

SUPPLEMENTAL "UP LINK CARRIER AGGREGATION" TEST REPORT

OF

Applicant:	Compal Electronics, Inc No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei, (114) Taiwan
Product Name:	5G M.2 Module
Brand Name:	Compal
Model No.:	RXM-G1
Model Difference:	N/A
Report Number:	E2/2019/A0032
FCC ID	GKRRXMG1
FCC Rule Part:	2 , 22H & 24E & 27C & 96
Issue Date:	Jul. 03, 2020
Date of Test:	Feb. 17, 2020 ~ Jun. 23, 2020
Date of EUT Received:	Oct. 31, 2019

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Central RF Lab The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.26-2015 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits.

The test results of this report relate only to the tested sample identified in this report.

Approved By:

Men lay

Blue Yang / Asst. Manager



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Revision History							
Report Number Revision		Description	Issue Date	Remark			
E2/2019/A0032	Rev.00	Original.	Jul. 03, 2020	Revised By: Karen Huang			

Note:

1 · Disclaimer

Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.

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GENERAL PRODUCT INFORMATION 1

1.1 **Product Description**

General:

Product Name:	5G M.2 Module
Brand Name:	Compal
Model No.:	RXM-G1
Model Difference:	N/A
Hardware Version:	DVT-1
Software Version:	RXMG1.00.00.036
Power Supply:	DC 3.3V
IMEI:	359047100009060

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1.2 **Operation Frequency Range**

		requeitoy i	unge	,					
LTE Band	BW (MHz)	Operation F	requer	ncy (MHz)	LTE Band	BW (MHz)	Operation	Freque	ency (MHz)
2	1.4	1850.7	-	1909.3		5	2498.5	-	2687.5
	3	1851.5	-	1908.5	41	10	2501.0	-	2685.0
	5	1852.5	-	1907.5	41	15	2503.5	-	2682.5
	10	1855.0	-	1905.0		20	2506.0	-	2680.0
	15	1857.5	-	1902.5		5	3552.5	-	3697.5
	20	1860.0	-	1900.0	48	10	3555.0	-	3695.0
	1.4	1.4 1710.7 - 1754.3 40	40	15	3557.5	-	3692.5		
	3	1711.5	-	1753.5		20	3560.0	-	3690.0
Λ	5	1712.5	-	1752.5		1.4	1710.7	-	1779.3
4	10	1715.0	-	1750.0		3	1711.5	-	1778.5
	15	1717.5	-	1747.5	66	5	1712.5	-	1777.5
	20	1720.0	-	1745.0		10	1715.0	-	1775.0
	1.4	824.7	-	848.3		15	1717.5	-	1772.5
F	3	825.5	-	847.5		20	1720.0	-	1770.0
5	5	826.5	-	846.5					
	10	829.0	-	844.0					
	5	2502.5	-	2567.5					
7	10	2505.0	-	2565.0					
1	15	2507.5	-	2562.5					
	20	2510.0	-	2560.0]				
	1.4	699.7	-	715.3	1				
10	3	700.5		714.5	1				
12	5	701.5	-	713.5					
ŀ	10	704.0	-	711.0					
10	5	779.5	-	784.5	1				
13	10		782		1				

Antenna Designation 1.3

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Vendor	Туре	Model Name	Modulation	Frequency (MHz)	Peak Antenna Gain (dBi)
			LTE Band 2	1850 ~ 1910	4
			LTE Band 4	1710 ~ 1755	4.5
	PIFA		LTE Band 5	824 ~ 849	2.9
		ANT0	LTE Band 7	2500 ~ 2570	3.4
Pulse			LTE Band 12	699 ~ 716	2.4
			LTE Band 13	777 ~ 787	3
			LTE Band 41	2496 ~ 2690	3.4
		ANT2	LTE Band 48	3550 ~ 3700	-2
		ANT0	LTE Band 66	1710 ~ 1780	4.5

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1.4	Typ	oe of Em	ission 8	k Max El	RP/EIRP	Power	[,] Meas	urement	t Result:		
LTE	BW		lency		ERP / EIRF		(W)	99%	Type of	Frequency	
Band	5	1	, 			· ·	• •		Emission	Tolerance (Hz)	
				QPSK	26.14	ERP	0.411	18.7580	18M76G7D	20	
5B	15	826.5	846.5	16QAM	25.82	ERP	0.382	18.6950	18M70D7W	20	
20	15	020.0	040.0	64QAM	25.07	ERP	0.321	18.6440	18M64D7W	20	
				256QAM	21.94	ERP	0.156	18.7580	18M76D7W	20	
LTE	BW	Eroqu	lency	Madulation	ERP / EIRF) (dDm)	010	99%	Type of	Frequency	
Band	DVV	пец	lency	Modulation		(ubiii)	(W)	9970	Emission	Tolerance (Hz)	
				QPSK	24.49	EIRP	0.281	37.438	37M4G7D	20	
70	10			16QAM	23.77	EIRP	0.238	37.340	37M3D7W	20	
7C	40	2505.0	2565.0	64QAM	22.68	EIRP	0.185	37.247	37M2D7W	20	
				256QAM	23.62	EIRP	0.230	36.984	37M0D7W	20	
LTE	BW	Frog	lency	Madulation	ERP / EIRF) (d Dm)	(W)	99%	Type of	Frequency	
Band	DVV	пец	lency	Modulation		r (ubiii)	(VV)	9970	Emission	Tolerance (Hz)	
			3.5 2687.5	QPSK	26.49	EIRP	0.446	37.458	37M5G7D	25	
410	25	0400 F		16QAM	25.49	EIRP	0.354	37.427	37M4D7W	25	
41C	25	2498.5		64QAM	24.49	EIRP	0.281	37.435	37M4D7W	25	
				256QAM	24.56	EIRP	0.286	37.284	37M3D7W	25	
LTE	BW	Eroqu	lency	Mashalatian	ERP / E	IRP	010	000/	Type of	Frequency	
Band	BW	пец	lency	Modulation	(dBm/10MHz)		(W) 99%	99 %	Emission	Tolerance (Hz)	
				QPSK	19.23	EIRP	0.084	37.405	37M4G7D	25	
100	05			2/07 5	16QAM	18.15	EIRP	0.065	37.419	37M4D7W	25
48C	25	3552.5	3697.5	64QAM	17.98	EIRP	0.063	37.432	37M4D7W	25	
				256QAM	19.14	EIRP	0.082	37.304	37M3D7W	25	
LTE		Eroqu	Jency	Madulation) (dDm)	010	000/	Type of	Frequency	
Band	BW	пец	lency	Modulation	ERP / EIRF	² (автт)	(W)	99%	Emission	Tolerance (Hz)	
				QPSK	26.38	EIRP	0.435	18.316	18M3G7D	29	
(()	20	1710 F	1777 F	16QAM	25.57	EIRP	0.361	18.285	18M3D7W	29	
66B	20	1712.5	1777.5	64QAM	25.02	EIRP	0.318	18.196	18M2D7W	29	
				256QAM	24.43	EIRP	0.277	18.133	18M1D7W	29	
				QPSK	25.84	EIRP	0.384	37.347	37M3G7D	29	
	40	1710 5	4777 5	16QAM	23.92	EIRP	0.247	37.538	37M5D7W	29	
66C	40	1712.5	1777.5	64QAM	24.27	EIRP	0.267	37.353	37M4D7W	29	
				256QAM	25.20	EIRP	0.331	37.114	37M1D7W	29	
										I	

Type of Emission & Max ERP/EIRP Power Measurement Result: 1 /

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1.5 Test Methodology of Applied Standards

FCC 47 CFR Part 2, 22H, 24E, 27C, Part96.

ANSI C63.26-2015

KDB971168 D01 Power Meas license Digital System v03r01

1.6 Test Facility

SGS Taiwan Ltd. Central RF Lab (TAF code 3702) No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333

FCC Designation number: TW0028

1.7 Special Accessories

No special accessories were used during testing.

1.8 Equipment Modifications

There was no modifications incorporated into the EUT.

1.9 Radiated Emission Test Sites for Measurements from 9 kHz to 30 MHz

Radiated emission below 30MHz is measured in a 9m*9m*6m semi-anechoic chamber, the measurements correspond to those obtained at an open-field test site. There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

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2 SYSTEM TEST CONFIGURATION

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

The EUT (Transmitter) was operated in the continuous transmission mode employed with the simulator of the Base Station that fixates at test default channels to fix the Tx frequency which was for the purpose of the measurements.

2.3 Test Procedure

2.3.1 Conducted Measurement at Antenna Port

The EUT is placed on a table which is 0.8 m above ground plane. A low loss of RF cable was used to connect the antenna port of EUT to measurement equipment.

2.3.2 Radiated Emissions (ERP/EIRP)

The EUT is placed on a turn table, for emission measurements below 1 GHz is 0.8 m above ground plane, for emission measurements above 1 GHz, the table height shall be 1.5 m. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both Horizontal and Vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna according to the requirements in Section 8 and 13.

2.4 Measurement Results Explanation Example For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuation factor between EUT conducted port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly EUT RF output level. **Note:**

The spectrum analyzer offset is derived from RF cable loss and attenuator factor. Following shows an offset computation in physical test.

	RF cable loss (dB)	Attenuation factor(dB)	offset(dB)
Low Band (Below 1GHz)	3.6	10	13.6
High Band (Above 1 GHz)	3.8	10	13.8

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2.5 Final Amplifier Voltage and Current Information:

Test Mode	DC voltage (V)	DC current (mA)
LTE Band 5B		490
LTE Band 7C		490
LTE Band 41C	3.3	480
LTE Band48C	3.3	490
LTE Band66B		490
LTE Band66C		480

2.6 Configuration of Tested System

Fig. 2-1 Configuration of Tested System (Fixed Channel-Conducted)

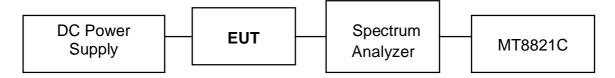
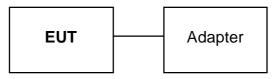


Fig. 2-2 Configuration of Tested System (Fixed Channel-Radiated)



Remote Side



Table 2-1 Equipment Used in

ltem	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1.	Radio Communication Analyzer	Anritsu	MT8821C	6261786084	shielded	Un-shielded

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SUMMARY OF TEST RESULTS 3

FCC Rules	Description Of Test	Result
§2.1046(a)	RF Power Output	Compliant
§22.913(a)(5) §24.232(c) §27.50(c)(10) §27.50(h)(2) §27.50(d)(4) §27.50(b)(10) §96.41(b)	ERP/ EIRP measurement	Compliant
§2.1049(h)	99% & 26dB Occuupied Bandwidth	Compliant
§2.1051 §22.917(a) §24.238(a) §27.53(g) §27.53(c)(2)(4) §27.53(h) §27.53(m)(4)(6) §96.41(e)	Out of Band Emissions at Antenna Terminals and Band Edge / Emission mask requirements	Compliant
§2.1053 §22.917(a) §24.238(a) §27.53(c)(2)(4) §27.53(f) §27.53(h) §96.41(e)	Field Strength of Spurious Radiation	Compliant
§24.232(d) §27.50((B) §96.41(g)	Peak to Average Ratio	Compliant
§2.1055(a)(1) §22.355 §24.235 §27.54	Frequency Stability	Compliant

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4 DESCRIPTION OF TEST MODES

4.1 The Test Channel Details

This device is 5G M.2 Module that support with carrier aggregation (two carrier) uplink Intra-Band contiguous and Inter-Band non-contiguous specification as below:

E-UTRA Intra-Band CA configuration / Bandwidth combination set									
		Component carriers	in order of increasing requency	Maximum	Bandwidth				
E-UTRA CA configuration	Uplink CA configurations	Channel bandwidth for carrier [MHz]	ion / Bandwidth combination setorder of increasing quencyMaximum aggregated bandwidth [MHz]Channel bandwidth for carrier [MHz]Maximum 	combination set					
CA_5B	CA_5B	<u>5,10</u> 10		20	0				
		15 20		40	0				
CA_7C	CA_7C	10 15 20	20 15,20	40	1				
		15 20		40	2				
	CA_41C	10 15 20	15,20	40	0				
CA_41C		5,10 15 20	15,20	40	1				
		10 15 20	15,20 10,15,20	40	2				
		10 20	20	40	3				
CA_48C	CA_48C	5,10,15,20 20		40	0				
CA_66B	CA_66B	5 10 15	5,10,15 5,10	20	0				
CA_66C	CA_66C	5 10 15 20	20 15,20 10,15,20 5,10,15,20	40	0				

Intra-Band Test Mode	Band	Description
1	5B	CA_PCC Ant0 Band 5_ SCC Ant 0 Band 5
2	7C	CA_PCC Ant0 Band 7_ SCC Ant 0 Band 7
3	41C	CA_PCC Ant0 Band 41_ SCC Ant 0 Band 41
4	48C	CA_PCC Ant0 Band 48_ SCC Ant 0 Band 48
5	66B	CA_PCC Ant0 Band 66_ SCC Ant 0 Band 66
6	66C	CA_PCC Ant0 Band 66_ SCC Ant 0 Band 66

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E-U	TRA Inter	-Band	CA co	nfigura	ition / I	Bandw	idth co	mbination se	et
Uplink CA								Maximum	Bandwidth
configurations	E-UTRA	1.4	3	5	10	15	20	aggregated	combination
(NOTE 4)	Bands	MHz	MHz	MHz	MHz	MHz	MHz	bandwidth	set
								[MHz]	301
	2			Yes	Yes	Yes	Yes	30	0
CA_2A-5A	5			Yes	Yes				•
0/(_2/(0/(2			Yes	Yes			20	1
	5			Yes	Yes			20	•
	2			Yes	Yes	Yes	Yes	30	0
	12			Yes	Yes				<u> </u>
CA_2A_12A	2			Yes	Yes	Yes	Yes	30	1
0/(_2/(_12/(12		Yes	Yes	Yes				•
	2			Yes	Yes			20	2
	12			Yes	Yes			20	_
	2		ļ	Yes	Yes	Yes	Yes	30	0
CA_2A-13A	13				Yes				
	2			Yes	Yes			20	1
	13				Yes			20	•
	4			Yes	Yes			20	0
CA 4A-5A	5			Yes	Yes			20	ç
	4			Yes	Yes	Yes	Yes	30	1
	5			Yes	Yes				
	4	Yes	Yes	Yes	Yes			20	0
	12			Yes	Yes				
	4	Yes	Yes	Yes	Yes	Yes	Yes	30	1
	12			Yes	Yes				
	4			Yes	Yes	Yes	Yes		2
CA_4A-12A	12		Yes	Yes	Yes				
	4			Yes	Yes			20	3
	12			Yes	Yes			20	5
	4			Yes	Yes	Yes	Yes	30	4
	12			Yes	Yes				
	4			Yes	Yes	Yes		20	5
	12			Yes				20	
	4			Yes	Yes	Yes	Yes	30	0
CA_4A-13A	13				Yes				
	4			Yes	Yes			20	1
	13				Yes			20	,
	5	Yes	Yes	Yes	Yes			30	0
CA_5A-7A	7				Yes	Yes	Yes		
	5			Yes	Yes			30	1
	7				Yes	Yes	Yes		-
CA_5A-66A	5			Yes	Yes			30	0
	66			Yes	Yes	Yes	Yes		.
	12			Yes	Yes			20	0
	66	Yes	Yes	Yes	Yes			20	U U
CA_12A-66A	12			Yes	Yes			30	1
<u> </u>	66	Yes	Yes	Yes	Yes	Yes	Yes		•
	12		Yes	Yes	Yes	N/	N/	30	2
	66			Yes	Yes	Yes	Yes		_

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12	Yes	Yes			20	3	
66	Yes	Yes			20	3	
12	Yes	Yes			30	Λ	
66	Yes	Yes	Yes	Yes	30	4	
12	Yes				20	Б	
66	Yes	Yes	Yes		20	5	

Inter-Band Test Mode	PCC & SCC Bands
1	CA_PCC Ant0 Band 2_ SCC Ant 0 Band 5
2	CA_PCC Ant0 Band 2_ SCC Ant 0 Band 12
3	CA_PCC Ant0 Band 2_ SCC Ant 0 Band 13
4	CA_PCC Ant0 Band 4_ SCC Ant 0 Band 5
5	CA_PCC Ant0 Band 4_ SCC Ant 0 Band 12
6	CA_PCC Ant0 Band 4_ SCC Ant 0 Band 13
7	CA_PCC Ant0 Band 5_ SCC Ant 0 Band 7
8	CA_PCC Ant0 Band 5_ SCC Ant 0 Band 66
9	CA_PCC Ant0 Band 12_ SCC Ant 0 Band 66

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4.2 The Worst-CaseTest Modes and Details

- 1. This EUT is UE LTE 4G 1Tx/2Rx device for single carrier with ANT0 that can support uplink Band 2/4/5/7/12/13/41/48/66 and Intra-Band carrier aggregation (CA) uplink. For operation of uplink CA mode, the transmitter enabled by 2Tx/2Rx mode with ANT0.
- The worst-case scenario for all measurements is based on the average conducted output power measurement investigation results. Output power measurements were measured on QPSK, 16QAM, 64QAM and 256QAM modulations. It was found that QPSK results the heighest, hence all testing was performed using QPSK modulations to represent the worst case.
- 3. For Band Edge and Emission Mask: The widest and narrowest BW combinations were tested. Combinations of same BW is considered equivalent. The RB combinations were selected as the signal activated closest to the band limit for determining the worst case senario.
- 4. For Out of Band Emissions: The widest and narrowest combinations was tested. The RB combination generates the highest power was determined as the worst case senario.
- For occupied bandwidth, frequency stability and conducted unwanted emission measurements, due to each single LTE Band standalone transmission gernerates higher power than the *Inter-band* transmissions, the test results are only demonstrated for each single LTE band standalone transmission in test report E2/2019/A0029 as the worst case senarios.

In addition, the radiated unwanted emissions of *inter-band* has been evaluated as no noticeable emissions, therefore, the conducted unwanted emissions was not tested.

 For peak to average ratial measurements, due to each single LTE Band standalone transmission gernerates higher power than the *Inter-band* transmissions, the test results are only demonstrated for each single LTE band standalone transmission in test report E2/2019/A0029 as the worst case senarios.

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4.2.1 Intra-Band

For uplink Intra-Band CA, evaluation has been done for contiguous and non-contiguous channel and bandwith, configurations that generates highest output power in standalone transmission have been selected for the final test.

Intra-band					PCC		SCC		
Test Mode	Band	Test Item	Modulation	Band width	Channel	RB Mode	Band width	Channel	RB Mode
	EIRP		5 MHz	20428	Full	10MHz	20500	Full	
1	5B	& Radiated	QPSK	5 MHz	20478	Full	10MHz	20550	Full
		Emission		5 MHz	20528	Full	10MHz	20600	Full
		EIRP		20 MHz	20850	Full	20 MHz	21048	Full
2	7C	& Radiated	QPSK	20 MHz	21001	Full	20 MHz	21199	Full
		Emission		20 MHz	21152	Full	20 MHz	21350	Full
		EIRP		5 MHz	39683	Full	20 MHz	39800	Full
3	3 41C & & Radiated	QPSK	5 MHz	40528	Full	20 MHz	40645	Full	
		Emission		5 MHz	41373	Full	20 MHz	41490	Full
		EIRP		5 MHz	55273	Full	20 MHz	55390	Full
4	48C	& Radiated	QPSK	5 MHz	55898	Full	20 MHz	56015	Full
		Emission		5 MHz	56523	Full	20 MHz	56640	Full
		EIRP		15 MHz	132047	Full	5 MHz	132140	Full
5	66B	& Radiated	QPSK	15 MHz	132398	Full	5 MHz	132491	Full
		Emission		15 MHz	132549	Full	5 MHz	132642	Full
		EIRP		20 MHz	132072	Full	5 MHz	132189	Full
6	66C	& Radiated	QPSK	20 MHz	132397	Full	5 MHz	132514	Full
		Emission		20 MHz	132522	Full	5 MHz	132639	Full

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4.2.2 Inter-Band

For uplink Inter-Band CA configurations, following configurations have been selected for the final test.

Inter-band				PCC			SCC	
Test Mode	Test Item	Modulation	Band width	Channel	RB Mode	Band width	Channel	RB Mode
	EIRP		5 MHz	18625	1 RB/0 RB	5 MHz	20425	1 RB/0 RB
1	& Radiated	QPSK	5 MHz	18900	1 RB/0 RB	5 MHz	20525	1 RB/0 RB
	Emission		5 MHz	19175	1 RB/0 RB	5 MHz	20625	1 RB/0 RB
	EIRP		20 MHz	18700	1 RB/0 RB	5 MHz	23035	1 RB/0 RB
2	& Radiated	QPSK	20 MHz	18900	1 RB/0 RB	5 MHz	23095	1 RB/0 RB
	Emission		20 MHz	19100	1 RB/0 RB	5 MHz	23155	1 RB/0 RB
	EIRP		20 MHz	18700	1 RB/0 RB	10 MHz	23230	1 RB/0 RB
3	& Radiated	QPSK	20 MHz	18900	1 RB/0 RB	10 MHz	23230	1 RB / 0 RB
	Emission		20 MHz	19100	1 RB/0 RB	10 MHz	23230	1 RB/0 RB
	EIRP		20 MHz	20050	1 RB/0 RB	5 MHz	20425	1 RB/0 RB
4	& Radiated	QPSK	20 MHz	20175	1 RB/0 RB	5 MHz	20525	1 RB/0 RB
	Emission		20 MHz	20300	1 RB/0 RB	5 MHz	20625	1 RB/0 RB
	EIRP		20 MHz	20050	1 RB/0 RB	10 MHz	23060	1 RB/0 RB
5	& Radiated	QPSK	20 MHz	20175	1 RB/0 RB	10 MHz	23095	1 RB/0 RB
	Emission		20 MHz	20300	1 RB/0 RB	10 MHz	23130	1 RB/0 RB
	EIRP		20 MHz	20050	1 RB/0 RB	10 MHz	23230	1 RB/0 RB
6	& Radiated	QPSK	20 MHz	20175	1 RB/0 RB	10 MHz	23230	1 RB/0 RB
	Emission		20 MHz	20300	1 RB/0 RB	10 MHz	23230	1 RB/0 RB
	EIRP		10 MHz	20450	1 RB/0 RB	20 MHz	20850	1 RB/0 RB
7	& Radiated	QPSK	10 MHz	20525	1 RB/0 RB	20 MHz	21100	1 RB / 0 RB
	Emission		10 MHz	20600	1 RB/0 RB	20 MHz	21350	1 RB/0 RB
	EIRP		10 MHz	20450	1 RB/0 RB	5 MHz	131997	1 RB/0 RB
8	& Radiated	QPSK	10 MHz	20525	1 RB/0 RB	5 MHz	132322	1 RB/0 RB
	Emission		10 MHz	20600	1 RB/0 RB	5 MHz	132647	1 RB / 0 RB
	EIRP		5 MHz	23035	1 RB/0 RB	20 MHz	132072	1 RB / 0 RB
9	& Radiated	QPSK	5 MHz	23095	1 RB/0 RB	20 MHz	132322	1 RB / 0 RB
	Emission		5 MHz	23155	1 RB/0 RB	20 MHz	132572	1 RB/0 RB

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5 MEASUREMENT UNCERTAINTY

Test Items	Uncertainty
RF Power Output	+/- 1.10 dB
ERP/ EIRP measurement	Vertical Polarization = +/- 4.74dB Horizontal Polarization =+/- 4.62dB
Temperature	+/- 0.65 °C
Humidity	+/- 4.6 %
DC / AC Power Source	DC= +/- 0.13%, AC=+/- 0.2%

Radiated Spurious Emission:

	9kHz – 30MHz: +/- 2.87 dB			
	30MHz - 180MHz: +/- 3.37dB			
Measurement uncertainty (Polarization : Vertical)	180MHz -417MHz: +/- 3.19dB			
	0.417GHz-1GHz: +/- 3.19dB			
	1GHz - 18GHz: +/- 4.04dB			
	18GHz - 40GHz: +/- 4.04dB			

	9kHz – 30MHz: +/- 2.87 dB			
	30MHz - 167MHz: +/- 4.22dB			
Measurement uncertainty (Polarization : Horizontal)	167MHz -500MHz: +/- 3.44dB			
	0.5GHz-1GHz: +/- 3.39dB			
	1GHz - 18GHz: +/- 4.08dB			
	18GHz - 40GHz: +/- 4.08dB			

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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MAXMUM OUTPUT POWER

6.1 **Standard Applicable**

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. The measured power in the radio frequency on the transmitter output terminals.

ERP/EIRP LIMIT 6.1.1

According to FCC §2.1046

FCC 22.913(a)

(5) mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

FCC 24.232(c)

Mobile and portable stations are limited to 2 W EIRP.

FCC 27.50 (a)

(3) for mobile and portable stations compliant with 3GPP LTE standards transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band are limited to 250 mW/ 5MHz EIRP but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth.

FCC 27.50 (b)

(9) Control stations and mobile stations transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 30 watts ERP.

(10) Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

FCC 27.50(c)

(9) Control and mobile stations in the 698-746 MHz band are limited to 30 watts ERP.

(10) Portable stations (hand-held devices) are limited to 3 watts ERP.

FCC 27.50(d)

(4) Mobile, and portable (hand-held) stations operating in the 1710-1755 MHz, 1695-1710 MHz and 1755-1780 MHz bands are limited to 1W EIRP.

(7) Mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band are limited to 2 watts EIRP.

FCC 27, 50(h)

(2) Mobile and other user stations transmitting in the BRS and EBS bands are limited to 2 W EIRP.

FCC 96.41(a)

Digital modulation. Systems operating in the Citizens Broadband Radio Service must use digital modulation techniques.

FCC 96.41(b)

Power limits. Unless otherwise specified in this section, the maximum effective iso tropic radiated power (EIRP) of any CBSD and End User Device must comply with the limits shown in the table in this paragraph (b):

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

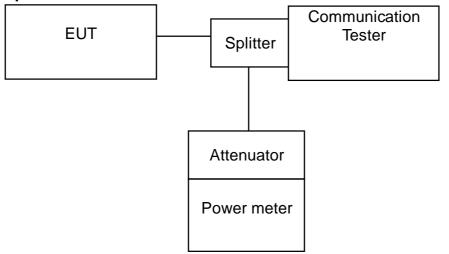
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Device	Maximum EIRP (dBm/10 megahertz)
End User Device	23
Category A CBSD	30
Category B CBSD ¹	47

Category B CBSDs will only be authorized for use after an ESC is approved and commercially deployed consistent with §§96.15 and 96.67.

6.2 **Test Set-up**



Note: Measurement setup for testing on Antenna connector

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

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6.3 **Output Power Measurement Applicable Guideance**

The transmitter output was connected to a calibrated attenuator, the other end of which was connected to a power meter. Transmitter output was read off the power meter in dBm. The power output at the transmitter antenna port was determined by adding the value of the attenuator to the power meter reading. TS 151 010-1 is reference to conduct the test measurement of output power.

The Procedure of KDB941225 (SAR Measurement Procedures for 3G devices, (WCD-MA/HSPA) was used for EUT and Base station setting. RMC 12.2kps is used for this testing, and KDB 971168 D01 Power Meas License Digital System as the supplemental test methodology to adjust the proper setting obtaining the measurement results.

All LTE bands conducted average power is obtained from the simulator telecommunication test set.

