	20625	20.77	21	0			
				826.5	20425	20.67	21	0			
		1 RB	12	836.5	20525	20.69	21	0			
				846.5	20625	20.72	21	0			
				826.5	20425	20.88	21	0			
			24	836.5	20525	20.81	21	0			
				846.5	20625	20.74	21	0			
				826.5	20425	20.73	21	0			
	QPSK		0	836.5	20525	20.83	21	0			
				846.5	20625	20.74	21	0			
				826.5	20425	20.67	21	0			
		12 RB	6	836.5	20525	20.78	21	0			
				846.5	20625	20.65	21	0			
				826.5	20425	20.73	21	0			
			13	836.5	20525	20.73	21	0			
				846.5	20625	20.87	21	0			
			-	826.5	20425	20.73	21	0			
		25	RB	836.5	20525	20.83	21	0			
5			-	846.5	20625	20.70	21	0			
U			0	826.5	20425	20.85	21	0			
			0	836.5	20525	20.68	21	0			
				846.5	20625	20.69	21	0			
				826.5	20425	20.64	21	0			
		1 RB	12	836.5	20525	20.74	21				
				846.5	20625	20.52	21	0			
				826.5	20425	20.84	21				
			24	836.5	20525	20.48	21				
				846.5	20625	20.51	21	0			
				826.5	20425	20.80	21				
	16-QAM		0	836.5	20525	20.72	21	0			
				846.5	20625	20.61	21	-			
				826.5	20425	20.81	21	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
		12 RB	6	836.5	20525	20.74	21				
				846.5	20625	20.54	21				
				826.5	20425	20.57	21	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
			13	836.5	20525	20.77	21				
				846.5	20625	20.56	21				
				826.5	20425	20.50	21				
	25RB		KB	836.5 846.5	20525	20.62	21				
					20625	20.54	21	0			

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FDD Band 5											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				825.5	20415	20.83	21	0			
			0	836.5	20525	20.69	21	0			
				847.5	20635	20.66	21	0			
				825.5	20415	20.75	21	0			
		1 RB	7	836.5	20525	20.79	21	0			
				847.5	20635	20.70	21	0			
				825.5	20415	20.74	21	0			
			14	836.5	20525	20.71	21	0			
				847.5	20635	20.70	21	0			
				825.5	20415	20.70	21	0			
	QPSK		0	836.5	20525	20.83	21	0			
				847.5	20635	20.60	21	0			
				825.5	20415	20.75	21	0			
		8 RB	4	836.5	20525	20.73	21	0			
				847.5	20635	20.74	21	0			
				825.5	20415	20.86	21	 Allow ed per 3GPP(dB) 0 0<!--</td-->			
			7	836.5	20525	20.75	21	0			
				847.5	20635	20.81	21	0			
			-	825.5	20415	20.70	21	0			
		15	RB	836.5	20525	20.70	21	0			
3			-	847.5	20635	20.73	21	0			
Ũ				825.5	20415	20.67	21	0			
			0	836.5	20525	20.67	21				
				847.5	20635	20.51	21				
				825.5	20415	20.59	21				
		1 RB	7	836.5	20525	20.78	21				
				847.5	20635	20.47	21				
				825.5	20415	20.74	21				
			14	836.5	20525	20.45	21				
		L		847.5	20635	20.46	21				
	40.000			825.5	20415	20.77	21				
	16-QAM		0	836.5	20525	20.65	21				
				847.5	20635	20.49	21	-			
		0.55		825.5	20415	20.63	21	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
		8 RB	4	836.5	20525	20.69	21				
				847.5	20635	20.53	21				
			-	825.5	20415	20.55	21	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
			7	836.5	20525	20.69	21				
				847.5	20635	20.73	21				
		4-	חח	825.5	20415	20.64	21				
		15RB		836.5 847.5	20525	20.57	21				
					20635	20.55	21	0			

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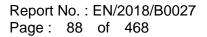


FDD Band 5											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				824.7	20407	20.78	21	0			
			0	836.5	20525	20.86	21	0			
				848.3	20643	20.82	21	0			
				824.7	20407	20.66	21	0			
		1 RB	2	836.5	20525	20.66	21	0			
				848.3	20643	20.59	21	0			
				824.7	20407	20.75	21	0			
			5	836.5	20525	20.77	21	0			
				848.3	20643	20.62	21	0			
				824.7	20407	20.74	21	0			
	QPSK		0	836.5	20525	20.84	21	0			
				848.3	20643	20.79	21	0			
				824.7	20407	20.86	21	0			
		3 RB	2	836.5	20525	20.73	21	0			
				848.3	20643	20.65	21	0			
				824.7	20407	20.73	21	0			
			3	836.5	20525	20.85	21	0			
				848.3	20643	20.79	21	0			
			-	824.7	20407	20.87	21	0			
		61	RB	836.5	20525	20.68	21	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
1.4				848.3	20643	20.89	21	0			
1.4			_	824.7	20407	20.85	21	0			
			0	836.5	20525	20.74	21	0			
				848.3	20643	20.68	21	0			
				824.7	20407	20.67	21	0			
		1 RB	2	836.5	20525	20.75	21				
				848.3	20643	20.39	21				
				824.7	20407	20.75	21	0			
			5	836.5	20525	20.53	21	0			
				848.3	20643	20.63	21	0			
				824.7	20407	20.65	21				
	16-QAM		0	836.5	20525	20.68	21				
				848.3	20643	20.53	21	-			
			-	824.7	20407	20.65	21	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
		3 RB	2	836.5	20525	20.66	21				
				848.3	20643	20.57	21				
			_	824.7	20407	20.71	21	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
			3	836.5	20525	20.64	21				
				848.3	20643	20.65	21				
				824.7	20407	20.59	21				
1		6RB		836.5 848.3	20525	20.58	21				
					20643	20.55	21	0			

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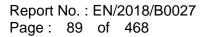




FDD Band 7											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				2510	20850	20.47	20.5	0			
			0	2535	21100	20.19	20.5	0			
				2560	21350	20.10	20.5	0			
				2510	20850	20.19	20.5	0			
		1 RB	50	2535	21100	19.96	20.5	0			
				2560	21350	20.02	20.5	0			
				2510	20850	20.15	20.5				
			99	2535	21100	19.97	20.5	0			
				2560	21350	19.98	20.5	0			
				2510	20850	20.28	20.5				
	QPSK		0	2535	21100	20.01	20.5	0			
				2560	21350	20.03	20.5	0			
				2510	20850	20.19	20.5				
		50 RB	25	2535	21100	20.04	20.5	0			
				2560	21350	20.07	20.5	-			
				2510	20850	20.18	20.5	 Allow ed per 3GPP(dB) O O<!--</td-->			
			50	2535	21100	20.13	20.5	0			
				2560	21350	20.18	20.5	0			
				2510	20850	20.45	20.5	0			
		100)RB	2535	21100	20.19	20.5				
20				2560	21350	20.15	20.5				
				2510	20850	20.26	20.5				
			0	2535	21100	20.08	20.5				
				2560	21350	20.00	20.5				
				2510	20850	20.09	20.5				
		1 RB	50	2535	21100	19.88	20.5				
				2560	21350	19.89	20.5				
				2510	20850	20.08	20.5				
			99	2535	21100	19.75	20.5				
				2560	21350	19.82	20.5				
				2510	20850	20.17	20.5				
	16-QAM		0	2535	21100	19.85	20.5				
				2560	21350	19.95	20.5	-			
				2510	20850	20.04	20.5				
		50 RB	25	2535	21100	19.86	20.5				
				2560	21350	19.91	20.5				
			=0	2510	20850	20.13	20.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
			50	2535	21100	19.97	20.5				
				2560	21350	20.09	20.5				
				2510	20850	20.24	20.5	3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0			
		100)RB	2535	21100	19.96	20.5				
						2560	21350	20.00	20.5	0	

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FDD Band 7											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				2507.5	20825	20.34	20.5	0			
			0	2535	21100	20.01	20.5	0			
				2562.5	21375	19.88	20.5	0			
				2507.5	20825	19.96	20.5	0			
		1 RB	36	2535	21100	19.83	20.5	0			
				2562.5	21375	19.87	20.5	0			
				2507.5	20825	20.06	20.5	0			
			74	2535	21100	19.92	20.5	0			
				2562.5	21375	19.87	20.5	0			
				2507.5	20825	20.11	20.5	0			
	QPSK		0	2535	21100	19.88	20.5	0			
				2562.5	21375	19.92	20.5	0			
				2507.5	20825	20.02	20.5	0			
		36 RB	18	2535	21100	19.93	20.5	0			
				2562.5	21375	19.89	20.5	0			
				2507.5	20825	20.07	20.5	0			
			37	2535	21100	20.03	20.5	0			
				2562.5	21375	19.98	20.5	0			
			-	2507.5	20825	20.24	20.5	0			
		75	RB	2535	21100	20.03	20.5	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
15			-	2562.5	21375	19.93	20.5	0			
10				2507.5	20825	20.03	20.5	0			
			0	2535	21100	20.01	20.5	0			
				2562.5	21375	19.78	20.5	0			
				2507.5	20825	19.90	20.5	0			
		1 RB	36	2535	21100	19.67	20.5				
				2562.5	21375	19.66	20.5	0			
				2507.5	20825	20.04	20.5	0			
			74	2535	21100	19.70	20.5	0			
				2562.5	21375	19.63	20.5				
				2507.5	20825	20.01	20.5				
	16-QAM		0	2535	21100	19.75	20.5				
				2562.5	21375	19.89	20.5				
				2507.5	20825	19.81	20.5				
		36 RB	18	2535	21100	19.70	20.5	0 0			
				2562.5	21375	19.76	20.5				
				2507.5	20825	19.95	20.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
			37	2535	21100	19.83	20.5				
				2562.5	21375	19.95	20.5	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
				2507.5	20825	20.07	20.5				
		75	RB	2535	21100	19.74	20.5				
				2562.5	21375	19.90	20.5	0			

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FDD Band 7											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				2505	20800	20.28	20.5	0			
			0	2535	21100	20.09	20.5	0			
				2565	21400	20.06	20.5	0			
				2505	20800	20.02	20.5	0			
		1 RB	25	2535	21100	19.74	20.5	0			
				2565	21400	19.96	20.5	0			
				2505	20800	20.05	20.5	0			
			49	2535	21100	19.93	20.5	0			
				2565	21400	19.92	20.5	0			
				2505	20800	20.15	20.5	0			
	QPSK		0	2535	21100	19.96	20.5	0			
				2565	21400	19.91	20.5	0			
				2505	20800	20.01	20.5	0			
		25 RB	12	2535	21100	19.91	20.5	0			
				2565	21400	19.99	20.5	0			
				2505	20800	20.07	20.5	Allow ed per 3GPP(dB) 0			
			25	2535	21100	19.98	20.5	0			
				2565	21400	20.11	20.5	0			
			-	2505	20800	20.36	20.5	0			
		50	RB	2535	21100	20.03	20.5	5 0 5 0			
10				2565	21400	19.95	20.5	0			
10				2505	20800	20.03	20.5	0			
		50	0	2535	21100	19.90	20.5	0			
				2565	21400	19.77	20.5	0			
				2505	20800	19.98	20.5	0			
		1 RB	25	2535	21100	19.82	20.5	0			
				2565	21400	19.75	20.5	0			
				2505	20800	20.03	20.5				
			49	2535	21100	19.62	20.5				
				2565	21400	19.74	20.5	0			
				2505	20800	20.12	20.5	0			
	16-QAM		0	2535	21100	19.77	20.5				
				2565	21400	19.73	20.5	-			
				2505	20800	19.81	20.5				
		25 RB	12	2535	21100	19.81	20.5				
				2565	21400	19.71	20.5				
				2505	20800	19.95	20.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
			25	2535	21100	19.85	20.5				
				2565	21400	20.02	20.5				
				2505	20800	20.13	20.5	0 0			
	ť		RB	2535	21100	19.87	20.5				
				2565	21400	19.95	20.5	0			

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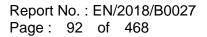
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FDD Band 7											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				2502.5	20775	20.40	20.5	0			
			0	2535	21100	20.01	20.5	0			
				2567.5	21425	20.05	20.5	0			
				2502.5	20775	19.99	20.5	0			
		1 RB	12	2535	21100	19.82	20.5	0			
				2567.5	21425	19.87	20.5	0			
				2502.5	20775	19.96	20.5	0			
			24	2535	21100	19.90	20.5	0			
				2567.5	21425	19.75	20.5	0			
				2502.5	20775	20.23	20.5	0			
	QPSK		0	2535	21100	19.92	20.5	0			
				2567.5	21425	19.94	20.5	0			
				2502.5	20775	20.04	20.5	0			
		12 RB	6	2535	21100	19.98	20.5	0			
				2567.5	21425	19.99	20.5	0			
				2502.5	20775	20.04	20.5	0			
			13	2535	21100	19.93	20.5	0			
				2567.5	21425	20.13	20.5	0			
			-	2502.5	20775	20.24	20.5	0			
		25	RB	2535	21100	19.98	20.5	0 0			
5			-	2567.5	21425	20.03	20.5	0			
Ũ			0	2502.5	20775	20.12	20.5	0			
			0	2535	21100	20.04	20.5				
				2567.5	21425	19.81	20.5	0			
				2502.5	20775	19.94	20.5	0			
		1 RB	12	2535	21100	19.77	20.5				
				2567.5	21425	19.71	20.5				
				2502.5	20775	20.03	20.5				
			24	2535	21100	19.52	20.5				
				2567.5	21425	19.61	20.5				
			_	2502.5	20775	20.01	20.5				
	16-QAM		0	2535	21100	19.68	20.5				
				2567.5	21425	19.73	20.5	-			
		· •	-	2502.5	20775	19.88	20.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
		12 RB	6	2535	21100	19.73	20.5				
				2567.5	21425	19.80	20.5				
			40	2502.5	20775	19.96	20.5	3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0			
			13	2535	21100	19.80	20.5				
				2567.5	21425	20.03	20.5				
				2502.5	20775	20.01	20.5				
		25RB		2535 2567.5	21100	19.84	20.5				
					21425	19.94	20.5	0			

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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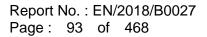


FDD Band 12											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				704	23060	21.34	21.5	0			
			0	707.5	23095	21.50	21.5	0			
				711	23130	21.45	21.5	0			
				704	23060	21.29	21.5	0			
		1 RB	25	707.5	23095	21.35	21.5	0			
				711	23130	21.37	21.5	0			
				704	23060	21.32	21.5	0			
			49	707.5	23095	21.14	21.5	0			
				711	23130	21.33	21.5	0			
				704	23060	21.32	21.5	0			
	QPSK		0	707.5	23095	21.33	21.5	0			
				711	23130	21.34	21.5	0			
				704	23060	21.28	21.5	0			
		25 RB	12	707.5	23095	21.35	21.5	0			
				711	23130	21.36	21.5	0			
				704	23060	21.39	21.5	0			
			25	707.5	23095	21.36	21.5	0			
				711	23130	21.47	21.5	0			
			-	704	23060	21.46	21.5	0			
		50	RB	707.5	23095	21.44	21.5	3GPP(dB) 0			
10			-	711	23130	21.49	21.5	0			
10				704	23060	21.14	21.5	0			
			0	707.5	23095	21.27	21.5	0			
				711	23130	21.22	21.5	0			
				704	23060	21.09	21.5				
		1 RB	25	707.5	23095	21.25	21.5				
				711	23130	21.26	21.5	0			
				704	23060	21.14	21.5				
			49	707.5	23095	20.97	21.5	0			
				711	23130	21.11	21.5				
				704	23060	21.22	21.5				
	16-QAM		0	707.5	23095	21.22	21.5				
				711	23130	21.20	21.5	-			
				704	23060	21.08	21.5				
		25 RB	12	707.5	23095	21.22	21.5				
				711	23130	21.20	21.5				
			_	704	23060	21.23	21.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
			25	707.5	23095	21.23	21.5				
				711	23130	21.42	21.5				
				704	23060	21.23	21.5				
		50	RB	707.5 711	23095	21.33	21.5				
					23130	21.38	21.5	0			

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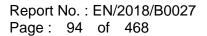




FDD Band 12											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				701.5	23035	21.11	21.5	0			
			0	707.5	23095	21.27	21.5	0			
				713.5	23155	21.28	21.5	0			
				701.5	23035	21.11	21.5	0			
		1 RB	12	707.5	23095	21.17	21.5	0			
				713.5	23155	21.26	21.5	0			
				701.5	23035	21.12	21.5	0			
			24	707.5	23095	20.96	21.5	0			
				713.5	23155	21.11	21.5	0			
				701.5	23035	21.14	21.5	0			
	QPSK		0	707.5	23095	21.15	21.5	0			
				713.5	23155	21.13	21.5	0			
				701.5	23035	21.07	21.5				
		12 RB	6	707.5	23095	21.26	21.5				
				713.5	23155	21.32	21.5				
				701.5	23035	21.33	21.5	0 0 0 0 0 0 0 0 0 0 0 0			
			13	707.5	23095	21.20	21.5				
				713.5	23155	21.39	21.5				
				701.5	23035	21.40	21.5	Allow ed per 3GPP(dB)			
		25	RB	707.5	23095	21.28	21.5				
5				713.5	23155	21.40	21.5				
				701.5	23035	20.99	21.5				
			0	707.5	23095	21.17	21.5				
				713.5	23155	21.08	21.5				
			10	701.5	23035	21.00	21.5				
		1 RB	12	707.5	23095	21.04	21.5	-			
				713.5	23155	21.19	21.5				
			0.4	701.5	23035	20.96	21.5				
			24	707.5	23095	20.88	21.5 21.5				
				713.5	23155	21.04 21.17	21.5				
	16 0 14		0	701.5	23035						
	16-QAM		0	707.5 713.5	23095 23155	21.07 20.98	21.5 21.5				
				713.5		20.98	21.5	-			
		12 RB	6	701.5	23035 23095	21.00	21.5				
			Ö	707.5	23095	21.15	21.5	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0			
				713.5	23155	21.00	21.5				
			13	701.5	23035	21.11	21.5				
			13	707.5	23095	21.03	21.5				
				713.5	23155	21.24	21.5				
		25.00		701.5	23035	21.00	21.5				
	25R		707.5	23095	21.24	21.5					
				113.0	20100	21.00	21.0	U			

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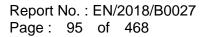




FDD Band 12										
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				700.5	23025	21.25	21.5	0		
			0	707.5	23095	21.32	21.5	0		
				714.5	23165	21.36	21.5	0		
				700.5	23025	21.12	21.5	0		
		1 RB	7	707.5	23095	21.24	21.5	0		
				714.5	23165	21.29	21.5	0		
				700.5	23025	21.16	21.5	0		
			14	707.5	23095	20.94	21.5	0		
				714.5	23165	21.14	21.5	0		
				700.5	23025	21.27	21.5	0		
	QPSK		0	707.5	23095	21.10	21.5	0		
				714.5	23165	21.19	21.5	0		
				700.5	23025	21.06	21.5	0		
		8 RB	4	707.5	23095	21.14	21.5	0		
				714.5	23165	21.15	21.5	0		
				700.5	23025	21.34	21.5	Max. Mirrs Allow ed per 3GPP(dB) 0		
			7	707.5	23095	21.29	21.5			
				714.5	23165	21.31	21.5	0		
			-	700.5	23025	21.30	21.5	0		
		15	RB	707.5	23095	21.34	21.5	0		
3				714.5	23165	21.28	21.5	0		
5				700.5	23025	20.98	21.5	0		
			0	707.5	23095	21.20	21.5	0		
				714.5	23165	20.99	21.5	0		
				700.5	23025	20.92	21.5	0		
		1 RB	7	707.5	23095	21.14	21.5	0		
				714.5	23165	21.06	21.5	0		
				700.5	23025	21.00	21.5			
			14	707.5	23095	20.79	21.5	0		
				714.5	23165	20.95	21.5	0		
				700.5	23025	21.00	21.5			
	16-QAM		0	707.5	23095	21.05	21.5			
				714.5	23165	21.06	21.5	-		
				700.5	23025	21.04	21.5			
		8 RB	4	707.5	23095	21.17	21.5			
				714.5	23165	21.14	21.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
				700.5	23025	21.16	21.5			
			7	707.5	23095	21.14	21.5			
				714.5	23165	21.32	21.5			
			700.5	23025	21.19	21.5				
		15	RB	707.5	23095	21.15	21.5			
			714.5	23165	21.19	21.5	0			

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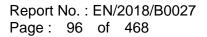




FDD Band 12											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				699.7	23017	21.12	21.5	0			
			0	707.5	23095	21.27	21.5	0			
				715.3	23173	21.28	21.5	0			
				699.7	23017	21.14	21.5	0			
		1 RB	2	707.5	23095	21.12	21.5	0			
				715.3	23173	21.23	21.5	0			
				699.7	23017	21.21	21.5	0			
			5	707.5	23095	21.08	21.5	0			
				715.3	23173	21.20	21.5	0			
				699.7	23017	21.15	21.5	0			
	QPSK		0	707.5	23095	21.19	21.5	0			
				715.3	23173	21.12	21.5	0			
				699.7	23017	21.13	21.5	0			
		3 RB	2	707.5	23095	21.19	21.5	0			
				715.3	23173	21.22	21.5	0			
				699.7	23017	21.25	21.5	0			
			3	707.5	23095	21.24	21.5	0			
				715.3	23173	21.36	21.5	0			
			-	699.7	23017	21.41	21.5	0			
		6F	RB	707.5	23095	21.22	21.5	0			
1.4				715.3	23173	21.38	21.5	0			
				699.7	23017	21.01	21.5	0			
			0	707.5	23095	21.21	21.5	0			
				715.3	23173	21.15	21.5	0			
				699.7	23017	20.90	21.5	0			
		1 RB	2	707.5	23095	21.17	21.5	0			
				715.3	23173	21.15	21.5	0			
				699.7	23017	20.91	21.5				
			5	707.5	23095	20.78	21.5				
				715.3	23173	21.07	21.5				
				699.7	23017	21.05	21.5				
	16-QAM		0	707.5	23095	21.05	21.5				
				715.3	23173	21.04	21.5	-			
				699.7	23017	20.87	21.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
		3 RB	2	707.5	23095	21.08	21.5				
				715.3	23173	20.99	21.5				
				699.7	23017	21.09	21.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
			3	707.5	23095	21.02	21.5				
				715.3	23173	21.38	21.5				
				699.7	23017	21.00	21.5				
	6RB		≺B	707.5	23095	21.11	21.5				
				715.3	23173	21.28	21.5	0			

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				FDD Band 13				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
			0	782	23230	20.86	21	0
		1 RB	25	782	23230	20.92	21	0
			49	782	23230	20.74	21	0
	QPSK		0	782	23230	20.89	21	0
		25 RB	12	782	23230	20.66	21	0
			25	782	23230	20.77	21	0
10		50	RB	782	23230	20.85	21	0
10			0	782	23230	20.76	21	0
		1 RB	25	782	23230	20.74	21	0
			49	782	23230	20.62	21	0
	16-QAM		0	782	23230	20.78	21	0
		25 RB	12	782	23230	20.49	21	0
			25	782	23230	20.68	21 0 21 0 21 0 21 0 21 0 21 0 21 0 21 0 21 0 21 0 21 0 21 0 21 0 21 0 21 0 21 0 21 0 21 0 21 0	0
		50	RB	782	23230	20.78	21	0

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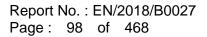
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FDD Band 13											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				779.5	23205	20.72	21	0			
			0	782	23230	20.80	21	0			
				784.5	23255	20.53	21	0			
				779.5	23205	20.70	21	0			
		1 RB	12	782	23230	20.62	21	0			
				784.5	23255	20.74	21	0			
				779.5	23205	20.77	21	0			
			24	782	23230	20.71	21	0			
				784.5	23255	20.65	21	0			
				779.5	23205	20.57	21	0			
	QPSK		0	782	23230	20.58	21	0			
				784.5	23255	20.34	21	0			
				779.5	23205	20.48	21	0			
		12 RB	6	782	23230	20.75	21	0			
				784.5	23255	20.77	21	0			
				779.5	23205	20.73	21	0			
			13	782	23230	20.62	21	0			
				784.5	23255	20.76	21	0			
			-	779.5	23205	20.48	21	0			
		25	RB	782	23230	20.64	21	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
5				784.5	23255	20.78	21				
Ũ			779.5	23205	20.65	21	0				
			0	782	23230	20.71	21				
				784.5	23255	20.48	21	0			
				779.5	23205	20.64	21				
		1 RB	12	782	23230	20.35	21				
				784.5	23255	20.49	21				
				779.5	23205	20.59	21				
			24	782	23230	20.78	21				
				784.5	23255	20.71	21				
			_	779.5	23205	20.62	21				
	16-QAM		0	782	23230	20.76	21				
				784.5	23255	20.51	21	-			
			-	779.5	23205	20.62	21	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
		12 RB	6	782	23230	20.75	21				
				784.5	23255	20.57	21				
			40	779.5	23205	20.56	21				
			13	782	23230	20.40	21	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
				784.5	23255	20.65	21				
				779.5	23205	20.36	21				
		25RB		782	23230	20.56	21				
				784.5	23255	20.75	21	0			

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FDD Band 17										
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				709	23780	21.50	21.5	0		
			0	710	23790	21.44	21.5	0		
				711	23800	21.46	21.5	0		
				709	23780	21.22	21.5	0		
		1 RB	25	710	23790	21.24	21.5	0		
				711	23800	21.31	21.5	0		
				709	23780	21.26	21.5	0		
			49	710	23790	21.33	21.5	0		
				711	23800	21.24	21.5	0		
				709	23780	21.30	21.5	0		
	QPSK		0	710	23790	21.31	21.5	0		
				711	23800	21.26	21.5	0		
				709	23780	21.27	21.5	0		
		25 RB	12	710	23790	21.29	21.5	0		
				711	23800	21.30	21.5	0		
				709	23780	21.40	21.5	0		
			25	710	23790	21.41	21.5	0		
				711	23800	21.37	21.5	0		
				709	23780	21.34	21.5	0		
		50	RB	710	23790	21.35	21.5	0		
10				711	23800	21.43	21.5	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
10				709	23780	21.43	21.5			
			0	710	23790	21.35	21.5	0		
				711	23800	21.37	21.5			
				709	23780	21.00	21.5			
		1 RB	25	710	23790	21.15	21.5			
				711	23800	21.21	21.5			
				709	23780	21.21	21.5			
			49	710	23790	21.15	21.5			
				711	23800	21.16	21.5			
				709	23780	21.20	21.5			
	16-QAM		0	710	23790	21.10	21.5			
				711	23800	21.20	21.5			
		05 55		709	23780	21.11	21.5	-		
		25 RB	12	710	23790	21.12	21.5			
				711	23800	21.09	21.5			
			05	709	23780	21.23	21.5			
			25	710	23790	21.38	21.5			
				711	23800	21.24	21.5			
		50	DD	709	23780	21.15	21.5			
	50R		ΝĎ	710	23790	21.32	21.5			
				711	23800	21.32	21.5	U		

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				FDD Band 17				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				706.5	23755	21.39	21.5	0
			0	710	23790	21.39	21.5	0
				713.5	23825	21.43	21.5	0
				706.5	23755	21.16	21.5	0
		1 RB	12	710	23790	21.11	21.5	0
				713.5	23825	21.22	21.5	0
				706.5	23755	21.09	21.5	0
			24	710	23790	21.30	21.5	0
				713.5	23825	21.17	21.5	0
				706.5	23755	21.11	21.5	0
	QPSK		0	710	23790	21.20	21.5	0
				713.5	23825	21.05	21.5	0
				706.5	23755	21.13	21.5	0
		12 RB	6	710	23790	21.26	21.5	0
				713.5	23825	21.17	21.5	0
				706.5	23755	21.25	21.5	0
			13	710	23790	21.33	21.5	0
				713.5	23825	21.31	21.5	0
			-	706.5	23755	21.25	21.5	0
		25	RB	710	23790	21.23	21.5	0
5				713.5	23825	21.33	21.5	0
U				706.5	23755	21.21	21.5	0
			0	710	23790	21.26	21.5	0
				713.5	23825	21.31	21.5	0
				706.5	23755	20.87	21.5	0
		1 RB	12	710	23790	20.98	21.5	0
				713.5	23825	21.13	21.5	0
			_	706.5	23755	21.08	21.5	0
			24	710	23790	21.08	21.5	0
				713.5	23825	21.04	21.5	0
			-	706.5	23755	21.11	21.5	0
	16-QAM		0	710	23790	20.93	21.5	0
				713.5	23825	21.03	21.5	0
		10.55		706.5	23755	20.91	21.5	0
		12 RB	6	710	23790	20.94	21.5	0
				713.5	23825	20.94	21.5	0
			10	706.5	23755	21.08	21.5	0
			13	710	23790	21.28	21.5	0
				713.5	23825	21.08	21.5	0
		05	חח	706.5	23755	20.93	21.5	0
		25RB		710	23790	21.24	21.5	0
			-	713.5	23825	21.15	21.5	0

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FDD Band 26											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				821.5	26765	20.32	21	0			
			0	831.5	26865	20.79	21	0			
				841.5	26965	20.43	21	0			
				821.5	26765	20.55	21	0			
		1 RB	36	831.5	26865	20.48	21	0			
				841.5	26965	20.41	21	0			
				821.5	26765	20.52	21	0			
			74	831.5	26865	20.45	21	0			
				841.5	26965	20.77	21	0			
				821.5	26765	20.54	21	0			
	QPSK		0	831.5	26865	20.48	21	0			
				841.5	26965	20.45	21	0			
				821.5	26765	20.57	21	0			
		36 RB	18	831.5	26865	20.54	21	0			
				841.5	26965	20.42	21	0			
				821.5	26765	20.62	21	0			
			37	831.5	26865	20.43	21	0			
				841.5	26965	20.42	21	0			
			-	821.5	26765	20.65	21	0			
		75	RB	831.5	26865	20.74	21	3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0			
15				841.5	26965	20.58	21	0			
10				821.5	26765	20.15	21	0			
			0	831.5	26865	20.61	21				
				841.5	26965	20.36	21				
				821.5	26765	20.46	21				
		1 RB	36	831.5	26865	20.4	21				
				841.5	26965	20.27	21				
				821.5	26765	20.36	21				
			74	831.5	26865	20.34	21				
				841.5	26965	20.56	21				
			-	821.5	26765	20.51	21				
	16-QAM		0	831.5	26865	20.45	21				
				841.5	26965	20.27	21	-			
				821.5	26765	20.47	21				
		36 RB	18	831.5	26865	20.37	21				
				841.5	26965	20.35	21				
			67	821.5	26765	20.58	21				
			37	831.5	26865	20.3	21				
				841.5	26965	20.33	21				
				821.5	26765	20.45	21	0 0			
	75R		КB	831.5	26865	20.59	21				
				841.5	26965	20.39	21	0			

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FDD Band 26											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				819	26740	20.12	21	0			
			0	831.5	26865	20.76	21	0			
				844	26990	20.30	21	0			
				819	26740	20.49	21	0			
		1 RB	25	831.5	26865	20.37	21	0			
				844	26990	20.25	21	0			
				819	26740	20.48	21	0			
			49	831.5	26865	20.24	21	0			
				844	26990	20.63	21	0			
				819	26740	20.37	21	0			
	QPSK		0	831.5	26865	20.29	21	0			
				844	26990	20.30	21	0			
				819	26740	20.36	21	0			
		25 RB	12	831.5	26865	20.33	21	0			
				844	26990	20.20	21	0			
				819	26740	20.41	21	0			
			25	831.5	26865	20.25	21	0			
				844	26990	20.28	21	0			
			-	819	26740	20.60	21	0			
		50	RB	831.5	26865	20.71	21	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0			
10				844	26990	20.45	21	0			
10				819	26740	20.00	21	0			
			0	831.5	26865	20.58	21				
				844	26990	20.33	21				
				819	26740	20.24	21				
		1 RB	25	831.5	26865	20.26	21				
				844	26990	20.13	21				
				819	26740	20.29	21				
			49	831.5	26865	20.20	21				
				844	26990	20.43	21				
			-	819	26740	20.35	21				
	16-QAM		0	831.5	26865	20.36	21				
				844	26990	20.14	21	-			
		05 55	45	819	26740	20.26	21				
		25 RB	12	831.5	26865	20.29	21				
				844	26990	20.21	21				
			05	819	26740	20.55	21				
			25	831.5	26865	20.24	21	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
				844	26990	20.20	21				
			DD	819	26740	20.40	21				
	50RI		КB	831.5	26865	20.46	21				
				844	26990	20.36	21	U			

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FDD Band 26											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				816.5	26715	20.15	21	0			
			0	831.5	26865	20.73	21	0			
				846.5	27015	20.21	21	0			
				816.5	26715	20.34	21	0			
		1 RB	12	831.5	26865	20.39	21	0			
				846.5	27015	20.27	21	0			
				816.5	26715	20.30	21	0			
			24	831.5	26865	20.41	21	0			
				846.5	27015	20.67	21	0			
				816.5	26715	20.46	21	0			
	QPSK		0	831.5	26865	20.30	21	0			
				846.5	27015	20.23	21	0			
				816.5	26715	20.35	21	0			
		12 RB	6	831.5	26865	20.47	21	0			
				846.5	27015	20.23	21	0			
				816.5	26715	20.40	21	0			
			13	831.5	26865	20.23	21	0			
				846.5	27015	20.31	21	0			
			-	816.5	26715	20.57	21	0			
		25	RB	831.5	26865	20.62	21	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0			
5			-	846.5	27015	20.50	21	0			
Ũ				816.5	26715	20.06	21	0			
			0	831.5	26865	20.48	21				
				846.5	27015	20.23	21	0			
				816.5	26715	20.33	21				
		1 RB	12	831.5	26865	20.30	21				
				846.5	27015	20.11	21				
				816.5	26715	20.31	21				
			24	831.5	26865	20.15	21				
				846.5	27015	20.46	21				
				816.5	26715	20.48	21				
	16-QAM		0	831.5	26865	20.38	21				
				846.5	27015	20.23	21	-			
		· • ==	_	816.5	26715	20.28	21				
		12 RB	6	831.5	26865	20.32	21				
				846.5	27015	20.27	21				
			40	816.5	26715	20.53	21				
			13	831.5	26865	20.15	21	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
				846.5	27015	20.13	21				
				816.5	26715	20.24	21				
		25RB		831.5	26865	20.48	21				
				846.5	27015	20.23	21	U			

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FDD Band 26											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				815.5	26705	20.23	21	0			
			0	831.5	26865	20.66	21	0			
				847.5	27025	20.39	21	0			
				815.5	26705	20.46	21	0			
		1 RB	7	831.5	26865	20.37	21	0			
				847.5	27025	20.32	21	0			
				815.5	26705	20.48	21	0			
			14	831.5	26865	20.42	21	0			
				847.5	27025	20.57	21	0			
				815.5	26705	20.42	21	0			
	QPSK		0	831.5	26865	20.43	21	0			
				847.5	27025	20.33	21	0			
				815.5	26705	20.53	21	0			
		8 RB	4	831.5	26865	20.51	21	0			
				847.5	27025	20.31	21	0			
				815.5	26705	20.55	21	Allow ed per 3GPP(dB) 0			
			7	831.5	26865	20.36	21	0			
				847.5	27025	20.21	21	0			
			-	815.5	26705	20.48	21	0			
		15	RB	831.5	26865	20.63	21	0 0			
3			-	847.5	27025	20.52	21	0			
U				815.5	26705	20.09	21	0			
			0	831.5	26865	20.46	21				
				847.5	27025	20.18	21	0			
				815.5	26705	20.28	21				
		1 RB	7	831.5	26865	20.27	21				
				847.5	27025	20.14	21				
				815.5	26705	20.19	21				
			14	831.5	26865	20.12	21				
				847.5	27025	20.42	21				
			_	815.5	26705	20.41	21				
	16-QAM		0	831.5	26865	20.24	21				
				847.5	27025	20.19	21	-			
			-	815.5	26705	20.28	21				
		8 RB	4	831.5	26865	20.31	21				
				847.5	27025	20.23	21				
			-	815.5	26705	20.37	21				
			7	831.5	26865	20.09	21				
				847.5	27025	20.25	21				
				815.5	26705	20.41	21				
	15R		КB	831.5	26865	20.49	21	0			
				847.5	27025	20.20	21	0			

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FDD Band 26											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				814.7	26697	20.13	21	0			
			0	831.5	26865	20.66	21	0			
				848.3	27033	20.24	21	0			
				814.7	26697	20.45	21	0			
		1 RB	2	831.5	26865	20.35	21	0			
				848.3	27033	20.31	21	0			
				814.7	26697	20.35	21	0			
			5	831.5	26865	20.38	21	0			
				848.3	27033	20.67	21	0			
				814.7	26697	20.34	21	0			
	QPSK		0	831.5	26865	20.42	21	0			
				848.3	27033	20.41	21	0			
				814.7	26697	20.51	21	0			
		3 RB	2	831.5	26865	20.34	21	0			
				848.3	27033	20.34	21	0			
				814.7	26697	20.55	21	0			
			3	831.5	26865	20.23	21	0			
				848.3	27033	20.29	21	0			
				814.7	26697	20.53	21	0			
		61	RB	831.5	26865	20.55	21	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
1.4				848.3	27033	20.47	21				
				814.7	26697	19.99	21				
			0	831.5	26865	20.58	21				
				848.3	27033	20.24	21				
				814.7	26697	20.35	21				
		1 RB	2	831.5	26865	20.23	21				
				848.3	27033	20.10	21				
			_	814.7	26697	20.25	21				
			5	831.5	26865	20.18	21				
				848.3	27033	20.38	21				
	40.011			814.7	26697	20.29	21				
	16-QAM		0	831.5	26865	20.42	21				
				848.3	27033	20.05	21				
		0.00		814.7	26697	20.32	21				
		3 RB	2	831.5	26865	20.25	21				
				848.3	27033	20.31	21				
			2	814.7	26697	20.54	21				
			3	831.5	26865	20.21 20.25	21	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
				848.3 814 7	27033		21				
		e1	סכ	814.7	26697	20.31	21				
		6RB		831.5	26865	20.40	21				
				848.3	27033	20.21	21	U			

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				FDD Band 66				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1720	132072	19.41	19.5	0
			0	1745	132322	19.35	19.5	0
				1770	132572	19.49	19.5	0
				1720	132072	19.18	19.5	0
		1 RB	50	1745	132322	19.13	19.5	0
				1770	132572	19.05	19.5	0
				1720	132072	19.11	19.5	0
			99	1745	132322	19.12	19.5	0
				1770	132572	19.44	19.5	0
				1720	132072	19.31	19.5	0
	QPSK		0	1745	132322	19.12	19.5	0
				1770	132572	19.21	19.5	0
				1720	132072	19.29	19.5	0
		50 RB	25	1745	132322	19.18	19.5	0
				1770	132572	19.13	19.5	0
				1720	132072	19.25	19.5	0
			50	1745	132322	19.34	19.5	0
				1770	132572	19.30	19.5	0
				1720	132072	19.39	19.5	0
		100)RB	1745	132322	19.41	19.5	0
20				1770	132572	19.29	19.5	0
20				1720	132072	19.33	19.5	0
			0	1745	132322	19.16	19.5	
				1770	132572	19.29	19.5	
				1720	132072	18.99	19.5	
		1 RB	50	1745	132322	18.95	19.5	
				1770	132572	18.96	19.5	0
				1720	132072	19.06	19.5	
			99	1745	132322	19.07	19.5	
				1770	132572	19.21	19.5	
	40.000			1720	132072	19.14	19.5	
	16-QAM		0	1745	132322	19.08	19.5	
				1770	132572	19.01	19.5	-
			05	1720	132072	19.09	19.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		50 RB	25	1745	132322	19.07	19.5	
				1770	132572	19.04	19.5	
			50	1720	132072	19.20	19.5	
			50	1745	132322	19.16	19.5	
				1770	132572	19.20	19.5	
		4.00	ססנ	1720	132072	19.22	19.5	
		100F		1745	132322	19.37	19.5	
				1770	132572	19.19	19.5	0

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FDD Band 66											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				1717.5	132047	19.27	19.5	0			
			0	1745	132322	19.28	19.5	0			
				1772.5	132597	19.41	19.5	0			
				1717.5	132047	19.14	19.5	0			
		1 RB	36	1745	132322	19.08	19.5	0			
				1772.5	132597	18.86	19.5	0			
				1717.5	132047	18.96	19.5	0			
			74	1745	132322	19.04	19.5	0			
				1772.5	132597	19.35	19.5	0			
				1717.5	132047	19.12	19.5	0			
	QPSK		0	1745	132322	19.08	19.5	0			
				1772.5	132597	19.04	19.5	0			
				1717.5	132047	19.18	19.5	0			
		36 RB	18	1745	132322	19.10	19.5	0			
				1772.5	132597	19.02	19.5	0			
				1717.5	132047	19.22	19.5	0			
			37	1745	132322	19.18	19.5	0			
				1772.5	132597	19.27	19.5	0			
				1717.5	132047	19.25	19.5	0			
		75	RB	1745	132322	19.35	19.5	3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0			
15				1772.5	132597	19.17	19.5				
				1717.5	132047	19.28	19.5	-			
			0	1745	132322	19.08	19.5				
				1772.5	132597	19.10	19.5				
				1717.5	132047	18.87	19.5				
		1 RB	36	1745	132322	18.74	19.5				
				1772.5	132597	18.85	19.5				
				1717.5	132047	18.98	19.5				
			74	1745	132322	18.92	19.5				
				1772.5	132597	19.15	19.5				
	40.000			1717.5	132047	18.92	19.5				
	16-QAM		0	1745	132322	19.02	19.5				
				1772.5	132597	18.84	19.5	-			
			40	1717.5	132047	19.04	19.5				
		36 RB	18	1745	132322	19.00	19.5				
				1772.5	132597	18.90	19.5				
			27	1717.5	132047	19.03	19.5				
			37	1745	132322	19.09	19.5				
				1772.5 1717.5	132597	19.09 19.17	19.5				
		75	DD	-	132047	-	19.5	3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
		75RB		1745	132322	19.26	19.5				
			-	1772.5	132597	19.10	19.5	U			

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FDD Band 66											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				1715	132022	19.29	19.5	0			
			0	1745	132322	19.22	19.5	0			
				1775	132622	19.27	19.5	0			
				1715	132022	19.03	19.5	0			
		1 RB	25	1745	132322	19.10	19.5	0			
				1775	132622	18.97	19.5	0			
				1715	132022	18.98	19.5	0			
			49	1745	132322	19.05	19.5	0			
				1775	132622	19.41	19.5	0			
				1715	132022	19.21	19.5	0			
	QPSK		0	1745	132322	19.00	19.5	0			
				1775	132622	19.00	19.5	0			
				1715	132022	19.25	19.5	0			
		25 RB	12	1745	132322	19.09	19.5	0			
				1775	132622	18.94	19.5	0			
				1715	132022	19.04	19.5	0			
			25	1745	132322	19.19	19.5	0			
				1775	132622	19.19	19.5	0			
			-	1715	132022	19.34	19.5	0			
		50	RB	1745	132322	19.32	19.5	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0			
10				1775	132622	19.26	19.5	0			
10				1715	132022	19.26	19.5	0			
			0	1745	132322	19.08	19.5				
				1775	132622	19.08	19.5	0			
				1715	132022	18.85	19.5				
		1 RB	25	1745	132322	18.85	19.5				
				1775	132622	18.90	19.5				
				1715	132022	19.02	19.5				
			49	1745	132322	18.92	19.5				
				1775	132622	19.04	19.5				
			-	1715	132022	19.08	19.5				
	16-QAM		0	1745	132322	18.98	19.5				
				1775	132622	18.96	19.5	_			
				1715	132022	19.06	19.5				
		25 RB	12	1745	132322	18.85	19.5				
				1775	132622	18.95	19.5				
			65	1715	132022	19.04	19.5				
			25	1745	132322	18.98	19.5				
				1775	132622	19.13	19.5				
l				1715	132022	19.05	19.5	Allow ed per 3GPP(dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
	50R		КB	1745	132322	19.33	19.5				
			-	1775	132622	19.04	19.5	U			

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FDD Band 66											
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)			
				1712.5	131997	19.30	19.5	0			
			0	1745	132322	19.23	19.5	0			
				1777.5	132647	19.27	19.5	0			
				1712.5	131997	19.05	19.5	0			
		1 RB	12	1745	132322	18.98	19.5	0			
				1777.5	132647	19.01	19.5	0			
				1712.5	131997	18.91	19.5	0			
			24	1745	132322	18.99	19.5	0			
				1777.5	132647	19.31	19.5	0			
				1712.5	131997	19.21	19.5	0			
	QPSK		0	1745	132322	19.00	19.5	0			
				1777.5	132647	19.14	19.5	0			
				1712.5	131997	19.20	19.5	0			
		12 RB	6	1745	132322	19.13	19.5	0			
				1777.5	132647	19.00	19.5	0			
				1712.5	131997	19.22	19.5	0			
			13	1745	132322	19.30	19.5	0			
				1777.5	132647	19.19	19.5	0			
				1712.5	131997	19.36	19.5				
		25	RB	1745	132322	19.34	19.5	0 0			
5			1	1777.5	132647	19.08	19.5				
_				1712.5	131997	19.22	19.5	-			
			0	1745	132322	19.05	19.5				
				1777.5	132647	19.24	19.5				
				1712.5	131997	18.96	19.5				
		1 RB	12	1745	132322	18.90	19.5				
				1777.5	132647	18.88	19.5				
				1712.5	131997	18.87	19.5				
			24	1745	132322	18.87	19.5				
				1777.5	132647	19.00	19.5				
	16 0 14		0	1712.5	131997	19.11	19.5				
	16-QAM		0	1745	132322	18.89	19.5				
				1777.5 1712.5	132647	18.94	19.5 19.5	_			
		12 RB	6	1712.5	131997 132322	19.04	19.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
		IZ KD	0	1745	132322	18.89 18.92	19.5				
				1777.5	132647	18.92	19.5				
			13	1712.5	132322	19.00	19.5				
			10	1745	132522	19.00	19.5				
				1712.5	132047	19.11	19.5				
		25	RB	1712.5	132322	19.14	19.5				
		25RB		1745	132522	19.29	19.5				
					102047	13.10	13.5	5			

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FDD Band 66										
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				1711.5	131987	19.33	19.5	0		
			0	1745	132322	19.29	19.5	0		
				1778.5	132657	19.42	19.5	0		
				1711.5	131987	19.06	19.5	0		
		1 RB	7	1745	132322	19.08	19.5	0		
	QPSK			1778.5	132657	18.89	19.5	0		
				1711.5	131987	19.06	19.5	0		
			14	1745	132322	19.05	19.5	0		
				1778.5	132657	19.40	19.5	0		
				1711.5	131987	19.23	19.5	0		
			0	1745	132322	19.03	19.5	0		
				1778.5	132657	18.99	19.5	0		
				1711.5	131987	19.20	19.5	0		
		8 RB	4	1745	132322	18.99	.20 19.5 0 .99 19.5 0 .07 19.5 0 .22 19.5 0 .17 19.5 0	0		
				1778.5	132657	19.07				
			_	1711.5	131987	19.22		0		
			7	1745	132322	19.17	19.5	0.5 0 0.5 0 0.5 0 0.5 0 0.5 0 0.5 0 0.5 0 0.5 0 0.5 0 0.5 0 0.5 0 0.5 0 0.5 0 0.5 0 0.5 0		
				1778.5	132657	19.13	19.5	0		
			-	1711.5	131987	19.36	19.5	0		
		15RB		1745	132322	19.32	19.5	0		
3				1778.5	132657	19.25	19.5	0		
U			0	1711.5	131987	19.12	19.5	0		
				1745	132322	19.02	19.5	0		
				1778.5	132657	19.24	19.5	0		
				1711.5	131987	18.90	19.5	0		
		1 RB	7	1745	132322	18.81	19.5	0		
				1778.5	132657	18.78	19.5	0		
				1711.5	131987	18.92	19.5	0		
			14	1745	132322	18.89	19.5	0		
				1778.5	132657	19.13	19.5	0		
				1711.5	131987	19.10	19.5	0		
	16-QAM		0	1745	132322	18.94	19.5	0		
				1778.5	132657	18.90	19.5	0		
				1711.5	131987	19.00	19.5	0		
		8 RB	4	1745	132322	18.89	19.5	0		
				1778.5	132657	18.95	19.5	0		
			_	1711.5	131987	18.99	19.5	0		
			7	1745	132322	18.94	19.5	0		
				1778.5	132657	19.16	19.5	0		
				1711.5	131987	19.08	19.5	0		
		15	RB	1745	132322	19.19	19.5	0		
				1778.5	132657	19.00	19.5	0		

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				FDD Band 66				
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)
				1710.7	131979	19.35	19.5	0
			0	1745	132322	19.14	19.5	0
				1779.3	132665	19.46	19.5	0
				1710.7	131979	19.01	19.5	0
		1 RB	2	1745	132322	18.96	19.5	0
				1779.3	132665	18.98	19.5	0
				1710.7	131979	19.08	19.5	0
			5	1745	132322	19.07	19.5	0
				1779.3	132665	19.30	19.5	0
			0	1710.7	131979	19.13	19.5	0
	QPSK			1745	132322	19.03	19.5	0
				1779.3	132665	19.11	19.5	0
				1710.7	131979	19.08	19.5	0
		3 RB	2	1745	132322	19.05	19.5 0 19.5 0 19.5 0 19.5 0 19.5 0 19.5 0 19.5 0 19.5 0 19.5 0 19.5 0 19.5 0 19.5 0 19.5 0 19.5 0 19.5 0	
				1779.3	132665	18.94	19.5	Max. Allow ed per 3GPP(dB) 5 0 5
				1710.7	131979	19.05	19.5	
			3	1745	132322	19.30	19.5	
				1779.3	132665	19.12	19.5	0
			-	1710.7	131979	19.26	19.5	0
		6RB		1745	132322	19.26	19.5	0
1.4				1779.3	132665	19.23	19.5	0
1.4			0	1710.7	131979	19.29	19.5	0
				1745	132322	19.11	19.5	0
				1779.3	132665	19.23	19.5	0
				1710.7	131979	18.80	19.5	0
		1 RB	2	1745	132322	18.75	19.5	0
				1779.3	132665	18.91	19.5	0
				1710.7	131979	18.94	19.5	
			5	1745	132322	18.95	19.5	
				1779.3	132665	19.01	19.5	
				1710.7	131979	19.04	19.5	
	16-QAM		0	1745	132322	18.88	19.5	
				1779.3	132665	18.80	19.5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
				1710.7	131979	18.89	19.5	
		3 RB	2	1745	132322	19.04	19.5	
				1779.3	132665	18.94	19.5	
				1710.7	131979	19.03	19.5	
			3	1745	132322	19.07	19.5	
				1779.3	132665	19.05	19.5	
		_		1710.7	131979	19.16	19.5	
1		61	RB	1745	132322	19.22	19.5	
				1779.3	132665	19.10	19.5	0

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TDD Band 41									
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)	
				2506	39750	22.45	22.5	0	
				2549.5	40185	22.30	22.5	0	
			0	2593	40620	22.24	22.5	0	
				2636.5	41055	22.23	22.5	0	
				2680	41490	22.50	22.5	0	
				2506	39750	22.18	22.5	0	
				2549.5	40185	22.18	22.5	0	
		1 RB	50	2593	40620	22.20	22.5	0	
				2636.5	41055	22.32	22.5	0	
				2680	41490	22.44	22.5	0	
			99	2506	39750	22.17	22.5	0	
				2549.5	40185	22.20	22.5	0	
				2593	40620	22.25	22.5	0	
				2636.5	41055	22.34	22.5	0	
				2680	41490	22.41	22.5	0	
			0	2506	39750	22.00	22.5	0	
				2549.5	40185	22.01	22.5	0	
20	QPSK			2593	40620	21.96	22.5	0	
				2636.5	41055	22.10	22.5	0	
				2680	41490	22.22	22.5	0	
				2506	39750	21.94	22.5	0	
				2549.5	40185	21.93	22.5	0	
		50 RB	25	2593	40620	21.95	22.5	0	
				2636.5	41055	22.09	22.5	0	
				2680	41490	21.93	22.5	0	
				2506	39750	21.97	22.5	0	
				2549.5	40185	21.93	22.5	0	
			50	2593	40620	21.97	22.5	0	
				2636.5	41055	22.08	22.5	0	
				2680	41490	22.18	22.5	0	
				2506	39750	22.04	22.5	0	
				2549.5	40185	21.95	22.5	0	
		100)RB	2593	40620	21.93	22.5	0	
				2636.5	41055	22.09	22.5	0	
				2680	41490	22.23	22.5	0	

LTE TDD Band 41 power table (Reduced power):

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TDD Band 41										
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				2506	39750	22.40	22.5	0		
				2549.5	40185	22.19	22.5	0		
			0	2593	40620	22.18	22.5	0		
				2636.5	41055	22.13	22.5	0		
				2680	41490	22.46	22.5	0		
				2506	39750	21.97	22.5	0		
				2549.5	40185	21.99	22.5	0		
		1 RB	50	2593	40620	22.10	22.5	0		
				2636.5	41055	22.20	22.5	0		
				2680	41490	22.29	22.5	0		
				2506	39750	22.00	22.5	0		
				2549.5	40185	22.07	22.5	0		
			99	2593	40620	22.05	22.5	0		
				2636.5	41055	22.29	22.5	0		
				2680	41490	22.21	22.5	0		
			0	2506	39750	21.87	22.5	0		
				2549.5	40185	21.86	22.5	0		
20	16-QAM			2593	40620	21.93	22.5	0		
				2636.5	41055	21.97	22.5	0		
				2680	41490	22.06	22.5	0		
				2506	39750	21.84	22.5	0		
				2549.5	40185	21.81	22.5	0		
		50 RB	25	2593	40620	21.89	22.5	0		
				2636.5	41055	21.88	22.5	0		
				2680	41490	21.89	22.5	0		
				2506	39750	21.81	22.5	0		
				2549.5	40185	21.90	22.5	0		
			50	2593	40620	21.78	22.5	0		
				2636.5	41055	22.04	22.5	0		
				2680	41490	22.03	22.5	0		
				2506	39750	21.93	22.5	0		
				2549.5	40185	21.82	22.5	0		
		100)RB	2593	40620	21.72	22.5	0		
				2636.5	41055	21.97	22.5	0		
				2680	41490	22.18	22.5	0		

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TDD Band 41										
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				2503.5	39725	22.26	22.5	0		
				2548.3	40173	22.21	22.5	0		
			0	2593	40620	22.04	22.5	0		
				2637.8	41068	22.18	22.5	0		
				2682.5	41515	22.35	22.5	0		
				2503.5	39725	22.14	22.5	0		
				2548.3	40173	22.03	22.5	0		
		1 RB	36	2593	40620	22.05	22.5	0		
				2637.8	7.8 41068	22.18	22.5	0		
				2682.5	41515	22.26	22.5	0		
				2503.5	39725	22.08	22.5	0		
			74	2548.3	40173	22.14	22.5	0		
				2593	40620	22.21	22.5	0		
				2637.8	41068	22.29	22.5	0		
				2682.5	41515	22.38	22.5	0		
				2503.5	39725	21.90	22.5	0		
			0	2548.3	40173	21.90	22.5	0		
15	QPSK			2593	40620	21.76	22.5	0		
				2637.8	41068	21.99	22.5	0		
				2682.5	41515	22.03	22.5	0		
				2503.5	39725	21.89	22.5	0		
				2548.3	40173	21.88	22.5	0		
		36 RB	18	2593	40620	21.83	22.5	0		
				2637.8	41068	21.87	22.5	0		
				2682.5	41515	21.83	22.5	0		
				2503.5	39725	21.91	22.5	0		
				2548.3	40173	21.88	22.5	0		
			37	2593	40620	21.88	22.5	0		
				2637.8	41068	22.05	22.5	0		
	-			2682.5	41515	22.03	22.5	0		
				2503.5	39725	22.01	22.5	0		
				2548.3	40173	21.73	22.5	0		
		75	RB	2593	40620	21.74	22.5	0		
				2637.8	41068	22.04	22.5	0		
				2682.5	41515	22.12	22.5	0		

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TDD Band 41										
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				2503.5	39725	22.25	22.5	0		
				2548.3	40173	21.99	22.5	0		
			0	2593	40620	21.97	22.5	0		
				2637.8	41068	21.92	22.5	0		
				2682.5	41515	22.33	22.5	0		
				2503.5	39725	21.90	22.5	0		
				2548.3	40173	21.95	22.5	0		
		1 RB	36	2593	40620	21.96	22.5	0		
				2637.8	41068	22.17	22.5	0		
				2682.5	41515	22.12	22.5	0		
				2503.5	39725	21.96	22.5	0		
				2548.3	40173	22.04	22.5	0		
			74	2593	40620	21.98	22.5	0		
				2637.8	41068	22.15	22.5	0		
				2682.5	41515	22.01	22.5	0		
			0	2503.5	39725	21.66	22.5	0		
		M		2548.3	40173	21.67	22.5	0		
15	16-QAM			2593	40620	21.79	22.5	0		
				2637.8	41068	21.82	22.5	0		
				2682.5	41515	22.01	22.5	0		
				2503.5	39725	21.80	22.5	0		
				2548.3	40173	21.74	22.5	0		
		36 RB	18	2593	40620	21.73	22.5	0		
				2637.8	41068	21.79	22.5	0		
				2682.5	41515	21.83	22.5	0		
				2503.5	39725	21.65	22.5	0		
				2548.3	40173	21.72	22.5	0		
			37	2593	40620	21.65	22.5	0		
				2637.8	41068	21.97	22.5	0		
				2682.5	41515	21.87	22.5	0		
				2503.5	39725	21.71	22.5	0		
				2548.3	40173	21.73	22.5	0		
		75	RB	2593	40620	21.68	22.5	0		
				2637.8	41068	21.84	22.5	0		
				2682.5	41515	22.04	22.5	0		

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TDD Band 41										
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				2501	39700	22.31	22.5	0		
				2547	40160	22.21	22.5	0		
			0	2593	40620	22.20	22.5	0		
				2639	41080	22.07	22.5	0		
				2685	41540	22.43	22.5	0		
				2501	39700	22.06	22.5	0		
				2547	40160	22.08	22.5	0		
		1 RB	25	2593	40620	22.16	22.5	0		
				2639	41080	22.24	22.5	0		
				2685	41540	22.22	22.5	0		
				2501	39700	22.03	22.5	0		
				2547	40160	22.11	22.5	0		
			49	2593	40620	22.11	22.5	0		
				2639	41080	22.24	22.5	0		
				2685	41540	22.25	22.5	0		
			0	2501	39700	21.79	22.5	0		
				2547	40160	21.95	22.5	0		
10	QPSK			2593	40620	21.91	22.5	0		
				2639	41080	21.99	22.5	0		
				2685	41540	22.05	22.5	0		
				2501	39700	21.90	22.5	0		
				2547	40160	21.77	22.5	0		
		25 RB	12	2593	40620	21.79	22.5	0		
				2639	41080	22.02	22.5	0		
				2685	41540	21.85	22.5	0		
				2501	39700	21.86	22.5	0		
				2547	40160	21.84	22.5	0		
			25	2593	40620	21.81	22.5	0		
				2639	41080	21.99	22.5	0		
				2685	41540	22.04	22.5	0		
				2501	39700	21.92	22.5	0		
				2547	40160	21.86	22.5	0		
		50	RB	2593	40620	21.72	22.5	0		
				2639	41080	21.93	22.5	0		
				2685	41540	22.12	22.5	0		

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TDD Band 41										
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				2501	39700	22.35	22.5	0		
				2547	40160	22.14	22.5	0		
			0	2593	40620	22.14	22.5	0		
				2639	41080	21.91	22.5	0		
				2685	41540	22.38	22.5	0		
				2501	39700	21.94	22.5	0		
				2547	40160	21.90	22.5	0		
		1 RB	25	2593	40620	22.02	22.5	0		
				2639	41080	22.10	22.5	0		
				2685	41540	22.11	22.5	0		
				2501	39700	21.91	22.5	0		
				2547	40160	21.97	22.5	0		
			49	2593	40620	21.83	22.5	0		
				2639	41080	22.25	22.5	0		
				2685	41540	22.10	22.5	0		
		MAQ	0	2501	39700	21.76	22.5	0		
				2547	40160	21.79	22.5	0		
10	16-QAM			2593	40620	21.83	22.5	0		
				2639	41080	21.94	22.5	0		
				2685	41540	21.94	22.5	0		
				2501	39700	21.66	22.5	0		
				2547	40160	21.76	22.5	0		
		25 RB	12	2593	40620	21.82	22.5	0		
				2639	41080	21.67	22.5	0		
				2685	41540	21.75	22.5	0		
				2501	39700	21.64	22.5	0		
				2547	40160	21.72	22.5	0		
			25	2593	40620	21.62	22.5	0		
				2639	41080	21.84	22.5	0		
				2685	41540	21.85	22.5	0		
				2501	39700	21.73	22.5	0		
				2547	40160	21.73	22.5	0		
		50	RB	2593	40620	21.50	22.5	0		
				2639	41080	21.82	22.5	0		
				2685	41540	22.00	22.5	0		

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TDD Band 41										
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				2498.5	39675	22.34	22.5	0		
				2547.8	40148	22.20	22.5	0		
			0	2593	40620	22.19	22.5	0		
				2640.3	41093	22.07	22.5	0		
				2687.5	41565	22.39	22.5	0		
				2498.5	39675	22.01	22.5	0		
				2547.8	40148	22.01	22.5	0		
		1 RB	12	2593	40620	22.10	22.5	0		
				2640.3	41093	22.11	22.5	0		
				2687.5	41565	22.29	22.5	0		
				2498.5	39675	22.09	22.5	0		
				2547.8	40148	22.13	22.5	0		
			24	2593	40620	22.07	22.5	0		
				2640.3	41093	22.16	22.5	0		
				2687.5	41565	22.32	22.5	0		
		QPSK		2498.5	39675	21.92	22.5	0		
			0	2547.8	40148	21.94	22.5	0		
5	QPSK			2593	40620	21.76	22.5	0		
				2640.3	41093	22.01	22.5	0		
				2687.5	41565	22.04	22.5	0		
				2498.5	39675	21.77	22.5	0		
				2547.8	40148	21.90	22.5	0		
		12 RB	6	2593	40620	21.83	22.5	0		
				2640.3	41093	22.03	22.5	0		
				2687.5	41565	21.83	22.5	0		
				2498.5	39675	21.88	22.5	0		
				2547.8	40148	21.76	22.5	0		
			13	2593	40620	21.83	22.5	0		
				2640.3	41093	21.99	22.5	0		
				2687.5	41565	22.00	22.5	0		
				2498.5	39675	21.89	22.5	0		
				2547.8	40148	21.85	22.5	0		
		25	RB	2593	40620	21.79	22.5	0		
				2640.3	41093	21.88	22.5	0		
				2687.5	41565	22.01	22.5	0		

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TDD Band 41										
BW(Mhz)	Modulation	RB Size	RB Offset	Frequency (MHz)	Channel	Conducted pow er (dBm)	Target Power + Max. Tolerance (dBm)	MPR Allow ed per 3GPP(dB)		
				2498.5	39675	22.22	22.5	0		
				2547.8	40148	22.01	22.5	0		
			0	2593	40620	22.04	22.5	0		
				2640.3	41093	21.96	22.5	0		
				2687.5	41565	22.27	22.5	0		
				2498.5	39675	21.87	22.5	0		
				2547.8	40148	21.79	22.5	0		
		1 RB	12	2593	40620	21.99	22.5	0		
				2640.3	41093	21.99 22.5 22.05 22.5 22.15 22.5 21.85 22.5 21.97 22.5	22.5	0		
				2687.5	41565	22.15	22.5	0		
				2498.5	39675	21.85	22.5	0		
				2547.8	40148	21.97	22.5	0		
			24	2593	40620	21.83	22.5	0		
				2640.3	41093	22.26	22.5	0		
				2687.5	41565	22.06	22.5	0		
			0	2498.5	39675	21.67	22.5	0		
				2547.8	40148	21.75	22.5	0		
5	16-QAM			2593	40620	21.73	22.5	0		
				2640.3	41093	21.93	22.5	0		
				2687.5	41565	21.95	22.5	0		
				2498.5	39675	21.73	22.5	0		
				2547.8	40148	21.73	22.5	0		
		12 RB	6	2593	40620	21.71	22.5	0		
				2640.3	41093	21.76	22.5	0		
				2687.5	41565	21.78	22.5	0		
				2498.5	39675	21.64	22.5	0		
				2547.8	40148	21.87	22.5	0		
			13	2593	40620	21.65	22.5	0		
				2640.3	41093	22.00	22.5	0		
				2687.5	41565	21.84	22.5	0		
				2498.5	39675	21.73	22.5	0		
				2547.8	40148	21.72	22.5	0		
		25	RB	2593	40620	21.59	22.5	0		
				2640.3	41093	21.82	22.5	0		
				2687.5	41565	22.05	22.5	0		

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Antenna	SI	SO	MIMO
Band	Chain 0	Chain 1	Chain0+1
WLAN802.11b	V	V	-
WLAN802.11g	V	V	-
WLAN802.11n(20M)	V	V	V
WLAN802.11n(40M)	V	V	V
WLAN802.11a	V	V	-
WLAN802.11n(20M) 5G	V	V	V
WLAN802.11n(40M) 5G	V	V	V
WLAN802.11ac(20M) 5G	V	V	V
WLAN802.11ac(40M) 5G	V	V	V
WLAN802.11ac(80M) 5G	V	V	V

WLAN802.11 a/b/g/n(20M/40M)/ac(20M/40M/80M) conducted power table:

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Tablet mode (Reduced power)

		Mair	n Antenna			
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
		1	2412		17.50	17.49
		6	2437		17.50	17.43
	802.11b	11	2462	1Mbps	17.50	17.41
		12	2467		14.00	13.90
		13	2472		8.00	7.92
		1	2412		16.00	15.80
	802.11g	2	2417		17.50	17.26
		6	2437		17.50	17.44
		10	2457	6Mbps	17.50	17.29
		11	2462		16.00	15.79
		12	2467		12.00	11.88
		13	2472		-3.00	-3.10
2450 MHz		1	2412		16.00	15.86
2430 1011 12		2	2417		17.50	17.34
		6	2437		17.50	17.32
	802.11n20-HT0	10	2457	MCS0	17.50	17.38
		11	2462		16.00	15.93
		12	2467		12.00	11.95
		13	2472		-3.00	-3.10
		3	2422		13.00	12.88
		4	2427		16.00	15.94
		6	2437		16.50	16.31
	802.11n40-HT0	8	2447	MCS0	15.50	15.45
		9	2452		15.00	14.86
		10	2457		12.00	11.99
		11	2462		-4.00	-4.02

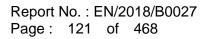
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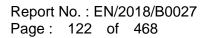




Main Antenna									
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)			
		36	5180		15.50	15.35			
	802.11a	40	5200	6Mbps	15.50	15.32			
	002.118	44	5220	olviopa	15.50	15.31			
		48	5240		15.50	15.43			
		36	5180	MCS0	15.50	15.45			
	802.11n20-HT0	40	5200		15.50	15.43			
	002.11120-010	44	5220		15.50	15.38			
		48	5240		15.50	15.33			
5.15-5.25 GHz		36	5180		15.50	15.38			
	802.11ac20-VHT0	40	5200	MCS0	15.50	15.35			
	002.118020-01110	44	5220	10050	15.50	15.45			
		48	5240		15.50	15.32			
	802.11n40-HT0	38	5190	MCS0	15.50	15.46			
	002.11140-1110	46	5230	10000	15.50	15.47			
	802.11ac40-VHT0	38	5190	MCS0	15.50	15.43			
	002.11a040-VH10	46	5230		15.50	15.42			
	802.11ac80-VHT0	42	5210	MCS0	13.00	12.97			

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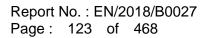
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		Main	Antenna			
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
		52	5260		15.50	15.41
	802.11a	56	5280	6Mbps	15.50	15.44
	802.118	60	5300	olviops	15.50	15.49
		64	5320		15.50	15.45
	802.11n20-HT0	52	5260		15.50	15.31
		56	5280	MCS0	15.50	15.37
		60	5300	10000	15.50	15.41
		64	5320		15.50	15.36
5.25-5.35 GHz		52	5260		15.50	15.34
	802.11ac20-VHT0	56	5280	MCS0	15.50	15.39
	002.118620-0110	60	5300	10030	15.50	15.32
		64	5320		15.50	15.44
	802.11n40-HT0	54	5270	MCS0	15.50	15.49
	002.11140-F110	62	5310	10030	13.00	12.87
	802.11ac40-VHT0	54	5270	MCS0	15.50	15.41
	002.11aC40-VH10	62	5310		13.00	12.93
	802.11ac80-VHT0	58	5290	MCS0	11.00	10.83

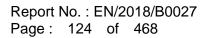
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		Main	Antenna			
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
		100	5500		15.50	15.38
		104	5520		15.50	15.42
	902 110	116	5580	GMbpa	15.50	15.44
	802.11a	120	5600	6Mbps	15.50	15.40
		136	5700		15.50	15.32
		140	5700		15.50	15.43
		100	5500		15.50	15.39
		104	5520		15.50	15.45
		116	5580	MOCO	15.50	15.31
	802.11n20-HT0	120	5600	MCS0	15.50	15.42
		136	5680		15.50	15.43
		140	5700		15.50	15.41
		100	5500		15.50	15.39
		104	5520	MCS0	15.50	15.33
		116	5580		15.50	15.34
5600 MHz	802.11ac20-VHT0	120	5600		15.50	15.35
		136	5680		15.50	15.28
		140	5700		15.50	15.30
		144	5720		15.50	15.29
		102	5510		15.50	15.49
	802.11n40-HT0	110	5550	MCCO	15.50	15.45
	802.11140-ПТО	118	5590	MCS0	15.50	15.43
		134	5670		15.50	15.48
		102	5510		15.50	15.31
		110	5550		15.50	15.39
	802.11ac40-VHT0	118	5590	MCS0	15.50	15.34
		134	5670		15.50	15.40
		142	5710	1	15.50	15.35
		106	5530		13.00	12.98
	802.11ac80-VHT0	122	5610	MCS0	15.50	15.45
		138	5690		15.50	15.49

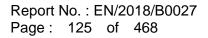
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		Main A	Antenna			
Mode	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
		149	5745		15.50	15.43
	802.11a	157	5785	6Mbps	15.50	15.42
		165	5825		15.50	15.34
	802.11n20-HT0	149	5745	MCS0	15.50	15.41
		157	5785		15.50	15.42
		165	5825		15.50	15.32
5800 MHz		149	5745		15.50	15.45
3000 IVII 12	802.11ac20-VHT0	157	5785	MCS0	15.50	15.31
		165	5825		15.50	15.26
	802.11n40-HT0	151	5755	MCS0	15.50	15.39
	002.11140-010	159	5795	10030	15.50	15.34
	802.11ac40-VHT0	151	5755	MCS0	15.50	15.29
	002.118040-01110	159	5795		15.50	15.28
	802.11ac80-VHT0	155	5775	MCS0	15.50	15.49

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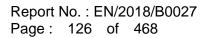


		Aux	Antenna			
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
		1	2412		17.50	17.49
		6	2437		17.50	17.47
	802.11b	11	2462	1Mbps	17.50	17.46
		12	2467		15.00	14.84
		13	2472		8.00	7.92
		1	2412		17.00	16.83
	802.11g	2	2417		17.50	17.43
		6	2437		17.50	17.33
		10	2457	6Mbps	17.50	17.26
		11	2462		17.00	16.88
		12	2467	_	13.00	11.90
		13	2472		-3.00	-3.23
2450 MHz		1	2412		17.00	16.84
		2	2417		17.50	17.37
		6	2437		17.50	17.39
	802.11n20-HT0	10	2457	MCS0	17.50	17.28
		11	2462		17.00	16.92
		12	2467		13.00	12.87
		13	2472		-3.00	-3.11
		3	2422		16.00	15.83
		4	2427		16.00	15.93
		6	2437		16.50	16.32
	802.11n40-HT0	8	2447	MCS0	15.50	15.41
		9	2452		15.00	14.84
		10	2457		12.00	11.98
		11	2462		-4.00	-4.04

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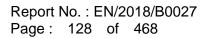
		Aux A	Intenna			
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
		36	5180		15.50	15.36
	802.11a	40	5200	6Mbps	15.50	15.26
	802.118	44	5220	olviops	15.50	15.44
		48	5240		15.50	15.38
	802.11n20-HT0	36	5180		15.50	15.36
		40	5200	MCS0	15.50	15.44
		44	5220		15.50	15.42
		48	5240		15.50	15.38
5.15-5.25 GHz		36	5180		15.50	15.40
	802.11ac20-VHT0	40	5200	MCS0	15.50	15.39
	002.118620-0110	44	5220	10030	15.50	15.43
		48	5240		15.50	15.41
	802.11n40-HT0	38	5190	MCS0	15.50	15.47
	ου <u>2.11114</u> 0-ΠΙΟ	46	5230	IVIC SU	15.50	15.41
	802.11ac40-VHT0	38	5190	MCS0	15.50	15.45
	802.11ac40-VH10	46	5230		15.50	15.35
	802.11ac80-VHT0	42	5210	MCS0	13.00	12.89

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Aux Antenna									
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)			
		52	5260		15.50	15.44			
	802.11a	56	5280	6Mbps	15.50	15.40			
	002.118	60	5300	olviops	15.50	15.47			
		64	5320		15.50	15.43			
		52	5260		15.50	15.39			
	802.11n20-HT0	56	5280	MCS0	15.50	15.31			
	002.111120-F110	60	5300	10030	15.50	15.26			
		64	5320		15.50	15.30			
5.25-5.35 GHz		52	5260		15.50	15.26			
	802.11ac20-VHT0	56	5280	MCS0	15.50	15.31			
	002.118020-01110	60	5300	10000	15.50	15.27			
		64	5320		15.50	15.33			
	802.11n40-HT0	54	5270	MCS0	15.50	15.49			
	002.11140-010	62	5310	IVIC30	13.00	13.00			
	802.11ac40-VHT0	54	5270	MCS0	15.50	15.42			
	002.118040-0110	62	5310		14.00	13.93			
	802.11ac80-VHT0	58	5290	MCS0	12.00	11.98			

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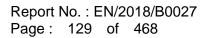


Aux Antenna								
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)		
		100	5500		15.50	15.44		
		104	5520	1	15.50	15.46		
	902 110	116	5580	GMbpa	15.50	15.39		
	802.11a	120	5600	6Mbps	15.50	15.45		
		136	5700		15.50	15.40		
		140	5700	1	15.50	15.43		
		100	5500		15.50	15.39		
	802.11n20-HT0	104	5520		15.50	15.27		
		116	5580	MCS0	15.50	15.35		
		120	5600	101030	15.50	15.33		
		136	5680		15.50	15.42		
		140	5700		15.50	15.45		
		100	5500		15.50	15.32		
		104	5520	MCS0	15.50	15.34		
		116	5580		15.50	15.39		
5600 MHz	802.11ac20-VHT0	120	5600		15.50	15.36		
		136	5680		15.50	15.44		
		140	5700		15.50	15.30		
		144	5720		15.50	15.28		
		102	5510		15.50	15.43		
	802.11n40-HT0	110	5550	MCS0	15.50	15.41		
	оо <u>г</u> .ттт 4 0-пто	118	5590	IVIC30	15.50	15.30		
		134	5670		15.50	15.35		
		102	5510		15.50	15.43		
		110	5550		15.50	15.31		
	802.11ac40-VHT0	118	5590	MCS0	15.50	15.41		
		134	5670		15.50	15.35		
		142	5710		15.50	15.27		
		106	5530		15.50	15.47		
	802.11ac80-VHT0	122	5610	MCS0	15.50	15.45		
		138	5690		15.50	15.49		

