FCC SAR TEST REPORT

FCC ID	:	**U4G-SGVNRNA**
Equipment	:	**Mobile Computer/Barcode Reader**
Brand Name	:	**Datalogic**
Model Name	:	**SGVNRNA**
Applicant	:	**Datalogic S.r.l. Via San Vitalino 13, 40012 Lippo di Calderara di Reno (BO) – Italy**
Manufacturer	:	**Datalogic S.r.l. Via San Vitalino 13, 40012 Lippo di Calderara di Reno (BO) – Italy**
Standard	:	**FCC 47 CFR Part 2 (2.1093)**

The product was received on Apr. 02, 2024 and testing was started from Apr. 24, 2024 and completed on Jun. 03, 2024. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample provide by manufacturer and the test data has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been pass the FCC requirement.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full.

Cona Huang

Approved by: Cona Huang / Deputy Manager

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History of this test report

Report No.	Version	Description	Issued Date
FA440146B	01	Initial issue of report	Jul. 02, 2024

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) for Datalogic S.r.l., Mobile Computer/Barcode Reader, SGVNRNA, are as follows.

Equipment Class	Frequency Band	Highest SAR Summary					Highest Simultaneous Transmission 1g SAR (W/kg)	Highest Simultaneous Transmission 10g SAR (W/kg)
		Head	Body-worn	Hotspot	Product Specific	Hand exposure condition with Pistol		
		1g SAR (W/kg)			10g SAR (W/kg)			
Licensed	GSM850	0.14	0.69	0.96	2.94	0.04	1.41	2.41
	GSM1900	0.16	0.60	0.94		0.40		
	WCDMA II	0.13	0.30	0.82		0.31		
	WCDMA IV	0.27	0.35	0.61		0.34		
	WCDMA V	0.49	0.62	1.10		0.57		
	LTE Band 7	0.03	0.35	0.81		0.41		
	LTE Band 12 / 17	0.37	0.53	0.65		0.33		
	LTE Band 13	0.42	0.51	0.74		0.39		
	LTE Band 14	0.38	0.51	0.76		0.35		
	LTE Band 2 / 25	0.17	0.39	0.80		0.40		
	LTE Band 5 / 26	0.45	0.58	0.84		0.58		
	LTE Band 30	0.14	0.18	0.41		0.13		
	LTE Band 4 / 66	0.41	0.45	0.66		0.33		
	LTE Band 38 / 41	0.01	0.31	0.45		0.29		
	LTE Band 48	0.19	0.19	0.38		0.19		
	FR1 n7	0.02	0.29	0.46		0.28		
	FR1 n12	0.36	0.53	0.62		0.38		
	FR1 n13	0.43	0.46	0.78		0.42		
	FR1 n14	0.33	0.41	0.74		0.31		
	FR1 n2 / n25	0.15	0.35	0.95		0.50		
	FR1 n5 / n26	0.36	0.34	0.61		0.46		
	FR1 n30	0.14	0.15	0.48		0.18		
	FR1 n66	0.34	0.29	0.63		0.30		
	FR1 n38 / n41	0.03	0.32	0.61		0.48		
	FR1 n48	0.23	0.34	0.53		0.29		
	FR1 n77 / n78	0.46	0.39	0.68		0.32		
DTS	2.4GHz WLAN	0.38	0.14	0.20		0.43	1.30	1.09
NII	5GHz WLAN	0.93	0.58		1.94	0.39	1.41	2.41
6CD	6GHz WLAN	0.15	0.14		0.55	0.09	1.41	2.41
DSS	Bluetooth	0.02	0.01		0.02	0.02	1.41	2.41
DXX	NFC				0.07			2.41

Equipment Class	Frequency Band	Head	Body-worn	Product Specific	Hand exposure condition with Pistol	Reported PD (mW/cm^2)
		Reported APD (mW/cm^2)	Reported APD (mW/cm^2)	Reported APD (mW/cm^2)	Reported APD (mW/cm^2)	
6CD	6GHz WLAN	0.11	0.10	1.34	0.10	0.77
Date of Testing:		2024/04/24 ~ 2024/06/03				

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation and the FCC designation No. TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test.This device is in compliance with Specific Absorption Rate (SAR) general population/uncontrolled exposure limits (1.6 W/kg for Partial-Body 1g SAR, 4.0 W/kg for Product Specific 10g SAR) specified in FCC 47 CFR part 2 (2.1093), Human Exposure to RF Radiation Limits (1.0 mW/cm^2=10 W/m^2) specified in FCC 47 CFR part 1.1310 and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

Reviewed by: Jason Wang
Report Producer: Daisy Peng

2. Equipment Under Test (EUT) Information

2.1 General Information

Product Feature & Specification	
Equipment Name	Mobile Computer/Barcode Reader
Brand Name	Datalogic
Model Name	SGVNRNA
FCC ID	U4G-SGVNRNA
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n13 : 777 MHz ~787 MHz 5G NR n14 : 788 MHz ~ 798 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n26 : 814 MHz ~ 849 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450MHz ~ 3550MHz WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3 GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6 GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz WLAN 5.9 GHz Band: 5850 MHz ~ 5895 MHz WLAN 6E: 5925 MHz ~ 6425 MHz, 6425 MHz ~ 6525 MHz, 6525 MHz ~ 6875 MHz, 6875 MHz ~ 7125 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz NFC : 13.56 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM WLAN: 802.11a/b/g/n/ac/ax HT20/HT40/VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE NFC: ASK
HW Version	DVT2
SW Version	dl4490_gms-userdebug_1.04.001.20240520_a13_qfil_fastboot
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Production Unit
Remark: 1. The device implements the power management for SAR compliance at different exposure conditions (head, body-worn, hotspot/extremity) and the Smart Transmit feature will manage to ensure the power level not exceeding the associated power table. 2. This device WLAN 2.4GHz supports Hotspot operation 3. The device support additional trigger handle accessory (Pistol) and the device can be attached on it. Since the handle of the accessory can be removed and can be directly connect the phantom. Since the handle of the accessory can be removed, it can be directly connected to the phantom, therefore, the device was attached the accessory without handle to assessment Hand Exposure condition.	

Accessory Information		
Pistol grip (Scan Tigger Handle)(Accessory 1)	Brand Name	Datalogic
	Model Name	SGVPGRIP
	PN	94ACC0373
Belt Holster(Accessory 4)	Brand Name	Datalogic
	PN	94ACC0377
WEARABLE (FOREARM) HOLSTER (support unit only)(Plastic only)	Brand Name	Datalogic
	PN	94ACC0378

2.2 Maximum Tune-up Limit

General Note:

1. For each cellular band, the device has several WWAN antennas, the antenna selection is based on the connection quality condition, and only one antenna will transmit at a time.
2. The device implements the power management and sensor detection for SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity) by output power index and the smart transmit feature will manage to ensure the power level not exceeding the associated power table.
3. The following table shows maximum output power configurations for various exposure conditions (output power index) with tune-up tolerance accounted. For time average SAR enabled bands, the values associate with Plimit plus the total uncertainty, or Pmax plus total uncertainty when the derived Plimit is higher than Pmax. In some frequency bands, for some power indexes which associate with the same power level, conducted power measurement for those only need to perform at once.

<WWAN>

Band	Antenna	Head (DSI = 2)	Hotspot (DSI = 1)	Body-worn/Extremity (DSI = 0)
		Max Tune-up (dBm)	Max Tune-up (dBm)	Max Tune-up (dBm)
GSM850 1 Tx slot	ANT0	34	34	34
GPRS 1 Tx slot	ANT0	34	34	34
GPRS 2 Tx slots	ANT0	33	30.5	32.5
GPRS 3 Tx slots	ANT0	33	29.5	31
GPRS 4 Tx slots	ANT0	32.5	29	31
EDGE 1 Tx slot	ANT0	27	27	27
EDGE 2 Tx slots	ANT0	26.5	26.5	26.5
EDGE 3 Tx slots	ANT0	26.5	26.5	26.5
EDGE 4 Tx slots	ANT0	26	26	26
GSM1900 1 Tx slot	ANT1	34	34	34
GPRS 1 Tx slot	ANT1	34	34	34
GPRS 2 Tx slots	ANT1	33	33	33
GPRS 3 Tx slots	ANT1	33	33	33
GPRS 4 Tx slots	ANT1	32.50	32.50	32.5
EDGE 1 Tx slot	ANT1	27	27	27
EDGE 2 Tx slots	ANT1	26.5	26.5	26.5
EDGE 3 Tx slots	ANT1	26.5	26.5	26.5
EDGE 4 Tx slots	ANT1	26	26	26

Band	Antenna	Head (DSI = 2) Max Tune-up (dBm)	Hotspot (DSI = 1) Max Tune-up (dBm)	Body-worn/Extremity (DSI = 0) Max Tune-up (dBm)
WCDMA B2	ANT1	25	25	25
WCDMA B4	ANT1	25	25	25
WCDMA B5	ANT0	25	25	25
LTE B7	ANT1	24.5	24.5	24.5
LTE B12/17	ANT0	24.5	24.5	24.5
LTE B13	ANT0	24.5	24.5	24.5
LTE B14	ANT0	24.5	24.5	24.5
LTE B25/2	ANT1	24.5	24.5	24.5
LTE B26/5	ANT0	24.5	24.5	24.5
LTE B30	ANT1	24.5	24.5	24.5
LTE B66/4	ANT1	24.5	24.5	24.5
LTE B38/41	ANT1	24.5	24.5	24.5
LTE B48	ANT7	24.5	24.5	24.5
n7	ANT1	25	25	25
n12	ANT0	25	25	25
n13	ANT0	25	25	25
n14	ANT0	25	25	25
n25	ANT0	25	25	25
n26/5	ANT0	25	25	25
n30	ANT1	25	25	25
n66	ANT1	25	25	25
n38/41	ANT1	25	25	25
n48	ANT7	23.5	23.5	23.5
n48	ANT4(SRS)	23.5	23.5	23.5
n48	ANT5(SRS)	23.5	23.5	23.5
n48	ANT6+ANT7	23.5	23.5	23.5
n77/n78_PC3	ANT7	24	24	24
n77/n78_PC2	ANT7	27	27	27
n77/n78_PC3	ANT4(SRS)	23.9	23.9	23.9
n77/n78_PC2	ANT4(SRS)	26.9	26.9	26.9
n77/n78_PC3	ANT5(SRS)	23.9	23.9	23.9
n77/n78_PC2	ANT5(SRS)	26.9	26.9	26.9
n77/n78_PC3	ANT6+ANT7	24	24	24
n77/n78_PC2	ANT6+ANT7	27	27	27

<WLAN Maximum Power>

General Note:

1. The device implements the power management for WLAN SAR compliance at different exposure conditions (head, body-worn, hotspot, extremity). The control logic about the power management decision is provided in the operational description. For each exposure condition and simultaneous transmission configuration, SAR was tested according to the associated power table

< WLAN >

	Mode	Channel	Frequency (MHz)	Ant 8 Tune-up Limit	Ant 9 Tune-up Limit	Ant 8+9 Tune-up Limit
2.4GHz WLAN	802.11b 1Mbps	1	2412	18.20	18.20	21.20
		6	2437	18.20	18.20	21.20
		11	2462	18.20	18.20	21.20
	802.11g 6Mbps	1	2412	17.70	17.70	20.70
		6	2437	17.70	17.70	20.70
		11	2462	15.70	15.70	18.70
	802.11n-HT20 MCS0	1	2412	17.20	17.20	20.20
		6	2437	17.20	17.20	20.20
		11	2462	15.20	15.20	18.20
	802.11n-HT40 MCS0	3	2422	12.70	12.70	15.70
		6	2437	16.20	16.20	19.20
		9	2452	10.20	10.20	13.20
	802.11ac-VHT20 MCS0	1	2412	17.20	17.20	20.20
		6	2437	17.20	17.20	20.20
		11	2462	15.20	15.20	18.20
	802.11ac-VHT40 MCS0	3	2422	12.70	12.70	15.70
		6	2437	16.20	16.20	19.20
		9	2452	10.20	10.20	13.20
	802.11ax-HE20 MCS0	1	2412	17.20	17.20	20.20
		6	2437	17.20	17.20	20.20
		11	2462	15.20	15.20	18.20
	802.11ax-HE40 MCS0	3	2422	12.70	12.70	15.70
		6	2437	16.20	16.20	19.20
		9	2452	10.20	10.20	13.20

	Mode	Channel	Frequency (MHz)	Ant 8 Tune-up Limit	Ant 9 Tune-up Limit	Ant 8+9 Tune-up Limit
5.2GHz WLAN	802.11a 6Mbps	36	5180	15.70	15.70	18.70
		40	5200	16.70	16.70	19.70
		44	5220	16.70	16.70	19.70
		48	5240	16.70	16.70	19.70
	802.11n-HT20 MCS0	36	5180	15.70	15.70	18.70
		40	5200	15.70	15.70	18.70
		44	5220	15.70	15.70	18.70
		48	5240	15.70	15.70	18.70
	802.11n-HT40 MCS0	38	5190	14.70	14.70	17.70
		46	5230	15.70	15.70	18.70
	802.11ac-VHT20 MCS0	36	5180	15.70	15.70	18.70
		40	5200	15.70	15.70	18.70
		44	5220	15.70	15.70	18.70
		48	5240	15.70	15.70	18.70
	802.11ac-VHT40 MCS0	38	5190	14.70	14.70	17.70
		46	5230	15.70	15.70	18.70
	802.11ac-VHT80 MCS0	42	5210	13.70	13.70	16.70
	802.11ax-HE20 MCS0	36	5180	15.70	15.70	18.70
		40	5200	15.70	15.70	18.70
		44	5220	15.70	15.70	18.70
		48	5240	15.70	15.70	18.70
	802.11ax-HE40 MCS0	38	5190	14.70	14.70	17.70
		46	5230	15.70	15.70	18.70
	802.11ax-HE80 MCS0	42	5210	13.70	13.70	16.70

	Mode	Channel	Frequency (MHz)	Ant 8 Tune-up Limit	Ant 9 Tune-up Limit	Ant 8+9 Tune-up Limit
5.3GHz WLAN	802.11a 6Mbps	52	5260	16.70	16.70	19.70
		56	5280	16.70	16.70	19.70
		60	5300	16.70	16.70	19.70
		64	5320	16.20	16.20	19.20
	802.11n-HT20 MCS0	52	5260	15.70	15.70	18.70
		56	5280	15.70	15.70	18.70
		60	5300	15.70	15.70	18.70
		64	5320	15.70	15.70	18.70
	802.11n-HT40 MCS0	54	5270	15.70	15.70	18.70
		62	5310	12.70	12.70	15.70
	802.11ac-VHT20 MCS0	52	5260	15.70	15.70	18.70
		56	5280	15.70	15.70	18.70
		60	5300	15.70	15.70	18.70
		64	5320	15.70	15.70	18.70
	802.11ac-VHT40 MCS0	54	5270	15.70	15.70	18.70
		62	5310	12.70	12.70	15.70
	802.11ac-VHT80 MCS0	58	5290	12.20	12.20	15.20
	802.11ac-VHT160 MCS0	50	5250	10.20	10.20	13.20
	802.11ax-HE20 MCS0	52	5260	15.70	15.70	18.70
		56	5280	15.70	15.70	18.70
		60	5300	15.70	15.70	18.70
		64	5320	15.70	15.70	18.70
	802.11ax-HE40 MCS0	54	5270	15.70	15.70	18.70
		62	5310	12.70	12.70	15.70
	802.11ax-HE80 MCS0	58	5290	12.20	12.20	15.20
	802.11ax-HE160 MCS0	50	5250	10.20	10.20	13.20

	Mode	Channel	Frequency (MHz)	Ant 8 Tune-up Limit	Ant 9 Tune-up Limit	Ant 8+9 Tune-up Limit
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.20	16.20	19.20
		116	5580	16.70	16.70	19.70
		124	5620	16.20	16.20	19.20
		132	5660	16.20	16.20	19.20
		144	5720	16.70	16.70	19.70
	802.11n-HT20 MCS0	100	5500	15.70	15.70	18.70
		116	5580	15.70	15.70	18.70
		124	5620	15.20	15.20	18.20
		132	5660	15.20	15.20	18.20
		140	5700	15.20	15.20	18.20
		144	5720	15.70	15.70	18.70
	802.11n-HT40 MCS0	102	5510	14.20	14.20	17.20
		110	5550	15.70	15.70	18.70
		126	5630	15.70	15.70	18.70
		134	5670	15.70	15.70	18.70
		142	5710	15.70	15.70	18.70
	802.11ac-VHT20 MCS0	100	5500	15.70	15.70	18.70
		116	5580	15.70	15.70	18.70
		124	5620	15.20	15.20	18.20
		132	5660	15.20	15.20	18.20
		140	5700	15.20	15.20	18.20
		144	5720	15.70	15.70	18.70
	802.11ac-VHT40 MCS0	102	5510	14.20	14.20	17.20
		110	5550	15.70	15.70	18.70
		126	5630	15.70	15.70	18.70
		134	5670	15.70	15.70	18.70
		142	5710	15.70	15.70	18.70
	802.11ac-VHT80 MCS0	106	5530	13.70	13.70	16.70
		122	5610	15.70	15.70	18.70
		138	5690	15.70	15.70	18.70
	802.11ac-VHT160 MCS0	114	5570	12.20	12.20	15.20
	802.11ax-HE20 MCS0	100	5500	15.70	15.70	18.70
		116	5580	15.70	15.70	18.70
		124	5620	15.20	15.20	18.20
		132	5660	15.20	15.20	18.20
		140	5700	15.20	15.20	18.20
		144	5720	15.70	15.70	18.70
	802.11ax-HE40 MCS0	102	5510	14.20	14.20	17.20
		110	5550	15.70	15.70	18.70
		126	5630	15.70	15.70	18.70
		134	5670	15.70	15.70	18.70
		142	5710	15.70	15.70	18.70
	802.11ax-HE80 MCS0	106	5530	13.70	13.70	16.70
		122	5610	15.70	15.70	18.70
		138	5690	15.70	15.70	18.70
	802.11ax-HE160 MCS0	114	5570	12.20	12.20	15.20

	Mode	Channel	Frequency (MHz)	Ant 8 Tune-up Limit	Ant 9 Tune-up Limit	Ant 8+9 Tune-up Limit
5.8GHz WLAN	802.11a 6Mbps	149	5745	16.70	16.70	19.70
		157	5785	16.70	16.70	19.70
		165	5825	16.70	16.70	19.70
	802.11n-HT20 MCS0	149	5745	15.70	15.70	18.70
		157	5785	15.70	15.70	18.70
		165	5825	15.70	15.70	18.70
	802.11n-HT40 MCS0	151	5755	15.70	15.70	18.70
		159	5795	15.70	15.70	18.70
	802.11ac-VHT20 MCS0	149	5745	15.70	15.70	18.70
		157	5785	15.70	15.70	18.70
		165	5825	15.70	15.70	18.70
	802.11ac-VHT40 MCS0	151	5755	15.70	15.70	18.70
		159	5795	15.70	15.70	18.70
	802.11ac-VHT80 MCS0	155	5775	15.70	15.70	18.70
	802.11ax-HE20 MCS0	149	5745	15.70	15.70	18.70
		157	5785	15.70	15.70	18.70
		165	5825	15.70	15.70	18.70
	802.11ax-HE40 MCS0	151	5755	15.70	15.70	18.70
		159	5795	15.70	15.70	18.70
	802.11ax-HE80 MCS0	155	5775	15.70	15.70	18.70

	Mode	Channel	Frequency (MHz)	Ant 8 Tune-up Limit	Ant 9 Tune-up Limit	Ant 8+9 Tune-up Limit
5.9GHz WLAN	802.11a 6Mbps	169	5845	16.70	16.70	19.70
		173	5865	16.70	16.70	19.70
		177	5885	16.70	16.70	19.70
	802.11n-HT20 MCS0	169	5845	15.70	15.70	18.70
		173	5865	15.70	15.70	18.70
		177	5885	13.20	13.20	16.20
	802.11n-HT40 MCS0	167	5835	15.70	15.70	18.70
		175	5875	15.70	15.70	18.70
	802.11ac-VHT20 MCS0	169	5845	15.70	15.70	18.70
		173	5865	15.70	15.70	18.70
		177	5885	13.20	13.20	16.20
	802.11ac-VHT40 MCS0	167	5835	15.70	15.70	18.70
		175	5875	15.70	15.70	18.70
	802.11ac-VHT80 MCS0	171	5855	15.70	15.70	18.70
	802.11ac-VHT160 MCS0	163	5815	15.70	15.70	18.70
	802.11ax-HE20 MCS0	169	5845	15.70	15.70	18.70
		173	5865	15.70	15.70	18.70
		177	5885	13.20	13.20	16.20
	802.11ax-HE40 MCS0	167	5835	15.70	15.70	18.70
		175	5875	15.70	15.70	18.70
	802.11ax-HE80 MCS0	171	5855	15.70	15.70	18.70
	802.11ax-HE160 MCS0	163	5815	15.70	15.70	18.70

	Mode	Channel	Frequency (MHz)	Ant 8 Tune-up Limit	Ant 9 Tune-up Limit	Ant 8+9 Tune-up Limit
6GHz WLAN (LPI)	802.11a 6Mbps	1	5955	1.20	1.20	4.20
		57	6235	1.20	1.20	4.20
		113	6515	1.20	1.20	4.20
		173	6815	1.20	1.20	4.20
		233	7115	1.20	1.20	4.20
	802.11ax-HE20 MCS0	1	5955	2.20	2.20	5.20
		57	6235	2.20	2.20	5.20
		113	6515	2.20	2.20	5.20
		173	6815	2.20	2.20	5.20
		233	7115	2.20	2.20	5.20
	802.11ax-HE40 MCS0	3	5965	4.20	4.20	7.20
		59	6245	4.20	4.20	7.20
		107	6485	4.20	4.20	7.20
		171	6805	4.20	4.20	7.20
		227	7085	4.20	4.20	7.20
	802.11ax-HE80 MCS0	7	5985	6.70	6.70	9.70
		71	6305	6.70	6.70	9.70
		119	6545	6.70	6.70	9.70
		167	6785	6.70	6.70	9.70
		215	7025	6.70	6.70	9.70
	802.11ax-HE160 MCS0	15	6025	10.20	10.20	13.20
		47	6185	10.20	10.20	13.20
		111	6505	10.20	10.20	13.20
		143	6665	10.20	10.20	13.20
		207	6985	10.20	10.20	13.20

	Mode	Channel	Frequency (MHz)	Ant 8 Tune-up Limit	Ant 9 Tune-up Limit	Ant 8+9 Tune-up Limit
6GHz WLAN (SP)	802.11a 6Mbps	1	5955	10.20	10.20	13.20
		57	6235	10.20	10.20	13.20
		173	6815	10.20	10.20	13.20
	802.11ax-HE20 MCS0	1	5955	10.20	10.20	13.20
		57	6235	10.20	10.20	13.20
		173	6815	10.20	10.20	13.20
	802.11ax-HE40 MCS0	3	5965	10.20	10.20	13.20
		59	6245	10.20	10.20	13.20
		171	6805	10.20	10.20	13.20
	802.11ax-HE80 MCS0	7	5985	10.20	10.20	13.20
		71	6305	10.20	10.20	13.20
		167	6785	10.20	10.20	13.20
	802.11ax-HE160 MCS0	15	6025	10.20	10.20	13.20
		47	6185	10.20	10.20	13.20
		143	6665	10.20	10.20	13.20

<Bluetooth>

	Mode	Channel	Frequency (MHz)	Ant 8 Tune-up Limit
Bluetooth	BR / EDR 1Mbps	0	2402	8.00
		39	2441	8.00
		78	2480	8.00
	BR / EDR 2Mbps	0	2402	5.00
		39	2441	5.00
		78	2480	5.00
	BR / EDR 3Mbps	0	2402	5.00
		39	2441	5.00
		78	2480	5.00
	LE 1Mbps	0	2402	2.00
		19	2440	2.00
		39	2480	2.00
	LE 2Mbps	0	2402	2.00
		19	2440	2.00
		39	2480	2.00

2.3 General LTE SAR Test and Reporting Considerations

Summarized necessary items addressed in KDB 941225 D05 v02r05	
FCC ID	U4G-SGVNRNA
Equipment Name	Mobile Computer/Barcode Reader
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz
Channel Bandwidth	LTE Band 2:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 4:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 5:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 7: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 13: 5MHz, 10MHz LTE Band 14: 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 25:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 26:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz LTE Band 30: 5MHz, 10MHz LTE Band 38: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 41: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 48: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 66:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
uplink modulations used	QPSK / 16QAM / 64QAM / 256QAM
LTE Voice / Data requirements	Voice and Data
LTE MPR permanently built-in by design	**Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3**
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations and the detail power measurement please referred to section 14.
LTE Carrier Aggregation Additional Information	This device supports maximum of 3 carriers in the downlink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.

Modulation	Channel bandwidth / Transmission bandwidth (N_{RB})						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
256 QAM	≥ 1						≤ 5

Transmission (H, M, L) channel numbers and frequencies in each LTE band

LTE Band 2

	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880

H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900

LTE Band 4

	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745

LTE Band 5

	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7	20415	825.5	20425	826.5	20450	829
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5
H	20643	848.3	20635	847.5	20625	846.5	20600	844

LTE Band 7

	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510
M	21100	2535	21100	2535	21100	2535	21100	2535
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560

LTE Band 12

	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23017	699.7	23025	700.5	23035	701.5	23060	704
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5
H	23173	715.3	23165	714.5	23155	713.5	23130	711

LTE Band 13

	Bandwidth 5 MHz		Bandwidth 10 MHz	
	Channel #	Freq.(MHz)	Channel #	Freq.(MHz)
L	23205	779.5	23230	782
M	23230	782		
H	23255	784.5		

LTE Band 14

	Bandwidth 5 MHz		Bandwidth 10 MHz	
	Channel #	Channel #	Channel #	Freq.(MHz)
L	23305	790.5	23330	793
M	23330	793		
H	23355	795.5		

LTE Band 17

	Bandwidth 5 MHz		Bandwidth 10 MHz	
	Channel #	Freq.(MHz)	Channel #	Freq. (MHz)
L	23755	706.5	23780	709
M	23790	710	23790	710
H	23825	713.5	23800	711

LTE Band 25

	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26047	1850.7	26055	1851.5	26065	1852.5	26090	1855	26115	1857.5	26140	1860
M	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880	26340	1880
H	26683	1914.3	26675	1913.5	26665	1912.5	26640	1910	26615	1907.5	26590	1905

LTE Band 26

	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	26697	814.7	26705	815.5	26715	816.5	26740	819	26765	821.5
M	26865	831.5	26865	831.5	26865	831.5	26865	831.5	26865	831.5
H	27033	848.3	27025	847.5	27015	846.5	26990	844	26965	841.5

LTE Band 30				
	Bandwidth 5 MHz		Bandwidth 10 MHz	
	Channel #	Freq.(MHz)	Channel #	Freq.(MHz)
L	27685	2307.5	27710	2310
M	27710	2310		
H	27735	2312.5		

LTE Band 38								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	37775	2572.5	37800	2575	37825	2577.5	37850	2580
M	38000	2595	38000	2595	38000	2595	38000	2595
H	38225	2617.5	38200	2615	38175	2612.5	38150	2610

LTE Band 41								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	39675	2498.5	39700	2501	39725	2503.5	39750	2506
LM	40148	2545.8	40160	2547	40173	2548.3	40185	2549.5
M	40620	2593	40620	2593	40620	2593	40620	2593
HM	41093	2640.3	41080	2639	41068	2637.8	41055	2636.5
H	41565	2687.5	41540	2685	41515	2682.5	41490	2680

LTE Band 48								
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	55265	3552.5	55290	3555	55315	3557.5	55340	3560
LM	55810	3607	55815	3607.5	55820	3608	55830	3609
MH	56170	3643	56165	3642.5	56160	3642	56150	3641
H	56715	3697.5	56690	3695	56665	3692.5	56640	3690

LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770

2.4 General 5G NR SAR Test and Reporting Considerations

5G NR Information	
FCC ID	U4G-SGVNRNA
Equipment Name	Mobile Computer/Barcode Reader
Operating Frequency Range of each 5G NR transmission band	5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5: 824 MHz ~ 849 MHz 5G NR n7: 2500 MHz ~ 2570 MHz 5G NR n12: 699 MHz ~ 716 MHz 5G NR n13 : 777 MHz ~787 MHz 5G NR n14 : 788 MHz ~ 798 MHz 5G NR n25: 1850 MHz ~ 1915 MHz 5G NR n26 : 814 MHz ~ 849 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38: 2570 MHz ~ 2620 MHz 5G NR n41: 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66: 1710 MHz ~ 1780 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450MHz ~ 3550MHz
Channel Bandwidth	5G NR n2: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n5: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n7: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n12: 5MHz, 10MHz, 15MHz 5G NR n13: 5MHz, 10MHz 5G NR n14: 5MHz, 10MHz 5G NR n25: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz 30MHz 5G NR n26: 5MHz, 10MHz, 15MHz, 20MHz 5G NR n30: 5MHz, 10MHz 5G NR n38: 10MHz, 20MHz, 30MHz, 40MHz 5G NR n41: 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz 5G NR n48: 10MHz, 20MHz, 30MHz, 40MHz 5G NR n66: 5MHz, 10MHz, 15MHz, 20MHz, 25 MHz,30MHz 5G NR n77: 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz 5G NR n78: 20MHz, 30MHz, 40MHz, 50MHz, 60MHz, 70MHz, 80MHz, 90MHz, 100MHz
SCS	FDD: SCS15KHz, TDD: SCS30KHz
uplink modulations used	DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM CP-OFDM QPSK / 16QAM / 64QAM / 256QAM
A-MPR (Additional MPR) disabled for SAR Testing?	Yes
LTE Anchor Bands for n2	LTE B5/12/13/14
LTE Anchor Bands for n5	LTE B2/30/48/66
LTE Anchor Bands for n66	LTE B5/12/13/14/48
LTE Anchor Bands for n77	LTE B2/5/12/13/14/30/66
LTE Anchor Bands for n78	LTE B5/41

NR Band 2

	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860
M	376000	1880	376000	1880	376000	1880	376000	1880
H	381500	1907.5	381000	1905	380500	1902.5	380000	1900

NR Band 5

	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	165300	826.5	165800	829	166300	831.5	166800	834
M	167300	836.5	167300	836.5	167300	836.5	167300	836.5
H	169300	846.5	168800	844	168300	841.5	167800	839

NR Band 7

	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	500500	2502.5	501000	2505	501500	2507.5	502000	2510
M	507000	2535	507000	2535	507000	2535	507000	2535
H	513500	2567.5	513000	2565	512500	2562.5	512000	2560

NR Band 12						
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	140300	701.5	140800	704	141300	706.5
M	141500	707.5	141500	707.5	141500	707.5
H	142700	713.5	142200	711	141700	708.5

NR Band 13				
	Bandwidth 5MHz		Bandwidth 10MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	155900	779.5		
M	156400	782	156400	782
H	156900	784.5		

NR Band 14				
	Bandwidth 5MHz		Bandwidth 10MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	158100	790.5		
M	158600	793	158600	793
H	159100	795.5		

NR Band 25												
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	370500	1852.5	371000	1855	371500	1857.5	372000	1860	372500	1862.5	373000	1865
M	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5	376500	1882.5
H	382500	1912.5	382000	1910	381500	1907.5	381000	1905	380500	1902.5	380000	1900

NR Band 26								
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	163300	816.5	163800	819	164300	821.5	164800	824
M	166300	831.5	166300	831.5	166300	831.5	166300	831.5
H	169300	846.5	168800	844	168300	841.5	167800	839

NR Band 30				
	Bandwidth 5MHz		Bandwidth 10MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	461500	2307.5		
M	462000	2310	462000	2310
H	462500	2312.5		

NR Band 38								
	Bandwidth 10MHz		Bandwidth 20MHz		Bandwidth 30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	515004	2575.02	516000	2580	517002	2585.01	518004	2590.02
M	519000	2595	519000	2595	519000	2595	519000	2595
H	522996	2614.98	522000	2610	520998	2604.99	519996	2599.98

NR Band 41																		
	Bandwidth20MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	501204	2506.02	502200	2511	503202	2516.01	504204	2521.02	505200	2526	506202	2531.01	507204	2536.02	508200	2541	509202	2546.01
M	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99	518598	2592.99
H	535998	2679.99	534996	2674.98	534000	2670	532998	2664.99	531996	2659.98	531000	2655	529998	2649.99	528996	2644.98	528000	2640

NR Band 48								
	Bandwidth10MHz		Bandwidth20MHz		Bandwidth30MHz		Bandwidth 40MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	637000	3555	637334	3560.01	637668	3565.02	638000	3570
M	641666	3624.99	641666	3624.99	641666	3624.99	641666	3624.99
H	646332	3694.98	646000	3690	645666	3684.99	645332	3679.98

NR Band 66												
	Bandwidth 5MHz		Bandwidth 10MHz		Bandwidth 15MHz		Bandwidth 20MHz		Bandwidth 25MHz		Bandwidth 30MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	342500	1712.5	343000	1715	343500	1717.5	344000	1720	344500	1722.5	345000	1725
M	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745	349000	1745
H	355500	1777.5	355000	1775	354500	1772.5	354000	1770	353500	1767.5	353000	1765

NR Band 77																		
	Bandwidth 20MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647334	3710.01	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840	656000	3840
H	664666	3969.99	664332	3964.98	664000	3960	663666	3954.99	663332	3949.98	663000	3945	662666	3939.99	662332	3934.98	662000	3930

NR Band 78																		
	Bandwidth 20MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	647334	3710.01	647668	3715.02	648000	3720	648334	3725.01	648668	3730.02	649000	3735	649334	3740.01	649668	3745.02	650000	3750
M	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750	650000	3750
H	652666	3789.99	652332	3784.98	652000	3780	651666	3774.99	651332	3769.98	651000	3765	650666	3759.99	650332	3754.98	650000	3750

NR Band 77/78(3450MHz ~ 3550MHz)																		
	Bandwidth 20MHz		Bandwidth30MHz		Bandwidth 40MHz		Bandwidth 50MHz		Bandwidth 60MHz		Bandwidth 70MHz		Bandwidth 80MHz		Bandwidth 90MHz		Bandwidth100MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	630668	3460.02	631000	3465	631334	3470.01	631668	3475.02	632000	3480	632334	3485.01	632668	3490.02	633000	3495	633334	3500.01
M	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98	633332	3499.98
H	636000	3540	635666	3534.99	635332	3529.98	635000	3525	634666	3519.99	634332	3514.98	634000	3510	633666	3504.99	633332	3499.98

3. Guidance Applied

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards, the below KDB standard may not including in the TAF code without accreditation.

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01
- IEC/IEEE 62209-1528:2020
- SPEAG DASY6 System Handbook
- SPEAG DASY6 Application Note (Interim Procedure for Device Operation at 6GHz-10GHz)

4. Smart Transmit feature for RF Exposure compliance

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR_design_target, below the predefined time-averaged power limit for each characterized technology and band (refer to RF exposure part0 report)

Smart Transmit allows the device to transmit at higher power instantaneously, as high as Pmax, when needed, but enforces power limiting to maintain time-averaged transmit power to Plimit. Below table shows Plimit EFS settings and maximum tune up output power Pmax configured for this EUT for various transmit conditions (Device State Index DSI).

<Terminologies in this report>

Plimit	The time-averaged RF power which corresponds to SAR_design_target.
Pmax	Maximum target power level
SAR_design_target:	The design target for SAR compliance. It should be less than regulatory power density limit to account for all device design related uncertainties.
SAR char	Plimit for all the technologies/bands for all applicable DSI

<SAR design target and uncertainty>

The detail SAR design target relate to each exposure conditions pls refer to operation description

Exposure Condition	Trigger Condition	SAR_design_target (W/kg)	Device Uncertainty (dB)
Head	Receiver	1g SAR 0.953 W/kg	1 dB
Hotspot	Hotspot	1g SAR 0.874 W/kg	1 dB
Body-Worn	NA	1g SAR 0.953 W/kg	1 dB
Product Specific	NA	10g SAR 2.383 W/kg	1 dB

To account for total uncertainty, SAR_design_target should be determined as:

$$SAR\_design\_target < SAR_{regulatory\_limit} \times 10^{\frac{-total\ uncertainty}{10}}$$

<SAR Characterization>

SAR char must be generated to cover all radio configurations and usage scenarios that the wireless device supports for operating at 6 GHz or below. It will then be used as input for Smart Transmit to control and manage RF exposure for f < 6 GHz.

<P_{limit} for supported technologies and bands (P_{limit} in EFS file)>

1. *Pmax is used for RF tune up procedure. The maximum allowed output power is equal to Pmax + 1dB uncertainty.
2. **All Plimit power levels entered in the Table correspond to average power levels after accounting for duty cycle in the case TDD modulation schemes (for e.g., GSM & LTE TDD & NR TDD).
3. The max allowed output power is the Plimit + 1dB device uncertainty, and if Plimit is higher than Pmax, the device output power will be Pmax instead.
4. The device support ULMIMO on n48/77/78 ant 6+7, as below table the Pmax and Plimit is single chain output power.

Band	Duty	Antenna	Head (DSI=2)	Body Worn / Extremity (DSI=0)	Hotspot (DSI=1)	Pmax*
GSM850 1 Tx slot**	12.50%	0	37.9	26.0	25.0	24.0
GPRS 1 Tx slot**	12.50%	0	37.9	26.0	25.0	24.0
GPRS 2 Tx slots**	25.00%	0	37.9	26.0	25.0	26.0
GPRS 3 Tx slots**	37.50%	0	37.9	26.0	25.0	27.7
GPRS 4 Tx slots**	50.00%	0	37.9	26.0	25.0	28.5
EDGE 1 Tx slot**	12.50%	0	37.9	26.0	25.0	17.0
EDGE 2 Tx slots**	25.00%	0	37.9	26.0	25.0	19.5
EDGE 3 Tx slots**	37.50%	0	37.9	26.0	25.0	21.2
EDGE 4 Tx slots**	50.00%	0	37.9	26.0	25.0	22.0
GSM1900 1 Tx slot**	12.50%	1	34.8	28.9	26.6	21.0
GPRS 1 Tx slot**	12.50%	1	34.8	28.9	26.6	21.0
GPRS 2 Tx slots**	25.00%	1	34.8	28.9	26.6	23.5
GPRS 3 Tx slots**	37.50%	1	34.8	28.9	26.6	24.7
GPRS 4 Tx slots**	50.00%	1	34.8	28.9	26.6	26.0
EDGE 1 Tx slot**	12.50%	1	34.8	28.9	26.6	17.0
EDGE 2 Tx slots**	25.00%	1	34.8	28.9	26.6	19.5
EDGE 3 Tx slots**	37.50%	1	34.8	28.9	26.6	21.2
EDGE 4 Tx slots**	50.00%	1	34.8	28.9	26.6	22.0
WCDMA II	100.00%	1	33.5	29.9	25.3	24.0
WCDMA IV	100.00%	1	30.5	29.3	26.5	24.0
WCDMA V	100.00%	0	27.8	26.8	24.0	24.0
LTE B2/25	100.00%	1	32.0	28.3	24.9	23.5
LTE B4/66	100.00%	1	28.1	27.8	25.7	23.5
LTE B5/26	100.00%	0	27.7	26.6	24.6	23.5
LTE B7	100.00%	1	39.5	28.8	24.9	23.5
LTE B12/B17	100.00%	0	28.6	26.7	26.2	23.5
LTE B13	100.00%	0	28.1	27.1	25.2	23.5
LTE B14	100.00%	0	28.5	27.2	25.1	23.5
LTE B30	100.00%	1	32.6	31.7	27.8	23.5
LTE B41/38_PC3**	63.30%	1	40.9	27.3	25.4	21.5
LTE B48_PC3**	63.30%	7	28.6	28.6	25.1	20.5
n7	100.00%	1	41.3	30.1	27.8	24.0
n12	100.00%	0	29.2	27.5	27.1	24.0
n13	100.00%	0	28.4	28.1	25.4	24.0
n14	100.00%	0	29.6	28.7	25.7	24.0
n25/n2	100.00%	1	33.0	29.4	24.6	24.0
n26/n5	100.00%	0	29.2	29.4	26.5	24.0
n30	100.00%	1	33.3	32.9	27.5	24.0
n66	100.00%	1	29.4	30.1	26.4	24.0

n38/41_PC3	100.00%	1	39.7	29.7	26.5	24.0
n48_PC3	100.00%	7	29.7	28.4	26.2	22.5
n48_PC3	100.00%	4	29.7	27.9	25.7	22.5
n48_PC3	100.00%	5	28.8	30.9	25.8	22.5
(4)n48_PC3	100.00%	6+7	27.8	26.0	23.9	19.5
n77/n78_PC3	100.00%	7	28.6	27.2	25.5	23.0
n77/n78_PC2**	50.00%	7	28.8	28.4	25.7	23.0
n77/n78_PC3	100.00%	4	26.8	29.1	26.1	22.9
n77/n78_PC2**	50.00%	4	26.9	29.2	26.2	22.9
n77/n78_PC3	100.00%	5	27.9	28.8	25.9	22.9
n77/n78_PC2**	50.00%	5	28.1	28.9	26.0	22.9
(4)n77/n78_PC3	100.00%	6+7	32.0	28.3	26.1	20.0
(4)n77/n78_PC2**	50.00%	6+7	35.5	30.4	26.9	20.0

5. RF Exposure Limits

5.1 Uncontrolled Environment

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

5.2 Controlled Environment

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. The exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.4	8.0	20.0

Limits for General Population/Uncontrolled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.08	1.6	4.0

1. Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1gram of tissue defined as a tissue volume in the shape of a cube. SAR for hands, wrists, feet and ankles is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

5.3 RF Exposure limit for above 6GHz

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Peak Spatially Averaged Power Density was evaluated over a circular area of 4cm^2 per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f2)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f2)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

6. Specific Absorption Rate (SAR)

6.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

6.2 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$\mathbf{SAR} = \frac{\mathbf{d}}{\mathbf{dt}}\left(\frac{\mathbf{dW}}{\mathbf{dm}}\right) = \frac{\mathbf{d}}{\mathbf{dt}}\left(\frac{\mathbf{dW}}{\boldsymbol{\rho}\mathbf{dv}}\right)$$

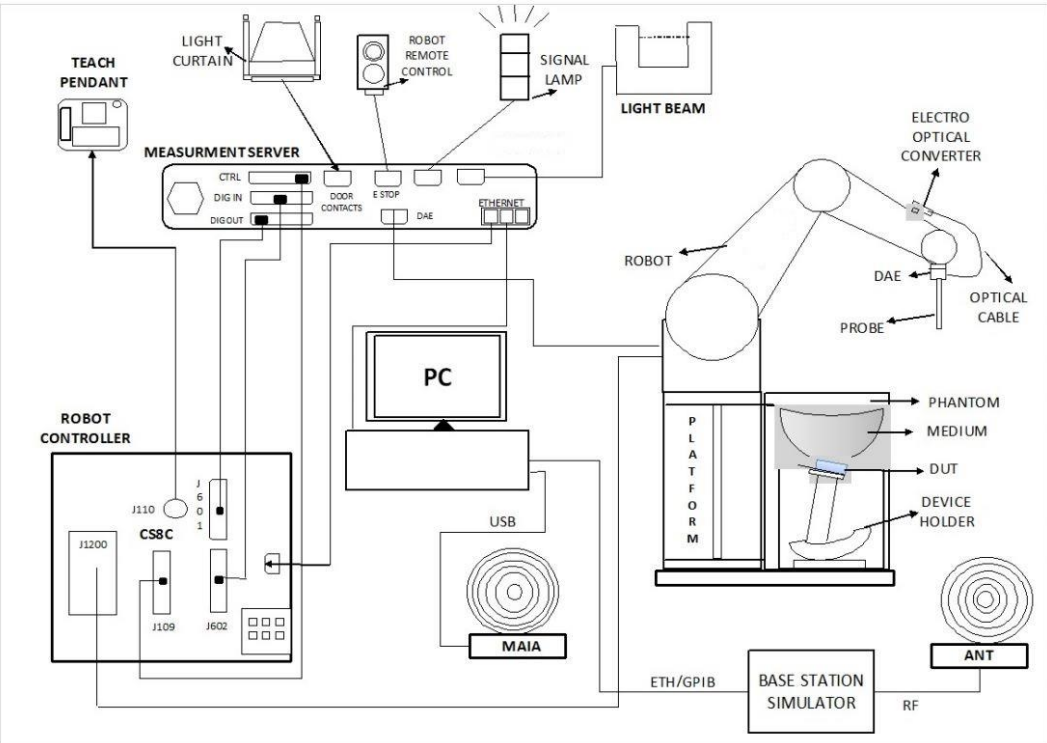
SAR is expressed in units of Watts per kilogram (W/kg)

$$\mathbf{SAR} = \frac{\boldsymbol{\sigma}|\mathbf{E}|^2}{\boldsymbol{\rho}}$$

Where: σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the RMS electrical field strength.

7. System Description and Setup

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



- The DASY system in SAR Configuration is shown above
- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- 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.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- 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.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running windows software and the DASY software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

7.1 Test Site Location

The SAR measurement facilities used to collect data are within both Sporton Lab list below test site location are accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190 and 3786) and the FCC designation No. TW1190 and TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test.

Laboratory	EMC & Wireless Communications Laboratory		Wensan Laboratory				
Test Site Location	TW1190 No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan		TW3786 No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan				
Test Site No.	SAR01-HY	SAR03-HY	SAR08-HY	SAR09-HY	SAR15-HY	SAR18-HY	SAR21-HY
	SAR04-HY	SAR05-HY	SAR11-HY	SAR12-HY	SAR16-HY	SAR19-HY	SAR22-HY
	SAR06-HY	SAR10-HY	SAR13-HY	SAR14-HY	SAR17-HY	SAR20-HY	

7.1 E-Field Probe

The SAR measurement is conducted with the dosimetric probe (manufactured by SPEAG).The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. This probe has a built in optical surface detection system to prevent from collision with phantom.

<ES3DV3 Probe>

Construction	Symmetric design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	4 MHz – 4 GHz; Linearity: ±0.2 dB (30 MHz – 4 GHz)	
Directivity	±0.2 dB in TSL (rotation around probe axis) ±0.3 dB in TSL (rotation normal to probe axis)	
Dynamic Range	5 µW/g – >100 mW/g; Linearity: ±0.2 dB	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 3.9 mm (body: 12 mm) Distance from probe tip to dipole centers: 3.0 mm	

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	4 MHz – >6 GHz Linearity: ±0.2 dB (30 MHz – 6 GHz)	
Directivity	±0.3 dB in TSL (rotation around probe axis) ±0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 µW/g – >100 mW/g Linearity: ±0.2 dB (noise: typically <1 µW/g)	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 2.5 mm (body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

7.2 Data Acquisition Electronics (DAE)

The data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock.

The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

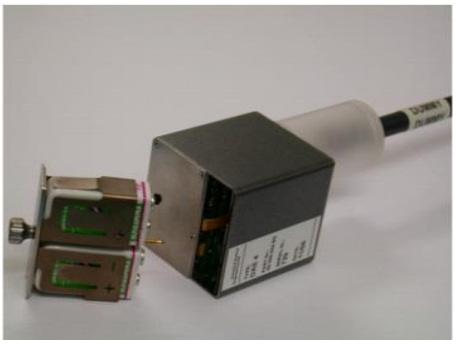
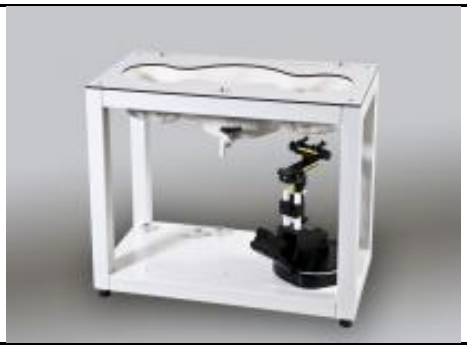


Fig 5.1 Photo of DAE

7.3 Phantom

<SAM Twin Phantom>

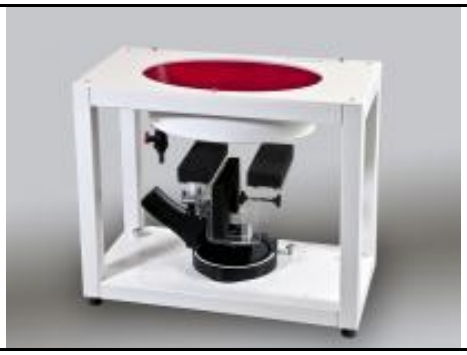
Shell Thickness	2 ± 0.2 mm; Center ear point: 6 ± 0.2 mm
Filling Volume	Approx. 25 liters
Dimensions	Length: 1000 mm; Width: 500 mm; Height: adjustable feet
Measurement Areas	Left Hand, Right Hand, Flat Phantom



The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

<ELI Phantom>

Shell Thickness	2 ± 0.2 mm (sagging: <1%)
Filling Volume	Approx. 30 liters
Dimensions	Major ellipse axis: 600 mm Minor axis: 400 mm



The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.

7.4 Device Holder

<Mounting Device for Hand-Held Transmitter>

In combination with the Twin SAM V5.0/V5.0c or ELI phantoms, the Mounting Device for Hand-Held Transmitters enables rotation of the mounted transmitter device to specified spherical coordinates. At the heads, the rotation axis is at the ear opening. Transmitter devices can be easily and accurately positioned according to IEC 62209-1, IEEE 1528, FCC, or other specifications. The device holder can be locked for positioning at different phantom sections (left head, right head, flat). And upgrade kit to Mounting Device to enable easy mounting of wider devices like big smart-phones, e-books, small tablets, etc. It holds devices with width up to 140 mm.

Mounting Device for Hand-Held Transmitters

Mounting Device Adaptor for Wide-Phones

<Mounting Device for Laptops and other Body-Worn Transmitters>

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the mounting device in place of the phone positioned. The extension is fully compatible with the SAM Twin and ELI phantoms.

Mounting Device for Laptops

8. Measurement Procedures

The measurement procedures are as follows:

(a) Use base station simulator to configure EUT WWAN transmission in radiated connection, and engineering software to configure EUT WLAN/BT continuously transmission, at maximum RF power, in the highest power channel.
(b) Place the EUT in the positions as Appendix D demonstrates.
(c) Set scan area, grid size and other setting on the DASY software.
(d) Measure SAR results for the highest power channel on each testing position.
(e) Find out the largest SAR result on these testing positions of each band
(f) Measure SAR results for other channels in worst SAR testing position if the reported SAR of highest power channel is larger than 0.8 W/kg

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

(a) Power reference measurement
(b) Area scan
(c) Zoom scan
(d) Power drift measurement

8.1 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

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 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

(a) Extraction of the measured data (grid and values) from the Zoom Scan
(b) Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
(c) Generation of a high-resolution mesh within the measured volume
(d) Interpolation of all measured values form the measurement grid to the high-resolution grid
(e) Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
(f) Calculation of the averaged SAR within masses of 1g and 10g

8.2 Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

8.3 Area Scan

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum found in the scanned area, within a range of the global maximum. The range (in dB0 is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.

Area scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

8.4 Zoom Scan

Zoom scans are used assess the peak spatial SAR values within a cubic averaging volume containing 1 gram and 10 gram of simulated tissue. The zoom scan measures points (refer to table below) within a cube shoes base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the zoom scan evaluates the averaged SAR for 1 gram and 10 gram and displays these values next to the job's label.

Zoom scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5·$\Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

* When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

8.5 Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

8.6 Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In DASY measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drifts more than 5%, the SAR will be retested.

9. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	750MHz System Validation Kit(2)	D750V3	1107	Jun. 22, 2022	Jun. 20, 2024
SPEAG	750MHz System Validation Kit(2)	D750V3	1117	Mar. 24, 2022	Mar. 21, 2025
SPEAG	835MHz System Validation Kit(2)	D835V2	4d060	Mar. 24, 2022	Mar. 21, 2025
SPEAG	835MHz System Validation Kit(2)	D835V2	4d167	Nov. 24, 2022	Nov. 22, 2024
SPEAG	1750MHz System Validation Kit(2)	D1750V2	1112	Jun. 22, 2022	Jun. 19, 2025
SPEAG	1900MHz System Validation Kit(2)	D1900V2	5d185	Jun. 17, 2022	Jun. 14, 2025
SPEAG	2300MHz System Validation Kit(2)	D2300V2	1006	Jan. 18, 2022	Jan. 15, 2025
SPEAG	2450MHz System Validation Kit(2)	D2450V2	736	Aug. 17, 2021	Aug. 14, 2024
SPEAG	2600MHz System Validation Kit(2)	D2600V2	1078	Jun. 23, 2022	Jun. 20, 2025
SPEAG	2600MHz System Validation Kit(2)	D2600V2	1089	Mar. 24, 2022	Mar. 21, 2025
SPEAG	3500MHz System Validation Kit(2)	D3500V2	1014	Jan. 17, 2022	Jan. 14, 2025
SPEAG	3500MHz System Validation Kit(2)	D3500V2	1036	Mar. 23, 2022	Mar. 20, 2025
SPEAG	3700MHz System Validation Kit(2)	D3700V2	1006	Jun. 20, 2022	Jun. 18, 2024
SPEAG	3900MHz System Validation Kit(2)	D3900V2	1017	Apr. 22, 2022	Apr. 19, 2025
SPEAG	5GHz System Validation Kit(2)	D5GHzV2	1006	May. 25, 2023	May. 23, 2025
SPEAG	6500MHz System Validation Kit	D6.5GHzV2	1083	Oct. 20, 2023	Oct. 19, 2024
SPEAG	13MHz System Validation Kit(2)	CLA13	1022	Sep. 01, 2022	Aug. 30, 2024
SPEAG	5G Verification Source	10GHz	1020	Jan. 18, 2024	Jan. 17, 2025
SPEAG	EUmmWV Probe Tip Protection	EUmmWV4	9441	Nov. 17, 2023	Nov. 16, 2024
SPEAG	Data Acquisition Electronics	DAE4	376	Sep. 14, 2023	Sep. 13, 2024
SPEAG	Data Acquisition Electronics	DAE4	1424	Dec. 07, 2023	Dec. 06, 2024
SPEAG	Data Acquisition Electronics	DAE4	1647	Dec. 27, 2023	Dec. 26, 2024
SPEAG	Data Acquisition Electronics	DAE4	1696	Oct. 23, 2023	Oct. 22, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	3931	Oct. 24, 2023	Oct. 23, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7694	Oct. 26, 2023	Oct. 25, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7695	May. 22, 2023	May. 21, 2024
SPEAG	Dosimetric E-Field Probe	EX3DV4	7793	Mar. 01, 2024	Feb. 28, 2025
Testo	Hygro meter	608-H1	45196600	Nov. 02, 2023	Nov. 01, 2024
Anritsu	Radio Communication Analyzer	MT8821C	6201341950	Nov. 13, 2023	Nov. 12, 2024
Keysight	5G Wireless Test Platform	E7515B	MY58300712	Apr. 22, 2024	Apr. 21, 2025
R&S	BT Base Station	CBT	101136	Oct. 22, 2023	Oct. 21, 2024
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Sep. 27, 2023	Sep. 26, 2024
Keysight	ENA Network Analyzer	E5071C	MY46104758	Oct. 30, 2023	Oct. 29, 2024
SPEAG	Dielectric Probe Kit	DAK-3.5	1126	Sep. 19, 2023	Sep. 18, 2024
SPEAG	Dielectric Probe Kit	DAK-12	1156	Jul. 17, 2023	Jul. 16, 2024
LINE SEIKI	Digital Thermometer	DTM3000-spezial	3690	Aug. 09, 2023	Aug. 08, 2024
Anritsu	Power Meter	ML2495A	1419002	Aug. 17, 2023	Aug. 16, 2024
Anritsu	Power Sensor	MA2411B	1911176	Aug. 18, 2023	Aug. 17, 2024
Anritsu	Spectrum Analyzer	MS2830A	6201396378	Jul. 10, 2023	Jul. 09, 2024
Mini-Circuits	Power Amplifier	ZVE-8G+	6418	Oct. 16, 2023	Oct. 15, 2024
ATM	Dual Directional Coupler	C122H-10	P610410z-02	Note 1	
Warison	Directional Coupler	WCOU-10-50S-10	WR889BMC4B1	Note 1	
Woken	Attenuator 1	WK0602-XX	N/A	Note 1	
PE	Attenuator 2	PE7005-10	N/A	Note 1	
PE	Attenuator 3	PE7005- 3	N/A	Note 1	

General Note:

1. Prior to system verification and validation, the path loss from the signal generator to the system check source and the power meter, which includes the amplifier, cable, attenuator and directional coupler, was measured by the network analyzer. The reading of the power meter was offset by the path loss difference between the path to the power meter and the path to the system check source to monitor the actual power level fed to the system check source.
2. The dipole calibration interval can be extended to 3 years with justification according to KDB 865664 D01. The dipoles are also not physically damaged, or repaired during the interval. The justification data in appendix C can be found which the return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration for each dipole.

10. System Verification

10.1 Tissue Verification

The tissue dielectric parameters of tissue-equivalent media used for SAR measurements must be characterized within a temperature range of 18℃ to 25℃, measured with calibrated instruments and apparatuses, such as network analyzers and temperature probes. The temperature of the tissue-equivalent medium during SAR measurement must also be within 18℃ to 25℃ and within ± 2℃ of the temperature when the tissue parameters are characterized. The tissue dielectric measurement system must be calibrated before use. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements.
The liquid tissue depth was at least 15cm in the phantom for all SAR testing

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Liquid Temp. (℃)	Conductivity (σ)	Permittivity (ε_r)	Conductivity Target (σ)	Permittivity Target (ε_r)	Delta (σ) (%)	Delta (ε_r) (%)	Limit (%)	Date
13	22.2	0.728	54.7	0.75	55.00	-2.93	-0.55	±5	2024/5/18
750	22.3	0.888	41.700	0.89	41.90	-0.22	-0.48	±5	2024/4/24
750	22.9	0.901	42.800	0.89	41.90	1.24	2.15	±5	2024/4/29
750	22.1	0.884	42.700	0.89	41.90	-0.67	1.91	±5	2024/5/1
750	22.6	0.883	42.700	0.89	41.90	-0.79	1.91	±5	2024/5/6
750	22.2	0.891	42.500	0.89	41.90	0.11	1.43	±5	2024/5/8
750	22.2	0.895	41.700	0.89	41.90	0.56	-0.48	±5	2024/5/16
835	22.3	0.922	41.400	0.90	41.50	2.44	-0.24	±5	2024/4/24
835	22.9	0.937	42.500	0.90	41.50	4.11	2.41	±5	2024/4/29
835	22.9	0.937	42.5	0.90	41.50	4.11	2.41	±5	2024/4/29
835	22.1	0.917	42.400	0.90	41.50	1.89	2.17	±5	2024/5/1
835	22.6	0.916	42.400	0.90	41.50	1.78	2.17	±5	2024/5/6
835	22.6	0.916	42.4	0.90	41.50	1.78	2.17	±5	2024/5/6
835	22.2	0.925	42.200	0.90	41.50	2.78	1.69	±5	2024/5/8
835	22.2	0.925	42.2	0.90	41.50	2.78	1.69	±5	2024/5/8
835	22.2	0.929	41.500	0.90	41.50	3.22	0.00	±5	2024/5/16
1750	22.5	1.350	40.700	1.37	40.10	-1.46	1.50	±5	2024/4/26
1750	22.5	1.370	40.500	1.37	40.10	0.00	1.00	±5	2024/4/30
1750	22.2	1.370	40.560	1.37	40.10	0.00	1.15	±5	2024/5/2
1750	22.6	1.360	40.300	1.37	40.10	-0.73	0.50	±5	2024/5/6
1750	22.4	1.350	40.800	1.37	40.10	-1.46	1.75	±5	2024/5/9
1750	22.2	1.370	41.100	1.37	40.10	0.00	2.49	±5	2024/5/16
1900	22.2	1.440	40.900	1.40	40.00	2.86	2.25	±5	2024/4/25
1900	22.5	1.450	38.900	1.40	40.00	3.57	-2.75	±5	2024/4/30
1900	22.5	1.45	38.9	1.40	40.00	3.57	-2.75	±5	2024/4/30
1900	22.2	1.450	39.000	1.40	40.00	3.57	-2.50	±5	2024/5/2
1900	22.6	1.440	38.800	1.40	40.00	2.86	-3.00	±5	2024/5/6
1900	22.4	1.430	39.200	1.40	40.00	2.14	-2.00	±5	2024/5/9
1900	22.4	1.43	39.2	1.40	40.00	2.14	-2.00	±5	2024/5/9
1900	22.2	1.450	39.600	1.40	40.00	3.57	-1.00	±5	2024/5/16
2300	22.5	1.650	39.400	1.67	39.50	-1.20	-0.25	±5	2024/4/26
2300	22.2	1.690	39.400	1.67	39.50	1.20	-0.25	±5	2024/5/3
2300	22.1	1.680	39.400	1.67	39.50	0.60	-0.25	±5	2024/5/11
2300	22.2	1.690	39.200	1.67	39.50	1.20	-0.76	±5	2024/5/16
2600	22.2	1.920	39.100	1.96	39.00	-2.04	0.26	±5	2024/4/25
2600	22.4	1.950	38.200	1.96	39.00	-0.51	-2.05	±5	2024/5/4
2600	22.2	1.980	38.100	1.96	39.00	1.02	-2.31	±5	2024/5/10
2600	22.2	2.020	38.000	1.96	39.00	3.06	-2.56	±5	2024/5/16
3500	22.5	2.930	37.300	2.91	37.90	0.69	-1.58	±5	2024/4/26
3500	22.7	2.920	37.300	2.91	37.90	0.34	-1.58	±5	2024/4/27
3500	22.8	2.930	38.200	2.91	37.90	0.69	0.79	±5	2024/4/28
3500	22.5	3.000	38.200	2.91	37.90	3.09	0.79	±5	2024/5/5
3500	22.6	2.980	37.600	2.91	37.90	2.41	-0.79	±5	2024/5/6
3500	22.7	2.970	38.500	2.91	37.90	2.06	1.58	±5	2024/5/7
3500	22.6	3.000	38.300	2.91	37.90	3.09	1.06	±5	2024/5/12
3500	22.3	2.940	37.500	2.91	37.90	1.03	-1.06	±5	2024/5/13

3500	22.4	2.970	38.300	2.91	37.90	2.06	1.06	±5	2024/5/14
3500	22.5	2.830	37.400	2.91	37.90	-2.75	-1.32	±5	2024/5/15
3500	22.7	2.970	38.800	2.91	37.90	2.06	2.37	±5	2024/5/17
3700	22.5	3.120	37.000	3.12	37.70	0.00	-1.86	±5	2024/4/26
3700	22.7	3.110	37.000	3.12	37.70	-0.32	-1.86	±5	2024/4/27
3700	22.8	3.140	38.000	3.12	37.70	0.64	0.80	±5	2024/4/28
3700	22.5	3.160	37.900	3.12	37.70	1.28	0.53	±5	2024/5/5
3700	22.6	3.170	37.300	3.12	37.70	1.60	-1.06	±5	2024/5/6
3700	22.7	3.130	38.300	3.12	37.70	0.32	1.59	±5	2024/5/7
3700	22.6	3.160	38.000	3.12	37.70	1.28	0.80	±5	2024/5/12
3700	22.3	3.120	37.200	3.12	37.70	0.00	-1.33	±5	2024/5/13
3700	22.4	3.180	38.100	3.12	37.70	1.92	1.06	±5	2024/5/14
3700	22.5	3.040	37.200	3.12	37.70	-2.56	-1.33	±5	2024/5/15
3700	22.7	3.180	38.600	3.12	37.70	1.92	2.39	±5	2024/5/17
3900	22.7	3.310	36.700	3.33	37.51	-0.60	-2.16	±5	2024/4/27
3900	22.8	3.350	37.800	3.33	37.51	0.60	0.77	±5	2024/4/28
3900	22.7	3.300	38.000	3.33	37.51	-0.90	1.31	±5	2024/5/7
3900	22.6	3.340	37.700	3.33	37.51	0.30	0.51	±5	2024/5/12
3900	22.3	3.330	36.900	3.33	37.51	0.00	-1.63	±5	2024/5/13
3900	22.4	3.400	37.900	3.33	37.51	2.10	1.04	±5	2024/5/14
3900	22.5	3.210	37.600	3.33	37.51	-3.60	0.24	±5	2024/5/15
3900	22.7	3.39	38.4	3.33	37.51	1.80	2.37	±5	2024/5/17
3900	22.2	3.28	37.2	3.33	37.51	-1.50	-0.83	±5	2024/6/3
2450	22.2	1.85	38.6	1.80	39.20	2.78	-1.53	±5	May. 16, 2024
2450	22.8	1.8	38.9	1.80	39.20	0.00	-0.77	±5	May. 18, 2024
5250	22.2	4.64	35.7	4.71	35.95	-1.49	-0.70	±5	May. 19, 2024
5250	22.3	4.69	36.6	4.71	35.95	-0.42	1.81	±5	May. 20, 2024
5600	22.2	5.04	35	5.07	35.50	-0.59	-1.41	±5	May. 19, 2024
5600	22.3	5.06	36.1	5.07	35.50	-0.20	1.69	±5	May. 20, 2024
5750	22.2	5.22	34.7	5.22	35.35	0.00	-1.84	±5	May. 19, 2024
5750	22.3	5.22	35.9	5.22	35.35	0.00	1.56	±5	May. 20, 2024
5850	22.3	5.33	35.7	5.32	35.25	0.19	1.28	±5	May. 20, 2024
6500	22.5	6.18	35.1	6.07	34.50	1.81	1.74	±5	May. 07, 2024

10.2 System Performance Check Results

Comparing to the original SAR value provided by SPEAG, the verification data should be within its specification of 10 %. Below table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion and the plots can be referred to Appendix A of this report.

Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)	Test Site
2024/5/18	13	1000	CLA13-1022	EX3DV4 - SN7695	DAE4 Sn376	0.507	0.560	0.507	-9.46	0.316	0.349	0.316	-9.71	SAR-17
2024/4/24	750	250	D750V3-1107	EX3DV4 - SN7695	DAE4 Sn376	2.280	8.540	9.12	6.79	1.530	5.570	6.12	9.87	SAR-17
2024/4/29	750	50	D750V3-1107	EX3DV4 - SN7695	DAE4 Sn376	0.431	8.540	8.62	0.94	0.292	5.570	5.84	4.85	SAR-17
2024/5/1	750	50	D750V3-1107	EX3DV4 - SN7695	DAE4 Sn376	0.422	8.540	8.44	-1.17	0.286	5.570	5.72	2.69	SAR-17
2024/5/6	750	50	D750V3-1117	EX3DV4 - SN7695	DAE4 Sn376	0.413	8.520	8.26	-3.05	0.279	5.600	5.58	-0.36	SAR-17
2024/5/8	750	50	D750V3-1117	EX3DV4 - SN7695	DAE4 Sn376	0.421	8.520	8.42	-1.17	0.285	5.600	5.7	1.79	SAR-17
2024/5/16	750	50	D750V3-1117	EX3DV4 - SN7695	DAE4 Sn376	0.428	8.520	8.56	0.47	0.288	5.600	5.76	2.86	SAR-17
2024/4/24	835	50	D835V2-4d060	EX3DV4 - SN7695	DAE4 Sn376	0.522	9.730	10.44	7.30	0.347	6.390	6.94	8.61	SAR-17
2024/4/29	835	50	D835V2-4d060	EX3DV4 - SN7695	DAE4 Sn376	0.522	9.730	10.44	7.30	0.349	6.390	6.98	9.23	SAR-17
2024/4/29	835	50	D835V2-4d060	EX3DV4 - SN7694	DAE4 Sn1696	0.527	9.730	10.54	8.32	0.346	6.390	6.92	8.29	SAR-18
2024/5/1	835	50	D835V2-4d060	EX3DV4 - SN7695	DAE4 Sn376	0.493	9.730	9.86	1.34	0.331	6.390	6.62	3.60	SAR-17
2024/5/6	835	50	D835V2-4d167	EX3DV4 - SN7695	DAE4 Sn376	0.494	9.800	9.88	0.82	0.330	6.380	6.6	3.45	SAR-17
2024/5/6	835	50	D835V2-4d060	EX3DV4 - SN7694	DAE4 Sn1696	0.516	9.730	10.32	6.06	0.339	6.390	6.78	6.10	SAR-18
2024/5/8	835	50	D835V2-4d167	EX3DV4 - SN7695	DAE4 Sn376	0.500	9.800	10	2.04	0.336	6.380	6.72	5.33	SAR-17
2024/5/8	835	50	D835V2-4d060	EX3DV4 - SN7694	DAE4 Sn1696	0.521	9.730	10.42	7.09	0.342	6.390	6.84	7.04	SAR-18
2024/5/16	835	50	D835V2-4d167	EX3DV4 - SN7695	DAE4 Sn376	0.513	9.800	10.26	4.69	0.344	6.380	6.88	7.84	SAR-17
2024/4/26	1750	50	D1750V2-1112	EX3DV4 - SN7695	DAE4 Sn376	1.670	36.900	33.4	-9.49	0.904	19.400	18.08	-6.80	SAR-17
2024/4/30	1750	50	D1750V2-1112	EX3DV4 - SN7695	DAE4 Sn376	1.680	36.900	33.6	-8.94	0.912	19.400	18.24	-5.98	SAR-17
2024/5/2	1750	50	D1750V2-1112	EX3DV4 - SN7695	DAE4 Sn376	1.670	36.900	33.4	-9.49	0.882	19.400	17.64	-9.07	SAR-17
2024/5/6	1750	50	D1750V2-1112	EX3DV4 - SN7695	DAE4 Sn376	1.680	36.900	33.6	-8.94	0.876	19.400	17.52	-9.69	SAR-17
2024/5/9	1750	50	D1750V2-1112	EX3DV4 - SN7695	DAE4 Sn376	1.670	36.900	33.4	-9.49	0.891	19.400	17.82	-8.14	SAR-17
2024/5/16	1750	50	D1750V2-1112	EX3DV4 - SN7695	DAE4 Sn376	1.680	36.900	33.6	-8.94	0.915	19.400	18.3	-5.67	SAR-17
2024/4/25	1900	50	D1900V2-5d185	EX3DV4 - SN7695	DAE4 Sn376	1.900	39.000	38	-2.56	1.010	20.400	20.2	-0.98	SAR-17
2024/4/30	1900	50	D1900V2-5d185	EX3DV4 - SN7695	DAE4 Sn376	1.950	39.000	39	0.00	1.030	20.400	20.6	0.98	SAR-17
2024/4/30	1900	50	D1900V2-5d185	EX3DV4 - SN7694	DAE4 Sn1696	2.000	39.000	40	2.56	1.040	20.400	20.8	1.96	SAR-18
2024/5/2	1900	**50**	D1900V2-5d185	EX3DV4 - SN7695	DAE4 Sn376	1.970	39.000	39.4	1.03	1.040	20.400	20.8	1.96	SAR-17
2024/5/6	1900	50	D1900V2-5d185	EX3DV4 - SN7695	DAE4 Sn376	1.920	39.000	38.4	-1.54	1.020	20.400	20.4	0.00	SAR-17
2024/5/9	1900	50	D1900V2-5d185	EX3DV4 - SN7695	DAE4 Sn376	1.920	39.000	38.4	-1.54	1.020	20.400	20.4	0.00	SAR-17
2024/5/9	1900	50	D1900V2-5d185	EX3DV4 - SN7694	DAE4 Sn1696	1.920	39.000	38.4	-1.54	0.994	20.400	19.88	-2.55	SAR-18
2024/5/16	1900	50	D1900V2-5d185	EX3DV4 - SN7695	DAE4 Sn376	1.980	39.000	39.6	1.54	1.050	20.400	21	2.94	SAR-17
2024/4/26	2300	50	D2300V2-1006	EX3DV4 - SN7695	DAE4 Sn376	2.210	48.300	44.2	-8.49	1.070	23.500	21.4	-8.94	SAR-17
2024/5/3	2300	50	D2300V2-1006	EX3DV4 - SN7695	DAE4 Sn376	2.230	48.300	44.6	-7.66	1.080	23.500	21.6	-8.09	SAR-17
2024/5/11	2300	50	D2300V2-1006	EX3DV4 - SN7695	DAE4 Sn376	2.240	48.300	44.8	-7.25	1.100	23.500	22	-6.38	SAR-17
2024/5/16	2300	50	D2300V2-1006	EX3DV4 - SN7695	DAE4 Sn376	2.260	48.300	45.2	-6.42	1.100	23.500	22	-6.38	SAR-17
2024/4/25	2600	50	D2600V2-1078	EX3DV4 - SN7695	DAE4 Sn376	2.520	55.400	50.4	-9.03	1.140	24.900	22.8	-8.43	SAR-17
2024/5/4	2600	50	D2600V2-1078	EX3DV4 - SN7695	DAE4 Sn376	2.500	55.400	50	-9.75	1.130	24.900	22.6	-9.24	SAR-17
2024/5/10	2600	50	D2600V2-1078	EX3DV4 - SN7695	DAE4 Sn376	2.540	55.400	50.8	-8.30	1.170	24.900	23.4	-6.02	SAR-17
2024/5/16	2600	50	D2600V2-1089	EX3DV4 - SN7695	DAE4 Sn376	2.600	55.400	52	-6.14	1.200	24.600	24	-2.44	SAR-17
2024/4/26	3500	50	D3500V2-1036	EX3DV4 - SN7695	DAE4 Sn376	3.070	67.400	61.4	-8.90	1.170	25.100	23.4	-6.77	SAR-17
2024/4/27	3500	250	D3500V2-1036	EX3DV4 - SN7695	DAE4 Sn376	15.900	67.400	63.6	-5.64	6.190	25.100	24.8	-1.35	SAR-17
2024/4/28	3500	100	D3500V2-1036	EX3DV4 - SN7695	DAE4 Sn376	6.360	67.400	63.6	-5.64	2.470	25.100	24.7	-1.59	SAR-17
2024/5/5	3500	50	D3500V2-1036	EX3DV4 - SN7695	DAE4 Sn376	3.050	67.400	61	-9.50	1.170	25.100	23.4	-6.77	SAR-17
2024/5/6	3500	100	D3500V2-1036	EX3DV4 - SN7695	DAE4 Sn376	6.710	67.400	67.1	-0.45	2.620	25.100	26.2	4.38	SAR-17
2024/5/7	3500	100	D3500V2-1036	EX3DV4 - SN7695	DAE4 Sn376	6.600	67.400	66	-2.08	2.570	25.100	25.7	2.39	SAR-17
2024/5/12	3500	50	D3500V2-1014	EX3DV4 - SN7695	DAE4 Sn376	3.060	67.200	61.2	-8.93	1.190	25.100	23.8	-5.18	SAR-17
2024/5/13	3500	50	D3500V2-1036	EX3DV4 - SN7695	DAE4 Sn376	3.070	67.400	61.4	-8.90	1.200	25.100	24	-4.38	SAR-17
2024/5/14	3500	50	D3500V2-1036	EX3DV4 - SN7695	DAE4 Sn376	3.060	67.400	61.2	-9.20	1.210	25.100	24.2	-3.59	SAR-17
2024/5/15	3500	50	D3500V2-1036	EX3DV4 - SN7695	DAE4 Sn376	3.040	67.400	60.8	-9.79	1.190	25.100	23.8	-5.18	SAR-17

2024/5/17	3500	50	D3500V2-1014	EX3DV4 - SN7695	DAE4 Sn376	3.060	67.200	61.2	-8.93	1.190	25.100	23.8	-5.18	SAR-17
2024/4/26	3700	50	D3700V2-1006	EX3DV4 - SN7695	DAE4 Sn376	3.130	65.600	62.6	-4.57	1.170	23.700	23.4	-1.27	SAR-17
2024/4/27	3700	50	D3700V2-1006	EX3DV4 - SN7695	DAE4 Sn376	2.960	65.600	59.2	-9.76	1.110	23.700	22.2	-6.33	SAR-17
2024/4/28	3700	100	D3700V2-1006	EX3DV4 - SN7695	DAE4 Sn376	6.510	65.600	65.1	-0.76	2.450	23.700	24.5	3.38	SAR-17
2024/5/5	3700	50	D3700V2-1006	EX3DV4 - SN7695	DAE4 Sn376	3.120	65.600	62.4	-4.88	1.180	23.700	23.6	-0.42	SAR-17
2024/5/6	3700	100	D3700V2-1006	EX3DV4 - SN7695	DAE4 Sn376	6.680	65.600	66.8	1.83	2.520	23.700	25.2	6.33	SAR-17
2024/5/7	3700	100	D3700V2-1006	EX3DV4 - SN7695	DAE4 Sn376	6.640	65.600	66.4	1.22	2.510	23.700	25.1	5.91	SAR-17
2024/5/12	3700	50	D3700V2-1006	EX3DV4 - SN7695	DAE4 Sn376	3.170	65.600	63.4	-3.35	1.210	23.700	24.2	2.11	SAR-17
2024/5/13	3700	50	D3700V2-1006	EX3DV4 - SN7695	DAE4 Sn376	3.130	65.600	62.6	-4.57	1.200	23.700	24	1.27	SAR-17
2024/5/14	3700	50	D3700V2-1006	EX3DV4 - SN7695	DAE4 Sn376	3.200	65.600	64	-2.44	1.220	23.700	24.4	2.95	SAR-17
2024/5/15	3700	50	D3700V2-1006	EX3DV4 - SN7695	DAE4 Sn376	3.050	65.600	61	-7.01	1.160	23.700	23.2	-2.11	SAR-17
2024/5/17	3700	50	D3700V2-1006	EX3DV4 - SN7695	DAE4 Sn376	3.210	65.600	64.2	-2.13	1.230	23.700	24.6	3.80	SAR-17
2024/4/27	3900	100	D3900V2-1017-3900	EX3DV4 - SN7695	DAE4 Sn376	6.650	68.700	66.5	-3.20	2.380	23.900	23.8	-0.42	SAR-17
2024/4/28	3900	100	D3900V2-1017-3900	EX3DV4 - SN7695	DAE4 Sn376	6.730	68.700	67.3	-2.04	2.410	23.900	24.1	0.84	SAR-17
2024/5/7	3900	100	D3900V2-1017-3900	EX3DV4 - SN7695	DAE4 Sn376	6.280	68.700	62.8	-8.59	2.270	23.900	22.7	-5.02	SAR-17
2024/5/12	3900	50	D3900V2-1017-3900	EX3DV4 - SN7695	DAE4 Sn376	3.110	68.700	62.2	-9.46	1.140	23.900	22.8	-4.60	SAR-17
2024/5/13	3900	50	D3900V2-1017-3900	EX3DV4 - SN7695	DAE4 Sn376	3.120	68.700	62.4	-9.17	1.140	23.900	22.8	-4.60	SAR-17
2024/5/14	3900	50	D3900V2-1017-3900	EX3DV4 - SN7695	DAE4 Sn376	3.170	68.700	63.4	-7.71	1.160	23.900	23.2	-2.93	SAR-17
2024/5/15	3900	50	D3900V2-1017-3900	EX3DV4 - SN7695	DAE4 Sn376	3.110	68.700	62.2	-9.46	1.140	23.900	22.8	-4.60	SAR-17
2024/5/17	3900	50	D3900V2-1017-3900	EX3DV4 - SN7695	DAE4 Sn376	3.390	68.700	67.8	-1.31	1.210	23.900	24.2	1.26	SAR-17
2024/6/3	3900	50	D3900V2-1017-3900	EX3DV4 - SN3931	DAE4 Sn376	3.100	68.700	62	-9.75	1.100	23.900	22	-7.95	SAR-19
May. 16, 2024	2450	250	D2450V2-736	EX3DV4 - SN7694	DAE4 Sn1696	14.800	54.200	59.2	9.23	6.880	25.300	27.52	8.77	SAR-18
May. 18, 2024	2450	250	D2450V2-736	EX3DV4 - SN7694	DAE4 Sn1696	14.200	54.200	56.8	4.80	6.600	25.300	26.4	4.35	SAR-18
May. 19, 2024	5250	50	D5GHzV2-1006-5250	EX3DV4 - SN7694	DAE4 Sn1696	3.710	81.200	74.2	-8.62	1.050	23.200	21	-9.48	SAR-18
May. 20, 2024	5250	50	D5GHzV2-1006-5250	EX3DV4 - SN7694	DAE4 Sn1696	3.730	81.200	74.6	-8.13	1.060	23.200	21.2	-8.62	SAR-18
May. 19, 2024	5600	50	D5GHzV2-1006-5600	EX3DV4 - SN7694	DAE4 Sn1696	4.590	84.700	91.8	8.38	1.300	24.200	26	7.44	SAR-18
May. 20, 2024	5600	50	D5GHzV2-1006-5600	EX3DV4 - SN7694	DAE4 Sn1696	4.180	84.700	83.6	-1.30	1.170	24.200	23.4	-3.31	SAR-18
May. 19, 2024	5750	50	D5GHzV2-1006-5750	EX3DV4 - SN7694	DAE4 Sn1696	4.440	80.900	88.8	9.77	1.240	22.900	24.8	8.30	SAR-18
May. 20, 2024	5750	50	D5GHzV2-1006-5750	EX3DV4 - SN7694	DAE4 Sn1696	3.710	80.900	74.2	-8.28	1.050	22.900	21	-8.30	SAR-18
May. 20, 2024	5850	100	D5GHzV2-1006-5850	EX3DV4 - SN7793	DAE4 Sn1647	8.670	81.800	86.7	5.99	2.390	23.200	23.9	3.02	SAR-20
May. 07, 2024	6500	100	D6.5GHzV2-1083	EX3DV4 - SN7694	DAE4 Sn1696	26.900	292.000	269	-7.88	5.440	54.000	54.4	0.74	SAR-18

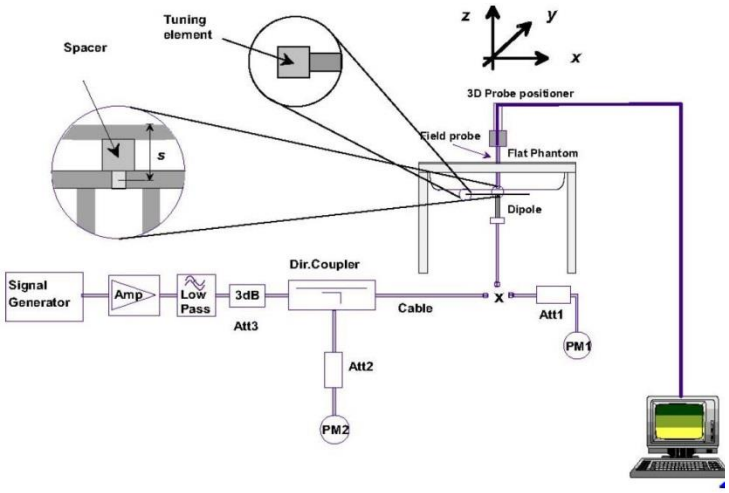


Fig 8.3.1 System Performance Check Setup

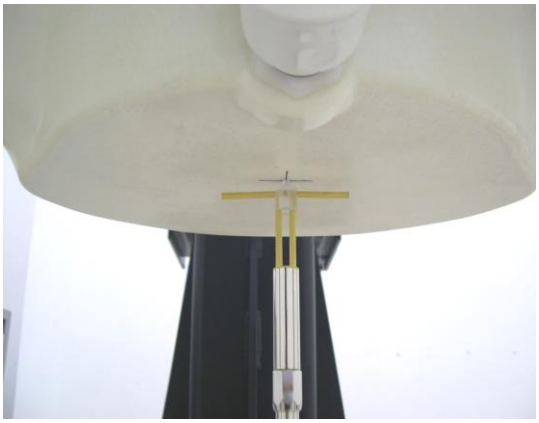


Fig 8.3.2 Setup Photo

10.3 PD System Performance Check Results

The system was verified to be within ±0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check. The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes

Test Site	Frequency (GHz)	5G Verification Source	Probe S/N	DAE S/N	Distance (mm)	Measured 4 cm^2 (W/m^2)	Targeted 4 cm^2 (W/m^2)	Deviation (dB)	Date
SAR13	10G	10GHz_1020	9441	1424	10mm	56.9	55.8	0.08	2024/5/5

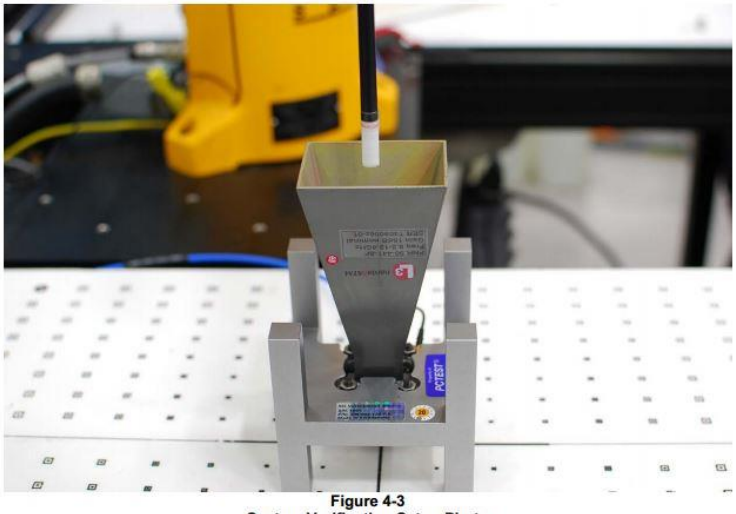


Figure 4-3
System Verification Setup Photo

System Performance Check Setup

11. RF Exposure Positions

11.1 Ear and handset reference point

Figure 9.1.1 shows the front, back, and side views of the SAM phantom. The center-of-mouth reference point is labeled “M,” the left ear reference point (ERP) is marked “LE,” and the right ERP is marked “RE.” Each ERP is 15 mm along the B-M (back-mouth) line behind the entrance-to-ear-canal (EEC) point, as shown in Figure 9.1.2 The Reference Plane is defined as passing through the two ear reference points and point M. The line N-F (neck-front), also called the reference pivoting line, is normal to the Reference Plane and perpendicular to both a line passing through RE and LE and the B-M line (see Figure 9.1.3). Both N-F and B-M lines should be marked on the exterior of the phantom shell to facilitate handset positioning. Posterior to the N-F line the ear shape is a flat surface with 6 mm thickness at each ERP, and forward of the N-F line the ear is truncated, as illustrated in Figure 9.1.2. The ear truncation is introduced to preclude the ear lobe from interfering with handset tilt, which could lead to unstable positioning at the cheek.

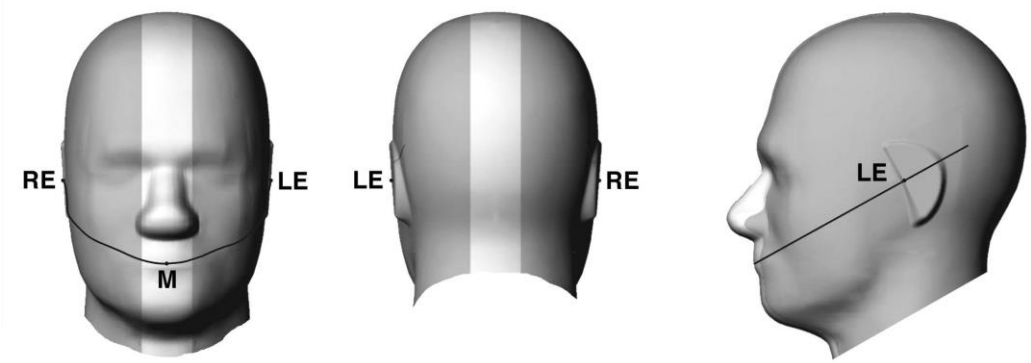


Fig 9.1.1 Front, back, and side views of SAM twin phantom

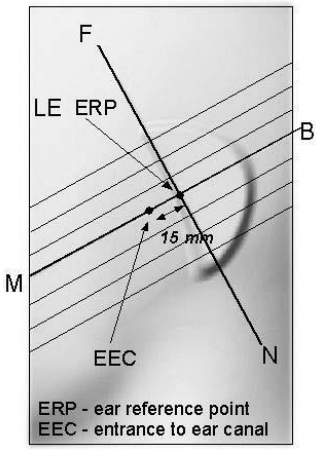


Fig 9.1.2 Close-up side view of phantom showing the ear region.

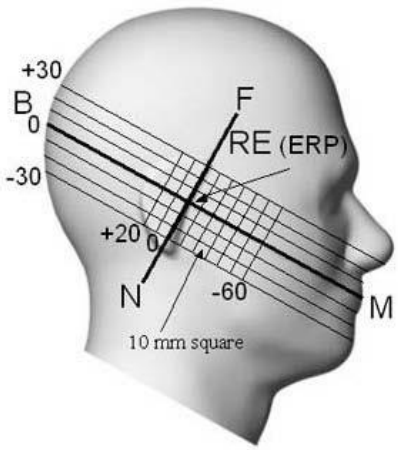


Fig 9.1.3 Side view of the phantom showing relevant markings and seven cross-sectional plane locations

11.2 Definition of the cheek position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. Define two imaginary lines on the handset—the vertical centerline and the horizontal line. The vertical centerline passes through two points on the front side of the handset—the midpoint of the width wt of the handset at the level of the acoustic output (point A in Figure 9.2.1 and Figure 9.2.2), and the midpoint of the width wb of the bottom of the handset (point B). The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output (see Figure 9.2.1). The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset (see Figure 9.2.2), especially for clamshell handsets, handsets with flip covers, and other irregularly-shaped handsets.
3. Position the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 9.2.3), such that the plane defined by the vertical centerline and the horizontal line of the handset is approximately parallel to the sagittal plane of the phantom.
4. Translate the handset towards the phantom along the line passing through RE and LE until handset point A touches the pinna at the ERP.
5. While maintaining the handset in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to the plane containing B-M and N-F lines, i.e., the Reference Plane.
6. Rotate the handset around the vertical centerline until the handset (horizontal line) is parallel to the N-F line.
7. While maintaining the vertical centerline in the Reference Plane, keeping point A on the line passing through RE and LE, and maintaining the handset contact with the pinna, rotate the handset about the N-F line until any point on the handset is in contact with a phantom point below the pinna on the cheek. See Figure 9.2.3. The actual rotation angles should be documented in the test report.

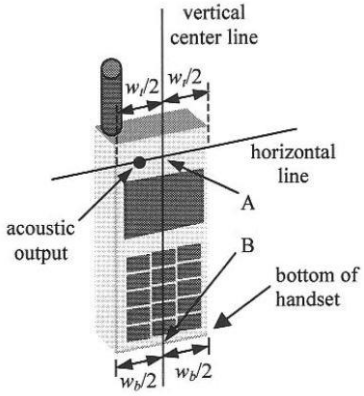


Fig 9.2.1 Handset vertical and horizontal reference lines—"fixed case

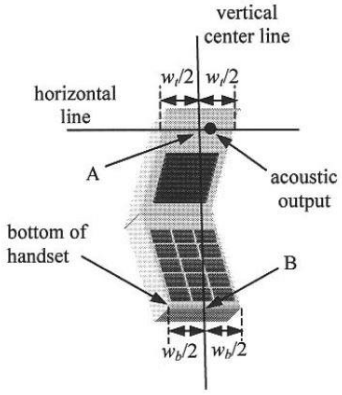


Fig 9.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

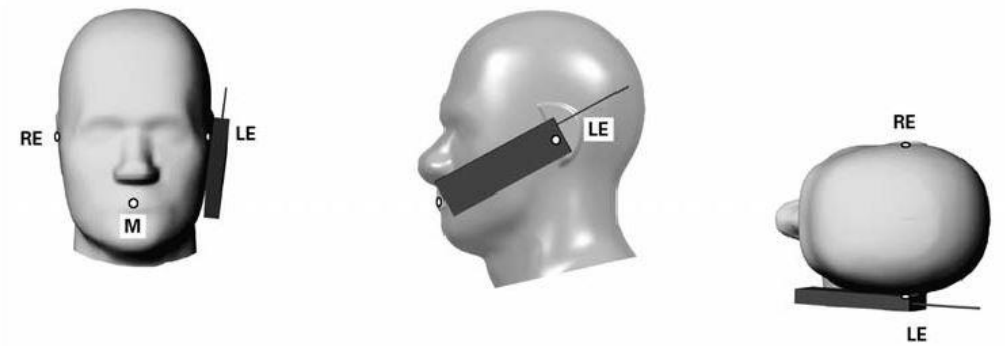


Fig 9.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

11.3 Definition of the tilt position

1. Ready the handset for talk operation, if necessary. For example, for handsets with a cover piece (flip cover), open the cover. If the handset can transmit with the cover closed, both configurations must be tested.
2. While maintaining the orientation of the handset, move the handset away from the pinna along the line passing through RE and LE far enough to allow a rotation of the handset away from the cheek by 15°.
3. Rotate the handset around the horizontal line by 15°.
4. While maintaining the orientation of the handset, move the handset towards the phantom on the line passing through RE and LE until any part of the handset touches the ear. The tilt position is obtained when the contact point is on the pinna. See Figure 9.3.1. If contact occurs at any location other than the pinna, e.g., the antenna at the back of the phantom head, the angle of the handset should be reduced. In this case, the tilt position is obtained if any point on the handset is in contact with the pinna and a second point

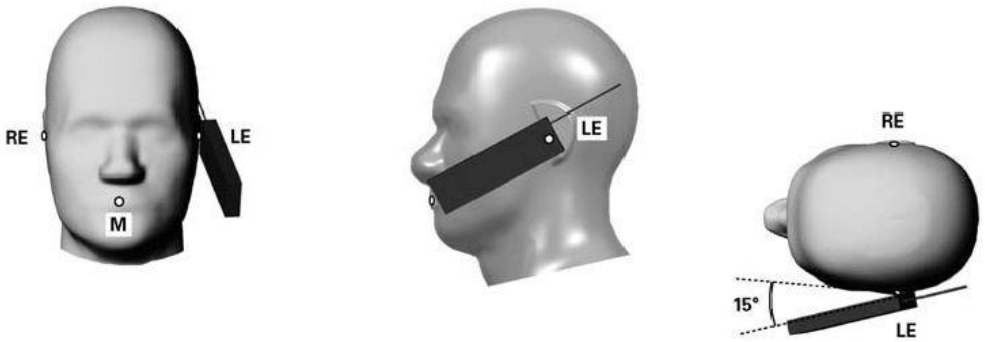


Fig 9.3.1 Tilt position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which define the Reference Plane for handset positioning, are indicated.

11.4 Body Worn Accessory

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 9.4). Per KDB648474 D04v01r03, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01v06 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a handset attached to the handset.

Accessories for body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are test with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-chip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

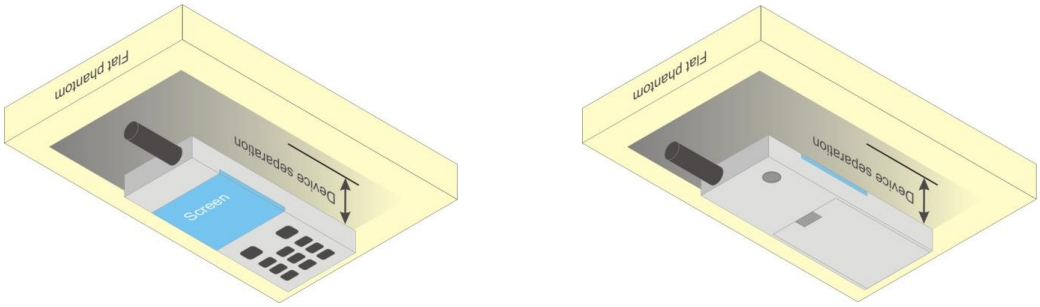


Fig 9.4 Body Worn Position

11.5 Product Specific Exposure

For smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, According to KDB648474 D04v01r03, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance

1. The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.

2. The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions.6 The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

11.6 Wireless Router

Some battery-operated handsets have the capability to transmit and receive user through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06 v02r01 where SAR test considerations for handsets (L x W ≥ 9 cm x 5 cm) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined form general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WIFI transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WIFI transmitter according to FCC KDB Publication 447498 D01v06 publication procedures. The “Portable Hotspot” feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

12. GSM/UMTS/LTE Output Power (Unit: dBm)

<GSM Conducted Power>

General Note:

1. Per KDB 447498 D01v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.
2. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Therefore, the GPRS (4Tx slots) for GSM850/GSM1900 is considered as the primary mode.
3. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode, SAR measurement is not required for the secondary mode

<GSM>

GSM850_Ant 0_DSI 2	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.40	32.78	32.66	34.00	23.40	23.78	23.66	25.00
GPRS 1 Tx slot	32.00	32.78	32.55	34.00	23.00	23.78	23.55	25.00
GPRS 2 Tx slots	31.70	32.56	32.39	33.00	25.70	26.56	26.39	27.00
GPRS 3 Tx slots	31.48	32.45	32.25	33.00	27.22	28.19	27.99	28.74
GPRS 4 Tx slots	32.01	32.20	31.99	32.50	29.01	29.20	28.99	29.50
EDGE 1 Tx slot	25.62	26.40	25.90	27.00	16.62	17.40	16.90	18.00
EDGE 2 Tx slots	25.45	26.12	25.72	26.50	19.45	20.12	19.72	20.50
EDGE 3 Tx slots	25.20	25.88	25.40	26.50	20.94	21.62	21.14	22.24
EDGE 4 Tx slots	25.00	25.65	25.24	26.00	22.00	22.65	22.24	23.00

<GSM>

GSM1900_Ant 1_DSI 0	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	30.05	30.27	30.11	31.00	16.11	16.04	16.32	22.00
GPRS 1 Tx slot	30.07	30.44	30.28	31.00	15.70	15.90	16.30	22.00
GPRS 2 Tx slots	29.88	30.20	30.02	30.50	18.33	18.48	19.08	24.50
GPRS 3 Tx slots	29.58	29.92	29.72	30.00	19.83	20.04	20.62	25.74
GPRS 4 Tx slots	29.28	29.59	29.40	30.00	20.89	20.90	21.50	27.00
EDGE 1 Tx slot	26.24	25.88	25.82	27.00	16.12	16.20	16.33	18.00
EDGE 2 Tx slots	26.03	25.59	25.70	26.50	19.00	19.04	19.22	20.50
EDGE 3 Tx slots	26.09	25.35	25.36	26.50	20.54	20.64	20.72	22.24
EDGE 4 Tx slots	25.77	25.12	25.00	26.00	21.60	21.70	21.78	23.00

<GSM>								
GSM850_Ant 0_DSI 1	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.40	32.78	32.66	34.00	23.40	23.78	23.66	25.00
GPRS 1 Tx slot	32.00	32.78	32.55	34.00	23.00	23.78	23.55	25.00
GPRS 2 Tx slots	29.23	28.54	29.02	30.50	23.23	22.54	23.02	24.50
GPRS 3 Tx slots	28.94	28.23	28.75	29.50	24.68	23.97	24.49	25.24
GPRS 4 Tx slots	28.70	27.95	28.47	29.00	25.70	24.95	25.47	26.00
EDGE 1 Tx slot	25.62	26.40	25.90	27.00	16.62	17.40	16.90	18.00
EDGE 2 Tx slots	25.45	26.12	25.72	26.50	19.45	20.12	19.72	20.50
EDGE 3 Tx slots	25.20	25.88	25.40	26.50	20.94	21.62	21.14	22.24
EDGE 4 Tx slots	25.00	25.65	25.24	26.00	22.00	22.65	22.24	23.00

<GSM>								
GSM850_Ant 0_DSI 0	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.40	32.78	32.66	34.00	23.40	23.78	23.66	25.00
GPRS 1 Tx slot	32.00	32.78	32.55	34.00	23.00	23.78	23.55	25.00
GPRS 2 Tx slots	31.70	32.46	32.39	32.50	25.70	26.46	26.39	26.50
GPRS 3 Tx slots	30.40	30.45	30.25	31.00	26.14	26.19	25.99	26.74
GPRS 4 Tx slots	29.91	29.52	29.60	31.00	26.91	26.52	26.60	28.00
EDGE 1 Tx slot	25.62	26.40	25.90	27.00	16.62	17.40	16.90	18.00
EDGE 2 Tx slots	25.45	26.12	25.72	26.50	19.45	20.12	19.72	20.50
EDGE 3 Tx slots	25.20	25.88	25.40	26.50	20.94	21.62	21.14	22.24
EDGE 4 Tx slots	25.00	25.65	25.24	26.00	22.00	22.65	22.24	23.00

<WCDMA Conducted Power>

1. The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
2. The procedures in KDB 941225 D01v03r01 are applied for 3GPP Rel. 6 HSPA to configure the device in the required sub-test mode(s) to determine SAR test exclusion.
3. For DC-HSDPA, the device was configured according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1, with the primary and the secondary serving HS-DSCH Cell enabled during the power measurement.

A summary of these settings are illustrated below:

HSDPA Setup Configuration:

a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting:
   i. Set Gain Factors (β_c and β_d) and parameters were set according to each
   ii. Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
   iii. Set RMC 12.2Kbps + HSDPA mode.
   iv. Set Cell Power = -86 dBm
   v. Set HS-DSCH Configuration Type to FRC (H-set 1, QPSK)
   vi. Select HSDPA Uplink Parameters
   vii. Set Delta ACK, Delta NACK and Delta CQI = 8
   viii. Set Ack-Nack Repetition Factor to 3
   ix. Set CQI Feedback Cycle (k) to 4 ms
   x. Set CQI Repetition Factor to 2
   xi. Power Ctrl Mode = All Up bits
d. The transmitted maximum output power was recorded.

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH

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 *(Note 4)*	15/15 *(Note 4)*	64	12/15 *(Note 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 Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_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_c, and Δ_{CQI} = 24/15 with β_{hs} = 24/15 * β_c.

Note 3: CM = 1 for β_c/β_d =12/15, β_{hs}/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.

Note 4: For subtest 2 the β_c/β_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 β_c = 11/15 and β_d = 15/15.

Setup Configuration

HSUPA Setup Configuration:

a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting * :
   i. Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
   ii. Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.3, quoted from the TS 34.121
   iii. Set Cell Power = -86 dBm
   iv. Set Channel Type = 12.2k + HSPA
   v. Set UE Target Power
   vi. Power Ctrl Mode= Alternating bits
   vii. Set and observe the E-TFCI
   viii. Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
d. The transmitted maximum output power was recorded.

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (Note 4) (Note 5)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	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	$\beta_{ed}1$: 47/15 $\beta_{ed}2$: 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	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c. For sub-test 5, Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 5/15 with β_{hs} = 5/15 * β_c.

Note 2: CM = 1 for β_c/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.

Note 3: For subtest 1 the β_c/β_d ratio of 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.

Note 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.

Note 5: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

Setup Configuration

DC-HSDPA 3GPP release 8 Setup Configuration:

a. The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration below
b. The RF path losses were compensated into the measurements.
c. A call was established between EUT and Base Station with following setting:
   i. Set RMC 12.2Kbps + HSDPA mode.
   ii. Set Cell Power = -25 dBm
   iii. Set HS-DSCH Configuration Type to FRC (H-set 12, QPSK)
   iv. Select HSDPA Uplink Parameters
   v. Set Gain Factors (β_c and β_d) and parameters were set according to each Specific sub-test in the following table, C10.1.4, quoted from the TS 34.121
      a). Subtest 1: β_c/β_d=2/15
      b). Subtest 2: β_c/β_d=12/15
      c). Subtest 3: β_c/β_d=15/8
      d). Subtest 4: β_c/β_d=15/4
   vi. Set Delta ACK, Delta NACK and Delta CQI = 8
   vii. Set Ack-Nack Repetition Factor to 3
   viii. Set CQI Feedback Cycle (k) to 4 ms
   ix. Set CQI Repetition Factor to 2
   x. Power Ctrl Mode = All Up bits
d. The transmitted maximum output power was recorded.

The following tests were conducted according to the test requirements outlines in 3GPP TS 34.121 specification.
A summary of these settings are illustrated below:

C.8.1.12 Fixed Reference Channel Definition H-Set 12

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

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Proces ses	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.		
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

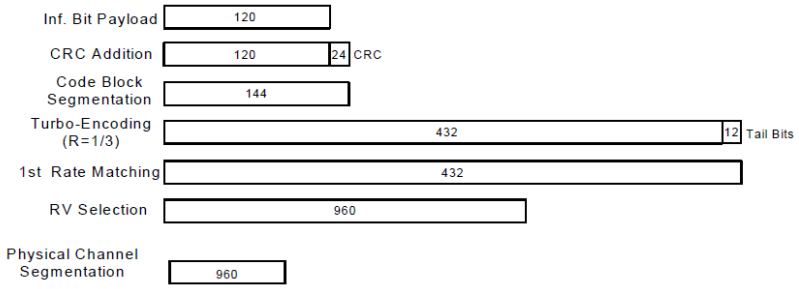


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

Setup Configuration

<WCDMA Conducted Power>

General Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is ≤ ¼ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

<WCDMA>					
Band		WCDMA V_Ant 0_DSI 0			Tune-up Limit (dBm)
TX Channel		4132	4182	4233	
Rx Channel		4357	4407	4458	
Frequency (MHz)		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.28	24.31	24.52	25.00
3GPP Rel 99	RMC 12.2Kbps	24.29	24.40	24.53	25.00
3GPP Rel 6	HSDPA Subtest-1	23.13	23.21	23.29	24.00
3GPP Rel 6	HSDPA Subtest-2	23.10	23.17	23.05	24.00
3GPP Rel 6	HSDPA Subtest-3	22.61	22.69	22.83	23.50
3GPP Rel 6	HSDPA Subtest-4	22.63	22.71	22.67	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.99	23.20	23.14	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.95	23.12	22.89	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.47	22.51	22.74	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.61	22.71	22.50	23.50
3GPP Rel 6	HSUPA Subtest-1	23.06	23.17	23.23	24.00
3GPP Rel 6	HSUPA Subtest-2	20.96	21.15	21.24	22.00
3GPP Rel 6	HSUPA Subtest-3	22.01	22.18	22.25	23.00
3GPP Rel 6	HSUPA Subtest-4	21.05	21.16	21.27	22.00
3GPP Rel 6	HSUPA Subtest-5	23.10	23.20	23.30	24.00

<WCDMA>									
Band		WCDMA II_Ant 1_DSI 0			Tune-up Limit (dBm)	WCDMA IV_Ant 1_DSI 0			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	24.27	24.35	24.31	26.00	24.11	24.15	24.30	25.00
3GPP Rel 99	RMC 12.2Kbps	24.47	24.45	24.40	25.00	24.42	24.37	24.43	25.00
3GPP Rel 6	HSDPA Subtest-1	23.48	23.47	23.47	24.00	23.46	23.42	23.44	24.00
3GPP Rel 6	HSDPA Subtest-2	23.46	23.46	23.48	24.00	23.44	23.39	23.44	24.00
3GPP Rel 6	HSDPA Subtest-3	23.01	22.96	22.98	23.50	22.96	22.89	22.98	23.50
3GPP Rel 6	HSDPA Subtest-4	23.03	22.96	22.95	23.50	22.98	22.90	22.87	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.45	23.40	23.43	24.00	23.37	23.42	23.37	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.36	23.41	23.41	24.00	23.39	23.38	23.39	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.96	22.96	22.97	23.50	22.86	22.79	22.98	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.99	22.96	22.91	23.50	22.94	22.81	22.86	23.50
3GPP Rel 6	HSUPA Subtest-1	23.50	23.47	23.45	24.00	23.42	23.38	23.45	24.00
3GPP Rel 6	HSUPA Subtest-2	21.48	21.43	21.44	22.00	21.53	21.40	21.40	22.00
3GPP Rel 6	HSUPA Subtest-3	22.51	22.46	22.43	23.00	22.47	22.39	22.39	23.00
3GPP Rel 6	HSUPA Subtest-4	21.48	21.47	21.47	22.00	21.47	21.35	21.38	22.00
3GPP Rel 6	HSUPA Subtest-5	23.50	23.50	23.40	24.00	23.50	23.40	23.40	24.00

<WCDMA>					
Band		WCDMA V_Ant 0_DSI 0			Tune-up Limit (dBm)
TX Channel		4132	4182	4233	
Rx Channel		4357	4407	4458	
Frequency (MHz)		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.28	24.31	24.52	25.00
3GPP Rel 99	RMC 12.2Kbps	24.29	24.40	24.53	25.00
3GPP Rel 6	HSDPA Subtest-1	23.13	23.21	23.29	24.00
3GPP Rel 6	HSDPA Subtest-2	23.10	23.17	23.05	24.00
3GPP Rel 6	HSDPA Subtest-3	22.61	22.69	22.83	23.50
3GPP Rel 6	HSDPA Subtest-4	22.63	22.71	22.67	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.99	23.20	23.14	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.95	23.12	22.89	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.47	22.51	22.74	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.61	22.71	22.50	23.50
3GPP Rel 6	HSUPA Subtest-1	23.06	23.17	23.23	24.00
3GPP Rel 6	HSUPA Subtest-2	20.96	21.15	21.24	22.00
3GPP Rel 6	HSUPA Subtest-3	22.01	22.18	22.25	23.00
3GPP Rel 6	HSUPA Subtest-4	21.05	21.16	21.27	22.00
3GPP Rel 6	HSUPA Subtest-5	23.10	23.20	23.30	24.00

<WCDMA>									
Band		WCDMA II_Ant 1_DSI 0			Tune-up Limit (dBm)	WCDMA IV_Ant 1_DSI 0			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	24.27	24.35	24.31	26.00	24.11	24.15	24.30	25.00
3GPP Rel 99	RMC 12.2Kbps	24.47	24.45	24.40	25.00	24.42	24.37	24.43	25.00
3GPP Rel 6	HSDPA Subtest-1	23.48	23.47	23.47	24.00	23.46	23.42	23.44	24.00
3GPP Rel 6	HSDPA Subtest-2	23.46	23.46	23.48	24.00	23.44	23.39	23.44	24.00
3GPP Rel 6	HSDPA Subtest-3	23.01	22.96	22.98	23.50	22.96	22.89	22.98	23.50
3GPP Rel 6	HSDPA Subtest-4	23.03	22.96	22.95	23.50	22.98	22.90	22.87	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.45	23.40	23.43	24.00	23.37	23.42	23.37	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.36	23.41	23.41	24.00	23.39	23.38	23.39	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.96	22.96	22.97	23.50	22.86	22.79	22.98	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.99	22.96	22.91	23.50	22.94	22.81	22.86	23.50
3GPP Rel 6	HSUPA Subtest-1	23.50	23.47	23.45	24.00	23.42	23.38	23.45	24.00
3GPP Rel 6	HSUPA Subtest-2	21.48	21.43	21.44	22.00	21.53	21.40	21.40	22.00
3GPP Rel 6	HSUPA Subtest-3	22.51	22.46	22.43	23.00	22.47	22.39	22.39	23.00
3GPP Rel 6	HSUPA Subtest-4	21.48	21.47	21.47	22.00	21.47	21.35	21.38	22.00
3GPP Rel 6	HSUPA Subtest-5	23.50	23.50	23.40	24.00	23.50	23.40	23.40	24.00

<LTE Conducted Power>

General Note:

1. A Base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r05, start with 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.
4. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r05, 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 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.
6. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
8. For LTE B4/B5/B12/B17/B26/B38 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE band 2/4/5/17/38 SAR test was covered by Band 25/66/26/12/41; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
    a. the maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion
    b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

<LTE Band 2_Ant 1_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	23.01	23.14	23.10	24.5
20	QPSK	1	49	23.10	23.06	23.09	
20	QPSK	1	99	23.02	22.96	23.02	
20	QPSK	50	0	22.23	22.23	21.97	23.5
20	QPSK	50	24	22.30	22.21	22.23	
20	QPSK	50	50	22.29	22.24	22.25	
20	QPSK	100	0	22.31	22.20	22.21	
20	16QAM	1	0	22.51	22.59	22.48	23.5
20	16QAM	1	49	22.52	22.57	22.62	
20	16QAM	1	99	22.36	22.49	22.46	
20	16QAM	50	0	21.24	21.25	21.24	22.5
20	16QAM	50	24	21.34	21.24	21.25	
20	16QAM	50	50	21.28	21.27	21.30	
20	16QAM	100	0	21.31	21.13	21.22	
20	64QAM	1	0	21.43	21.49	21.44	22.5
20	64QAM	1	49	21.32	21.42	20.88	
20	64QAM	1	99	21.27	21.33	21.34	
20	64QAM	50	0	20.24	20.26	20.26	21.5
20	64QAM	50	24	20.33	20.24	20.26	
20	64QAM	50	50	20.29	20.26	20.31	
20	64QAM	100	0	20.31	20.24	20.24	
20	256QAM	1	0	17.91	18.05	17.84	19.5
20	256QAM	1	49	18.17	18.27	18.14	
20	256QAM	1	99	18.19	18.24	17.96	
20	256QAM	50	0	17.91	18.14	18.12	19.5
20	256QAM	50	24	17.95	18.19	18.00	
20	256QAM	50	50	18.07	18.20	17.95	
20	256QAM	100	0	17.93	18.14	18.01	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	22.86	23.04	22.97	24.5
15	QPSK	1	37	22.92	22.95	22.95	
15	QPSK	1	74	22.92	22.82	22.86	
15	QPSK	36	0	22.10	22.12	21.81	23.5
15	QPSK	36	20	22.18	22.06	22.09	
15	QPSK	36	39	22.15	22.14	22.12	
15	QPSK	75	0	22.14	22.03	22.10	
15	16QAM	1	0	22.39	22.42	22.34	23.5
15	16QAM	1	37	22.34	22.40	22.47	
15	16QAM	1	74	22.17	22.31	22.35	
15	16QAM	36	0	21.07	21.14	21.13	22.5
15	16QAM	36	20	21.22	21.08	21.06	
15	16QAM	36	39	21.08	21.16	21.12	
15	16QAM	75	0	21.18	21.03	21.04	
15	64QAM	1	0	21.33	21.36	21.33	22.5
15	64QAM	1	37	21.13	21.22	20.71	
15	64QAM	1	74	21.17	21.14	21.21	
15	64QAM	36	0	20.14	20.09	20.08	21.5
15	64QAM	36	20	20.14	20.08	20.15	
15	64QAM	36	39	20.17	20.16	20.18	
15	64QAM	75	0	20.19	20.04	20.14	
15	256QAM	1	0	17.75	17.90	17.70	19.5
15	256QAM	1	37	18.03	18.08	17.94	
15	256QAM	1	74	18.09	18.09	17.79	
15	256QAM	36	0	17.76	17.96	18.00	19.5
15	256QAM	36	20	17.76	18.07	17.89	

15	256QAM	36	39	17.88	18.01	17.79	
15	256QAM	75	0	17.82	17.97	17.86	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.87	22.95	22.92	24.5
10	QPSK	1	25	22.95	22.92	22.98	
10	QPSK	1	49	22.87	22.82	22.89	
10	QPSK	25	0	22.06	22.13	21.79	23.5
10	QPSK	25	12	22.11	22.06	22.09	
10	QPSK	25	25	22.13	22.14	22.05	
10	QPSK	50	0	22.19	22.07	22.02	
10	16QAM	1	0	22.32	22.45	22.33	23.5
10	16QAM	1	25	22.39	22.42	22.46	
10	16QAM	1	49	22.24	22.34	22.30	
10	16QAM	25	0	21.12	21.12	21.05	22.5
10	16QAM	25	12	21.24	21.11	21.09	
10	16QAM	25	25	21.11	21.14	21.13	
10	16QAM	50	0	21.14	20.99	21.09	
10	64QAM	1	0	21.27	21.29	21.28	22.5
10	64QAM	1	25	21.14	21.27	20.68	
10	64QAM	1	49	21.09	21.17	21.16	
10	64QAM	25	0	20.13	20.06	20.11	21.5
10	64QAM	25	12	20.14	20.13	20.10	
10	64QAM	25	25	20.10	20.09	20.13	
10	64QAM	50	0	20.18	20.05	20.08	
10	256QAM	1	0	17.78	17.89	17.64	19.5
10	256QAM	1	25	18.06	18.13	18.03	
10	256QAM	1	49	18.01	18.10	17.80	
10	256QAM	25	0	17.81	18.01	17.93	19.5
10	256QAM	25	12	17.85	18.02	17.83	
10	256QAM	25	25	17.87	18.07	17.80	
10	256QAM	50	0	17.78	17.98	17.81	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	22.83	22.98	22.99	24.5
5	QPSK	1	12	22.92	22.93	22.96	
5	QPSK	1	24	22.87	22.83	22.89	
5	QPSK	12	0	22.13	22.08	21.86	23.5
5	QPSK	12	7	22.16	22.04	22.03	
5	QPSK	12	13	22.15	22.08	22.09	
5	QPSK	25	0	22.14	22.07	22.02	
5	16QAM	1	0	22.35	22.42	22.36	23.5
5	16QAM	1	12	22.34	22.44	22.49	
5	16QAM	1	24	22.19	22.33	22.36	
5	16QAM	12	0	21.10	21.07	21.06	22.5
5	16QAM	12	7	21.23	21.08	21.10	
5	16QAM	12	13	21.16	21.16	21.13	
5	16QAM	25	0	21.17	21.03	21.04	
5	64QAM	1	0	21.27	21.35	21.30	22.5
5	64QAM	1	12	21.14	21.25	20.76	
5	64QAM	1	24	21.07	21.15	21.21	
5	64QAM	12	0	20.08	20.15	20.06	21.5
5	64QAM	12	7	20.13	20.06	20.15	
5	64QAM	12	13	20.18	20.08	20.19	
5	64QAM	25	0	20.11	20.11	20.06	
5	256QAM	1	0	17.73	17.92	17.72	19.5
5	256QAM	1	12	18.02	18.13	17.94	
5	256QAM	1	24	18.03	18.14	17.84	
5	256QAM	12	0	17.74	18.00	18.00	19.5
5	256QAM	12	7	17.78	18.05	17.84	
5	256QAM	12	13	17.89	18.01	17.75	
5	256QAM	25	0	17.80	17.97	17.86	
Channel				18615	18900	19185	

Frequency (MHz)				1851.5	1880	1908.5	Tune-up limit (dBm)
3	QPSK	1	0	22.89	22.97	22.99	24.5
3	QPSK	1	8	22.92	22.90	22.97	
3	QPSK	1	14	22.91	22.82	22.90	
3	QPSK	8	0	22.05	22.10	21.77	23.5
3	QPSK	8	4	22.19	22.06	22.11	
3	QPSK	8	7	22.13	22.07	22.12	
3	QPSK	15	0	22.15	22.02	22.08	
3	16QAM	1	0	22.36	22.46	22.30	23.5
3	16QAM	1	8	22.37	22.45	22.51	
3	16QAM	1	14	22.16	22.33	22.34	
3	16QAM	8	0	21.05	21.10	21.14	22.5
3	16QAM	8	4	21.15	21.07	21.09	
3	16QAM	8	7	21.11	21.09	21.20	
3	16QAM	15	0	21.19	20.99	21.08	
3	64QAM	1	0	21.26	21.31	21.24	22.5
3	64QAM	1	8	21.19	21.31	20.73	
3	64QAM	1	14	21.08	21.19	21.17	
3	64QAM	8	0	20.12	20.08	20.06	21.5
3	64QAM	8	4	20.13	20.13	20.07	
3	64QAM	8	7	20.19	20.06	20.12	
3	64QAM	15	0	20.21	20.14	20.13	
3	256QAM	1	0	17.80	17.88	17.69	19.5
3	256QAM	1	8	17.98	18.07	17.95	
3	256QAM	1	14	18.09	18.11	17.84	
3	256QAM	8	0	17.71	17.99	18.01	19.5
3	256QAM	8	4	17.75	18.01	17.81	
3	256QAM	8	7	17.87	18.06	17.81	
3	256QAM	15	0	17.74	17.94	17.86	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.81	22.99	22.95	24.5
1.4	QPSK	1	3	22.97	22.94	22.98	
1.4	QPSK	1	5	22.82	22.86	22.83	
1.4	QPSK	3	0	22.73	22.79	22.57	
1.4	QPSK	3	1	22.87	22.80	22.74	
1.4	QPSK	3	3	22.84	22.80	22.82	
1.4	QPSK	6	0	22.15	22.08	22.05	23.5
1.4	16QAM	1	0	22.33	22.39	22.36	23.5
1.4	16QAM	1	3	22.41	22.47	22.45	
1.4	16QAM	1	5	22.26	22.37	22.34	
1.4	16QAM	3	0	22.34	22.35	22.25	
1.4	16QAM	3	1	22.39	22.30	22.32	
1.4	16QAM	3	3	22.31	22.31	22.34	
1.4	16QAM	6	0	21.12	20.93	21.09	22.5
1.4	64QAM	1	0	21.25	21.30	21.27	22.5
1.4	64QAM	1	3	21.15	21.28	20.74	
1.4	64QAM	1	5	21.08	21.16	21.18	
1.4	64QAM	3	0	21.25	21.28	21.29	
1.4	64QAM	3	1	21.45	21.30	21.29	
1.4	64QAM	3	3	21.38	21.31	21.31	
1.4	64QAM	6	0	20.18	20.10	20.08	21.5
1.4	256QAM	1	0	17.72	17.86	17.74	19.5
1.4	256QAM	1	3	18.05	18.07	17.95	
1.4	256QAM	1	5	18.09	18.05	17.85	
1.4	256QAM	3	0	17.72	17.95	18.02	
1.4	256QAM	3	1	17.82	18.08	17.88	
1.4	256QAM	3	3	17.97	18.07	17.75	
1.4	256QAM	6	0	17.80	17.95	17.87	19.5

<LTE Band 4_Ant 1_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	23.17	23.20	23.10	24.5
20	QPSK	1	49	23.12	23.11	23.08	
20	QPSK	1	99	23.11	23.03	23.06	
20	QPSK	50	0	22.35	22.34	22.32	23.5
20	QPSK	50	24	22.33	22.30	22.28	
20	QPSK	50	50	21.72	22.32	22.24	
20	QPSK	100	0	22.31	22.25	22.63	
20	16QAM	1	0	22.60	22.56	22.58	23.5
20	16QAM	1	49	22.49	22.53	21.99	
20	16QAM	1	99	22.57	22.39	22.40	
20	16QAM	50	0	21.35	21.32	21.37	22.5
20	16QAM	50	24	21.34	21.31	21.29	
20	16QAM	50	50	21.34	21.31	21.26	
20	16QAM	100	0	21.35	21.46	21.54	
20	64QAM	1	0	21.50	21.45	21.46	22.5
20	64QAM	1	49	21.40	21.43	21.34	
20	64QAM	1	99	21.44	22.22	22.23	
20	64QAM	50	0	19.79	20.35	20.34	21.5
20	64QAM	50	24	20.36	19.74	20.29	
20	64QAM	50	50	20.31	20.32	20.26	
20	64QAM	100	0	20.34	20.90	21.11	
20	256QAM	1	0	18.08	18.22	18.02	19.5
20	256QAM	1	49	18.16	18.30	18.23	
20	256QAM	1	99	18.28	18.50	18.24	
20	256QAM	50	0	18.08	18.11	17.93	19.5
20	256QAM	50	24	18.05	18.30	18.13	
20	256QAM	50	50	18.25	18.41	18.28	
20	256QAM	100	0	18.31	18.31	18.04	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	23.01	23.03	22.91	24.5
15	QPSK	1	37	22.96	22.93	22.93	
15	QPSK	1	74	22.93	22.83	22.94	
15	QPSK	36	0	22.22	22.14	22.15	23.5
15	QPSK	36	20	22.13	22.17	22.14	
15	QPSK	36	39	21.54	22.19	22.08	
15	QPSK	75	0	22.15	22.11	22.50	
15	16QAM	1	0	22.40	22.40	22.40	23.5
15	16QAM	1	37	22.35	22.39	21.88	
15	16QAM	1	74	22.44	22.22	22.22	
15	16QAM	36	0	21.16	21.17	21.26	22.5
15	16QAM	36	20	21.18	21.19	21.10	
15	16QAM	36	39	21.15	21.13	21.06	
15	16QAM	75	0	21.24	21.28	21.35	
15	64QAM	1	0	21.31	21.26	21.30	22.5
15	64QAM	1	37	21.22	21.31	21.22	
15	64QAM	1	74	21.24	22.07	22.12	
15	64QAM	36	0	19.64	20.23	20.17	21.5
15	64QAM	36	20	20.18	19.55	20.17	
15	64QAM	36	39	20.14	20.13	20.13	
15	64QAM	75	0	20.17	20.77	20.94	
15	256QAM	1	0	17.94	18.10	17.89	19.5
15	256QAM	1	37	17.98	18.14	18.06	
15	256QAM	1	74	18.11	18.33	18.12	
15	256QAM	36	0	17.96	17.98	17.77	19.5
15	256QAM	36	20	17.93	18.18	17.93	

15	256QAM	36	39	18.15	18.22	18.09	
15	256QAM	75	0	18.21	18.16	17.90	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	23.07	23.02	22.96	24.5
10	QPSK	1	25	22.92	22.91	22.95	
10	QPSK	1	49	22.96	22.88	22.90	
10	QPSK	25	0	22.15	22.22	22.13	23.5
10	QPSK	25	12	22.15	22.17	22.16	
10	QPSK	25	25	21.56	22.19	22.05	
10	QPSK	50	0	22.15	22.12	22.46	
10	16QAM	1	0	22.47	22.46	22.39	23.5
10	16QAM	1	25	22.31	22.42	21.80	
10	16QAM	1	49	22.37	22.21	22.26	
10	16QAM	25	0	21.15	21.19	21.25	22.5
10	16QAM	25	12	21.18	21.18	21.17	
10	16QAM	25	25	21.22	21.16	21.15	
10	16QAM	50	0	21.23	21.29	21.36	
10	64QAM	1	0	21.35	21.28	21.30	22.5
10	64QAM	1	25	21.28	21.27	21.15	
10	64QAM	1	49	21.24	22.04	22.07	
10	64QAM	25	0	19.66	20.21	20.24	21.5
10	64QAM	25	12	20.21	19.62	20.19	
10	64QAM	25	25	20.12	20.16	20.16	
10	64QAM	50	0	20.14	20.74	20.99	
10	256QAM	1	0	17.94	18.08	17.88	19.5
10	256QAM	1	25	18.05	18.14	18.12	
10	256QAM	1	49	18.10	18.32	18.07	
10	256QAM	25	0	17.97	17.94	17.82	19.5
10	256QAM	25	12	17.94	18.12	17.94	
10	256QAM	25	25	18.11	18.29	18.09	
10	256QAM	50	0	18.11	18.18	17.89	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.00	23.08	22.93	24.5
5	QPSK	1	12	22.93	22.92	22.95	
5	QPSK	1	24	23.01	22.93	22.90	
5	QPSK	12	0	22.23	22.17	22.21	23.5
5	QPSK	12	7	22.15	22.12	22.15	
5	QPSK	12	13	21.53	22.13	22.07	
5	QPSK	25	0	22.18	22.15	22.45	
5	16QAM	1	0	22.46	22.41	22.43	23.5
5	16QAM	1	12	22.37	22.40	21.89	
5	16QAM	1	24	22.43	22.25	22.28	
5	16QAM	12	0	21.18	21.14	21.23	22.5
5	16QAM	12	7	21.23	21.20	21.15	
5	16QAM	12	13	21.21	21.12	21.11	
5	16QAM	25	0	21.17	21.35	21.41	
5	64QAM	1	0	21.40	21.25	21.30	22.5
5	64QAM	1	12	21.22	21.26	21.22	
5	64QAM	1	24	21.30	22.08	22.12	
5	64QAM	12	0	19.64	20.18	20.18	21.5
5	64QAM	12	7	20.18	19.54	20.15	
5	64QAM	12	13	20.14	20.16	20.07	
5	64QAM	25	0	20.19	20.77	20.95	
5	256QAM	1	0	17.91	18.02	17.88	19.5
5	256QAM	1	12	17.98	18.11	18.07	
5	256QAM	1	24	18.10	18.33	18.11	
5	256QAM	12	0	17.91	17.98	17.81	19.5
5	256QAM	12	7	17.93	18.15	17.94	
5	256QAM	12	13	18.10	18.25	18.08	
5	256QAM	25	0	18.20	18.20	17.86	
Channel				19965	20175	20385	

Frequency (MHz)				1711.5	1732.5	1753.5	Tune-up limit (dBm)
3	QPSK	1	0	23.02	23.05	23.00	24.5
3	QPSK	1	8	23.01	22.95	22.91	
3	QPSK	1	14	22.98	22.90	22.93	
3	QPSK	8	0	22.17	22.15	22.19	23.5
3	QPSK	8	4	22.22	22.13	22.12	
3	QPSK	8	7	21.54	22.22	22.14	
3	QPSK	15	0	22.17	22.13	22.47	
3	16QAM	1	0	22.45	22.37	22.44	23.5
3	16QAM	1	8	22.38	22.41	21.85	
3	16QAM	1	14	22.37	22.27	22.20	
3	16QAM	8	0	21.19	21.16	21.19	22.5
3	16QAM	8	4	21.17	21.21	21.16	
3	16QAM	8	7	21.23	21.14	21.07	
3	16QAM	15	0	21.23	21.30	21.43	
3	64QAM	1	0	21.37	21.33	21.27	22.5
3	64QAM	1	8	21.24	21.25	21.23	
3	64QAM	1	14	21.33	22.07	22.12	
3	64QAM	8	0	19.61	20.25	20.20	21.5
3	64QAM	8	4	20.22	19.54	20.15	
3	64QAM	8	7	20.11	20.22	20.09	
3	64QAM	15	0	20.24	20.71	21.00	
3	256QAM	1	0	17.98	18.06	17.84	19.5
3	256QAM	1	8	18.01	18.11	18.05	
3	256QAM	1	14	18.10	18.38	18.07	
3	256QAM	8	0	17.98	17.95	17.76	19.5
3	256QAM	8	4	17.90	18.11	18.02	
3	256QAM	8	7	18.11	18.30	18.09	
3	256QAM	15	0	18.19	18.12	17.85	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.06	23.07	22.94	24.5
1.4	QPSK	1	3	22.92	22.96	22.97	
1.4	QPSK	1	5	22.94	22.86	22.93	
1.4	QPSK	3	0	22.78	22.74	22.72	
1.4	QPSK	3	1	22.83	22.79	22.68	
1.4	QPSK	3	3	22.74	22.56	22.55	
1.4	QPSK	6	0	22.11	22.13	22.50	23.5
1.4	16QAM	1	0	22.45	22.45	22.47	23.5
1.4	16QAM	1	3	22.29	22.41	21.89	
1.4	16QAM	1	5	22.42	22.28	22.21	
1.4	16QAM	3	0	22.35	22.42	22.44	
1.4	16QAM	3	1	22.36	22.31	22.31	
1.4	16QAM	3	3	22.34	22.37	22.29	
1.4	16QAM	6	0	21.15	21.28	21.34	22.5
1.4	64QAM	1	0	21.38	21.29	21.33	22.5
1.4	64QAM	1	3	21.25	21.30	21.21	
1.4	64QAM	1	5	21.26	22.10	22.11	
1.4	64QAM	3	0	20.86	21.45	21.39	
1.4	64QAM	3	1	21.37	20.80	21.38	
1.4	64QAM	3	3	21.39	21.42	21.30	
1.4	64QAM	6	0	20.22	20.80	21.00	21.5
1.4	256QAM	1	0	17.96	18.04	17.87	19.5
1.4	256QAM	1	3	17.96	18.16	18.10	
1.4	256QAM	1	5	18.08	18.33	18.12	
1.4	256QAM	3	0	17.95	17.99	17.73	
1.4	256QAM	3	1	17.93	18.10	17.99	
1.4	256QAM	3	3	18.14	18.28	18.13	
1.4	256QAM	6	0	18.13	18.19	17.85	19.5

<LTE Band 5_Ant 0_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	22.92	23.12	23.07	24.5
10	QPSK	1	25	22.95	23.09	23.11	
10	QPSK	1	49	22.96	23.05	23.05	
10	QPSK	25	0	22.26	22.36	22.40	23.5
10	QPSK	25	12	22.36	22.51	22.50	
10	QPSK	25	25	22.31	22.43	22.47	
10	QPSK	50	0	22.33	22.35	22.42	
10	16QAM	1	0	22.50	22.52	22.68	23.5
10	16QAM	1	25	22.50	22.72	22.72	
10	16QAM	1	49	22.53	22.67	22.62	
10	16QAM	25	0	21.26	21.36	21.44	22.5
10	16QAM	25	12	21.34	21.40	21.51	
10	16QAM	25	25	21.34	21.40	21.49	
10	16QAM	50	0	21.32	21.35	21.43	
10	64QAM	1	0	21.47	21.54	21.62	22.5
10	64QAM	1	25	21.52	21.66	21.70	
10	64QAM	1	49	21.51	21.64	21.56	
10	64QAM	25	0	20.26	20.40	20.43	21.5
10	64QAM	25	12	20.36	20.40	20.50	
10	64QAM	25	25	20.35	20.42	20.46	
10	64QAM	50	0	20.32	20.37	20.41	
10	256QAM	1	0	17.85	17.83	17.95	19.5
10	256QAM	1	25	17.90	18.12	18.03	
10	256QAM	1	49	17.76	17.91	17.94	
10	256QAM	25	0	18.08	18.14	18.05	19.5
10	256QAM	25	12	17.87	18.01	17.93	
10	256QAM	25	25	18.01	17.85	17.88	
10	256QAM	50	0	18.06	18.05	18.00	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	22.85	23.08	23.00	24.5
5	QPSK	1	12	22.84	23.08	22.96	
5	QPSK	1	24	22.88	22.90	22.95	
5	QPSK	12	0	22.24	22.33	22.35	23.5
5	QPSK	12	7	22.29	22.27	22.34	
5	QPSK	12	13	22.13	22.41	22.31	
5	QPSK	25	0	22.27	22.27	22.32	
5	16QAM	1	0	22.36	22.42	22.67	23.5
5	16QAM	1	12	22.32	22.65	22.64	
5	16QAM	1	24	22.37	22.56	22.48	
5	16QAM	12	0	21.12	21.23	21.38	22.5
5	16QAM	12	7	21.17	21.34	21.43	
5	16QAM	12	13	21.25	21.37	21.47	
5	16QAM	25	0	21.24	21.17	21.27	
5	64QAM	1	0	21.46	21.37	21.58	22.5
5	64QAM	1	12	21.41	21.53	21.60	
5	64QAM	1	24	21.37	21.45	21.40	
5	64QAM	12	0	20.14	20.35	20.31	21.5
5	64QAM	12	7	20.29	20.39	20.32	
5	64QAM	12	13	20.18	20.24	20.27	
5	64QAM	25	0	20.27	20.35	20.33	
5	256QAM	1	0	17.72	17.71	17.92	19.5
5	256QAM	1	12	17.85	18.05	17.84	
5	256QAM	1	24	17.59	17.76	17.92	
5	256QAM	12	0	17.94	18.02	18.03	19.5

5	256QAM	12	7	17.69	17.86	17.81	
5	256QAM	12	13	17.95	17.74	17.76	
5	256QAM	25	0	17.89	18.03	17.90	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	22.76	23.04	22.93	24.5
3	QPSK	1	8	22.91	23.01	22.95	
3	QPSK	1	14	22.82	22.86	22.95	
3	QPSK	8	0	22.10	22.20	22.29	23.5
3	QPSK	8	4	22.32	22.32	22.46	
3	QPSK	8	7	22.19	22.27	22.38	
3	QPSK	15	0	22.18	22.23	22.38	
3	16QAM	1	0	22.45	22.48	22.59	23.5
3	16QAM	1	8	22.43	22.65	22.58	
3	16QAM	1	14	22.44	22.62	22.55	
3	16QAM	8	0	21.13	21.24	21.36	22.5
3	16QAM	8	4	21.31	21.25	21.32	
3	16QAM	8	7	21.25	21.36	21.34	
3	16QAM	15	0	21.27	21.33	21.36	
3	64QAM	1	0	21.31	21.47	21.51	22.5
3	64QAM	1	8	21.46	21.48	21.59	
3	64QAM	1	14	21.49	21.52	21.42	
3	64QAM	8	0	20.25	20.24	20.33	21.5
3	64QAM	8	4	20.34	20.25	20.36	
3	64QAM	8	7	20.22	20.41	20.40	
3	64QAM	15	0	20.25	20.20	20.33	
3	256QAM	1	0	17.69	17.68	17.82	19.5
3	256QAM	1	8	17.83	18.11	17.84	
3	256QAM	1	14	17.67	17.78	17.90	
3	256QAM	8	0	18.06	18.05	17.89	19.5
3	256QAM	8	4	17.81	17.98	17.85	
3	256QAM	8	7	17.84	17.80	17.83	
3	256QAM	15	0	17.97	17.96	17.96	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	22.73	23.10	23.05	24.5
1.4	QPSK	1	3	22.87	22.95	22.99	
1.4	QPSK	1	5	22.88	22.91	22.91	
1.4	QPSK	3	0	22.81	22.84	22.86	
1.4	QPSK	3	1	22.80	22.82	23.04	
1.4	QPSK	3	3	22.86	22.93	22.92	
1.4	QPSK	6	0	22.16	22.31	22.40	23.5
1.4	16QAM	1	0	22.40	22.35	22.57	23.5
1.4	16QAM	1	3	22.41	22.62	22.62	
1.4	16QAM	1	5	22.49	22.48	22.59	
1.4	16QAM	3	0	22.27	22.51	22.54	
1.4	16QAM	3	1	22.46	22.45	22.68	
1.4	16QAM	3	3	22.53	22.57	22.68	
1.4	16QAM	6	0	21.16	21.29	21.39	22.5
1.4	64QAM	1	0	21.45	21.39	21.45	22.5
1.4	64QAM	1	3	21.44	21.48	21.52	
1.4	64QAM	1	5	21.39	21.57	21.46	
1.4	64QAM	3	0	21.39	21.45	21.51	
1.4	64QAM	3	1	21.43	21.59	21.54	
1.4	64QAM	3	3	21.50	21.53	21.58	
1.4	64QAM	6	0	20.16	20.32	20.31	21.5
1.4	256QAM	1	0	18.40	18.26	18.48	19.5
1.4	256QAM	1	3	18.39	18.71	18.44	
1.4	256QAM	1	5	18.35	18.49	18.40	
1.4	256QAM	3	0	18.60	18.68	18.57	
1.4	256QAM	3	1	18.30	18.60	18.41	
1.4	256QAM	3	3	18.44	18.41	18.44	
1.4	256QAM	6	0	18.01	17.93	17.82	19.5

<LTE Band 7_Ant 1_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	22.71	22.96	22.83	24.5
20	QPSK	1	49	22.80	22.93	22.89	
20	QPSK	1	99	22.81	22.79	22.94	
20	QPSK	50	0	21.92	22.00	22.02	23.5
20	QPSK	50	24	22.06	22.15	22.06	
20	QPSK	50	50	21.57	22.14	22.07	
20	QPSK	100	0	22.04	22.05	22.04	
20	16QAM	1	0	22.11	22.28	22.26	23.5
20	16QAM	1	49	22.22	22.37	22.27	
20	16QAM	1	99	22.24	22.37	22.32	
20	16QAM	50	0	20.91	21.02	21.04	22.5
20	16QAM	50	24	21.06	21.14	21.06	
20	16QAM	50	50	21.04	21.15	21.08	
20	16QAM	100	0	21.01	21.06	21.07	
20	64QAM	1	0	20.94	21.13	22.41	22.5
20	64QAM	1	49	21.13	21.21	22.43	
20	64QAM	1	99	21.12	21.25	21.21	
20	64QAM	50	0	19.93	20.04	20.09	21.5
20	64QAM	50	24	20.07	19.59	21.40	
20	64QAM	50	50	20.05	20.15	20.12	
20	64QAM	100	0	20.05	20.07	20.09	
20	256QAM	1	0	18.28	18.40	18.34	19.5
20	256QAM	1	49	17.82	17.95	17.94	
20	256QAM	1	99	18.00	18.09	18.01	
20	256QAM	50	0	17.85	18.03	17.92	19.5
20	256QAM	50	24	18.01	18.08	17.83	
20	256QAM	50	50	18.01	18.12	18.03	
20	256QAM	100	0	17.86	18.15	18.09	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.59	22.80	22.69	24.5
15	QPSK	1	37	22.70	22.79	22.73	
15	QPSK	1	74	22.65	22.63	22.76	
15	QPSK	36	0	21.78	21.82	21.87	23.5
15	QPSK	36	20	21.96	22.01	21.95	
15	QPSK	36	39	21.56	21.95	21.91	
15	QPSK	75	0	21.93	21.88	21.94	
15	16QAM	1	0	21.94	22.14	22.16	23.5
15	16QAM	1	37	22.03	22.17	22.11	
15	16QAM	1	74	22.04	22.25	22.19	
15	16QAM	36	0	20.71	20.84	20.94	22.5
15	16QAM	36	20	20.95	20.98	20.95	
15	16QAM	36	39	20.90	20.98	20.98	
15	16QAM	75	0	20.86	20.86	20.89	
15	64QAM	1	0	20.74	20.98	22.23	22.5
15	64QAM	1	37	21.01	21.04	22.26	
15	64QAM	1	74	21.02	21.10	21.09	
15	64QAM	36	0	19.73	19.92	19.91	21.5
15	64QAM	36	20	19.87	19.56	21.21	
15	64QAM	36	39	19.94	20.04	19.98	
15	64QAM	75	0	19.89	19.92	19.91	
15	256QAM	1	0	18.15	18.28	18.22	19.5
15	256QAM	1	37	17.65	17.84	17.78	
15	256QAM	1	74	17.88	17.96	17.87	
15	256QAM	36	0	17.73	17.88	17.81	19.5