Determining ERP and/or EIRP from conducted RF output power measurements 6.4 ERP/EIRP = PMeas + GT-LC

Where:

ERP/EIRP	= effective or equivalent radiated power, respectively (expressed in the
	same units as PMeas, typically dBW or dBm);
PMeas	measured transmitter output power or PSD, in dBm or dBW;
GT	= gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)
LC	= signal attenuation in the connecting cable between the transmitter and
	antenna, in dB.2

For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.

	EQUIPMENT TYPE	MFR	MODEL NUM- BER	SERIAL NUMBER	LAST CAL.	CAL DUE.					
ſ	Spectrum Analyzer	KEYSIGHT	N9010A	MY51440113	07/15/2019	07/14/2020					
	Radio Communication Analyer	Anritsu	MT8821C	6261786084	01/18/2020	01/17/2021					
	Attenuator	Marvelous	MVE2213-10	RF30	11/20/2019	11/19/2020					
	DC Block	PASTERNACK	PE8210	RF32	11/20/2019	11/19/2020					
	Splitter	Woken	DOM35LW1A2	RF83	11/20/2019	11/19/2020					
	Coaxial Cables	Woken	00100A1F1A185C	RF229	11/20/2019	11/19/2020					

6.5 Measurement Equipment Used

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

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6.6 LTE Measurement Results: Antenna gain

	enna gain	2.9	First E	Band			I			Second Ba	Ind				Powe	er(dBm)		EIRP	Margin
	Range	Modulation	Band width	-	Frequency	RB	1	Range	Modulation	Band width		Frequency	RB	PCC	SCC	Total	EIRP	Limit	(dBm)
	Low	QPSK	5 MHz	20428	826.8	Full		Low	QPSK	10 MHz	20500	834	Full	22.49	15.48	23.24	26.14	38.45	-12.31
		QPSK	5 MHz	20478	831.8	1			QPSK	10 MHz	20550	839	1	13.82	6.71	14.59	17.49	38.45	-20.96
		QPSK	5 MHz	20478	831.8	Full			QPSK	10 MHz	20550	839	Full	22.31	15.33	23.06	25.96	38.45	-12.49
		16QAM	5 MHz	20478	831.8	1			16QAM	10 MHz	20550	839	1	11.97	11.44	14.72	17.62	38.45	-20.83
		16QAM	5 MHz	20478	831.8	Full			16QAM	10 MHz	20550	839	Full	21.31	14.54	22.1	25.00	38.45	-13.45
		64QAM	5 MHz	20478	831.8	1			64QAM	10 MHz	20550	839	1	13.84	7.58	14.76	17.66	38.45	-20.79
		64QAM	5 MHz	20478	831.8	Full			64QAM	10 MHz	20550	839	Full	21.38	14.54	22.16	25.06	38.45	-13.39
		256QAM	5 MHz	20478	831.8	1			256QAM	10 MHz	20550	839	1	13.65	6.49	14.12	17.02	38.45	-21.43
		256QAM	5 MHz	20478	831.8	Full			256QAM	10 MHz	20550	839	Full	18.21	11.54	19.04	21.94	38.45	-16.51
		QPSK	10 MHz	20500	834	1			QPSK	5 MHz	20572	841.2	1	12.04	4.72	12.59	15.49	38.45	-22.96
		QPSK	10 MHz	20500	834	Full			QPSK	5 MHz	20572	841.2	Full	22.28	15.05	23.01	25.91	38.45	-12.54
5B		16QAM	10 MHz	20500	834	1			16QAM	5 MHz	20572	841.2	1	12.57	4.58	12.99	15.89	38.45	-22.56
ЭВ	Mid	16QAM	10 MHz	20500	834	Full	+	Mid	16QAM	5 MHz	20572	841.2	Full	21.18	13.97	21.93	24.83	38.45	-13.62
	IVIIG	64QAM	10 MHz	20500	834	1		IVIIG	64QAM	5 MHz	20572	841.2	1	12.44	4.53	12.91	15.81	38.45	-22.64
		256QAM	10 MHz	20500	834	Full			64QAM	5 MHz	20572	841.2	Full	21.17	14.04	21.93	24.83	38.45	-13.62
		256QAM	10 MHz	20500	834	1			256QAM	5 MHz	20572	841.2	1	11.38	4.07	12.12	15.02	38.45	-23.43
		256QAM	10 MHz	20500	834	Full			256QAM	5 MHz	20572	841.2	Full	18.24	11.12	19.01	21.91	38.45	-16.54
		QPSK	10 MHz	20476	831.6	1			QPSK	10 MHz	20575	841.5	1	11.88	4.59	12.63	15.53	38.45	-22.92
		QPSK	10 MHz	20476	831.6	Full			QPSK	10 MHz	20575	841.5	Full	22.25	15.11	23.02	25.92	38.45	-12.53
		16QAM	10 MHz	20476	831.6	1			16QAM	10 MHz	20575	841.5	1	11.02	8.37	12.9	15.80	38.45	-22.65
		16QAM	10 MHz	20476	831.6	Full			16QAM	10 MHz	20575	841.5	Full		18.1	22.92	25.82	38.45	-12.63
		64QAM	10 MHz	20476	831.6	1			64QAM	10 MHz	20575	841.5	1	12.23	4.73	12.94	15.84	38.45	-22.61
		64QAM	10 MHz	20476	831.6	Full			64QAM	10 MHz	20575	841.5	Full	21.41	14.2	22.17	25.07	38.45	-13.38
		256QAM	10 MHz	20476	831.6	1			256QAM	10 MHz	20575	841.5	1	11.47	4.1	12.09	14.99	38.45	-23.46
		256QAM	10 MHz	20476	831.6	Full			256QAM	10 MHz	20575	841.5	Full	17.25	10.45	18.04	20.94	38.45	-17.51
	High	QPSK	5 MHz	20528	836.8	Full		High	QPSK	10 MHz	20600	844	Full	19.9	19.73	22.79	25.69	38.45	-12.76
Ante	nna gain	3.4	Elect D							0				T	David				Manada
	Danna	Madulation	First B		Fra much av			Damma	Madulation	Second Ba	1	Francisco au	RB	PCC	SCC	er(dBm) Total	EIRP	EIRP Limit	Margin (dBm)
	Range Low	Modulation QPSK	20 MHz	20850	Frequency 2510	RB Full		Range Low	Modulation QPSK	20 MHz	21048	Frequency 2529.8	Full				23.21	33	-9.79
	LOW	QPSK	10 MHz	21006	2525.6	1		LOW	QPSK	20 MHz	21150	2523.0	1	16.33	9.89	17.06	20.46	33	-12.54
		QPSK	10 MHz	21006	2525.6	Full	1		QPSK	20 MHz	21150	2540	Full	20.05		20.73	24.13	33	-8.87
		16QAM	10 MHz	21006	2525.6	1			16QAM	20 MHz	21150	2540		17.12		17.56	20.96	33	-12.04
		16QAM	10 MHz	21006	2525.6	Full			16QAM	20 MHz	21150	2540	Full	18.01			22.95	33	-10.05
		64QAM	10 MHz	21006	2525.6	1			64QAM	20 MHz	21150	2540	_1	15.34		16.08	19.48	33	-13.52
	ŀ	64QAM 256QAM	10 MHz 10 MHz	21006 21006	2525.6 2525.6	Full 1			64QAM 256QAM	20 MHz 20 MHz	21150 21150	2540 2540	Full 1	18.13	11.43		22.17 21.67	33 33	-10.83 -11.33
		256QAM	10 MHz	21006	2525.6	Full			256QAM	20 MHz	21150	2540		19.33			23.62	33	-9.38
	l i													15.33			19.07	33	-13.93
		UP3N	20 MHz	21051	2530.1	1			QPSK			2544.5	1						
		QPSK QPSK	20 MHz 20 MHz	21051 21051	2530.1 2530.1	1 Full			QPSK QPSK	10 MHz 10 MHz	21195 21195	2544.5 2544.5		19.16			23.32	33	-9.68
70		QPSK 16QAM	20 MHz 20 MHz	21051 21051	2530.1 2530.1	Full 1			QPSK 16QAM	10 MHz 10 MHz 10 MHz	21195 21195 21195	2544.5 2544.5	Full 1	19.16 15.26	12.25 7.88	19.92 15.68	19.08	33	-13.92
7C	Mid	QPSK 16QAM 16QAM	20 MHz 20 MHz 20 MHz	21051 21051 21051	2530.1 2530.1 2530.1	Full 1 Full	+	Mid	QPSK 16QAM 16QAM	<u>10 MHz</u> 10 MHz 10 MHz 10 MHz	21195 21195 21195 21195 21195	2544.5 2544.5 2544.5	Full	19.16 15.26 17.23	12.25 7.88 14.54	19.92 15.68 19.33	19.08 22.73	33 33	-13.92 -10.27
7C	Mid	QPSK 16QAM 16QAM 64QAM	20 MHz 20 MHz 20 MHz 20 MHz	21051 21051 21051 21051	2530.1 2530.1 2530.1 2530.1	Full 1 Full 1	+	Mid	QPSK 16QAM 16QAM 64QAM	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz	21195 21195 21195 21195 21195 21195	2544.5 2544.5 2544.5 2544.5	Full 1 Full 1	19.16 15.26 17.23 15.28	12.25 7.88 14.54 7.37	19.92 15.68 19.33 15.32	19.08 22.73 18.72	33 33 33	-13.92 -10.27 -14.28
7C	Mid	QPSK 16QAM 16QAM 64QAM 64QAM	20 MHz 20 MHz 20 MHz 20 MHz 20 MHz	21051 21051 21051 21051 21051	2530.1 2530.1 2530.1 2530.1 2530.1 2530.1	Full 1 Full 1 Full	÷	Mid	QPSK 16QAM 16QAM 64QAM 64QAM	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz	21195 21195 21195 21195 21195 21195 21195	2544.5 2544.5 2544.5 2544.5 2544.5	Full Full T Full	19.16 15.26 17.23 15.28 18.28	12.25 7.88 14.54 7.37 11.32	19.92 15.68 19.33 15.32 19.18	19.08 22.73 18.72 22.58	33 33 33 33	-13.92 -10.27 -14.28 -10.42
7C	Mid	QPSK 16QAM 16QAM 64QAM 64QAM 256QAM	20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz	21051 21051 21051 21051 21051 21051	2530.1 2530.1 2530.1 2530.1 2530.1 2530.1 2530.1	Full 1 Full 1 Full 1	+	Mid	QP SK 16QAM 16QAM 64QAM 64QAM 256QAM	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz	21195 21195 21195 21195 21195 21195 21195 21195	2544.5 2544.5 2544.5 2544.5 2544.5 2544.5 2544.5	Full Full Full Full	19.16 15.26 17.23 15.28 18.28 17.74	12.25 7.88 14.54 7.37 11.32 9.66	19.92 15.68 19.33 15.32 19.18 17.83	19.08 22.73 18.72 22.58 21.23	33 33 33 33 33 33	-13.92 -10.27 -14.28 -10.42 -11.77
7C	Mid	QPSK 16QAM 16QAM 64QAM 64QAM	20 MHz 20 MHz 20 MHz 20 MHz 20 MHz	21051 21051 21051 21051 21051	2530.1 2530.1 2530.1 2530.1 2530.1 2530.1	Full 1 Full 1 Full	+	Mid	QPSK 16QAM 16QAM 64QAM 64QAM	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz	21195 21195 21195 21195 21195 21195 21195	2544.5 2544.5 2544.5 2544.5 2544.5	Full Full T Full	19.16 15.26 17.23 15.28 18.28 17.74	12.25 7.88 14.54 7.37 11.32 9.66 11.84	19.92 15.68 19.33 15.32 19.18 17.83	19.08 22.73 18.72 22.58	33 33 33 33	-13.92 -10.27 -14.28 -10.42
7C	Mid	QPSK 16QAM 16QAM 64QAM 256QAM 256QAM QPSK QPSK	20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz	21051 21051 21051 21051 21051 21051 21051 21001 21001	2530.1 2530.1 2530.1 2530.1 2530.1 2530.1 2530.1 2530.1 2525.1 2525.1	Full 1 Full 1 Full Full Full	+	Mid	QP SK 16QAM 64QAM 256QAM 256QAM QP SK QP SK	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 20 MHz	21195 21195 21195 21195 21195 21195 21195 21195 21195 21199 21199	2544.5 2544.5 2544.5 2544.5 2544.5 2544.5 2544.5 2544.5 2544.9 2544.9	Full Full Full Full Full	19.16 15.26 17.23 15.28 18.28 17.74 18.89 15.02 20.09	12.25 7.88 14.54 7.37 11.32 9.66 11.84 7.87 13.33	19.92 15.68 19.33 15.32 19.18 17.83 19.56 15.66 21.09	19.08 22.73 18.72 22.58 21.23 22.96 19.06 24.49	33 33 33 33 33 33 33 33 33 33	-13.92 -10.27 -14.28 -10.42 -11.77 -10.04 -13.94 -8.51
7C	Mid	QPSK 16QAM 64QAM 64QAM 256QAM 256QAM QPSK QPSK 16QAM	20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz	21051 21051 21051 21051 21051 21051 21051 21001 21001	2530.1 2530.1 2530.1 2530.1 2530.1 2530.1 2530.1 2525.1 2525.1 2525.1	Full 1 Full 1 Full 1 Full 1 1	+	Mid	QPSK 16QAM 64QAM 256QAM 256QAM QPSK QPSK 16QAM	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 20 MHz 20 MHz	21195 21195 21195 21195 21195 21195 21195 21195 21195 21199 21199 21199	2544.5 2544.5 2544.5 2544.5 2544.5 2544.5 2544.5 2544.5 2544.9 2544.9	Full 1 Full 1 Full 1 Full 1	19.16 15.26 17.23 15.28 18.28 17.74 18.89 15.02 20.09 15.68	12.25 7.88 14.54 7.37 11.32 9.66 11.84 7.87 13.33 8.02	19.92 15.68 19.33 15.32 19.18 17.83 19.56 15.66 21.09 16.21	19.08 22.73 18.72 22.58 21.23 22.96 19.06 24.49 19.61	33 33 33 33 33 33 33 33 33 33 33 33	-13.92 -10.27 -14.28 -10.42 -11.77 -10.04 -13.94 -8.51 -13.39
7C	Mid	QPSK 16QAM 16QAM 64QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM	20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz	21051 21051 21051 21051 21051 21051 21051 21001 21001 21001	2530.1 2530.1 2530.1 2530.1 2530.1 2530.1 2530.1 2525.1 2525.1 2525.1	Full 1 Full	+	Mid	QPSK 16QAM 64QAM 64QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz	21195 21195 21195 21195 21195 21195 21195 21195 21195 21199 21199 21199 21199	2544.5 2544.5 2544.5 2544.5 2544.5 2544.5 2544.5 2544.5 2544.9 2544.9 2544.9 2544.9	Full 1 Full 1 Full 1 Full 1 Full	19.16 15.26 17.23 15.28 18.28 17.74 18.89 15.02 20.09 15.68 19.34	12.25 7.88 14.54 7.37 11.32 9.66 11.84 7.87 13.33 8.02 12.19	19.92 15.68 19.33 15.32 19.18 17.83 19.56 15.66 21.09 16.21 20.37	19.08 22.73 18.72 22.58 21.23 22.96 19.06 24.49 19.61 23.77	33 33 33 33 33 33 33 33 33 33 33 33 33	-13.92 -10.27 -14.28 -10.42 -11.77 -10.04 -13.94 -8.51 -13.39 -9.23
7C	Mid	QPSK 16QAM 64QAM 64QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM 64QAM	20 MHz 20 MHz	21051 21051 21051 21051 21051 21051 21051 21001 21001 21001 21001 21001	2530.1 2530.1 2530.1 2530.1 2530.1 2530.1 2530.1 2525.1 2525.1 2525.1 2525.1 2525.1	Full 1 Full 1 Full 1 Full 1 Full 1 Full 1 1 1 1 1 1 1 1 1 1 1 1 1	+	Mid	QPSK 16QAM 64QAM 64QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM 64QAM	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz	21195 21195 21195 21195 21195 21195 21195 21195 21195 21199 21199 21199 21199 21199	2544.5 2544.5 2544.5 2544.5 2544.5 2544.5 2544.9 2544.9 2544.9 2544.9 2544.9 2544.9	Full 1 Full 1 Full 1 Full 1 Full 1	19.16 15.26 17.23 15.28 18.28 17.74 18.89 15.02 20.09 15.68 19.34 15.31	12.25 7.88 14.54 7.37 11.32 9.66 11.84 7.87 13.33 8.02 12.19 7.88	19.92 15.68 19.33 15.32 19.18 17.83 19.56 15.66 21.09 16.21 20.37 16.11	19.08 22.73 18.72 22.58 21.23 22.96 19.06 24.49 19.61 23.77 19.51	33 33	-13.92 -10.27 -14.28 -10.42 -11.77 -10.04 -13.94 -8.51 -13.39 -9.23 -13.49
7C	Mid	QPSK 16QAM 64QAM 64QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM 64QAM 64QAM	20 MHz 20 MHz	21051 21051 21051 21051 21051 21051 21051 21001 21001 21001 21001 21001	2530.1 2530.1 2530.1 2530.1 2530.1 2530.1 2520.1 2525.1 2525.1 2525.1 2525.1 2525.1 2525.1	Full 1 Full	+	Mid	QPSK 16QAM 16QAM 64QAM 256QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM 64QAM 64QAM	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz	21195 21195 21195 21195 21195 21195 21195 21195 21199 21199 21199 21199 21199 21199	2544.5 2544.5 2544.5 2544.5 2544.5 2544.5 2544.9 2544.9 2544.9 2544.9 2544.9 2544.9	Full 1 Full 1 Full 1 Full 1 Full 1	19.16 15.26 17.23 15.28 18.28 17.74 18.89 15.02 20.09 15.68 19.34 15.31 18.65	12.25 7.88 14.54 7.37 11.32 9.66 11.84 7.87 13.33 8.02 12.19 7.88 16.22	19.92 15.68 19.33 15.32 19.18 17.83 19.56 15.66 21.09 16.21 20.37 16.11 19.28	19.08 22.73 18.72 22.58 21.23 22.96 19.06 24.49 19.61 23.77 19.51 22.68	33 33	-13.92 -10.27 -14.28 -10.42 -11.77 -10.04 -13.94 -8.51 -13.39 -9.23 -13.49 -10.32
7C	Mid	QPSK 16QAM 64QAM 64QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM 64QAM	20 MHz 20 MHz	21051 21051 21051 21051 21051 21051 21051 21001 21001 21001 21001 21001	2530.1 2530.1 2530.1 2530.1 2530.1 2530.1 2530.1 2525.1 2525.1 2525.1 2525.1 2525.1	Full 1 Full Ful	+	Mid	QPSK 16QAM 64QAM 64QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM 64QAM	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz	21195 21195 21195 21195 21195 21195 21195 21195 21195 21199 21199 21199 21199 21199	2544.5 2544.5 2544.5 2544.5 2544.5 2544.5 2544.9 2544.9 2544.9 2544.9 2544.9 2544.9	Full 1 Full 1 Full 1 Full 1 Full 1	19.16 15.26 17.23 15.28 18.28 17.74 18.89 15.02 20.09 15.68 19.34 15.31	12.25 7.88 14.54 7.37 11.32 9.66 11.84 7.87 13.33 8.02 12.19 7.88 16.22	19.92 15.68 19.33 15.32 19.18 17.83 19.56 21.09 16.21 20.37 16.11 19.28 18.07	19.08 22.73 18.72 22.58 21.23 22.96 19.06 24.49 19.61 23.77 19.51	33 33	-13.92 -10.27 -14.28 -10.42 -11.77 -10.04 -13.94 -8.51 -13.39 -9.23 -13.49