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	Aux Antenna								
Mode	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)			
		149	5745		15.50	15.41			
	802.11a	157	5785	6Mbps	15.50	15.36			
		165	5825		15.50	15.37			
	802.11n20-HT0	149	5745	MCS0	15.50	15.44			
		157	5785		15.50	15.47			
		165	5825		15.50	15.43			
5800 MHz		149	5745		15.50	15.29			
3000 IVII 12	802.11n40-VHT0	157	5785	MCS0	15.50	15.46			
		165	5825		15.50	15.42			
	802.11n40-HT0	151	5755	MCS0	15.50	15.31			
	002.11140-010	159	5795	WC30	15.50	15.28			
	802.11ac40-VHT0	151	5755	MCS0	15.50	15.38			
	002.11ac40-VH10	159	5795		15.50	15.32			
	802.11ac80-VHT0	155	5775	MCS0	15.50	15.49			

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Notebook mode (Full power)

		Mair	n Antenna			
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
		1	2412		18.00	17.95
		2	2417		20.00	19.92
		6	2437		20.00	19.99
	802.11b	10	2457	1Mbps	20.00	19.95
		11	2462		19.00	18.92
		12	2467		14.00	13.87
		13	2472		8.00	7.94
		1	2412		16.00	15.80
		2	2417	6Mbps	19.00	18.84
		6	2437		20.00	19.82
	802.11g	10	2457		19.00	18.85
		11	2462		16.00	15.95
		12	2467		12.00	11.88
		13	2472		-3.00	-3.18
2450 MHz		1	2412		16.00	15.78
		2	2417		19.00	18.80
		6	2437		20.00	19.92
	802.11n20-HT0	10	2457	MCS0	19.00	18.85
		11	2462		16.00	15.86
		12	2467		12.00	11.91
		13	2472		-3.00	-3.21
		3	2422		13.00	12.77
		4	2427		16.00	15.91
		6	2437		16.50	16.39
	802.11n40-HT0	8	2447	MCS0	15.50	15.38
		9	2452		15.00	14.87
		10	2457		12.00	11.98
		11	2462		-4.00	-4.02

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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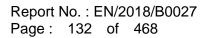
	Main Antenna								
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)			
		36	5180		18.00	17.99			
	802.11a	40	5200	6Mbps	20.00	19.96			
	002.118	44	5220	UNIDPS	20.00	19.99			
		48	5240		20.00	19.95			
		36	5180	MCS0	18.00	17.94			
	802.11n20-HT0	40	5200		20.00	19.87			
	оо <u>г</u> .тпго-пто	44	5220		20.00	19.76			
		48	5240		20.00	19.94			
5.15-5.25 GHz		36	5180		18.00	17.77			
	802.11ac20-VHT0	40	5200	MCS0	20.00	19.86			
	002.118620-0110	44	5220	NIC30	20.00	19.82			
		48	5240		20.00	19.94			
	802.11n40-HT0	38	5190	MCS0	17.00	16.99			
	002.11140-010	46	5230	IVICSU	20.00	19.93			
	802 11ac/0_\/UT0	38	5190	MCS0	17.00	16.86			
	802.11ac40-VHT0	46	5230		20.00	19.90			
	802.11ac80-VHT0	42	5210	MCS0	13.00	12.81			

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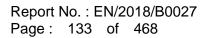
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		Main	Antenna			
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
		52	5260		20.00	19.97
	802.11a	56	5280	6Mbps	20.00	19.95
	602.11a	60	5300		20.00	19.99
		64	5320		17.00	16.95
	802.11n20-HT0	52	5260		20.00	19.88
		56	5280	MCS0	20.00	19.82
		60	5300	10000	20.00	19.86
		64	5320		17.00	16.87
5.25-5.35 GHz		52	5260		20.00	19.95
	802.11ac20-VHT0	56	5280	MCS0	20.00	19.77
	002.118020-01110	60	5300	10000	20.00	19.90
		64	5320		17.00	16.84
	802.11n40-HT0	54	5270	MCS0	20.00	19.96
	002.1111 4 0-1110	62	5310	10000	13.00	12.92
	802.11ac40-VHT0	54	5270	MCS0	20.00	19.91
	002.118040-VH10	62	5310		13.00	12.88
	802.11ac80-VHT0	58	5290	MCS0	11.00	10.83

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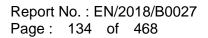


Main Antenna											
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)					
		100	5500		18.00	17.92					
		104	5520		20.00	19.97					
	802.11a	116	5580	6Mbps	20.00	19.99					
	002.11a	120	5600	olviops	20.00	19.91					
		136	5700		20.00	19.92					
		140	5700		17.00	16.95					
		100	5500		18.00	17.85					
		104	5520		20.00	19.95					
	802.11n20-HT0	116	5580	MCS0	20.00	19.76					
	002.11120-1110	120	5600	10000	20.00	19.82					
		136	5680		20.00	19.79					
		140	5700		17.00	16.78					
		100	5500		18.00	17.85					
		104	5520		20.00	19.89					
		116	5580		20.00	19.76					
5600 MHz	802.11ac20-VHT0	120	5600	MCS0	20.00	19.88					
		136	5680		20.00	19.77					
		140	5700		17.00	16.80					
		144	5720		19.00	18.84					
		102	5510		18.00	18.00					
	802.11n40-HT0	110	5550	MCS0	20.00	19.95					
	002.11140-1110	118	5590	10000	20.00	19.94					
		134	5670		19.00	18.98					
		102	5510		18.00	17.95					
		110	5550		20.00	19.83					
	802.11ac40-VHT0	118	5590	MCS0	20.00	19.91					
		134	5670		19.00	18.78					
		142	5710		20.00	19.80					
		106	5530		16.00	15.88					
	802.11ac80-VHT0	122	5610	MCS0	18.00	17.87					
		138	5690		20.00	19.76					

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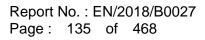
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Main Antenna												
Mode	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)						
		149	5745		20.00	19.92						
	802.11a	157	5785	6Mbps	20.00	19.79						
		165	5825		20.00	19.77						
		149	5745		20.00	19.81						
	802.11n20-HT0	157	5785	MCS0	20.00	19.86						
		165	5825		20.00	19.84						
5800 MHz		149	5745		20.00	19.89						
3000 1011 12	802.11ac20-VHT0	157	5785	MCS0	20.00	19.85						
		165	5825		20.00	19.83						
	802.11n40-HT0	151	5755	MCS0	20.00	19.94						
	002.11140-010	159	5795	10030	20.00	19.99						
	802.11ac40-VHT0	151	5755	MCS0	20.00	19.91						
	002.118040-01110	159	5795	10030	20.00	19.93						
	802.11ac80-VHT0	155	5775	MCS0	18.00	17.87						

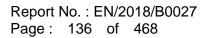
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		Aux	Antenna			
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)
		1	2412		18.00	17.98
		2	2417		20.00	19.99
		6	2437		20.00	19.94
	802.11b	10	2457	1Mbps	20.00	19.93
		11	2462		19.00	18.76
		12	2467		15.00	14.89
		13	2472		8.00	7.92
		1	2412		17.00	16.89
		2	2417		19.00	18.80
	802.11g	6	2437	6Mbps	20.00	19.85
		10	2457		19.00	18.88
		11	2462		17.00	16.89
		12	2467		13.00	12.89
0.450 MIL		13	2472		-3.00	-3.07
2450 MHz		1	2412		17.00	16.84
		2	2417		19.00	18.85
		6	2437		20.00	19.82
	802.11n20-HT0	10	2457	MCS0	19.00	18.78
		11	2462		17.00	16.93
		12	2467		13.00	12.92
		13	2472		-3.00	-3.16
		3	2422		16.00	15.86
		4	2427	1	16.00	15.91
		6	2437	1	16.50	16.30
	802.11n40-HT0	8	2447	MCS0	15.50	15.43
		9	2452		15.00	14.90
		10	2457		12.00	11.99
		11	2462	1	-4.00	-4.01

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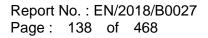
	Aux Antenna												
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)							
		36	5180		18.00	17.97							
	802.11a	40	5200	6Mbps	20.00	19.93							
	002.11a	44	5220	olviops	20.00	19.98							
		48	5240		20.00	19.93							
		36	5180		18.00	17.87							
	802.11n20-HT0	40	5200	MCS0	20.00	19.95							
		44	5220	10000	20.00	19.91							
		48	5240		20.00	19.78							
5.15-5.25 GHz		36	5180		18.00	17.93							
	802.11ac20-VHT0	40	5200	MCS0	20.00	19.78							
	002.118620-0110	44	5220	10030	20.00	19.87							
		48	5240		20.00	19.86							
	802.11n40-HT0	38	5190	MCS0	17.00	16.99							
	ου <u>2.11114</u> 0-ΠΙΟ	46	5230	IVIC SU	20.00	19.95							
	802.11ac40-VHT0	38	5190	MCS0	17.00	16.80							
	002.11a040-VH10	46	5230	10000	20.00	19.87							
	802.11ac80-VHT0	42	5210	MCS0	13.00	12.86							

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Aux Antenna											
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)					
		52	5260		20.00	19.99					
	802.11a	56	5280	6Mbps	20.00	19.96					
	002.11a	60	5300	olviops	20.00	19.91					
		64	5320		17.00	16.98					
		52	5260		20.00	19.76					
	802.11n20-HT0	56	5280	MCS0	20.00	19.85					
		60	5300	10030	20.00	19.79					
		64	5320		17.00	16.89					
5.25-5.35 GHz		52	5260		20.00	19.82					
	802.11ac20-VHT0	56	5280	MCS0	20.00	19.77					
	002.118620-0110	60	5300	NIC30	20.00	19.78					
		64	5320		17.00	16.87					
	802.11n40-HT0	54	5270	MCS0	20.00	19.99					
	002.111140-F110	62	5310	IVICSU	14.00	13.99					
	802.11ac40-VHT0	54	5270	MCS0	20.00	19.79					
	002.11ac40-vH10	62	5310	10030	14.00	13.82					
	802.11ac80-VHT0	58	5290	MCS0	12.00	11.89					

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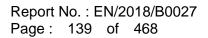


Aux Antenna											
Band	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)					
		100	5500		18.00	17.93					
		104	5520		20.00	19.81					
	000.44	116	5580		20.00	19.99					
	802.11a	120	5600	6Mbps	20.00	19.94					
		136	5700	1	20.00	19.97					
		140	5700	1	17.00	16.92					
		100	5500		18.00	17.94					
		104	5520	1	20.00	19.90					
		116	5580	1	20.00	19.82					
	802.11n20-HT0	120	5600	MCS0	20.00	19.91					
		136	5680	1	20.00	19.80					
		140	5700		17.00	16.77					
		144	5720		19.00	18.85					
		100	5500		18.00	17.78					
		104	5520		20.00	19.78					
		116	5580		20.00	19.88					
5600 MHz	802.11ac20-VHT0	120	5600	MCS0	20.00	19.80					
		136	5680		20.00	19.76					
		140	5700		17.00	16.85					
		144	5720	1	19.00	18.90					
		102	5510		16.00	15.98					
	802.11n40-HT0	110	5550	MCGO	20.00	19.99					
	002.11140-010	118	5590	MCS0	20.00	19.96					
		134	5670		19.00	18.98					
		102	5510		18.00	17.77					
		110	5550]	20.00	19.84					
	802.11ac40-VHT0	118	5590	MCS0	20.00	19.79					
		134	5670		19.00	18.95					
		142	5710		20.00	19.81					
		106	5530		16.00	15.92					
	802.11ac80-VHT0	122	5610	MCS0	18.00	17.87					
		138	5690		20.00	19.93					

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Aux Antenna											
Mode	Mode	Channel	Frequency (MHz)	Data Rate	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)					
		149	5745		20.00	19.77					
	802.11a	157	5785	6Mbps	20.00	19.92					
		165	5825		20.00	19.95					
	802.11n20-HT0	149	5745		20.00	19.89					
		157	5785	MCS0	20.00	19.82					
		165	5825		20.00	19.79					
5800 MHz		149	5745		20.00	19.87					
3000 1011 12	802.11n40-VHT0	157	5785	MCS0	20.00	19.88					
		165	5825		20.00	19.94					
	802.11n40-HT0	151	5755	MCS0	20.00	19.99					
	002.11140-010	159	5795	IVIC30	20.00	19.91					
	802.11ac40-VHT0	151	5755	MCS0	20.00	19.81					
	002.11ac40-VH10	159	5795	IVIC SU	20.00	19.93					
	802.11ac80-VHT0	155	5775	MCS0	18.00	17.91					

Bluetooth conducted power table:

			1M	bps	2MI	ops	3Mbps		
Mode	Channel	Frequency (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Average power (dBm)	
	CH 00	2402	11.50	11.45	8.00	7.88	7.00	6.94	
BR/EDR	CH 39	2441	11.50	11.48	8.00	7.85	7.00	6.99	
	CH 78	2480	11.50	11.30	8.00	8.00	7.00	6.79	

Mode	Channel	Frequency	GFSK						
Mode	Channel	(MHz)	Max. Rated Avg.Power + Max. Tolerance (dBm)	Average Output Power (dBm)					
	CH 00			6.96					
LE	CH 19	2440	7	6.73					
	CH 39	2480		6.84					

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1.3.1 LTE Downlink CA specification

LTE Downlink 2CA conducted power table

						Tw	o Compon	ent Carrier I	Maximum C	onducted P	ower					
				PCC						so	C		Po	wer		
PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC (UL) RB	PCC (UL) RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	LTE Tx.Power with DL CA active (dBm)	LTE Tx.Power with DL CA inactive (dBm)	Configurations	Maximum power
LTE B2	20	18700	1860	QPSK	1	0	700	1940	LTE B2	20	1100	1980	22.91	22.93	CA_2A-2A	Full power
LTE B2	20	18700	1860	QPSK	1	0	700	1940	LTE B2	20	1100	1980	18.70	18.94	CA_2A-2A	Reduced power
LTE B2	20	18700	1860	QPSK	1	0	700	1940	LTE B17	10	5790	740	22.92	22.93	CA_2A-17A	Full power
LTE B2	20	18900	1880	QPSK	100	0	900	1960	LTE B17	10	5790	740	18.84	18.89	CA_2A-17A	Reduced power
LTE B17	10	23780	709	QPSK	1	0	5780	739	LTE B2	20	900	1960	22.91	23.08	CA_2A-17A	Full power
LTE B17	10	23780	709	QPSK	1	0	5780	739	LTE B2	20	900	1960	21.44	21.50	CA_2A-17A	Reduced power
LTE B4	20	20300	1745	QPSK	1	99	2300	2145	LTE B4	20	2050	2120	23.40	23.45	CA_4A-4A	Full power
LTE B4	20	20300	1745	QPSK	100	0	2300	2145	LTE B4	20	2050	2120	19.84	19.92	CA_4A-4A	Reduced power
LTE B4	20	20300	1745	QPSK	1	99	2300	2145	LTE B17	10	5790	740	23.41	23.45	CA_4A-17A	Full power
LTE B4	20	20300	1745	QPSK	100	0	2300	2145	LTE B17	10	5790	740	19.71	19.92	CA_4A-17A	Reduced power
LTE B17	10	23780	709	QPSK	1	0	5780	739	LTE B4	20	2175	2132.5	22.86	23.08	CA_4A-17A	Full power
LTE B17	10	23780	709	QPSK	1	0	5780	739	LTE B4	20	2175	2132.5	21.43	21.50	CA_4A-17A	Reduced power
LTE B5	10	20600	844	QPSK	1	0	2600	889	LTE B7	20	21100	2535	23.88	23.97	CA_5A-7A	Full power
LTE B5	10	20600	844	QPSK	1	0	2600	889	LTE B7	20	21100	2535	20.63	20.87	CA_5A-7A	Reduced power
LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B5	10	2525	881.5	23.33	23.47	CA_5A-7A	Full power
LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B5	10	2525	881.5	20.12	20.19	CA_5A-7A	Reduced power
LTE B7	15	20825	2507.5	QPSK	1	74	2825	2627.5	LTE B7	5	2918	2636	23.32	23.41	CA_7B	Full power
LTE B7	15	20825	2507.5	QPSK	36	37	2825	2627.5	LTE B7	5	2918	2636	19.98	20.07	CA_7B	Reduced power
LTE B7	20	21350	2560	QPSK	1	50	3350	2680	LTE B7	20	3152	2660.2	22.90	23.11	CA_7C	Full power
LTE B7	20	21350	2560	QPSK	1	50	3350	2680	LTE B7	20	3152	2660.2	19.84	20.02	CA_7C	Reduced power
LTE B7	20	21350	2560	QPSK	1	50	3350	2680	LTE B7	20	2850	2630	23.02	23.11	CA_7A-7A	Full power
LTE B7	20	21350	2560	QPSK	1	50	3350	2680	LTE B7	20	2850	2630	19.99	20.02	CA_7A-7A	Reduced power
LTE B41	20	41490	2680	QPSK	1	0	41490	2680	LTE B41	20	41292	2660.2	23.12	23.36	CA_41C	Full power
LTE B41	20	41490	2680	QPSK	1	0	41490	2680	LTE B41	20	39750	2506	22.30	22.50	CA_41A-41A	Reduced power
LTE B66	20	1770	132572	QPSK	1	0	67036	2170	LTE B66	20	65536	2120	23.52	23.71	CA_66A-66A	Full power
LTE B66	20	1770	132572	QPSK	1	0	67036	2170	LTE B66	20	65536	2120	19.24	19.49	CA_66A-66A	Reduced power

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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LTE Downlink 3CA conducted power table

				PCC				Thr	ee Compoi		Maximum	Conducted	Power	0	DC 2			ower	1	
PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC (UL) RB	PCC (UL) RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	LTE Tx.Power with DL CA active (dBm)	LTE Tx.Power with DL CA inactive (dBm)	Configurations	Maximum power
LTE B2	20	18700	1860	QPSK	1	0	700	1940	LTE B4	20	2175	2132.5	LTE B5	10	2525	881.5	22.77	22.93	CA_2A-4A-5A	Full power
LTE B2 LTE B4	20	18900 20300	1880 1745	QPSK QPSK	100	0	900 2300	1960 2145	LTE B4 LTE B2	20	2175 900	2132.5 1960	LTE B5 LTE B5	10	2525 2525	881.5 881.5	18.86	18.89 23.45	CA_2A-4A-5A CA_2A-4A-5A	Reduced power Full power
LTE B4	20	20300	1745	QPSK	100	0	2300	2145	LTE B2	20	900	1960	LTE B5	10	2525	881.5	19.76	19.92	CA_2A-4A-5A	Reduced power
LTE B5	10	20600	844	QPSK	1	0	2600	889	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	23.81	23.97	CA_2A-4A-5A	Full power
LTE B5 LTE B2	10 20	20600 18700	844 1860	QPSK QPSK	1	0	2600 700	889 1940	LTE B2 LTE B4	20	900 2175	1960 2132.5	LTE B4 LTE B13	20	2175 5230	2132.5 751	20.85	20.87	CA_2A-4A-5A CA 2A-4A-13A	Reduced power Full power
LTE B2	20	18900	1880	QPSK	100	0	900	1960	LTE B4	20	2175	2132.5	LTE B13	10	5230	751	18.66	18.89	CA_2A-4A-13A	Reduced power
LTE B4	20	20300	1745	QPSK	1	99	2300	2145	LTE B2	20	900	1960	LTE B13	10	5230	751	23.29	23.45	CA_2A-4A-13A	Full power
LTE B4 LTE B13	20 10	20300 23230	1745 782	QPSK QPSK	100	0 25	2300 5230	2145 751	LTE B2 LTE B2	20 20	900 900	1960 1960	LTE B13 LTE B4	10 20	5230 2175	751 2132.5	19.83 23.28	19.92 23.44	CA_2A-4A-13A CA_2A-4A-13A	Reduced power Full power
LTE B13	10	23230	782	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	20.73	20.92	CA_2A-4A-13A	Reduced power
LTE B5	10	20600	844	QPSK	1	0	2600	889	LTE B2	20	700	1940	LTE B2	20	898	1959.8	23.79	23.97	CA_2C-5A	Full power
LTE B5 LTE B2	10 20	20600 18700	844 1860	QPSK QPSK	1	0	2600 700	889 1940	LTE B2 LTE B2	20	700 898	1940 1959.8	LTE B2 LTE B5	20 10	898 2525	1959.8 881.5	20.62 22.88	20.87 22.93	CA_2C-5A CA_2C-5A	Reduced power Full power
LTE B2	20	18700	1860	QPSK	1	0	700	1940	LTE B2	20	898	1959.8	LTE B5	10	2525	881.5	18.87	18.94	CA_2C-5A	Reduced power
LTE B2	20	18700	1860	QPSK	1	0	700	1940	LTE B5	10	2525	881.5	LTE B30	10	9820	2355	22.84	22.93	CA_2A-5A-30A	Full power
LTE B2 LTE B5	20	18900 20600	1880 844	QPSK QPSK	100	0	900 2600	1960 889	LTE B5 LTE B2	10 20	2525 900	881.5 1960	LTE B30 LTE B30	10	9820 9820	2355 2355	18.65	18.84 23.97	CA_2A-5A-30A CA_2A-5A-30A	Reduced power Full power
LTE B5	10	20600	844	QPSK	1	0	2600	889	LTE B2	20	900	1960	LTE B30	10	9820	2355	23.94	23.97	CA_2A-5A-30A CA_2A-5A-30A	Reduced power
LTE B30	10	27710	2310	QPSK	1	0	9820	2355	LTE B2	20	900	1960	LTE B5	10	2525	881.5	19.85	19.95	CA_2A-5A-30A	Full power
LTE B30	10	27710	2310 1860	QPSK QPSK	50	0	9820	2355 1940	LTE B2	20	900	1960 881.5	LTE B5	10	2525 66786	881.5	18.89 22.83	18.93	CA_2A-5A-30A CA_2A-5A-66A	Full power
LTE B2 LTE B2	20	18700 18900	1860 1880	QPSK QPSK	1 100	0	700 900	1940 1960	LTE B5 LTE B5	10	2525 2525	881.5 881.5	LTE B66 LTE B66	20 20	66786 66786	2145 2145	22.83	22.93 18.89	CA_2A-5A-66A CA_2A-5A-66A	Full power Reduced power
LTE B5	10	20600	844	QPSK	1	0	2600	889	LTE B2	20	900	1960	LTE B66	20	66786	2145	23.79	23.97	CA_2A-5A-66A	Full power
LTE B5	10	20600	844	QPSK	1	0	2600	889	LTE B2	20	900	1960	LTE B66	20	66786	2145	20.76	20.87	CA_2A-5A-66A	Reduced power
LTE B66 LTE B66	20	132572 132322	1770	QPSK QPSK	1	0	67036 66786	2170 2145	LTE B2 LTE B2	20	900 900	1960 1960	LTE B5 LTE B5	10	2525 2525	881.5 881.5	23.47	23.71 19.41	CA_2A-5A-66A CA_2A-5A-66A	Full power Reduced power
LTE B2	20	18700	1860	QPSK	1	0	700	1940	LTE B12	10	5095	737.5	LTE B30	10	9820	2355	22.72	22.93	CA_2A-12A-30A	Full power
LTE B2	20	18900	1880	QPSK	100	0	900	1960	LTE B12	10	5095	737.5	LTE B30	10	9820	2355	18.87	18.89	CA_2A-12A-30A	Reduced power
LTE B12 LTE B12	10	23095 23095	707.5	QPSK QPSK	1	25 49	5095 5095	737.5 737.5	LTE B2 LTE B2	20	900 900	1960 1960	LTE B30 LTE B30	10	9820 9820	2355 2355	22.43 21.04	22.68	CA_2A-12A-30A CA_2A-12A-30A	Full power Reduced power
LTE B30	10	27710	2310	QPSK	1	0	9820	2355	LTE B12	10	5095	737.5	LTE B2	20	900	1960	19.78	19.95	CA_2A-12A-30A	Full power
LTE B30	10	27710	2310	QPSK	50	0	9820	2355	LTE B12	10	5095	737.5	LTE B2	20	900	1960	18.80	18.93	CA_2A-12A-30A	Reduced power
LTE B2 LTE B2	20 20	18700 18900	1860 1880	QPSK QPSK	1	0	700 900	1940 1960	LTE B13 LTE B13	10 10	5230 5230	751 751	LTE B66 LTE B66	20 20	66786 66786	2145 2145	22.80 18.88	22.93 18.89	CA_2A-13A-66A CA_2A-13A-66A	Full power Reduced power
LTE B13	10	23230	782	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B66	20	66786	2145	23.43	23.44	CA_2A-13A-66A	Full power
LTE B13	10	23230	782	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B66	20	66786	2145	20.78	20.92	CA_2A-13A-66A	Reduced power
LTE B66 LTE B66	20 20	132572 132322	1770 1745	QPSK QPSK	1	0	67036 66786	2170 2145	LTE B2 LTE B2	20	900 900	1960 1960	LTE B13 LTE B13	10 10	5230 5230	751	23.62 19.37	23.71 19.41	CA_2A-13A-66A CA_2A-13A-66A	Full power Reduced power
LTE B00	20	18700	1860	QPSK	1	0	700	1940	LTE B29	10	9715	722.5	LTE B30	10	9820	2355	22.72	22.93	CA_2A-29A-30A	Full power
LTE B2	20	18900	1880	QPSK	100	0	900	1960	LTE B29	10	9715	722.5	LTE B30	10	9820	2355	18.75	18.89	CA_2A-29A-30A	Reduced power
LTE B30 LTE B30	10	27710 27710	2310 2310	QPSK QPSK	1 50	0	9820 9820	2355 2355	LTE B2 LTE B2	20	900 900	1960 1960	LTE B29 LTE B29	10	9715 9715	722.5	19.76	19.95	CA_2A-29A-30A CA_2A-29A-30A	Full power Reduced power
LTE B30	20	18700	1860	QPSK	1	0	9820	2355	LTE B2	20	66536	2120	LTE B29	20	66734	2139.8	22.74	22.93	CA_2A-66B	Full power
LTE B2	20	18900	1880	QPSK	100	0	900	1960	LTE B66	20	66536	2120	LTE B66	20	66734	2139.8	18.70	18.89	CA_2A-66B	Reduced power
LTE B66 LTE B66	10	132622 132622	1775	QPSK QPSK	1	49 49	67086 67086	2175 2175	LTE B66 LTE B66	20 20	66987 66987	2165.1 2165.1	LTE B2 LTE B2	20 20	900 900	1960 1960	23.22	23.41 19.41	CA_2A-66B CA_2A-66B	Full power
LTE B00	20	132622	1860	QPSK	1	49	700	1940	LTE B66	20	66536	2165.1	LTE B66	20	66734	2139.8	22.74	22.93	CA_2A-66D CA_2A-66C	Reduced power Full power
LTE B2	20	18900	1880	QPSK	100	0	900	1960	LTE B66	20	66536	2120	LTE B66	20	66734	2139.8	18.69	18.89	CA_2A-66C	Reduced power
LTE B66	20	132572	1770	QPSK	1	0	67036	2170	LTE B66	20	66734	2139.8	LTE B2	20	900	1960	23.68	23.71	CA_2A-66C	Full power
LTE B66 LTE B4	20	132572 20300	1770	QPSK QPSK	1	0 99	66838 2300	2150.2 2145	LTE B66 LTE B5	20	66734 2525	2139.8 881.5	LTE B2 LTE B30	20	900 9820	1960 2355	19.29 23.25	19.49 23.45	CA_2A-66C CA 4A-5A-30A	Reduced power Full power
LTE B4	20	20300	1745	QPSK	100	0	2300	2145	LTE B5	10	2525	881.5	LTE B30	10	9820	2355	19.89	19.92	CA_4A-5A-30A	Reduced power
LTE B5	10	20600	844	QPSK	1	0	2600	889	LTE B4	20	2175	2132.5	LTE B30	10	9820	2355	23.85	23.97	CA_4A-5A-30A	Full power
LTE B5 LTE B30	10	20600 27710	844 2310	QPSK QPSK	1	0	2600 9820	889 2355	LTE B4 LTE B4	20 20	2175 2175	2132.5 2132.5	LTE B30 LTE B5	10	9820 2525	2355 881.5	20.76 19.88	20.87 19.95	CA_4A-5A-30A CA_4A-5A-30A	Reduced power Full power
LTE B30	10	27710	2310	QPSK	50	0	9820	2355	LTE B4	20	2175	2132.5	LTE B5	10	2525	881.5	18.68	18.93	CA_4A-5A-30A	Reduced power
LTE B4	20	20300	1745	QPSK	1	99	2300	2145	LTE B12	10	5095	737.5	LTE B30	10	9820	2355 2355	23.25	23.45	CA_4A-12A-30A	Full power
LTE B4 LTE B12	20	20300 23095	1745 707.5	QPSK QPSK	100	0 25	2300 5095	2145 737.5	LTE B12 LTE B4	10 20	5095 2175	737.5 2132.5	LTE B30 LTE B30	10	9820 9820	2355 2355	19.67 22.51	19.92 22.68	CA_4A-12A-30A CA_4A-12A-30A	Reduced power Full power
LTE B12	10	23095	707.5	QPSK	1	49	5095	737.5	LTE B4	20	2175	2132.5	LTE B30	10	9820	2355	21.13	21.14	CA_4A-12A-30A	Reduced power
LTE B30	10	27710	2310	QPSK	1	0	9820	2355	LTE B4	20	2175	2132.5	LTE B12	10	5095	737.5	19.78	19.95	CA_4A-12A-30A	Full power
LTE B30 LTE B4	10 20	27710 20300	2310 1745	QPSK QPSK	50	0 99	9820 2300	2355 2145	LTE B4 LTE B29	20	2175 9715	2132.5 722.5	LTE B12 LTE B30	10 10	5095 9820	737.5 2355	18.88 23.26	18.93 23.45	CA_4A-12A-30A CA_4A-29A-30A	Reduced power Full power
LTE B4	20	20300	1745	QPSK	1 100	0	2300	2145	LTE B29 LTE B29	10	9715	722.5	LTE B30	10	9820	2355	23.26	23.45	CA_4A-29A-30A CA_4A-29A-30A	Full power Reduced power
LTE B30	10	27710	2310	QPSK	1	0	9820	2355	LTE B4	20	2175	2132.5	LTE B29	10	9715	722.5	19.75	19.95	CA_4A-29A-30A	Full power
LTE B30 LTE B5	10	27710 20600	2310 844	QPSK QPSK	50	0	9820 2600	2355 889	LTE B4 LTE B66	20	2175 66536	2132.5 2120	LTE B29 LTE B66	10 20	9715 67036	722.5	18.85 23.73	18.93 23.97	CA_4A-29A-30A CA 5A-66B	Reduced power Full power
LTE B5	10	20600	844 844	QPSK	1	0	2600	889	LTE B66	20 20	66536	2120	LTE B66	20	67036	2170	23.73	23.97 20.87	CA_5A-66B CA_5A-66B	Full power Reduced power
LTE B66	20	132622	1775	QPSK	1	49	67086	2175	LTE B66	20	66987	2165.1	LTE B5	10	2525	881.5	23.32	23.41	CA_5A-66B	Full power
LTE B66	20	132622	1775	QPSK	1	49	67086	2175	LTE B66	20	66987	2165.1	LTE B5	10	2525	881.5	19.33	19.41	CA_5A-66B	Reduced power
LTE B5 LTE B5	10	20600	844 844	QPSK QPSK	1	0	2600 2600	889 889	LTE B66 LTE B66	20	66536 66536	2120 2120	LTE B66 LTE B66	20	67036 67036	2170	23.95	23.97 20.87	CA_5A-66C CA_5A-66C	Full power Reduced power
LTE B66	20	132572	1770	QPSK	1	0	67036	2170	LTE B66	20	66734	2139.8	LTE B5	10	2525	881.5	23.66	23.71	CA_5A-66C	Full power
LTE B66	20	132572	1770	QPSK	1	0	66838	2150.2	LTE B66	20	66734	2139.8	LTE B5	10	2525	881.5	19.39	19.49	CA_5A-66C	Reduced power
LTE B66 LTE B66	20	132072 132072	1720	QPSK QPSK	1	50 0	66536 66536	2120 2120	LTE B66 LTE B66	20	66734 66734	2139.8 2139.8	LTE B66 LTE B66	20	66932 66932	2159.6 2159.6	23.35	23.52	CA_66D CA_66D	Full power Reduced power
LTE B13	10	23230	782	QPSK	1	25	5230	751	LTE B66	20	66536	2135.5	LTE B66	20	67036	2133.0	23.40	23.44	CA_13A-66B	Full power
LTE B13	10	23230	782	QPSK	1	25	5230	751	LTE B66	20	66536	2120	LTE B66	20	67036	2170	20.67	20.92	CA_13A-66B	Reduced power
LTE B66 LTE B66	20 20	132622 132622	1775	QPSK QPSK	1	49	67086 67086	2175 2175	LTE B66 LTE B66	20 20	66987 66987	2165.1 2165.1	LTE B13	10	5230 5230	751	23.21 19.31	23.41 19.41	CA_13A-66B CA_13A-66B	Full power Reduced power
LTE B66	20	132622 23230	782	QPSK QPSK	1	49 25	5230	2175 751	LTE B66	20	66536	2165.1 2120	LTE B13 LTE B66	10 20	67036	2170	23.25	19.41 23.44	CA_13A-66B CA_13A-66C	Full power
LTE B13	10	23230	782	QPSK	1	25	5230	751	LTE B66	20	66536	2120	LTE B66	20	67036	2170	20.70	20.92	CA_13A-66C	Reduced power
LTE B66	20	132572	1770	QPSK	1	0	67036	2170	LTE B66	20	66734	2139.8	LTE B13	10	5230	751	23.70	23.71	CA_13A-66C	Full power
LTE B66	20	132572	1770	QPSK	1	0	66838	2150.2	LTE B66	20	66734	2139.8	LTE B13	10	5230	751	19.45	19.49	CA_13A-66C	Reduced power

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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LTE CA information

A)

The device supports downlink LTE Carrier Aggregation (CA) only. It supports a maximum of 3 carriers in the downlink. Other Release 10 features or higher features are not supported, including Uplink Carrier Aggregation, Enhanced SC-FDMA and Uplink MIMO or other antenna diversity configurations etc. All uplink communications are identical to the Release 8 Specifications.

The possible downlink LTE CA combinations supported by this device are as below tables per 3GPP TS 36.521-1 V14.3.0. The conducted power measurement results of downlink LTE CA are provided as above per 3GPP TS 36.521-1 V14.3.0. According to KDB 941225 D05A and RF exposure procedures in TCB workshop April 2018, the downlink LTE CA SAR test is not required.

B)

CA combination table

Index	2CC	Restriction	Completely Covered by Measurement Superset	Index	3CC	Restriction	Completely Covered by Measurement Superset
2CC #1	CA 2C		3CC #3	3CC #1	CA 2A-4A-5A		No
2CC #2	CA 2A-2A		No	3CC #2	CA 2A-4A-13A		No
2CC #3	CA 2A-4A		3CC #1	3CC #3	CA 2C-5A		No
2CC #4	CA 2A-5A		3CC #4	3CC #4	CA 2A-5A-30A		No
2CC #5	CA 2A-12A		3CC #6	3CC #5	CA 2A-5A-66A		No
2CC #6	CA 2A-13A		3CC #7	3CC #6	CA 2A-12A-30A		No
2CC #7	CA 2A-17A		No	3CC #7	CA 2A-13A-66A		No
2CC #8	CA 2A-29A	B29 SCC only	3CC #8	3CC #8	CA 2A-29A-30A	B29 SCC only	No
2CC #9	CA 2A-30A		3CC #4	3CC #9	CA 2A-66B		No
2CC #10	CA 2A-66A		3CC #5	3CC #10	CA 2A-66C		No
2CC #11	CA 4A-4A		No	3CC #11	CA 4A-5A-30A		No
2CC #12	CA 4A-5A		3CC #11	3CC #12	CA 4A-12A-30A		No
2CC #13	CA 4A-12A		3CC #12	3CC #13	CA 4A-29A-30A	B29 SCC only	No
2CC #14	CA 4A-13A		3CC #2	3CC #14	CA 5A-66B		No
2CC #15	CA 4A-17A		No	3CC #15	CA 5A-66C		No
2CC #16	CA 4A-29A	B29 SCC only	3CC #13	3CC #16	CA 66D		No
2CC #17	CA 4A-30A		3CC #11	3CC #17	CA 13A-66B		No
2CC #18	CA 5A-7A		No	3CC #18	CA 13A-66C		No
2CC #19	CA 5A-30A		3CC #4				
2CC #20	CA 5A-66A		3CC #5				
2CC #21	CA-7B		No				
2CC #22	CA-7C		No				
2CC #23	CA-7A-7A		No				
2CC #24	CA 12A-30A		3CC #6				
2CC #25	CA 13A-66A		3CC #7				
2CC #26	CA 29A-30A		3CC #8				
2CC #27	CA 41C		No				
2CC #28	CA 41A-41A		No				
2CC #29	CA 66B		3CC #9				
2CC #30	CA 66C		3CC #10				
2CC #31	CA 66A-66A		No				

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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Note:

1) For the inter-band CA combinations, except B29 can't be PCC, all the listed bands above can be used as PCC or SCC.

2) The channel spacing and aggregated channel bandwidth for CA are identical to the associated specification in 3GPP TS 36.521-1 V14.3.0.

3) The reference test frequencies for CA refers to 3GPP TS 36.508 V14.2.0

4) Testing is not required in bands or modes not intended/allowed for US operation

5) Based on TCB workshop April 2018, only indicate "No" in CA combination table need power measurement

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1.4 Test Environment

Ambient Temperature: 22±2° C Tissue Simulating Liquid: 22±2° C

1.5 Operation Description

For WWAN, the EUT is controlled by using a Radio Communication Tester, and the communication between the EUT and the tester is established by air link. For WLAN, using chipset specific software to control the EUT, and makes it transmit in maximum power. The EUT is set to maximum power level during all tests, and at the beginning of each test the battery is fully charged. There are two antenna vendors for this device, one is AWAN, another is HONG-BO, and both of them were tested fully and respectively.

EUT was tested as below based on KDB inquiry.

WWAN / WLAN

Tablet mode

Back/top/bottom/right/left sides_0mm with reduced power

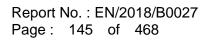
Laptop mode

SAR measurement for Laptop SAR with full power is not required since the distance between antenna and user is > 20cm

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Note:

- 1. During the SAR testing, the DASY 5 system checks power drift by comparing the e-field strength of one specific location measured at the beginning with that measured at the end of the SAR testing.
- 2. The 3G SAR test reduction procedure is applied to HSDPA with 12.2 kbps RMC as the primary mode. Since the maximum output power in a secondary mode (HSDPA) is $\leq \frac{1}{4}$ dB higher than the primary mode (WCDMA), SAR measurement is not required for the secondary mode (HSDPA). The following 4 sub-tests were completed according to Release 5 procedures in section 5.2 of 3GPP TS 34.121. A summary of these setting are illustrated below:

Sub-test	βα	βa	βα (SF)	βο/βα	β _{HS} ⁽¹⁾⁽²⁾	CM ⁽³⁾ (dB)	MPR ⁽³⁾ (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 ⁽⁴⁾	15/15 ⁽⁴⁾	64	12/15 ⁽⁴⁾	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5
Note 2: For the H clause 5.1 24/15 with Note 3: CM = 1 for relative Cl Note 4: For subte	13.1A, and HSDPA η β _{HS} = 24/15 * β _c . or β _o /β _d = 12/15, β _H M difference. This	mask requirement EVM with phase $\sigma_{s}/\beta_{c} = 24/15$. For a is applicable for or of 12/15 for the TF	test in clause 5.20 discontinuity in cla Il other combinationly UEs that support C during the mea	C, 5.7A, and the Eruse 5.13.1AA, Δ_{AC} ons of DPDCH, DP ort HSDPA in releasurement period ((5/15.	$_{\rm X}$ and $\Delta_{\rm NACK} = 30/1$ PCCH and HS-DP(ise 6 and later rele	15 with $β_{HS} = 30/15$ CCH the MPR is b bases.	$\delta * \beta_c$, and $\Delta_{CQ} =$ ased on the

3. The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) with 12.2 kbps RMC as the primary mode. Since the maximum output power in a secondary mode (HSPA) is $\leq \frac{1}{4}$ dB higher than the primary mode (WCDMA), SAR measurement is not required for the secondary mode (HSPA). The following 5 sub-tests were completed according to Release 6 procedures in section 5.2 of 3GPP TS 34.121. A summary of these setting are illustrated below:

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Sub-test	βε	βd	β₀ (SF)	β_c/β_d	β _{HS} ⁽¹⁾	βes	β _{ed} ⁽⁴⁾⁽⁵⁾	β _{ed} (SF)	β _{ed} (Codes)	CM ⁽²⁾ (dB)	MPR ⁽²⁾⁽⁶⁾ (dB)	AG (5) Index	E-TFCI
1	11/15 (3)	15/15 (a)	64	11/15 (រ)	22/15	209/225	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	βed1:47/15 βed2:47/15	4 4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67
Note 2: CM diffe Note 3: For (TF1 Note 4: In ca	10113 0 - - 0.13 0.13 4.113 4 1 1.0 0.0 12 07 Iote 1: For sub-test 1 to 4, Δ _{ΔCK} , Δ _{MACK} and Δ _{COI} = 30/15 with β _{HS} = 30/15 * β _c . For sub-test 5, Δ _{ACK} , Δ _{MACK} and Δ _{COI} = 5/15 * β _c . 10 1.0 0.0 12 07 Iote 1: For sub-test 1 to 4, Δ _{ΔCK} , Δ _{MACK} and Δ _{COI} = 30/15 with β _{HS} = 30/15 * β _c . 10 10 12 07 Iote 2: CM = 1 for β _b /β _d = 12/15, β _{HS} β _c = 24/15. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference. 10 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to β _c = 10/15 and β _d = 15/15. 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to β _c = 10/15 and β _d = 15/15. Iote 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g. 10 Iote 5: B _d can not be set directly, it is set by Absolute Grant Value. 1 1 1												

4. The 3G SAR test reduction procedure is applied to HSPA+ with 12.2 kbps RMC as the primary mode. Since the maximum output power in a secondary mode (HSPA+) is $\leq \frac{1}{4}$ dB higher than the primary mode (WCDMA), SAR measurement is not required for the secondary mode (HSPA+). The following 1 sub-test was completed according to Release 7 procedures in section 5.2 of 3GPP TS34.121. A summary of these settings are illustrated below:

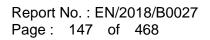
Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM

Sub- test	β _c (Note3)	βď	β _{HS} (Note1)	βec	β _{ed} (2xSF2) (Note 4)	β _{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β _{ed} 1: 30/15 β _{ed} 2: 30/15	β _{ed} 3: 24/15 β _{ed} 4: 24/15	3.5	2.5	14	105	105
Note 1 Note 2 Note 3 Note 4 Note 5	2: CM = 3: DPD 4: β _{ed} c 5: All th DPD	= 3.5 a CH is an noi e sub CH ca	and the Mi not config t be set di tests requ ategory 7.	PR is bas jured, the rectly; it is uire the U E-DCH T	with $\beta_{hz} = 30/15$ ed on the relativ refore the β_c is s is set by Absolute E to transmit 2S TI is set to 2ms allocated. The U	e CM difference set to 1 and β_d = Grant Value. F2+2SF4 16QA TTI and E-DCH	0 by defau M EDCH a table inde	ult. and they a x = 2. To :	apply for l support ti	hese E-DO	

5. The 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable. Since the maximum output power in a secondary mode (DC-HSDPA) is $\leq \frac{1}{4}$ dB higher than the primary mode (WCDMA), SAR measurement is not required for the secondary mode (DC-HSDPA). The

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following tests were completed according to procedures in section 7.3.13 of 3GPP TS 34.108 v9.5.0. A summary of these setting are illustrated below:

The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122

		Pa	rameter		Unit	Value		
	Nominal	Avg. Inf. B	lit Rate		kbps	60		
	Inter-TTI	Distance			TTI's	1	1	
	Number	of HARQ F	Processes		Proces ses	6		
	Informati	on Bit Pay	load ($N_{_{I\!N\!F}}$)		Bits	120		
	Number	Code Bloc	ks		Blocks	1		
	Binary Cl	hannel Bit	s Per TTI		Bits	960		
	Total Ava	ailable SM	L's in UE		SML's	19200		
	Number	of SML's p	er HARQ Proc.		SML's	3200		
	Coding R	late				0.15		
	Number	of Physica	l Channel Codes		Codes	1		
	Modulatio	on				QPSK		
	Note 2:	paramet Maximur retransm	nd both cells shall to ers as listed in the m number of transm nission is not allowe ation version 0 shal	table. nission ed. The	is limited t redundar	o 1, i.e.,		
Inf. Bit Pay	load	120						
CRC Addi	tion	120	24 CRC					
Code Blo Segmenta		144						
Turbo-Encoc (R=1/3)	ling			432				12 Tail Bits
1st Rate Mate	ching			432				
RV Select	ion		960					
Physical Chann Segmentation		960]					

Table C.8.1.12: Fixed Reference Channel H-Set 12

Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

The following 4 sub-tests for HSDPA were completed according to Release 8 procedures in section 5.2 of 3GPP TS34.121. A summary of subtest settings are illustrated below:

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Sub-test	βα	βa	βα (SF)	βο/βα	β _{HS} ⁽¹⁾⁽²⁾	CM ⁽³⁾ (dB)	MPR ⁽³⁾ (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 ⁽⁴⁾	15/15 ⁽⁴⁾	64	12/15 ⁽⁴⁾	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{HS} = 30/15 * \beta_{C}$.

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and Δ_{NACK} = 30/15 with β_{HS} = 30/15 * β_{e_1} and Δ_{CCM} = 30/15 * β_{e_1} and β_{e_1} and β_{e_2} = 30/15 * β_{e_1} = 30/15 * $\beta_$ 24/15 with βHS = 24/15 * βc.

Note 3: CM = 1 for β_d/β_d = 12/15, β_{H5}/β_c = 24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases

Jote 4: For subtest 2 the β_d/g_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.

6.LTE modes test according to KDB 941225D05v02r05.

a. Per Section 5.2.1, the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation.

Using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.

When the reported SAR is \leq 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel.

When the reported SAR of a required test channel is > 1.45 W/kg, SAR is

required for all three RB offset configurations for that required test channel. b. Per Section 5.2.2, the largest channel bandwidth and measure SAR for QPSK with 50% RB allocation

The procedures required for 1 RB allocation in 5.2.1 are applied to measure the SAR for QPSK with 50% RB allocation.

c. Per Section 5.2.3, the largest channel bandwidth and measure SAR for QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 5.2.1 and 5.2.2 are ≤ 0.8 W/kg.

Otherwise, SAR is measured for the highest output power channel and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

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d. Per Section 5.2.4, Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in sections 5.2.1, 5.2.2 and 5.2.3 to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is $> \frac{1}{2}$ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

e. Per Section 5.3, other channel bandwidth standalone SAR test requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section 5.2 to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > 1/2 dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg. The equivalent channel configuration for the RB allocation, RB offset and modulation etc. is determined for the smaller channel bandwidth according to the same number of RB allocated in the largest channel bandwidth.

TDD LTE was tested at highest duty factor using UL-DL configuration 0 with 6 UL subframes and 2 S subframes using extended cyclic prefix only and special subframe configuration 7. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Section 4, the duty factor for special subframe configuration 6 using extended cyclic prefix is 0.633.

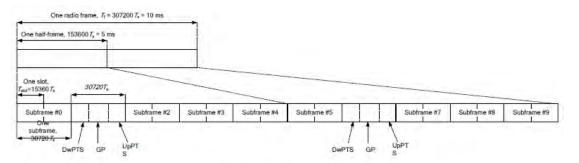
According to KDB 941225 D05, SAR testing for TDD LTE must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP TDD LTE configurations. The TDD-LTE of this device supports frame structure type 2 defined in 3GPP TS 36.211 section 4.2, and the frame structure configuration can be tabulated as below.

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3GPP TS 36.211 Figure 4.2-1: Frame Structure Type 2

	No	rmal Cyclic Prefix in	Downlink	Exter	nded Cyclic Prefix in	Downlink	
Special Subframe		Upf	PTS		UpPTS		
Configuration	DwPTS	Normal Cyclic	Extended Cyclic	DwPTS	Normal Cyclic	Extended Cyclic	
		Prefix in Uplink	Prefix in Uplink		Prefix in Uplink	Prefix in Uplink	
0	6592 · Ts			7680 · Ts			
1	19760 · Ts			20480 • Ts	2192 • Ts	2560 · Ts	
2	21952 · Ts	2192 • Ts	2560 • Ts	23040 • Ts		2000 • 18	
3	24144 • Ts			25600 · Ts			
4	26336 · Ts			7680 • Ts			
5	6592 · Ts			20480 • Ts	4384 • Ts	5120 • Ts	
6	19760 · Ts			23040 • Ts	4384 • 15	5120 • 15	
7	21952 · Ts	4384 • Ts	5120 · Ts	12800 · Ts	1		
8	24144 · Ts			-	-	-	
9	13168 · Ts			-	-	-	

3GPP TS 36.211 Table 4.2-1: Configuration of Special Subframe

Uplink-Downlink	Downlink-to-Uplink	Subframe Number										
Configuration	Switch-Point Periodicity	0	1	2	3	4	5	6	7	8	9	
0	5 ms	D	S	U	U	U	D	S	U	U	U	
1	5 ms	D	S	U	U	D	D	S	U	U	D	
2	5 ms	D	S	U	D	D	D	S	U	D	D	
3	10 ms	D	S	U	U	U	D	D	D	D	D	
4	10 ms	D	S	U	U	D	D	D	D	D	D	
5	10 ms	D	S	U	D	D	D	D	D	D	D	
6	5 ms	D	S	U	U	U	D	S	U	U	D	

3GPP TS 36.211 Table 4.2-2: Uplink-Downlink Configurations

The uplink duty cycle of these seven configurations can be computed as below.

UL-DL Configuration	0	1	2	3	4	5	6
Highest Duty-Cycle	63.33%	43.33%	23.33%	31.67%	21.67%	11.67%	53.33%

Considering the highest transmission duty cycle, TDD LTE was tested using Uplink-Downlink configuration 0 with 6 uplink subframe and 2 special subframe. The special subframe was set to special subframe configuration 7 using extended cyclic prefix uplink. Therefore, SAR testing for TDD LTE was measured at the maximum output power with highest transmission duty cycle of 63.33%.

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LTE downlink CA (KDB942225 D05A)

- 7. The device supports a maximum of 3 carriers in the downlink. All uplink communications are identical to the Release 8 specifications. Uplink maximum output power is measured with downlink carrier aggregation active, only for the channel with highest measured maximum output power when downlink carrier aggregation is inactive, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than 1/4 dB higher than the maximum output power measured when downlink carrier aggregation inactive.
- 8. The downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements. The nominal channel spacing is determined by [BW1 + BW2 - 0.1*|BW1 - BW2|]/2 MHz, where BW1 and BW2 are the channel bandwidths of the CC in a 2-CC aggregation configuration.
- 9. The downlink PCC channel should be paired with the uplink channel according to normal configurations, as if there is no carrier aggregation. The downlink SCC should be adjacent to the PCC and remain within the downlink transmission band for contiguous intra-band CA. For non-contiguous intra-band CA, the SCC should be selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band. For inter-band CA, the SCC should be near the middle of its transmission band.
- 10. When downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than 1/4 dB higher than the maximum output power measured when downlink carrier aggregation inactive, so SAR evaluation is not required for downlink carrier aggregation.

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- 11. According to KDB447498D01v06, SAR test exclusion evaluation for surfaces/edges of tablet mode is not required since SAR measurements for all the surfaces/edges were performed.
- 12. According to KDB447498D01v06, testing of other required channels is not required when the reported 1-g SAR for the highest output channel is ≤ 0.8 W/kg, when the transmission band is \leq 100 MHz.
- 13. According to KDB865664D01v01r04, SAR measurement variability must be assessed for each frequency band. When the original highest measured SAR is \geq 0.8 W/kg, repeated that measurement once. Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is \geq 1.45 W/kg (~ 10% from the 1-g SAR limit)

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1.6 The SAR Measurement System

A block diagram of the SAR measurement System is given in Fig. a. This SAR Measurement System uses a Computer-controlled 3-D stepper motor system (SPEAG DASY 5 professional system). The model EX3DV4 field probe is used to determine the internal electric fields. The SAR can be obtained from the equation SAR= σ (|Ei|²)/ ρ where σ and ρ are the conductivity and mass density of the tissue-simulant.

The DASY 5 system for performing compliance tests consists of the following items:

- 1. A standard high precision 6-axis robot (Staubli RX family) with controller, teach pendant and software. An arm extension is for accommodating the data acquisition electronics (DAE).
- 2. A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage intissue simulating liquid. The probe is equipped with an optical surface detector system.
- 3. A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.

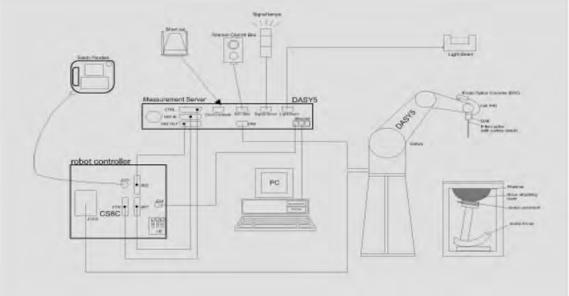


Fig. a The block diagram of SAR system

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- 4. The Electro-optical converter (EOC) performs the conversion between optical and electrical of the signals for the digital communication to the DAE and for the analog signal from the optical surface detection. The EOC is connected to the measurement server.
- 5. The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- 6. A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
- 7. A computer operating Windows 7.
- 8. DASY 5 software.
- Remote control with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
- Tissue simulating liquid mixed according to the given recipes. 10.
- 11. Validation dipole kits allowing to validate the proper functioning of the system.

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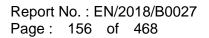
1.7 System Components

EX3DV4 E-Field Probe

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	Basic Broad Band Calibration in air Conversion Factors (CF) for HSL 750/835/1750/1900/2300/2450/2600/ 5200/5300/5600/5800 MHz Additional CF for other liquids and frequencies upon request
Frequency	10 MHz to > 6 GHz
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic	$10 \mu\text{W/g}$ to > 100 mW/g
Range	Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)
Dimensions	Tip diameter: 2.5 mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.

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PHANTOM

Model	ELI
Construction	The ELI phantom is used for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.
Shell Thickness	2 ± 0.2 mm
Filling Volume	Approx. 30 liters
Dimensions	Major axis: 600 mm
	Minor axis: 400 mm

DEVICE HOLDER

Construction	The device holder (Supporter) for Notebook is made by POM (polyoxymethylene resin) , which is non-metal and non-conductive. The height can be adjusted to fit varies kind of notebooks.	
		Device Holder

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1.8 SAR System Verification

The microwave circuit arrangement for system verification is sketched in Fig. b. The daily system accuracy verification occurs within the flat section of the SAM phantom. A SAR measurement was performed to see if the measured SAR was within +/- 10% from the target SAR values. These tests were done at 750/835/1750/1900/2300/2450/2600/5200/5300/5600/5800MHz. The tests were conducted on the same days as the measurement of the DUT. The obtained results from the system accuracy verification are displayed in the table 1 (SAR values are normalized to 1W forward power delivered to the dipole). During the tests, the liquid depth above the ear reference points was ≥ 15 cm ± 5 mm (frequency ≤ 3 GHz) or \geq 10 cm ± 5 mm (frequency > 3 G Hz) in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values.

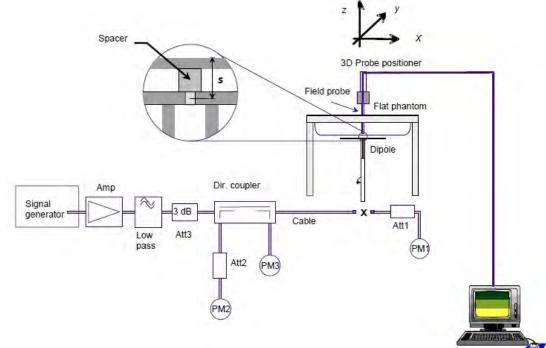


Fig. b The block diagram of system verification

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Validation Kit	S/N	Frequency (MHz)		1W Target SAR-1g (mW/g)	Pin=250mW Measured SAR-1g (mW/g)	Measured SAR-1g normalized to 1W (mW/g)	Deviation (%)	Measured Date		
D750V3	1015	750	Body	8.62	2.25	9.00	4.41%	Dec. 10, 2018		
D730V3	1015	750	Body	8.62	2.09	8.36	-3.02%	Dec. 14, 2018		
D835V2	4d063	835	Body	9.58	2.45	9.80	2.30%	Dec. 11, 2018		
D033V2	40003	000	Body	9.58	2.43	9.72	1.46%	Dec. 17, 2018		
D1750V2	1008	1750	Pady	37	9.23	36.92	-0.22%	Dec. 12, 2018		
D1750V2	1008	1750	1750 Body	37	9.27	37.08	0.22%	Dec. 18, 2018		
D1900V2	5d173	1000	1900	73 1000	Body	40.9	10.2	40.80	-0.24%	Dec. 12, 2018
D1900V2	50175	1900	Bouy	40.9	10.4	41.60	1.71%	Dec. 18, 2018		
D2300V2	1023	2300	Body	47.7	12.7	50.80	6.50%	Dec. 13, 2018		
D2300V2	1025	2300	Bouy	47.7	12.2	48.80	2.31%	Dec. 19, 2018		
D2450V2	727	2450	Padu	50.8	12.8	51.2	0.79%	Dec. 01, 2018		
DZ400VZ	121	2400	Body	50.8	13.4	53.6	5.51%	Dec. 07, 2018		
D2600V2	1005	2600	Padu	54.4	14.3	57.20	5.15%	Dec. 13, 2018		
D2000V2	1005	2000	Body	54.4	13.7	54.80	0.74%	Dec. 19, 2018		

Validation Kit	S/N	Frequency (MHz)		1W Target SAR-1g (mW/g)	Pin=100mW Measured SAR-1g (mW/g)	Measured SAR-1g normalized to 1W (mW/g)	Deviation (%)	Measured Date								
		5200	Body	72.8	7.09	70.9	-2.61%	Dec. 03, 2018								
		5200	Bouy	72.8	7.07	70.7	-2.88%	Dec. 07, 2018								
		5300	Pody	76.1	7.39	73.9	-2.89%	Dec. 04, 2018								
D5GHzV2	1023		800 Body	76.1	7.52	75.2	-1.18%	Dec. 08, 2018								
DOGHZVZ	1023	5600	5600	5600	5600	5600	5600	5600	5600	5600 E	0 Body	79.6	7.88	78.8	-1.01%	Dec. 05, 2018
		5000	БОЦУ	79.6	7.82	78.2	-1.76%	Dec. 09, 2018								
		5800		75.9	7.32	73.2	-3.56%	Dec. 06, 2018								
			Body	75.9	7.43	74.3	-2.11%	Dec. 10, 2018								

Table 1. Results of system validation

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1.9 Tissue Simulant Fluid for the Frequency Band

The dielectric properties for this Head-simulant fluid were measured by using the Agilent Model 85070E Dielectric Probe (rates frequency band 200 MHz to 20 GHz) in conjunction with Network Analyzer.

All dielectric parameters of tissue simulates were measured within 24 hours of SAR measurements. The measured conductivity and permittivity are all within ± 5% of the target values.

The depth of the tissue simulant in the flat section of the phantom was ≥ 15 cm ± 5 mm (Frequency \leq 3G) or \geq 10 cm \pm 5 mm (Frequency >3G) during all tests. (Fig. 2)

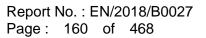
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Tissue Type	Measurement Date	Measured Frequency (MHz)	Target Dielectric Constant,	Target Conductivity, σ (S/m)	Measured Dielectric Constant,	Measured Conductivity, σ (S/m)	% dev ɛr	% dev σ
		(101112)	٤r	0 (3/11)	εr	0 (3/11)		
		704.00	55.710	0.960	53.992	0.967	3.08%	-0.75%
		707.50	55.697	0.960	53.950	0.971	3.14%	-1.14%
		709.00	55.691	0.960	53.923	0.972	3.17%	-1.23%
	Dec, 10. 2018	710.00	55.687	0.960	53.910	0.973	3.19%	-1.33%
	200, 101 2010	711.00	55.683	0.960	53.898	0.974	3.21%	-1.42%
		750.00	55.531	0.963	53.492	0.979	3.67%	-1.62%
		782.00	55.406	0.966	53.478	0.985	3.48%	-1.98%
		793.00	55.364	0.967	53.209	0.983	3.89%	-1.68%
		821.50	55.242	0.953	57.444	0.982	-3.99%	-3.00%
		826.40	55.226	0.959	57.343	0.986	-3.83%	-2.77%
		829.00	55.218	0.963	57.321	0.989	-3.81%	-2.74%
		831.50	55.211	0.966	57.249	0.992	-3.69%	-2.72%
	Dec, 11. 2018	835.00	55.200	0.970	57.237	0.996	-3.69%	-2.68%
	Dec, 11. 2010	836.50	55.195	0.972	57.236	0.998	-3.70%	-2.69%
		836.60	55.195	0.972	57.230	0.996	-3.69%	-2.49%
		841.50	55.180	0.978	57.165	1.001	-3.60%	-2.35%
		844.00	55.172	0.981	57.160	1.005	-3.60%	-2.44%
		846.60	55.164	0.984	57.157	1.006	-3.61%	-2.21%
		1712.40	53.531	1.465	51.506	1.426	3.78%	2.64%
		1720.00	53.511	1.469	51.468	1.439	3.82%	2.07%
		1732.40	53.478	1.477	51.465	1.447	3.76%	2.05%
		1732.50	53.478	1.477	51.465	1.447	3.76%	2.06%
Body		1745.00	53.445	1.485	51.433	1.459	3.76%	1.77%
		1750.00	53.432	1.488	51.392	1.468	3.82%	1.37%
	Dec. 12, 2018	1752.60	53.425	1.490	51.386	1.471	3.82%	1.28%
	Dec, 12. 2018	1770.00	53.379	1.501	51.370	1.492	3.76%	0.60%
		1852.40	53.162	1.553	51.069	1.578	3.94%	-1.60%
		1860.00	53.142	1.558	51.038	1.586	3.96%	-1.80%
		1880.00	53.089	1.571	50.905	1.609	4.11%	-2.45%
		1882.50	53.083	1.572	50.904	1.609	4.10%	-2.35%
		1900.00	53.037	1.583	50.897	1.630	4.03%	-2.97%
		1907.60	53.017	1.588	50.871	1.633	4.05%	-2.83%
		2300.00	52.900	1.807	54.055	1.844	-2.18%	-2.07%
		2310.00	52.887	1.816	54.043	1.853	-2.19%	-2.02%
		2506.00	52.629	2.029	52.854	2.089	-0.43%	-2.94%
		2510.00	52.624	2.035	52.821	2.097	-0.38%	-3.04%
		2535.00	52.592	2.071	52.806	2.129	-0.41%	-2.82%
		2549.50	52.573	2.091	52.748	2.147	-0.33%	-2.67%
	Dec, 13. 2018	2560.00	52.560	2.106	52.700	2.165	-0.27%	-2.80%
		2593.00	52.518	2.153	52.621	2.210	-0.20%	-2.66%
		2595.00	52.515	2.156	52.608	2.214	-0.18%	-2.71%
		2580.00	52.511	2.134	52.645	2.215	-0.26%	-3.78%
		2600.00	52.509	2.163	52.576	2.216	-0.13%	-2.46%
		2636.50	52.463	2.214	52.466	2.276	-0.01%	-2.78%
		2680.00	52.407	2.276	52.371	2.336	0.07%	-2.63%

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Tissue Type	Measurement Date	Measured Frequency (MHz)	Measured Dielectric Constant, εr	Measured Conductivity, σ (S/m)	% dev εr	% dev σ
		704.00	57.837	0.924	-3.82%	3.71%
		707.50	57.831	0.926	-3.83%	3.55%
		709.00	57.813	0.926	-3.81%	3.56%
	Dec. 14, 2019	710.00	57.809	0.930	-3.81%	3.15%
	Dec, 14. 2018	711.00	57.679	0.930	-3.58%	3.16%
		750.00	57.483	0.969	-3.51%	-0.58%
		782.00	57.114	0.984	-3.08%	-1.88%
		793.00	57.044	0.993	-3.04%	-2.72%
Body		821.50	57.441	0.982	-3.98%	-3.00%
Bouy		826.40	57.344	0.986	-3.83%	-2.77%
		829.00	57.351	0.989	-3.86%	-2.74%
		831.50	57.253	0.992	-3.70%	-2.72%
	Dec, 17. 2018	835.00	57.261	0.996	-3.73%	-2.68%
	Dec, 17. 2010	836.50	57.275	0.998	-3.77%	-2.69%
		836.60	57.275	0.998	-3.77%	-2.69%
		841.50	57.261	1.001	-3.77%	-2.35%
		844.00	57.255	1.006	-3.77%	-2.54%
		846.60	57.249	1.011	-3.78%	-2.71%

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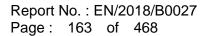
Tissue Type	Measurement Date	Measured Frequency (MHz)	Measured Dielectric Constant, εr	Measured Conductivity, σ (S/m)	% dev εr	% dev σ
		1712.40	52.091	1.432	2.69%	2.23%
		1720.00	52.060	1.449	2.71%	1.39%
		1732.40	52.013	1.456	2.74%	1.44%
		1732.50	52.044	1.456	2.68%	1.45%
		1745.00	52.004	1.469	2.70%	1.09%
		1750.00	51.974	1.474	2.73%	0.97%
	Dec, 18. 2018	1752.60	51.990	1.478	2.69%	0.81%
	Dec, 10. 2010	1770.00	51.921	1.491	2.73%	0.67%
		1852.40	51.620	1.588	2.90%	-2.25%
		1860.00	51.603	1.594	2.90%	-2.32%
		1880.00	51.541	1.616	2.92%	-2.90%
		1882.50	51.522	1.617	2.94%	-2.86%
		1900.00	51.461	1.642	2.97%	-3.73%
Body		1907.60	51.464	1.647	2.93%	-3.72%
		2300.00	54.063	1.835	-2.20%	-1.57%
		2310.00	54.074	1.839	-2.25%	-1.25%
		2506.00	51.404	2.083	2.33%	-2.64%
		2510.00	51.423	2.091	2.28%	-2.75%
		2535.00	51.344	2.124	2.37%	-2.58%
		2549.50	51.314	2.145	2.40%	-2.58%
	Dec, 19. 2018	2560.00	51.231	2.166	2.53%	-2.85%
		2580.00	51.198	2.194	2.54%	-2.79%
		2593.00	51.174	2.202	2.56%	-2.29%
		2595.00	51.123	2.209	2.65%	-2.48%
		2600.00	51.104	2.224	2.68%	-2.83%
		2636.50	50.981	2.265	2.82%	-2.28%
		2680.00	50.843	2.328	2.98%	-2.28%

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Tissue Type	Measurement Date	Measured Frequency (MHz)	Target Dielectric Constant, εr	Target Conductivity, σ (S/m)	Measured Dielectric Constant, εr	Measured Conductivity, σ (S/m)	% dev ɛr	% dev σ
		2402.00	52.764	1.904	53.735	1.903	-1.84%	0.05%
		2412.00	52.751	1.914	53.706	1.920	-1.81%	-0.31%
		2417.00	52.744	1.918	53.677	1.928	-1.77%	-0.52%
		2437.00	52.717	1.938	53.609	1.951	-1.69%	-0.67%
	Dec, 04. 2018	2441.00	52.712	1.941	53.591	1.952	-1.67%	-0.57%
		2450.00	52.700	1.950	53.577	1.974	-1.66%	-1.23%
		2457.00	52.691	1.960	53.551	1.981	-1.63%	-1.07%
		2462.00	52.685	1.967	53.546	1.985	-1.63%	-0.92%
		2480.00	52.662	1.993	53.479	2.006	-1.55%	-0.65%
		5180.00	49.041	5.276	49.459	5.141	-0.85%	2.56%
		5190.00	49.028	5.288	49.419	5.153	-0.80%	2.55%
	Dec. 04.0040	5200.00	49.014	5.299	49.348	5.158	-0.68%	2.66%
	Dec, 04. 2018	5220.00	48.987	5.323	49.299	5.176	-0.64%	2.76%
		5230.00	48.974	5.334	49.212	5.209	-0.49%	2.34%
		5240.00	48.960	5.346	49.208	5.218	-0.51%	2.39%
		5260.00	48.933	5.369	49.122	5.260	-0.39%	2.03%
Body		5270.00	48.919	5.381	49.093	5.283	-0.36%	1.82%
	Dec. 05. 2018	5280.00	48.906	5.393	49.071	5.293	-0.34%	1.85%
	Dec, 05. 2018	5300.00	48.879	5.416	49.055	5.323	-0.36%	1.72%
		5310.00	48.865	5.428	48.968	5.335	-0.21%	1.71%
		5320.00	48.851	5.439	48.938	5.353	-0.18%	1.58%
		5510.00	48.594	5.661	48.301	5.656	0.60%	0.09%
		5530.00	48.566	5.685	48.260	5.692	0.63%	-0.12%
		5550.00	48.539	5.708	48.160	5.720	0.78%	-0.21%
	D 05. 0040	5590.00	48.485	5.755	48.084	5.806	0.83%	-0.89%
	Dec, 05. 2018	5600.00	48.471	5.766	48.082	5.808	0.80%	-0.73%
		5610.00	48.458	5.778	48.036	5.820	0.87%	-0.73%
		5670.00	48.376	5.848	47.860	5.925	1.07%	-1.32%
		5690.00	48.349	5.872	47.784	5.978	1.17%	-1.81%
		5755.00	48.261	5.947	47.580	6.049	1.41%	-1.72%
	D 05 0010	5775.00	48.234	5.971	47.507	6.095	1.51%	-2.08%
	Dec, 05. 2018	5795.00	48.207	5.994	47.455	6.137	1.56%	-2.39%
		5800.00	48.200	6.000	47.441	6.143	1.57%	-2.38%

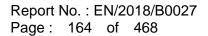
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Tissue Type	Measurement Date	Measured Frequency (MHz)	Target Dielectric Constant, εr	Target Conductivity, σ (S/m)	Measured Dielectric Constant, εr	Measured Conductivity, σ (S/m)	% dev ɛr	% dev σ
		2402.00	52.764	1.904	53.793	1.916	-1.95%	-0.63%
		2412.00	52.751	1.914	53.779	1.928	-1.95%	-0.73%
		2417.00	52.744	1.918	53.779	1.941	-1.96%	-1.20%
		2437.00	52.717	1.938	53.738	1.964	-1.94%	-1.34%
	Dec, 04. 2018	2441.00	52.712	1.941	53.692	1.969	-1.86%	-1.44%
		2450.00	52.700	1.950	53.722	1.986	-1.94%	-1.85%
		2457.00	52.691	1.960	53.681	1.988	-1.88%	-1.43%
		2462.00	52.685	1.967	53.639	1.993	-1.81%	-1.32%
		2480.00	52.662	1.993	53.588	2.018	-1.76%	-1.25%
		5180.00	49.041	5.276	49.567	5.147	-1.07%	2.45%
		5190.00	49.028	5.288	49.533	5.156	-1.03%	2.50%
	Dec, 04. 2018	5200.00	49.014	5.299	49.473	5.165	-0.94%	2.53%
	Dec, 04. 2016	5220.00	48.987	5.323	49.449	5.196	-0.94%	2.39%
		5230.00	48.974	5.334	49.346	5.219	-0.76%	2.16%
		5240.00	48.960	5.346	49.339	5.225	-0.77%	2.26%
		5260.00	48.933	5.369	49.222	5.276	-0.59%	1.73%
Body		5270.00	48.919	5.381	49.214	5.293	-0.60%	1.64%
	Dec, 05. 2018	5280.00	48.906	5.393	49.193	5.302	-0.59%	1.69%
	Dec, 05. 2016	5300.00	48.879	5.416	49.159	5.338	-0.57%	1.44%
		5310.00	48.865	5.428	49.119	5.341	-0.52%	1.60%
		5320.00	48.851	5.439	49.079	5.355	-0.47%	1.54%
		5510.00	48.594	5.661	48.441	5.678	0.31%	-0.30%
		5530.00	48.566	5.685	48.401	5.701	0.34%	-0.28%
		5550.00	48.539	5.708	48.320	5.731	0.45%	-0.40%
	Dec. 05. 2018	5590.00	48.485	5.755	48.208	5.817	0.57%	-1.08%
	Dec, 05. 2018	5600.00	48.471	5.766	48.200	5.820	0.56%	-0.94%
		5610.00	48.458	5.778	48.173	5.830	0.59%	-0.90%
		5670.00	48.376	5.848	47.960	5.944	0.86%	-1.64%
		5690.00	48.349	5.872	47.872	5.984	0.99%	-1.91%
		5755.00	48.261	5.947	47.713	6.049	1.14%	-1.72%
	Dec. 05, 0010	5775.00	48.234	5.971	47.592	6.124	1.33%	-2.56%
	Dec, 05. 2018	5795.00	48.207	5.994	47.589	6.150	1.28%	-2.60%
		5800.00	48.200	6.000	47.587	6.158	1.27%	-2.63%

Table 2. Dielectric Parameters of Tissue Simulant Fluid

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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F				Ingre	dient			Tatal
Frequency (MHz)	Mode	DGMBE	Water	Salt	Preventol D-7	Cellulose	Sugar	Total amount
750	Body	_	631.68 g	11.72 g	1.2 g		600 g	1.0L(Kg)
850	Body	—	631.68 g	11.72 g	1.2 g	-	600 g	1.0L(Kg)
1750	Body	300.67 g	716.56 g	4.0 g	—	-	-	1.0L(Kg)
1900	Body	300.67 g	716.56 g	4.0 g	—	-	_	1.0L(Kg)
2300	Body	301.7ml	698.3ml		—			1.0L(Kg)
2450	Body	301.7ml	698.3ml		_		_	1.0L(Kg)
2600	Body	301.7ml	698.3ml	_	_	_	_	1.0L(Kg)

The composition of the body tissue simulating liquid:

Body Simulating Liquids for 5 GHz, Manufactured by SPEAG:

Ingredients	Water	Esters, Emulsifiers, Inhibitors	Sodium and Salt
(% by weight)	60-80	20-40	0-1.5

Table 3. Recipes for Tissue Simulating Liquid

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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1.10 Evaluation Procedures

The entire evaluation of the spatial peak values is performed within the Post-processing engine (SEMCAD). The system always gives the maximum values for the 1 g and 10 g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

- 1. The extraction of the measured data (grid and values) from the Zoom Scan.
- 2. The calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
- 3. The generation of a high-resolution mesh within the measured volume
- 4. The interpolation of all measured values from the measurement grid to the high-resolution grid
- 5. The extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
- 6. The calculation of the averaged SAR within masses of 1g and 10g.