15	256QAM	36	20	17.91	17.94	17.68	
15	256QAM	36	39	17.83	17.92	17.88	
15	256QAM	75	0	17.75	18.00	17.89	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	22.55	22.83	22.65	24.5
10	QPSK	1	25	22.67	22.82	22.79	
10	QPSK	1	49	22.64	22.62	22.76	
10	QPSK	25	0	21.75	21.89	21.88	23.5
10	QPSK	25	12	21.89	22.03	21.86	
10	QPSK	25	25	21.56	22.00	21.93	
10	QPSK	50	0	21.87	21.93	21.85	
10	16QAM	1	0	21.96	22.15	22.10	23.5
10	16QAM	1	25	22.11	22.23	22.09	
10	16QAM	1	49	22.14	22.22	22.19	
10	16QAM	25	0	20.81	20.83	20.87	22.5
10	16QAM	25	12	20.93	20.97	20.91	
10	16QAM	25	25	20.84	21.00	20.97	
10	16QAM	50	0	20.84	20.96	20.95	
10	64QAM	1	0	20.81	20.93	22.22	22.5
10	64QAM	1	25	20.95	21.09	22.29	
10	64QAM	1	49	20.95	21.11	21.04	
10	64QAM	25	0	19.82	19.84	19.92	21.5
10	64QAM	25	12	19.91	19.51	21.30	
10	64QAM	25	25	19.91	20.00	19.97	
10	64QAM	50	0	19.95	19.91	19.95	
10	256QAM	1	0	18.09	18.21	18.14	19.5
10	256QAM	1	25	17.71	17.85	17.83	
10	256QAM	1	49	17.86	17.97	17.89	
10	256QAM	25	0	17.66	17.93	17.73	19.5
10	256QAM	25	12	17.89	17.95	17.71	
10	256QAM	25	25	17.84	17.94	17.85	
10	256QAM	50	0	17.66	17.95	17.96	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	22.56	22.81	22.69	24.5
5	QPSK	1	12	22.64	22.76	22.74	
5	QPSK	1	24	22.66	22.61	22.84	
5	QPSK	12	0	21.79	21.86	21.91	23.5
5	QPSK	12	7	21.93	22.05	21.88	
5	QPSK	12	13	21.54	21.95	21.88	
5	QPSK	25	0	21.86	21.86	21.93	
5	16QAM	1	0	21.99	22.16	22.14	23.5
5	16QAM	1	12	22.09	22.19	22.12	
5	16QAM	1	24	22.13	22.23	22.22	
5	16QAM	12	0	20.80	20.90	20.94	22.5
5	16QAM	12	7	20.95	20.98	20.89	
5	16QAM	12	13	20.93	21.01	20.90	
5	16QAM	25	0	20.82	20.86	20.91	
5	64QAM	1	0	20.75	20.94	22.26	22.5
5	64QAM	1	12	21.00	21.02	22.29	
5	64QAM	1	24	21.01	21.09	21.05	
5	64QAM	12	0	19.78	19.93	19.92	21.5
5	64QAM	12	7	19.92	19.55	21.24	
5	64QAM	12	13	19.88	19.98	19.98	
5	64QAM	25	0	19.88	19.91	19.92	
5	256QAM	1	0	18.10	18.29	18.17	19.5
5	256QAM	1	12	17.64	17.78	17.75	
5	256QAM	1	24	17.83	17.99	17.85	
5	256QAM	12	0	17.70	17.90	17.80	19.5
5	256QAM	12	7	17.83	17.98	17.69	
5	256QAM	12	13	17.82	18.02	17.92	
5	256QAM	25	0	17.71	17.96	17.92	

<LTE Band 12_Ant 0_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.11	23.22	23.08	24.5
10	QPSK	1	25	23.19	23.21	23.20	
10	QPSK	1	49	23.17	23.18	23.12	
10	QPSK	25	0	22.41	22.44	22.40	23.5
10	QPSK	25	12	22.53	22.48	22.44	
10	QPSK	25	25	22.53	22.55	22.49	
10	QPSK	50	0	22.53	22.48	22.43	
10	16QAM	1	0	22.67	22.71	22.67	23.5
10	16QAM	1	25	22.79	22.86	22.84	
10	16QAM	1	49	22.80	22.81	22.77	
10	16QAM	25	0	21.42	21.42	21.42	22.5
10	16QAM	25	12	21.52	21.48	21.45	
10	16QAM	25	25	21.56	21.56	21.51	
10	16QAM	50	0	21.52	21.46	21.45	
10	64QAM	1	0	21.65	21.58	21.67	22.5
10	64QAM	1	25	21.74	21.78	21.70	
10	64QAM	1	49	21.71	21.74	21.63	
10	64QAM	25	0	20.43	20.45	20.43	21.5
10	64QAM	25	12	20.55	20.48	20.44	
10	64QAM	25	25	20.50	20.55	20.50	
10	64QAM	50	0	20.50	20.44	20.41	
10	256QAM	1	0	18.21	18.20	18.03	19.5
10	256QAM	1	25	18.32	18.23	18.13	
10	256QAM	1	49	17.96	18.12	18.07	
10	256QAM	25	0	18.32	18.19	18.16	19.5
10	256QAM	25	12	18.12	18.05	18.07	
10	256QAM	25	25	18.10	18.18	17.98	
10	256QAM	50	0	18.20	18.10	18.05	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	22.96	23.21	22.92	24.5
5	QPSK	1	12	23.16	23.05	23.07	
5	QPSK	1	24	23.07	23.06	23.04	
5	QPSK	12	0	22.31	22.31	22.39	23.5
5	QPSK	12	7	22.40	22.46	22.30	
5	QPSK	12	13	22.49	22.44	22.38	
5	QPSK	25	0	22.45	22.40	22.38	
5	16QAM	1	0	22.65	22.64	22.58	23.5
5	16QAM	1	12	22.78	22.68	22.76	
5	16QAM	1	24	22.63	22.70	22.65	
5	16QAM	12	0	21.25	21.35	21.28	22.5
5	16QAM	12	7	21.45	21.38	21.33	
5	16QAM	12	13	21.46	21.50	21.34	
5	16QAM	25	0	21.40	21.39	21.30	
5	64QAM	1	0	21.60	21.57	21.52	22.5
5	64QAM	1	12	21.64	21.72	21.62	
5	64QAM	1	24	21.65	21.70	21.53	
5	64QAM	12	0	20.39	20.29	20.37	21.5
5	64QAM	12	7	20.37	20.46	20.28	
5	64QAM	12	13	20.32	20.53	20.31	
5	64QAM	25	0	20.35	20.40	20.37	
5	256QAM	1	0	18.10	18.05	18.00	19.5
5	256QAM	1	12	18.25	18.04	18.10	
5	256QAM	1	24	17.93	18.11	18.00	
5	256QAM	12	0	18.16	18.10	18.12	19.5

5	256QAM	12	7	17.99	17.94	17.90	
5	256QAM	12	13	18.05	18.11	17.95	
5	256QAM	25	0	18.18	18.09	17.92	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.06	23.16	22.94	24.5
3	QPSK	1	8	23.02	23.06	23.07	
3	QPSK	1	14	23.08	23.01	23.00	
3	QPSK	8	0	22.30	22.27	22.32	23.5
3	QPSK	8	4	22.36	22.38	22.36	
3	QPSK	8	7	22.41	22.51	22.32	
3	QPSK	15	0	22.41	22.42	22.35	
3	16QAM	1	0	22.62	22.69	22.56	23.5
3	16QAM	1	8	22.61	22.81	22.81	
3	16QAM	1	14	22.63	22.73	22.60	
3	16QAM	8	0	21.23	21.27	21.41	22.5
3	16QAM	8	4	21.44	21.47	21.39	
3	16QAM	8	7	21.53	21.44	21.44	
3	16QAM	15	0	21.37	21.31	21.26	
3	64QAM	1	0	21.59	21.57	21.52	22.5
3	64QAM	1	8	21.57	21.63	21.51	
3	64QAM	1	14	21.56	21.72	21.44	
3	64QAM	8	0	20.41	20.37	20.29	21.5
3	64QAM	8	4	20.37	20.36	20.32	
3	64QAM	8	7	20.42	20.53	20.31	
3	64QAM	15	0	20.32	20.37	20.23	
3	256QAM	1	0	18.05	18.05	17.86	19.5
3	256QAM	1	8	18.26	18.13	18.05	
3	256QAM	1	14	17.87	17.99	18.06	
3	256QAM	8	0	18.24	18.08	18.14	19.5
3	256QAM	8	4	17.97	18.04	18.05	
3	256QAM	8	7	17.96	18.15	17.84	
3	256QAM	15	0	18.16	17.93	17.94	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	22.92	23.05	23.06	24.5
1.4	QPSK	1	3	23.08	23.14	23.17	
1.4	QPSK	1	5	23.03	23.06	23.10	
1.4	QPSK	3	0	22.86	22.89	22.95	
1.4	QPSK	3	1	23.03	23.07	22.86	
1.4	QPSK	3	3	22.96	23.08	23.01	
1.4	QPSK	6	0	22.37	22.39	22.37	23.5
1.4	16QAM	1	0	22.62	22.52	22.52	23.5
1.4	16QAM	1	3	22.71	22.76	22.76	
1.4	16QAM	1	5	22.73	22.71	22.67	
1.4	16QAM	3	0	22.48	22.48	22.60	
1.4	16QAM	3	1	22.59	22.55	22.64	
1.4	16QAM	3	3	22.74	22.62	22.59	
1.4	16QAM	6	0	21.42	21.38	21.32	22.5
1.4	64QAM	1	0	21.57	21.52	21.64	22.5
1.4	64QAM	1	3	21.59	21.59	21.51	
1.4	64QAM	1	5	21.53	21.59	21.59	
1.4	64QAM	3	0	21.56	21.61	21.49	
1.4	64QAM	3	1	21.65	21.60	21.53	
1.4	64QAM	3	3	21.58	21.63	21.54	
1.4	64QAM	6	0	20.45	20.31	20.31	21.5
1.4	256QAM	1	0	18.03	18.18	17.97	19.5
1.4	256QAM	1	3	18.20	18.20	17.98	
1.4	256QAM	1	5	17.79	17.96	17.94	
1.4	256QAM	3	0	18.19	18.18	17.99	
1.4	256QAM	3	1	18.08	17.90	18.04	
1.4	256QAM	3	3	18.00	18.13	17.90	
1.4	256QAM	6	0	18.01	17.96	17.96	19.5

<LTE Band 13_Ant 0_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					23230		
Frequency (MHz)					782		
10	QPSK	1	0		23.07		24.5
10	QPSK	1	25		23.06		
10	QPSK	1	49		22.99		
10	QPSK	25	0		22.06		23.5
10	QPSK	25	12		22.15		
10	QPSK	25	25		22.19		
10	QPSK	50	0		22.16		
10	16QAM	1	0		22.23		23.5
10	16QAM	1	25		22.48		
10	16QAM	1	49		22.34		
10	16QAM	25	0		21.08		22.5
10	16QAM	25	12		21.15		
10	16QAM	25	25		21.17		
10	16QAM	50	0		21.17		
10	64QAM	1	0		21.17		22.5
10	64QAM	1	25		21.40		
10	64QAM	1	49		21.31		
10	64QAM	25	0		20.06		21.5
10	64QAM	25	12		20.16		
10	64QAM	25	25		20.19		
10	64QAM	50	0		20.15		
10	256QAM	1	0		18.24		19.5
10	256QAM	1	25		18.04		
10	256QAM	1	49		18.15		
10	256QAM	25	0		18.12		19.5
10	256QAM	25	12		18.08		
10	256QAM	25	25		18.17		
10	256QAM	50	0		18.21		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	22.95	22.92	22.87	24.5
5	QPSK	1	12	22.86	22.93	22.91	
5	QPSK	1	24	22.89	22.86	22.89	
5	QPSK	12	0	21.95	21.96	21.93	23.5
5	QPSK	12	7	21.98	21.99	21.95	
5	QPSK	12	13	22.08	22.02	22.09	
5	QPSK	25	0	22.01	22.03	21.97	
5	16QAM	1	0	22.09	22.11	22.07	23.5
5	16QAM	1	12	22.36	22.32	22.35	
5	16QAM	1	24	22.15	22.15	22.17	
5	16QAM	12	0	20.97	20.91	20.94	22.5
5	16QAM	12	7	20.99	20.97	21.01	
5	16QAM	12	13	21.00	21.03	21.03	
5	16QAM	25	0	21.06	21.05	21.03	
5	64QAM	1	0	20.98	21.07	21.02	22.5
5	64QAM	1	12	21.22	21.22	21.30	
5	64QAM	1	24	21.21	21.13	21.11	
5	64QAM	12	0	19.93	19.89	19.90	21.5
5	64QAM	12	7	19.96	19.97	20.02	
5	64QAM	12	13	20.07	20.01	20.01	
5	64QAM	25	0	20.03	20.05	20.05	
5	256QAM	1	0	18.14	18.09	18.13	19.5
5	256QAM	1	12	17.94	17.87	17.93	
5	256QAM	1	24	17.99	18.01	18.02	
5	256QAM	12	0	17.95	17.92	17.93	19.5

5	256QAM	12	7	17.96	17.95	17.89	
5	256QAM	12	13	17.97	17.98	18.00	
5	256QAM	25	0	18.07	18.05	18.04	

<LTE Band 14_Ant 0_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					23330		
Frequency (MHz)					793		
10	QPSK	1	0		23.18		24.5
10	QPSK	1	25		23.15		
10	QPSK	1	49		23.12		
10	QPSK	25	0		22.23		23.5
10	QPSK	25	12		22.26		
10	QPSK	25	25		22.31		
10	QPSK	50	0		22.25		
10	16QAM	1	0		22.54		23.5
10	16QAM	1	25		22.55		
10	16QAM	1	49		22.49		
10	16QAM	25	0		21.24		22.5
10	16QAM	25	12		21.28		
10	16QAM	25	25		21.31		
10	16QAM	50	0		21.24		
10	64QAM	1	0		21.46		22.5
10	64QAM	1	25		21.54		
10	64QAM	1	49		21.42		
10	64QAM	25	0		20.23		21.5
10	64QAM	25	12		20.26		
10	64QAM	25	25		20.31		
10	64QAM	50	0		20.23		
10	256QAM	1	0		18.17		19.5
10	256QAM	1	25		18.22		
10	256QAM	1	49		18.01		
10	256QAM	25	0		18.12		19.5
10	256QAM	25	12		18.22		
10	256QAM	25	25		18.10		
10	256QAM	50	0		18.24		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	22.98	23.00	23.08	24.5
5	QPSK	1	12	22.98	23.05	22.96	
5	QPSK	1	24	23.02	22.99	22.95	
5	QPSK	12	0	22.11	22.08	22.04	23.5
5	QPSK	12	7	22.07	22.10	22.08	
5	QPSK	12	13	22.14	22.12	22.12	
5	QPSK	25	0	22.10	22.10	22.06	
5	16QAM	1	0	22.42	22.35	22.39	23.5
5	16QAM	1	12	22.38	22.38	22.40	
5	16QAM	1	24	22.38	22.35	22.35	
5	16QAM	12	0	21.14	21.08	21.07	22.5
5	16QAM	12	7	21.16	21.11	21.17	
5	16QAM	12	13	21.21	21.15	21.21	
5	16QAM	25	0	21.12	21.13	21.13	
5	64QAM	1	0	21.26	21.36	21.36	22.5
5	64QAM	1	12	21.35	21.35	21.43	
5	64QAM	1	24	21.30	21.25	21.29	
5	64QAM	12	0	20.13	20.03	20.12	21.5
5	64QAM	12	7	20.08	20.08	20.12	
5	64QAM	12	13	20.19	20.14	20.12	
5	64QAM	25	0	20.09	20.06	20.05	
5	256QAM	1	0	18.03	17.99	18.07	19.5

5	256QAM	1	12	18.09	18.03	18.03	
5	256QAM	1	24	17.87	17.81	17.84	
5	256QAM	12	0	18.01	17.98	17.93	19.5
5	256QAM	12	7	18.06	18.07	18.10	
5	256QAM	12	13	17.95	17.98	17.94	
5	256QAM	25	0	18.05	18.08	18.10	

<LTE Band 17_Ant 0_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.11	23.21	23.08	24.5
10	QPSK	1	25	23.18	23.20	23.20	
10	QPSK	1	49	23.16	23.10	23.08	
10	QPSK	25	0	22.47	22.46	22.46	23.5
10	QPSK	25	12	22.61	22.62	22.53	
10	QPSK	25	25	22.58	22.47	22.45	
10	QPSK	50	0	22.57	22.47	22.47	
10	16QAM	1	0	22.66	22.68	22.66	23.5
10	16QAM	1	25	22.82	22.83	22.79	
10	16QAM	1	49	22.76	22.69	22.65	
10	16QAM	25	0	21.49	21.47	21.46	22.5
10	16QAM	25	12	21.60	21.55	21.51	
10	16QAM	25	25	21.58	21.50	21.47	
10	16QAM	50	0	21.55	21.48	21.48	
10	64QAM	1	0	21.62	21.61	21.62	22.5
10	64QAM	1	25	21.76	21.76	21.75	
10	64QAM	1	49	21.64	21.61	21.58	
10	64QAM	25	0	20.46	20.46	20.47	21.5
10	64QAM	25	12	20.61	20.53	20.50	
10	64QAM	25	25	20.59	20.49	20.45	
10	64QAM	50	0	20.55	20.48	20.45	
10	256QAM	1	0	18.06	18.08	17.95	19.5
10	256QAM	1	25	18.16	18.16	18.14	
10	256QAM	1	49	18.20	18.09	17.94	
10	256QAM	25	0	18.18	18.40	18.38	19.5
10	256QAM	25	12	18.19	18.06	18.19	
10	256QAM	25	25	18.10	18.16	18.10	
10	256QAM	50	0	18.09	18.13	17.96	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	22.93	23.07	22.94	24.5
5	QPSK	1	12	23.04	23.10	23.04	
5	QPSK	1	24	23.02	22.98	22.91	
5	QPSK	12	0	22.29	22.29	22.35	23.5
5	QPSK	12	7	22.49	22.34	22.42	
5	QPSK	12	13	22.44	22.32	22.28	
5	QPSK	25	0	22.40	22.35	22.34	
5	16QAM	1	0	22.49	22.49	22.52	23.5
5	16QAM	1	12	22.66	22.66	22.68	
5	16QAM	1	24	22.64	22.51	22.49	
5	16QAM	12	0	21.33	21.33	21.32	22.5
5	16QAM	12	7	21.45	21.44	21.35	
5	16QAM	12	13	21.38	21.31	21.32	
5	16QAM	25	0	21.43	21.35	21.34	
5	64QAM	1	0	21.45	21.43	21.45	22.5
5	64QAM	1	12	21.61	21.57	21.64	
5	64QAM	1	24	21.45	21.42	21.41	
5	64QAM	12	0	20.26	20.29	20.27	21.5
5	64QAM	12	7	20.50	20.33	20.32	

5	64QAM	12	13	20.46	20.36	20.35	
5	64QAM	25	0	20.45	20.33	20.31	
5	256QAM	1	0	17.87	17.94	17.82	19.5
5	256QAM	1	12	18.00	17.97	17.95	
5	256QAM	1	24	18.08	17.89	17.82	
5	256QAM	12	0	18.08	18.22	18.20	19.5
5	256QAM	12	7	18.01	17.92	18.09	
5	256QAM	12	13	17.97	17.99	17.93	
5	256QAM	25	0	17.97	17.94	17.81	

<LTE Band 25_Ant 1_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				26140	26340	26590	
Frequency (MHz)				1860	1880	1905	
20	QPSK	1	0	23.18	23.24	23.12	24.5
20	QPSK	1	49	23.17	23.14	23.08	
20	QPSK	1	99	23.11	23.06	23.04	
20	QPSK	50	0	22.53	22.48	22.44	23.5
20	QPSK	50	24	22.59	22.60	22.04	
20	QPSK	50	50	22.54	22.47	22.45	
20	QPSK	100	0	22.57	22.58	22.50	
20	16QAM	1	0	22.78	22.83	22.72	23.5
20	16QAM	1	49	22.78	22.78	22.74	
20	16QAM	1	99	22.73	22.66	22.70	
20	16QAM	50	0	21.54	21.46	21.43	22.5
20	16QAM	50	24	21.59	21.53	21.51	
20	16QAM	50	50	21.55	21.46	21.44	
20	16QAM	100	0	21.56	21.49	21.50	
20	64QAM	1	0	21.75	21.56	21.67	22.5
20	64QAM	1	49	21.73	21.71	21.66	
20	64QAM	1	99	21.62	21.61	20.98	
20	64QAM	50	0	20.52	20.49	20.44	21.5
20	64QAM	50	24	20.61	20.54	20.51	
20	64QAM	50	50	20.56	20.47	20.46	
20	64QAM	100	0	20.57	20.52	20.49	
20	256QAM	1	0	18.07	18.32	18.22	19.5
20	256QAM	1	49	18.29	18.49	18.35	
20	256QAM	1	99	18.14	18.37	18.17	
20	256QAM	50	0	18.15	18.30	18.15	19.5
20	256QAM	50	24	18.11	18.32	18.02	
20	256QAM	50	50	18.11	18.37	18.33	
20	256QAM	100	0	18.15	18.31	18.30	
Channel				26115	26340	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1907.5	
15	QPSK	1	0	23.03	23.03	23.05	24.5
15	QPSK	1	37	23.06	23.12	22.91	
15	QPSK	1	74	23.09	22.90	23.01	
15	QPSK	36	0	22.42	22.37	22.30	23.5
15	QPSK	36	20	22.42	22.39	21.91	
15	QPSK	36	39	22.43	22.33	22.31	
15	QPSK	75	0	22.53	22.32	22.41	
15	16QAM	1	0	22.66	22.69	22.68	23.5
15	16QAM	1	37	22.74	22.70	22.72	
15	16QAM	1	74	22.63	22.61	22.57	
15	16QAM	36	0	21.42	21.29	21.30	22.5
15	16QAM	36	20	21.48	21.44	21.50	
15	16QAM	36	39	21.47	21.28	21.33	
15	16QAM	75	0	21.46	21.43	21.33	
15	64QAM	1	0	21.60	21.47	21.56	22.5
15	64QAM	1	37	21.67	21.65	21.48	

15	64QAM	1	74	21.61	21.47	20.79	
15	64QAM	36	0	20.38	20.36	20.31	21.5
15	64QAM	36	20	20.54	20.44	20.43	
15	64QAM	36	39	20.39	20.46	20.45	
15	64QAM	75	0	20.39	20.50	20.41	
15	256QAM	1	0	17.89	18.21	18.16	19.5
15	256QAM	1	37	18.23	18.31	18.24	
15	256QAM	1	74	18.13	18.33	18.10	
15	256QAM	36	0	18.08	18.21	18.08	19.5
15	256QAM	36	20	17.92	18.21	18.00	
15	256QAM	36	39	18.09	18.32	18.28	
15	256QAM	75	0	18.08	18.16	18.14	
Channel				26090	26340	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1910	
10	QPSK	1	0	23.13	23.04	22.98	24.5
10	QPSK	1	25	23.00	23.07	22.96	
10	QPSK	1	49	23.01	22.93	22.95	
10	QPSK	25	0	22.44	22.45	22.27	23.5
10	QPSK	25	12	22.58	22.46	21.96	
10	QPSK	25	25	22.49	22.30	22.33	
10	QPSK	50	0	22.42	22.43	22.48	
10	16QAM	1	0	22.66	22.80	22.65	23.5
10	16QAM	1	25	22.75	22.65	22.60	
10	16QAM	1	49	22.59	22.60	22.69	
10	16QAM	25	0	21.50	21.42	21.25	22.5
10	16QAM	25	12	21.48	21.40	21.46	
10	16QAM	25	25	21.47	21.38	21.35	
10	16QAM	50	0	21.47	21.47	21.40	
10	64QAM	1	0	21.60	21.37	21.51	22.5
10	64QAM	1	25	21.61	21.70	21.60	
10	64QAM	1	49	21.50	21.48	20.83	
10	64QAM	25	0	20.49	20.43	20.35	21.5
10	64QAM	25	12	20.59	20.47	20.37	
10	64QAM	25	25	20.46	20.45	20.28	
10	64QAM	50	0	20.53	20.42	20.36	
10	256QAM	1	0	17.97	18.23	18.09	19.5
10	256QAM	1	25	18.20	18.42	18.34	
10	256QAM	1	49	17.96	18.35	18.08	
10	256QAM	25	0	18.11	18.17	18.01	19.5
10	256QAM	25	12	18.00	18.19	17.89	
10	256QAM	25	25	18.00	18.31	18.29	
10	256QAM	50	0	17.96	18.19	18.23	
Channel				26065	26340	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1912.5	
5	QPSK	1	0	23.04	23.13	22.94	24.5
5	QPSK	1	12	23.16	23.00	22.91	
5	QPSK	1	24	23.04	23.03	22.86	
5	QPSK	12	0	22.34	22.41	22.36	23.5
5	QPSK	12	7	22.44	22.40	22.01	
5	QPSK	12	13	22.48	22.29	22.32	
5	QPSK	25	0	22.52	22.36	22.36	
5	16QAM	1	0	22.72	22.79	22.64	23.5
5	16QAM	1	12	22.68	22.64	22.63	
5	16QAM	1	24	22.67	22.49	22.56	
5	16QAM	12	0	21.48	21.45	21.29	22.5
5	16QAM	12	7	21.53	21.42	21.46	
5	16QAM	12	13	21.43	21.45	21.42	
5	16QAM	25	0	21.51	21.43	21.36	
5	64QAM	1	0	21.56	21.44	21.48	22.5
5	64QAM	1	12	21.64	21.63	21.62	
5	64QAM	1	24	21.51	21.50	20.90	
5	64QAM	12	0	20.35	20.43	20.36	21.5
5	64QAM	12	7	20.43	20.47	20.46	

5	64QAM	12	13	20.43	20.30	20.36	
5	64QAM	25	0	20.45	20.38	20.44	
5	256QAM	1	0	17.98	18.28	18.17	19.5
5	256QAM	1	12	18.12	18.38	18.22	
5	256QAM	1	24	18.00	18.25	18.01	
5	256QAM	12	0	18.01	18.29	18.10	19.5
5	256QAM	12	7	18.06	18.18	17.89	
5	256QAM	12	13	17.98	18.19	18.30	
5	256QAM	25	0	17.96	18.25	18.26	
Channel				26055	26340	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1913.5	
3	QPSK	1	0	23.10	23.14	23.06	24.5
3	QPSK	1	8	23.07	22.99	22.97	
3	QPSK	1	14	23.09	22.97	22.89	
3	QPSK	8	0	22.47	22.35	22.39	23.5
3	QPSK	8	4	22.57	22.42	21.87	
3	QPSK	8	7	22.46	22.32	22.36	
3	QPSK	15	0	22.54	22.42	22.43	
3	16QAM	1	0	22.71	22.81	22.69	23.5
3	16QAM	1	8	22.59	22.65	22.55	
3	16QAM	1	14	22.68	22.52	22.60	
3	16QAM	8	0	21.42	21.37	21.40	22.5
3	16QAM	8	4	21.43	21.52	21.45	
3	16QAM	8	7	21.46	21.27	21.41	
3	16QAM	15	0	21.48	21.40	21.38	
3	64QAM	1	0	21.66	21.37	21.57	22.5
3	64QAM	1	8	21.55	21.59	21.59	
3	64QAM	1	14	21.57	21.48	20.80	
3	64QAM	8	0	20.38	20.45	20.36	21.5
3	64QAM	8	4	20.50	20.46	20.37	
3	64QAM	8	7	20.53	20.30	20.40	
3	64QAM	15	0	20.44	20.46	20.38	
3	256QAM	1	0	17.96	18.13	18.09	19.5
3	256QAM	1	8	18.26	18.37	18.24	
3	256QAM	1	14	18.03	18.22	18.05	
3	256QAM	8	0	18.14	18.21	18.14	19.5
3	256QAM	8	4	18.08	18.19	17.88	
3	256QAM	8	7	18.06	18.22	18.26	
3	256QAM	15	0	18.11	18.24	18.12	
Channel				26047	26340	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1914.3	
1.4	QPSK	1	0	23.10	23.13	23.05	24.5
1.4	QPSK	1	3	23.10	23.10	23.03	
1.4	QPSK	1	5	22.93	22.87	22.95	
1.4	QPSK	3	0	23.11	22.95	22.86	
1.4	QPSK	3	1	23.14	23.04	22.62	
1.4	QPSK	3	3	23.06	23.03	22.91	
1.4	QPSK	6	0	22.42	22.34	22.37	23.5
1.4	16QAM	1	0	22.77	22.71	22.68	23.5
1.4	16QAM	1	3	22.59	22.69	22.60	
1.4	16QAM	1	5	22.62	22.56	22.57	
1.4	16QAM	3	0	22.62	22.47	22.47	
1.4	16QAM	3	1	22.74	22.60	22.61	
1.4	16QAM	3	3	22.74	22.51	22.63	
1.4	16QAM	6	0	21.47	21.31	21.31	22.5
1.4	64QAM	1	0	21.59	21.54	21.48	22.5
1.4	64QAM	1	3	21.58	21.52	21.60	
1.4	64QAM	1	5	21.54	21.54	20.93	
1.4	64QAM	3	0	21.66	21.54	21.60	
1.4	64QAM	3	1	21.68	21.69	21.66	
1.4	64QAM	3	3	21.66	21.63	21.47	
1.4	64QAM	6	0	20.52	20.39	20.38	21.5
1.4	256QAM	1	0	17.97	18.19	18.07	19.5

1.4	256QAM	1	3	18.24	18.43	18.28	
1.4	256QAM	1	5	18.12	18.25	17.98	
1.4	256QAM	3	0	18.06	18.20	18.00	
1.4	256QAM	3	1	17.92	18.27	17.84	
1.4	256QAM	3	3	18.08	18.23	18.30	
1.4	256QAM	6	0	18.03	18.13	18.15	19.5

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	23.02	23.20	23.02	
15	QPSK	1	37	22.99	23.10	23.19	24.5
15	QPSK	1	74	22.90	23.08	23.01	
15	QPSK	36	0	22.30	22.35	22.48	
15	QPSK	36	20	22.37	22.41	22.50	23.5
15	QPSK	36	39	22.33	22.55	22.54	
15	QPSK	75	0	22.38	22.53	22.51	
15	16QAM	1	0	22.70	22.62	22.69	
15	16QAM	1	37	22.64	22.61	22.77	23.5
15	16QAM	1	74	22.61	22.70	22.59	
15	16QAM	36	0	21.33	21.35	21.48	
15	16QAM	36	20	21.35	21.42	21.50	22.5
15	16QAM	36	39	21.37	21.47	21.56	
15	16QAM	75	0	21.38	21.44	21.51	
15	64QAM	1	0	21.58	21.52	21.57	
15	64QAM	1	37	21.49	21.67	21.71	22.5
15	64QAM	1	74	21.55	21.61	21.58	
15	64QAM	36	0	20.33	20.34	20.49	
15	64QAM	36	20	20.37	20.42	20.51	21.5
15	64QAM	36	39	20.37	20.50	20.55	
15	64QAM	75	0	20.38	20.42	20.55	
15	256QAM	1	0	18.12	18.06	18.01	
15	256QAM	1	37	18.29	18.04	18.27	19.5
15	256QAM	1	74	17.92	18.12	18.03	
15	256QAM	36	0	18.14	18.15	18.16	
15	256QAM	36	20	18.01	18.09	18.17	19.5
15	256QAM	36	39	18.03	18.08	17.97	
15	256QAM	75	0	18.19	18.17	17.98	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	22.89	23.07	22.86	
10	QPSK	1	25	22.83	22.97	23.02	24.5
10	QPSK	1	49	22.76	22.88	22.81	
10	QPSK	25	0	22.12	22.25	22.33	
10	QPSK	25	12	22.22	22.21	22.36	23.5
10	QPSK	25	25	22.15	22.32	22.40	
10	QPSK	50	0	22.18	22.26	22.40	
10	16QAM	1	0	22.52	22.48	22.51	
10	16QAM	1	25	22.48	22.50	22.64	23.5
10	16QAM	1	49	22.46	22.56	22.46	
10	16QAM	25	0	21.14	21.25	21.34	
10	16QAM	25	12	21.23	21.31	21.39	22.5
10	16QAM	25	25	21.26	21.27	21.39	
10	16QAM	50	0	21.21	21.29	21.38	
10	64QAM	1	0	21.42	21.35	21.43	
10	64QAM	1	25	21.33	21.47	21.55	22.5
10	64QAM	1	49	21.43	21.51	21.41	
10	64QAM	25	0	20.22	20.15	20.30	
10	64QAM	25	12	20.22	20.26	20.40	21.5

10	64QAM	25	25	20.21	20.39	20.45	
10	64QAM	50	0	20.22	20.27	20.39	
10	256QAM	1	0	18.02	17.89	17.86	19.5
10	256QAM	1	25	18.13	17.91	18.16	
10	256QAM	1	49	17.79	17.94	17.83	
10	256QAM	25	0	18.00	18.02	17.98	19.5
10	256QAM	25	12	17.84	17.90	17.97	
10	256QAM	25	25	17.92	17.88	17.85	
10	256QAM	50	0	18.09	18.02	17.78	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	22.85	23.00	22.87	24.5
5	QPSK	1	12	22.85	22.94	23.09	
5	QPSK	1	24	22.80	22.92	22.87	
5	QPSK	12	0	22.11	22.24	22.35	23.5
5	QPSK	12	7	22.24	22.24	22.33	
5	QPSK	12	13	22.16	22.32	22.35	
5	QPSK	25	0	22.18	22.27	22.33	
5	16QAM	1	0	22.56	22.50	22.53	23.5
5	16QAM	1	12	22.53	22.48	22.60	
5	16QAM	1	24	22.50	22.60	22.47	
5	16QAM	12	0	21.22	21.22	21.28	22.5
5	16QAM	12	7	21.23	21.28	21.30	
5	16QAM	12	13	21.21	21.31	21.39	
5	16QAM	25	0	21.27	21.24	21.35	
5	64QAM	1	0	21.38	21.41	21.43	22.5
5	64QAM	1	12	21.38	21.53	21.53	
5	64QAM	1	24	21.37	21.46	21.43	
5	64QAM	12	0	20.19	20.20	20.35	21.5
5	64QAM	12	7	20.26	20.23	20.32	
5	64QAM	12	13	20.25	20.32	20.39	
5	64QAM	25	0	20.26	20.23	20.44	
5	256QAM	1	0	17.97	17.89	17.85	19.5
5	256QAM	1	12	18.12	17.87	18.10	
5	256QAM	1	24	17.73	18.01	17.85	
5	256QAM	12	0	17.98	17.97	17.98	19.5
5	256QAM	12	7	17.82	17.90	18.07	
5	256QAM	12	13	17.86	17.93	17.80	
5	256QAM	25	0	18.07	17.97	17.82	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	22.85	23.07	22.87	24.5
3	QPSK	1	8	22.89	22.93	22.99	
3	QPSK	1	14	22.72	22.97	22.84	
3	QPSK	8	0	22.12	22.23	22.34	23.5
3	QPSK	8	4	22.25	22.22	22.37	
3	QPSK	8	7	22.21	22.34	22.38	
3	QPSK	15	0	22.24	22.31	22.41	
3	16QAM	1	0	22.53	22.46	22.52	23.5
3	16QAM	1	8	22.48	22.46	22.63	
3	16QAM	1	14	22.47	22.50	22.46	
3	16QAM	8	0	21.15	21.23	21.38	22.5
3	16QAM	8	4	21.16	21.32	21.31	
3	16QAM	8	7	21.26	21.36	21.36	
3	16QAM	15	0	21.28	21.25	21.32	
3	64QAM	1	0	21.41	21.42	21.43	22.5
3	64QAM	1	8	21.33	21.51	21.57	
3	64QAM	1	14	21.35	21.51	21.46	
3	64QAM	8	0	20.22	20.22	20.34	21.5
3	64QAM	8	4	20.17	20.26	20.37	
3	64QAM	8	7	20.18	20.31	20.43	
3	64QAM	15	0	20.28	20.27	20.39	
3	256QAM	1	0	18.00	17.91	17.91	19.5

3	256QAM	1	8	18.19	17.85	18.10	
3	256QAM	1	14	17.76	18.01	17.86	
3	256QAM	8	0	17.95	18.04	17.98	19.5
3	256QAM	8	4	17.89	17.91	17.99	
3	256QAM	8	7	17.86	17.90	17.78	
3	256QAM	15	0	18.08	18.03	17.86	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	22.90	23.07	22.89	24.5
1.4	QPSK	1	3	22.83	22.95	23.08	
1.4	QPSK	1	5	22.70	22.92	22.87	
1.4	QPSK	3	0	22.80	22.84	22.98	
1.4	QPSK	3	1	22.77	22.83	22.90	
1.4	QPSK	3	3	22.78	22.93	22.97	
1.4	QPSK	6	0	22.20	22.25	22.37	23.5
1.4	16QAM	1	0	22.55	22.49	22.52	23.5
1.4	16QAM	1	3	22.48	22.43	22.58	
1.4	16QAM	1	5	22.49	22.59	22.42	
1.4	16QAM	3	0	22.36	22.42	22.52	
1.4	16QAM	3	1	22.38	22.52	22.51	
1.4	16QAM	3	3	22.40	22.49	22.56	
1.4	16QAM	6	0	21.22	21.33	21.39	22.5
1.4	64QAM	1	0	21.41	21.37	21.37	22.5
1.4	64QAM	1	3	21.29	21.56	21.60	
1.4	64QAM	1	5	21.37	21.51	21.42	
1.4	64QAM	3	0	21.36	21.44	21.53	
1.4	64QAM	3	1	21.40	21.51	21.60	
1.4	64QAM	3	3	21.42	21.59	21.63	
1.4	64QAM	6	0	20.25	20.32	20.36	21.5
1.4	256QAM	1	0	17.95	17.88	17.84	19.5
1.4	256QAM	1	3	18.11	17.89	18.16	
1.4	256QAM	1	5	17.82	17.93	17.90	
1.4	256QAM	3	0	17.96	18.04	18.01	
1.4	256QAM	3	1	17.87	17.95	18.02	
1.4	256QAM	3	3	17.83	17.89	17.84	
1.4	256QAM	6	0	18.05	18.04	17.83	19.5

<LTE Band 30_Ant 1_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					27710		
Frequency (MHz)					2310		
10	QPSK	1	0		23.12		24.5
10	QPSK	1	25		23.11		
10	QPSK	1	49		22.99		
10	QPSK	25	0		22.05		23.5
10	QPSK	25	12		22.04		
10	QPSK	25	25		22.00		
10	QPSK	50	0		22.01		
10	16QAM	1	0		21.90		23.5
10	16QAM	1	25		21.85		
10	16QAM	1	49		21.50		
10	16QAM	25	0		21.05		22.5
10	16QAM	25	12		21.07		
10	16QAM	25	25		21.00		
10	16QAM	50	0		21.08		
10	64QAM	1	0		20.70		22.5
10	64QAM	1	25		20.50		
10	64QAM	1	49		20.51		
10	64QAM	25	0		21.04		21.5
10	64QAM	25	12		21.07		

10	64QAM	25	25		19.56		
10	64QAM	50	0		21.04		
10	256QAM	1	0		18.25		19.5
10	256QAM	1	25		18.34		
10	256QAM	1	49		18.22		
10	256QAM	25	0		18.41		19.5
10	256QAM	25	12		18.28		
10	256QAM	25	25		18.21		
10	256QAM	50	0		18.26		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.96	23.00	22.97	24.5
5	QPSK	1	12	22.95	22.92	22.99	
5	QPSK	1	24	22.88	22.81	22.83	
5	QPSK	12	0	21.85	21.87	21.87	23.5
5	QPSK	12	7	21.87	21.89	21.87	
5	QPSK	12	13	21.82	21.88	21.85	
5	QPSK	25	0	21.84	21.89	21.83	
5	16QAM	1	0	21.79	21.75	21.71	23.5
5	16QAM	1	12	21.68	21.67	21.69	
5	16QAM	1	24	21.66	21.65	21.61	
5	16QAM	12	0	20.90	20.92	20.88	22.5
5	16QAM	12	7	20.96	20.88	20.88	
5	16QAM	12	13	20.85	20.82	20.86	
5	16QAM	25	0	20.91	20.94	20.94	
5	64QAM	1	0	20.51	20.56	20.50	22.5
5	64QAM	1	12	20.64	20.62	20.68	
5	64QAM	1	24	20.65	20.63	20.68	
5	64QAM	12	0	20.90	20.87	20.92	21.5
5	64QAM	12	7	20.96	20.95	20.89	
5	64QAM	12	13	19.75	19.75	19.70	
5	64QAM	25	0	20.84	20.91	20.91	
5	256QAM	1	0	18.15	18.06	18.15	19.5
5	256QAM	1	12	18.21	18.15	18.14	
5	256QAM	1	24	18.02	18.08	18.10	
5	256QAM	12	0	18.22	18.21	18.29	19.5
5	256QAM	12	7	18.10	18.15	18.14	
5	256QAM	12	13	18.04	18.07	18.11	
5	256QAM	25	0	18.06	18.09	18.12	

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	23.20	23.21	23.12	24.5
20	QPSK	1	49	23.12	23.14	23.08	
20	QPSK	1	99	23.14	23.09	22.94	
20	QPSK	50	0	22.28	22.32	22.26	23.5
20	QPSK	50	24	22.35	22.36	22.25	
20	QPSK	50	50	22.34	22.31	22.25	
20	QPSK	100	0	22.33	22.35	22.20	
20	16QAM	1	0	22.64	22.47	22.59	23.5
20	16QAM	1	49	22.54	22.52	22.56	
20	16QAM	1	99	22.56	22.56	21.87	
20	16QAM	50	0	21.31	21.33	21.26	22.5
20	16QAM	50	24	21.36	21.29	21.25	
20	16QAM	50	50	21.34	21.29	21.26	
20	16QAM	100	0	21.36	21.25	21.23	
20	64QAM	1	0	21.52	21.58	21.44	22.5
20	64QAM	1	49	21.42	21.46	21.48	

20	64QAM	1	99	21.46	21.36	21.30	
20	64QAM	50	0	20.32	20.32	20.24	21.5
20	64QAM	50	24	20.35	20.27	20.23	
20	64QAM	50	50	20.35	19.73	20.23	
20	64QAM	100	0	20.36	20.25	20.20	
20	256QAM	1	0	18.14	18.38	18.08	19.5
20	256QAM	1	49	18.23	18.36	18.15	
20	256QAM	1	99	18.56	18.72	18.58	
20	256QAM	50	0	18.03	18.30	18.09	19.5
20	256QAM	50	24	18.39	18.42	18.39	
20	256QAM	50	50	18.33	18.46	18.38	
20	256QAM	100	0	18.32	18.44	18.27	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.13	23.17	23.07	24.5
15	QPSK	1	37	23.05	23.10	23.00	
15	QPSK	1	74	23.08	23.04	22.89	
15	QPSK	36	0	22.21	22.31	22.25	23.5
15	QPSK	36	20	22.31	22.24	22.24	
15	QPSK	36	39	22.32	22.23	22.24	
15	QPSK	75	0	22.32	22.21	22.11	
15	16QAM	1	0	22.55	22.45	22.55	23.5
15	16QAM	1	37	22.47	22.45	22.53	
15	16QAM	1	74	22.52	22.50	21.86	
15	16QAM	36	0	21.22	21.26	21.18	22.5
15	16QAM	36	20	21.33	21.27	21.20	
15	16QAM	36	39	21.31	21.25	21.22	
15	16QAM	75	0	21.34	21.18	21.21	
15	64QAM	1	0	21.51	21.56	21.42	22.5
15	64QAM	1	37	21.33	21.44	21.45	
15	64QAM	1	74	21.44	21.33	21.21	
15	64QAM	36	0	20.31	20.26	20.17	21.5
15	64QAM	36	20	20.26	20.24	20.14	
15	64QAM	36	39	20.27	19.66	20.17	
15	64QAM	75	0	20.27	20.18	20.14	
15	256QAM	1	0	18.08	18.30	18.02	19.5
15	256QAM	1	37	18.17	18.35	18.10	
15	256QAM	1	74	18.51	18.66	18.51	
15	256QAM	36	0	17.98	18.23	18.04	19.5
15	256QAM	36	20	18.30	18.41	18.34	
15	256QAM	36	39	18.29	18.39	18.30	
15	256QAM	75	0	18.28	18.43	18.25	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.18	23.15	23.11	24.5
10	QPSK	1	25	23.04	23.06	23.03	
10	QPSK	1	49	23.07	23.07	22.85	
10	QPSK	25	0	22.27	22.30	22.23	23.5
10	QPSK	25	12	22.27	22.21	22.17	
10	QPSK	25	25	22.28	22.25	22.22	
10	QPSK	50	0	22.28	22.23	22.15	
10	16QAM	1	0	22.57	22.43	22.53	23.5
10	16QAM	1	25	22.45	22.51	22.49	
10	16QAM	1	49	22.48	22.50	21.84	
10	16QAM	25	0	21.27	21.26	21.22	22.5
10	16QAM	25	12	21.34	21.27	21.16	
10	16QAM	25	25	21.26	21.20	21.20	
10	16QAM	50	0	21.35	21.19	21.22	
10	64QAM	1	0	21.45	21.54	21.35	22.5
10	64QAM	1	25	21.36	21.37	21.40	
10	64QAM	1	49	21.43	21.35	21.24	
10	64QAM	25	0	20.23	20.30	20.15	21.5
10	64QAM	25	12	20.30	20.23	20.16	

10	64QAM	25	25	20.33	19.70	20.21	
10	64QAM	50	0	20.31	20.21	20.18	
10	256QAM	1	0	18.12	18.32	18.03	19.5
10	256QAM	1	25	18.22	18.29	18.08	
10	256QAM	1	49	18.52	18.67	18.57	
10	256QAM	25	0	17.96	18.29	18.00	19.5
10	256QAM	25	12	18.32	18.34	18.31	
10	256QAM	25	25	18.32	18.38	18.32	
10	256QAM	50	0	18.31	18.35	18.24	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.13	23.20	23.11	24.5
5	QPSK	1	12	23.08	23.08	23.02	
5	QPSK	1	24	23.13	23.03	22.85	
5	QPSK	12	0	22.20	22.27	22.22	23.5
5	QPSK	12	7	22.32	22.23	22.16	
5	QPSK	12	13	22.27	22.27	22.22	
5	QPSK	25	0	22.30	22.18	22.18	
5	16QAM	1	0	22.58	22.38	22.50	23.5
5	16QAM	1	12	22.46	22.48	22.48	
5	16QAM	1	24	22.55	22.55	21.78	
5	16QAM	12	0	21.28	21.26	21.17	22.5
5	16QAM	12	7	21.32	21.20	21.22	
5	16QAM	12	13	21.29	21.26	21.22	
5	16QAM	25	0	21.31	21.22	21.15	
5	64QAM	1	0	21.46	21.55	21.38	22.5
5	64QAM	1	12	21.37	21.45	21.41	
5	64QAM	1	24	21.44	21.33	21.29	
5	64QAM	12	0	20.24	20.23	20.15	21.5
5	64QAM	12	7	20.26	20.18	20.22	
5	64QAM	12	13	20.33	19.68	20.21	
5	64QAM	25	0	20.34	20.23	20.16	
5	256QAM	1	0	18.06	18.32	18.06	19.5
5	256QAM	1	12	18.22	18.29	18.11	
5	256QAM	1	24	18.49	18.64	18.52	
5	256QAM	12	0	18.00	18.25	18.07	19.5
5	256QAM	12	7	18.31	18.38	18.33	
5	256QAM	12	13	18.29	18.37	18.35	
5	256QAM	25	0	18.25	18.35	18.23	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	23.17	23.14	23.09	24.5
3	QPSK	1	8	23.10	23.13	23.03	
3	QPSK	1	14	23.12	23.04	22.85	
3	QPSK	8	0	22.27	22.26	22.20	23.5
3	QPSK	8	4	22.28	22.24	22.23	
3	QPSK	8	7	22.33	22.24	22.18	
3	QPSK	15	0	22.25	22.22	22.12	
3	16QAM	1	0	22.63	22.46	22.51	23.5
3	16QAM	1	8	22.45	22.44	22.48	
3	16QAM	1	14	22.49	22.48	21.83	
3	16QAM	8	0	21.26	21.32	21.21	22.5
3	16QAM	8	4	21.28	21.28	21.20	
3	16QAM	8	7	21.32	21.27	21.22	
3	16QAM	15	0	21.32	21.23	21.19	
3	64QAM	1	0	21.45	21.50	21.38	22.5
3	64QAM	1	8	21.40	21.44	21.47	
3	64QAM	1	14	21.41	21.33	21.21	
3	64QAM	8	0	20.23	20.25	20.16	21.5
3	64QAM	8	4	20.31	20.24	20.20	
3	64QAM	8	7	20.26	19.72	20.19	
3	64QAM	15	0	20.32	20.17	20.17	
3	256QAM	1	0	18.12	18.32	18.07	19.5

3	256QAM	1	8	18.14	18.32	18.12	
3	256QAM	1	14	18.54	18.67	18.57	
3	256QAM	8	0	17.96	18.22	18.07	19.5
3	256QAM	8	4	18.37	18.37	18.36	
3	256QAM	8	7	18.31	18.40	18.33	
3	256QAM	15	0	18.23	18.37	18.18	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	23.19	23.20	23.07	24.5
1.4	QPSK	1	3	23.06	23.08	23.07	
1.4	QPSK	1	5	23.12	23.08	22.89	
1.4	QPSK	3	0	22.79	22.90	22.80	
1.4	QPSK	3	1	22.86	22.80	22.83	
1.4	QPSK	3	3	22.93	22.90	22.76	
1.4	QPSK	6	0	22.26	22.18	22.16	23.5
1.4	16QAM	1	0	22.55	22.42	22.52	23.5
1.4	16QAM	1	3	22.46	22.50	22.54	
1.4	16QAM	1	5	22.50	22.54	21.79	
1.4	16QAM	3	0	22.45	22.45	22.45	
1.4	16QAM	3	1	22.47	22.46	22.44	
1.4	16QAM	3	3	22.53	22.44	22.44	
1.4	16QAM	6	0	21.34	21.17	21.19	22.5
1.4	64QAM	1	0	21.51	21.53	21.35	22.5
1.4	64QAM	1	3	21.33	21.37	21.45	
1.4	64QAM	1	5	21.38	21.32	21.29	
1.4	64QAM	3	0	21.43	21.45	21.43	
1.4	64QAM	3	1	21.53	21.42	21.40	
1.4	64QAM	3	3	21.49	20.87	21.41	
1.4	64QAM	6	0	20.27	20.17	20.12	21.5
1.4	256QAM	1	0	18.07	18.34	18.05	19.5
1.4	256QAM	1	3	18.18	18.27	18.10	
1.4	256QAM	1	5	18.50	18.65	18.49	
1.4	256QAM	3	0	18.02	18.21	18.08	
1.4	256QAM	3	1	18.37	18.40	18.36	
1.4	256QAM	3	3	18.29	18.39	18.35	
1.4	256QAM	6	0	18.30	18.38	18.24	19.5

<TDD LTE SAR Measurement>

TDD LTE configuration setup for SAR measurement

SAR was tested with a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by 3GPP.

a. 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations

b. "special subframe S" contains both uplink and downlink transmissions, it has been taken into consideration to determine the transmission duty factor according to the worst case uplink and downlink cyclic prefix requirements for UpPTS

c. Establishing connections with base station simulators ensure a consistent means for testing SAR and recommended for evaluating SAR. The Base station simulator was used for LTE output power measurements and SAR testing.

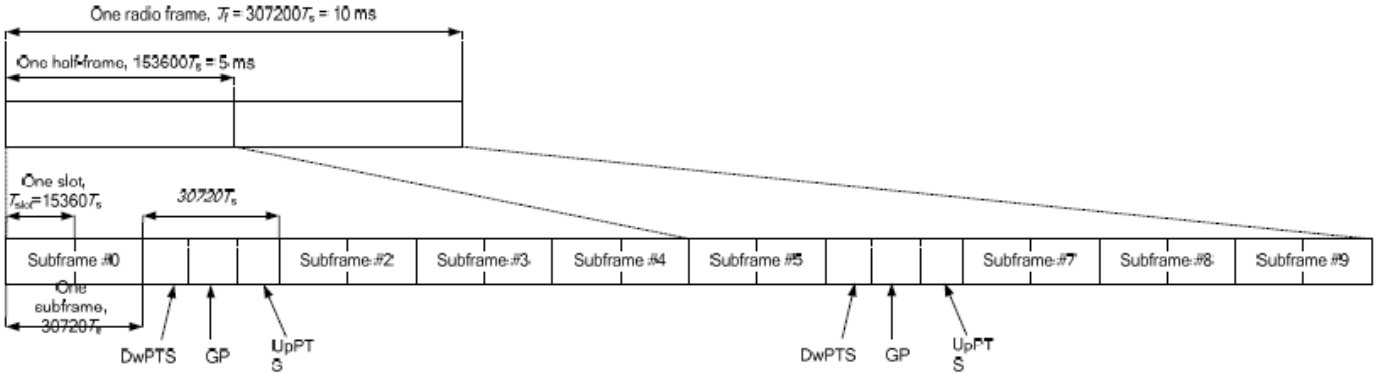

Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity).

Table 4.2-2: Uplink-downlink configurations.

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		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

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

Special subframe (30720·T_s): Normal cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	**Normal cyclic prefix in uplink**	**Extended cyclic prefix in uplink**
Uplink duty factor in one special subframe	**0~4**	7.13%	8.33%
	5~9	14.3%	16.7%

Special subframe(30720·T_s): Extended cyclic prefix in downlink (UpPTS)			
	Special subframe configuration	**Normal cyclic prefix in uplink**	**Extended cyclic prefix in uplink**
Uplink duty factor in one special subframe	**0~3**	7.13%	8.33%
	4~7	14.3%	16.7%

The highest duty factor is resulted from:

i. Uplink-downlink configuration: 0. In a half-frame consisted of 5 subfames, uplink operation is in 3 uplink subframes and 1 special subframe.

ii. special subframe configuration: 5-9 for normal cyclic prefix in downlink, 4-7 for extended cyclic prefix in downlink

iii. for special subframe with extended cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (3+0.167)/5 = 63.3%

iv. for special subframe with normal cyclic prefix in uplink, the total uplink duty factor in one half-frame is: (3+0.143)/5 = 62.9%

v. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The scaled TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.

vi. The device supports Power Class 3 uplink-downlink configurations 0 and 6, and Power Class 2 uplink-downlink configurations 1 to 5 operations for LTE Band 41.

vii. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1, for Power Class 3 operation is 63.3% using UL-DL configuration 0. Per FCC Guidance, all SAR tests were performed using Power Class 3. SAR with Power Class 2 at the available duty factor was additionally performed for the Power Class 3 configuration with the highest SAR among all exposure condition.

<LTE Band 38_Ant 1_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.02	23.06	22.96	24.5
20	QPSK	1	49	23.01	23.04	22.97	
20	QPSK	1	99	23.03	23.01	22.91	
20	QPSK	50	0	22.02	22.06	22.03	23.5
20	QPSK	50	24	22.15	22.07	22.03	
20	QPSK	50	50	22.15	22.16	22.00	
20	QPSK	100	0	22.13	22.05	22.01	
20	16QAM	1	0	22.03	22.02	21.98	23.5
20	16QAM	1	49	22.09	22.08	21.98	
20	16QAM	1	99	22.06	21.95	21.91	
20	16QAM	50	0	21.03	21.03	21.01	22.5
20	16QAM	50	24	21.13	21.06	21.03	
20	16QAM	50	50	21.16	21.14	21.03	
20	16QAM	100	0	21.13	21.05	21.02	
20	64QAM	1	0	22.03	21.01	20.97	22.5
20	64QAM	1	49	22.09	21.07	20.98	
20	64QAM	1	99	22.02	21.03	20.88	
20	64QAM	50	0	21.04	20.05	20.03	21.5
20	64QAM	50	24	21.13	20.06	20.03	
20	64QAM	50	50	21.15	20.15	20.03	
20	64QAM	100	0	21.12	20.06	20.06	
20	256QAM	1	0	18.14	18.37	18.26	19.5
20	256QAM	1	49	18.25	18.30	18.05	
20	256QAM	1	99	18.18	18.35	18.12	
20	256QAM	50	0	18.08	18.38	18.32	19.5
20	256QAM	50	24	18.14	18.36	18.25	
20	256QAM	50	50	18.31	18.33	18.18	
20	256QAM	100	0	18.35	18.37	18.28	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	22.97	22.94	22.83	24.5
15	QPSK	1	37	22.86	23.00	22.93	
15	QPSK	1	74	22.98	22.93	22.89	
15	QPSK	36	0	21.92	21.96	22.00	23.5
15	QPSK	36	20	22.11	21.93	21.96	
15	QPSK	36	39	22.06	22.04	21.90	
15	QPSK	75	0	22.07	22.03	21.86	
15	16QAM	1	0	21.96	21.90	21.91	23.5
15	16QAM	1	37	21.99	22.02	21.97	
15	16QAM	1	74	21.99	21.81	21.86	
15	16QAM	36	0	20.89	20.97	20.93	22.5
15	16QAM	36	20	21.02	21.00	20.95	
15	16QAM	36	39	21.12	21.09	20.91	
15	16QAM	75	0	21.05	21.03	20.94	
15	64QAM	1	0	21.92	20.90	20.94	22.5
15	64QAM	1	37	22.00	20.93	20.93	
15	64QAM	1	74	21.97	20.89	20.74	
15	64QAM	36	0	21.03	19.94	19.99	21.5
15	64QAM	36	20	21.06	20.05	19.93	
15	64QAM	36	39	21.11	20.03	19.98	
15	64QAM	75	0	21.03	19.97	20.02	
15	256QAM	1	0	18.07	18.28	18.20	19.5
15	256QAM	1	37	18.18	18.24	17.98	
15	256QAM	1	74	18.10	18.24	18.04	
15	256QAM	36	0	18.02	18.23	18.30	19.5
15	256QAM	36	20	18.10	18.32	18.20	

15	256QAM	36	39	18.17	18.28	18.14	
15	256QAM	75	0	18.28	18.25	18.26	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.01	23.04	22.86	24.5
10	QPSK	1	25	22.87	22.98	22.90	
10	QPSK	1	49	22.93	22.95	22.81	
10	QPSK	25	0	21.95	21.98	21.97	23.5
10	QPSK	25	12	22.00	22.01	21.95	
10	QPSK	25	25	22.01	22.03	21.90	
10	QPSK	50	0	22.07	22.04	21.93	
10	16QAM	1	0	21.91	21.89	21.96	23.5
10	16QAM	1	25	22.01	21.93	21.90	
10	16QAM	1	49	21.94	21.83	21.76	
10	16QAM	25	0	20.95	20.98	20.92	22.5
10	16QAM	25	12	21.04	21.04	20.94	
10	16QAM	25	25	21.06	21.03	20.96	
10	16QAM	50	0	21.10	20.91	21.00	
10	64QAM	1	0	21.89	20.95	20.82	22.5
10	64QAM	1	25	21.96	21.03	20.90	
10	64QAM	1	49	22.01	20.94	20.73	
10	64QAM	25	0	21.01	20.04	19.96	21.5
10	64QAM	25	12	21.04	20.01	20.01	
10	64QAM	25	25	21.13	20.07	19.99	
10	64QAM	50	0	20.98	19.96	19.97	
10	256QAM	1	0	18.11	18.31	18.13	19.5
10	256QAM	1	25	18.22	18.24	18.03	
10	256QAM	1	49	18.08	18.27	18.10	
10	256QAM	25	0	18.07	18.25	18.21	19.5
10	256QAM	25	12	18.07	18.34	18.14	
10	256QAM	25	25	18.16	18.26	18.03	
10	256QAM	50	0	18.27	18.27	18.23	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	22.95	22.92	22.83	24.5
5	QPSK	1	12	23.00	22.98	22.88	
5	QPSK	1	24	22.96	22.99	22.90	
5	QPSK	12	0	21.97	22.02	22.02	23.5
5	QPSK	12	7	22.09	21.98	21.96	
5	QPSK	12	13	22.06	22.01	21.95	
5	QPSK	25	0	22.07	22.02	21.89	
5	16QAM	1	0	21.88	21.94	21.93	23.5
5	16QAM	1	12	22.07	21.97	21.95	
5	16QAM	1	24	21.93	21.89	21.79	
5	16QAM	12	0	20.97	20.98	20.90	22.5
5	16QAM	12	7	21.02	21.04	20.93	
5	16QAM	12	13	21.04	21.02	20.92	
5	16QAM	25	0	20.98	20.99	20.89	
5	64QAM	1	0	21.93	20.95	20.85	22.5
5	64QAM	1	12	22.05	21.04	20.93	
5	64QAM	1	24	21.95	20.90	20.75	
5	64QAM	12	0	21.02	19.98	19.99	21.5
5	64QAM	12	7	20.98	19.96	19.89	
5	64QAM	12	13	21.09	20.09	19.91	
5	64QAM	25	0	20.99	19.99	20.03	
5	256QAM	1	0	18.11	18.23	18.21	19.5
5	256QAM	1	12	18.10	18.24	18.03	
5	256QAM	1	24	18.06	18.28	18.02	
5	256QAM	12	0	18.07	18.37	18.21	19.5
5	256QAM	12	7	18.04	18.34	18.19	
5	256QAM	12	13	18.20	18.22	18.06	
5	256QAM	25	0	18.28	18.24	18.14	

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	22.92	23.08	23.15	23.04	22.89	24.5
20	QPSK	1	49	22.97	23.07	23.10	23.02	22.88	
20	QPSK	1	99	22.95	23.04	23.06	23.09	22.87	
20	QPSK	50	0	21.91	21.98	22.02	22.06	21.84	23.5
20	QPSK	50	24	21.99	22.09	22.06	22.08	21.93	
20	QPSK	50	50	21.96	22.07	22.13	22.09	21.95	
20	QPSK	100	0	21.98	22.09	22.03	22.07	21.94	
20	16QAM	1	0	21.96	22.02	22.13	22.07	21.90	23.5
20	16QAM	1	49	21.99	22.03	22.18	22.11	21.88	
20	16QAM	1	99	21.92	22.09	22.22	22.09	21.94	
20	16QAM	50	0	20.92	21.01	21.04	21.10	20.85	22.5
20	16QAM	50	24	21.02	21.11	21.09	21.11	20.95	
20	16QAM	50	50	21.02	21.06	21.15	21.11	20.95	
20	16QAM	100	0	21.04	21.09	21.06	21.08	20.95	
20	64QAM	1	0	20.92	20.93	21.12	21.06	20.78	22.5
20	64QAM	1	49	20.98	21.02	21.11	21.06	20.88	
20	64QAM	1	99	20.92	21.02	21.18	21.08	20.92	
20	64QAM	50	0	19.93	20.01	20.05	20.07	19.86	21.5
20	64QAM	50	24	20.02	20.12	20.10	20.12	19.96	
20	64QAM	50	50	20.02	20.11	20.16	20.12	19.94	
20	64QAM	100	0	20.02	20.12	20.08	20.08	19.94	
20	256QAM	1	0	18.14	18.20	18.33	18.05	18.06	19.5
20	256QAM	1	49	18.23	18.25	18.25	18.06	18.02	
20	256QAM	1	99	18.12	18.23	18.27	18.27	17.98	
20	256QAM	50	0	18.15	18.21	18.34	18.21	18.11	19.5
20	256QAM	50	24	18.02	18.24	18.29	18.09	18.08	
20	256QAM	50	50	18.11	18.24	18.35	18.24	18.34	
20	256QAM	100	0	18.09	18.25	18.30	18.05	18.17	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	22.82	22.90	22.99	22.93	22.69	24.50
15	QPSK	1	37	22.78	22.97	22.91	22.89	22.77	
15	QPSK	1	74	22.75	22.92	22.92	22.96	22.75	
15	QPSK	36	0	21.75	21.82	21.83	21.87	21.69	23.5
15	QPSK	36	20	21.89	21.90	21.94	21.89	21.74	
15	QPSK	36	39	21.78	21.93	21.94	21.96	21.84	
15	QPSK	75	0	21.85	21.97	21.83	21.97	21.82	
15	16QAM	1	0	21.77	21.88	21.98	21.90	21.70	23.5
15	16QAM	1	37	21.85	21.93	21.98	21.93	21.77	
15	16QAM	1	74	21.79	21.93	22.06	21.99	21.74	
15	16QAM	36	0	20.74	20.87	20.86	20.94	20.72	22.5
15	16QAM	36	20	20.83	20.99	20.93	21.01	20.77	
15	16QAM	36	39	20.89	20.87	21.03	20.92	20.80	
15	16QAM	75	0	20.89	20.90	20.90	20.89	20.79	
15	64QAM	1	0	20.76	20.77	20.98	20.87	20.67	22.5
15	64QAM	1	37	20.80	20.85	20.96	20.91	20.72	
15	64QAM	1	74	20.77	20.90	21.04	20.96	20.76	
15	64QAM	36	0	19.83	19.83	19.91	19.92	19.69	21.5
15	64QAM	36	20	19.88	19.94	19.97	19.99	19.81	
15	64QAM	36	39	19.86	19.98	20.01	19.96	19.82	
15	64QAM	75	0	19.92	19.98	19.95	19.98	19.81	
15	256QAM	1	0	17.96	18.01	18.22	17.87	17.90	19.5
15	256QAM	1	37	18.13	18.10	18.05	17.87	17.87	
15	256QAM	1	74	18.02	18.12	18.07	18.08	17.82	
15	256QAM	36	0	18.05	18.10	18.21	18.06	17.97	19.5

15	256QAM	36	20	17.85	18.09	18.17	17.94	17.89	
15	256QAM	36	39	17.98	18.11	18.24	18.10	18.18	
15	256QAM	75	0	17.94	18.11	18.18	17.87	18.02	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	22.75	22.93	23.00	22.90	22.72	24.50
10	QPSK	1	25	22.81	22.95	23.00	22.92	22.70	
10	QPSK	1	49	22.83	22.92	22.89	22.93	22.76	
10	QPSK	25	0	21.78	21.88	21.88	21.94	21.71	23.5
10	QPSK	25	12	21.85	21.94	21.91	21.93	21.82	
10	QPSK	25	25	21.76	21.91	22.00	21.91	21.78	
10	QPSK	50	0	21.80	21.95	21.85	21.90	21.83	
10	16QAM	1	0	21.80	21.82	21.99	21.90	21.76	23.5
10	16QAM	1	25	21.87	21.92	21.98	21.96	21.70	
10	16QAM	1	49	21.73	21.91	22.11	21.92	21.78	
10	16QAM	25	0	20.80	20.84	20.89	20.97	20.72	22.5
10	16QAM	25	12	20.91	20.94	20.96	20.98	20.77	
10	16QAM	25	25	20.84	20.89	21.05	20.96	20.82	
10	16QAM	50	0	20.90	20.96	20.92	20.97	20.76	
10	64QAM	1	0	20.72	20.80	20.98	20.96	20.58	22.5
10	64QAM	1	25	20.87	20.85	20.95	20.93	20.70	
10	64QAM	1	49	20.82	20.89	21.03	20.98	20.79	
10	64QAM	25	0	19.76	19.91	19.89	19.88	19.68	21.5
10	64QAM	25	12	19.85	19.94	19.99	19.98	19.86	
10	64QAM	25	25	19.92	19.95	19.96	19.99	19.79	
10	64QAM	50	0	19.84	19.97	19.94	19.96	19.81	
10	256QAM	1	0	18.00	18.01	18.18	17.91	17.89	19.5
10	256QAM	1	25	18.12	18.13	18.12	17.87	17.84	
10	256QAM	1	49	17.95	18.05	18.16	18.09	17.87	
10	256QAM	25	0	17.97	18.05	18.21	18.02	17.92	19.5
10	256QAM	25	12	17.87	18.10	18.18	17.95	17.90	
10	256QAM	25	25	18.00	18.08	18.16	18.13	18.17	
10	256QAM	50	0	17.93	18.05	18.14	17.86	18.04	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	22.76	22.94	23.00	22.90	22.77	24.50
5	QPSK	1	12	22.78	22.91	22.93	22.88	22.70	
5	QPSK	1	24	22.79	22.93	22.86	22.90	22.69	
5	QPSK	12	0	21.74	21.83	21.89	21.94	21.73	23.5
5	QPSK	12	7	21.83	21.90	21.88	21.88	21.77	
5	QPSK	12	13	21.80	21.87	22.02	21.92	21.81	
5	QPSK	25	0	21.83	21.99	21.91	21.89	21.78	
5	16QAM	1	0	21.77	21.87	21.99	21.94	21.71	23.5
5	16QAM	1	12	21.79	21.90	22.07	21.95	21.75	
5	16QAM	1	24	21.75	21.99	22.03	21.90	21.76	
5	16QAM	12	0	20.72	20.87	20.86	20.98	20.68	22.5
5	16QAM	12	7	20.84	20.94	20.90	20.97	20.75	
5	16QAM	12	13	20.83	20.91	21.04	20.92	20.77	
5	16QAM	25	0	20.89	20.91	20.90	20.94	20.76	
5	64QAM	1	0	20.75	20.77	20.95	20.87	20.67	22.5
5	64QAM	1	12	20.83	20.88	21.01	20.90	20.74	
5	64QAM	1	24	20.75	20.88	21.03	20.96	20.72	
5	64QAM	12	0	19.81	19.81	19.91	19.90	19.68	21.5
5	64QAM	12	7	19.87	19.94	19.90	19.92	19.76	
5	64QAM	12	13	19.89	19.92	20.00	19.93	19.84	
5	64QAM	25	0	19.92	19.95	19.96	19.98	19.75	
5	256QAM	1	0	17.98	18.03	18.21	17.88	17.91	19.5
5	256QAM	1	12	18.13	18.15	18.06	17.90	17.88	
5	256QAM	1	24	17.92	18.12	18.09	18.13	17.82	
5	256QAM	12	0	18.02	18.08	18.20	18.09	17.98	19.5
5	256QAM	12	7	17.85	18.04	18.12	17.92	17.91	
5	256QAM	12	13	17.95	18.08	18.15	18.06	18.15	
5	256QAM	25	0	17.97	18.06	18.15	17.90	18.02	

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				55340	55830	56150	56640	
Frequency (MHz)				3560	3609	3641	3690	
20	QPSK	1	0	21.85	22.17	22.40	22.38	23.5
20	QPSK	1	49	21.79	22.17	22.24	22.37	
20	QPSK	1	99	21.71	22.02	22.09	22.23	
20	QPSK	50	0	20.78	21.16	21.40	21.37	22.5
20	QPSK	50	24	20.85	21.22	21.23	21.42	
20	QPSK	50	50	20.82	21.21	21.28	21.45	
20	QPSK	100	0	20.84	21.20	21.39	21.30	
20	16QAM	1	0	20.82	21.19	21.28	21.46	22.5
20	16QAM	1	49	20.83	21.19	21.22	21.36	
20	16QAM	1	99	20.78	21.02	21.07	21.25	
20	16QAM	50	0	19.81	20.16	20.28	20.48	21.5
20	16QAM	50	24	19.86	20.20	20.21	20.43	
20	16QAM	50	50	19.87	20.17	20.25	20.44	
20	16QAM	100	0	19.85	20.22	20.30	20.39	
20	64QAM	1	0	20.80	20.15	20.12	20.37	21.5
20	64QAM	1	49	20.79	20.10	20.22	20.36	
20	64QAM	1	99	20.74	20.02	20.09	20.17	
20	64QAM	50	0	19.80	19.18	19.29	19.48	20.5
20	64QAM	50	24	19.86	19.20	19.23	19.41	
20	64QAM	50	50	19.85	19.20	19.29	19.41	
20	64QAM	100	0	19.87	19.22	19.28	19.37	
20	256QAM	1	0	16.89	17.07	17.36	17.26	18
20	256QAM	1	49	17.11	17.13	17.24	17.17	
20	256QAM	1	99	17.13	17.34	17.41	17.44	
20	256QAM	50	0	16.99	17.20	17.19	17.13	18.5
20	256QAM	50	24	17.06	17.31	17.05	16.95	
20	256QAM	50	50	17.05	17.20	17.17	17.04	
20	256QAM	100	0	17.09	17.24	16.96	17.03	
Channel				55315	55820	56160	56665	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3608	3642	3692.5	
15	QPSK	1	0	21.75	22.14	22.29	22.31	23.5
15	QPSK	1	37	21.65	22.15	22.10	22.22	
15	QPSK	1	74	21.70	22.01	22.07	22.22	
15	QPSK	36	0	20.74	21.11	21.28	21.23	22.5
15	QPSK	36	20	20.70	21.12	21.18	21.41	
15	QPSK	36	39	20.70	21.06	21.25	21.32	
15	QPSK	75	0	20.78	21.16	21.32	21.21	
15	16QAM	1	0	20.77	21.08	21.16	21.42	22.5
15	16QAM	1	37	20.70	21.06	21.17	21.23	
15	16QAM	1	74	20.64	20.98	21.06	21.11	
15	16QAM	36	0	19.66	20.06	20.23	20.43	21.5
15	16QAM	36	20	19.79	20.07	20.11	20.35	
15	16QAM	36	39	19.82	20.09	20.10	20.29	
15	16QAM	75	0	19.82	20.19	20.21	20.27	
15	64QAM	1	0	20.71	20.08	20.01	20.33	21.5
15	64QAM	1	37	20.67	19.97	20.20	20.33	
15	64QAM	1	74	20.66	19.99	19.94	20.11	
15	64QAM	36	0	19.68	19.04	19.28	19.36	20.5
15	64QAM	36	20	19.76	19.18	19.08	19.34	

15	64QAM	36	39	19.76	19.18	19.21	19.27	
15	64QAM	75	0	19.85	19.14	19.25	19.32	
15	256QAM	1	0	16.83	17.01	17.24	17.23	18.5
15	256QAM	1	37	16.99	17.10	17.22	17.02	
15	256QAM	1	74	17.03	17.27	17.31	17.43	
15	256QAM	36	0	16.96	17.17	17.15	17.10	18.5
15	256QAM	36	20	16.94	17.26	17.04	16.93	
15	256QAM	36	39	16.91	17.05	17.10	16.95	
15	256QAM	75	0	17.03	17.18	16.82	16.96	
Channel				55290	55815	56165	56690	Tune-up limit (dBm)
Frequency (MHz)				3555	3607.5	3642.5	3695	
10	QPSK	1	0	21.72	22.15	22.28	22.28	23.5
10	QPSK	1	25	21.74	22.04	22.14	22.27	
10	QPSK	1	49	21.59	22.01	21.96	22.10	
10	QPSK	25	0	20.65	21.06	21.28	21.33	22.5
10	QPSK	25	12	20.83	21.08	21.21	21.28	
10	QPSK	25	25	20.68	21.10	21.20	21.34	
10	QPSK	50	0	20.83	21.05	21.28	21.28	
10	16QAM	1	0	20.69	21.16	21.24	21.33	22.5
10	16QAM	1	25	20.68	21.12	21.20	21.23	
10	16QAM	1	49	20.72	20.91	21.04	21.13	
10	16QAM	25	0	19.73	20.11	20.16	20.37	21.5
10	16QAM	25	12	19.82	20.14	20.13	20.29	
10	16QAM	25	25	19.78	20.04	20.24	20.35	
10	16QAM	50	0	19.77	20.07	20.22	20.30	
10	64QAM	1	0	20.72	20.02	20.04	20.31	21.5
10	64QAM	1	25	20.71	20.06	20.18	20.26	
10	64QAM	1	49	20.66	19.91	20.07	20.06	
10	64QAM	25	0	19.74	19.04	19.15	19.45	20.5
10	64QAM	25	12	19.72	19.17	19.16	19.27	
10	64QAM	25	25	19.80	19.11	19.22	19.34	
10	64QAM	50	0	19.73	19.17	19.22	19.25	
10	256QAM	1	0	16.83	16.95	17.22	17.18	18.5
10	256QAM	1	25	17.06	17.08	17.14	17.04	
10	256QAM	1	49	17.11	17.24	17.39	17.37	
10	256QAM	25	0	16.88	17.18	17.06	17.02	18.5
10	256QAM	25	12	16.91	17.25	16.95	16.85	
10	256QAM	25	25	16.97	17.08	17.14	16.93	
10	256QAM	50	0	17.00	17.10	16.86	17.02	
Channel				55265	55810	56170	56715	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3607	3643	3697.5	
5	QPSK	1	0	21.83	22.12	22.30	22.26	23.5
5	QPSK	1	12	21.72	22.09	22.12	22.26	
5	QPSK	1	24	21.65	21.91	21.96	22.21	
5	QPSK	12	0	20.71	21.15	21.26	21.27	22.5
5	QPSK	12	7	20.80	21.08	21.16	21.40	
5	QPSK	12	13	20.80	21.06	21.22	21.35	
5	QPSK	25	0	20.72	21.17	21.26	21.20	
5	16QAM	1	0	20.73	21.05	21.16	21.35	22.5
5	16QAM	1	12	20.82	21.04	21.17	21.21	
5	16QAM	1	24	20.70	20.95	20.92	21.13	
5	16QAM	12	0	19.79	20.07	20.26	20.46	21.5
5	16QAM	12	7	19.76	20.05	20.20	20.36	
5	16QAM	12	13	19.86	20.12	20.13	20.30	
5	16QAM	25	0	19.74	20.16	20.17	20.37	
5	64QAM	1	0	20.75	20.02	20.00	20.23	21.5

5	64QAM	1	12	20.65	20.06	20.15	20.29	
5	64QAM	1	24	20.65	19.93	19.95	20.02	
5	64QAM	12	0	19.71	19.09	19.14	19.44	20.5
5	64QAM	12	7	19.82	19.14	19.19	19.35	
5	64QAM	12	13	19.82	19.07	19.28	19.40	
5	64QAM	25	0	19.79	19.07	19.13	19.29	
5	256QAM	1	0	16.86	17.06	17.33	17.20	18.5
5	256QAM	1	12	17.02	17.07	17.11	17.07	
5	256QAM	1	24	17.04	17.27	17.33	17.29	
5	256QAM	12	0	16.93	17.06	17.07	17.01	18.5
5	256QAM	12	7	17.00	17.22	17.02	16.83	
5	256QAM	12	13	16.94	17.08	17.13	17.01	
5	256QAM	25	0	17.08	17.22	16.84	16.89	

<LTE Carrier Aggregation combinations>

General Note:

1. This device supports Carrier Aggregation on downlink only for inter and intra band, Uplink CA is not supported. For the device supports combination bands and configurations are according to 3GPP.
2. In applying the existing power measurement procedure of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of the frequency band and CCs in each row need consideration, and that configurations require power measurement should be highlighted in the below table.