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

除非另有說明.此報告結果僅對測試之樣品負責.同時此樣品僅保留90天。本報告未經本公司書面許可.不可部份複製。

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	na gain	3.4	First B	and						Second Ba	and				Pow	er(dBm)		EIRP	Margir
	Range	Modulation	Band width		Frequency	RB		Range	Modulation	Band width	7	Frequency	RB	PCC	SCC	Total	EIRP	Limit	(dBm)
	Low	QPSK	5 MHz	39683	2499.3	Full		Low	QPSK	20 MHz	39800	2511	Full		17.82	23.09	26.49	33	-6.51
	2011	QPSK	5 MHz	40528	2583.8	1		2011	QPSK	20 MHz	40645	2595.5	1	19.67	12.63			33	-9.19
		QPSK	5 MHz	40528	2583.8	Full			QPSK	20 MHz	40645	2595.5	Full		17.27		26.23	33	-6.77
		16QAM	5 MHz	40528	2583.8	1			16QAM	20 MHz	40645	2595.5	1	20.11	12.54			33	-8.91
		16QAM	5 MHz	40528	2583.8	Full			16QAM	20 MHz	40645	2595.5	Full		16.34		25.49	33	-7.51
		64QAM	5 MHz	40528	2583.8	1			64QAM	20 MHz	40645	2595.5	1	19.72	12.05		23.81	33	-9.19
		64QAM	5 MHz	40528	2583.8	Full			64QAM	20 MHz	40645	2595.5	Full		15.35			33	-8.51
		256QAM	5 MHz	40528	2583.8	1			256QAM	20 MHz	40645	2595.5	1	19.92	12.42		23.83	33	-9.17
		256QAM	5 MHz	40528	2583.8	Full			256QAM	20 MHz	40645	2595.5	Full		15.27			33	-8.44
		QPSK	20 MHz	40595	2590.5	1			QPSK	5 MHz	40712	2602.2	1	14.47	6.59		17.9	33	-15.1
		QPSK	20 MHz	40595	2590.5	Full			QPSK	5 MHz	40712	2602.2	Full		15.21		26.06	33	-6.94
		16QAM	20 MHz	40595	2590.5	1			16QAM	5 MHz	40712	2602.2	1	15.04	6.98			33	-14.52
1C		16QAM	20 MHz	40595	2590.5	Full	+		16QAM	5 MHz	40712	2602.2	Full		14.34		25.31	33	-7.69
	Mid	64QAM	20 MHz	40595	2590.5		-	Mid	64QAM	5 MHz	40712	2602.2	1	14.88	6.04	14.79	18.19	33	-14.81
		64QAM	20 MHz	40595	2590.5	Full			64QAM	5 MHz	40712	2602.2	Full		13.23		24.22	33	-8.78
		256QAM	20 MHz	40595	2590.5	1			256QAM	5 MHz	40712	2602.2	1	17.58	9.33	17.85	24.22	33	-11.75
		256QAM	20 MHz	40595	2590.5	Full			256QAM	5 MHz	40712	2602.2	Full		13.17		24.28	33	-8.72
		QPSK	20 MHz	40535	2583.1	1	-		QPSK	20 MHz	40712	2602.2	1	13.84	6.66			33	-14.84
		QPSK QPSK	20 MHz	40521	2583.1		-		QPSK QPSK	20 MHz	40719	2602.9	Full	21.88	15.16		25.91	33	-14.84
						Full	-												
		16QAM	20 MHz	40521	2583.1	1	-		16QAM	20 MHz	40719	2602.9	1	14.49	6.98	15.21	18.61	33	-14.39
		16QAM	20 MHz	40521	2583.1	Full			16QAM	20 MHz	40719	2602.9	Full 1		14.27		25.18	33	-7.82
		64QAM	20 MHz	40521	2583.1	1			64QAM	20 MHz	40719	2602.9		14.21	6.89	15.15	18.55	33	-14.45
	-	64QAM	20 MHz	40521	2583.1	Full	1		64QAM	20 MHz	40719	2602.9	Full		13.19			33	-8.78
	ļ	256QAM	20 MHz	40521	2583.1	1	4	1	256QAM	20 MHz	40719	2602.9	1	19.62	11.67		23.61	33	-9.39
		256QAM	20 MHz	40521	2583.1	Full	1	·	256QAM	20 MHz	40719	2602.9	Full		13.18		24.4	33	-8.6
	High	QPSK	5 MHz	41373	2668.3	Full		High	QPSK	20 MHz	41490	2680	Full	21.09	16.14	21.88	25.28	33	-7.72
ntei	nna gain	-2																	
			First B	and						Second Ba	and				Powe	er(dBm)		EIRP	Margi
	Range	Modulation	Band width	Channel	Frequency	RB	1	Range	Modulation	Band width	1	Frequency	RB	PCC	SCC	Total	EIRP	Limit	(dBm
	Low	QPSK	5 MHz	55273	3553.3	Full	1	Low	QPSK	20 MHz	55390	3565	Full		14.49		17.96	23	-5.04
	LU 11	QPSK	5 MHz	55898	3615.8	1	1		QPSK	20 MHz	56015	3627.5	1	17.57	10.61	18.37	16.37	23	-6.63
		QPSK	5 MHz	55898	3615.8	Full			QPSK	20 MHz	56015	3627.5	Full	20.41	10.61	21.18	19.18	23	-3.82
		16QAM	5 MHz	55898	3615.8	1			16QAM	20 MHz	56015	3627.5	1	18.1	10.68			23	-6.18
		16QAM	5 MHz	55898	3615.8	Full			16QAM	20 MHz	56015	3627.5	Full		14.27	20.03	18.03	23	-4.97
													1						
		64QAM	5 MHz	55898	3615.8	1			64QAM	20 MHz	56015	3627.5	<u> </u>	17.9	10.28			23	-6.40
		64QAM	5 MHz	55898	3615.8	Full			64QAM	20 MHz	56015	3627.5	Full		14.25			23	-5.10
		256QAM	5 MHz	55898	3615.8	1			256QAM	20 MHz	56015	3627.5	1	20.45	12.97	21.14	19.14	23	-3.86
		256QAM	5 MHz	55898	3615.8	Full	-		256QAM	20 MHz	56015	3627.5	Full		15.07	20.80		23	-4.20
		QPSK	20 MHz	55965	3622.5	1			QPSK	5 MHz	56082	3634.2	1	14.53	6.57	14.53	12.53	23	-10.47
		QPSK	20 MHz	55965	3622.5	Full			QPSK	5 MHz	56082	3634.2	Full		11.24	19.01	17.01	23	-5.99
18C		16QAM	20 MHz	55965	3622.5	1	+		16QAM	5 MHz	56082	3634.2	1	15.14	6.8	15.14		23	-9.86
	Mid	16QAM	20 MHz	55965	3622.5	Full	•	Mid	16QAM	5 MHz	56082	3634.2	Full	18.33	11.14	19.00	17.00	23	-6.00
		64QAM	20 MHz	55965	3622.5	1			64QAM	5 MHz	56082	3634.2	1	14.58	8.19	14.58		23	-10.42
		64QAM	20 MHz	55965	3622.5	Full			64QAM	5 MHz	56082	3634.2	Full		11.23	18.96	16.96	23	-6.04
		256QAM	20 MHz	55965	3622.5	1			256QAM	5 MHz	56082	3634.2	1	17.5	9.37	17.42	15.42	23	-7.58
		256QAM	20 MHz	55965	3622.5	Full			256QAM	5 MHz	56082	3634.2	Full	20.2	13.02	20.86	18.86	23	-4.14
		QPSK	20 MHz	55891	3615.1	1			QPSK	20 MHz	56089	3634.9	1	14.07	6.93	14.83	12.83	23	-10.17
		QPSK	20 MHz	55891	3615.1	Full			QPSK	20 MHz	56089	3634.9	Full	20.46	13.01	21.17	19.17	23	-3.83
		16QAM	20 MHz	55891	3615.1	1			16QAM	20 MHz	56089	3634.9	1	14.73	7.22	15.40	13.40	23	-9.60
		16QAM	20 MHz	55891	3615.1	Full			16QAM	20 MHz	56089	3634.9	Full	19.4	12.15	20.15	18.15	23	-4.85
		64QAM	20 MHz	55891	3615.1	1			64QAM	20 MHz	56089	3634.9	1	14.38	6.76	15.08	13.08	23	-9.92
		64QAM	20 MHz	55891	3615.1	Full			64QAM	20 MHz	56089	3634.9	Full	19.18	12.28	19.98	17.98	23	-5.02
		256QAM	20 MHz	55891	3615.1	1			256QAM	20 MHz	56089	3634.9	1	18.22	14.84	19.83	17.83	23	-5.17
		256QAM	20 MHz	55891	3615.1	Full			256QAM	20 MHz	56089	3634.9	Full		13.06	20.83		23	-4.17
	High	QPSK	5 MHz	56523	3678.3	Full		High	QPSK	20 MHz	56640	3690	Full		15.55			23	-3.77
nto	nna gain																		
Intel	ina yain	4.5	First B				1	r		Casan d Da				1	Davis	a #/ dD		EIRP	Marai
	Den ver	Mar dada da u							Marchala da a	Second Ba		F		500		er(dBm)			Margi
		Modulation					1		Modulation							Total	-	Limit	(dBm)
	Low	QPSK	15 MHz	132047	1717.5	Full	1	Low	QPSK ODSK	5 MHz	132140	1726.8	Full		15.61	20.37	24.87	30	-5.13
		QPSK	5 MHz	132398	1752.6	1	4	1	QPSK ODSK	5 MHz	132446	1757.4	1	10.82	3.83	11.68	16.18	30	-13.82
		QPSK 4004M	5 MHz	132398	1752.6	Full	1		QPSK 100 AM	5 MHz	132446	1757.4	Full		14.26			30	-3.66
		16QAM	5 MHz	132398	1752.6	1	1	1	16QAM	5 MHz	132446	1757.4	1	11.39	4.22	12.13		30	-13.37
		16QAM	5 MHz	132398	1752.6	Full	4	1	16QAM	5 MHz	132446	1757.4	Full		16.41			30	-4.43
		64QAM	5 MHz	132398	1752.6	1	1		64QAM	5 MHz	132446	1757.4	1	10.99	4.23	12.08		30	-13.42
		64QAM	5 MHz	132398	1752.6	Full	-	1	64QAM	5 MHz	132446	1757.4	Full		15.79		25.02	30	-4.98
		256QAM	5 MHz	132398	1752.6	1	1		256QAM	5 MHz	132446	1757.4	1	18.02	10.9	18.42		30	-7.08
		256QAM	5 MHz	132398	1752.6	Full	4	1	256QAM	5 MHz	132446	1757.4	Full		11.84		24.13	30	-5.87
		QPSK	5 MHz	132353	1748.1	1	1		QPSK	15 MHz	132446	1757.4	1	10.38	3.55	11.09		30	-14.4
		QPSK	5 MHz	132353	1748.1	Full	1	1	QPSK	15 MHz	132446	1757.4		19.72	14.58			30	-5.37
			C 1411	132353	1748.1	1	1.		16QAM	15 MHz	132446	1757.4	1	11.04	5.39	11.89		30	-13.6
6R		16QAM	5 MHz	400050	1748.1	Full	+	Mid	16QAM	15 MHz	132446	1757.4	Full	18.25	13.43	19.27	23.77	30	-6.23
6B	Mid	16QAM 16QAM	5 MHz	132353	1740.1				64QAM	15 MHz	132446	1757.4	1	11.01	4.06	11.74		30	-13.70
6B	Mid	16QAM		132353	1748.1	1		IVIIO	04QAW					17.39				30	-7.02
бB	Mid	16QAM 16QAM	5 MHz			1 Full		IVIIC	64QAM	15 MHz	132446	1757.4	Full		12.41	18.48	22.98	30	
6B	Mid	16QAM 16QAM 64QAM	5 MHz 5 MHz	132353	1748.1			IVIIO		15 MHz 15 MHz	132446 132446	<u>1757.4</u> 1757.4	<u>Full</u>	17.56	<u>12.41</u> 10.15			30	-7.40
6B	Mid	16QAM 16QAM 64QAM 64QAM 256QAM	5 MHz 5 MHz 5 MHz 5 MHz 5 MHz	132353 132353 132353	1748.1 1748.1 1748.1	Full	-	IVIIC	64QAM 256QAM	15 MHz	132446	1757.4	1	17.56	10.15	18.10	22.60	30	
6B	Mid	16QAM 16QAM 64QAM 64QAM 256QAM 256QAM	5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz	132353 132353 132353 132353	1748.1 1748.1 1748.1 1748.1	Full 1		IVIIC	64QAM 256QAM 256QAM	15 MHz 15 MHz	132446 132446	1757.4 1757.4	1	17.56 18.95	10.15 14.14	18.10 19.23	22.60 23.73	30 30	-6.27
6B	Mid	16QAM 16QAM 64QAM 64QAM 256QAM 256QAM QPSK	5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 15 MHz	132353 132353 132353 132353 132398	1748.1 1748.1 1748.1 1748.1 1752.6	Full 1 Full 1		MIG	64QAM 256QAM 256QAM QPSK	15 MHz 15 MHz 5 MHz	132446 132446 132491	1757.4 1757.4 1761.9	1 Full 1	17.56 18.95 9.74	10.15 14.14 2.81	18.10 19.23 9.89	22.60 23.73 14.39	30 30 30	-6.27 -15.6
6B	Mid	16QAM 16QAM 64QAM 256QAM 256QAM QPSK QPSK	5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 15 MHz 15 MHz	132353 132353 132353 132353 132398 132398	1748.1 1748.1 1748.1 1748.1 1752.6 1752.6	Full 1 Full 1 Full		MIG	64QAM 256QAM 256QAM QPSK QPSK	15 MHz 15 MHz 5 MHz 5 MHz	132446 132446 132491 132491	1757.4 1757.4 1761.9 1761.9	1 Full 1 Full	17.56 18.95 9.74 19.98	10.15 14.14 2.81 18.42	18.10 19.23 9.89 21.88	22.60 23.73 14.39 26.38	30 30 30 30	-6.27 -15.6 -3.62
6B	Mid	16QAM 16QAM 64QAM 256QAM 256QAM QPSK QPSK 16QAM	5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 15 MHz 15 MHz 15 MHz 15 MHz	132353 132353 132353 132353 132398 132398 132398	1748.1 1748.1 1748.1 1748.1 1752.6 1752.6 1752.6	Full 1 Full 1 Full 1		MIC	64QAM 256QAM 256QAM QPSK QPSK 16QAM	15 MHz 15 MHz 5 MHz 5 MHz 5 MHz	132446 132446 132491 132491 132491	1757.4 1757.4 1761.9 1761.9 1761.9	1 Full Full 1	17.56 18.95 9.74 19.98 10.15	10.15 14.14 2.81 18.42 2.43	18.10 19.23 9.89 21.88 10.76	22.60 23.73 14.39 26.38 15.26	30 30 30 30 30	-6.27 -15.6 -3.62 -14.74
6B	Mid	16QAM 16QAM 64QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM	5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 15 MHz 15 MHz 15 MHz 15 MHz 15 MHz	132353 132353 132353 132353 132398 132398 132398 132398 132398	1748.1 1748.1 1748.1 1748.1 1752.6 1752.6 1752.6 1752.6	Full 1 Full 1 Full 1 Full		Mild	64QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM	15 MHz 15 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz	132446 132446 132491 132491 132491 132491	1757.4 1757.4 1761.9 1761.9 1761.9 1761.9	1 Full Full Full	17.56 18.95 9.74 19.98 10.15 18.62	10.15 14.14 2.81 18.42 2.43 12.11	18.10 19.23 9.89 21.88 10.76 18.83	22.60 23.73 14.39 26.38 15.26 23.33	30 30 30 30 30 30 30	-6.27 -15.61 -3.62 -14.74 -6.67
i6B	Mid	16QAM 16QAM 64QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM 64QAM	5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 15 MHz 15 MHz 15 MHz 15 MHz 15 MHz 15 MHz	132353 132353 132353 132353 132398 132398 132398 132398 132398 132398 132398 132398 132398 132398	1748.1 1748.1 1748.1 1752.6 1752.6 1752.6 1752.6 1752.6 1752.6	Full 1 Full 1 Full 1 Full 1		Mia	64QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM 64QAM	15 MHz 15 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz	132446 132446 132491 132491 132491 132491 132491	1757.4 1757.4 1761.9 1761.9 1761.9 1761.9 1761.9	1 Full Full Full 1	17.56 18.95 9.74 19.98 10.15 18.62 10.21	10.15 14.14 2.81 18.42 2.43 12.11 2.63	18.10 19.23 9.89 21.88 10.76 18.83 10.54	22.60 23.73 14.39 26.38 15.26 23.33 15.04	30 30 30 30 30 30 30 30	-6.27 -15.61 -3.62 -14.74 -6.67 -14.96
66B	Mid	16QAM 16QAM 64QAM 256QAM 256QAM QPSK QPSK 0PSK 16QAM 16QAM 64QAM	5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 15 MHz 15 MHz 15 MHz 15 MHz 15 MHz 15 MHz	132353 132353 132353 132353 132398 132398 132398 132398 132398 132398 132398	1748.1 1748.1 1748.1 1748.1 1752.6 1752.6 1752.6 1752.6 1752.6 1752.6	Full Full 1 Full 1 Full 1 Full Full		MIG	64QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM 64QAM 64QAM	15 MHz 15 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz	132446 132491 132491 132491 132491 132491 132491 132491	1757.4 1757.4 1761.9 1761.9 1761.9 1761.9 1761.9 1761.9	1 Full Full Full Full Full	17.56 18.95 9.74 19.98 10.15 18.62 10.21 17.59	10.15 14.14 2.81 18.42 2.43 12.11 2.63 10.53	18.10 19.23 9.89 21.88 10.76 18.83 10.54 18.34	22.60 23.73 14.39 26.38 15.26 23.33 15.04 22.84	30 30 30 30 30 30 30 30 30	-7.40 -6.27 -15.61 -3.62 -14.74 -6.67 -14.96 -7.16 -7.20
6B	Mid	16QAM 16QAM 64QAM 256QAM 256QAM 256QAM QPSK 0PSK 16QAM 16QAM 64QAM 256QAM	5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 15 MHz 15 MHz 15 MHz 15 MHz 15 MHz 15 MHz 15 MHz 15 MHz	132353 132353 132353 132353 132398 132398 132398 132398 132398 132398 132398 132398	1748.1 1748.1 1748.1 1752.6 1752.6 1752.6 1752.6 1752.6 1752.6 1752.6	Full 1 Full 1 Full 1 Full 1 Full 1		Mid	64QAM 256QAM 256QAM QPSK 0PSK 16QAM 16QAM 64QAM 64QAM 256QAM	15 MHz 15 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz	132446 132491 132491 132491 132491 132491 132491 132491 132491 132491	1757.4 1757.4 1761.9 1761.9 1761.9 1761.9 1761.9 1761.9 1761.9	1 Full Full Full Full 1 Full	17.56 18.95 9.74 19.98 10.15 18.62 10.21 17.59 18.74	10.15 14.14 2.81 18.42 2.43 12.11 2.63 10.53 10.92	18.10 19.23 9.89 21.88 10.76 18.83 10.54 18.34 18.11	22.60 23.73 14.39 26.38 15.26 23.33 15.04 22.84 22.61	30 30 30 30 30 30 30 30 30 30	-6.27 -15.61 -3.62 -14.74 -6.67 -14.96 -7.16 -7.39
;6B	Mid	16QAM 16QAM 64QAM 256QAM 256QAM QPSK QPSK 0PSK 16QAM 16QAM 64QAM	5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 15 MHz 15 MHz 15 MHz 15 MHz 15 MHz 15 MHz	132353 132353 132353 132353 132398 132398 132398 132398 132398 132398 132398	1748.1 1748.1 1748.1 1748.1 1752.6 1752.6 1752.6 1752.6 1752.6 1752.6	Full Full 1 Full 1 Full 1 Full Full		High	64QAM 256QAM 256QAM QPSK QPSK 16QAM 16QAM 64QAM 64QAM	15 MHz 15 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz	132446 132491 132491 132491 132491 132491 132491 132491	1757.4 1757.4 1761.9 1761.9 1761.9 1761.9 1761.9 1761.9	1 Full 1 Full 1 Full 1 Full	17.56 18.95 9.74 19.98 10.15 18.62 10.21 17.59	10.15 14.14 2.81 18.42 2.43 12.11 2.63 10.53	18.10 19.23 9.89 21.88 10.76 18.83 10.54 18.34 18.11 19.93	22.60 23.73 14.39 26.38 15.26 23.33 15.04 22.84	30 30 30 30 30 30 30 30 30	-6.27 -15.6 -3.62 -14.7 -6.67 -14.9 -7.16

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

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		First B	and					Second Ba	ind				Powe	er(dBm)		EIRP	Margin
Rang	e Modulation	Band width	Channel	Frequency	RB	Range	Modulation	Band width	Channel	Frequency	RB	PCC	SCC	Total	EIRP	Limit	(dBm)
Low	QPSK	20 MHz	132072	1720	worst RB	Low	QPSK	5 MHz	132189	1731.7	Full	18.91	11.99	19.56	24.06	30	-5.94
	QPSK	20 MHz	132397	1752.5	1		QPSK	5 MHz	132514	1764.2	1	10.13	2.31	10.15	14.65	30	-15.35
	QPSK	20 MHz	132397	1752.5	Full		QPSK	5 MHz	132514	1764.2	Full	19.64	17.6	20.42	24.92	30	-5.08
	16QAM	20 MHz	132397	1752.5	1		16QAM	5 MHz	132514	1764.2	1	10.66	2.79	10.99	15.49	30	-14.51
	16QAM	20 MHz	132397	1752.5	Full		16QAM	5 MHz	132514	1764.2	Full	18.46	11.61	19.42	23.92	30	-6.08
	64QAM	20 MHz	132397	1752.5	1		64QAM	5 MHz	132514	1764.2	1	10.11	2.75	10.33	14.83	30	-15.17
	64QAM	20 MHz	132397	1752.5	Full		64QAM	5 MHz	132514	1764.2	Full	17.36	10.52	18.15	22.65	30	-7.35
	256QAM	20 MHz	132397	1752.5	1		256QAM	5 MHz	132514	1764.2	1	17.13	9.47	16.93	21.43	30	-8.57
	256QAM	20 MHz	132397	1752.5	Full		256QAM	5 MHz	132514	1764.2	Full	19.29	12.11	20.70	25.20	30	-4.80
	QPSK	5 MHz	132330	1745.8	1		QPSK	20 MHz	132447	1757.5	1	15.36	8.97	16.13	20.63	30	-9.37
	QPSK	5 MHz	132330	1745.8	Full		QPSK	20 MHz	132447	1757.5	Full	18.46	15.47	19.54	24.04	30	-5.96
66C	16QAM	5 MHz	132330	1745.8	1		16QAM	20 MHz	132447	1757.5	1	16.44	8.77	17.19	21.69	30	-8.31
Mid	16QAM	5 MHz	132330	1745.8	Full	T Mid	16QAM	20 MHz	132447	1757.5	Full	17.23	13.65	18.56	23.06	30	-6.94
IVIIG	64QAM	5 MHz	132330	1745.8	1	IVIIC	64QAM	20 MHz	132447	1757.5	1	15.72	10.98	16.82	21.32	30	-8.68
	64QAM	5 MHz	132330	1745.8	Full		64QAM	20 MHz	132447	1757.5	Full	18.18	14.81	19.77	24.27	30	-5.73
	256QAM	5 MHz	132330	1745.8	1		256QAM	20 MHz	132447	1757.5	1	16.39	9.06	16.58	21.08	30	-8.92
	256QAM	5 MHz	132330	1745.8	Full		256QAM	20 MHz	132447	1757.5	Full	18.12	13.34	19.10	23.60	30	-6.40
	QPSK	20 MHz	132323	1745.1	1		QPSK	20 MHz	132521	1764.9	1	9.35	2.39	10.16	14.66	30	-15.34
	QPSK	20 MHz	132323	1745.1	Full		QPSK	20 MHz	132521	1764.9	Full	18.76	13.36	19.33	23.83	30	-6.17
	16QAM	20 MHz	132323	1745.1	1		16QAM	20 MHz	132521	1764.9	1	9.78	2.74	10.62	15.12	30	-14.88
	16QAM	20 MHz	132323	1745.1	Full		16QAM	20 MHz	132521	1764.9	Full	17.37	10.71	18.26	22.76	30	-7.24
	64QAM	20 MHz	132323	1745.1	1		64QAM	20 MHz	132521	1764.9	1	9.87	2.54	10.29	14.79	30	-15.21
	64QAM	20 MHz	132323	1745.1	Full		64QAM	20 MHz	132521	1764.9	Full	16.29	10.08	17.24	21.74	30	-8.26
	256QAM	20 MHz	132323	1745.1	1		256QAM	20 MHz	132521	1764.9	1	16.39	9.69	17.66	22.16	30	-7.84
	256QAM	20 MHz	132323	1745.1	Full		256QAM	20 MHz	132521	1764.9	Full	18.24	14.25	18.39	22.89	30	-7.11
High	QPSK	20 MHz	132522	1765	Full	High	QPSK	5 MHz	132639	1776.7	Full	19.95	13.86	21.34	25.84	30	-4.16