The probe is calibrated at the center of the dipole sensors that is located 1 to 2.7mm away from the probe tip. During measurements, the probe stops shortly above the phantom surface, depending on the probe and the surface detecting system. Both distances are included as parameters in the probe configuration file. The software always knows exactly how far away the measured point is from the surface. As the probe cannot directly measure at the surface, the values between the deepest measured point and the surface must be extrapolated. The angle between the probe axis and the surface normal line is less than 30 degree.

In the Area Scan, the gradient of the interpolation function is evaluated to find all the extreme of the SAR distribution. The uncertainty on the locations of the extreme is less than 1/20 of the grid size. Only local maximum within -2 dB of the global maximum are searched and passed for the Cube Scan measurement. In the Cube Scan, the interpolation function is used to extrapolate the Peak SAR from the lowest measurement points to the inner phantom surface (the extrapolation distance). The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5mm.

The maximum search is automatically performed after each area scan measurement. It is based on splines in two or three dimensions. The procedure can find the maximum for most SAR distributions even with relatively large grid spacing. After the area scanning measurement, the probe is automatically moved to a position at the interpolated maximum. The following scan can directly use this position for reference, e.g., for a finer resolution grid or the cube evaluations. The 1g and 10g peak evaluations are only available for the predefined cube 7x7x7 scans. The routines are verified and optimized for the grid dimensions used in these cube measurements.

The measured volume of 30x30x30mm contains about 30g of tissue.

The first procedure is an extrapolation (incl. Boundary correction) to get the points between the lowest measured plane and the surface. The next step uses 3D

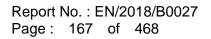
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interpolation to get all points within the measured volume. In the last step, a 1g cube is placed numerically into the volume and its averaged SAR is calculated. This cube is the moved around until the highest averaged SAR is found. If the highest SAR is found at the edge of the measured volume, the system will issue a warning: higher SAR values might be found outside of the measured volume. In that case the cube measurement can be repeated, using the new interpolated maximum as the center.

1.11 Probe Calibration Procedures

For the calibration of E-field probes in lossy liquids, an electric field with an accurately known field strength must be produced within the measured liquid. For standardization purposes it would be desirable if all measurements which are necessary to assess the correct field strength would be traceable to standardized measurement procedures. In the following two different calibration techniques are summarized:

1.11.1 Transfer Calibration with Temperature Probes

In lossy liquids the specific absorption rate (SAR) is related both to the electric field (E) and the temperature gradient ($\delta T / \delta t$) in the liquid.

$$SAR = C \frac{\delta T}{\delta t}$$

whereby σ is the conductivity, ρ the density and c the heat capacity of the liquid.

Hence, the electric field in lossy liquid can be measured indirectly by measuring the temperature gradient in the liquid. Non-disturbing temperature probes (optical probes or thermistor probes with resistive lines) with high spatial resolution (<1-2 mm) and fast reaction time (<1 s) are available and can be easily calibrated with high precision [1]. The setup and the exciting source have no influence on the calibration; only the relative positioning uncertainties of the standard temperature probe and the E-field probe to be calibrated must be considered. However, several problems limit the available accuracy of probe calibrations with temperature probes:

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- The temperature gradient is not directly measurable but must be evaluated from temperature measurements at different time steps. Special precaution is necessary to avoid measurement errors caused by temperature gradients due to energy equalizing effects or convection currents in the liquid. Such effects cannot be completely avoided, as the measured field itself destroys the thermal equilibrium in the liquid. With a careful setup these errors can be kept small.
- The measured volume around the temperature probe is not well defined. It is difficult to calculate the energy transfer from a surrounding gradient temperature field into the probe. These effects must be considered, since temperature probes are calibrated in liquid with homogeneous temperatures. There is no traceable standard for temperature rise measurements.
- The calibration depends on the assessment of the specific density, the heat capacity and the conductivity of the medium. While the specific density and heat capacity can be measured accurately with standardized procedures (~ 2% for c; much better for ρ), there is no standard for the measurement of the conductivity. Depending on the method and liquid, the error can well exceed $\pm 5\%$.
- Temperature rise measurements are not very sensitive and therefore are often performed at a higher power level than the E-field measurements. The nonlinearities in the system (e.g., power measurements, different components, etc.) must be considered.

Considering these problems, the possible accuracy of the calibration of E-field probes with temperature gradient measurements in a carefully designed setup is about ±10% (RSS) [2]. Recently, a setup which is a combination of the waveguide techniques and the thermal measurements was presented in [3]. The estimated uncertainty of the setup is $\pm 5\%$ (RSS) when the same liquid is used for the calibration and for actual measurements and ±7-9% (RSS) when not, which is in good agreement with the estimates given in [2].

1.11.2 Calibration with Analytical Fields

In this method a technical setup is used in which the field can be calculated analytically from measurements of other physical magnitudes (e.g., input power). This corresponds to the standard field method for probe calibration in air; however, there is no standard defined for fields in lossy liquids.

When using calculated fields in lossy liquids for probe calibration, several points must be considered in the assessment of the uncertainty:

- The setup must enable accurate determination of the incident power.
- The accuracy of the calculated field strength will depend on the assessment of the dielectric parameters of the liquid.
- Due to the small wavelength in liquids with high permittivity, even small

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setups might be above the resonant cutoff frequencies. The field distribution in the setup must be carefully checked for conformity with the theoretical field distribution.

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- 3. K. Jokela, P. Hyysalo, and L. Puranen, \Calibration of specific absorption rate (SAR) probes in waveguide at 900 MHz", IEEE Transactions on Instrumentation and Measurements, vol. 47, no. 2, pp. 432{438, Apr. 1998.

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1.12 Test Standards and Limits

According to FCC 47CFR §2.1093(d) The limits to be used for evaluation are based generally on criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate ("SAR") in Section 4.2 of "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," ANSI/IEEE C95.1, By the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017. These criteria for SAR evaluation are similar to those recommended by the National Council on Radiation Protection and Measurements (NCRP) in "Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields," NCRP Report No. 86, Section 17.4.5. Copyright NCRP, 1986, Bethesda, Maryland 20814. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards. The criteria to be used are specified in paragraphs (d)(1) and (d)(2) of this section and shall apply for portable devices transmitting in the frequency range from 100 kHz to 6 GHz. Portable devices that transmit at frequencies above 6 GHz are to be evaluated in terms of the MPE limits specified in § 1.1310 of this chapter. Measurements and calculations to demonstrate compliance with MPE field strength or power density limits for devices operating above 6 GHz should be made at a minimum distance of 5 cm from the radiating source.

- Limits for Occupational/Controlled exposure: 0.4 W/kg as averaged over the (1) whole-body and spatial peak SAR not exceeding 8 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 20 W/kg, as averaged over an 10 grams of tissue (defined as a tissue volume in the shape of a cube).
- Occupational/Controlled limits apply when persons are exposed as a (2) consequence of their employment provided these persons are fully aware of and exercise control over their exposure. Awareness of exposure can be accomplished by use of warning labels or by specific training or education through appropriate means, such as an RF safety program in a work environment.

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(3)Limits for General Population/Uncontrolled exposure: 0.08 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 1.6 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). General Population/Uncontrolled limits apply when the general public may be exposed, or when persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or do not exercise control over their exposure. Warning labels placed on consumer devices such as cellular telephones will not be sufficient reason to allow these devices to be evaluated subject to limits for occupational/controlled exposure in paragraph (d)(1) of this section. (Table 4.)

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
Spatial Peak SAR (Brain)	1.60 W/kg	8.00 W/kg
Spatial Average SAR (Whole Body)	0.08 W/kg	0.40 W/kg
Spatial Peak SAR (Hands/Feet/Ankle/Wrist)	4.00 W/kg	20.00 W/kg

Table 4. RF exposure limits

Notes:

- 1. Uncontrolled environments are defined as locations where there is potential exposure of individuals who have no knowledge or control of their potential exposure.
- 2. Controlled environments are defined as locations where there is potential exposure of individuals who have knowledge of their potential exposure and can exercise control over their exposure.

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2. Summary of Results

AWAN

WCDMA Band II

Mode	Position	Distance (mm)	СН	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Scaling	Averaged S (W/	Plot page	
					roloranoo (abiii)	(ubiii)		Measured	Reported	
	Back side	0	9400	1880	19	18.98	0.46%	0.297	0.298	-
	Top side	0	9262	1852.4	19	18.93	1.62%	1.380	1.402	299
	Top side*	0	9262	1852.4	19	18.93	1.62%	1.240	1.260	-
	Top side**	0	9262	1852.4	19	18.93	1.62%	1.190	1.209	-
WCDMA Band	Top side	0	9400	1880	19	18.98	0.46%	1.220	1.226	-
	Top side	0	9538	1907.6	19	18.88	2.80%	0.973	1.000	-
	Bottom side	0	9400	1880	19	18.98	0.46%	0.030	0.030	-
	Right side	0	9400	1880	19	18.98	0.46%	0.471	0.473	-
	Left side	0	9400	1880	19	18.98	0.46%	0.044	0.045	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

WCDMA Band IV

Mode	Position	Distance (mm) CH		Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Power Scaling	Averaged S (W/	Plot page	
						(ubiii)		Measured	Reported	
	Back side	0	1513	1752.6	20	20	0.00%	0.311	0.311	-
	Top side	0	1312	1712.4	20	19.85	3.51%	1.170	1.211	-
	Top side	0	1412	1732.4	20	19.98	0.46%	1.200	1.206	-
	Top side	0	1513	1752.6	20	20	0.00%	1.350	1.350	300
WCDMA Band IV	Top side*	0	1513	1752.6	20	20	0.00%	1.210	1.210	-
Dana II	Top side**	0	1513	1752.6	20	20	0.00%	1.180	1.180	-
	Bottom side	0	1513	1752.6	20	20	0.00%	0.033	0.033	-
	Right side	0	1513	1752.6	20	20	0.00%	0.566	0.566	-
	Left side	0	1513	1752.6	20	20	0.00%	0.047	0.047	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

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WCDMA Band V

Mode	Position	Distance (mm) CH		Freq. (MHz)	Max. Rated Avg. Power + Max.Tolerance	Measured Avg. Power (dBm)	Power Scaling	Averaged S (W/	Plot page	
					(dBm)	(02)		Measured	Reported	
	Back side	0	4132	826.4	20.5	20.480	0.46%	0.332	0.334	-
	Top side	0	4132	826.4	20.5	20.480	0.46%	1.380	1.386	301
	Top side*	0	4132	826.4	20.5	20.48	0.46%	1.110	1.115	-
	Top side**	0	4132	826.4	20.5	20.48	0.46%	1.070	1.075	-
WCDMA Band V	Top side	0	4183	836.6	20.5	20.330	3.99%	1.150	1.196	-
Bana v	Top side	0	4233	846.6	20.5	20.440	1.39%	1.100	1.115	-
	Bottom side	0	4132	826.4	20.5	20.480	0.46%	0.036	0.036	-
Ī	Right side	0	4132	826.4	20.5	20.480	0.46%	0.573	0.576	-
	Left side	0	4132	826.4	20.5	20.480	0.46%	0.049	0.050	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

LTE FDD Band 2

Mode	Bandwidth	Modulation	RB	RB	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg.	Scaling	Averaged 1g (V		Plot
Mode	(MHz)	Woddation	Size	start	1 Coldon	(mm)	UII	(MHz)	Tolerance (dBm)	Power (dBm)	County	Measured	Reported	page
					Back side	0	18700	1860	19	18.94	1.39%	0.296	0.300	-
					Top side	0	18700	1860	19	18.94	1.39%	1.200	1.217	-
				0	Bottom side	0	18700	1860	19	18.94	1.39%	0.033	0.034	-
				Right side	0	18700	1860	19	18.94	1.39%	0.477	0.484		
		1 RB		Left side	0	18700	1860	19	18.94	1.39%	0.051	0.052	-	
			50	Top side	0	19100	1900	19	18.58	10.15%	0.931	1.026	-	
				Top side	0	18900	1880	19	18.91	2.09%	1.360	1.388	302	
				99	Top side*	0	18900	1880	19	18.91	2.09%	1.210	1.235	-
					Top side**	0	18900	1880	19	18.91	2.09%	1.160	1.184	-
					Back side	0	18900	1880	19	18.91	2.09%	0.286	0.292	-
LTE					Top side	0	18900	1880	19	18.91	2.09%	1.220	1.246	-
Band 2	20MHz	QPSK		0	Bottom side	0	18900	1880	19	18.91	2.09%	0.031	0.032	-
Danaz			50 RB		Right side	0	18900	1880	19	18.91	2.09%	0.473	0.483	-
					Left side	0	18900	1880	19	18.91	2.09%	0.047	0.048	-
				25	Top side	0	19100	1900	19	18.61	9.40%	0.978	1.070	-
				50	Top side	0	18700	1860	19	18.90	2.33%	1.190	1.218	-
					Back side	0	18900	1880	19	18.89	2.57%	0.303	0.311	
					Top side	0	18700	1860	19	18.86	3.28%	1.210	1.250	-
					Top side	0	18900	1880	19	18.89	2.57%	1.290	1.323	-
			100	RB	Top side	0	19100	1900	19	18.77	5.44%	1.050	1.107	-
					Bottom side	0	18900	1880	19	18.89	2.57%	0.042	0.043	-
					Right side	0	18900	1880	19	18.89	2.57%	0.501	0.514	-
					Left side	0	18900	1880	19	18.89	2.57%	0.064	0.066	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

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Mode	Bandwidth	Modulation	BB Size	PP stort	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
Widde	(MHz)	Woodation	ND 312e	ND Start	Position	(mm)	GI	(MHz)	Tolerance (dBm)	(dBm)		Measured		page
					Back side	0	20300	1745	20	19.98	0.46%	0.329	0.331	-
					Top side	0	20300	1745	20	19.98	0.46%	1.340	1.346	303
					Top side*	0	20300	1745	20	19.98	0.46%	1.210	1.216	-
				0	Top side**	0	20300	1745	20	19.98	0.46%	1.180	1.185	-
			1 RB		Bottom side	0	20300	1745	20	19.98	0.46%	0.032	0.032	-
					Right side	0	20300	1745	20	19.98	0.46%	0.563	0.566	-
					Left side	0	20300	1745	20	19.98	0.46%	0.046	0.047	-
				99	Top side	0	20050	1720	20	19.86	3.28%	1.110	1.146	-
					Top side	0	20175	1732.5	20	19.88	2.80%	1.170	1.203	-
				0	Top side	0	20050	1720	20	19.92	1.86%	1.120	1.141	-
LTE				-	Top side	0	20175	1732.5	20	19.78	5.20%	1.110	1.168	-
Band 4	20MHz	QPSK			Back side	0	20300	1745	20	19.94	1.39%	0.298	0.302	-
			50 RB		Top side	0	20300	1745	20	19.94	1.39%	1.220	1.237	-
				50	Bottom side	0	20300	1745	20	19.94	1.39%	0.028	0.028	-
					Right side	0	20300	1745	20	19.94	1.39%	0.512	0.519	-
					Left side	0	20300	1745	20	19.94	1.39%	0.041	0.042	-
					Back side	0	20300	1745	20	19.92	1.86%	0.294	0.299	-
					Top side	0	20050	1720	20	19.83	3.99%	1.150	1.196	-
					Top side	0	20175	1732.5	20	19.87	3.04%	1.160	1.195	-
			100	RB	Top side	0	20300	1745	20	19.92	1.86%	1.180	1.202	-
					Bottom side	0	20300	1745	20	19.92	1.86%	0.025	0.026	-
					Right side	0	20300	1745	20	19.92	1.86%	0.483	0.492	-
					Left side	0	20300	1745	20	19.92	1.86%	0.039	0.039	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

LTE FDD Band 5

Mode	Bandwidth	Modulation	RB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
Mode	(MHz)	Woddation	100120	ND Start	1 USIAUT	(mm)	01	(MHz)	Tolerance (dBm)	(dBm)	ocaing	Measured	Reported	page
					Back side	0	20450	829	21	21.00	0.00%	0.337	0.337	-
					Top side	0	20450	829	21	21.00	0.00%	1.420	1.420	304
					Top side*	0	20450	829	21	21.00	0.00%	1.210	1.210	-
					Top side**	0	20450	829	21	21.00	0.00%	1.190	1.190	-
			1 RB	0	Top side	0	20525	836.5	21	20.90	2.33%	1.130	1.156	-
					Top side	0	20600	844	21	20.87	3.04%	1.100	1.133	-
					Bottom side	0	20450	829	21	21.00	0.00%	0.039	0.039	-
					Right side	0	20450	829	21	21.00	0.00%	0.581	0.581	-
					Left side	0	20450	829	21	21.00	0.00%	0.051	0.051	-
					Back side	0	20600	844	21	20.96	0.93%	0.324	0.327	-
LTE					Top side	0	20450	829	21	20.92	1.86%	1.130	1.151	-
Band 5	10MHz	QPSK			Top side	0	20525	836.5	21	20.91	2.09%	1.100	1.123	-
Dana S			25 RB	25	Top side	0	20600	844	21	20.96	0.93%	1.160	1.171	-
					Bottom side	0	20600	844	21	20.96	0.93%	0.034	0.034	-
					Right side	0	20600	844	21	20.96	0.93%	0.562	0.567	-
					Left side	0	20600	844	21	20.96	0.93%	0.049	0.050	-
					Back side	0	20600	844	21	20.92	1.86%	0.326	0.332	-
					Top side	0	20450	829	21	20.91	2.09%	1.140	1.164	-
					Top side	0	20525	836.5	21	20.89	2.57%	1.110	1.138	-
			50	RB	Top side	0	20600	844	21	20.92	1.86%	1.150	1.171	-
					Bottom side	0	20600	844	21	20.92	1.86%	0.036	0.037	-
					Right side	0	20600	844	21	20.92	1.86%	0.566	0.577	-
					Left side	0	20600	844	21	20.92	1.86%	0.051	0.052	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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Mode	Bandwidth	Modulation	PR Sizo	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling	Averaged 1g (V		Plot
Wode	(MHz)	Woddaton	ND 0120	ND Start	1 USHION	(mm)	01	(MHz)	Tolerance (dBm)	(dBm)	County	Measured	Reported	page
					Back side	0	20850	2510	20.5	20.47	0.69%	0.382	0.385	-
					Top side	0	20850	2510	20.5	20.47	0.69%	1.360	1.369	305
					Top side*	0	20850	2510	20.5	20.47	0.69%	1.240	1.249	-
					Top side**	0	20850	2510	20.5	20.47	0.69%	1.180	1.188	-
			1 RB	0	Top side	0	21100	2535	20.5	20.19	7.40%	1.220	1.310	-
					Top side	0	21350	2560	20.5	20.10	9.65%	1.270	1.393	-
					Bottom side	0	20850	2510	20.5	20.47	0.69%	0.047	0.047	-
					Right side	0	20850	2510	20.5	20.47	0.69%	0.612	0.616	-
					Left side	0	20850	2510	20.5	20.47	0.69%	0.056	0.057	-
					Back side	0	20850	2510	20.5	20.28	5.20%	0.318	0.335	-
LTE					Top side	0	20850	2510	20.5	20.28	5.20%	1.260	1.325	-
Band 7	20MHz	QPSK		0	Bottom side	0	20850	2510	20.5	20.28	5.20%	0.033	0.035	-
Dana			50 RB		Right side	0	20850	2510	20.5	20.28	5.20%	0.545	0.573	-
					Left side	0	20850	2510	20.5	20.28	5.20%	0.049	0.051	-
				50	Top side	0	21100	2535	20.5	20.13	8.89%	1.250	1.361	-
				50	Top side	0	21350	2560	20.5	20.18	7.65%	1.230	1.324	-
					Back side	0	20850	2510	20.5	20.45	1.16%	0.319	0.323	-
					Top side	0	20850	2510	20.5	20.45	1.16%	1.230	1.244	-
					Top side	0	21100	2535	20.5	20.19	7.40%	1.240	1.332	-
			100	RB	Top side	0	21350	2560	20.5	20.15	8.39%	1.250	1.355	-
					Bottom side	0	20850	2510	20.5	20.45	1.16%	0.035	0.036	-
					Right side	0	20850	2510	20.5	20.45	1.16%	0.551	0.557	-
					Left side	0	20850	2510	20.5	20.45	1.16%	0.051	0.052	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

LTE FDD Band 12

Mode	Bandwidth	Modulation	RB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
Mode	(MHz)	Woddation	10020	ND Start	1 03/40/1	(mm)	6	(MHz)	Tolerance (dBm)	(dBm)	Octaining	Measured	Reported	page
					Back side	0	23095	707.5	21.5	21.50	0.00%	0.372	0.372	-
					Top side	0	23060	704	21.5	21.34	3.75%	1.170	1.214	-
					Top side	0	23095	707.5	21.5	21.50	0.00%	1.310	1.310	306
					Top side*	0	23095	707.5	21.5	21.50	0.00%	1.260	1.260	-
			1 RB	0	Top side**	0	23095	707.5	21.5	21.50	0.00%	1.210	1.210	-
					Top side	0	23130	711	21.5	21.45	1.16%	1.190	1.204	-
					Bottom side	0	23095	707.5	21.5	21.50	0.00%	0.045	0.045	-
					Right side	0	23095	707.5	21.5	21.50	0.00%	0.603	0.603	-
					Left side	0	23095	707.5	21.5	21.50	0.00%	0.052	0.052	-
					Back side	0	23130	711	21.5	21.47	0.69%	0.331	0.333	-
LTE					Top side	0	23060	704	21.5	21.39	2.57%	1.230	1.262	-
Band 12	10MHz	QPSK			Top side	0	23095	707.5	21.5	21.36	3.28%	1.200	1.239	-
Dana 12			25 RB	25	Top side	0	23130	711	21.5	21.47	0.69%	1.290	1.299	-
					Bottom side	0	23130	711	21.5	21.47	0.69%	0.042	0.042	-
					Right side	0	23130	711	21.5	21.47	0.69%	0.585	0.589	-
					Left side	0	23130	711	21.5	21.47	0.69%	0.050	0.050	-
					Back side	0	23130	711	21.5	21.49	0.23%	0.332	0.333	-
					Top side	0	23060	704	21.5	21.46	0.93%	1.240	1.251	-
1					Top side	0	23095	707.5	21.5	21.44	1.39%	1.230	1.247	-
1			50	RB	Top side	0	23130	711	21.5	21.49	0.23%	1.280	1.283	-
1					Bottom side	0	23130	711	21.5	21.49	0.23%	0.044	0.044	
1					Right side	0	23130	711	21.5	21.49	0.23%	0.588	0.589	-
					Left side	0	23130	711	21.5	21.49	0.23%	0.052	0.052	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

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Mode	Bandwidth	Modulation	PB Sizo	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
Wode	(MHz)	Modulaton	10 3120	ND Statt	Position	(mm)	CIT	(MHz)	Tolerance (dBm)	(dBm)	Scaling	Measured	Reported	page
				0	Top side	0	23230	782	21	20.86	3.28%	1.190	1.229	-
					Back side	0	23230	782	21	20.92	1.86%	0.333	0.339	-
					Top side	0	23230	782	21	20.92	1.86%	1.300	1.324	307
					Top side*	0	23230	782	21	20.92	1.86%	1.220	1.243	-
			1 RB	25	Top side**	0	23230	782	21	20.92	1.86%	1.180	1.202	-
					Bottom side	0	23230	782	21	20.92	1.86%	0.045	0.046	-
					Right side	0	23230	782	21	20.92	1.86%	0.591	0.602	-
					Left side	0	23230	782	21	20.92	1.86%	0.054	0.055	-
				49	Top side	0	23230	782	21	20.74	6.17%	1.130	1.200	-
LTE					Back side	0	23230	782	21	20.89	2.57%	0.329	0.337	-
Band 13	10MHz	QPSK			Top side	0	23230	782	21	20.89	2.57%	1.210	1.241	-
Bana io				0	Bottom side	0	23230	782	21	20.89	2.57%	0.041	0.042	-
			25 RB		Right side	0	23230	782	21	20.89	2.57%	0.583	0.598	-
					Left side	0	23230	782	21	20.89	2.57%	0.053	0.054	-
				12	Top side	0	23230	782	21	20.66	8.14%	1.130	1.222	-
				25	Top side	0	23230	782	21	20.77	5.44%	1.180	1.244	-
					Back side	0	23230	782	21	20.85	3.51%	0.317	0.328	-
					Top side	0	23230	782	21	20.85	3.51%	1.190	1.232	-
			50	RB	Bottom side	0	23230	782	21	20.85	3.51%	0.038	0.040	-
1					Right side	0	23230	782	21	20.85	3.51%	0.521	0.539	
					Left side	0	23230	782	21	20.85	3.51%	0.045	0.047	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

LTE FDD Band 17

Mode	Bandwidth	Modulation	PR Sizo	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling	Averaged 1g (V	SAR over V/kg)	Plot
Mode	(MHz)	Modulation	ND 312e	ND Start	Position	(mm)	5	(MHz)	Tolerance (dBm)	(dBm)	Scaling	Measured	Reported	page
					Back side	0	23780	709	21.5	21.50	0.00%	0.377	0.377	-
					Top side	0	23780	709	21.5	21.50	0.00%	1.230	1.230	-
					Top side	0	23790	710	21.5	21.44	1.39%	1.200	1.217	-
					Top side	0	23800	711	21.5	21.46	0.93%	1.350	1.362	308
			1 RB	0	Top side*	0	23800	711	21.5	21.46	0.93%	1.210	1.221	-
					Top side**	0	23800	711	21.5	21.46	0.93%	1.180	1.191	-
					Bottom side	0	23780	709	21.5	21.50	0.00%	0.046	0.046	-
					Right side	0	23780	709	21.5	21.50	0.00%	0.614	0.614	-
					Left side	0	23780	709	21.5	21.50	0.00%	0.057	0.057	-
					Back side	0	23790	710	21.5	21.41	2.09%	0.351	0.358	-
LTE					Top side	0	23780	709	21.5	21.40	2.33%	1.250	1.279	-
Band 17	10MHz	QPSK			Top side	0	23790	710	21.5	21.41	2.09%	1.240	1.266	-
Danu 17			25 RB	25	Top side	0	23800	711	21.5	21.37	3.04%	1.190	1.226	-
					Bottom side	0	23790	710	21.5	21.41	2.09%	0.039	0.039	-
					Right side	0	23790	710	21.5	21.41	2.09%	0.592	0.604	-
					Left side	0	23790	710	21.5	21.41	2.09%	0.051	0.052	-
					Back side	0	23800	711	21.5	21.43	1.62%	0.349	0.355	-
					Top side	0	23780	709	21.5	21.34	3.75%	1.230	1.276	-
					Top side	0	23790	710	21.5	21.35	3.51%	1.220	1.263	-
			50	RB	Top side	0	23800	711	21.5	21.43	1.62%	1.320	1.341	-
					Bottom side	0	23800	711	21.5	21.43	1.62%	0.037	0.038	-
					Right side	0	23800	711	21.5	21.43	1.62%	0.588	0.598	-
					Left side	0	23800	711	21.5	21.43	1.62%	0.049	0.050	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

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Mode	Bandwidth	Modulation	DD Circ	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
Mode	(MHz)	Modulation	KD SIZE	RD Start	Position	(mm)	СП	(MHz)	Tolerance (dBm)	(dBm)	Scaling	Measured	Reported	page
					Back side	0	26865	831.5	21	20.79	4.95%	0.328	0.344	-
					Top side	0	26865	831.5	21	20.79	4.95%	1.150	1.207	-
				0	Bottom side	0	26865	831.5	21	20.79	4.95%	0.038	0.039	-
					Right side	0	26865	831.5	21	20.79	4.95%	0.601	0.631	-
			1 RB		Left side	0	26865	831.5	21	20.79	4.95%	0.046	0.048	-
				36	Top side	0	26765	821.5	21	20.55	10.92%	1.060	1.176	-
					Top side	0	26965	841.5	21	20.77	5.44%	1.310	1.381	309
				74	Top side*	0	26965	841.5	21	20.77	5.44%	1.220	1.286	-
					Top side**	0	26965	841.5	21	20.77	5.44%	1.180	1.244	-
				0	Top side	0	26965	841.5	21	20.45	13.50%	1.100	1.249	-
LTE				18	Top side	0	26865	831.5	21	20.54	11.17%	1.120	1.245	-
Band 26	15MHz	QPSK			Back side	0	26765	821.5	21	20.62	9.14%	0.316	0.345	-
			36 RB		Top side	0	26765	821.5	21	20.62	9.14%	1.220	1.332	-
				37	Bottom side	0	26765	821.5	21	20.62	9.14%	0.033	0.036	-
					Right side	0	26765	821.5	21	20.62	9.14%	0.583	0.636	-
					Left side	0	26765	821.5	21	20.62	9.14%	0.041	0.045	-
					Back side	0	26865	831.5	21	20.74	6.17%	0.322	0.342	-
					Top side	0	26765	821.5	21	20.65	8.39%	1.160	1.257	-
					Top side	0	26865	831.5	21	20.74	6.17%	1.200	1.274	-
			75	RB	Top side	0	26965	841.5	21	20.58	10.15%	1.110	1.223	-
					Bottom side	0	26865	831.5	21	20.74	6.17%	0.036	0.038	-
					Right side	0	26865	831.5	21	20.74	6.17%	0.594	0.631	-
					Left side	0	26865	831.5	21	20.74	6.17%	0.051	0.054	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

LTE FDD Band 30

Mode	Bandwidth (MHz)	Modulation	PR Sizo	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling	Averaged 1g (V		Plot
Wode	(MHz)	Noduation	ND 312e	ND Statt	Position	(mm)	5	(MHz)	Tolerance (dBm)	(dBm)	Scaling	Measured	Reported	page
					Back side	0	27710	2310	20	19.95	1.16%	0.386	0.390	-
					Top side	0	27710	2310	20	19.95	1.16%	1.370	1.386	310
					Top side*	0	27710	2310	20	19.95	1.16%	1.277	1.292	-
				0	Top side**	0	27710	2310	20	19.95	1.16%	1.269	1.284	-
			1 RB		Bottom side	0	27710	2310	20	19.95	1.16%	0.041	0.042	-
					Right side	0	27710	2310	20	19.95	1.16%	0.611	0.618	-
					Left side	0	27710	2310	20	19.95	1.16%	0.058	0.059	-
				25	Top side	0	27710	2310	20	19.89	2.57%	1.190	1.221	-
				49	Top side	0	27710	2310	20	19.87	3.04%	1.160	1.195	-
LTE				0	Top side	0	27710	2310	19	18.98	0.46%	1.210	1.216	-
Band 30	10MHz	QPSK			Back side	0	27710	2310	19	18.99	0.23%	0.351	0.352	-
Bana oo					Top side	0	27710	2310	19	18.99	0.23%	1.260	1.263	-
			25 RB	12	Bottom side	0	27710	2310	19	18.99	0.23%	0.035	0.035	-
					Right side	0	27710	2310	19	18.99	0.23%	0.603	0.604	-
					Left side	0	27710	2310	19	18.99	0.23%	0.051	0.051	-
				25	Top side	0	27710	2310	19	18.89	2.57%	1.180	1.210	-
					Back side	0	27710	2310	19	18.93	1.62%	0.352	0.358	-
					Top side	0	27710	2310	19	18.93	1.62%	1.270	1.291	-
			50	RB	Bottom side	0	27710	2310	19	18.93	1.62%	0.036	0.037	-
					Right side	0	27710	2310	19	18.93	1.62%	0.596	0.606	-
					Left side	0	27710	2310	19	18.93	1.62%	0.049	0.050	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

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Mode	Bandwidth	Modulation	RB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling	Averaged 1g (V	SAR over V/kg)	Plot
Mode	(MHz)	Woddiation	10020	ND Statt	1 031001	(mm)	on	(MHz)	Tolerance (dBm)	(dBm)	ocaing	Measured	Reported	page
					Back side	0	37850	2580	24	23.68	7.65%	0.267	0.287	-
					Top side	0	37850	2580	24	23.68	7.65%	1.190	1.281	311
					Top side*	0	37850	2580	24	23.68	7.65%	1.110	1.195	-
				0	Top side**	0	37850	2580	24	23.68	7.65%	1.120	1.206	-
			1 RB	0	Top side	0	38150	2610	24	23.55	10.92%	1.090	1.209	-
					Bottom side	0	37850	2580	24	23.68	7.65%	0.023	0.025	-
					Right side	0	37850	2580	24	23.68	7.65%	0.561	0.604	-
					Left side	0	37850	2580	24	23.68	7.65%	0.047	0.051	-
				99	Top side	0	38000	2595	24	23.58	10.15%	1.040	1.146	-
					Back side	0	37850	2580	23	22.58	10.15%	0.234	0.258	-
LTE					Top side	0	37850	2580	23	22.58	10.15%	1.030	1.135	-
Band 38	20MHz	QPSK		0	Bottom side	0	37850	2580	23	22.58	10.15%	0.020	0.022	-
			50 RB		Right side	0	37850	2580	23	22.58	10.15%	0.551	0.607	-
					Left side	0	37850	2580	23	22.58	10.15%	0.038	0.042	-
				50	Top side	0	38000	2595	23	22.55	10.92%	0.993	1.101	-
				50	Top side	0	38150	2610	23	22.49	12.46%	0.981	1.103	-
					Back side	0	37850	2580	23	22.54	11.17%	0.223	0.248	-
					Top side	0	37850	2580	23	22.54	11.17%	0.987	1.097	-
1					Top side	0	38000	2595	23	22.52	11.69%	0.978	1.092	-
1			100	RB	Top side	0	38150	2610	23	22.50	12.20%	0.967	1.085	-
					Bottom side	0	37850	2580	23	22.54	11.17%	0.019	0.021	-
					Right side	0	37850	2580	23	22.54	11.17%	0.543	0.604	-
	l				Left side	0	37850	2580	23	22.54	11.17%	0.029	0.032	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

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Mode	Bandwidth	Modulation	RB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
mode	(MHz)	modulaton	10 0120	no out	, conton	(mm)		(MHz)	Tolerance (dBm)	(dBm)	oounig	Measured	Reported	page
					Back side	0	41490	2680	22.5	22.50	0.00%	0.374	0.374	-
					Top side	0	39750	2506	22.5	22.45	1.16%	1.320	1.335	312
					Top side*	0	39750	2506	22.5	22.45	1.16%	1.190	1.204	-
					Top side**	0	39750	2506	22.5	22.45	1.16%	1.180	1.194	-
				0	Top side	0	40185	2549.5	22.5	22.30	4.71%	1.180	1.236	-
			1 RB	[Top side	0	41490	2680	22.5	22.50	0.00%	1.210	1.210	-
				[Bottom side	0	41490	2680	22.5	22.50	0.00%	0.039	0.039	-
				[Right side	0	41490	2680	22.5	22.50	0.00%	0.617	0.617	-
					Left side	0	41490	2680	22.5	22.50	0.00%	0.052	0.052	-
				99	Top side	0	40620	2593	22.5	22.25	5.93%	1.110	1.176	-
				35	Top side	0	41055	2636.5	22.5	22.34	3.75%	1.200	1.245	-
					Back side	0	41490	2680	22.5	22.22	6.66%	0.356	0.380	-
				[Top side	0	39750	2506	22.5	22.00	12.20%	1.150	1.290	-
LTE				[Top side	0	40185	2549.5	22.5	22.01	11.94%	1.160	1.299	-
Band 41	20MHz	QPSK		0	Top side	0	41055	2636.5	22.5	22.10	9.65%	1.170	1.283	-
Dand 41			50 RB		Top side	0	41490	2680	22.5	22.22	6.66%	1.160	1.237	-
					Bottom side	0	41490	2680	22.5	22.22	6.66%	0.034	0.036	-
					Right side	0	41490	2680	22.5	22.22	6.66%	0.597	0.637	-
					Left side	0	41490	2680	22.5	22.22	6.66%	0.048	0.051	-
				50	Top side	0	40620	2593	22.5	21.97	12.98%	0.987	1.115	-
					Back side	0	41490	2680	22.5	22.23	6.41%	0.358	0.381	-
					Top side	0	39750	2506	22.5	22.04	11.17%	1.190	1.323	-
					Top side	0	40185	2549.5	22.5	21.95	13.50%	1.130	1.283	-
					Top side	0	40620	2593	22.5	21.93	14.02%	0.990	1.129	-
			100	RB	Top side	0	41055	2636.5	22.5	22.09	9.90%	1.160	1.275	-
					Top side	0	41490	2680	22.5	22.23	6.41%	1.130	1.202	-
					Bottom side	0	41490	2680	22.5	22.23	6.41%	0.036	0.038	-
					Right side	0	41490	2680	22.5	22.23	6.41%	0.601	0.640	-
					Left side	0	41490	2680	22.5	22.23	6.41%	0.051	0.054	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

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Mode	Bandwidth	Modulation	RB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling	Averaged 1g (V		Plot
Mode	(MHz)	Woddiator	10 0120	ND Start	1 0318011	(mm)	6	(MHz)	Tolerance (dBm)	(dBm)	ocaing	Measured	Reported	page
					Back side	0	132572	1770	19.5	19.49	0.23%	0.391	0.392	-
					Top side	0	132072	1720	19.5	19.41	2.09%	1.110	1.133	-
					Top side	0	132322	1745	19.5	19.35	3.51%	1.090	1.128	-
					Top side	0	132572	1770	19.5	19.49	0.23%	1.340	1.343	313
			1 RB	0	Top side*	0	132572	1770	19.5	19.49	0.23%	1.210	1.213	-
					Top side**	0	132572	1770	19.5	19.49	0.23%	1.190	1.193	-
					Bottom side	0	132572	1770	19.5	19.49	0.23%	0.040	0.040	-
					Right side	0	132572	1770	19.5	19.49	0.23%	0.614	0.615	-
					Left side	0	132572	1770	19.5	19.49	0.23%	0.054	0.054	-
				0	Top side	0	132072	1720	19.5	19.31	4.47%	1.020	1.066	-
LTE					Back side	0	132322	1745	19.5	19.34	3.75%	0.364	0.378	-
Band 66	20MHz	QPSK			Top side	0	132322	1745	19.5	19.34	3.75%	1.020	1.058	-
Dana oo			50 RB	50	Top side	0	132572	1770	19.5	19.30	4.71%	1.130	1.183	-
				50	Bottom side	0	132322	1745	19.5	19.34	3.75%	0.032	0.034	-
					Right side	0	132322	1745	19.5	19.34	3.75%	0.584	0.606	-
					Left side	0	132322	1745	19.5	19.34	3.75%	0.043	0.045	-
					Back side	0	132322	1745	19.5	19.41	2.09%	0.366	0.374	-
					Top side	0	132072	1720	19.5	19.39	2.57%	1.170	1.200	-
					Top side	0	132322	1745	19.5	19.41	2.09%	1.120	1.143	-
1			100	RB	Top side	0	132572	1770	19.5	19.29	4.95%	1.160	1.217	-
1					Bottom side	0	132322	1745	19.5	19.41	2.09%	0.042	0.043	-
1					Right side	0	132322	1745	19.5	19.41	2.09%	0.591	0.603	-
					Left side	0	132322	1745	19.5	19.41	2.09%	0.047	0.048	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01.

** - 2nd Battery spotcheck

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台灣檢驗科技股份有限公司 t (886-2) 2299-3279

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Hong-Bo

WCDMA Band II

Mode	Position	Distance (mm)	СН	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Scaling	Averaged S (W/	•	Plot page
					Toloranoo (abiii)	(abiii)		Measured	Reported	
	Back side	0	9400	1880	19	18.98	0.46%	0.288	0.289	-
	Top side	0	9262	1852.4	19	18.93	1.62%	1.260	1.280	314
	Top side*	0	9262	1852.4	19	18.93	1.62%	1.250	1.270	-
	Top side**	0	9262	1852.4	19	18.93	1.62%	1.240	1.260	-
WCDMA Band	Top side	0	9400	1880	19	18.98	0.46%	1.230	1.236	-
	Top side	0	9538	1907.6	19	18.88	2.80%	1.110	1.141	-
	Bottom side	0	9400	1880	19	18.98	0.46%	0.027	0.027	-
	Right side	0	9400	1880	19	18.98	0.46%	0.466	0.468	-
	Left side	0	9400	1880	19	18.98	0.46%	0.042	0.042	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

WCDMA Band IV

Mode	Position	Distance (mm)	СН	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)		Averaged S (W/	-	Plot page
					Toloranoo (abiii)	(abiii)		Measured	Reported	
	Back side	0	1513	1752.6	20	20	0.00%	0.303	0.303	-
	Top side	0	1312	1712.4	20	19.85	3.51%	1.050	1.087	-
	Top side	0	1412	1732.4	20	19.98	0.46%	1.140	1.145	-
14/05144	Top side	0	1513	1752.6	20	20	0.00%	1.360	1.360	315
WCDMA Band IV	Top side*	0	1513	1752.6	20	20	0.00%	1.340	1.340	-
Dana	Top side**	0	1513	1752.6	20	20	0.00%	1.350	1.350	-
	Bottom side	0	1513	1752.6	20	20	0.00%	0.031	0.031	-
	Right side	0	1513	1752.6	20	20	0.00%	0.503	0.503	-
	Left side	0	1513	1752.6	20	20	0.00%	0.056	0.056	-

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WCDMA Band V

Mode	Position	Distance (mm)	СН	Freq. (MHz)	Max. Rated Avg. Power + Max.Tolerance	Measured Avg. Power (dBm)	Scaling	Averaged S (W/		Plot page
					(dBm)	(02)		Measured	Reported	
	Back side	0	4132	826.4	20.5	20.480	0.46%	0.294	0.295	-
	Top side	0	4132	826.4	20.5	20.480	0.46%	1.310	1.316	316
	Top side*	0	4132	826.4	20.5	20.480	0.46%	1.300	1.306	-
	Top side**	0	4132	826.4	20.5	20.480	0.46%	1.290	1.296	-
WCDMA Band V	Top side	0	4183	836.6	20.5	20.33	3.99%	1.180	1.227	-
Bana v	Top side	0	4233	846.6	20.5	20.44	1.39%	1.270	1.288	-
	Bottom side	0	4132	826.4	20.5	20.480	0.46%	0.029	0.029	-
	Right side	0	4132	826.4	20.5	20.480	0.46%	0.495	0.497	-
	Left side	0	4132	826.4	20.5	20.480	0.46%	0.054	0.055	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

LTE FDD Band 2

Mode	Bandwidth	Modulation	RB	RB	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg.	Scaling	Averaged 1g (V		Plot
Wode	(MHz)	Modulation	Size	start	1 031001	(mm)	GIT	(MHz)	Tolerance (dBm)	Power (dBm)	Claining	Measured	Reported	page
					Back side	0	18700	1860	19	18.94	1.39%	0.285	0.289	-
					Top side	0	18700	1860	19	18.94	1.39%	1.280	1.298	317
					Top side*	0	18700	1860	19	18.94	1.39%	1.270	1.288	-
				0	Top side**	0	18700	1860	19	18.94	1.39%	1.260	1.278	-
		1 RB		Bottom side	0	18700	1860	19	18.94	1.39%	0.027	0.027	-	
				Right side	0	18700	1860	19	18.94	1.39%	0.473	0.480	-	
				Left side	0	18700	1860	19	18.94	1.39%	0.044	0.045	-	
				50	Top side	0	19100	1900	19	18.58	10.15%	1.000	1.102	-
				99	Top side	0	18900	1880	19	18.91	2.09%	1.060	1.082	-
					Back side	0	18900	1880	19	18.91	2.09%	0.257	0.262	-
LTE					Top side	0	18900	1880	19	18.91	2.09%	1.190	1.215	-
Band 2	20MHz	QPSK		0	Bottom side	0	18900	1880	19	18.91	2.09%	0.022	0.023	-
Danaz			50 RB		Right side	0	18900	1880	19	18.91	2.09%	0.453	0.462	-
					Left side	0	18900	1880	19	18.91	2.09%	0.039	0.040	-
				25	Top side	0	19100	1900	19	18.61	9.40%	1.050	1.149	-
				50	Top side	0	18700	1860	19	18.90	2.33%	1.130	1.156	-
					Back side	0	18900	1880	19	18.89	2.57%	0.259	0.266	-
					Top side	0	18700	1860	19	18.86	3.28%	1.190	1.229	-
				Top side	0	18900	1880	19	18.89	2.57%	1.190	1.221	-	
		100	RB	Top side	0	19100	1900	19	18.77	5.44%	1.130	1.191	-	
				Bottom side	0	18900	1880	19	18.89	2.57%	0.025	0.026	-	
					Right side	0	18900	1880	19	18.89	2.57%	0.458	0.470	-
					Left side	0	18900	1880	19	18.89	2.57%	0.041	0.042	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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Mode	Bandwidth	Modulation	PB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
Mode	(MHz)	Woddation	100120	ND Start	1 USHION	(mm)	5	(MHz)	Tolerance (dBm)	(dBm)	County	Measured	Reported	page
					Back side	0	20300	1745	20	19.98	0.46%	0.308	0.309	-
					Top side	0	20300	1745	20	19.98	0.46%	1.360	1.366	318
					Top side*	0	20300	1745	20	19.98	0.46%	1.350	1.356	-
				0	Top side**	0	20300	1745	20	19.98	0.46%	1.340	1.346	-
		1 RB		Bottom side	0	20300	1745	20	19.98	0.46%	0.033	0.033	-	
				Right side	0	20300	1745	20	19.98	0.46%	0.509	0.511	-	
				Left side	0	20300	1745	20	19.98	0.46%	0.058	0.059	-	
				99	Top side	0	20050	1720	20	19.86	3.28%	1.010	1.043	-
				00	Top side	0	20175	1732.5	20	19.88	2.80%	1.040	1.069	-
				0	Top side	0	20050	1720	20	19.92	1.86%	1.010	1.029	-
LTE					Top side	0	20175	1732.5	20	19.78	5.20%	1.050	1.105	-
Band 4	20MHz	QPSK			Back side	0	20300	1745	20	19.94	1.39%	0.299	0.303	-
			50 RB		Top side	0	20300	1745	20	19.94	1.39%	1.100	1.115	-
				50	Bottom side	0	20300	1745	20	19.94	1.39%	0.031	0.032	-
					Right side	0	20300	1745	20	19.94	1.39%	0.492	0.499	-
					Left side	0	20300	1745	20	19.94	1.39%	0.049	0.050	-
					Back side	0	20300	1745	20	19.92	1.86%	0.293	0.298	-
					Top side	0	20050	1720	20	19.83	3.99%	1.060	1.102	-
1					Top side	0	20175	1732.5	20	19.87	3.04%	1.090	1.123	-
1			100	RB	Top side	0	20300	1745	20	19.92	1.86%	1.110	1.131	-
[Bottom side	0	20300	1745	20	19.92	1.86%	0.029	0.030	-
1					Right side	0	20300	1745	20	19.92	1.86%	0.485	0.494	-
					Left side	0	20300	1745	20	19.92	1.86%	0.042	0.043	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

LTE FDD Band 5

Mode	Bandwidth	Modulation	RB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
Mode	(MHz)	Woddaton	110 0120	ND Start	1 USHION	(mm)	on	(MHz)	Tolerance (dBm)	(dBm)	ocumg	Measured	Reported	page
					Back side	0	20450	829	21	21.00	0.00%	0.303	0.303	-
					Top side	0	20450	829	21	21.00	0.00%	1.350	1.350	319
					Top side*	0	20450	829	21	21.00	0.00%	1.330	1.330	-
					Top side**	0	20450	829	21	21.00	0.00%	1.340	1.340	-
		1 RB	0	Top side	0	20525	836.5	21	20.90	2.33%	1.290	1.320	-	
				Top side	0	20600	844	21	20.87	3.04%	1.250	1.288	-	
					Bottom side	0	20450	829	21	21.00	0.00%	0.033	0.033	-
					Right side	0	20450	829	21	21.00	0.00%	0.511	0.511	-
					Left side	0	20450	829	21	21.00	0.00%	0.063	0.063	-
					Back side	0	20600	844	21	20.96	0.93%	0.297	0.300	-
LTE					Top side	0	20450	829	21	20.92	1.86%	1.310	1.334	-
Band 5	10MHz	QPSK			Top side	0	20525	836.5	21	20.91	2.09%	1.240	1.266	-
			25 RB	25	Top side	0	20600	844	21	20.96	0.93%	1.230	1.241	-
					Bottom side	0	20600	844	21	20.96	0.93%	0.030	0.030	-
					Right side	0	20600	844	21	20.96	0.93%	0.499	0.504	-
					Left side	0	20600	844	21	20.96	0.93%	0.058	0.059	-
					Back side	0	20600	844	21	20.92	1.86%	0.298	0.304	-
					Top side	0	20450	829	21	20.91	2.09%	1.310	1.337	-
1					Top side	0	20525	836.5	21	20.89	2.57%	1.260	1.292	-
1			50	RB	Top side	0	20600	844	21	20.92	1.86%	1.250	1.273	-
[Bottom side	0	20600	844	21	20.92	1.86%	0.029	0.030	-
1					Right side	0	20600	844	21	20.92	1.86%	0.497	0.506	-
					Left side	0	20600	844	21	20.92	1.86%	0.054	0.055	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

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Mode	Bandwidth	Modulation	RB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
Widde	(MHz)	Modulation	ND 312e	ND Statt	1 Galdon	(mm)	GIT	(MHz)	Tolerance (dBm)	(dBm)	Scaling	Measured	Reported	page
					Back side	0	20850	2510	20.5	20.47	0.69%	0.311	0.313	-
					Top side	0	20850	2510	20.5	20.47	0.69%	1.330	1.339	320
					Top side*	0	20850	2510	20.5	20.47	0.69%	1.320	1.329	-
					Top side**	0	20850	2510	20.5	20.47	0.69%	1.310	1.319	-
			1 RB	0	Top side	0	21100	2535	20.5	20.19	7.40%	1.220	1.310	-
					Top side	0	21350	2560	20.5	20.10	9.65%	1.110	1.217	-
					Bottom side	0	20850	2510	20.5	20.47	0.69%	0.036	0.036	-
					Right side	0	20850	2510	20.5	20.47	0.69%	0.513	0.517	-
					Left side	0	20850	2510	20.5	20.47	0.69%	0.061	0.062	-
					Back side	0	20850	2510	20.5	20.28	5.20%	0.309	0.325	-
LTE					Top side	0	20850	2510	20.5	20.28	5.20%	1.120	1.178	-
Band 7	20MHz	QPSK		0	Bottom side	0	20850	2510	20.5	20.28	5.20%	0.034	0.036	-
			50 RB		Right side	0	20850	2510	20.5	20.28	5.20%	0.509	0.535	-
					Left side	0	20850	2510	20.5	20.28	5.20%	0.059	0.062	-
				50	Top side	0	21100	2535	20.5	20.13	8.89%	1.180	1.285	-
				00	Top side	0	21350	2560	20.5	20.18	7.65%	1.120	1.206	-
					Back side	0	20850	2510	20.5	20.45	1.16%	0.307	0.311	-
					Top side	0	20850	2510	20.5	20.45	1.16%	1.310	1.325	-
					Top side	0	21100	2535	20.5	20.19	7.40%	1.220	1.310	-
			100	RB	Top side	0	21350	2560	20.5	20.15	8.39%	1.120	1.214	-
1					Bottom side	0	20850	2510	20.5	20.45	1.16%	0.031	0.031	-
					Right side	0	20850	2510	20.5	20.45	1.16%	0.499	0.505	-
					Left side	0	20850	2510	20.5	20.45	1.16%	0.051	0.052	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

LTE FDD Band 12

Mode	Bandwidth	Modulation		PP start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
Node	(MHz)	Modulation	ND SIZE	ND SIGH	POSIDON	(mm)	Ch	(MHz)	Tolerance (dBm)	(dBm)	Scaling	Measured	Reported	page
					Back side	0	23095	707.5	21.5	21.50	0.00%	0.294	0.294	-
					Top side	0	23060	704	21.5	21.34	3.75%	1.370	1.421	321
					Top side*	0	23060	704	21.5	21.34	3.75%	1.350	1.401	-
					Top side**	0	23060	704	21.5	21.34	3.75%	1.360	1.411	-
			1 RB	0	Top side	0	23095	707.5	21.5	21.50	0.00%	1.260	1.260	-
					Top side	0	23130	711	21.5	21.45	1.16%	1.240	1.254	-
					Bottom side	0	23095	707.5	21.5	21.50	0.00%	0.029	0.029	-
					Right side	0	23095	707.5	21.5	21.50	0.00%	0.493	0.493	-
					Left side	0	23095	707.5	21.5	21.50	0.00%	0.048	0.048	
					Back side	0	23130	711	21.5	21.47	0.69%	0.292	0.294	-
LTE					Top side	0	23060	704	21.5	21.39	2.57%	1.290	1.323	-
Band 12	10MHz	QPSK			Top side	0	23095	707.5	21.5	21.36	3.28%	1.270	1.312	
Dana 12			25 RB	25	Top side	0	23130	711	21.5	21.47	0.69%	1.260	1.269	-
					Bottom side	0	23130	711	21.5	21.47	0.69%	0.031	0.031	
					Right side	0	23130	711	21.5	21.47	0.69%	0.499	0.502	-
					Left side	0	23130	711	21.5	21.47	0.69%	0.051	0.052	-
					Back side	0	23130	711	21.5	21.49	0.23%	0.293	0.294	-
					Top side	0	23060	704	21.5	21.46	0.93%	1.340	1.352	-
					Top side	0	23095	707.5	21.5	21.44	1.39%	1.310	1.328	-
1			50	RB	Top side	0	23130	711	21.5	21.49	0.23%	1.290	1.293	-
[Bottom side	0	23130	711	21.5	21.49	0.23%	0.032	0.032	
1	1				Right side	0	23130	711	21.5	21.49	0.23%	0.501	0.502	-
1					Left side	0	23130	711	21.5	21.49	0.23%	0.054	0.055	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

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Mode	Bandwidth	Modulation	PB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
Widde	(MHz)	Modulation	10 0120	ND start	1 031001	(mm)	GIT	(MHz)	Tolerance (dBm)	(dBm)	Scaling	Measured	Reported	page
					Top side	0	23230	782	21	20.86	3.28%	1.290	1.332	322
				0	Top side*	0	23230	782	21	20.86	3.28%	1.260	1.301	-
					Top side**	0	23230	782	21	20.86	3.28%	1.280	1.322	-
					Back side	0	23230	782	21	20.92	1.86%	0.233	0.237	
			1 RB		Top side	0	23230	782	21	20.92	1.86%	1.140	1.161	-
				25	Bottom side	0	23230	782	21	20.92	1.86%	0.022	0.023	-
					Right side	0	23230	782	21	20.92	1.86%	0.412	0.420	-
					Left side	0	23230	782	21	20.92	1.86%	0.035	0.035	-
				49	Top side	0	23230	782	21	20.74	6.17%	1.100	1.168	-
LTE					Back side	0	23230	782	21	20.89	2.57%	0.296	0.304	-
Band 13	10MHz	QPSK			Top side	0	23230	782	21	20.89	2.57%	1.280	1.313	-
Build To				0	Bottom side	0	23230	782	21	20.89	2.57%	0.033	0.034	-
			25 RB		Right side	0	23230	782	21	20.89	2.57%	0.495	0.508	-
					Left side	0	23230	782	21	20.89	2.57%	0.049	0.050	-
				12	Top side	0	23230	782	21	20.66	8.14%	1.170	1.265	-
				25	Top side	0	23230	782	21	20.77	5.44%	1.160	1.223	-
					Back side	0	23230	782	21	20.85	3.51%	0.287	0.297	-
1					Top side	0	23230	782	21	20.85	3.51%	1.230	1.273	-
			50	RB	Bottom side	0	23230	782	21	20.85	3.51%	0.031	0.032	-
1					Right side	0	23230	782	21	20.85	3.51%	0.493	0.510	
					Left side	0	23230	782	21	20.85	3.51%	0.046	0.048	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

LTE FDD Band 17

Mode	Bandwidth	Modulation	RB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		I SAR over N/kg)	Plot
mode	(MHz)	modulation	10 0120	no otari	1 conton	(mm)	0.11	(MHz)	Tolerance (dBm)	(dBm)	County	Measured	Reported	page
					Back side	0	23780	709	21.5	21.50	0.00%	0.312	0.312	-
					Top side	0	23780	709	21.5	21.50	0.00%	1.340	1.340	323
					Top side*	0	23780	709	21.5	21.50	0.00%	1.310	1.310	-
					Top side**	0	23780	709	21.5	21.50	0.00%	1.320	1.320	-
			1 RB	0	Top side	0	23790	710	21.5	21.44	1.39%	1.230	1.247	-
					Top side	0	23800	711	21.5	21.46	0.93%	1.240	1.251	-
					Bottom side	0	23780	709	21.5	21.50	0.00%	0.047	0.047	-
					Right side	0	23780	709	21.5	21.50	0.00%	0.513	0.513	-
					Left side	0	23780	709	21.5	21.50	0.00%	0.073	0.073	-
					Back side	0	23790	710	21.5	21.41	2.09%	0.253	0.258	-
LTE					Top side	0	23780	709	21.5	21.40	2.33%	1.240	1.269	-
Band 17	10MHz	QPSK			Top side	0	23790	710	21.5	21.41	2.09%	1.230	1.256	-
Danu 17			25 RB	25	Top side	0	23800	711	21.5	21.37	3.04%	1.240	1.278	-
					Bottom side	0	23790	710	21.5	21.41	2.09%	0.028	0.029	-
					Right side	0	23790	710	21.5	21.41	2.09%	0.487	0.497	-
					Left side	0	23790	710	21.5	21.41	2.09%	0.039	0.040	-
					Back side	0	23800	711	21.5	21.43	1.62%	0.251	0.255	-
					Top side	0	23780	709	21.5	21.34	3.75%	1.270	1.318	-
					Top side	0	23790	710	21.5	21.35	3.51%	1.240	1.284	-
			50	RB	Top side	0	23800	711	21.5	21.43	1.62%	1.270	1.291	-
					Bottom side	0	23800	711	21.5	21.43	1.62%	0.023	0.024	-
					Right side	0	23800	711	21.5	21.43	1.62%	0.047	0.047	-
					Left side	0	23800	711	21.5	21.43	1.62%	0.034	0.035	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

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Mode	Bandwidth	Modulation	DD Sime	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
Mode	(MHz)	Modulation	KD SIZE	RD SIAN	Position	(mm)	Сн	(MHz)	Tolerance (dBm)	(dBm)	Scaling	Measured	Reported	page
					Back side	0	26865	831.5	21	20.79	4.95%	0.299	0.314	-
					Top side	0	26865	831.5	21	20.79	4.95%	1.360	1.427	324
					Top side*	0	26865	831.5	21	20.79	4.95%	1.330	1.396	-
				0	Top side**	0	26865	831.5	21	20.79	4.95%	1.340	1.406	-
			1 RB		Bottom side	0	26865	831.5	21	20.79	4.95%	0.031	0.033	-
					Right side	0	26865	831.5	21	20.79	4.95%	0.507	0.532	-
					Left side	0	26865	831.5	21	20.79	4.95%	0.059	0.062	-
				36	Top side	0	26765	821.5	21	20.55	10.92%	1.230	1.364	-
				74	Top side	0	26965	841.5	21	20.77	5.44%	1.280	1.350	-
				0	Top side	0	26965	841.5	21	20.45	13.50%	1.080	1.226	-
LTE				18	Top side	0	26865	831.5	21	20.54	11.17%	1.120	1.245	-
Band 26	15MHz	QPSK			Back side	0	26765	821.5	21	20.62	9.14%	0.263	0.287	-
			36 RB		Top side	0	26765	821.5	21	20.62	9.14%	1.150	1.255	-
				37	Bottom side	0	26765	821.5	21	20.62	9.14%	0.029	0.032	-
					Right side	0	26765	821.5	21	20.62	9.14%	0.502	0.548	-
					Left side	0	26765	821.5	21	20.62	9.14%	0.054	0.059	-
					Back side	0	26865	831.5	21	20.74	6.17%	0.261	0.277	-
					Top side	0	26765	821.5	21	20.65	8.39%	1.300	1.409	-
					Top side	0	26865	831.5	21	20.74	6.17%	1.320	1.401	-
			75	RB	Top side	0	26965	841.5	21	20.58	10.15%	1.270	1.399	-
					Bottom side	0	26865	831.5	21	20.74	6.17%	0.026	0.028	-
					Right side	0	26865	831.5	21	20.74	6.17%	0.499	0.530	-
					Left side	0	26865	831.5	21	20.74	6.17%	0.050	0.053	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

LTE FDD Band 30

Mode	Bandwidth (MHz)	Modulation	RB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling	Averaged 1g (V	SAR over N/kg)	Plot
Mode	(MHz)	Modulation	10 0120	ND Start	1 001001	(mm)	0	(MHz)	Tolerance (dBm)	(dBm)	obuing	Measured	Reported	page
					Back side	0	27710	2310	20	19.95	1.16%	0.273	0.276	-
					Top side	0	27710	2310	20	19.95	1.16%	1.270	1.285	325
					Top side*	0	27710	2310	20	19.95	1.16%	1.250	1.264	-
				0	Top side**	0	27710	2310	20	19.95	1.16%	1.260	1.275	-
			1 RB		Bottom side	0	27710	2310	20	19.95	1.16%	0.029	0.029	-
					Right side	0	27710	2310	20	19.95	1.16%	0.501	0.507	-
					Left side	0	27710	2310	20	19.95	1.16%	0.055	0.056	-
				25	Top side	0	27710	2310	20	19.89	2.57%	1.210	1.241	-
				49	Top side	0	27710	2310	20	19.87	3.04%	1.180	1.216	-
LTE				0	Top side	0	27710	2310	19	18.98	0.46%	1.240	1.246	-
Band 30	10MHz	QPSK			Back side	0	27710	2310	19	18.99	0.23%	0.241	0.242	-
					Top side	0	27710	2310	19	18.99	0.23%	1.250	1.253	-
			25 RB	12	Bottom side	0	27710	2310	19	18.99	0.23%	0.022	0.022	-
					Right side	0	27710	2310	19	18.99	0.23%	0.488	0.489	-
					Left side	0	27710	2310	19	18.99	0.23%	0.051	0.051	-
1				25	Top side	0	27710	2310	19	18.89	2.57%	1.160	1.190	-
1					Back side	0	27710	2310	19	18.93	1.62%	0.243	0.247	-
1					Top side	0	27710	2310	19	18.93	1.62%	1.130	1.148	-
1			50	RB	Bottom side	0	27710	2310	19	18.93	1.62%	0.024	0.025	-
1					Right side	0	27710	2310	19	18.93	1.62%	0.491	0.499	-
					Left side	0	27710	2310	19	18.93	1.62%	0.052	0.053	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

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Mode	Bandwidth	Modulation	PB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling	Averaged 1g (V	SAR over V/kg)	Plot
Widde	(MHz)	Noduation	ND 012e	ND statt	1 031001	(mm)	GIT	(MHz)	Tolerance (dBm)	(dBm)	Scaling	Measured	Reported	page
					Back side	0	37850	2580	24	23.68	7.65%	0.287	0.309	-
					Top side	0	37850	2580	24	23.68	7.65%	1.160	1.249	326
					Top side*	0	37850	2580	24	23.68	7.65%	1.130	1.216	-
				0	Top side**	0	37850	2580	24	23.68	7.65%	1.140	1.227	-
			1 RB	Ŭ	Top side	0	38150	2610	24	23.55	10.92%	1.110	1.231	-
					Bottom side	0	37850	2580	24	23.68	7.65%	0.024	0.026	-
					Right side	0	37850	2580	24	23.68	7.65%	0.531	0.572	-
					Left side	0	37850	2580	24	23.68	7.65%	0.045	0.048	-
				99	Top side	0	38000	2595	24	23.58	10.15%	1.080	1.190	-
					Back side	0	37850	2580	23	22.58	10.15%	0.269	0.296	-
LTE					Top side	0	37850	2580	23	22.58	10.15%	1.080	1.190	-
Band 38	20MHz	QPSK		0	Bottom side	0	37850	2580	23	22.58	10.15%	0.021	0.023	-
			50 RB		Right side	0	37850	2580	23	22.58	10.15%	0.498	0.549	-
					Left side	0	37850	2580	23	22.58	10.15%	0.042	0.046	
				50	Top side	0	38000	2595	23	22.55	10.92%	1.040	1.154	-
				50	Top side	0	38150	2610	23	22.49	12.46%	1.020	1.147	-
					Back side	0	37850	2580	23	22.54	11.17%	0.251	0.279	-
					Top side	0	37850	2580	23	22.54	11.17%	1.020	1.134	-
	1				Top side	0	38000	2595	23	22.52	11.69%	0.992	1.108	-
	1		100	RB	Top side	0	38150	2610	23	22.50	12.20%	0.988	1.109	-
1	1				Bottom side	0	37850	2580	23	22.54	11.17%	0.019	0.021	-
	1				Right side	0	37850	2580	23	22.54	11.17%	0.465	0.517	-
					Left side	0	37850	2580	23	22.54	11.17%	0.039	0.043	-

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** - 2nd Battery spotcheck

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Mode	Bandwidth	Modulation	RB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
	(MHz)					(mm)		(MHz)	Tolerance (dBm)	(dBm)	g	Measured	Reported	page
					Back side	0	41490	2680	22.5	22.50	0.00%	0.301	0.301	-
					Top side	0	39750	2506	22.5	22.45	1.16%	1.270	1.285	-
					Top side	0	40185	2549.5	22.5	22.30	4.71%	1.280	1.340	-
					Top side	0	41490	2680	22.5	22.50	0.00%	1.300	1.300	327
				0	Top side*	0	41490	2680	22.5	22.50	0.00%	1.290	1.290	-
			1 RB		Top side**	0	41490	2680	22.5	22.50	0.00%	1.280	1.280	-
					Bottom side	0	41490	2680	22.5	22.50	0.00%	0.035	0.035	-
					Right side	0	41490	2680	22.5	22.50	0.00%	0.534	0.534	-
					Left side	0	41490	2680	22.5	22.50	0.00%	0.063	0.063	-
				99	Top side	0	40620	2593	22.5	22.25	5.93%	0.891	0.944	-
				99	Top side	0	41055	2636.5	22.5	22.34	3.75%	1.100	1.141	-
					Back side	0	41490	2680	22.5	22.22	6.66%	0.288	0.307	-
					Top side	0	39750	2506	22.5	22.00	12.20%	1.040	1.167	-
					Top side	0	40185	2549.5	22.5	22.01	11.94%	0.839	0.939	-
LTE Band 41	20MHz	QPSK		0	Top side	0	41055	2636.5	22.5	22.10	9.65%	0.963	1.056	-
Banu 41			50 RB	0	Top side	0	41490	2680	22.5	22.22	6.66%	1.270	1.355	-
					Bottom side	0	41490	2680	22.5	22.22	6.66%	0.030	0.032	-
					Right side	0	41490	2680	22.5	22.22	6.66%	0.512	0.546	-
					Left side	0	41490	2680	22.5	22.22	6.66%	0.061	0.065	-
				50	Top side	0	40620	2593	22.5	21.97	12.98%	0.882	0.996	-
					Back side	0	41490	2680	22.5	22.23	6.41%	0.284	0.302	-
					Top side	0	39750	2506	22.5	22.04	11.17%	1.020	1.134	-
					Top side	0	40185	2549.5	22.5	21.95	13.50%	0.870	0.987	-
					Top side	0	40620	2593	22.5	21.93	14.02%	0.889	1.014	-
			100	RB	Top side	0	41055	2636.5	22.5	22.09	9.90%	1.010	1.110	-
					Top side	0	41490	2680	22.5	22.23	6.41%	1.220	1.298	-
					Bottom side	0	41490	2680	22.5	22.23	6.41%	0.028	0.030	-
					Right side	0	41490	2680	22.5	22.23	6.41%	0.503	0.535	-
					Left side	0	41490	2680	22.5	22.23	6.41%	0.057	0.061	-

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** - 2nd Battery spotcheck

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Mode	Bandwidth	Modulation	PB Size	RB start	Position	Distance	СН	Freq.	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling		SAR over V/kg)	Plot
Mode	(MHz)	Modulation	ND 012e	ND start	1 Galilon	(mm)	011	(MHz)	Tolerance (dBm)	(dBm)	ocaing	Measured	Reported	page
					Back side	0	132572	1770	19.5	19.49	0.23%	0.286	0.287	-
					Top side	0	132072	1720	19.5	19.41	2.09%	1.280	1.307	-
					Top side	0	132322	1745	19.5	19.35	3.51%	1.350	1.397	328
					Top side*	0	132322	1745	19.5	19.35	3.51%	1.340	1.387	-
			1 RB	0	Top side**	0	132322	1745	19.5	19.35	3.51%	1.330	1.377	-
					Top side	0	132572	1770	19.5	19.49	0.23%	1.250	1.253	-
					Bottom side	0	132572	1770	19.5	19.49	0.23%	0.029	0.029	-
					Right side	0	132572	1770	19.5	19.49	0.23%	0.508	0.509	-
					Left side	0	132572	1770	19.5	19.49	0.23%	0.059	0.059	-
				0	Top side	0	132072	1720	19.5	19.31	4.47%	1.320	1.379	-
LTE					Back side	0	132322	1745	19.5	19.34	3.75%	0.277	0.287	-
Band 66	20MHz	QPSK			Top side	0	132322	1745	19.5	19.34	3.75%	1.270	1.318	-
Dana oo			50 RB	50	Top side	0	132572	1770	19.5	19.30	4.71%	1.260	1.319	-
				50	Bottom side	0	132322	1745	19.5	19.34	3.75%	0.026	0.027	-
					Right side	0	132322	1745	19.5	19.34	3.75%	0.489	0.507	-
					Left side	0	132322	1745	19.5	19.34	3.75%	0.054	0.056	-
					Back side	0	132322	1745	19.5	19.41	2.09%	0.264	0.270	-
					Top side	0	132072	1720	19.5	19.39	2.57%	1.230	1.262	-
					Top side	0	132322	1745	19.5	19.41	2.09%	1.210	1.235	-
			100	RB	Top side	0	132572	1770	19.5	19.29	4.95%	1.290	1.354	-
					Bottom side	0	132322	1745	19.5	19.41	2.09%	0.019	0.020	-
					Right side	0	132322	1745	19.5	19.41	2.09%	0.423	0.432	-
					Left side	0	132322	1745	19.5	19.41	2.09%	0.045	0.046	-

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AWAN

WLAN Antenna (Tablet mode)

Antenna	Mode	Position	Distance (mm)	СН	Freq. (MHz)	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling	Averaged S (W)		Plot
			. ,		` ´	Tolerance (dBm)	(dBm)		Measured	Reported	1.3.
		Back side	0	1	2412	17.50	17.49	100.23%	0.146	0.146	-
		Top side	0	1	2412	17.50	17.49	100.23%	0.455	0.456	329
	WLAN 802.11b	Top side**	0	1	2412	17.50	17.49	100.23%	0.438	0.439	
		Bottom side	0	1	2412	17.50	17.49	100.23%	0.025	0.025	-
		Right side	0	1	2412	17.50	17.49	100.23%	0.042	0.042	-
		Left side	0	1	2412	17.50	17.49	100.23%	0.042	0.042	-
		Back side	0	46	5230	15.50	15.47	100.69%	0.073	0.074	-
		Top side	0	46	5230	15.50	15.47	100.69%	0.465	0.468	330
	WLAN 802.11n(40M) 5.2G	Top side**	0	46	5230	15.50	15.47	100.69%	0.456	0.459	-
		Bottom side	0	46	5230	15.50	15.47	100.69%	0.079	0.080	-
		Right side	0	46	5230	15.50	15.47	100.69%	0.012	0.012	-
		Left side	0	46	5230	15.50	15.47	100.69%	0.042	0.043	-
		Back side	0	60	5300	15.50	15.49	100.23%	0.058	0.058	-
		Top side	0	60	5300	15.50	15.49	100.23%	0.372	0.373	331
	WLAN 802.11a 5.3G	Bottom side	0	60	5300	15.50	15.49	100.23%	0.067	0.067	-
		Right side	0	60	5300	15.50	15.49	100.23%	0.008	0.008	-
		Left side	0	60	5300	15.50	15.49	100.23%	0.031	0.031	-
		Back side	0	54	5270	15.50	15.50	100.00%	0.068	0.068	-
	WLAN 802.11n(40M) 5.3G	Top side	0	54	5270	15.50	15.50	100.00%	0.405	0.405	332
		Top side**	0	54	5270	15.50	15.50	100.00%	0.399	0.399	-
		Bottom side	0	54	5270	15.50	15.50	100.00%	0.073	0.073	-
Main		Right side	0	54	5270	15.50	15.50	100.00%	0.010	0.010	-
		Left side	0	54	5270	15.50	15.50	100.00%	0.034	0.034	-
		Back side	0	102	5510	15.50	15.49	100.23%	0.083	0.083	-
		Top side	0	102	5510	15.50	15.49	100.23%	0.565	0.566	333
	WLAN 802.11n(40M) 5.6G	Bottom side	0	102	5510	15.50	15.49	100.23%	0.082	0.082	-
		Right side	0	102	5510	15.50	15.49	100.23%	0.013	0.013	-
		Left side	0	102	5510	15.50	15.49	100.23%	0.046	0.046	-
		Back side	0	138	5690	15.50	15.49	100.23%	0.131	0.131	-
		Top side	0	122	5610	15.50	15.45	101.16%	0.730	0.738	-
		Top side	0	138	5690	15.50	15.49	100.23%	0.850	0.852	334
	W// ANI 000 44 /0018	Top side*	0	138	5690	15.50	15.49	100.23%	0.831	0.833	-
	WLAN 802.11ac(80M) 5.6G	Top side**	0	138	5690	15.50	15.49	100.23%	0.838	0.840	-
		Bottom side	0	138	5690	15.50	15.49	100.23%	0.127	0.127	-
		Right side	0	138	5690	15.50	15.49	100.23%	0.022	0.022	-
		Left side	0	138	5690	15.50	15.49	100.23%	0.064	0.064	-
		Back side	0	155	5775	15.50	15.49	100.23%	0.144	0.144	-
		Top side	0	155	5775	15.50	15.49	100.23%	0.895	0.897	335
		Top side*	0	155	5775	15.50	15.49	100.23%	0.881	0.883	-
	WLAN 802.11ac(80M) 5.8G	Top side**	0	155	5775	15.50	15.49	100.23%	0.876	0.878	-
	. ,	Bottom side	0	155	5775	15.50	15.49	100.23%	0.132	0.132	-
		Right side	0	155	5775	15.50	15.49	100.23%	0.026	0.026	-
		Left side	0	155	5775	15.50	15.49	100.23%	0.069	0.069	-

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WLAN Aux Antenna (Tablet mode)