2CC Downlink Carrier Aggregation			3CC Downlink Carrier Aggregation		
Number	Combination	Covered by Measurement Superset	Number	Combination	Covered by Measurement Superset
1	CA_5B	100	41	CA_41D	
2	CA_38C		42	CA_48D	102
3	CA_41C	41	43	CA_48A-48C	102
4	CA_48B	102	44	CA_66A-66A-66A	103
5	CA_48C	102	45	CA_66A-66C	103
6	CA_66B	103	46	CA_2A-2A-4A	85
7	CA_66C	103	47	CA_2A-2A-5A	88
8	CA_2A-2A	96	48	CA_2A-2A-12A	90
9	CA_4A-4A	98	49	CA_2A-2A-13A	92
10	CA_5A-5A	100	50	CA_2A-2A-14A	94
11	CA_7A-7A	29	51	CA_2A-2A-66A	96
12	CA_25A-25A		52	CA_2A-4A-4A	85
13	CA_48A-48A	102	53	CA_2A-5B	88
14	CA_66A-66A	103	54	CA_2A-48A-48A	96
15	CA_2A-4A	85	55	CA_2A-48C	96
16	CA_2A-5A	88	56	CA_2A-66A-66A	96
17	CA_2A-12A	90	57	CA_2A-66B	96
18	CA_2A-13A	92	58	CA_2A-66C	96
19	CA_2A-14A	94	59	CA_4A-4A-5A	97
20	CA_2A-30A	95	60	CA_4A-4A-12A	98
21	CA_2A-48A	96	61	CA_4A-4A-13A	85
22	CA_2A-66A	96	62	CA_4A-5B	97
23	CA_4A-5A	97	63	CA_4A-48C	
24	CA_4A-12A	98	64	CA_5A-5A-66A	100
25	CA_4A-13A	85	65	CA_5A-48C	100
26	CA_4A-17A		66	CA_5A-66A-66A	100
27	CA_4A-30A	98	67	CA_5A-66B	100
28	CA_4A-48A	63	68	CA_5A-66C	100
29	CA_5A-7A		69	CA_5B-66A	100
30	CA_5A-30A	99	70	CA_12A-66A-66A	101
31	CA_5A-48A	100	71	CA_13A-48A-48A	102
32	CA_5A-66A	100	72	CA_13A-48C	102
33	CA_12A-30A	101	73	CA_13A-66A-66A	102
34	CA_12A-66A	101	74	CA_13A-66B	102
35	CA_13A-48A	102	75	CA_13A-66C	102
36	CA_13A-66A	102	76	CA_14A-66A-66A	103
37	CA_14A-30A	103	77	CA_30A-66A-66A	103
38	CA_14A-66A	103	78	CA_48A-48A-66A	102
39	CA_30A-66A	103	79	CA_48A-66A-66A	102
40	CA_48A-66A	102	80	CA_48A-66B	102
			81	CA_48A-66C	102
			82	CA_48C-66A	102
			83	CA_2A-4A-5A	
			84	CA_2A-4A-12A	

			85	CA_2A-4A-13A	
			86	CA_2A-5A-30A	
			87	CA_2A-5A-48A	
			88	CA_2A-5A-66A	
			89	CA_2A-12A-30A	
			90	CA_2A-12A-66A	
			91	CA_2A-13A-48A	
			92	CA_2A-13A-66A	
			93	CA_2A-14A-30A	
			94	CA_2A-14A-66A	
			95	CA_2A-30A-66A	
			96	CA_2A-48A-66A	
			97	CA_4A-5A-30A	
			98	CA_4A-12A-30A	
			99	CA_5A-30A-66A	
			100	CA_5A-48A-66A	
			101	CA_12A-30A-66A	
			102	CA_13A-48A-66A	
			103	CA_14A-30A-66A	

<Power verification when LTE Carrier Aggregation Active>

General Note:

i. According to KDB941225 D05A v01r02, Uplink maximum output power measurement with downlink carrier aggregation active should be measured, using the highest output channel measured without downlink carrier aggregation, to confirm that uplink maximum output power with downlink carrier aggregation active remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output measured without downlink carrier aggregation active.

ii. Uplink maximum output power with downlink carrier aggregation active does not show more than ¼ dB higher than the maximum output power without downlink carrier aggregation active, therefore SAR evaluation with downlink carrier aggregation active can be excluded.

iii. The device supports downlink two carrier aggregation. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.

iv. Selected highest measured power when downlink carrier aggregation is inactive for conducted power comparison with downlink carrier aggregation is active, 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 ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.

v. For non-contiguous intra-band CA, the SCC selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band.

vi. For Intra-band, contiguous CA, 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.

$$\text{Nominal channel spacing} = \left\lfloor \frac{BW_{Channel(1)} + BW_{Channel(2)} - 0.1\left|BW_{Channel(1)} - BW_{Channel(2)}\right|}{0.6} \right\rfloor 0.3 \ \ [\text{MHz}]$$

<Two Carrier power verification>

Configure		PCC							SCC				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band		4	20	1732.5	20175	QPSK	1	0	17	10	740	5790	23.01	23.20
		5	10	836.5	20525	QPSK	1	0	7	20	2655	3100	23.11	23.32
Intra-Band	Non-Contiguous	25	20	1880	26340	QPSK	1	0	25	20	1985	8590	23.09	23.22
	Contiguous	38	20	2595	38000	QPSK	1	0	38	20	2614.80	38198	22.98	23.06

<Three Carrier power verification>

Configure		PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band		2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	5	10	881.5	2525	22.96	23.14
		2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	12	10	737.5	5095	22.95	23.14
		2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	13	10	751	5230	22.94	23.14
		2	20	1880	18900	QPSK	1	0	5	10	881.5	2525	30	10	2355	9820	23.01	23.14
		2	20	1880	18900	QPSK	1	0	5	10	881.5	2525	48	20	3625	55990	23.02	23.14
		2	20	1880	18900	QPSK	1	0	5	10	881.5	2525	66	20	2155	66886	22.89	23.14
		2	20	1880	18900	QPSK	1	0	12	10	737.5	5095	30	10	2355	9820	23.01	23.14
		2	20	1880	18900	QPSK	1	0	12	10	737.5	5095	66	20	2155	66886	22.93	23.14
		2	20	1880	18900	QPSK	1	0	13	10	751	5230	48	20	3625	55990	22.97	23.14
		2	20	1880	18900	QPSK	1	0	13	10	751	5230	66	20	2155	66886	23.01	23.14
		2	20	1880	18900	QPSK	1	0	14	10	763	5330	30	10	2355	9820	23.06	23.14
		2	20	1880	18900	QPSK	1	0	14	10	763	5330	66	20	2155	66886	22.97	23.14
		2	20	1880	18900	QPSK	1	0	30	10	2355	9820	66	20	2155	66886	22.86	23.14
		2	20	1880	18900	QPSK	1	0	48	20	3625	55990	66	20	2155	66886	22.89	23.14
		4	20	1732.5	20175	QPSK	1	0	5	10	881.5	2525	30	10	2355	9820	23.05	23.20
		4	20	1732.5	20175	QPSK	1	0	12	10	737.5	5095	30	10	2355	9820	23.01	23.20
		4	20	1732.5	20175	QPSK	1	0	48	20	3625	55990	48	10	3625	55990	23.05	23.20
		5	10	836.5	20525	QPSK	1	0	30	10	2355	9820	66	20	2155	66886	23.15	23.32
		5	10	836.5	20525	QPSK	1	0	48	20	3625	55990	66	20	2155	66886	23.11	23.32
		12	10	707.5	23095	QPSK	1	0	30	10	2355	9820	66	20	2155	66886	23.04	23.22
		13	10	782	23230	QPSK	1	0	48	20	3625	55990	66	20	2155	66886	22.87	23.07
		14	10	793	23330	QPSK	1	0	30	10	2355	9820	66	20	2155	66886	22.94	23.18
Intra-Band	Contiguous	41	20	2593	40620	QPSK	1	0	41	5	2593	40620	41	20	2593	40620	22.93	23.15

13. 5G NR Output Power (Unit: dBm)

General Note:

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below
   a. For DFT-OFDM output power measurement, full measurement was done for Pi/2 BPSK and QPSK and for the largest supported bandwidth, repeat test for 16QAM/64QAM/256QAM under 1RB 1Offset configuration. For smaller bandwidth, measure conducted power for Pi/2 BPSK and 1RB 1Offset configuration.
   b. According to the tune-up, CP-OFDM output power is not ½ dB higher than DFT-OFDM mode, and the reported SAR of DFT-OFDM mode reported SAR is ≤ 1.45 W/kg, SAR test and thus conducted power for CP-OFDM mode is not required.
   c. To start SAR test for the largest channel bandwidth for PI/2 BPSK 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. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
   d. For PI/2 BPSK with 100% RB allocation, SAR test 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 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.
   e. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is not ½ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
   f. Smaller bandwidth output power for each RB allocation configuration for this device is not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
2. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission

<3GPP 38.101 MPR for EN-DC>

Table 6.2.2-1 Maximum power reduction (MPR) for power class 3

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5[1]	≤ 1.2[1]	≤ 0.2[1]
		≤ 0.5[2]	≤ 0.5[2]	0[2]
	QPSK	≤ 1		0
	16 QAM	≤ 2		≤ 1
	64 QAM	≤ 2.5		
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

NOTE 1: Applicable for UE operating in TDD mode with Pi/2 BPSK modulation and UE indicates support for UE capability *powerBoosting-pi2BPSK* and if the IE *powerBoostPi2BPSK* is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0 dB MPR is 26 dBm.

NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 with Pi/2 BPSK modulation and if the IE *powerBoostPi2BPSK* is set to 0 and if more than 40 % of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.

Table 6.2.2-2 Maximum power reduction (MPR) for power class 2

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5	≤ 0.5	0
	QPSK	≤ 3.5	≤ 1	0
	16 QAM	≤ 3.5	≤ 2	≤ 1
	64 QAM	≤ 3.5	≤ 2.5	
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3.5	≤ 3	≤ 1.5
	16 QAM	≤ 3.5	≤ 3	≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

<FR1 n2_Ant 1_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	1	1	23.99	24.05	23.94	25.0
20	PI/2 BPSK	1	53	23.83	24.00	23.85	
20	PI/2 BPSK	1	104	23.83	23.99	23.89	
20	PI/2 BPSK	50	0	23.27	23.47	23.34	24.5
20	PI/2 BPSK	50	28	23.86	23.97	23.80	25.0
20	PI/2 BPSK	50	56	23.34	23.47	23.31	24.5
20	PI/2 BPSK	100	0	23.29	23.45	23.32	
20	QPSK	1	1	23.84	24.01	23.91	25.0
20	QPSK	1	53	23.79	23.90	23.76	
20	QPSK	1	104	23.79	23.97	23.87	
20	QPSK	50	0	23.25	23.45	23.33	24.0
20	QPSK	50	28	23.73	23.87	23.70	25.0
20	QPSK	50	56	23.22	23.39	23.25	24.0
20	QPSK	100	0	23.19	23.35	23.19	
20	16QAM	1	1	23.86	23.96	23.80	24.0
20	64QAM	1	1	21.67	21.85	21.73	22.5
20	256QAM	1	1	18.85	19.04	18.86	20.5
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	PI/2 BPSK	1	1	23.89	23.95	23.84	25.0
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	PI/2 BPSK	1	1	23.79	23.93	23.78	25.0
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	1	1	23.83	23.85	23.83	25.0

<FR1 n5_Ant 0_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				166800	167300	167800	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	1	1	24.30	24.42	24.24	25.0
20	PI/2 BPSK	1	53	24.13	24.33	24.16	
20	PI/2 BPSK	1	104	24.27	24.41	24.31	
20	PI/2 BPSK	50	0	24.30	24.40	24.29	24.5
20	PI/2 BPSK	50	28	23.60	23.80	23.61	25.0
20	PI/2 BPSK	50	56	23.83	23.93	23.77	24.5
20	PI/2 BPSK	100	0	23.74	23.90	23.79	
20	QPSK	1	1	24.20	24.30	24.20	25.0
20	QPSK	1	53	24.13	24.25	24.07	
20	QPSK	1	104	24.12	24.24	24.06	
20	QPSK	50	0	23.21	23.37	23.25	24.0
20	QPSK	50	28	23.55	23.71	23.52	25.0
20	QPSK	50	56	23.74	23.85	23.71	24.0
20	QPSK	100	0	23.51	23.65	23.49	
20	16QAM	1	1	23.29	23.44	23.24	24.0
20	64QAM	1	1	21.70	21.88	21.70	22.5
20	256QAM	1	1	19.61	19.75	19.55	20.5
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	PI/2 BPSK	1	1	24.35	24.38	24.22	25.0
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	1	1	24.33	24.41	24.21	25.0

Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	1	1	24.35	24.37	24.29	25.0

<FR1 n7_Ant 1_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				502000	507000	512000	
Frequency (MHz)				2510	2535	2560	
20	PI/2 BPSK	1	1	24.61	24.75	24.63	25.0
20	PI/2 BPSK	1	53	24.49	24.64	24.52	
20	PI/2 BPSK	1	104	24.46	24.65	24.52	
20	PI/2 BPSK	50	0	23.84	24.03	23.92	24.5
20	PI/2 BPSK	50	28	24.37	24.54	24.39	25.0
20	PI/2 BPSK	50	56	23.86	24.04	23.93	24.5
20	PI/2 BPSK	100	0	23.79	23.98	23.83	
20	QPSK	1	1	24.57	24.69	24.54	25.0
20	QPSK	1	53	24.45	24.56	24.46	
20	QPSK	1	104	24.50	24.61	24.44	
20	QPSK	50	0	23.86	23.96	23.80	24.0
20	QPSK	50	28	24.41	24.53	24.38	25.0
20	QPSK	50	56	23.82	23.98	23.84	24.0
20	QPSK	100	0	23.73	23.92	23.77	
20	16QAM	1	1	23.24	23.44	23.33	24.0
20	64QAM	1	1	20.87	21.03	20.83	22.5
20	256QAM	1	1	19.77	19.91	19.77	20.5
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	PI/2 BPSK	1	1	24.56	24.61	24.46	25.0
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	PI/2 BPSK	1	1	24.49	24.50	24.36	25.0
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	PI/2 BPSK	1	1	24.39	24.46	24.44	25.0

<FR1 n12_Ant 0_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				141300	141500	141700	
Frequency (MHz)				706.5	707.5	708.5	
15	PI/2 BPSK	1	1	24.46	24.51	24.44	25.0
15	PI/2 BPSK	1	40	24.15	24.33	24.15	
15	PI/2 BPSK	1	77	23.85	24.04	23.87	
15	PI/2 BPSK	36	0	23.69	23.85	23.70	24.5
15	PI/2 BPSK	36	22	24.04	24.15	24.02	25.0
15	PI/2 BPSK	36	43	23.36	23.56	23.46	24.5
15	PI/2 BPSK	75	0	23.63	23.79	23.61	
15	QPSK	1	1	24.31	24.48	24.32	25.0
15	QPSK	1	40	24.20	24.31	24.13	
15	QPSK	1	77	23.87	23.98	23.78	
15	QPSK	36	0	23.73	23.84	23.66	24.0
15	QPSK	36	22	23.90	24.10	23.94	25.0
15	QPSK	36	43	23.34	23.52	23.33	24.0
15	QPSK	75	0	23.55	23.71	23.55	
15	16QAM	1	1	23.48	23.64	23.45	24.0
15	64QAM	1	1	21.79	21.89	21.71	22.5
	256QAM	1	1	19.69	19.79	19.63	20.5

Channel				140800	141500	142200	Tune-up limit (dBm)
Frequency (MHz)				704	707.5	711	
10	PI/2 BPSK	1	1	24.41	24.50	24.41	25.0
Channel				140300	141500	142700	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	PI/2 BPSK	1	1	24.26	24.46	24.43	25.0

<FR1 n13_Ant 0_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					156400		
Frequency (MHz)					782		
10	PI/2 BPSK	1	1		24.16		25.0
10	PI/2 BPSK	1	26		24.10		
10	PI/2 BPSK	1	50		24.12		
10	PI/2 BPSK	25	0		23.56		24.5
10	PI/2 BPSK	25	14		24.03		25.0
10	PI/2 BPSK	25	27		23.57		24.5
10	PI/2 BPSK	50	0		23.60		
10	QPSK	1	1		24.14		25.0
10	QPSK	1	26		24.06		
10	QPSK	1	50		24.11		
10	QPSK	25	0		23.46		24.0
10	QPSK	25	14		23.97		25.0
10	QPSK	25	27		23.55		24.0
10	QPSK	50	0		23.56		
10	16QAM	1	1		23.55		24.0
10	64QAM	1	1		21.65		22.5
10	256QAM	1	1		19.44		20.5
Channel				155900	156400	156900	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	PI/2 BPSK	1	1	24.06	24.10	24.03	25.0

<FR1 n14_Ant 0_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					158600		
Frequency (MHz)					793		
10	PI/2 BPSK	1	1		24.57		25.0
10	PI/2 BPSK	1	26		24.48		
10	PI/2 BPSK	1	50		24.40		
10	PI/2 BPSK	25	0		23.91		24.5
10	PI/2 BPSK	25	14		24.44		25.0
10	PI/2 BPSK	25	27		23.91		24.5
10	PI/2 BPSK	50	0		23.86		
10	QPSK	1	1		24.51		25.0
10	QPSK	1	26		24.47		
10	QPSK	1	50		24.38		
10	QPSK	25	0		23.84		24.0
10	QPSK	25	14		24.41		25.0
10	QPSK	25	27		23.91		24.0
10	QPSK	50	0		23.81		
10	16QAM	1	1		23.78		24.0
10	64QAM	1	1		21.69		22.5
10	256QAM	1	1		19.88		20.5
Channel				158100	158600	159100	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	PI/2 BPSK	1	1	24.39	24.44	24.33	25.0

<FR1 n25_Ant 1_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				373000	376500	380000	
Frequency (MHz)				1865	1882.5	1900	
30	PI/2 BPSK	1	1	24.07	24.11	24.09	25.0
30	PI/2 BPSK	1	80	23.98	24.10	24.00	
30	PI/2 BPSK	1	158	23.92	24.09	23.92	
30	PI/2 BPSK	80	0	23.43	23.56	23.39	24.5
30	PI/2 BPSK	80	40	23.81	23.97	23.86	25.0
30	PI/2 BPSK	80	80	23.45	23.59	23.46	24.5
30	PI/2 BPSK	160	0	23.42	23.57	23.45	
30	QPSK	1	1	23.93	24.08	23.94	25.0
30	QPSK	1	80	23.93	24.06	23.95	
30	QPSK	1	158	23.94	24.05	23.88	
30	QPSK	80	0	23.44	23.54	23.36	24.0
30	QPSK	80	40	23.78	23.93	23.78	25.0
30	QPSK	80	80	23.40	23.55	23.39	24.0
30	QPSK	160	0	23.39	23.52	23.35	
30	16QAM	1	1	22.83	23.03	22.83	24.0
30	64QAM	1	1	20.89	21.01	20.86	22.5
30	256QAM	1	1	18.83	19.00	18.86	20.5
Channel				372500	376500	380500	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1882.5	1902.5	
25	PI/2 BPSK	1	1	24.00	24.05	24.01	25.0
Channel				372000	376500	381000	Tune-up limit (dBm)
Frequency (MHz)				1860	1882.5	1905	
20	PI/2 BPSK	1	1	23.96	23.88	23.98	25.0
Channel				371500	376500	381500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5	
15	PI/2 BPSK	1	1	23.89	23.86	23.78	25.0
Channel				371000	376500	382000	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	
10	PI/2 BPSK	1	1	23.81	23.96	23.86	25.0
Channel				370500	376500	382500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5	
5	PI/2 BPSK	1	1	23.84	24.00	23.94	25.0

<FR1 n26_Ant 0_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				164800	166300	167800	
Frequency (MHz)				824	831.5	839	
20	PI/2 BPSK	1	1	24.16	24.43	24.13	25.0
20	PI/2 BPSK	1	53	23.82	23.95	23.77	
20	PI/2 BPSK	1	104	23.82	23.99	23.85	
20	PI/2 BPSK	50	0	23.72	23.87	23.70	24.5
20	PI/2 BPSK	50	28	23.73	23.90	23.73	25.0
20	PI/2 BPSK	50	56	23.86	23.98	23.79	24.5
20	PI/2 BPSK	100	0	23.69	23.89	23.73	
20	QPSK	1	1	24.23	24.40	24.23	25.0
20	QPSK	1	53	23.77	23.89	23.75	
20	QPSK	1	104	23.70	23.89	23.78	
20	QPSK	50	0	23.67	23.83	23.63	24.0
20	QPSK	50	28	23.70	23.89	23.73	25.0
20	QPSK	50	56	23.79	23.96	23.85	24.0
20	QPSK	100	0	23.71	23.89	23.70	
20	16QAM	1	1	23.69	23.88	23.73	24.0
20	64QAM	1	1	21.67	21.87	21.72	22.5

20	256QAM	1	1	19.82	19.95	19.84	20.5
Channel				164300	166300	168300	Tune-up limit (dBm)
Frequency (MHz)				821.5	831.5	841.5	
15	PI/2 BPSK	1	1	23.76	24.35	24.08	25.0
Channel				163800	166300	168800	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	PI/2 BPSK	1	1	24.05	24.22	24.06	25.0
Channel				163300	166300	169300	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	PI/2 BPSK	1	1	23.88	24.03	24.10	25.0

<FR1 n30_Ant 1_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					462000		
Frequency (MHz)					2310		
10	PI/2 BPSK	1	1		23.94		25.0
10	PI/2 BPSK	1	26		23.89		
10	PI/2 BPSK	1	50		23.81		
10	PI/2 BPSK	25	0		23.29		24.5
10	PI/2 BPSK	25	14		23.77		25.0
10	PI/2 BPSK	25	27		23.19		24.5
10	PI/2 BPSK	50	0		23.26		
10	QPSK	1	1		23.91		25.0
10	QPSK	1	26		23.87		
10	QPSK	1	50		23.77		
10	QPSK	25	0		23.19		24.0
10	QPSK	25	14		23.69		25.0
10	QPSK	25	27		23.09		24.0
10	QPSK	50	0		23.18		
10	16QAM	1	1		23.82		24.0
10	64QAM	1	1		21.77		22.5
10	256QAM	1	1		19.70		20.5
Channel				461500	462000	462500	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	PI/2 BPSK	1	1	23.68	23.84	23.75	25.0

<FR1 n66_Ant 1_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				345000	349000	353000	
Frequency (MHz)				1725	1745	1765	
30	PI/2 BPSK	1	1	24.15	24.28	24.27	25.0
30	PI/2 BPSK	1	80	24.02	24.20	24.04	
30	PI/2 BPSK	1	158	24.15	24.25	24.07	
30	PI/2 BPSK	80	0	23.71	23.87	23.70	24.5
30	PI/2 BPSK	80	40	24.05	24.22	24.06	25.0
30	PI/2 BPSK	80	80	23.63	23.78	23.67	24.5
30	PI/2 BPSK	160	0	23.65	23.80	23.70	
30	QPSK	1	1	24.01	24.19	24.09	25.0
30	QPSK	1	80	24.07	24.17	24.00	
30	QPSK	1	158	24.06	24.18	24.02	
30	QPSK	80	0	23.68	23.78	23.65	24.0
30	QPSK	80	40	24.03	24.20	24.10	25.0
30	QPSK	80	80	23.67	23.77	23.59	24.0
30	QPSK	160	0	23.59	23.71	23.56	
30	16QAM	1	1	23.02	23.13	22.96	24.0
30	64QAM	1	1	20.99	21.09	20.94	22.5
30	256QAM	1	1	18.99	19.18	19.07	20.5
Channel				344500	349000	353500	Tune-up limit (dBm)
Frequency (MHz)				1722.5	1745	1767.5	
25	PI/2 BPSK	1	1	24.07	24.11	24.06	25.0
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	PI/2 BPSK	1	1	24.00	24.05	23.98	25.0
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	PI/2 BPSK	1	1	23.99	24.03	23.98	25.0
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	PI/2 BPSK	1	1	23.89	24.00	23.97	25.0
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	PI/2 BPSK	1	1	24.02	24.06	24.00	25.0

<FR1 n38_Ant 1_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				518000	519000	520000	
Frequency (MHz)				2590	2595	2600	
40	PI/2 BPSK	1	1	24.57	24.61	24.56	25.0
40	PI/2 BPSK	1	53	24.48	24.52	24.47	
40	PI/2 BPSK	1	104	24.55	24.59	24.54	
40	PI/2 BPSK	50	0	23.96	24.00	23.95	24.5
40	PI/2 BPSK	50	28	24.44	24.48	24.43	25.0
40	PI/2 BPSK	50	56	24.04	24.08	24.03	24.5
40	PI/2 BPSK	100	0	23.96	24.00	23.95	
40	QPSK	1	1	24.55	24.59	24.54	25.0
40	QPSK	1	53	24.39	24.43	24.38	
40	QPSK	1	104	24.55	24.59	24.54	
40	QPSK	50	0	23.94	23.98	23.93	24.0
40	QPSK	50	28	24.39	24.43	24.38	25.0
40	QPSK	50	56	23.89	23.93	23.88	24.0
40	QPSK	100	0	23.96	24.00	23.95	
40	16QAM	1	1	23.46	23.50	23.45	24.0
40	64QAM	1	1	21.37	21.40	21.36	22.5
40	256QAM	1	1	19.53	19.56	19.52	20.5
Channel				517000	519000	521000	Tune-up limit (dBm)
Frequency (MHz)				2585	2595	2605	
30	PI/2 BPSK	1	1	24.44	24.50	24.49	25.0
Channel				516000	519000	522000	Tune-up limit (dBm)
Frequency (MHz)				2580	2595	2610	
20	PI/2 BPSK	1	1	24.35	24.51	24.39	25.0
Channel				515000	519000	523000	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	PI/2 BPSK	1	1	24.44	24.53	24.41	25.0

<FR1 n41_Ant 1_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				509202	518598	528000	
Frequency (MHz)				2546.01	2592.99	2640	
100	PI/2 BPSK	1	1	24.35	24.63	24.26	25.0
100	PI/2 BPSK	1	137	24.25	24.41	24.16	
100	PI/2 BPSK	1	271	24.15	24.31	24.06	
100	PI/2 BPSK	135	0	23.67	23.83	23.59	24.5
100	PI/2 BPSK	135	69	24.25	24.41	24.16	25.0
100	PI/2 BPSK	135	138	23.71	23.87	23.63	24.5
100	PI/2 BPSK	270	0	23.76	23.92	23.68	
100	QPSK	1	1	24.31	24.47	24.22	25.0
100	QPSK	1	137	24.25	24.41	24.16	
100	QPSK	1	271	24.07	24.23	23.98	
100	QPSK	135	0	23.63	23.79	23.55	24.0
100	QPSK	135	69	24.18	24.34	24.09	25.0
100	QPSK	135	138	23.69	23.85	23.61	24.0
100	QPSK	270	0	23.73	23.89	23.65	
100	16QAM	1	1	23.22	23.37	23.13	24.0
100	64QAM	1	1	21.18	21.32	21.10	22.5
100	256QAM	1	1	19.06	19.19	18.99	20.5
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	PI/2 BPSK	1	1	24.33	24.49	24.25	25.0
Channel				507204	518598	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI/2 BPSK	1	1	24.33	24.48	24.23	25.0
Channel				506202	518598	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2592.99	2655	
70	PI/2 BPSK	1	1	24.32	24.48	24.21	25.0
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	PI/2 BPSK	1	1	24.33	24.49	24.23	25.0
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	PI/2 BPSK	1	1	24.34	24.50	24.23	25.0
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	PI/2 BPSK	1	1	24.33	24.50	24.22	25.0
Channel				502200	518598	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2592.99	2674.98	
30	PI/2 BPSK	1	1	24.30	24.46	24.22	25.0
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI/2 BPSK	1	1	24.25	24.36	24.25	25.0

<FR1 n48_Ant 7_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dbm)		
Sub carrier spacing		Channel		637000	641666	646332	637000	641666	646332
30k	Hz	Frequency (MHz)		3555	3624.99	3694.98	3555	3624.99	3694.98
10	PI/2 BPSK	1	1	21.61	22.05	21.49	23.50	23.50	23.50
10	PI/2 BPSK	1	22	21.47	22.04	21.69	23.50	23.50	23.50
10	PI/2 BPSK	12	6	21.62	22.25	21.65	23.50	23.50	23.50
10	PI/2 BPSK	1	0	21.06	21.56	21.00	23.50	23.50	23.50
10	PI/2 BPSK	1	23	21.00	21.58	21.03	23.50	23.50	23.50
10	PI/2 BPSK	24	0	21.09	21.75	21.09	23.50	23.50	23.50
10	QPSK	1	1	21.58	22.03	21.52	23.50	23.50	23.50
10	QPSK	1	22	21.45	22.11	21.52	23.50	23.50	23.50
10	QPSK	12	6	21.59	22.17	21.60	23.50	23.50	23.50
10	QPSK	1	0	20.65	21.13	20.48	22.50	22.50	22.50
10	QPSK	1	23	20.42	21.22	20.51	22.50	22.50	22.50
10	QPSK	24	0	20.61	21.27	20.65	22.50	22.50	22.50
10	16QAM	1	1	20.68	21.32	20.73	22.50	22.50	22.50
10	64QAM	1	1	19.17	19.65	19.05	21.50	21.50	21.50
10	256QAM	1	1	16.84	17.36	16.79	19.50	19.50	19.50
Sub carrier spacing		Channel		637334	641666	646000	637334	641666	646000
30k	Hz	Frequency (MHz)		3560.01	3624.99	3690	3560.01	3624.99	3690
20	PI/2 BPSK	1	1	17.60	21.93	21.47	19.50	23.50	23.50
20	PI/2 BPSK	1	49	21.60	22.15	17.49	23.50	23.50	19.50
20	PI/2 BPSK	25	12	21.69	22.29	21.67	23.50	23.50	23.50
20	PI/2 BPSK	1	0	17.55	21.51	21.08	19.50	23.50	23.50
20	PI/2 BPSK	1	50	21.01	21.72	17.59	23.50	23.50	19.50
20	PI/2 BPSK	50	0	17.53	21.70	17.61	19.50	23.50	19.50
20	QPSK	1	1	17.54	21.98	21.38	19.50	23.50	23.50
20	QPSK	1	49	21.61	22.07	17.54	23.50	23.50	19.50
20	QPSK	25	12	21.63	22.22	21.57	23.50	23.50	23.50
20	QPSK	1	0	17.46	20.93	20.42	19.50	22.50	22.50
20	QPSK	1	50	20.63	21.33	17.40	22.50	23.50	19.50
20	QPSK	50	0	17.70	21.23	17.55	19.50	23.50	19.50
20	16QAM	1	1	16.76	21.04	20.42	18.50	23.50	22.50
20	64QAM	1	1	16.64	19.53	19.06	18.50	21.50	21.50
20	256QAM	1	1	16.89	17.29	16.82	18.50	19.50	18.50
Sub carrier spacing		Channel		637668	641666	645666	637668	641666	645666
30k	Hz	Frequency (MHz)		3565.02	3624.99	3684.99	3565.02	3624.99	3684.99
30	PI/2 BPSK	1	1	11.30	18.11	11.31	13.00	20.00	13.00
30	PI/2 BPSK	1	76	11.16	18.08	11.00	13.00	20.00	13.00
30	PI/2 BPSK	36	18	11.17	22.19	21.72	13.00	23.50	23.50
30	PI/2 BPSK	1	0	11.23	17.96	11.33	13.00	20.00	13.00
30	PI/2 BPSK	1	77	11.11	18.13	11.02	13.00	20.00	13.00
30	PI/2 BPSK	75	0	11.20	18.30	11.27	13.00	20.00	13.00
30	QPSK	1	1	11.25	18.06	11.27	13.00	20.00	13.00
30	QPSK	1	76	11.08	18.07	10.97	13.00	20.00	13.00
30	QPSK	36	18	11.17	22.29	21.64	13.00	23.50	23.50
30	QPSK	1	0	11.25	18.19	11.25	13.00	20.00	13.00
30	QPSK	1	77	11.10	18.06	11.05	13.00	20.00	13.00
30	QPSK	75	0	11.22	18.25	11.20	13.00	20.00	13.00
30	16QAM	1	1	10.89	18.37	10.91	13.00	20.00	13.00
30	64QAM	1	1	10.90	18.24	10.86	13.00	20.00	13.00
30	256QAM	1	1	10.51	17.47	10.55	13.00	20.00	13.00
Sub carrier spacing		Channel		638000	641666	645333	638000	641666	645333

30k	Hz	Frequency (MHz)		3570	3624.99	3680	3570	3624.99	3680
40	PI/2 BPSK	1	1	11.30	18.02	11.29	13.00	20.00	13.00
40	PI/2 BPSK	1	104	11.36	18.19	11.09	13.00	20.00	13.00
40	PI/2 BPSK	50	25	11.23	22.23	11.16	13.00	23.50	13.00
40	PI/2 BPSK	1	0	11.21	17.99	11.32	13.00	20.00	13.00
40	PI/2 BPSK	1	105	11.41	18.23	11.07	13.00	20.00	13.00
40	PI/2 BPSK	100	0	11.22	17.77	11.17	13.00	20.00	13.00
40	QPSK	1	1	11.19	17.97	11.34	13.00	20.00	13.00
40	QPSK	1	104	11.38	18.15	11.06	13.00	20.00	13.00
40	QPSK	50	25	11.15	22.24	11.14	13.00	23.50	13.00
40	QPSK	1	0	11.25	18.05	11.34	13.00	20.00	13.00
40	QPSK	1	105	11.41	18.30	11.08	13.00	20.00	13.00
40	QPSK	100	0	11.19	17.74	11.19	13.00	20.00	13.00
40	16QAM	1	1	10.80	18.17	10.92	13.00	20.00	13.00
40	64QAM	1	1	10.76	18.06	10.87	13.00	20.00	13.00
40	256QAM	1	1	10.55	17.32	10.55	13.00	20.00	13.00

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	21.78	21.84	21.79	23.5
40	PI/2 BPSK	1	53	21.73	21.79	21.74	
40	PI/2 BPSK	1	104	21.68	21.74	21.69	
40	PI/2 BPSK	50	0	21.02	21.08	21.03	23.0
40	PI/2 BPSK	50	28	21.67	21.73	21.68	23.5
40	PI/2 BPSK	50	56	21.07	21.03	21.28	23.0
40	PI/2 BPSK	100	0	21.11	21.17	21.12	
40	QPSK	1	1	21.60	21.66	21.61	23.5
40	QPSK	1	53	21.62	21.68	21.63	
40	QPSK	1	104	21.67	21.73	21.68	
40	QPSK	50	0	20.93	20.99	20.94	22.5
40	QPSK	50	28	21.64	21.70	21.65	23.5
40	QPSK	50	56	20.86	20.92	20.87	22.5
40	QPSK	100	0	21.07	21.13	21.08	
40	16QAM	1	1	21.23	21.29	21.24	22.5
40	64QAM	1	1	19.21	19.26	19.22	21.0
40	256QAM	1	1	17.87	17.02	17.98	19.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	21.73	21.71	21.65	23.5
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	21.63	21.78	21.69	23.5
Channel				637000	641666	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3624.99	3694.98	
10	PI/2 BPSK	1	1	21.72	21.76	21.69	23.5

<FR1 n48_Ant 5_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	22.52	22.94	22.80	23.5
40	PI/2 BPSK	1	53	22.51	22.91	22.79	
40	PI/2 BPSK	1	104	22.50	22.90	22.73	
40	PI/2 BPSK	50	0	22.69	22.91	22.81	23.0
40	PI/2 BPSK	50	28	22.56	22.84	22.59	23.5
40	PI/2 BPSK	50	56	22.68	22.90	22.88	23.0
40	PI/2 BPSK	100	0	22.65	22.85	22.66	
40	QPSK	1	1	21.58	21.86	21.79	23.5
40	QPSK	1	53	21.85	21.96	21.94	
40	QPSK	1	104	21.75	21.76	21.60	
40	QPSK	50	0	21.07	21.33	21.23	22.5
40	QPSK	50	28	21.75	21.88	21.83	23.5
40	QPSK	50	56	21.38	21.40	21.23	22.5
40	QPSK	100	0	21.34	21.44	21.20	
40	16QAM	1	1	21.20	21.25	21.02	22.5
40	64QAM	1	1	19.47	19.74	19.73	21.0
40	256QAM	1	1	17.50	17.71	17.58	19.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	21.87	22.00	21.86	23.5
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	21.88	21.99	21.88	23.5
Channel				637000	641666	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3624.99	3694.98	
10	PI/2 BPSK	1	1	21.84	21.91	21.86	23.5

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	20.85	21.18	20.88	22.0
40	PI/2 BPSK	1	53	20.73	21.03	20.90	
40	PI/2 BPSK	1	104	20.42	20.60	20.38	
40	PI/2 BPSK	50	0	21.07	21.17	20.94	21.5
40	PI/2 BPSK	50	28	20.50	20.73	20.61	22.0
40	PI/2 BPSK	50	56	20.28	20.54	20.45	21.5
40	PI/2 BPSK	100	0	20.93	20.93	20.73	
40	QPSK	1	1	21.10	21.11	20.95	22.0
40	QPSK	1	53	21.00	21.11	20.84	
40	QPSK	1	104	20.10	20.11	20.13	
40	QPSK	50	0	20.89	20.99	20.99	21.0
40	QPSK	50	28	20.30	20.09	20.04	22.0
40	QPSK	50	56	20.14	20.20	19.92	21.0
40	QPSK	100	0	19.66	19.93	19.90	
40	16QAM	1	1	19.55	19.92	19.97	21.0
40	64QAM	1	1	18.55	18.54	18.66	20.5
40	256QAM	1	1	17.03	17.15	17.05	19.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	20.77	21.14	20.78	22.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	20.80	21.16	20.79	22.0

<FR1 n48_Ant 6+7(7)_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				638000	641666	645332	
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	20.70	21.20	20.84	22.0
40	PI/2 BPSK	1	53	21.05	21.07	21.07	
40	PI/2 BPSK	1	104	21.11	21.11	20.86	
40	PI/2 BPSK	50	0	20.81	21.09	20.83	21.5
40	PI/2 BPSK	50	28	20.81	20.95	20.75	22.0
40	PI/2 BPSK	50	56	20.79	21.08	21.01	21.5
40	PI/2 BPSK	100	0	20.93	21.00	20.80	
40	QPSK	1	1	20.80	20.84	20.77	22.0
40	QPSK	1	53	21.00	21.07	20.88	
40	QPSK	1	104	21.06	21.11	20.90	
40	QPSK	50	0	20.74	20.90	20.85	21.0
40	QPSK	50	28	20.82	20.95	20.82	22.0
40	QPSK	50	56	20.57	20.59	20.98	21.0
40	QPSK	100	0	20.80	21.00	20.84	
40	16QAM	1	1	20.97	21.00	20.77	21.0
40	64QAM	1	1	20.23	20.34	20.16	20.5
40	256QAM	1	1	18.39	18.55	18.49	19.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	20.65	21.14	20.84	22.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	20.67	21.10	20.75	22.0

<FR1 n48_Ant 6+7_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dbm)								
Ant				Antenna 6			Antenna 7			Combine			Antenna 6			Antenna 7			Combine		
Channel				637000	641666	646332	637000	641666	646332	637000	641666	646332	637000	641666	646332	637000	641666	646332	637000	641666	646332
Frequency (MHz)				3555	3624.99	3694.98	3555	3624.99	3694.98	3555	3624.99	3694.98	3555	3624.99	3694.98	3555	3624.99	3694.98	3555	3624.99	3694.98
10	PI/2 BPSK	1	1	18.02	18.98	18.02	18.18	18.03	18.14	21.11	21.54	21.09	20.00	20.00	20.00	20.00	20.00	20.00	23.00	23.00	23.00
10	PI/2 BPSK	1	22	18.15	18.99	18.14	18.06	18.03	18.21	21.12	21.55	21.19	20.00	20.00	20.00	20.00	20.00	20.00	23.00	23.00	23.00
10	PI/2 BPSK	12	6	18.28	18.71	18.23	18.07	18.14	18.10	21.19	21.44	21.18	20.00	20.00	20.00	20.00	20.00	20.00	23.00	23.00	23.00
10	PI/2 BPSK	1	0	16.65	17.36	16.70	16.63	16.90	16.59	19.65	20.15	19.66	18.50	18.50	18.50	18.50	18.50	18.50	21.50	21.50	21.50
10	PI/2 BPSK	1	23	16.67	17.32	16.63	16.55	16.78	16.58	19.62	20.07	19.62	18.50	18.50	18.50	18.50	18.50	18.50	21.50	21.50	21.50
10	PI/2 BPSK	24	0	16.68	17.40	16.71	16.51	16.95	16.54	19.61	20.19	19.64	18.50	18.50	18.50	18.50	18.50	18.50	21.50	21.50	21.50
10	QPSK	1	1	18.15	18.81	18.17	18.28	18.18	18.26	21.23	21.52	21.23	20.00	20.00	20.00	20.00	20.00	20.00	23.00	23.00	23.00
10	QPSK	1	22	18.31	18.82	18.34	18.22	18.21	18.34	21.28	21.54	21.35	20.00	20.00	20.00	20.00	20.00	20.00	23.00	23.00	23.00
10	QPSK	12	6	18.38	18.87	18.39	18.27	18.25	18.21	21.34	21.58	21.31	20.00	20.00	20.00	20.00	20.00	20.00	23.00	23.00	23.00
10	QPSK	1	0	16.80	17.54	16.81	16.74	17.01	16.71	19.78	20.29	19.77	18.50	18.50	18.50	18.50	18.50	18.50	21.50	21.50	21.50
10	QPSK	1	23	16.82	17.52	16.76	16.65	16.91	16.70	19.75	20.24	19.74	18.50	18.50	18.50	18.50	18.50	18.50	21.50	21.50	21.50
10	QPSK	24	0	16.80	17.62	16.89	16.66	17.07	16.73	19.74	20.36	19.82	18.50	18.50	18.50	18.50	18.50	18.50	21.50	21.50	21.50
10	16QAM	1	1	17.70	18.49	17.74	17.81	18.14	17.83	20.77	21.33	20.80	19.50	19.50	19.50	19.50	19.50	19.50	22.50	22.50	22.50
10	64QAM	1	1	16.16	16.92	16.16	16.36	16.48	16.31	19.27	19.72	19.25	18.00	18.00	18.00	18.00	18.00	18.00	21.00	21.00	21.00
10	256QAM	1	1	13.25	14.04	13.34	13.36	13.51	13.17	16.32	16.79	16.27	15.00	15.50	15.00	15.00	15.50	15.00	18.00	18.50	18.00
Ant				Antenna 6			Antenna 7			Combine			Antenna 6			Antenna 7			Combine		
Channel				637334	641666	646000	637334	641666	646000	637334	641666	646000	637334	641666	646000	637334	641666	646000	637334	641666	646000
Frequency (MHz)				3560.01	3624.99	3690	3560.01	3624.99	3690	3560.01	3624.99	3690	3560.01	3624.99	3690	3560.01	3624.99	3690	3560.01	3624.99	3690
20	PI/2 BPSK	1	1	13.58	18.91	18.06	13.58	18.11	18.01	16.59	21.54	21.05	15.00	20.00	20.00	15.00	20.00	20.00	18.00	23.00	23.00
20	PI/2 BPSK	1	49	18.34	18.84	13.61	18.13	18.05	13.48	21.25	21.47	16.56	20.00	20.00	15.00	20.00	20.00	15.00	23.00	23.00	18.00
20	PI/2 BPSK	25	12	18.42	18.54	18.18	18.01	18.57	18.06	21.23	21.57	21.13	20.00	20.00	20.00	20.00	20.00	20.00	23.00	23.00	23.00
20	PI/2 BPSK	1	0	13.52	17.34	16.52	13.64	16.96	16.58	16.59	20.16	19.56	15.00	18.50	18.00	15.00	18.50	18.00	18.00	21.50	21.00
20	PI/2 BPSK	1	50	17.05	17.42	13.47	16.66	17.21	13.56	19.87	20.33	16.53	18.50	18.50	15.00	18.50	18.50	15.00	21.50	21.50	18.00
20	PI/2 BPSK	50	0	13.83	17.44	13.75	13.50	17.03	13.57	16.68	20.25	16.67	15.00	18.50	15.00	15.00	18.50	15.00	18.00	21.50	18.00
20	QPSK	1	1	13.76	18.51	18.19	13.69	18.51	18.18	16.74	21.52	21.20	15.00	20.50	19.50	15.00	20.50	19.50	18.00	23.50	22.50
20	QPSK	1	49	18.46	18.51	13.78	18.25	18.53	13.65	21.37	21.53	16.73	19.50	20.50	15.00	19.50	20.50	15.00	22.50	23.50	18.00
20	QPSK	25	12	18.59	18.72	18.35	18.13	18.52	18.17	21.38	21.63	21.27	20.00	20.50	19.50	20.00	20.50	19.50	23.00	23.50	22.50
20	QPSK	1	0	13.66	17.52	16.70	13.78	17.06	16.78	16.73	20.31	19.75	15.00	19.00	18.50	15.00	19.00	18.50	18.00	22.00	21.50
20	QPSK	1	50	17.17	17.54	13.64	16.78	17.33	13.71	19.99	20.45	16.69	18.50	19.00	15.00	18.50	19.00	15.00	21.50	22.00	18.00
20	QPSK	50	0	13.99	17.64	13.85	13.70	17.17	13.71	16.86	20.42	16.79	15.50	19.00	15.00	15.50	19.00	15.00	18.50	22.00	18.00
20	16QAM	1	1	13.87	18.43	17.77	13.85	18.06	17.78	16.87	21.26	20.79	15.00	19.50	19.00	15.00	19.50	19.00	18.00	22.50	22.00
20	64QAM	1	1	13.71	16.80	16.21	13.82	16.52	16.31	16.78	19.67	19.27	15.00	18.00	17.50	15.00	18.00	17.50	18.00	21.00	20.50
20	256QAM	1	1	13.34	13.94	13.14	13.31	13.63	13.29	16.34	16.80	16.23	14.50	15.50	14.50	14.50	15.50	14.50	17.50	18.50	17.50
Ant				Antenna 6			Antenna 7			Combine			Antenna 6			Antenna 7			Combine		
Channel				637668	641666	645666	637666	641666	645666	637666	641666	645666	637668	641666	645666	637666	641666	645666	637666	641666	645666
Frequency (MHz)				3565.02	3624.99	3684.99	3564.99	3624.99	3684.99	3564.99	3624.99	3684.99	3565.02	3624.99	3684.99	3564.99	3624.99	3684.99	3564.99	3624.99	3684.99
30	PI/2 BPSK	1	1	8.10	16.41	8.26	7.78	16.07	7.82	10.95	19.25	11.06	9.50	18.00	9.50	9.50	18.00	9.50	12.50	21.00	12.50
30	PI/2 BPSK	1	76	8.20	16.68	8.02	7.72	16.01	7.74	10.98	19.37	10.89	9.50	18.00	9.50	9.50	18.00	9.50	12.50	21.00	12.50
30	PI/2 BPSK	36	18	8.17	18.55	8.19	7.57	18.51	7.54	10.89	21.54	10.89	9.50	20.50	9.50	9.50	20.50	9.50	12.50	23.50	12.50
30	PI/2 BPSK	1	0	8.14	16.37	8.24	7.87	16.16	7.89	11.02	19.28	11.08	9.50	18.00	9.50	9.50	18.00	9.50	12.50	21.00	12.50
30	PI/2 BPSK	1	77	8.26	16.35	7.97	7.61	16.15	7.62	10.96	19.26	10.81	9.50	18.00	9.50	9.50	18.00	9.50	12.50	21.00	12.50
30	PI/2 BPSK	75	0	8.19	16.55	8.19	7.51	16.09	7.56	10.87	19.34	10.90	9.50	18.00	9.50	9.50	18.00	9.50	12.50	21.00	12.50
30	QPSK	1	1	8.25	16.59	8.46	7.89	16.02	7.99	11.08	19.32	11.24	9.50	18.00	9.50	9.50	18.00	9.50	12.50	21.00	12.50
30	QPSK	1	76	8.39	16.62	8.15	7.83	16.00	7.85	11.13	19.33	11.01	9.50	18.00	9.50	9.50	18.00	9.50	12.50	21.00	12.50
30	QPSK	36	18	8.37	18.56	8.35	7.69	18.56	7.72	11.05	21.57	11.06	9.50	20.50	9.50	9.50	20.50	9.50	12.50	23.50	12.50
30	QPSK	1	0	8.26	16.56	8.35	7.97	16.04	7.99	11.13	19.32	11.18	9.50	18.00	9.50	9.50	18.00	9.50	12.50	21.00	12.50
30	QPSK	1	77	8.43	16.48	8.14	7.78	16.05	7.82	11.13	19.28	10.99	9.50	18.00	9.50	9.50	18.00	9.50	12.50	21.00	12.50
30	QPSK	75	0	8.36	16.66	8.34	7.71	16.07	7.72	11.06	19.39	11.05	9.50	18.00	9.50	9.50	18.00	9.50	12.50	21.00	12.50
30	16QAM	1	1	8.47	16.56	8.56	8.02	16.16	8.15	11.26	19.37	11.37	10.00	18.00	10.00	10.00	18.00	10.00	13.00	21.00	13.00
30	64QAM	1	1	8.26	16.47	8.36	8.01	16.36	8.01	11.15	19.43	11.20	10.00	18.00	10.00	10.00	18.00	10.00	13.00	21.00	13.00

30	256QAM	1	1	8.33	14.06	8.46	8.02	13.79	8.06	11.19	16.94	11.27	10.00	15.50	10.00	10.00	15.50	10.00	13.00	18.50	13.00
Ant				Antenna 6			Antenna 7			Combine			Antenna 6			Antenna 7			Combine		
Channel				638000	641666	645332	638000	641666	645332	638000	641666	645332	638000	641666	645332	638000	641666	645332	638000	641666	645332
Frequency (MHz)				3570	3624.99	3679.98	3570	3624.99	3679.98	3570	3624.99	3679.98	3570	3624.99	3679.98	3570	3624.99	3679.98	3570	3624.99	3679.98
40	PI/2 BPSK	1	1	8.17	16.29	8.23	7.64	15.74	7.81	10.92	19.03	11.04	9.50	17.50	9.50	9.50	17.50	9.50	12.50	20.50	12.50
40	PI/2 BPSK	1	104	8.69	16.28	7.93	8.06	15.72	7.61	11.40	19.02	10.78	10.00	17.50	9.50	10.00	17.50	9.50	13.00	20.50	12.50
40	PI/2 BPSK	50	25	8.39	18.97	8.08	7.57	18.56	7.52	11.01	21.78	10.82	9.50	20.50	9.50	9.50	20.50	9.50	12.50	23.50	12.50
40	PI/2 BPSK	1	0	8.19	16.22	8.45	7.68	16.05	7.75	10.95	19.15	11.12	9.50	18.00	9.50	9.50	18.00	9.50	12.50	21.00	12.50
40	PI/2 BPSK	1	105	8.36	16.50	8.12	7.90	16.03	7.51	11.15	19.28	10.84	9.50	18.00	9.50	9.50	18.00	9.50	12.50	21.00	12.50
40	PI/2 BPSK	100	0	8.40	15.97	8.12	7.65	15.51	7.55	11.05	18.76	10.85	9.50	17.50	9.50	9.50	17.50	9.50	12.50	20.50	12.50
40	QPSK	1	1	8.31	16.44	8.40	7.78	15.92	7.91	11.06	19.20	11.17	9.50	17.50	9.50	9.50	17.50	9.50	12.50	20.50	12.50
40	QPSK	1	104	8.81	16.39	8.09	8.53	15.90	7.75	11.68	19.16	10.93	10.50	17.50	9.50	10.50	17.50	9.50	13.50	20.50	12.50
40	QPSK	50	25	8.52	**19.17**	8.20	8.08	**18.58**	7.63	11.32	**21.90**	10.93	10.00	20.50	9.50	10.00	20.50	9.50	13.00	23.50	12.50
40	QPSK	1	0	8.37	16.41	8.58	8.03	15.75	8.05	11.21	19.10	11.33	10.00	17.50	10.00	10.00	17.50	10.00	13.00	20.50	13.00
40	QPSK	1	105	8.54	16.65	8.24	8.02	16.04	8.01	11.30	19.37	11.14	10.00	18.00	10.00	10.00	18.00	10.00	13.00	21.00	13.00
40	QPSK	100	0	8.53	16.09	8.23	8.09	15.57	8.09	11.33	18.85	11.17	10.00	17.50	10.00	10.00	17.50	10.00	13.00	20.50	13.00
40	16QAM	1	1	8.22	16.35	8.31	8.06	16.54	8.05	11.15	19.46	11.19	10.00	18.00	10.00	10.00	18.00	10.00	13.00	21.00	13.00
40	64QAM	1	1	8.29	16.43	8.47	8.05	16.51	8.02	11.18	19.48	11.26	10.00	18.00	10.00	10.00	18.00	10.00	13.00	21.00	13.00
40	256QAM	1	1	8.40	13.94	8.51	8.09	13.56	8.02	11.26	16.76	11.28	10.00	15.50	10.00	10.00	15.50	10.00	13.00	18.50	13.00

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	23.26	23.60	23.44	
100	PI/2 BPSK	1	137	23.12	23.46	23.30	24.0
100	PI/2 BPSK	1	271	23.14	23.48	23.32	
100	PI/2 BPSK	135	0	23.00	23.34	23.18	24.0
100	PI/2 BPSK	135	69	23.02	23.36	23.20	24.0
100	PI/2 BPSK	135	138	23.10	23.44	23.28	
100	PI/2 BPSK	270	0	22.98	23.32	23.16	24.0
100	QPSK	1	1	23.16	23.50	23.34	
100	QPSK	1	137	23.04	23.38	23.22	24.0
100	QPSK	1	271	23.09	23.43	23.27	
100	QPSK	135	0	22.06	22.29	22.14	24.0
100	QPSK	135	69	22.97	23.31	23.15	24.0
100	QPSK	135	138	22.03	22.35	22.20	
100	QPSK	270	0	22.09	22.28	22.13	24.0
100	16QAM	1	1	22.24	22.57	22.42	24.0
100	64QAM	1	1	22.05	22.34	22.20	23.0
100	256QAM	1	1	21.08	21.36	21.23	21.5
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	23.14	23.49	23.29	24.0
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	23.23	23.45	23.32	24.0
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	23.17	23.59	23.39	24.0
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	23.15	23.59	23.31	24.0
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	23.23	23.59	23.33	24.0
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	23.19	23.58	23.38	24.0
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	23.19	23.53	23.37	24.0
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	23.17	23.55	23.39	24.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	22.62	22.75	22.54	23.9
100	PI/2 BPSK	1	137	22.56	22.69	22.48	
100	PI/2 BPSK	1	271	22.38	22.51	22.30	
100	PI/2 BPSK	135	0	22.42	22.55	22.34	23.4
100	PI/2 BPSK	135	69	22.45	22.58	22.37	23.9
100	PI/2 BPSK	135	138	22.33	22.46	22.25	23.4
100	PI/2 BPSK	270	0	22.35	22.48	22.27	
100	QPSK	1	1	22.60	22.73	22.52	23.9
100	QPSK	1	137	22.50	22.63	22.42	
100	QPSK	1	271	22.34	22.47	22.26	
100	QPSK	135	0	22.35	22.48	22.27	22.9
100	QPSK	135	69	22.37	22.50	22.29	23.9
100	QPSK	135	138	22.27	22.40	22.19	22.9
100	QPSK	270	0	22.34	22.47	22.26	
100	16QAM	1	1	22.56	22.69	22.48	22.9
100	64QAM	1	1	20.49	20.61	20.42	21.4
100	256QAM	1	1	18.31	18.42	18.25	19.4
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	22.54	22.66	22.38	23.9
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	22.48	22.60	22.42	23.9
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	22.46	22.59	22.43	23.9
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	22.55	22.67	22.44	23.9
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	22.53	22.65	22.45	23.9
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	22.46	22.62	22.47	23.9
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	22.53	22.65	22.39	23.9
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	22.54	22.61	22.43	23.9

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	23.00	23.10	22.99	23.9
100	PI/2 BPSK	1	137	22.84	22.94	22.93	
100	PI/2 BPSK	1	271	22.86	22.96	22.95	
100	PI/2 BPSK	135	0	22.74	22.84	22.83	23.4
100	PI/2 BPSK	135	69	22.80	22.90	22.88	23.9
100	PI/2 BPSK	135	138	22.68	22.78	22.77	23.4
100	PI/2 BPSK	270	0	22.71	22.81	22.80	
100	QPSK	1	1	22.43	22.53	22.52	23.9
100	QPSK	1	137	22.45	22.45	22.44	
100	QPSK	1	271	22.43	22.53	22.52	
100	QPSK	135	0	22.32	22.42	22.41	22.9
100	QPSK	135	69	22.48	22.58	22.57	23.9
100	QPSK	135	138	22.25	22.35	22.34	22.9
100	QPSK	270	0	22.22	22.32	22.31	
100	16QAM	1	1	22.42	22.52	22.51	22.9
100	64QAM	1	1	20.79	20.88	20.87	21.4
100	256QAM	1	1	18.88	18.97	18.96	19.4
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	21.97	22.02	22.02	23.9
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	21.93	22.07	22.09	23.9
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	21.91	22.10	22.07	23.9
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	21.93	22.06	22.07	23.9
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	21.98	22.06	22.04	23.9
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	21.91	22.01	22.09	23.9
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	21.92	22.09	22.09	23.9
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	21.98	22.06	22.04	23.9

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	20.45	20.46	20.04	21.0
100	PI/2 BPSK	1	137	19.89	19.96	19.67	
100	PI/2 BPSK	1	271	20.11	20.31	20.19	
100	PI/2 BPSK	135	0	19.80	19.86	19.69	21.0
100	PI/2 BPSK	135	69	19.69	19.78	19.73	21.0
100	PI/2 BPSK	135	138	19.82	19.84	19.80	21.0
100	PI/2 BPSK	270	0	19.58	19.85	19.58	
100	QPSK	1	1	20.14	20.35	20.28	21.0
100	QPSK	1	137	19.69	19.93	19.91	
100	QPSK	1	271	20.06	20.23	19.96	
100	QPSK	135	0	19.69	19.83	19.76	21.0
100	QPSK	135	69	19.46	19.76	19.60	21.0
100	QPSK	135	138	19.55	19.64	19.51	21.0
100	QPSK	270	0	19.72	19.81	19.51	
100	16QAM	1	1	19.98	20.03	19.99	21.0
100	64QAM	1	1	19.81	19.98	19.90	20.5
100	256QAM	1	1	17.96	18.02	17.97	19.0
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	20.36	20.43	19.99	21.0
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	20.45	20.40	20.04	21.0
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	20.41	20.43	20.01	21.0
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	20.42	20.41	20.00	21.0
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	20.36	20.41	20.03	21.0
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	20.40	20.44	19.98	21.0
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	20.43	20.39	19.97	21.0
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	20.40	20.45	20.04	21.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	19.88	20.90	19.97	21.0
100	PI/2 BPSK	1	137	19.89	20.01	19.98	
100	PI/2 BPSK	1	271	20.80	20.09	19.97	
100	PI/2 BPSK	135	0	19.73	20.01	19.61	21.0
100	PI/2 BPSK	135	69	19.75	20.00	19.76	21.0
100	PI/2 BPSK	135	138	19.72	19.97	19.79	21.0
100	PI/2 BPSK	270	0	19.87	19.90	19.83	
100	QPSK	1	1	19.68	19.68	19.53	21.0
100	QPSK	1	137	19.57	19.76	19.47	
100	QPSK	1	271	19.83	20.08	19.93	
100	QPSK	135	0	19.54	19.76	19.70	21.0
100	QPSK	135	69	19.95	20.00	20.00	21.0
100	QPSK	135	138	19.66	19.81	19.63	21.0
100	QPSK	270	0	19.50	19.63	19.38	
100	16QAM	1	1	19.90	19.95	19.66	21.0
100	64QAM	1	1	19.55	19.70	19.43	20.5
100	256QAM	1	1	17.90	18.10	17.95	19.0
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	19.88	20.83	19.90	21.0
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	19.80	20.84	19.95	21.0
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	19.80	20.85	19.96	21.0
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	19.82	20.83	19.91	21.0
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	19.80	20.84	19.93	21.0
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	19.79	20.87	19.89	21.0
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	19.80	20.83	19.90	21.0
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	19.86	20.81	19.92	21.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	23.18	23.70	23.02	24.0
100	PI/2 BPSK	1	137	22.90	23.00	22.84	
100	PI/2 BPSK	1	271	23.48	23.21	23.09	
100	PI/2 BPSK	135	0	22.78	22.95	22.66	24.0
100	PI/2 BPSK	135	69	22.73	22.90	22.76	24.0
100	PI/2 BPSK	135	138	22.78	22.92	22.81	24.0
100	PI/2 BPSK	270	0	22.74	22.89	22.72	
100	QPSK	1	1	22.93	23.04	22.93	24.0
100	QPSK	1	137	22.64	22.86	22.71	
100	QPSK	1	271	22.96	23.17	22.96	
100	QPSK	135	0	22.63	22.81	22.74	24.0
100	QPSK	135	69	22.72	22.89	22.81	24.0
100	QPSK	135	138	22.62	22.74	22.58	24.0
100	QPSK	270	0	22.62	22.73	22.46	
100	16QAM	1	1	22.95	23.00	22.84	24.0
100	64QAM	1	1	22.69	22.85	22.68	23.5
100	256QAM	1	1	20.94	21.07	20.97	22.0
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	23.14	23.64	22.96	24.0
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	23.15	23.64	23.01	24.0
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	23.13	23.66	23.00	24.0
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	23.14	23.64	22.97	24.0
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	19.85	20.88	19.97	24.0
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	23.12	23.67	22.95	24.0
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	23.14	23.63	22.95	24.0
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	23.15	23.64	22.99	24.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	25.20	25.31	25.12	27.0
100	PI/2 BPSK	1	137	25.27	25.30	25.12	
100	PI/2 BPSK	1	271	25.15	25.29	25.29	
100	PI/2 BPSK	135	0	24.68	24.77	24.61	26.5
100	PI/2 BPSK	135	69	25.15	25.30	25.22	27.0
100	PI/2 BPSK	135	138	24.72	24.75	24.60	26.5
100	PI/2 BPSK	270	0	24.76	24.76	24.65	
100	QPSK	1	1	25.19	25.29	25.27	27.0
100	QPSK	1	137	25.25	25.26	25.18	
100	QPSK	1	271	25.12	25.24	25.11	
100	QPSK	135	0	24.45	24.62	24.52	26.0
100	QPSK	135	69	25.19	25.26	25.22	27.0
100	QPSK	135	138	24.73	24.73	24.56	26.0
100	QPSK	270	0	24.54	24.57	24.40	
100	16QAM	1	1	24.27	24.40	24.33	26.0
100	64QAM	1	1	22.84	22.87	22.82	24.5
100	256QAM	1	1	20.69	20.73	20.65	22.5
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	25.03	25.12	25.07	27.0
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	25.08	25.10	25.02	27.0
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	25.04	25.12	25.00	27.0
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	25.08	25.09	25.02	27.0
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	25.07	25.08	25.06	27.0
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	25.03	25.20	25.06	27.0
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	25.02	25.15	25.06	27.0
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	25.08	25.15	25.01	27.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	25.13	25.22	25.10	26.9
100	PI/2 BPSK	1	137	24.96	25.05	24.93	
100	PI/2 BPSK	1	271	24.97	25.06	24.94	
100	PI/2 BPSK	135	0	24.43	24.52	24.40	26.4
100	PI/2 BPSK	135	69	24.94	25.03	24.91	26.9
100	PI/2 BPSK	135	138	24.43	24.42	24.40	26.4
100	PI/2 BPSK	270	0	24.42	24.51	24.49	
100	QPSK	1	1	25.11	25.20	25.08	26.9
100	QPSK	1	137	24.97	24.96	24.98	
100	QPSK	1	271	24.91	25.00	24.99	
100	QPSK	135	0	24.40	24.49	24.37	25.9
100	QPSK	135	69	24.94	25.03	24.91	26.9
100	QPSK	135	138	24.30	24.39	24.27	25.9
100	QPSK	270	0	24.35	24.44	24.32	
100	16QAM	1	1	25.03	25.12	25.00	25.9
100	64QAM	1	1	23.81	23.90	23.79	24.4
100	256QAM	1	1	21.86	21.94	21.84	22.4
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	25.03	25.13	25.08	26.9
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	25.08	25.20	25.02	26.9
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	25.03	25.21	25.03	26.9
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	25.12	25.20	25.02	26.9
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	25.05	25.14	25.09	26.9
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	25.10	25.14	25.00	26.9
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	25.10	25.17	25.04	26.9
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	25.13	25.20	25.07	26.9