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

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Antenna gain 4

Ante	nna gain	4	First D.					T		-					1	-			EIG -	
David	Denne	Madulation	First Band	Observat	F			David	Damas	7	econd Band Band width	Observat			DOO		er(dBm)	CIDD.	EIRP	Margin
Band	Range	Modulation	Band width	Channel	Frequency	<u>RB</u>		Band	Range	Modulation		Channel		RB	22.02	5CC 17.54	Total	EIRP	Limit 33	(dBm)
	Low	QPSK QPSK	5 MHz 5 MHz	18625 18900	1852.5 1880	1			Low	QPSK QPSK	5 MHz 5 MHz	20425 20525	826.5 836.5	1	22.02	17.54	23.34 24.22	27.34 28.22	33	-5.66 -4.78
		QPSK	5 MHz	18900	1880	1	+			QPSK	10 MHz	20525	836.5	1	21.22	20.14	24.22	27.74	33	-5.26
2A	Mid	QPSK	20 MHz	18900	1880	1		5A	Mid	QPSK	5 MHz	20525	836.5	1	22.42	18.39	23.87	27.87	33	-5.13
		QPSK	20 MHz	18900	1880	1	1			QPSK	10 MHz	20525	836.5	1	22.45	18.56	23.94	27.94	33	-5.06
	High	QPSK	5 MHz	19175	1907.5	1	1		High	QPSK	5 MHz	20625	846.5	1	22.57	19.82	24.42	28.42	33	-4.58
Ante	nna gain	4							. <u> </u>	•	•	•	•							
	J. J.		First Band							S	econd Band					Pow	er(dBm)		EIRP	Margin
Band	Range	Modulation	Band width	Channel	Frequency	RB		Band	Range	Modulation	Band width	Channel	Frequency	RB	PCC	SCC	Total	EIRP	Limit	(dBm)
	Low	QPSK	20 MHz	18700	1860	1			Low	QPSK	5 MHz	23035	701.5	1	22.41	21.82	25.14	29.14	33	-3.86
		QPSK	5 MHz	18900	1880	1	.			QPSK	5 MHz	23095	707.5	1	22.28	21.99	25.15	29.15	33	-3.85
2A	Mid	QPSK	5 MHz	18900	1880	1	Τ.	12A	Mid	QPSK	10 MHz	23095	707.5	1	22.23	21.99	25.08	29.08	33	-3.92
		QPSK ODSK	20 MHz.	18900	1880	11				QPSK ODSK	5 MHz	23095	707.5	1	22.22	22.46	25.35	29.35	33	-3.65
	High	QPSK QPSK	20 MHz 20 MHz	18900 19100	1880 1900	1			High	QPSK QPSK	10 MHz 5 MHz	23095 23155	707.5 713.5	1	22.51 22.27	21.92 23.07	25.24 25.7	29.24 29.70	33 33	-3.76 -3.3
Ante	nna gain	4	2010112	13100	1300				l High		5 10112	20100	715.5		22.21	20.07	20.1	23.10	55	-0.0
	nna gan	-	First Band					T		s	econd Band				I	Pow	er(dBm)		EIRP	Margin
Band	Range	Modulation	Band width	Channel	Frequency	RB	1	Band	Range	Modulation	Band width	Channel	Frequency	RB	PCC	SCC	Total	EIRP	Limit	(dBm)
	Low	QPSK	20 MHz	18700	1860 MHz	1			Low	QPSK	10 MHz	23230	782 MHz	1	22.3	21.64	24.99	28.99	33	-4.01
2A	Mid	QPSK	5 MHz	18900	1880 MHz	1	+	13A	Mid	QPSK	10 MHz	23230	782 MHz	1	22.28	21.69	25.01	29.01	33	-3.99
		QPSK	20 MHz	18900	1880 MHz	1				QPSK	10 MHz	23230	782 MHz	1	22.57	22.55	25.57	29.57	33	-3.43
L	High	QPSK	20 MHz	19100	1900 MHz	1		1	High	QPSK	10 MHz	23230	782 MHz	1	22.02	21.5	24.78	28.78	33	-4.22
Ante	nna gain	4.5	Firet Pand				1	1			econd Band					Dow	er(dBm)	1	EIDD 1	Morein
Band	Range	Modulation	First Band Band width	Channel	Frequency	RB		Band	Range	Modulation	Band width	Channel	Frequency	RB	PCC	SCC	er(dBm) Total	EIRP	EIRP Limit	Margin (dBm)
Dana	Low	QPSK	20 MHz	20050	1720 MHz	1		Bana	Low	QPSK	5 MHz	20425	826.5 MHz	1	21.67	19.12	23.59	28.09	30	-1.91
		QPSK	5 MHz	20000	1732.5 MHz	1				QPSK	5 MHz	20525	836.5 MHz	_1_	22.94	18.48	24.27	28.77	30	-1.23
4A	Mid	QPSK	5 MHz	20175	1732.5 MHz	1	+	5A	Mid	QPSK	10 MHz	20525	836.5 MHz	1	22.76	17.73	23.95	28.45	30	-1.55
4A	IVIIG	QPSK	20 MHz	20175	1732.5 MHz	1		БА	IVIIG	QPSK	5 MHz	20525	836.5 MHz	1	23.05	18.51	24.36	28.86	30	-1.14
		QPSK	20 MHz	20175	1732.5 MHz	1				QPSK	10 MHz	20525	836.5 MHz	1	22.08	18.51	23.66	28.16	30	-1.84
	High	QPSK	20 MHz	20300	1745 MHz	1			High	QPSK	5 MHz	20625	846.5 MHz	1	22.05	20.03	24.45	28.95	30	-1.05
Ante	nna gain	4.5																		
			First Band						r -		econd Band		-		Power(EIRP	Margin
Band	Range	Modulation	Band width	Channel	Frequency	RB		Band	Range	Modulation	Band width	Channel	Frequency	RB	PCC	SCC	Total	EIRP	Limit	(dBm)
	Low	QPSK	20 MHz	20050	1720 MHz	1			Low	QPSK	10 MHz	23060	704 MHz	1	21.78	22.7	25.27	29.77	30	-0.23
		QPSK QPSK	1.4 MHz 1.4 MHz	20175 20175	1732.5 MHz 1732.5 MHz	1	+			QPSK QPSK	5 MHz 10 MHz	23095 23095	707.5 MHz 707.5 MHz	1	22.89 22.82	21.92 20.43	25.44 24.80	29.94 29.30	30 30	-0.06 -0.70
4A	Mid							12A	Mid	QF3N		23095	707.5 WITZ							-0.70
				20175	1732 5 MHz	1		12/1	IVIIG	OPSK	5 MHz	23095	707 5 MHz	1	2219	22	25 11	29.61	30	-0.39
		QPSK QPSK	20 MHz 20 MHz	20175 20175	1732.5 MHz 1732.5 MHz	1		127	IVII G	QPSK QPSK	5 MHz 10 MHz	23095 23095	707.5 MHz 707.5 MHz	1	22.19	22	25.11 25.43	29.61 29.93	30 30	-0.39
	High	QPSK	20 MHz	20175 20175 20300	1732.5 MHz	1 1 1		121		QPSK QPSK QPSK	10 MHz	23095	707.5 MHz	1	22.51	22 22.45 21.89	25.11 25.43 25.33	29.93	30 30 30	-0.07
Ante		QPSK QPSK		20175		1		1253	High	QPSK				1		22.45	25.43		30	
Ante	High nna gain	QPSK	20 MHz	20175	1732.5 MHz	1				QPSK QPSK	10 MHz	23095	707.5 MHz	1	22.51	22.45 21.89	25.43	29.93	30	-0.07
Ante Band		QPSK QPSK	20 MHz 20 MHz	20175	1732.5 MHz	1		Band		QPSK QPSK	10 MHz 10 MHz	23095	707.5 MHz	1	22.51	22.45 21.89	25.43 25.33	29.93	30 30	-0.07 -0.17
	nna gain	QPSK QPSK 4.5	20 MHz 20 MHz First Band Band width 20 MHz	20175 20300 Channel 20050	1732.5 MHz 1745 MHz Frequency 1720 MHz	1			High	QPSK QPSK S Modulation QPSK	10 MHz 10 MHz econd Band Band width 10 MHz	23095 23130 Channel 23230	707.5 MHz 711 MHz Frequency 782 MHz	1	22.51 22.71	22.45 21.89 Pow	25.43 25.33 er(dBm) Total 24.76	29.93 29.83	30 30 EIRP Limit 30	-0.07 -0.17 Margin
Band	nna gain Range Low	QPSK QPSK 4.5 Modulation QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 5 MHz	20175 20300 Channel 20050 20175	1732.5 MHz 1745 MHz Frequency 1720 MHz 1732.5 MHz	1 1 RB 1 1	+	Band	High Range Low	QPSK QPSK S Modulation QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz	23095 23130 Channel 23230 23230	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz	1 1 RB 1 1	22.51 22.71 PCC 21.87 23.06	22.45 21.89 Pow SCC 21.63 21.5	25.43 25.33 er(dBm) Total 24.76 25.36	29.93 29.83 EIRP 29.26 29.86	30 30 EIRP Limit 30 30	-0.07 -0.17 Margin (dBm) -0.74 -0.14
	nna gain Range Low Mid	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 5 MHz 20 MHz	20175 20300 Channel 20050 20175 20175	1732.5 MHz 1745 MHz Frequency 1720 MHz 1732.5 MHz 1732.5 MHz	1 1 RB 1 1 1	+		High Range Low Mid	QPSK QPSK S Modulation QPSK QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz	23095 23130 Channel 23230 23230 23230	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz	1 1 1 1 1 1	22.51 22.71 PCC 21.87 23.06 23.22	22.45 21.89 Pow SCC 21.63 21.55	25.43 25.33 er(dBm) Total 24.76 25.36 25.48	29.93 29.83 EIRP 29.26 29.86 29.98	30 30 EIRP Limit 30 30 30	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02
Band 4A	nna gain Range Low Mid High	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 5 MHz	20175 20300 Channel 20050 20175	1732.5 MHz 1745 MHz Frequency 1720 MHz 1732.5 MHz	1 1 RB 1 1	+	Band	High Range Low	QPSK QPSK S Modulation QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz	23095 23130 Channel 23230 23230	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz	1 1 RB 1 1	22.51 22.71 PCC 21.87 23.06	22.45 21.89 Pow SCC 21.63 21.5	25.43 25.33 er(dBm) Total 24.76 25.36	29.93 29.83 EIRP 29.26 29.86	30 30 EIRP Limit 30 30	-0.07 -0.17 Margin (dBm) -0.74 -0.14
Band 4A	nna gain Range Low Mid	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 20 MHz 20 MHz	20175 20300 Channel 20050 20175 20175	1732.5 MHz 1745 MHz Frequency 1720 MHz 1732.5 MHz 1732.5 MHz	1 1 RB 1 1 1	+	Band	High Range Low Mid	QPSK QPSK Modulation QPSK QPSK QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz	23095 23130 Channel 23230 23230 23230	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz	1 1 1 1 1 1	22.51 22.71 PCC 21.87 23.06 23.22	22.45 21.89 Pow SCC 21.63 21.5 21.55 19.31	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27	29.93 29.83 EIRP 29.26 29.86 29.98	30 30 EIRP Limit 30 30 30 30	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23
Band 4A Ante	nna gain Range Low Mid High nna gain	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK 3.4	20 MHz 20 MHz First Band Band width 20 MHz 20 MHz 20 MHz First Band	20175 20300 Channel 20050 20175 20175 20300	1732.5 MHz 1745 MHz Frequency 1720 MHz 1732.5 MHz 1732.5 MHz	1 1 1 1 1 1 1	+	Band 13A	High Range Low Mid High	QPSK QPSK Modulation QPSK QPSK QPSK QPSK S	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz econd Band	23095 23130 23230 23230 23230 23230 23230	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz 782 MHz	1 1 1 1 1 1	22.51 22.71 PCC 21.87 23.06 23.22 22.6	22.45 21.89 Pow SCC 21.63 21.5 21.55 19.31 Pow	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 er(dBm)	29.93 29.83 EIRP 29.26 29.86 29.98 28.77	30 30 EIRP Limit 30 30 30 30 EIRP	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 Margin
Band 4A	Range Low Mid High nna gain	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK 3.4 Modulation	20 MHz 20 MHz First Band Band width 20 MHz 5 MHz 20 MHz 20 MHz First Band Band width	20175 20300 Channel 20050 20175 20175 20300 Channel	1732.5 MHz 1745 MHz Frequency 1720 MHz 1732.5 MHz 1732.5 MHz 1745 MHz Frequency	1 1 1 1 1 1 8 RB	+	Band	High Range Low Mid High Range	QPSK QPSK S Modulation QPSK QPSK QPSK QPSK S Modulation	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz Band width	23095 23130 23230 23230 23230 23230 23230 23230 Channel	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz	1 1 1 1 1 1 1 8 8	22.51 22.71 PCC 21.87 23.06 23.22 22.6 PCC	22.45 21.89 Pow 21.63 21.5 21.55 19.31 Pow SCC	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 er(dBm) Total	29.93 29.83 EIRP 29.26 29.86 29.98 28.77 EIRP	30 30 EIRP Limit 30 30 30 30 30 EIRP Limit	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 Margin (dBm)
Band 4A Ante	nna gain Range Low Mid High nna gain	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK 3.4 Modulation QPSK	20 MHz 20 MHz First Band Band width 20 MHz 5 MHz 20 MHz 20 MHz First Band Band width 10 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450	1732.5 MHz 1745 MHz Frequency 1720 MHz 1732.5 MHz 1732.5 MHz 1745 MHz Frequency 829 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1	+	Band 13A	High Range Low Mid High	QPSK QPSK Modulation QPSK QPSK QPSK QPSK S Modulation QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz econd Band Band width 20 MHz	23095 23130 23230 23230 23230 23230 23230 23230 23230 23230	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz Frequency 2510 MHz	1 1 1 1 1 1	22.51 22.71 PCC 21.87 23.06 23.22 22.6 PCC 20.67	22.45 21.89 Pow 21.63 21.5 21.55 19.31 Pow SCC 20.91	25.43 25.33 er(dBm) 24.76 25.36 25.48 24.27 er(dBm) Total 23.80	29.93 29.83 29.83 29.26 29.86 29.98 28.77 EIRP 27.20	30 30 EIRP Limit 30 30 30 30 30 EIRP Limit 33	-0.07 -0.17 Margin (dBm) -0.74 -0.74 -0.02 -1.23 Margin (dBm) -5.80
Band 4A Ante	Range Low Mid High nna gain	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK 3.4 Modulation QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 20 MHz 20 MHz 20 MHz First Band Band width 10 MHz 1.4 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525	1732.5 MHz 1745 MHz 1745 MHz 1720 MHz 1720 MHz 1732.5 MHz 1745 MHz 1745 MHz Frequency 829 MHz 836.5 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1	+	Band 13A	High Range Low Mid High Range	QPSK QPSK GPSK QPSK QPSK QPSK QPSK S Modulation QPSK QPSK	10 MHz 10 MHz econd Band 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 10 MHz 20 MHz	23095 23130 2320 2320 2320 2320 2320 2320 2320 2320 200 20	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2510 MHz 2510 MHz	1 1 1 1 1 1 1 1 1 1	22.51 22.71 PCC 21.87 23.06 23.22 22.6 PCC 20.67 21.54	22.45 21.89 Pow 21.63 21.55 21.55 19.31 Pow SCC 20.91 19.91	25.43 25.33 Total 24.76 25.36 25.48 24.27 er(dBm) Total 23.80 23.81	29.93 29.83 29.83 29.26 29.86 29.98 28.77 EIRP 27.20 27.21	30 30 EIRP Limit 30 30 30 30 30 EIRP Limit 33 33	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 Margin (dBm) -5.80 -5.79
Band 4A Ante	Range Low Mid High nna gain	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK 3.4 Modulation QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 5 MHz 20 MHz 20 MHz 20 MHz 7 MHz 10 MHz 1.4 MHz 1.4 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525	1732.5 MHz 1745 MHz 1745 MHz 1720 MHz 1732.5 MHz 1732.5 MHz 1745 MHz Frequency 829 MHz 836.5 MHz 836.5 MHz	1 1 1 1 1 1 1 1 8 8 8 1 1 1	+	Band 13A	High Range Low Mid High Range	QPSK QPSK Modulation QPSK QPSK QPSK QPSK S Modulation QPSK QPSK QPSK	10 MHz 10 MHz econd Band 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz econd Band Band width 20 MHz 20 MHz	23095 23130 23210 2010 20	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2535 MHz 2535 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1	22.51 22.71 22.71 21.87 23.06 23.22 22.6 PCC 20.67 21.54 21.42	22.45 21.89 Pow 21.63 21.55 21.55 19.31 Pow SCC 20.91 19.91 21.06	25.43 25.33 Total 24.76 25.36 25.48 24.27 er(dBm) Total 23.80 23.81 24.25	29.93 29.83 29.83 29.26 29.86 29.98 28.77 EIRP 27.20 27.21 27.65	30 30 EIRP Limit 30 30 30 30 30 30 30 30 33 33 33 33	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 Margin (dBm) -5.80 -5.79 -5.35
Band 4A Ante Band	Range Low Mid High nna gain Range Low	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 1.4 MHz 1.4 MHz 10 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525	1732.5 MHz 1745 MHz Frequency 1720 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 829 MHz 836.5 MHz 836.5 MHz 836.5 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1	+	Band 13A Band	High Range Low Mid High Range Low	QPSK QPSK Modulation QPSK QPSK QPSK QPSK S Modulation QPSK QPSK QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz econd Band Band width 20 MHz 10 MHz 10 MHz 10 MHz	23095 23130 Channel 23230 23210 23210 23210 23210 23100 23110 20100 21100 21100 21100 21100 21100 21100	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz 782 MHz 2510 MHz 2535 MHz 2535 MHz	1 1 1 1 1 1 1 1 1 1	22.51 22.71 22.71 21.87 23.06 23.22 22.6 PCC 20.67 21.54 21.42 21.47	22.45 21.89 Pow 21.63 21.55 21.55 19.31 Pow SCC 20.91 19.91 21.06 20.85	25.43 25.33 er(dBm) 24.76 25.36 25.48 24.27 er(dBm) 70tal 23.80 23.81 24.25 24.18	29.93 29.83 EIRP 29.26 29.98 28.77 EIRP 27.20 27.21 27.65 27.58	30 30 EIRP Limit 30 30 30 30 30 50 EIRP Limit 33 33 33 33 33	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 Margin (dBm) -5.80 -5.79 -5.35 -5.42
Band 4A Ante Band	Range Low Mid High nna gain Low Mid	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK 3.4 Modulation QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 1.4 MHz 1.4 MHz 1.0 MHz 10 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20525	1732.5 MHz 1745 MHz Frequency 1720 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 1745 MHz 829 MHz 836.5 MHz 836.5 MHz 836.5 MHz	1 1 1 1 1 1 1 1 8 8 8 1 1 1	+	Band 13A Band	High Range Low Mid High Range Low Mid	QPSK QPSK Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz	23095 23130 Channel 23230 23230 23230 23230 23230 23230 23230 23230 23230 23250 21100 21100 21100	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2510 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1	22.51 22.71 PCC 21.87 23.06 23.22 22.6 PCC 20.67 21.54 21.42 21.47 21.49	22.45 21.89 Pow 21.63 21.55 21.55 19.31 Pow SCC 20.91 19.91 21.06 20.85 21.23	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 er(dBm) Total 23.80 23.81 24.25 24.18 24.37	29.93 29.83 29.26 29.26 29.86 29.98 28.77 27.21 27.21 27.21 27.25 27.58 27.77	30 30 EIRP Limit 30 30 30 30 EIRP Limit 33 33 33 33 33 33 33	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 Margin (dBm) -5.80 -5.79 -5.54 -5.42 -5.23
Band 4A Ante Band 5A	Range Low Mid High nna gain Low Mid High	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 1.4 MHz 1.4 MHz 10 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525	1732.5 MHz 1745 MHz Frequency 1720 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 829 MHz 836.5 MHz 836.5 MHz 836.5 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+	Band 13A Band	High Range Low Mid High Range Low	QPSK QPSK Modulation QPSK QPSK QPSK QPSK S Modulation QPSK QPSK QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz econd Band Band width 20 MHz 10 MHz 10 MHz 10 MHz	23095 23130 Channel 23230 23210 23210 23210 23210 23100 23110 20100 21100 21100 21100 21100 21100 21100	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz 782 MHz 2510 MHz 2535 MHz 2535 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22.51 22.71 22.71 21.87 23.06 23.22 22.6 PCC 20.67 21.54 21.42 21.47	22.45 21.89 Pow 21.63 21.55 21.55 19.31 Pow SCC 20.91 19.91 21.06 20.85	25.43 25.33 er(dBm) 24.76 25.36 25.48 24.27 er(dBm) 70tal 23.80 23.81 24.25 24.18	29.93 29.83 EIRP 29.26 29.98 28.77 EIRP 27.20 27.21 27.65 27.58	30 30 EIRP Limit 30 30 30 30 30 50 EIRP Limit 33 33 33 33 33	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 Margin (dBm) -5.80 -5.79 -5.35 -5.42
Band 4A Ante Band 5A	Range Low Mid High nna gain Low Mid	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK 3.4 Modulation QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 1.4 MHz 1.4 MHz 1.0 MHz 10 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20525	1732.5 MHz 1745 MHz Frequency 1720 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 1745 MHz 829 MHz 836.5 MHz 836.5 MHz 836.5 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+	Band 13A Band	High Range Low Mid High Range Low Mid	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz	23095 23130 Channel 23230 23230 23230 23230 23230 23230 23230 23230 23230 23250 21100 21100 21100	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2510 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22.51 22.71 PCC 21.87 23.06 23.22 22.6 PCC 20.67 21.54 21.42 21.47 21.49	22.45 21.89 Pow 21.63 21.55 19.31 Pow SCC 20.91 19.91 21.06 20.85 21.23 20.77	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 er(dBm) Total 23.80 23.81 24.25 24.18 24.37	29.93 29.83 29.26 29.26 29.86 29.98 28.77 27.21 27.21 27.21 27.25 27.58 27.77	30 30 EIRP Limit 30 30 30 30 30 30 30 30 30 30 30 30 30	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 Margin (dBm) -5.80 -5.80 -5.80 -5.80 -5.82 -5.42 -5.23 -5.23
Band 4A Ante Band 5A	nna gain Range Low Mid High nna gain Range Low Mid High nna gain	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 1.4 MHz 1.4 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20525	1732.5 MHz 1745 MHz 1745 MHz 1720 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 1745 MHz 829 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+	Band 13A Band	High Low Mid High Low Mid Low Mid High	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz	23095 23130 Channel 23230 23100 21100	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz 782 MHz 2510 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22.51 22.71 PCC 21.87 23.06 23.22 22.6 PCC 20.67 21.54 21.42 21.47 21.49	22.45 21.89 Pow 21.63 21.55 19.31 Pow SCC 20.91 19.91 21.06 20.85 21.23 20.77	25.43 25.33 er(dBm) Total 24.76 25.48 24.27 er(dBm) Total 23.80 23.81 24.25 24.18 24.37 24.29	29.93 29.83 29.26 29.26 29.86 29.98 28.77 27.21 27.21 27.21 27.25 27.58 27.77	30 30 EIRP Limit 30 30 30 30 EIRP Limit 33 33 33 33 33 33 33	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 Margin (dBm) -5.80 -5.79 -5.52 -5.42 -5.23
Band 4A Ante Band 5A Ante	Range Low Mid High nna gain Low Mid High	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 5 MHz 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 1.4 MHz 1.4 MHz 1.4 MHz 10 MHz 10 MHz 10 MHz 10 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20525 20525	1732.5 MHz 1745 MHz Frequency 1720 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 1745 MHz 829 MHz 836.5 MHz 836.5 MHz 836.5 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+	Band 13A Band 7A	High Range Low Mid High Range Low Mid	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz	23095 23130 Channel 23230 23230 23230 23230 23230 23230 23230 23230 23230 23250 21100 21100 21100	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2510 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22.51 22.71 22.71 21.87 23.06 23.22 22.6 PCC 20.67 21.54 21.42 21.42 21.47 21.49 21.73	22.45 21.89 Pow 21.63 21.55 19.31 Pow SCC 20.91 19.91 21.06 20.85 21.23 20.77 Pow	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 er(dBm) Total 23.80 23.81 24.25 24.18 24.23 24.29 er(dBm)	29.93 29.83 29.83 29.26 29.86 29.98 28.77 27.20 27.21 27.65 27.58 27.77 27.69	30 30 EIRP Limit 30 30 30 30 30 30 30 30 30 30	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 Margin (dBm) -5.80 -5.79 -5.35 -5.79 -5.35 -5.42 -5.23 -5.31 Margin
Band 4A Ante Band 5A Ante	Range Low Mid High nna gain Range Low Mid High nna gain Range	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 1.4 MHz 1.4 MHz 1.4 MHz 1.0 MHz 10 MHz 10 MHz 10 MHz 10 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20525 20525 20525 20525 20500	1732.5 MHz 1745 MHz Frequency 1720 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 1745 MHz 829 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+	Band 13A Band 7A	High Range Low Mid High Range Low Mid High Range Range Range	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz	23095 23130 Channel 23230 23230 23230 23230 23230 23230 23230 23230 23230 21100 21100 21100 21100 21100 211350	707.5 MHz 711 MHz Frequency 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2510 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2536 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22.51 22.71 22.71 23.06 23.22 22.6 PCC 20.67 21.54 21.42 21.42 21.47 21.49 21.73 PCC	22.45 21.89 SCC 21.63 21.55 19.31 Pow SCC 20.91 21.06 20.85 21.23 20.77 Pow SCC	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 er(dBm) 23.80 23.81 24.25 24.18 24.37 24.29 er(dBm) Total	29.93 29.83 29.83 29.26 29.98 29.98 28.77 27.20 27.21 27.65 27.58 27.77 27.69 27.77 27.69	30 30 EIRP Limit 30 30 30 30 30 30 30 30 33 33	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 Margin (dBm) -5.80 -5.79 -5.82 -5.42 -5.23 -5.31 Margin (dBm)
Band 4A Band 5A Ante Band	nna gain Range Low Mid High nna gain Kange Low Mid High nna gain Range Low	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 1.4 MHz 1.4 MHz 1.4 MHz 10 MHz 10 MHz 10 MHz 10 MHz 5 MHz 5 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20525 20525 20525 20600 Channel 20450 20525	1732.5 MHz 1745 MHz 1745 MHz 1720 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 1745 MHz 829 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+ +	Band 13A Band 7A Band	High Range Low Mid High Kange Low Mid High	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 10 MHz 20 MHz	23095 23130 Channel 23230 23230 23230 23230 23230 23230 23230 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 211350	707.5 MHz 711 MHz 711 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2536 MHz 771 L5 MHz 1745 MHz	I I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22.51 22.71 23.06 23.22 22.6 PCC 21.54 21.42 21.42 21.42 21.42 21.42 21.47 21.49 21.73	22.45 21.89 Pow 21.63 21.55 21.55 19.31 Pow SCC 20.91 21.95 20.91 21.06 20.85 21.23 20.77 Pow SCC 21.37 20.27 20.23	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 er(dBm) Total 23.80 23.81 24.25 24.18 24.37 24.29 er(dBm) Total 23.61 23.83 23.87	29.93 29.83 EIRP 29.26 29.86 29.98 28.77 27.20 27.21 27.65 27.58 27.58 27.58 27.58 27.77 27.69 EIRP 28.11 28.33 28.37	30 30 EIRP Limit 30 30 30 30 EIRP Limit 33 33 33 33 33 33 33 33 33 3	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 -1.23 Margin (dBm) -5.80 -5.79 -5.35 -5.42 -5.5
Band 4A Ante Band 5A Ante	Range Low Mid High nna gain Range Low Mid High nna gain Range	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 1.4 MHz 1.4 MHz 1.4 MHz 1.4 MHz 1.4 MHz 1.0 MHz 10 MHz 10 MHz 10 MHz 5 MHz 5 MHz 10 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20620 20525 20600 Channel 20450 20525 20625	1732.5 MHz 1745 MHz 1745 MHz 1720 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 1745 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+ +	Band 13A Band 7A	High Range Low Mid High Range Low Mid High Range Range Range	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 5 MHz 5 MHz 5 MHz	23095 23130 Channel 23230 23230 23230 23230 23230 23230 23230 21100 21100 21100 21100 21100 21350 21100 21350 21350 21350 213222 132322	707.5 MHz 711 MHz 711 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2536 MHz 2536 MHz 712.5 MHz 1745 MHz 1745 MHz 1745 MHz	I I	22.51 22.71 PCC 21.87 23.02 23.22 22.6 PCC 20.67 21.54 21.42 21.47 21.49 21.73 21.49 21.73 21.49 21.73 21.32 22.46	22.45 21.89 Poww SCC 21.63 21.55 21.55 19.31 Pow SCC 20.91 19.91 20.95 21.06 20.85 21.23 20.77 Pow SCC 21.3 20.27 20.35 20.23 20.35	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 Total 23.80 23.81 24.25 24.18 24.37 24.45	29.93 29.83 EIRP 29.26 29.98 29.98 28.77 27.20 27.21 27.65 27.58 27.77 27.69 EIRP 28.11 28.33 28.37 28.95	30 30 EIRP Limit 30 30 30 30 30 30 30 33 33 33 33 33 33	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 Margin (dBm) -5.80 -5.79 -5.35 -5.42 -5.23 -5.25 -5.23 -5.25 -5.55 -5.5
Band 4A Band 5A Ante Band	Range Low Mid High nna gain Range Low Mid Range Low Mid	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz 20 MHz First Band Band width 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 5 MHz 5 MHz 5 MHz 10 MHz 10 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20525 20620 Channel 20450 20525 20625 20525 20525 20525	1732.5 MHz 1745 MHz 1745 MHz 1745 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+ +	Band 13A Band 7A Band	High Range Low Mid High Low Mid High Range Low Mid	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 20 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 5 MHz 5 MHz 20 MHz 5 MHz 20 MHz	23095 23130 Channel 23230 23230 23230 23230 23230 23230 23230 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21350 21322 2132322 132322 132322	707.5 MHz 711 MHz 711 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2510 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2536 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz	I I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22.51 22.71 PCC 23.06 23.22 22.6 PCC 21.54 21.42 21.42 21.42 21.42 21.42 21.42 21.42 21.43 21.42 21.43 21.42 21.43 21.42 21.43 21.43 21.43 21.43 21.44 21.43 21.44 21.43 21.44 21.43 21.44 21.43 21.44 21.43 21.44 21.43 21.44 21.43 21.44 21.44 21.45	22,45 21,89 Pow SCC 21,63 21,55 21,55 21,55 21,55 21,55 21,55 21,55 21,55 20,91 19,91 21,05 20,91 20,91 21,23 20,77 Pow SCC 21,23 20,27 20,35 20,21 20	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 er(dBm) Total 23.80 23.81 24.25 24.18 24.23 er(dBm) Total 23.81 24.29 er(dBm) Total 23.83 23.87 24.45 24.45	29.93 29.83 29.83 29.86 29.86 29.86 29.98 28.77 27.20 27.21 27.65 27.25 27.58 27.77 27.69 EIRP 28.11 28.33 28.37 28.95 28.70	30 30 EIRP Limit 30 30 30 30 30 30 33 33 33 33 33 33 33	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.12 -1.23 -1.23 -1.23 -0.02 -1.23 -0.02 -1.23 -0.02 -0.74 -0.02 -0.123 -0.02 -0.74 -0.02 -0.123 -0.02 -0.123 -
Band 4A Ante Band 5A Ante Band 5A	Range Low Mid High nna gain Range Low Mid High nna gain Range Low Mid High	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 1.4 MHz 1.4 MHz 1.4 MHz 1.4 MHz 1.4 MHz 1.0 MHz 10 MHz 10 MHz 10 MHz 10 MHz 5 MHz 10 MHz 5 MHz 10 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20620 20525 20600 Channel 20450 20525 20625	1732.5 MHz 1745 MHz 1745 MHz 1720 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 1745 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz 836.5 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+ +	Band 13A Band 7A Band	High Range Low Mid High Kange Low Mid High	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 5 MHz 5 MHz 5 MHz	23095 23130 Channel 23230 23230 23230 23230 23230 23230 23230 21100 21100 21100 21100 21100 21350 21100 21350 21350 21350 213222 132322	707.5 MHz 711 MHz 711 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2536 MHz 2536 MHz 712.5 MHz 1745 MHz 1745 MHz 1745 MHz	I I	22.51 22.71 PCC 21.87 23.02 23.22 22.6 PCC 20.67 21.54 21.42 21.47 21.49 21.73 21.49 21.73 21.49 21.73 21.32 22.46	22.45 21.89 Pow 21.63 21.55 21.55 19.31 Pow SCC 20.91 19.91 20.06 20.85 21.23 20.77 Pow SCC 21.3 20.77 Pow SCC 21.3 20.277	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 Total 23.80 23.81 24.25 24.18 24.37 24.45	29.93 29.83 EIRP 29.26 29.98 29.98 28.77 27.20 27.21 27.65 27.58 27.77 27.69 EIRP 28.11 28.33 28.37 28.95	30 30 EIRP Limit 30 30 30 30 30 30 30 33 33 33 33 33 33	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 -1.23 -0.02 -1.23 -0.02 -1.23 -5.80 -5.79 -5.35 -5.42 -5.23 -5.25 -5.23 -5.25 -5.55
Band 4A Ante Band 5A Ante Band 5A	Range Low Mid High nna gain Range Low High nna gain Range Low Mid	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 5 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 5 MHz 10 MHz 5 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20525 20620 Channel 20450 20525 20625 20525 20525 20525	1732.5 MHz 1745 MHz 1745 MHz 1745 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+	Band 13A Band 7A Band	High Range Low Mid High Low Mid High Range Low Mid	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 5 MHz 20 MHz 5 MHz 20 MHz 5 MHz 5 MHz 20 MHz 10 MHz	23095 23130 Channel 23230 23230 23230 23230 23230 23230 23230 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21350 21322 2132322 132322 132322	707.5 MHz 711 MHz 711 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2510 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2536 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz	I I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22.51 22.71 PCC 23.06 23.22 22.6 PCC 21.54 21.42 21.42 21.42 21.42 21.42 21.42 21.42 21.43 21.42 21.43 21.42 21.43 21.42 21.43 21.43 21.43 21.43 21.44 21.43 21.44 21.43 21.44 21.43 21.44 21.43 21.44 21.43 21.44 21.43 21.44 21.43 21.44 21.44 21.45	22,45 21,89 Poww 21,63 21,55 19,31 Poww SCC 20,91 19,91 21,06 20,91 20,85 21,23 20,85 21,23 20,85 21,23 20,77 Poww SCC 21,33 20,27 20,35 20,11 21,8 20,41 21,5 20,5 20,5 20,5 20,5 20,5 20,5 20,5 20	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 er(dBm) Total 23.80 23.81 24.25 24.18 24.37 24.29 er(dBm) Total 23.61 23.61 23.83 23.87 24.45 24.20 24.58	29.93 29.83 29.83 29.86 29.86 29.86 29.98 28.77 27.20 27.21 27.65 27.25 27.58 27.77 27.69 EIRP 28.11 28.33 28.37 28.95 28.70	30 30 EIRP Limit 30 30 30 30 30 30 33 33 33 33 33 33 33	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 Margin (dBm) -5.80 -5.79 -5.35 -5.42 -5.43 -5.42 -5.43 -5.42 -5.43 -5.43 -5.43 -5.43 -5.43 -5.43 -5.43 -5.43 -5.43 -5.43 -5.43 -5.43 -5.43 -5.43 -5.43 -5.43 -5.45 -5.5
Band 4A 5A 5A Band 5A 5A	nna gain Range Low Mid High nna gain Mid High nna gain Range Low Mid High nna gain	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 5 MHz 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 1.4 MHz 1.4 MHz 1.4 MHz 1.4 MHz 1.4 MHz 10 MHz 10 MHz 10 MHz 5 MHz 10 MHz 5 MHz 10 MHz 10 MHz 5 MHz 10 MHz 10 MHz 10 MHz 9	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20620 20525 20620 Channel 20450 20525 20625 20525 20525 20525 20525 20525	1732.5 MHz 1745 MHz 1745 MHz 1720 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 1745 MHz 836.5 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+	Band 13A Band 7A Band 66A	High Range Low Mid High Mid High Range Low Mid High	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 5 MHz 5 MHz 20 MHz 5 MHz 20 MHz 5 MHz 20 MHz 20 MHz 5 MHz 20 MHz 20 MHz 5 MHz 20 MHz 20 MHz 3 MHz 20 MHz 20 MHz 3 MHz 20 MHz 3 MHz 20 MHz 3 MHz 20 MHz 3 MHz 20 MHz 3	23095 23130 Channel 23230 23230 23230 23230 23230 23230 23230 21100 21100 21100 21100 21100 21100 21100 21350 Channel 131997 132322 132322 132322 132322 132322	707.5 MHz 711 MHz 711 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2535 MHz 2536 MHz 2536 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz	I I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22.51 22.71 PCC 21.87 23.02 23.22 22.6 PCC 20.67 21.54 21.42 21.47 21.49 21.73 21.32 21.49 21.73 21.32 21.49 21.73 21.32 22.46	22,45 21,89 Poww SCC 21,63 21,55 19,31 21,55 21,55 21,55 20,91 19,91 20,85 20,91 20,85 20,27 20,35 20,27 20,35 20,21 20,35 20,21 20,35 20,21 20,35 20,21 20,35 20,31 20,35 20,31 20,35 20,31 20,35 20,31 20,35 20,31 20,35 20,31 20,35 20,	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 Total 23.80 23.81 24.25 24.18 24.37 24.45 24.33 23.81 24.29 er(dBm) Total 23.80 23.81 24.45 24.29 er(dBm)	29.93 29.83 EIRP 29.26 29.98 28.77 27.20 27.21 27.65 27.58 27.77 27.69 EIRP 28.11 28.33 28.37 28.95 28.70 29.08	30 30 EIRP Limit 30 30 30 30 30 30 33 33 33 33	-0.07 -0.17 -0.14 -0.74 -0.74 -0.14 -0.02 -1.23 -0.02 -1.23 -5.80 -5.79 -5.35 -5.42 -5.23 -5.31 -5.23 -5.31 -5.23 -5.23 -5.31 -1.67 -1.67 -1.65 -1.05 -1.05 -1.30 -0.92 -0.92 Margin
Band 4A Ante Band 5A Ante Band 5A	Range Low Mid High nna gain Range Low Mid High nna gain Range Low Mid High nna gain	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz 20 MHz 5 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 10 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20555 20	1732.5 MHz 1745 MHz 1745 MHz 1745 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 1745 MHz 836.5 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+ +	Band 13A Band 7A Band	High Range Low Mid High Low Mid High Range Low Mid High	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 5 MHz 5 MHz 20 MHz 5 MHz 20 MHz 5 MHz 20 MHz 5 MHz 20 MHz 5 MHz 20 MHz 5 MHz 20 MHz 10 MH	23095 23130 Channel 23230 23230 23230 23230 23230 23230 23230 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21350 21322 2132322 23230 23232 232322 13232 1322 13232 1	707.5 MHz 711 MHz 711 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2535 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz	1 1	22.51 22.71 23.06 23.22 22.6 PCC 21.54 21.42 21.42 21.42 21.42 21.42 21.43 21.49 21.73 21.32 22.46 22.49 PCC	22.45 21.89 Pow SCC 21.63 21.55 19.31 Pow SCC 20.91 19.91 20.05 21.06 20.85 21.23 20.77 Pow SCC 20.32 20.77 20.35 20.11 21.3 20.27 20.31 20.27 20.31 20.27 20.31 20.27 20.31 20.27 20.31 20.27 20.31 20.27 20.31 20.32 20.41 20.32 20.41 20.32 20.41 20.55 20.51 20.55 20.51 20.55 20.51 20.55 20.51 20.55 20.51 20.55 2	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 er(dBm) Total 23.80 23.81 24.25 24.18 24.25 24.18 24.25 24.18 24.29 er(dBm) Total 23.83 23.87 24.45 24.25 24.58 er(dBm) Total	29.93 29.83 29.83 29.86 29.86 29.98 28.77 27.20 27.21 27.69 27.21 27.58 27.77 27.69 27.58 27.77 27.69 28.11 28.33 28.37 28.95 28.70 29.08	30 30 EIRP Limit 30 30 30 30 30 30 33 33 33 33 33 33 33	-0.07 -0.17 -0.17 -0.74 -0.14 -0.14 -0.22 -1.23 -1.23 -0.22 -1.23 -5.80 -5.79 -5.35 -5.42 -5.35 -5.42 -5.31 -5.31 -5.31 -5.31 -5.31 -6.7 -1.63 -1.65 -1.63 -1.05 -1.30 -0.92 -1.30 -0.92
Band 4A 5A 5A Band 5A 5A	nna gain Range Low Mid High nna gain Mid High nna gain Range Low Mid High nna gain	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 5 MHz 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 1.4 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 5 MHz 5 MHz 10 MHz	20175 20300 Channel 20050 20175 20300 Channel 20450 20525 2055 20	1732.5 MHz 1745 MHz 1745 MHz 1745 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 829 MHz 836.5 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+	Band 13A Band 7A Band 66A	High Range Low Mid High Mid High Range Low Mid High	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 5 MHz 20 MHz 20 MHz 20 MHz 3 MHz 20 MHz 3 MHz 20 MHz 3 MHz 20 MHz 3	23095 23130 23230 23230 23230 23230 23230 23230 23230 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21350 2100 21100 21350 21322 132322 132322 132322 132322 132322 132322 132647 132647	707.5 MHz 711 MHz 711 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2535 MHz 2550 MHz 1712.5 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1777.5 MHz	I I	22.51 22.71 PCC 21.87 23.06 20.67 21.54 21.42 21.42 21.47 21.42 21.47 21.42 21.47 21.42 21.47 21.42 21.47 21.42 21.47 21.42 21.47 21.42 21.47 21.42 21.47 21.42 21.47 21.42 22.49	22.45 21.89 Powwer 21.63 21.55 19.31 Pow SCC 20.91 19.91 21.06 20.91 20.85 21.23 20.77 20.35 20.27 20.35 20.27 20.21 20.27 20.35 20.27 20.35 20.21 20.21 20.27 20.35 20.21 20.	25.43 25.33 er(dBm) Total 24.76 25.36 25.48 24.27 er(dBm) Total 23.80 23.81 24.25 24.23 24.29 er(dBm) Total 23.83 23.87 24.45 24.45 24.20 24.45 24.20 24.45 24.20 24.45 24.20 24.45 24.20 24.26 er(dBm) Total 24.26 er(dBm) Total 24.26 er(dBm) Total 24.26 er(dBm) Total 24.26 er(dBm) Total 24.26 er(dBm) Total 24.26 er(dBm) Total 24.26 er(dBm) Total 24.26 er(dBm) Total 24.26 er(dBm) Total 24.26 24.27 er(dBm) Total 24.26 24.20 24.20 25.48 er(dBm) Total 24.26 24.20 24.20 24.20 24.20 25.48 24.20 25.48 24.20 24.20 24.20 24.20 25.48 24.20 25.48 24.20 25.48 24.20 25.48 24.20 25.48 24.20 25.48 24.20 25.48 24.20 25.48 24.20 25.48 24.20 25.48 24.20 25.48 24.20 25.48 24.20 25.48 24.20 25.48 24.20 25.48 25.49 25.49 25.49 25.49 25.49 25.49 25.49 26.20 27.20	29.93 29.83 EIRP 29.26 29.86 29.98 28.77 27.20 27.21 27.65 27.58 27.77 27.69 27.58 27.77 27.69 27.58 27.77 27.69 28.33 28.37 28.37 28.37 28.37 28.95 28.70 29.08 29.76	30 30 EIRP Limit 30 30 30 30 30 30 33 33 33 33 33 33 33	-0.07 -0.17 Margin (dBm) -0.74 -0.12 -1.23 -1.23 Margin (dBm) -5.80 -5.79 -5.37 -5.42 -5.23 -5.31 -1.63 -1.05 -1.63 -1.05 -1.23 -0.02 -0.0
Band 4A Ante Band 5A Ante Band 5A Ante Band	Range Low Mid High nna gain Range Low Mid High nna gain Range Low Mid High nna gain	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz First Band Band width 20 MHz 5 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 5 MHz 5 MHz 10 MHz 10 MHz 5 MHz 5 MHz 5 MHz	20175 20300 Channel 20050 20175 20300 Channel 20450 20525 205555 205555 205555 205555 2055555 2055555555	1732.5 MHz 1745 MHz 1745 MHz 1745 MHz 1720 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+	Band 13A 7A Band 66A Band	High Range Low Mid High Cow Mid High Range Low Mid High	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 10 MHz	23095 23130 Channel 23230 23230 23230 23230 23230 23230 23230 21100 21100 21100 21100 21100 21100 21100 21100 21100 21100 21350 2100 21350 21322 132322 132322 132322 132647	707.5 MHz 711 MHz 711 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2535 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22.51 22.71 PCC 21.87 23.06 20.67 21.54 21.42 21.42 21.47 21.42 21.47 21.42 21.47 21.42 21.47 21.42 21.47 21.42 21.47 21.42 21.47 21.42 21.47 21.42 21.47 21.42 22.44 21.42 22.42 21.32 22.44 22.42 22	22,45 21,89 Poww SCC 21,63 21,55 19,31 9,04 20,91 21,05 20,91 21,05 20,91 21,05 20,91 21,05 20,91 21,05 20,85 20,85 20,85 20,85 20,85 20,85 20,85 20,85 20,85 20,85 20,85 20,85 20,85 20,85 20,85 20,91 20,85 20,85 20,91 20,85 20,85 20,85 20,85 20,91 20,85 20,85 20,91 20,85 20,91 20,85 20,85 20,91 20,85 20,91 20,85 20,91 20,85 20,91 20,85 20,91 20,85 20,91 20,85 20,91 20,85 20,91 20,85 20,85 20,91 20,85 20,85 20,91 20,85 20,85 20,85 20,91 20,85 20,85 20,85 20,91 20,85 20,85 20,85 20,85 20,91 20,85 20,85 20,91 20,85 20,85 20,91 20,85 20,85 20,85 20,85 20,91 20,85 20,85 20,85 20,85 20,85 20,91 20,85 20,85 20,85 20,85 20,85 20,91 20,85 20,8	25.43 25.33 er(dBm) 7otal 24.76 25.36 25.48 24.27 er(dBm) 7otal 23.80 23.81 24.25 24.18 24.37 24.29 er(dBm) 7otal 23.61 23.61 23.83 23.87 24.45 24.20 24.58 er(dBm) 7otal 24.58	29.93 29.83 29.83 29.86 29.86 29.98 28.77 27.20 27.21 27.65 27.58 27.58 27.58 27.58 27.58 27.57 27.69 28.11 28.31 28.37 28.95 28.70 29.08 28.70 29.08	30 30 30 30 30 30 30 30 30 30 33 33 33 3	-0.07 -0.17 -0.17 -0.14 -0.74 -0.12 -1.23 -0.02 -1.23 -1.23 -5.30 -5.79 -5.42 -5.54 -5.42
Band 4A 5A 5A Band 5A 5A	Range Low Mid High nna gain Range Low Mid High nna gain Range Low Mid High nna gain	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz 20 MHz 5 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 1.4 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20525 20525 20525 20525 20600 Channel 20450 20525 20525 20525 20525 20525 20525 20525 20525 20600	1732.5 MHz 1745 MHz 1745 MHz 1745 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 1745 MHz 836.5 MHz 846.5 M	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+	Band 13A Band 7A Band 66A	High Range Low Mid High Low Mid High Range Low Mid High	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz 10 MHz econd Band Band width 10 MHz 20 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 20 MHz 5 MHz 20 MHz 5 MHz 20 MHz 5 MHz 20	23095 23130 23230 23230 23230 23230 23230 23230 23230 2100 21222 212222 212222	707.5 MHz 711 MHz 711 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2535 MHz 2536 MHz 2536 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz	1 1	22.51 22.71 23.06 23.22 22.6 PCC 21.54 21.42 21.42 21.42 21.42 21.42 21.42 21.42 21.42 21.42 21.42 21.43 21.42 21.43 21.42 21.43 21.42 21.44 21.49 21.43 21.42 22.46 22.49 PCC 22.97 22.96	22.45 21.89 SCC 21.63 21.55 21.55 21.55 21.55 21.55 20.91 19.91 20.95 20.27 20.35 20.77 20.35 20.77 20.35 20.77 20.35 20.11 21.8 20.41 20.41 21.8 20.41 21.8 20.41 21.8 20.41 21.8 20.41 21.8 20.41 21.8 20.41 21.8 20.41 21.8 20.41 21.5 20.5 21.5 20.5 20.5 20.5 20.5 20.5 20.5 20.5 20	25.43 25.33 er(dBm) Total 24.76 25.36 25.36 25.48 24.27 Total 23.80 23.81 24.25 24.18 24.25 24.18 24.29 er(dBm) Total 23.81 24.29 er(dBm) Total 23.81 24.45 24.20 24.58 er(dBm) Total 24.45 24.20	29.93 29.83 29.83 29.86 29.86 29.86 29.98 28.77 27.20 27.21 27.65 27.25 27.77 27.69 27.21 27.69 27.21 27.69 28.11 28.33 28.37 28.95 28.70 29.08	30 30 EIRP Limit 30 30 30 30 30 33 33 33 33 33 33 33 33	-0.07 -0.17 -0.17 -0.74 -0.14 -0.14 -1.23 -1.23 -1.23 -5.30 -5.79 -5.35 -5.42 -5.31 -5.31 -5.31 -5.31 -5.31 -5.31 -1.67 -1.63 -1.67 -1.63 -1.67 -1.63 -1.89 -1.89 -1.30 -0.92 -1.24 -1.35 -0.94
Band 4A Ante Band 5A Ante Band 5A Ante Band	Range Low Mid High nna gain Range Low Mid High nna gain Range Low Mid High nna gain	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz 20 MHz 5 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 5 MHz 5 MHz 5 MHz 10 MHz 10 MHz 5 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20525 20600 Channel 20555 20525 205555 205555 205555 205555 205555 2055555 2055555555	1732.5 MHz 1745 MHz 1745 MHz 1745 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 1745 MHz 836.5 MHz 84.5 MHz 85.5 MHz	I 1	+ + +	Band 13A 7A Band 66A Band	High Range Low Mid High Cow Mid High Range Low Mid High	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz 10 MHz econd Band Band width 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 20 MHz 10 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 5 MHz 20 MHz 5 MHz 20 MHz 5 MHz 20 MHz 5 MHz 20 MHz 14 MHz 1.4 MHz 20 MHz 1.4 MHz	23095 23130 23230 23230 23230 23230 23230 23230 23230 23230 21100 21120 21322 132322	707.5 MHz 711 MHz 711 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2535 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz 1745 MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22.51 22.71 23.06 23.22 22.6 PCC 20.67 21.54 21.42 21.42 21.47 21.42 21.47 21.49 21.73 21.32 22.46 PCC 22.49 PCC 22.49 PCC 22.49 22.49 22.49	22.45 21.89 Pow SCC 21.63 21.55 19.31 Pow SCC 20.91 19.91 20.06 21.06 20.05 21.02 20.77 Pow SCC 21.3 20.77 20.35 20.17 20.35 20.21 20.55 20.51 20.55 20.51 20.55 20.51 20.55	25.43 25.33 er(dBm) Total 24.76 25.36 25.38 24.27 er(dBm) Total 23.80 23.81 24.25 24.18 24.25 24.18 24.29 er(dBm) Total 23.83 23.87 24.45 24.58 er(dBm) Total 23.83 23.87 24.45 24.25 24.58 er(dBm) Total 23.80 23.81 24.29 er(dBm) Total 23.83 23.87 24.45 24.25 24.25 24.28 er(dBm) Total 23.80 23.81 24.29 er(dBm) Total 23.83 23.87 24.45 24.25	29.93 29.83 29.83 29.86 29.98 28.77 27.20 27.21 27.65 27.58 27.77 27.69 27.58 27.77 27.69 28.70 28.33 28.37 28.35 28.70 29.08 EIRP 28.76 28.76 28.76 28.76 28.76	30 30 EIRP Limit 30 30 30 30 30 30 33 33 33 33 33 33 33	-0.07 -0.17 -0.17 -0.74 -0.74 -0.74 -0.74 -1.23 -1.23 -0.74 -1.23 -0.74 -0.75 -0.75 -0.75 -0.75 -0.75 -0.75 -0.75 -0.75 -0.75 -0.75 -0.75 -0.75 -0.75 -0.75 -0.74 -0.74 -0.74 -0.74 -0.74 -0.74 -0.74 -0.74 -0.74 -0.74 -0.74 -0.74 -0.74 -0.74 -0.74 -0.75
Band 4A Ante Band 5A Ante Band 5A Ante Band	Range Low Mid High nna gain Range Low Mid High nna gain Range Low Mid High nna gain	QPSK QPSK 4.5 Modulation QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	20 MHz 20 MHz 20 MHz 5 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 20 MHz 10 MHz 1.4 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 10 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz	20175 20300 Channel 20050 20175 20175 20300 Channel 20450 20525 20525 20525 20525 20525 20525 20525 20600 Channel 20450 20525 20525 20525 20525 20525 20525 20525 20525 20600	1732.5 MHz 1745 MHz 1745 MHz 1745 MHz 1732.5 MHz 1732.5 MHz 1732.5 MHz 1745 MHz 1745 MHz 836.5 MHz 846.5 M	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+ + +	Band 13A 7A Band 66A Band	High Range Low Mid High Cow Mid High Range Low Mid High	QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	10 MHz 10 MHz 10 MHz econd Band Band width 10 MHz 20 MHz 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz 20 MHz 5 MHz 20 MHz 5 MHz 20 MHz 5 MHz 20	23095 23130 23230 23230 23230 23230 23230 23230 23230 2100 21222 212222 212222	707.5 MHz 711 MHz 711 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 782 MHz 2535 MHz 1745 MHz	1 1	22.51 22.71 23.06 23.22 22.6 PCC 21.54 21.42 21.42 21.42 21.42 21.42 21.42 21.42 21.42 21.42 21.42 21.43 21.42 21.43 21.42 21.43 21.42 21.44 21.49 21.43 21.42 22.46 22.49 PCC 22.97 22.96	22.45 21.89 SCC 21.63 21.55 21.55 21.55 21.55 21.55 20.91 19.91 20.95 20.27 20.35 20.77 20.35 20.77 20.35 20.77 20.35 20.11 21.8 20.41 20.41 21.8 20.41 21.8 20.41 21.8 20.41 21.8 20.41 21.8 20.41 21.8 20.41 21.8 20.41 21.8 20.41 21.5 20.5 21.5 20.5 20.5 20.5 20.5 20.5 20.5 20.5 20	25.43 25.33 er(dBm) Total 24.76 25.36 25.36 25.48 24.27 Total 23.80 23.81 24.25 24.18 24.25 24.18 24.29 er(dBm) Total 23.81 24.29 er(dBm) Total 23.81 24.45 24.20 24.58 er(dBm) Total 24.45 24.20	29.93 29.83 29.83 29.86 29.86 29.86 29.98 28.77 27.20 27.21 27.65 27.25 27.77 27.69 27.21 27.69 27.21 27.69 28.11 28.33 28.37 28.95 28.70 29.08	30 30 EIRP Limit 30 30 30 30 30 33 33 33 33 33 33 33 33	-0.07 -0.17 Margin (dBm) -0.74 -0.14 -0.02 -1.23 -1.23 -5.30 -5.73 -5.80 -5.75 -5.42 -5.35 -5.42 -5.35 -5.42 -5.31 -5.31 -5.31 -1.67 -1.63 -1.67 -1.63 -1.05 -1.30 -0.92 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.35 -1.24 -1.30 -1.24 -1.24 -1.24 -1.35 -1.24 -1.30 -1.24 -1.25