Antenna	Mode	Position	Distance (mm)	СН	Freq. (MHz)	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling	Averaged S (W)		Plot
			()		(Tolerance (dBm)	(dBm)		Measured	Reported	P9-
		Back side	0	1	2412	17.50	17.49	100.23%	0.088	0.088	-
		Top side	0	1	2412	17.50	17.49	100.23%	0.747	0.749	336
	WLAN 802.11b	Top side**	0	1	2412	17.50	17.49	100.23%	0.738	0.740	-
	WLAN 802.11D	Bottom side	0	1	2412	17.50	17.49	100.23%	0.055	0.055	-
		Right side	0	1	2412	17.50	17.49	100.23%	0.028	0.028	-
		Left side	0	1	2412	17.50	17.49	100.23%	0.479	0.480	-
		Back side	0	39	2441	11.50	11.50	100.00%	0.016	0.016	-
		Top side	0	39	2441	11.50	11.50	100.00%	0.153	0.153	337
	Bluetooth (GFSK)	Bottom side	0	39	2441	11.50	11.50	100.00%	0.011	0.011	-
		Right side	0	39	2441	11.50	11.50	100.00%	0.010	0.010	-
		Left side	0	39	2441	11.50	11.50	100.00%	0.107	0.107	-
		Back side	0	38	5190	15.50	15.47	100.69%	0.037	0.038	-
		Top side	0	38	5190	15.50	15.47	100.69%	0.375	0.378	338
		Top side**	0	38	5190	15.50	15.47	100.69%	0.366	0.369	-
	WLAN 802.11n(40M) 5.2G	Bottom side	0	38	5190	15.50	15.47	100.69%	0.016	0.016	-
		Right side	0	38	5190	15.50	15.47	100.69%	0.013	0.013	-
		Left side	0	38	5190	15.50	15.47	100.69%	0.216	0.217	-
		Back side	0	60	5300	15.50	15.47	100.69%	0.042	0.043	-
	WLAN 802.11a 5.3G	Top side	0	60	5300	15.50	15.47	100.69%	0.469	0.472	339
		Top side**	0	60	5300	15.50	15.47	100.69%	0.457	0.460	-
		Bottom side	0	60	5300	15.50	15.47	100.69%	0.020	0.020	-
Aux		Right side	0	60	5300	15.50	15.47	100.69%	0.017	0.018	-
		Left side	0	60	5300	15.50	15.47	100.69%	0.311	0.313	-
		Back side	0	54	5270	15.50	15.49	100.23%	0.039	0.039	-
		Top side	0	54	5270	15.50	15.49	100.23%	0.410	0.411	340
	WLAN 802.11n(40M) 5.3G	Bottom side	0	54	5270	15.50	15.49	100.23%	0.018	0.018	-
		Right side	0	54	5270	15.50	15.49	100.23%	0.014	0.014	-
		Left side	0	54	5270	15.50	15.49	100.23%	0.243	0.244	-
		Back side	0	138	5690	15.50	15.49	100.23%	0.082	0.082	-
		Top side	0	106	5530	15.50	15.47	100.69%	0.448	0.451	
		Top side	0	138	5690	15.50	15.49	100.23%	0.895	0.897	341
		Top side*	0	138	5690	15.50	15.49	100.23%	0.893	0.873	-
	WLAN 802.11ac(80M) 5.6G	Top side**	0	138	5690	15.50	15.49	100.23%	0.887	0.889	-
		Bottom side	0	138	5690	15.50	15.49	100.23%	0.038	0.038	
		Right side	0	138	5690	15.50	15.49	100.23%	0.038	0.038	
		Left side	0	130	5690	15.50	15.49	100.23%	0.033	0.553	-
	<u> </u>	Back side	0	155	5090	15.50	15.49	100.23%	0.073	0.074	
			0	155	5775	15.50	15.49	100.23%	0.073	0.074	- 342
		Top side	-								342
	WLAN 802.11ac(80M) 5.8G	Top side**	0	155	5775	15.50	15.49	100.23%	0.774	0.776	
		Bottom side	0	155	5775	15.50	15.49	100.23%	0.037	0.037	-
		Right side	0	155	5775	15.50	15.49	100.23%	0.032	0.032	-
		Left side	0	155	5775	15.50	15.49	100.23%	0.511	0.512	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

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HONG-BO

WLAN Antenna (Tablet mode)

Antenna	Mode	Position	Distance (mm)	СН	Freq. (MHz)	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling	Averaged S (W)		Plot page
			. ,		. ,	Tolerance (dBm)	(dBm)		Measured	Reported	
		Back side	0	1	2412	17.50	17.49	100.23%	0.143	0.143	-
		Top side	0	1	2412	17.50	17.49	100.23%	0.630	0.631	343
	WLAN 802.11b	Top side**	0	1	2412	17.50	17.49	100.23%	0.623	0.624	-
		Bottom side	0	1	2412	17.50	17.49	100.23%	0.005	0.005	-
		Right side	0	1	2412	17.50	17.49	100.23%	0.004	0.004	-
		Left side	0	1	2412	17.50	17.49	100.23%	0.125	0.125	-
		Back side	0	46	5230	15.50	15.47	100.69%	0.195	0.196	-
		Top side	0	38	5190	15.50	15.46	100.93%	0.846	0.854	344
		Top side**	0	38	5190	15.50	15.46	100.93%	0.841	0.849	-
	WLAN 802.11n(40M) 5.2G	Top side	0	46	5230	15.50	15.47	100.69%	0.803	0.809	-
		Bottom side	0	46	5230	15.50	15.47	100.69%	0.006	0.006	-
		Right side	0	46	5230	15.50	15.47	100.69%	0.007	0.008	-
		Left side	0	46	5230	15.50	15.47	100.69%	0.177	0.178	-
		Back side	0	60	5300	15.50	15.49	100.23%	0.274	0.275	-
		Top side	0	60	5300	15.50	15.49	100.23%	0.945	0.947	-
		Top side	0	64	5320	15.50	15.45	101.16%	0.957	0.968	345
	WLAN 802.11a 5.3G	Top side**	0	64	5320	15.50	15.45	101.16%	0.945	0.956	-
		Bottom side	0	60	5300	15.50	15.49	100.23%	0.010	0.010	-
		Right side	0	60	5300	15.50	15.49	100.23%	0.011	0.011	-
		Left side	0	60	5300	15.50	15.49	100.23%	0.185	0.185	-
		Back side	0	54	5270	15.50	15.50	100.00%	0.217	0.217	-
	WLAN 802.11n(40M) 5.3G	Top side	0	54	5270	15.50	15.50	100.00%	0.877	0.877	346
Main		Top side	0	62	5310	13.00	12.98	100.46%	0.492	0.494	-
	WENT 002.1 m(+0m) 0.00	Bottom side	0	54	5270	15.50	15.50	100.00%	0.008	0.008	-
		Right side	0	54	5270	15.50	15.50	100.00%	0.008	0.008	-
		Left side	0	54	5270	15.50	15.50	100.00%	0.179	0.179	-
		Back side	0	102	5510	15.50	15.49	100.23%	0.255	0.256	-
		Top side	0	102	5510	15.50	15.49	100.23%	0.926	0.928	-
		Top side	0	134	5670	15.50	15.48	100.46%	1.030	1.035	347
	WLAN 802.11n(40M) 5.6G	Top side**	0	134	5670	15.50	15.48	100.46%	0.995	1.000	-
		Bottom side	0	102	5510	15.50	15.49	100.23%	0.010	0.010	-
		Right side	0	102	5510	15.50	15.49	100.23%	0.009	0.009	-
		Left side	0	102	5510	15.50	15.49	100.23%	0.184	0.184	-
		Back side	0	138	5690	15.50	15.49	100.23%	0.243	0.244	-
		Top side	0	122	5610	15.50	15.45	101.16%	0.902	0.912	-
	WLAN 802.11ac(80M) 5.6G	Top side	0	138	5690	15.50	15.49	100.23%	0.918	0.920	348
		Bottom side	0	138	5690	15.50	15.49	100.23%	0.009	0.009	-
		Right side	0	138	5690	15.50	15.49	100.23%	0.008	0.008	-
		Left side	0	138	5690	15.50	15.49	100.23%	0.182	0.182	-
		Back side	0	155	5775	15.50	15.49	100.23%	0.288	0.289	-
		Top side	0	155	5775	15.50	15.49	100.23%	0.959	0.961	349
	WLAN 802.11ac(80M) 5.8G	Top side**	0	155	5775	15.50	15.49	100.23%	0.951	0.953	-
	**Enix 002.1 180(0010) 3.80	Bottom side	0	155	5775	15.50	15.49	100.23%	0.011	0.011	-
		Right side	0	155	5775	15.50	15.49	100.23%	0.010	0.010	-
		Left side	0	155	5775	15.50	15.49	100.23%	0.186	0.186	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

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WLAN Aux Antenna (Tablet mode)

Antenna	Mode	Position	Distance (mm)	СН	Freq. (MHz)	Max. Rated Avg. Power + Max.	Measured Avg. Power	Scaling	Averaged S (W)		Plot page
			()		()	Tolerance (dBm)	(dBm)		Measured	Reported	F-9-
		Back side	0	1	2412	17.50	17.49	100.23%	0.413	0.414	-
		Top side	0	1	2412	17.50	17.49	100.23%	1.190	1.193	350
		Top side**	0	1	2412	17.50	17.49	100.23%	1.100	1.103	-
	WLAN 802.11b	Top side	0	6	2437	17.50	17.47	100.69%	1.170	1.178	-
		Bottom side	0	1	2412	17.50	17.49	100.23%	0.022	0.022	-
		Right side	0	1	2412	17.50	17.49	100.23%	0.021	0.021	-
		Left side	0	1	2412	17.50	17.49	100.23%	0.394	0.395	-
		Back side	0	39	2441	11.50	11.50	100.00%	0.088	0.088	-
		Top side	0	39	2441	11.50	11.50	100.00%	0.270	0.270	351
	Bluetooth (GFSK)	Bottom side	0	39	2441	11.50	11.50	100.00%	0.005	0.005	-
		Right side	0	39	2441	11.50	11.50	100.00%	0.003	0.003	-
		Left side	0	39	2441	11.50	11.50	100.00%	0.077	0.077	-
		Back side	0	38	5190	15.50	15.47	100.69%	0.226	0.228	-
		Top side	0	38	5190	15.50	15.47	100.69%	0.901	0.907	-
		Top side	0	46	5230	15.50	15.41	102.09%	0.923	0.942	352
	WLAN 802.11n(40M) 5.2G	Top side**	0	46	5230	15.50	15.41	102.09%	0.910	0.929	-
		Bottom side	0	38	5190	15.50	15.47	100.69%	0.019	0.019	-
		Right side	0	38	5190	15.50	15.47	100.69%	0.016	0.016	-
		Left side	0	38	5190	15.50	15.47	100.69%	0.179	0.180	-
		Back side	0	60	5300	15.50	15.47	100.69%	0.253	0.255	-
		Top side	0	52	5260	15.50	15.44	101.39%	1.000	1.014	353
		Top side**	0	52	5260	15.50	15.44	101.39%	0.975	0.989	-
Aux	WLAN 802.11a 5.3G	Top side	0	60	5300	15.50	15.47	100.69%	0.933	0.939	-
		Bottom side	0	60	5300	15.50	15.47	100.69%	0.020	0.020	-
		Right side	0	60	5300	15.50	15.47	100.69%	0.017	0.017	-
		Left side	0	60	5300	15.50	15.47	100.69%	0.182	0.183	-
		Back side	0	54	5270	15.50	15.49	100.23%	0.261	0.262	-
		Top side	0	54	5270	15.50	15.49	100.23%	0.987	0.989	354
	WLAN 802.11n(40M) 5.3G	Top side	0	62	5310	13.00	13.00	100.00%	0.571	0.571	-
		Bottom side	0	54	5270	15.50	15.49	100.23%	0.021	0.021	-
		Right side	0	54	5270	15.50	15.49	100.23%	0.018	0.018	-
		Left side	0	54	5270	15.50	15.49	100.23%	0.187	0.187	-
		Back side	0	138	5690	15.50	15.49	100.23%	0.221	0.222	-
		Top side	0	106	5530	15.50	15.47	100.69%	0.910	0.916	355
		Top side**	0	106	5530	15.50	15.47	100.69%	0.905	0.911	-
	WLAN 802.11ac(80M) 5.6G	Top side	0	138	5690	15.50	15.49	100.23%	0.817	0.819	-
		Bottom side	0	138	5690	15.50	15.49	100.23%	0.018	0.018	
		Right side	0	138	5690	15.50	15.49	100.23%	0.015	0.015	-
		Left side	0	138	5690	15.50	15.49	100.23%	0.156	0.156	-
		Back side	0	155	5775	15.50	15.49	100.23%	0.204	0.204	-
		Top side	0	155	5775	15.50	15.49	100.23%	0.770	0.772	356
	WLAN 802.11ac(80M) 5.8G	Top side**	0	155	5775	15.50	15.49	100.23%	0.766	0.768	-
		Bottom side	0	155	5775	15.50	15.49	100.23%	0.016	0.016	-
		Right side	0	155	5775	15.50	15.49	100.23%	0.013	0.013	-
		Left side	0	155	5775	15.50	15.49	100.23%	0.158	0.158	-

* - repeated at the highest SAR measurement according to the KDB 865664 D01

** - 2nd Battery spotcheck

Note:

Scaling =
$$\frac{\text{reported SAR}}{\text{measured SAR}} = \frac{P2(mW)}{P1(mW)} = 10^{\left(\frac{P2-P1}{10}\right)(dBm)}$$

Reported SAR = measured SAR * (scaling) Where P2 is maximum specified power, P1 is measured conducted power

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3. Simultaneous Transmission Analysis

Simultaneous Transmission Scenarios:

NO.	Simultaneous Transmit Configurations	Body
1	UMTS + 2.4GHz WLAN Main / 2.4GHz WLAN Aux / 2.4GHz MIMO	YES
2	UMTS + 5GHz WLAN Main / 5GHz WLAN Aux / 5GHz MIMO	YES
3	UMTS + BT	YES
4	UMTS + 2.4/5GHz WLAN Maiin + BT	YES
5	LTE + 2.4GHz WLAN Main / 2.4GHz WLAN Aux / 2.4GHz MIMO	YES
6	LTE + 5GHz WLAN Main / 5GHz WLAN Aux / 5GHz MIMO	YES
7	LTE + BT	YES
8	LTE + 2.4/5GHz WLAN Main + BT	YES

Note :

- 1) WWAN and WLAN may transmit simultaneously.
- 2) Bluetooth and WLAN Aux share the same antenna path.
- 3) Bluetooth can transmit with WLAN Main simultaneously.

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3.1 Estimated SAR calculation

According to KDB447498 D01v06 – When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

Estimated SAR = $\frac{\text{Max.tune up power (mW)}}{\text{Min.test separation distance(mm)}} \times \frac{\sqrt{f(\text{GHz})}}{7.5}$

If the minimum test separation distance is < 5mm, a distance of 5mm is used for estimated SAR calculation. When the test separation distance is >50mm, the 0.4W/kg is used for SAR-1g.

3.2 SPLSR evaluation and analysis

Per KDB447498D01, when the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR sum to peak location separation ratio(SPLSR).

The simultaneous transmitting antennas in each operating mode and exposure condition combination must be considered one pair at a time to determine the SAR to peak location separation ratio to qualify for test exclusion.

The ratio is determined by (SAR1 + SAR2)^1.5/Ri, rounded to two decimal digits, and must be \leq 0.04 for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion.

SAR1 and SAR2 are the highest reported or estimated SAR for each antenna in the pair, and Ri is the separation distance between the peak SAR locations for the antenna pair in mm.

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When standalone test exclusion applies, SAR is estimated; the peak location is assumed to be at the feed-point or geometric center of the antenna.

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AWAN

Back side WWAN + 2.4G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.298	0.146	0.088	0.532	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.311	0.146	0.088	0.545	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.334	0.146	0.088	0.568	ΣSAR<1.6, Not required
		LTE Band 2	0	0.311	0.146	0.088	0.545	ΣSAR<1.6, Not required
		LTE Band 4	0	0.331	0.146	0.088	0.565	ΣSAR<1.6, Not required
		LTE Band 5	0	0.337	0.146	0.088	0.571	ΣSAR<1.6, Not required
		LTE Band 7	0	0.385	0.146	0.088	0.619	ΣSAR<1.6, Not required
1	Back side	LTE Band 12	0	0.372	0.146	0.088	0.606	ΣSAR<1.6, Not required
		LTE Band 13	0	0.339	0.146	0.088	0.573	ΣSAR<1.6, Not required
		LTE Band 17	0	0.377	0.146	0.088	0.611	ΣSAR<1.6, Not required
		LTE Band 26	0	0.345	0.146	0.088	0.579	ΣSAR<1.6, Not required
		LTE Band 30	0	0.390	0.146	0.088	0.624	ΣSAR<1.6, Not required
		LTE Band 38	0	0.287	0.146	0.088	0.521	ΣSAR<1.6, Not required
		LTE Band 41	0	0.381	0.146	0.088	0.615	ΣSAR<1.6, Not required
		LTE Band 66	0	0.392	0.146	0.088	0.626	ΣSAR<1.6, Not required

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Back side WWAN + 5G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.298	0.144	0.082	0.524	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.311	0.144	0.082	0.537	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.334	0.144	0.082	0.560	ΣSAR<1.6, Not required
		LTE Band 2	0	0.311	0.144	0.082	0.537	ΣSAR<1.6, Not required
		LTE Band 4	0	0.331	0.144	0.082	0.557	ΣSAR<1.6, Not required
		LTE Band 5	0	0.337	0.144	0.082	0.563	ΣSAR<1.6, Not required
		LTE Band 7	0	0.385	0.144	0.082	0.611	ΣSAR<1.6, Not required
2	Back side	LTE Band 12	0	0.372	0.144	0.082	0.598	ΣSAR<1.6, Not required
		LTE Band 13	0	0.339	0.144	0.082	0.565	ΣSAR<1.6, Not required
		LTE Band 17	0	0.377	0.144	0.082	0.603	ΣSAR<1.6, Not required
		LTE Band 26	0	0.345	0.144	0.082	0.571	ΣSAR<1.6, Not required
		LTE Band 30	0	0.390	0.144	0.082	0.616	ΣSAR<1.6, Not required
		LTE Band 38	0	0.287	0.144	0.082	0.513	ΣSAR<1.6, Not required
		LTE Band 41	0	0.381	0.144	0.082	0.607	ΣSAR<1.6, Not required
		LTE Band 66	0	0.392	0.144	0.082	0.618	ΣSAR<1.6, Not required

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No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.298	0.146	0.016	0.460	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.311	0.146	0.016	0.473	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.334	0.146	0.016	0.496	ΣSAR<1.6, Not required
		LTE Band 2	0	0.311	0.146	0.016	0.473	ΣSAR<1.6, Not required
		LTE Band 4	0	0.331	0.146	0.016	0.493	ΣSAR<1.6, Not required
		LTE Band 5	0	0.337	0.146	0.016	0.499	ΣSAR<1.6, Not required
		LTE Band 7	0	0.385	0.146	0.016	0.547	ΣSAR<1.6, Not required
3	Back side	LTE Band 12	0	0.372	0.146	0.016	0.534	ΣSAR<1.6, Not required
		LTE Band 13	0	0.339	0.146	0.016	0.501	ΣSAR<1.6, Not required
		LTE Band 17	0	0.377	0.146	0.016	0.539	ΣSAR<1.6, Not required
		LTE Band 26	0	0.345	0.146	0.016	0.507	ΣSAR<1.6, Not required
		LTE Band 30	0	0.390	0.146	0.016	0.552	ΣSAR<1.6, Not required
		LTE Band 38	0	0.287	0.146	0.016	0.449	ΣSAR<1.6, Not required
		LTE Band 41	0	0.381	0.146	0.016	0.543	ΣSAR<1.6, Not required
		LTE Band 66	0	0.392	0.146	0.016	0.554	ΣSAR<1.6, Not required

Back side WWAN + 2.4G WLAN Main + BT

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Back side WWAN + 5G WLAN Main + BT

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.298	0.144	0.016	0.458	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.311	0.144	0.016	0.471	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.334	0.144	0.016	0.494	ΣSAR<1.6, Not required
		LTE Band 2	0	0.311	0.144	0.016	0.471	ΣSAR<1.6, Not required
		LTE Band 4	0	0.331	0.144	0.016	0.491	ΣSAR<1.6, Not required
		LTE Band 5	0	0.337	0.144	0.016	0.497	ΣSAR<1.6, Not required
		LTE Band 7	0	0.385	0.144	0.016	0.545	ΣSAR<1.6, Not required
4	Back side	LTE Band 12	0	0.372	0.144	0.016	0.532	ΣSAR<1.6, Not required
		LTE Band 13	0	0.339	0.144	0.016	0.499	ΣSAR<1.6, Not required
		LTE Band 17	0	0.377	0.144	0.016	0.537	ΣSAR<1.6, Not required
		LTE Band 26	0	0.345	0.144	0.016	0.505	ΣSAR<1.6, Not required
		LTE Band 30	0	0.390	0.144	0.016	0.550	ΣSAR<1.6, Not required
		LTE Band 38	0	0.287	0.144	0.016	0.447	ΣSAR<1.6, Not required
		LTE Band 41	0	0.381	0.144	0.016	0.541	ΣSAR<1.6, Not required
		LTE Band 66	0	0.392	0.144	0.016	0.552	ΣSAR<1.6, Not required

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Top side WWAN + 2.4G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	1.402	0.456	0.749	2.607	Analyzed as below
		WCDMA Band 4	0	1.350	0.456	0.749	2.555	Analyzed as below
		WCDMA Band 5	0	1.386	0.456	0.749	2.591	Analyzed as below
		LTE Band 2	0	1.388	0.456	0.749	2.593	Analyzed as below
		LTE Band 4	0	1.346	0.456	0.749	2.551	Analyzed as below
		LTE Band 5	0	1.420	0.456	0.749	2.625	Analyzed as below
		LTE Band 7	0	1.393	0.456	0.749	2.598	Analyzed as below
5	Top side	LTE Band 12	0	1.310	0.456	0.749	2.515	Analyzed as below
		LTE Band 13	0	1.324	0.456	0.749	2.529	Analyzed as below
		LTE Band 17	0	1.362	0.456	0.749	2.567	Analyzed as below
		LTE Band 26	0	1.381	0.456	0.749	2.586	Analyzed as below
		LTE Band 30	0	1.386	0.456	0.749	2.591	Analyzed as below
		LTE Band 38	0	1.281	0.456	0.749	2.486	Analyzed as below
		LTE Band 41	0	1.335	0.456	0.749	2.540	Analyzed as below
		LTE Band 66	0	1.343	0.456	0.749	2.548	Analyzed as below

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Top side WWAN + 5G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	1.402	0.897	0.897	3.196	Analyzed as below
		WCDMA Band 4	0	1.350	0.897	0.897	3.144	Analyzed as below
		WCDMA Band 5	0	1.386	0.897	0.897	3.180	Analyzed as below
		LTE Band 2	0	1.388	0.897	0.897	3.182	Analyzed as below
		LTE Band 4	0	1.346	0.897	0.897	3.140	Analyzed as below
		LTE Band 5	0	1.420	0.897	0.897	3.214	Analyzed as below
		LTE Band 7	0	1.393	0.897	0.897	3.187	Analyzed as below
6	Top side	LTE Band 12	0	1.310	0.897	0.897	3.104	Analyzed as below
		LTE Band 13	0	1.324	0.897	0.897	3.118	Analyzed as below
		LTE Band 17	0	1.362	0.897	0.897	3.156	Analyzed as below
		LTE Band 26	0	1.381	0.897	0.897	3.175	Analyzed as below
		LTE Band 30	0	1.386	0.897	0.897	3.180	Analyzed as below
		LTE Band 38	0	1.281	0.897	0.897	3.075	Analyzed as below
		LTE Band 41	0	1.335	0.897	0.897	3.129	Analyzed as below
		LTE Band 66	0	1.343	0.897	0.897	3.137	Analyzed as below

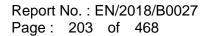
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No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	1.402	0.456	0.153	2.011	Analyzed as below
		WCDMA Band 4	0	1.350	0.456	0.153	1.959	Analyzed as below
		WCDMA Band 5	0	1.386	0.456	0.153	1.995	Analyzed as below
		LTE Band 2	0	1.388	0.456	0.153	1.997	Analyzed as below
		LTE Band 4	0	1.346	0.456	0.153	1.955	Analyzed as below
		LTE Band 5	0	1.420	0.456	0.153	2.029	Analyzed as below
		LTE Band 7	0	1.393	0.456	0.153	2.002	Analyzed as below
7	Top side	LTE Band 12	0	1.310	0.456	0.153	1.919	Analyzed as below
		LTE Band 13	0	1.324	0.456	0.153	1.933	Analyzed as below
		LTE Band 17	0	1.362	0.456	0.153	1.971	Analyzed as below
		LTE Band 26	0	1.381	0.456	0.153	1.990	Analyzed as below
		LTE Band 30	0	1.386	0.456	0.153	1.995	Analyzed as below
		LTE Band 38	0	1.281	0.456	0.153	1.890	Analyzed as below
		LTE Band 41	0	1.335	0.456	0.153	1.944	Analyzed as below
		LTE Band 66	0	1.343	0.456	0.153	1.952	Analyzed as below

Top side WWAN + 2.4G WLAN Main + BT

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Top side WWAN + 5G WLAN Main + BT

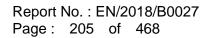
No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	1.402	0.897	0.153	2.452	Analyzed as below
		WCDMA Band 4	0	1.350	0.897	0.153	2.400	Analyzed as below
		WCDMA Band 5	0	1.386	0.897	0.153	2.436	Analyzed as below
		LTE Band 2	0	1.388	0.897	0.153	2.438	Analyzed as below
		LTE Band 4	0	1.346	0.897	0.153	2.396	Analyzed as below
		LTE Band 5	0	1.420	0.897	0.153	2.470	Analyzed as below
		LTE Band 7	0	1.393	0.897	0.153	2.443	Analyzed as below
8	Top side	LTE Band 12	0	1.310	0.897	0.153	2.360	Analyzed as below
		LTE Band 13	0	1.324	0.897	0.153	2.374	Analyzed as below
		LTE Band 17	0	1.362	0.897	0.153	2.412	Analyzed as below
		LTE Band 26	0	1.381	0.897	0.153	2.431	Analyzed as below
		LTE Band 30	0	1.386	0.897	0.153	2.436	Analyzed as below
		LTE Band 38	0	1.281	0.897	0.153	2.331	Analyzed as below
		LTE Band 41	0	1.335	0.897	0.153	2.385	Analyzed as below
		LTE Band 66	0	1.343	0.897	0.153	2.393	Analyzed as below

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Bottom side WWAN + 2.4G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.030	0.025	0.055	0.110	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.033	0.025	0.055	0.113	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.036	0.025	0.055	0.116	ΣSAR<1.6, Not required
		LTE Band 2	0	0.043	0.025	0.055	0.123	ΣSAR<1.6, Not required
		LTE Band 4	0	0.032	0.025	0.055	0.112	ΣSAR<1.6, Not required
		LTE Band 5	0	0.039	0.025	0.055	0.119	ΣSAR<1.6, Not required
		LTE Band 7	0	0.047	0.025	0.055	0.127	ΣSAR<1.6, Not required
9	Bottom side	LTE Band 12	0	0.045	0.025	0.055	0.125	ΣSAR<1.6, Not required
		LTE Band 13	0	0.046	0.025	0.055	0.126	ΣSAR<1.6, Not required
		LTE Band 17	0	0.046	0.025	0.055	0.126	ΣSAR<1.6, Not required
		LTE Band 26	0	0.039	0.025	0.055	0.119	ΣSAR<1.6, Not required
		LTE Band 30	0	0.042	0.025	0.055	0.122	ΣSAR<1.6, Not required
		LTE Band 38	0	0.025	0.025	0.055	0.105	ΣSAR<1.6, Not required
		LTE Band 41	0	0.039	0.025	0.055	0.119	ΣSAR<1.6, Not required
		LTE Band 66	0	0.043	0.025	0.055	0.123	ΣSAR<1.6, Not required

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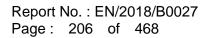
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Top side WWAN + 2.4G WLAN Main

Position	Conditions	SAR Value	Coo	ordinates ((cm)	ΣSAR	Peak Location	SPLSR	Simultaneous Transmission SAR Test - SPLSR ≤ 0.04, Not required SPLSR ≤ 0.04, Not required SPLSR ≤ 0.04, Not required
FOSILION	Conditions	(W/kg)	x	у	Z	(W/kg)	Separation Distance (mm)	OF LOIX	
	WLAN Main	0.456	-0.64	-5.28	-0.20	-	-	-	-
	WCDMA Band 2	1.402	-0.95	8.00	-0.68	1.858	132.93	0.019	
	WCDMA Band 4	1.350	-0.80	8.00	-0.68	1.806	132.90	0.018	
	WCDMA Band 5	1.386	-0.81	9.69	-6.97	1.842	164.33	0.015	
	LTE Band 2	1.388	-0.95	8.00	-0.69	1.844	132.93	0.019	,
	LTE Band 4	1.346	-0.95	8.00	-0.67	1.802	132.92	0.018	SPLSR ≤ 0.04, Not required
	LTE Band 5	1.420	-0.66	9.84	-0.70	1.876	151.29	0.017	SPLSR ≤ 0.04, Not required
Top side	LTE Band 7	1.393	-0.94	7.94	-0.63	1.849	132.31	0.019	SPLSR ≤ 0.04, Not required
Top side	LTE Band 12	1.310	-0.65	10.00	-0.70	1.766	152.88	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 13	1.324	-0.19	9.50	-0.44	1.780	147.89	0.016	SPLSR ≤ 0.04, Not required
	LTE Band 17	1.362	-0.80	9.85	-0.69	1.818	151.39	0.016	SPLSR ≤ 0.04, Not required SPLSR ≤ 0.04, Not required
	LTE Band 26	1.381	-0.35	9.35	-0.44	1.837	146.35	0.017	
	LTE Band 30	1.386	-0.72	7.98	-0.55	1.842	132.65	0.019	SPLSR ≤ 0.04, Not required
-	LTE Band 38	1.281	-0.74	11.44	-0.18	1.737	167.20	0.014	SPLSR ≤ 0.04, Not required
	LTE Band 41	1.335	-0.84	7.96	-0.48	1.791	132.45	0.018	SPLSR ≤ 0.04, Not required
	LTE Band 66	1.343	-0.95	8.04	-0.66	1.799	133.32	0.018	SPLSR ≤ 0.04, Not required

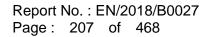
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Top side WWAN + 2.4G WLAN Aux

Position	Conditions	SAR Value	Cod	ordinates ((cm)	ΣSAR			Simultaneous Transmission
FOSILION	Conditions	(W/kg)	х	у	z	(W/kg)	Separation Distance (mm)	SPLSR	SAR Test
	WLAN Aux	0.749	-0.34	-14.14	-0.22	-	-	-	-
	WCDMA Band 2	1.402	-0.95	8.00	-0.68	2.151	221.53	0.014	SPLSR ≤ 0.04, Not required
	WCDMA Band 4	1.350	-0.80	8.00	-0.68	2.099	221.50	0.014	SPLSR ≤ 0.04, Not required
	WCDMA Band 5	1.386	-0.81	9.69	-6.97	2.135	247.71	0.013	SPLSR ≤ 0.04, Not required
	LTE Band 2	1.388	-0.95	8.00	-0.69	2.137	221.53	0.014	SPLSR ≤ 0.04, Not required
	LTE Band 4	1.346	-0.95	8.00	-0.67	2.095	221.53	0.014	SPLSR ≤ 0.04, Not required
	LTE Band 5	1.420	-0.66	9.84	-0.70	2.169	239.87	0.013	SPLSR ≤ 0.04, Not required
Tanaida	LTE Band 7	1.393	-0.94	7.94	-0.63	2.142	220.92	0.014	SPLSR ≤ 0.04, Not required
Top side	LTE Band 12	1.310	-0.65	10.00	-0.70	2.059	241.47	0.012	SPLSR ≤ 0.04, Not required
	LTE Band 13	1.324	-0.19	9.50	-0.44	2.073	236.41	0.013	SPLSR ≤ 0.04, Not required
	LTE Band 17	1.362	-0.80	9.85	-0.69	2.111	239.99	0.013	SPLSR ≤ 0.04, Not required
	LTE Band 26	1.381	-0.35	9.35	-0.44	2.130	234.91	0.013	SPLSR ≤ 0.04, Not required
	LTE Band 30	1.386	-0.72	7.98	-0.55	2.135	221.26	0.014	SPLSR ≤ 0.04, Not required
-	LTE Band 38	1.281	-0.74	11.44	-0.18	2.030	255.83	0.011	SPLSR ≤ 0.04, Not required
	LTE Band 41	1.335	-0.84	7.96	-0.48	2.084	221.07	0.014	SPLSR ≤ 0.04, Not required
	LTE Band 66	1.343	-0.95	8.04	-0.66	2.092	221.93	0.014	SPLSR ≤ 0.04, Not required

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Top side WWAN + 5G WLAN Main

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Position	Conditions	SAR Value	Coo	ordinates ((cm)	ΣSAR			Simultaneous Transmission
FOSILION	Conditions	(W/kg)	х	у	z	(W/kg)	Separation Distance (mm)	SPLSR	SAR Test
	WLAN Main	0.897	-0.36	-5.88	-0.21	-	-	-	-
	WCDMA Band 2	1.402	-0.95	8.00	-0.68	2.299	139.01	0.025	SPLSR ≤ 0.04, Not required
	WCDMA Band 4	1.350	-0.80	8.00	-0.68	2.247	138.95	0.024	SPLSR ≤ 0.04, Not required
	WCDMA Band 5	1.386	-0.81	9.69	-6.97	2.283	169.81	0.020	SPLSR ≤ 0.04, Not required
	LTE Band 2	1.388	-0.95	8.00	-0.69	2.285	139.01	0.025	SPLSR ≤ 0.04, Not required
	LTE Band 4	1.346	-0.95	8.00	-0.67	2.243	139.00	0.024	SPLSR ≤ 0.04, Not required
	LTE Band 5	1.420	-0.66	9.84	-0.70	2.317	157.31	0.022	SPLSR ≤ 0.04, Not required
	LTE Band 7	1.393	-0.94	7.94	-0.63	2.290	138.39	0.025	SPLSR ≤ 0.04, Not required
Top side	LTE Band 12	1.310	-0.65	10.00	-0.70	2.207	158.90	0.021	SPLSR ≤ 0.04, Not required
	LTE Band 13	1.324	-0.19	9.50	-0.44	2.221	153.83	0.022	SPLSR ≤ 0.04, Not required
	LTE Band 17	1.362	-0.80	9.85	-0.69	2.259	157.44	0.022	SPLSR ≤ 0.04, Not required
	LTE Band 26	1.381	-0.35	9.35	-0.44	2.278	152.32	0.023	SPLSR ≤ 0.04, Not required
	LTE Band 30	1.386	-0.72	7.98	-0.55	2.283	138.69	0.025	SPLSR ≤ 0.04, Not required
-	LTE Band 38	1.281	-0.74	11.44	-0.18	2.178	173.24	0.019	SPLSR ≤ 0.04, Not required
	LTE Band 41	1.335	-0.84	7.96	-0.48	2.232	138.51	0.024	SPLSR ≤ 0.04, Not required
	LTE Band 66	1.343	-0.95	8.04	-0.66	2.240	139.40	0.024	SPLSR ≤ 0.04, Not required

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Top side WWAN + 5G WLAN Aux

Position	Conditions	SAR Value	Cod	ordinates ((cm)	ΣSAR			Simultaneous Transmission
FOSILION	Conditions	(W/kg)	х	у	z	(W/kg)	Separation Distance (mm)	SPLSR	SAR Test
	WLAN Aux	0.897	-0.26	-13.94	-0.24	-	-	-	-
	WCDMA Band 2	1.402	-0.95	8.00	-0.68	2.299	219.55	0.016	SPLSR ≤ 0.04, Not required
	WCDMA Band 4	1.350	-0.80	8.00	-0.68	2.247	219.51	0.015	SPLSR ≤ 0.04, Not required
	WCDMA Band 5	1.386	-0.81	9.69	-6.97	2.283	245.77	0.014	SPLSR ≤ 0.04, Not required
	LTE Band 2	1.388	-0.95	8.00	-0.69	2.285	219.56	0.016	SPLSR ≤ 0.04, Not required
	LTE Band 4	1.346	-0.95	8.00	-0.67	2.243	219.55	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 5	1.420	-0.66	9.84	-0.70	2.317	237.88	0.015	SPLSR ≤ 0.04, Not required
Top side	LTE Band 7	1.393	-0.94	7.94	-0.63	2.290	218.94	0.016	SPLSR ≤ 0.04, Not required
Top side	LTE Band 12	1.310	-0.65	10.00	-0.70	2.207	239.48	0.014	SPLSR ≤ 0.04, Not required
	LTE Band 13	1.324	-0.19	9.50	-0.44	2.221	234.41	0.014	SPLSR ≤ 0.04, Not required
	LTE Band 17	1.362	-0.80	9.85	-0.69	2.259	238.00	0.014	SPLSR ≤ 0.04, Not required
	LTE Band 26	1.381	-0.35	9.35	-0.44	2.278	232.91	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 30	1.386	-0.72	7.98	-0.55	2.283	219.27	0.016	SPLSR ≤ 0.04, Not required
-	LTE Band 38	1.281	-0.74	11.44	-0.18	2.178	253.85	0.013	SPLSR ≤ 0.04, Not required
	LTE Band 41	1.335	-0.84	7.96	-0.48	2.232	219.09	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 66	1.343	-0.95	8.04	-0.66	2.240	219.95	0.015	SPLSR ≤ 0.04, Not required

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Top side WWAN + BT

Position	Conditions	SAR Value	Coo	ordinates ((cm)	ΣSAR	Peak Location	SPLSR	Simultaneous Transmission
FOSILION	Conditions	(W/kg)	x	у	z	(W/kg)	Separation Distance (mm)	3FL3K	SAR Test
	Bluetooth	0.153	-0.32	-14.06	-0.23	-	-	-	-
	WCDMA Band 2	1.402	-0.95	8.00	-0.68	1.555	220.74	0.009	SPLSR ≤ 0.04, Not required
	WCDMA Band 4	1.350	-0.80	8.00	-0.68	1.503	220.70	0.008	SPLSR ≤ 0.04, Not required
	WCDMA Band 5	1.386	-0.81	9.69	-6.97	1.539	246.94	0.008	SPLSR ≤ 0.04, Not required
	LTE Band 2	1.388	-0.95	8.00	-0.69	1.541	220.74	0.009	SPLSR ≤ 0.04, Not required
	LTE Band 4	1.346	-0.95	8.00	-0.67	1.499	220.73	0.008	SPLSR ≤ 0.04, Not required
	LTE Band 5	1.420	-0.66	9.84	-0.70	1.573	239.07	0.008	SPLSR ≤ 0.04, Not required
Top side	LTE Band 7	1.393	-0.94	7.94	-0.63	1.546	220.12	0.009	SPLSR ≤ 0.04, Not required
Top side	LTE Band 12	1.310	-0.65	10.00	-0.70	1.463	240.67	0.007	SPLSR ≤ 0.04, Not required
	LTE Band 13	1.324	-0.19	9.50	-0.44	1.477	235.61	0.008	SPLSR ≤ 0.04, Not required
	LTE Band 17	1.362	-0.80	9.85	-0.69	1.515	239.19	0.008	SPLSR ≤ 0.04, Not required
	LTE Band 26	1.381	-0.35	9.35	-0.44	1.534	234.11	0.008	SPLSR ≤ 0.04, Not required
	LTE Band 30	1.386	-0.72	7.98	-0.55	1.539	220.46	0.009	SPLSR ≤ 0.04, Not required
-	LTE Band 38	1.281	-0.74	11.44	-0.18	1.434	255.03	0.007	SPLSR ≤ 0.04, Not required
	LTE Band 41	1.335	-0.84	7.96	-0.48	1.488	220.28	0.008	SPLSR ≤ 0.04, Not required
	LTE Band 66	1.343	-0.95	8.04	-0.66	1.496	221.13	0.008	SPLSR ≤ 0.04, Not required

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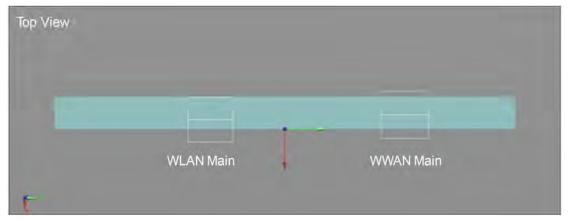
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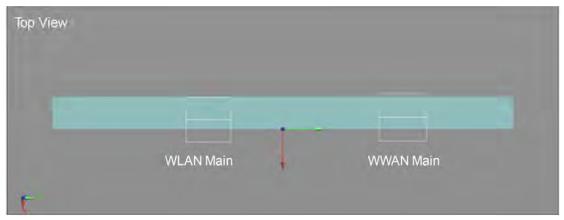


Top_2.4G_Main→WWAN

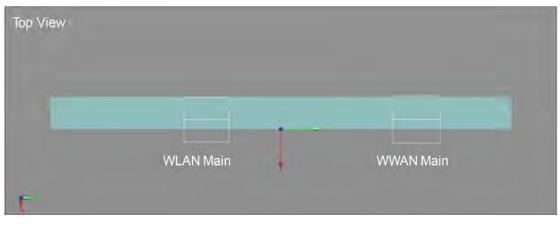
WCDMA Band 2



WCDMA Band 4



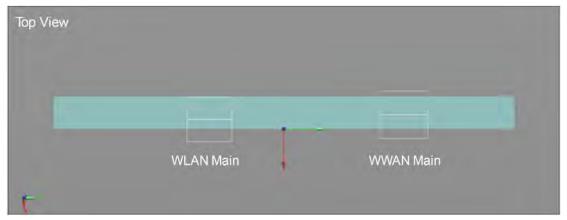
WCDMA Band 5



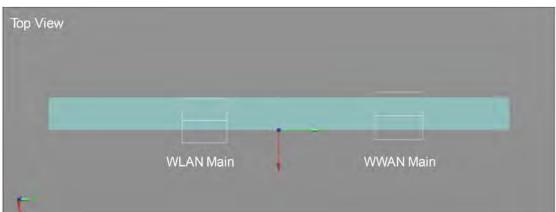
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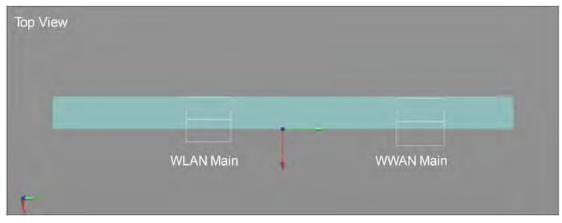




LTE Band 4



LTE Band 5



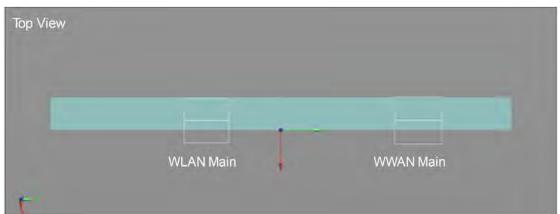
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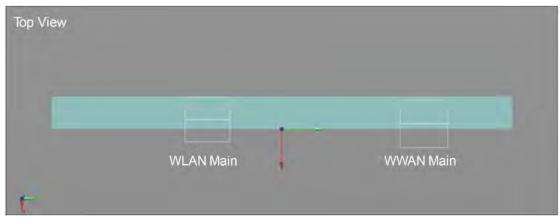




LTE Band 12



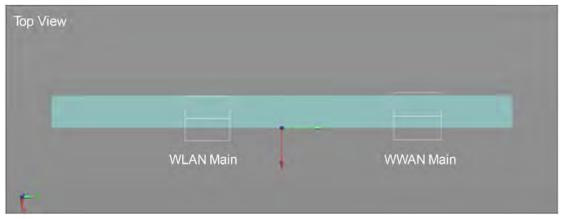
LTE Band 13



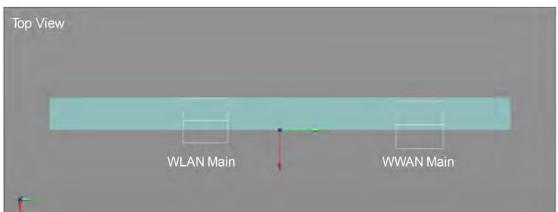
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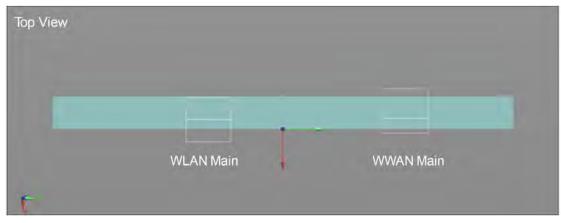




LTE Band 26



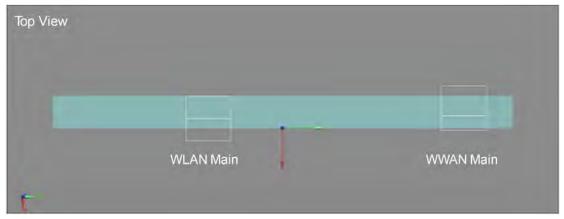
LTE Band 30



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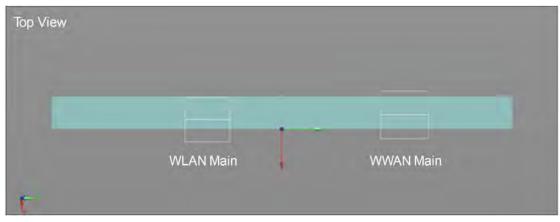




LTE Band 41



LTE Band 66



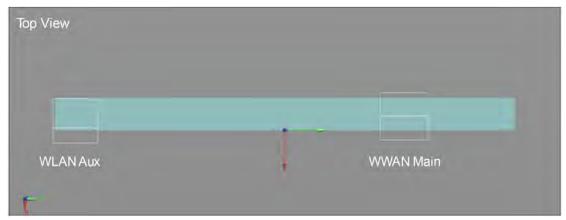
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Top_2.4G_Aux→WWAN

WCDMA Band 2



WCDMA Band 4

Top View			
WLAN Aux	1	WWAN Main	
t			

WCDMA Band 5

Top View			
WLAN Aux	1	WWAN Main	
t			

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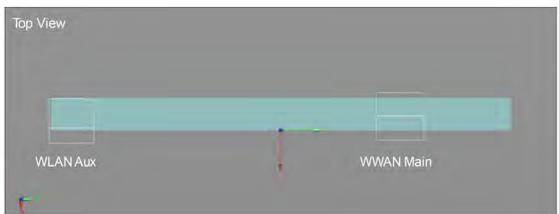
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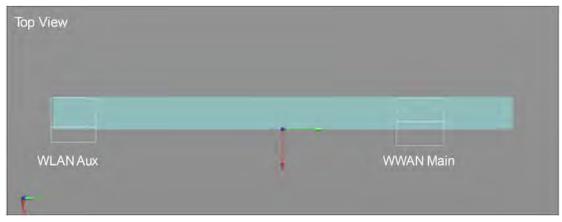




LTE Band 4



LTE Band 5



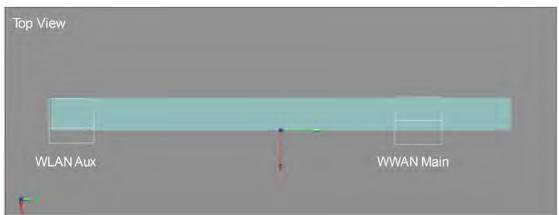
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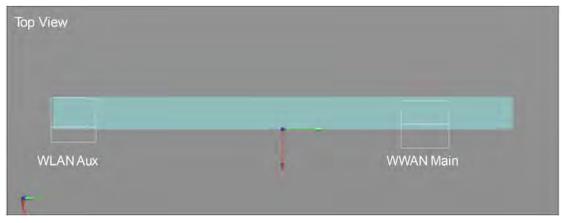




LTE Band 12



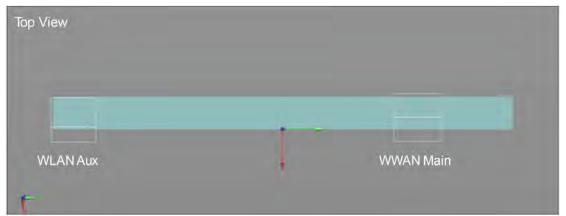
LTE Band 13



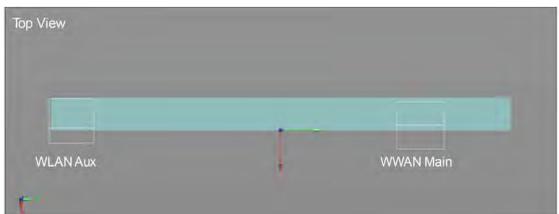
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LTE Band 26



LTE Band 30



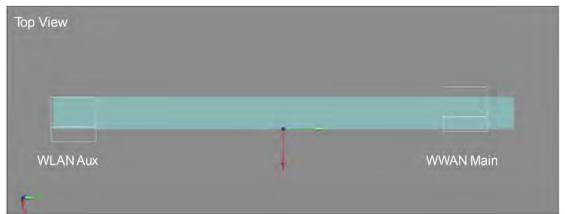
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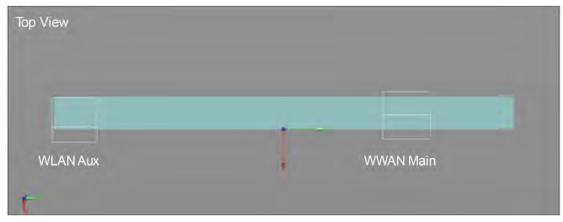
LTE Band 38



LTE Band 41



LTE Band 66



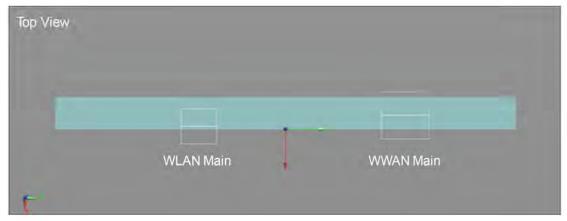
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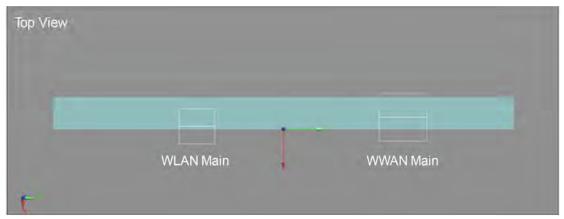


Top_5G_Main→WWAN

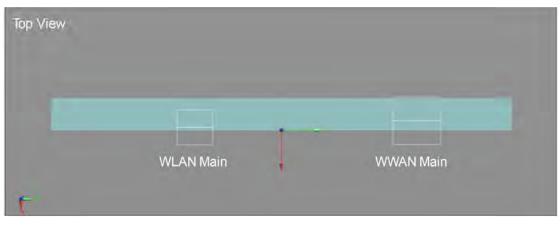
WCDMA Band 2



WCDMA Band 4



WCDMA Band 5



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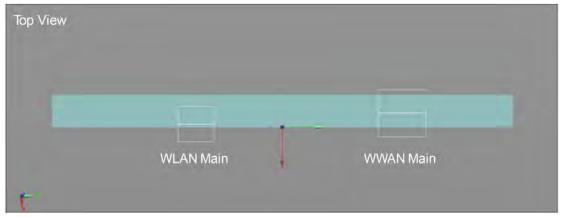
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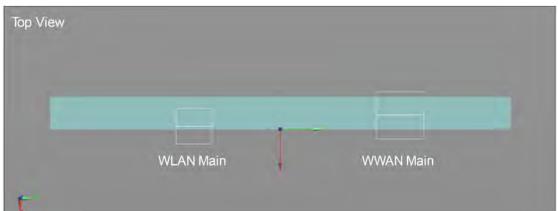
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f (886-2) 2298-0488

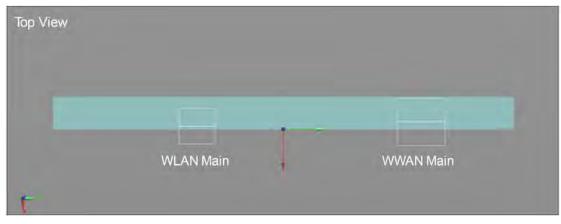




LTE Band 4



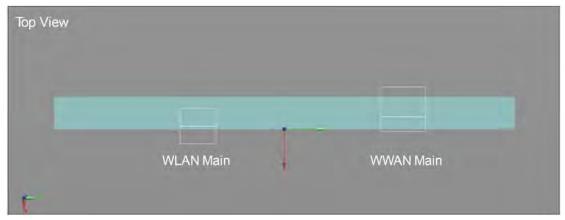
LTE Band 5



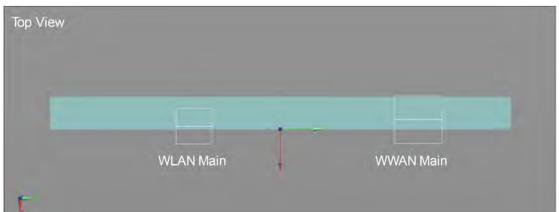
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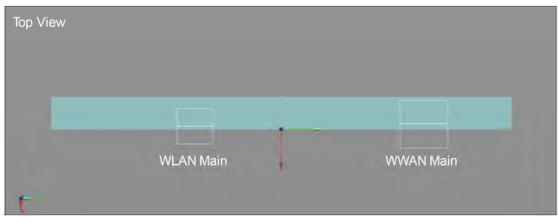




LTE Band 12



LTE Band 13



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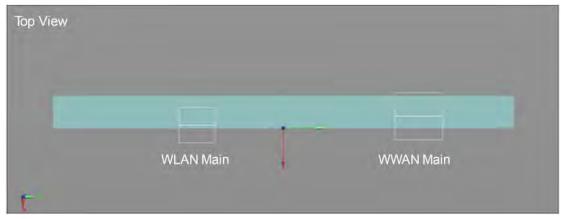
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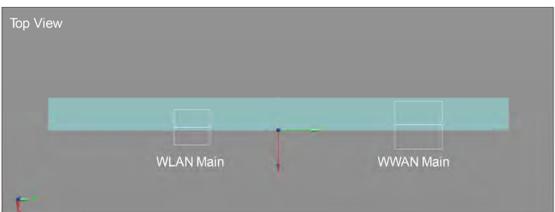
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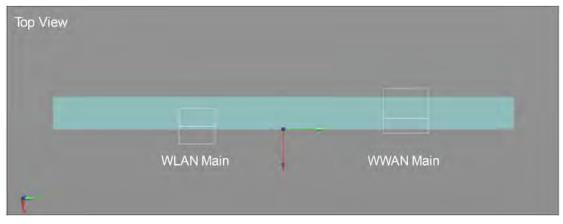




LTE Band 26



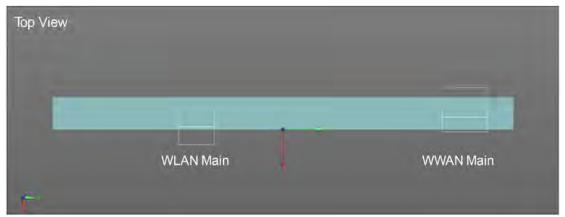
LTE Band 30



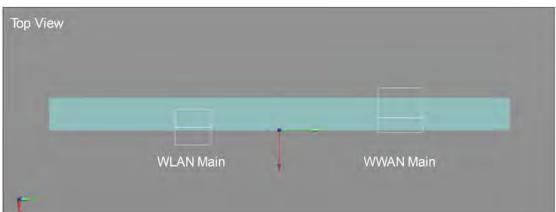
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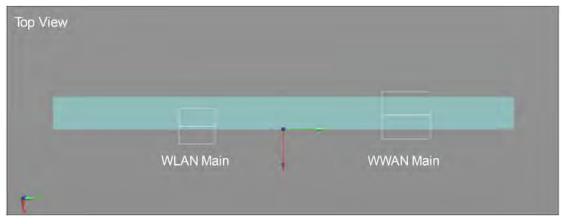




LTE Band 41



LTE Band 66



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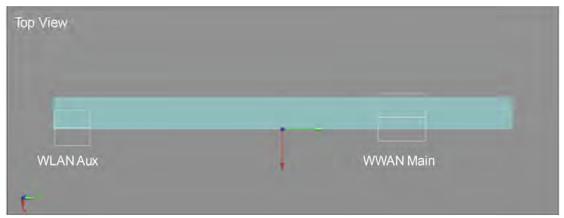


Top_5G_Aux→WWAN

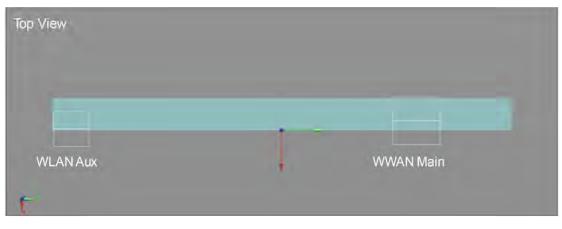
WCDMA Band 2



WCDMA Band 4



WCDMA Band 5



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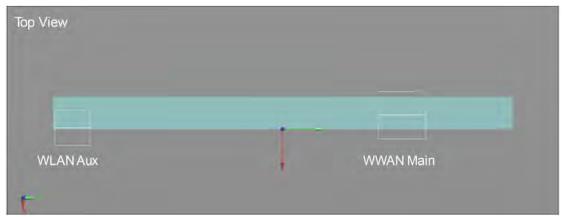
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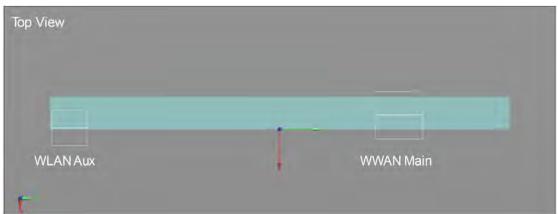
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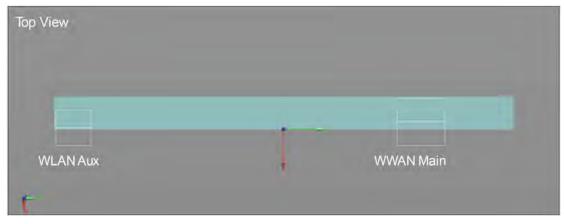




LTE Band 4



LTE Band 5



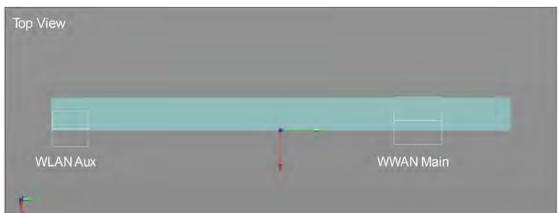
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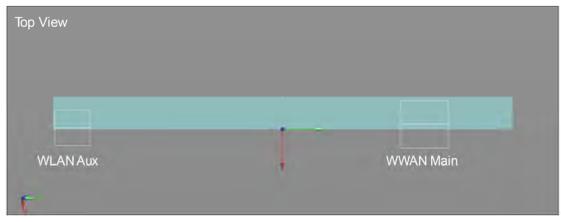




LTE Band 12



LTE Band 13



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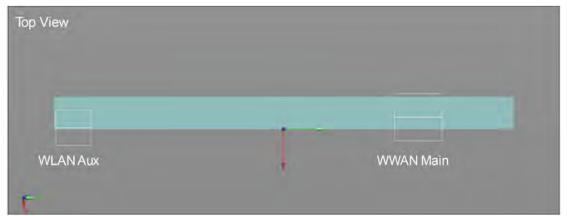
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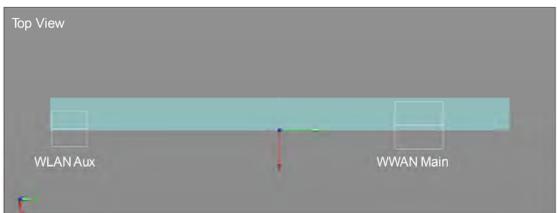
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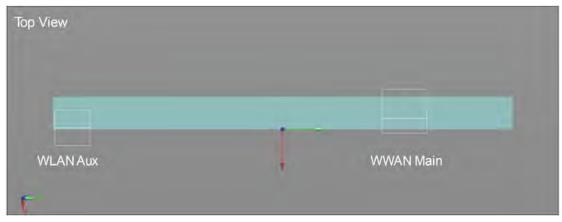




LTE Band 26



LTE Band 30



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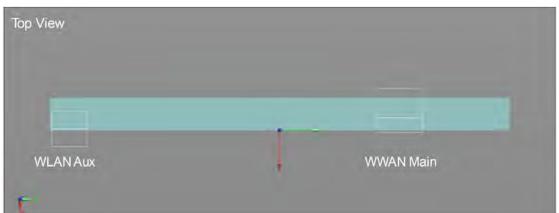


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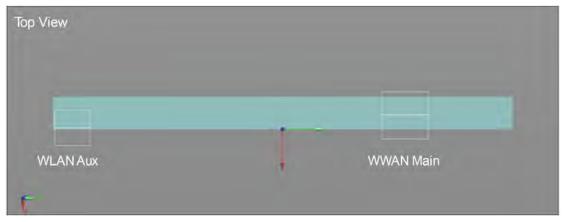
LTE Band 38



LTE Band 41



LTE Band 66



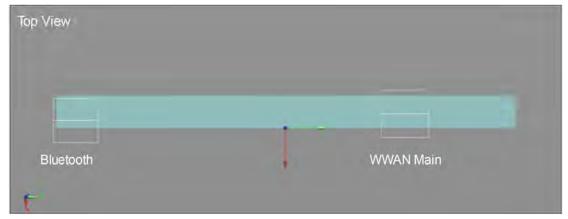
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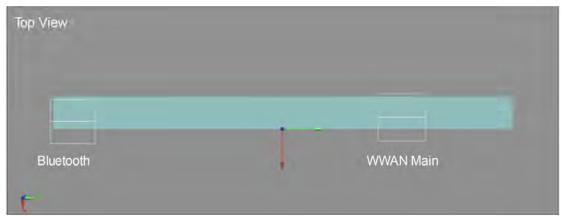


Top_BT→WWAN

WCDMA Band 2



WCDMA Band 4



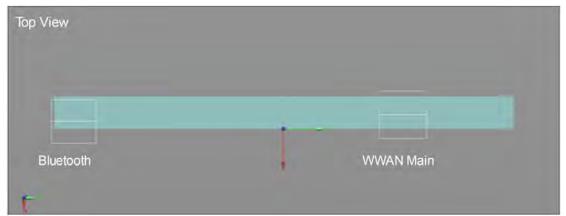
WCDMA Band 5

Top View		
Bluetooth	WWAN Main	
t		

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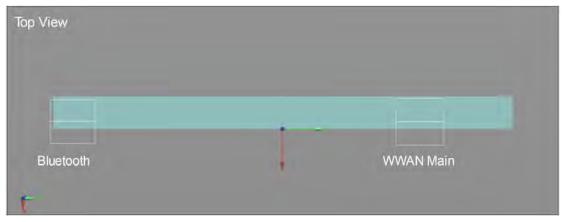




LTE Band 4



LTE Band 5



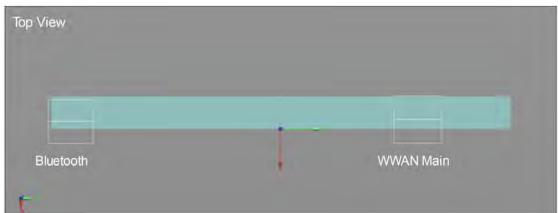
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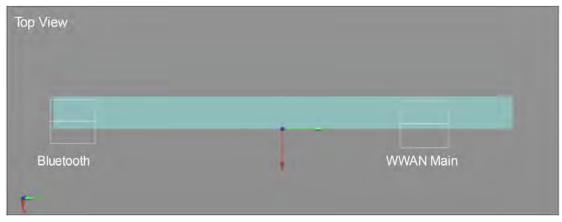








LTE Band 13



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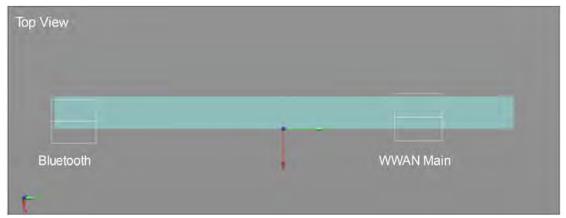
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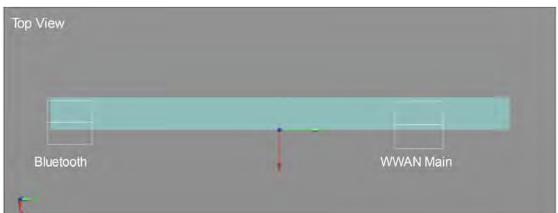


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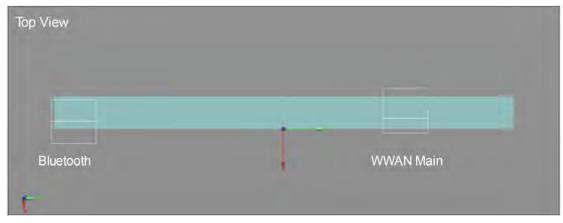
LTE Band 17



LTE Band 26



LTE Band 30



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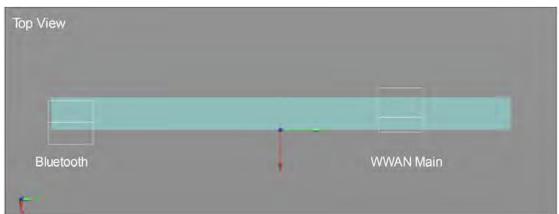


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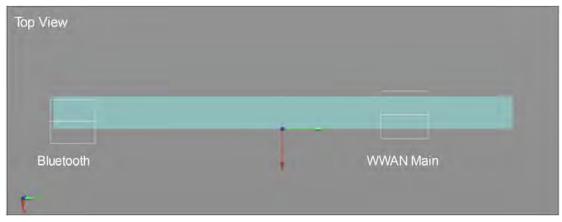
LTE Band 38



LTE Band 41



LTE Band 66



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Bottom side WWAN + 5G WLAN

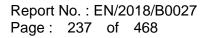
No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.030	0.132	0.038	0.200	ΣSAR<1.6,
		110D III/ Dalla 2	Ű	0.000	0.102	0.000	0.200	Not required
		WCDMA Band 4	0	0.033	0.132	0.038	0.203	ΣSAR<1.6,
			-					Not required
		WCDMA Band 5	0	0.036	0.132	0.038	0.206	ΣSAR<1.6,
								Not required ΣSAR<1.6,
		LTE Band 2	0	0.043	0.132	0.038	0.213	Not required
								Σ SAR<1.6,
		LTE Band 4	0	0.032	0.132	0.038	0.202	Not required
								ΣSAR<1.6,
		LTE Band 5	0	0.039	0.132	0.038	0.209	Not required
		LTE Band 7	0	0.047	0.132	0.020	0.017	ΣSAR<1.6,
			0	0.047	0.132	0.038	0.217	Not required
10	Bottom	LTE Band 12	0	0.045	0.132	0.038	0.215	ΣSAR<1.6,
10	side		Ŭ	0.040	0.102	0.000	0.210	Not required
		LTE Band 13	0	0.046	0.132	0.038	0.216	ΣSAR<1.6,
		ETE Bana To	Ű	0.010	0.102	0.000	0.210	Not required
		LTE Band 17	0	0.046	0.132	0.038	0.216	ΣSAR<1.6,
								Not required
		LTE Band 26	0	0.039	0.132	0.038	0.209	ΣSAR<1.6, Not required
								Σ SAR<1.6,
		LTE Band 30	0	0.042	0.132	0.038	0.212	Not required
								ΣSAR<1.6,
		LTE Band 38	0	0.025	0.132	0.038	0.195	Not required
			0	0.000	0.400	0.000	0.000	ΣSAR<1.6,
		LTE Band 41 0	U	0.039	0.132	0.038	0.209	Not required
		LTE Band 66	0	0.043	0.132	0.038	0.213	ΣSAR<1.6,
		LIE Danu 00	U	0.043	0.132	0.036	0.213	Not required

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Bottom side WWAN + 2.4G WLAN Main + BT

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.030	0.025	0.011	0.066	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.033	0.025	0.011	0.069	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.036	0.025	0.011	0.072	ΣSAR<1.6, Not required
		LTE Band 2	0	0.043	0.025	0.011	0.079	ΣSAR<1.6, Not required
		LTE Band 4	0	0.032	0.025	0.011	0.068	ΣSAR<1.6, Not required
		LTE Band 5	0	0.039	0.025	0.011	0.075	ΣSAR<1.6, Not required
		LTE Band 7	0	0.047	0.025	0.011	0.083	ΣSAR<1.6, Not required
11	Bottom side	LTE Band 12	0	0.045	0.025	0.011	0.081	ΣSAR<1.6, Not required
		LTE Band 13	0	0.046	0.025	0.011	0.082	ΣSAR<1.6, Not required
		LTE Band 17	0	0.046	0.025	0.011	0.082	ΣSAR<1.6, Not required
		LTE Band 26	0	0.039	0.025	0.011	0.075	ΣSAR<1.6, Not required
		LTE Band 30	0	0.042	0.025	0.011	0.078	ΣSAR<1.6, Not required
		LTE Band 38	0	0.025	0.025	0.011	0.061	ΣSAR<1.6, Not required
		LTE Band 41	0	0.039	0.025	0.011	0.075	ΣSAR<1.6, Not required
		LTE Band 66	0	0.043	0.025	0.011	0.079	ΣSAR<1.6, Not required

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Bottom side WWAN + 5G WLAN Main + BT

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.030	0.132	0.011	0.173	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.033	0.132	0.011	0.176	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.036	0.132	0.011	0.179	ΣSAR<1.6, Not required
		LTE Band 2	0	0.043	0.132	0.011	0.186	ΣSAR<1.6, Not required
		LTE Band 4	0	0.032	0.132	0.011	0.175	ΣSAR<1.6, Not required
		LTE Band 5	0	0.039	0.132	0.011	0.182	ΣSAR<1.6, Not required
		LTE Band 7	0	0.047	0.132	0.011	0.190	ΣSAR<1.6, Not required
12	Bottom side	LTE Band 12	0	0.045	0.132	0.011	0.188	ΣSAR<1.6, Not required
		LTE Band 13	0	0.046	0.132	0.011	0.189	ΣSAR<1.6, Not required
		LTE Band 17	0	0.046	0.132	0.011	0.189	ΣSAR<1.6, Not required
		LTE Band 26	0	0.039	0.132	0.011	0.182	ΣSAR<1.6, Not required
		LTE Band 30	0	0.042	0.132	0.011	0.185	ΣSAR<1.6, Not required
		LTE Band 38	0	0.025	0.132	0.011	0.168	ΣSAR<1.6, Not required
		LTE Band 41	0	0.039	0.132	0.011	0.182	ΣSAR<1.6, Not required
		LTE Band 66	0	0.043	0.132	0.011	0.186	ΣSAR<1.6, Not required

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Right side WWAN + 2.4G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.473	0.042	0.028	0.543	ΣSAR<1.6,
		TODIN (Dana 2	ů	0.110	0.012	0.020	0.010	Not required
		WCDMA Band 4	0	0.566	0.042	0.028	0.636	ΣSAR<1.6,
								Not required
		WCDMA Band 5	0	0.576	0.042	0.028	0.646	ΣSAR<1.6, Not required
								Σ SAR<1.6,
		LTE Band 2	0	0.514	0.042	0.028	0.584	Not required
								ΣSAR<1.6,
		LTE Band 4	0	0.566	0.042	0.028	0.636	Not required
		LTE David C	0	0.504	0.040	0.000	0.054	ΣSAR<1.6,
		LTE Band 5	0	0.581	0.042	0.028	0.651	Not required
		LTE Band 7	0	0.616	0.042	0.028	0.686	ΣSAR<1.6,
			U	0.010	0.042	0.020	0.000	Not required
13	Right side	LTE Band 12	0	0.603	0.042	0.028	0.673	ΣSAR<1.6,
	3							Not required
		LTE Band 13	0	0.602	0.042	0.028	0.672	ΣSAR<1.6,
								Not required ΣSAR<1.6,
		LTE Band 17	0	0.614	0.042	0.028	0.684	Not required
								ΣSAR<1.6,
		LTE Band 26	0	0.636	0.042	0.028	0.706	Not required
			â	0.040	0.040	0.000	0.000	ΣSAR<1.6,
		LTE Band 30	0	0.618	0.042	0.028	0.688	Not required
		LTE Band 38	0	0.607	0.042	0.028	0.677	ΣSAR<1.6,
		LTL Danu 30	0	0.007	0.042	0.020	0.077	Not required
		LTE Band 41	0	0.640	0.042	0.028	0.710	ΣSAR<1.6,
			Ŭ	0.640	0.0.12	0.028	010	Not required
		LTE Band 66	0	0.615	0.042	0.028	0.685	ΣSAR<1.6,
								Not required

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Right side WWAN + 5G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.473	0.026	0.033	0.532	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.566	0.026	0.033	0.625	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.576	0.026	0.033	0.635	ΣSAR<1.6, Not required
		LTE Band 2	0	0.514	0.026	0.033	0.573	ΣSAR<1.6, Not required
		LTE Band 4	0	0.566	0.026	0.033	0.625	ΣSAR<1.6, Not required
		LTE Band 5	0	0.581	0.026	0.033	0.640	ΣSAR<1.6, Not required
		LTE Band 7	0	0.616	0.026	0.033	0.675	ΣSAR<1.6, Not required
14	Right side	LTE Band 12	0	0.603	0.026	0.033	0.662	ΣSAR<1.6, Not required
		LTE Band 13	0	0.602	0.026	0.033	0.661	ΣSAR<1.6, Not required
		LTE Band 17	0	0.614	0.026	0.033	0.673	ΣSAR<1.6, Not required
		LTE Band 26	0	0.636	0.026	0.033	0.695	ΣSAR<1.6, Not required
		LTE Band 30	0	0.618	0.026	0.033	0.677	ΣSAR<1.6, Not required
		LTE Band 38	0	0.607	0.026	0.033	0.666	ΣSAR<1.6, Not required
		LTE Band 41	0	0.640	0.026	0.033	0.699	ΣSAR<1.6, Not required
		LTE Band 66	0	0.615	0.026	0.033	0.674	ΣSAR<1.6, Not required

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Right side WWAN + 2.4G WLAN Main + BT

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.473	0.042	0.010	0.525	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.566	0.042	0.010	0.618	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.576	0.042	0.010	0.628	ΣSAR<1.6, Not required
		LTE Band 2	0	0.514	0.042	0.010	0.566	ΣSAR<1.6, Not required
		LTE Band 4	0	0.566	0.042	0.010	0.618	ΣSAR<1.6, Not required
		LTE Band 5	0	0.581	0.042	0.010	0.633	ΣSAR<1.6, Not required
		LTE Band 7	0	0.616	0.042	0.010	0.668	ΣSAR<1.6, Not required
15	Right side	LTE Band 12	0	0.603	0.042	0.010	0.655	ΣSAR<1.6, Not required
		LTE Band 13	0	0.602	0.042	0.010	0.654	ΣSAR<1.6, Not required
		LTE Band 17	0	0.614	0.042	0.010	0.666	ΣSAR<1.6, Not required
		LTE Band 26	0	0.636	0.042	0.010	0.688	ΣSAR<1.6, Not required
		LTE Band 30	0	0.618	0.042	0.010	0.670	ΣSAR<1.6, Not required
		LTE Band 38	0	0.607	0.042	0.010	0.659	ΣSAR<1.6, Not required
		LTE Band 41	0	0.640	0.042	0.010	0.692	ΣSAR<1.6, Not required
		LTE Band 66	0	0.615	0.042	0.010	0.667	ΣSAR<1.6, Not required

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Right side WWAN + 5G WLAN Main + BT