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	25.42	25.67	25.49	26.9
100	PI/2 BPSK	1	137	25.42	25.47	25.48	
100	PI/2 BPSK	1	271	25.40	25.45	25.47	
100	PI/2 BPSK	135	0	24.92	24.96	25.44	26.4
100	PI/2 BPSK	135	69	25.42	25.47	25.46	26.9
100	PI/2 BPSK	135	138	24.96	24.99	24.93	26.4
100	PI/2 BPSK	270	0	24.94	25.08	24.90	
100	QPSK	1	1	25.42	25.57	25.46	26.9
100	QPSK	1	137	25.43	25.47	25.41	
100	QPSK	1	271	25.45	25.48	25.40	
100	QPSK	135	0	24.70	24.94	24.77	25.9
100	QPSK	135	69	25.41	25.46	25.48	26.9
100	QPSK	135	138	24.67	24.91	24.74	25.9
100	QPSK	270	0	24.76	25.00	24.82	
100	16QAM	1	1	25.22	25.47	25.29	25.9
100	64QAM	1	1	24.18	24.22	24.25	24.4
100	256QAM	1	1	21.63	21.85	21.69	22.4
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	24.90	25.07	24.99	26.9
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	24.92	25.12	24.99	26.9
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	24.98	25.17	24.91	26.9
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	24.90	25.14	24.92	26.9
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	24.95	25.14	24.90	26.9
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	24.90	25.08	24.96	26.9
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	24.91	25.07	24.97	26.9
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	24.90	25.13	24.93	26.9

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	23.78	23.96	23.83	24.0
100	PI/2 BPSK	1	137	23.67	23.81	23.54	
100	PI/2 BPSK	1	271	23.74	23.77	23.95	
100	PI/2 BPSK	135	0	23.14	23.19	23.19	23.5
100	PI/2 BPSK	135	69	23.54	23.77	23.67	24.0
100	PI/2 BPSK	135	138	22.96	23.17	22.97	23.5
100	PI/2 BPSK	270	0	22.86	23.15	23.04	
100	QPSK	1	1	22.60	22.63	22.38	24.0
100	QPSK	1	137	22.52	22.66	22.41	
100	QPSK	1	271	22.42	22.71	22.52	
100	QPSK	135	0	21.51	21.65	21.52	23.0
100	QPSK	135	69	22.47	22.65	22.56	24.0
100	QPSK	135	138	21.53	21.69	21.46	23.0
100	QPSK	270	0	21.51	21.72	21.58	
100	16QAM	1	1	22.51	22.72	22.64	23.0
100	64QAM	1	1	20.73	21.00	20.98	21.5
100	256QAM	1	1	18.97	19.17	19.04	19.5
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	23.73	23.87	23.78	24.0
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	23.78	23.89	23.76	24.0
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	23.76	23.90	23.75	24.0
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	23.74	23.88	23.79	24.0
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	23.76	23.89	23.80	24.0
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	23.70	23.90	23.82	24.0
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	23.73	23.89	23.81	24.0
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	23.74	23.91	23.79	24.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	22.79	23.03	22.87	24.0
100	PI/2 BPSK	1	137	22.71	23.01	22.73	
100	PI/2 BPSK	1	271	22.85	22.94	22.91	
100	PI/2 BPSK	135	0	22.32	22.41	22.39	23.5
100	PI/2 BPSK	135	69	22.67	22.97	22.95	24.0
100	PI/2 BPSK	135	138	22.13	22.40	22.15	23.5
100	PI/2 BPSK	270	0	22.11	22.39	22.38	
100	QPSK	1	1	22.71	22.91	22.81	24.0
100	QPSK	1	137	22.57	22.76	22.50	
100	QPSK	1	271	22.56	22.78	22.50	
100	QPSK	135	0	22.11	22.29	22.08	23.0
100	QPSK	135	69	22.67	22.67	22.47	24.0
100	QPSK	135	138	21.97	22.17	22.04	23.0
100	QPSK	270	0	22.10	22.10	22.00	
100	16QAM	1	1	21.81	21.95	21.78	23.0
100	64QAM	1	1	20.30	20.40	20.16	21.5
100	256QAM	1	1	18.08	18.16	18.07	19.5
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	22.31	22.56	22.38	24.0
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	22.34	22.61	22.39	24.0
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	22.30	22.54	22.42	24.0
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	22.32	22.56	22.37	24.0
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	22.36	22.56	22.46	24.0
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	22.39	22.60	22.38	24.0
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	22.39	22.57	22.38	24.0
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	22.36	22.58	22.47	24.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				650000	656000	662000	
Frequency (MHz)				3750	3840	3930	
100	PI/2 BPSK	1	1	26.32	26.53	26.39	27.0
100	PI/2 BPSK	1	137	26.23	26.44	26.16	
100	PI/2 BPSK	1	271	26.33	26.39	26.47	
100	PI/2 BPSK	135	0	25.76	25.83	25.82	26.5
100	PI/2 BPSK	135	69	26.14	26.40	26.34	27.0
100	PI/2 BPSK	135	138	25.58	25.81	25.59	26.5
100	PI/2 BPSK	270	0	25.51	25.80	25.73	
100	QPSK	1	1	25.67	25.78	25.61	27.0
100	QPSK	1	137	25.56	25.72	25.47	
100	QPSK	1	271	25.50	25.76	25.52	
100	QPSK	135	0	24.83	24.99	24.82	26.0
100	QPSK	135	69	25.58	25.67	25.53	27.0
100	QPSK	135	138	24.77	24.95	24.77	26.0
100	QPSK	270	0	24.83	24.92	24.81	
100	16QAM	1	1	25.18	25.36	25.24	26.0
100	64QAM	1	1	23.53	23.72	23.60	24.5
100	256QAM	1	1	21.56	21.70	21.59	22.5
Channel				649668	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3934.98	
90	PI/2 BPSK	1	1	26.09	26.27	26.15	27.0
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	PI/2 BPSK	1	1	26.13	26.31	26.14	27.0
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	PI/2 BPSK	1	1	26.10	26.28	26.15	27.0
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	PI/2 BPSK	1	1	26.10	26.28	26.15	27.0
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	PI/2 BPSK	1	1	26.13	26.29	26.19	27.0
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI/2 BPSK	1	1	26.10	26.31	26.17	27.0
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840.00	3964.98	
30	PI/2 BPSK	1	1	26.12	26.29	26.16	27.0
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	PI/2 BPSK	1	1	26.11	26.31	26.19	27.0

<FR1 n77_Part 27Q_Ant 7_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		22.94		24.0
100	PI/2 BPSK	1	137		22.70		
100	PI/2 BPSK	1	271		22.67		
100	PI/2 BPSK	135	0		22.82		24.0
100	PI/2 BPSK	135	69		22.72		24.0
100	PI/2 BPSK	135	138		22.61		24.0
100	PI/2 BPSK	270	0		22.75		
100	QPSK	1	1		22.91		24.0
100	QPSK	1	137		22.69		
100	QPSK	1	271		22.65		
100	QPSK	135	0		22.74		24.0
100	QPSK	135	69		22.67		24.0
100	QPSK	135	138		22.61		24.0
100	QPSK	270	0		22.69		
100	16QAM	1	1		22.85		24.0
100	64QAM	1	1		22.60		23.0
100	256QAM	1	1		20.58		21.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	22.91	22.93	22.92	24.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	22.88	22.91	22.88	24.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	22.86	22.87	22.90	24.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	22.90	22.92	22.90	24.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	22.86	22.87	22.89	24.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	22.87	22.90	22.87	24.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	22.85	22.88	22.86	24.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	22.89	22.89	22.86	24.0

<FR1 n77_Part 27Q_Ant 4_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.39		23.9
100	PI/2 BPSK	1	137		23.18		
100	PI/2 BPSK	1	271		23.00		
100	PI/2 BPSK	135	0		23.32		23.4
100	PI/2 BPSK	135	69		23.20		23.9
100	PI/2 BPSK	135	138		23.07		23.4
100	PI/2 BPSK	270	0		23.22		
100	QPSK	1	1		23.30		23.9
100	QPSK	1	137		23.11		
100	QPSK	1	271		22.91		
100	QPSK	135	0		21.90		22.9
100	QPSK	135	69		23.10		23.9
100	QPSK	135	138		22.09		22.9
100	QPSK	270	0		22.12		
100	16QAM	1	1		22.20		22.9
100	64QAM	1	1		21.03		21.4
100	256QAM	1	1		18.86		19.4
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.18	23.11	23.09	23.9
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.09	23.11	23.09	23.9
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.13	23.09	23.16	23.9
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.18	23.17	23.08	23.9
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.08	23.13	23.15	23.9
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.18	23.13	23.16	23.9
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.15	23.09	23.18	23.9
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.17	23.11	23.12	23.9

<FR1 n77_Part 27Q_Ant 5_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.61		23.9
100	PI/2 BPSK	1	137		23.16		
100	PI/2 BPSK	1	271		23.00		
100	PI/2 BPSK	135	0		23.21		23.4
100	PI/2 BPSK	135	69		23.14		23.9
100	PI/2 BPSK	135	138		22.94		23.4
100	PI/2 BPSK	270	0		23.09		
100	QPSK	1	1		22.99		23.9
100	QPSK	1	137		22.75		
100	QPSK	1	271		22.58		
100	QPSK	135	0		22.76		22.9
100	QPSK	135	69		22.65		23.9
100	QPSK	135	138		22.51		22.9
100	QPSK	270	0		22.67		
100	16QAM	1	1		22.90		22.9
100	64QAM	1	1		20.65		21.4
100	256QAM	1	1		19.01		19.4
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	22.26	22.20	22.25	23.9
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	22.25	22.20	22.26	23.9
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	22.25	22.16	22.22	23.9
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	22.16	22.18	22.17	23.9
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	22.22	22.24	22.18	23.9
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	22.20	22.20	22.24	23.9
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	22.17	22.21	22.21	23.9
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	22.26	22.18	22.26	23.9

<FR1 n77_Part 27Q_Ant 6+7(6)_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		20.45		21.0
100	PI/2 BPSK	1	137		20.31		
100	PI/2 BPSK	1	271		20.16		
100	PI/2 BPSK	135	0		20.18		21.0
100	PI/2 BPSK	135	69		20.11		21.0
100	PI/2 BPSK	135	138		20.09		21.0
100	PI/2 BPSK	270	0		20.11		
100	QPSK	1	1		20.36		21.0
100	QPSK	1	137		20.30		
100	QPSK	1	271		20.18		
100	QPSK	135	0		20.23		21.0
100	QPSK	135	69		20.22		21.0
100	QPSK	135	138		20.17		21.0
100	QPSK	270	0		20.25		
100	16QAM	1	1		20.41		21.0
100	64QAM	1	1		20.25		20.5
100	256QAM	1	1		18.56		19.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	20.31	20.28	20.28	21.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	20.22	20.25	20.29	21.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	20.26	20.22	20.29	21.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	20.25	20.22	20.31	21.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	20.29	20.31	20.21	21.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	20.24	20.23	20.24	21.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	20.25	20.25	20.24	21.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	20.22	20.22	20.31	21.0

<FR1 n77_Part 27Q_Ant 6+7(7)_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		20.25		21.0
100	PI/2 BPSK	1	137		19.70		
100	PI/2 BPSK	1	271		19.71		
100	PI/2 BPSK	135	0		19.74		21.0
100	PI/2 BPSK	135	69		19.73		21.0
100	PI/2 BPSK	135	138		19.57		21.0
100	PI/2 BPSK	270	0		19.60		
100	QPSK	1	1		19.54		21.0
100	QPSK	1	137		19.11		
100	QPSK	1	271		19.08		
100	QPSK	135	0		19.08		21.0
100	QPSK	135	69		19.19		21.0
100	QPSK	135	138		19.14		21.0
100	QPSK	270	0		19.19		
100	16QAM	1	1		19.40		21.0
100	64QAM	1	1		19.50		20.5
100	256QAM	1	1		17.75		19.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	20.17	20.16	20.19	21.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	20.15	20.22	20.22	21.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	20.23	20.16	20.13	21.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	20.15	20.21	20.20	21.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	20.18	20.23	20.20	21.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	20.13	20.19	20.17	21.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	20.14	20.16	20.13	21.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	20.14	20.14	20.16	21.0

<FR1 n77_Part 27Q_Ant 6+7_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.36		24.0
100	PI/2 BPSK	1	137		23.03		
100	PI/2 BPSK	1	271		22.95		
100	PI/2 BPSK	135	0		22.98		24.0
100	PI/2 BPSK	135	69		22.93		24.0
100	PI/2 BPSK	135	138		22.85		24.0
100	PI/2 BPSK	270	0		22.87		
100	QPSK	1	1		22.98		24.0
100	QPSK	1	137		22.76		
100	QPSK	1	271		22.68		
100	QPSK	135	0		22.70		24.0
100	QPSK	135	69		22.75		24.0
100	QPSK	135	138		22.70		24.0
100	QPSK	270	0		22.76		
100	16QAM	1	1		22.94		24.0
100	64QAM	1	1		22.90		23.5
100	256QAM	1	1		21.18		22.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.25	23.23	23.25	24.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.20	23.25	23.27	24.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.26	23.20	23.22	24.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.21	23.23	23.27	24.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.25	23.28	23.22	24.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.20	23.22	23.22	24.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.21	23.22	23.20	24.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.19	23.19	23.25	24.0

<FR1 n77_Part 27Q_HPUE_Ant 7_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		25.36		27.0
100	PI/2 BPSK	1	137		25.13		
100	PI/2 BPSK	1	271		25.08		
100	PI/2 BPSK	135	0		24.69		26.5
100	PI/2 BPSK	135	69		25.10		27.0
100	PI/2 BPSK	135	138		24.50		26.5
100	PI/2 BPSK	270	0		24.56		
100	QPSK	1	1		25.31		27.0
100	QPSK	1	137		25.03		
100	QPSK	1	271		25.05		
100	QPSK	135	0		24.59		26.0
100	QPSK	135	69		25.07		27.0
100	QPSK	135	138		24.42		26.0
100	QPSK	270	0		24.50		
100	16QAM	1	1		25.28		26.0
100	64QAM	1	1		23.02		24.5
100	256QAM	1	1		21.96		22.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	25.26	25.35	25.29	27.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	25.22	25.31	25.20	27.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	25.24	25.29	25.28	27.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	25.25	25.32	25.28	27.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	25.20	25.33	25.27	27.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	25.17	25.28	25.22	27.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	25.23	25.32	25.20	27.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	25.25	25.28	25.20	27.0

<FR1 n77_Part 27Q_HPUE_Ant 4_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		25.69		26.9
100	PI/2 BPSK	1	137		25.44		
100	PI/2 BPSK	1	271		25.31		
100	PI/2 BPSK	135	0		24.57		26.4
100	PI/2 BPSK	135	69		25.40		26.9
100	PI/2 BPSK	135	138		24.45		26.4
100	PI/2 BPSK	270	0		24.47		
100	QPSK	1	1		25.42		26.9
100	QPSK	1	137		25.30		
100	QPSK	1	271		24.94		
100	QPSK	135	0		25.31		25.9
100	QPSK	135	69		24.96		26.9
100	QPSK	135	138		24.40		25.9
100	QPSK	270	0		25.40		
100	16QAM	1	1		25.27		25.9
100	64QAM	1	1		23.42		24.4
100	256QAM	1	1		21.21		22.4
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	25.37	25.44	25.37	26.9
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	25.40	25.36	25.38	26.9
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	25.35	25.38	25.37	26.9
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	25.38	25.39	25.38	26.9
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	25.34	25.41	25.40	26.9
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	25.34	25.36	25.36	26.9
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	25.36	25.37	25.41	26.9
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	25.43	25.40	25.41	26.9

<FR1 n77_Part 27Q_HPUE_Ant 5_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		25.81		26.9
100	PI/2 BPSK	1	137		25.62		
100	PI/2 BPSK	1	271		25.42		
100	PI/2 BPSK	135	0		25.15		26.4
100	PI/2 BPSK	135	69		25.54		26.9
100	PI/2 BPSK	135	138		24.93		26.4
100	PI/2 BPSK	270	0		25.02		
100	QPSK	1	1		25.71		26.9
100	QPSK	1	137		25.56		
100	QPSK	1	271		25.41		
100	QPSK	135	0		25.07		25.9
100	QPSK	135	69		25.49		26.9
100	QPSK	135	138		24.86		25.9
100	QPSK	270	0		25.01		
100	16QAM	1	1		24.85		25.9
100	64QAM	1	1		23.39		24.4
100	256QAM	1	1		20.77		22.4
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	25.25	25.25	25.24	26.9
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	25.25	25.26	25.20	26.9
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	25.21	25.24	25.24	26.9
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	25.27	25.25	25.28	26.9
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	25.27	25.22	25.27	26.9
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	25.24	25.21	25.30	26.9
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	25.28	25.21	25.27	26.9
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	25.20	25.30	25.30	26.9

<FR1 n77_Part 27Q_HPUE_Ant 6+7(6)_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.55		24.0
100	PI/2 BPSK	1	137		23.45		
100	PI/2 BPSK	1	271		23.33		
100	PI/2 BPSK	135	0		23.44		23.5
100	PI/2 BPSK	135	69		23.50		24.0
100	PI/2 BPSK	135	138		23.30		23.5
100	PI/2 BPSK	270	0		23.35		
100	QPSK	1	1		23.27		24.0
100	QPSK	1	137		23.28		
100	QPSK	1	271		23.12		
100	QPSK	135	0		23.00		23.0
100	QPSK	135	69		23.40		24.0
100	QPSK	135	138		22.10		23.0
100	QPSK	270	0		22.30		
100	16QAM	1	1		22.96		23.0
100	64QAM	1	1		21.34		21.5
100	256QAM	1	1		19.40		19.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.38	23.38	23.38	24.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.36	23.45	23.37	24.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.45	23.40	23.45	24.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.43	23.45	23.41	24.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.41	23.42	23.42	24.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.43	23.42	23.43	24.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.42	23.37	23.45	24.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.36	23.41	23.38	24.0

<FR1 n77_Part 27Q_HPUE_Ant 6+7(7)_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		22.67		24.0
100	PI/2 BPSK	1	137		22.50		
100	PI/2 BPSK	1	271		22.50		
100	PI/2 BPSK	135	0		22.57		23.5
100	PI/2 BPSK	135	69		22.59		24.0
100	PI/2 BPSK	135	138		22.48		23.5
100	PI/2 BPSK	270	0		22.49		
100	QPSK	1	1		22.50		24.0
100	QPSK	1	137		22.50		
100	QPSK	1	271		22.50		
100	QPSK	135	0		22.37		23.0
100	QPSK	135	69		22.50		24.0
100	QPSK	135	138		22.37		23.0
100	QPSK	270	0		22.45		
100	16QAM	1	1		22.18		23.0
100	64QAM	1	1		20.49		21.5
100	256QAM	1	1		18.67		19.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	22.03	22.00	22.06	24.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	22.09	22.02	22.02	24.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	22.01	22.02	22.06	24.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	22.01	22.02	22.05	24.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	22.01	22.10	22.10	24.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	22.10	22.05	22.01	24.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	22.05	22.01	22.06	24.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	22.10	22.06	22.07	24.0

<FR1 n77_Part 27Q_HPUE_Ant 6+7_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		26.14		27.0
100	PI/2 BPSK	1	137		26.01		
100	PI/2 BPSK	1	271		25.95		
100	PI/2 BPSK	135	0		26.04		26.5
100	PI/2 BPSK	135	69		26.08		27.0
100	PI/2 BPSK	135	138		25.92		26.5
100	PI/2 BPSK	270	0		25.95		
100	QPSK	1	1		25.91		27.0
100	QPSK	1	137		25.92		
100	QPSK	1	271		25.83		
100	QPSK	135	0		25.71		26.0
100	QPSK	135	69		25.98		27.0
100	QPSK	135	138		25.25		26.0
100	QPSK	270	0		25.39		
100	16QAM	1	1		25.60		26.0
100	64QAM	1	1		23.95		24.5
100	256QAM	1	1		22.06		22.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	25.77	25.75	25.78	27.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	25.78	25.80	25.76	27.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	25.80	25.77	25.82	27.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	25.79	25.80	25.79	27.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	25.78	25.82	25.82	27.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	25.83	25.80	25.79	27.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	25.80	25.75	25.82	27.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	25.79	25.80	25.78	27.0

<FR1 n78_Part 27O_Ant 7_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		23.10		24.0
100	PI/2 BPSK	1	137		23.00		
100	PI/2 BPSK	1	271		22.91		
100	PI/2 BPSK	135	0		23.04		24.0
100	PI/2 BPSK	135	69		23.02		24.0
100	PI/2 BPSK	135	138		22.83		24.0
100	PI/2 BPSK	270	0		22.88		
100	QPSK	1	1		23.07		24.0
100	QPSK	1	137		22.99		
100	QPSK	1	271		22.85		
100	QPSK	135	0		22.96		24.0
100	QPSK	135	69		23.01		24.0
100	QPSK	135	138		22.79		24.0
100	QPSK	270	0		22.85		
100	16QAM	1	1		22.02		24.0
100	64QAM	1	1		22.94		23.0
100	256QAM	1	1		20.75		21.5
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	23.06	23.09	23.05	24.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	23.03	23.01	23.04	24.0
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	23.05	23.03	23.00	24.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	22.99	23.06	23.04	24.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	23.02	23.05	22.99	24.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	22.98	23.05	23.03	24.0
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	22.98	23.03	22.98	24.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	23.05	23.05	22.98	24.0

<FR1 n78_Part 27O_Ant 4_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		22.72		23.9
100	PI/2 BPSK	1	137		22.64		
100	PI/2 BPSK	1	271		22.41		
100	PI/2 BPSK	135	0		22.69		23.4
100	PI/2 BPSK	135	69		22.54		23.9
100	PI/2 BPSK	135	138		22.41		23.4
100	PI/2 BPSK	270	0		22.55		
100	QPSK	1	1		22.70		23.9
100	QPSK	1	137		22.60		
100	QPSK	1	271		22.33		
100	QPSK	135	0		22.63		22.9
100	QPSK	135	69		22.50		23.9
100	QPSK	135	138		22.40		22.9
100	QPSK	270	0		22.54		
100	16QAM	1	1		21.66		22.9
100	64QAM	1	1		20.60		21.4
100	256QAM	1	1		18.24		19.4
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	22.59	22.55	22.61	23.9
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	22.55	22.61	22.54	23.9
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	22.61	22.64	22.56	23.9
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	22.62	22.62	22.60	23.9
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	22.62	22.62	22.54	23.9
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	22.63	22.57	22.55	23.9
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	22.57	22.58	22.64	23.9
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	22.60	22.57	22.57	23.9

<FR1 n78_Part 27O_Ant 5_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		22.57		23.9
100	PI/2 BPSK	1	137		22.47		
100	PI/2 BPSK	1	271		22.46		
100	PI/2 BPSK	135	0		22.48		23.4
100	PI/2 BPSK	135	69		22.47		23.9
100	PI/2 BPSK	135	138		22.38		23.4
100	PI/2 BPSK	270	0		22.43		
100	QPSK	1	1		22.14		23.9
100	QPSK	1	137		21.98		
100	QPSK	1	271		22.04		
100	QPSK	135	0		22.07		22.9
100	QPSK	135	69		22.07		23.9
100	QPSK	135	138		21.90		22.9
100	QPSK	270	0		21.94		
100	16QAM	1	1		22.13		22.9
100	64QAM	1	1		21.07		21.4
100	256QAM	1	1		19.04		19.4
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	22.02	22.04	22.02	23.9
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	22.04	22.01	22.02	23.9
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	22.00	22.02	22.02	23.9
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	21.98	21.97	22.06	23.9
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	21.98	22.01	22.04	23.9
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	22.02	22.04	21.98	23.9
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	22.07	22.02	22.05	23.9
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	21.97	22.05	22.01	23.9

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		20.30		21.0
100	PI/2 BPSK	1	137		20.27		
100	PI/2 BPSK	1	271		20.18		
100	PI/2 BPSK	135	0		20.10		21.0
100	PI/2 BPSK	135	69		20.15		21.0
100	PI/2 BPSK	135	138		20.05		21.0
100	PI/2 BPSK	270	0		20.12		
100	QPSK	1	1		20.09		21.0
100	QPSK	1	137		20.10		
100	QPSK	1	271		19.97		
100	QPSK	135	0		19.92		21.0
100	QPSK	135	69		20.03		21.0
100	QPSK	135	138		19.87		21.0
100	QPSK	270	0		19.93		
100	16QAM	1	1		20.10		21.0
100	64QAM	1	1		20.17		20.5
100	256QAM	1	1		19.00		19.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	20.21	20.19	20.24	21.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	20.26	20.27	20.27	21.0
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	20.19	20.24	20.18	21.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	20.18	20.22	20.24	21.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	20.27	20.22	20.24	21.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	20.25	20.26	20.18	21.0
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	20.25	20.24	20.25	21.0
Channel				647500	650000	652500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	20.24	20.21	20.22	21.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	20.24	20.17	20.17	21.0

<FR1 n78_Part 27O_Ant 6+7(7)_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		19.50		21.0
100	PI/2 BPSK	1	137		19.45		
100	PI/2 BPSK	1	271		19.40		
100	PI/2 BPSK	135	0		19.36		21.0
100	PI/2 BPSK	135	69		19.45		21.0
100	PI/2 BPSK	135	138		19.30		21.0
100	PI/2 BPSK	270	0		19.37		
100	QPSK	1	1		19.39		21.0
100	QPSK	1	137		19.36		
100	QPSK	1	271		19.11		
100	QPSK	135	0		19.11		21.0
100	QPSK	135	69		19.45		21.0
100	QPSK	135	138		19.01		21.0
100	QPSK	270	0		19.17		
100	16QAM	1	1		19.45		21.0
100	64QAM	1	1		19.20		20.5
100	256QAM	1	1		18.45		19.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	19.41	19.45	19.36	21.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	19.39	19.43	19.40	21.0
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	19.36	19.36	19.43	21.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	19.39	19.36	19.36	21.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	19.41	19.42	19.36	21.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	19.35	19.38	19.45	21.0
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	19.38	19.37	19.42	21.0
Channel				647500	650000	652500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	19.44	19.39	19.37	21.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	19.43	19.42	19.35	21.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		22.93		24.0
100	PI/2 BPSK	1	137		22.89		
100	PI/2 BPSK	1	271		22.82		
100	PI/2 BPSK	135	0		22.76		24.0
100	PI/2 BPSK	135	69		22.82		24.0
100	PI/2 BPSK	135	138		22.70		24.0
100	PI/2 BPSK	270	0		22.77		
100	QPSK	1	1		22.76		24.0
100	QPSK	1	137		22.76		
100	QPSK	1	271		22.57		
100	QPSK	135	0		22.54		24.0
100	QPSK	135	69		22.76		24.0
100	QPSK	135	138		22.47		24.0
100	QPSK	270	0		22.58		
100	16QAM	1	1		22.80		24.0
100	64QAM	1	1		22.72		23.5
100	256QAM	1	1		21.74		22.0
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	22.84	22.85	22.83	24.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	22.86	22.88	22.87	24.0
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	22.81	22.83	22.83	24.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	22.81	22.82	22.83	24.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	22.87	22.85	22.83	24.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	22.83	22.85	22.84	24.0
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	22.85	22.84	22.87	24.0
Channel				647500	650000	652500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	22.87	22.83	22.83	24.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	22.86	22.82	22.79	24.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		25.10		27.0
100	PI/2 BPSK	1	137		25.08		
100	PI/2 BPSK	1	271		25.03		
100	PI/2 BPSK	135	0		24.54		26.5
100	PI/2 BPSK	135	69		25.02		27.0
100	PI/2 BPSK	135	138		24.50		26.5
100	PI/2 BPSK	270	0		24.51		
100	QPSK	1	1		25.07		27.0
100	QPSK	1	137		25.08		
100	QPSK	1	271		25.03		
100	QPSK	135	0		24.47		26.0
100	QPSK	135	69		25.09		27.0
100	QPSK	135	138		24.48		26.0
100	QPSK	270	0		24.48		
100	16QAM	1	1		25.00		26.0
100	64QAM	1	1		23.90		24.5
100	256QAM	1	1		21.93		22.5
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	25.04	25.09	25.06	27.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	25.07	25.02	25.01	27.0
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	25.05	25.07	25.09	27.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	25.09	25.08	25.01	27.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	25.05	25.09	25.04	27.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	25.00	25.06	25.07	27.0
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	25.01	25.08	25.00	27.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	25.07	25.06	25.00	27.0

<FR1 n78_Part 27O_HPUE_Ant 4_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		25.13		26.9
100	PI/2 BPSK	1	137		24.96		
100	PI/2 BPSK	1	271		24.97		
100	PI/2 BPSK	135	0		24.43		26.4
100	PI/2 BPSK	135	69		24.94		26.9
100	PI/2 BPSK	135	138		24.43		26.4
100	PI/2 BPSK	270	0		24.42		
100	QPSK	1	1		25.11		26.9
100	QPSK	1	137		24.97		
100	QPSK	1	271		24.91		
100	QPSK	135	0		24.40		25.9
100	QPSK	135	69		24.94		26.9
100	QPSK	135	138		24.30		25.9
100	QPSK	270	0		24.35		
100	16QAM	1	1		25.03		25.9
100	64QAM	1	1		23.81		24.4
100	256QAM	1	1		21.86		22.4
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	25.07	25.07	25.04	26.9
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	25.03	25.10	25.11	26.9
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	25.05	25.01	25.11	26.9
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	25.11	25.06	25.11	26.9
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	25.03	25.07	25.05	26.9
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	25.05	25.03	25.06	26.9
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	25.06	25.03	25.05	26.9
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	25.05	25.10	25.03	26.9

<FR1 n78_Part 27O_HPUE_Ant 5_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		25.12		26.9
100	PI/2 BPSK	1	137		24.92		
100	PI/2 BPSK	1	271		24.90		
100	PI/2 BPSK	135	0		24.42		26.4
100	PI/2 BPSK	135	69		24.92		26.9
100	PI/2 BPSK	135	138		24.46		26.4
100	PI/2 BPSK	270	0		24.44		
100	QPSK	1	1		24.92		26.9
100	QPSK	1	137		24.93		
100	QPSK	1	271		24.95		
100	QPSK	135	0		24.20		25.9
100	QPSK	135	69		24.91		26.9
100	QPSK	135	138		24.17		25.9
100	QPSK	270	0		24.26		
100	16QAM	1	1		24.72		25.9
100	64QAM	1	1		23.68		24.4
100	256QAM	1	1		21.63		22.4
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	25.02	25.04	25.03	26.9
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	25.09	25.11	25.08	26.9
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	25.10	25.05	25.07	26.9
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	25.06	25.11	25.03	26.9
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	25.03	25.07	25.03	26.9
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	25.05	25.12	25.08	26.9
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	25.02	25.03	25.12	26.9
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	25.03	25.02	25.03	26.9

<FR1 n78_Part 27O_HPUE_Ant 6+7(6)_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		23.80		24.0
100	PI/2 BPSK	1	137		23.78		
100	PI/2 BPSK	1	271		23.72		
100	PI/2 BPSK	135	0		23.20		23.5
100	PI/2 BPSK	135	69		23.72		24.0
100	PI/2 BPSK	135	138		23.17		23.5
100	PI/2 BPSK	270	0		23.22		
100	QPSK	1	1		23.71		24.0
100	QPSK	1	137		23.59		
100	QPSK	1	271		23.67		
100	QPSK	135	0		23.00		23.0
100	QPSK	135	69		23.48		24.0
100	QPSK	135	138		22.97		23.0
100	QPSK	270	0		22.94		
100	16QAM	1	1		22.60		23.0
100	64QAM	1	1		21.13		21.5
100	256QAM	1	1		19.10		19.5
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	23.76	23.68	23.69	24.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	23.78	23.69	23.70	24.0
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	23.76	23.69	23.72	24.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	23.72	23.69	23.74	24.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	23.77	23.76	23.73	24.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	23.69	23.73	23.70	24.0
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	23.78	23.73	23.74	24.0
Channel				647500	650000	652500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	23.73	23.70	23.69	24.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	23.76	23.75	23.70	24.0

<FR1 n78_Part 27O_HPUE_Ant 6+7(7)_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		22.35		24.0
100	PI/2 BPSK	1	137		22.03		
100	PI/2 BPSK	1	271		22.06		
100	PI/2 BPSK	135	0		22.11		23.5
100	PI/2 BPSK	135	69		22.06		24.0
100	PI/2 BPSK	135	138		21.55		23.5
100	PI/2 BPSK	270	0		22.11		
100	QPSK	1	1		22.18		24.0
100	QPSK	1	137		22.09		
100	QPSK	1	271		22.05		
100	QPSK	135	0		22.04		23.0
100	QPSK	135	69		22.03		24.0
100	QPSK	135	138		21.02		23.0
100	QPSK	270	0		22.06		
100	16QAM	1	1		22.17		23.0
100	64QAM	1	1		21.34		21.5
100	256QAM	1	1		17.74		19.5
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	22.28	22.20	22.24	24.0
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	22.26	22.29	22.24	24.0
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	22.20	22.21	22.20	24.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	22.27	22.24	22.27	24.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	22.21	22.23	22.24	24.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	22.26	22.27	22.26	24.0
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	22.19	22.22	22.29	24.0
Channel				647500	650000	652500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	22.25	22.21	22.28	24.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	22.26	22.24	22.22	24.0

<FR1 n78_Part 27O_HPUE_Ant 6+7_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					650000		
Frequency (MHz)					3750		
100	PI/2 BPSK	1	1		26.15		27.0
100	PI/2 BPSK	1	137		26.00		
100	PI/2 BPSK	1	271		25.98		
100	PI/2 BPSK	135	0		25.70		26.5
100	PI/2 BPSK	135	69		25.98		27.0
100	PI/2 BPSK	135	138		25.45		26.5
100	PI/2 BPSK	270	0		25.71		
100	QPSK	1	1		26.02		27.0
100	QPSK	1	137		25.91		
100	QPSK	1	271		25.95		
100	QPSK	135	0		25.56		26.0
100	QPSK	135	69		25.83		27.0
100	QPSK	135	138		25.11		26.0
100	QPSK	270	0		25.53		
100	16QAM	1	1		25.40		26.0
100	64QAM	1	1		24.25		24.5
100	256QAM	1	1		21.48		22.5
Channel				649668	650000	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3750	3754.98	
90	PI/2 BPSK	1	1	26.09	26.01	26.04	27.01
Channel				649334	650000	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3750	3759.99	
80	PI/2 BPSK	1	1	26.10	26.06	26.04	27.0
Channel				649000	650000	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3750	3765	
70	PI/2 BPSK	1	1	26.06	26.02	26.04	27.0
Channel				648668	650000	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3750	3769.98	
60	PI/2 BPSK	1	1	26.07	26.04	26.08	27.0
Channel				648334	650000	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3750	3774.99	
50	PI/2 BPSK	1	1	26.07	26.07	26.06	27.0
Channel				648000	650000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3750	3780	
40	PI/2 BPSK	1	1	26.04	26.07	26.05	27.0
Channel				647668	650000	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3750.00	3784.98	
30	PI/2 BPSK	1	1	26.07	26.05	26.09	27.0
Channel				647500	650000	652500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3750.00	3787.50	
25	PI/2 BPSK	1	1	26.06	26.03	26.05	27.0
Channel				647334	650000	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3750	3789.99	
20	PI/2 BPSK	1	1	26.08	26.07	26.03	27.0

<FR1 n78_Part 27Q_Ant 7_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.55		24.0
100	PI/2 BPSK	1	137		23.29		
100	PI/2 BPSK	1	271		23.08		
100	PI/2 BPSK	135	0		23.35		24.0
100	PI/2 BPSK	135	69		23.28		24.0
100	PI/2 BPSK	135	138		23.12		24.0
100	PI/2 BPSK	270	0		23.30		
100	QPSK	1	1		23.49		24.0
100	QPSK	1	137		23.19		
100	QPSK	1	271		23.00		
100	QPSK	135	0		22.31		24.0
100	QPSK	135	69		23.23		24.0
100	QPSK	135	138		22.03		24.0
100	QPSK	270	0		22.23		
100	16QAM	1	1		22.42		24.0
100	64QAM	1	1		22.12		23.0
100	256QAM	1	1		20.35		21.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.50	23.52	23.46	24.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.50	23.52	23.48	24.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.50	23.52	23.49	24.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.53	23.47	23.48	24.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.53	23.50	23.48	24.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.52	23.48	23.39	24.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.47	23.45	23.51	24.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.44	23.48	23.53	24.0

<FR1 n78_Part 27Q_Ant 4_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.48		23.9
100	PI/2 BPSK	1	137		23.30		
100	PI/2 BPSK	1	271		23.06		
100	PI/2 BPSK	135	0		23.33		23.4
100	PI/2 BPSK	135	69		23.22		23.9
100	PI/2 BPSK	135	138		23.05		23.4
100	PI/2 BPSK	270	0		23.21		
100	QPSK	1	1		23.38		23.9
100	QPSK	1	137		23.24		
100	QPSK	1	271		22.99		
100	QPSK	135	0		22.26		22.9
100	QPSK	135	69		23.14		23.9
100	QPSK	135	138		21.96		22.9
100	QPSK	270	0		22.12		
100	16QAM	1	1		22.35		22.9
100	64QAM	1	1		21.15		21.4
100	256QAM	1	1		18.89		19.4
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.38	23.34	23.30	23.9
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.37	23.34	23.28	23.9
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.31	23.32	23.31	23.9
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.36	23.37	23.37	23.9
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.30	23.36	23.29	23.9
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.38	23.35	23.38	23.9
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.32	23.33	23.28	23.9
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.31	23.38	23.29	23.9

<FR1 n78_Part 27Q_Ant 5_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.00		23.9
100	PI/2 BPSK	1	137		22.80		
100	PI/2 BPSK	1	271		22.55		
100	PI/2 BPSK	135	0		22.82		23.4
100	PI/2 BPSK	135	69		22.72		23.9
100	PI/2 BPSK	135	138		22.55		23.4
100	PI/2 BPSK	270	0		22.70		
100	QPSK	1	1		22.55		23.9
100	QPSK	1	137		22.40		
100	QPSK	1	271		22.05		
100	QPSK	135	0		22.35		22.9
100	QPSK	135	69		22.28		23.9
100	QPSK	135	138		22.08		22.9
100	QPSK	270	0		22.23		
100	16QAM	1	1		22.50		22.9
100	64QAM	1	1		21.31		21.4
100	256QAM	1	1		19.03		19.4
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	22.57	22.50	22.59	23.9
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	22.56	22.53	22.57	23.9
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	22.53	22.58	22.52	23.9
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	22.57	22.56	22.60	23.9
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	22.53	22.56	22.52	23.9
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	22.56	22.56	22.57	23.9
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	22.55	22.58	22.56	23.9
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	22.55	22.55	22.60	23.9

<FR1 n78_Part 27Q_Ant 6+7(6)_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		20.56		21.0
100	PI/2 BPSK	1	137		20.52		
100	PI/2 BPSK	1	271		20.55		
100	PI/2 BPSK	135	0		20.41		21.0
100	PI/2 BPSK	135	69		20.47		21.0
100	PI/2 BPSK	135	138		20.50		21.0
100	PI/2 BPSK	270	0		20.48		
100	QPSK	1	1		20.53		21.0
100	QPSK	1	137		20.38		
100	QPSK	1	271		20.50		
100	QPSK	135	0		19.50		21.0
100	QPSK	135	69		20.32		21.0
100	QPSK	135	138		20.18		21.0
100	QPSK	270	0		20.29		
100	16QAM	1	1		20.45		21.0
100	64QAM	1	1		20.44		20.5
100	256QAM	1	1		19.00		19.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	20.49	20.51	20.50	21.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	20.49	20.52	20.47	21.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	20.42	20.49	20.52	21.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	20.51	20.47	20.42	21.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	20.52	20.47	20.43	21.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	20.47	20.43	20.51	21.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	20.45	20.52	20.51	21.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	20.49	20.48	20.48	21.0

<FR1 n78_Part 27Q _Ant 6+7(7)_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		19.63		21.0
100	PI/2 BPSK	1	137		19.50		
100	PI/2 BPSK	1	271		19.44		
100	PI/2 BPSK	135	0		19.50		21.0
100	PI/2 BPSK	135	69		19.50		21.0
100	PI/2 BPSK	135	138		19.38		21.0
100	PI/2 BPSK	270	0		19.45		
100	QPSK	1	1		19.49		21.0
100	QPSK	1	137		19.21		
100	QPSK	1	271		19.29		
100	QPSK	135	0		19.24		21.0
100	QPSK	135	69		19.42		21.0
100	QPSK	135	138		19.09		21.0
100	QPSK	270	0		19.33		
100	16QAM	1	1		19.56		21.0
100	64QAM	1	1		19.45		20.5
100	256QAM	1	1		18.25		19.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	19.48	19.40	19.44	21.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	19.47	19.47	19.45	21.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	19.45	19.40	19.41	21.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	19.42	19.42	19.44	21.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	19.45	19.50	19.47	21.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	19.41	19.46	19.43	21.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	19.41	19.40	19.50	21.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	19.45	19.50	19.42	21.0

<FR1 n78_Part 27Q _Ant 6+7_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.13		24.0
100	PI/2 BPSK	1	137		23.05		
100	PI/2 BPSK	1	271		23.04		
100	PI/2 BPSK	135	0		22.99		24.0
100	PI/2 BPSK	135	69		23.02		24.0
100	PI/2 BPSK	135	138		22.99		24.0
100	PI/2 BPSK	270	0		23.01		
100	QPSK	1	1		23.05		24.0
100	QPSK	1	137		22.84		
100	QPSK	1	271		22.95		
100	QPSK	135	0		22.38		24.0
100	QPSK	135	69		22.90		24.0
100	QPSK	135	138		22.68		24.0
100	QPSK	270	0		22.85		
100	16QAM	1	1		23.04		24.0
100	64QAM	1	1		22.98		23.5
100	256QAM	1	1		21.65		22.0
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1				24.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.02	23.04	23.00	24.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	22.97	22.99	23.01	24.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.01	22.99	22.97	24.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.03	23.02	22.99	24.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	22.98	22.98	23.01	24.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	22.97	23.01	23.04	24.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.01	23.03	22.99	24.0

<FR1 n78_Part 27Q_HPUE_Ant 7_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		25.64		27.0
100	PI/2 BPSK	1	137		25.35		
100	PI/2 BPSK	1	271		25.18		
100	PI/2 BPSK	135	0		24.95		26.5
100	PI/2 BPSK	135	69		25.29		27.0
100	PI/2 BPSK	135	138		24.67		26.5
100	PI/2 BPSK	270	0		24.81		
100	QPSK	1	1		25.59		27.0
100	QPSK	1	137		25.25		
100	QPSK	1	271		25.08		
100	QPSK	135	0		24.87		26.0
100	QPSK	135	69		25.21		27.0
100	QPSK	135	138		24.66		26.0
100	QPSK	270	0		24.78		
100	16QAM	1	1		25.55		26.0
100	64QAM	1	1		23.23		24.5
100	256QAM	1	1		21.95		22.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	25.35	25.28	25.26	27.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	25.34	25.35	25.33	27.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	25.35	25.25	25.34	27.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	25.35	25.28	25.27	27.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	25.27	25.31	25.28	27.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	25.26	25.30	25.34	27.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	25.35	25.25	25.27	27.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	25.34	25.27	25.33	27.0

<FR1 n78_Part 27Q_HPUE_Ant 4_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		25.69		26.9
100	PI/2 BPSK	1	137		25.44		
100	PI/2 BPSK	1	271		25.31		
100	PI/2 BPSK	135	0		24.57		26.4
100	PI/2 BPSK	135	69		25.40		26.9
100	PI/2 BPSK	135	138		24.45		26.4
100	PI/2 BPSK	270	0		24.47		
100	QPSK	1	1		25.42		26.9
100	QPSK	1	137		25.30		
100	QPSK	1	271		24.94		
100	QPSK	135	0		25.31		25.9
100	QPSK	135	69		24.96		26.9
100	QPSK	135	138		24.40		25.9
100	QPSK	270	0		25.40		
100	16QAM	1	1		25.27		25.9
100	64QAM	1	1		23.42		24.4
100	256QAM	1	1		21.21		22.4
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	25.34	25.34	25.34	26.9
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	25.41	25.39	25.44	26.9
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	25.40	25.42	25.42	26.9
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	25.42	25.39	25.38	26.9
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	25.36	25.35	25.44	26.9
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1				26.9
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	25.38	25.44	25.42	26.9
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	25.44	25.41	25.44	26.9

<FR1 n78_Part 27Q_HPUE_Ant 5_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		25.31		26.9
100	PI/2 BPSK	1	137		25.12		
100	PI/2 BPSK	1	271		24.92		
100	PI/2 BPSK	135	0		24.65		26.4
100	PI/2 BPSK	135	69		25.04		26.9
100	PI/2 BPSK	135	138		24.43		26.4
100	PI/2 BPSK	270	0		24.52		
100	QPSK	1	1		25.21		26.9
100	QPSK	1	137		25.06		
100	QPSK	1	271		24.91		
100	QPSK	135	0		24.57		25.9
100	QPSK	135	69		24.99		26.9
100	QPSK	135	138		24.36		25.9
100	QPSK	270	0		24.51		
100	16QAM	1	1		24.35		25.9
100	64QAM	1	1		22.89		24.4
100	256QAM	1	1		20.77		22.4
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	25.12	25.12	25.14	26.9
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	25.15	25.15	25.13	26.9
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	25.12	25.13	25.16	26.9
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	25.15	25.18	25.15	26.9
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	25.12	25.20	25.14	26.9
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	25.10	25.13	25.19	26.9
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	25.13	25.17	25.19	26.9
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	25.19	25.17	25.14	26.9

<FR1 n78_Part 27Q_HPUE_Ant 6+7(6)_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		23.53		24.0
100	PI/2 BPSK	1	137		23.44		
100	PI/2 BPSK	1	271		23.32		
100	PI/2 BPSK	135	0		23.33		23.5
100	PI/2 BPSK	135	69		23.38		24.0
100	PI/2 BPSK	135	138		23.25		23.5
100	PI/2 BPSK	270	0		23.32		
100	QPSK	1	1		23.34		24.0
100	QPSK	1	137		23.35		
100	QPSK	1	271		23.14		
100	QPSK	135	0		23.00		23.0
100	QPSK	135	69		23.29		24.0
100	QPSK	135	138		22.90		23.0
100	QPSK	270	0		22.80		
100	16QAM	1	1		22.99		23.0
100	64QAM	1	1		21.32		21.5
100	256QAM	1	1		19.33		19.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	23.39	23.40	23.35	24.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	23.36	23.37	23.35	24.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	23.34	23.41	23.42	24.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	23.34	23.42	23.42	24.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	23.35	23.38	23.39	24.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	23.39	23.44	23.36	24.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	23.36	23.37	23.38	24.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	23.36	23.42	23.44	24.0

<FR1 n78_Part 27Q_HPUE_Ant 6+7(7)_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		22.15		24.0
100	PI/2 BPSK	1	137		22.00		
100	PI/2 BPSK	1	271		22.00		
100	PI/2 BPSK	135	0		22.05		23.5
100	PI/2 BPSK	135	69		22.10		24.0
100	PI/2 BPSK	135	138		21.80		23.5
100	PI/2 BPSK	270	0		21.98		
100	QPSK	1	1		22.03		24.0
100	QPSK	1	137		22.00		
100	QPSK	1	271		22.00		
100	QPSK	135	0		21.83		23.0
100	QPSK	135	69		22.01		24.0
100	QPSK	135	138		21.77		23.0
100	QPSK	270	0		21.91		
100	16QAM	1	1		21.59		23.0
100	64QAM	1	1		19.99		21.5
100	256QAM	1	1		18.20		19.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	22.06	22.05	22.05	24.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	22.12	22.05	22.12	24.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	22.11	22.08	22.12	24.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	22.05	22.12	22.13	24.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	22.13	22.09	22.03	24.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	22.13	22.03	22.05	24.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	22.13	22.06	22.05	24.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	22.11	22.07	22.07	24.0

<FR1 n78_Part 27Q _HPUE_Ant 6+7_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel					633332		
Frequency (MHz)					3499.98		
100	PI/2 BPSK	1	1		25.90		27.0
100	PI/2 BPSK	1	137		25.79		
100	PI/2 BPSK	1	271		25.72		
100	PI/2 BPSK	135	0		25.75		26.5
100	PI/2 BPSK	135	69		25.80		27.0
100	PI/2 BPSK	135	138		25.60		26.5
100	PI/2 BPSK	270	0		25.71		
100	QPSK	1	1		25.74		27.0
100	QPSK	1	137		25.74		
100	QPSK	1	271		25.62		
100	QPSK	135	0		25.46		26.0
100	QPSK	135	69		25.71		27.0
100	QPSK	135	138		25.38		26.0
100	QPSK	270	0		25.39		
100	16QAM	1	1		25.36		26.0
100	64QAM	1	1		23.72		24.5
100	256QAM	1	1		21.81		22.5
Channel				633000	633332	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3499.98	3504.99	
90	PI/2 BPSK	1	1	25.79	25.79	25.76	27.0
Channel				632668	633332	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3499.98	3510	
80	PI/2 BPSK	1	1	25.79	25.77	25.79	27.0
Channel				632334	633332	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3499.98	3514.98	
70	PI/2 BPSK	1	1	25.78	25.81	25.83	27.0
Channel				632000	633332	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3499.98	3519.99	
60	PI/2 BPSK	1	1	25.75	25.83	25.83	27.0
Channel				631668	633332	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3499.98	3525	
50	PI/2 BPSK	1	1	25.79	25.79	25.77	27.0
Channel				631334	633332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3499.98	3529.98	
40	PI/2 BPSK	1	1	25.82	25.80	25.76	27.0
Channel				631000	633332	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3499.98	3534.99	
30	PI/2 BPSK	1	1	25.80	25.77	25.78	27.0
Channel				630668	633332	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3499.98	3540	
20	PI/2 BPSK	1	1	25.79	25.81	25.82	27.0

<FR1 n77/n78_Ant 7_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				640000	641666	643332	
Frequency (MHz)				3600	3624.99	3649.98	
100	PI/2 BPSK	1	1	22.78	23.46	22.81	24.0
100	PI/2 BPSK	1	137	22.51	23.06	22.54	
100	PI/2 BPSK	1	271	22.71	23.13	22.74	
100	PI/2 BPSK	135	0	22.54	22.92	22.57	24.0
100	PI/2 BPSK	135	69	22.60	22.98	22.63	24.0
100	PI/2 BPSK	135	138	22.63	23.01	22.66	24.0
100	PI/2 BPSK	270	0	22.57	22.92	22.60	
100	QPSK	1	1	22.73	23.41	22.76	24.0
100	QPSK	1	137	22.47	22.99	22.50	
100	QPSK	1	271	22.67	23.10	22.70	
100	QPSK	135	0	22.47	22.87	22.50	24.0
100	QPSK	135	69	22.51	22.98	22.54	24.0
100	QPSK	135	138	22.60	22.99	22.63	24.0
100	QPSK	270	0	22.52	22.82	22.55	
100	16QAM	1	1	22.08	22.33	22.11	24.0
100	64QAM	1	1	22.48	22.54	22.56	23.0
100	256QAM	1	1	20.70	20.06	20.72	21.5
Channel				639668	641666	643666	Tune-up limit (dBm)
Frequency (MHz)				3595.02	3624.99	3654.99	
90	PI/2 BPSK	1	1	22.73	23.41	22.76	24.0
Channel				639334	641666	644000	Tune-up limit (dBm)
Frequency (MHz)				3590.01	3624.99	3660	
80	PI/2 BPSK	1	1	22.77	23.42	22.78	24.0
Channel				639000	641666	644332	Tune-up limit (dBm)
Frequency (MHz)				3585	3624.99	3664.98	
70	PI/2 BPSK	1	1	22.69	23.41	22.79	24.0
Channel				638668	641666	644666	Tune-up limit (dBm)
Frequency (MHz)				3580.02	3624.99	3669.99	
60	PI/2 BPSK	1	1	22.77	23.36	22.80	24.0
Channel				638334	641666	645000	Tune-up limit (dBm)
Frequency (MHz)				3575.01	3624.99	3675	
50	PI/2 BPSK	1	1	22.78	23.40	22.74	24.0
Channel				638000	641666	645332	Tune-up limit (dBm)
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	22.75	23.39	22.77	24.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	22.78	23.40	22.73	24.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	22.76	23.38	22.76	24.0

<FR1 n77/n78_Ant 4_DSI 0>

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				640000	641666	643332	
Frequency (MHz)				3600	3624.99	3649.98	
100	PI/2 BPSK	1	1	22.68	23.50	22.73	
100	PI/2 BPSK	1	137	22.02	22.82	22.07	23.9
100	PI/2 BPSK	1	271	22.00	22.80	22.05	
100	PI/2 BPSK	135	0	21.94	22.73	21.99	23.4
100	PI/2 BPSK	135	69	22.02	22.82	22.07	23.9
100	PI/2 BPSK	135	138	21.98	22.77	22.02	
100	PI/2 BPSK	270	0	21.93	22.72	21.98	23.4
100	QPSK	1	1	22.65	23.41	22.70	
100	QPSK	1	137	21.95	22.72	21.99	23.9
100	QPSK	1	271	21.97	22.75	22.01	
100	QPSK	135	0	21.89	22.71	21.94	22.9
100	QPSK	135	69	21.93	22.76	21.98	23.9
100	QPSK	135	138	21.94	22.68	21.99	
100	QPSK	270	0	21.89	22.65	21.94	22.9
100	16QAM	1	1	20.91	21.34	20.96	22.9
100	64QAM	1	1	19.97	20.63	20.01	21.4
100	256QAM	1	1	18.01	18.65	18.05	19.4
Channel				639668	641666	643666	Tune-up limit (dBm)
Frequency (MHz)				3595.02	3624.99	3654.99	
90	PI/2 BPSK	1	1	21.99	22.81	21.98	23.9
Channel				639334	641666	644000	Tune-up limit (dBm)
Frequency (MHz)				3590.01	3624.99	3660	
80	PI/2 BPSK	1	1	21.95	22.82	22.06	23.9
Channel				639000	641666	644332	Tune-up limit (dBm)
Frequency (MHz)				3585	3624.99	3664.98	
70	PI/2 BPSK	1	1	22.01	22.75	22.00	23.9
Channel				638668	641666	644666	Tune-up limit (dBm)
Frequency (MHz)				3580.02	3624.99	3669.99	
60	PI/2 BPSK	1	1	22.01	22.76	21.98	23.9
Channel				638334	641666	645000	Tune-up limit (dBm)
Frequency (MHz)				3575.01	3624.99	3675	
50	PI/2 BPSK	1	1	21.96	22.75	22.06	23.9
Channel				638000	641666	645332	Tune-up limit (dBm)
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	21.98	22.80	21.97	23.9
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	22.01	22.74	21.98	23.9
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	22.02	22.81	22.03	23.9

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				640000	641666	643332	
Frequency (MHz)				3600	3624.99	3649.98	
100	PI/2 BPSK	1	1	22.53	22.61	22.48	23.9
100	PI/2 BPSK	1	137	22.02	22.10	21.97	
100	PI/2 BPSK	1	271	22.08	22.16	22.03	
100	PI/2 BPSK	135	0	21.86	21.94	21.81	23.4
100	PI/2 BPSK	135	69	22.00	22.08	21.95	23.9
100	PI/2 BPSK	135	138	21.96	22.04	21.91	23.4
100	PI/2 BPSK	270	0	21.90	21.98	21.85	
100	QPSK	1	1	22.47	22.55	22.42	23.9
100	QPSK	1	137	21.97	22.05	21.92	
100	QPSK	1	271	22.05	22.13	22.00	
100	QPSK	135	0	21.79	21.87	21.74	22.9
100	QPSK	135	69	21.99	22.07	21.94	23.9
100	QPSK	135	138	21.87	21.95	21.82	22.9
100	QPSK	270	0	21.80	21.88	21.75	
100	16QAM	1	1	22.38	22.46	22.33	22.9
100	64QAM	1	1	20.88	20.95	20.83	21.4
100	256QAM	1	1	19.02	19.09	18.98	19.4
Channel				639668	641666	643666	Tune-up limit (dBm)
Frequency (MHz)				3595.02	3624.99	3654.99	
90	PI/2 BPSK	1	1	22.43	22.54	22.44	23.9
Channel				639334	641666	644000	Tune-up limit (dBm)
Frequency (MHz)				3590.01	3624.99	3660	
80	PI/2 BPSK	1	1	22.51	22.54	22.41	23.9
Channel				639000	641666	644332	Tune-up limit (dBm)
Frequency (MHz)				3585	3624.99	3664.98	
70	PI/2 BPSK	1	1	22.52	22.54	22.45	23.9
Channel				638668	641666	644666	Tune-up limit (dBm)
Frequency (MHz)				3580.02	3624.99	3669.99	
60	PI/2 BPSK	1	1	22.44	22.57	22.39	23.9
Channel				638334	641666	645000	Tune-up limit (dBm)
Frequency (MHz)				3575.01	3624.99	3675	
50	PI/2 BPSK	1	1	22.52	22.55	22.41	23.9
Channel				638000	641666	645332	Tune-up limit (dBm)
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	22.46	22.53	22.47	23.9
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	22.53	22.54	22.47	23.9
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	22.49	22.51	22.38	23.9

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				640000	641666	643332	
Frequency (MHz)				3600	3624.99	3649.98	
100	PI/2 BPSK	1	1	20.45	20.84	20.60	21.0
100	PI/2 BPSK	1	137	20.60	20.80	20.63	
100	PI/2 BPSK	1	271	20.64	20.63	20.74	
100	PI/2 BPSK	135	0	20.00	20.00	19.80	21.0
100	PI/2 BPSK	135	69	20.59	20.77	20.48	21.0
100	PI/2 BPSK	135	138	19.94	20.12	19.85	21.0
100	PI/2 BPSK	270	0	19.89	20.15	20.12	
100	QPSK	1	1	20.46	20.56	20.47	21.0
100	QPSK	1	137	20.40	20.52	20.44	
100	QPSK	1	271	20.55	20.81	20.52	
100	QPSK	135	0	19.71	19.99	19.78	21.0
100	QPSK	135	69	20.64	20.69	20.64	21.0
100	QPSK	135	138	19.74	19.93	19.66	21.0
100	QPSK	270	0	19.82	19.90	19.65	
100	16QAM	1	1	19.19	19.41	19.20	21.0
100	64QAM	1	1	18.59	18.54	18.71	20.5
100	256QAM	1	1	17.72	17.98	17.72	19.0
Channel				639668	641666	643666	Tune-up limit (dBm)
Frequency (MHz)				3595.02	3624.99	3654.99	
90	PI/2 BPSK	1	1	20.50	20.70	20.61	21.0
Channel				639334	641666	644000	Tune-up limit (dBm)
Frequency (MHz)				3590.01	3624.99	3660	
80	PI/2 BPSK	1	1	20.60	20.75	20.57	21.0
Channel				639000	641666	644332	Tune-up limit (dBm)
Frequency (MHz)				3585	3624.99	3664.98	
70	PI/2 BPSK	1	1	20.51	20.73	20.54	21.0
Channel				638668	641666	644666	Tune-up limit (dBm)
Frequency (MHz)				3580.02	3624.99	3669.99	
60	PI/2 BPSK	1	1	20.56	20.71	20.54	21.0
Channel				638334	641666	645000	Tune-up limit (dBm)
Frequency (MHz)				3575.01	3624.99	3675	
50	PI/2 BPSK	1	1	20.57	20.71	20.61	21.0
Channel				638000	641666	645332	Tune-up limit (dBm)
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	20.51	20.79	20.55	21.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	20.58	20.73	20.63	21.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	20.52	20.73	20.58	21.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				640000	641666	643332	
Frequency (MHz)				3600	3624.99	3649.98	
100	PI/2 BPSK	1	1	19.11	19.71	19.30	21.0
100	PI/2 BPSK	1	137	19.52	19.55	19.51	
100	PI/2 BPSK	1	271	19.62	19.14	19.45	
100	PI/2 BPSK	135	0	19.11	19.18	19.11	21.0
100	PI/2 BPSK	135	69	19.21	19.51	19.22	21.0
100	PI/2 BPSK	135	138	19.16	19.01	19.19	21.0
100	PI/2 BPSK	270	0	19.14	19.16	19.15	
100	QPSK	1	1	19.60	19.06	19.03	21.0
100	QPSK	1	137	19.16	19.40	19.35	
100	QPSK	1	271	19.62	19.69	19.41	
100	QPSK	135	0	19.13	19.19	19.29	21.0
100	QPSK	135	69	19.03	19.21	19.03	21.0
100	QPSK	135	138	19.12	19.18	19.16	21.0
100	QPSK	270	0	19.19	19.10	19.10	
100	16QAM	1	1	19.10	19.17	19.03	21.0
100	64QAM	1	1	18.57	18.50	18.50	20.5
100	256QAM	1	1	17.06	17.02	17.08	19.0
Channel				639668	641666	643666	Tune-up limit (dBm)
Frequency (MHz)				3595.02	3624.99	3654.99	
90	PI/2 BPSK	1	1	19.48	19.51	19.51	21.0
Channel				639334	641666	644000	Tune-up limit (dBm)
Frequency (MHz)				3590.01	3624.99	3660	
80	PI/2 BPSK	1	1	19.42	19.48	19.45	21.0
Channel				639000	641666	644332	Tune-up limit (dBm)
Frequency (MHz)				3585	3624.99	3664.98	
70	PI/2 BPSK	1	1	19.42	19.49	19.46	21.0
Channel				638668	641666	644666	Tune-up limit (dBm)
Frequency (MHz)				3580.02	3624.99	3669.99	
60	PI/2 BPSK	1	1	19.50	19.53	19.50	21.0
Channel				638334	641666	645000	Tune-up limit (dBm)
Frequency (MHz)				3575.01	3624.99	3675	
50	PI/2 BPSK	1	1	19.47	19.45	19.45	21.0
Channel				638000	641666	645332	Tune-up limit (dBm)
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	19.44	19.55	19.44	21.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	19.45	19.48	19.41	21.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	19.49	19.47	19.48	21.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				640000	641666	643332	
Frequency (MHz)				3600	3624.99	3649.98	
100	PI/2 BPSK	1	1	22.84	23.32	23.01	24.0
100	PI/2 BPSK	1	137	23.10	23.23	23.12	
100	PI/2 BPSK	1	271	23.17	22.96	23.15	
100	PI/2 BPSK	135	0	22.59	22.62	22.48	24.0
100	PI/2 BPSK	135	69	22.96	23.20	22.91	24.0
100	PI/2 BPSK	135	138	22.58	22.61	22.54	24.0
100	PI/2 BPSK	270	0	22.54	22.69	22.67	
100	QPSK	1	1	23.06	22.88	22.82	24.0
100	QPSK	1	137	22.83	23.01	22.94	
100	QPSK	1	271	23.12	23.30	23.01	
100	QPSK	135	0	22.44	22.62	22.55	24.0
100	QPSK	135	69	22.92	23.02	22.92	24.0
100	QPSK	135	138	22.45	22.58	22.43	24.0
100	QPSK	270	0	22.53	22.53	22.39	
100	16QAM	1	1	22.16	22.30	22.13	24.0
100	64QAM	1	1	21.59	21.53	21.62	23.5
100	256QAM	1	1	20.41	20.54	20.42	22.0
Channel				639668	641666	643666	Tune-up limit (dBm)
Frequency (MHz)				3595.02	3624.99	3654.99	
90	PI/2 BPSK	1	1	23.03	23.16	23.11	24.0
Channel				639334	641666	644000	Tune-up limit (dBm)
Frequency (MHz)				3590.01	3624.99	3660	
80	PI/2 BPSK	1	1	23.06	23.17	23.06	24.0
Channel				639000	641666	644332	Tune-up limit (dBm)
Frequency (MHz)				3585	3624.99	3664.98	
70	PI/2 BPSK	1	1	23.01	23.16	23.04	24.0
Channel				638668	641666	644666	Tune-up limit (dBm)
Frequency (MHz)				3580.02	3624.99	3669.99	
60	PI/2 BPSK	1	1	23.07	23.17	23.06	24.0
Channel				638334	641666	645000	Tune-up limit (dBm)
Frequency (MHz)				3575.01	3624.99	3675	
50	PI/2 BPSK	1	1	23.07	23.14	23.08	24.0
Channel				638000	641666	645332	Tune-up limit (dBm)
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	23.02	23.22	23.04	24.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	23.06	23.16	23.07	24.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	23.05	23.16	23.08	24.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				640000	641666	643332	
Frequency (MHz)				3600	3624.99	3649.98	
100	PI/2 BPSK	1	1	25.32	25.69	25.46	27.0
100	PI/2 BPSK	1	137	25.01	25.00	25.09	
100	PI/2 BPSK	1	271	25.09	25.07	25.17	
100	PI/2 BPSK	135	0	24.50	25.20	24.68	26.5
100	PI/2 BPSK	135	69	25.17	25.00	25.05	27.0
100	PI/2 BPSK	135	138	25.14	24.58	24.52	26.5
100	PI/2 BPSK	270	0	25.09	24.50	24.57	
100	QPSK	1	1	25.03	25.33	25.11	27.0
100	QPSK	1	137	25.19	25.00	25.07	
100	QPSK	1	271	25.00	25.06	25.08	
100	QPSK	135	0	24.34	24.46	24.42	26.0
100	QPSK	135	69	25.08	25.16	25.17	27.0
100	QPSK	135	138	24.35	24.53	24.43	26.0
100	QPSK	270	0	24.38	24.47	24.46	
100	16QAM	1	1	25.00	25.31	25.08	26.0
100	64QAM	1	1	23.95	23.98	24.02	24.5
100	256QAM	1	1	21.91	21.05	21.98	22.5
Channel				639668	641666	643666	Tune-up limit (dBm)
Frequency (MHz)				3595.02	3624.99	3654.99	
90	PI/2 BPSK	1	1	25.06	25.40	25.18	27.0
Channel				639334	641666	644000	Tune-up limit (dBm)
Frequency (MHz)				3590.01	3624.99	3660	
80	PI/2 BPSK	1	1	25.12	25.35	25.13	27.0
Channel				639000	641666	644332	Tune-up limit (dBm)
Frequency (MHz)				3585	3624.99	3664.98	
70	PI/2 BPSK	1	1	25.02	25.35	25.14	27.0
Channel				638668	641666	644666	Tune-up limit (dBm)
Frequency (MHz)				3580.02	3624.99	3669.99	
60	PI/2 BPSK	1	1	25.03	25.42	25.12	27.0
Channel				638334	641666	645000	Tune-up limit (dBm)
Frequency (MHz)				3575.01	3624.99	3675	
50	PI/2 BPSK	1	1	25.12	25.36	25.15	27.0
Channel				638000	641666	645332	Tune-up limit (dBm)
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	25.03	25.34	25.20	27.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	25.11	25.35	25.14	27.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	25.04	25.35	25.10	27.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				640000	641666	643332	
Frequency (MHz)				3600	3624.99	3649.98	
100	PI/2 BPSK	1	1	25.04	25.10	25.09	26.9
100	PI/2 BPSK	1	137	24.91	24.97	24.96	
100	PI/2 BPSK	1	271	24.90	24.95	24.94	
100	PI/2 BPSK	135	0	24.92	24.98	24.97	26.4
100	PI/2 BPSK	135	69	24.91	24.97	24.96	26.9
100	PI/2 BPSK	135	138	24.86	24.92	24.91	26.4
100	PI/2 BPSK	270	0	24.91	24.97	24.96	
100	QPSK	1	1	24.94	25.00	24.99	26.9
100	QPSK	1	137	24.91	24.95	24.94	
100	QPSK	1	271	24.92	24.93	24.92	
100	QPSK	135	0	24.20	24.26	24.25	25.9
100	QPSK	135	69	24.95	24.91	24.90	26.9
100	QPSK	135	138	24.16	24.22	24.21	25.9
100	QPSK	270	0	24.13	24.19	24.18	
100	16QAM	1	1	24.93	24.99	24.98	25.9
100	64QAM	1	1	23.97	24.03	24.02	24.4
100	256QAM	1	1	21.87	21.92	21.91	22.4
Channel				639668	641666	643666	Tune-up limit (dBm)
Frequency (MHz)				3595.02	3624.99	3654.99	
90	PI/2 BPSK	1	1	25.03	25.08	24.99	26.9
Channel				639334	641666	644000	Tune-up limit (dBm)
Frequency (MHz)				3590.01	3624.99	3660	
80	PI/2 BPSK	1	1	25.04	25.00	25.03	26.9
Channel				639000	641666	644332	Tune-up limit (dBm)
Frequency (MHz)				3585	3624.99	3664.98	
70	PI/2 BPSK	1	1	25.00	25.03	25.02	26.9
Channel				638668	641666	644666	Tune-up limit (dBm)
Frequency (MHz)				3580.02	3624.99	3669.99	
60	PI/2 BPSK	1	1	24.94	25.07	24.99	26.9
Channel				638334	641666	645000	Tune-up limit (dBm)
Frequency (MHz)				3575.01	3624.99	3675	
50	PI/2 BPSK	1	1	24.96	25.01	25.00	26.9
Channel				638000	641666	645332	Tune-up limit (dBm)
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	25.00	25.04	25.02	26.9
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	25.04	25.08	25.00	26.9
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	24.96	25.09	25.04	26.9

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				640000	641666	643332	
Frequency (MHz)				3600	3624.99	3649.98	
100	PI/2 BPSK	1	1	25.19	25.28	25.10	26.9
100	PI/2 BPSK	1	137	25.01	25.10	24.92	
100	PI/2 BPSK	1	271	24.97	25.06	24.98	
100	PI/2 BPSK	135	0	24.66	24.75	24.57	26.4
100	PI/2 BPSK	135	69	24.93	24.97	24.95	26.9
100	PI/2 BPSK	135	138	24.52	24.61	24.43	26.4
100	PI/2 BPSK	270	0	24.54	24.63	24.45	
100	QPSK	1	1	25.09	25.18	25.00	26.9
100	QPSK	1	137	25.00	25.09	24.91	
100	QPSK	1	271	24.95	25.04	24.96	
100	QPSK	135	0	24.60	24.69	24.51	25.9
100	QPSK	135	69	24.93	24.95	24.94	26.9
100	QPSK	135	138	24.44	24.53	24.36	25.9
100	QPSK	270	0	24.54	24.63	24.45	
100	16QAM	1	1	24.01	24.10	23.93	25.9
100	64QAM	1	1	22.56	22.64	22.48	24.4
100	256QAM	1	1	20.76	20.83	20.68	22.4
Channel				639668	641666	643666	Tune-up limit (dBm)
Frequency (MHz)				3595.02	3624.99	3654.99	
90	PI/2 BPSK	1	1	25.17	25.19	25.02	26.9
Channel				639334	641666	644000	Tune-up limit (dBm)
Frequency (MHz)				3590.01	3624.99	3660	
80	PI/2 BPSK	1	1	25.09	25.21	25.09	26.9
Channel				639000	641666	644332	Tune-up limit (dBm)
Frequency (MHz)				3585	3624.99	3664.98	
70	PI/2 BPSK	1	1	25.18	25.22	25.07	26.9
Channel				638668	641666	644666	Tune-up limit (dBm)
Frequency (MHz)				3580.02	3624.99	3669.99	
60	PI/2 BPSK	1	1	25.10	25.18	25.06	26.9
Channel				638334	641666	645000	Tune-up limit (dBm)
Frequency (MHz)				3575.01	3624.99	3675	
50	PI/2 BPSK	1	1	25.14	25.23	25.00	26.9
Channel				638000	641666	645332	Tune-up limit (dBm)
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	25.15	25.18	25.03	26.9
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	25.12	25.19	25.01	26.9
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	25.13	25.17	25.00	26.9