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

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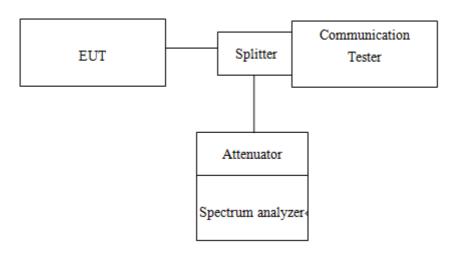


7 OCCUPIED BANDWIDTH MEASUREMENT

7.1 Standard Applicable

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power.

7.2 Test Set-up



7.3 Measurement Procedure

99% &26dB Bandwidth with detector peak

The EUT's output RF connector was connected with a short cable to the spectrum analyzer, RBW was set to about 1% of emission BW, VBW= 3 times RBW, -26dBc display line was placed on the screen (or 26dB bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace. Then set RBW to 99% bandwidth, RBW= 1%, VBW= 3 RBW, with span > 2 * Signal BW, set % Power = 99%.

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Measurement Equipment Used 7.4

Conduc	ted Emission (m	neasured at a	antenna port)	Test Site	
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.
TYPE		NUMBER	NUMBER	CAL.	
Spectrum Analyzer	KEYSIGHT	N9010A	MY51440113	07/15/2019	07/14/2020
Radio Communication Analyer	Anritsu	MT8821C	6261786084	01/18/2020	01/17/2021
Attenuator	Marvelous	MVE2213-10	RF30	11/20/2019	11/19/2020
DC Block	PASTERNACK	PE8210	RF32	11/20/2019	11/19/2020
Splitter	Woken	DOM35LW1 A2	RF83	11/20/2019	11/19/2020
Coaxial Cables	Woken	00100A1F1A 185C	RF229	11/20/2019	11/19/2020

7.5 **Measurement Result**

		First Band		Freq.	1	S	econd Band		Freq.	OE	SW
	Modulation	Band width	Channel	(MHz)		Modulation	Band width	Channel	(MHz)	26dB(MHz)	99%(MHz)
	QPSK	5 MHz	20428	826.8		QPSK	10 MHz	20500	834	14.73	13.911
	QPSK	5 MHz	20478	831.8		QPSK	10 MHz	20550	839	14.81	13.904
	16QAM	5 MHz	20478	831.8		16QAM	10 MHz	20550	839	14.62	13.845
	64QAM	5 MHz	20478	831.8		64QAM	10 MHz	20550	839	14.61	13.837
	256QAM	5 MHz	20478	831.8		256QAM	10 MHz	20550	839	14.55	13.737
5B	QPSK	10 MHz	20500	834		QPSK	5 MHz	20572	841.2	14.79	13.928
50	16QAM	10 MHz	20500	834	+	16QAM	5 MHz	20572	841.2	14.77	13.867
	64QAM	10 MHz	20500	834		64QAM	5 MHz	20572	841.2	14.81	13.906
	256QAM	10 MHz	20500	834		256QAM	5 MHz	20572	841.2	14.61	13.805
	QPSK	10 MHz	20476	831.6		QPSK	10 MHz	20575	841.5	19.8	18.758
	16QAM	10 MHz	20476	831.6		16QAM	10 MHz	20575	841.5	19.83	18.695
	64QAM	10 MHz	20476	831.6		64QAM	10 MHz	20575	841.5	19.89	18.644
	256QAM	10 MHz	20476	831.6		256QAM	10 MHz	20575	841.5	19.8	18.758
	QPSK	5 MHz	20528	836.8		QPSK	10 MHz	20600	844	14.58	13.872
		First Band		Freq.		S	econd Band		Freq.	OE	
	Modulation	Band width	Channel	(MHz)		Modulation	Band width	Channel	(MHz)	26dB(MHz)	99%(MHz)
	QPSK	20 MHz	20850	2510		QPSK	20 MHz	21048	2529.8	39.27	37.438
	QPSK	10 MHz	21006	2525.6		QPSK	20 MHz	21150	2540	29.17	27.698
	16QAM	10 MHz	21006	2525.6	_	16QAM	20 MHz	21150	2540	29.12	27.605
	64QAM	10 MHz	21006	2525.6		64QAM	20 MHz	21150	2540	33.15	27.575
	QPSK	20 MHz	21051	2530.1		QPSK	10 MHz	21195	2544.5	31.31	27.695
7C	16QAM	20 MHz	21051	2530.1	+	16QAM	10 MHz	21195	2544.5	29.43	27.699
	64QAM	20 MHz	21051	2530.1	_	64QAM	10 MHz	21195	2544.5	30.68	27.656
	256QAM	20 MHz	21051	2530.1		256QAM	10 MHz	21195	2544.5	30.68	27.656
	QPSK	20 MHz	21001	2525.1		QPSK	20 MHz	21199	2544.9	39.46	37.286
	16QAM	20 MHz	21001	2525.1		16QAM	20 MHz	21199	2544.9	39.3	37.34
	64QAM	20 MHz	21001	2525.1		64QAM	20 MHz	21199	2544.9	39.25	37.247
	256QAM	20 MHz	21001	2525.1		256QAM	20 MHz	21199	2544.9	38.92	36.984
	QPSK	20 MHz	21152	2540.2		QPSK	20 MHz	21350	2560	38.97	37.017

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		First Band		Freq.	1	s	econd Band		Freq.	OE	3W
	Modulation	Band width	Channel	(MHz)		Modulation	Band width	Channel	(MHz)	26dB(MHz)	99%(MHz)
	QPSK	5 MHz	39683	2499.3		QPSK	20 MHz	39800	2511	24.05	22.836
	QPSK	5 MHz	40528	2583.8		QPSK	20 MHz	40645	2595.5	24.23	22.897
	16QAM	5 MHz	40528	2583.8		16QAM	20 MHz	40645	2595.5	23.91	22.807
	64QAM	5 MHz	40528	2583.8		64QAM	20 MHz	40645	2595.5	23.95	22.882
	256QAM	5 MHz	40528	2583.8	1	256QAM	20 MHz	40645	2595.5	24	22.698
440	QPSK	20 MHz	40595	2590.5	1	QPSK	5 MHz	40712	2602.2	24.37	22.996
41C	16QAM	20 MHz	40595	2590.5	+	16QAM	5 MHz	40712	2602.2	24.34	22.989
	64QAM	20 MHz	40595	2590.5	1	64QAM	5 MHz	40712	2602.2	24.31	22.835
	256QAM	20 MHz	40595	2590.5	1	256QAM	5 MHz	40712	2602.2	24.04	22.853
	QPSK	20 MHz	40521	2583.1	1	QPSK	20 MHz	40719	2602.9	39.35	37.458
	16QAM	20 MHz	40521	2583.1	1	16QAM	20 MHz	40719	2602.9	39.44	37.427
	64QAM	20 MHz	40521	2583.1		64QAM	20 MHz	40719	2602.9	39.33	37.435
	256QAM	20 MHz	40521	2583.1		256QAM	20 MHz	40719	2602.9	39.17	37.284
	QPSK	5 MHz	41373	2668.3		QPSK	20 MHz	41490	2680	24.03	22.878
		First Band		Freq.		S	econd Band		Freq.	OE	BW
	Modulation	Band width	Channel	(MHz)		Modulation	Band width	Channel	(MHz)	26dB(MHz)	99%(MHz)
	QPSK	5 MHz	55273	3553.3		QPSK	20 MHz	55390	3565	24.03	22.865
	QPSK	5 MHz	55898	3615.8		QPSK	20 MHz	56015	3627.5	23.97	22.829
	16QAM	5 MHz	55898	3615.8		16QAM	20 MHz	56015	3627.5	23.97	22.802
	64QAM	5 MHz	55898	3615.8		64QAM	20 MHz	56015	3627.5	23.9	22.728
	256QAM	5 MHz	55898	3615.8		256QAM	20 MHz	56015	3627.5	24	22.765
400	QPSK	20 MHz	55965	3622.5	۱.	QPSK	5 MHz	56082	3634.2	24.1	22.913
48C	16QAM	20 MHz	55965	3622.5	+	16QAM	5 MHz	56082	3634.2	23.95	22.87
	64QAM	20 MHz	55965	3622.5		64QAM	5 MHz	56082	3634.2	24.15	22.829
	256QAM	20 MHz	55965	3622.5		256QAM	5 MHz	56082	3634.2	24.01	22.849
	QPSK	20 MHz	55891	3615.1		QPSK	20 MHz	56089	3634.9	38.99	37.405
	16QAM	20 MHz	55891	3615.1		16QAM	20 MHz	56089	3634.9	39.28	37.419
	64QAM	20 MHz	55891	3615.1		64QAM	20 MHz	56089	3634.9	39.4	37.432
	256QAM	20 MHz	55891	3615.1		256QAM	20 MHz	56089	3634.9	38.92	37.304
	QPSK	5 MHz	56523	3678.3		QPSK	20 MHz	56640	3690	23.89	22.878
		First Band		Freq.		S	econd Band		Freq.	OE	BW
	Modulation	Band width	Channel	(MHz)		Modulation	Band width	Channel	(MHz)	26dB(MHz)	99%(MHz)
	QPSK	15 MHz	132047	1717.5		QPSK	5 MHz	132140	1726.8	19.37	18.223
	QPSK	5 MHz	132398	1752.6		QPSK	5 MHz	132446	1757.4	9.913	9.2748
	16QAM	5 MHz	132398	1752.6		16QAM	5 MHz	132446	1757.4	9.851	9.247
	64QAM	5 MHz	132398	1752.6		64QAM	5 MHz	132446	1757.4	9.838	9.2797
	256QAM	5 MHz	132398	1752.6		256QAM	5 MHz	132446	1757.4	9.716	9.1884
66B	QPSK	5 MHz	132353	1748.1		QPSK	15 MHz	132446	1757.4	19.33	18.316
	16QAM	5 MHz	132353	1748.1	+	16QAM	15 MHz	132446	1757.4	19.19	18.285
	64QAM	5 MHz	132353	1748.1		64QAM	15 MHz	132446	1757.4	19.16	18.196
	256QAM	5 MHz	132353	1748.1		256QAM	15 MHz	132446	1757.4	19.04	18.04
	QPSK	15 MHz	132398	1752.6		QPSK	5 MHz	132491	1761.9	19.37	18.207
	16QAM	15 MHz	132398	1752.6		16QAM	5 MHz	132491	1761.9	19.35	18.206
	64QAM	15 MHz	132398	1752.6		64QAM	5 MHz	132491	1761.9	19.39	18.186
	256QAM	15 MHz	132398	1752.6		256QAM	5 MHz	132491	1761.9	19.19	18.133
	QPSK	15 MHz	132549	1767.7		QPSK	5 MHz	132642	1777	19.47	18.22