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.473	0.026	0.010	0.509	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.566	0.026	0.010	0.602	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.576	0.026	0.010	0.612	ΣSAR<1.6, Not required
		LTE Band 2	0	0.514	0.026	0.010	0.550	ΣSAR<1.6, Not required
		LTE Band 4	0	0.566	0.026	0.010	0.602	ΣSAR<1.6, Not required
		LTE Band 5	0	0.581	0.026	0.010	0.617	ΣSAR<1.6, Not required
		LTE Band 7	0	0.616	0.026	0.010	0.652	ΣSAR<1.6, Not required
16	Right side	LTE Band 12	0	0.603	0.026	0.010	0.639	ΣSAR<1.6, Not required
		LTE Band 13	0	0.602	0.026	0.010	0.638	ΣSAR<1.6, Not required
		LTE Band 17	0	0.614	0.026	0.010	0.650	ΣSAR<1.6, Not required
		LTE Band 26	0	0.636	0.026	0.010	0.672	ΣSAR<1.6, Not required
		LTE Band 30	0	0.618	0.026	0.010	0.654	ΣSAR<1.6, Not required
		LTE Band 38	0	0.607	0.026	0.010	0.643	ΣSAR<1.6, Not required
		LTE Band 41	0	0.640	0.026	0.010	0.676	ΣSAR<1.6, Not required
		LTE Band 66	0	0.615	0.026	0.010	0.651	ΣSAR<1.6, Not required

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Left side WWAN + 2.4G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.045	0.042	0.480	0.567	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.047	0.042	0.480	0.569	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.050	0.042	0.480	0.572	ΣSAR<1.6, Not required
		LTE Band 2	0	0.066	0.042	0.480	0.588	ΣSAR<1.6, Not required
		LTE Band 4	0	0.047	0.042	0.480	0.569	ΣSAR<1.6, Not required
		LTE Band 5	0	0.052	0.042	0.480	0.574	ΣSAR<1.6, Not required
		LTE Band 7	0	0.057	0.042	0.480	0.579	ΣSAR<1.6, Not required
17	Left side	LTE Band 12	0	0.052	0.042	0.480	0.574	ΣSAR<1.6, Not required
		LTE Band 13	0	0.055	0.042	0.480	0.577	ΣSAR<1.6, Not required
		LTE Band 17	0	0.057	0.042	0.480	0.579	ΣSAR<1.6, Not required
		LTE Band 26	0	0.054	0.042	0.480	0.576	ΣSAR<1.6, Not required
		LTE Band 30	0	0.059	0.042	0.480	0.581	ΣSAR<1.6, Not required
		LTE Band 38	0	0.051	0.042	0.480	0.573	ΣSAR<1.6, Not required
		LTE Band 41	0	0.054	0.042	0.480	0.576	ΣSAR<1.6, Not required
		LTE Band 66	0	0.054	0.042	0.480	0.576	ΣSAR<1.6, Not required

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Left side WWAN + 5G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.045	0.069	0.553	0.667	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.047	0.069	0.553	0.669	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.050	0.069	0.553	0.672	ΣSAR<1.6, Not required
		LTE Band 2	0	0.066	0.069	0.553	0.688	ΣSAR<1.6, Not required
		LTE Band 4	0	0.047	0.069	0.553	0.669	ΣSAR<1.6, Not required
		LTE Band 5	0	0.052	0.069	0.553	0.674	ΣSAR<1.6, Not required
		LTE Band 7	0	0.057	0.069	0.553	0.679	ΣSAR<1.6, Not required
18	Left side	LTE Band 12	0	0.052	0.069	0.553	0.674	ΣSAR<1.6, Not required
		LTE Band 13	0	0.055	0.069	0.553	0.677	ΣSAR<1.6, Not required
		LTE Band 17	0	0.057	0.069	0.553	0.679	ΣSAR<1.6, Not required
		LTE Band 26	0	0.054	0.069	0.553	0.676	ΣSAR<1.6, Not required
		LTE Band 30	0	0.059	0.069	0.553	0.681	ΣSAR<1.6, Not required
		LTE Band 38	0	0.051	0.069	0.553	0.673	ΣSAR<1.6, Not required
		LTE Band 41	0	0.054	0.069	0.553	0.676	ΣSAR<1.6, Not required
		LTE Band 66	0	0.054	0.069	0.553	0.676	ΣSAR<1.6, Not required

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Left side WWAN + 2.4G WLAN Main + BT

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.045	0.042	0.107	0.194	ΣSAR<1.6,
								Not required
		WCDMA Band 4	0	0.047	0.042	0.107	0.196	ΣSAR<1.6,
								Not required
		WCDMA Band 5	0	0.050	0.042	0.107	0.199	ΣSAR<1.6,
								Not required ΣSAR<1.6,
		LTE Band 2	0	0.066	0.042	0.107	0.215	Not required
		LTE Band 4	0	0.047	0.042	0.107	0.196	,
		LTE Band 5	0	0.052	0.042	0.107	0.201	,
		LTE Band 7	0	0.057	0.042	0.107	0.206	,
10				0.050	0.040	0.407	0.004	
19	Left side	LTE Band 12	0	0.052	0.042	0.107	0.201	Not required
		LTE David 40	0	0.055	0.042	0.107	0.204	ΣSAR<1.6,
		LTE Band 13	0	0.055	0.042	0.107	0.204	Not required
		LTE Band 17	0	0.057	0.042	0.107	0.206	ΣSAR<1.6,
			0	0.057	0.042	0.107	0.200	Not required
		LTE Band 26	0	0.054	0.042	0.107	0.203	ΣSAR<1.6,
			0	0.004	0.042	0.107	0.200	Not required
		LTE Band 30	0	0.059	0.042	0.107	0.208	ΣSAR<1.6,
			Ű	0.000	0.042	0.107	0.200	
		LTE Band 38	0	0.051	0.042	0.107	0.200	,
			-					
		LTE Band 41	0	0.054	0.042	0.107	0.203	,
			-					ΣSAR<1.6,
		LTE Band 66	0	0.054	0.042	0.107	0.203	,
								Not required

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Left side WWAN + 5G WLAN Main + BT

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.045	0.069	0.107	0.221	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.047	0.069	0.107	0.223	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.050	0.069	0.107	0.226	ΣSAR<1.6, Not required
		LTE Band 2	0	0.066	0.069	0.107	0.242	ΣSAR<1.6, Not required
		LTE Band 4	0	0.047	0.069	0.107	0.223	ΣSAR<1.6, Not required
		LTE Band 5	0	0.052	0.069	0.107	0.228	ΣSAR<1.6, Not required
		LTE Band 7	0	0.057	0.069	0.107	0.233	ΣSAR<1.6, Not required
20	Left side	LTE Band 12	0	0.052	0.069	0.107	0.228	ΣSAR<1.6, Not required
		LTE Band 13	0	0.055	0.069	0.107	0.231	ΣSAR<1.6, Not required
		LTE Band 17	0	0.057	0.069	0.107	0.233	ΣSAR<1.6, Not required
		LTE Band 26	0	0.054	0.069	0.107	0.230	ΣSAR<1.6, Not required
		LTE Band 30	0	0.059	0.069	0.107	0.235	ΣSAR<1.6, Not required
		LTE Band 38	0	0.051	0.069	0.107	0.227	ΣSAR<1.6, Not required
		LTE Band 41	0	0.054	0.069	0.107	0.230	Not required ΣSAR<1.6,
		LTE Band 66	0	0.054	0.069	0.107	0.230	ΣSAR<1.6, Not required

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Hong-Bo

Back side WWAN + 2.4G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.289	0.143	0.414	0.846	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.303	0.143	0.414	0.860	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.295	0.143	0.414	0.852	ΣSAR<1.6, Not required
		LTE Band 2	0	0.289	0.143	0.414	0.846	ΣSAR<1.6, Not required
		LTE Band 4	0	0.309	0.143	0.414	0.866	ΣSAR<1.6, Not required
	Back side	LTE Band 5	0	0.304	0.143	0.414	0.861	ΣSAR<1.6, Not required
		LTE Band 7	0	0.325	0.143	0.414	0.882	ΣSAR<1.6, Not required
1		LTE Band 12	0	0.294	0.143	0.414	0.851	ΣSAR<1.6, Not required
		LTE Band 13	0	0.304	0.143	0.414	0.861	ΣSAR<1.6, Not required
		LTE Band 17	0	0.312	0.143	0.414	0.869	ΣSAR<1.6, Not required
		LTE Band 26	0	0.314	0.143	0.414	0.871	ΣSAR<1.6, Not required
		LTE Band 30	0	0.276	0.143	0.414	0.833	ΣSAR<1.6, Not required
		LTE Band 38	0	0.309	0.143	0.414	0.866	ΣSAR<1.6, Not required
		LTE Band 41	0	0.307	0.143	0.414	0.864	ΣSAR<1.6, Not required
		LTE Band 66	0	0.287	0.143	0.414	0.844	ΣSAR<1.6, Not required

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Back side WWAN + 5G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.289	0.289	0.262	0.840	ΣSAR<1.6,
								Not required
		WCDMA Band 4	0	0.303	0.289	0.262	0.854	ΣSAR<1.6,
								Not required
		WCDMA Band 5	0	0.295	0.289	0.262	0.846	ΣSAR<1.6,
								Not required
		LTE Band 2	0	0.289	0.289	0.262	0.840	ΣSAR<1.6,
								Not required ΣSAR<1.6,
		LTE Band 4	0	0.309	0.289	0.262	0.860	Not required
								Σ SAR<1.6,
	Back side	LTE Band 5	0	0.304 0.289	0.289	0.289 0.262	0.855	Not required
		LTE Band 7	0		5 0.289	9 0.262	0.876	Σ SAR<1.6,
				0.325				Not required
		LTE Band 12						ΣSAR<1.6,
2			0	0.294	0.289	0.262	0.845	Not required
		LTE Band 13		0.004	0.000	0.000	0.855	ΣSAR<1.6,
			0	0.304	0.289	0.262		Not required
		LTE Band 17	0	0.040	0.000	0.262	0.863	ΣSAR<1.6,
		LIE Band I7	0	0.312	0.289	0.262	0.863	Not required
		LTE Band 26	0	0.314	0.289	0.262	0.865	ΣSAR<1.6,
		LTL Daliu 20	0	0.314	0.209	0.202	0.805	Not required
		LTE Band 30	0	0.276	0.289	0.262	0.827	ΣSAR<1.6,
		LTE Dand 50	0	0.270	0.209	0.202	0.027	Not required
		LTE Band 38	0	0.309	0.289	0.262	0.860	ΣSAR<1.6,
				0.000	0.200	0.202	0.000	Not required
		LTE Band 41 0	0	0.307	0.289	0.262	0.858	ΣSAR<1.6,
								Not required
		LTE Band 66	0	0.287	0.289	0.262	0.838	ΣSAR<1.6,
								Not required

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No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.289	0.143	0.088	0.520	ΣSAR<1.6,
								Not required
		WCDMA Band 4	0	0.303	0.143	0.088	0.534	ΣSAR<1.6, Not required
								Σ SAR<1.6,
		WCDMA Band 5	0	0.295	0.143	0.088	0.526	Not required
			0	0.000	0.4.40	0.000	0.500	ΣSAR<1.6,
		LTE Band 2	0	0.289	0.143	0.088	0.520	Not required
		LTE Band 4	0	0.309	0.143	0.088	0.540	ΣSAR<1.6,
				0.000	0.140	0.000	0.040	Not required
		LTE Band 5	0	0.304	0.143	0.088	0.535	ΣSAR<1.6,
	Back side	LTE Band 7			0.143 0.088		Not required	
			0	0.325		0.088	0.556	ΣSAR<1.6, Not required
								Σ SAR<1.6,
3		LTE Band 12	0	0.294	0.143	0.088	0.525	Not required
		LTE Band 13	0	0.304	0.143	0.088	0.535	ΣSAR<1.6,
		LTE Dallu 15	0	0.304	0.143	0.088	0.555	Not required
		LTE Band 17	0	0.312	0.143	0.088	0.543	ΣSAR<1.6,
			Ů	0.012	0.110	0.000	0.010	Not required
		LTE Band 26	0	0.314	0.143	0.088	0.545	ΣSAR<1.6,
								Not required ΣSAR<1.6,
		LTE Band 30	0	0.276	0.143	0.088	0.507	Not required
			-					ΣSAR<1.6,
		LTE Band 38	0	0.309	0.143	0.088	0.540	Not required
		LTE Band 41 0	0	0.307	0.143	0.088	0.538	ΣSAR<1.6,
			0.307	0.143	0.000	0.538	Not required	
		LTE Band 66	0	0.287	0.143	0.088	0.518	ΣSAR<1.6,
		ETE Band oo	ÿ	0.201	0.140	0.000	0.010	Not required

Back side WWAN + 2.4G WLAN Main + BT

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Back side WWAN + 5G WLAN Main + BT

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.289	0.289	0.088	0.666	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.303	0.289	0.088	0.680	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.295	0.289	0.088	0.672	ΣSAR<1.6, Not required
		LTE Band 2	0	0.289	0.289	0.088	0.666	ΣSAR<1.6, Not required
		LTE Band 4	0	0.309	0.289	0.088	0.686	ΣSAR<1.6, Not required
		LTE Band 5	0	0.304	0.289	0.088	0.681	ΣSAR<1.6, Not required
		LTE Band 7	0	0.325	0.289	0.088	0.702	ΣSAR<1.6, Not required
4	Back side	LTE Band 12	0	0.294	0.289	0.088	0.671	ΣSAR<1.6, Not required
		LTE Band 13	0	0.304	0.289	0.088	0.681	ΣSAR<1.6, Not required
		LTE Band 17	0	0.312	0.289	0.088	0.689	ΣSAR<1.6, Not required
		LTE Band 26	0	0.314	0.289	0.088	0.691	ΣSAR<1.6, Not required
		LTE Band 30	0	0.276	0.289	0.088	0.653	ΣSAR<1.6, Not required
		LTE Band 38	0	0.309	0.289	0.088	0.686	ΣSAR<1.6, Not required
		LTE Band 41	0	0.307	0.289	0.088	0.684	ΣSAR<1.6, Not required
		LTE Band 66	0	0.287	0.289	0.088	0.664	ΣSAR<1.6, Not required

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Top side WWAN + 2.4G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	1.280	0.631	1.193	3.104	Analyzed as below
		WCDMA Band 4	0	1.360	0.631	1.193	3.184	Analyzed as below
		WCDMA Band 5	0	1.316	0.631	1.193	3.140	Analyzed as below
		LTE Band 2	0	1.298	0.631	1.193	3.122	Analyzed as below
		LTE Band 4	0	1.366	0.631	1.193	3.190	Analyzed as below
	Top side	LTE Band 5	0	1.350	0.631	1.193	3.174	Analyzed as below
		LTE Band 7	0	1.339	0.631	1.193	3.163	Analyzed as below
5		LTE Band 12	0	1.421	0.631	1.193	3.245	Analyzed as below
		LTE Band 13	0	1.332	0.631	1.193	3.156	Analyzed as below
		LTE Band 17	0	1.340	0.631	1.193	3.164	Analyzed as below
		LTE Band 26	0	1.427	0.631	1.193	3.251	Analyzed as below
		LTE Band 30	0	1.285	0.631	1.193	3.109	Analyzed as below
		LTE Band 38	0	1.249	0.631	1.193	3.073	Analyzed as below
		LTE Band 41	0	1.355	0.631	1.193	3.179	Analyzed as below
		LTE Band 66	0	1.397	0.631	1.193	3.221	Analyzed as below

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Top side WWAN + 5G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR	
		WCDMA Band 2	0	1.280	1.035	1.014	3.329	Analyzed as below	
		WCDMA Band 4	0	1.360	1.035	1.014	3.409	Analyzed as below	
		WCDMA Band 5	0	1.316	1.035	1.014	3.365	Analyzed as below	
		LTE Band 2	0	1.298	1.035	1.014	3.347	Analyzed as below	
		LTE Band 4	0	1.366	1.035	1.014	3.415	Analyzed as below	
	Top side	LTE Band 5	0	1.350	1.035	1.014	3.399	Analyzed as below	
		LTE Band 7	0	1.339	1.035	1.014	3.388	Analyzed as below	
6		LTE Band 12	0	1.421	1.035	1.014	3.470	Analyzed as below	
		LTE Band 13	0	1.332	1.035	1.014	3.381	Analyzed as below	
		LTE Band 17	0	1.340	1.035	1.014	3.389	Analyzed as below	
		LTE Band 26	0	1.427	1.035	1.014	3.476	Analyzed as below	
			LTE Band 30	0	1.285	1.035	1.014	3.334	Analyzed as below
		LTE Band 38	0	1.249	1.035	1.014	3.298	Analyzed as below	
		LTE Band 41	0	1.355	1.035	1.014	3.404	Analyzed as below	
		LTE Band 66	0	1.397	1.035	1.014	3.446	Analyzed as below	

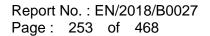
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No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	1.280	0.631	0.270	2.181	Analyzed as below
								Analyzed
		WCDMA Band 4	0	1.360	0.631	0.270	2.261	as below
								Analyzed
		WCDMA Band 5	0	1.316	0.631	0.270	2.217	as below
								Analyzed
		LTE Band 2	0	1.298	0.631	0.270	2.199	as below
			_					Analyzed
		LTE Band 4	0	1.366	0.631	0.270	2.267	as below
			â	4.050	0.004	0.070	0.054	Analyzed
		LTE Band 5	0	1.350	0.631	0.270	2.251	as below
			0	4 000	0.631	0.070	2.240	Analyzed
		LTE Band 7	0	1.339	0.631	0.270	2.240	as below
7	Top side	LTE Band 12	0	1.421	0.631	0.270	2.322	Analyzed
'	Top side		0	1.421	0.031	0.270	2.322	as below
		LTE Band 13	0	1.332	0.631	0.270	2.233	Analyzed
			0	1.002	0.031	0.270	2.200	as below
		LTE Band 17	0	1.340	0.631	0.270	2.241	Analyzed
			Ŭ	1.040	0.001	0.270	2.241	as below
		LTE Band 26	0	1.427	0.631	0.270	2.328	Analyzed
			, v		0.001	0.270		as below
		LTE Band 30	0	1.285	0.631	0.270	2.186	Analyzed
			-		0.001	0.270		as below
1		LTE Band 38	0	1.249	0.631	0.270	2.150	Analyzed
			-	-				as below
		LTE Band 41	0	1.355	0.631	0.270	2.256	Analyzed
								as below
		LTE Band 66	0	1.397	0.631	0.270	2.298	Analyzed
								as below

Top side WWAN + 2.4G WLAN Main + BT

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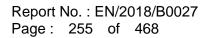
Top side WWAN + 5G WLAN Main + BT Distance Mox Mox

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	1.280	1.035	0.270	2.585	Analyzed as below
		WCDMA Band 4	0	1.360	1.035	0.270	2.665	Analyzed as below
		WCDMA Band 5	0	1.316	1.035	0.270	2.621	Analyzed as below
		LTE Band 2	0	1.298	1.035	0.270	2.603	Analyzed as below
		LTE Band 4	0	1.366	1.035	0.270	2.671	Analyzed as below
		LTE Band 5	0	1.350	1.035	0.270	2.655	Analyzed as below
		LTE Band 7	0	1.339	1.035	0.270	2.644	Analyzed as below
8	Top side	LTE Band 12	0	1.421	1.035	0.270	2.726	Analyzed as below
		LTE Band 13	0	1.332	1.035	0.270	2.637	Analyzed as below
		LTE Band 17	0	1.340	1.035	0.270	2.645	Analyzed as below
		LTE Band 26	0	1.427	1.035	0.270	2.732	Analyzed as below
		LTE Band 30	0	1.285	1.035	0.270	2.590	Analyzed as below
		LTE Band 38	0	1.249	1.035	0.270	2.554	Analyzed as below
		LTE Band 41	0	1.355	1.035	0.270	2.660	Analyzed as below
		LTE Band 66	0	1.397	1.035	0.270	2.702	Analyzed as below

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Top side WWAN + 2.4G WLAN Main

Position	Conditions	SAR Value	Coordinates (cm)			ΣSAR	Peak Location	SPLSR	Simultaneous Transmission
FOSILION	Conditions	(W/kg)	x	у	Z	(W/kg)	Separation Distance (mm)	OF LOIX	SAR Test
	WLAN Main	0.631	-0.64	-5.18	-0.22	-	-	-	-
	WCDMA Band 2	1.280	-0.95	12.90	-0.30	1.911	180.83	0.015	SPLSR ≤ 0.04, Not required
	WCDMA Band 4	1.360	-0.80	13.05	-0.30	1.991	182.31	0.015	SPLSR ≤ 0.04, Not required
	WCDMA Band 5	1.316	-0.66	9.92	-0.27	1.947	151.00	0.018	SPLSR ≤ 0.04, Not required
	LTE Band 2	1.298	-0.95	12.74	-0.52	1.929	179.25	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 4	1.366	-0.80	13.05	-0.53	1.997	182.33	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 5	1.350	-0.36	9.19	-0.38	1.981	143.74	0.019	SPLSR ≤ 0.04, Not required
Top side	LTE Band 12	1.339	-0.54	13.12	-0.39	1.970	183.01	0.015	SPLSR ≤ 0.04, Not required
Top side	LTE Band 12	1.421	-0.35	9.05	-0.38	2.052	142.34	0.021	SPLSR ≤ 0.04, Not required
	LTE Band 17	1.332	-0.35	9.05	-0.39	1.963	142.34	0.019	SPLSR ≤ 0.04, Not required
	LTE Band 25	1.340	-0.35	9.20	-0.38	1.971	143.84	0.019	SPLSR ≤ 0.04, Not required
	LTE Band 26	1.427	-0.36	9.34	-0.38	2.058	145.24	0.020	SPLSR ≤ 0.04, Not required
	LTE Band 30	1.285	-0.90	12.90	-0.34	1.916	180.82	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 38	1.249	-1.34	12.54	-0.14	1.880	177.34	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 41	1.355	-0.68	13.14	-0.35	1.986	183.21	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 66	1.397	-0.80	12.90	-0.53	2.028	180.83	0.016	SPLSR ≤ 0.04, Not required

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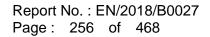
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Top side WWAN + 2.4G WLAN Aux

Position	Conditions	SAR Value	Coordinates (cm)			ΣSAR	Peak Location	SPLSR	Simultaneous Transmission
FOSILION	Conditions	(W/kg)	х	у	Z	(W/kg)	Separation Distance (mm)	OF LOIX	SAR Test
	WLAN Aux	1.193	-0.42	-13.66	-0.21	-	-	-	-
	WCDMA Band 2	1.280	-0.95	12.90	-0.30	2.473	265.65	0.015	SPLSR ≤ 0.04, Not required
	WCDMA Band 4	1.360	-0.80	13.05	-0.30	2.553	267.13	0.015	SPLSR ≤ 0.04, Not required
	WCDMA Band 5	1.316	-0.66	9.92	-0.27	2.509	235.81	0.017	SPLSR ≤ 0.04, Not required
	LTE Band 2	1.298	-0.95	12.74	-0.52	2.491	264.07	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 4	1.366	-0.80	13.05	-0.53	2.559	267.15	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 5	1.350	-0.36	9.19	-0.38	2.543	228.51	0.018	SPLSR ≤ 0.04, Not required
Tan aida	LTE Band 5	1.339	-0.54	13.12	-0.39	2.532	267.81	0.015	SPLSR ≤ 0.04, Not required
Top side	LTE Band 12	1.421	-0.35	9.05	-0.38	2.614	227.11	0.019	SPLSR ≤ 0.04, Not required
	LTE Band 17	1.332	-0.35	9.05	-0.39	2.525	227.11	0.018	SPLSR ≤ 0.04, Not required
	LTE Band 25	1.340	-0.35	9.20	-0.38	2.533	228.61	0.018	SPLSR ≤ 0.04, Not required
	LTE Band 26	1.427	-0.36	9.34	-0.38	2.620	230.01	0.018	SPLSR ≤ 0.04, Not required
	LTE Band 30	1.285	-0.90	12.90	-0.34	2.478	265.65	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 38	1.249	-1.34	12.54	-0.14	2.442	262.16	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 41	1.355	-0.68	13.14	-0.35	2.548	268.02	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 66	1.397	-0.80	12.90	-0.53	2.590	265.65	0.016	SPLSR ≤ 0.04, Not required

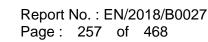
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Top side WWAN + 5G WLAN Main

Position	Conditions	SAR Value	Coordinates (cm)			ΣSAR	Peak Location	SPLSR	Simultaneous Transmission
POSICION	Conditions	(W/kg)	х	у	z	(W/kg)	Separation Distance (mm)	OF LOIX	SAR Test
	WLAN Main	1.035	-0.50	-5.68	-0.21	-	-	-	-
	WCDMA Band 2	1.280	-0.95	12.90	-0.30	2.315	185.86	0.019	SPLSR ≤ 0.04, Not required
	WCDMA Band 4	1.360	-0.80	13.05	-0.30	2.395	187.33	0.020	SPLSR ≤ 0.04, Not required
	WCDMA Band 5	1.316	-0.66	9.92	-0.27	2.351	156.01	0.023	SPLSR ≤ 0.04, Not required
	LTE Band 2	1.298	-0.95	12.74	-0.52	2.333	184.28	0.019	SPLSR ≤ 0.04, Not required
	LTE Band 4	1.366	-0.80	13.05	-0.53	2.401	187.35	0.020	SPLSR ≤ 0.04, Not required
	LTE Band 5	1.350	-0.36	9.19	-0.38	2.385	148.72	0.025	SPLSR ≤ 0.04, Not required
Top side	LTE Band 5	1.339	-0.54	13.12	-0.39	2.374	188.01	0.019	SPLSR ≤ 0.04, Not required
TOP SIDE	LTE Band 12	1.421	-0.35	9.05	-0.38	2.456	147.32	0.026	SPLSR ≤ 0.04, Not required
	LTE Band 17	1.332	-0.35	9.05	-0.39	2.367	147.32	0.025	SPLSR ≤ 0.04, Not required
	LTE Band 25	1.340	-0.35	9.20	-0.38	2.375	148.82	0.025	SPLSR ≤ 0.04, Not required
	LTE Band 26	1.427	-0.36	9.34	-0.38	2.462	150.22	0.026	SPLSR ≤ 0.04, Not required
	LTE Band 30	1.285	-0.90	12.90	-0.34	2.320	185.85	0.019	SPLSR ≤ 0.04, Not required
	LTE Band 38	1.249	-1.34	12.54	-0.14	2.284	182.40	0.019	SPLSR ≤ 0.04, Not required
	LTE Band 41	1.355	-0.68	13.14	-0.35	2.390	188.21	0.020	SPLSR ≤ 0.04, Not required
	LTE Band 66	1.397	-0.80	12.90	-0.53	2.432	185.85	0.020	SPLSR ≤ 0.04, Not required

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Top side WWAN + 5G WLAN Aux

Position	Conditions	SAR Value	Cod	ordinates (cm)	ΣSAR	Peak Location	SPLSR	Simultaneous Transmission
FOSILION	Conditions	(W/kg)	х	у	z	(W/kg)	Separation Distance (mm)	3FL3K	SAR Test
	WLAN Aux	1.014	-0.40	-14.10	-0.21	-	-	-	-
	WCDMA Band 2	1.280	-0.95	12.90	-0.30	2.294	270.06	0.013	SPLSR ≤ 0.04, Not required
	WCDMA Band 4	1.360	-0.80	13.05	-0.30	2.374	271.53	0.013	SPLSR ≤ 0.04, Not required
	WCDMA Band 5	1.316	-0.66	9.92	-0.27	2.330	240.21	0.015	SPLSR ≤ 0.04, Not required
	LTE Band 2	1.298	-0.95	12.74	-0.52	2.312	268.47	0.013	SPLSR ≤ 0.04, Not required
	LTE Band 4	1.366	-0.80	13.05	-0.53	2.380	271.55	0.014	SPLSR ≤ 0.04, Not required
	LTE Band 5	1.350	-0.36	9.19	-0.38	2.364	232.91	0.016	SPLSR ≤ 0.04, Not required
Top side	LTE Band 5	1.339	-0.54	13.12	-0.39	2.353	272.21	0.013	SPLSR ≤ 0.04, Not required
Top Side	LTE Band 12	1.421	-0.35	9.05	-0.38	2.435	231.51	0.016	SPLSR ≤ 0.04, Not required
	LTE Band 17	1.332	-0.35	9.05	-0.39	2.346	231.51	0.016	SPLSR ≤ 0.04, Not required
	LTE Band 25	1.340	-0.35	9.20	-0.38	2.354	233.01	0.016	SPLSR ≤ 0.04, Not required
	LTE Band 26	1.427	-0.36	9.34	-0.38	2.441	234.41	0.016	SPLSR ≤ 0.04, Not required
	LTE Band 30	1.285	-0.90	12.90	-0.34	2.299	270.05	0.013	SPLSR ≤ 0.04, Not required
	LTE Band 38	1.249	-1.34	12.54	-0.14	2.263	266.57	0.013	SPLSR ≤ 0.04, Not required
	LTE Band 41	1.355	-0.68	13.14	-0.35	2.369	272.42	0.013	SPLSR ≤ 0.04, Not required
	LTE Band 66	1.397	-0.80	12.90	-0.53	2.411	270.05	0.014	SPLSR ≤ 0.04, Not required

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Top side WWAN + BT

Position	Conditions	SAR Value	Coordinates (cm)			ΣSAR	Peak Location	SPLSR	Simultaneous Transmission
FOSILION	Conditions	(W/kg)	х	у	z	(W/kg)	Separation Distance (mm)	3FL3K	SAR Test
	Bluetooth	0.270	-0.52	-13.68	-0.21	-	-	-	-
	WCDMA Band 2	1.280	-0.95	12.90	-0.30	1.550	265.84	0.007	SPLSR ≤ 0.04, Not required
	WCDMA Band 4	1.360	-0.80	13.05	-0.30	1.630	267.32	0.008	SPLSR ≤ 0.04, Not required
	WCDMA Band 5	1.316	-0.66	9.92	-0.27	1.586	236.00	0.008	SPLSR ≤ 0.04, Not required
	LTE Band 2	1.298	-0.95	12.74	-0.52	1.568	264.25	0.007	SPLSR ≤ 0.04, Not required
	LTE Band 4	1.366	-0.80	13.05	-0.53	1.636	267.33	0.008	SPLSR ≤ 0.04, Not required
	LTE Band 5	1.350	-0.36	9.19	-0.38	1.620	228.71	0.009	SPLSR ≤ 0.04, Not required
Top side	LTE Band 7	1.339	-0.54	13.12	-0.39	1.609	268.01	0.008	SPLSR ≤ 0.04, Not required
TOP Side	LTE Band 12	1.421	-0.35	9.05	-0.38	1.691	227.31	0.010	SPLSR ≤ 0.04, Not required
	LTE Band 13	1.332	-0.35	9.05	-0.39	1.602	227.31	0.009	SPLSR ≤ 0.04, Not required
	LTE Band 17	1.340	-0.35	9.20	-0.38	1.610	228.81	0.009	SPLSR ≤ 0.04, Not required
	LTE Band 26	1.427	-0.36	9.34	-0.38	1.697	230.21	0.010	SPLSR ≤ 0.04, Not required
	LTE Band 30	1.285	-0.90	12.90	-0.34	1.555	265.83	0.007	SPLSR ≤ 0.04, Not required
	LTE Band 38	1.249	-1.34	12.54	-0.14	1.519	262.33	0.007	SPLSR ≤ 0.04, Not required
	LTE Band 41	1.355	-0.68	13.14	-0.35	1.625	268.21	0.008	SPLSR ≤ 0.04, Not required
	LTE Band 66	1.397	-0.80	12.90	-0.53	1.667	265.83	0.008	SPLSR ≤ 0.04, Not required

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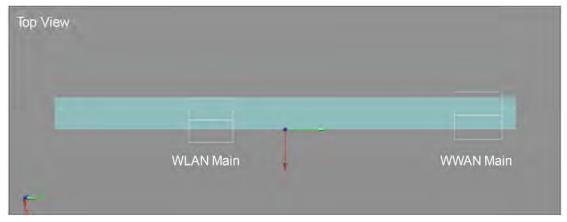
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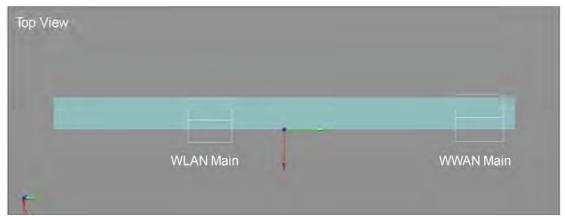


Top_2.4G_Main→WWAN

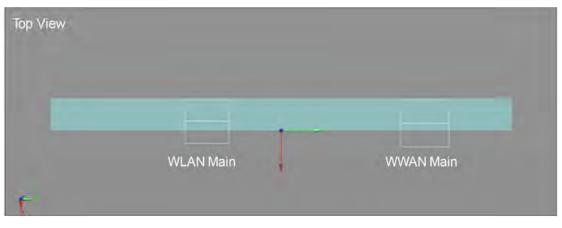
WCDMA Band 2



WCDMA Band 4



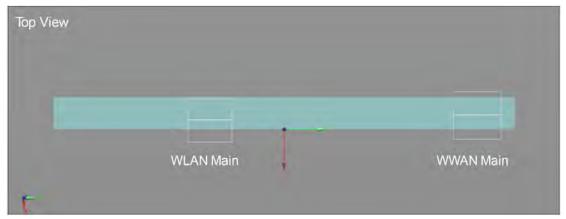
WCDMA Band 5



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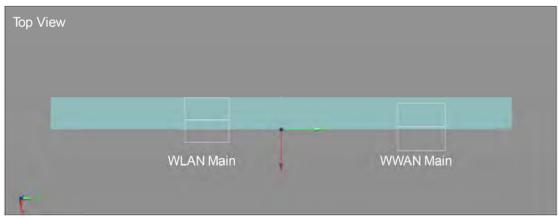




LTE Band 4



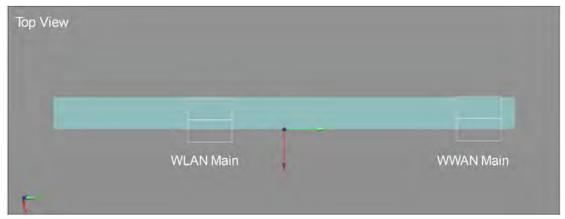
LTE Band 5



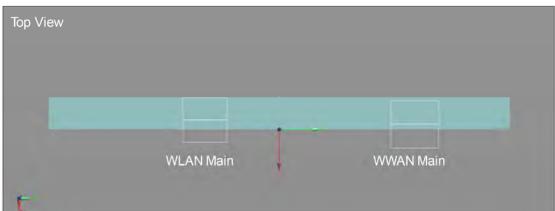
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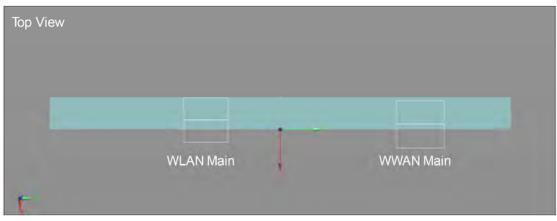








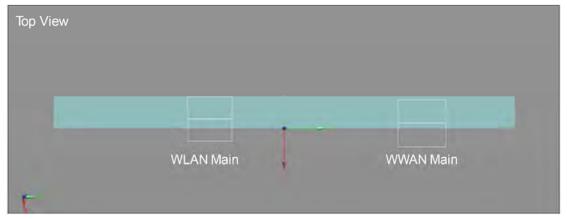
LTE Band 13



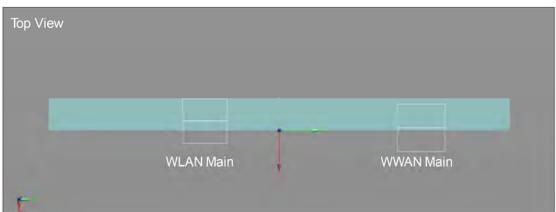
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LTE Band 26



LTE Band 30



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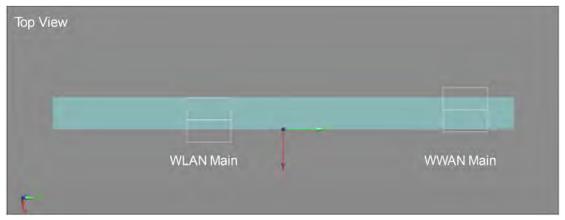
No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803/新北市五股區新北產業園區五工路 134號 SGS Taiwan Ltd.

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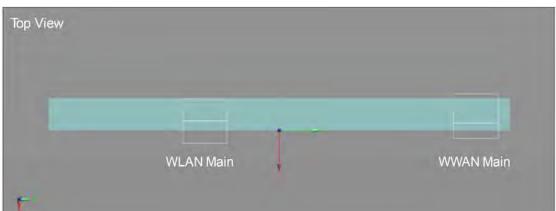


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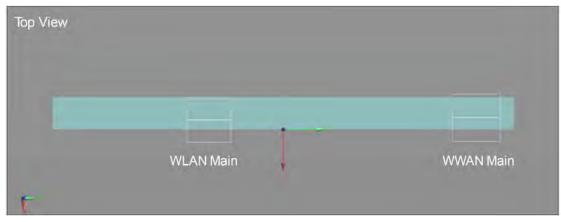
LTE Band 38



LTE Band 41



LTE Band 66



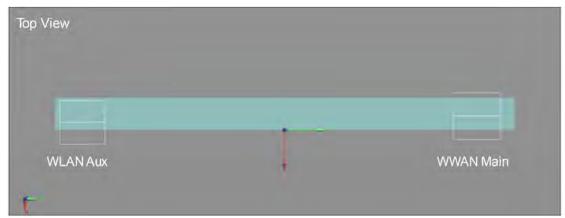
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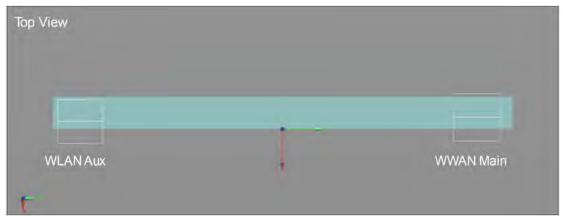


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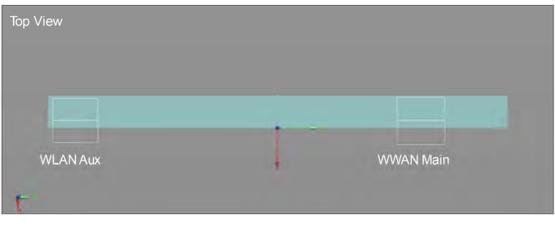
WCDMA Band 2



WCDMA Band 4



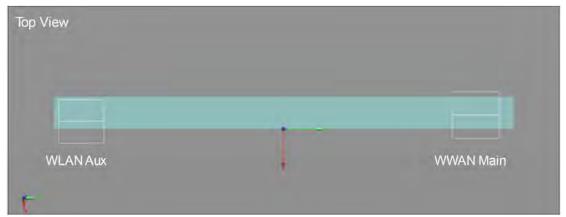
WCDMA Band 5



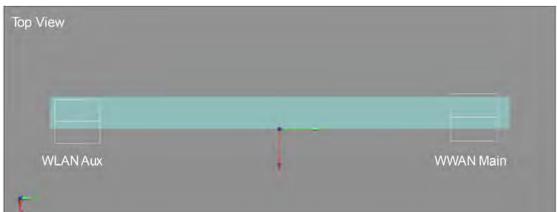
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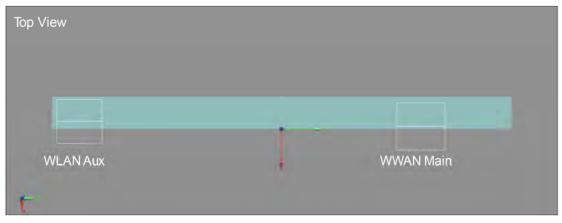




LTE Band 4



LTE Band 5



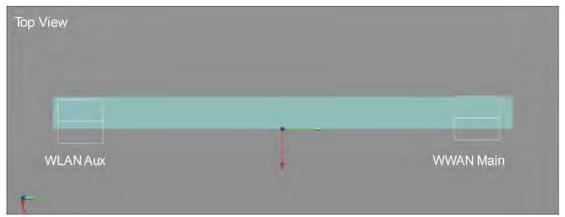
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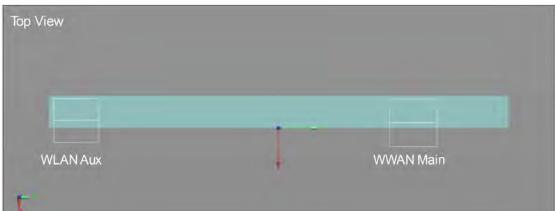


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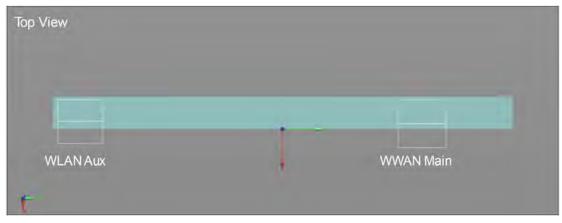
LTE Band 7







LTE Band 13



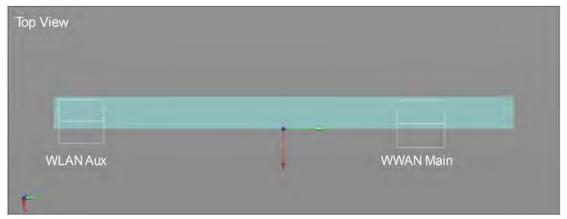
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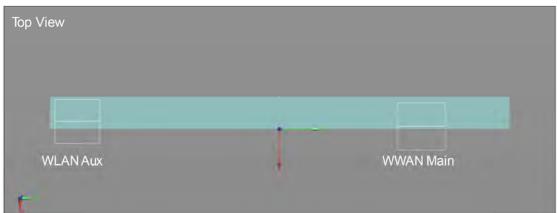


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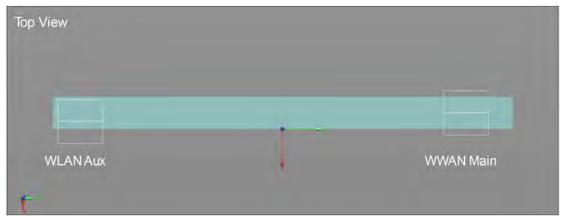
LTE Band 17



LTE Band 26



LTE Band 30



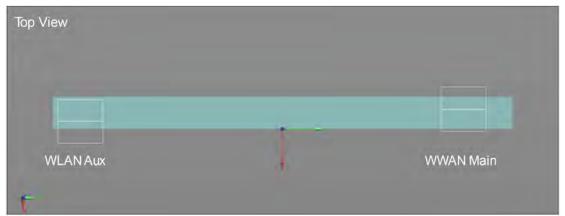
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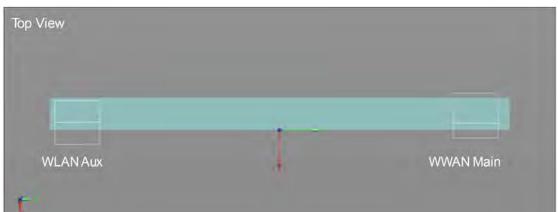


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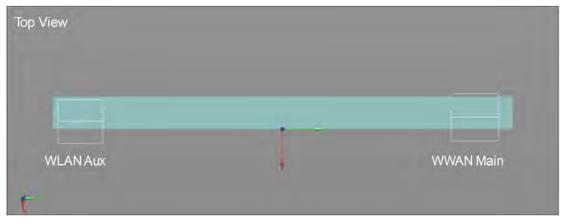
LTE Band 38



LTE Band 41



LTE Band 66



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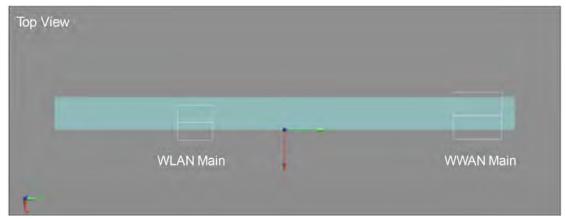
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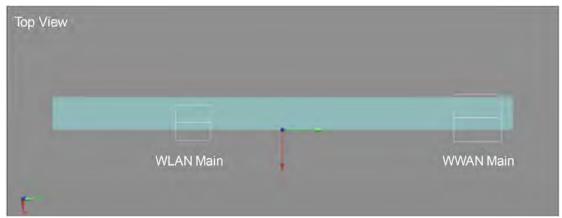


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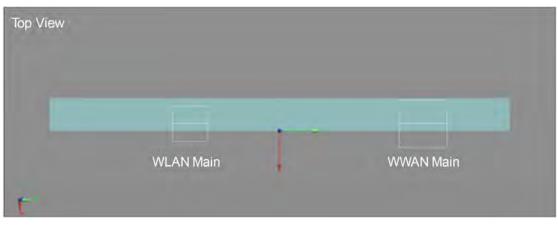
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WCDMA Band 4



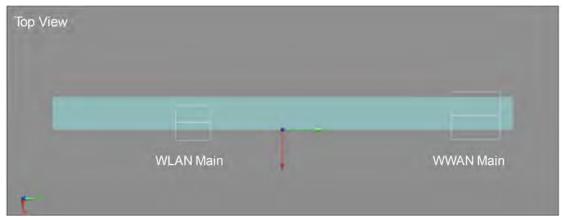
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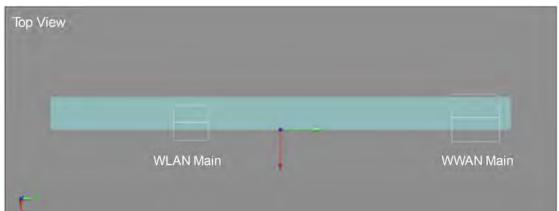
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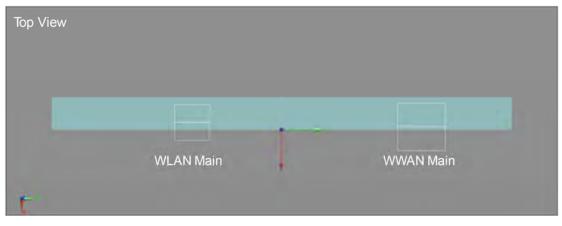




LTE Band 4



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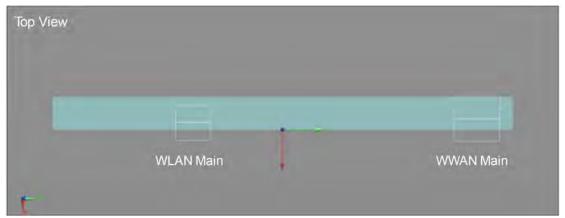
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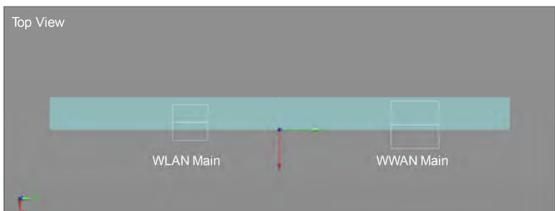
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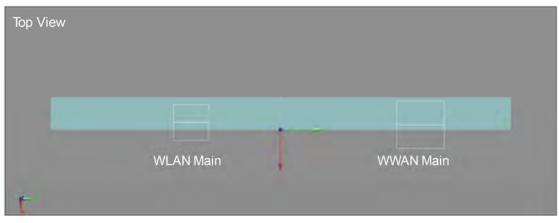








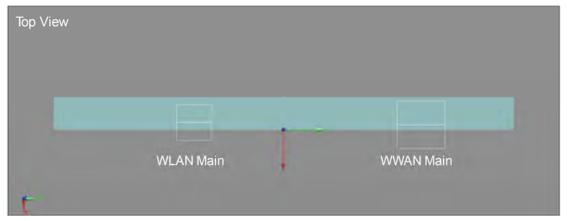
LTE Band 13



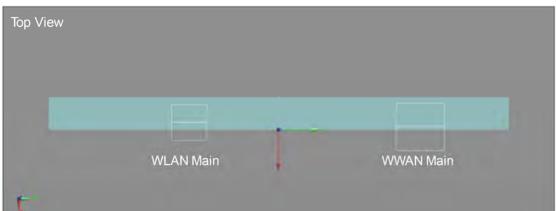
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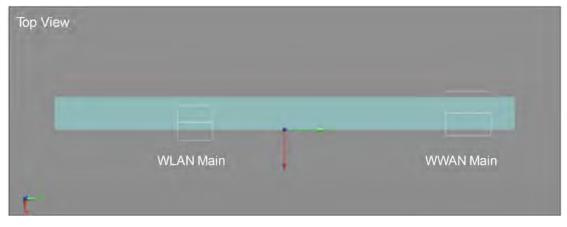




LTE Band 26



LTE Band 30



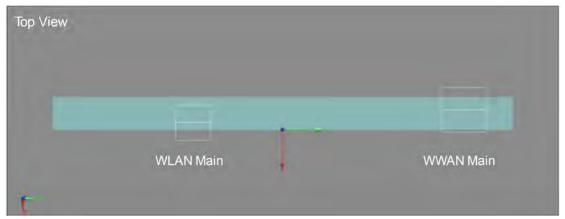
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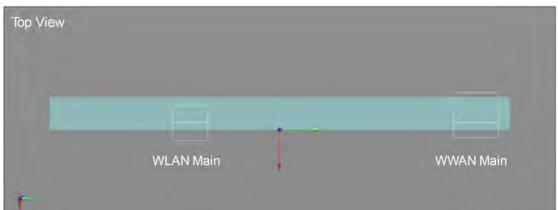


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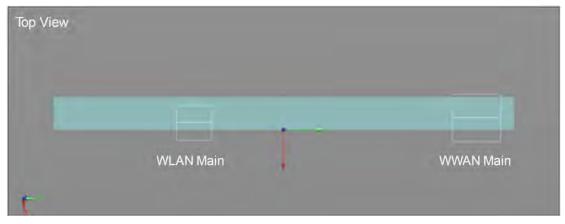
LTE Band 38



LTE Band 41



LTE Band 66



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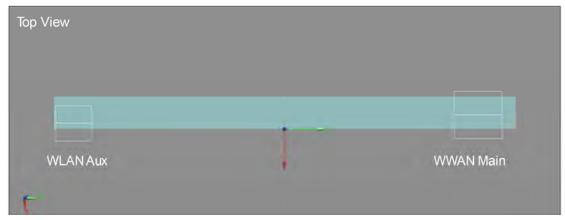
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Top_5G_Aux→WWAN

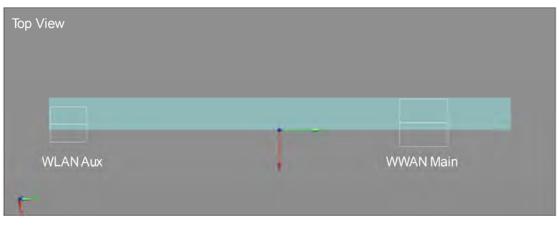
WCDMA Band 2



WCDMA Band 4

Top View	
WLAN Aux	WWAN Main
e.	

WCDMA Band 5



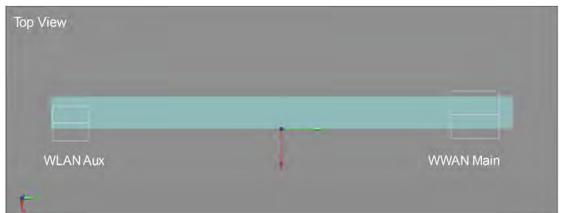
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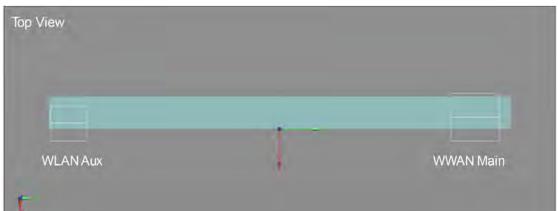


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LTE Band 2



LTE Band 4



LTE Band 5

Top View			
	-		
WLAN Aux	ik.	WWAN Main	

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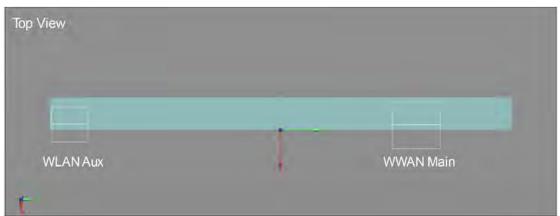


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LTE Band 7



LTE Band 12



LTE Band 13

Top View			
WLAN Aux	1	WWAN Main	
t			

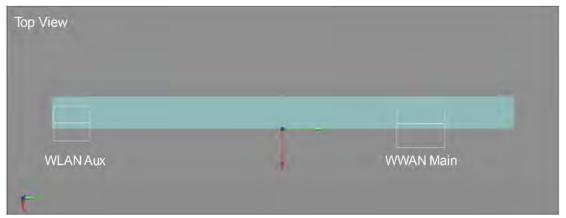
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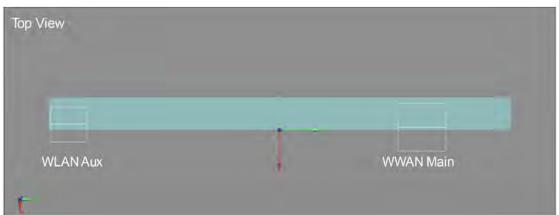


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LTE Band 17



LTE Band 26



LTE Band 30



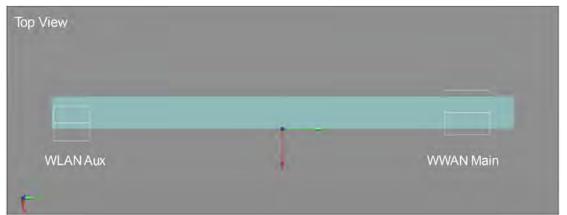
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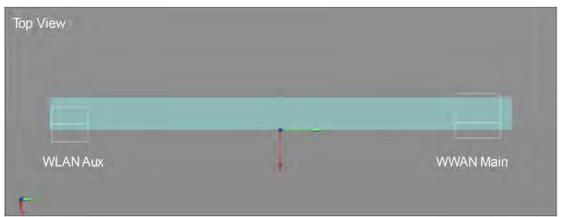


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LTE Band 38



LTE Band 41



LTE Band 66

Top View	
WLANAux	WWAN Main
ť	

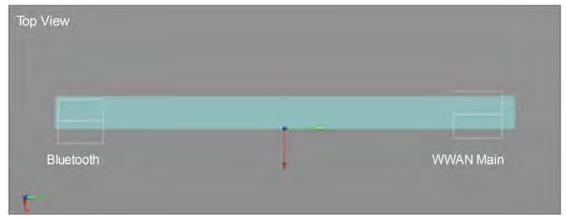
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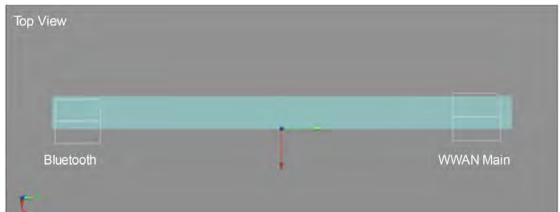


Top_BT→WWAN

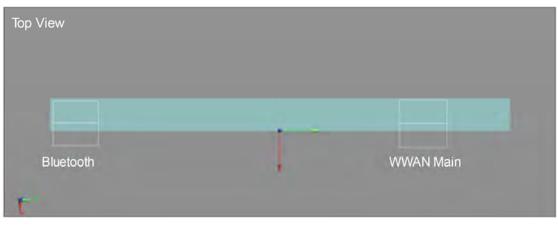
WCDMA Band 2



WCDMA Band 4



WCDMA Band 5



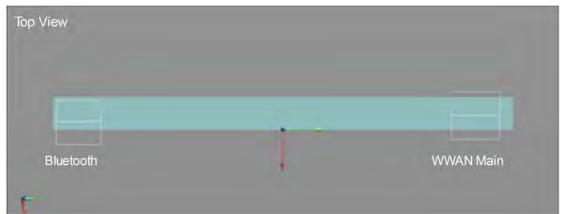
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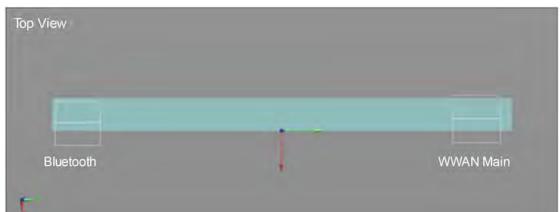


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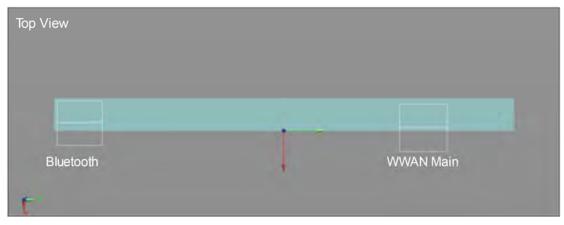
LTE Band 2



LTE Band 4



LTE Band 5



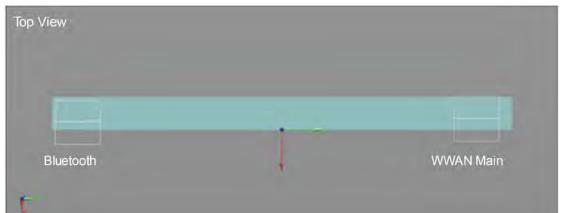
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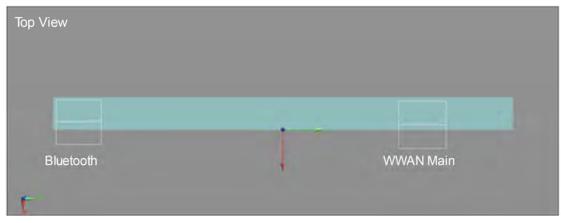
LTE Band 7



LTE Band 12



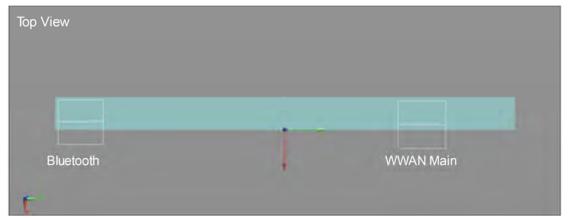
LTE Band 13



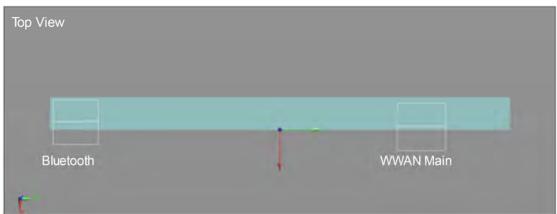
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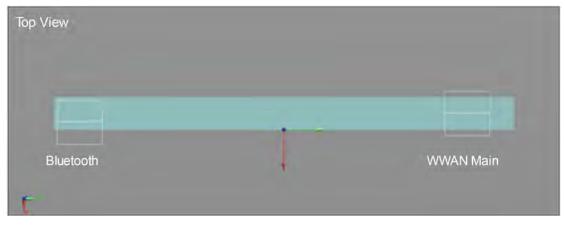




LTE Band 26



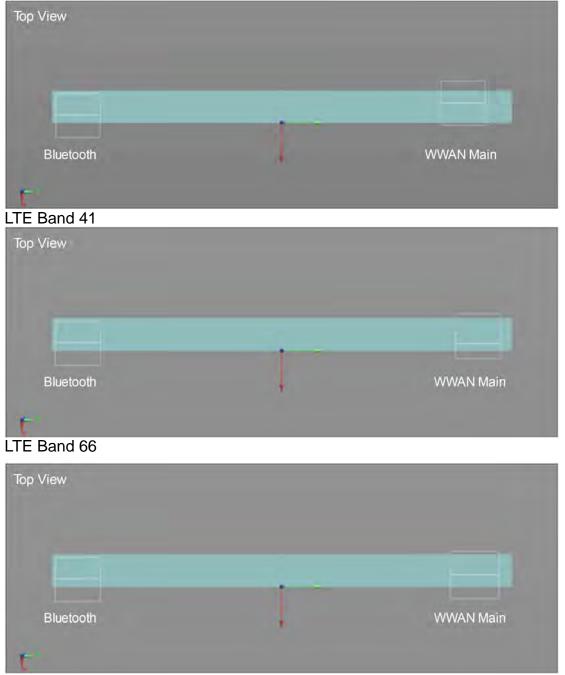
LTE Band 30



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Bottom side WWAN + 2.4G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR	
		WCDMA Band 2	0	0.027	0.005	0.022	0.054	ΣSAR<1.6, Not required	
		WCDMA Band 4	0	0.031	0.005	0.022	0.058	ΣSAR<1.6, Not required	
		WCDMA Band 5	0	0.029	0.005	0.022	0.056	ΣSAR<1.6, Not required	
		LTE Band 2	0	0.027	0.005	0.022	0.054	ΣSAR<1.6, Not required	
		LTE Band 4	0	0.033	0.005	0.022	0.060	ΣSAR<1.6, Not required	
		LTE Band 5	0	0.033	0.005	0.022	0.060	ΣSAR<1.6, Not required	
	Bottom side	LTE Band 7	0	0.036	0.005	0.022	0.063	ΣSAR<1.6, Not required	
9			LTE Band 12	0	0.032	0.005	0.022	0.059	ΣSAR<1.6, Not required
		LTE Band 13	0	0.034	0.005	0.022	0.061	ΣSAR<1.6, Not required	
		LTE Band 17	0	0.047	0.005	0.022	0.074	ΣSAR<1.6, Not required	
		LTE Band 26	0	0.033	0.005	0.022	0.060	ΣSAR<1.6, Not required	
		LTE Band 30	0	0.029	0.005	0.022	0.056	ΣSAR<1.6, Not required	
		LTE Band 38	0	0.026	0.005	0.022	0.053	ΣSAR<1.6, Not required	
		LTE Band 41	0	0.035	0.005	0.022	0.062	ΣSAR<1.6, Not required	
		LTE Band 66	0	0.029	0.005	0.022	0.056	ΣSAR<1.6, Not required	

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Bottom side W	'WAN +	5G WLAN
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No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR	
		WCDMA Band 2	0	0.027	0.011	0.021	0.059	ΣSAR<1.6, Not required	
		WCDMA Band 4	0	0.031	0.011	0.021	0.063	ΣSAR<1.6, Not required	
		WCDMA Band 5	0	0.029	0.011	0.021	0.061	ΣSAR<1.6, Not required	
		LTE Band 2	0	0.027	0.011	0.021	0.059	ΣSAR<1.6, Not required	
		LTE Band 4	0	0.033	0.011	0.021	0.065	ΣSAR<1.6, Not required	
		LTE Band 5	0	0.033	0.011	0.021	0.065	ΣSAR<1.6, Not required	
	Bottom side	LTE Band 7	0	0.036	0.011	0.021	0.068	ΣSAR<1.6, Not required	
10		LTE Band 12	0	0.032	0.011	0.021	0.064	ΣSAR<1.6, Not required	
			LTE Band 13	0	0.034	0.011	0.021	0.066	ΣSAR<1.6, Not required
		LTE Band 17	0	0.047	0.011	0.021	0.079	ΣSAR<1.6, Not required	
			LTE Band 26	0	0.033	0.011	0.021	0.065	ΣSAR<1.6, Not required
			LTE Band 30	0	0.029	0.011	0.021	0.061	ΣSAR<1.6, Not required
		LTE Band 38	0	0.026	0.011	0.021	0.058	ΣSAR<1.6, Not required	
		LTE Band 41	0	0.035	0.011	0.021	0.067	ΣSAR<1.6, Not required	
		LTE Band 66	0	0.029	0.011	0.021	0.061	ΣSAR<1.6, Not required	

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No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.027	0.005	0.005	0.037	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.031	0.005	0.005	0.041	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.029	0.005	0.005	0.039	ΣSAR<1.6, Not required
		LTE Band 2	0	0.027	0.005	0.005	0.037	ΣSAR<1.6, Not required
		LTE Band 4	0	0.033	0.005	0.005	0.043	ΣSAR<1.6, Not required
		LTE Band 5	0	0.033	0.005	0.005	0.043	ΣSAR<1.6, Not required
	Bottom side	LTE Band 7	0	0.036	0.005	0.005	0.046	ΣSAR<1.6, Not required
11		LTE Band 12	0	0.032	0.005	0.005	0.042	ΣSAR<1.6, Not required
		LTE Band 13	0	0.034	0.005	0.005	0.044	ΣSAR<1.6, Not required
		LTE Band 17	0	0.047	0.005	0.005	0.057	ΣSAR<1.6, Not required
		LTE Band 26	0	0.033	0.005	0.005	0.043	ΣSAR<1.6, Not required
		LTE Band 30	0	0.029	0.005	0.005	0.039	ΣSAR<1.6, Not required
		LTE Band 38	0	0.026	0.005	0.005	0.036	ΣSAR<1.6, Not required
		LTE Band 41	0	0.035	0.005	0.005	0.045	ΣSAR<1.6, Not required
		LTE Band 66	0	0.029	0.005	0.005	0.039	ΣSAR<1.6, Not required

Bottom side WWAN + 2.4G WLAN Main + BT

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No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.027	0.011	0.005	0.043	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.031	0.011	0.005	0.047	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.029	0.011	0.005	0.045	ΣSAR<1.6, Not required
		LTE Band 2	0	0.027	0.011	0.005	0.043	ΣSAR<1.6, Not required
		LTE Band 4	0	0.033	0.011	0.005	0.049	ΣSAR<1.6, Not required
		LTE Band 5	0	0.033	0.011	0.005	0.049	ΣSAR<1.6, Not required
	Bottom side	LTE Band 7	0	0.036	0.011	0.005	0.052	ΣSAR<1.6, Not required
12		LTE Band 12	0	0.032	0.011	0.005	0.048	ΣSAR<1.6, Not required
		LTE Band 13	0	0.034	0.011	0.005	0.050	ΣSAR<1.6, Not required
		LTE Band 17	0	0.047	0.011	0.005	0.063	ΣSAR<1.6, Not required
		LTE Band 26	0	0.033	0.011	0.005	0.049	ΣSAR<1.6, Not required
		LTE Band 30	0	0.029	0.011	0.005	0.045	ΣSAR<1.6, Not required
		LTE Band 38	0	0.026	0.011	0.005	0.042	ΣSAR<1.6, Not required
		LTE Band 41	0	0.035	0.011	0.005	0.051	ΣSAR<1.6, Not required
		LTE Band 66	0	0.029	0.011	0.005	0.045	ΣSAR<1.6, Not required

Bottom side WWAN + 5G WLAN Main + BT

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Right side WWAN + 2.4G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.468	0.004	0.021	0.493	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.503	0.004	0.021	0.528	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.497	0.004	0.021	0.522	ΣSAR<1.6, Not required
		LTE Band 2	0	0.480	0.004	0.021	0.505	ΣSAR<1.6, Not required
		LTE Band 4	0	0.511	0.004	0.021	0.536	ΣSAR<1.6, Not required
		LTE Band 5	0	0.511	0.004	0.021	0.536	ΣSAR<1.6, Not required
		LTE Band 7	0	0.535	0.004	0.021	0.560	ΣSAR<1.6, Not required
13	Right side	LTE Band 12	0	0.502	0.004	0.021	0.527	ΣSAR<1.6, Not required
		LTE Band 13	0	0.510	0.004	0.021	0.535	ΣSAR<1.6, Not required
		LTE Band 17	0	0.513	0.004	0.021	0.538	ΣSAR<1.6, Not required
		LTE Band 26	0	0.548	0.004	0.021	0.573	ΣSAR<1.6, Not required
		LTE Band 30	0	0.507	0.004	0.021	0.532	ΣSAR<1.6, Not required
		LTE Band 38	0	0.572	0.004	0.021	0.597	ΣSAR<1.6, Not required
		LTE Band 41	0	0.546	0.004	0.021	0.571	ΣSAR<1.6, Not required
		LTE Band 66	0	0.509	0.004	0.021	0.534	ΣSAR<1.6, Not required

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Right side WWAN + 5G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.468	0.011	0.018	0.497	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.503	0.011	0.018	0.532	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.497	0.011	0.018	0.526	ΣSAR<1.6, Not required
		LTE Band 2	0	0.480	0.011	0.018	0.509	ΣSAR<1.6, Not required
		LTE Band 4	0	0.511	0.011	0.018	0.540	ΣSAR<1.6, Not required
		LTE Band 5	0	0.511	0.011	0.018	0.540	ΣSAR<1.6, Not required
		LTE Band 7	0	0.535	0.011	0.018	0.564	ΣSAR<1.6, Not required
14	Right side	LTE Band 12	0	0.502	0.011	0.018	0.531	ΣSAR<1.6, Not required
		LTE Band 13	0	0.510	0.011	0.018	0.539	ΣSAR<1.6, Not required
		LTE Band 17	0	0.513	0.011	0.018	0.542	ΣSAR<1.6, Not required
		LTE Band 26	0	0.548	0.011	0.018	0.577	ΣSAR<1.6, Not required
		LTE Band 30	0	0.507	0.011	0.018	0.536	ΣSAR<1.6, Not required
		LTE Band 38	0	0.572	0.011	0.018	0.601	ΣSAR<1.6, Not required
		LTE Band 41	0	0.546	0.011	0.018	0.575	ΣSAR<1.6, Not required
		LTE Band 66	0	0.509	0.011	0.018	0.538	ΣSAR<1.6, Not required

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No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.468	0.004	0.003	0.475	ΣSAR<1.6,
			-		0.001	0.000	00	Not required
		WCDMA Band 4	0	0.503	0.004	0.003	0.510	ΣSAR<1.6,
								Not required ΣSAR<1.6,
		WCDMA Band 5	0	0.497	0.004	0.003	0.504	Not required
								ΣSAR<1.6,
		LTE Band 2	0	0.480	0.004	0.003	0.487	Not required
			â	0.544	0.004	0.000	0.540	ΣSAR<1.6,
		LTE Band 4	0	0.511	0.004	0.003	0.518	Not required
		LTE Band 5	0	0.511	0.004	0.003	0.518	ΣSAR<1.6,
		LTL Daliu J	0	0.511	0.004	0.003	0.518	Not required
		LTE Band 7	0	0.535	0.004	0.003	0.542	ΣSAR<1.6,
				0.000	0.001	0.000	0.0.1	Not required
15	Right side	LTE Band 12	0	0.502	0.004	0.003	0.509	ΣSAR<1.6,
	_							Not required ΣSAR<1.6,
		LTE Band 13	0	0.510	0.004	0.003	0.517	Not required
								ΣSAR<1.6,
		LTE Band 17	0	0.513	0.004	0.003	0.520	Not required
			0	0 5 40	0.004	0.000	0.555	ΣSAR<1.6,
		LTE Band 26	0	0.548	0.004	0.003	0.555	Not required
		LTE Band 30	0	0.507	0.004	0.003	0.514	ΣSAR<1.6,
		LTE Dand 50	0	0.507	0.004	0.005	0.514	Not required
		LTE Band 38	0	0.572	0.004	0.003	0.579	ΣSAR<1.6,
								Not required
		LTE Band 41	0	0.546	0.004	0.003	0.553	ΣSAR<1.6,
								Not required
		LTE Band 66	0	0.509	0.004	0.003	0.516	ΣSAR<1.6,
L								Not required

Right side WWAN + 2.4G WLAN Main + BT

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No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.468	0.011	0.003	0.482	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.503	0.011	0.003	0.517	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.497	0.011	0.003	0.511	ΣSAR<1.6, Not required
		LTE Band 2	0	0.480	0.011	0.003	0.494	ΣSAR<1.6, Not required
		LTE Band 4	0	0.511	0.011	0.003	0.525	ΣSAR<1.6, Not required
		LTE Band 5	0	0.511	0.011	0.003	0.525	ΣSAR<1.6, Not required
		LTE Band 7	0	0.535	0.011	0.003	0.549	ΣSAR<1.6, Not required
16	Right side	LTE Band 12	0	0.502	0.011	0.003	0.516	ΣSAR<1.6, Not required
		LTE Band 13	0	0.510	0.011	0.003	0.524	ΣSAR<1.6, Not required
		LTE Band 17	0	0.513	0.011	0.003	0.527	ΣSAR<1.6, Not required
		LTE Band 26	0	0.548	0.011	0.003	0.562	ΣSAR<1.6, Not required
		LTE Band 30	0	0.507	0.011	0.003	0.521	ΣSAR<1.6, Not required
		LTE Band 38	0	0.572	0.011	0.003	0.586	ΣSAR<1.6, Not required
		LTE Band 41	0	0.546	0.011	0.003	0.560	ΣSAR<1.6, Not required
		LTE Band 66	0	0.509	0.011	0.003	0.523	ΣSAR<1.6, Not required

Right side WWAN + 5G WLAN Main + BT

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Left side WWAN + 2.4G WLA	Ν
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No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.042	0.125	0.395	0.562	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.056	0.125	0.395	0.576	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.055	0.125	0.395	0.575	ΣSAR<1.6, Not required
		LTE Band 2	0	0.045	0.125	0.395	0.565	ΣSAR<1.6, Not required
		LTE Band 4	0	0.059	0.125	0.395	0.579	ΣSAR<1.6, Not required
		LTE Band 5	0	0.063	0.125	0.395	0.583	ΣSAR<1.6, Not required
		LTE Band 7	0	0.062	0.125	0.395	0.582	ΣSAR<1.6, Not required
17	Left side	LTE Band 12	0	0.055	0.125	0.395	0.575	ΣSAR<1.6, Not required
		LTE Band 13	0	0.050	0.125	0.395	0.570	ΣSAR<1.6, Not required
		LTE Band 17	0	0.073	0.125	0.395	0.593	ΣSAR<1.6, Not required
		LTE Band 26	0	0.062	0.125	0.395	0.582	ΣSAR<1.6, Not required
		LTE Band 30	0	0.056	0.125	0.395	0.576	ΣSAR<1.6, Not required
		LTE Band 38	0	0.048	0.125	0.395	0.568	ΣSAR<1.6, Not required
		LTE Band 41	0	0.065	0.125	0.395	0.585	ΣSAR<1.6, Not required
		LTE Band 66	0	0.059	0.125	0.395	0.579	ΣSAR<1.6, Not required

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Left side WWAN + 5G WLAN

No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Max. WLAN Aux	SAR Sum	SPLSR
		WCDMA Band 2	0	0.042	0.186	0.187	0.415	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.056	0.186	0.187	0.429	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.055	0.186	0.187	0.428	ΣSAR<1.6, Not required
		LTE Band 2	0	0.045	0.186	0.187	0.418	ΣSAR<1.6, Not required
		LTE Band 4	0	0.059	0.186	0.187	0.432	ΣSAR<1.6, Not required
		LTE Band 5	0	0.063	0.186	0.187	0.436	ΣSAR<1.6, Not required
		LTE Band 7	0	0.062	0.186	0.187	0.435	ΣSAR<1.6, Not required
18	Left side	LTE Band 12	0	0.055	0.186	0.187	0.428	ΣSAR<1.6, Not required
		LTE Band 13	0	0.050	0.186	0.187	0.423	ΣSAR<1.6, Not required
		LTE Band 17	0	0.073	0.186	0.187	0.446	ΣSAR<1.6, Not required
		LTE Band 26	0	0.062	0.186	0.187	0.435	ΣSAR<1.6, Not required
		LTE Band 30	0	0.056	0.186	0.187	0.429	ΣSAR<1.6, Not required
		LTE Band 38	0	0.048	0.186	0.187	0.421	ΣSAR<1.6, Not required
		LTE Band 41	0	0.065	0.186	0.187	0.438	ΣSAR<1.6, Not required
		LTE Band 66	0	0.059	0.186	0.187	0.432	ΣSAR<1.6, Not required

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No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.042	0.125	0.077	0.244	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.056	0.125	0.077	0.258	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.055	0.125	0.077	0.257	ΣSAR<1.6, Not required
		LTE Band 2	0	0.045	0.125	0.077	0.247	ΣSAR<1.6, Not required
		LTE Band 4	0	0.059	0.125	0.077	0.261	ΣSAR<1.6, Not required
		LTE Band 5	0	0.063	0.125	0.077	0.265	ΣSAR<1.6, Not required
		LTE Band 7	0	0.062	0.125	0.077	0.264	ΣSAR<1.6, Not required
19	Left side	LTE Band 12	0	0.055	0.125	0.077	0.257	ΣSAR<1.6, Not required
		LTE Band 13	0	0.050	0.125	0.077	0.252	ΣSAR<1.6, Not required
		LTE Band 17	0	0.073	0.125	0.077	0.275	ΣSAR<1.6, Not required
		LTE Band 26	0	0.062	0.125	0.077	0.264	ΣSAR<1.6, Not required
		LTE Band 30	0	0.056	0.125	0.077	0.258	ΣSAR<1.6, Not required
		LTE Band 38	0	0.048	0.125	0.077	0.250	ΣSAR<1.6, Not required
		LTE Band 41	0	0.065	0.125	0.077	0.267	ΣSAR<1.6, Not required
		LTE Band 66	0	0.059	0.125	0.077	0.261	ΣSAR<1.6, Not required

Left side WWAN + 2.4G WLAN Main + BT

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No.	Position	Conditions	Distance (mm)	Max. WWAN	Max. WLAN Main	Bluetooth	SAR Sum	SPLSR
		WCDMA Band 2	0	0.042	0.186	0.077	0.305	ΣSAR<1.6, Not required
		WCDMA Band 4	0	0.056	0.186	0.077	0.319	ΣSAR<1.6, Not required
		WCDMA Band 5	0	0.055	0.186	0.077	0.318	ΣSAR<1.6, Not required
		LTE Band 2	0	0.045	0.186	0.077	0.308	ΣSAR<1.6, Not required
		LTE Band 4	0	0.059	0.186	0.077	0.322	ΣSAR<1.6, Not required
		LTE Band 5	0	0.063	0.186	0.077	0.326	ΣSAR<1.6, Not required
		LTE Band 7	0	0.062	0.186	0.077	0.325	ΣSAR<1.6, Not required
20	Left side	LTE Band 12	0	0.055	0.186	0.077	0.318	ΣSAR<1.6, Not required
		LTE Band 13	0	0.050	0.186	0.077	0.313	ΣSAR<1.6, Not required
		LTE Band 17	0	0.073	0.186	0.077	0.336	ΣSAR<1.6, Not required
		LTE Band 26	0	0.062	0.186	0.077	0.325	ΣSAR<1.6, Not required
		LTE Band 30	0	0.056	0.186	0.077	0.319	ΣSAR<1.6, Not required
		LTE Band 38	0	0.048	0.186	0.077	0.311	ΣSAR<1.6, Not required
		LTE Band 41	0	0.065	0.186	0.077	0.328	ΣSAR<1.6, Not required
		LTE Band 66	0	0.059	0.186	0.077	0.322	ΣSAR<1.6, Not required

Left side WWAN + 5G WLAN Main + BT

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because either the sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is \leq 0.04 for all circumstances that require SPLSR calculation.