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				640000	641666	643332	
Frequency (MHz)				3600	3624.99	3649.98	
100	PI/2 BPSK	1	1	23.50	23.90	23.66	24.0
100	PI/2 BPSK	1	137	23.77	23.85	23.61	
100	PI/2 BPSK	1	271	23.75	23.60	23.68	
100	PI/2 BPSK	135	0	22.90	23.06	22.95	23.5
100	PI/2 BPSK	135	69	23.64	23.70	23.44	24.0
100	PI/2 BPSK	135	138	22.93	23.22	23.06	23.5
100	PI/2 BPSK	270	0	23.14	23.15	22.85	
100	QPSK	1	1	23.33	23.51	23.46	24.0
100	QPSK	1	137	23.53	23.73	23.65	
100	QPSK	1	271	23.61	23.85	23.65	
100	QPSK	135	0	22.94	23.00	23.00	23.0
100	QPSK	135	69	23.32	23.43	23.32	24.0
100	QPSK	135	138	23.00	23.00	22.95	23.0
100	QPSK	270	0	22.90	23.00	22.74	
100	16QAM	1	1	22.25	22.52	22.35	23.0
100	64QAM	1	1	20.75	20.94	20.76	21.5
100	256QAM	1	1	18.91	19.00	18.98	19.5
Channel				639668	641666	643666	Tune-up limit (dBm)
Frequency (MHz)				3595.02	3624.99	3654.99	
90	PI/2 BPSK	1	1	23.77	23.76	23.57	24.0
Channel				639334	641666	644000	Tune-up limit (dBm)
Frequency (MHz)				3590.01	3624.99	3660	
80	PI/2 BPSK	1	1	23.69	23.75	23.56	24.0
Channel				639000	641666	644332	Tune-up limit (dBm)
Frequency (MHz)				3585	3624.99	3664.98	
70	PI/2 BPSK	1	1	23.73	23.84	23.51	24.0
Channel				638668	641666	644666	Tune-up limit (dBm)
Frequency (MHz)				3580.02	3624.99	3669.99	
60	PI/2 BPSK	1	1	23.72	23.77	23.53	24.0
Channel				638334	641666	645000	Tune-up limit (dBm)
Frequency (MHz)				3575.01	3624.99	3675	
50	PI/2 BPSK	1	1	23.68	23.84	23.60	24.0
Channel				638000	641666	645332	Tune-up limit (dBm)
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	23.76	23.78	23.57	24.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	23.67	23.83	23.58	24.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	23.76	23.78	23.53	24.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				640000	641666	643332	
Frequency (MHz)				3600	3624.99	3649.98	
100	PI/2 BPSK	1	1	22.20	22.80	22.40	24.0
100	PI/2 BPSK	1	137	22.41	22.50	22.37	
100	PI/2 BPSK	1	271	22.58	22.25	22.76	
100	PI/2 BPSK	135	0	21.75	21.90	21.60	23.5
100	PI/2 BPSK	135	69	22.29	22.50	22.39	24.0
100	PI/2 BPSK	135	138	22.04	22.14	22.04	23.5
100	PI/2 BPSK	270	0	21.81	21.98	21.91	
100	QPSK	1	1	22.06	22.05	22.00	24.0
100	QPSK	1	137	22.24	22.47	22.33	
100	QPSK	1	271	22.51	22.67	22.51	
100	QPSK	135	0	21.60	21.82	21.55	23.0
100	QPSK	135	69	22.38	22.40	22.34	24.0
100	QPSK	135	138	21.70	21.88	21.68	23.0
100	QPSK	270	0	21.69	21.93	21.83	
100	16QAM	1	1	21.21	21.23	21.08	23.0
100	64QAM	1	1	19.68	19.80	19.55	21.5
100	256QAM	1	1	17.75	17.88	17.87	19.5
Channel				639668	641666	643666	Tune-up limit (dBm)
Frequency (MHz)				3595.02	3624.99	3654.99	
90	PI/2 BPSK	1	1	22.39	22.44	22.31	24.0
Channel				639334	641666	644000	Tune-up limit (dBm)
Frequency (MHz)				3590.01	3624.99	3660	
80	PI/2 BPSK	1	1	22.36	22.44	22.37	24.0
Channel				639000	641666	644332	Tune-up limit (dBm)
Frequency (MHz)				3585	3624.99	3664.98	
70	PI/2 BPSK	1	1	22.41	22.48	22.28	24.0
Channel				638668	641666	644666	Tune-up limit (dBm)
Frequency (MHz)				3580.02	3624.99	3669.99	
60	PI/2 BPSK	1	1	22.33	22.41	22.30	24.0
Channel				638334	641666	645000	Tune-up limit (dBm)
Frequency (MHz)				3575.01	3624.99	3675	
50	PI/2 BPSK	1	1	22.36	22.44	22.30	24.0
Channel				638000	641666	645332	Tune-up limit (dBm)
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	22.38	22.48	22.34	24.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	22.41	22.44	22.34	24.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	22.35	22.46	22.32	24.0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				640000	641666	643332	
Frequency (MHz)				3600	3624.99	3649.98	
100	PI/2 BPSK	1	1	25.91	26.40	26.09	
100	PI/2 BPSK	1	137	26.15	26.24	26.04	27.0
100	PI/2 BPSK	1	271	26.21	25.99	26.25	
100	PI/2 BPSK	135	0	25.37	25.53	25.34	26.5
100	PI/2 BPSK	135	69	26.03	26.15	25.96	27.0
100	PI/2 BPSK	135	138	25.52	25.72	25.59	
100	PI/2 BPSK	270	0	25.54	25.61	25.42	26.5
100	QPSK	1	1	25.75	25.85	25.80	
100	QPSK	1	137	25.94	26.16	26.05	27.0
100	QPSK	1	271	26.11	26.31	26.13	
100	QPSK	135	0	25.33	25.46	25.35	26.0
100	QPSK	135	69	25.89	25.96	25.87	27.0
100	QPSK	135	138	25.41	25.49	25.37	
100	QPSK	270	0	25.35	25.51	25.32	26.0
100	16QAM	1	1	24.77	24.93	24.77	26.0
100	64QAM	1	1	23.26	23.42	23.21	24.5
100	256QAM	1	1	21.38	21.49	21.47	22.5
Channel				639668	641666	643666	Tune-up limit (dBm)
Frequency (MHz)				3595.02	3624.99	3654.99	
90	PI/2 BPSK	1	1	26.14	26.16	26.00	27.0
Channel				639334	641666	644000	Tune-up limit (dBm)
Frequency (MHz)				3590.01	3624.99	3660	
80	PI/2 BPSK	1	1	26.09	26.15	26.02	27.0
Channel				639000	641666	644332	Tune-up limit (dBm)
Frequency (MHz)				3585	3624.99	3664.98	
70	PI/2 BPSK	1	1	26.13	26.22	25.95	27.0
Channel				638668	641666	644666	Tune-up limit (dBm)
Frequency (MHz)				3580.02	3624.99	3669.99	
60	PI/2 BPSK	1	1	26.09	26.15	25.97	27.0
Channel				638334	641666	645000	Tune-up limit (dBm)
Frequency (MHz)				3575.01	3624.99	3675	
50	PI/2 BPSK	1	1	26.08	26.21	26.01	27.0
Channel				638000	641666	645332	Tune-up limit (dBm)
Frequency (MHz)				3570	3624.99	3679.98	
40	PI/2 BPSK	1	1	26.13	26.19	26.01	27.0
Channel				637668	641666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3624.99	3684.99	
30	PI/2 BPSK	1	1	26.10	26.20	26.01	27.0
Channel				637334	641666	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3624.99	3690	
20	PI/2 BPSK	1	1	26.12	26.18	25.98	27.0

14. WiFi/Bluetooth Output Power (Unit: dBm)

General Note:

1. For each antenna, transmit power in SISO operation is larger than (or equal to) the power in MIMO operation, RF exposure compliance of MIMO mode can be deduced from the compliance simultaneous transmission of antennas operating in SISO mode.
2. Per KDB 248227 D01v02r02, the simultaneous SAR provisions in KDB publication 447498 should be applied to determine simultaneous transmission SAR test exclusion for WiFi MIMO. If the sum of 1g single transmission chain SAR measurements is < 1.6W/kg and SAR peak to location ratio ≤ 0.04, no additional SAR measurements for MIMO.
3. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For “Not required”, SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, additional output power measurements were not necessary.
4. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
5. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
6. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
7. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
    a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
    b. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
    c. For all positions/configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
8. Per 201904 TCBC workshops, General principles of FCC KDB Publication 248227 D01 can be applied to determine the SAR Initial Test Configurations and test reduction for 802.11ax SAR testing. For the table below the 802.11ax maximum power is SU (non-OFDMA), and the SU maximum power also higher than RU (OFDMA)
9. In applying the test guidance, the IEEE 802.11 mode with the maximum output power (out of all modes) should be considered for testing
10. For modes with the same maximum output power, the guidance from section 5.3.2 a) of FCC KDB Publication 248227 D01 should be applied, with 802.11ax being considered as the highest 802.11 mode for the appropriate frequency bands
11. When SAR testing for 802.11ax is required
    a. If the maximum output power is highest for OFDMA scenarios, choose the tone size with the maximum number of tones and the highest maximum output power
    b. Otherwise, consider the fully allocated channel for SAR testing
    c. When SAR testing is required on RU sizes less than the fully allocated channel, use the RU number closest to the middle of the channel, choosing the higher RU number when two RUs are equidistant to the middle of the channel

<2.4GHz WLAN>																
				Ant 8			Ant 9			Ant 8+9 (8)		Ant 8+9 (9)		Ant 8+9		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	Not required	18.20	Not required	17.77	18.20	98.48	18.19	18.20	17.28	18.20	20.77	21.20	98.48
		6	2437		18.20		18.06	18.20		18.19	18.20	17.80	18.20	21.01	21.20	
		11	2462		18.20		17.93	18.20		18.11	18.20	17.55	18.20	20.85	21.20	
	802.11g 6Mbps	1	2412		17.70		Not required	17.70	Not required	Not required	17.70	Not required	17.70	Not required	20.70	Not required
		6	2437		17.70			17.70			17.70		17.70		20.70	
		11	2462		15.70			15.70			15.70		15.70		18.70	
	802.11n-HT20 MCS0	1	2412		17.20			17.20			17.20		17.20		20.20	
		6	2437		17.20			17.20			17.20		17.20		20.20	
		11	2462		15.20			15.20			15.20		15.20		18.20	
	802.11n-HT40 MCS0	3	2422		12.70			12.70			12.70		12.70		15.70	
		6	2437		16.20			16.20			16.20		16.20		19.20	
		9	2452		10.20			10.20			10.20		10.20		13.20	
	802.11ac-VHT20 MCS0	1	2412		17.20			17.20			17.20		17.20		20.20	
		6	2437		17.20			17.20			17.20		17.20		20.20	
		11	2462		15.20			15.20			15.20		15.20		18.20	
	802.11ac-VHT40 MCS0	3	2422		12.70			12.70			12.70		12.70		15.70	
		6	2437		16.20			16.20			16.20		16.20		19.20	
		9	2452		10.20			10.20			10.20		10.20		13.20	
	802.11ax-HE20 MCS0	1	2412		17.20			17.20			17.20		17.20		20.20	
		6	2437		17.20			17.20			17.20		17.20		20.20	
		11	2462		15.20			15.20			15.20		15.20		18.20	
	802.11ax-HE40 MCS0	3	2422		12.70			12.70			12.70		12.70		15.70	
		6	2437		16.20			16.20			16.20		16.20		19.20	
		9	2452		10.20			10.20			10.20		10.20		13.20	

<5.2GHz WLAN>																
				Ant 8			Ant 9			Ant 8+9 (8)		Ant 8+9 (9)		Ant 8+9		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	Not required	15.70	Not required	Not required	15.70	Not required	Not required	15.70	Not required	15.70	Not required	18.70	Not required
		40	5200		16.70			16.70			16.70		16.70		19.70	
		44	5220		16.70			16.70			16.70		16.70		19.70	
		48	5240		16.70			16.70			16.70		16.70		19.70	
	802.11n-HT20 MCS0	36	5180		15.70			15.70			15.70		15.70		18.70	
		40	5200		15.70			15.70			15.70		15.70		18.70	
		44	5220		15.70			15.70			15.70		15.70		18.70	
		48	5240		15.70			15.70			15.70		15.70		18.70	
	802.11n-HT40 MCS0	38	5190		14.70			14.70			14.70		14.70		17.70	
		46	5230		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT20 MCS0	36	5180		15.70			15.70			15.70		15.70		18.70	
		40	5200		15.70			15.70			15.70		15.70		18.70	
		44	5220		15.70			15.70			15.70		15.70		18.70	
		48	5240		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT40 MCS0	38	5190		14.70			14.70			14.70		14.70		17.70	
		46	5230		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT80 MCS0	42	5210		13.70			13.70			13.70		13.70		16.70	
	802.11ax-HE20 MCS0	36	5180		15.70			15.70			15.70		15.70		18.70	
		40	5200		15.70			15.70			15.70		15.70		18.70	
		44	5220		15.70			15.70			15.70		15.70		18.70	
		48	5240		15.70			15.70			15.70		15.70		18.70	
	802.11ax-HE40 MCS0	38	5190		14.70			14.70			14.70		14.70		17.70	
		46	5230		15.70			15.70			15.70		15.70		18.70	
	802.11ax-HE80 MCS0	42	5210		13.70			13.70			13.70		13.70		16.70	

<5.3GHz WLAN>																
				Ant 8			Ant 9			Ant 8+9 (8)		Ant 8+9 (9)		Ant 8+9		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	Not required	16.70	Not required	Not required	16.70	Not required	15.82	16.70	16.61	16.70	19.24	19.70	99.25
		56	5280		16.70			16.70		15.94	16.70	16.68	16.70	19.34	19.70	
		60	5300		16.70			16.70		15.73	16.70	16.60	16.70	19.20	19.70	
		64	5320		16.20			16.20		15.82	16.20	16.14	16.20	19.01	19.20	
	802.11n-HT20 MCS0	52	5260		15.70			15.70		Not required	15.70	Not required	15.70	Not required	18.70	Not required
		56	5280		15.70			15.70			15.70		15.70		18.70	
		60	5300		15.70			15.70			15.70		15.70		18.70	
		64	5320		15.70			15.70			15.70		15.70		18.70	
	802.11n-HT40 MCS0	54	5270		15.70			15.70			15.70		15.70		18.70	
		62	5310		12.70			12.70			12.70		12.70		15.70	
	802.11ac-VHT20 MCS0	52	5260		15.70			15.70			15.70		15.70		18.70	
		56	5280		15.70			15.70			15.70		15.70		18.70	
		60	5300		15.70			15.70			15.70		15.70		18.70	
		64	5320		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT40 MCS0	54	5270		15.70			15.70			15.70		15.70		18.70	
		62	5310		12.70			12.70			12.70		12.70		15.70	
	802.11ac-VHT80 MCS0	58	5290		12.20			12.20			12.20		12.20		15.20	
	802.11ac-VHT160 MCS0	50	5250		10.20			10.20			10.20		10.20		13.20	
	802.11ax-HE20 MCS0	52	5260		15.70			15.70			15.70		15.70		18.70	
		56	5280		15.70			15.70			15.70		15.70		18.70	
		60	5300		15.70			15.70			15.70		15.70		18.70	
		64	5320		15.70			15.70			15.70		15.70		18.70	
	802.11ax-HE40 MCS0	54	5270		15.70			15.70			15.70		15.70		18.70	
		62	5310		12.70			12.70			12.70		12.70		15.70	
	802.11ax-HE80 MCS0	58	5290		12.20			12.20			12.20		12.20		15.20	
	802.11ax-HE160 MCS0	50	5250		10.20			10.20			10.20		10.20		13.20	

<5.5GHz WLAN>																
				Ant 8			Ant 9			Ant 8+9 (8)		Ant 8+9 (9)		Ant 8+9		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	Not required	16.20	Not required	Not required	16.20	Not required	15.22	16.20	15.74	16.20	18.50	19.20	99.25
		116	5580		16.70			16.70		15.93	16.70	16.05	16.70	19.00	19.70	
		124	5620		16.20			16.20		15.70	16.20	15.90	16.20	18.80	19.20	
		132	5660		16.20			16.20		15.75	16.20	15.85	16.20	18.75	19.20	
		144	5720		16.70			16.70		16.34	16.70	16.51	16.70	19.44	19.70	
	802.11n-HT20 MCS0	100	5500		15.70			15.70		Not required	15.70	Not required	15.70	Not required	18.70	Not required
		116	5580		15.70			15.70			15.70		15.70		18.70	
		124	5620		15.20			15.20			15.20		15.20		18.20	
		132	5660		15.20			15.20			15.20		15.20		18.20	
		140	5700		15.20			15.20			15.20		15.20		18.20	
		144	5720		15.70			15.70			15.70		15.70		18.70	
	802.11n-HT40 MCS0	102	5510		14.20			14.20			14.20		14.20		17.20	
		110	5550		15.70			15.70			15.70		15.70		18.70	
		126	5630		15.70			15.70			15.70		15.70		18.70	
		134	5670		15.70			15.70			15.70		15.70		18.70	
		142	5710		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT20 MCS0	100	5500		15.70			15.70			15.70		15.70		18.70	
		116	5580		15.70			15.70			15.70		15.70		18.70	
		124	5620		15.20			15.20			15.20		15.20		18.20	
		132	5660		15.20			15.20			15.20		15.20		18.20	
		140	5700		15.20			15.20			15.20		15.20		18.20	
		144	5720		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT40 MCS0	102	5510		14.20			14.20			14.20		14.20		17.20	
		110	5550		15.70			15.70			15.70		15.70		18.70	
		126	5630		15.70			15.70			15.70		15.70		18.70	
		134	5670		15.70			15.70			15.70		15.70		18.70	
		142	5710		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT80 MCS0	106	5530		13.70			13.70			13.70		13.70		16.70	
		122	5610		15.70			15.70			15.70		15.70		18.70	
		138	5690		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT160 MCS0	114	5570		12.20			12.20			12.20		12.20		15.20	
	802.11ax-HE20 MCS0	100	5500		15.70			15.70			15.70		15.70		18.70	
		116	5580		15.70			15.70			15.70		15.70		18.70	
		124	5620		15.20			15.20			15.20		15.20		18.20	
		132	5660		15.20			15.20			15.20		15.20		18.20	
		140	5700		15.20			15.20			15.20		15.20		18.20	
		144	5720		15.70			15.70			15.70		15.70		18.70	
	802.11ax-HE40 MCS0	102	5510		14.20			14.20			14.20		14.20		17.20	
		110	5550		15.70			15.70			15.70		15.70		18.70	
		126	5630		15.70			15.70			15.70		15.70		18.70	
		134	5670		15.70			15.70			15.70		15.70		18.70	
		142	5710		15.70			15.70			15.70		15.70		18.70	
	802.11ax-HE80 MCS0	106	5530		13.70			13.70			13.70		13.70		16.70	
		122	5610		15.70			15.70			15.70		15.70		18.70	
		138	5690		15.70			15.70			15.70		15.70		18.70	
	802.11ax-HE160 MCS0	114	5570		12.20			12.20			12.20		12.20		15.20	

<5.8GHz WLAN>

				Ant 8			Ant 9			Ant 8+9 (8)		Ant 8+9 (9)		Ant 8+9		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	Not required	16.70	Not required	Not required	16.70	Not required	16.37	16.70	16.48	16.70	19.44	19.70	99.24
		157	5785		16.70			16.70		16.61	16.70	16.55	16.70	19.59	19.70	
		165	5825		16.70			16.70		16.34	16.70	16.48	16.70	19.42	19.70	
	802.11n-HT20 MCS0	149	5745		15.70			15.70		Not required	15.70	Not required	15.70	Not required	18.70	Not required
		157	5785		15.70			15.70			15.70		15.70		18.70	
		165	5825		15.70			15.70			15.70		15.70		18.70	
	802.11n-HT40 MCS0	151	5755		15.70			15.70			15.70		15.70		18.70	
		159	5795		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT20 MCS0	149	5745		15.70			15.70			15.70		15.70		18.70	
		157	5785		15.70			15.70			15.70		15.70		18.70	
		165	5825		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT40 MCS0	151	5755		15.70			15.70			15.70		15.70		18.70	
		159	5795		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT80 MCS0	155	5775		15.70			15.70			15.70		15.70		18.70	
	802.11ax-HE20 MCS0	149	5745		15.70			15.70			15.70		15.70		18.70	
		157	5785		15.70			15.70			15.70		15.70		18.70	
		165	5825		15.70			15.70			15.70		15.70		18.70	
	802.11ax-HE40 MCS0	151	5755		15.70			15.70			15.70		15.70		18.70	
		159	5795		15.70			15.70			15.70		15.70		18.70	
	802.11ax-HE80 MCS0	155	5775		15.70			15.70			15.70		15.70		18.70	

<5.9GHz WLAN>

				Ant 8			Ant 9			Ant 8+9 (8)		Ant 8+9 (9)		Ant 8+9		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.9GHz WLAN	802.11a 6Mbps	169	5845	Not required	16.70	Not required	Not required	16.70	Not required	16.55	16.70	16.65	16.70	19.60	19.70	99.38
		173	5865		16.70			16.70		16.68	16.70	16.70	16.70	19.68	19.70	
		177	5885		16.70			16.70		16.54	16.70	16.62	16.70	19.58	19.70	
	802.11n-HT20 MCS0	169	5845		15.70			15.70		Not required	15.70	Not required	15.70	Not required	18.70	Not required
		173	5865		15.70			15.70			15.70		15.70		18.70	
		177	5885		13.20			13.20			13.20		13.20		16.20	
	802.11n-HT40 MCS0	167	5835		15.70			15.70			15.70		15.70		18.70	
		175	5875		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT20 MCS0	169	5845		15.70			15.70			15.70		15.70		18.70	
		173	5865		15.70			15.70			15.70		15.70		18.70	
		177	5885		13.20			13.20			13.20		13.20		16.20	
	802.11ac-VHT40 MCS0	167	5835		15.70			15.70			15.70		15.70		18.70	
		175	5875		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT80 MCS0	171	5855		15.70			15.70			15.70		15.70		18.70	
	802.11ac-VHT160 MCS0	163	5815		15.70			15.70			15.70		15.70		18.70	
	802.11ax-HE20 MCS0	169	5845		15.70			15.70			15.70		15.70		18.70	
		173	5865		15.70			15.70			15.70		15.70		18.70	
		177	5885		13.20			13.20			13.20		13.20		16.20	
	802.11ax-HE40 MCS0	167	5835		15.70			15.70			15.70		15.70		18.70	
		175	5875		15.70			15.70			15.70		15.70		18.70	
	802.11ax-HE80 MCS0	171	5855		15.70			15.70			15.70		15.70		18.70	

	802.11ax-HE160 MCS0	163	5815		15.70			15.70			15.70		15.70		18.70	

<WiFi 6E (LPI)>

				Ant 8			Ant 9			Ant 8+9 (8)		Ant 8+9 (9)		Ant 8+9		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
WiFi 6E (LPI)	802.11a 6Mbps	1	5955	Not required	1.20	Not required	Not required	1.20	Not required	Not required	1.20	Not required	1.20	Not required	4.20	Not required
		57	6235		1.20			1.20			1.20		1.20		4.20	
		113	6515		1.20			1.20			1.20		1.20		4.20	
		173	6815		1.20			1.20			1.20		1.20		4.20	
		233	7115		1.20			1.20			1.20		1.20		4.20	
	802.11ax-HE20 MCS0	1	5955		2.20			2.20			2.20		2.20		5.20	
		57	6235		2.20			2.20			2.20		2.20		5.20	
		113	6515		2.20			2.20			2.20		2.20		5.20	
		173	6815		2.20			2.20			2.20		2.20		5.20	
		233	7115		2.20			2.20			2.20		2.20		5.20	
	802.11ax-HE40 MCS0	3	5965		4.20			4.20			4.20		4.20		7.20	
		59	6245		4.20			4.20			4.20		4.20		7.20	
		107	6485		4.20			4.20			4.20		4.20		7.20	
		171	6805		4.20			4.20			4.20		4.20		7.20	
		227	7085		4.20			4.20			4.20		4.20		7.20	
	802.11ax-HE80 MCS0	7	5985		6.70			6.70			6.70		6.70		9.70	
		71	6305		6.70			6.70			6.70		6.70		9.70	
		119	6545		6.70			6.70			6.70		6.70		9.70	
		167	6785		6.70			6.70			6.70		6.70		9.70	
		215	7025		6.70			6.70			6.70		6.70		9.70	
	802.11ax-HE160 MCS0	15	6025		10.20			10.20		10.13	10.20	10.17	10.20	13.15	13.20	98.79
		47	6185		10.20			10.20		9.82	10.20	9.94	10.20	12.88	13.20	
		111	6505		10.20			10.20		9.78	10.20	10.02	10.20	12.90	13.20	
		143	6665		10.20			10.20		9.90	10.20	9.98	10.20	12.94	13.20	
		207	6985		10.20			10.20		9.76	10.20	9.96	10.20	12.86	13.20	

<WiFi 6E_SP>

				Ant 8			Ant 9			Ant 8+9 (8)		Ant 8+9 (9)		Ant 8+9		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Duty Cycle %	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Average power (dBm)	Tune-Up Limit	Duty Cycle %
WiFi 6E	802.11a 6Mbps	1	5955	Not required	10.20	Not required	Not required	10.20	Not required	Not required	10.20	Not required	10.20	Not required	13.20	Not required
		57	6235		10.20			10.20			10.20		10.20		13.20	
		173	6815		10.20			10.20			10.20		10.20		13.20	
	802.11ax-HE20 MCS0	1	5955		10.20			10.20			10.20		10.20		13.20	
		57	6235		10.20			10.20			10.20		10.20		13.20	
		173	6815		10.20			10.20			10.20		10.20		13.20	
	802.11ax-HE40 MCS0	3	5965		10.20			10.20			10.20		10.20		13.20	
		59	6245		10.20			10.20			10.20		10.20		13.20	
		171	6805		10.20			10.20			10.20		10.20		13.20	
	802.11ax-HE80 MCS0	7	5985		10.20			10.20			10.20		10.20		13.20	
		71	6305		10.20			10.20			10.20		10.20		13.20	
		167	6785		10.20			10.20			10.20		10.20		13.20	
	802.11ax-HE160 MCS0	15	6025		10.20			10.20		13.18	10.20	13.14	10.20	13.16	13.20	98.79
		47	6185		10.20			10.20		12.62	10.20	12.78	10.20	12.70	13.20	
		143	6665		10.20			10.20		12.74	10.20	12.80	10.20	12.86	13.20	

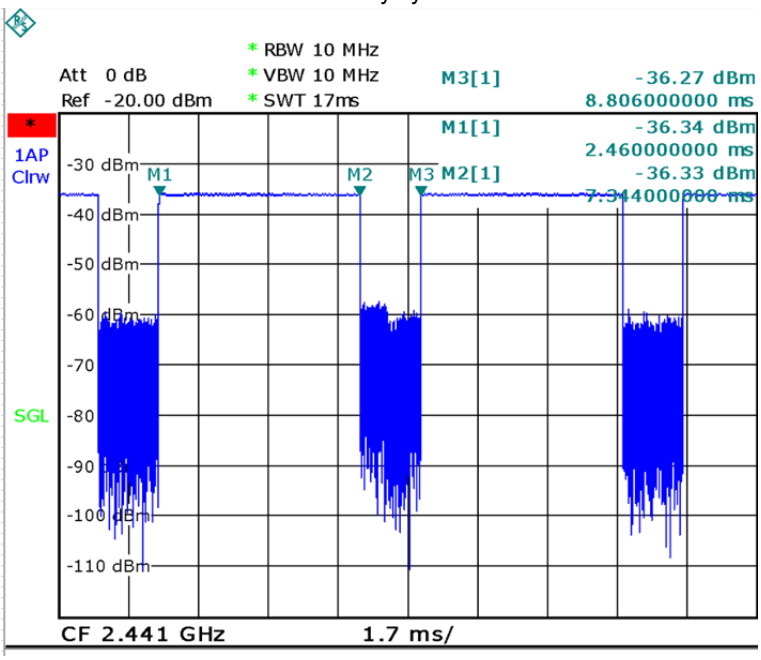
<2.4GHz Bluetooth>

				Ant 8		
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
Bluetooth	BR / EDR 1Mbps	0	2402	6.89	8.00	76.96
		39	2441	7.01	8.00	
		78	2480	6.93	8.00	
	BR / EDR 2Mbps	0	2402	Not required	5.00	Not required
		39	2441		5.00	
		78	2480		5.00	
	BR / EDR 3Mbps	0	2402		5.00	
		39	2441		5.00	
		78	2480		5.00	
	LE 1Mbps	0	2402		2.00	
		19	2440		2.00	
		39	2480		2.00	
	LE 2Mbps	0	2402		2.00	
		19	2440		2.00	
		39	2480		2.00	

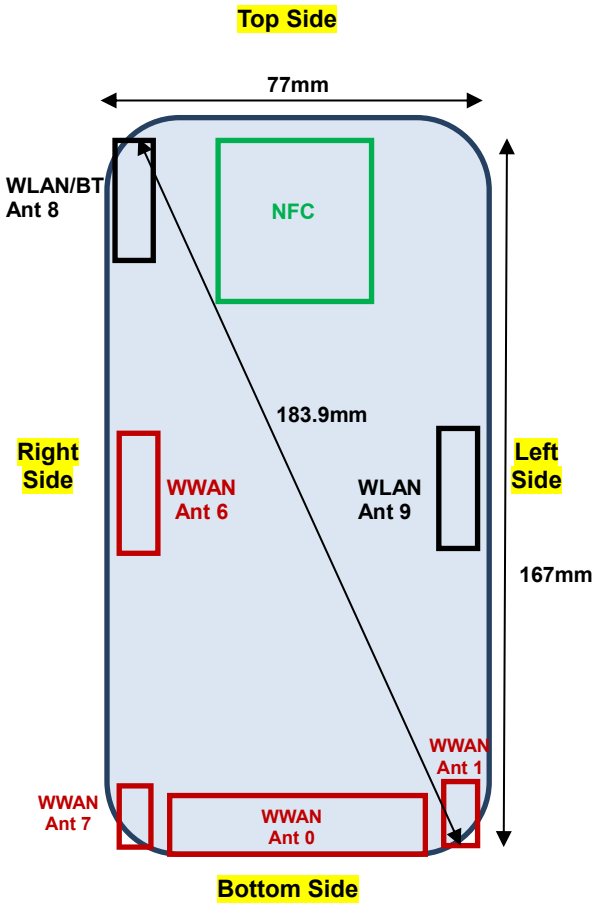
General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps due to its highest average power and duty cycle is 76.96% considered in SAR testing, and the duty cycle would be scaled to theoretical 83.3% in reported SAR calculation.

BT Duty cycle



15. Antenna Location



Back View

Distance of the Antenna to the EUT surface/edge						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 0	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 1	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 6	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Ant 7	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
2.4GHz WLAN Ant 8+9	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm
2.4GHz WLAN Ant 9	≤ 25mm	≤ 25mm	>25mm	>25mm	>25mm	≤ 25mm

Positions for SAR tests; Hotspot mode						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN Ant 0	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 1	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 6	Yes	Yes	No	Yes	Yes	Yes
WWAN Ant 7	Yes	Yes	No	Yes	Yes	Yes
2.4GHz WLAN Ant 8+9	Yes	Yes	Yes	No	Yes	Yes
2.4GHz WLAN Ant 9	Yes	Yes	No	No	No	Yes

General Note:

1. Referring to KDB 941225 D06 v02r01, when the overall device length and width are ≥ 9cm*5cm, the test distance is 10 mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge

16. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
   a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
   b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
   c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
   d. For WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
   e. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8W/kg.
4. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/kg, SAR testing with a headset connected to the handset is not required.
5. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g product specific SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold, for this device only bottom side SAR for WWAN transmitter scaled to maximum output power is higher than 1.2W/kg of GSM850, therefore product specific SAR is necessary.
6. For 5.3GHz / 5.5GHz / 5.8GHz / 6GHz WLAN product specific SAR is necessary too, due to an overall diagonal dimension is > 16cm.

GSM Note:

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Therefore, the GPRS (4Tx slots) for GSM850/GSM1900 is considered as the primary mode.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode, SAR measurement is not required for the secondary mode.

UMTS Note:

5. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.
6. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is ≤ ¼ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than ¼ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

LTE Note:

1. Per KDB 941225 D05v02r05, start with 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.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, 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 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.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is > not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4/B5/B12/B17/B26/B38 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE band 2/4/5/17/38 SAR test was covered by Band 25/66/26/12/41; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
   a. The maximum output power, including tolerance, for the smaller band is ≤ the larger band to qualify for the SAR test exclusion.
   b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

5G NR Note:

1. Referencing the procedure in KDB 941225, the test procedures are outlined as below:
   a. To start SAR test for the largest channel bandwidth for PI/2 BPSK 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. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
   b. For PI/2 BPSK with 100% RB allocation, SAR test 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 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.
   c. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is not ½ dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
   d. Smaller bandwidth output power for each RB allocation configuration for this device is not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device
   e. For 5G FR1 n5/n12/n41/n77, the maximum channel bandwidth does not support three non-overlapping channels in the frequency band, the middle channel of the group of overlapping channels were selected for testing.
   f. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission

WLAN Note:

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
2. Per KDB 248227 D01v02r02, WLAN5.2GHz SAR testing is not required when the WLAN5.3GHz band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for WLAN5.2GHz band.
3. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. For WLAN SAR testing was performed on single antenna RF power in SISO mode is larger or equal to the single antenna RF power in MIMO mode, and for RF exposure assessment of MIMO mode simultaneous transmission exclusion analysis was performed with SAR test results of each antenna in SISO mode.
6. Per KDB 248227 D01v02r02, the simultaneous SAR provisions in KDB publication 447498 should be applied to determine simultaneous transmission SAR test exclusion for WiFi MIMO. If the sum of 1g single transmission chain SAR measurements is < 1.6W/kg and SAR peak to location ratio ≤ 0.04, no additional SAR measurements for MIMO.
7. For determination of the scaling factor for report SAR of MIMO mode, if the hot spots are separated the scaling factors are individually determined from each transmit chain. If the hot spots are not spatially separated, the scaling factor is determined from the worst number of each transmit chain
8. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

WLAN PD Note:

1. The WiFi 6E PD was performed according 2020 TCB workshop RF Exposure 5G RFX Policies Interim Procedures.
2. First, evaluate SAR using 6-7 GHz parameters per IEC/IEEE 62209-1528:2020 and using highest SAR test configurations evaluate incident PD using the mmw near-field probe and total-field/power-density reconstruction method (2 mm closest meas. plane).
3. Per Interim Procedures. The power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty > 30%. Total expanded uncertainty of 2.68 dB (85.4%) was used to determine the psPD measurement scaling factor
4. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. The WiFi 6E RF Exposure results are used for simultaneous transmission analysis with the other transmitters and total exposure ratio, the analysis can be found in this report section 19
6. Absorbed power density (APD) using a 4cm2 averaging area is reported based on SAR measurements.
7. Power density was calculated by repeated E-field measurements on two measurement planes separated by λ/4.
8. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
9. The measurement procedure consists of measuring the PDinc at two different distances: 2 mm (compliance distance) and λ/5. The grid extents should be large enough to fully capture the transmitted energy. The grid step should be fine enough to demonstrate that the integrated Power Density iPDn fulfill the criterion described below. Since iPD ratio between the two distances is ≥ -1dB, the grid step (0.0625) was sufficient for determining compliance at d=2mm.

$$10 \cdot log_{10} \frac{iPD_n(2mm)}{iPD_n(\lambda/5)} \geq -1$$

NFC Note:

1. NFC mainly operate in hand-held extremity exposure conditions, therefore Standalone 10-g extremity SAR testing for NFC will be performed with active mode, with 100% duty cycle at 0mm separation distance.
2. NFC SAR is measured for all surface edges of the device with a transmitting antenna located within 25 mm.
3. NFC 13.56MHz antenna port is not available on the device to support conducted power measurement, therefore the measured results are referred to as reported SAR.
4. NFC SAR test tissue-simulating liquid parameter: refer to IEC/IEEE 62209-1528 2020.

16.1 Head SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Scanner	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
01	GSM850_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	Argon	DSI 2	189	836.4	32.20	32.50	1.072	0.11	0.126	0.135
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Tilted	0mm	Argon	DSI 2	189	836.4	32.20	32.50	1.072	0.14	0.032	0.034
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Cheek	0mm	Argon	DSI 2	189	836.4	32.20	32.50	1.072	-0.16	0.060	0.064
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Tilted	0mm	Argon	DSI 2	189	836.4	32.20	32.50	1.072	-0.11	0.026	0.028
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Cheek	0mm	Xenon	DSI 2	189	836.4	32.20	32.50	1.072	0.05	0.111	0.119
02	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Argon	DSI 0	661	1880	29.59	30.00	1.099	0.09	0.143	0.157
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Tilted	0mm	Argon	DSI 0	661	1880	29.59	30.00	1.099	0.11	0.052	0.057
	GSM1900_Ant 1	GPRS (4 Tx slots)	Left Cheek	0mm	Argon	DSI 0	661	1880	29.59	30.00	1.099	0.12	0.101	0.111
	GSM1900_Ant 1	GPRS (4 Tx slots)	Left Tilted	0mm	Argon	DSI 0	661	1880	29.59	30.00	1.099	0.04	0.035	0.038
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Cheek	0mm	Xenon	DSI 0	661	1880	29.59	30.00	1.099	-0.05	0.109	0.120

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Scanner	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Argon	DSI 0	9262	1852.4	24.47	25.00	1.130	-0.13	0.073	0.082
	WCDMA II_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Argon	DSI 0	9262	1852.4	24.47	25.00	1.130	-0.07	0.056	0.063
03	WCDMA II_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Argon	DSI 0	9262	1852.4	24.47	25.00	1.130	0.05	0.118	0.133
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	Argon	DSI 0	9262	1852.4	24.47	25.00	1.130	-0.02	0.048	0.054
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Xenon	DSI 0	9262	1852.4	24.47	25.00	1.130	-0.03	0.091	0.103
04	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Argon	DSI 0	1513	1752.6	24.43	25.00	1.140	0.05	0.233	0.266
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Tilted	0mm	Argon	DSI 0	1513	1752.6	24.43	25.00	1.140	-0.17	0.063	0.072
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Cheek	0mm	Argon	DSI 0	1513	1752.6	24.43	25.00	1.140	0.15	0.203	0.231
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Tilted	0mm	Argon	DSI 0	1513	1752.6	24.43	25.00	1.140	-0.1	0.091	0.104
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Cheek	0mm	Xenon	DSI 0	1513	1752.6	24.43	25.00	1.140	-0.17	0.227	0.259
05	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	Argon	DSI 0	4233	846.6	24.53	25.00	1.114	0.15	0.443	0.494
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Tilted	0mm	Argon	DSI 0	4233	846.6	24.53	25.00	1.114	-0.18	0.274	0.305
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Cheek	0mm	Argon	DSI 0	4233	846.6	24.53	25.00	1.114	-0.14	0.433	0.482
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Tilted	0mm	Argon	DSI 0	4233	846.6	24.53	25.00	1.114	0.06	0.236	0.263
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Cheek	0mm	Xenon	DSI 0	4233	846.6	24.53	25.00	1.114	-0.09	0.439	0.489

<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Scanner	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Argon	DSI 0	21100	2535	22.96	24.50	1.426			-0.11	0.001	0.001
	LTE Band 7_Ant 1	20M	QPSK	50	24	Right Cheek	0mm	Argon	DSI 0	21100	2535	22.15	23.50	1.365			0.01	0.001	0.001
	LTE Band 7_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	Argon	DSI 0	21100	2535	22.96	24.50	1.426			-0.1	0.001	0.001
	LTE Band 7_Ant 1	20M	QPSK	50	24	Right Tilted	0mm	Argon	DSI 0	21100	2535	22.15	23.50	1.365			0.02	0.001	0.001
06	LTE Band 7_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Argon	DSI 0	21100	2535	22.96	24.50	1.426			-0.04	0.021	0.030
	LTE Band 7_Ant 1	20M	QPSK	50	24	Left Cheek	0mm	Argon	DSI 0	21100	2535	22.15	23.50	1.365			0.05	0.015	0.020
	LTE Band 7_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	Argon	DSI 0	21100	2535	22.96	24.50	1.426			0	0.001	0.001
	LTE Band 7_Ant 1	20M	QPSK	50	24	Left Tilted	0mm	Argon	DSI 0	21100	2535	22.15	23.50	1.365			0	0.001	0.001
	LTE Band 7_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Xenon	DSI 0	21100	2535	22.96	24.50	1.426			0.05	0.018	0.026
07	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	Argon	DSI 0	23095	707.5	23.22	24.50	1.343			0.03	0.274	0.368
	LTE Band 12_Ant 0	10M	QPSK	25	25	Right Cheek	0mm	Argon	DSI 0	23095	707.5	22.55	23.50	1.245			0.02	0.222	0.276
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	Argon	DSI 0	23095	707.5	23.22	24.50	1.343			-0.15	0.143	0.192
	LTE Band 12_Ant 0	10M	QPSK	25	25	Right Tilted	0mm	Argon	DSI 0	23095	707.5	22.55	23.50	1.245			0.05	0.111	0.138
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	Argon	DSI 0	23095	707.5	23.22	24.50	1.343			0.17	0.181	0.243
	LTE Band 12_Ant 0	10M	QPSK	25	25	Left Cheek	0mm	Argon	DSI 0	23095	707.5	22.55	23.50	1.245			0.06	0.121	0.151
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	Argon	DSI 0	23095	707.5	23.22	24.50	1.343			-0.04	0.143	0.192
	LTE Band 12_Ant 0	10M	QPSK	25	25	Left Tilted	0mm	Argon	DSI 0	23095	707.5	22.55	23.50	1.245			0.09	0.105	0.131
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	Xenon	DSI 0	23095	707.5	23.22	24.50	1.343			-0.06	0.143	0.192
08	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	Argon	DSI 0	23230	782	23.07	24.50	1.390			0.18	0.299	0.416
	LTE Band 13_Ant 0	10M	QPSK	25	25	Right Cheek	0mm	Argon	DSI 0	23230	782	22.19	23.50	1.352			0.01	0.215	0.291
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	Argon	DSI 0	23230	782	23.07	24.50	1.390			0.15	0.169	0.235
	LTE Band 13_Ant 0	10M	QPSK	25	25	Right Tilted	0mm	Argon	DSI 0	23230	782	22.19	23.50	1.352			0.06	0.142	0.192
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	Argon	DSI 0	23230	782	23.07	24.50	1.390			0	0.229	0.318
	LTE Band 13_Ant 0	10M	QPSK	25	25	Left Cheek	0mm	Argon	DSI 0	23230	782	22.19	23.50	1.352			0.02	0.175	0.237
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	Argon	DSI 0	23230	782	23.07	24.50	1.390			-0.04	0.176	0.245
	LTE Band 13_Ant 0	10M	QPSK	25	25	Left Tilted	0mm	Argon	DSI 0	23230	782	22.19	23.50	1.352			0.06	0.155	0.210
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	Xenon	DSI 0	23230	782	23.07	24.50	1.390			0.16	0.145	0.202
09	LTE Band 14_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	Argon	DSI 0	23330	793	23.18	24.50	1.355			0.12	0.277	0.375
	LTE Band 14_Ant 0	10M	QPSK	25	25	Right Cheek	0mm	Argon	DSI 0	23330	793	22.31	23.50	1.315			0.04	0.216	0.284
	LTE Band 14_Ant 0	10M	QPSK	1	0	Right Tilted	0mm	Argon	DSI 0	23330	793	23.18	24.50	1.355			0.02	0.131	0.178
	LTE Band 14_Ant 0	10M	QPSK	25	25	Right Tilted	0mm	Argon	DSI 0	23330	793	22.31	23.50	1.315			0.01	0.102	0.134
	LTE Band 14_Ant 0	10M	QPSK	1	0	Left Cheek	0mm	Argon	DSI 0	23330	793	23.18	24.50	1.355			-0.17	0.258	0.350
	LTE Band 14_Ant 0	10M	QPSK	25	25	Left Cheek	0mm	Argon	DSI 0	23330	793	22.31	23.50	1.315			0.06	0.211	0.278
	LTE Band 14_Ant 0	10M	QPSK	1	0	Left Tilted	0mm	Argon	DSI 0	23330	793	23.18	24.50	1.355			0.12	0.141	0.191
	LTE Band 14_Ant 0	10M	QPSK	25	25	Left Tilted	0mm	Argon	DSI 0	23330	793	22.31	23.50	1.315			0.06	0.111	0.146
	LTE Band 14_Ant 0	10M	QPSK	1	0	Right Cheek	0mm	Xenon	DSI 0	23330	793	23.18	24.50	1.355			-0.01	0.240	0.325
	LTE Band 25_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Argon	DSI 0	26340	1880	23.24	24.50	1.337			-0.05	0.083	0.111
	LTE Band 25_Ant 1	20M	QPSK	50	24	Right Cheek	0mm	Argon	DSI 0	26340	1880	22.60	23.50	1.230			0.1	0.061	0.075
	LTE Band 25_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	Argon	DSI 0	26340	1880	23.24	24.50	1.337			-0.13	0.057	0.076
	LTE Band 25_Ant 1	20M	QPSK	50	24	Right Tilted	0mm	Argon	DSI 0	26340	1880	22.60	23.50	1.230			0.01	0.038	0.047
10	LTE Band 25_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Argon	DSI 0	26340	1880	23.24	24.50	1.337			0.07	0.124	0.166
	LTE Band 25_Ant 1	20M	QPSK	50	24	Left Cheek	0mm	Argon	DSI 0	26340	1880	22.60	23.50	1.230			-0.05	0.089	0.109
	LTE Band 25_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	Argon	DSI 0	26340	1880	23.24	24.50	1.337			0.09	0.052	0.070
	LTE Band 25_Ant 1	20M	QPSK	50	24	Left Tilted	0mm	Argon	DSI 0	26340	1880	22.60	23.50	1.230			0.06	0.040	0.049
	LTE Band 25_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Xenon	DSI 0	26340	1880	23.24	24.50	1.337			-0.11	0.098	0.131
11	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Cheek	0mm	Argon	DSI 0	26865	831.5	23.20	24.50	1.349			0.13	0.334	0.451
	LTE Band 26_Ant 0	15M	QPSK	36	39	Right Cheek	0mm	Argon	DSI 0	26865	831.5	22.55	23.50	1.245			0.04	0.295	0.367
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Tilted	0mm	Argon	DSI 0	26865	831.5	23.20	24.50	1.349			-0.07	0.154	0.208
	LTE Band 26_Ant 0	15M	QPSK	36	39	Right Tilted	0mm	Argon	DSI 0	26865	831.5	22.55	23.50	1.245			0.01	0.112	0.139
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Cheek	0mm	Argon	DSI 0	26865	831.5	23.20	24.50	1.349			-0.03	0.138	0.186
	LTE Band 26_Ant 0	15M	QPSK	36	39	Left Cheek	0mm	Argon	DSI 0	26865	831.5	22.55	23.50	1.245			0.06	0.099	0.123

	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Tilted	0mm	Argon	DSI 0	26865	831.5	23.20	24.50	1.349			0.09	0.164	0.221
	LTE Band 26_Ant 0	15M	QPSK	36	39	Left Tilted	0mm	Argon	DSI 0	26865	831.5	22.55	23.50	1.245			-0.01	0.114	0.142
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Cheek	0mm	Xenon	DSI 0	26865	831.5	23.20	24.50	1.349			-0.14	0.276	0.372
	LTE Band 30_Ant 1	10M	QPSK	1	0	Right Cheek	0mm	Argon	DSI 0	27710	2310	23.12	24.50	1.374			0.05	0.058	0.080
	LTE Band 30_Ant 1	10M	QPSK	25	0	Right Cheek	0mm	Argon	DSI 0	27710	2310	22.05	23.50	1.396			0.01	0.040	0.056
	LTE Band 30_Ant 1	10M	QPSK	1	0	Right Tilted	0mm	Argon	DSI 0	27710	2310	23.12	24.50	1.374			0	0.045	0.062
	LTE Band 30_Ant 1	10M	QPSK	25	0	Right Tilted	0mm	Argon	DSI 0	27710	2310	22.05	23.50	1.396			-0.06	0.034	0.047
12	LTE Band 30_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	Argon	DSI 0	27710	2310	23.12	24.50	1.374			0.03	0.105	0.144
	LTE Band 30_Ant 1	10M	QPSK	25	0	Left Cheek	0mm	Argon	DSI 0	27710	2310	22.05	23.50	1.396			0.09	0.086	0.120
	LTE Band 30_Ant 1	10M	QPSK	1	0	Left Tilted	0mm	Argon	DSI 0	27710	2310	23.12	24.50	1.374			0.07	0.035	0.048
	LTE Band 30_Ant 1	10M	QPSK	25	0	Left Tilted	0mm	Argon	DSI 0	27710	2310	22.05	23.50	1.396			0.06	0.028	0.039
	LTE Band 30_Ant 1	10M	QPSK	1	0	Left Cheek	0mm	Xenon	DSI 0	27710	2310	23.12	24.50	1.374			-0.06	0.065	0.089
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Argon	DSI 0	132322	1745	23.21	24.50	1.346			-0.13	0.127	0.171
	LTE Band 66_Ant 1	20M	QPSK	50	24	Right Cheek	0mm	Argon	DSI 0	132322	1745	22.36	23.50	1.300			0.05	0.091	0.118
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	Argon	DSI 0	132322	1745	23.21	24.50	1.346			0.15	0.089	0.120
	LTE Band 66_Ant 1	20M	QPSK	50	24	Right Tilted	0mm	Argon	DSI 0	132322	1745	22.36	23.50	1.300			0.06	0.071	0.092
13	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Argon	DSI 0	132322	1745	23.21	24.50	1.346			0.18	0.305	0.410
	LTE Band 66_Ant 1	20M	QPSK	50	24	Left Cheek	0mm	Argon	DSI 0	132322	1745	22.36	23.50	1.300			0.09	0.265	0.345
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	Argon	DSI 0	132322	1745	23.21	24.50	1.346			-0.05	0.117	0.157
	LTE Band 66_Ant 1	20M	QPSK	50	24	Left Tilted	0mm	Argon	DSI 0	132322	1745	22.36	23.50	1.300			0.01	0.094	0.122
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Xenon	DSI 0	132322	1745	23.21	24.50	1.346			0.12	0.299	0.402
	LTE Band 41_Ant 1	20M	QPSK	1	0	Right Cheek	0mm	Argon	DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	0	0.001	0.001
	LTE Band 41_Ant 1	20M	QPSK	50	50	Right Cheek	0mm	Argon	DSI 0	40620	2593	22.13	23.50	1.371	62.9	1.006	0.05	0.001	0.001
	LTE Band 41_Ant 1	20M	QPSK	1	0	Right Tilted	0mm	Argon	DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	-0.18	0.001	0.001
	LTE Band 41_Ant 1	20M	QPSK	50	50	Right Tilted	0mm	Argon	DSI 0	40620	2593	22.13	23.50	1.371	62.9	1.006	0.06	0.001	0.001
14	LTE Band 41_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Argon	DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	0.08	0.010	0.014
	LTE Band 41_Ant 1	20M	QPSK	50	50	Left Cheek	0mm	Argon	DSI 0	40620	2593	22.13	23.50	1.371	62.9	1.006	-0.05	0.001	0.001
	LTE Band 41_Ant 1	20M	QPSK	1	0	Left Tilted	0mm	Argon	DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	0.09	0.001	0.001
	LTE Band 41_Ant 1	20M	QPSK	50	50	Left Tilted	0mm	Argon	DSI 0	40620	2593	22.13	23.50	1.371	62.9	1.006	-0.02	0.001	0.001
	LTE Band 41_Ant 1	20M	QPSK	1	0	Left Cheek	0mm	Xenon	DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	0.13	0.009	0.012
15	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Cheek	0mm	Argon	DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	0.06	0.143	0.185
	LTE Band 48_Ant 7	20M	QPSK	50	50	Right Cheek	0mm	Argon	DSI 0	56150	3641	21.28	22.50	1.324	62.9	1.006	0.02	0.091	0.121
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Tilted	0mm	Argon	DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	-0.03	0.064	0.083
	LTE Band 48_Ant 7	20M	QPSK	50	50	Right Tilted	0mm	Argon	DSI 0	56150	3641	21.28	22.50	1.324	62.9	1.006	-0.06	0.051	0.068
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Cheek	0mm	Argon	DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	0.01	0.091	0.118
	LTE Band 48_Ant 7	20M	QPSK	50	50	Left Cheek	0mm	Argon	DSI 0	56150	3641	21.28	22.50	1.324	62.9	1.006	-0.06	0.051	0.068
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Tilted	0mm	Argon	DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	-0.19	0.074	0.096
	LTE Band 48_Ant 7	20M	QPSK	50	50	Left Tilted	0mm	Argon	DSI 0	56150	3641	21.28	22.50	1.324	62.9	1.006	0.06	0.060	0.080
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Cheek	0mm	Xenon	DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	0.06	0.084	0.109

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Scanner	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n7_Ant 1	20M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	507000	2535	24.75	25.00	1.059	0.07	0.016	0.017
	FR1 n7_Ant 1	20M	BPSK	50	28	Right Cheek	0mm	Argon	DSI 0	507000	2535	24.54	25.00	1.112	0.05	0.005	0.006
	FR1 n7_Ant 1	20M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	507000	2535	24.75	25.00	1.059	0.07	0.001	0.001
	FR1 n7_Ant 1	20M	BPSK	50	28	Right Tilted	0mm	Argon	DSI 0	507000	2535	24.54	25.00	1.112	0.06	0.001	0.001
16	FR1 n7_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	507000	2535	24.75	25.00	1.059	0.02	0.021	0.022
	FR1 n7_Ant 1	20M	BPSK	50	28	Left Cheek	0mm	Argon	DSI 0	507000	2535	24.54	25.00	1.112	0.05	0.010	0.011
	FR1 n7_Ant 1	20M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	507000	2535	24.75	25.00	1.059	-0.12	0.001	0.001
	FR1 n7_Ant 1	20M	BPSK	50	28	Left Tilted	0mm	Argon	DSI 0	507000	2535	24.54	25.00	1.112	-0.03	0.001	0.001
	FR1 n7_Ant 1	20M	BPSK	1	1	Left Cheek	0mm	Xenon	DSI 0	507000	2535	24.75	25.00	1.059	-0.12	0.020	0.021
17	FR1 n12_Ant 0	15M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	141500	707.5	24.51	25.00	1.119	0.13	0.320	0.358
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Cheek	0mm	Argon	DSI 0	141500	707.5	24.15	25.00	1.216	0.06	0.256	0.311
	FR1 n12_Ant 0	15M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	141500	707.5	24.51	25.00	1.119	0.07	0.159	0.178
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Tilted	0mm	Argon	DSI 0	141500	707.5	24.15	25.00	1.216	0.05	0.135	0.164
	FR1 n12_Ant 0	15M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	141500	707.5	24.51	25.00	1.119	0.15	0.222	0.249
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Cheek	0mm	Argon	DSI 0	141500	707.5	24.15	25.00	1.216	0.01	0.195	0.237
	FR1 n12_Ant 0	15M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	141500	707.5	24.51	25.00	1.119	-0.14	0.134	0.150
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Tilted	0mm	Argon	DSI 0	141500	707.5	24.15	25.00	1.216	0.02	0.099	0.120
	FR1 n12_Ant 0	15M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	141500	707.5	24.51	25.00	1.119	-0.13	0.278	0.311
18	FR1 n13_Ant 0	10M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	156400	782	24.16	25.00	1.213	0.1	0.358	0.434
	FR1 n13_Ant 0	10M	BPSK	25	14	Right Cheek	0mm	Argon	DSI 0	156400	782	24.03	25.00	1.250	-0.12	0.259	0.324
	FR1 n13_Ant 0	10M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	156400	782	24.16	25.00	1.213	-0.18	0.199	0.241
	FR1 n13_Ant 0	10M	BPSK	25	14	Right Tilted	0mm	Argon	DSI 0	156400	782	24.03	25.00	1.250	0.08	0.175	0.219
	FR1 n13_Ant 0	10M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	156400	782	24.16	25.00	1.213	-0.07	0.274	0.332
	FR1 n13_Ant 0	10M	BPSK	25	14	Left Cheek	0mm	Argon	DSI 0	156400	782	24.03	25.00	1.250	0.01	0.256	0.320
	FR1 n13_Ant 0	10M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	156400	782	24.16	25.00	1.213	0.15	0.162	0.197
	FR1 n13_Ant 0	10M	BPSK	25	14	Left Tilted	0mm	Argon	DSI 0	156400	782	24.03	25.00	1.250	0.06	0.149	0.186
	FR1 n13_Ant 0	10M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	156400	782	24.16	25.00	1.213	-0.1	0.357	0.433
19	FR1 n14_Ant 0	10M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	158600	793	24.57	25.00	1.104	0.01	0.297	0.328
	FR1 n14_Ant 0	10M	BPSK	25	14	Right Cheek	0mm	Argon	DSI 0	158600	793	24.44	25.00	1.138	0.12	0.256	0.291
	FR1 n14_Ant 0	10M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	158600	793	24.57	25.00	1.104	0.13	0.193	0.213
	FR1 n14_Ant 0	10M	BPSK	25	14	Right Tilted	0mm	Argon	DSI 0	158600	793	24.44	25.00	1.138	0.15	0.175	0.199
	FR1 n14_Ant 0	10M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	158600	793	24.57	25.00	1.104	-0.16	0.247	0.273
	FR1 n14_Ant 0	10M	BPSK	25	14	Left Cheek	0mm	Argon	DSI 0	158600	793	24.44	25.00	1.138	0.03	0.210	0.239
	FR1 n14_Ant 0	10M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	158600	793	24.57	25.00	1.104	0.12	0.148	0.163
	FR1 n14_Ant 0	10M	BPSK	25	14	Left Tilted	0mm	Argon	DSI 0	158600	793	24.44	25.00	1.138	-0.12	0.126	0.143
	FR1 n14_Ant 0	10M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	158600	793	24.57	25.00	1.104	0.12	0.276	0.305
	FR1 n25_Ant 1	30M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	376500	1882.5	24.11	25.00	1.227	-0.15	0.074	0.091
	FR1 n25_Ant 1	30M	BPSK	80	40	Right Cheek	0mm	Argon	DSI 0	376500	1882.5	23.97	25.00	1.268	-0.1	0.063	0.080
	FR1 n25_Ant 1	30M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	376500	1882.5	24.11	25.00	1.227	0.05	0.061	0.075
	FR1 n25_Ant 1	30M	BPSK	80	40	Right Tilted	0mm	Argon	DSI 0	376500	1882.5	23.97	25.00	1.268	0.01	0.052	0.066
20	FR1 n25_Ant 1	30M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	376500	1882.5	24.11	25.00	1.227	0.07	0.121	0.149
	FR1 n25_Ant 1	30M	BPSK	80	40	Left Cheek	0mm	Argon	DSI 0	376500	1882.5	23.97	25.00	1.268	-0.12	0.103	0.131
	FR1 n25_Ant 1	30M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	376500	1882.5	24.11	25.00	1.227	-0.16	0.051	0.063
	FR1 n25_Ant 1	30M	BPSK	80	40	Left Tilted	0mm	Argon	DSI 0	376500	1882.5	23.97	25.00	1.268	0.05	0.043	0.055
	FR1 n25_Ant 1	30M	BPSK	1	1	Left Cheek	0mm	Xenon	DSI 0	376500	1882.5	24.11	25.00	1.227	0.05	0.086	0.106
21	FR1 n26_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	166300	831.5	24.43	25.00	1.140	0.17	0.312	0.356
	FR1 n26_Ant 0	20M	BPSK	50	56	Right Cheek	0mm	Argon	DSI 0	166300	831.5	23.98	24.50	1.127	0.05	0.265	0.299
	FR1 n26_Ant 0	20M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	166300	831.5	24.43	25.00	1.140	0.17	0.104	0.119
	FR1 n26_Ant 0	20M	BPSK	50	56	Right Tilted	0mm	Argon	DSI 0	166300	831.5	23.98	24.50	1.127	0.1	0.088	0.099
	FR1 n26_Ant 0	20M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	166300	831.5	24.43	25.00	1.140	-0.12	0.211	0.241
	FR1 n26_Ant 0	20M	BPSK	50	56	Left Cheek	0mm	Argon	DSI 0	166300	831.5	23.98	24.50	1.127	-0.05	0.179	0.202
	FR1 n26_Ant 0	20M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	166300	831.5	24.43	25.00	1.140	-0.08	0.119	0.136
	FR1 n26_Ant 0	20M	BPSK	50	56	Left Tilted	0mm	Argon	DSI 0	166300	831.5	23.98	24.50	1.127	0.06	0.101	0.114

	FR1 n26_Ant 0	20M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	166300	831.5	24.43	25.00	1.140	0.04	0.230	0.262
	FR1 n30_Ant 1	10M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	462000	2310	23.94	25.00	1.276	-0.03	0.065	0.083
	FR1 n30_Ant 1	10M	BPSK	25	14	Right Cheek	0mm	Argon	DSI 0	462000	2310	23.77	25.00	1.327	0.07	0.055	0.073
	FR1 n30_Ant 1	10M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	462000	2310	23.94	25.00	1.276	-0.02	0.063	0.080
	FR1 n30_Ant 1	10M	BPSK	25	14	Right Tilted	0mm	Argon	DSI 0	462000	2310	23.77	25.00	1.327	-0.12	0.054	0.072
22	FR1 n30_Ant 1	10M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	462000	2310	23.94	25.00	1.276	-0.05	0.109	0.139
	FR1 n30_Ant 1	10M	BPSK	25	14	Right Tilted	0mm	Argon	DSI 0	462000	2310	23.77	25.00	1.327	0.06	0.093	0.123
	FR1 n30_Ant 1	10M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	462000	2310	23.94	25.00	1.276	-0.02	0.042	0.054
	FR1 n30_Ant 1	10M	BPSK	25	14	Left Tilted	0mm	Argon	DSI 0	462000	2310	23.77	25.00	1.327	0.1	0.036	0.048
	FR1 n30_Ant 1	10M	BPSK	1	1	Left Cheek	0mm	Xenon	DSI 0	462000	2310	23.94	25.00	1.276	0.14	0.069	0.088
	FR1 n66_Ant 1	30M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	349000	1745	24.28	25.00	1.180	0.08	0.181	0.214
	FR1 n66_Ant 1	30M	BPSK	80	40	Right Cheek	0mm	Argon	DSI 0	349000	1745	24.22	25.00	1.197	0.03	0.154	0.184
	FR1 n66_Ant 1	30M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	349000	1745	24.28	25.00	1.180	-0.05	0.076	0.090
	FR1 n66_Ant 1	30M	BPSK	80	40	Right Tilted	0mm	Argon	DSI 0	349000	1745	24.22	25.00	1.197	-0.11	0.065	0.078
23	FR1 n66_Ant 1	30M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	349000	1745	24.28	25.00	1.180	0.19	0.289	0.341
	FR1 n66_Ant 1	30M	BPSK	80	40	Left Cheek	0mm	Argon	DSI 0	349000	1745	24.22	25.00	1.197	0.05	0.246	0.294
	FR1 n66_Ant 1	30M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	349000	1745	24.28	25.00	1.180	-0.04	0.095	0.112
	FR1 n66_Ant 1	30M	BPSK	80	40	Left Tilted	0mm	Argon	DSI 0	349000	1745	24.22	25.00	1.197	-0.19	0.081	0.097
	FR1 n66_Ant 1	30M	BPSK	1	1	Left Cheek	0mm	Xenon	DSI 0	349000	1745	24.28	25.00	1.180	-0.1	0.286	0.338
	FR1 n41_Ant 1	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	518598	2592.99	24.63	25.00	1.089	-0.16	0.019	0.021
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Cheek	0mm	Argon	DSI 0	518598	2592.99	24.41	25.00	1.146	0.05	0.016	0.018
	FR1 n41_Ant 1	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	518598	2592.99	24.63	25.00	1.089	0.11	0.001	0.001
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Tilted	0mm	Argon	DSI 0	518598	2592.99	24.41	25.00	1.146	0.03	0.001	0.001
24	FR1 n41_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	518598	2592.99	24.63	25.00	1.089	-0.08	0.029	0.032
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Cheek	0mm	Argon	DSI 0	518598	2592.99	24.41	25.00	1.146	0.12	0.025	0.029
	FR1 n41_Ant 1	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	518598	2592.99	24.63	25.00	1.089	0.12	0.001	0.001
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Tilted	0mm	Argon	DSI 0	518598	2592.99	24.41	25.00	1.146	0.06	0.001	0.001
	FR1 n41_Ant 1	100M	BPSK	1	1	Left Cheek	0mm	Xenon	DSI 0	518598	2592.99	24.63	25.00	1.089	-0.06	0.027	0.029
	FR1 n48_Ant 7	40M	BPSK	50	25	Right Cheek	0mm	Agron	DSI 0	641666	3624.99	22.23	23.50	1.340	0	0.168	0.225
	FR1 n48_Ant 7	40M	BPSK	1	105	Right Cheek	0mm	Agron	DSI 0	641666	3624.99	18.23	20.00	1.503	-0.09	0.149	0.224
	FR1 n48_Ant 7	20M	BPSK	1	49	Right Cheek	0mm	Agron	DSI 0	641666	3624.99	22.15	23.50	1.365	0.05	0.159	0.217
	FR1 n48_Ant 7	40M	BPSK	50	25	Right Tilted	0mm	Agron	DSI 0	641666	3624.99	22.23	23.50	1.340	-0.13	0.057	0.076
	FR1 n48_Ant 7	40M	BPSK	1	105	Right Tilted	0mm	Agron	DSI 0	641666	3624.99	18.23	20.00	1.503	0.1	0.048	0.072
	FR1 n48_Ant 7	20M	BPSK	1	49	Right Tilted	0mm	Agron	DSI 0	641666	3624.99	22.15	23.50	1.365	0.05	0.038	0.052
	FR1 n48_Ant 7	40M	BPSK	50	25	Left Cheek	0mm	Agron	DSI 0	641666	3624.99	22.23	23.50	1.340	0.15	0.119	0.159
	FR1 n48_Ant 7	40M	BPSK	1	105	Left Cheek	0mm	Agron	DSI 0	641666	3624.99	18.23	20.00	1.503	0.05	0.101	0.152
	FR1 n48_Ant 7	20M	BPSK	1	49	Left Cheek	0mm	Agron	DSI 0	641666	3624.99	22.15	23.50	1.365	0.09	0.099	0.135
	FR1 n48_Ant 7	40M	BPSK	50	25	Left Tilted	0mm	Agron	DSI 0	641666	3624.99	22.23	23.50	1.340	0.05	0.095	0.127
	FR1 n48_Ant 7	40M	BPSK	1	105	Left Tilted	0mm	Agron	DSI 0	641666	3624.99	18.23	20.00	1.503	0	0.079	0.119
	FR1 n48_Ant 7	20M	BPSK	1	49	Left Tilted	0mm	Agron	DSI 0	641666	3624.99	22.15	23.50	1.365	-0.04	0.081	0.111
	FR1 n48_Ant 7	20M	BPSK	1	49	Right Cheek	0mm	Xenon	DSI 0	641666	3624.99	22.15	23.50	1.365	0.11	0.124	0.169
	FR1 n48_Ant 4	40M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	21.84	23.50	1.466	-0.06	0.066	0.097
	FR1 n48_Ant 4	40M	BPSK	50	28	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	21.73	23.50	1.503	0.05	0.056	0.084
	FR1 n48_Ant 4	40M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	21.84	23.50	1.466	0.18	0.042	0.062
	FR1 n48_Ant 4	40M	BPSK	50	28	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	21.73	23.50	1.503	-0.09	0.036	0.054
25	FR1 n48_Ant 4	40M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	21.84	23.50	1.466	-0.1	0.155	0.227
	FR1 n48_Ant 4	40M	BPSK	50	28	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	21.73	23.50	1.503	0.04	0.132	0.198
	FR1 n48_Ant 4	40M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	21.84	23.50	1.466	-0.05	0.031	0.045
	FR1 n48_Ant 4	40M	BPSK	50	28	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	21.73	23.50	1.503	0.08	0.026	0.039
	FR1 n48_Ant 4	40M	BPSK	1	1	Left Cheek	0mm	Xenon	DSI 0	641666	3624.99	21.84	23.50	1.466	-0.07	0.137	0.201
	FR1 n48_Ant 5	40M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	22.94	23.50	1.138	-0.03	0.192	0.218
	FR1 n48_Ant 5	40M	BPSK	50	0	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	22.91	23.00	1.021	0.12	0.163	0.166
	FR1 n48_Ant 5	40M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	22.94	23.50	1.138	0.1	0.066	0.075
	FR1 n48_Ant 5	40M	BPSK	50	0	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	22.91	23.00	1.021	-0.05	0.056	0.057
	FR1 n48_Ant 5	40M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	22.94	23.50	1.138	0.15	0.086	0.098
	FR1 n48_Ant 5	40M	BPSK	50	0	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	22.91	23.00	1.021	0.06	0.073	0.075
	FR1 n48_Ant 5	40M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	22.94	23.50	1.138	-0.15	0.055	0.063
	FR1 n48_Ant 5	40M	BPSK	50	0	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	22.91	23.00	1.021	0.08	0.047	0.048
	FR1 n48_Ant 5	40M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	641666	3624.99	22.94	23.50	1.138	0.15	0.189	0.215