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		First Band		Freq.		S	econd Band		Freq.	OE	SW
	Modulation	Band width	Channel	(MHz)		Modulation	Band width	Channel	(MHz)	26dB(MHz)	99%(MHz)
	QPSK	20 MHz	132072	1720		QPSK	5 MHz	132189	1731.7	24.16	22.865
	QPSK	20 MHz	132397	1752.5		QPSK	5 MHz	132514	1764.2	24.22	22.833
	16QAM	20 MHz	132397	1752.5		16QAM	5 MHz	132514	1764.2	24.16	22.836
	64QAM	20 MHz	132397	1752.5		64QAM	5 MHz	132514	1764.2	24.03	22.817
	256QAM	20 MHz	132397	1752.5		256QAM	5 MHz	132514	1764.2	24.24	22.822
66C	QPSK	5 MHz	132330	1745.8].	QPSK	20 MHz	132447	1757.5	23.93	22.984
000	16QAM	5 MHz	132330	1745.8	•	16QAM	20 MHz	132447	1757.5	23.86	22.82
	64QAM	5 MHz	132330	1745.8		64QAM	20 MHz	132447	1757.5	23.74	22.744
	256QAM	5 MHz	132330	1745.8		256QAM	20 MHz	132447	1757.5	23.66	22.527
	QPSK	20 MHz	132323	1745.1		QPSK	20 MHz	132521	1764.9	39.25	37.347
	16QAM	20 MHz	132323	1745.1		16QAM	20 MHz	132521	1764.9	39.09	37.538
	64QAM	20 MHz	132323	1745.1		64QAM	20 MHz	132521	1764.9	42.99	37.353
	256QAM	20 MHz	132323	1745.1		256QAM	20 MHz	132521	1764.9	39.14	37.114
	QPSK	20 MHz	132522	1765		QPSK	5 MHz	132639	1776.7	24.1	22.784

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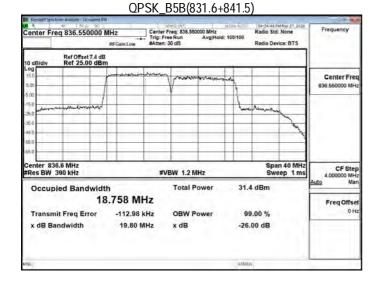
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QPSK_B5B(826.8+834)

Center F	req 831.650		MHz #FGain:Low	Center F			100/100	Radio Sto		Frequency
10 dB/div	Ref Offset			11					1	_
15.0 5.00		-	monimum	James	an a	renter	7			Center Freq
-5.00		-1					1	1		
10.0	alwananta	called	_				laco	ant. Man. An	inanu	
45.0		-					-			
-65.0		_			-			-		
Center 8: #Res BW				#VI	BW 1 MH	z	_		eep 1 ms	CF Step 3.000000 MH
Occur	pied Band	widt	h		Total P	ower	31.	3 dBm		<u>Auto</u> Mar
		13	.911 MH	łz						Freq Offse
Transr	nit Freq Err	or	-185.13	Hz	OBW P	ower	9	9.00 %		0 Hz
x dB B	landwidth		14.73 M	IHz	x dB		-26	.00 dB		
without in							AYAO			



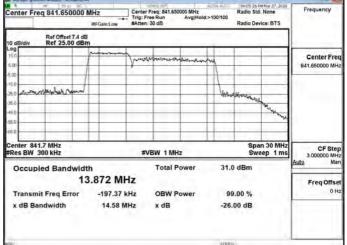
QPSK_B5B(831.8+839)

Center Fre	eq 836.650000 I	Trig	er Freq: 836.650000 MHz Free Run Avg Hole m: 30 dB	d:>100/100	Tot 10 CT PMMar 27, 2020 Radio Std: None Radio Device: BTS	Frequency
10 dB/div	Ref Offset 7.4 dB Ref 25.00 dBn					
150 500 500		r	mon			Center Free 836.650000 MH
15.0	whencensermound			h	Nontrinstanting	
450 550 650						
Center 830 #Res BW			#VBW 1 MHz	11 1	Span 30 MHz Sweep 1 ms	
Occup	ied Bandwidt 13	h 3.904 MHz	Total Power	32.3	dBm	Auto Mar Freg Offse
	it Freq Error ndwidth	-191.34 kHz 14.81 MHz	OBW Power x dB	99. -26.0	00 % 0 dB	0H
(66)				AYATON		-

QPSK_B5B(834+841.2)

Feynigill Specia	an Analyze Occupied Bi	N	1 19965-007	1	MALTO	Tanatas	PMMar 27, 2020	
Center Fre	eq 836.350000		Center Freq: 836.350 rig: Free Run Atten: 30 dB			Radio Sti		Frequency
10 dB/div	Ref Offset 7.4 dB Ref 25.00 dBr			_				
150 500 500		Junaman	V	righter and the factor				Center Freq 836.350000 MHz
150 250 edyntur	menund				Maria	and the second		
45 0 55 0								
Center 83			#VBW 1 MH:	z			an 30 MHz eep 1 ms	CF Step 3.000000 MHz
Occup	ied Bandwidt 13	th 3.928 MHz	Total P	ower	31.6	dBm		<u>Auto</u> Man
	it Freq Error Indwidth	120.53 kH: 14.79 MH:	OBW P	ower		.00 % 00 dB		Freq Offset 0 Hz
(100)					ATAGON			

QPSK_B5B(836.8+844)



16QAM B5B(826.8+834)

Center Fre	q 831.650000	MHz #FGain:Low	Center Fr	req: 831.650 e Run 0 dB	000 MHz AvgiHold:>	100/100	Radio St	th April 0, 2020 d: None evice: BTS	Frequency
10 dB/div	Ref Offset 7.4 de Ref 25.00 dBr			_	_				
150 500 500		perman	Musine	whendow	en an	1	-		Center Freq 831.650000 MHz
-15.0	mound					ten	-	aun	
450 -550									
Center 831 #Res BW 3			#VE	SW 1 MH	z			an 30 MHz /eep 1 ms	CF Step 3.000000 MHz
Occupi	ed Bandwidt	th 3.839 MI	Hz	Total P	ower	27.	2 dBm		Auto Man Freg Offset
	it Freq Error ndwidth	-213.20 14.65 M		% of OI x dB	BW Power		9.00 % .00 dB		0 H2
(66)						AYAR	n		

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16QAM_B5B(831.6+841.5)

Center Fr	eq 836.5500		Hz #FGain:Low	Center F			00/100	Radio Dev		Frequency
10 dB/div	Ref Offset 7 Ref 25.00									
150 500		1	umm	man	month	human	5			Center Fre 836.550000 MH
150 -250	-	m					100	many	~	-
450						_			Y	
-55.0									-	
Center 83 #Res BW				#V8	BW 1.2 M	IHz		Spa Swe	n 40 MHz ep 1 ms	CF Ste 4.000000 MH
Occup	ied Bandy	width	Contract		Total P	ower	31.	6 dBm	-	<u>Auto</u> Ma
		18	.695 MI	Ηz						Freq Offse
Transm	nit Freq Erro	or	-101.00	kHz	OBW P	ower	99	9.00 %		01
x dB Ba	andwidth		19.83 N	1Hz	x dB		-26.	8b 00.		
etal							ATAO			

Center Fre	q 836.65000	INFG	Tentra Te	inter Freq: 83 ig: Free Run itten: 30 dB	6.650000 MHz	ALIGN 8		Radio Std Radio Dev		Frequency
10 dB/div Log	Ref 25.00 d	1 1	anna		1	11	-	-	-	
15.0	1	1	V	w. 2phillin	homester	day			5	Center Free 835,650000 MH
5.00		11		_	_	-11	-		-	
15.0		1				+++		-	-	
350 Mar	annumanal	¥				11	kning	hik-monstring	wanna	
45.0				-	-		-		-	
-55.0	+ +	++				++-	-	-	-	
-65 0						11			-	
Center 836 #Res BW 3				#VBW 1	MHz				n 30 MHz ep 1 ms	CF Ste 3.000000 MH
Occupi	ed Bandwi	idth		Tot	al Power		30.8	dBm		Auto Mar
			15 MHz							FregOffse
Transmi	t Freq Error	-1	17.49 kHz	OB	W Power		99.	.00 %		OH
x dB Ba	ndwidth		14.62 MHz	x d	в		-26.0	00 dB		-
(10)						-	AYAGON			-

16QAM_B5B(834+841.2)

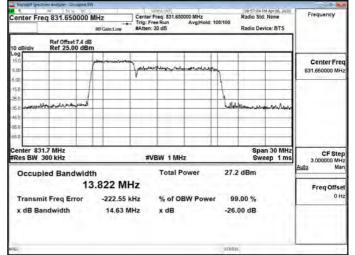
Center Fre	eq 836.350000 M		Center Freq: 836. Trig: Free Run #Atten: 30 dB		100/100	Radio St	td: None evice: BTS	Frequency
10 dB/div	Ref Offset 7.4 dB Ref 25.00 dBm							
150 500 500		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ywynd far de	Annum	Curtury .			Center Fred 836.350000 MHz
15.0 350 00000	unathrand			-	h	minun	Muning	
450 550 650								
Center 830 Res BW			#VBW 11	VIHz			an 30 MHz veep 1 ms	CF Step 3.000000 MH
Occup	ied Bandwidth 13	.867 MH		Power	30.	7 dBm		Auto Mar Freg Offse
	it Freq Error ndwidth	112.99 kH 14.77 MH		Power		9.00 % .00 dB		013
(5G)					AYARO	n		-

16QAM_B5B(831.8+839)

16QAM_B5B(836.8+844)

	turn sinalister + O(cupied 6	W							
Center Fre	eq 841.650000	MHz #FGain:Low	Center Trig: F	Freq: 841.650 ree Run : 30 dB	000 MHz Avg Hold: 10	00/100	Radio De		Frequency
10 dB/div	Ref Offset 7.4 dl Ref 25.00 dB	3 m	1.1						
15.0 5.00		provenum	Mary	man	multiple				Center Free 841.650000 MH
150 150 350 arals	Manasan					1			
450	-Carl Markard Bula					UM	handream	and the second	
650 Center 841	17 MU7						En	an 30 MHz	
Res BW	300 kHz	41-	#	/BW 1 MH		27.4		eep 1 ms	CF Step 3.000000 MH Auto Mar
Occup	ied Bandwid	3.879 M	Hz	Total P	ower	21.1	UDIII		Freq Offse
	it Freq Error Indwidth	-191.21 14.65 M		% of OI x dB	BW Power		9.00 % 00 dB		0 H:
elia						AYAGO	1		

64QAM_B5B(826.8+834)



64QAM_B5B(831.6+841.5)

Keynigilt Spectr	um éneste D(cupet 6W		1.9	100 100	1.0	una auto	04:36:22	PM Mar 27, 2020	
Center Fre	eq 836.550000 N	IHZ INFGain:Low	Center F	req: 835.550 e Run			Radio Sti		Frequency
10 dB/div	Ref Offset 7.4 dB Ref 25.00 dBm		1.1		_				
150 500		manan	alsonia .	minim	drawkominy	m		-	Center Fred 836.550000 MHs
-5.00 -15.0 -35.0	mound					lun	munhan		
350								Y	
-55.0						-		~	
Center 836 #Res BW 3			#VI	BW 1.2 N	IHz			an 40 MHz eep 1 ms	CF Step 4.000000 MHz
Occupi	ied Bandwidth	1		Total P	ower	30.	6 dBm		Auto Mar
	18	.644 MH	Iz						FreqOffse
Transmi	it Freq Error	-123.72 k	Hz	OBW P	ower	9	9.00 %		0 Ha
x dB Ba	ndwidth	19.89 M	Hz	x dB		-26	8b 00.		
who:						AYAD	ni		_

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64QAM_B5B(831.8+839)

	eq 836.650	0000 M	#FGain:Low	Center F			100/100	Radio De		Frequency
10 dB/div Log 15.0 5.00	Ref 25.0			Jurm	ManMin	anter	1			Center Freq 835.650000 MHz
-15.0 -25.0 -25.0 -35.0 -45.0	uliyangatu")(tal	wat					hu	4mptellu	-	
-55.0 -65.0 Center 83 #Res BW				#VI	BW 1 MH	iz iz		Spa Sw	an 30 MHz eep 1 ms	CF Step
Occup	oied Band		h .837 MH	łz	Total P	ower	30.	8 dBm		Auto Man
	nit Freq Er andwidth		-234.69 k 14.61 M	Hz	OBW P x dB	ower		9.00 % .00 dB		OH
(00)							ATAGO	n.		-

Center Fr	eq 836.35000		z Gain:Low	Center F		000 MHz AvgiHol		100	Radio Dev		Frequency
10 dB/div	Ref Offset 7.4 dB 0 dB/div Ref 25.00 dBm 90										
15.0 5.00		r	ana antar		V		-				Center Free 836.350000 MH
5.00 -15.0 -35.0	personale	1						Juis	white	molina	
450 -560 -650											
Center 83 #Res BW				#VI	BW 1 MH	z		-	Spa Swe	n 30 MHz ep 1 ms	CF Step 3.000000 MH
Occup	ied Bandwi	dth			Total P	ower		30.3	2 dBm		<u>Auto</u> Mar
		13.9	06 MI	Hz							Freq Offset
Transm	nit Freq Error		141.96	kHz	OBW P	ower		99	9.00 %		0 Hz
x dB Ba	andwidth		14.81 M	AHz	x dB			-26.	00 dB		
weich 1								ATAGO	n.]		

64QAM_B5B(834+841.2)

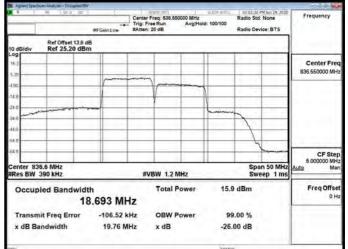
64QAM_B5B(836.8+844)

Center Fr	Anter: Freq 841.650000 MHz BirGainLow BirGainLow Center Freq 841.650000 MHz Trig: Free Run AvgiHold: 100100 BirGainLow BirGainLow									Frequency
10 dB/div	Ref Offset 7. Ref 25.00									
500		1	www.mana		monther					Center Free 841.650000 MH
15.0	whenter	w					-	wither with the se	MWA MARCAL	
45 0									"A AMONTON	
65.0 Center 84 #Res BW			1	#VI	BW 1MH	z			an 30 MHz leep 1 ms	CF Step 3.000000 MH
Occup	pied Bandw		858 M	u.,	Total P	ower	27.	5 dBm		<u>Auto</u> Mar
	nit Freq Erro andwidth		-204.87 14.64 I	kHz	% of OI x dB	BW Power	1.1	9.00 % .00 dB		Freq Offse 0 H
001							AYAR			-

256QAM_B5(826.8+834)

Keynigilt Speci	ant while the second for	¥	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	- T	MARN MITTO	100-00-01-0	1.Jun 23, 2020	3
Center Fre	eq 831.650000 l			831.650000 MHz	bid: 100/100	Radio Std: Radio Devi	None	Frequency
10 dB/div	Ref Offset 13.6 d Ref 23.60 dBn		12.2			10.1	1	_
Log 136 380 640 -164 -364 -364 -464 -664		······	V					Center Freq 831.650000 MHz
-66.4 Center 83 #Res BW			#VBW	1 MHz	11		n 30 MHz ep 1 ms	CF Step 3.000000 MHz
Occup	ied Bandwidt 13	h 3.761 MH		otal Power	18.	9 dBm		Auto Man Freg Offset
	it Freq Error andwidth	-245.69 kł 14.56 Mł		BW Power dB		9.00 % .00 dB		OHz
waa					AYAR	n		

256QAM_B5(831.6+841.5)



256QAM_B5(831.8+839)

Center Fre	aq 836.650000 I	MH2 #FGain:Low	Center Freq: 836.650000 MHz Trig: Free Run Avg/Hold: 100/100 #Atten: 30 dB				Radio De		Frequency
10 dB/div	Ref Offset 13.6 dl Ref 23.60 dBn								
Log 136 360 640 -164 -364 -364 -64 -64		~~~~~			*****				Center Freq 836,660000 MHz
-66 4 Center 830 #Res BW			#\	/BW 1 MHz			Spa Sw	an 30 MHz eep 1 ms	CF Step 3.000000 MHz
Occup	ied Bandwidt	h 8.737 MH	47	Total Pov	ver	18.	9 dBm		<u>Auto</u> Man
	it Freq Error Indwidth	-270.91	Hz	OBW Pov x dB	ver		9.00 % .00 dB		Freq Offset 0 Hz
witica						AYARO	n		-

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256QAM_B5(834+841.2)

a	w isa ari	Trig:	r Freq: 836.350000 MHz Free Run Avg Hold n: 20 dB	: 100/100	Radio Device: BTS	Frequency
10 dB/div	Ref Offset 13.6 dB Ref 25.00 dBm				-	
15,0 5.00						Center Free 836.350000 MH
5.00		-	- V	-		
150						
35.0						
450		1				
85.0 85.0						
Center 836					Span 30 MHz	CF Step 3.000000 MH: Auto Mar
#Res BW 3			VBW 1 MHz	-	Sweep 1 ms	Auto Mai
Occupi	ied Bandwidth 13	805 MHz	Total Power	18.7	dBm	Freq Offse 0 H
Transmi	it Freq Error	107.02 kHz	OBW Power	99.	00 %	
x dB Ba	ndwidth	14.61 MHz	x dB	-26.0	0 dB	
Aller				STATUL		

Center Fre	eq 841.650000 I	Trig: I	r Freq: 841.650000 MHz Free Run AvgiHold h: 30 dB	ALTINE ALTO 5: 100/100	Radio Std		Frequency
10 dB/div	Ref Offset 13.6 dl Ref 23.60 dBn						
136							Center Free 841.650000 MH
-6.40 -16.4 -36.4				1			
36 A	mound			him	-		
-66.4							
Center 84 #Res BW		#	VBW 1 MHz		Spa Swi	eep 1 ms	CF Step 3.000000 MH
Occup	ied Bandwidt	h	Total Power	19.	0 dBm		Auto Mar
	13	3.732 MHz					Freq Offsel
Transm	it Freq Error	-264.68 kHz	OBW Power	9	9.00 %		0 Hz
x dB Ba	indwidth	14.56 MHz	x dB	-26	00 dB		
MBQ1				AYAD	a.		_

256QAM_B5(836.8+844)

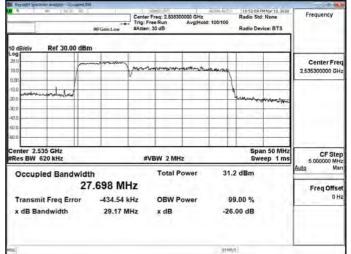
QPSK_B7C(2510+2529.8)

Center Fre	eq 2.51990		GHz #FGain:Low	Center F	e Run 0 dB	AvgiHold: 10	0/100	Radio Std		Frequency
10 dB/div	Ref Offset			100						
15.2 5.20		1000	and a Linear Arthury	-		munidation	ing			Center Free 2.519900000 GH
400	and and a state of the state of	1			V		ļ		an the strate	1
34.6		-							an and a fire	
44 B										
64.8		-						1		
Center 2.5 #Res BW				#VE	SW 1.8 N	NHz			eep 1 ms	CF Step 7.000000 MH
Occup	ied Band				Total P	ower	29.9	dBm		Auto Mar
George State			.438 MI	1						Freq Offse
	iit Freq Ern Indwidth	or	-115.50 39.27 M		% of OI x dB	BW Power		9.00 % 00 dB		
801							AYAGU			

QPSK_B7C(2525.1+2544.9)

Keynigilt Specia	Ref 55 D bC	V	1000		ATON ALTON	11.08.48	PM Mar 10, 2020	
Center Fre	q 2.535000000	Tr.	inter Freq: 2.5350 ig: Free Run itten: 30 dB			Radio St		Frequency
10 dB/div	Ref Offset 7.6 dB Ref 30.00 dBn							
20.0 10.0					مرهمون	-		Center Freq 2.535000000 GHz
30.0	~				_		Unicenn	1
40.0								
600 Center 2.5	25.042					-	an 50 MHz	
#Res BW (#VBW 2.2	MHz			eep 1 ms	CF Step 5.000000 MHz
Occupi	ied Bandwidt 37	h .286 MHz	Total	Power	30.0) dBm		Auto Man Freg Offset
	it Freq Error ndwidth	-144.36 kHz 39.46 MHz		Power		9.00 % 00 dB		0H
60					ATARO	N		

QPSK_B7C(2525.6+2540)



QPSK_B7C(2530.1+2544.5)

Feynigill Specia	tram Analyzer - Occupient BW		and out		ALTEN ALTO	11:00:02	PM Mar 10, 2020	2 10
Center Fre	eq 2.534800000	Trig	ter Freq: 2.53480 : Free Run en: 30 dB	AvgiHold	s: 100/100	Radio St		Frequency
10 dB/div	Ref Offset 7.6 dB Ref 30.00 dBm							
20.0 10.0		and and an and a second		from	renna	1		Center Fred 2,534800000 GH:
0.00 -10.0 -20.0 000000	umedulal					kternes	-	
-30.0			-	-				
50.0 80.0				-				
Center 2.5 #Res BW			#VBW 2 MH	z			an 50 MHz /eep 1 ms	CF Step 5.000000 MH
Occup	ied Bandwidt 27	h .695 MHz	Total P	ower	30.	.6 dBm		<u>Auto</u> Mar
	it Freq Error	246.11 kHz	OBW P	ower		9.00 %		Freq Offse 0 H
x dB Ba	ndwidth	31.31 MHz	x dB		-26	5.00 dB		
ABG)					BTAR	U%	-	

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QPSK_B7C(2540.2+2560)

Center Freq 2.	550100000	Trig:1	Freg: 2,550100000 GHz	: 100/100 Ra	0:12:02 PMMar 19, 2020 idio Std: None idio Device: BTS	Frequency
10 dB/div Re	f 20.00 dB	m				-
10.00	-					Center Free 2.650100000 GH
-10.0			V			
-30.0	-					
50.0						
-70.0					_	
Center 2.55 GH Res BW 560 kH		#	VBW 1.8 MHz		Span 60 MHz Sweep 1 ms	CF Ste 6.000000 MH
Occupied I			Total Power	21.2 d	Bm	<u>Auto</u> Ma
Transmit Fre		-298.45 kHz	OBW Power	99.00)%	Freq Offse
x dB Bandw	idth	38.97 MHz	x dB	-26.00	dB	
96				BTARUS		

Cente	r Freq 2	51990		iHz IFGain:Low	Center F		0000 GHz Avg/Hold:>	100/10	þ	Radio Sto		Frequency
10 dB/d		ef Offset 7 ef 25.20			100							
15.2 5.20			-	lennederne	normal	pomerno	a draw from the second	-	-			Center Free 2.519900000 GH
-4 80 -14 8 -24 8	Anna	-	4			Y			La la	turner	Marrian	
348												
-54.6						_						
	r 2.52 Gi BW 560		_		#VE	BW 1.8 M	IHz		-		an 70 MHz eep 1 ms	CF Ste
Oc	cupied	Bandy	width	1		Total P	ower	2	9.3	dBm		Auto Ma
			37.	563 MI	Hz							Freq Offse
Tra	nsmit Fi	req Erre	or	-95.869	kHz	% of OF	SW Powe	r I	99	.00 %		OH
x di	B Bandy	vidth		39.31 M	1Hz	x dB		-2	6.0	00 dB		
-									-			

16QAM_B7C(2510+2529.8)

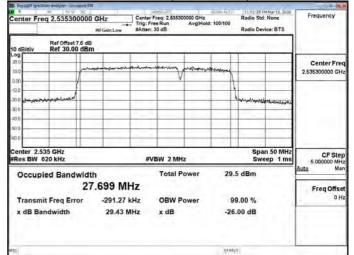
16QAM_B7C(2525.1+2544.9)

Center F	req 2.53530000	GHz	Center Trig: Fr			100/100	Radio	63 PM Mar 10, 2020 Std: None	Frequency
_		#FGain:Low	#Atten:	30 dB	1112	11.000	Radio	Device: BTS	
10 dB/div	Ref Offset 7.6 dE Ref 30.00 dB								
20.0 10.0	formation		anon	permite		mathera	here		Center Fred 2,535300000 GH:
0.00		-		V	-	-	-	1	
20.0 mint	weat	-		1		-		human	
30.0		-		-		-	1		
40.0		-		-		-			
80.0									
Center 2	.535 GHz	1	-	-	-	-	5	pan 50 MHz	
	680 kHz		#V	BW 2.2 N	NHz	-		weep 1 ms	CF Ster 5.000000 MH
Occur	pled Bandwid	th		Total P	ower	29.5	dBm		Auto Mar
	et al	7.340 MI	Hz					1.1	Freq Offse
Transr	mit Freq Error	-421.16		OBW P	ower	00	.00 %		0 Hi
	andwidth	39.30 M		x dB	ower		00 dB		
								24	
						ITARU			

16QAM_B7C(2525.6+2540)

	New Analyse Glob	00	Gain:Low	Center F	req: 2.53530 e Run	0000 GHz AvgiHold	млен мл : 100/100	R	adio Sta	PMMar 10, 2020 d: None vice: BTS	Frequency
10 dB/div	Ref 30.00		GentLow	antitere o	iv ub	_	-		auto De	vice. 013	
20.0 10.0			manter	min	-		*****				Center Freq 2.535300000 GHz
10.0	aminutant							4.	cite the second	much how the	
40.0 50.0											
Center 2.5 Res BW 6				#VE	BW 2 MH	z		-		an 50 MHz eep 1 ms	CF Step 5.000000 MH
Occupi	ied Bandy				Total P	ower	29	9.9 d	Bm		<u>Auto</u> Man
	it Freq Erro ndwidth		05 MH 460.84 H 29.12 M	Hz	OBW P x dB	ower		99.0 6.00	1.11		Freq Offset 0 Hz
no)								WU5			

16QAM_B7C(2530.1+2544.5)



64QAM_B7C(2510+2529.8)