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4. Instruments List

Manufacturer	Device	Туре	Serial number	Date of last calibration	Date of next calibration
SPEAG	Dosimetric E-Field Probe	EX3DV4	3770	Apr.25,2018	Apr.24,2019
		D750V3	1015	Aug.23,2018	Aug.22,2019
		D835V2	4d063	Aug.23,2018	Aug.22,2019
	System Validation Dipole	D1750V2	1008	Aug.30,2018	Aug.29,2019
SPEAG		D1900V2	5d173	Apr.25,2018	Apr.24,2019
SPEAG		D2300V2	1023	Aug.24,2018	Aug.23,2019
		D2450V2	727	Apr.24,2018	Apr.23,2019
		D2600V2	1005	Jan.17,2018	Jan.16,2019
		D5GHzV2	1023	Jan.25,2018	Jan.24,2019
SPEAG	Data acquisition Electronics	DAE4	856	Apr.21,2018	Apr.20,2019
SPEAG	Software	DASY 52 V52.10.1	N/A	Calibration not required	Calibration not required
SPEAG	Phantom	ELI	N/A	Calibration not required	Calibration not required
Agilent	Network Analyzer	E5071C	MY46107530	Feb.26,2018	Feb.25,2019
Agilent	Dielectric Probe Kit	85070E	MY44300677	Calibration not required	Calibration not required
Agilent	Dual-directional	772D	MY52180142	Jul.04,2018	Jul.03,2019
Aglient	coupler	778D	MY52180302	Jul.05,2018	Jul.04,2019
Agilent	RF Signal Generator	N5181A	MY50144143	Mar.15,2018	Mar.14,2019
Agilent	Power Meter	E4417A	MY52240003	Feb.01,2018	Jan.31,2019

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Manufacturer	Device	Туре	Serial number	Date of last calibration	Date of next calibration
Agilent	Power Sensor	E9301H	MY52200003	Feb.01,2018	Jan.31,2019
Agilent			MY52200004	Feb.01,2018	Jan.31,2019
TECPEL	Digital thermometer	DTM-303A	TP130075	Mar.09,2018	Mar.08,2019
Anritsu	Radio Communication Test	MT8820C	6201061014	Mar.14,2018	Mar.13,2019
R&S	Radio Communication Test	CMW 500	143913	Apr.29.2018	Apr.28.2019

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5. Measurements

Date: 2018/12/12

WCDMA Band II Body Top side CH 9262 0mm

Communication System: WCDMA; Frequency: 1852.4 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1852.4 MHz; σ = 1.578 S/m; ϵ_r = 51.069; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 22.0°C; Liquid temperature: 21.6°C

DASY5 Configuration:

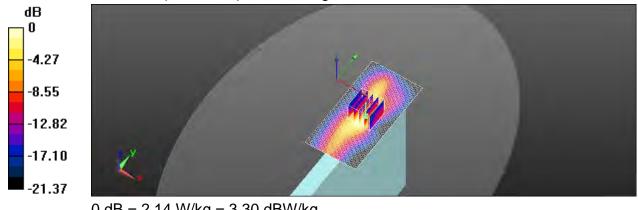
- Probe: EX3DV4 SN3770; ConvF(8, 8, 8); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm Maximum value of SAR (interpolated) = 2.49 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 1.958 V/m; Power Drift = 0.15 dB Peak SAR (extrapolated) = 2.80 W/kg

SAR(1 g) = 1.38 W/kg; SAR(10 g) = 0.628 W/kg

Maximum value of SAR (measured) = 2.14 W/kg



0 dB = 2.14 W/kg = 3.30 dBW/kg

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Date: 2018/12/12

WCDMA Band IV_Body_Top side_CH 1513_0mm

Communication System: WCDMA; Frequency: 1752.6 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1753 MHz; σ = 1.471 S/m; ϵ_r = 51.386; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 22.0°C; Liquid temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(8.26, 8.26, 8.26); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

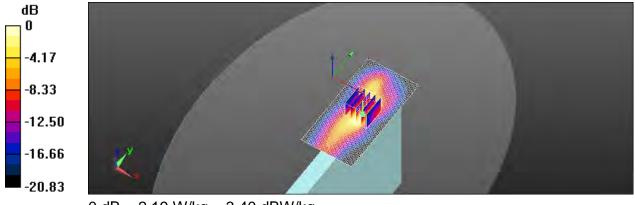
Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 2.30 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.525 V/m; Power Drift = 0.12 dB Peak SAR (extrapolated) = 2.84 W/kg

SAR(1 g) = 1.35 W/kg; SAR(10 g) = 0.623 W/kgMaximum value of SAR (measured) = 2.19 W/kg



0 dB = 2.19 W/kg = 3.40 dBW/kg

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Date: 2018/12/11

WCDMA Band V_Body_Top side_CH 4132_0mm

Communication System: WCDMA; Frequency: 826.4 MHz; Duty Cycle: 1:1 Medium parameters used: f = 826.4 MHz; σ = 0.986 S/m; ϵ_r = 57.343; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.7°C; Liquid temperature: 22.1°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(9.72, 9.72, 9.72); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

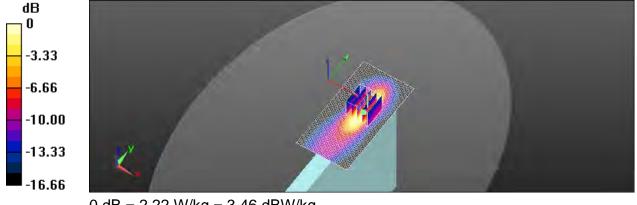
Maximum value of SAR (interpolated) = 2.02 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.781 V/m; Power Drift = 0.19 dB Peak SAR (extrapolated) = 3.12 W/kg

SAR(1 g) = 1.38 W/kg; SAR(10 g) = 0.672 W/kg

Maximum value of SAR (measured) = 2.22 W/kg



0 dB = 2.22 W/kg = 3.46 dBW/kg

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Date: 2018/12/12

LTE Band 2 (20MHz)_Body_Top side_CH 18900_QPSK_1-99_0mm

Communication System: LTE; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.61 S/m; ϵ_r = 50.905; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 22.0°C; Liquid temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(8, 8, 8); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

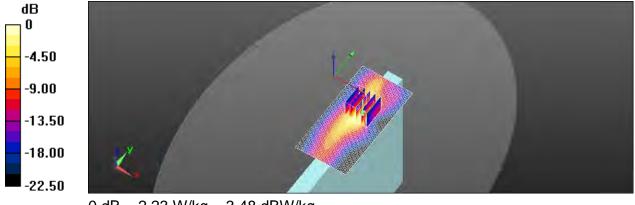
Maximum value of SAR (interpolated) = 2.30 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.036 V/m; Power Drift = 0.12 dB Peak SAR (extrapolated) = 2.91 W/kg

SAR(1 g) = 1.36 W/kg; SAR(10 g) = 0.606 W/kg

Maximum value of SAR (measured) = 2.23 W/kg



0 dB = 2.23 W/kg = 3.48 dBW/kg

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Date: 2018/12/12

LTE Band 4 (20MHz)_Body_Top side_CH 20300_QPSK_1-0_0mm

Communication System: LTE; Frequency: 1745 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1745 MHz; σ = 1.459 S/m; ϵ_r = 51.433; ρ = 1000 kg/m³

Phantom section: Flat Section

Ambient temperature: 22.0°C; Liquid temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(8.26, 8.26, 8.26); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

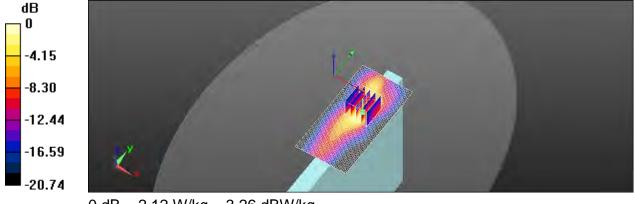
Maximum value of SAR (interpolated) = 2.18 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.311 V/m; Power Drift = 0.15 dB Peak SAR (extrapolated) = 2.76 W/kg

SAR(1 g) = 1.34 W/kg; SAR(10 g) = 0.623 W/kg

Maximum value of SAR (measured) = 2.12 W/kg



0 dB = 2.12 W/kg = 3.26 dBW/kg

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Date: 2018/12/11

LTE Band 5 (10MHz)_Body_Top side_CH 20450_QPSK_1-0_0mm

Communication System: LTE; Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used: f = 829 MHz; σ = 0.989 S/m; ϵ_r = 57.321; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.7°C; Liquid temperature: 22.1°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(9.72, 9.72, 9.72); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

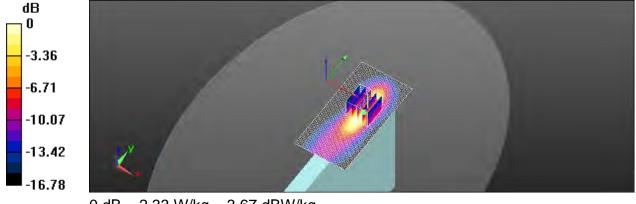
Maximum value of SAR (interpolated) = 2.33 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.699 V/m; Power Drift = -0.11 dB Peak SAR (extrapolated) = 3.17 W/kg

SAR(1 g) = 1.42 W/kg; SAR(10 g) = 0.693 W/kg

Maximum value of SAR (measured) = 2.33 W/kg



0 dB = 2.33 W/kg = 3.67 dBW/kg

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Date: 2018/12/13

LTE Band 7 (20MHz)_Body_Top side_CH 20850_QPSK_1-0_0mm

Communication System: LTE; Frequency: 2510 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2510 MHz; σ = 2.097 S/m; ϵ_r = 52.821; ρ = 1000 kg/m³

Phantom section: Flat Section

Ambient temperature: 21.8°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.37, 7.37, 7.37); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

Area Scan (61x121x1): Interpolated grid: dx=12 mm, dy=12 mm

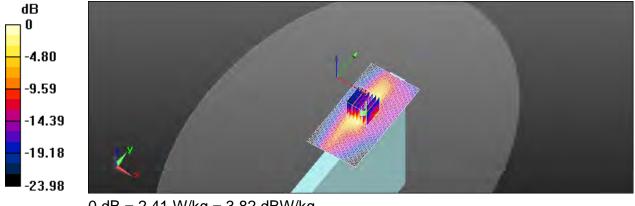
Maximum value of SAR (interpolated) = 2.34 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.579 V/m; Power Drift = 0.12 dB Peak SAR (extrapolated) = 3.37 W/kg

SAR(1 g) = 1.36 W/kg; SAR(10 g) = 0.565 W/kg

Maximum value of SAR (measured) = 2.41 W/kg



0 dB = 2.41 W/kg = 3.82 dBW/kg

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Date: 2018/12/10

LTE Band 12 (10MHz)_Body_Top side_CH 23095_QPSK_1-0_0mm

Communication System: LTE; Frequency: 707.5 MHz; Duty Cycle: 1:1 Medium parameters used: f = 707.5 MHz; σ = 0.971 S/m; ϵ_r = 53.95; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 22.3°C; Liquid temperature: 21.8°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(9.97, 9.97, 9.97); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

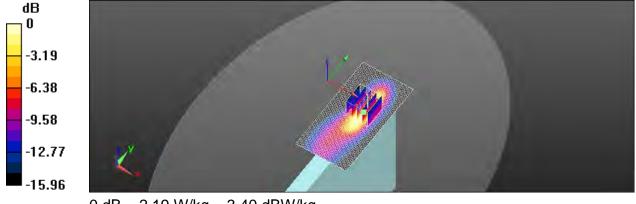
Maximum value of SAR (interpolated) = 2.07 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.382 V/m; Power Drift = 0.17 dB Peak SAR (extrapolated) = 3.04 W/kg

SAR(1 g) = 1.31 W/kg; SAR(10 g) = 0.643 W/kg

Maximum value of SAR (measured) = 2.19 W/kg



0 dB = 2.19 W/kg = 3.40 dBW/kg

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Date: 2018/12/10

LTE Band 13 (10MHz)_Body_Top side_CH 23230_QPSK_1-25_0mm

Communication System: LTE; Frequency: 782 MHz; Duty Cycle: 1:1 Medium parameters used: f = 782 MHz; σ = 0.985 S/m; ϵ_r = 53.478; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 22.3°C; Liquid temperature: 21.8°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(9.97, 9.97, 9.97); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

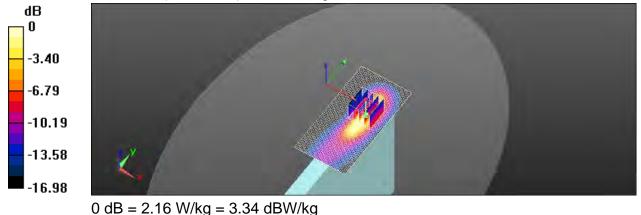
Maximum value of SAR (interpolated) = 1.99 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.138 V/m; Power Drift = 0.18 dB Peak SAR (extrapolated) = 3.05 W/kg

SAR(1 g) = 1.3 W/kg; SAR(10 g) = 0.622 W/kg

Maximum value of SAR (measured) = 2.16 W/kg



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Date: 2018/12/10

LTE Band 17 (10MHz)_Body_Top side_CH 23800_QPSK_1-0_0mm

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1 Medium parameters used: f = 711 MHz; σ = 0.974 S/m; ϵ_r = 53.898; ρ = 1000 kg/m³

Phantom section: Flat Section

Ambient temperature: 22.3°C; Liquid temperature: 21.8°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(9.97, 9.97, 9.97); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

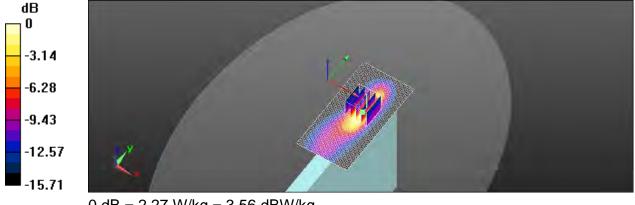
Maximum value of SAR (interpolated) = 1.90 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.112 V/m; Power Drift = 0.11 dB Peak SAR (extrapolated) = 3.15 W/kg

SAR(1 g) = 1.35 W/kg; SAR(10 g) = 0.667 W/kg

Maximum value of SAR (measured) = 2.27 W/kg



0 dB = 2.27 W/kg = 3.56 dBW/kg

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Date: 2018/12/11

LTE Band 26 (15MHz)_Body_Top side_CH 26965_QPSK_1-74_0mm

Communication System: LTE; Frequency: 841.5 MHz; Duty Cycle: 1:1 Medium parameters used: f = 841.5 MHz; σ = 1.001 S/m; ϵ_r = 57.165; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.7°C; Liquid temperature: 22.1°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(9.72, 9.72, 9.72); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

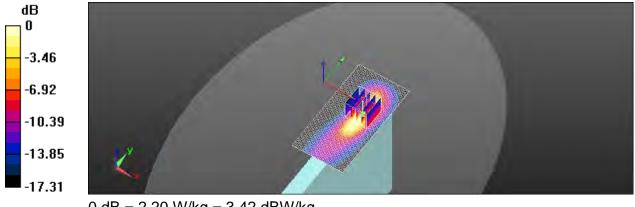
Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 2.02 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.388 V/m; Power Drift = 0.17 dB Peak SAR (extrapolated) = 3.08 W/kg SAR(1 g) = 1.31 W/kg; SAR(10 g) = 0.630 W/kg

Maximum value of SAR (measured) = 2.20 W/kg



0 dB = 2.20 W/kg = 3.42 dBW/kg

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Date: 2018/12/13

LTE Band 30 (10MHz)_Body_Top side_CH 27710_QPSK_1-0_0mm

Communication System: LTE; Frequency: 2310 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2310 MHz; σ = 1.853 S/m; ϵ_r = 54.043; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 22.2°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.68, 7.68, 7.68); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

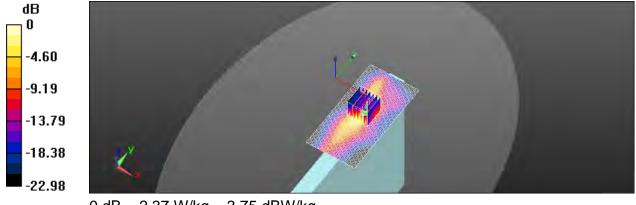
Area Scan (61x121x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 1.89 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.131 V/m; Power Drift = 0.15 dB Peak SAR (extrapolated) = 3.30 W/kg SAR(1 g) = 1.37 W/kg; SAR(10 g) = 0.576 W/kg

Maximum value of SAR (measured) = 2.37 W/kg



0 dB = 2.37 W/kg = 3.75 dBW/kg

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Date: 2018/12/13

LTE Band 38 (20MHz)_Body_Top side_CH 37850_QPSK_1-0_0mm

Communication System: LTE; Frequency: 2580 MHz; Duty Cycle: 1:1.59956 Medium parameters used: f = 2580 MHz; σ = 2.215 S/m; ϵ_r = 52.645; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.8°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.37, 7.37, 7.37); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x121x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 1.40 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.859 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.96 W/kg

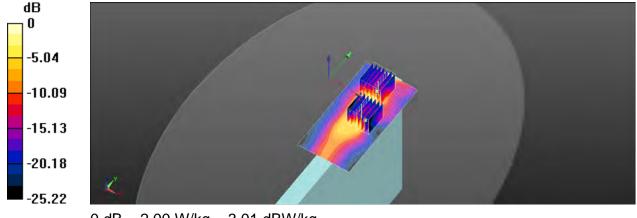
SAR(1 g) = 0.888 W/kg; SAR(10 g) = 0.405 W/kg

Maximum value of SAR (measured) = 0.07 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 6.859 V/m: Power Drift = 0.17 dB

Peak SAR (extrapolated) = 3.83 W/kg

SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.385 W/kg Maximum value of SAR (measured) = 2.00 W/kg



0 dB = 2.00 W/kg = 3.01 dBW/kg

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Date: 2018/12/13

LTE Band 41 (20MHz)_Body_Top side_CH 39750_QPSK_1-0_0mm

Communication System: LTE; Frequency: 2506 MHz; Duty Cycle: 1:1.59956 Medium parameters used: f = 2506 MHz; σ = 2.089 S/m; ϵ_r = 52.854; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.8°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.37, 7.37, 7.37); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

Area Scan (61x121x1): Interpolated grid: dx=12 mm, dy=12 mm

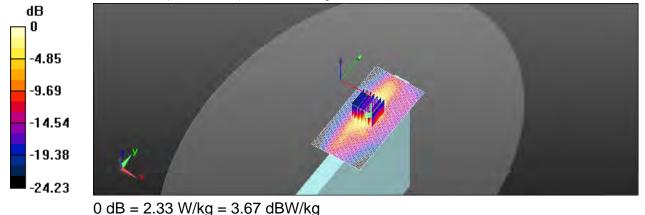
Maximum value of SAR (interpolated) = 1.92 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.455 V/m; Power Drift = 0.18 dB Peak SAR (extrapolated) = 3.27 W/kg

SAR(1 g) = 1.32 W/kg; SAR(10 g) = 0.549 W/kg

Maximum value of SAR (measured) = 2.33 W/kg



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Date: 2018/12/12

LTE Band 66 (20MHz)_Body_Top side_CH 132572_QPSK_1-0_0mm

Communication System: LTE; Frequency: 1770 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1770 MHz; σ = 1.492 S/m; ϵ_r = 51.37; ρ = 1000 kg/m³

Phantom section: Flat Section

Ambient temperature: 22.0°C; Liquid temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(8.26, 8.26, 8.26); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.10(7373)

Area Scan (51x91x1): Interpolated grid: dx=15 mm, dy=15 mm

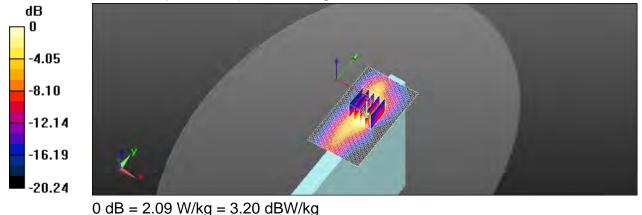
Maximum value of SAR (interpolated) = 2.22 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.135 V/m; Power Drift = 0.13 dB Peak SAR (extrapolated) = 2.76 W/kg

SAR(1 g) = 1.34 W/kg; SAR(10 g) = 0.611 W/kg

Maximum value of SAR (measured) = 2.09 W/kg



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Date: 2018/12/18

WCDMA Band II_Body_Top side_CH 9262_0mm

Communication System: WCDMA; Frequency: 1852.4 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1852.4 MHz; σ = 1.588 S/m; ϵ_r = 51.620; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.9°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(8, 8, 8) ;Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x111x1): Interpolated grid: dx=15 mm, dy=15 mm

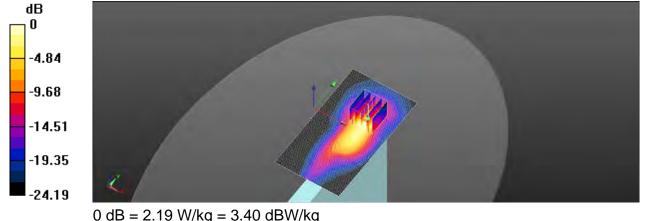
Maximum value of SAR (interpolated) = 2.08 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.620 V/m; Power Drift = 0.14 dB Peak SAR (extrapolated) = 2.88 W/kg

SAR(1 g) = 1.26 W/kg; SAR(10 g) = 0.543 W/kg

Maximum value of SAR (measured) = 2.19 W/kg



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Date: 2018/12/18

WCDMA Band IV_Body_Top side_CH 1513_0mm

Communication System: WCDMA; Frequency: 1752.6 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1753 MHz; σ = 1.478 S/m; ϵ_r = 51.990; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.9°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(8.26, 8.26, 8.26);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x111x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 2.15 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.915 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.05 W/kg

SAR(1 g) = 1.36 W/kg; SAR(10 g) = 0.589 W/kg

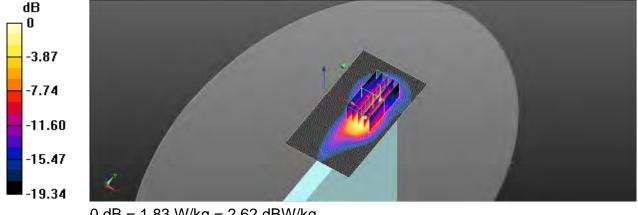
Maximum value of SAR (measured) = 2.43 W/kg

Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.915 V/m: Power Drift = -0.01 dB

Peak SAR (extrapolated) = 2.36 W/kg

SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.541 W/kg Maximum value of SAR (measured) = 1.83 W/kg



0 dB = 1.83 W/kg = 2.62 dBW/kg

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Date: 2018/12/17

WCDMA Band V_Body_Top side_CH 4132_0mm

Communication System: WCDMA; Frequency: 826.4 MHz; Duty Cycle: 1:1 Medium parameters used: f = 826.4 MHz; σ = 0.986 S/m; ϵ_r = 57.344; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.5°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(9.72, 9.72, 9.72);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

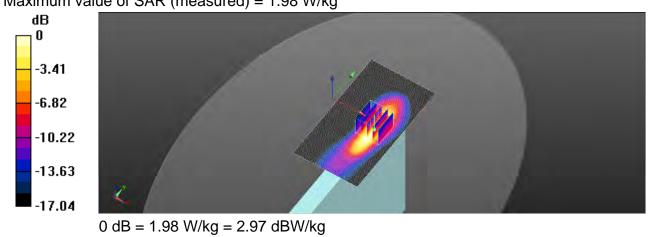
Area Scan (61x111x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 1.99 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.095 V/m; Power Drift = -0.12 dB Peak SAR (extrapolated) = 2.81 W/kg SAR(1 g) = 1.31 W/kg; SAR(10 g) = 0.638 W/kg

Maximum value of SAR (measured) = 1.98 W/kg



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Date: 2018/12/18

LTE Band 2 (20MHz)_Body_Top side_CH 18700_QPSK_1-0_0mm

Communication System: LTE; Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1860 MHz; σ = 1.594 S/m; ϵ_r = 51.603; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(8, 8, 8);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x111x1): Interpolated grid: dx=15 mm, dy=15 mm

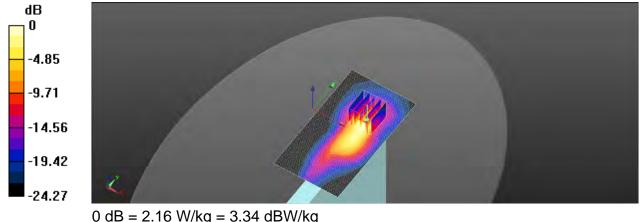
Maximum value of SAR (interpolated) = 2.12 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.618 V/m; Power Drift = 0.17 dB Peak SAR (extrapolated) = 2.87 W/kg

SAR(1 g) = 1.28 W/kg; SAR(10 g) = 0.548 W/kg

Maximum value of SAR (measured) = 2.16 W/kg



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Date: 2018/12/18

LTE Band 4 (20MHz)_Body_Top side_CH 20300_QPSK_1-0_0mm

Communication System: LTE; Frequency: 1745 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1745 MHz; σ = 1.469 S/m; ϵ_r = 52.004; ρ = 1000 kg/m³

Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(8.26, 8.26, 8.26);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x111x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 2.19 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.053 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 3.02 W/kg

SAR(1 g) = 1.36 W/kg; SAR(10 g) = 0.593 W/kg

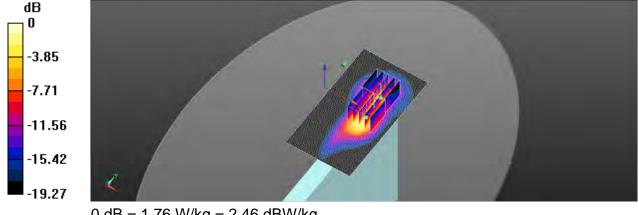
Maximum value of SAR (measured) = 2.40 W/kg

Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.053 V/m: Power Drift = 0.16 dB

Peak SAR (extrapolated) = 2.28 W/kg

SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.548 W/kg Maximum value of SAR (measured) = 1.76 W/kg



0 dB = 1.76 W/kg = 2.46 dBW/kg

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Date: 2018/12/17

LTE Band 5 (10MHz)_Body_Top side_CH 20450_QPSK_1-0_210

Communication System: LTE; Frequency: 829 MHz; Duty Cycle: 1:1 Medium parameters used: f = 829 MHz; σ = 0.989 S/m; ϵ_r = 57.351; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.5°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(9.72, 9.72, 9.72): 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

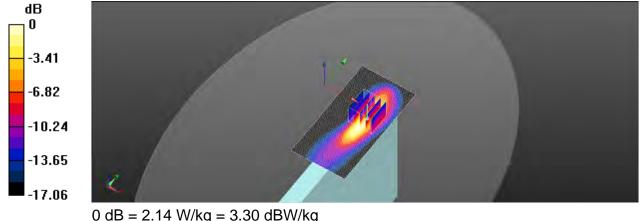
Maximum value of SAR (interpolated) = 2.24 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.30 V/m; Power Drift = 0.09 dB Peak SAR (extrapolated) = 2.93 W/kg

SAR(1 g) = 1.35 W/kg; SAR(10 g) = 0.656 W/kg

Maximum value of SAR (measured) = 2.14 W/kg



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Date: 2018/12/19

LTE Band 7 (20MHz)_Body_Top side_CH 20850_QPSK_1-0_0mm

Communication System: LTE; Frequency: 2510 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2510 MHz; σ = 2.091 S/m; ϵ_r = 51.423; ρ = 1000 kg/m³

Phantom section: Flat Section

Ambient temperature: 21.7°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(7.37, 7.37, 7.37);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x141x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 1.32 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.039 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 3.53 W/kg

SAR(1 g) = 1.33 W/kg; SAR(10 g) = 0.484 W/kg

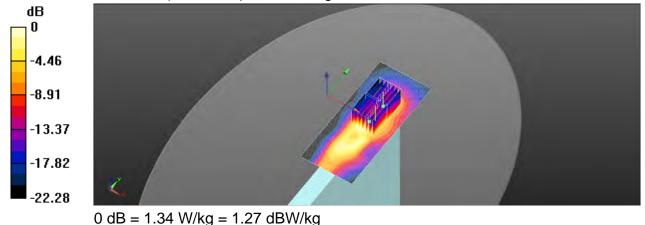
Maximum value of SAR (measured) = 2.16 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.039 V/m: Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.81 W/kg

SAR(1 g) = 0.899 W/kg; SAR(10 g) = 0.419 W/kg Maximum value of SAR (measured) = 1.34 W/kg



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Date: 2018/12/14

LTE Band 12 (10MHz)_Body_Top side_CH 23060_QPSK_1-0_0mm

Communication System: LTE; Frequency: 704 MHz; Duty Cycle: 1:1 Medium parameters used: f = 704 MHz; σ = 0.924 S/m; ϵ_r = 57.837; ρ = 1000 kg/m³

Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(9.97, 9.97, 9.97);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

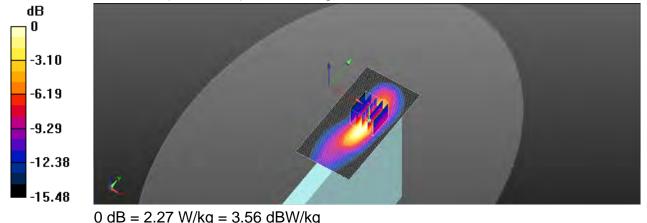
Maximum value of SAR (interpolated) = 2.16 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.73 V/m; Power Drift = 0.04 dB Peak SAR (extrapolated) = 3.14 W/kg

SAR(1 g) = 1.37 W/kg; SAR(10 g) = 0.683 W/kg

Maximum value of SAR (measured) = 2.27 W/kg



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Date: 2018/12/14

LTE Band 13 (10MHz)_Body_Top side_CH 23230_QPSK_1-0_0mm

Communication System: LTE; Frequency: 782 MHz; Duty Cycle: 1:1 Medium parameters used: f = 782 MHz; σ = 0.984 S/m; ϵ_r = 57.114; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.9°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(9.97, 9.97, 9.97);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

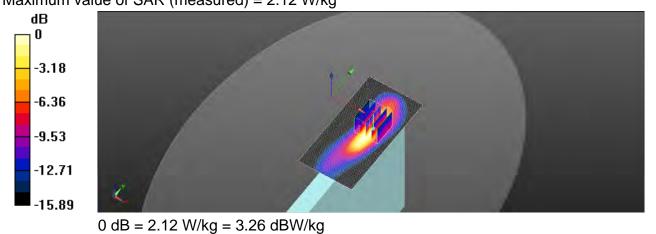
Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 2.05 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.960 V/m; Power Drift = 0.11 dB Peak SAR (extrapolated) = 2.90 W/kg SAR(1 g) = 1.29 W/kg; SAR(10 g) = 0.633 W/kg

Maximum value of SAR (measured) = 2.12 W/kg



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Date: 2018/12/14

LTE Band 17 (10MHz)_Body_Top side_CH 23780_QPSK_1-0_0mm

Communication System: LTE; Frequency: 709 MHz; Duty Cycle: 1:1 Medium parameters used: f = 709 MHz; σ = 0.926 S/m; ϵ_r = 57.813; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.9°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(9.97, 9.97, 9.97);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

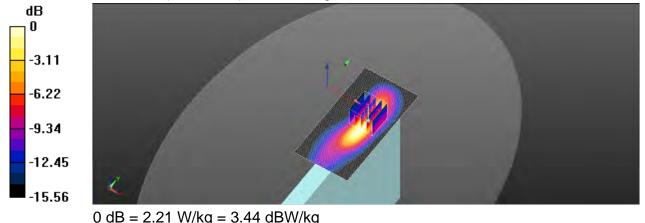
Maximum value of SAR (interpolated) = 2.11 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.62 V/m; Power Drift = 0.09 dB Peak SAR (extrapolated) = 3.06 W/kg

SAR(1 g) = 1.34 W/kg; SAR(10 g) = 0.668 W/kg

Maximum value of SAR (measured) = 2.21 W/kg



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Date: 2018/12/19

LTE Band 26 (15MHz)_Body_Top side_CH 26865_QPSK_1-0_0mm

Communication System: LTE; Frequency: 831.5 MHz; Duty Cycle: 1:1 Medium parameters used: f = 831.5 MHz; σ = 0.992 S/m; ϵ_r = 57.253; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.5°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(9.72, 9.72, 9.72);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

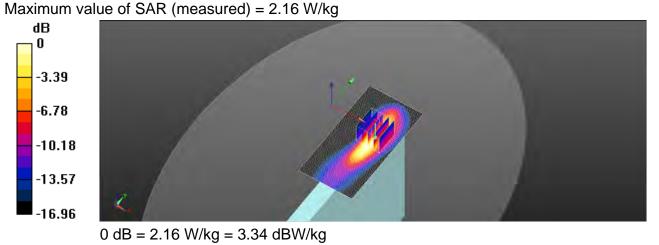
Area Scan (51x101x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 2.27 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.16 V/m; Power Drift = 0.06 dB Peak SAR (extrapolated) = 2.97 W/kg

SAR(1 g) = 1.36 W/kg; SAR(10 g) = 0.657 W/kg



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Report No. : EN/2018/B0027 Page: 325 of 468

Date: 2018/12/19

LTE Band 30 (10MHz)_Body_Top side_CH 27710_QPSK_1-0_0mm

Communication System: LTE; Frequency: 2310 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2310 MHz; σ = 1.839 S/m; ϵ_r = 54.074; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.7°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(7.68, 7.68, 7.68);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

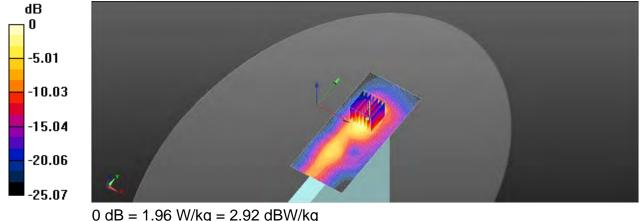
Area Scan (61x141x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 1.80 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.095 V/m; Power Drift = -0.03 dB Peak SAR (extrapolated) = 3.07 W/kg SAR(1 g) = 1.27 W/kg; SAR(10 g) = 0.508 W/kg

Maximum value of SAR (measured) = 1.96 W/kg



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Date: 2018/12/19

LTE Band 38 (20MHz)_Body_Top side_CH 37850_QPSK_1-0_0mm

Communication System: LTE; Frequency: 2580 MHz; Duty Cycle: 1:1.59956 Medium parameters used: f = 2580 MHz; σ = 2.194 S/m; ϵ_r = 51.198; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.7°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.37, 7.37, 7.37); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x121x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 1.43 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.698 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 2.08 W/kg

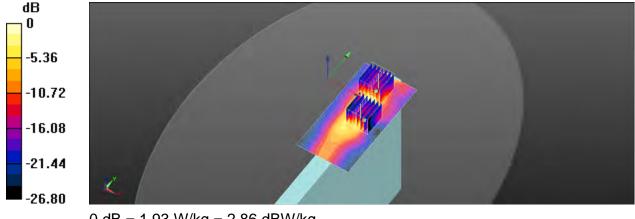
SAR(1 g) = 0.909 W/kg; SAR(10 g) = 0.415 W/kg

Maximum value of SAR (measured) = 1.41 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 6.698 V/m: Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.75 W/kg

SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.372 W/kg Maximum value of SAR (measured) = 1.93 W/kg



0 dB = 1.93 W/kg = 2.86 dBW/kg

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Date: 2018/12/19

LTE Band 41 (20MHz)_Body_Top side_CH 41490_QPSK_1-0_0mm

Communication System: LTE; Frequency: 2680 MHz; Duty Cycle: 1:1.59956 Medium parameters used: f = 2680 MHz; σ = 2.328 S/m; ϵ_r = 50.843; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.7°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(7.37, 7.37, 7.37);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI

-22.27

-27.84

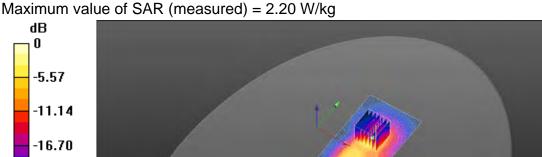
DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x141x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 1.64 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.249 V/m; Power Drift = 0.15 dB Peak SAR (extrapolated) = 3.59 W/kg SAR(1 g) = 1.3 W/kg; SAR(10 g) = 0.434 W/kg



0 dB = 2.20 W/kg = 3.42 dBW/kg

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Date: 2018/12/18

LTE Band 66 (20MHz)_Body_Top side_CH 132322_QPSK_1-0_0mm

Communication System: LTE; Frequency: 1745 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1745 MHz; σ = 1.469 S/m; ϵ_r = 52.004; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(8.26, 8.26, 8.26);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

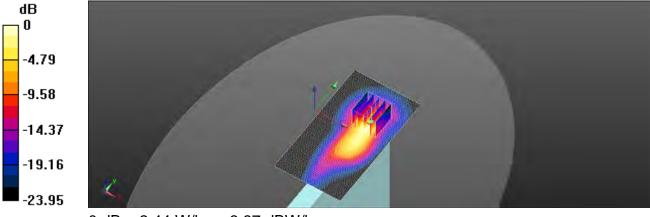
Area Scan (61x111x1): Interpolated grid: dx=15 mm, dy=15 mm Maximum value of SAR (interpolated) = 2.22 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 2.791 V/m: Power Drift = 0.16 dB

Peak SAR (extrapolated) = 3.09 W/kg

SAR(1 g) = 1.35 W/kg; SAR(10 g) = 0.588 W/kg

Maximum value of SAR (measured) = 2.44 W/kg



0 dB = 2.44 W/kg = 3.87 dBW/kg

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Date: 2018/12/1

WLAN 802.11b_Body_Top side_CH 1_Main_0mm

Communication System: WLAN 2.45G; Frequency: 2412 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2412 MHz; σ = 1.92 S/m; ϵ_r = 53.706; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.59, 7.59, 7.59); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

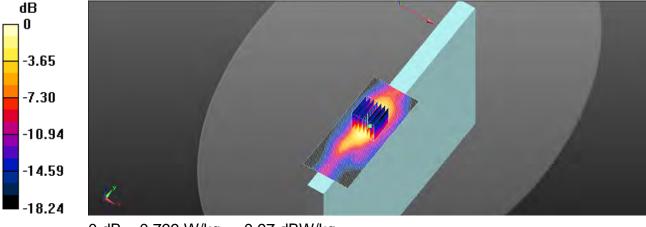
Area Scan (51x121x1): Interpolated grid: dx=12 mm, dy=12 mm Maximum value of SAR (interpolated) = 0.862 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 2.422 V/m: Power Drift = 0.16 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.455 W/kg; SAR(10 g) = 0.212 W/kg

Maximum value of SAR (measured) = 0.799 W/kg



0 dB = 0.799 W/kg = -0.97 dBW/kg

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Date: 2018/12/3

WLAN 802.11n(40M) 5.2G_Body_Top side_CH 46_Main_0mm

Communication System: WLAN 5G; Frequency: 5230 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5230 MHz; σ = 5.209 S/m; ϵ_r = 49.212; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.8°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x141x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.830 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.271 V/m: Power Drift = 0.11 dB

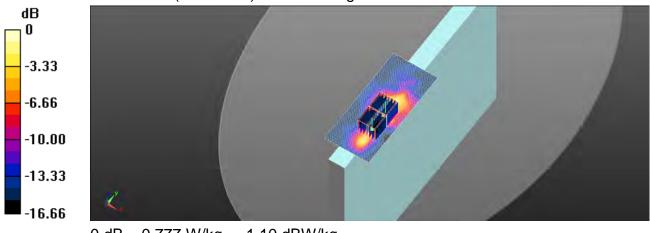
Peak SAR (extrapolated) = 1.97 W/kg

SAR(1 g) = 0.465 W/kg; SAR(10 g) = 0.146 W/kg

Maximum value of SAR (measured) = 0.945 W/kg

Zoom Scan (7x7x12)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 2.271 V/m; Power Drift = 0.11 dB Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 0.358 W/kg; SAR(10 g) = 0.102 W/kg Maximum value of SAR (measured) = 0.777 W/kg



0 dB = 0.777 W/kg = -1.10 dBW/kg

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Date: 2018/12/4

WLAN 802.11a 5.3G_Body_Top side_CH 60_Main_0mm

Communication System: WLAN 5G; Frequency: 5300 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5300 MHz; σ = 5.323 S/m; ϵ_r = 49.056; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 21.6°C **DASY5** Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25 •
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x141x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.664 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 2.599 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.59 W/kg

SAR(1 g) = 0.372 W/kg; SAR(10 g) = 0.128 W/kg

Maximum value of SAR (measured) = 0.736 W/kg

Zoom Scan (7x7x12)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 2.599 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 0.320 W/kg; SAR(10 g) = 0.090 W/kg

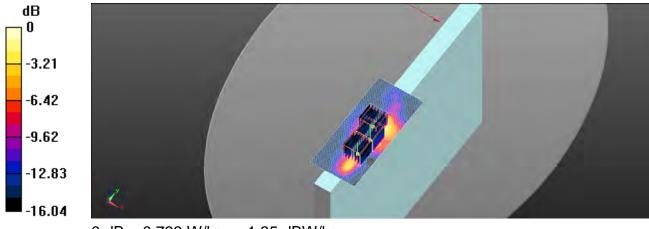
Maximum value of SAR (measured) = 0.701 W/kg

Zoom Scan (7x7x12)/Cube 2: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 2.599 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.58 W/kg

SAR(1 g) = 0.297 W/kg; SAR(10 g) = 0.124 W/kg

Maximum value of SAR (measured) = 0.733 W/kg



0 dB = 0.733 W/kg = -1.35 dBW/kg

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Date: 2018/12/4

WLAN 802.11n(40M) 5.3G_Body_Top side_CH 54_Main_0mm

Communication System: WLAN 5G; Frequency: 5270 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5270 MHz; σ = 5.283 S/m; ϵ_r = 49.093; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.9°C; Liquid temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x121x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.736 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.021 V/m: Power Drift = 0.14 dB

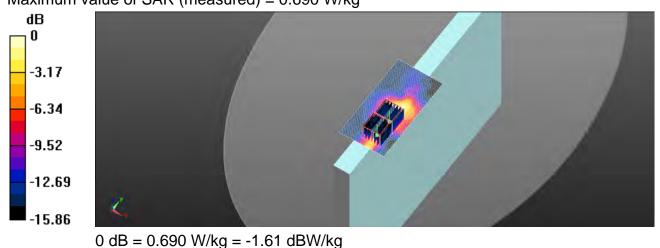
Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 0.405 W/kg; SAR(10 g) = 0.133 W/ka

Maximum value of SAR (measured) = 0.792 W/kg

Zoom Scan (7x7x12)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 2.021 V/m; Power Drift = 0.14 dB Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.327 W/kg; SAR(10 g) = 0.093 W/kg Maximum value of SAR (measured) = 0.690 W/kg



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Date: 2018/12/5

WLAN 802.11n(40M) 5.6G_Body_Top side_CH 102_Main_0mm

Communication System: WLAN 5G; Frequency: 5510 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5510 MHz; σ = 5.656 S/m; ϵ_r = 48.301; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 22.0°C; Liquid temperature: 21.8°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.06, 4.06, 4.06); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

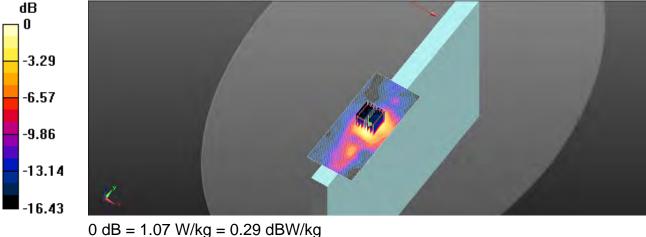
Area Scan (61x141x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 1.04 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 2.581 V/m: Power Drift = 0.12 dB

Peak SAR (extrapolated) = 2.22 W/kg

SAR(1 g) = 0.565 W/kg; SAR(10 g) = 0.215 W/kg

Maximum value of SAR (measured) = 1.07 W/kg



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Date: 2018/12/5

WLAN 802.11ac(80M) 5.6G_Body_Top side_CH 138_Main_0mm

Communication System: WLAN 5G; Frequency: 5690 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5690 MHz; σ = 5.978 S/m; ϵ_r = 47.784; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 22.0°C; Liquid temperature: 21.8°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.38, 4.38, 4.38); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

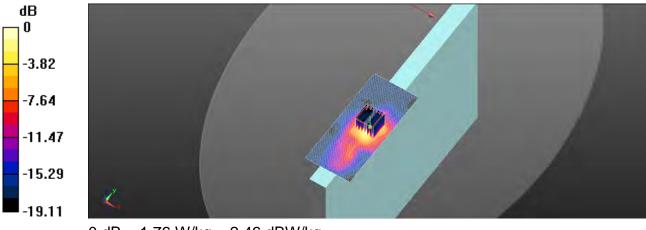
Area Scan (61x141x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.71 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 1.958 V/m: Power Drift = 0.13 dB

Peak SAR (extrapolated) = 3.69 W/kg

SAR(1 g) = 0.850 W/kg; SAR(10 g) = 0.282 W/kg Maximum value of SAR (measured) = 1.76 W/kg



0 dB = 1.76 W/kg = 2.46 dBW/kg

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Date: 2018/12/6

WLAN 802.11ac(80M) 5.8G_Body_Top side_CH 155_Main_0mm

Communication System: WLAN 5G; Frequency: 5775 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5775 MHz; σ = 6.095 S/m; ϵ_r = 47.507; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.7°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.38, 4.38, 4.38); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x141x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 1.86 W/kg

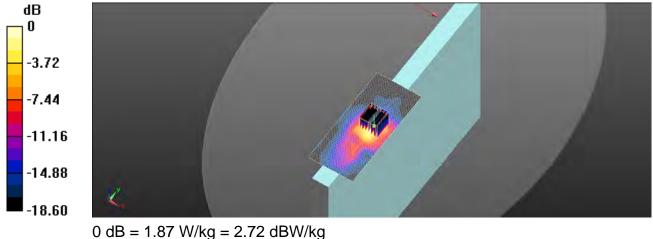
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.076 V/m: Power Drift = 0.11 dB

Peak SAR (extrapolated) = 4.11 W/kg

SAR(1 g) = 0.895 W/kg; SAR(10 g) = 0.285 W/kg

Maximum value of SAR (measured) = 1.87 W/kg



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Date: 2018/12/1

WLAN 802.11b_Body_Top side_CH 1_Aux_0mm

Communication System: WLAN 2.45G; Frequency: 2412 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2412 MHz; σ = 1.92 S/m; ϵ_r = 53.706; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.59, 7.59, 7.59); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (51x101x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 1.33 W/kg

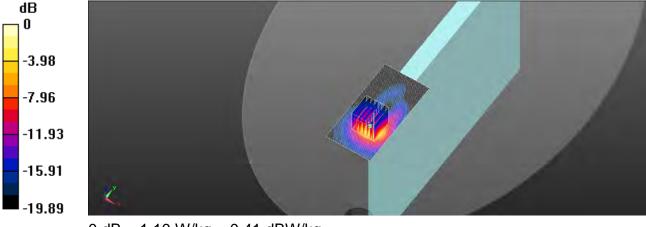
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.869 V/m: Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 0.747 W/kg; SAR(10 g) = 0.314 W/ka

Maximum value of SAR (measured) = 1.10 W/kg



0 dB = 1.10 W/kg = 0.41 dBW/kg

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Date: 2018/12/1

Bluetooth(GFSK)_Body_Top side_CH 39_Aux_0mm

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2441 MHz; σ = 1.952 S/m; ϵ_r = 53.591; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.9°C; Liquid temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.59, 7.59, 7.59); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (51x91x1): Interpolated grid: dx=12 mm, dy=12 mm

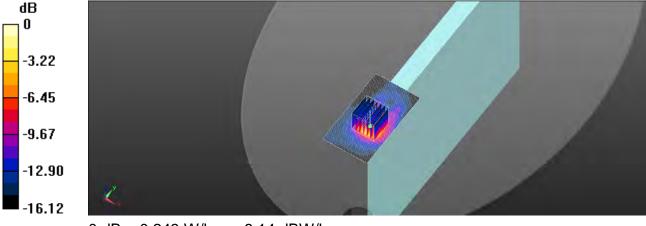
Maximum value of SAR (interpolated) = 0.278 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.514 V/m: Power Drift = 0.13 dB

- Peak SAR (extrapolated) = 0.343 W/kg
- SAR(1 g) = 0.153 W/kg; SAR(10 g) = 0.065 W/kg

Maximum value of SAR (measured) = 0.243 W/kg



0 dB = 0.243 W/kg = -6.14 dBW/kg

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Date: 2018/12/3

WLAN 802.11n(40M) 5.2G_Body_Top side_CH 38_Aux_0mm

Communication System: WLAN 5G; Frequency: 5190 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5190 MHz; σ = 5.153 S/m; ϵ_r = 49.419; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.8°C; Liquid temperature: 22.0°C

DASY5 Configuration:

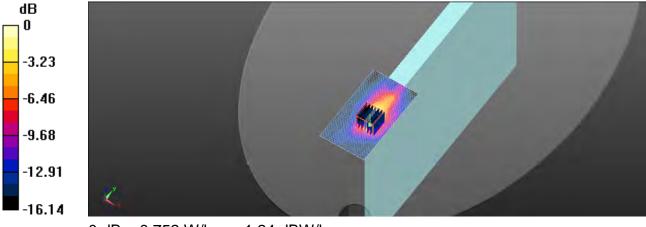
- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x111x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 0.698 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 2.109 V/m: Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.375 W/kg; SAR(10 g) = 0.120 W/kg Maximum value of SAR (measured) = 0.752 W/kg



0 dB = 0.752 W/kg = -1.24 dBW/kg

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Date: 2018/12/4

WLAN 802.11a 5.3G_Body_Top side_CH 60_Aux_0mm

Communication System: WLAN 5G; Frequency: 5300 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5300 MHz; σ = 5.323 S/m; ϵ_r = 49.056; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 21.6°C

DASY5 Configuration:

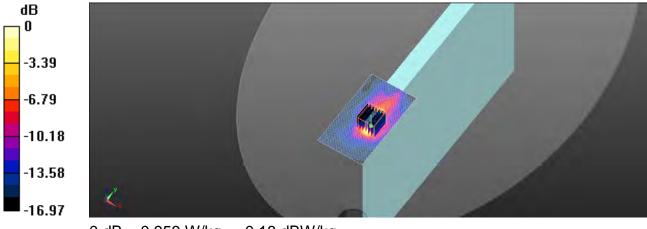
- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x111x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 0.846 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 1.994 V/m: Power Drift = 0.03 dB

Peak SAR (extrapolated) = 2.18 W/kg

SAR(1 g) = 0.469 W/kg; SAR(10 g) = 0.144 W/kg Maximum value of SAR (measured) = 0.959 W/kg



0 dB = 0.959 W/kg = -0.18 dBW/kg

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Report No. : EN/2018/B0027 Page: 340 of 468

Date: 2018/12/4

WLAN 802.11n(40M) 5.3G_Body_Top side_CH 54_Aux_0mm

Communication System: WLAN 5G; Frequency: 5270 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5270 MHz; σ = 5.283 S/m; ϵ_r = 49.093; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x111x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 0.751 W/kg

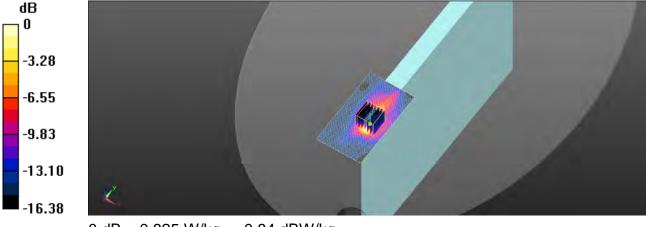
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.092 V/m: Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.84 W/kg

SAR(1 g) = 0.410 W/kg; SAR(10 g) = 0.134 W/kg

Maximum value of SAR (measured) = 0.825 W/kg



0 dB = 0.825 W/kg = -0.84 dBW/kg

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Date: 2018/12/5

WLAN 802.11ac(80M) 5.6G_Body_Top side_CH 138_Aux_0mm

Communication System: WLAN 5G; Frequency: 5690 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5690 MHz; σ = 5.978 S/m; ϵ_r = 47.784; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 22.0°C; Liquid temperature: 21.8°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.38, 4.38, 4.38); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x111x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.66 W/kg

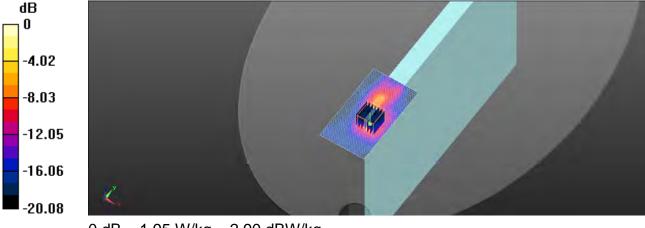
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.131 V/m: Power Drift = 0.07 dB

Peak SAR (extrapolated) = 4.75 W/kg

SAR(1 g) = 0.895 W/kg; SAR(10 g) = 0.236 W/kg

Maximum value of SAR (measured) = 1.95 W/kg



0 dB = 1.95 W/kg = 2.90 dBW/kg

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Date: 2018/12/6

WLAN 802.11ac(80M) 5.8G_Body_Top side_CH 155_Aux_0mm

Communication System: WLAN 5G; Frequency: 5775 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5775 MHz; σ = 6.095 S/m; ϵ_r = 47.507; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.7°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.38, 4.38, 4.38); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x111x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.56 W/kg

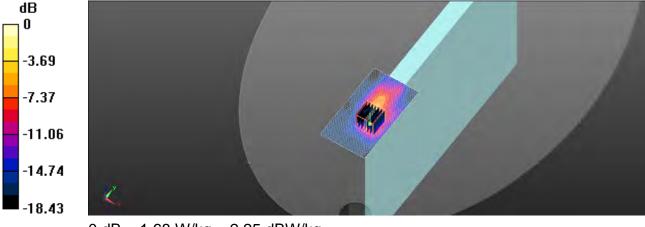
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.016 V/m: Power Drift = 0.02 dB

Peak SAR (extrapolated) = 4.09 W/kg

SAR(1 g) = 0.780 W/kg; SAR(10 g) = 0.212 W/kg

Maximum value of SAR (measured) = 1.68 W/kg



0 dB = 1.68 W/kg = 2.25 dBW/kg

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Date: 2018/12/7

WLAN 802.11b_Body_Top side_CH 1_Main_0mm

Communication System: WLAN 2.45G; Frequency: 2412 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2412 MHz; σ = 1.928 S/m; ϵ_r = 53.779; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.6°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.59, 7.59, 7.59); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (51x121x1): Interpolated grid: dx=12 mm, dy=12 mm Maximum value of SAR (interpolated) = 1.21 W/kg

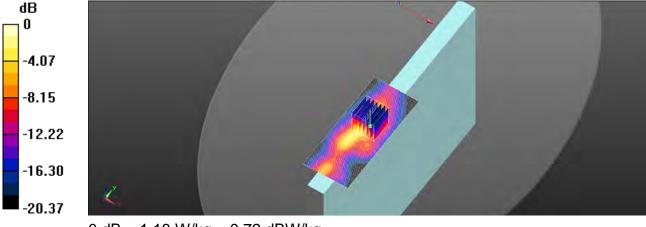
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.415 V/m: Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.92 W/kg

SAR(1 g) = 0.630 W/kg; SAR(10 g) = 0.264 W/kg

Maximum value of SAR (measured) = 1.18 W/kg



0 dB = 1.18 W/kg = 0.72 dBW/kg

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Date: 2018/12/7

WLAN 802.11n(40M) 5.2G_Body_Top side_CH 38 _Main_0mm

Communication System: WLAN 5G; Frequency: 5190 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5190 MHz; σ = 5.156 S/m; ϵ_r = 49.533; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 22.1°C; Liquid temperature: 21.8°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

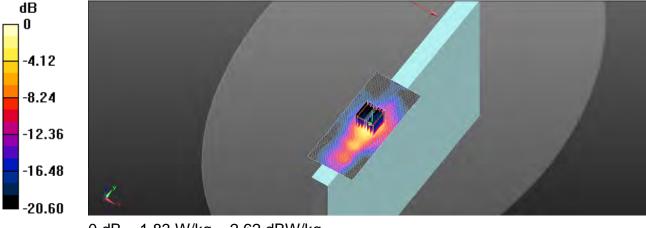
Area Scan (61x141x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 1.58 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 2.338 V/m: Power Drift = -0.09 dB

Peak SAR (extrapolated) = 3.99 W/kg

SAR(1 g) = 0.846 W/kg; SAR(10 g) = 0.271 W/kg

Maximum value of SAR (measured) = 1.83 W/kg



0 dB = 1.83 W/kg = 2.62 dBW/kg

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Date: 2018/12/8

WLAN 802.11a 5.3G_Body_Top side_CH 64_Main_0mm

Communication System: WLAN 5G; Frequency: 5320 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5320 MHz; σ = 5.355 S/m; ϵ_r = 49.079; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.7°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

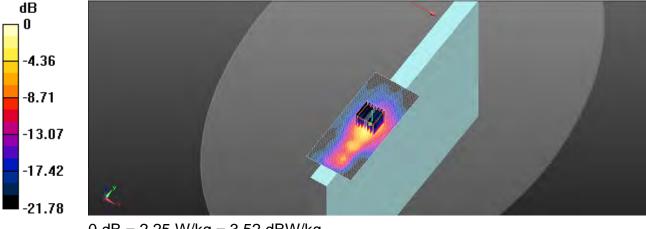
Area Scan (61x141x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 1.63 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.968 V/m: Power Drift = 0.13 dB Peak SAR (extrapolated) = 5.02 W/kg

SAR(1 g) = 0.957 W/kg; SAR(10 g) = 0.284 W/kg

Maximum value of SAR (measured) = 2.25 W/kg



0 dB = 2.25 W/kg = 3.52 dBW/kg

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Date: 2018/12/8

WLAN 802.11n(40M) 5.3G_Body_Top side_CH 54_Main_0mm

Communication System: WLAN 5G; Frequency: 5270 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5270 MHz; σ = 5.293 S/m; ϵ_r = 49.214; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.7°C; Liquid temperature: 21.9°C

DASY5 Configuration:

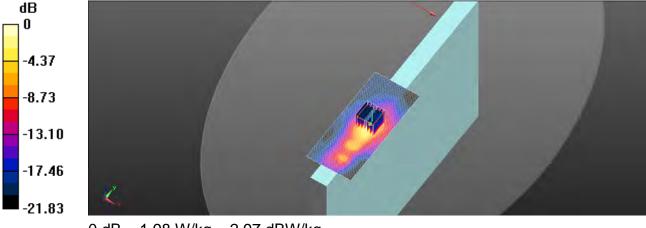
- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x141x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 1.58 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.157 V/m: Power Drift = -0.12 dB Peak SAR (extrapolated) = 4.40 W/kg SAR(1 g) = 0.877 W/kg; SAR(10 g) = 0.273 W/kg

Maximum value of SAR (measured) = 1.98 W/kg



0 dB = 1.98 W/kg = 2.97 dBW/kg

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Date: 2018/12/9

WLAN 802.11n(40M) 5.6G_Body_Top side_CH 134_Main_0mm

Communication System: WLAN 5G; Frequency: 5670 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5670 MHz; σ = 5.944 S/m; ϵ_r = 47.96; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 22.2°C

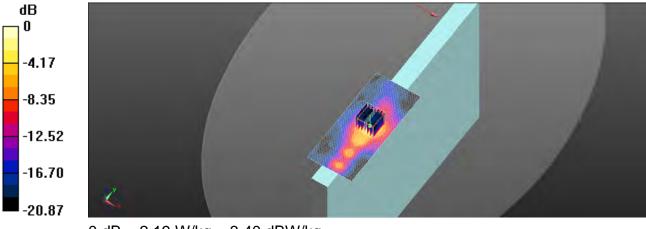
DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.06, 4.06, 4.06); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x141x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 2.03 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 2.340 V/m: Power Drift = 0.02 dB Peak SAR (extrapolated) = 5.14 W/kg

SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.319 W/kg Maximum value of SAR (measured) = 2.19 W/kg



0 dB = 2.19 W/kg = 3.40 dBW/kg

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Date: 2018/12/9

WLAN 802.11ac(80M) 5.6G_Body_Top side_CH 138_Main_0mm

Communication System: WLAN 5G; Frequency: 5690 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5690 MHz; σ = 5.984 S/m; ϵ_r = 47.872; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.38, 4.38, 4.38); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x141x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 1.84 W/kg

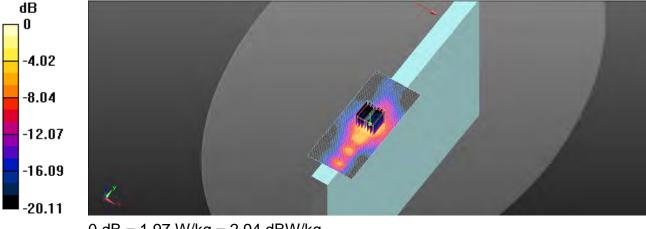
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.894 V/m: Power Drift = 0.16 dB

Peak SAR (extrapolated) = 4.54 W/kg

SAR(1 g) = 0.918 W/kg; SAR(10 g) = 0.288 W/kg

Maximum value of SAR (measured) = 1.97 W/kg



0 dB = 1.97 W/kg = 2.94 dBW/kg

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Date: 2018/12/10

WLAN 802.11ac(80M) 5.8G_Body_Top side_CH 155_Main_0mm

Communication System: WLAN 5G; Frequency: 5775 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5775 MHz; σ = 6.124 S/m; ϵ_r = 47.592; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.6°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.38, 4.38, 4.38); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

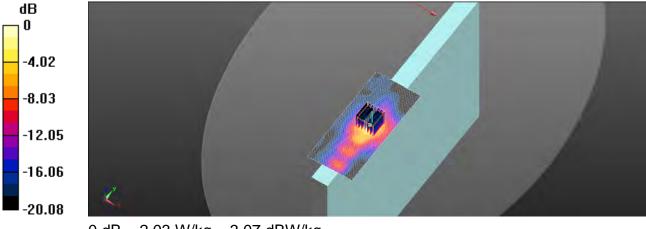
Area Scan (61x141x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 1.88 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 1.721 V/m: Power Drift = 0.01 dB

Peak SAR (extrapolated) = 4.93 W/kg

SAR(1 g) = 0.959 W/kg; SAR(10 g) = 0.312 W/kg

Maximum value of SAR (measured) = 2.03 W/kg



0 dB = 2.03 W/kg = 3.07 dBW/kg

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Date: 2018/12/7

WLAN 802.11b_Body_Top side_CH 1_Aux_0mm

Communication System: WLAN 2.45G; Frequency: 2412 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2412 MHz; σ = 1.928 S/m; ϵ_r = 53.779; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.6°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.59, 7.59, 7.59); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (51x101x1): Interpolated grid: dx=12 mm, dy=12 mm Maximum value of SAR (interpolated) = 2.19 W/kg

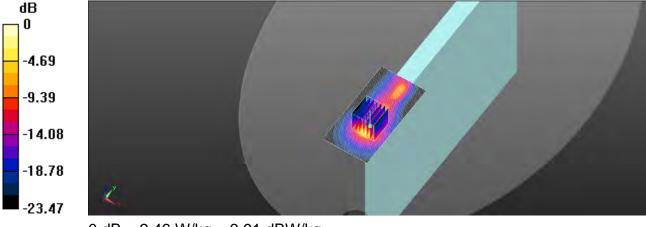
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.305 V/m: Power Drift = 0.06 dB

Peak SAR (extrapolated) = 3.52 W/kg

SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.425 W/kg

Maximum value of SAR (measured) = 2.46 W/kg



0 dB = 2.46 W/kg = 3.91 dBW/kg

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Date: 2018/12/7

Bluetooth(GFSK)_Body_Top side_CH 39_Aux_0mm

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2441 MHz; σ = 1.969 S/m; ϵ_r = 53.692; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.6°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.59, 7.59, 7.59); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (51x101x1): Interpolated grid: dx=12 mm, dy=12 mm Maximum value of SAR (interpolated) = 0.504 W/kg

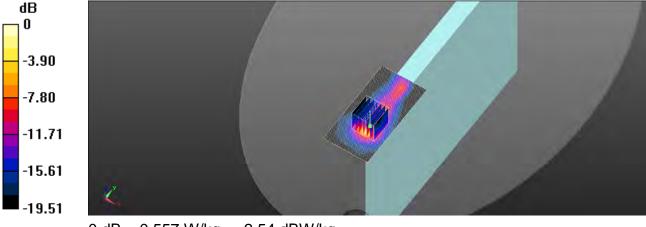
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.410 V/m: Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.798 W/kg

SAR(1 g) = 0.270 W/kg; SAR(10 g) = 0.098 W/kg

Maximum value of SAR (measured) = 0.557 W/kg



0 dB = 0.557 W/kg = -2.54 dBW/kg

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Date: 2018/12/7

WLAN 802.11n(40M) 5.2G_Body_Top side_CH 46_Aux_0mm

Communication System: WLAN 5G; Frequency: 5230 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5230 MHz; σ = 5.219 S/m; ϵ_r = 49.346; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 22.1°C; Liquid temperature: 21.8°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x91x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.74 W/kg

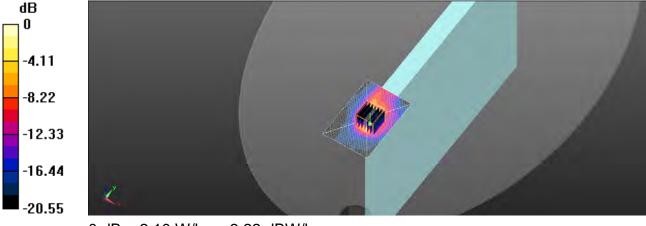
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.934 V/m: Power Drift = 0.03 dB

Peak SAR (extrapolated) = 5.16 W/kg

SAR(1 g) = 0.923 W/kg; SAR(10 g) = 0.252 W/ka

Maximum value of SAR (measured) = 2.10 W/kg



0 dB = 2.10 W/kg = 3.22 dBW/kg

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Date: 2018/12/8

WLAN 802.11a 5.3G_Body_Top side_CH 52_Aux_0mm

Communication System: WLAN 5G; Frequency: 5260 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5260 MHz; σ = 5.276 S/m; ϵ_r = 49.214; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.7°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x111x1): Interpolated grid: dx=10 mm, dy=10 mm

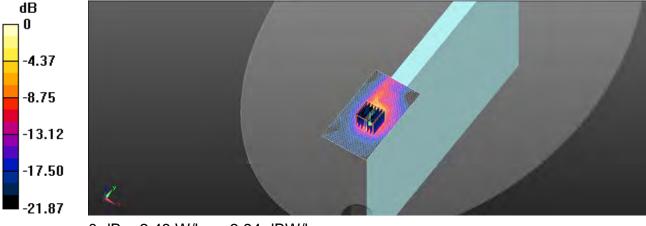
Maximum value of SAR (interpolated) = 1.88 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 1.951 V/m: Power Drift = 0.08 dB

Peak SAR (extrapolated) = 5.61 W/kg

SAR(1 g) = 1 W/kg; SAR(10 g) = 0.263 W/kg

Maximum value of SAR (measured) = 2.48 W/kg



0 dB = 2.48 W/kg = 3.94 dBW/kg

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Date: 2018/12/8

WLAN 802.11n(40M) 5.3G_Body_Top side_CH 54_Aux_0mm

Communication System: WLAN 5G; Frequency: 5270 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5270 MHz; σ = 5.293 S/m; ϵ_r = 49.222; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.7°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x101x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 1.87 W/kg

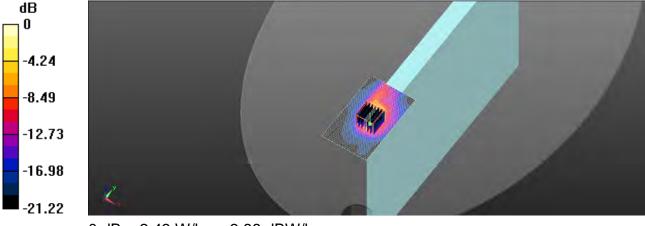
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.838 V/m: Power Drift = 0.13 dB

Peak SAR (extrapolated) = 5.56 W/kg

SAR(1 g) = 0.987 W/kg; SAR(10 g) = 0.260 W/ka

Maximum value of SAR (measured) = 2.43 W/kg



0 dB = 2.43 W/kg = 3.86 dBW/kg

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Date: 2018/12/9

WLAN 802.11ac(80M) 5.6G_Body_Top side_CH 106_Aux_0mm

Communication System: WLAN 5G; Frequency: 5530 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5530 MHz; σ = 5.701 S/m; ϵ_r = 48.401; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.06, 4.06, 4.06); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x81x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.85 W/kg

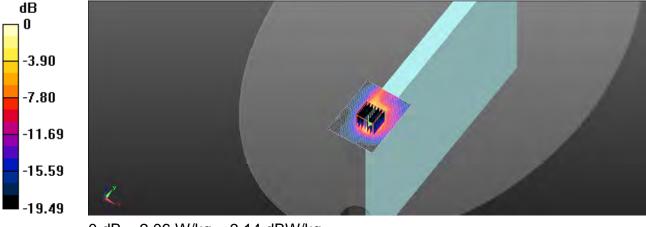
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.116 V/m: Power Drift = 0.12 dB

Peak SAR (extrapolated) = 5.10 W/kg

SAR(1 g) = 0.910 W/kg; SAR(10 g) = 0.275 W/kg

Maximum value of SAR (measured) = 2.06 W/kg



0 dB = 2.06 W/kg = 3.14 dBW/kg

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Date: 2018/12/10

WLAN 802.11ac(80M) 5.8G_Body_Top side_CH 155_Aux_0mm

Communication System: WLAN 5G; Frequency: 5775 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5775 MHz; σ = 6.124 S/m; ϵ_r = 47.592; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.6°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.38, 4.38, 4.38); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Area Scan (61x81x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.63 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.950 V/m; Power Drift = 0.06 dB

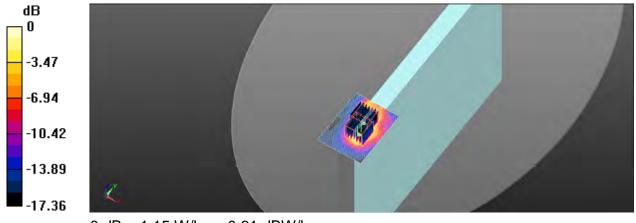
Peak SAR (extrapolated) = 4.61 W/kg

SAR(1 g) = 0.770 W/kg; SAR(10 g) = 0.256 W/kg

Maximum value of SAR (measured) = 1.81 W/kg

Zoom Scan (7x7x12)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=2mm Reference Value = 1.950 V/m: Power Drift = 0.06 dB Peak SAR (extrapolated) = 2.58 W/kg

SAR(1 g) = 0.586 W/kg; SAR(10 g) = 0.231 W/kg Maximum value of SAR (measured) = 1.15 W/kg



0 dB = 1.15 W/kg = 0.61 dBW/kg

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6. SAR System Performance Verification

Dipole 750 MHz SN:1015

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1 Medium parameters used: f = 750 MHz; σ = 0.979 S/m; ϵ_r = 53.492; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 22.3°C; Liquid temperature: 21.8°C

DASY5 Configuration:

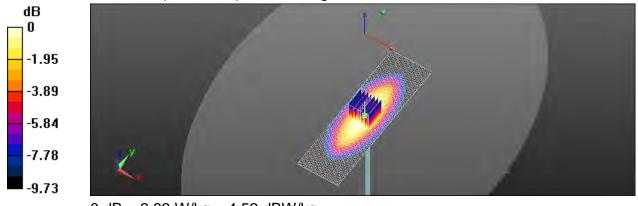
- Probe: EX3DV4 SN3770; ConvF(9.97, 9.97, 9.97); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Pin=250mW/Area Scan (41x141x1): Interpolated grid: dx=15 mm, dy=15 mm Maximum value of SAR (interpolated) = 2.82 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm,

dz=5mm

Reference Value = 54.21 V/m; Power Drift = -0.04 dB Peak SAR (extrapolated) = 3.29 W/kg SAR(1 g) = 2.25 W/kg; SAR(10 g) = 1.51 W/kg Maximum value of SAR (measured) = 2.83 W/kg