	FR1 n48_Ant 6+7(6)	40M	QPSK	1	105	Right Cheek	0mm	Agron	DSI 0	641666	3624.99	16.65	18.00	1.365	0.05	0.111	0.151
	FR1 n48_Ant 6+7(7)	40M	QPSK	1	105	Right Cheek	0mm	Agron	DSI 0	641666	3624.99	16.04	18.00	1.570	0.05	0.001	0.002
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Right Cheek	0mm	Agron	DSI 0	641666	3624.99	19.17	20.50	1.358	-0.02	0.130	0.177
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Right Cheek	0mm	Agron	DSI 0	641666	3624.99	18.58	20.50	1.556	-0.02	0.001	0.002
	FR1 n48_Ant 6+7(6)	40M	QPSK	1	105	Right Tilted	0mm	Agron	DSI 0	641666	3624.99	16.65	18.00	1.365	0.15	0.001	0.001
	FR1 n48_Ant 6+7(7)	40M	QPSK	1	105	Right Tilted	0mm	Agron	DSI 0	641666	3624.99	16.04	18.00	1.570	0.15	0.001	0.002
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Right Tilted	0mm	Agron	DSI 0	641666	3624.99	19.17	20.50	1.358	-0.11	0.001	0.001
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Right Tilted	0mm	Agron	DSI 0	641666	3624.99	18.58	20.50	1.556	-0.11	0.001	0.002
	FR1 n48_Ant 6+7(6)	40M	QPSK	1	105	Left Cheek	0mm	Agron	DSI 0	641666	3624.99	16.65	18.00	1.365	-0.07	0.001	0.001
	FR1 n48_Ant 6+7(7)	40M	QPSK	1	105	Left Cheek	0mm	Agron	DSI 0	641666	3624.99	16.04	18.00	1.570	-0.07	0.081	0.127
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Left Cheek	0mm	Agron	DSI 0	641666	3624.99	19.17	20.50	1.358	0.09	0.001	0.001
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Left Cheek	0mm	Agron	DSI 0	641666	3624.99	18.58	20.50	1.556	0.09	0.069	0.107
	FR1 n48_Ant 6+7(6)	40M	QPSK	1	105	Left Tilted	0mm	Agron	DSI 0	641666	3624.99	16.65	18.00	1.365	0.12	0.001	0.001
	FR1 n48_Ant 6+7(7)	40M	QPSK	1	105	Left Tilted	0mm	Agron	DSI 0	641666	3624.99	16.04	18.00	1.570	0.12	0.001	0.002
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Left Tilted	0mm	Agron	DSI 0	641666	3624.99	19.17	20.50	1.358	-0.03	0.001	0.001
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Left Tilted	0mm	Agron	DSI 0	641666	3624.99	18.58	20.50	1.556	-0.03	0.001	0.002
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Right Cheek	0mm	Xenon	DSI 0	641666	3624.99	19.17	20.50	1.358	0.11	0.074	0.101
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Right Cheek	0mm	Xenon	DSI 0	641666	3624.99	18.58	20.50	1.556	0.11	0.074	0.115
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	656000	3840	23.60	24.00	1.096	0.03	0.259	0.284
	FR1 n77_Ant 7	100M	BPSK	135	138	Right Cheek	0mm	Argon	DSI 0	656000	3840	23.44	24.00	1.138	0.05	0.220	0.250
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	656000	3840	23.60	24.00	1.096	-0.16	0.072	0.079
	FR1 n77_Ant 7	100M	BPSK	135	138	Right Tilted	0mm	Argon	DSI 0	656000	3840	23.44	24.00	1.138	0.09	0.061	0.069
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	656000	3840	23.60	24.00	1.096	-0.17	0.156	0.171
	FR1 n77_Ant 7	100M	BPSK	135	138	Left Cheek	0mm	Argon	DSI 0	656000	3840	23.44	24.00	1.138	0.11	0.133	0.151
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	656000	3840	23.60	24.00	1.096	0.13	0.137	0.150
	FR1 n77_Ant 7	100M	BPSK	135	138	Left Tilted	0mm	Argon	DSI 0	656000	3840	23.44	24.00	1.138	-0.04	0.116	0.132
	FR1 n77_HPUE_Ant 7	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	656000	3840	25.31	27.00	1.476	0.18	0.151	0.223
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	656000	3840	23.60	24.00	1.096	-0.18	0.081	0.089
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	22.94	24.00	1.276	0.05	0.255	0.325
	FR1 n77_Ant 7	100M	BPSK	135	0	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	22.82	24.00	1.312	-0.09	0.217	0.285
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	633332	3499.98	22.94	24.00	1.276	0.17	0.074	0.094
	FR1 n77_Ant 7	100M	BPSK	135	0	Right Tilted	0mm	Argon	DSI 0	633332	3499.98	22.82	24.00	1.312	0.04	0.063	0.083
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	633332	3499.98	22.94	24.00	1.276	-0.14	0.193	0.246
	FR1 n77_Ant 7	100M	BPSK	135	0	Left Cheek	0mm	Argon	DSI 0	633332	3499.98	22.82	24.00	1.312	0.05	0.164	0.215
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	633332	3499.98	22.94	24.00	1.276	-0.04	0.113	0.144
	FR1 n77_Ant 7	100M	BPSK	135	0	Left Tilted	0mm	Argon	DSI 0	633332	3499.98	22.82	24.00	1.312	-0.11	0.096	0.126
	FR1 n77_HPUE_Ant 7	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	25.36	27.00	1.459	0	0.211	0.308
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	633332	3499.98	22.94	24.00	1.276	0.15	0.184	0.235
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	23.46	24.00	1.132	0.12	0.179	0.203
	FR1 n77_Ant 7	100M	BPSK	135	138	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	23.01	24.00	1.256	-0.06	0.122	0.153
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	23.46	24.00	1.132	0.06	0.041	0.046
	FR1 n77_Ant 7	100M	BPSK	135	138	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	23.01	24.00	1.256	0.01	0.035	0.044
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	23.46	24.00	1.132	-0.11	0.091	0.103
	FR1 n77_Ant 7	100M	BPSK	135	138	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	23.01	24.00	1.256	-0.07	0.077	0.097
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	23.46	24.00	1.132	-0.17	0.068	0.077
	FR1 n77_Ant 7	100M	BPSK	135	138	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	23.01	24.00	1.256	0.08	0.058	0.073
	FR1 n77_HPUE_Ant 7	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	25.69	27.00	1.352	0.04	0.147	0.199
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	641666	3624.99	23.46	24.00	1.132	0.16	0.158	0.179
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	656000	3840	22.75	23.90	1.303	-0.02	0.120	0.156
	FR1 n77_Ant 4	100M	BPSK	135	69	Right Cheek	0mm	Argon	DSI 0	656000	3840	22.58	23.90	1.355	0.06	0.102	0.138
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	656000	3840	22.75	23.90	1.303	-0.13	0.054	0.070
	FR1 n77_Ant 4	100M	BPSK	135	69	Right Tilted	0mm	Argon	DSI 0	656000	3840	22.58	23.90	1.355	-0.17	0.046	0.062
	FR1 n77_Ant 4	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	656000	3840	22.75	23.90	1.303	0.03	0.225	0.293
	FR1 n77_Ant 4	100M	BPSK	135	69	Left Cheek	0mm	Argon	DSI 0	656000	3840	22.58	23.90	1.355	0.09	0.191	0.259
	FR1 n77_Ant 4	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	656000	3840	22.75	23.90	1.303	-0.08	0.063	0.082
	FR1 n77_Ant 4	100M	BPSK	135	69	Left Tilted	0mm	Argon	DSI 0	656000	3840	22.58	23.90	1.355	-0.1	0.054	0.073
	FR1 n77_HPUE_Ant 4	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	656000	3840	25.22	26.90	1.472	0.1	0.188	0.277
	FR1 n77_Ant 4	100M	BPSK	1	1	Left Cheek	0mm	Xenon	DSI 0	656000	3840	22.75	23.90	1.303	0.13	0.115	0.150
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	23.39	23.90	1.125	-0.06	0.122	0.137

	FR1 n77_Ant 4	100M	BPSK	135	0	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	23.32	23.40	1.019	0.01	0.104	0.106
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	633332	3499.98	23.39	23.90	1.125	0.14	0.002	0.002
	FR1 n77_Ant 4	100M	BPSK	135	0	Right Tilted	0mm	Argon	DSI 0	633332	3499.98	23.32	23.40	1.019	-0.07	0.001	0.001
26	FR1 n77_Ant 4	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	633332	3499.98	23.39	23.90	1.125	0.1	0.431	0.485
	FR1 n77_Ant 4	100M	BPSK	135	0	Left Cheek	0mm	Argon	DSI 0	633332	3499.98	23.32	23.40	1.019	0.16	0.366	0.373
	FR1 n77_Ant 4	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	633332	3499.98	23.39	23.90	1.125	0.14	0.002	0.002
	FR1 n77_Ant 4	100M	BPSK	135	0	Left Tilted	0mm	Argon	DSI 0	633332	3499.98	23.32	23.40	1.019	-0.13	0.001	0.001
	FR1 n77_HPUE_Ant 4	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	633332	3499.98	25.69	26.90	1.321	-0.03	0.358	0.473
	FR1 n77_Ant 4	100M	BPSK	1	1	Left Cheek	0mm	Xenon	DSI 0	633332	3499.98	23.39	23.90	1.125	0.04	0.342	0.385
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	23.50	23.90	1.096	0.05	0.130	0.143
	FR1 n77_Ant 4	100M	BPSK	135	69	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	22.82	23.90	1.282	-0.15	0.111	0.142
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	23.50	23.90	1.096	0.09	0.087	0.095
	FR1 n77_Ant 4	100M	BPSK	135	69	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	22.82	23.90	1.282	0.04	0.074	0.095
	FR1 n77_Ant 4	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	23.50	23.90	1.096	0.12	0.391	0.429
	FR1 n77_Ant 4	100M	BPSK	135	69	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	22.82	23.90	1.282	-0.05	0.332	0.426
	FR1 n77_Ant 4	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	23.50	23.90	1.096	0.08	0.077	0.084
	FR1 n77_Ant 4	100M	BPSK	135	69	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	22.82	23.90	1.282	0.06	0.065	0.083
	FR1 n77_HPUE_Ant 4	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	25.10	26.90	1.514	-0.12	0.243	0.368
	FR1 n77_Ant 4	100M	BPSK	1	1	Left Cheek	0mm	Xenon	DSI 0	641666	3624.99	23.50	23.90	1.096	-0.17	0.298	0.327
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	656000	3840	23.10	23.90	1.202	0.05	0.088	0.106
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	Argon	DSI 0	656000	3840	22.90	23.90	1.259	-0.01	0.075	0.094
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	656000	3840	23.10	23.90	1.202	-0.11	0.025	0.030
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	Argon	DSI 0	656000	3840	22.90	23.90	1.259	0.09	0.021	0.026
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	656000	3840	23.10	23.90	1.202	0.18	0.033	0.040
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Argon	DSI 0	656000	3840	22.90	23.90	1.259	0.1	0.028	0.035
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	656000	3840	23.10	23.90	1.202	-0.12	0.023	0.028
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	Argon	DSI 0	656000	3840	22.90	23.90	1.259	0.07	0.020	0.025
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	656000	3840	25.67	26.90	1.327	0.06	0.071	0.094
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	656000	3840	23.10	23.90	1.202	0.16	0.067	0.081
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	23.61	23.90	1.069	-0.1	0.351	0.375
	FR1 n77_Ant 5	100M	BPSK	135	0	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	23.21	23.40	1.045	0.05	0.298	0.311
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	633332	3499.98	23.61	23.90	1.069	-0.09	0.096	0.103
	FR1 n77_Ant 5	100M	BPSK	135	0	Right Tilted	0mm	Argon	DSI 0	633332	3499.98	23.21	23.40	1.045	0.16	0.082	0.086
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	633332	3499.98	23.61	23.90	1.069	0.1	0.140	0.150
	FR1 n77_Ant 5	100M	BPSK	135	0	Left Cheek	0mm	Argon	DSI 0	633332	3499.98	23.21	23.40	1.045	-0.07	0.119	0.124
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	633332	3499.98	23.61	23.90	1.069	0.1	0.100	0.107
	FR1 n77_Ant 5	100M	BPSK	135	0	Left Tilted	0mm	Argon	DSI 0	633332	3499.98	23.21	23.40	1.045	0.01	0.085	0.089
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	25.81	26.90	1.285	-0.04	0.278	0.357
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	633332	3499.98	23.61	23.90	1.069	-0.13	0.275	0.294
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	22.61	23.90	1.346	-0.12	0.149	0.201
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	22.08	23.90	1.521	-0.04	0.127	0.193
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	22.61	23.90	1.346	-0.1	0.059	0.079
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	22.08	23.90	1.521	0.17	0.050	0.076
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	22.61	23.90	1.346	-0.18	0.067	0.090
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	22.08	23.90	1.521	-0.05	0.057	0.087
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	22.61	23.90	1.346	-0.09	0.046	0.062
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	22.08	23.90	1.521	0.04	0.039	0.059
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	25.28	26.90	1.452	0.17	0.124	0.180
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	641666	3624.99	22.61	23.90	1.346	-0.17	0.137	0.184
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	656000	3840	20.46	21.0	1.132	0.14	0.066	0.075
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	656000	3840	20.90	21.0	1.023	0.14	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Right Cheek	0mm	Argon	DSI 0	656000	3840	19.84	21.0	1.306	0.05	0.056	0.073
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Right Cheek	0mm	Argon	DSI 0	656000	3840	19.97	21.0	1.268	0.05	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	656000	3840	20.46	21.0	1.132	-0.16	0.034	0.039
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	656000	3840	20.90	21.0	1.023	-0.16	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Right Tilted	0mm	Argon	DSI 0	656000	3840	19.84	21.0	1.306	-0.07	0.029	0.038
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Right Tilted	0mm	Argon	DSI 0	656000	3840	19.97	21.0	1.268	-0.07	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	656000	3840	20.46	21.0	1.132	-0.09	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	656000	3840	20.90	21.0	1.023	-0.09	0.043	0.044

	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Left Cheek	0mm	Argon	DSI 0	656000	3840	19.84	21.0	1.306	-0.14	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Left Cheek	0mm	Argon	DSI 0	656000	3840	19.97	21.0	1.268	-0.14	0.037	0.047
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	656000	3840	20.46	21.0	1.132	-0.17	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	656000	3840	20.90	21.0	1.023	-0.17	0.027	0.028
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Left Tilted	0mm	Argon	DSI 0	656000	3840	19.84	21.0	1.306	0.05	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Left Tilted	0mm	Argon	DSI 0	656000	3840	19.97	21.0	1.268	0.05	0.023	0.029
	FR1 n77_HPUE_Ant 6+7(6)	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	656000	3840	23.96	24.0	1.009	0	0.068	0.069
	FR1 n77_HPUE_Ant 6+7(7)	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	656000	3840	23.03	24.0	1.250	0	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	656000	3840	20.46	21.0	1.132	-0.02	0.063	0.071
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	656000	3840	20.90	21.0	1.023	-0.02	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	20.45	21.0	1.135	0.01	0.060	0.068
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	20.25	21.0	1.189	0.01	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	69	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	20.11	21.0	1.227	0.07	0.051	0.063
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	69	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	19.73	21.0	1.340	0.07	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	633332	3499.98	20.45	21.0	1.135	-0.16	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	633332	3499.98	20.25	21.0	1.189	-0.16	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	69	Right Tilted	0mm	Argon	DSI 0	633332	3499.98	20.11	21.0	1.227	0.14	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	69	Right Tilted	0mm	Argon	DSI 0	633332	3499.98	19.73	21.0	1.340	0.14	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	633332	3499.98	20.45	21.0	1.135	0	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	633332	3499.98	20.25	21.0	1.189	0	0.045	0.053
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	69	Left Cheek	0mm	Argon	DSI 0	633332	3499.98	20.11	21.0	1.227	-0.14	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	69	Left Cheek	0mm	Argon	DSI 0	633332	3499.98	19.73	21.0	1.340	-0.14	0.038	0.051
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	633332	3499.98	20.45	21.0	1.135	-0.03	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	633332	3499.98	20.25	21.0	1.189	-0.03	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	69	Left Tilted	0mm	Argon	DSI 0	633332	3499.98	20.11	21.0	1.227	-0.09	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	69	Left Tilted	0mm	Argon	DSI 0	633332	3499.98	19.73	21.0	1.340	-0.09	0.001	0.001
	FR1 n77_HPUE_Ant 6+7(6)	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	23.55	24.0	1.109	-0.14	0.029	0.032
	FR1 n77_HPUE_Ant 6+7(7)	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	633332	3499.98	22.67	24.0	1.358	-0.14	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	633332	3499.98	20.45	21.0	1.135	0.07	0.037	0.042
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	633332	3499.98	20.25	21.0	1.189	0.07	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	20.84	21.0	1.038	0.04	0.058	0.060
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	19.71	21.0	1.346	0.04	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	69	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	20.77	21.0	1.054	-0.16	0.049	0.052
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	69	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	19.51	21.0	1.409	-0.16	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	20.84	21.0	1.038	0.07	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	19.71	21.0	1.346	0.07	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	69	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	20.77	21.0	1.054	0.11	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	69	Right Tilted	0mm	Argon	DSI 0	641666	3624.99	19.51	21.0	1.409	0.11	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	20.84	21.0	1.038	-0.16	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	19.71	21.0	1.346	-0.16	0.040	0.054
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	69	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	20.77	21.0	1.054	0.07	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	69	Left Cheek	0mm	Argon	DSI 0	641666	3624.99	19.51	21.0	1.409	0.07	0.034	0.048
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	20.84	21.0	1.038	0.02	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	19.71	21.0	1.346	0.02	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	69	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	20.77	21.0	1.054	-0.12	0.001	0.001
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	69	Left Tilted	0mm	Argon	DSI 0	641666	3624.99	19.51	21.0	1.409	-0.12	0.001	0.001
	FR1 n77_HPUE_Ant 6+7(6)	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	23.90	24.0	1.023	0.13	0.051	0.052
	FR1 n77_HPUE_Ant 6+7(7)	100M	BPSK	1	1	Right Cheek	0mm	Argon	DSI 0	641666	3624.99	22.80	24.0	1.318	0.13	0.001	0.001
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	641666	3624.99	20.84	21.0	1.038	-0.11	0.034	0.035
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Right Cheek	0mm	Xenon	DSI 0	641666	3624.99	19.71	21.0	1.346	-0.11	0.001	0.001

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Scanner	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 9	Argon	6	2437	18.06	18.20	1.033	98.48	1.015	0.16	0.181	0.190
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 9	Argon	6	2437	18.06	18.20	1.033	98.48	1.015	-0.19	0.099	0.104
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 9	Argon	6	2437	18.06	18.20	1.033	98.48	1.015	-0.17	0.342	0.359
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 9	Argon	6	2437	18.06	18.20	1.033	98.48	1.015	-0.09	0.087	0.091
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 9	Xenon	6	2437	18.06	18.20	1.033	98.48	1.015	-0.04	0.325	0.341
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 8+9(8)	Argon	6	2437	18.19	18.20	1.002	98.48	1.015	0	0.272	0.277
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	Ant 8+9(9)	Argon	6	2437	17.80	18.20	1.096	98.48	1.015	0	0.193	0.215
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 8+9(8)	Argon	6	2437	18.19	18.20	1.002	98.48	1.015	0.16	0.191	0.194
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	0mm	Ant 8+9(9)	Argon	6	2437	17.80	18.20	1.096	98.48	1.015	0.16	0.135	0.150
27	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 8+9(8)	Argon	6	2437	18.19	18.20	1.002	98.48	1.015	0.04	0.371	0.377
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 8+9(9)	Argon	6	2437	17.80	18.20	1.096	98.48	1.015	0.04	0.263	0.293
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 8+9(8)	Argon	6	2437	18.19	18.20	1.002	98.48	1.015	-0.08	0.149	0.152
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 8+9(9)	Argon	6	2437	17.80	18.20	1.096	98.48	1.015	-0.08	0.149	0.166
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 8+9(8)	Xenon	6	2437	18.19	18.20	1.002	98.48	1.015	-0.13	0.254	0.258
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	0mm	Ant 8+9(9)	Xenon	6	2437	17.80	18.20	1.096	98.48	1.015	-0.13	0.254	0.283
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 8+9(8)	Argon	56	5280	15.94	16.70	1.191	99.25	1.008	-0.04	0.082	0.098
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 8+9(9)	Argon	56	5280	16.68	16.70	1.005	99.25	1.008	-0.04	0.025	0.025
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 8+9(8)	Argon	56	5280	15.94	16.70	1.191	99.25	1.008	0.04	0.075	0.090
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 8+9(9)	Argon	56	5280	16.68	16.70	1.005	99.25	1.008	0.04	0.022	0.022
25	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(8)	Argon	56	5280	15.94	16.70	1.191	99.25	1.008	0.02	0.293	0.352
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(9)	Argon	56	5280	16.68	16.70	1.005	99.25	1.008	0.02	0.088	0.089
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+9(8)	Argon	56	5280	15.94	16.70	1.191	99.25	1.008	0.05	0.156	0.187
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+9(8)	Argon	56	5280	15.94	16.70	1.191	99.25	1.008	0.05	0.047	0.056
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(9)	Xenon	56	5280	16.68	16.70	1.005	99.25	1.008	-0.16	0.287	0.291
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(8)	Xenon	56	5280	15.94	16.70	1.191	99.25	1.008	-0.16	0.086	0.103
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 8+9(8)	Argon	144	5720	16.34	16.70	1.086	99.25	1.008	0.14	0.142	0.156
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 8+9(9)	Argon	144	5720	16.51	16.70	1.045	99.25	1.008	0.14	0.063	0.066
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 8+9(8)	Argon	144	5720	16.34	16.70	1.086	99.25	1.008	0.07	0.138	0.151
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 8+9(9)	Argon	144	5720	16.51	16.70	1.045	99.25	1.008	0.07	0.061	0.064
29	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(8)	Argon	144	5720	16.34	16.70	1.086	99.25	1.008	0.08	0.336	0.368
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(9)	Argon	144	5720	16.51	16.70	1.045	99.25	1.008	0.08	0.148	0.156
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+9(8)	Argon	144	5720	16.34	16.70	1.086	99.25	1.008	-0.12	0.267	0.292
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+9(8)	Argon	144	5720	16.34	16.70	1.086	99.25	1.008	-0.12	0.118	0.129
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(9)	Xenon	144	5720	16.51	16.70	1.045	99.25	1.008	-0.11	0.325	0.342
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(8)	Xenon	144	5720	16.34	16.70	1.086	99.25	1.008	-0.11	0.143	0.157
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 8+9(8)	Argon	157	5785	16.61	16.70	1.021	99.24	1.008	0.09	0.209	0.215
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 8+9(9)	Argon	157	5785	16.55	16.70	1.035	99.24	1.008	0.09	0.086	0.090
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 8+9(8)	Argon	157	5785	16.61	16.70	1.021	99.24	1.008	-0.12	0.193	0.199
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 8+9(9)	Argon	157	5785	16.55	16.70	1.035	99.24	1.008	-0.12	0.079	0.082
30	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(8)	Argon	157	5785	16.61	16.70	1.021	99.24	1.008	0.07	0.426	0.438
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(9)	Argon	157	5785	16.55	16.70	1.035	99.24	1.008	0.07	0.175	0.183
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+9(8)	Argon	157	5785	16.61	16.70	1.021	99.24	1.008	-0.12	0.339	0.349
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+9(9)	Argon	157	5785	16.55	16.70	1.035	99.24	1.008	-0.12	0.139	0.145
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(8)	Xenon	157	5785	16.61	16.70	1.021	99.24	1.008	0.14	0.414	0.426
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(9)	Xenon	157	5785	16.55	16.70	1.035	99.24	1.008	0.14	0.170	0.177
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 8+9(8)	Argon	173	5865	16.68	16.70	1.005	99.38	1.006	-0.13	0.501	0.506
	WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	Ant 8+9(9)	Argon	173	5865	16.70	16.70	1.000	99.38	1.006	-0.13	0.129	0.130
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 8+9(8)	Argon	173	5865	16.68	16.70	1.005	99.38	1.006	0.14	0.417	0.421
	WLAN5GHz	802.11a 6Mbps	Right Tilted	0mm	Ant 8+9(9)	Argon	173	5865	16.70	16.70	1.000	99.38	1.006	0.14	0.107	0.108
31	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(8)	Argon	173	5865	16.68	16.70	1.005	99.38	1.006	-0.13	0.915	0.925
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(9)	Argon	173	5865	16.70	16.70	1.000	99.38	1.006	-0.13	0.235	0.236

	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(8)	Argon	169	5845	16.55	16.70	1.035	99.38	1.006	-0.05	0.715	0.745
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(9)	Argon	169	5845	16.65	16.70	1.012	99.38	1.006	-0.05	0.189	0.192
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(8)	Argon	177	5885	16.54	16.70	1.038	99.38	1.006	0.17	0.879	0.917
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(9)	Argon	177	5885	16.62	16.70	1.019	99.38	1.006	0.17	0.214	0.219
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+9(8)	Argon	173	5865	16.68	16.70	1.005	99.38	1.006	-0.04	0.753	0.761
	WLAN5GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 8+9(9)	Argon	173	5865	16.70	16.70	1.000	99.38	1.006	-0.04	0.193	0.194
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(8)	Xenon	173	5865	16.68	16.70	1.005	99.38	1.006	0.15	0.897	0.907
	WLAN5GHz	802.11a 6Mbps	Left Cheek	0mm	Ant 8+9(9)	Xenon	173	5865	16.70	16.70	1.000	99.38	1.006	0.15	0.230	0.231

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Scanner	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Measured APD (W/m^2)	Reported APD (W/m^2)
32	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 8+9(8)	Agron	15	6025	10.13	10.20	1.016	98.79	1.012	0.03	0.148	0.152	1.110	1.142
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 8+9(9)	Agron	15	6025	10.17	10.20	1.007	98.79	1.012	0.03	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 8+9(8)	Agron	47	6185	9.82	10.20	1.091	98.79	1.012	-0.09	0.123	0.136	0.921	1.017
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 8+9(9)	Agron	47	6185	9.94	10.20	1.062	98.79	1.012	-0.09	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 8+9(8)	Agron	111	6505	9.78	10.20	1.102	98.79	1.012	0.07	0.128	0.143	0.968	1.079
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 8+9(9)	Agron	111	6505	10.02	10.20	1.042	98.79	1.012	0.07	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 8+9(8)	Agron	143	6665	9.90	10.20	1.072	98.79	1.012	0	0.131	0.142	0.992	1.076
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 8+9(9)	Agron	143	6665	9.98	10.20	1.052	98.79	1.012	0	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 8+9(8)	Agron	207	6985	9.76	10.20	1.107	98.79	1.012	-0.19	0.131	0.147	0.968	1.084
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 8+9(9)	Agron	207	6985	9.96	10.20	1.057	98.79	1.012	-0.19	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 8+9(8)	Agron	15	6025	10.13	10.20	1.016	98.79	1.012	-0.1	0.131	0.135	0.992	1.020
	WLAN6GHz	802.11ax-HE160 MCS0	Right Tilted	0mm	Ant 8+9(9)	Agron	15	6025	10.17	10.20	1.007	98.79	1.012	-0.1	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 8+9(8)	Agron	15	6025	10.13	10.20	1.016	98.79	1.012	-0.11	0.137	0.141	0.024	0.025
	WLAN6GHz	802.11ax-HE160 MCS0	Left Cheek	0mm	Ant 8+9(9)	Agron	15	6025	10.17	10.20	1.007	98.79	1.012	-0.11	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 8+9(8)	Agron	15	6025	10.13	10.20	1.016	98.79	1.012	0.15	0.127	0.131	0.024	0.025
	WLAN6GHz	802.11ax-HE160 MCS0	Left Tilted	0mm	Ant 8+9(9)	Agron	15	6025	10.17	10.20	1.007	98.79	1.012	0.15	0.001	0.001	0.001	0.001
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 8+9(8)	Xenon	15	6025	10.13	10.20	1.016	98.79	1.012	-0.05	0.138	0.142	1.040	1.070
	WLAN6GHz	802.11ax-HE160 MCS0	Right Cheek	0mm	Ant 8+9(9)	Xenon	15	6025	10.17	10.20	1.007	98.79	1.012	-0.05	0.001	0.001	0.001	0.001

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Scanner	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
33	Bluetooth	1Mbps	Right Cheek	0mm	Ant 8	Argon	39	2441	7.01	8.00	1.256	76.96	1.082	0.11	0.011	0.015
	Bluetooth	1Mbps	Right Tilted	0mm	Ant 8	Argon	39	2441	7.01	8.00	1.256	76.96	1.082	0.07	0.001	0.001
	Bluetooth	1Mbps	Left Cheek	0mm	Ant 8	Argon	39	2441	7.01	8.00	1.256	76.96	1.082	-0.05	0.001	0.001
	Bluetooth	1Mbps	Left Tilted	0mm	Ant 8	Argon	39	2441	7.01	8.00	1.256	76.96	1.082	0.11	0.001	0.001
	Bluetooth	1Mbps	Right Cheek	0mm	Ant 8	Xenon	39	2441	7.01	8.00	1.256	76.96	1.082	0.07	0.001	0.001

16.2 Hotspot SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Scanner	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	10mm	Argon	DSI 1	189	836.4	27.95	29.00	1.274	0.04	0.172	0.219
34	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Argon	DSI 1	189	836.4	27.95	29.00	1.274	-0.04	0.757	0.964
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Argon	DSI 1	128	824.2	28.70	29.00	1.072	-0.12	0.867	0.929
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Argon	DSI 1	251	848.8	28.47	29.00	1.130	0.15	0.647	0.731
	GSM850_Ant 0	GPRS (4 Tx slots)	Left Side	10mm	Argon	DSI 1	189	836.4	27.95	29.00	1.274	-0.07	0.120	0.153
	GSM850_Ant 0	GPRS (4 Tx slots)	Right Side	10mm	Argon	DSI 1	189	836.4	27.95	29.00	1.274	0.04	0.227	0.289
	GSM850_Ant 0	GPRS (4 Tx slots)	Bottom Side	10mm	Argon	DSI 1	189	836.4	27.95	29.00	1.274	0.04	0.257	0.327
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Xenon	DSI 1	128	824.2	28.70	29.00	1.072	0.1	0.788	0.844
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Xenon	DSI 1	189	836.4	27.95	29.00	1.274	0.08	0.689	0.877
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	10mm	Xenon	DSI 1	251	848.8	28.47	29.00	1.130	0.07	0.590	0.667
	GSM1900_Ant 1	GPRS (4 Tx slots)	Front	10mm	Argon	DSI 0	661	1880	29.59	30.00	1.099	-0.09	0.178	0.196
35	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	10mm	Argon	DSI 0	661	1880	29.59	30.00	1.099	-0.03	0.858	0.943
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	10mm	Argon	DSI 0	512	1850.2	29.28	30.00	1.180	0.02	0.560	0.661
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	10mm	Argon	DSI 0	810	1909.8	29.40	30.00	1.148	0	0.796	0.914
	GSM1900_Ant 1	GPRS (4 Tx slots)	Left Side	10mm	Argon	DSI 0	661	1880	29.59	30.00	1.099	0.02	0.240	0.264
	GSM1900_Ant 1	GPRS (4 Tx slots)	Right Side	10mm	Argon	DSI 0	661	1880	29.59	30.00	1.099	-0.08	0.037	0.041
	GSM1900_Ant 1	GPRS (4 Tx slots)	Bottom Side	10mm	Argon	DSI 0	661	1880	29.59	30.00	1.099	-0.03	0.339	0.373
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	10mm	Xenon	DSI 0	661	1880	29.59	30.00	1.099	-0.06	0.443	0.487

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Scanner	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 1	RMC 12.2Kbps	Front	10mm	Argon	DSI 0	9262	1852.4	24.47	25.00	1.130	-0.01	0.294	0.332
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	10mm	Argon	DSI 0	9262	1852.4	24.47	25.00	1.130	-0.18	0.711	0.803
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	10mm	Argon	DSI 0	9400	1880	24.45	25.00	1.135	-0.05	0.693	0.787
36	WCDMA II_Ant 1	RMC 12.2Kbps	Back	10mm	Argon	DSI 0	9538	1907.6	24.40	25.00	1.148	0.02	0.715	0.821
	WCDMA II_Ant 1	RMC 12.2Kbps	Left Side	10mm	Argon	DSI 0	9262	1852.4	24.47	25.00	1.130	-0.14	0.001	0.001
	WCDMA II_Ant 1	RMC 12.2Kbps	Right Side	10mm	Argon	DSI 0	9262	1852.4	24.47	25.00	1.130	0.06	0.305	0.345
	WCDMA II_Ant 1	RMC 12.2Kbps	Bottom Side	10mm	Argon	DSI 0	9262	1852.4	24.47	25.00	1.130	-0.13	0.397	0.449
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	10mm	Xenon	DSI 0	9538	1907.6	24.40	25.00	1.148	-0.11	0.711	0.816
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	10mm	Xenon	DSI 0	9262	1852.4	24.47	25.00	1.130	-0.05	0.627	0.708
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	10mm	Xenon	DSI 0	9400	1880	24.45	25.00	1.135	-0.15	0.689	0.782
	WCDMA IV_Ant 1	RMC 12.2Kbps	Front	10mm	Argon	DSI 0	1513	1752.6	24.43	25.00	1.140	0.08	0.326	0.372
37	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	10mm	Argon	DSI 0	1513	1752.6	24.43	25.00	1.140	0.02	0.533	0.608
	WCDMA IV_Ant 1	RMC 12.2Kbps	Left Side	10mm	Argon	DSI 0	1513	1752.6	24.43	25.00	1.140	-0.02	0.084	0.096
	WCDMA IV_Ant 1	RMC 12.2Kbps	Right Side	10mm	Argon	DSI 0	1513	1752.6	24.43	25.00	1.140	-0.03	0.248	0.283
	WCDMA IV_Ant 1	RMC 12.2Kbps	Bottom Side	10mm	Argon	DSI 0	1513	1752.6	24.43	25.00	1.140	-0.06	0.395	0.450
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	10mm	Xenon	DSI 0	1513	1752.6	24.43	25.00	1.140	0.08	0.506	0.577
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	10mm	Argon	DSI 0	4233	846.6	24.53	25.00	1.114	-0.17	0.239	0.266
38	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Argon	DSI 0	4233	846.6	24.53	25.00	1.114	-0.01	0.985	1.098
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Argon	DSI 0	4132	826.4	24.29	25.00	1.178	0.15	0.787	0.927
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Argon	DSI 0	4182	836.4	24.40	25.00	1.148	-0.17	0.918	1.054
	WCDMA V_Ant 0	RMC 12.2Kbps	Left Side	10mm	Argon	DSI 0	4233	846.6	24.53	25.00	1.114	-0.02	0.266	0.296
	WCDMA V_Ant 0	RMC 12.2Kbps	Right Side	10mm	Argon	DSI 0	4233	846.6	24.53	25.00	1.114	0.09	0.129	0.144
	WCDMA V_Ant 0	RMC 12.2Kbps	Bottom Side	10mm	Argon	DSI 0	4233	846.6	24.53	25.00	1.114	0.1	0.347	0.387
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Xenon	DSI 0	4233	846.6	24.53	25.00	1.114	0.12	0.970	1.081
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Xenon	DSI 0	4132	826.4	24.29	25.00	1.178	-0.11	0.775	0.913
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	10mm	Xenon	DSI 0	4182	836.4	24.40	25.00	1.148	-0.01	0.904	1.038

<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Scanner	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Ant 1	20M	QPSK	1	0	Front	10mm	Argon	DSI 0	21100	2535	22.96	24.50	1.426			0.14	0.132	0.188
	LTE Band 7_Ant 1	20M	QPSK	50	24	Front	10mm	Argon	DSI 0	21100	2535	22.15	23.50	1.365			0.05	0.121	0.165
	LTE Band 7_Ant 1	20M	QPSK	1	0	Back	10mm	Argon	DSI 0	21100	2535	22.96	24.50	1.426			-0.09	0.562	0.801
	LTE Band 7_Ant 1	20M	QPSK	50	24	Back	10mm	Argon	DSI 0	21100	2535	22.15	23.50	1.365			0.14	0.569	0.776
	LTE Band 7_Ant 1	20M	QPSK	1	0	Back	10mm	Argon	DSI 0	20850	2510	22.71	24.50	1.510			-0.01	0.491	0.741
	LTE Band 7_Ant 1	20M	QPSK	50	24	Back	10mm	Argon	DSI 0	20850	2510	22.06	23.50	1.393			0.05	0.457	0.637
39	LTE Band 7_Ant 1	20M	QPSK	1	0	Back	10mm	Argon	DSI 0	21350	2560	22.83	24.50	1.469			-0.04	0.549	0.806
	LTE Band 7_Ant 1	20M	QPSK	50	24	Back	10mm	Argon	DSI 0	21350	2560	22.06	23.50	1.393			0.01	0.511	0.712
	LTE Band 7_Ant 1	20M	QPSK	100	0	Back	10mm	Argon	DSI 0	21100	2535	22.05	23.50	1.396			0.11	0.526	0.734
	LTE Band 7_Ant 1	20M	QPSK	1	0	Left Side	10mm	Argon	DSI 0	21100	2535	22.96	24.50	1.426			-0.06	0.270	0.385
	LTE Band 7_Ant 1	20M	QPSK	50	24	Left Side	10mm	Argon	DSI 0	21100	2535	22.15	23.50	1.365			0.02	0.254	0.347
	LTE Band 7_Ant 1	20M	QPSK	1	0	Right Side	10mm	Argon	DSI 0	21100	2535	22.96	24.50	1.426			-0.1	0.001	0.001
	LTE Band 7_Ant 1	20M	QPSK	50	24	Right Side	10mm	Argon	DSI 0	21100	2535	22.15	23.50	1.365			0.02	0.001	0.001
	LTE Band 7_Ant 1	20M	QPSK	1	0	Bottom Side	10mm	Argon	DSI 0	21100	2535	22.96	24.50	1.426			0.12	0.273	0.389
	LTE Band 7_Ant 1	20M	QPSK	50	24	Bottom Side	10mm	Argon	DSI 0	21100	2535	22.15	23.50	1.365			0.01	0.264	0.360
	LTE Band 7_Ant 1	20M	QPSK	1	0	Back	10mm	Xenon	DSI 0	21350	2560	22.83	24.50	1.469			0.02	0.463	0.680
	LTE Band 12_Ant 0	10M	QPSK	1	0	Front	10mm	Argon	DSI 0	23095	707.5	23.22	24.50	1.343			0.09	0.119	0.160
	LTE Band 12_Ant 0	10M	QPSK	25	25	Front	10mm	Argon	DSI 0	23095	707.5	22.55	23.50	1.245			0.06	0.105	0.131
40	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	Argon	DSI 0	23095	707.5	23.22	24.50	1.343			-0.02	0.483	0.649
	LTE Band 12_Ant 0	10M	QPSK	25	25	Back	10mm	Argon	DSI 0	23095	707.5	22.55	23.50	1.245			0.04	0.421	0.524
	LTE Band 12_Ant 0	10M	QPSK	1	0	Left Side	10mm	Argon	DSI 0	23095	707.5	23.22	24.50	1.343			-0.16	0.105	0.141
	LTE Band 12_Ant 0	10M	QPSK	25	25	Left Side	10mm	Argon	DSI 0	23095	707.5	22.55	23.50	1.245			0.06	0.094	0.117
	LTE Band 12_Ant 0	10M	QPSK	1	0	Right Side	10mm	Argon	DSI 0	23095	707.5	23.22	24.50	1.343			0.08	0.144	0.193
	LTE Band 12_Ant 0	10M	QPSK	25	25	Right Side	10mm	Argon	DSI 0	23095	707.5	22.55	23.50	1.245			0.03	0.112	0.139
	LTE Band 12_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	Argon	DSI 0	23095	707.5	23.22	24.50	1.343			-0.09	0.080	0.107
	LTE Band 12_Ant 0	10M	QPSK	25	25	Bottom Side	10mm	Argon	DSI 0	23095	707.5	22.55	23.50	1.245			0.01	0.065	0.081
	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	10mm	Xenon	DSI 0	23095	707.5	23.22	24.50	1.343			-0.17	0.254	0.341
	LTE Band 13_Ant 0	10M	QPSK	1	0	Front	10mm	Argon	DSI 0	23230	782	23.07	24.50	1.390			-0.04	0.116	0.161
	LTE Band 13_Ant 0	10M	QPSK	25	25	Front	10mm	Argon	DSI 0	23230	782	22.19	23.50	1.352			0.06	0.104	0.141
41	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	10mm	Argon	DSI 0	23230	782	23.07	24.50	1.390			-0.01	0.531	0.738
	LTE Band 13_Ant 0	10M	QPSK	25	25	Back	10mm	Argon	DSI 0	23230	782	22.19	23.50	1.352			0.03	0.499	0.675
	LTE Band 13_Ant 0	10M	QPSK	1	0	Left Side	10mm	Argon	DSI 0	23230	782	23.07	24.50	1.390			-0.07	0.053	0.074
	LTE Band 13_Ant 0	10M	QPSK	25	25	Left Side	10mm	Argon	DSI 0	23230	782	22.19	23.50	1.352			-0.05	0.491	0.664
	LTE Band 13_Ant 0	10M	QPSK	1	0	Right Side	10mm	Argon	DSI 0	23230	782	23.07	24.50	1.390			0.01	0.456	0.634
	LTE Band 13_Ant 0	10M	QPSK	25	25	Right Side	10mm	Argon	DSI 0	23230	782	22.19	23.50	1.352			0.09	0.425	0.575
	LTE Band 13_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	Argon	DSI 0	23230	782	23.07	24.50	1.390			-0.05	0.110	0.153
	LTE Band 13_Ant 0	10M	QPSK	25	25	Bottom Side	10mm	Argon	DSI 0	23230	782	22.19	23.50	1.352			-0.15	0.090	0.122
	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	10mm	Xenon	DSI 0	23230	782	23.07	24.50	1.390			-0.05	0.359	0.499
	LTE Band 14_Ant 0	10M	QPSK	1	0	Front	10mm	Argon	DSI 0	23330	793	23.18	24.50	1.355			-0.16	0.165	0.224
	LTE Band 14_Ant 0	10M	QPSK	25	25	Front	10mm	Argon	DSI 0	23330	793	22.31	23.50	1.315			0.03	0.145	0.191
42	LTE Band 14_Ant 0	10M	QPSK	1	0	Back	10mm	Argon	DSI 0	23330	793	23.18	24.50	1.355			0	0.560	0.759
	LTE Band 14_Ant 0	10M	QPSK	25	25	Back	10mm	Argon	DSI 0	23330	793	22.31	23.50	1.315			0.03	0.145	0.191
	LTE Band 14_Ant 0	10M	QPSK	1	0	Left Side	10mm	Argon	DSI 0	23330	793	23.18	24.50	1.355			-0.11	0.069	0.094
	LTE Band 14_Ant 0	10M	QPSK	25	25	Left Side	10mm	Argon	DSI 0	23330	793	22.31	23.50	1.315			0.06	0.049	0.064
	LTE Band 14_Ant 0	10M	QPSK	1	0	Right Side	10mm	Argon	DSI 0	23330	793	23.18	24.50	1.355			-0.03	0.158	0.214
	LTE Band 14_Ant 0	10M	QPSK	25	25	Right Side	10mm	Argon	DSI 0	23330	793	22.31	23.50	1.315			0.11	0.136	0.179
	LTE Band 14_Ant 0	10M	QPSK	1	0	Bottom Side	10mm	Argon	DSI 0	23330	793	23.18	24.50	1.355			0.04	0.150	0.203
	LTE Band 14_Ant 0	10M	QPSK	25	25	Bottom Side	10mm	Argon	DSI 0	23330	793	22.31	23.50	1.315			0.08	0.132	0.174
	LTE Band 14_Ant 0	10M	QPSK	1	0	Back	10mm	Xenon	DSI 0	23330	793	23.18	24.50	1.355			-0.1	0.492	0.667
	LTE Band 25_Ant 1	20M	QPSK	1	0	Front	10mm	Argon	DSI 0	26340	1880	23.24	24.50	1.337			-0.07	0.218	0.291
	LTE Band 25_Ant 1	20M	QPSK	50	24	Front	10mm	Argon	DSI 0	26340	1880	22.60	23.50	1.230			0.05	0.185	0.228

43	LTE Band 25_Ant 1	20M	QPSK	1	0	Back	10mm	Argon	DSI 0	26340	1880	23.24	24.50	1.337			0.01	0.596	0.797
	LTE Band 25_Ant 1	20M	QPSK	50	24	Back	10mm	Argon	DSI 0	26340	1880	22.60	23.50	1.230			0.12	0.507	0.624
	LTE Band 25_Ant 1	20M	QPSK	1	0	Left Side	10mm	Argon	DSI 0	26340	1880	23.24	24.50	1.337			0.04	0.252	0.337
	LTE Band 25_Ant 1	20M	QPSK	50	24	Left Side	10mm	Argon	DSI 0	26340	1880	22.60	23.50	1.230			0.09	0.236	0.290
	LTE Band 25_Ant 1	20M	QPSK	1	0	Right Side	10mm	Argon	DSI 0	26340	1880	23.24	24.50	1.337			-0.16	0.054	0.072
	LTE Band 25_Ant 1	20M	QPSK	50	24	Right Side	10mm	Argon	DSI 0	26340	1880	22.60	23.50	1.230			0.04	0.045	0.055
	LTE Band 25_Ant 1	20M	QPSK	1	0	Bottom Side	10mm	Argon	DSI 0	26340	1880	23.24	24.50	1.337			-0.17	0.328	0.438
	LTE Band 25_Ant 1	20M	QPSK	50	24	Bottom Side	10mm	Argon	DSI 0	26340	1880	22.60	23.50	1.230			0.03	0.298	0.367
	LTE Band 25_Ant 1	20M	QPSK	1	0	Back	10mm	Xenon	DSI 0	26340	1880	23.24	24.50	1.337			-0.13	0.494	0.660
	LTE Band 26_Ant 0	15M	QPSK	1	0	Front	10mm	Argon	DSI 0	26865	831.5	23.20	24.50	1.349			-0.04	0.153	0.206
	LTE Band 26_Ant 0	15M	QPSK	36	39	Front	10mm	Argon	DSI 0	26865	831.5	22.55	23.50	1.245			0.09	0.141	0.175
44	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	Argon	DSI 0	26865	831.5	23.20	24.50	1.349			-0.02	0.626	0.844
	LTE Band 26_Ant 0	15M	QPSK	36	39	Back	10mm	Argon	DSI 0	26865	831.5	22.55	23.50	1.245			0.02	0.601	0.748
	LTE Band 26_Ant 0	15M	QPSK	75	0	Back	10mm	Argon	DSI 0	26865	831.5	22.53	23.50	1.250			0.07	0.591	0.739
	LTE Band 26_Ant 0	15M	QPSK	1	0	Left Side	10mm	Argon	DSI 0	26865	831.5	23.20	24.50	1.349			0.03	0.061	0.082
	LTE Band 26_Ant 0	15M	QPSK	36	39	Left Side	10mm	Argon	DSI 0	26865	831.5	22.55	23.50	1.245			0.02	0.601	0.748
	LTE Band 26_Ant 0	15M	QPSK	1	0	Right Side	10mm	Argon	DSI 0	26865	831.5	23.20	24.50	1.349			0.11	0.561	0.757
	LTE Band 26_Ant 0	15M	QPSK	36	39	Right Side	10mm	Argon	DSI 0	26865	831.5	22.55	23.50	1.245			0.09	0.528	0.657
	LTE Band 26_Ant 0	15M	QPSK	1	0	Bottom Side	10mm	Argon	DSI 0	26865	831.5	23.20	24.50	1.349			0.13	0.266	0.359
	LTE Band 26_Ant 0	15M	QPSK	36	39	Bottom Side	10mm	Argon	DSI 0	26865	831.5	22.55	23.50	1.245			-0.16	0.247	0.307
	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	10mm	Xenon	DSI 0	26865	831.5	23.20	24.50	1.349			0.15	0.569	0.768
	LTE Band 30_Ant 1	10M	QPSK	1	0	Front	10mm	Argon	DSI 0	27710	2310	23.12	24.50	1.374			-0.07	0.109	0.150
	LTE Band 30_Ant 1	10M	QPSK	25	0	Front	10mm	Argon	DSI 0	27710	2310	22.05	23.50	1.396			0.04	0.094	0.131
45	LTE Band 30_Ant 1	10M	QPSK	1	0	Back	10mm	Argon	DSI 0	27710	2310	23.12	24.50	1.374			-0.17	0.296	0.407
	LTE Band 30_Ant 1	10M	QPSK	25	0	Back	10mm	Argon	DSI 0	27710	2310	22.05	23.50	1.396			0.06	0.271	0.378
	LTE Band 30_Ant 1	10M	QPSK	1	0	Left Side	10mm	Argon	DSI 0	27710	2310	23.12	24.50	1.374			-0.1	0.234	0.322
	LTE Band 30_Ant 1	10M	QPSK	25	0	Left Side	10mm	Argon	DSI 0	27710	2310	22.05	23.50	1.396			-0.01	0.211	0.295
	LTE Band 30_Ant 1	10M	QPSK	1	0	Right Side	10mm	Argon	DSI 0	27710	2310	23.12	24.50	1.374			0.14	0.035	0.048
	LTE Band 30_Ant 1	10M	QPSK	25	0	Right Side	10mm	Argon	DSI 0	27710	2310	22.05	23.50	1.396			0.02	0.030	0.042
	LTE Band 30_Ant 1	10M	QPSK	1	0	Bottom Side	10mm	Argon	DSI 0	27710	2310	23.12	24.50	1.374			-0.14	0.090	0.124
	LTE Band 30_Ant 1	10M	QPSK	25	0	Bottom Side	10mm	Argon	DSI 0	27710	2310	22.05	23.50	1.396			0.12	0.075	0.105
	LTE Band 30_Ant 1	10M	QPSK	1	0	Back	10mm	Xenon	DSI 0	27710	2310	23.12	24.50	1.374			0.03	0.246	0.338
	LTE Band 66_Ant 1	20M	QPSK	1	0	Front	10mm	Argon	DSI 0	132322	1745	23.21	24.50	1.346			0.04	0.354	0.476
	LTE Band 66_Ant 1	20M	QPSK	50	24	Front	10mm	Argon	DSI 0	132322	1745	22.36	23.50	1.300			0.02	0.326	0.424
46	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	10mm	Argon	DSI 0	132322	1745	23.21	24.50	1.346			0.05	0.489	0.658
	LTE Band 66_Ant 1	20M	QPSK	50	24	Back	10mm	Argon	DSI 0	132322	1745	22.36	23.50	1.300			-0.17	0.469	0.610
	LTE Band 66_Ant 1	20M	QPSK	1	0	Left Side	10mm	Argon	DSI 0	132322	1745	23.21	24.50	1.346			0.07	0.269	0.362
	LTE Band 66_Ant 1	20M	QPSK	50	24	Left Side	10mm	Argon	DSI 0	132322	1745	22.36	23.50	1.300			0.01	0.248	0.322
	LTE Band 66_Ant 1	20M	QPSK	1	0	Right Side	10mm	Argon	DSI 0	132322	1745	23.21	24.50	1.346			0.13	0.078	0.105
	LTE Band 66_Ant 1	20M	QPSK	50	24	Right Side	10mm	Argon	DSI 0	132322	1745	22.36	23.50	1.300			0.14	0.065	0.085
	LTE Band 66_Ant 1	20M	QPSK	1	0	Bottom Side	10mm	Argon	DSI 0	132322	1745	23.21	24.50	1.346			-0.15	0.391	0.526
	LTE Band 66_Ant 1	20M	QPSK	50	24	Bottom Side	10mm	Argon	DSI 0	132322	1745	22.36	23.50	1.300			-0.09	0.374	0.486
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	10mm	Xenon	DSI 0	132322	1745	23.21	24.50	1.346			-0.04	0.487	0.655
	LTE Band 41_Ant 1	20M	QPSK	1	0	Front	10mm	Argon	DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	-0.09	0.115	0.158
	LTE Band 41_Ant 1	20M	QPSK	50	50	Front	10mm	Argon	DSI 0	40620	2593	22.13	23.50	1.371	62.9	1.006	0.01	0.097	0.134
47	LTE Band 41_Ant 1	20M	QPSK	1	0	Back	10mm	Argon	DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	-0.04	0.325	0.446
	LTE Band 41_Ant 1	20M	QPSK	50	50	Back	10mm	Argon	DSI 0	40620	2593	22.13	23.50	1.371	62.9	1.006	0.06	0.299	0.412
	LTE Band 41_Ant 1	20M	QPSK	1	0	Left Side	10mm	Argon	DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	0.07	0.223	0.306
	LTE Band 41_Ant 1	20M	QPSK	50	50	Left Side	10mm	Argon	DSI 0	40620	2593	22.13	23.50	1.371	62.9	1.006	0.01	0.198	0.273
	LTE Band 41_Ant 1	20M	QPSK	1	0	Right Side	10mm	Argon	DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	-0.04	0.001	0.001
	LTE Band 41_Ant 1	20M	QPSK	50	50	Right Side	10mm	Argon	DSI 0	40620	2593	22.13	23.50	1.371	62.9	1.006	0.01	0.001	0.001
	LTE Band 41_Ant 1	20M	QPSK	1	0	Bottom Side	10mm	Argon	DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	0.13	0.235	0.323
	LTE Band 41_Ant 1	20M	QPSK	50	50	Bottom Side	10mm	Argon	DSI 0	40620	2593	22.13	23.50	1.371	62.9	1.006	0.09	0.205	0.283
	LTE Band 41_Ant 1	20M	QPSK	1	0	Back	10mm	Xenon	DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	-0.03	0.323	0.443
	LTE Band 48_Ant 7	20M	QPSK	1	0	Front	10mm	Argon	DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	-0.11	0.116	0.150
	LTE Band 48_Ant 7	20M	QPSK	50	50	Front	10mm	Argon	DSI 0	56150	3641	21.28	22.50	1.324	62.9	1.006	-0.12	0.104	0.139

48	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	Argon	DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	-0.14	0.294	0.381
	LTE Band 48_Ant 7	20M	QPSK	50	50	Back	10mm	Argon	DSI 0	56150	3641	21.28	22.50	1.324	62.9	1.006	0.12	0.275	0.366
	LTE Band 48_Ant 7	20M	QPSK	1	0	Left Side	10mm	Argon	DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	0.09	0.045	0.058
	LTE Band 48_Ant 7	20M	QPSK	50	50	Left Side	10mm	Argon	DSI 0	56150	3641	21.28	22.50	1.324	62.9	1.006	0.01	0.030	0.040
	LTE Band 48_Ant 7	20M	QPSK	1	0	Right Side	10mm	Argon	DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	0.15	0.178	0.231
	LTE Band 48_Ant 7	20M	QPSK	50	50	Right Side	10mm	Argon	DSI 0	56150	3641	21.28	22.50	1.324	62.9	1.006	0.09	0.164	0.218
	LTE Band 48_Ant 7	20M	QPSK	1	0	Bottom Side	10mm	Argon	DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	-0.11	0.156	0.202
	LTE Band 48_Ant 7	20M	QPSK	50	50	Bottom Side	10mm	Argon	DSI 0	56150	3641	21.28	22.50	1.324	62.9	1.006	-0.13	0.144	0.192
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	10mm	Xenon	DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	0.18	0.180	0.233

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Scanner	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n7_Ant 1	20M	BPSK	1	1	Front	10mm	Argon	DSI 0	507000	2535	24.75	25.00	1.059	0.04	0.157	0.166
	FR1 n7_Ant 1	20M	BPSK	50	28	Front	10mm	Argon	DSI 0	507000	2535	24.54	25.00	1.112	0.01	0.141	0.157
49	FR1 n7_Ant 1	20M	BPSK	1	1	Back	10mm	Argon	DSI 0	507000	2535	24.75	25.00	1.059	-0.01	0.433	0.459
	FR1 n7_Ant 1	20M	BPSK	50	28	Back	10mm	Argon	DSI 0	507000	2535	24.54	25.00	1.112	-0.09	0.401	0.446
	FR1 n7_Ant 1	20M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	507000	2535	24.75	25.00	1.059	0.13	0.305	0.323
	FR1 n7_Ant 1	20M	BPSK	50	28	Left Side	10mm	Argon	DSI 0	507000	2535	24.54	25.00	1.112	0.01	0.274	0.305
	FR1 n7_Ant 1	20M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	507000	2535	24.75	25.00	1.059	-0.05	0.001	0.001
	FR1 n7_Ant 1	20M	BPSK	50	28	Right Side	10mm	Argon	DSI 0	507000	2535	24.54	25.00	1.112	0.01	0.001	0.001
	FR1 n7_Ant 1	20M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	507000	2535	24.75	25.00	1.059	-0.17	0.302	0.320
	FR1 n7_Ant 1	20M	BPSK	50	28	Bottom Side	10mm	Argon	DSI 0	507000	2535	24.54	25.00	1.112	-0.06	0.288	0.320
	FR1 n7_Ant 1	20M	BPSK	1	1	Back	10mm	Xenon	DSI 0	507000	2535	24.75	25.00	1.059	0	0.400	0.424
	FR1 n12_Ant 0	15M	BPSK	1	1	Front	10mm	Argon	DSI 0	141500	707.5	24.51	25.00	1.119	-0.05	0.196	0.219
	FR1 n12_Ant 0	15M	BPSK	36	22	Front	10mm	Argon	DSI 0	141500	707.5	24.15	25.00	1.216	0.09	0.184	0.224
50	FR1 n12_Ant 0	15M	BPSK	1	1	Back	10mm	Argon	DSI 0	141500	707.5	24.51	25.00	1.119	0	0.551	0.617
	FR1 n12_Ant 0	15M	BPSK	36	22	Back	10mm	Argon	DSI 0	141500	707.5	24.15	25.00	1.216	-0.07	0.498	0.606
	FR1 n12_Ant 0	15M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	141500	707.5	24.51	25.00	1.119	-0.02	0.143	0.160
	FR1 n12_Ant 0	15M	BPSK	36	22	Left Side	10mm	Argon	DSI 0	141500	707.5	24.15	25.00	1.216	0.09	0.131	0.159
	FR1 n12_Ant 0	15M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	141500	707.5	24.51	25.00	1.119	-0.08	0.202	0.226
	FR1 n12_Ant 0	15M	BPSK	36	22	Right Side	10mm	Argon	DSI 0	141500	707.5	24.15	25.00	1.216	0.09	0.189	0.230
	FR1 n12_Ant 0	15M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	141500	707.5	24.51	25.00	1.119	0.18	0.124	0.139
	FR1 n12_Ant 0	15M	BPSK	36	22	Bottom Side	10mm	Argon	DSI 0	141500	707.5	24.15	25.00	1.216	-0.06	0.101	0.123
	FR1 n12_Ant 0	15M	BPSK	1	1	Back	10mm	Xenon	DSI 0	141500	707.5	24.51	25.00	1.119	-0.19	0.426	0.477
	FR1 n13_Ant 0	10M	BPSK	1	1	Front	10mm	Argon	DSI 0	156400	782	24.16	25.00	1.213	0.04	0.220	0.267
	FR1 n13_Ant 0	10M	BPSK	25	14	Front	10mm	Argon	DSI 0	156400	782	24.03	25.00	1.250	-0.17	0.198	0.248
51	FR1 n13_Ant 0	10M	BPSK	1	1	Back	10mm	Argon	DSI 0	156400	782	24.16	25.00	1.213	0	0.644	0.781
	FR1 n13_Ant 0	10M	BPSK	25	14	Back	10mm	Argon	DSI 0	156400	782	24.03	25.00	1.250	-0.16	0.603	0.754
	FR1 n13_Ant 0	10M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	156400	782	24.16	25.00	1.213	-0.11	0.100	0.121
	FR1 n13_Ant 0	10M	BPSK	25	14	Left Side	10mm	Argon	DSI 0	156400	782	24.03	25.00	1.250	0.09	0.089	0.111
	FR1 n13_Ant 0	10M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	156400	782	24.16	25.00	1.213	-0.18	0.211	0.256
	FR1 n13_Ant 0	10M	BPSK	25	14	Right Side	10mm	Argon	DSI 0	156400	782	24.03	25.00	1.250	0.09	0.187	0.234
	FR1 n13_Ant 0	10M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	156400	782	24.16	25.00	1.213	0.08	0.208	0.252
	FR1 n13_Ant 0	10M	BPSK	25	14	Bottom Side	10mm	Argon	DSI 0	156400	782	24.03	25.00	1.250	0.04	0.162	0.203
	FR1 n13_Ant 0	10M	BPSK	1	1	Back	10mm	Xenon	DSI 0	156400	782	24.16	25.00	1.213	-0.07	0.623	0.756
	FR1 n14_Ant 0	10M	BPSK	1	1	Front	10mm	Argon	DSI 0	158600	793	24.57	25.00	1.104	-0.08	0.229	0.253
	FR1 n14_Ant 0	10M	BPSK	25	14	Front	10mm	Argon	DSI 0	158600	793	24.44	25.00	1.138	0.19	0.196	0.223
52	FR1 n14_Ant 0	10M	BPSK	1	1	Back	10mm	Argon	DSI 0	158600	793	24.57	25.00	1.104	0	0.668	0.738
	FR1 n14_Ant 0	10M	BPSK	25	14	Back	10mm	Argon	DSI 0	158600	793	24.44	25.00	1.138	-0.15	0.601	0.684
	FR1 n14_Ant 0	10M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	158600	793	24.57	25.00	1.104	-0.05	0.095	0.105
	FR1 n14_Ant 0	10M	BPSK	25	14	Left Side	10mm	Argon	DSI 0	158600	793	24.44	25.00	1.138	-0.07	0.084	0.096
	FR1 n14_Ant 0	10M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	158600	793	24.57	25.00	1.104	-0.07	0.205	0.226
	FR1 n14_Ant 0	10M	BPSK	25	14	Right Side	10mm	Argon	DSI 0	158600	793	24.44	25.00	1.138	0.01	0.196	0.223

	FR1 n14_Ant 0	10M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	158600	793	24.57	25.00	1.104	-0.06	0.187	0.206
	FR1 n14_Ant 0	10M	BPSK	25	14	Bottom Side	10mm	Argon	DSI 0	158600	793	24.44	25.00	1.138	0.09	0.167	0.190
	FR1 n14_Ant 0	10M	BPSK	1	1	Back	10mm	Xenon	DSI 0	158600	793	24.57	25.00	1.104	-0.1	0.635	0.701
	FR1 n25_Ant 1	30M	BPSK	1	1	Front	10mm	Argon	DSI 0	376500	1882.5	24.11	25.00	1.227	0.08	0.312	0.383
	FR1 n25_Ant 1	30M	BPSK	80	40	Front	10mm	Argon	DSI 0	376500	1882.5	23.97	25.00	1.268	0.01	0.286	0.363
	FR1 n25_Ant 1	30M	BPSK	1	1	Back	10mm	Argon	DSI 0	376500	1882.5	24.11	25.00	1.227	-0.09	0.679	0.833
	FR1 n25_Ant 1	30M	BPSK	80	40	Back	10mm	Argon	DSI 0	376500	1882.5	23.97	25.00	1.268	0.18	0.641	0.813
	FR1 n25_Ant 1	30M	BPSK	1	1	Back	10mm	Argon	DSI 0	373000	1865	24.07	25.00	1.239	0.03	0.656	0.813
	FR1 n25_Ant 1	30M	BPSK	80	40	Back	10mm	Argon	DSI 0	373000	1865	23.81	25.00	1.315	0.05	0.631	0.830
53	FR1 n25_Ant 1	30M	BPSK	1	1	Back	10mm	Argon	DSI 0	380000	1900	24.09	25.00	1.233	0.02	0.767	0.946
	FR1 n25_Ant 1	30M	BPSK	80	40	Back	10mm	Argon	DSI 0	380000	1900	23.86	25.00	1.300	0.11	0.701	0.911
	FR1 n25_Ant 1	30M	BPSK	160	0	Back	10mm	Argon	DSI 0	376500	1882.5	23.57	24.50	1.239	0.01	0.647	0.802
	FR1 n25_Ant 1	30M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	376500	1882.5	24.11	25.00	1.227	0.03	0.284	0.349
	FR1 n25_Ant 1	30M	BPSK	80	40	Left Side	10mm	Argon	DSI 0	376500	1882.5	23.97	25.00	1.268	0.18	0.274	0.347
	FR1 n25_Ant 1	30M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	376500	1882.5	24.11	25.00	1.227	0.19	0.060	0.074
	FR1 n25_Ant 1	30M	BPSK	80	40	Right Side	10mm	Argon	DSI 0	376500	1882.5	23.97	25.00	1.268	0.05	0.049	0.062
	FR1 n25_Ant 1	30M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	376500	1882.5	24.11	25.00	1.227	0.16	0.359	0.441
	FR1 n25_Ant 1	30M	BPSK	80	40	Bottom Side	10mm	Argon	DSI 0	376500	1882.5	23.97	25.00	1.268	0.09	0.341	0.432
	FR1 n25_Ant 1	30M	BPSK	1	1	Back	10mm	Xenon	DSI 0	380000	1900	24.09	25.00	1.233	-0.1	0.751	0.926
	FR1 n25_Ant 1	30M	BPSK	1	1	Back	10mm	Xenon	DSI 0	376500	1882.5	24.11	25.00	1.227	0.12	0.665	0.816
	FR1 n25_Ant 1	30M	BPSK	1	1	Back	10mm	Xenon	DSI 0	373000	1865	24.07	25.00	1.239	0.1	0.643	0.797
	FR1 n26_Ant 0	20M	BPSK	1	1	Front	10mm	Argon	DSI 0	166300	831.5	24.43	25.00	1.140	0.05	0.150	0.171
	FR1 n26_Ant 0	20M	BPSK	50	56	Front	10mm	Argon	DSI 0	166300	831.5	23.98	24.50	1.127	0.01	0.139	0.157
54	FR1 n26_Ant 0	20M	BPSK	1	1	Back	10mm	Argon	DSI 0	166300	831.5	24.43	25.00	1.140	0.04	0.534	0.609
	FR1 n26_Ant 0	20M	BPSK	50	56	Back	10mm	Argon	DSI 0	166300	831.5	23.98	24.50	1.127	0.01	0.519	0.585
	FR1 n26_Ant 0	20M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	166300	831.5	24.43	25.00	1.140	0	0.073	0.083
	FR1 n26_Ant 0	20M	BPSK	50	56	Left Side	10mm	Argon	DSI 0	166300	831.5	23.98	24.50	1.127	-0.15	0.061	0.069
	FR1 n26_Ant 0	20M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	166300	831.5	24.43	25.00	1.140	0	0.263	0.300
	FR1 n26_Ant 0	20M	BPSK	50	56	Right Side	10mm	Argon	DSI 0	166300	831.5	23.98	24.50	1.127	0.09	0.241	0.272
	FR1 n26_Ant 0	20M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	166300	831.5	24.43	25.00	1.140	-0.14	0.269	0.307
	FR1 n26_Ant 0	20M	BPSK	50	56	Bottom Side	10mm	Argon	DSI 0	166300	831.5	23.98	24.50	1.127	0.19	0.243	0.274
	FR1 n26_Ant 0	20M	BPSK	1	1	Back	10mm	Xenon	DSI 0	166300	831.5	24.43	25.00	1.140	0.18	0.524	0.597
	FR1 n30_Ant 1	10M	BPSK	1	1	Front	10mm	Argon	DSI 0	462000	2310	23.94	25.00	1.276	-0.14	0.176	0.225
	FR1 n30_Ant 1	10M	BPSK	25	14	Front	10mm	Argon	DSI 0	462000	2310	23.77	25.00	1.327	0.03	0.150	0.199
	FR1 n30_Ant 1	10M	BPSK	1	1	Back	10mm	Argon	DSI 0	462000	2310	23.94	25.00	1.276	-0.19	0.127	0.162
	FR1 n30_Ant 1	10M	BPSK	25	14	Back	10mm	Argon	DSI 0	462000	2310	23.77	25.00	1.327	-0.01	0.108	0.143
55	FR1 n30_Ant 1	10M	BPSK	1	1	Left side	10mm	Argon	DSI 0	462000	2310	23.94	25.00	1.276	0	0.377	0.481
	FR1 n30_Ant 1	10M	BPSK	25	14	Left side	10mm	Argon	DSI 0	462000	2310	23.77	25.00	1.327	-0.09	0.359	0.477
	FR1 n30_Ant 1	10M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	462000	2310	23.94	25.00	1.276	0	0.052	0.066
	FR1 n30_Ant 1	10M	BPSK	25	14	Right Side	10mm	Argon	DSI 0	462000	2310	23.77	25.00	1.327	-0.07	0.039	0.052
	FR1 n30_Ant 1	10M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	462000	2310	23.94	25.00	1.276	0.03	0.124	0.158
	FR1 n30_Ant 1	10M	BPSK	25	14	Bottom Side	10mm	Argon	DSI 0	462000	2310	23.77	25.00	1.327	0.01	0.108	0.143
	FR1 n30_Ant 1	10M	BPSK	1	1	Back	10mm	Xenon	DSI 0	462000	2310	23.94	25.00	1.276	-0.17	0.343	0.438
	FR1 n66_Ant 1	30M	BPSK	1	1	Front	10mm	Argon	DSI 0	349000	1745	24.28	25.00	1.180	-0.15	0.380	0.449
	FR1 n66_Ant 1	30M	BPSK	80	40	Front	10mm	Argon	DSI 0	349000	1745	24.22	25.00	1.197	0.19	0.364	0.436
56	FR1 n66_Ant 1	30M	BPSK	1	1	Back	10mm	Argon	DSI 0	349000	1745	24.28	25.00	1.180	0.01	0.530	0.626
	FR1 n66_Ant 1	30M	BPSK	80	40	Back	10mm	Argon	DSI 0	349000	1745	24.22	25.00	1.197	0.06	0.510	0.610
	FR1 n66_Ant 1	30M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	349000	1745	24.28	25.00	1.180	-0.13	0.301	0.355
	FR1 n66_Ant 1	30M	BPSK	80	40	Left Side	10mm	Argon	DSI 0	349000	1745	24.22	25.00	1.197	0.06	0.294	0.352
	FR1 n66_Ant 1	30M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	349000	1745	24.28	25.00	1.180	-0.07	0.083	0.098
	FR1 n66_Ant 1	30M	BPSK	80	40	Right Side	10mm	Argon	DSI 0	349000	1745	24.22	25.00	1.197	-0.09	0.071	0.085
	FR1 n66_Ant 1	30M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	349000	1745	24.28	25.00	1.180	0.19	0.453	0.535
	FR1 n66_Ant 1	30M	BPSK	80	40	Bottom Side	10mm	Argon	DSI 0	349000	1745	24.22	25.00	1.197	-0.09	0.429	0.513
	FR1 n66_Ant 1	30M	BPSK	1	1	Back	10mm	Xenon	DSI 0	349000	1745	24.28	25.00	1.180	0.04	0.502	0.593
	FR1 n41_Ant 1	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	518598	2592.99	24.63	25.00	1.089	-0.03	0.228	0.248
	FR1 n41_Ant 1	100M	BPSK	135	69	Front	10mm	Argon	DSI 0	518598	2592.99	24.41	25.00	1.146	0.06	0.219	0.251