Keynigilt Spect	um éxelete - O(c	Athena Ball								
Center Fre	q 2.51990		SHz IFGain:Low	Center F		0000 GHz Avg Hold:>	100/100	Radio Str	PM Apr 00, 2020 5: None vice: BTS	Frequency
10 dB/div	Ref Offset 7 Ref 25.20									
15.2 5.20 -4.00		free	marro	wanny	Monoralise		Lam		-	Center Free 2.519900000 GH
-14 0 -34 8 daywyber	Lagensillaritisna	1						holewalkippe	19 minutesta	
34.8 44.8 54.6			-							
-64 B Center 2.5			1						an 70 MHz	CF Ster
#Res BW	ied Bandy	width		#VI	BW 1.8 M		28	.2 dBm	eep 1 ms	7.000000 MH Auto Mar
			448 M							Freq Offse
	it Freq Erro ndwidth	or	-120.69 39.13 I		% of OI x dB	BW Power		9.00 % 5.00 dB		0.H
wild)							AYAG	()n		

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64QAM_B7C(2525.1+2544.9)

Fayight Spectrum	n Anlyter Dico	Aned 6W		1.2	Chesis (NT)		MARN MITCH		-38 04	Mar 10, 2020	
Center Freq			lz Gain:Low	Center Freq: 2.535300000 GHz Trig: Free Run Avg Hold: 100/100 #Atten: 30 dB					Std:	None ice: BTS	Frequency
10 dB/div	Ref Offset 7 Ref 30.00			1							
20.0 10.0 0.0	man	waterest		mont	-	there was a state of the	والمغرب مستحصون	himan	1		Center Fred 2,535300000 GH
-10.0					1	-		-	ł	40MM.~~~~	
-30.0 -40.0 -50.0											
80.0 Center 2.53										n 50 MHz	CF Ster
#Res BW 68			_	#V	BW 2.2 M		20	1 dBm	-	ep 1 ms	5.000000 MH
Occupie	d Bandy		47 M	łz	Total P	ower	20.	1 dBn			FreqOffse
Transmit x dB Ban		or	-480.74 H 39.25 N		OBW P x dB	ower		9.00 % .00 dE			0 Hi
MIG.							TAFL	19			

	10 50 x 00	#FGain:Low	Trig: F	Freq: 2.53530 Free Run :: 30 dB	AvgiHol	d: 100/10		Radio Der		Frequency
10 dB/div	Ref 30.00 df	Bm		-			_			
20.0	r		Varan	manyan	menner	-	1			Center Fred 2,535300000 GHz
-10.0	11						1			
30.0	millionence	-			-		1	a wheel the	الم المراجد المالغد الم	
40.0		-				-				
80.0										
Center 2.5 #Res BW			#	VBW 2 MH	z				in 50 MHz eep 1 ms	CF Ster
Occup	led Bandwi	dth		Total P	ower	2	9.0	dBm		Auto Mar
	2	7.575 MI	Ηz							Freq Offset
Transm	it Freq Error	-499.04	kHz	OBW P	ower		99	.00 %		0 Ha
x dB Ba	indwidth	33.15 M	IHz	x dB			26.	00 dB		
ABG							AFUS			

64QAM_B7C(2525.6+2540)

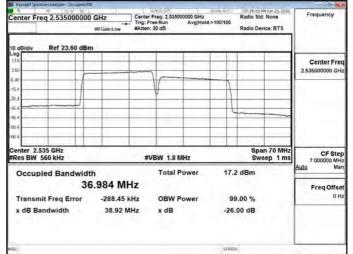
64QAM_B7C(2530.1+2544.5)

Center Fre	q 2.53530			Center F	req: 2.53530 e Run	0000 GHz AvgiHold	ALTER ALT		Radio St		Frequency
_	_	5	FGain:Low	#Atten:	30 dB				Radio De	vice: BTS	
10 dB/div	Ref Offset 7 Ref 30.00		-				-		-		
20.0 10.0		Ann	manna		many ,		manya			-	Center Free 2.535300000 GH
a.m	1	1			V	-		ł	-	-	
	And and and and and	-	_	-	-	-	-	Ţ	nt-washington	mount	
40.0	1			-		-			-		
50 D	-									-	
Center 2.5	35 GHz								Sn	an 50 MHz	
Res BW				#V	BW 2 MH	z		_		eep 1 ms	CF Ste 5.000000 MH
Occupi	ied Bandy				Total P	ower	28	3.5	dBm	1.00	<u>Auto</u> Mai
		27.0	656 MH	1z						100	Freq Offse
Transmi	it Freq Erro	or	-265.63	Hz	OBW P	ower		99	.00 %	1.11	OH
x dB Ba	ndwidth		30.68 M	IHz	x dB		-2	6.0	00 dB		
1.								AU5		· · · · ·	1.1.1.1

256QAM_B7(2510+2529.8)

	10 56 p 6C		101001-017	ALTIN AL		PM Jun 23, 2020	Frequency
Center Fr	req 2.519900000	Tr Tr	nter Freq: 2.51990 g: Free Run tten: 30 dB	Avg Hold: 100/10		vice: BTS	(indexing)
10 dB/div	Ref 23.60 dBn						
136 360 6.40			-				Center Free 2.519900000 GH
-16.4 -36.4			V				
-46.4 -46.4					4		
Center 2.	52 GHz				Sn	an 70 MHz	6450
#Res BW			#VBW 1.8 M	Hz		eep 1 ms	CF Step 7.000000 MH
Occup	bied Bandwidt 37	h .264 MHz	Total P	ower 1	6.9 dBm		Auto Mar Freg Offsel
	nit Freq Error andwidth	-175.20 kHz 39.00 MHz	OBW Po x dB		99.00 % 26.00 dB		0 Hs
who)				61	(AQUA		

256QAM_B7(2525.1+2544.9)



256QAM_B7(2525.6+2540)

🚺 Agilent Spectrum Analyzer - Document IB	Y			24 A 10			
a 8 11 - 26 ar.	Trig:						
10 dB/div Ref 25.20 dB							
15.2 5.20				Center Freq 2.535300000 GHz			
480	- V-			_			
34.9							
44.8							
64.0				CF Step 5.000000 MH;			
Center 2.535 GHz #Res BW 620 kHz		VBW 2 MHz	Span 50 Sweep 1	MHz <u>Auto</u> Mar ms			
Occupied Bandwid	th 7.165 MHz	Total Power	Total Power 17.8 dBm				
Transmit Freq Error x dB Bandwidth	-652.69 kHz 29.02 MHz	OBW Power x dB	99.00 % -26.00 dB				
mit			Prattyn .	_			

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256QAM_B7(2530.1+2544.5)

Agilent Spech	num Analyzer - Document RW	11	SING NU	# 16# ##PD	10:14:44 PM Jun 29, 20		
	19 520 d all	Center Freq. 2.334800000 GHz Radio Store Trig: Free Run AvgiHold: 100/100 #FGaint.tow Br Gaint.tow					
10 dB/div	Ref Offset 13.8 d Ref 25.20 dBr						
15.2				-		Center Free 2.534800000 GH	
5.20 4.90	r		man from the second	many		2.534800000 GH	
14.8			Y				
348	manual						
44,13						-	
54.6							
Center 2.5	535 GH2				Span 50 MH	CF Ster 5.000000 MH	
Res BW			#VBW 2 MHz		Sweep 1 m	s ma	
Occupied Bandwidth			Total Power	Freq Offse			
	Sec. 19	7.502 MHz	-inite			-	
	hit Freq Error andwidth	179.75 kHz 29.17 MHz	OBW Power x dB		0.00 %		
x dB Ba	andwidth	29.17 MHZ	X OB	-26.	00 08		
MRI				31479	1	3-	

Center Freq 2.5501000	Frequency				
10 dB/div Ref 23.60 dl	Bm			_	-
136					Center Free 2.550100000 GH
16.4		V			1
364			1	_	
46.4 56.4					
66.4				_	1
Center 2.55 GHz #Res BW 560 kHz		VBW 1.8 MHz		ep 1 ms	CF Step 7.000000 MH
Occupied Bandwi	dth	Total Power	16.5 dBm		Auto Mar
	37.250 MHz			1	Freq Offse
Transmit Freq Error	-173.39 kHz	OBW Power	99.00 %	1.1	0 Hz
x dB Bandwidth	38.98 MHz	x dB	-26.00 dB	11	1

256QAM_B7(2540.2+2560)

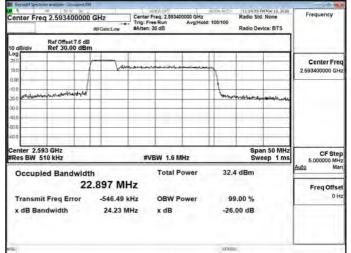
QPSK_B41C(2499.3+2511)

Center Fre	eq 2.508900000				s; 100/100	Radio Std: None Frequency Radio Device: BTS				
10 dB/div	Ref Offset 7.6 dB Ref 25.00 dBm	,		1.1						
15.00			the	haimadaman	to Manhard and a day	~				Center Free
5.00	Manufletelleringe	-Ally								2.00890000 GH
350 M	Autoria	-					a service	wellower	number	
55 0										
Center 2.5 Res BW		-		#V	BW 1.8 MHz		1		an 70 MHz veep 1 ms	CF Ste 7.000000 MH
Occupi	ied Bandwidt 22		9 MI	Hz	Total Power 29.8 dBm					Auto Ma Freg Offse
	it Freq Error ndwidth	-5	67.58 3.99 N	kHz	% of OBW x dB	Pow		9.00 % .00 dB	- 8	0H
eso (AYAO	n	-	

QPSK_B41C(2583.1+2602.9)

Center Fre	aq 2.59300					AvgiHold	ALTON ALTO	Radio Std: None Frequency Radio Device: BT5			
10 dB/div	Ref Offset										
20.0 10.0	1	namental production		norm	Journa	-Abelganda	********	1		Center Freq 2.593000000 GHz	
-20.0	mund	-						Late	watnes		
40.0											
Center 2.5		_		#/	BW 2.2 M	NH7			an 60 MHz /eep 1 ms	CF Step 6 000000 MHz	
Occupied Bandwidth 37,458 MH				Total Power 31.6 dBm				Auto			
Transmit Freq Error -68.0		-68.003 kH 39.35 MH	Hz OBW Power		ower	99.00 % -26.00 dB			Freq Offset 0 Hz		
66)							AYATOR				

QPSK_B41C(2583.8+2595.5)



QPSK_B41C(2590.5+2602.2)

Center Freq 2.592600000	Tri	nter Freq: 2.592600 g: Free Run tten: 30 dB		100/100 III 07-16 EMMar 10, 2020 Frequency Radio Std: None Radio Device: BTS				
Ref Offset 7.6 dB 10 dB/div Ref 30.00 dBn								
200 100	Almenstermort	,	-un marker	1		Center Freq 2.592600000 GHz		
000 100 200 processing with and raise				Lansara	monthman	1		
42.0								
-60.0					-			
Center 2.593 GHz #Res BW 620 kHz		#VBW 1.8 MH	łz		pan 50 MHz weep 1 ms	CF Step 5.000000 MHz		
Occupied Bandwidt	th 2.996 MHz	Total Po	wer	31.2 dBm				
Transmit Freq Error x dB Bandwidth	485.29 kHz 24.37 MHz	OBW Po x dB	wer	99.00 % -26.00 dB		Freq Offset 0 Hz		
witc)				ATARUA				

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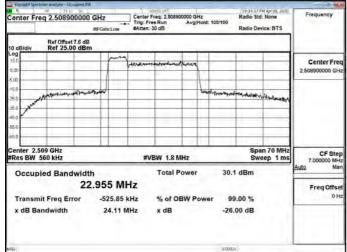
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QPSK_B41C(2668.3+2680)

Center Freq 2,508900000 GHz arFoainLow Arganold - Avganold - 100100 Rate - Radio Seti None Arganold - 100100 Rate - Radio Device: BTS									Frequency
Ref Offset 7.6 dB 10 dB/div Ref 30.00 dBm									_
20.0 10.0		front	www.www	game n	-when	X			Center Fred 2.508900000 GH
100 000 gladelalaran an a	1				Lusanda	esperantes	and the state	-	
40.0 50.0 60.0		-							
Center 2.5 #Res BW 5		_	#VE	SW 1.6 M	IHz		Spa Swi	n 60 MHz eep 1 ms	CF Step 6.000000 MHz
Occupi	ed Bandwidth	878 M	Total Power 31.6 dBm					<u>Auto</u> Man	
Transmit Freq Error -546.		-546.15 24.03 M	kHz OBW Power 99.00 %					Freq Offset 0 Hz	
601						ATATO			



16QAM_B41C(2583.1+2602.9)

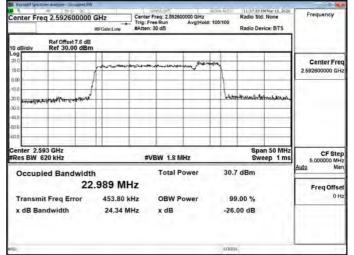
Center Fre			0000 GHz AvgiHold	100/100	Radio Std: None Frequency Radio Device: BT5					
Ref Offset 7.6 dB 10 dB/div Ref 30.00 dBm										
20.0	-			annar	mann	-				Center Free 2.593000000 GH
10.0	1				4			1		
20.0 4000000	numment	-	-	-		-		home	ablanyaby	
40.0										
50.0			-			-		-	-	
60.0										
Res BW				#VE	BW 2.2 N	IHz			an 60 MHz /eep 1 ms	CF Ster 6.000000 MH
Occupi	ed Band	width			Total P	ower	30.8	dBm		<u>Auto</u> Mar
		37.	427 MH	łz						Freq Offse
Transmit Freq Error -88.501		-88.501	Hz	OBW P	ower	99	.00 %	1	OH	
x dB Ba	ndwidth		39.44 M	IHz	x dB		-26.0	00 dB		
alar I							ATATOR			

16QAM_B41C(2499.3+2511)

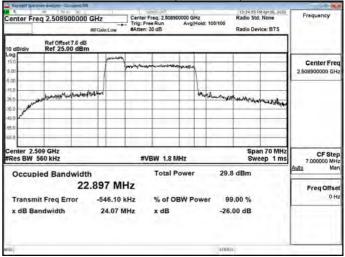
16QAM_B41C(2583.8+2595.5)

Keynigill Speck	num énelige - D(coper	16W		1 Sales at		_	and write				
Conter Freq 2,593400000 GHz Center Freq 2,593400000 GHz RFGalnLow RFGalnLow Ref Offset 7.6 dB 10 dB/div Ref 30.00 dBm Log									Frequency		
20.0		progress	N	ANDIANA	-	- Mary	2			Center Free 2.593400000 GHz	
-10.0	mandratheathe			-	_		have	-	allungum		
40.0											
Center 2.5				#VBW	1 5 MI	47	-		an 50 MHz eep 1 ms	CF Step	
	ied Bandwi	dth			tal Po		30.	30.2 dBm			
22.807 MH Transmit Freq Error -546.78 kl				OB	W Po	Power 99.00 %			Freq Offse 0 Ha		
x dB Ba	ndwidth	23	3.91 MHz	xd	B		-26	8b 00.			
186							AYAR	m	-	_	

16QAM_B41C(2590.5+2602.2)



64QAM_B41C(2499.3+2511)



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64QAM_B41C(2583.1+2602.9)

Center Fr	enter Freq 2.593000000 GHz Genter Freq 2.593000000 GHz Genter Freq 2.593000000 GHz AvgaNoid: 100/100 #FGainLow #Atten: 30 dB									
10 dB/div	Ref Offse Ref 30.			11						
20.0		punnet	n and a second	many	mon	mananana	equilities , stopping the			Center Free 2.593000000 GH
-10.0	estimated		-		V			-	ANNO-AP	
30.0 40.0 50.0			-							(
-600 Center 2.	503 CH2		1				1	Sn	an 60 MHz	-
#Res BW		_		#V	BW 2.21	WHz		Sv	veep 1 ms	CF Step 6.000000 MH
Occup	oied Ban	dwidth			Total I	Power	29.9	dBm		Auto Mar
		37.	435 M	Hz						Freq Offsel
Transm	Transmit Freq Error -62.3				OBW F	Power	99	.00 %		0 Ha
x dB B	andwidth	39,33 M	.33 MHz x dB			-26.	00 dB			
1001							ATARUS			

Center Fre	MMar 10, 2020 I None Vice: BTS	Frequency								
10 dB/div										
20.0 10.0		100	ernin fran		*****	*****	-			Center Free 2.593400000 GH
10.0	water the second with	J					testa	alen Maren w	whitemation	
40.0 50.0					-					
Center 2.5 #Res BW 4		-		#	/BW 1.6 P	AHz	11	Spa Swe	n 50 MHz eep 1 ms	CF Ste 5.000000 MH
Occupi	ied Bandwi		82 M	U 7	Total F	ower	29.	8 dBm		<u>Auto</u> Mar
	it Freq Error ndwidth	HZ kHz MHz	OBW F x dB	ower		9.00 % .00 dB		Freq Offsi 0 F		
-							ATAD	m ²		

64QAM_B41C(2583.8+2595.5)

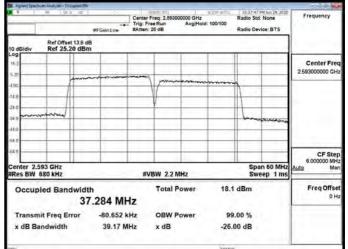
64QAM B41C(2590.5+2602.2)

Center Freq 2.59260000	Trig:	er Freq: 2.892600000 GHz Free Run AvgiHold en: 30 dB	dio Std: None dio Device: BTS	Frequency	
10 dB/div Ref 30.00 dE	im	T			
20.0	dimeterial discourses	maning me	in		Center Free 2.592600000 GHz
10.0	1				
20.0	d		human	how-man starten	
40.0					
50 0 60 0					
Center 2.593 GHz #Res BW 510 kHz		#VBW 1.6 MHz		Span 50 MHz Sweep 1 ms	CF Step 5.000000 MH
Occupied Bandwid	ith	Total Power	30.4 di	Bm	Auto Mar
2	2.835 MHz			S	FreqOffse
Transmit Freq Error	458.24 kHz	OBW Power	99.00		0 H
x dB Bandwidth	24.31 MHz	x dB	-26.00	dB	
					1.00

256QAM_B41(2499.3+2511)

Feynyill Specia	norm denilyter Occupient Bil and 56 pc bic	N		1005-107			ALTER ALTER	03:54:54	PM Jun 23, 2020	
Center Fre	aq 2.508900000	I GHz	Trig: F	Freq: 2.5089 ree Run : 30 dB	00000 Gi Avg	Hz Hold:	100/100	Radio Str Radio De	d: None vice: BTS	Frequency
10 dB/div	Ref 23.60 dBr	n								
136 360										Center Freq 2.508900000 GHz
-16.40 -16.4 -26.4										
16.4	por management			-		1				
-66.4 -66.4									-	
Res BW			#1	/BW 1.81	WHz				an 70 MHz eep 1 ms	CF Step 7.000000 MHz
Occup	ied Bandwidt	Contract of the Contract		Total I	Power		16.	5 dBm		<u>Auto</u> Man
		2.713 MI	Ηz							Freq Offset
	it Freq Error Indwidth	-640.48 24.00 N		OBW Power x dB			99.00 % -26.00 dB			0 H3
waca							ATARO	n		

256QAM_B41(2583.1+2602.9)



256QAM_B41(2583.8+2595.5)

Center Fre	q 2.59340000	GHz	Center Trig: F	Freq: 2.593	400000 GI		44.000	Radio St	em sun 23, 2020 d: Nome	Frequency	
-		#FGain:Lo		30 dB				Radio De	vice: BTS		
10 dB/div	Ref 23.60 dB	m		_				_			
136		-		-				-		Center Free 2,593400000 GH	
6.40			harrow				-	-	-		
-16.4		1	-						-		
145.4	al according					haven					
-56.4				-							
Center 2.5			#	VBW 1.81	MHz				an 70 MHz eep 1 ms	CF Step 7.000000 MH	
Occupi	ed Bandwid	th			Power		16.0	dBm		Auto Mar	
	2	2.698	MHz							Freq Offsel	
Transmi	it Freq Error	-631.	95 kHz	OBW	Power		99	.00 %		0 Hz	
x dB Ba	ndwidth	24.0	0 MHz	x dB			-26.	00 dB			
uno l							ATARU				

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256QAM_B41(2590.5+2602.2)

agilent Spectrum Analyzer - Docume				4167 40		PM Jun 29, 2020	244
8 H (S)2 (WFGainLow	Center Freq: 2. Trig: Free Run #Atten: 20 dB	Frequency				
10 dB/div Ref 25.20 c						-	1 · · · · · · · · · · · · · · · · · · ·
15.2					-		Center Free 2.592600000 GH
5.20	manne	manne	and the second	- mark		-	2.592600000 GH
14.0				+ +	-	-	
24.0	1						
44.8	~~				the prograd	- All Internet and a	1
54.10							
Center 2.593 GHz					60	an 50 MHz	CF Step 5.000000 MH
#Res BW 510 kHz		#VBW 1	.6 MHz	-		eep 1 ms	Auto Mar
Occupied Bandw			al Power	16	6.6 dBm		Freq Offse
	22.853 MH	-		÷.,	inite-		-
Transmit Freq Error x dB Bandwidth	508.01 k 24.04 M		N Power		99.00 % 6.00 dB		
A GE BUILDING	24.04 1	AL AU		~	0.00 00		
DIM				114	(1911)		-

Center F	req 2.677900000		Trig: F	r Freq: 2.67790 Free Run 1: 30 dB		ALTER ALTER d: 100/100	Radio Dev		Frequency
10 dB/div	Ref 23.60 dBr	n	1	-				-	
136 3.60			1						Center Free 2.677900000 GH
-16.4 -16.4 -26.4		1			1				1
Ser.	And				le	-			
-56:4 -66:4	_			-					
	.678 GHz 560 kHz	1.1	#	VBW 1.8 M	IHz	_	Spa Swe	n 70 MHz ep 1 ms	CF Step 7.000000 MH
Occu	pied Bandwidt	th		Total P	ower	14.	9 dBm		<u>Auto</u> Man
	22	2.665 M	Hz						Freq Offset
Transi	mit Freq Error	-664.93	kHz	OBW P	9	9.00 %		0 Hz	
x dB B	Bandwidth	24.01	MHz	x dB		-26	.00 dB		
						678.00	-1		

256QAM_B41(2668.3+2680)

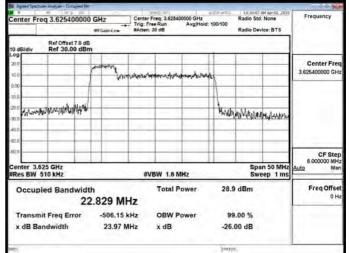
QPSK_B48C(3553.3+3565)

Agilent Specia	num Analyzh - Docupied Rat					a 164 400 1			
Center Fr	eq 3.562900000	GHz #FGainLow	Center	Freq: 3.5629 ree Run : 30 dB		Radio Dev		Frequency	
10 dB/div	Ref Offset 7.8 dB Ref 30.00 dBm	_	2.7						
20.0 10.0		ming				~			Center Free 3.562900000 GH
10.0	woodowgenthese				-	1			
-30.0 -40.0	Yesherin Jan					-04.4	New Artes like	unter Bastlings	
60.0 60.0				-				_	CF Step
Center 3.5 #Res BW			#1	/BW 1.6 M	IHZ		Spa Sw	an 50 MHz eep 1 ms	5.000000 MH: <u>Auto</u> Mar
Occup	ied Bandwidth 22	865 M	Hz				7 dBm		Freq Offse 0 H
	hit Freq Error andwidth	-515.93 24.03 I		OBW P	ower		9.00 % .00 dB	2	
LANY:						2 MAR			

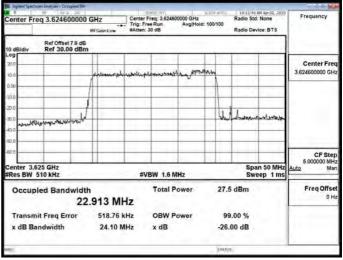
QPSK_B48C(3615.1+3634.9)

M Agilent Specto	um Linslyzh + l	Occupied Re-		-	_					
Center Fre	eq 3.625	500000	GHz #FGainLow	Center F		00000 GHz AvgiHold	a triv arito : 100/100	Radio Sto		Frequency
10 dB/div		et 7.8 dB								
20.0 10.0		handlarts	an and the second	enny	machine	ener and	an unitation			Center Freq 3.625500000 GHz
0.00					1			1		
and the second second	republic	-						Watter	allow and the second	
-30.0 -40.0								1		
-60,0	-		-			-	-		-	
-60,0										CF Step 6.000000 MHz
Center 3.6 Res BW 5		-		#V	BW 1.6 N	Hz	-		an 60 MHz eep 1 ms	<u>Auto</u> Man
Occup	ied Bar		.405 MI	Ηz	Total P	ower	29.1	dBm		Freq Offset 0 Hz
Transm	it Freq E	Irror	-541.48	KHz	OBW P	ower	99	.00 %		
x dB Ba	ndwidth		38.99 N	IHz	x dB		-26.	00 dB		
AMERI				_			IMAN	1.	_	

QPSK_B48C(3615.8+33627.5)



QPSK_B48C(3622.5+3634.2)



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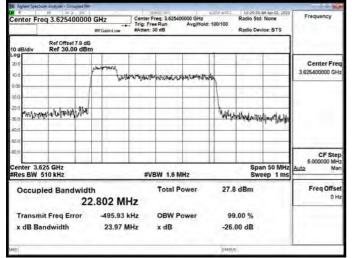
QPSK_B48C(3678.3+3690)

M Agilent Spec	Chum Analyzh + Dco										212.00
Center Freq 3.687900000 GHz Freq 3.687900000 GHz Freq 3.687900000 GHz Freq 3.687900000 GHz Freq Radio Sdt None Freq 3.68790000 GHz Freq Radio Sdt None Freq Radio Sdt Freq Radio										: None	Frequency
10 dB/div	Ref Offset Ref 30.0										
100 regeneration											Center Freq 3.687900000 GHz
0.00 -10.0	-					- and - I					1
-30,0	eentertetatatata	anti-			-			47.44	handhaver	haliyal Addishan	
40.0 50.0	_	-									
Center 3 #Res BW		_			#V	BW 1.6 M	IHz			an 50 MHz eep 1 ms	CF Step 5.000000 MHz Auto Man
Occu	pied Band			8 M	Hz	Total P	ower	29.0	dBm		Freq Offset 0 Hz
	nit Freq En andwidth	or		87.03 83.89 M		OBW P x dB	ower		00 % 00 dB		
MIC	_	_		_	_			TMIN	6	-	

Radio Std: None er Freq 3.625500000 GHz Center Freq: 3/ Trig: Free Run 000 GHz d: 100/100 Radio Device: BTS Ref Offset 7.8 dB Ref 30.00 dBn Center Fre 2 000000 white NIN At Maria happy CF Step 6.00000 M Span 60 MHz Center 3.626 GHz Res BW 560 kHz #VBW 1.6 MHz Sweep 1 m Total Power 28.2 dBm Freq Offs Occupied Bandwidth 37.419 MHz Transmit Freq Error -548.30 kHz OBW Power 99.00 % 39.28 MHz x dB Bandwidth x dB -26.00 dB

16QAM_B48C(3615.1+3634.9)

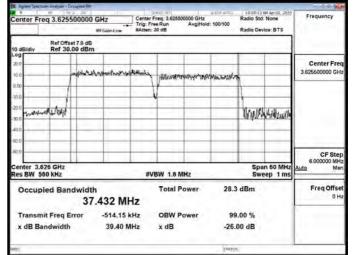
16QAM_B48C(3615.8+33627.5)