⁰ dB = 2.83 W/kg = 4.52 dBW/kg

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Date: 2018/12/14

Dipole 750 MHz_SN:1015

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: f = 750 MHz; σ = 0.969 S/m; ϵ_r = 57.114; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(9.97, 9.97, 9.97);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

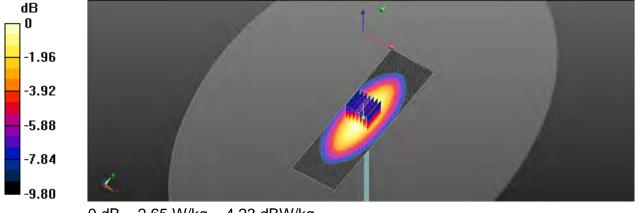
Pin=250mW/Area Scan (41x141x1): Interpolated grid: dx=15 mm, dy=15 mm Maximum value of SAR (interpolated) = 2.63 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.30 V/m; Power Drift = -0.04 dB Peak SAR (extrapolated) = 3.11 W/kg

SAR(1 g) = 2.09 W/kg; SAR(10 g) = 1.4 W/kg

Maximum value of SAR (measured) = 2.65 W/kg



0 dB = 2.65 W/kg = 4.23 dBW/kg

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Date: 2018/12/11

Dipole 835 MHz_SN:4d063

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: f = 835 MHz; σ = 0.996 S/m; ϵ_r = 57.237; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.7°C; Liquid temperature: 22.1°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(9.72, 9.72, 9.72); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

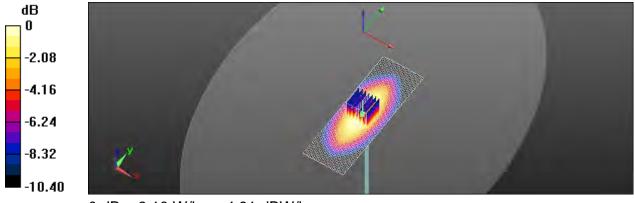
Pin=250mW/Area Scan (41x121x1): Interpolated grid: dx=15 mm, dy=15 mm Maximum value of SAR (interpolated) = 3.09 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.66 V/m: Power Drift = -0.01 dB Peak SAR (extrapolated) = 3.64 W/kg

SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.59 W/kg

Maximum value of SAR (measured) = 3.10 W/kg



0 dB = 3.10 W/kg = 4.91 dBW/kg

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Date: 2018/12/17

Dipole 835 MHz_SN:4d063

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1 Medium parameters used: f = 835 MHz; σ = 0.996 S/m; ϵ_r = 57.261; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.5°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(9.72, 9.72, 9.72);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

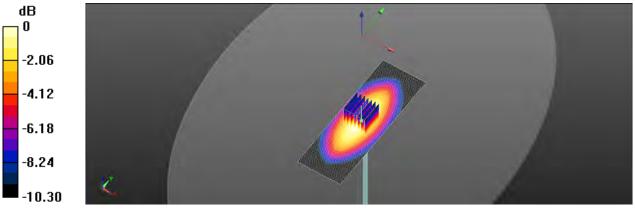
Pin=250mW/Area Scan (41x121x1): Interpolated grid: dx=15 mm, dy=15 mm Maximum value of SAR (interpolated) = 3.07 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm,

dz=5mm Reference Value = 56.64 V/m: Power Drift = -0.02 dB Peak SAR (extrapolated) = 3.58 W/kg

SAR(1 g) = 2.43 W/kg; SAR(10 g) = 1.6 W/kg

Maximum value of SAR (measured) = 3.06 W/kg



0 dB = 3.06 W/kg = 4.86 dBW/kg

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Date: 2018/12/12

Dipole 1750 MHz_SN:1008

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1750 MHz; σ = 1.468 S/m; ϵ_r = 51.392; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 22.0°C; Liquid temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(8.26, 8.26, 8.26); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

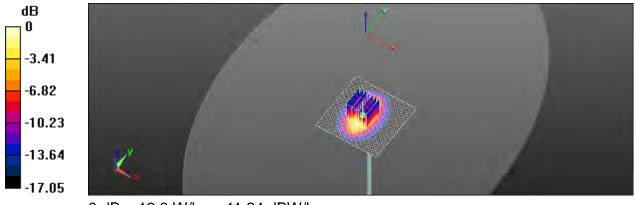
Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15 mm, dy=15 mm Maximum value of SAR (interpolated) = 13.1 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm,

dz=5mm Reference Value = 92.28 V/m: Power Drift = 0.08 dB Peak SAR (extrapolated) = 17.1 W/kg

SAR(1 g) = 9.23 W/kg; SAR(10 g) = 4.83 W/kg

Maximum value of SAR (measured) = 13.3 W/kg



0 dB = 13.3 W/kg = 11.24 dBW/kg

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Date: 2018/12/18

Dipole 1750 MHz_SN:1008

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1750 MHz; σ = 1.474 S/m; ϵ_r = 51.974; ρ = 1000 kg/m³

Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(8.26, 8.26, 8.26);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

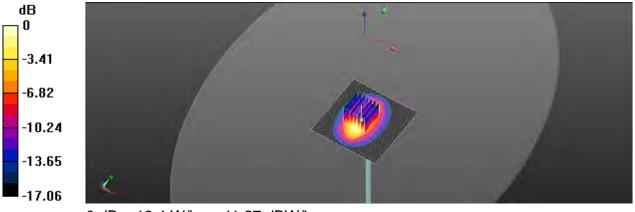
Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15 mm, dy=15 mm Maximum value of SAR (interpolated) = 13.1 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.28 V/m: Power Drift = 0.08 dB Peak SAR (extrapolated) = 17.1 W/kg

SAR(1 g) = 9.27 W/kg; SAR(10 g) = 4.85 W/kg

Maximum value of SAR (measured) = 13.4 W/kg



0 dB = 13.4 W/kg = 11.27 dBW/kg

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Date: 2018/12/12

Dipole 1900 MHz_SN:5d173

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; σ = 1.63 S/m; ϵ_r = 50.897; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 22.0°C; Liquid temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(8, 8, 8); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

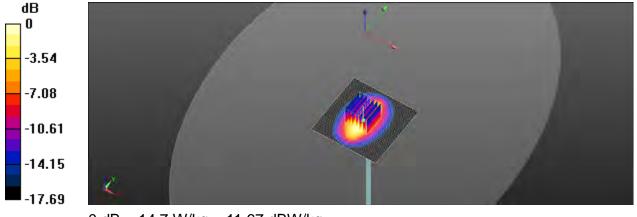
Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15 mm, dy=15 mm Maximum value of SAR (interpolated) = 14.7 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 95.70 V/m; Power Drift = 0.01 dB Peak SAR (extrapolated) = 18.8 W/kg

SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.25 W/kg

Maximum value of SAR (measured) = 14.7 W/kg



0 dB = 14.7 W/kg = 11.67 dBW/kg

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Date: 2018/12/18

Dipole 1900 MHz_SN: 5d173

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; σ = 1.642 S/m; ϵ_r = 51.461; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 21.9°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(8, 8, 8); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

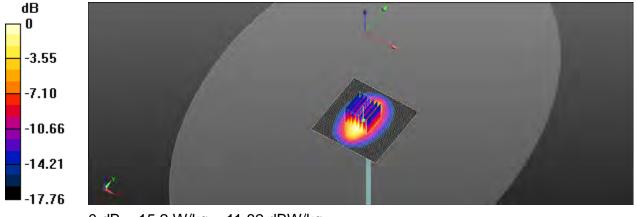
Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=15 mm, dy=15 mm Maximum value of SAR (interpolated) = 15.2 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.27 V/m; Power Drift = -0.02 dB Peak SAR (extrapolated) = 19.5 W/kg

SAR(1 g) = 10.4 W/kg; SAR(10 g) = 5.38 W/kg

Maximum value of SAR (measured) = 15.2 W/kg



0 dB = 15.2 W/kg = 11.82 dBW/kg

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Date: 2018/12/13

Dipole 2300 MHz_SN:1023

Communication System: CW; Frequency: 2300 MHz; Duty Cycle: 1:1

Medium parameters used: f = 2300 MHz; σ = 1.844 S/m; ϵ_r = 54.055; ρ = 1000 kg/m³ Phantom section: Flat Section

Ambient temperature: 22.2°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.68, 7.68, 7.68); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

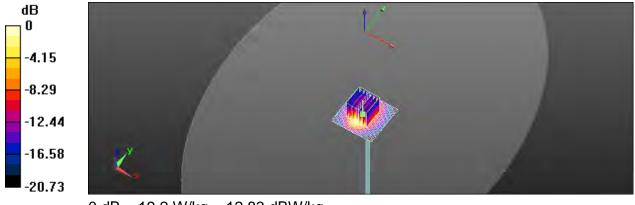
Pin=250mW/Area Scan (51x51x1): Interpolated grid: dx=12 mm, dy=12 mm Maximum value of SAR (interpolated) = 20.2 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 98.73 V/m: Power Drift = 0.05 dB Peak SAR (extrapolated) = 25.4 W/kg

SAR(1 g) = 12.7 W/kg; SAR(10 g) = 6.02 W/kg

Maximum value of SAR (measured) = 19.2 W/kg



0 dB = 19.2 W/kg = 12.83 dBW/kg

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Dipole 2300 MHz SN:1023

Communication System: CW; Frequency: 2300 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2300 MHz; σ = 1.835 S/m; ϵ_r = 54.063; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.7°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(7.68, 7.68, 7.68);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Pin=250mW/Area Scan (51x51x1): Interpolated grid: dx=12 mm, dy=12 mm Maximum value of SAR (interpolated) = 19.5 W/kg

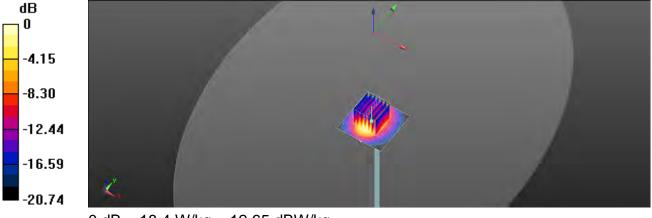
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm,

dz=5mm

Reference Value = 97.05 V/m; Power Drift = 0.06 dB Peak SAR (extrapolated) = 24.3 W/kg

SAR(1 g) = 12.2 W/kg; SAR(10 g) = 5.77 W/kg

Maximum value of SAR (measured) = 18.4 W/kg



0 dB = 18.4 W/kg = 12.65 dBW/kg

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Dipole 2450 MHz SN:727

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2450 MHz; σ = 1.974 S/m; ϵ_r = 53.577; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.9°C; Liquid temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.59, 7.59, 7.59); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Pin=250mW/Area Scan (51x51x1): Interpolated grid: dx=12 mm, dy=12 mm Maximum value of SAR (interpolated) = 20.4 W/kg

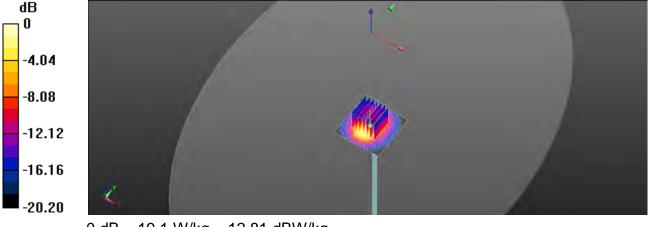
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm,

dz=5mm

Reference Value = 100.2 V/m; Power Drift = 0.04 dB Peak SAR (extrapolated) = 24.9 W/kg

SAR(1 g) = 12.8 W/kg; SAR(10 g) = 6.14 W/kg

Maximum value of SAR (measured) = 19.1 W/kg



0 dB = 19.1 W/kg = 12.81 dBW/kg

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Dipole 2450 MHz SN:727

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2450 MHz; σ = 1.986 S/m; ϵ_r = 53.722; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.6°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.59, 7.59, 7.59); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Pin=250mW/Area Scan (51x51x1): Interpolated grid: dx=12 mm, dy=12 mm Maximum value of SAR (interpolated) = 21.4 W/kg

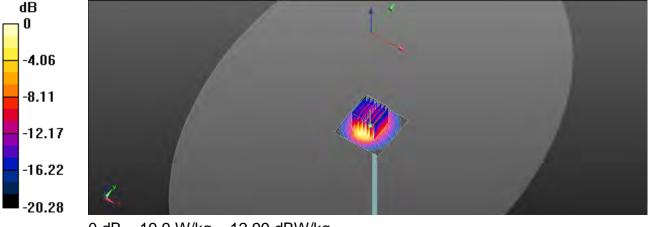
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm,

dz=5mm

Reference Value = 100.6 V/m; Power Drift = 0.02 dB Peak SAR (extrapolated) = 26.0 W/kg

SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.38 W/kg

Maximum value of SAR (measured) = 19.9 W/kg



0 dB = 19.9 W/kg = 12.99 dBW/kg

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Dipole 2600 MHz SN:1005

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2600 MHz; σ = 2.216 S/m; ϵ_r = 52.576; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.8°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(7.37, 7.37, 7.37); Calibrated: 2018/4/25;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=12 mm, dy=12 mm Maximum value of SAR (interpolated) = 22.6 W/kg

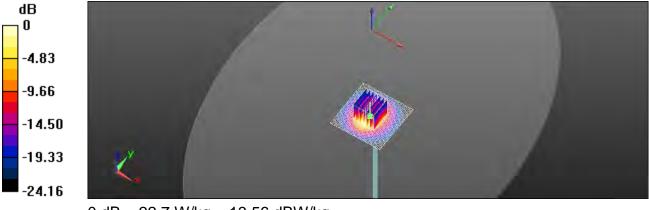
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm,

dz=5mm

Reference Value = 99.22 V/m; Power Drift = -0.03 dB Peak SAR (extrapolated) = 31.4 W/kg

SAR(1 g) = 14.3 W/kg; SAR(10 g) = 6.27 W/kg

Maximum value of SAR (measured) = 22.7 W/kg



0 dB = 22.7 W/kg = 13.56 dBW/kg

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Dipole 2600 MHz SN:1005

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2600 MHz; σ = 2.224 S/m; ϵ_r = 51.104; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.7°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770;ConvF(7.37, 7.37, 7.37);Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=12 mm, dy=12 mm Maximum value of SAR (interpolated) = 21.4 W/kg

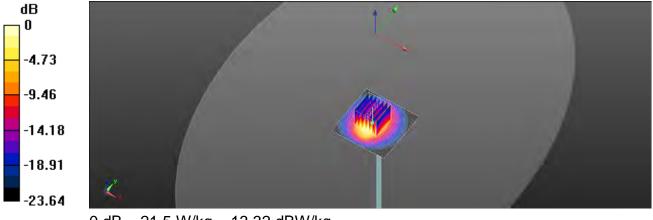
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm,

dz=5mm

Reference Value = 97.06 V/m; Power Drift = 0.12 dB Peak SAR (extrapolated) = 29.7 W/kg

SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.09 W/kg

Maximum value of SAR (measured) = 21.5 W/kg



0 dB = 21.5 W/kg = 13.32 dBW/kg

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Dipole 5200 MHz SN:1023

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5200 MHz; σ = 5.158 S/m; ϵ_r = 49.348; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.8°C; Liquid temperature: 22.0°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Pin=100mW/Area Scan (51x51x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 14.6 W/kg

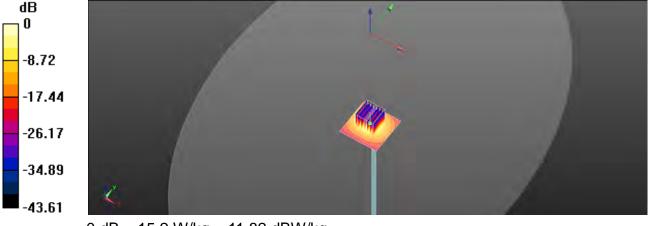
Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

dz=2mm

Reference Value = 54.81 V/m; Power Drift = 0.15 dB Peak SAR (extrapolated) = 34.3 W/kg

SAR(1 g) = 7.09 W/kg; SAR(10 g) = 1.97 W/kg

Maximum value of SAR (measured) = 15.2 W/kg



0 dB = 15.2 W/kg = 11.82 dBW/kg

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Dipole 5200 MHz_SN:1023

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5200 MHz; σ = 5.165 S/m; ϵ_r = 49.473; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 22.1°C; Liquid temperature: 21.8°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

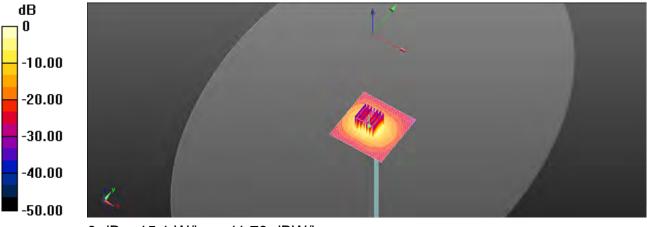
Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 14.6 W/kg

Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 54.88 V/m; Power Drift = 0.11 dB Peak SAR (extrapolated) = 30.1 W/kg

SAR(1 g) = 7.07 W/kg; SAR(10 g) = 1.99 W/kg

Maximum value of SAR (measured) = 15.1 W/kg



0 dB = 15.1 W/kg = 11.79 dBW/kg

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Dipole 5300 MHz SN:1023

Communication System: CW; Frequency: 5300 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5300 MHz; σ = 5.323 S/m; ϵ_r = 49.055; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.9°C; Liquid temperature: 21.6°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 15.3 W/kg

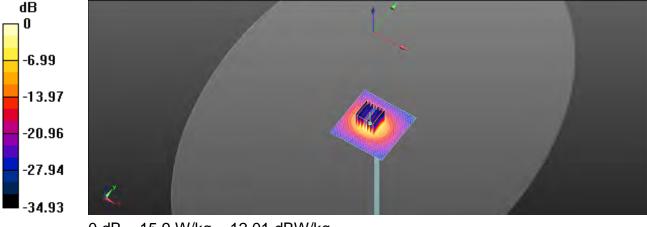
Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

dz=2mm

Reference Value = 55.07 V/m; Power Drift = 0.07 dB Peak SAR (extrapolated) = 31.9 W/kg

SAR(1 g) = 7.39 W/kg; SAR(10 g) = 2.07 W/kg

Maximum value of SAR (measured) = 15.9 W/kg



0 dB = 15.9 W/kg = 12.01 dBW/kg

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Dipole 5300 MHz SN:1023

Communication System: CW; Frequency: 5300 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5300 MHz; σ = 5.338 S/m; ϵ_r = 49.159; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.7°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.65, 4.65, 4.65); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 15.7 W/kg

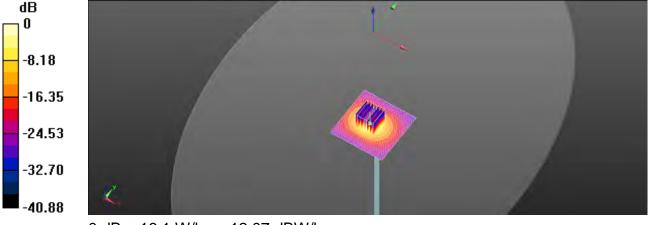
Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

dz=2mm

Reference Value = 55.21 V/m; Power Drift = 0.06 dB Peak SAR (extrapolated) = 32.6 W/kg

SAR(1 g) = 7.52 W/kg; SAR(10 g) = 2.11 W/kg

Maximum value of SAR (measured) = 16.1 W/kg



0 dB = 16.1 W/kg = 12.07 dBW/kg

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Dipole 5600 MHz SN:1023

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5600 MHz; σ = 5.808 S/m; ϵ_r = 48.082; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 22.0°C; Liquid temperature: 21.8°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.06, 4.06, 4.06); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Pin=100mW/Area Scan (81x81x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 15.7 W/kg

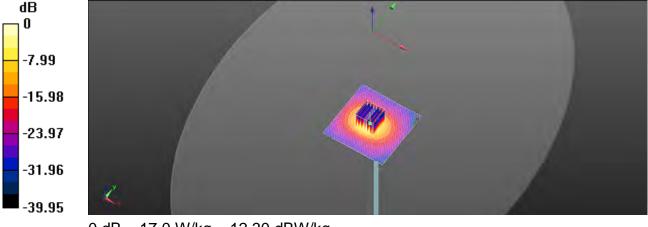
Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

dz=2mm

Reference Value = 54.01 V/m; Power Drift = 0.03 dB Peak SAR (extrapolated) = 36.1 W/kg

SAR(1 g) = 7.88 W/kg; SAR(10 g) = 2.18 W/kg

Maximum value of SAR (measured) = 17.0 W/kg



0 dB = 17.0 W/kg = 12.30 dBW/kg

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Dipole 5600 MHz SN:1023

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5600 MHz; σ = 5.82 S/m; ϵ_r = 48.2; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.9°C; Liquid temperature: 22.2°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.06, 4.06, 4.06); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Pin=100mW/Area Scan (81x81x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 15.9 W/kg

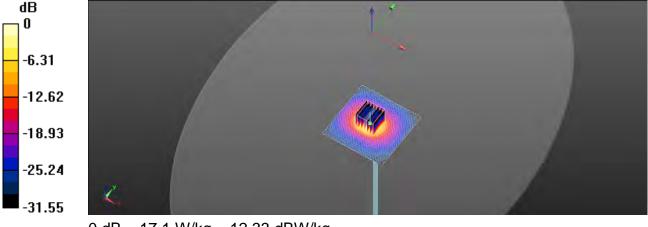
Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

dz=2mm

Reference Value = 54.83 V/m; Power Drift = 0.17 dB Peak SAR (extrapolated) = 36.2 W/kg

SAR(1 g) = 7.82 W/kg; SAR(10 g) = 2.15 W/kg

Maximum value of SAR (measured) = 17.1 W/kg



0 dB = 17.1 W/kg = 12.33 dBW/kg

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Dipole 5800 MHz SN:1023

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5800 MHz; σ = 6.143 S/m; ϵ_r = 47.441; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.7°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.38, 4.38, 4.38); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

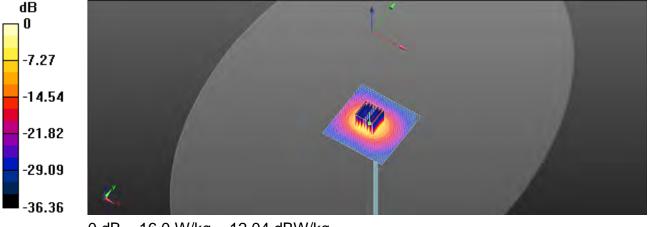
Pin=100mW/Area Scan (81x81x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 14.7 W/kg

Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 51.70 V/m; Power Drift = 0.08 dB Peak SAR (extrapolated) = 35.6 W/kg

SAR(1 g) = 7.32 W/kg; SAR(10 g) = 2.03 W/kg

Maximum value of SAR (measured) = 16.0 W/kg



0 dB = 16.0 W/kg = 12.04 dBW/kg

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Dipole 5800 MHz SN:1023

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1 Medium parameters used: f = 5800 MHz; σ = 6.158 S/m; ϵ_r = 47.587; ρ = 1000 kg/m³ Phantom section: Flat Section Ambient temperature: 21.6°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 SN3770; ConvF(4.38, 4.38, 4.38); Calibrated: 2018/4/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2018/4/21
- Phantom: ELI
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

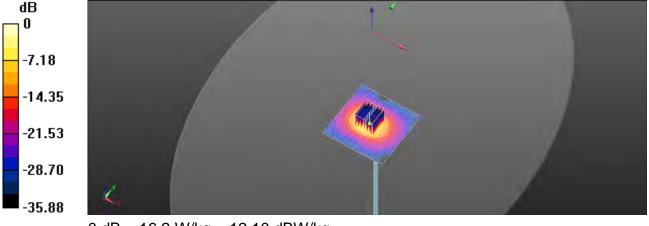
Pin=100mW/Area Scan (81x81x1): Interpolated grid: dx=10 mm, dy=10 mm Maximum value of SAR (interpolated) = 15.0 W/kg

Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 51.77 V/m; Power Drift = 0.08 dB Peak SAR (extrapolated) = 36.0 W/kg

SAR(1 g) = 7.43 W/kg; SAR(10 g) = 2.07 W/kg

Maximum value of SAR (measured) = 16.2 W/kg



0 dB = 16.2 W/kg = 12.10 dBW/kg

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7.DAE & Probe Calibration Certificate

Schmid & Partner Engineering AG eughausstrasse 43, 8004 Zuri	ry of ch, Switzerland	ILAC-MRA	S Schweizerlischer Kalibrierdienet Service suisse d'étaionnage Servizio avizzero di taratura S Swiss Calibration Service
Accredited by the Swiss Accredit The Swiss Accreditation Servic Multilateral Agreement for the	ce is one of the signatories	s to the EA	on No.: SCS 0108
Client SGS-TW (Aud	en)	Certificate	No: DAE4-856 Apr18
CALIBRATION	CERTIFICATE		
Object	DAE4 - SD 000 D	004 BM - SN: 856	
Calibration procedure(s)	QA CAL-06.v28 Calibration proces	dure for the data acquisition ele	actronics (DAE)
Calibration dette:	April 21, 2018		
The measurements and the unco	ertaintias with confidence pr kted in the closed laboratory	only standards, which realize the physical r obschifty are given on the following pages y facility: environment temperature (22 \pm 3)	and are part of the certificate.
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The measurements and the uno All calibrations have been condu Calibration Equipment used (MB Primery Standards Keithley Multimeter Type 2001	entainties with confidence pr icted in the closed (sconitary TE critical for calibration) (ID # (SN: 0810278	Obebility are given on the following pages y facility: environment temperature (22 ± 3) <u>Cal Date (Certificate No.)</u> 31-Aug-17 (No:21082)	Ind are part of the centificans. If C and humidity = 70%. Scheduled Calibration Aug-18
The measurements and the unco All calibrations have been condu Calibration Equipment used (MB Primary Standards Keithlay Multimeter Type 2001 Secondary Standards Auto DAE Calibration Unit	entainties with confidence pr icted in the closed teconitory (TE ontical for calibration) (ID #	obsolvity are given on the following pages y facility: environment temperature (22 ± 3) <u>Cal Date (Centificate No.)</u> 31-Aug-17 (Nor21092) <u>Check Date (In house)</u> D4-Jan-18 (In house check)	and are part of the certificate. PC and humidity = 70%. Scheckled Catibration
The measurements and the unco All calibrations have been condu	In the closed taboratory (TE online) for calibration) (D # SN: 0810278 ID # SE UWS 063 AA 1001	obschilty are given on the following pages y facility: environment temperature (22 ± 3) Cal Date (Certificate No.) 31-Aug-17 (No:21082) Check Date (In house) 04-Jan-18 (In house check) 04-Jan-18 (In house check)	And are part of the certificans. PC and humidity = 70%. Scheduled Calibration Aug-18 Scheduled Check In house check: Jan-19 In house check: Jan-19 In house check: Jan-19
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The measurements and the unco All calibrations have been condu Calibration Equipment used (MB Primary Standards Kathlay Multimeter Type 2001 Secondary Standards Auto DAE Calibration Unit	Atantes with confidence pre- sted in the closed taboratory (TE online) for calibration) ID # SN: 0510278 ID # SE UWS 053 AA 1001 SE UWS 006 AA 1002 Name	Obebility are given on the following pages y facility: environment temperature (22 ± 3) Cal Date (Certificate No.) 31-Aug-17 (Nor21092) Check Date (In house) 04-Jan-18 (In house check) 04-Jan-18 (In house check)	And are part of the certificans. PC and humidity < 70%. Scheduled Calibration Aug-18 Scheduled Check In house check: Jan-19 In house check: Jan-19

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Calibration Laboratory of Schmid & Partner Engineering AG http://www.strasen.45, 0064 Zurich, Switzerland



Schwagerischer Kalibrierdier Service suisse d'étalonnage C Servizio svizzaro di laratura Swiss Calibration Service

Accreditation Ma.: SCS 0108

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Accredited by the Seas Accordiation Service (SAS) The Swiss Accreditation Service is one of the signaturine to the EA Multilateral Agreement for the recognition of calibration continuates

Glossary

DAE Connector angle

data acquisition electronics Information used in DASY system to align probe sensor X to the robot coordinate system.

Methods Applied and Interpretation of Parameters.

- DC Voltage Measurement: Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- Connector angle: The angle of the connector is assessed measuring the angle ٠ mechanically by a tool inserted. Uncertainty is not required.
- The following parameters as documented in the Appendix contain technical information as a ٠ result from the performance test and require no uncertainty.
 - ÷ DC Voltage Measurement Linearity: Verification of the Linearity at +10% and -10% of the nominal calibration voltage. Influence of offset voltage is included in this measurement.
 - Common mode sensitivity: Influence of a positive or negative common mode voltage on the differential measurement.
 - Channel separation: Influence of a voltage on the neighbor channels not subject to an input voltage:
 - AD Converter Values with Inputs shorted: Values on the internal AD converter corresponding to zero input voltage
 - Input Offset Measurement: Output voltage and statistical results over a large number of zero voltage measurements.
 - Input Offset Current: Typical value for information; Maximum channel input offset current, not considering the input resistance.
 - Input resistance: Typical value for information: DAE input resistance at the connector, ٠ during internal auto-zeroing and during measurement.
 - Low Battery Alarm Voltage: Typical value for information. Below this voltage, a battery alarm signal is generated.
 - Power consumption: Typical value for information. Supply currents in various operating modes.

Certificate No: DAE4-886 April 6

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DC Voltage Measurement

AD - Conventer Meso	lution nominal			
High Range:	1LSB =	6.1µV,	full range =	-100+300 mV
Low Range:	1LSB =	61nV .	full range =	-1 →3mV
DASY measurement p	parameters: Aut	o Zero Time: 3	sec; Measuring	time: 3 sec

Calibration Factors	x	Y	z
High Range	403.380 ± 0.02% (k=2)	404.500 ± 0.02% (k=2)	403.824 ± 0.02% (k=2)
Low Range	3.97569 ± 1.50% (k=2)	3.98803 ± 1.50% (k=2)	3.94148 ± 1.50% (k=2)

Connector Angle

Connector Angle to be used in DASY system	264.5 ° ± 1 °
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Certificate No: DAE4-856_Apr18

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Appendix (Additional assessments outside the scope of SCS0108)

1. DC Voltage Linearity

High Range		Reading (µV)	Difference (µV)	Error (%)
Channel X	+ Input	199991.32	-3.93	-0.00
Channel X	+ Input	20000.89	-0.73	-0.00
Channel X	- Input	-19999.72	1.38	-0.01
Channel Y	+ Input	199995.30	0.19	0.00
Channel Y	+ Input	19999.58	-1.96	-0.01
Channel Y	- Input	-20002.18	-0.91	0.00
Channel Z	+ Input	199995.15	0.22	0.00
Channel Z	+ Input	19998.23	-3.34	-0.02
Channel Z	- Input	-20002.45	-1.22	0.01

Low Range	Reading (µV)	Difference (µV)	Error (%)
Channel X + Input	2001.18	-0.15	-0.01
Channel X + Input	202.02	0.40	0.20
Channel X - Input	-197.78	0.37	-0.19
Channel Y + Input	1999.81	-1.28	-0.06
Channel Y + Input	201.37	-0.27	-0.13
Channel Y - Input	-199.29	-0.94	0.47
Channel Z + Input	2000.80	-0.29	-0.01
Channel Z + Input	201.21	-0.19	-0.10
Channel Z - Input	-199.51	-1.1B	0.60

2. Common mode sensitivity

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	Common mode Input Voltage (mV)	High Range Average Reading (µV)	Low Range Average Reading (µV)
Channel X	200	-13.71	-15.90
	- 200	17.59	16.11
Channel Y	200	-2.20	-2.52
	- 200	0.55	-0.02
Channel Z	200	11.04	10.58
	- 200	-12.61	-12.99

3. Channel separation

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	Input Voltage (mV)	Channel X (µV)	Channel Y (µV)	Channel Z (µV)
Channel X	200	-	2.30	-2.46
Channel Y	200	7.31	-	3.25
Channel Z	200	8.90	4.49	-

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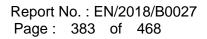
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AD-Converter Values with inputs shorted

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	High Range (LSB)	Low Range (LSB)
Channel X	16218	15730
Channel Y	15957	16114
Channel Z	15879	16093

5. Input Offset Measurement

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec Input 10MΩ

	Avcrage (µV)	min. Offset (µV)	max. Offset (µV)	Std. Deviation (µV)
Channel X	-0.35	-1.46	1.21	0.40
Channel Y	-0.34	-1.68	0.58	0.46
Channel Z	-0.03	-1.43	1.45	0.57

6. Input Offset Current

Nominal Input circuitry offset current on all channels: <25fA

7. Input Resistance (Typical values for information)

	Zeroing (kOhm)	Measuring (MOhm)
Channel X	200	200
Channel Y	200	200
Channel Z	200	200

8. Low Battery Alarm Voltage (Typical values for information)

Typical values	Alarm Level (VDC)
Supply (+ Vcc)	+7.9
Supply (- Vec)	-7.6

9. Power Consumption (Typical values for information)

Typical values	Switched off (mA)	Stand by (mA)	Transmitting (mA)
Supply (+ Vcc)	+0.01	+6	+14
Supply (- Vcc)	-0.01	-8	-9

Certificate No: DAE4-858 Apr18

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Report No. : EN/2018/B0027 Page: 384 of 468

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Salibration Edularment used IM Primary Standards Power motion NRP Power sensor NRP 251 Rower sensor NRP 251 Reference 20 dB Attenuator Reference Pedar E33DV2 DAE4	ID SN: 104778 SN: 104778 SN: 103744 SN: 103245 SN: 103245 SN: 56277 (20x) SN: 3013 SN: 860 ID	TotENY: envelopment temperature (22 ± 3)°C e Cal Cate (Certificate No.) 04-Apr 18 (No. 217-02672/02673) 04-Apr 18 (No. 217-02672) 04-Apr 18 (No. 217-02672) 04-Dec 17 (No. ES3-3013, Dec 17)	Ind humitity 4 76%, Scheduled Califration Apr-19 Apr-19 Apr-19 Apr-19 Der-18 Der-18 Der-18 Der-10 Echeduled Check
Calibration Equipment used (M Primary Standards Rower meter NRP Rower sensor NRP-291 Rolemons 20 dB Attenuator Relemons 20 dB Attenuator Relemons Pictar E330V2 DAE4 Secondary Standards Power meter E44108	ID SN: 104778 SN: 104778 SN: 10524 SN: 103243 SN: 103245 SN: 103245 SN: 55277 (20b) SN: 55277 (20b) SN: 3013 SN: 960 ID SN: 050412830774 SN: 750412830774	TodBity: envelopment temperature (22 ± 3)°C e Cal Cate (Certificate No.) 04-Apr 18 (No. 217-02672/02673) 04-Apr 18 (No. 217-02672) 04-Apr 19 (No. 217-02672) 04-Apr 19 (No. 217-02682) 04-Apr 19 (No. 217-02682) 04-Apr 19 (No. 217-02682) 04-Dec 17 (No. ESS-3013, Dec 17) 21-Dec 17 (No. DAE4-600, Dec 17) Check Date (in Insuse) 06-Apr 16 (in Insuse)	Ind humility 4 76%, Scheduled Califration April 9 April 9 April 9 April 9 Derit 8 Derit 8
Calibration Equipment used (M Primary Disentantis Power sensor NRP 251 Power sensor NRP 251 Rolenonce 20 dB Attenuator Relenence 20 dB Attenuator Power meter E44108 Power sensor E4412A	6TE stoload for calibration) 10 SN: 104778 SN: 103244 SN: 103244 SN: 55277 (20s) SN: 55277 (20s) SN: 55277 (20s) SN: 56277 SN: 050 SN: 05077 SN: 050777 SN: 0	Cal Date (Gertificate No.) Cal Date (Gertificate No.) 04-Apr.18 (No. 217-026720/02673) 04-Apr.18 (No. 217-02672) 04-Apr.18 (No. 217-02673) 04-Apr.18 (No. 217-02673) 04-Apr.19 (No. 217-02673) 05-Apr.19 (No. 217-02673) 06-Apr.19 (No. 217-02673) 07-Discl Date (n house) 08-Apr.18 (n house-these Jun-16) 08-Apr.16 (n house-these Jun-16)	Ind humility 4 76%, Scheduled Calibration April 9 April 9 April 9 April 9 Dec-18 Dec-18 Dec-18 Dec-18 Dec-18 in house deck: Jan 18 in house deck: Jan 18
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Calibration Equipment used (M Primary Disordards Power meter NRP Power sensor NRP-251 Reference Pedar E33DV2 DAE4 Secondary Standards Power meter E44108 Power sensor E4412A RF generator HP 8548C	ID SN: 104778 SN: 104778 SN: 10378 SN: 103245 SN: 103245 SN: 50277 (20v) SN: 3013 SN: 50275 SN: 50276 ID SN: 608412830774 SN: 00111210 SN: 00111210	Call Onle (Certificate No.) O4-Apr-18 (No. 217-02672/02673) O4-Apr-18 (No. 217-02672/02673) O4-Apr-18 (No. 217-02672) O4-Apr-18 (No. 102-0262) O5-Apr-18 (No. 102-0262) O5-Apr-16 (No. 102-0262) O6-Apr-16 (No. 102-0262) O6-0262) <t< td=""><td>Ind humitity 4 76%, Scheduled Calibration Apr. 19 Apr. 19 Apr. 19 Apr. 19 Der. 18 Der. 19 Der. 18 Der. 19 Der. 18 Der. 19 Der. 18 Der. 19 Der. 19 Der. 18 Der. 19 Der. 10 Der. 19 Der. 10 Der. 10 Der.</td></t<>	Ind humitity 4 76%, Scheduled Calibration Apr. 19 Apr. 19 Apr. 19 Apr. 19 Der. 18 Der. 19 Der. 18 Der. 19 Der. 18 Der. 19 Der. 18 Der. 19 Der. 19 Der. 18 Der. 19 Der. 10 Der. 19 Der. 10 Der.
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Calibration Equipment used (M Primary Standards Power sensor NRP-251 Roles and NRP-251 Relationce 20 dB Attenuistor Relationce 20 dB Attenuistor Relationce 20 dB Attenuistor Relations 20 dB Attenuistor Power Sensor E4412A RE generator HP 854BC Network Analyzer HP 8553E	ID SN: 104778 SN: 104778 SN: 103748 SN: 10344 SN: 103445 SN: 58277 (20e) SN: 3015 SN: 3015 SN: 980 ID SN: 60412830774 SN: 60412830774 SN: 001111210 SN: 001111210 SN: US26-2001700 SN: LIS37390585 Name	Call Onle (Certificate No.) O4-Apr-1H (No. 217-02672/02673) O4-Apr-1B (No. 217-02672) O5-Disc-17 (No. DAE-460, Dest17) Check Date (In Insuse) D5-Apr-1B (In Insuse Check Jun-16) D6-Apr-1B (In Insuse Check Jun-17) D6-Apr-1B (In Insuse Check Jun-17) D6-Apr-1B (In Insuse Insus	Ind transitiv + 76%, Scheduled Calibration April 9 April 9 April 9 April 9 Dec-19 Dec-19 Dec-19 Dec-19 Dec-19 Dec-19 Dec-19 Dec-19 In house check: Jan 18 In ho

Certificate No: EX3-3770_Apr18

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Calibration Laboratory of Schmid & Partner Engineering AG Higheumtrises #2, 9564 Zurith, Seitzerland



Schumberischer Kall 5 Service wateres d'étalonnece C Servizio svizzero di tantura S. **Bwiss Calibration Service**

Aucrediancer No.: SCS 0108

Arcrested by the Series Accreditions Service (SAU) The Swits Accreditation Service is one of the segretories to the EA Millibraria Agreement for the moogaition of calibration cartificates

Glossary

TSL NORMANZ	tesue simulating liquid
- The state of the	sensitivity in free space
CallVF	sensitivity in TSL / NORMX, y, z
DCP	diode compression point
CF	crest factor (1/daty, cycle) of the RF signer
A, B, C, O	modulation dependent linearization parameters
Polarization a	a rotation around probe rate
Polarization 3	3 rotation anxiet an axis that is in the plane normal to probe axis (at measurement peners), i.e., h = 0 is normal to probe axis.
Connector Anale	information used in DASY system to alon drobe sense: X to the mbol coordinate system

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, TEEE Recommended Practice for Determining the Peak Spatial Averaged Specific Absorption Rate (SAR) in the Human Head from Windows Communications Devices: Measure
- Adaption rate (24%) in the numer numer frame within some submittantices between the submittantices between the numer of the submittantices between the submittantices between the submittantices between the submittantices and the submittantices between the submittan b)
- 0
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- MORMs,y,z: Assessed for E-field polarization 4 = 0 (/ s 900 MHz in TEM-cell, / > 1600 MHz; R22 waveguide) NORMs,y,z are only intermediate values, ...s. The uncertainties of NORMs,y,z does not affect the E-field
- winertainty inside TSL (see below ConvF). NORM(7)x, y, z = NORMx, y, z * Bequency, response (see Frequency Response Chert). This ineliatization is indemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included. It the stated uncertainty of ConvF. DCPx,y.z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW.
- signal (no uncertainty required) DCP does not depend on traguency nor media PAR: PAR is the Peak to Average Rabo likat is not calibrated but determined based on the signal

- AX, Y, Z, BX, Y, Z, CX, Y, Z, OX, Y, Z, VRX, Y, Z, A, B, C, D are numerical linearization parameters assessed based fire data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the dioda. ssed based on
- ConvF and Boundary Effect Parameters: Assessed in Ital phantom using E-field (or Temperature Transfer Standard for t < 800 MHz) and inside waveguide using analytical field distributions based on power measurements for t > 800 MHz. The same setups are used for aspessment of the parameters applied for meaburements (or 1 × 600 km/z, the same sesups are used for assessment is the parameters apprenting boundary compensation (white, the same sesups are used for assessment is the power these parameters are used in DASY4 software to improve probal accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from a 50 MHz to a 100 MH2
- Spherical (hotropy (30 deviation from (sotropy); in a field of low gradients realized using a flat phantom exposed by a patch antenno. Sensor Offset: The sensul offset corresponds in the offset of virtual measurement cariter from the probe tip
- (on proce axis). No tolerance moulreid.
- Connector Angle. The angle is assessed using ion information gained by determining the NORMs (no uncertainty required).

Certificale No. EX3-3770_Apr18

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EX3DV4 - SN:3770

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April 25, 2018

Probe EX3DV4

SN:3770

Manufactured: Calibrated:

July 6, 2010 April 25, 2018

Calibrated for DASY/EASY Systems (Note: non-compatible with DASY2 system!)

Certificate No: EX3-3770_Apr18

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台灣檢驗科技股份有限公司 t (886-2) 2299-3279 f (886-2) 2298-0488

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EX3DV4- SN:3770

April 25, 2018

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3770

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (µV/(V/m) ²) ^A	0.30	0.60	0.38	± 10.1 %
DCP (mV) ⁸	101.9	101.9	101.5	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dBõV	c	D dB	VR mV	Unc ^L (k=2)
0	CW	X	0.0	0.0	1.0	0.00	138.1	±3.5 %
		Y	0.0	0.0	1.0		134.7	
		Z	0.0	0.0	1.0		135.6	

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

^a The uncertainties of Norm X, Y, Z do not affect the E²-field uncertainty inside TSL (see Pages 5 and 6).
^a Numerical Insartzation parameter: uncertainty not required.
^b Uncertainty is determined using the max, deviation from linear response applying ractangular distribution and is expressed for the square of the field value.

Certificate No: EX3-3770_Apr18

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EX3DV4-SN:3770

April 25, 2018

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3770

f (MHz) ^c	Relative Permittivity [®]	Conductivity (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha®	Depth ^G (mm)	Unc (k=2)
450	43.5	0.87	11.20	11.20	11.20	0.13	1.25	±13.3 %
750	41.9	0.89	10.05	10.05	10.05	0.43	0.80	± 12.0 %
835	41.5	0.90	9.55	9.55	9.55	0.35	0.97	± 12.0 %
900	41.5	0.97	9.36	9.36	9.36	0.27	1.10	± 12.0 %
1750	40.1	1.37	8.48	8.48	8.48	0.35	0.80	± 12.0 %
1900	40.0	1.40	8.22	8.22	8.22	0.32	0.80	± 12.0 %
2000	40.0	1.40	8.15	8.15	8.15	0.38	0.80	± 12.0 %
2300	39.5	1.67	7.78	7.78	7.78	0.33	0.84	± 12.0 %
2450	39.2	1.80	7.43	7.43	7.43	0.38	0.80	± 12.0 %
2600	39.0	1.96	7.20	7.20	7.20	0.35	0.84	± 12.0 %
5250	35.9	4.71	5.25	5.25	5.25	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.92	4.92	4.92	0.40	1.80	± 13.1 %
5750	35.4	5.22	5.21	5.21	5.21	0.40	1.80	± 13.1 %

Calibration Parameter Determined in Head Tissue Simulating Media

^C Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else K is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency bend. Frequency validity above 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF eccessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity are extended to ± 100 MHz. The respectively. Above 5 GHz frequency validity can be extended to ± 100 MHz. The uncertainty is the RSS of the convF uncertainty of 100 MHz. The uncertainty is the NEX of the uncertainty is respectively. Above 5 GHz frequency validity can be extended to ± 10% if iquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz the validity of tissue parameters (a and a) can be relaxed to ± 10% if iquid compensation formula is applied to the measured SAR values. At frequencies above 3 GHz the validity of tissue parameters (a and b) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated larget tissue parameters. ⁶ AlphaDepth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diamater from the boundary.

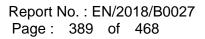
Certificate No: EX3-3770_Apr18

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EX3DV4-- SN:3770

April 25, 2018

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3770

Calib	ration Parameter		Body	Tissue	Sim	ulating M	edia	
	Dolofius	Conductivity					· · ·	-

f (MHz) ^e	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ⁰ (mm)	Unc (k=2)
450	56.7	0.94	10.68	10.68	10.68	0.08	1.25	± 13.3 %
750	55.5	0.96	9.97	9.97	9.97	0.39	0.95	± 12.0 %
835	55.2	0.97	9.72	9.72	9.72	0.45	0.88	± 12.0 %
900	55.0	1.05	9.64	9.64	9.64	0.44	0.85	± 12.0 %
1750	53.4	1.49	8.26	8.26	8.26	0.43	0.80	± 12.0 %
1900		1.52	8.00	8.00	8.00	0.37	0.87	± 12.0 %
2000	53.3	1.52	7.97	7.97	7.97	0.29	1.00	± 12.0 %
2300	52.9	1.81	7.68	7.68	7.68	0.42	0.84	± 12.0 %
2450	52.7	1.95	7.59	7.59	7.59	0.41	0.84	± 12.0 %
2600	52.5	2.16	7.37	7.37	7.37	0.15	0.98	± 12.0 %
5250	48.9	5.36	4.65	4.65	4.65	0.50	1.90	± 13.1 %
5600	48.5	5.77	4.06	4.06	4.06	0.50	1.90	± 13.1 %
5750	48.3	5.94	4.38	4.38	4.38	0.50	1.90	± 13.1 %

⁶ Frequency validity above 300 MHz of ± 100 MHz only applies for CASY vi.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the Conv⁶ uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity as be extended to ± 10, 25, 40, 99 and 70 MHz for Conv⁶ accessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity as be extended to ± 110 MHz.
⁷ At trequencies below 3 GHz, the validity of tissue parameters (*x* and *x*) can be released to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (*x* and *x*) can be released to ± 10% if liquid compensation formula is applied to the Conv⁶ uncertainty for indicated target fitsue parameters.
⁷ At trequencies below 3 GHz, the validity of tissue parameters (*x* and *x*) can be released to ± 10% if liquid compensation formula is applied to the Conv⁶ uncertainty for indicated target fitsue parameters.
⁸ ApplDepth are determined during calibration. SPEAC werearts that the remaining deviation due to the boundary effect after compensation is always lass that at 1% for frequencies below 3 GHz and below ± 2% for frequencies below as -6. GHz at any distance larger than half the probe tip diameter from the boundary.

Certificate No: EX3-3770_Apr18

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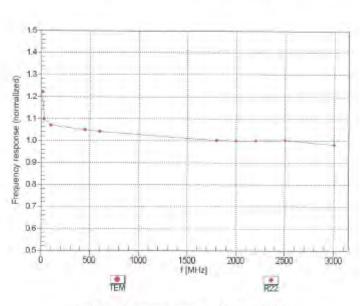
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EX30V4-SN:3770

April 25, 2018



Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

Gertificate No; EX3-3770_Apr18

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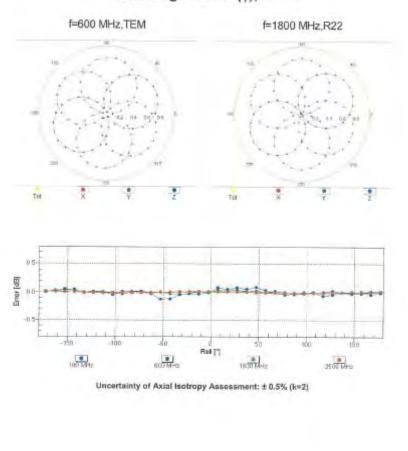
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EX3DV4- SN:3770

SG

April 25, 2018



Receiving Pattern (\$), 9 = 0°

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EX3DV4-- SN:3770

April 25, 2018

Dynamic Range f(SARhead) (TEM cell , feval= 1900 MHz) 10 10 Input Signel [uV] 10 102 109 101 íœ 102 10 10 SAR [mW/cm3] not comper ٠ comp 9 ٥ Error -2 109 104 SAR [mW/om3] 10-2 10-102 103 ٠ ۰ not Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Certificate No: EX3-3770_Apr18

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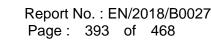
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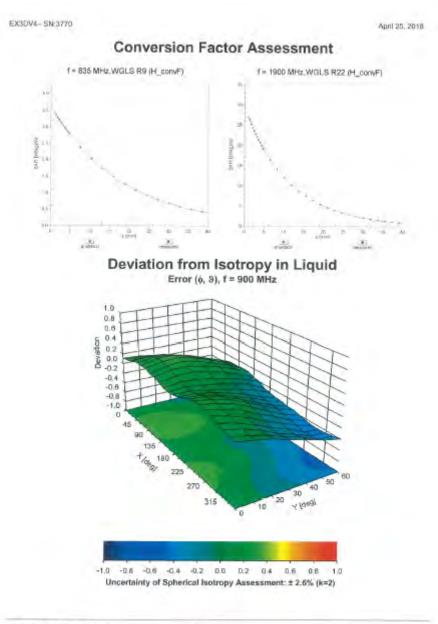
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EX3DV4- SN:3770

April 25, 2018

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3770

Other Probe Parameters

Sensor Arrangement	Triangutar
Connector Angle (*)	-32.8
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

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8. Uncertainty Budget

A		D	-		4	~	h a * f / a		Ŀ
	c Tolerance/	D Probability	е		1	g	h=c * f / e Standard	i=c * g / e Standard	k
Source of Uncertainty	Uncertainty	Distributio	Div	Div Value	ci (1g)	ci (10g)	uncertainty	uncertainty	vi, or Veff
Measurement system									
Probe calibration	6.55%	N	1	1	1	1	6.55%	6.55%	80
lsotropy , Axial	3.50%	R	√3	1.732	1	1	2.02%	2.02%	œ
lsotropy, Hemispherical	9.60%	R	√3	1.732	1	1	5.54%	5.54%	œ
Modulation Response	2.40%	R	√3	1.732	1	1	1.40%	1.40%	8
Boundary Effect	1.00%	R	√3	1.732	1	1	0.58%	0.58%	8
Linearity	4.70%	R	√3	1.732	1	1	2.71%	2.71%	8
Detection Limits	1.00%	R	√3	1.732	1	1	0.58%	0.58%	00
Readout Electronics	0.30%	N	1	1	1	1	0.30%	0.30%	80
Response time	0.80%	R	√3	1.732	1	1	0.46%	0.46%	80
Integration Time	2.60%	R	√3	1.732	1	1	1.50%	1.50%	œ
Measurement drift (class A evaluation)	1.75%	R	√3	1.732	1	1	1.01%	1.01%	80
RF ambient condition - noise	3.00%	R	√3	1.732	1	1	1.73%	1.73%	00
RF ambient conditions - reflections	3.00%	R	√3	1.732	1	1	1.73%	1.73%	80
Probe positioner Mechanical restrictions	0.40%	R	√3	1.732	1	1	0.23%	0.23%	00
Probe Positioning with respect to phantom shell	2.90%	R	√3	1.732	1	1	1.67%	1.67%	80
Post-processing	1.00%	R	√3	1.732	1	1	0.58%	0.58%	00
Max SAR Eval	1.00%	R	√3	1.732	1	1	0.58%	0.58%	œ
Test Sample related									
Test sample positioning	2.90%	N	1	1	1	1	2.90%	2.90%	M-1
Device Holder Uncertainty	3.60%	N	1	1	1	1	3.60%	3.60%	M-1
Drift of output power	5.00%	R	√3	1.732	1	1	2.89%	2.89%	œ
Phantom and Setup									
Phantom Uncertainty	4.00%	R	√3	1.732	1	1	2.31%	2.31%	œ
Liquid permittivity (mea.)	1.57%	N	1	1	0.64	0.43	1.00%	0.68%	М
Liquid Conductivity (mea.)	2.76%	N	1	1	0.6	0.49	1.66%	1.35%	М
Combined standard uncertainty		RSS					11.88%	11.80%	
Expant uncertainty (95% confidence interval), K=2							23.75%	23.61%	

Measurement Uncertainty evaluation template for DUT SAR test (3-6G)

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A	с	D	е		f	g	h=c * f / e	i=c * g / e	k
Source of Uncertainty	Tolerance/ Uncertainty	Probability Distributio	Div	Div Value	ci (1g)	ci (10g)	Standard uncertainty	Standard uncertainty	vi, or Veff
Measurement system									
Probe calibration	6.00%	Ν	1	1	1	1	6.00%	6.00%	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
lsotropy , Axial	3.50%	R	$\sqrt{3}$	1.732	1	1	2.02%	2.02%	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
lsotropy, Hemispherical	9.60%	R	√3	1.732	1	1	5.54%	5.54%	∞
Modulation Response	2.40%	R	√3	1.732	1	1	1.40%	1.40%	∞
Boundary Effect	1.00%	R	√3	1.732	1	1	0.58%	0.58%	~
Linearity	4.70%	R	√3	1.732	1	1	2.71%	2.71%	∞
Detection Limits	1.00%	R	√3	1.732	1	1	0.58%	0.58%	~
Readout Electronics	0.30%	Ν	1	1	1	1	0.30%	0.30%	∞
Response time	0.80%	R	√3	1.732	1	1	0.46%	0.46%	~
Integration Time	2.60%	R	√3	1.732	1	1	1.50%	1.50%	∞
Measurement drift (class A evaluation)	1.75%	R	√3	1.732	1	1	1.01%	1.01%	~
RF ambient condition - noise	3.00%	R	√3	1.732	1	1	1.73%	1.73%	∞
RF ambient conditions - reflections	3.00%	R	√3	1.732	1	1	1.73%	1.73%	~
Probe positioner Mechanical restrictions	0.40%	R	√3	1.732	1	1	0.23%	0.23%	∞
Probe Positioning with respect to phantom shell	2.90%	R	√3	1.732	1	1	1.67%	1.67%	∞
Post-processing	1.00%	R	√3	1.732	1	1	0.58%	0.58%	~
Max SAR Eval	1.00%	R	√3	1.732	1	1	0.58%	0.58%	~
Test Sample related									
Test sample positioning	2.90%	N	1	1	1	1	2.90%	2.90%	M-1
Device Holder Uncertainty	3.60%	N	1	1	1	1	3.60%	3.60%	M-1
Drift of output power	5.00%	R	√3	1.732	1	1	2.89%	2.89%	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Phantom and Setup									
Phantom Uncertainty	4.00%	R	√3	1.732	1	1	2.31%	2.31%	~
Liquid permittivity (mea.)	4.11%	Ν	1	1	0.64	0.43	2.63%	1.77%	М
Liquid Conductivity (mea.)	3.78%	Ν	1	1	0.6	0.49	2.27%	1.85%	М
Combined standard uncertainty		RSS					11.93%	11.69%	
Expant uncertainty (95% confidence interval), K=2							23.87%	23.38%	

Measurement Uncertainty evaluation template for DUT SAR test (0.3-3G)

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9. Phantom Description

Schmid & Partner Engineering AG

s а D e a

Zeughausstrasse 43, 8004 Zurich, Switzerland Phone +41 44 245 9700, Fax +41 44 245 9779 info@speag.com, http://www.speag.com

Certificate of Conformity / First Article Inspection

Item	Oval Flat Phantom ELI 5.0	
Type No	QD OVA 002 A	
Series No	1108 and higher	
Manufacturer	Untersee Composites Knebelstrasse 8, CH-8268 Mannenbach, Switzerland	

Tests

Complete tests were made on the prototype units QD OVA 001 A, pre-series units QD OVA 001 B as well as on some series units QD OVA 001 B. Some tests are made on all series units QD OVA 002 A.

Test	Requirement	Details	Units tested
Shape	Internal dimensions, depth and sagging are compatible with standards	Bottom elliptical 600 x 400 mm, Depth 190 mm, dimension compliant with [1] for f > 375 MHz	Prototypes
Material thickness	Bottom: 2.0mm +/- 0.2mm	dimension compliant with [3] for f > 800 MHz	all
Material parameters	rel. permittivity 2 – 5, loss tangent ≤ 0.05, at f ≤ 6 GHz	rel. permittivity 3.5 +/- 0.5 loss tangent ≤ 0.05	Material samples
Material resistivity	Compatibility with tissue simulating liquids .	Compatible with SPEAG liquids. **	Phantoms, Material sample
Sagging	Sagging of the flat section in tolerance when filled with tissue simulating liquid.	within tolerance for filling height up to 155 mm	Prototypes, samples

Note: Compatibility restrictions apply certain liquid components mentioned in the standard, containing e.g. DGBE, DGMHE or Triton X-100. Observe technical note on material compatibility.

Standards

**

- OET Bulletin 65, Supplement C, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", Edition 01-01
 IEEE 1528-2003, "Recommended Practice for Determining the Peak Spatial-Average Specific
- Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques, December 2003
- [3] IEC 62209-1 ed1.0, "Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close
- proximity to the ear (frequency range of 300 MHz to 3 GHz)*, 2005-02-18 [4] IEC 62209-2 ed1.0, "Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", 2010-03-30

Conformity

Based on the sample tests above, we certify that this item is in compliance with the uncertainty requirements of body-worn SAR measurements and system performance checks as specified in [1-4] and further standards

Date 25.7.2011

Signature / Stamp

eag s id & Berrier-Engineering-AG boyestrasse 43, 8004 Voich, Scienciar #441 44/2659708 #44-46 6948 9779

Doc No 881 - QD OVA 002 A - A

Page 1(1)

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10.System Validation from Original Equipment Supplier

coniditied by the Swiss Accreditation he Swiss Accreditation Service luitilateral Agreement for the rec	is one of the signatorie	is to the EA	coreditation No.: SCS 0108
SGS-TW (Auder	1)	Certificate N	c D750V3-1015_Aug18
CALIBRATION C	ERTIFICATE	1	
Déject	D750V3 - SN:10	15	
Calibration procedure(k)	QA CAL-05.v10 Calibration proce	dure for dipole validation kits abo	ove 700 MHz
Calibration date:	August 23, 2018		
This calibration cartificate document	ris the transmitte in rat	ional standards, which realize the physical ur	are of manufacturements (SD
		robability are given on the following pages a	
	ed in the closed laborato	ry faqility. environment temperature (22 \pm 3)*	
All patibrations have been conclupt Calibration Equipment used (M&TE	critical for calibration)	ry faqility, environment temperature (22 \pm 3)*	C and humidity < 70%.
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Calibration Laboratory of Schmid & Partner Engineering AG trasse 43, 8004 Zurich, Switzerland



Schweizerischer Kalibriefdienzi S Service suisse d'diatonnège C Servizio svizzoro di Inratura S Suiss Calibration Service

creditation No.: SCS 0108

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Glossary: TSL

fissue simulating liquid ConvF sensitivity in TSL / NORM x, y, z N/A not applicable or not measured

Callbration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Pate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL. The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna. connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement. multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Certilicate No: D750V3 1015 Aug18

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Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.10,1
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	ds, dy, d2 = 5 mm	
Frequency	750 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.9	0.89 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	$40.9 \pm 6 \%$	0.89 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	_	

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.07 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	8.23 W/kg ± 17.0 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR averaged over 10 cm ³ (10 g) of Head TSL SAR measured	condition 250 mW input power	1.34 W/kg

Body TSL parameters

The following parameters and calculations were applied,

	Permittivity	Conductivity
22.0 °C	:55,5	miodm 86.0
(22.0 ± 0.2) °C	55.0±6%	0.96 mho/m ± 8 %
< 0.5 °C		-
	(22.0 ± 0.2) °C	22.0 °C 55.5 (22.0 ± 0.2) °C 55.0 ± 6 %

SAR result with Body TSL

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.16 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	8.62 W/kg = 17.0 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR averaged over 10 cm ³ (10 g) of Body TSL. SAR measured	condition 250 mW input power	1.43 W/kg

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Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Imperdance, transformed in fixed point	53.4 41 + 0.0 (02
Fleturn Loss	- 29.6 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	48.2 \$2 ÷ 3.6 \$2
Return Loss	- 27.8 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.037 ns
	1 (Janet Joan

After long term use with HOOW rediated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxed cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-onculted for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the 'Measurement Conditions' paragraph. The SAFI data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	March 22, 2010

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DASY5 Validation Report for Head TSL

Date: 22.08.2018

Test Laboratory: SPEAG, Zurich, Switzerland

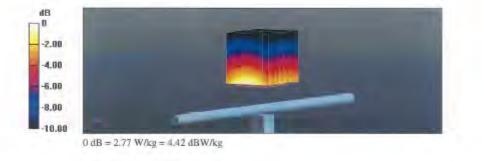
DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1015

Communication System: UID 0 - CW; Frequency: 750 MHz Medium parameters used: f = 750 MHz; $\sigma = 0.89 \text{ S/m}$; $v_r = 40.9$; $p = 1000 \text{ kg/m}^3$ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(10.22, 10.22, 10.22) @ 750 MHz; Calibrated: 30.12.2017
- Sensor-Surface: 1.4mm (Mechanical Surface Detection) κ.
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017
- Phantom: Flat Phantom 4.9 (front); Type: QD 00L P49 AA; Serial: 1001 .
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 59.12 V/m; Power Drift = -0.04 dB Peak SAR (extrapolated) = 3.11 W/kg SAR(1 g) = 2.07 W/kg; SAR(10 g) = 1.34 W/kg Maximum value of SAR (measured) = 2.77 W/kg



Certificate No: D750V3-1015_Aug18

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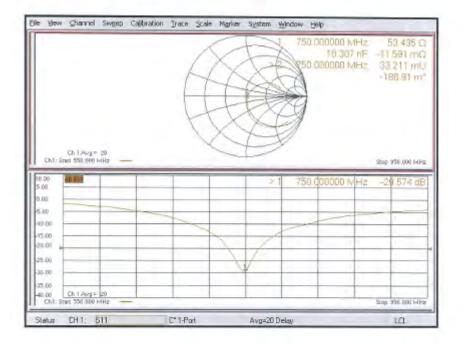
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Impedance Measurement Plot for Head TSL



Certificate No: D750V3-1015 Aug18

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t (886-2) 2299-3279 台灣檢驗科技股份有限公司

f (886-2) 2298-0488



DASY5 Validation Report for Body TSL

Date: 23.08.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1015

Communication System: UID 0 - CW; Frequency: 750 MHz Medium parameters used: f = 750 MHz; $\sigma = 0.96 \text{ S/m}$; $\epsilon_r = 55$; $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(10.19, 10.19, 10.19) @ 750 MHz; Calibrated: 30.12.2017
- Sensor-Surface: 1.4mm (Mechanical Surface Detection) .
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017 .
- Phantom: Flat Phantom 4.9 (Back); Type: QD 00R P49 AA; Serial: 1005 .
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Dipole Calibration for Body Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 57.93 V/m; Power Drift = -0.02 dB Peak SAR (extrapolated) = 3.17 W/kg SAR(1 g) = 2.16 W/kg; SAR(10 g) = 1.43 W/kg

Maximum value of SAR (measured) = 2.85 W/kg



0 dB = 2.85 W/kg = 4.55 dBW/kg

Certificate No: D750V3-1015_Aug18

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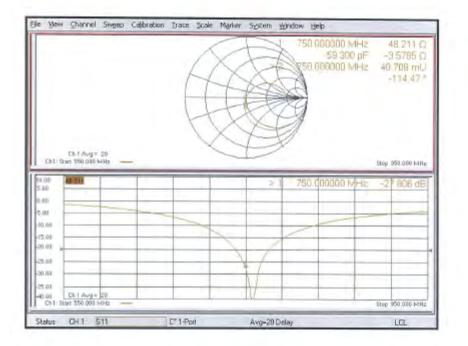
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Impedance Measurement Plot for Body TSL



Certificate No: D750V3-1015_Aug18

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Engineering AG aughausatrasse 43, 8004 Zurich,	Of Switzerland		Schweizwischer Kalibrierdienst Service suisse d'étaionnage Servizio svizzero di fareture Swiss Calibration Service
Accredited by the Swiss Accreditation The Swise Accreditation Service i duffiliateral Agreement for the rec	is one of the signatorie	s to the EA	ccreditation No.: SCS 0108
Signt SGS-TW (Auden			: D835V2-4d063_Aug18
CALIBRATION C	ERTIFICATE	E.	
Object	D835V2 - SN:4d	063	
Calibration procedure(s)	QA CAL-05.v10 Calibration proce	dure for dipole validation kits abo	ove 700 MHz
Calibration state:	August 23, 2018		
	ed in the closed laborato	ry facility; environment temperature (22 ± 3)*	nd are part of the certificate C and humidity < 70%.
All calibrations have been conducts Calibration Equipment used (M&TE		ry facility, enwronment temperature (22 ± 3)*	C and numbery < 70%.
NI calibrations have been conclucts Calibration Equipment used (M&TE Primary Standards	E critical for cellocation)		
Il calibrations have been concluts alibration Equipment used (M&TE meavy Standards lower meter NRP	E critical for celloration)	ry facility; environment temperature (22 ± 3)* Cal Daté (Cartificate No.)	C and humility < 70%. Scheduled Calibration
il calibrations have been conclucts alibration Equipment used (M&TE meany Standards (ower meter NRP (ower sensor NRP-281 tower sensor NRP-291	critical for cellocation) ID # SN: 104778 SN: 102244 SN: 103245	ry facility; environment temperature (22 ± 3)* Cal Date (Certificate 6ko.) 04-Apr+18 (4b. 217-02872)02673) 04-Apr-18 (4b. 217-02872) 04-Apr-18 (4b. 217-02873)	C and humility < 70%. Schedured Calibration Apr 19 Apr 19 Apr 19
III calibrations have been conclucts Calibration Equipment used (M&TE Primary Standards Tower meter NRP- Tower sensor NRP-281 Telefence 20 dB Attenuator	critical for cellocation) ID # SN: 104778 SN: 103244 SN: 103245 SN: 5058 (20k)	ry facility; environment temperature (22 ± 3)* Cal Date (Camilicate 6ko.) 04-Apr-18 (4ko, 217-02872)02673) 04-Apr-18 (No, 217-02672) 04-Apr-18 (No, 217-02672) 04-Apr-18 (No, 217-02602)	C and humility < 70%. Schedured Calibration Apr.19 Apr.19 Apr.18 Apr.18
NI calibrations have been concluds Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-281 Power sensor NRP-281 Neterence 208 Azenuator (ype-N mismatch combination	critical for oditionition) 10 # SN: 104778 SN: 103244 SN: 103245 SN: 5068 (20k) SN: 5047.2 / 06327	ry facility; environment temperature (22 ± 3)* Call Date (Camfronte Mo.) 04-Apr-15 (No. 217-02072)02673) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02673) 04-Apr-18 (No. 217-02683)	C and humility < 70%. Schedured Calibration Apr.19 Apr.19 Apr.18 Apr.18 Apr.19
VI calibrations have been concluds Calibration Equipment used (M&TE *ower meter NRP *ower sensor NRP-201 *ower sensor NRP-201 Telerence 20 dB Attenuator Yop-N misematich combination Reteinence Probe EX3DV4	critical for cellocation) ID # SN: 104778 SN: 103244 SN: 103245 SN: 5058 (20k)	ry facility; environment temperature (22 ± 3)* Cal Date (Camilicate 6ko.) 04-Apr-18 (4ko, 217-02872)02673) 04-Apr-18 (No, 217-02672) 04-Apr-18 (No, 217-02672) 04-Apr-18 (No, 217-02602)	C and humility < 70%. Schedured Calibration Apr.19 Apr.19 Apr.18 Apr.18
III calibrations have been conclusts Calibration Equipment used (M&TE Primary Standards Tower meter NRP Tower sensor NRP-201 Power sensor NRP-201 Teleference 2016 Attenustor (ypo-N mismatch combination Teleference Probe EX30V4 DAE4 Secundary Standards	critical for oditionition) 10 # SN: 104778 SN: 103244 SN: 103245 SN: 5068 (20k) SN: 5068 (20k) SN: 5047.2 / 06327 SN: 7349 SN: 601 10 #	Cal Date (Camfront temperature (22 ± 3)* Od-Apr-18 (No. 217-02072)02673) Od-Apr-18 (No. 217-02072)02673) Od-Apr-18 (No. 217-02672) Od-Apr-18 (No. 217-02602) Od-Apr-18 (No. 217-02602) Od-Apr-18 (No. 217-02602) Od-Apr-18 (No. 217-02602) Od-Apr-18 (No. 217-02602) Od-Apr-19 (No. EXS-7349, Dac-17) 26-Oci-17 (No. DAE4-601_Oci17) Check Date (in house)	C and humility < 70%. Schedured Calibration Apr-19 Apr-19 Apr-19 Apr-18 Apr-18 Apr-18 Dec-18 Oct-18 Schedured Check
II calibrations have been concluds Calibration Equipment used (M&TE Primary Stantiards Power meter NRP Power sensor NRP-281 Heterance 20 dB Attenuator Paper 20 dB Attenuator Paper N mismatch combination Retainince Probe EX30V4 HAE4 Secundary Standards	critical for cellocation) ID # SN: 104776 SN: 102245 SN: 3058 (20k) SN: 5047 2 / 06327 SN: 5047 2 / 06327 SN: 601 ID # SN: 6B37480704	ry facility: environment temperature (22 ± 3)*1 Call Daté (Certificate No.) 04-Apr-15 (No. 217-02672)02673) 04-Apr-16 (No. 217-02672) 04-Apr-16 (No. 217-02682) 04-Apr-16 (No. 217-02683) 30-Dec-17 (No. EXS-7349, Dec-17) 26-Dec-17 (No. DAE4-601_0±17) Check Date (in house) 07-Oct 15 (in house check Oct-16)	C and humility < 70%. Schedured Calibration Apr-19 Apr-19 Apr-19 Apr-19 Dao-18 Oct-18 Oct-18 Schedured Check In house check: Oct-18
NI calibrations have been conclucts Calibration Equipment used (M&TE Primary Standards "ower meter NRP- "ower sensor NRP-201 heterence 20 dB Attenuator Type-N mismatich combination fetaleince Probe EX30V4 36E4 Secondary Standards "ower meter EPM-442A Power sensor HP S481A	critical for celloration) ID # SN: 104776 SN: 103244 SN: 103245 SN: 5058 (20k) SN: 5047.2 / 06327 SN: 5047.2 / 06327 SN: 5047.2 / 06327 SN: 601 ID # SN: 6B37490704 SN: US37292783	ry facility: environment temperature (22 ± 3)*1 Gal Date (Certificate No.) 04-Apr-18 (No. 217-02072)02673) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02683) 30-Dec-17 (No. EXS-7349, Dec-17) 28-Oci-17 (No. DAE4-601-Oci17) Check Date (in house) 07-Oci 15 (in house check Oci-16) 07-Oci-15 (in house check Oci-16)	C and humility < 70%. Schedured Calibration Apr.19 Apr.19 Apr.19 Apr.19 Apr.19 Dec.18 Oct-18 Schedured Check In house check: Oct-18 in house check: Oct-18
NI calibrations have been conclucts Calibration Equipment used (M&TE Primary Standards Tower meter NRP Power sensor NRP-281 Telerence 20 dB Abenuator Type-N mismatich combination Retainince Proba EX30V4 IAE4 Secundary Standards Tower meter EPM 442A Tower ansor HP 5481A Power sensor HP 5481A	critical for celloration) ID # SN: 104778 SN: 103244 SN: 103245 SN: 5047.2 / 06327 SN: 5047.2 / 06327 SN: 5047.4 SN: 601 ID # SN: 6B37480704 SN: 0537292783 SN: MY41082317	Cal Date (Certificate No.) Od-Apr-18 (No. 217-028720/02873) Od-Apr-18 (No. 217-02872) Od-Apr-18 (No. 217-02872) Od-Apr-18 (No. 217-02882) Od-Apr-18 (No. 217-02882) Od-Apr-18 (No. 217-02882) Od-Apr-18 (No. 217-02883) 30-Dec-17 (No. DAF4-601_Oct17) 26 Oct-17 (No. DAF4-601_Oct17) Check Date (In house check Oct-16) 07-Oct15 (in house check Oct-16) 07-Oct-16 (in house check Oct-16)	C and humility < 70%. Schedured Calibration Apr-19 Apr-10 Apr-18
NI calibrations have been concluds Calibration Equipment used (M&TE Primary Standards *ower meter NRP Power sensor NRP-201 *ower sensor NRP-201 Teleference 208 Attenutor (vpe-N mismatich combination Teleference Protos EX30V4 DAE4 *ower meter EPM-442A *ower meter EPM-442A *ower meter EPM-442A *ower meter EPM-442A *ower sensor HP 8481A *ower sensor HP 8481A	critical for celloration) ID # SN: 104776 SN: 103244 SN: 103245 SN: 5058 (20k) SN: 5047.2 / 06327 SN: 5047.2 / 06327 SN: 5047.2 / 06327 SN: 601 ID # SN: 6B37490704 SN: US37292783	ry facility: environment temperature (22 ± 3)*1 Gal Date (Certificate No.) 04-Apr-18 (No. 217-02072)02673) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02683) 30-Dec-17 (No. EXS-7349, Dec-17) 28-Oci-17 (No. DAE4-601-Oci17) Check Date (in house) 07-Oci 15 (in house check Oci-16) 07-Oci-15 (in house check Oci-16)	C and humility < 70%. Schedured Calibration Apr.19 Apr.19 Apr.19 Apr.19 Apr.19 Dec.18 Oct-18 Schedured Check In house check: Oct-18 in house check: Oct-18
All calibrations have been conclucts Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-281 Reference 20 dB Attenuator Type-N mismatich combination Retainince Probe EX3DV4 DAE4 Securidary Standards Power meter EPM-442A Power sensor HP S481A Power sensor HP S481A	critical for celloration) ID # SN: 104776 SN: 103244 SN: 103245 SN: 5047.2 (98) SN: 5047.2 (98) SN: 5047.2 (98) SN: 5047.2 (98) SN: 601 ID # SN: 0837490704 SN: 0837292783 SN: 4044082317 SN: 106972 SN: 10541080477 Name	ry facility: environment temperature (22 ± 3)*1 Cal Date (Certificate Alo.) 04-Apr-18 (Mo. 217-02872)02873) 04-Apr-18 (Mo. 217-02872) 04-Apr-18 (Mo. 217-02802) 04-Apr-18 (Mo. 217-02802) 05-Oct 15 (in house check Oct-16) 07-Oct 15 (in house check Oct-16) 07-Oct-16 (in house check Oct-16) 15-Jun-15 (in house check Oct-16) 15-Jun-15 (in house check Oct-17) Function	C and humility < 70%. Schedured Calibration Apr.19 Apr.19 Apr.19 Apr.19 Dec.18 Oct-16 Schedured Check In house check: Oct-18 In house check: Oct-18
All calibrations have been conclucts Calibration Equipment used (M&TE Primary Standards Prover meter NRP Power sensor NRP-281 Reference 20 dB Attenuator Type-N mismatich combination Reteinance Probe EX3DV4 DAE4 Securidary Standards Power meter EPM 442A Power sensor HP S481A Power sensor HP S481A Power sensor HP S481A Re generator R&S SMT-06 Network Analyzei Aglient ER3584	critical for celloration) ID # SN: 104776 SN: 103245 SN: 5058 (20k) SN: 5047 2 / 06327 SN: 5047 2 / 06327 SN: 5049 SN: 601 ID # SN: 6B37490704 SN: 04537292783 SN: Mr44082317 SN: 10541080477	Cal Daté (Certificate No.) Od-Apr-18 (No. 217-02072/02673) Od-Apr-18 (No. 217-02072) Od-Apr-18 (No. 217-02672) Od-Apr-18 (No. 217-02672) Od-Apr-18 (No. 217-02612) Od-Apr-18 (No. 217-02612) Od-Apr-18 (No. 217-02612) 30-Dec-17 (No. 2167-02612) 30-Dec-17 (No. 2167-02612) 30-Dec-17 (No. 2167-02612) 30-Dec-17 (No. 2167-02612) 30-Dec-17 (No. 2167-02612) 07-Oct-15 (In house check Oct-16] 07-Oct-15 (In house check Oct-16] 07-Oct-15 (In house check Oct-16] 15-Jun-15 (In house check Oct-16] 15-Jun-15 (In house check Oct-16]	C and humilarly < 70%: Scheduled Calibration Apr-19 Apr-19 Apr-19 Apr-19 Cal-18 Oct-18 Scheduled Check In house check: Oct-18 In house check: Oct-18
	critical for celloration) ID # SN: 104776 SN: 103244 SN: 103245 SN: 5047.2 (98) SN: 5047.2 (98) SN: 5047.2 (98) SN: 5047.2 (98) SN: 601 ID # SN: 0837490704 SN: 0837292783 SN: 4044082317 SN: 106972 SN: 10541080477 Name	ry facility: environment temperature (22 ± 3)*1 Cal Date (Certificate Alo.) 04-Apr-18 (Mo. 217-02872)02873) 04-Apr-18 (Mo. 217-02872) 04-Apr-18 (Mo. 217-02802) 04-Apr-18 (Mo. 217-02802) 05-Oct 15 (in house check Oct-16) 07-Oct 15 (in house check Oct-16) 07-Oct-16 (in house check Oct-16) 15-Jun-15 (in house check Oct-16) 15-Jun-15 (in house check Oct-17) Function	C and humienty < 70%: <u>Scheduled Calibration</u> Apr-19 Apr-19 Apr-19 Apr-19 Cal-18 Ccl-18 <u>Scheduled Check</u> In house check: Oct-18 In house check: Oct-18