57	FR1 n41_Ant 1	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	518598	2592.99	24.63	25.00	1.089	-0.07	0.559	0.609
	FR1 n41_Ant 1	100M	BPSK	135	69	Back	10mm	Argon	DSI 0	518598	2592.99	24.41	25.00	1.146	0.16	0.526	0.603
	FR1 n41_Ant 1	100M	BPSK	270	0	Back	10mm	Argon	DSI 0	518598	2592.99	23.92	24.50	1.143	0.14	0.529	0.605
	FR1 n41_Ant 1	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	518598	2592.99	24.63	25.00	1.089	-0.01	0.381	0.415
	FR1 n41_Ant 1	100M	BPSK	135	69	Left Side	10mm	Argon	DSI 0	518598	2592.99	24.41	25.00	1.146	0.03	0.359	0.411
	FR1 n41_Ant 1	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	518598	2592.99	24.63	25.00	1.089	-0.17	0.001	0.001
	FR1 n41_Ant 1	100M	BPSK	135	69	Right Side	10mm	Argon	DSI 0	518598	2592.99	24.41	25.00	1.146	0.03	0.001	0.001
	FR1 n41_Ant 1	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	518598	2592.99	24.63	25.00	1.089	-0.02	0.366	0.399
	FR1 n41_Ant 1	100M	BPSK	135	69	Bottom Side	10mm	Argon	DSI 0	518598	2592.99	24.41	25.00	1.146	0.09	0.342	0.392
	FR1 n41_Ant 1	100M	BPSK	1	1	Back	10mm	Xenon	DSI 0	518598	2592.99	24.63	25.00	1.089	-0.02	0.522	0.568
	FR1 n48_Ant 7	40M	BPSK	50	25	Front	10mm	Agron	DSI 0	641666	3624.99	22.23	23.50	1.340	-0.09	0.227	0.304
	FR1 n48_Ant 7	40M	BPSK	1	105	Front	10mm	Agron	DSI 0	641666	3624.99	18.23	20.00	1.503	0.01	0.201	0.302
	FR1 n48_Ant 7	20M	BPSK	1	49	Front	10mm	Agron	DSI 0	641666	3624.99	22.15	23.50	1.365	-0.11	0.211	0.288
	FR1 n48_Ant 7	40M	BPSK	50	25	Back	10mm	Agron	DSI 0	641666	3624.99	22.23	23.50	1.340	-0.05	0.349	0.468
	FR1 n48_Ant 7	40M	BPSK	1	105	Back	10mm	Agron	DSI 0	641666	3624.99	18.23	20.00	1.503	0.06	0.328	0.493
	FR1 n48_Ant 7	20M	BPSK	1	49	Back	10mm	Agron	DSI 0	641666	3624.99	22.15	23.50	1.365	0.06	0.296	0.404
	FR1 n48_Ant 7	40M	BPSK	50	25	Left Side	10mm	Agron	DSI 0	641666	3624.99	22.23	23.50	1.340	-0.16	0.188	0.252
	FR1 n48_Ant 7	40M	BPSK	1	105	Left Side	10mm	Agron	DSI 0	641666	3624.99	18.23	20.00	1.503	0.12	0.164	0.247
	FR1 n48_Ant 7	20M	BPSK	1	49	Left Side	10mm	Agron	DSI 0	641666	3624.99	22.15	23.50	1.365	0.11	0.174	0.237
	FR1 n48_Ant 7	40M	BPSK	50	25	Right Side	10mm	Agron	DSI 0	641666	3624.99	22.23	23.50	1.340	0.05	0.165	0.221
	FR1 n48_Ant 7	40M	BPSK	1	105	Right Side	10mm	Agron	DSI 0	641666	3624.99	18.23	20.00	1.503	0.11	0.159	0.239
	FR1 n48_Ant 7	20M	BPSK	1	49	Right Side	10mm	Agron	DSI 0	641666	3624.99	22.15	23.50	1.365	-0.06	0.149	0.203
	FR1 n48_Ant 7	40M	BPSK	50	25	Bottom Side	10mm	Agron	DSI 0	641666	3624.99	22.23	23.50	1.340	-0.05	0.182	0.244
	FR1 n48_Ant 7	40M	BPSK	1	105	Bottom Side	10mm	Agron	DSI 0	641666	3624.99	18.23	20.00	1.503	0.09	0.170	0.256
	FR1 n48_Ant 7	20M	BPSK	1	49	Bottom Side	10mm	Agron	DSI 0	641666	3624.99	22.15	23.50	1.365	-0.06	0.167	0.228
	FR1 n48_Ant 7	40M	BPSK	50	25	Back	10mm	Xenon	DSI 0	641666	3624.99	22.23	23.50	1.340	0.02	0.220	0.295
	FR1 n48_Ant 4	40M	BPSK	1	1	Front	10mm	Argon	DSI 0	641666	3624.99	21.84	23.50	1.466	-0.18	0.117	0.171
	FR1 n48_Ant 4	40M	BPSK	50	28	Front	10mm	Argon	DSI 0	641666	3624.99	21.73	23.50	1.503	-0.08	0.099	0.149
58	FR1 n48_Ant 4	40M	BPSK	1	1	Back	10mm	Argon	DSI 0	641666	3624.99	21.84	23.50	1.466	-0.04	0.358	0.525
	FR1 n48_Ant 4	40M	BPSK	50	28	Back	10mm	Argon	DSI 0	641666	3624.99	21.73	23.50	1.503	0.1	0.304	0.457
	FR1 n48_Ant 4	40M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	641666	3624.99	21.84	23.50	1.466	-0.04	0.320	0.469
	FR1 n48_Ant 4	40M	BPSK	50	28	Left Side	10mm	Argon	DSI 0	641666	3624.99	21.73	23.50	1.503	0.17	0.299	0.449
	FR1 n48_Ant 4	40M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	641666	3624.99	21.84	23.50	1.466	-0.15	0.157	0.230
	FR1 n48_Ant 4	40M	BPSK	50	28	Right Side	10mm	Argon	DSI 0	641666	3624.99	21.73	23.50	1.503	-0.08	0.145	0.218
	FR1 n48_Ant 4	40M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	21.84	23.50	1.466	-0.13	0.062	0.091
	FR1 n48_Ant 4	40M	BPSK	50	28	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	21.73	23.50	1.503	-0.08	0.058	0.087
	FR1 n48_Ant 4	40M	BPSK	1	1	Left Side	10mm	Xenon	DSI 0	641666	3624.99	21.84	23.50	1.466	0.1	0.252	0.369
	FR1 n48_Ant 5	40M	BPSK	1	1	Front	10mm	Argon	DSI 0	641666	3624.99	22.94	23.50	1.138	-0.06	0.195	0.222
	FR1 n48_Ant 5	40M	BPSK	50	28	Front	10mm	Argon	DSI 0	641666	3624.99	22.84	23.50	1.164	-0.18	0.166	0.193
	FR1 n48_Ant 5	40M	BPSK	1	1	Back	10mm	Argon	DSI 0	641666	3624.99	22.94	23.50	1.138	-0.15	0.221	0.251
	FR1 n48_Ant 5	40M	BPSK	50	28	Back	10mm	Argon	DSI 0	641666	3624.99	22.84	23.50	1.164	0.1	0.188	0.219
	FR1 n48_Ant 5	40M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	641666	3624.99	22.94	23.50	1.138	0.13	0.078	0.089
	FR1 n48_Ant 5	40M	BPSK	50	28	Left Side	10mm	Argon	DSI 0	641666	3624.99	22.84	23.50	1.164	0.06	0.067	0.078
	FR1 n48_Ant 5	40M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	641666	3624.99	22.94	23.50	1.138	-0.01	0.445	0.506
	FR1 n48_Ant 5	40M	BPSK	50	28	Right Side	10mm	Argon	DSI 0	641666	3624.99	22.84	23.50	1.164	0.11	0.421	0.490
	FR1 n48_Ant 5	40M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	22.94	23.50	1.138	0.18	0.035	0.040
	FR1 n48_Ant 5	40M	BPSK	50	28	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	22.84	23.50	1.164	0.01	0.030	0.035
	FR1 n48_Ant 5	40M	BPSK	1	1	Right Side	10mm	Xenon	DSI 0	641666	3624.99	22.94	23.50	1.138	0.01	0.399	0.454
	FR1 n48_Ant 6+7(6)	40M	QPSK	1	105	Front	10mm	Argon	DSI 0	641666	3624.99	16.65	18.00	1.365	0.02	0.226	0.308
	FR1 n48_Ant 6+7(7)	40M	QPSK	1	105	Front	10mm	Argon	DSI 0	641666	3624.99	16.04	18.00	1.570	0.02	0.261	0.410
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Front	10mm	Argon	DSI 0	641666	3624.99	19.17	20.50	1.358	0.12	0.192	0.261
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Front	10mm	Argon	DSI 0	641666	3624.99	18.58	20.50	1.556	0.12	0.222	0.345
	FR1 n48_Ant 6+7(6)	40M	QPSK	1	105	Back	10mm	Argon	DSI 0	641666	3624.99	16.65	18.00	1.365	0.02	0.281	0.383
	FR1 n48_Ant 6+7(7)	40M	QPSK	1	105	Back	10mm	Argon	DSI 0	641666	3624.99	16.04	18.00	1.570	0.02	0.305	0.479
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Back	10mm	Argon	DSI 0	641666	3624.99	19.17	20.50	1.358	-0.07	0.293	0.398
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Back	10mm	Argon	DSI 0	641666	3624.99	18.58	20.50	1.556	-0.07	0.335	0.521

	FR1 n48_Ant 6+7(6)	40M	QPSK	1	105	Left Side	10mm	Argon	DSI 0	641666	3624.99	16.65	18.00	1.365	-0.04	0.176	0.240
	FR1 n48_Ant 6+7(7)	40M	QPSK	1	105	Left Side	10mm	Argon	DSI 0	641666	3624.99	16.04	18.00	1.570	-0.04	0.202	0.317
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Left Side	10mm	Argon	DSI 0	641666	3624.99	19.17	20.50	1.358	0.03	0.165	0.224
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Left Side	10mm	Argon	DSI 0	641666	3624.99	18.58	20.50	1.556	0.03	0.194	0.302
	FR1 n48_Ant 6+7(6)	40M	QPSK	1	105	Right Side	10mm	Argon	DSI 0	641666	3624.99	16.65	18.00	1.365	-0.11	0.140	0.191
	FR1 n48_Ant 6+7(7)	40M	QPSK	1	105	Right Side	10mm	Argon	DSI 0	641666	3624.99	16.04	18.00	1.570	-0.11	0.160	0.251
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Right Side	10mm	Argon	DSI 0	641666	3624.99	19.17	20.50	1.358	0.05	0.125	0.170
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Right Side	10mm	Argon	DSI 0	641666	3624.99	18.58	20.50	1.556	0.05	0.149	0.232
	FR1 n48_Ant 6+7(6)	40M	QPSK	1	105	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	16.65	18.00	1.365	-0.13	0.175	0.239
	FR1 n48_Ant 6+7(7)	40M	QPSK	1	105	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	16.04	18.00	1.570	-0.13	0.200	0.314
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	19.17	20.50	1.358	0.06	0.165	0.224
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	18.58	20.50	1.556	0.06	0.187	0.291
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Back	10mm	Xenon	DSI 0	641666	3624.99	19.17	20.50	1.358	0.04	0.230	0.312
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Back	10mm	Xenon	DSI 0	641666	3624.99	18.58	20.50	1.556	0.04	0.263	0.409
	FR1 n77_Ant 7	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	656000	3840	23.60	24.00	1.096	-0.14	0.142	0.156
	FR1 n77_Ant 7	100M	BPSK	135	138	Front	10mm	Argon	DSI 0	656000	3840	23.44	24.00	1.138	0.15	0.135	0.154
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	656000	3840	23.60	24.00	1.096	-0.04	0.316	0.346
	FR1 n77_Ant 7	100M	BPSK	135	138	Back	10mm	Argon	DSI 0	656000	3840	23.44	24.00	1.138	0.05	0.295	0.336
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	656000	3840	23.60	24.00	1.096	-0.07	0.060	0.066
	FR1 n77_Ant 7	100M	BPSK	135	138	Left Side	10mm	Argon	DSI 0	656000	3840	23.44	24.00	1.138	0.06	0.051	0.058
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	656000	3840	23.60	24.00	1.096	-0.19	0.121	0.133
	FR1 n77_Ant 7	100M	BPSK	135	138	Right Side	10mm	Argon	DSI 0	656000	3840	23.44	24.00	1.138	0.06	0.101	0.115
	FR1 n77_Ant 7	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	656000	3840	23.60	24.00	1.096	0.11	0.204	0.224
	FR1 n77_Ant 7	100M	BPSK	135	138	Bottom Side	10mm	Argon	DSI 0	656000	3840	23.44	24.00	1.138	0.01	0.192	0.218
	FR1 n77_HPUE_Ant 7	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	656000	3840	25.31	27.00	1.476	0.16	0.118	0.174
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	10mm	Xenon	DSI 0	656000	3840	23.60	24.00	1.096	-0.08	0.309	0.339
	FR1 n77_Ant 7	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	633332	3499.98	22.94	24.00	1.276	0.17	0.094	0.120
	FR1 n77_Ant 7	100M	BPSK	135	0	Front	10mm	Argon	DSI 0	633332	3499.98	22.82	24.00	1.312	0.06	0.081	0.106
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	633332	3499.98	22.94	24.00	1.276	-0.02	0.479	0.611
	FR1 n77_Ant 7	100M	BPSK	135	0	Back	10mm	Argon	DSI 0	633332	3499.98	22.82	24.00	1.312	0.05	0.451	0.592
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	633332	3499.98	22.94	24.00	1.276	-0.12	0.097	0.124
	FR1 n77_Ant 7	100M	BPSK	135	0	Left Side	10mm	Argon	DSI 0	633332	3499.98	22.82	24.00	1.312	0.05	0.081	0.106
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	633332	3499.98	22.94	24.00	1.276	-0.03	0.169	0.216
	FR1 n77_Ant 7	100M	BPSK	135	0	Right Side	10mm	Argon	DSI 0	633332	3499.98	22.82	24.00	1.312	0.07	0.156	0.205
	FR1 n77_Ant 7	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	633332	3499.98	22.94	24.00	1.276	-0.05	0.049	0.063
	FR1 n77_Ant 7	100M	BPSK	135	0	Bottom Side	10mm	Argon	DSI 0	633332	3499.98	22.82	24.00	1.312	0.07	0.041	0.054
	FR1 n77_HPUE_Ant 7	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	633332	3499.98	25.36	27.00	1.459	-0.07	0.395	0.576
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	10mm	Xenon	DSI 0	633332	3499.98	22.94	24.00	1.276	0.18	0.406	0.518
	FR1 n77_Ant 7	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	641666	3624.99	23.46	24.00	1.132	0.01	0.082	0.093
	FR1 n77_Ant 7	100M	BPSK	135	138	Front	10mm	Argon	DSI 0	641666	3624.99	23.01	24.00	1.256	0.05	0.074	0.093
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	641666	3624.99	23.46	24.00	1.132	-0.14	0.277	0.314
	FR1 n77_Ant 7	100M	BPSK	135	138	Back	10mm	Argon	DSI 0	641666	3624.99	23.01	24.00	1.256	0.05	0.261	0.328
	FR1 n77_Ant 7	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	641666	3624.99	23.46	24.00	1.132	-0.14	0.072	0.082
	FR1 n77_Ant 7	100M	BPSK	135	138	Left Side	10mm	Argon	DSI 0	641666	3624.99	23.01	24.00	1.256	0.05	0.058	0.073
	FR1 n77_Ant 7	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	641666	3624.99	23.46	24.00	1.132	0.15	0.110	0.125
	FR1 n77_Ant 7	100M	BPSK	135	138	Right Side	10mm	Argon	DSI 0	641666	3624.99	23.01	24.00	1.256	0.08	0.098	0.123
	FR1 n77_Ant 7	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	23.46	24.00	1.132	-0.18	0.104	0.118
	FR1 n77_Ant 7	100M	BPSK	135	138	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	23.01	24.00	1.256	0.06	0.084	0.106
	FR1 n77_HPUE_Ant 7	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	641666	3624.99	25.69	27.00	1.352	0.11	0.215	0.291
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	10mm	Xenon	DSI 0	641666	3624.99	23.46	24.00	1.132	0.08	0.254	0.288
	FR1 n77_Ant 4	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	656000	3840	22.75	23.90	1.303	-0.01	0.154	0.201
	FR1 n77_Ant 4	100M	BPSK	135	69	Front	10mm	Argon	DSI 0	656000	3840	22.58	23.90	1.355	0.06	0.145	0.197
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	656000	3840	22.75	23.90	1.303	-0.11	0.401	0.523
	FR1 n77_Ant 4	100M	BPSK	135	69	Back	10mm	Argon	DSI 0	656000	3840	22.58	23.90	1.355	0.02	0.375	0.508
	FR1 n77_Ant 4	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	656000	3840	22.75	23.90	1.303	0.06	0.138	0.180
	FR1 n77_Ant 4	100M	BPSK	135	69	Left Side	10mm	Argon	DSI 0	656000	3840	22.58	23.90	1.355	0.02	0.125	0.169

	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	656000	3840	22.75	23.90	1.303	0.1	0.270	0.352
	FR1 n77_Ant 4	100M	BPSK	135	69	Right Side	10mm	Argon	DSI 0	656000	3840	22.58	23.90	1.355	0.06	0.241	0.327
	FR1 n77_Ant 4	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	656000	3840	22.75	23.90	1.303	-0.17	0.097	0.126
	FR1 n77_Ant 4	100M	BPSK	135	69	Bottom Side	10mm	Argon	DSI 0	656000	3840	22.58	23.90	1.355	0.04	0.084	0.114
	FR1 n77_HPUE_Ant 4	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	656000	3840	25.22	26.90	1.472	-0.13	0.347	0.511
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	10mm	Xenon	DSI 0	656000	3840	22.75	23.90	1.303	-0.15	0.375	0.489
	FR1 n77_Ant 4	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	633332	3499.98	23.39	23.90	1.125	0.02	0.082	0.092
	FR1 n77_Ant 4	100M	BPSK	135	0	Front	10mm	Argon	DSI 0	633332	3499.98	23.32	23.40	1.019	0.08	0.070	0.071
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	633332	3499.98	23.39	23.90	1.125	0.17	0.169	0.190
	FR1 n77_Ant 4	100M	BPSK	135	0	Back	10mm	Argon	DSI 0	633332	3499.98	23.32	23.40	1.019	0.01	0.144	0.147
	FR1 n77_Ant 4	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	633332	3499.98	23.39	23.90	1.125	0.17	0.240	0.270
	FR1 n77_Ant 4	100M	BPSK	135	0	Left Side	10mm	Argon	DSI 0	633332	3499.98	23.32	23.40	1.019	0.03	0.204	0.208
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	633332	3499.98	23.39	23.90	1.125	-0.1	0.085	0.096
	FR1 n77_Ant 4	100M	BPSK	135	0	Right Side	10mm	Argon	DSI 0	633332	3499.98	23.32	23.40	1.019	-0.08	0.072	0.073
	FR1 n77_Ant 4	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	633332	3499.98	23.39	23.90	1.125	-0.06	0.026	0.029
	FR1 n77_Ant 4	100M	BPSK	135	0	Bottom Side	10mm	Argon	DSI 0	633332	3499.98	23.32	23.40	1.019	-0.08	0.022	0.022
	FR1 n77_HPUE_Ant 4	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	633332	3499.98	25.69	26.90	1.321	0.15	0.202	0.267
	FR1 n77_Ant 4	100M	BPSK	1	1	Left Side	10mm	Xenon	DSI 0	633332	3499.98	23.39	23.90	1.125	-0.01	0.224	0.252
	FR1 n77_Ant 4	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	641666	3624.99	23.50	23.90	1.096	0.19	0.114	0.125
	FR1 n77_Ant 4	100M	BPSK	135	69	Front	10mm	Argon	DSI 0	641666	3624.99	22.82	23.90	1.282	0.14	0.097	0.124
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	641666	3624.99	23.50	23.90	1.096	-0.1	0.265	0.291
	FR1 n77_Ant 4	100M	BPSK	135	69	Back	10mm	Argon	DSI 0	641666	3624.99	22.82	23.90	1.282	0.11	0.225	0.289
	FR1 n77_Ant 4	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	641666	3624.99	23.50	23.90	1.096	0.1	0.309	0.339
	FR1 n77_Ant 4	100M	BPSK	135	69	Left Side	10mm	Argon	DSI 0	641666	3624.99	22.82	23.90	1.282	-0.05	0.263	0.337
	FR1 n77_Ant 4	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	641666	3624.99	23.50	23.90	1.096	0.06	0.147	0.161
	FR1 n77_Ant 4	100M	BPSK	135	69	Right Side	10mm	Argon	DSI 0	641666	3624.99	22.82	23.90	1.282	0.18	0.125	0.160
	FR1 n77_Ant 4	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	23.50	23.90	1.096	0.05	0.044	0.048
	FR1 n77_Ant 4	100M	BPSK	135	69	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	22.82	23.90	1.282	0.14	0.037	0.047
	FR1 n77_HPUE_Ant 4	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	641666	3624.99	25.10	26.90	1.514	0.18	0.223	0.338
	FR1 n77_Ant 4	100M	BPSK	1	1	Left Side	10mm	Xenon	DSI 0	641666	3624.99	23.50	23.90	1.096	-0.03	0.256	0.281
	FR1 n77_Ant 5	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	656000	3840	23.10	23.90	1.202	0.14	0.116	0.139
	FR1 n77_Ant 5	100M	BPSK	135	69	Front	10mm	Argon	DSI 0	656000	3840	22.90	23.90	1.259	0.17	0.099	0.125
	FR1 n77_Ant 5	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	656000	3840	23.10	23.90	1.202	-0.13	0.155	0.186
	FR1 n77_Ant 5	100M	BPSK	135	69	Back	10mm	Argon	DSI 0	656000	3840	22.90	23.90	1.259	-0.05	0.132	0.166
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	656000	3840	23.10	23.90	1.202	-0.1	0.038	0.046
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Side	10mm	Argon	DSI 0	656000	3840	22.90	23.90	1.259	0.01	0.032	0.040
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	656000	3840	23.10	23.90	1.202	0.02	0.385	0.463
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Side	10mm	Argon	DSI 0	656000	3840	22.90	23.90	1.259	0.1	0.327	0.412
	FR1 n77_Ant 5	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	656000	3840	23.10	23.90	1.202	0.04	0.040	0.048
	FR1 n77_Ant 5	100M	BPSK	135	69	Bottom Side	10mm	Argon	DSI 0	656000	3840	22.90	23.90	1.259	-0.17	0.034	0.043
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	656000	3840	25.67	26.90	1.327	-0.05	0.336	0.446
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Side	10mm	Xenon	DSI 0	656000	3840	23.10	23.90	1.202	0.01	0.357	0.429
	FR1 n77_Ant 5	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	633332	3499.98	23.61	23.90	1.069	0.02	0.183	0.196
	FR1 n77_Ant 5	100M	BPSK	135	0	Front	10mm	Argon	DSI 0	633332	3499.98	23.21	23.40	1.045	-0.01	0.156	0.163
	FR1 n77_Ant 5	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	633332	3499.98	23.61	23.90	1.069	0.17	0.306	0.327
	FR1 n77_Ant 5	100M	BPSK	135	0	Back	10mm	Argon	DSI 0	633332	3499.98	23.21	23.40	1.045	-0.08	0.260	0.272
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	633332	3499.98	23.61	23.90	1.069	0.1	0.132	0.141
	FR1 n77_Ant 5	100M	BPSK	135	0	Left Side	10mm	Argon	DSI 0	633332	3499.98	23.21	23.40	1.045	0.05	0.112	0.117
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	633332	3499.98	23.61	23.90	1.069	-0.01	0.514	0.549
	FR1 n77_Ant 5	100M	BPSK	135	0	Right Side	10mm	Argon	DSI 0	633332	3499.98	23.21	23.40	1.045	0.06	0.437	0.457
	FR1 n77_Ant 5	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	633332	3499.98	23.61	23.90	1.069	-0.04	0.035	0.037
	FR1 n77_Ant 5	100M	BPSK	135	0	Bottom Side	10mm	Argon	DSI 0	633332	3499.98	23.21	23.40	1.045	-0.09	0.030	0.031
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	633332	3499.98	25.81	26.90	1.285	0.1	0.409	0.526
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Side	10mm	Xenon	DSI 0	633332	3499.98	23.61	23.90	1.069	0.03	0.471	0.504
	FR1 n77_Ant 5	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	641666	3624.99	22.61	23.90	1.346	0.11	0.141	0.190
	FR1 n77_Ant 5	100M	BPSK	135	69	Front	10mm	Argon	DSI 0	641666	3624.99	22.08	23.90	1.521	0.09	0.124	0.189

	FR1 n77_Ant 5	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	641666	3624.99	22.61	23.90	1.346	0.14	0.159	0.214
	FR1 n77_Ant 5	100M	BPSK	135	69	Back	10mm	Argon	DSI 0	641666	3624.99	22.08	23.90	1.521	0.05	0.132	0.201
	FR1 n77_Ant 5	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	641666	3624.99	22.61	23.90	1.346	0.18	0.114	0.153
	FR1 n77_Ant 5	100M	BPSK	135	69	Left Side	10mm	Argon	DSI 0	641666	3624.99	22.08	23.90	1.521	0.08	0.094	0.143
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	641666	3624.99	22.61	23.90	1.346	0.08	0.481	0.647
	FR1 n77_Ant 5	100M	BPSK	135	69	Right Side	10mm	Argon	DSI 0	641666	3624.99	22.08	23.90	1.521	-0.05	0.418	0.636
	FR1 n77_Ant 5	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	22.61	23.90	1.346	-0.09	0.089	0.120
	FR1 n77_Ant 5	100M	BPSK	135	69	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	22.08	23.90	1.521	-0.01	0.068	0.103
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	641666	3624.99	25.28	26.90	1.452	-0.01	0.412	0.598
	FR1 n77_Ant 5	100M	BPSK	1	1	Right Side	10mm	Xenon	DSI 0	641666	3624.99	22.61	23.90	1.346	0.16	0.435	0.585
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	656000	3840	20.46	21.0	1.132	0	0.221	0.250
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	656000	3840	20.90	21.0	1.023	0	0.305	0.312
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Front	10mm	Argon	DSI 0	656000	3840	19.84	21.0	1.306	0.15	0.198	0.259
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Front	10mm	Argon	DSI 0	656000	3840	19.97	21.0	1.268	0.15	0.241	0.306
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	656000	3840	20.46	21.0	1.132	0.03	0.277	0.314
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	656000	3840	20.90	21.0	1.023	0.03	0.437	0.447
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Back	10mm	Argon	DSI 0	656000	3840	19.84	21.0	1.306	-0.11	0.215	0.281
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Back	10mm	Argon	DSI 0	656000	3840	19.97	21.0	1.268	-0.11	0.289	0.366
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	656000	3840	20.46	21.0	1.132	0.12	0.097	0.110
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	656000	3840	20.90	21.0	1.023	0.12	0.134	0.137
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Left Side	10mm	Argon	DSI 0	656000	3840	19.84	21.0	1.306	0.11	0.084	0.110
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Left Side	10mm	Argon	DSI 0	656000	3840	19.97	21.0	1.268	0.11	0.099	0.125
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	656000	3840	20.46	21.0	1.132	0.15	0.156	0.177
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	656000	3840	20.90	21.0	1.023	0.15	0.215	0.220
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Right Side	10mm	Argon	DSI 0	656000	3840	19.84	21.0	1.306	-0.05	0.125	0.163
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Right Side	10mm	Argon	DSI 0	656000	3840	19.97	21.0	1.268	-0.05	0.173	0.219
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	656000	3840	20.46	21.0	1.132	0.1	0.225	0.255
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	656000	3840	20.90	21.0	1.023	0.1	0.311	0.318
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Bottom Side	10mm	Argon	DSI 0	656000	3840	19.84	21.0	1.306	0.06	0.187	0.244
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Bottom Side	10mm	Argon	DSI 0	656000	3840	19.97	21.0	1.268	0.06	0.249	0.316
	FR1 n77_HPUE_Ant 6+7(6)	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	656000	3840	23.96	24.0	1.009	-0.14	0.258	0.260
	FR1 n77_HPUE_Ant 6+7(7)	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	656000	3840	23.03	24.0	1.250	-0.14	0.357	0.446
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Back	10mm	Xenon	DSI 0	656000	3840	20.46	21.0	1.132	0.16	0.261	0.296
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Back	10mm	Xenon	DSI 0	656000	3840	20.90	21.0	1.023	0.16	0.401	0.410
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	633332	3499.98	20.45	21.0	1.135	0.11	0.211	0.239
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	633332	3499.98	20.25	21.0	1.189	0.11	0.227	0.270
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Front	10mm	Argon	DSI 0	633332	3499.98	20.09	21.0	1.233	0.05	0.187	0.231
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Front	10mm	Argon	DSI 0	633332	3499.98	19.57	21.0	1.390	0.05	0.172	0.239
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	633332	3499.98	20.45	21.0	1.135	0.09	0.354	0.402
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	633332	3499.98	20.25	21.0	1.189	0.09	0.381	0.453
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Back	10mm	Argon	DSI 0	633332	3499.98	20.09	21.0	1.233	0.02	0.321	0.396
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Back	10mm	Argon	DSI 0	633332	3499.98	19.57	21.0	1.390	0.02	0.315	0.438
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	633332	3499.98	20.45	21.0	1.135	-0.13	0.178	0.202
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	633332	3499.98	20.25	21.0	1.189	-0.13	0.191	0.227
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Left Side	10mm	Argon	DSI 0	633332	3499.98	20.09	21.0	1.233	0.02	0.158	0.195
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Left Side	10mm	Argon	DSI 0	633332	3499.98	19.57	21.0	1.390	0.02	0.162	0.225
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	633332	3499.98	20.45	21.0	1.135	-0.01	0.171	0.194
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	633332	3499.98	20.25	21.0	1.189	-0.01	0.184	0.219
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Right Side	10mm	Argon	DSI 0	633332	3499.98	20.09	21.0	1.233	0.09	0.159	0.196
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Right Side	10mm	Argon	DSI 0	633332	3499.98	19.57	21.0	1.390	0.09	0.148	0.206
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	633332	3499.98	20.45	21.0	1.135	0.14	0.213	0.242
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	633332	3499.98	20.25	21.0	1.189	0.14	0.229	0.272
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	138	Bottom Side	10mm	Argon	DSI 0	633332	3499.98	20.09	21.0	1.233	-0.15	0.185	0.228
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	138	Bottom Side	10mm	Argon	DSI 0	633332	3499.98	19.57	21.0	1.390	-0.15	0.195	0.271
	FR1 n77_HPUE_Ant 6+7(6)	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	633332	3499.98	23.55	24.0	1.109	-0.07	0.292	0.324
	FR1 n77_HPUE_Ant 6+7(7)	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	633332	3499.98	22.67	24.0	1.358	-0.07	0.314	0.427

	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Back	10mm	Xenon	DSI 0	633332	3499.98	20.45	21.0	1.135	0.18	0.326	0.370
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Back	10mm	Xenon	DSI 0	633332	3499.98	20.25	21.0	1.189	0.18	0.318	0.378
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	641666	3624.99	20.84	21.0	1.038	-0.09	0.176	0.183
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Front	10mm	Argon	DSI 0	641666	3624.99	19.71	21.0	1.346	-0.09	0.346	0.466
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	69	Front	10mm	Argon	DSI 0	641666	3624.99	20.77	21.0	1.054	0.01	0.159	0.168
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	69	Front	10mm	Argon	DSI 0	641666	3624.99	19.51	21.0	1.409	0.01	0.326	0.459
59	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	641666	3624.99	20.84	21.0	1.038	-0.07	0.258	0.268
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	641666	3624.99	19.71	21.0	1.346	-0.07	0.507	0.682
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	69	Back	10mm	Argon	DSI 0	641666	3624.99	20.77	21.0	1.054	0.02	0.231	0.244
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	69	Back	10mm	Argon	DSI 0	641666	3624.99	19.51	21.0	1.409	0.02	0.456	0.643
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	641666	3624.99	20.84	21.0	1.038	0.15	0.149	0.155
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Left Side	10mm	Argon	DSI 0	641666	3624.99	19.71	21.0	1.346	0.15	0.293	0.394
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	69	Left Side	10mm	Argon	DSI 0	641666	3624.99	20.77	21.0	1.054	0.09	0.125	0.132
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	69	Left Side	10mm	Argon	DSI 0	641666	3624.99	19.51	21.0	1.409	0.09	0.261	0.368
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	641666	3624.99	20.84	21.0	1.038	-0.09	0.122	0.127
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Right Side	10mm	Argon	DSI 0	641666	3624.99	19.71	21.0	1.346	-0.09	0.240	0.323
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	69	Right Side	10mm	Argon	DSI 0	641666	3624.99	20.77	21.0	1.054	-0.01	0.105	0.111
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	69	Right Side	10mm	Argon	DSI 0	641666	3624.99	19.51	21.0	1.409	-0.01	0.210	0.296
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	20.84	21.0	1.038	-0.06	0.141	0.146
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	19.71	21.0	1.346	-0.06	0.278	0.374
	FR1 n77_Ant 6+7(6)	100M	BPSK	135	69	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	20.77	21.0	1.054	0	0.125	0.132
	FR1 n77_Ant 6+7(7)	100M	BPSK	135	69	Bottom Side	10mm	Argon	DSI 0	641666	3624.99	19.51	21.0	1.409	0	0.248	0.350
	FR1 n77_HPUE_Ant 6+7(6)	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	641666	3624.99	23.90	24.0	1.023	-0.11	0.216	0.221
	FR1 n77_HPUE_Ant 6+7(7)	100M	BPSK	1	1	Back	10mm	Argon	DSI 0	641666	3624.99	22.80	24.0	1.318	-0.11	0.485	0.639
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Back	10mm	Xenon	DSI 0	641666	3624.99	20.84	21.0	1.038	0.04	0.208	0.216
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Back	10mm	Xenon	DSI 0	641666	3624.99	19.71	21.0	1.346	0.04	0.408	0.549

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Scanner	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 9	Argon	6	2437	18.06	18.20	1.033	98.48	1.015	0.08	0.041	0.043
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 9	Argon	6	2437	18.06	18.20	1.033	98.48	1.015	0.09	0.078	0.082
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 9	Argon	6	2437	18.06	18.20	1.033	98.48	1.015	0.11	0.114	0.120
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 9	Xenon	6	2437	18.06	18.20	1.033	98.48	1.015	0.18	0.099	0.104
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 8+9(8)	Argon	6	2437	18.19	18.20	1.002	98.48	1.015	-0.05	0.144	0.146
	WLAN2.4GHz	802.11b 1Mbps	Front	10mm	Ant 8+9(9)	Argon	6	2437	17.80	18.20	1.096	98.48	1.015	-0.05	0.105	0.117
60	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 8+9(8)	Argon	6	2437	18.19	18.20	1.002	98.48	1.015	-0.04	0.197	0.200
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 8+9(9)	Argon	6	2437	17.80	18.20	1.096	98.48	1.015	-0.04	0.144	0.160
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 8+9(8)	Argon	1	2412	18.19	18.20	1.002	98.48	1.015	0.02	0.112	0.114
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 8+9(9)	Argon	1	2412	17.28	18.20	1.236	98.48	1.015	0.02	0.098	0.123
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 8+9(8)	Argon	11	2462	18.11	18.20	1.021	98.48	1.015	-0.17	0.132	0.137
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 8+9(9)	Argon	11	2462	17.55	18.20	1.161	98.48	1.015	-0.17	0.087	0.103
	WLAN2.4GHz	802.11b 1Mbps	Left Side	10mm	Ant 8+9(9)	Argon	6	2437	17.80	18.20	1.096	98.48	1.015	-0.19	0.116	0.129
	WLAN2.4GHz	802.11b 1Mbps	Right Side	10mm	Ant 8+9(8)	Argon	6	2437	18.19	18.20	1.002	98.48	1.015	0.11	0.196	0.199
	WLAN2.4GHz	802.11b 1Mbps	Top Side	10mm	Ant 8+9(8)	Argon	6	2437	18.19	18.20	1.002	98.48	1.015	0.17	0.143	0.145
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 8+9(8)	Xenon	6	2437	18.19	18.20	1.002	98.48	1.015	0.07	0.085	0.086
	WLAN2.4GHz	802.11b 1Mbps	Back	10mm	Ant 8+9(9)	Xenon	6	2437	17.80	18.20	1.096	98.48	1.015	0.07	0.142	0.158

16.3 Body Worn Accessory SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Scanner	Holster	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850_Ant 0	GPRS (4 Tx slots)	Front	15mm	Argon		DSI 0	128	824.2	29.91	31.00	1.285	-0.07	0.107	0.138
61	GSM850_Ant 0	GPRS (4 Tx slots)	Back	15mm	Argon		DSI 0	128	824.2	29.91	31.00	1.285	-0.03	0.537	0.690
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	0mm	Argon	Holster	DSI 0	128	824.2	29.91	31.00	1.285	-0.07	0.045	0.058
	GSM850_Ant 0	GPRS (4 Tx slots)	Back	15mm	Xenon		DSI 0	128	824.2	29.91	31.00	1.285	-0.05	0.419	0.539
	GSM1900_Ant 1	GPRS (4 Tx slots)	Front	15mm	Argon		DSI 0	661	1880	29.59	30.00	1.099	0.09	0.114	0.125
62	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	15mm	Argon		DSI 0	661	1880	29.59	30.00	1.099	-0.03	0.550	0.604
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	0mm	Argon	Holster	DSI 0	661	1880	29.59	30.00	1.099	0.17	0.056	0.062
	GSM1900_Ant 1	GPRS (4 Tx slots)	Back	15mm	Xenon		DSI 0	661	1880	29.59	30.00	1.099	0.06	0.472	0.519

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Scanner	Holster	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA II_Ant 1	RMC 12.2Kbps	Front	15mm	Argon		DSI 0	9262	1852.4	24.47	25.00	1.130	0.09	0.159	0.180
63	WCDMA II_Ant 1	RMC 12.2Kbps	Back	15mm	Argon		DSI 0	9262	1852.4	24.47	25.00	1.130	0.02	0.267	0.302
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	0mm	Argon	Holster	DSI 0	9262	1852.4	24.47	25.00	1.130	-0.02	0.141	0.159
	WCDMA II_Ant 1	RMC 12.2Kbps	Back	15mm	Xenon		DSI 0	9262	1852.4	24.47	25.00	1.130	0.15	0.185	0.209
	WCDMA IV_Ant 1	RMC 12.2Kbps	Front	15mm	Argon		DSI 0	1513	1752.6	24.43	25.00	1.140	0.06	0.210	0.239
64	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	15mm	Argon		DSI 0	1513	1752.6	24.43	25.00	1.140	0.01	0.304	0.347
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	0mm	Argon	Holster	DSI 0	1513	1752.6	24.43	25.00	1.140	0.15	0.192	0.219
	WCDMA IV_Ant 1	RMC 12.2Kbps	Back	15mm	Xenon		DSI 0	1513	1752.6	24.43	25.00	1.140	-0.08	0.277	0.316
	WCDMA V_Ant 0	RMC 12.2Kbps	Front	15mm	Argon		DSI 0	4233	846.6	24.53	25.00	1.114	-0.18	0.175	0.195
65	WCDMA V_Ant 0	RMC 12.2Kbps	Back	15mm	Argon		DSI 0	4233	846.6	24.53	25.00	1.114	-0.01	0.558	0.622
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	0mm	Argon	Holster	DSI 0	4233	846.6	24.53	25.00	1.114	-0.08	0.324	0.361
	WCDMA V_Ant 0	RMC 12.2Kbps	Back	15mm	Xenon		DSI 0	4233	846.6	24.53	25.00	1.114	0.18	0.487	0.543

<LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Scanner	Holster	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 7_Ant 1	20M	QPSK	1	0	Front	15mm	Argon		DSI 0	21100	2535	22.96	24.50	1.426			0.03	0.078	0.111
	LTE Band 7_Ant 1	20M	QPSK	50	24	Front	15mm	Argon		DSI 0	21100	2535	22.15	23.50	1.365			0.02	0.058	0.079
66	LTE Band 7_Ant 1	20M	QPSK	1	0	Back	15mm	Argon		DSI 0	21100	2535	22.96	24.50	1.426			-0.01	0.247	0.352
	LTE Band 7_Ant 1	20M	QPSK	50	24	Back	15mm	Argon		DSI 0	21100	2535	22.15	23.50	1.365			0.01	0.235	0.321
	LTE Band 7_Ant 1	20M	QPSK	1	0	Back	0mm	Argon	Holster	DSI 0	21100	2535	22.96	24.50	1.426			0.04	0.106	0.151
	LTE Band 7_Ant 1	20M	QPSK	1	0	Back	15mm	Xenon		DSI 0	21100	2535	22.96	24.50	1.426			-0.09	0.201	0.287
	LTE Band 12_Ant 0	10M	QPSK	1	0	Front	15mm	Argon		DSI 0	23095	707.5	23.22	24.50	1.343			0.11	0.248	0.333
	LTE Band 12_Ant 0	10M	QPSK	25	25	Front	15mm	Argon		DSI 0	23095	707.5	22.55	23.50	1.245			0.05	0.226	0.281
67	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	15mm	Argon		DSI 0	23095	707.5	23.22	24.50	1.343			0.01	0.393	0.528
	LTE Band 12_Ant 0	10M	QPSK	25	25	Back	15mm	Argon		DSI 0	23095	707.5	22.55	23.50	1.245			-0.09	0.389	0.484
	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	0mm	Argon	Holster	DSI 0	23095	707.5	23.22	24.50	1.343			0.14	0.250	0.336
	LTE Band 12_Ant 0	10M	QPSK	1	0	Back	15mm	Xenon		DSI 0	23095	707.5	23.22	24.50	1.343			-0.15	0.392	0.526
	LTE Band 13_Ant 0	10M	QPSK	1	0	Front	15mm	Argon		DSI 0	23230	782	23.07	24.50	1.390			-0.03	0.213	0.296
	LTE Band 13_Ant 0	10M	QPSK	25	25	Front	15mm	Argon		DSI 0	23230	782	22.19	23.50	1.352			0.05	0.201	0.272
68	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	15mm	Argon		DSI 0	23230	782	23.07	24.50	1.390			0.01	0.370	0.514
	LTE Band 13_Ant 0	10M	QPSK	25	25	Back	15mm	Argon		DSI 0	23230	782	22.19	23.50	1.352			0.09	0.356	0.481
	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	0mm	Argon	Holster	DSI 0	23230	782	23.07	24.50	1.390			-0.16	0.177	0.246
	LTE Band 13_Ant 0	10M	QPSK	1	0	Back	15mm	Xenon		DSI 0	23230	782	23.07	24.50	1.390			-0.02	0.324	0.450
	LTE Band 14_Ant 0	10M	QPSK	1	0	Front	15mm	Argon		DSI 0	23330	793	23.18	24.50	1.355			0	0.237	0.321
	LTE Band 14_Ant 0	10M	QPSK	25	25	Front	15mm	Argon		DSI 0	23330	793	22.31	23.50	1.315			0.05	0.211	0.278
69	LTE Band 14_Ant 0	10M	QPSK	1	0	Back	15mm	Argon		DSI 0	23330	793	23.18	24.50	1.355			-0.02	0.376	0.510
	LTE Band 14_Ant 0	10M	QPSK	25	25	Back	15mm	Argon		DSI 0	23330	793	22.31	23.50	1.315			0.08	0.351	0.462
	LTE Band 14_Ant 0	10M	QPSK	1	0	Back	0mm	Argon	Holster	DSI 0	23330	793	23.18	24.50	1.355			-0.04	0.198	0.268
	LTE Band 14_Ant 0	10M	QPSK	1	0	Back	15mm	Xenon		DSI 0	23330	793	23.18	24.50	1.355			0.17	0.353	0.478
	LTE Band 25_Ant 1	20M	QPSK	1	0	Front	15mm	Argon		DSI 0	26340	1880	23.24	24.50	1.337			0.03	0.133	0.178
	LTE Band 25_Ant 1	20M	QPSK	50	24	Front	15mm	Argon		DSI 0	26340	1880	22.60	23.50	1.230			0.01	0.102	0.125
70	LTE Band 25_Ant 1	20M	QPSK	1	0	Back	15mm	Argon		DSI 0	26340	1880	23.24	24.50	1.337			-0.01	0.294	0.393
	LTE Band 25_Ant 1	20M	QPSK	50	24	Back	15mm	Argon		DSI 0	26340	1880	22.60	23.50	1.230			-0.05	0.263	0.324
	LTE Band 25_Ant 1	20M	QPSK	1	0	Back	0mm	Argon	Holster	DSI 0	26340	1880	23.24	24.50	1.337			0.01	0.158	0.211
	LTE Band 25_Ant 1	20M	QPSK	1	0	Back	15mm	Xenon		DSI 0	26340	1880	23.24	24.50	1.337			0.04	0.256	0.342
	LTE Band 26_Ant 0	15M	QPSK	1	0	Front	15mm	Argon		DSI 0	26865	831.5	23.20	24.50	1.349			-0.12	0.191	0.258
	LTE Band 26_Ant 0	15M	QPSK	36	39	Front	15mm	Argon		DSI 0	26865	831.5	22.55	23.50	1.245			0.02	0.176	0.219
71	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	15mm	Argon		DSI 0	26865	831.5	23.20	24.50	1.349			-0.02	0.426	0.575
	LTE Band 26_Ant 0	15M	QPSK	36	39	Back	15mm	Argon		DSI 0	26865	831.5	22.55	23.50	1.245			-0.05	0.411	0.511
	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	0mm	Argon	Holster	DSI 0	26865	831.5	23.20	24.50	1.349			-0.08	0.234	0.316
	LTE Band 26_Ant 0	15M	QPSK	1	0	Back	15mm	Xenon		DSI 0	26865	831.5	23.20	24.50	1.349			-0.18	0.351	0.473
72	LTE Band 30_Ant 1	10M	QPSK	1	0	Front	15mm	Argon		DSI 0	27710	2310	23.12	24.50	1.374			-0.06	0.130	0.179
	LTE Band 30_Ant 1	10M	QPSK	25	0	Front	15mm	Argon		DSI 0	27710	2310	22.05	23.50	1.396			0.01	0.109	0.152
	LTE Band 30_Ant 1	10M	QPSK	1	0	Back	15mm	Argon		DSI 0	27710	2310	23.12	24.50	1.374			-0.03	0.113	0.155
	LTE Band 30_Ant 1	10M	QPSK	25	0	Back	15mm	Argon		DSI 0	27710	2310	22.05	23.50	1.396			-0.06	0.101	0.141
	LTE Band 30_Ant 1	10M	QPSK	1	0	Back	0mm	Argon	Holster	DSI 0	27710	2310	23.12	24.50	1.374			0.02	0.046	0.063
	LTE Band 30_Ant 1	10M	QPSK	1	0	Back	15mm	Xenon		DSI 0	27710	2310	23.12	24.50	1.374			0.02	0.125	0.172
	LTE Band 66_Ant 1	20M	QPSK	1	0	Front	15mm	Argon		DSI 0	132322	1745	23.21	24.50	1.346			-0.17	0.253	0.341
	LTE Band 66_Ant 1	20M	QPSK	50	24	Front	15mm	Argon		DSI 0	132322	1745	22.36	23.50	1.300			0.15	0.241	0.313
73	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	15mm	Argon		DSI 0	132322	1745	23.21	24.50	1.346			-0.01	0.331	0.445
	LTE Band 66_Ant 1	20M	QPSK	50	24	Back	15mm	Argon		DSI 0	132322	1745	22.36	23.50	1.300			0.06	0.294	0.382
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	0mm	Argon	Holster	DSI 0	132322	1745	23.21	24.50	1.346			-0.04	0.204	0.275
	LTE Band 66_Ant 1	20M	QPSK	1	0	Back	15mm	Xenon		DSI 0	132322	1745	23.21	24.50	1.346			-0.17	0.307	0.413
	LTE Band 41_Ant 1	20M	QPSK	1	0	Front	15mm	Argon		DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	0.04	0.076	0.104
	LTE Band 41_Ant 1	20M	QPSK	50	50	Front	15mm	Argon		DSI 0	40620	2593	22.13	23.50	1.371	62.9	1.006	0.02	0.056	0.077
74	LTE Band 41_Ant 1	20M	QPSK	1	0	Back	15mm	Argon		DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	0.01	0.229	0.314

	LTE Band 41_Ant 1	20M	QPSK	50	50	Back	15mm	Argon		DSI 0	40620	2593	22.13	23.50	1.371	62.9	1.006	-0.09	0.208	0.287
	LTE Band 41_Ant 1	20M	QPSK	1	0	Back	0mm	Argon	Holster	DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	0.01	0.132	0.181
	LTE Band 41_Ant 1	20M	QPSK	1	0	Back	15mm	Xenon		DSI 0	40620	2593	23.15	24.50	1.365	62.9	1.006	0.04	0.214	0.294
	LTE Band 48_Ant 7	20M	QPSK	1	0	Front	15mm	Argon		DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	0.16	0.051	0.066
	LTE Band 48_Ant 7	20M	QPSK	50	50	Front	15mm	Argon		DSI 0	56150	3641	21.28	22.50	1.324	62.9	1.006	0.11	0.041	0.055
75	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	15mm	Argon		DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	-0.03	0.143	0.185
	LTE Band 48_Ant 7	20M	QPSK	50	50	Back	15mm	Argon		DSI 0	56150	3641	21.28	22.50	1.324	62.9	1.006	0.09	0.126	0.168
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	0mm	Argon	Holster	DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	0.1	0.102	0.132
	LTE Band 48_Ant 7	20M	QPSK	1	0	Back	15mm	Xenon		DSI 0	56150	3641	22.40	23.50	1.288	62.9	1.006	0.03	0.079	0.102

<5G NR SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Gap (mm)	Scanner	Holster	Power State	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	FR1 n7_Ant 1	20M	BPSK	1	1	Front	15mm	Argon		DSI 0	507000	2535	24.75	25.00	1.059	0.09	0.139	0.147
	FR1 n7_Ant 1	20M	BPSK	50	28	Front	15mm	Argon		DSI 0	507000	2535	24.54	25.00	1.112	0.01	0.125	0.139
76	FR1 n7_Ant 1	20M	BPSK	1	1	Back	15mm	Argon		DSI 0	507000	2535	24.75	25.00	1.059	0.02	0.275	0.291
	FR1 n7_Ant 1	20M	BPSK	50	28	Back	15mm	Argon		DSI 0	507000	2535	24.54	25.00	1.112	-0.04	0.251	0.279
	FR1 n7_Ant 1	20M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	507000	2535	24.75	25.00	1.059	-0.13	0.262	0.278
	FR1 n7_Ant 1	20M	BPSK	1	1	Back	15mm	Xenon		DSI 0	507000	2535	24.75	25.00	1.059	-0.17	0.261	0.276
	FR1 n12_Ant 0	15M	BPSK	1	1	Front	15mm	Argon		DSI 0	141500	707.5	24.51	25.00	1.119	0.1	0.275	0.308
	FR1 n12_Ant 0	15M	BPSK	36	22	Front	15mm	Argon		DSI 0	141500	707.5	24.15	25.00	1.216	0	0.259	0.315
77	FR1 n12_Ant 0	15M	BPSK	1	1	Back	15mm	Argon		DSI 0	141500	707.5	24.51	25.00	1.119	-0.03	0.473	0.529
	FR1 n12_Ant 0	15M	BPSK	36	22	Back	15mm	Argon		DSI 0	141500	707.5	24.15	25.00	1.216	-0.09	0.415	0.505
	FR1 n12_Ant 0	15M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	141500	707.5	24.51	25.00	1.119	0.17	0.208	0.233
	FR1 n12_Ant 0	15M	BPSK	1	1	Back	15mm	Xenon		DSI 0	141500	707.5	24.51	25.00	1.119	-0.06	0.445	0.498
	FR1 n13_Ant 0	10M	BPSK	1	1	Front	15mm	Argon		DSI 0	156400	782	24.16	25.00	1.213	0.11	0.256	0.311
	FR1 n13_Ant 0	10M	BPSK	25	14	Front	15mm	Argon		DSI 0	156400	782	24.03	25.00	1.250	0.05	0.222	0.278
78	FR1 n13_Ant 0	10M	BPSK	1	1	Back	15mm	Argon		DSI 0	156400	782	24.16	25.00	1.213	0.02	0.379	0.460
	FR1 n13_Ant 0	10M	BPSK	25	14	Back	15mm	Argon		DSI 0	156400	782	24.03	25.00	1.250	-0.09	0.348	0.435
	FR1 n13_Ant 0	10M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	156400	782	24.16	25.00	1.213	-0.18	0.217	0.263
	FR1 n13_Ant 0	10M	BPSK	1	1	Back	15mm	Xenon		DSI 0	156400	782	24.16	25.00	1.213	0.11	0.345	0.419
	FR1 n14_Ant 0	10M	BPSK	1	1	Front	15mm	Argon		DSI 0	158600	793	24.57	25.00	1.104	-0.11	0.234	0.258
	FR1 n14_Ant 0	10M	BPSK	25	14	Front	15mm	Argon		DSI 0	158600	793	24.44	25.00	1.138	0.05	0.215	0.245
79	FR1 n14_Ant 0	10M	BPSK	1	1	Back	15mm	Argon		DSI 0	158600	793	24.57	25.00	1.104	-0.04	0.368	0.406
	FR1 n14_Ant 0	10M	BPSK	25	14	Back	15mm	Argon		DSI 0	158600	793	24.44	25.00	1.138	0.09	0.351	0.399
	FR1 n14_Ant 0	10M	BPSK	1	1	Back	0mm	Argon		DSI 0	158600	793	24.57	25.00	1.104	0.04	0.188	0.208
	FR1 n14_Ant 0	10M	BPSK	1	1	Back	15mm	Xenon		DSI 0	158600	793	24.57	25.00	1.104	0.16	0.338	0.373
	FR1 n25_Ant 1	30M	BPSK	1	1	Front	15mm	Argon		DSI 0	376500	1882.5	24.11	25.00	1.227	0.06	0.139	0.171
	FR1 n25_Ant 1	30M	BPSK	80	40	Front	15mm	Argon		DSI 0	376500	1882.5	23.97	25.00	1.268	0.01	0.118	0.150
80	FR1 n25_Ant 1	30M	BPSK	1	1	Back	15mm	Argon		DSI 0	376500	1882.5	24.11	25.00	1.227	-0.03	0.281	0.345
	FR1 n25_Ant 1	30M	BPSK	80	40	Back	15mm	Argon		DSI 0	376500	1882.5	23.97	25.00	1.268	-0.08	0.251	0.318
	FR1 n25_Ant 1	30M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	376500	1882.5	24.11	25.00	1.227	-0.18	0.122	0.150
	FR1 n25_Ant 1	30M	BPSK	1	1	Back	15mm	Xenon		DSI 0	376500	1882.5	24.11	25.00	1.227	0.06	0.261	0.320
	FR1 n26_Ant 0	20M	BPSK	1	1	Front	15mm	Argon		DSI 0	166300	831.5	24.43	25.00	1.140	-0.19	0.187	0.213
	FR1 n26_Ant 0	20M	BPSK	50	56	Front	15mm	Argon		DSI 0	166300	831.5	23.98	24.50	1.127	0.09	0.169	0.190
81	FR1 n26_Ant 0	20M	BPSK	1	1	Back	15mm	Argon		DSI 0	166300	831.5	24.43	25.00	1.140	0.03	0.302	0.344
	FR1 n26_Ant 0	20M	BPSK	50	56	Back	15mm	Argon		DSI 0	166300	831.5	23.98	24.50	1.127	0.05	0.289	0.326
	FR1 n26_Ant 0	20M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	166300	831.5	24.43	25.00	1.140	0.17	0.144	0.164
	FR1 n26_Ant 0	20M	BPSK	1	1	Back	15mm	Xenon		DSI 0	166300	831.5	24.43	25.00	1.140	-0.16	0.287	0.327
82	FR1 n30_Ant 1	10M	BPSK	1	1	Front	15mm	Argon		DSI 0	462000	2310	23.94	25.00	1.276	-0.02	0.121	0.154
	FR1 n30_Ant 1	10M	BPSK	25	14	Front	15mm	Argon		DSI 0	462000	2310	23.77	25.00	1.327	0.06	0.106	0.141
	FR1 n30_Ant 1	10M	BPSK	1	1	Back	15mm	Argon		DSI 0	462000	2310	23.94	25.00	1.276	0.03	0.114	0.146
	FR1 n30_Ant 1	10M	BPSK	25	14	Back	15mm	Argon		DSI 0	462000	2310	23.77	25.00	1.327	0.05	0.098	0.130
	FR1 n30_Ant 1	10M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	462000	2310	23.94	25.00	1.276	0.12	0.069	0.088

	FR1 n30_Ant 1	10M	BPSK	1	1	Front	15mm	Xenon		DSI 0	462000	2310	23.94	25.00	1.276	-0.17	0.113	0.144
	FR1 n66_Ant 1	30M	BPSK	1	1	Front	15mm	Argon		DSI 0	349000	1745	24.28	25.00	1.180	0.02	0.209	0.247
	FR1 n66_Ant 1	30M	BPSK	80	40	Front	15mm	Argon		DSI 0	349000	1745	24.22	25.00	1.197	0.01	0.198	0.237
83	FR1 n66_Ant 1	30M	BPSK	1	1	Back	15mm	Argon		DSI 0	349000	1745	24.28	25.00	1.180	0	0.248	0.293
	FR1 n66_Ant 1	30M	BPSK	80	40	Back	15mm	Argon		DSI 0	349000	1745	24.22	25.00	1.197	-0.05	0.236	0.282
	FR1 n66_Ant 1	30M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	349000	1745	24.28	25.00	1.180	-0.07	0.116	0.137
	FR1 n66_Ant 1	30M	BPSK	1	1	Back	15mm	Xenon		DSI 0	349000	1745	24.28	25.00	1.180	-0.03	0.224	0.264
	FR1 n41_Ant 1	100M	BPSK	1	1	Front	15mm	Argon		DSI 0	518598	2592.99	24.63	25.00	1.089	0.09	0.107	0.117
	FR1 n41_Ant 1	100M	BPSK	135	69	Front	15mm	Argon		DSI 0	518598	2592.99	24.41	25.00	1.146	0.05	0.099	0.113
84	FR1 n41_Ant 1	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	518598	2592.99	24.63	25.00	1.089	0.03	0.293	0.319
	FR1 n41_Ant 1	100M	BPSK	135	69	Back	15mm	Argon		DSI 0	518598	2592.99	24.41	25.00	1.146	-0.09	0.275	0.315
	FR1 n41_Ant 1	100M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	518598	2592.99	24.63	25.00	1.089	-0.02	0.169	0.184
	FR1 n41_Ant 1	100M	BPSK	1	1	Back	15mm	Xenon		DSI 0	518598	2592.99	24.63	25.00	1.089	-0.07	0.272	0.296
	FR1 n48_Ant 7	40M	BPSK	50	25	Front	15mm	Agron		DSI 0	641666	3624.99	22.23	23.50	1.340	-0.03	0.081	0.109
	FR1 n48_Ant 7	40M	BPSK	1	105	Front	15mm	Agron		DSI 0	641666	3624.99	18.23	20.00	1.503	0.09	0.068	0.102
	FR1 n48_Ant 7	20M	BPSK	1	49	Front	15mm	Agron		DSI 0	641666	3624.99	22.15	23.50	1.365	0.04	0.059	0.081
	FR1 n48_Ant 7	40M	BPSK	50	25	Back	15mm	Agron		DSI 0	641666	3624.99	22.23	23.50	1.340	-0.1	0.230	0.308
	FR1 n48_Ant 7	40M	BPSK	1	105	Back	15mm	Agron		DSI 0	641666	3624.99	18.23	20.00	1.503	0.01	0.214	0.322
	FR1 n48_Ant 7	20M	BPSK	1	49	Back	15mm	Agron		DSI 0	641666	3624.99	22.15	23.50	1.365	0.09	0.201	0.274
	FR1 n48_Ant 7	40M	BPSK	50	25	Back	0mm	Agron	Holster	DSI 0	641666	3624.99	22.23	23.50	1.340	0.03	0.170	0.228
	FR1 n48_Ant 7	40M	BPSK	50	25	Back	15mm	Xenon		DSI 0	641666	3624.99	22.23	23.50	1.340	0.1	0.206	0.276
	FR1 n48_Ant 4	40M	BPSK	1	1	Front	15mm	Argon		DSI 0	641666	3624.99	21.84	23.50	1.466	0.06	0.074	0.108
	FR1 n48_Ant 4	40M	BPSK	50	28	Front	15mm	Argon		DSI 0	641666	3624.99	21.73	23.50	1.503	0.05	0.065	0.098
85	FR1 n48_Ant 4	40M	BPSK	1	1	Back	15mm	Argon		DSI 0	641666	3624.99	21.84	23.50	1.466	-0.16	0.232	0.340
	FR1 n48_Ant 4	40M	BPSK	50	28	Back	15mm	Argon		DSI 0	641666	3624.99	21.73	23.50	1.503	0.09	0.205	0.308
	FR1 n48_Ant 4	40M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	641666	3624.99	21.84	23.50	1.466	0.12	0.040	0.059
	FR1 n48_Ant 4	40M	BPSK	1	1	Back	15mm	Xenon		DSI 0	641666	3624.99	21.84	23.50	1.466	-0.03	0.206	0.302
	FR1 n48_Ant 5	40M	BPSK	1	1	Front	15mm	Argon		DSI 0	641666	3624.99	22.94	23.50	1.138	0.08	0.125	0.142
	FR1 n48_Ant 5	40M	BPSK	50	28	Front	15mm	Argon		DSI 0	641666	3624.99	22.84	23.50	1.164	0.05	0.102	0.119
	FR1 n48_Ant 5	40M	BPSK	1	1	Back	15mm	Argon		DSI 0	641666	3624.99	22.94	23.50	1.138	-0.15	0.149	0.170
	FR1 n48_Ant 5	40M	BPSK	50	28	Back	15mm	Argon		DSI 0	641666	3624.99	22.84	23.50	1.164	-0.19	0.131	0.153
	FR1 n48_Ant 5	40M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	641666	3624.99	22.94	23.50	1.138	0.07	0.085	0.097
	FR1 n48_Ant 5	40M	BPSK	1	1	Back	15mm	Xenon		DSI 0	641666	3624.99	22.94	23.50	1.138	0.09	0.128	0.146
	FR1 n48_Ant 6+7(6)	40M	QPSK	1	105	Front	15mm	Argon		DSI 0	641666	3624.99	16.65	18.00	1.365	0.1	0.149	0.203
	FR1 n48_Ant 6+7(7)	40M	QPSK	1	105	Front	15mm	Argon		DSI 0	641666	3624.99	16.04	18.00	1.570	0.1	0.151	0.237
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Front	15mm	Argon		DSI 0	641666	3624.99	19.17	20.50	1.358	0.05	0.125	0.170
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Front	15mm	Argon		DSI 0	641666	3624.99	18.58	20.50	1.556	0.05	0.136	0.212
	FR1 n48_Ant 6+7(6)	40M	QPSK	1	105	Back	15mm	Argon		DSI 0	641666	3624.99	16.65	18.00	1.365	0.04	0.179	0.244
	FR1 n48_Ant 6+7(7)	40M	QPSK	1	105	Back	15mm	Argon		DSI 0	641666	3624.99	16.04	18.00	1.570	0.04	0.181	0.284
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Back	15mm	Argon		DSI 0	641666	3624.99	19.17	20.50	1.358	-0.06	0.197	0.268
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Back	15mm	Argon		DSI 0	641666	3624.99	18.58	20.50	1.556	-0.06	0.199	0.310
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Back	0mm	Argon	Holster	DSI 0	641666	3624.99	19.17	20.50	1.358	-0.1	0.079	0.107
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Back	0mm	Argon	Holster	DSI 0	641666	3624.99	18.58	20.50	1.556	-0.1	0.081	0.126
	FR1 n48_Ant 6+7(6)	40M	QPSK	50	25	Back	15mm	Xenon		DSI 0	641666	3624.99	19.17	20.50	1.358	0.12	0.160	0.217
	FR1 n48_Ant 6+7(7)	40M	QPSK	50	25	Back	15mm	Xenon		DSI 0	641666	3624.99	18.58	20.50	1.556	0.12	0.163	0.254
	FR1 n77_Ant 7	100M	BPSK	1	1	Front	15mm	Argon		DSI 0	656000	3840	23.60	24.00	1.096	-0.1	0.155	0.170
	FR1 n77_Ant 7	100M	BPSK	135	138	Front	15mm	Argon		DSI 0	656000	3840	23.44	24.00	1.138	-0.08	0.142	0.162
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	656000	3840	23.60	24.00	1.096	-0.1	0.294	0.322
	FR1 n77_Ant 7	100M	BPSK	135	138	Back	15mm	Argon		DSI 0	656000	3840	23.44	24.00	1.138	-0.05	0.278	0.316
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	656000	3840	23.60	24.00	1.096	0.16	0.131	0.144
	FR1 n77_HPUE_Ant 7	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	656000	3840	25.31	27.00	1.476	-0.09	0.148	0.218
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	15mm	Xenon		DSI 0	656000	3840	23.60	24.00	1.096	0.03	0.250	0.274
	FR1 n77_Ant 7	100M	BPSK	1	1	Front	15mm	Argon		DSI 0	633332	3499.98	22.94	24.00	1.276	0.06	0.058	0.074
	FR1 n77_Ant 7	100M	BPSK	135	0	Front	15mm	Argon		DSI 0	633332	3499.98	22.82	24.00	1.312	0.01	0.041	0.054
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	633332	3499.98	22.94	24.00	1.276	-0.02	0.277	0.354

	FR1 n77_Ant 7	100M	BPSK	135	0	Back	15mm	Argon		DSI 0	633332	3499.98	22.82	24.00	1.312	-0.05	0.251	0.329
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	633332	3499.98	22.94	24.00	1.276	0.1	0.167	0.213
	FR1 n77_HPUE_Ant 7	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	633332	3499.98	25.36	27.00	1.459	0.1	0.236	0.344
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	15mm	Xenon		DSI 0	633332	3499.98	22.94	24.00	1.276	-0.07	0.210	0.268
	FR1 n77_Ant 7	100M	BPSK	1	1	Front	15mm	Argon		DSI 0	641666	3624.99	23.46	24.00	1.132	0.08	0.061	0.069
	FR1 n77_Ant 7	100M	BPSK	135	138	Front	15mm	Argon		DSI 0	641666	3624.99	23.01	24.00	1.256	0.01	0.049	0.062
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	641666	3624.99	23.46	24.00	1.132	-0.05	0.206	0.233
	FR1 n77_Ant 7	100M	BPSK	135	138	Back	15mm	Argon		DSI 0	641666	3624.99	23.01	24.00	1.256	0.06	0.192	0.241
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	641666	3624.99	23.46	24.00	1.132	0.15	0.157	0.178
	FR1 n77_HPUE_Ant 7	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	641666	3624.99	25.69	27.00	1.352	-0.11	0.160	0.216
	FR1 n77_Ant 7	100M	BPSK	1	1	Back	15mm	Xenon		DSI 0	641666	3624.99	23.46	24.00	1.132	-0.05	0.201	0.228
	FR1 n77_Ant 4	100M	BPSK	1	1	Front	15mm	Argon		DSI 0	656000	3840	22.75	23.90	1.303	-0.05	0.073	0.095
	FR1 n77_Ant 4	100M	BPSK	135	69	Front	15mm	Argon		DSI 0	656000	3840	22.58	23.90	1.355	0.05	0.068	0.092
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	656000	3840	22.75	23.90	1.303	-0.14	0.163	0.212
	FR1 n77_Ant 4	100M	BPSK	135	69	Back	15mm	Argon		DSI 0	656000	3840	22.58	23.90	1.355	0.01	0.148	0.201
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	656000	3840	22.75	23.90	1.303	-0.11	0.132	0.172
	FR1 n77_HPUE_Ant 4	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	656000	3840	25.22	26.90	1.472	0.03	0.143	0.211
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Xenon		DSI 0	656000	3840	22.75	23.90	1.303	0.05	0.153	0.199
	FR1 n77_Ant 4	100M	BPSK	1	1	Front	15mm	Argon		DSI 0	633332	3499.98	23.39	23.90	1.125	-0.17	0.095	0.107
	FR1 n77_Ant 4	100M	BPSK	135	0	Front	15mm	Argon		DSI 0	633332	3499.98	23.32	23.40	1.019	0.01	0.075	0.076
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	633332	3499.98	23.39	23.90	1.125	-0.1	0.253	0.285
	FR1 n77_Ant 4	100M	BPSK	135	0	Back	15mm	Argon		DSI 0	633332	3499.98	23.32	23.40	1.019	-0.12	0.235	0.239
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	633332	3499.98	23.39	23.90	1.125	0.05	0.132	0.148
	FR1 n77_HPUE_Ant 4	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	633332	3499.98	25.69	26.90	1.321	0.13	0.211	0.279
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Xenon		DSI 0	633332	3499.98	23.39	23.90	1.125	0.05	0.244	0.274
	FR1 n77_Ant 4	100M	BPSK	1	1	Front	15mm	Argon		DSI 0	641666	3624.99	23.50	23.90	1.096	-0.12	0.098	0.107
	FR1 n77_Ant 4	100M	BPSK	135	69	Front	15mm	Argon		DSI 0	641666	3624.99	22.82	23.90	1.282	0.08	0.081	0.104
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	641666	3624.99	23.50	23.90	1.096	-0.15	0.217	0.238
	FR1 n77_Ant 4	100M	BPSK	135	69	Back	15mm	Argon		DSI 0	641666	3624.99	22.82	23.90	1.282	0.05	0.184	0.236
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	641666	3624.99	23.50	23.90	1.096	0	0.171	0.187
	FR1 n77_HPUE_Ant 4	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	641666	3624.99	25.10	26.90	1.514	0.18	0.156	0.236
	FR1 n77_Ant 4	100M	BPSK	1	1	Back	15mm	Xenon		DSI 0	641666	3624.99	23.50	23.90	1.096	0.1	0.195	0.214
	FR1 n77_Ant 5	100M	BPSK	1	1	Front	15mm	Argon		DSI 0	656000	3840	23.10	23.90	1.202	-0.01	0.104	0.125
	FR1 n77_Ant 5	100M	BPSK	135	69	Front	15mm	Argon		DSI 0	656000	3840	22.90	23.90	1.259	0.05	0.091	0.115
	FR1 n77_Ant 5	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	656000	3840	23.10	23.90	1.202	-0.16	0.129	0.155
	FR1 n77_Ant 5	100M	BPSK	135	69	Back	15mm	Argon		DSI 0	656000	3840	22.90	23.90	1.259	0.01	0.098	0.123
	FR1 n77_Ant 5	100M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	656000	3840	23.10	23.90	1.202	0.02	0.090	0.108
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	656000	3840	25.67	26.90	1.327	0.07	0.125	0.166
	FR1 n77_Ant 5	100M	BPSK	1	1	Back	15mm	Xenon		DSI 0	656000	3840	23.10	23.90	1.202	-0.18	0.121	0.145
	FR1 n77_Ant 5	100M	BPSK	1	1	Front	15mm	Argon		DSI 0	633332	3499.98	23.61	23.90	1.069	0.15	0.141	0.151
	FR1 n77_Ant 5	100M	BPSK	135	0	Front	15mm	Argon		DSI 0	633332	3499.98	23.21	23.40	1.045	0.09	0.115	0.120
	FR1 n77_Ant 5	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	633332	3499.98	23.61	23.90	1.069	-0.15	0.223	0.238
	FR1 n77_Ant 5	100M	BPSK	135	0	Back	15mm	Argon		DSI 0	633332	3499.98	23.21	23.40	1.045	0.06	0.195	0.204
	FR1 n77_Ant 5	100M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	633332	3499.98	23.61	23.90	1.069	-0.06	0.103	0.110
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	633332	3499.98	25.81	26.90	1.285	-0.15	0.211	0.271
	FR1 n77_Ant 5	100M	BPSK	1	1	Back	15mm	Xenon		DSI 0	633332	3499.98	23.61	23.90	1.069	-0.03	0.209	0.223
	FR1 n77_Ant 5	100M	BPSK	1	1	Front	15mm	Argon		DSI 0	641666	3624.99	22.61	23.90	1.346	-0.05	0.200	0.269
	FR1 n77_Ant 5	100M	BPSK	135	69	Front	15mm	Argon		DSI 0	641666	3624.99	22.08	23.90	1.521	0.06	0.175	0.266
	FR1 n77_Ant 5	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	641666	3624.99	22.61	23.90	1.346	-0.14	0.226	0.304
	FR1 n77_Ant 5	100M	BPSK	135	69	Back	15mm	Argon		DSI 0	641666	3624.99	22.08	23.90	1.521	0.05	0.198	0.301
	FR1 n77_Ant 5	100M	BPSK	1	1	Back	0mm	Argon	Holster	DSI 0	641666	3624.99	22.61	23.90	1.346	-0.03	0.132	0.178
	FR1 n77_HPUE_Ant 5	100M	BPSK	1	1	Back	15mm	Argon		DSI 0	641666	3624.99	25.28	26.90	1.452	0.09	0.203	0.295
	FR1 n77_Ant 5	100M	BPSK	1	1	Back	15mm	Xenon		DSI 0	641666	3624.99	22.61	23.90	1.346	-0.02	0.208	0.280
	FR1 n77_Ant 6+7(6)	100M	BPSK	1	1	Front	15mm	Argon		DSI 0	656000	3840	20.46	21.0	1.132	0	0.148	0.168
	FR1 n77_Ant 6+7(7)	100M	BPSK	1	1	Front	15mm	Argon		DSI 0	656000	3840	20.90	21.0	1.023	0	0.136	0.139