Certificate No: D835V2-4d063_Aug18

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Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



Schweizerischer Kolihrierdim S Service suisse d'Melonnage C Servizio svizzero di lorabina S Swiss Calibration Service

Accreditation No.: SCS 0108

According by the Swiss According tim Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Mullilateral Agreement for the recognition of calibration certificat

Glossary: TSL

Ilssue simulating liquid sensitivity in TSL / NORM x,y,z ConvF N/A not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) In the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- C) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)*, March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions. Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required,
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Certificate No: DB35V2-4d063 Aug18

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Measurement Conditions

DASY system configuration	m, as far as not given on page 1.
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DASY Version	DASY5	V52.10.1
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantóm	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz, = 5 mm	
Frequency	835 MHz = 1 MHz	

Head TSL parameters

The following parameters and calculations were applied

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	martin 06.0
Measured Head TSL parameters	(22.0 ± 0.2) °C	40.7 ± 6 %	0.92 mho/m ± 8 %
Head TSL temperature change during test	< 0.5 °C	_	The second second

SAR result with Head TSL

SAR averaged over 1 cm ¹ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.42 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	9.48 W/kg ± 17.0 % (k=2)
SAR averaged over 10 cm ² (10 g) of Head TSL	condition	
SAR averaged over 10 cm ² (10 g) of Head TSL SAR measured	condition 250 mW input power	1.55 W/kg

Body TSL parameters

The following parameters and calculations were applied

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	65.2	0.97 mholm
Measured Body TSL parameters	(22.0 ± 0.2) °C	54.9±6%	0.99 mha/m ±6 %
Body TSL temperature change during test	< 0.5 °C		1

SAR result with Body TSL

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.43 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	9.56 W/kg ± 17.0 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR averaged over 10 cm ³ (10 g) of Body TSL SAR measured	condition 250 mW input power	1.59 W/kg:

Certilicate No. DB35V2-4d063_Aug18

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Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impadaboe, transformed to feed point	51.3 Ω - 1.8 JΩ	
Relum Loss	- 33.3 dB	

Antenna Parameters with Body TSL

impedance, transformed to feed point	47.7 Ω - 4.4 jΩ
Return Loss	- 25,8 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.393 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the leedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

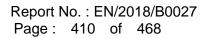
Manufactured by	SPEAG
Manufactured on	November 27, 2006

Certificate No: D835V2-4d063_Aup18

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DASY5 Validation Report for Head TSL

Date: 22.08.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d063

Communication System: UID 0 - CW; Frequency: 835 MHz Medium parameters used: f = 835 MHz; σ = 0.92 S/m; z = 40.7; p = 1000 kg/m3 Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

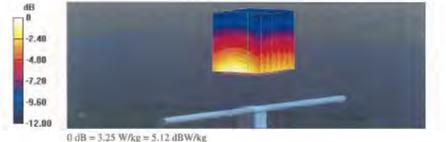
DASY52 Configuration:

SG

- Probe: EX3DV4 SN7349; ConvF(9.9, 9.9, 9.9) @ 835 MHz; Calibrated: 30.12.2017
- Sensor-Surface: 1.4mm (Mechanical Surface Detection) .
- Electronics: DAE4 Sn601; Calibrated: 26.10,2017
- · Phantom: Flat Phantom 4.9 (front); Type: QD 00L P49 AA; Serial: 1001
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 62.96 V/m; Power Drift = -0.03 dB Peak SAR (extrapolated) = 3.70 W/kg SAR(1 g) = 2.42 W/kg; SAR(10 g) = 1.55 W/kg Maximum value of SAR (measured) = 3.25 W/kg





Centificate No: D835V2-4d063_Aug18

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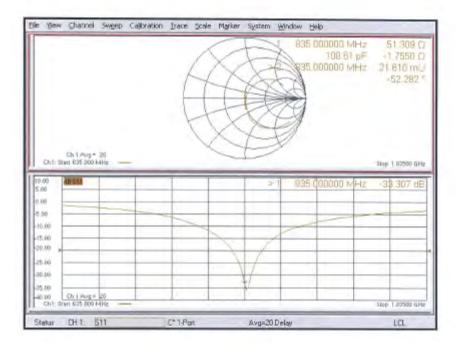
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Impedance Measurement Plot for Head TSL



Certificate No: D635V2-4d063_Aug18

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DASY5 Validation Report for Body TSL

Date: 23.08.2018

Test Laboratory: SPEAG, Zurich, Switzerland

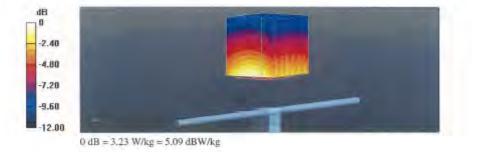
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d063

Communication System: UID 0 - CW; Frequency: 835 MHz Medium parameters used: f = 835 MHz; o = 0.99 S/m; c = 54.9; p = 1000 kg/m⁴ Phantom section: Flat Section Measurement Standard: DASY5 (JEEE/JEC/ANSI C63,19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(10.05, 10.05, 10.05) @ 835 MHz; Calibrated: 30.12.2017 .
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017 .
- Phantom: Flat Phantom 4.9 (Back); Type: QD 00R P49 AA; Serial: 1005
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439) ٠

Dipole Calibration for Body Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 60.67 V/m; Power Drift = -0.02 dB Peak SAR (extrapolated) = 3.61 W/kg SAR(1 g) = 2.43 W/kg; SAR(10 g) = 1.59 W/kg Maximum value of SAR (measured) = 3.23 W/kg



Certificate No: D635V2-4d063_Aug18

Page 7 of 8

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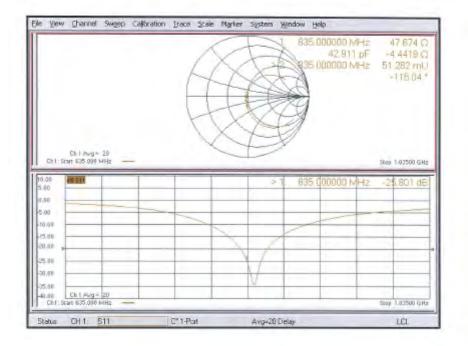
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Impedance Measurement Plot for Body TSL



Certificate No: D835V2-4d063_Aug18

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Sient SGS-TW (Aude	n)	Certificate No	D1750V2-1008_Aug18
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treidd	01750V2 - SN:1	800	-
Calibration procedure(s)	QA CAL-05.v10 Calibration proce	dure for dipole validation kits ab	ove 700 MHz
Calibration date:	August 30, 2018		
			C and humidity < 70%
	E critical for celfbration)		
rimary Standards		Car Date (Certificate No.) (4-4pr-16 (No. 217-02672/02673)	Scheduled Calibration
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hmary Standards lower meter NRP lower sensor NRP-291 lower sensor NRP-291	ID # SN: 104778 SN: 103244	Car Date (Certificate No.) 04-0pt-16 (No. 217-02672/02673) 04-0pt-16 (No. 217-02672)	Scheduled Calibration Apr-19 Apr-19
Pomary Standards Power mister NRP Power sensor NRP-291 Power sensor NRP-291 Helensnic 2018 Attenuator Type-N mismatch combination	10 H SN: 104778 SN: 103244 SN: 103245 SN: 5058 (20K) SN: 5058 (20K) SN: 5047.2706327	Car Date (Certificate No.) 04-Apr-16 (No. 217-02672/02673) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02673) 04-Apr-18 (No. 217-02683) 04-Apr-16 (No. 217-02683)	Scheduled Calibration Apr-19 Apr-19 Apr-19 Apr-19
Inmary Standards Iower meter NRP- Iower sensor NRP-291 Iower sensor NRP-291 Reference 20 dB Attenuator yes-N mismatch combination Reference Probe EX3DV4	ID # SN: 104778 SN: 103244 SN: 103245 SN: 5058 (204) SN: 5047.2706327 SN: 7349	Car Date (Certificate No.) 04-Apr-16 (No. 217-02672/02673) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02683) 30-Dec-17 (No. 5X3-7349, Dec17)	Scheduled Calibration Apr-19 Apr-19 Apr-19 Apr-19 Apr-19 Dec-18
Primary Standards Power meter NRP- Power sensor NRP-291 Power sensor NRP-291 Reference 20 dB Attenuator ryge-N mismatch schelulation Telecence Probe EX3DV4	10 H SN: 104778 SN: 103244 SN: 103245 SN: 5058 (20K) SN: 5058 (20K) SN: 5047.2706327	Car Date (Certificate No.) 04-Apr-16 (No. 217-02672/02673) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02673) 04-Apr-18 (No. 217-02683) 04-Apr-16 (No. 217-02683)	Schooluled Calibration Apr-19 Apr-19 Apr-19 Apr-19 Apr-19
Yomary Standards Yower sensor NRP-291 Yower sensor NRP-291 Vower sensor NRP-291 Reference 20 dB Attenuator yse-N mismatch combination Reference Probe EX3DV4 ME4	ID # SN: 104778 SN: 103244 SN: 103245 SN: 5058 (204) SN: 5047.2706327 SN: 7349	Car Date (Certificate No.) 04-Apr-16 (No. 217-02672/02673) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02683) 30-Dec-17 (No. 5X3-7349, Dec17)	Scheduled Calibration Apr-19 Apr-19 Apr-19 Apr-19 Apr-19 Dec-18
Pomary Standards Power meter NRP Power sensor NRP-291 Yower sensor NRP-291 Hetersnoe 20 dB Attanuator Type-N mismatch combination Hetersnoe Probe EX3DV4 DAE4 Secondary Standards	ID # SN: 104778 SN: 103244 SN: 103246 SN: 5058 (20k) SN: 5047.2706327 SN: 7349 SN: 801	Car Date (Certificate No.) 04-Apr-16 (No. 217-02672)02573) 04-Apr-16 (No. 217-02672) 04-Apr-18 (No. 217-02673) 04-Apr-18 (No. 217-02683) 04-Apr-18 (No. 217-02683) 30-Dec-17 (No. 5X0-7348, Dec17) 26-Oct-17 (No. DAE4-601_Oct17)	Scheduled Calibration Apr-19 Apr-19 Apr-18 Apr-19 Apr-19 Oec-18 Oet-18
Primary Standards Power sensor NRP-291 Power sensor NRP-291 Power sensor NRP-291 Power sensor NRP-291 Power sensor NRP-291 Power meter Probe EX3DV4 Power meter EPM-442A Power meter EPM-442A Power sensor HP 8481A	ID # SN: 104778 SN: 103244 SN: 103245 SN: 5058 (20k) SN: 5047.2706327 SN: 7346 SN: 801 ID # SN: 5057040704 SN: 5057280704 SN: 5057280704	Car Date (Certificate No.) 04-Apr-16 (No. 217-02672/02673) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02682) 04-Apr-17 (No. 216-02682) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No.	Scheduled Calibration Apr-19 Apr-19 Apr-19 Apr-19 Apr-19 Oct-18 Oct-18 Oct-18 Scheduled Check In house check: Oct-18 In house check: Oct-18
Pomary Standards Power sensor NRP-291 Power sensor NRP-291 Reterence 20 dB Attenuator Type-N mismatch stanbination Telesence Probe EX3DV4 DAE4 Secondary Standards Power motar EPM-442A Power motar EPM-442A Power sensor HP 8481A	ID # SN: 104778 SN: 103246 SN: 00246 SN: 5058 (20k) SN: 5058 (20k) SN: 507 JD # SN: 6037480704 SN: 6337480704 SN: 6337280783 SN: MY:41082317	Car Date (Certificate No.) 04-Apr-18 (No. 217-02672/02673) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02673) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02683) 30-Dec-17 (No. 237-398_Dec-17) 26-Cet-17 (No. DAE4-601_Oc117) Check Date (at house check Oct-16) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16)	Scheduled Calibration Apr-19 Apr-19 Apr-19 Apr-19 Apr-19 Dec-18 Oct-18 Scheduled Check In house check: Oct-18 In house check: Oct-18 In house check: Oct-18
Vernary Standards Vower sensor NRP-291 Vower sensor NRP-291 Verkerence 20 dB Attenuator yze-N mismatch combination telesence Probe EX3DV4 VAE4 Secondary Standards Vower sensor HP 8481A Vower sensor HP 8481A	ID # SN: 104778 SN: 103246 SN: 5058 (20k) SN: 5058 (20k) SN: 5047.2706327 SN: 7346 SN: 601 ID # SN: 6857480704 SN: 6857480704 SN: 0837252785 SN: 09441(682317 SN: 100972	Car Date (Certificate No.) 04-Apr-16 (No. 217-02672/02573) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02682) 30-Dec-17 (No. 5X3-7340, Dec-17) 26-Oct-17 (No. 5X3-7340, Dec-17) 27-Oct-17 (No.	Scheduled Calibration Apr-19 Apr-19 Apr-19 Apr-19 Dec-18 Dec-18 Dec-18 Scheduled Check In house check: Oct-18 In house check: Oct-18 In house check: Oct-18 In house check: Oct-18 In house check: Oct-18
Vernary Standards Vower sensor NRP-291 Vower sensor NRP-291 Verkerence 20 dB Attenuator yze-N mismatch combination telesence Probe EX3DV4 VAE4 Secondary Standards Vower sensor HP 8481A Vower sensor HP 8481A	ID # SN: 104778 SN: 103246 SN: 5058 (20k) SN: 5058 (20k) SN: 5047.2706327 SN: 7346 SN: 601 ID # SN: 6357480704 SN: 6357480704 SN: 0037252785 SN: 6044(682317 SN: 100972	Car Date (Certificate No.) 04-Apr-18 (No. 217-02672/02673) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02673) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02683) 30-Dec-17 (No. 237-398_Dec-17) 26-Cet-17 (No. DAE4-601_Oc117) Check Date (at house check Oct-16) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16)	Scheduled Calibration Apr-19 Apr-19 Apr-19 Apr-19 Apr-19 Dec-18 Oct-18 Scheduled Check In house check: Oct-18 In house check: Oct-18 In house check: Oct-18
Premary Standards Power sensor NRP-291 Power sensor NRP-291 Power sensor NRP-291 Retenence 20 dB Attenuator Type-N mismatch sombination Telesence Probe EX3DV4 DAE4 Secondary Standards Power metar EPM-442A Power metar EPM-442A Power metar EPM-442A Power sensor HP 8481A TF generator R&S SMT-06 Network Analyzer Aglioni E8358A	ID # SN: 104778 SN: 103246 SN: 5038 (20k) SN: 5058 (20k) SN: 507 ID # SN: 507 ID # SN: 5037480704 SN: 0037283 SN: 100372 SN: 100372 SN: 00341080477 Name	Car Date (Certificate No.) 04-Apr-16 (No. 217-02672/02673) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02673) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02683) 30-Dec-17 (No. 217-02683) 10-Dec-17 (No.	Scheduled Calibration Apr-19 Apr-19 Apr-19 Apr-19 Dec-18 Dec-18 Scheduled Check In house check: Oct-18 In house check: Oct-18
Calibration Equipment used (M&T Parnary Standards Power seasor NRP-291 Power seasor NRP-291 Power seasor NRP-291 Retende 20 dB Attanuator Pype-N mismatch combination Retende Probe EX3DV4 DAE4 Secondary Standards Power sensor HP 8481A Power sensor HP 8481A Robeck Analyzer Aglient E8358A	ID # SN: 104778 SN: 103244 SN: 103245 SN: 5058 (25k) SN: 5047 27 06327 SN: 501 ID # SN: 513746 SN: 501 ID # SN: 5137460704 SN: 5137252785 SN: MY441582317 SN: 00541080477	Car Date (Certificate No.) 04-Apr-16 (No. 217-02672/02673) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02672) 04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02683) 30-Dec-17 (No. 217-02683) 30-Dec-17 (No. 2NO-9349, Dec-17) 26-Ord-17 (No. 2NO-9349, Dec-17) 26-Ord-17 (No. 2NO-9349, Dec-17) 26-Ord-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 15-Jun-15 (in house check Oct-16) 15-Jun-15 (in house check Oct-17)	Scheduled Calibration Apr-19 Apr-19 Apr-19 Apr-19 Apr-19 Dec-18 Oec-18 Scheduled Check In house check: Oct-18 In house check: Oct-18

Certificate No: D1750V2-1008 Aug18

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Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



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Glossary:

TSL tissue simulating liquid ConvF sensitivity in TSL / NORM x,y,z N/A not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Anlenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms prianted parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay; One-way delay between the SMA connector and the antenna leed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenne connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Certificate No: D1750V2-1008_Aug18

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Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASYS	V52.10.1
Extrapolation	Advanced Extrapolation	
Phantom	Modular Fiat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz/ = 5 mm	
Frequency	1750 MH2 ± 1 MH2	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	40.1	1.37 mbolm
Measured Head TSL parameters	(22.0 ± 0.2) °C	38.9 ± 6 %	1.34 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL

SAR averaged over 1 cm ¹ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	9.07 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	35.5 W/kg = 17.0 % (k=2)
		the second s
SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR averaged over 10 cm ³ (10 g) of Heed TSL. SAR measured	condition 250 mW input power	-4.81 W/kg

Body TSL parameters

The following parameters and calculations were applied.

	Temperatura	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	53.4	1.49 mino/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	53.4 ± 0 %	1.47 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	-	-

SAR result with Body TSL

SAR averaged over 1 cm ² (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	9.16 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	37.0 W/kg ± 17.0 % (k=2)
SAR averaged over 10 cm ² (10 g) of Body TSL	condition	
SAR everaged over 10 cm ² (10 g) of Body TSL SAR measured	condition 250 mW input power	4.93 W/kg

Certificate No: D1750V2-1006_Aug18

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Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	52.0 Ω + 1.6 jΩ		
Ratum Loss	+ 32.2 dB		

Antenna Parameters with Body TSL

Impedance, transformed to feed point	=i8,3 Ω = 0.6 jΩ	
Riatum Lass	- 34.7 dB	

General Antenna Parameters and Design

Electrical Delay (one direction)	1:207 ms	
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid cosxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The anterna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	February 11, 2009

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DASY5 Validation Report for Head TSL

Date: 30.08.2018

Test Laboratory: SPEAG, Zurich, Switzerland

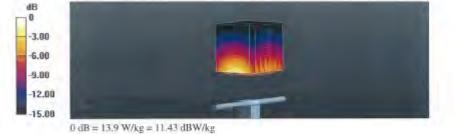
DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN:1008

Communication System: UID 0 - CW; Frequency: 1750 MHz Medium parameters used: f = 1750 MHz; a = 1.34 S/m; er = 38.9; p = 1000 kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(8.5, 8.5, 8.5) @ 1750 MHz; Calibrated: 30.12.2017
- Sensor-Surface: 1.4mm (Mechanical Surface Detection) .
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017 .
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 107.6 V/m; Power Drift = -0.04 dB Peak SAR (extrapolated) = 16.3 W/kg SAR(1 g) = 9.07 W/kg; SAR(10 g) = 4.81 W/kg Maximum value of SAR (measured) = 13.9 W/kg



Certificate No: D1750V2-1008_Aug18

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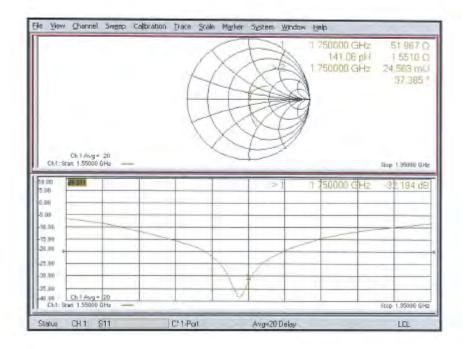
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Impedance Measurement Plot for Head TSL



Certificate No: D1750V2-1008 Aug18

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DASY5 Validation Report for Body TSL

Date: 30.08.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN:1008

Communication System: UID 0 - CW; Frequency: 1750 MHz Medium parameters used: f = 1750 MHz; σ = 1.47 S/m; ε_c = 53.4; p = 1000 kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(8.35, 8.35, 8.35) @ 1750 MHz; Calibrated: 30.12,2017
- Sensor-Surface: 1.4mm (Mechanical Surface Detection) .
- Electronics: DAE4 Sn601: Calibrated: 26.10.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439) ٠

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 101.7 V/m; Power Drift = -0.07 dB Peak SAR (extrapolated) = 15.9 W/kg SAR(1 g) = 9.16 W/kg; SAR(10 g) = 4.93 W/kg Maximum value of SAR (measured) = 13.7 W/kg



Certificate No: D1750V2-1008_Aug18

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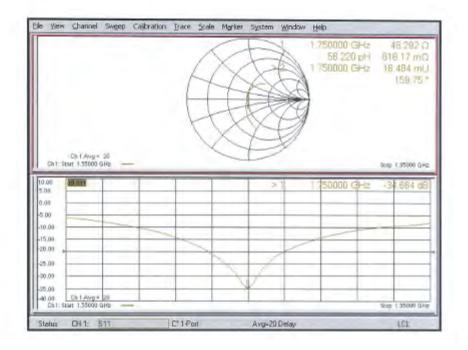
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Impedance Measurement Plot for Body TSL



Certificate No: D1750V2-1008_Aug18

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Report No. : EN/2018/B0027 Page: 422 of 468

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Certificate No: D1900V2-50173_Apr16

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Report No. : EN/2018/B0027 Page: 423 of 468

Calibration Laboratory of Schmid & Partner Engineering AG susstrance 43, 8004 Zurich, Switzerland



Schweizerischer Kalibrierdienst s Service suisso d'étalonnage C Servizio sviziero di taratura S Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accorditation Service (SAS) The Swiss Accreditation Service is one of the signatorias to the EA Multilateral Agreement for the recognition of calibration curtificates

Glossary:

TSL tissue simulating liquid sensitivity in TSL / NORM x.y.z. ConvF N/A not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless. communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)*, March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz" d)

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented. parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized. SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Camilcate No D1900V2-5d173 Aprill

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Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52:10.0
Extrapolation	Advanced Extrapolation	452.10.0
Phantom	Modular Fist Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	cbi, dy', dz = 5 mm	
Frequency	1900 MHz ± T MHz:	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	40.0	1.40 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	411±8%	1.35 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C.		

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	9.89 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	40.7 W/kg = 17.0 % (k=2)
SAR averaged over 10 cm ² (10 g) of Head TSL	opridition	
SAR averaged over 10 cm ² (10 g) of Head TSL SAR ineasured	condition 250 mW input power	5.21 W/kg

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	53.3	1.52 mhorm
Measured Body TSL parameters	(22.0 ± 0.2) °C	55.3 ± 6 %	1.47 mho/m±6 %
Body TSL temperature change during test	≈0.5 °C		

SAR result with Body TSL

SAR averaged over 1 cm ² (1 g) of Body TSL	Contition	
SAR measured	250 mW input power	9.93 W/kg
SAR for nominal Body TSL parameters	W1 of besilemon	40.9 W/kg ± 17.0 % (k=2)
	and the second se	
SAR averaged over 10 cm ² (10 g) of Body TSL	condition	
SAR averaged over 10 cm ² (10 g) of Body TSL SAR measured	condition 250 mW input power	5.30 W/kg

Certificate No: D1900V2-5d173_April8

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Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	5140+510
Return Loss	- 25,6 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed pully	47.3 41 + 7.2 32
Return Loss	- 22 1 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.195 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	June 08, 2012

Centricate No: D1900V2-5d173_Apr1II

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DASY5 Validation Report for Head TSL

Date: 25.04.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d173

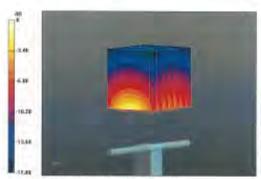
Communication System: UID 0 - CW: Frequency: 1900 MHz Medium parameters used: f = 1900 MHz; $\sigma = 1.35$ S/m; $c_c = 41.1$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(8.18, 8.18, 8.18); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 110.9 V/m; Power Drift = -0.01 dB Peak SAR (extrapolated) = 18.3 W/kg SAR(1 g) = 9.89 W/kg; SAR(10 g) = 5.21 W/kg Maximum value of SAR (measured) = 15.2 W/kg



0 dB = 15.2 W/kg = 11.82 dBW/kg

Certificate No: D1900V2-5d173_Apr18

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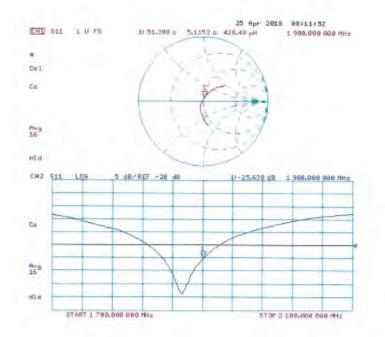
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Impedance Measurement Plot for Head TSL



Certificate No: D1900V2-5d173_Apr18

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DASY5 Validation Report for Body TSL

Date: 25.04.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d173

Communication System: UID 0 - CW; Frequency: 1900 MHz Medium parameters used: f = 1900 MHz; o = 1.47 S/m; e = 55.3; p = 1000 kg/m3 Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(8.15, 8.15, 8.15); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26,10.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 104.6 V/m; Power Drift = -0.09 dB Peak SAR (extrapolated) = 17.7 W/kg SAR(1 g) = 9.93 W/kg; SAR(10 g) = 5.3 W/kg

Maximum value of SAR (measured) = 14.7 W/kg



0 dB = 14.7 W/kg = 11.67 dBW/kg

Certificate No: D1900V2-5d173_Apr18

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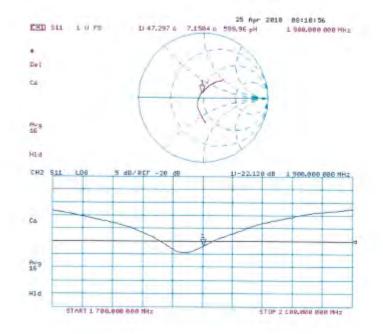
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Impedance Measurement Plot for Body TSL



Certificate No: D1900V2-5d173_Apr18

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CALIBRATION	te is one of the signatori recognition of cellbration AN)	es to the EA a certificates Certificate N	ocreditation No.: SCS 0108
CALIBRATION			D2300V2-1023_Aug18
	CENTIFICATI		
Object			
	D2300V2 - SN:1	023	
Calibration procedure(s)	QA CAL-05.v10 Calibration proce	edure for dipole validation kits ab	ove 700 MHz
Calibration date:	August 24, 2018		
Calibration Equipment used (M6 Primery Standards	TE critical (or calibration)	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-18 (No. 217-02672/02673)	Apr-19
Power sensor NFIP-291	SN: 103244	04-Apr-18 (No. 217-02672)	Apr-19
ower sensor NRP-291	SIN: 103245	84-Apr-18 (No. 217-02673)	
		and the second sec	Apr-19
	SN: 5058 (20k)	04-Apr-18 (No. 217-02682)	Apr-19
Reference 20 dB Attenuator Type-N mismatch combination	SN: 5047.2 / 06327	04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02683)	Apr-19 Apr-19
Type-N mismatch combination Retarance Probe EX3DV4	1	04-Apr-18 (No. 217-02682)	Apr-19
Type-N mismatch combination Retarance Probé EX3DV4 DAE4 Secondary Standards	SN: 5047.2 / 06327 SN: 7349 SN: 601	04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02683) 30-Dec-17 (No. EX5-7340, Dec17) 26-Det-17 (No. DAE4-601_Oct17) Check Date (in house)	Apr-19 Apr-18 Dec-18 Oct-18 Scheduled Check
Type-N mismatch combination Reterence Probe EX3DV4 DAE4 Secondary Standards Power meter EPM-442A	SN: 5047.2 / 06327 SN: 7349 SN: 601 ID # SN: 6837480704	04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02683) 30-Dec-17 (No. EX5-7349, Dec-17) 26-Det-17 (No. DAE4-601_Oct17) Check Date (n. house) 07-Oct-15 (in house check Oct-16)	Apr-19 Apr-19 Dec-18 Oct-18 Scheduled Check In house check: Oct-18
Type-N mismatch combination Reterence Probe EX3DV4 DAE4 Secondary Standards Power meter EPM-442A Power sensor HP B481A	SN: 5047.2 / 06327 SN: 7349 SN: 601 ID # SN: GB37430704 SN: US37292783	04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02683) 30-Doc-17 (No. EX5-7349, Dec17) 26-Oct-17 (No. EX5-7349, Dec17) Check Date (in house) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16)	Apr-19 Apr-19 Dec-18 Oct-18 Scheduled Check In house check: Oct-18 In house check: Oct-18
Typs-N mismatch combination Ratarance Probe EX3DV4 DAE4 Secondary Standards Power meter EPM-442A Power sensor HP 8481A Power sensor HP 8481A	SN: 5047.2 / 06327 SN: 7349 SN: 601 ID # SN: GB37490704 SN: GB37992763 SN: WY41092317	04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02682) 30-Dac-17 (No. EX3-7349, Dec17) 26-Det-17 (No. DAE4-601_Oct17) Check Date (In house) 07-Oct-15 (In house check Oct-16) 07-Oct-15 (In house check Oct-16) 07-Oct-15 (In house check Oct-16)	Apr-19 Apr-19 Dec-18 Dec-18 Dec-18 Scheduled Check In house check: Oct-18 In house check: Oct-18 In house check: Oct-18
Type-N mismatch combination Relarence Proble EX3Dv4 DAE4 Secondary Standards Power meter EPM-442A Power sensor HP 8481A Power sensor HP 8481A RF generator R&S SMT-06	SN: 5047.2 / 06327 SN: 7349 SN: 601 ID # SN: GB37480704 SN: GB37480704 SN: US37292780 SN: MY41092317 SN: 100972	04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02683) 30-Doc-17 (No. EX5-7349, Dec17) 26-Oct-17 (No. EX5-7349, Dec17) Check Date (in house) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16)	Apr-19 Apr-19 Dec-18 Oct-18 Scheduled Check In house check: Oct-18 In house check: Oct-18
Type-N mismatch combination Reterence Probe EX3DV4 DAE4 Secondary Standards Power meter EPM-442A Power sensor HP 8481A Power sensor HP 8481A RF generator R&S SMT-05 Network Analyzer Agiliam EB358	SN: 5047.2 / 06327 SN: 7349 SN: 601 ID # SN: GB37480704 SN: GB37480704 SN: GB37480704 SN: U337292783 SN: MY41092317 SN: 100972 A SN: U341060477 Name	04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02682) 30-Dec-17 (No. EX3-7349, Dec-17) 28-Det-17 (No. DAE-4-601_Oct17) Check Date (In house) 07-Oct-15 (In house check Oct-16) 07-Oct-15 (In house check Oct-16) 07-Oct-15 (In house check Oct-16) 15-Jun-15 (In house check Oct-16) 15-Jun-15 (In house check Oct-17) Findion	Apr-19 Apr-19 Dec-18 Dec-18 Dec-18 Scheduled Check In house check: Oct-18 In house check: Oct-18 In house check: Oct-18 In house check: Oct-18
Type-N mismatch combination Ratarance Probe EX3DV4 DAE4 Secondary Standards Power meter EPN-442A Power sensor HP 8481A Power sensor HP 8481A RF generator R&S SMT-06	SN: 5047.2 / 06327 SN: 7349 SN: 601 ID # SN: GB37480704 SN: US37292783 SN: MY41092317 SN: 100972 A SN: US41060477	04-Apr-18 (No. 217-02682) 04-Apr-18 (No. 217-02683) 30-Dec-17 (No. EX5-7349, Dec17) 28-Oct-17 (No. DAE4-601_Oct17) Check Date (in house) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 15-Jun-15 (in house check Oct-16) 31-Alien-14 (in house check Oct-17)	Apr-19 Apr-19 Dec-18 Doci-18 Scheduled Check In house check: Oct-18 In house check: Oct-18

Certificate No: D2300V2-1023_Aug18

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Report No. : EN/2018/B0027 Page: 431 of 468

Calibration Laboratory of Schmid & Partner Engineering AG sughausstrasse 43, 1904 Zurich, Swiizerland



Schweizerischer Kalibrierde S Service suisse d'étalonnace C Servizio svizzero di taratura S IRR Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swise Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA

Multilateral Agreement for the recognition of calibration certificate Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) In the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate b) (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless c) communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms prianted parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay. One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

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Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY5	V52.10.1
Advanced Extrapolation	
Modular Flat Phantem	
10 mm	with Spacer
dx, dy, dz = 5 mm	
2300 MHz ± 1 MHz	
	Advanced Extrapolation Modular Flat Phantom 10 mm dx, dy, dz = 5 mm

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.5	1.67 mbo/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	38.2 ± 6 %	1.70 mho/m ± 6 %
Head TSL temperature change during test	× 0.6 °C		

SAR result with Head TSL

SAR averaged over 1 cm ² (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	12.3 W/kg
SAR for norminal Head TSL parameters	W of besilemon	48.4 W/kg a 17.0 % (k=2)
SAR averaged over 10 cm ² (10 g) of Head TSL	condition	
SAR averaged over 10 cm ² (10 g) of Head TSL SAR measured	condition 250 mW input power	5.93 W/kg

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	62.9	1,81 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	52.2 ± 6 %	1.85 mho/m ± 6 %
Body TSL temperature change during test	≤0.5 °C		

SAR result with Body TSL

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAB measured	250 mW input power	12.1 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	47.7 W/kg ± 17.0 % (k=2)
SAR averaged over 10 cm ² (10 g) of Body TSL	condition	
SAR averaged over 10 cm ² (10 g) of Body TSL SAR measured	condition 250 mW input power	5.86 W/kg

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Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	49.6 Q - 2.1 jQ
Return Loss	-33.5 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	45.4 Ω - 0.9 JΩ
Return Loss	- 26,1 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.171 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipola near the teedpoint can be measured.

The dipole is made of standard semirityid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenne is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" periograph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might band or the soldered connections near the feedpoint may be carnaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	March 30, 2009

Certificate No: D2300V2-1023_Aug18

Page 4 at E

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DASY5 Validation Report for Head TSL

Date: 23.08.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2300 MHz; Type: D2300V2; Serial: D2300V2 - SN:1023

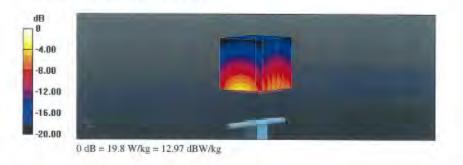
Communication System: UID 0 - CW; Frequency: 2300 MHz Medium parameters used: f = 2300 MHz; $\sigma = 1.7$ S/m; $\varepsilon_r = 38.2$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(8.08, 8.08, 8.08) @ 2300 MHz; Calibrated: 30.12.2017
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017 .
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439) .

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 114.4 V/m; Power Drift = -0.06 dB Peak SAR (extrapolated) = 23.7 W/kg SAR(1 g) = 12.3 W/kg; SAR(10 g) = 5.93 W/kg Maximum value of SAR (measured) = 19.8 W/kg



Certificate No: D2300V2-1023_Aug18

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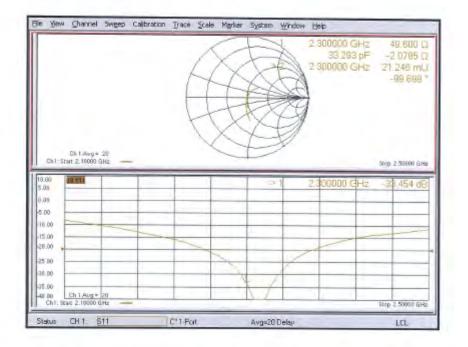
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Impedance Measurement Plot for Head TSL



Certificate No: D2300V2-1023_Aug18

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DASY5 Validation Report for Body TSL

Date: 24.08.2018

Test Laboratory: SPEAG, Zurich, Switzerland

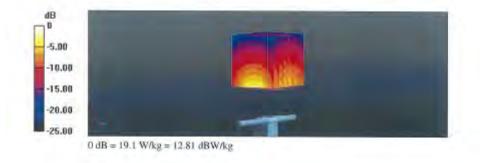
DUT: Dipole 2300 MHz; Type: D2300V2; Serial: D2300V2 - SN:1023

Communication System: UID 0 - CW; Frequency: 2300 MHz Medium parameters used: f = 2300 MHz; $\sigma = 1.85$ S/m; $e_r = 52.2$; p = 1000 kg/m² Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(8.08, 8.08, 8.08) @ 2300 MHz; Calibrated: 30.12.2017
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA: Serial: 1002
- DASY52 52.10.1(1476); SEMCAD X 14.6.11(7439)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 108.1 V/m; Power Drift = -0.07 dB Peak SAR (extrapolated) = 22.8 W/kg SAR(1 g) = 12.1 W/kg; SAR(10 g) = 5.86 W/kg Maximum value of SAR (measured) = 19.1 W/kg



Certificate No: D2300V2-1023_Aug18

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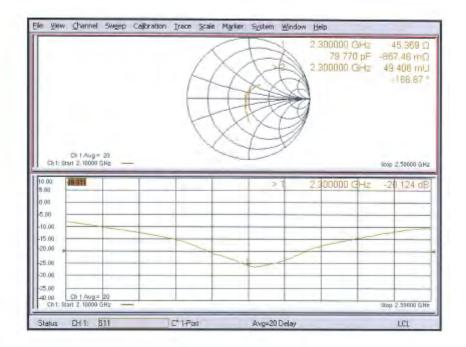
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Impedance Measurement Plot for Body TSL



Certificate No: D2300V2-1023 Aug18

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Report No. : EN/2018/B0027 Page: 438 of 468

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covertified by the Swise Accredita he Swise Accreditation Service fulfilateral Agreement for the re	r is one of the signatorie	s to the EA	controllimation No.: SCS 0108
Ileni SGS-TW (Aude	n)	Certificate N	o: D2450V2-727_Apr18
CALIBRATION C	ERTIFICATE		
Disjont	D2450V2 - SN:72	27	
Calibration percendure(s)	QA CAL-05.v10 Calibration proce	dure for dipole validation kits ab	ove 700 MHz
Calibration date:	April 24, 2018		
The measurements and the unce All calibrations have been conduc		ry tactility: environment temperature (22 ± 3)*	C and humidity < 70%
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Certificate No: D2450V2-727_Apr18

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Calibration Laboratory of Schmid & Partner





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creditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

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Glossary: TSL

tissue simulating liquid sensitivity in TSL / NORM x,y,z ConvF N/A not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless
- Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010.
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented. parallel to the body axis.
- Feed Point impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna. connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Certificate No: D2450V2-727 April 8

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Measurement Conditions

DASY system config	iuration.	es far as	not o	even on	nana 1

DASY Version	DASYS	V52.10.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2450 MHz = 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 "C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	38.3 ± 8 %	1.86 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL

SAR averaged over 1 cm ⁵ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.3 W/kg
SAR for nominal Head TSL parameters	hormalized to 1W	52.1 W/kg ± 17.0 % (k=2)
	a second s	and the second sec
SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR averaged over 10 cm ³ (10 g) of Head TSL SAR measured	condition 250 mW input power	B.16 W/kg

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.7	1.95 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	52.5 ± 6 %	2.01 mhc/m ≠ 6 %
Body TSL temperature change during test	< 0,5 °C	_	(1997)

SAR result with Body TSL

SAR sveraged over 1 cm ¹ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	12.9 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	50.8 W/kg ± 17,0 % (k=2)
AND DESCRIPTION OF ANY ADDRESS TOP		
SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR averaged over 10 cm ³ (10 g) of Body TSL SAR measured	condition 250 mW input power	6.00 W/kg

Centricale No: D2450V2-727_Apr18

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Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	55.2 Ω + 2.7 jΩ	
Return Loss	= 25.1 dB	

Antenna Parameters with Body TSL

Impledance, transformed to lead point	51.2 Q + 5.6 JQ
Return Loss	- 25.0 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.149 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semingid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore shart-circuited for DC-signals. On some of the dipoles, small end capaare added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole emits, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	January 09, 2003

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DASY5 Validation Report for Head TSL

Date: 24.04.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:727

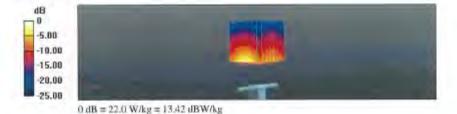
Communication System: UID 0 - CW; Frequency: 2450 MHz Medium parameters used: f = 2450 MHz; $\sigma = 1.86$ S/m; $\varepsilon_t = 38.3$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(7.88, 7.88, 7.88); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017 .
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001 .
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 116.0 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 26.7 W/kg SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.16 W/kg Maximum value of SAR (measured) = 22.0 W/kg



Certificate No: D2450V2-727_April8

Page 5 of 8

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

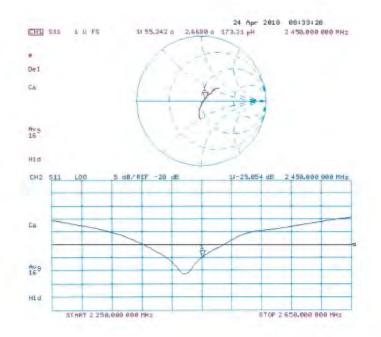
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Impedance Measurement Plot for Head TSL



Certificate No: D2450V2-727 Apr18

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DASY5 Validation Report for Body TSL

Date: 24.04.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:727

Communication System: UID 0 - CW; Frequency: 2450 MHz Medium parameters used: f = 2450 MHz; $\sigma = 2.01$ S/m; $\varepsilon_r = 52.5$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(8.01, 8.01, 8.01); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 108.4 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 25.5 W/kg SAR(1 g) = 12.9 W/kg; SAR(10 g) = 6 W/kg Maximum value of SAR (measured) = 21.1 W/kg

0	
-5.00	
-15.00	
-20.00	
-25.00	g = 13,24 dBW/kg

Certificate No: D2450V2-727 April8

Page 7 of 8

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

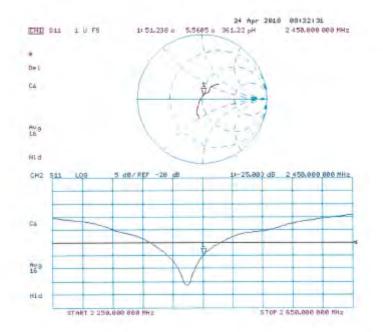
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Impedance Measurement Plot for Body TSL



Certificate No: D2450V2-727_Apr18

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		s to the EA	Accreditation No.: SCS 0108
lient SGS-TW (Au		Part of the second	ve: D2600V2-1005_Jan18
CALIBRATION	CERTIFICATE		
Doject	D2600V2 - SN:1	005	
Calibration procedure(s)	QA CAL-05.v9 Calibration proce	dure for dipole validation kits at	oove 700 MHz
Calibration date:	January 17, 2018	3	
The measurements and the ur	certainties with confidence p ducted in the closed laborato	ional standards, which realize the physical v robability are given on the following pages r ry facility: environment temperature (22 ± 3)	and are part of the certificate.
The measurements and the un All calibrations have been con Calibration Equipment used (M	certainties with confidence p ducted in the closed laborato	robability are given on the following pages a	and are part of the certificate.
The measurements and the un All calibrations have been con Calibration Equipment used (M Primary Standards	scertainties with confidence p ducted in the closed laborato 48TE critical for calibration)	robability are given on the following pages i ny facility: environment temperature (22 \pm 3)	and are part of the certificate. PC and humidity < 70%.
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The measurements and the un All calibrations have been con Calibration Equipment used (M Primary Standards Power sensor NRP Power sensor NRP-291 Reference 20 dB Attenuator	Acertainties with confidence p ducted in the closed laborato 48/TE critical for calibration) (D # SN: 104778 SN: 103244 SN: 103245 SN: 103245 SN: 5056 (20k)	robability are given on the following pages a ny facility: environment temperature (22 ± 3) Cal Date (Certificate No.) 04 Apr-17 (No. 217-02221/02522) 04 Apr-17 (No. 217-02521)	and are part of the certificate. PC and humidity < 70%. Scheduled Calibration Apr-18 Apr-18 Apr-18 Apr-18
The measurements and the un All calibration Equipment used (M Primary Standards Power meter NRP Power sensor NRP-291 Power sensor NRP-291 Reference 20 dB Attenuator	Acertainties with confidence p ducted in the closed laborato 48/TE critical for calibration) (D # SN: 104778 SN: 103244 SN: 103245 SN: 103245 SN: 5056 (20k)	robability are given on the following pages a ry facility: environment temperature (22 ± 3) Cal Date (Certificate No.) 04 Apr-17 (No. 217-02221/02522) 04 Apr-17 (No. 217-02521) 04 Apr-17 (No. 217-02522)	and are part of the certificate. PC and humidity < 70%. Scheduled Calibration Apr-18 Apr-18 Apr-18
The measurements and the un All calibration Equipment used (M Primary Standards Power meter NRP Power sensor NRP-291 Reference 20 dB Attenuator Type-N mismetch combinetion Reference Probe EX3DV4	AcertainUes: with confidence p ducted in the closed laborato 48TE critical for calibration) ID # SN: 104778 SN: 103244 SN: 103244 SN: 103245 SN: 5068 (20k) SN: 5067.2 / 06327 SN: 7349	robability are given on the following pages in ry facility: environment temperature (22 ± 3) Cal Date (Certificate No.) 04 Apr-17 (No. 217-02521/02522) 04 Apr-17 (No. 217-02521) 04 Apr-17 (No. 217-02522) 07 Apr-17 (No. 217-02528)	and are part of the certificate. PC and humidity < 70%. Scheduled Calibration Apr-18 Apr-18 Apr-18 Apr-18 Apr-18 Apr-18 Apr-18 Dec-18
The measurements and the un All calibration Equipment used (M Primary Standards Power meter NRP Power sensor NRP-291 Reference 20 dB Attenuator Type-N mismetch combinetion Reference Probe EX3DV4	AcetainUes with confidence p ducted in the closed laboration ARTE critical for calibration) (D # SN: 104778 SN: 103244 SN: 103244 SN: 103245 SN: 5058 (20k) I SN: 5047.2 / 06327	Cal Date (Certificate No.) 04 Apr-17 (No. 217-02521/02522) 04 Apr-17 (No. 217-02521/02522) 04 Apr-17 (No. 217-02521/02522) 04 Apr-17 (No. 217-02521) 07 Apr-17 (No. 217-02528) 07 Apr-17 (No. 217-02528) 07 Apr-17 (No. 217-02528)	PC and humidity < 70%. Scheduled Calibration Apr-18 Apr-18 Apr-18 Apr-18 Apr-18
The measurements and the un All calibrations have been con Calibration Equipment used (k Primary Standards Power meter NRP Power sensor NRP-201 Power sensor	Acetainties with confidence p ducted in the closed istoratio (ID # 9N: 104778 9N: 103245 9N: 103245 9N: 50345 9N: 5056 (20k) 1 SN: 5047.2 / 06327 9N: 504 9N: 601 1D #	robability are given on the following pages a ry facility: environment temperature (22 ± 3) 04 Apr-17 (No. 217-02521/02522) 04 Apr-17 (No. 217-02521) 04 Apr-17 (No. 217-02521) 04 Apr-17 (No. 217-02528) 07-Apr-17 (No. 217-02528) 07-Apr-17 (No. 217-02528) 07-Apr-17 (No. 217-02529) 30-Dec-17 (No. 217-02529) 30-Dec-17 (No. EX3-7249_Dec17) 26-Oct-17 (No. DAE4-801_Oct17) Check Date (in house)	and are part of the certificate. PG and humidity < 70%. Scheduled Calibration Apr-18 Apr-18 Apr-18 Apr-18 Apr-18 Dec-18 Dec-18 Oct-18 Scheduled Check
The measurements and the un All calibrations have been com- Calibration Equipment used (M Primary Standards Power meter NRP Power sensor NRP-201 Power sensor NRP-201 Power sensor NRP-201 Reference 20 dB Attenuator Type-N mismalch combinistion Reference 20 dB Attenuator Type-N mismalch combinistion Reference 20 dB Attenuator DAE4 Secondary Standards Power meter EPM-442A	AcertainUes: with confidence ; ducted in the closed laborato 48/TE critical for calibration) (D 8 SN: 104778 SN: 103244 SN: 103244 SN: 103245 SN: 5068 (20k) SN: 5068 (20k) SN: 5067 2 / 06327 SN: 7349 SN: 601 (D 4 SN: GB37480704	robability are given on the following pages a ry facility: environment temperature (22 ± 3) 04 Apr-17 (No. 217-02521/02522) 04 Apr-17 (No. 217-02521/02522) 04 Apr-17 (No. 217-02521) 07 Apr-17 (No. 217-02528) 07 Apr-17 (No. 217-02528) 07 Apr-17 (No. 217-02528) 30 Dec-17 (No. 217-02528) 30 Dec-17 (No. 217-02529) 30 Dec-17 (No. 217	and are part of the certificate. PC and humidity < 70%. Scheduled Calibration Apr-18 Apr-18 Apr-18 Dac-18 Dac-18 Oct-18 Scheduled Check In house check: Oct-18
The measurements and the un All calibrations have been com Calibration Equipment used (M Primary Standards Power sensor NRP-201 Power sensor NRP-201 Reference 20 dB Attenuator Type-N mamelich combinistion Reference Probe EX3DV4 DAE4 Secondary Standards Power meter EPM-442A Power sensor HP 8481A.	AcetainUes: with confidence ; ducted in the closed laborato 48/TE critical for calibration) ID # SN: 104778 SN: 103244 SN: 103244 SN: 103244 SN: 5068 (20k) SN: 5067.2 / 06327 SN: 7349 SN: 601 ID # SN: 6837460704 SN: 0537292783	robability are given on the following pages a ry facility: environment temperature (22 ± 3) 04 Apr-17 (No. 217-02521/02522) 04 Apr-17 (No. 217-02521/02522) 04 Apr-17 (No. 217-02521) 04 Apr-17 (No. 217-02522) 07-Apr-17 (No. 217-02528) 07-Apr-17 (No. 217-02528) 30-Dec-17 (No. 217-02529) 30-Dec-17 (No. EX3-7349_Dec17) 26-Oct-17 (No. DAE4-801_Oct17) Check Data (in house) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16)	and are part of the certificate. PC and humidity < 70%. Scheduled Calibration Apr-18 Apr-18 Apr-18 Apr-18 Apr-18 Dec-18 Dec-18 Dec-18 Oct-18 Scheduled Check In house check: Oct-18 In house check: Oct-18
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Che measurements and the un All calibrations I save been com Calibration Equipment used (M Primary Standards Power meter NRP Power sensor NRP-291 Power sensor NRP-291 Reference 20 dB Attenuator Type-N mismatch combinistion Reference Probe EX3DV4 DAE4 Secondary Standards Power sensor HP 8461A Power sensor HP 8461A Power sensor HP 8461A RF generator R&S SMT-06	AcetainUes: with confidence ; ducted in the closed laborato A&TE critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 SN: 5056 (20k) SN: 5057 2 / 06327 SN: 5057 SN: 501 ID # ID # SN: GB37480704 SN: US37292783 SN: MY41092217 SN: 100972	robability are given on the following pages a ry facility: environment temperature (22 ± 3) Cal Date (Certificate No.) 04-Apr-17 (No. 217-02521/02522) 04-Apr-17 (No. 217-02521) 04-Apr-17 (No. 217-02521) 04-Apr-17 (No. 217-02529) 30-Dech-17 (No. DAE4-801_Oct17) Check Date (in house) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 15-Jun-15 (in house check Oct-16)	and are part of the certificate. PG and humidity < 70%. Scheduled Calibration Apr-18 Apr-18 Apr-18 Apr-18 Dac-1
The measurements and the un All calibrations I save been com Calibration Equipment used (M Primary Standards Power meter NRP Power sensor NRP-291 Power sensor NRP-291 Reference 20 dB Attenuator Type-N memalch combination Reference Probe EX3DV4 DAE4 Secondary Standards Power sensor HP 8461A Power sensor HP 8461A Power sensor HP 8461A RF generator R&S SMT-06	Acetainties with confidence ; ducted in the closed laborato 48/TE critical for calibration) ID # SN: 104778 SN: 103244 SN: 103244 SN: 103244 SN: 5066 (20k) SN: 5067.2 / 06327 SN: 5067.2 / 06327 SN: 501 ID # SN: 601 ID # SN: 6837490704 SN: 0537292783 SN: MY41092317	robability are given on the following pages a ry facility: environment temperature (22 ± 3) Cal Date (Certificate No.) 04-Apr-17 (No. 217-02521/02522) 04-Apr-17 (No. 217-02521) 04-Apr-17 (No. 217-02522) 07-Apr-17 (No. 217-02528) 07-Apr-17 (No. 217-02528) 07-Apr-17 (No. 217-02528) 30-Deci-17 (No. 217-02528) 30-Deci-17 (No. EX3-7349_Deci 7) 26-Oci-17 (No. DAE4-801_Oci 17) Check Date (in house) 07-Oci-15 (in house check Oci-16) 07-Oci-15 (in house check Oci-16)	and are part of the certificate. PC and humidity < 70%. Scheduled Calibration Apr-18 Apr-18 Apr-18 Apr-18 Dac-18 Dac-18 Dac-18 Scheduled Check In house check: Oct-18 In house check: Oct-18 In house check: Oct-18 In house check: Oct-18
Che measurements and the un All calibrations I save been com Calibration Equipment used (M Primary Standards Power meter NRP Power sensor NRP-291 Reference 20 dB Attenuator Type-N memetch combinistor Reference Probe EX3DV4 DAE4 Secondary Standards Power meter EPM-442A Power sensor HP 8461A Power sensor HP 8461A Power sensor HP 8461A RF generator R&S SMT-06 Network Analyzer HP 8753E	AcetainUes: with confidence ; ducted in the closed laborato 48/TE critical for calibration) ID # SN: 104778 SN: 103244 SN: 103244 SN: 5068 (20k) SN: 5067 (2 / 06327 SN: 7349 SN: 601 ID # SN: 6658 (20k) SN: 601 ID # SN: 6637460704 SN: 0537292783 SN: MY41092317 SN: 100972 SN: 0037390585 Niamo	robability are given on the following pages a ry facility: environment temperature (22 ± 3) 04 Apr-17 (No. 217-02521/02522) 04 Apr-17 (No. 217-02521/02522) 04 Apr-17 (No. 217-02528) 07-Apr-17 (No. 217-02528) 07-Apr-17 (No. 217-02528) 30-Dec-17 (No. 217-02528) 30-Dec-17 (No. 217-02528) 30-Dec-17 (No. 217-02528) 30-Dec-17 (No. DAE4-801_Oct17) 26-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 07-Oct-15 (in house check Oct-16) 15-Jun-15 (in house check Oct-16) 16-Oct-01 (in house check Oct-17) Function	and are part of the certificate. PG and humidity < 70%. Scheduled Calibration Apr-18 Apr-18 Apr-18 Apr-18 Dac-1
The measurements and the un All calibrations have been con	AcetainUes with confidence ; ducted in the closed laboration ARTE critical for calibration) ID 8 SN: 104778 SN: 103244 SN: 103244 SN: 103244 SN: 5068 (20k) SN: 5068 (20k) SN: 5068 (20k) ID 4 ID 4 SN: GB37480704 SN: GB37480704 SN: US37292783 SN: MY41092317 SN: 100972 SN: US37390585	robability are given on the following pages a ry facility: environment temperature (22 ± 3) 04 Apr-17 (No. 217-02521/02522) 04 Apr-17 (No. 217-02521/02522) 04 Apr-17 (No. 217-02521) 07 Apr-17 (No. 217-02522) 07 Apr-17 (No. 217-02522) 07 Apr-17 (No. 217-02522) 30-Dec-17 (No. 217-02529) 30-Dec-17 (No. 217-0252	and are part of the certificate. PC and humidity < 70%. Scheduled Calibration Apr-18 Apr-18 Apr-18 Dac-18 Dac-18 Oct-18 Scheduled Check In house check: Oct-18 In house check: Oct-18

Certificate No: D2600V2-1005_Jan18

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Calibration Laboratory of Schmid & Partner Engineering AG instresse 43, 8004 Zurich, Switzerland Zeugha



Schweizerischer Kallbrierdienst Service suisse d'étalonnage Servizio svizzero di taratura Swiss Calibration Service

Accreditation No.: SCS 0108

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Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques*, June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Certificate No: D2600V2-1005_Jan18

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Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.10.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2600 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.0	1.96 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	37.2±6%	2.04 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	(****)	

SAR result with Head TSL

SAR averaged over 1 cm ² (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	14.6 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	55.8 W/kg ± 17.0 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR averaged over 10 cm ² (10 g) of Head TSL SAR measured	condition 250 mW Input power	6.49 W/kg

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.5	2.16 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	51.1±6%	2.20 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		-

SAR result with Body TSL

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.8 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	54.4 W/kg ± 17.0 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR averaged over 10 cm ³ (10 g) of Body TSL SAR measured	condition 250 mW input power	6.13 W/kg

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Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	48.4 Ω - 4.7 jΩ	
Return Loss	- 26.0 dB	

Antenna Parameters with Body TSL

Impedance, transformed to feed point	46.2 Ω - 3.0 jΩ
Return Loss	- 25.9 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.155 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard seminigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG.
Manufactured on	December 23, 2006

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DASY5 Validation Report for Head TSL

Date: 17.01.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1005

Communication System: UID 0 - CW; Frequency: 2600 MHz Medium parameters used: f = 2600 MHz; $\sigma = 2.04 \text{ S/m}$; $\epsilon_r = 37.2$; $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(7.7, 7.7, 7.7); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001 .
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 118.8 V/m; Power Drift = -0.08 dB Peak SAR (extrapolated) = 29.8 W/kg SAR(1 g) = 14.6 W/kg; SAR(10 g) = 6.49 W/kg Maximum value of SAR (measured) = 24.1 W/kg



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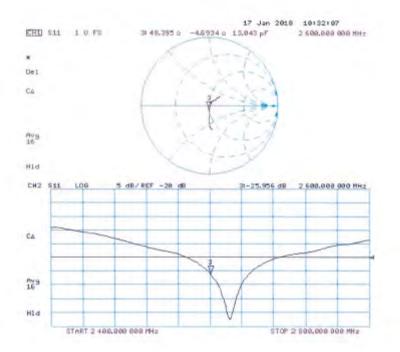
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Impedance Measurement Plot for Head TSL



Certificate No: D2600V2-1005 Jan18

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DASY5 Validation Report for Body TSL

Date: 17.01.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1005

Communication System: UID 0 - CW; Frequency: 2600 MHz Medium parameters used: f = 2600 MHz; $\sigma = 2.2 \text{ S/m}$; $\varepsilon_r = 51.1$; $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(7.81, 7.81, 7.81); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 108.0 V/m; Power Drift = -0.06 dB Peak SAR (extrapolated) = 28.6 W/kg SAR(1 g) = 13.8 W/kg; SAR(10 g) = 6.13 W/kg Maximum value of SAR (measured) = 22.6 W/kg



Certificate No: D2600V2-1005_Jan18

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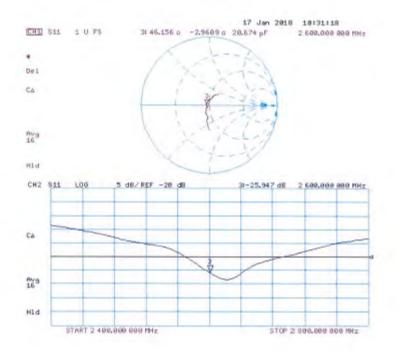
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Impedance Measurement Plot for Body TSL



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Calibration Laboratory of Schmid & Partner Engineering AG Zeughausetrease 43, 8004 Zurich. Switzerland



Schweizerischer Kalibrievtlienst Service subse d'atalonnage Servizio evizzero di taraitura Swiss Calibration Service

Accreditation No.: SCS 0108

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Accretited by the Swiss Accreditation Service (SAS)

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TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x.y.z.
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless. Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%

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Measurement Conditions

ASY system configuration, as far as no	ot given on page 1.	
DASY Version	DASY5	V52,10.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V5.0	
Distance Dipole Center - TSL	T0 mm	with Spader
Zoom Scan Resolution	dx, dy = 4.0 mm, dz = 1.4 mm	Graded Ratio = 1.4 (Z direction)
Frequency	5200 MHz ± 1 MHz 5300 MHz ± 1 MHz 5600 MHz ± 1 MHz 5800 MHz ± 1 MHz	

Head TSL parameters at 5200 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22,0 °C	38.0	4.66 mino/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	36.3 ± 6 %	4.50 mha/m ± 6 %
Head TSL temperature change during test	<0.5 ℃		1997

SAR result with Head TSL at 5200 MHz

SAR averaged over 1 cm ² (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	7:72 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	77.3 W/kg ± 19.9 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	consition	
SAR everaged over 10 cm ³ (10 g) of Head TSL SAR measured	candition 100 mW input power	2.22 W/kg

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Head TSL parameters at 5300 MHz

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.9	4.76 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	35.2 ± 6 %	4.60 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	-	-

SAR result with Head TSL at 5300 MHz

SAR averaged over 1 cm ^o (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.09 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	80.9 W / kg ± 19.9 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR averaged over 10 cm ³ (10 g) of Head TSL SAR measured	condition 100 mW input power	2.32 W/kg

Head TSL parameters at 5600 MHz

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.5	5.07 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	35.8 ± 6 %	4.90 mhaim ± 6 %
Head TSL temperature change during test	< 0.5 °C	-	+

SAR result with Head TSL at 5600 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.19 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	81.9 W/kg ± 19.9 % (k=2)
SAR averaged over 10 cm ² (10 g) of Head TSL	condition	
SAR averaged over 10 cm ² (10 g) of Head TSL SAR measured	condition	2.34 W/kg

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Head TSL parameters at 5800 MHz

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.3	5.27 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	35.5±6%	5.11 mho/m ± © %
Head TSL temperature change during test	< 0.5 °C	(teac)	-

SAR result with Head TSL at 5800 MHz

SAR averaged over 1 cm ² (1 g) of Head TSL	Condition	
SAR measured	100 mW Input power	7.90 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	79.0 W/kg ± 19.9 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR averaged over 10 cm ³ (10 g) of Head TSL. SAR measured	condition 100 mW input power	2.25 W/kg

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Body TSL parameters at 5200 MHz

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	49.0	5.30 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	47.3±6%	5,41 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		-

SAR result with Body TSL at 5200 MHz

SAR averaged over 1 cm ² (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.14 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	70.9 W/kg ± 19.9 % (k+2)
SAR averaged over 10 cm ² (10 g) of Body TSL	condition	
SAR averaged over 10 cm ² (10 g) of Body TSL SAR measured	condition 100 mW input power	2.00 W/kg

Body TSL parameters at 5300 MHz

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.9	5.42 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	47 1 ± 6 %	5.54 mho/m = 6 %
Body TSL temperature change during test	< 0.5 °C	-	0-0-0

SAR result with Body TSL at 5300 MHz

SAR averaged over 10 cm" (10 g) of Body ISL	contration	
SAR measured	100 mW input power	2.06 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	20.4 W/kg ± 19.5 % (k=2)

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Body TSL parameters at 5600 MHz

The following parameters and calculat	ions were applied.
	Temperature

	Temperature	Permitivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.5	5.77 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	46.6±6%	.5.94 mha/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

SAR result with Body TSL at 5600 MHz

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.81 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	77.6 W/kg ± 19.9 % (k=2)
of it i for instantial area j i to a paratiticitaria	y deministration of a ray	
	condition	
SAR averaged over 10 cm ³ (10 g) of Body TSL SAR measured		2.19 W/kg

Body TSL parameters at 5800 MHz

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.2	6.00 mhaim
Measured Body TSL parameters	(22.0 ± 0.2) °C	46.2 ± 6 %	6.22 mha/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	-	-

SAR result with Body TSL at 5800 MHz

SAR averaged over 1 cm ² (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.46 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	74.1 W/kg ± 19.9 % (k=2)
SAR averaged over 10 cm ² (10 g) of Body TSL	condition	
SAR averaged over 10 cm ² (10 g) of Body TSL SAR measured	condition 100 mW input power	2.07 W/kg

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Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 5200 MHz

Impedance, transformed to feed point	50.1 Ω - 8.1 jΩ	_
Return Loss	- 21.9 dB	

Antenna Parameters with Head TSL at 5300 MHz

Impedance, transformed to feed point	50.5 Ω - 2.3 JΩ
Return Loss	- 32.7 dB

Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	53.9 Ω - 0.7 jΩ	
Return Loss	- 28.4 dB	

Antenna Parameters with Head TSL at 5800 MHz

Impedance, transformed to feed point	55.3 Ω + 2.6 jΩ
Return Loss	- 25.1 dB

Antenna Parameters with Body TSL at 5200 MHz

Impedance, transformed to feed point	49.8 Ω - 6.9 jΩ.
Return Loss	- 23.2 dB

Antenna Parameters with Body TSL at 5300 MHz

Impedance, transformed to leed point	50.9 Ω - 0.9 jΩ	
Return Loss	- 37.9 dB	_

Antenna Parameters with Body TSL at 5600 MHz

Impedance, transformed to feed point	58.0 Ω + 0.5 JΩ
Beturn Loss	- 24.9 dB

Antenna Parameters with Body TSL at 5800 MHz

Impedance, transformed to lead point	56.6 Ω + 2.3 μΩ
Return Loss	- 23.7 dB

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General Antenna Parameters and Design

Electrical Delay (one direction)	1:199 ns
meaning a city forth subsection	

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	February 05, 2004

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DASY5 Validation Report for Head TSL

Date: 25.01.2018

Test Laboratory; SPEAG, Zurich, Switzerland

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1023

Communication System: UID 0 - CW; Frequency: 5200 MHz, Frequency: 5300 MHz, Frequency: 5600 MHz, Frequency: 5800 MHz Medium parameters used: f = 5200 MHz; $\sigma = 4.5$ S/m; $r_e = 36.3$; p = 1000 kg/m³. Medium parameters used: f = 5300 MHz; a = 4.6 S/m; z = 36.2; p = 1000 kg/m³. Medium parameters used: f = 5600 MHz; o = 4.9 S/m; t, = 35.8; p = 1000 kg/m2 Medium parameters used: f = 5800 MHz; $\sigma = 5.11$ S/m; $e_r = 35.5$; $\rho = 1000$ kg/m² Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Prope: EX3DV4 SN3503; ConvF(5.75, 5.75, 5.75); Calibrated: 30.12,2017, ConvF(5.5, 5.5, 5.5); Calibrated: 30.12.2017, ConvF(5.05, 5.05, 5.05); Calibrated: 30.12.2017. ConvF(4.96, 4,96, 4,96); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electromics: DAE4 Sn601; Calibrated: 26.10.2017.
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5200 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 70.47 V/m; Power Drift = -0.04 dB Peak SAR (extrapolated) = 27.5 W/kg SAR(1 g) = 7.72 W/kg; SAR(10 g) = 2.22 W/kg Maximum value of SAR (measured) = 17.7 W/kg.

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5300 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 74.63 V/m; Power Drift = -0.06 dB Peak SAR (extrapolated) = 29.6 W/kg SAR(1 g) = 8.09 W/kg; SAR(10 g) = 2.32 W/kg Maximum value of SAR (measured) = 18.6 W/kg

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid; dx=4mm, dy=4mm, dz=1.4mm Reference Value = 70.79 V/m; Power Drift = -0.05 dB Peak SAR (extrapolated) = 31,5 W/kg SAR(1 g) = 8.19 W/kg; SAR(10 g) = 2.34 W/kg Maximum value of SAR (measured) = 19.6 W/kg

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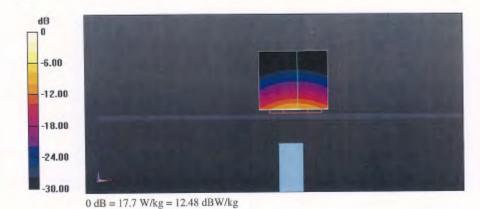
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Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5800 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 69.22 V/m; Power Drift = -0.05 dB Peak SAR (extrapolated) = 31.2 W/kg SAR(1 g) = 7.9 W/kg; SAR(10 g) = 2.25 W/kg Maximum value of SAR (measured) = 19.0 W/kg



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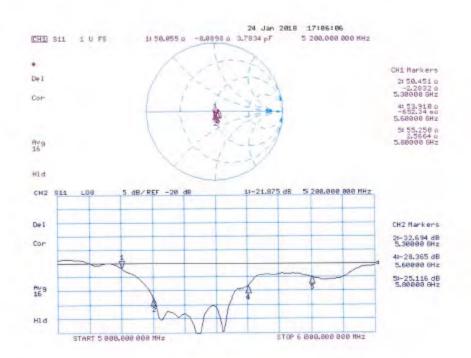
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Impedance Measurement Plot for Head TSL



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DASY5 Validation Report for Body TSL

Date: 23.01.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1023

Communication System: UID 0 - CW; Frequency: 5200 MHz, Frequency: 5300 MHz, Frequency: 5600 MHz, Frequency: 5800 MHz Medium parameters used: f = 5200 MHz; $\sigma = 5.41 \text{ S/m}$; $\epsilon_c = 47.3$; $\rho = 1000 \text{ kg/m}^3$. Medium parameters used: f = 5300 MHz; $\sigma = 5.54$ S/m; $\epsilon_r = 47.1$; p = 1000 kg/m² Medium parameters used: f = 5600 MHz; $\sigma = 5.94 \text{ S/m}$; $e_r = 46.6$; $p = 1000 \text{ kg/m}^2$. Medium parameters used: f = 5800 MHz; $\sigma = 6.22$ S/m; $\epsilon_r = 46.2$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 SN3503; ConvF(5.35, 5.35, 5.35); Calibrated: 30.12.2017. ConvF(5.15, 5.15, 5.15); Calibrated: 30.12.2017, ConvF(4.65, 4.65, 4.65); Calibrated: 30.12.2017, ConvF(4.53, 4.53, 4.53); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52 10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5200 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 66.00 V/m; Power Drift = -0.05 dB Peak SAR (extrapolated) = 26.4 W/kg SAR(1 g) = 7.14 W/kg; SAR(10 g) = 2 W/kg Maximum value of SAR (measured) = 16.8 W/kg

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5300 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1,4mm Reference Value = 65.19 V/m; Power Drift = -0.06 dB Peak SAR (extrapolated) = 28.4 W/kg SAR(1 g) - 7.34 W/kg; SAR(10 g) = 2.06 W/kg Maximum value of SAR (measured) = 17.6 W/kg

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 66.21 V/m; Power Drift = -0.09 dB Peak SAR (extrapolated) = 32.8 W/kg SAR(1 g) = 7.81 W/kg; SAR(10 g) = 2.19 W/kg Maximum value of SAR (measured) = 19.1 W/kg

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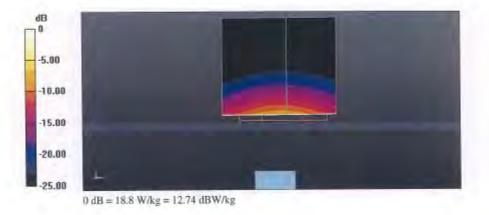
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Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5800 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 64.05 V/m; Power Drift = -0.05 dB Peak SAR (extrapolated) = 32.3 W/kg SAR(1 g) = 7.46 W/kg; SAR(10 g) = 2.07 W/kg Maximum value of SAR (measured) = 18.8 W/kg



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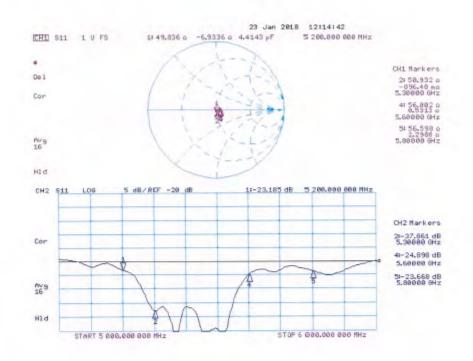
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Impedance Measurement Plot for Body TSL



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