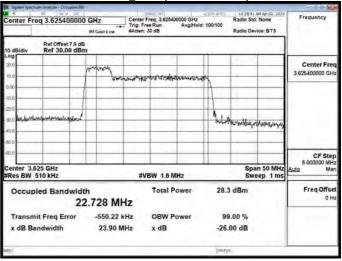
16QAM_B48C(3622.5+3634.2)

M Agilent Spects	um Analyzin + Doque	inst Film		-				_			
Center Fre	eq 3.62460		GHZ	Center F		00000 GHz AvgiHold	a 100		Radio Std Radio Dev		Frequency
10 dB/div	Ref Offset 7 Ref 30.00		_	_						1	
100	manner man man water										Center Free 3.624600000 GH
0.00 -10.0 -20.0		1						-		-	
10.2	ntrotimentari	wet						y.	lbalia	had shad shad	
-60,0											CF Step 5.000000 MHz
Center 3.6 #Res BW {		_		#VE	3W 1.6 M	IHz	_			n 50 MHz ep 1 ms	
Occupi	Occupied Bandwidth Total Power 27.4 dBm 22.870 MHz										
	it Freq Erro ndwidth	or	524.68 M		OBW P x dB	ower			.00 % 00 dB		
MICI							-	1MARY	1).	-	_

64QAM_B48C(3615.1+3634.9)



64QAM_B48C(3615.8+33627.5)



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64QAM_B48C(3622.5+3634.2)

M Agilent Spectrum &	inalyzes - Docupied Tim		-	NE INT	_	र १९४१	_			
Center Freq	None None	Frequency								
10 dBldiv	Ref Offset 7.8 dB Ref 30.00 dBm								-	
10.0		parente.	nijektijenti	y.c.c.	- way Mains	m/k.				Center Free 3.624600000 GH:
10.0. 20.0	entertilities						Hick	ومدانيانهم	erlisbasijets	
60.0 60.0 Center 3.625									in 50 MHz	CF Step 5.000000 MH: Auto Mar
#Res BW 510 Occupied	Bandwidth			Total P			27.4	Swi I dBm	eep 1 ms	Freq Offset
Transmit F		.829 Mł 513.92 ł		OBW P	ower		00	.00 %		
x dB Band	1	24.15 N		x dB	Ower			00 dB		
AMERI						-	IMARY		-	

Center Fre	eq 3.5629000		Trig:	r Freq: 3.5629 Free Run 1: 30 dB		Hz	100/100	Radio Dev		Frequency
10 dB/div	Ref 23.60 d	Bm		1		_		1		
136 360 8.40										Center Free 3.562900000 GH
-16.4 -26.4										
36.4 46.4		month				has	-			
Center 3.5	63 CU2							Ena	n 70 MHz	
#Res BW				VBW 1.8 P	ЛНz		_	Swe	ep 1 ms	CF Ste 7.000000 MH
Occup	ied Bandwi	idth		Total F	ower		14.	0 dBm		Auto Mar
		22.794	MHz							Freq Offse
Transm	it Freq Error	-592	.90 kHz	OBW F	ower		9	9.00 %		0 H:
x dB Ba	andwidth	23.	97 MHz	x dB			-26	8b 00.		
wito)							AYAD			

256QAM_B48(3553.3+3565)

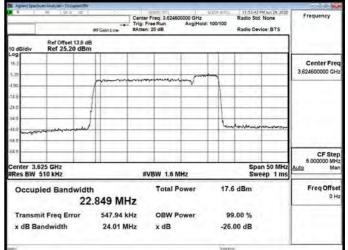
256QAM_B48(3615.1+3634.9)

a	W (92	ar I	Trig: I	Freq: 3.6200 Free Run 20 dB		e Invietio d: 100/100	Radio Str	PM Jun 29, 2020 d: None vice: BTS	Frequency
10 dB/div	Ref Offset Ref 25.20								
15.2 5.20									Center Freq 3.625000000 GHz
4.80	h	-		2	·	-	-		
14.0				W			11		
34 19	man			V	-	-	1	man	
44.8								anome	
64.0				-		-			CF Ster 6.00000 MH
	.625 GHz 560 kHz		#	VBW 1.6	MHz			an 60 MHz eep 1 ms	Auto Mar
Occu	pied Band		4 MHz	Total	Power	16.1	l dBm		Freq Offse 0 Ho
	mit Freq Erro		1.807 kHz	OBW	Power		9.00 %	0.11	-
x dB B	Bandwidth	3	8.92 MHz	x dB		-26.	00 dB		
ANET						PIARU	1.	-	

256QAM_B48(3615.8+3627.5)

Keynigilt Spec	them simily to - D(cup et B)	N	- 1	Sanasi uniti	_		IN MITTY	Televis de la	PM Jun 23, 2020	
Center Fr	eq 3.625400000		Trig: I	r Freq: 3.625 Free Run h: 30 dB	400000 G Avgi			Radio De	i: None	Frequency
10 dB/div	Ref 23.60 dBr	n		-						
136 360		par	1					-		Center Freq 3.625400000 GHz
6.40 -16.4 -26.4				-	satisfier and					1
36 J		-				Lim		-		
-56.4 -66.4			-	-	-					
Center 3. #Res BW				VBW 1.8	MHz				eep 1 ms	CF Step 7.000000 MHz
Occup	bied Bandwidt	th 2.765 M	AH7	Total	Power		15.7	dBm		<u>Auto</u> Man
	nit Freq Error andwidth	-575.1	6 kHz	OBW x dB	Power			00 %		Freq Offset 0 Hz
X UB B	andwidth	24.00	MEZ	x dB			-20.	UU UB		
(aa)							AYAGO	1		-

256QAM_B48(3622.5+3634.2)



256QAM_B48(3678.3+3690)

Center Fre	eq 3.687900000 G	Hz FGain:Low	Center F	req: 3.68790 e Run 10 dB		Hz	100/100	Radio Str	None vice: BTS	Frequency
10 dB/div	Ref 23.60 dBm		1.1							_
136 360		-								Center Freq 3.687900000 GHz
-6.40 -16.4 -26.4		1	Juneration		daway .					1
16.1 148.1		4				5				
-66.4										
Center 3.6 #Res BW			#VE	BW 1.8 N	IHz				an 70 MHz eep 1 ms	CF Step 7.000000 MHz
Occup	ied Bandwidth			Total P	ower		14.	dBm		Auto Man
	22.3	748 M	Hz							Freq Offset
Transm	it Freq Error	-601.53	kHz	OBW P	ower		99	9.00 %		0 Hz
x dB Ba	ndwidth	23.95 1	ИНz	x dB			-26.	00 dB		
witica)							AYARD			

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QPSK_B66B(1717.5+1726.8)

	18 56 D OC		Center Freq: 1.76 Trig: Free Run tAtten: 30 dB		100/100	Radio St	DMMart1_2020 d: None wice: BTS	Frequency
10 dB/div	Ref Offset 7.6 dB Ref 30.00 dBm							
20.0		prominent	merrene	wymme	un			Center Fred 1.769850000 GHz
-10.0	mannen			-	Ļ		man	
-50.0 -50.0								
Center 1.7			#VBW 1.2	MH7			an 40 MHz reep 1 ms	CF Step
	ied Bandwidt	h		Power	31.3	3 dBm	cep rms	4.000000 MHz Auto Man
	18	.233 MHz	z					Freq Offset
	iit Freq Error Indwidth	297.38 kH 19.37 MH		Power		9.00 % 00 dB		0 Hz
4801					ATARU			

Center Fre	q 1.755250000	GHz #FGain:Low	Center	Freq: 1.75525 ree Run 30 dB		ALTER ALTER 4:>100/100	Radio Der		Frequency
10 dB/div	Ref Offset 7.6 dB Ref 30.00 dBm		1.1	2		· ·			
200		()	hanna		nummum		-		Center Fred 1.755250000 GH
10.0	-					have		water	11
-30.0	11001				-			monthear	
-50.0				-	-				
-600 Center 1.7	55 CH2			1		11	Sna	n 40 MHz	
#Res BW 3			#1	VBW 1.2 N	IHz	-	Sw	eep 1 ms	CF Step 4.000000 MH
Occupi	ed Bandwidt	h		Total P	ower	31.	9 dBm		<u>Auto</u> Mar
	18	3.316 M	Hz						Freq Offsel
Transmi	it Freq Error	-320.54	kHz	OBW P	ower	9	9.00 %		0 H3
x dB Ba	ndwidth	19.33	MHz	x dB		-26	8b 00.		
450						AYAD	0		

QPSK_B66B(1748.1+1757.4)

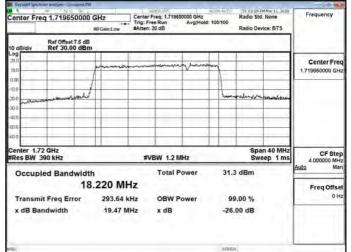
QPSK_B66B(1752.6+1757.4)

Center Fre	eq 1.75500000	0 GHz #FGain:Low	-+- Trig: I	Freq: 1.7550 Free Run 1: 30 dB	AvgiHold	100/100	Radio Sto		Frequency
10 dB/div	Ref Offset 7.6 dl Ref 30.00 dB	B m							
20.0		man		Jum	mu	~	-		Center Free 1.755000000 GH
10.0	communitation					los	ana tana ta	warm	1
30 0 40 0			-						
50.0 60.0									
Center 1.7 #Res BW		-	#	VBW 6201	ĸHz		Spa Sw	eep 1 ms	CF Step 2.000000 MH
Occup	ied Bandwid 9	th .2748 M	ЛНz	Total P	ower	32.4	4 dBm		Auto Mar Freg Offse
	iit Freq Error Indwidth	-4.20 9.913	6 kHz 8 MHz	OBW P x dB	ower		9.00 % 00 dB		он
1001						AYACU	i.		

QPSK_B66B(1752.6+1761.9)

Center Fre	q 1.754750000		Center Trig: Fi			0/100	Radio Sto		Frequency
		#FGain:Low	#Atten:	30 dB		-	Radio De	vice: BTS	
10 dB/div	Ref 30.00 dBm	à	_				_	_	
20.0		hanner	wheeler	-	www.	1	-		Center Fred
0.00		1				1		1	1,754750000 GH
0.0			-	-		1	i in it a	mound	1.1.1
0.0	Constraint more			-		1.438	Particular 61.77	And And and a	
00									
0.0			_	-		-	-	-	
50.0				-		-			
Res BW 3			#\	/BW 1.2 M	NHz		Spa Sw	eep 1 ms	CF Step
Occupi	ed Bandwidth	1		Total P	ower	32.	1 dBm		Auto Mar
		207 MH	łz						FregOffse
Transmi	it Freq Error	325.31 k	Hz	OBW P	ower	99	9.00 %		OH
x dB Ba		19.37 M		x dB			Bb 00.		
60						AYARO	a		

QPSK_B66B(1767.7+1777).PNG



16QAM_B66B(1748.1+1757.4)

Center Fre	q 1.7552500		lz Gain:Low	Center	Freq: 1.75525 ree Run 30 dB	PMMar 19, 2020 d: None evice: BTS	Frequency			
10 dB/div	Ref Offset 7.6 Ref 30.00 di				_					
200-00-000		-	m	dansmend	auma	-	-			Center Freq 1,755250000 GHz
10.0 -10.0	matrice the section	A					hun	The disaster	-	1
-50.0										
-600 Center 1.75	55 CH2							En	an 40 MHz	
#Res BW 3				#\	/BW 1.2 M	Hz			veep 1 ms	CF Step 4.000000 MHz
Occupi	ed Bandwi				Total P	ower	30.	1 dBm		<u>Auto</u> Man
	1	18.2	85 M	Hz						Freq Offset
Transmi x dB Bar	it Freq Error ndwidth		-335.46 19.19 M		OBW P x dB	ower		9.00 % .00 dB		0 Hz
MBG)							AYAD	n .		

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16QAM_B66B(1752.6+1757.4)

Center Fre	eq 1.755000		GHz #FGain:Low	Center F		None vice: BTS	Frequency			
10 dB/div	Ref Offset 7 Ref 30.00			1.1						-
20.0		1	manim	nam	former	an manufacture				Center Fre 1.755000000 GH
10.0	mum	and					have	maryte	amon	
30.0 40.0 50.0		-								
-60.0		-					_			1
Center 1.7 #Res BW			_	#VE	BW 620 H	Hz			eep 1 ms	CF Ste 2.000000 MH
Occup	ied Bandy			5.11	Total P	ower	31.1	dBm		Auto Ma
			470 Mł	100						Freq Offse
	iit Freq Erro Indwidth	or	-18.368 9,851 N		OBW P x dB	ower		9.00 % 00 dB		OH
001							ATAGU			

Center Freq	Center Freq 1.754750000 GHz #GainLow #Atten: 30 dB AvgHold: 100100 #FGainLow #Atten: 30 dB Radio Stat. None Radio Stat. None Radio Stat. None Radio Stat. None									
10 dB/div	Ref Offset 7.6 dB Ref 30.00 dBm		11	_	_					
20.0		prosenum	a.currada	m	www.	5	-		Center Free 1.754750000 GH:	
10.00 -10.0 -20.0 درمان	mannen	/				he	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	www.		
-30.0										
-60.0										
Center 1.755 #Res BW 39			#V	BW 1.2 N	IHz			eep 1 ms	CF Step 4.000000 MH	
Occupie	d Bandwidt	h		Total P	ower	31.	1 dBm		Auto Mar	
	18	.206 MH	Ηz						Freq Offse	
Transmit	Freq Error	310.44	cHz	OBW P	ower	9	9.00 %		0 H:	
x dB Band	lwidth	19.35 N	IHz	x dB		-26	.00 dB			
MR01						AYAD	n		_	

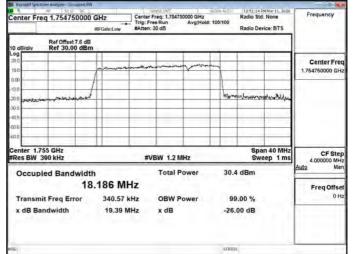
Center Free	q 1.755250000		in:Low	Center Fr			ALTEN ALTER	Radio Dev		Frequency
0 dB/div	Ref Offset 7.6 dB Ref 30.00 dBr			11	_	_				
200 200 000			errent free	and and a stand at the stand			~		-	Center Fred 1.755250000 GH
10.0 20.0 30.0	warwww.era						Unite		MP24-14/1/-14-1	
40.0 50.0 50.0										
Center 1.75 Res BW 3		-		#VE	W 1.2 M	IHz			n 40 MHz eep 1 ms	CF Step 4.000000 MH
Occupie	ed Bandwidt				Total P	ower	29.9	dBm		<u>Auto</u> Mar
Transmit x dB Bar	Freq Error	-3	6 MI 80.54 9.16 M	kHz	OBW P x dB	ower		0.00 % 00 dB		Freq Offse 0 H

16QAM_B66B(1752.6+1761.9)

64QAM_B66B(1752.6+1757.4)

Feynigilt Spec	tram Grander - Graners 6	W						
Center Fr	eq 1.75500000		Center Freq: 1.75 Trig: Free Run #Atten: 30 dB	6000000 GHz AvgiHold	ALTON ALTO 100/100	Radio Std: Radio Devi		Frequency
10 dB/div								
20.0 (0.0		monte	myno	minim	m			Center Freq 1.755000000 GHz
100 300	manner	1		-	har	ternenne	making	
40.0 40.0								
Center 1.7	755 GHz			1		Spar	20 MHz	05.01-0
Res BW	200 kHz		#VBW 62			Swe	ep 1 ms	CF Step 2.000000 MHz Auto Man
Occup	ied Bandwid 9.	th .2797 MH		Power	30.	3 dBm		FregOffse
	Transmit Freq Error x dB Bandwidth		iz OBW iz x dB	Power		9.00 % .00 dB		0 Hz
80)					AYAD	n)	_	_

64QAM_B66B(1752.6+1761.9)



256QAM_B66(1717.5+1726.8)

Center Fre	eq 1.719650000	UT12. T	enter Freq: 1.719 rig: Free Run Atten: 30 dB		Radio Std		Frequency
10 dB/div	Ref 23.60 dBm	-					
136		-		Jumment	-		Center Freq 1.719650000 GHz
-16.4				1		-	
36.4		-/		-			
-56.4							
Center 1.7 #Res BW			#VBW 1.2	MHz		n 50 MHz ep 1 ms	CF Step 5.000000 MHz
Occup	ied Bandwidt	h	Total	Power	18.9 dBm		<u>Auto</u> Man
	18	.180 MHz					Freq Offset
Transm	Transmit Freq Error		OBW	Power	99.00 %		0 Hz
x dB Ba	andwidth	19.21 MHz	x dB		-26.00 dB		
witci)					AYADDA		

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256QAM_B66(1748.1+1757.4)

	H Starl		Center Freq: 1.755 Trig: Free Run #Atten: 20 dB		100/100	Radio Std: I Radio Devic	10.0	Frequency
10 dB/div		1.						
15.2 5.20								Center Fred 1.755250000 GH
4.80				mener	-			
-14/8					1			
34.9					han		-	
54.8								
Center 1.7							10.000	CF Step 4.000000 MH
#Res BW			#VBW 1.2	MHz	_	Swee	40 MHz ep 1 ms	<u>Auto</u> Mar
Occup	ied Bandwidt 18	h .040 MH:		Total Power 19.				Freq Offse 0 Ho
	it Freq Error Indwidth	z OBW	e en la contra de la		00 % 00 dB			
MIRT				_	hinter		_	

Di Agilent Spa Di R	ndhum Analyzm - Docupied RW	Cent	er Freg: 1.755000000 GHz	Radio S	25 PM Jun 29, 2020 itd: None	Frequency	
1.22.3	P	WFGainLow #Atte	FreeRun AvgiHole an: 20 dB	d: 100/100 Radio D	evice: BTS		
10 dB/div	Ref Offset 13.8 d Ref 25.20 dBn						
15.2						Center Fre	
5.20						1.755000000 GH	
4.80	_		france	-m			
-14.0	-		-		-		
-24.8	-				-		
34.9	mannend				man		
-14.6					-		
64.6							
64.0						CF Ste 2.000000 MH	
	1.755 GHz 200 kHz		#VBW 620 kHz		pan 20 MHz weep 1 ms	Auto Ma	
Occu	pied Bandwidt	h	Total Power	18.6 dBm		Freq Offse	
	9.	1884 MHz				OH	
Trans	mit Freq Error	-27.330 kHz	OBW Power	99.00 %			
x dB E	x dB Bandwidth 9.716		x dB	-26.00 dB			
1				bianus.	_		

256QAM_B66(1752.6+1757.4)

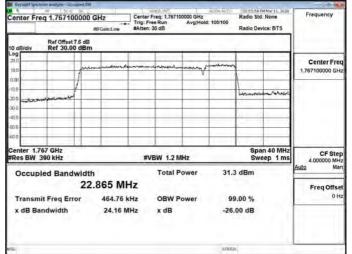
256QAM_B66(1752.6+1761.9)

Center Fr	eq 1.754750000	GHz IIFGain:Low	Center	Freq: 1.754750 ree Run : 30 dB		100/100	Radio St	PM Jun 23, 2020 d: None wice: BTS	Frequency
10 dB/div	Ref 23.60 dBm						_		
136			~~~~					-	Center Fred 1.754750000 GH
6.40 -16.4		1							1
36.4					L				
46.4 66.4								-	
664 Center 1.7								an 50 MHz	CF Ster
Res BW	390 KHZ		#1	/BW 1.2 MH		10 (Sw OdBm	eep 1 ms	5.000000 MHz Auto Man
Occup	18	Ηz	Total Po	Wei	13.	, april		Freq Offse	
	nit Freq Error	cHz	OBW Po	wer		9.00 %	1.44	OH	
x dB Ba	x dB Bandwidth 19.19		IHz x dB			-26.	00 dB		
961						AYARD			

256QAM_B66(1767.7+1777)

Feynigilt Spec	an so g be	v	10044-007	Anne Anno		3 4
Center Fr	eq 1.769850000	1	enter Freq: 1.76985 rig: Free Run Atten: 30 dB		Radio Device: BT	Frequency
10 dB/div	Ref 23.60 dBn	n				
136 360 8.40						Center Freq 1.769850000 GHz
-16.4				home		
35.4 45.4 55.4						~
Center 1.7	77 GHz				Span 50 M	AH2
#Res BW			#VBW 1.2 M	Hz	Sweep 1	ms 5.000000 MHz
Occup	bied Bandwidt 18	h 3.202 MHz	Total P	ower 19.	0 dBm	Auto Man Freq Offset
	nit Freq Error andwidth	259.88 kHz 19.25 MHz			9.00 % .00 dB	0 Hz
(100)				ATAD	n)	

QPSK_B66C(1720+1731.7)



QPSK_B66C(1745.1+1764.9)

Center Fre	eq 1.75500		Hz Gain:Low	Center F	req: 1.75500 e Run 30 dB	0000 GHz AvgiHold	ALTER ALTO	Radio Sta	Willer 11, 2020 d: None vice: BTS	Frequency
10 dB/div	Ref Offset Ref 30.0								_	
200 100	1	anna anna anna anna anna anna anna ann	an de se de se Constant de se d	www	protons	Arthurtop	Mahanjawa	2		Center Freq 1.755000000 GHz
-10.0	went				1			have	mulmor	
-30.0							-			
-50.0										
Center 1.7 #Res BW				#V	BW 2.2 M	IHz	-		an 60 MHz eep 1 ms	CF Step 6.000000 MHz
Occup	led Band	łz	Total P	ower	29.8	dBm		Auto Man Freq Offset		
Transmit Freq Error x dB Bandwidth			-105.59 kHz 39.20 MHz					.00 % 00 dB		DH2
496.							BTARUS		-	

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QPSK_B66C(1745.8+1757.5)

Center Fre	eq 1.755400000	GHz #FGain:Low	Center F		PMMar 19, 2020 d: None wice: BTS	Frequency			
10 dB/div	Ref Offset 7.6 dB Ref 30.00 dBm		11						
200 200 000		-	- Antonio Per	ner-am	manas				Center Fred 1.755400000 GHz
Contraction of the second	and second second second	-				Whereware	ntentent	of the second second	1
40,0 50,0									
Center 1.7 #Res BW		d.	#VI	BW 1.2 M	Hz		Sp: Sw	an 60 MHz eep 1 ms	CF Step
Occup	ied Bandwidt	n .984 M	47	Total P	ower	31.9	9 dBm		Auto Mar
Transmit Freq Error x dB Bandwidth		-473.63 23.93 1	kHz	z OBW Power		99.00 % -26.00 dB			Freq Offset 0 Hz
(00)						STARU	a		

Center Freq	1.754600000 G	Hz FGain:Low	Center F			100/100	Radio Std Radio Dev		Frequency
10 dB/div	Ref Offset 7.6 dB Ref 30.00 dBm		1.10						
20.0			hanna		mount				Center Free
0.01		1	1						1,754600000 GH
10.0	Internation	1			-	Lungertan	-anterna	Lakerone.	1.1
30.0 Min. 424/343	SWISS RIV	1						- I Bright	
40.0		-			-	-			
-60.0									
Center 1.75 #Res BW 51			#VI	BW 1.5 M	Hz			n 60 MHz ep 1 ms	CF Step 6.000000 MH
Occupie	d Bandwidth			Total P	ower	31.5	dBm		Auto Mar
	22.	833 M	Hz						Freq Offse
Transmit Freq Error		479.63	kHz	OBW P	ower	99	.00 %		0 H:
x dB Ban	dwidth	24.22 MHz		x dB		-26.	00 dB		1
100						ATARON			

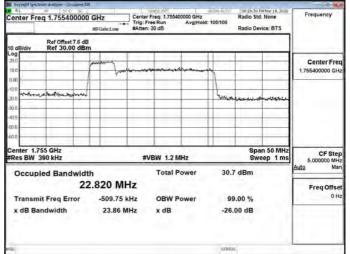
Center Freq 1.722100000 GHz					Center Freq: 1.722100000 GHz Trig: Freq: 1.722100000 GHz AvgiHold: 100/100 #Atten: 30 dB				MMar 11, 2020 I None vice: BTS	Frequency	
Ref Offset 7.6 dB 10 dB/div Ref 30.00 dBm											
00 00		-	and an and an	-	Roomer	anna p	-		-	Center Free 1.722100000 GH	
0.0		1			-						
0.0	home and the w		-		-			CAPA AND	which and the		
20 20 20					-						
enter 1.7 Res BW 3				#	VBW 1.2 M	AHz			n 40 MHz eep 1 ms	CF Ste 4.000000 MH	
Occupi	ed Band		h 2.784 M	Н7	Total Power 3					Auto Mar	
Transmit Freq Error 425.42 k x dB Bandwidth 24.10 M				kHz	Hz OBW Power 9			9.00 % .00 dB		Freq Offse 0 H	

QPSK_B66C(1752.5+1764.2)

16QAM_B66C(1745.1+1764.9)

Faynigilt Spe	strong deally be - Ch									2 A A
Center F	req 1.75500	00000 G					ALTER ALTER 5: 100/100	Radio St	tan Narta, 2020 td: None evice: BTS	Frequency
10 dB/div	Ref Offsel Ref 30.0			1						
200-00-000-000-000-000-000-000-000-000-	1	ow-wereners		man	mar	in the second	administration	-		Center Freq 1.755000000 GHz
and a	morem			1	0			hun	Monument	
-30.0 -40.0 -50.0										
Center 1.	755 CH-							-	an 60 MHz	
#Res BW				#VE	SW 2.2 N	IHz			veep 1 ms	CF Step 6.000000 MHz Auto Man
Occup	Occupied Bandwidth 37.538 N				Total P	ower	30.1	dBm		Auto Man Freq Offset
	Transmit Freq Error x dB Bandwidth		-55.666 kHz 39.09 MHz		OBW Power x dB			.00 % 00 dB		0 Hz
MSG					_	_	BTARUS	_		_

16QAM_B66C(1745.8+1757.5)



16QAM_B66C(1752.5+1764.2)

* NO K					00000 GHz	WHEN WITCH			Frequency		
aq 1.75460000			Trig: Fr	ee Run		100/100					
	Ref Offset 7.6 dB Ref 30.00 dBm										
	-	maderation	- chorasof	manel	man				Center Free		
	-1		_	-			-	-	1,75400000 814		
-	www				-	14mm	-	and total			
55 GHz	-			DW SER		-			CF Step		
	+t-		#0			30		eep 1 ms	6.000000 MH Auto Mar		
				TOTAL	Ower	50.	4 ubin		FregOffse		
Transmit Freq Error 503.5			Hz	OBW P	ower	9	9.00 %		0 Ha		
x dB Bandwidth		24.16 MHz		x dB		-26	8b 00.				
						ATAD					
	Ref Offset 7.6 dl Ref Offset 7.6 dl Ref 30.00 dB makes classification 555 GHz 510 kHz lied Bandwild 22 it Freq Error	AFG Ref Offset 7.6 dB Ref 30.00 dBm So GHZ So GHZ Sto KHZ Lied Bandwidth 22.833 it Freq Error 55	seq 1.754600000 GHz #RGainLow Ref Offset 7.6 dB Ref 30.00 dBm set offset 7.6 dB ref offset 7.6 dB ref 30.00 dBm set offset 7.6 dB set offset 7.6 dB	Ref Offset 7.6 dB Ref Offset 7.6 dB Ref 30.00 dBm strain 55 GHz 510 kHz 22.836 MHz it Freq Error 503.56 kHz	AT 1754600000 GHZ BEGINLOW TGREETCOW TGRE	Arten 20 dB/ Brown Low Arten 20 dB Ref Offset 7.6 dB Ref 00fset 7.6	Active Active<	All	Non-Non-Non-Non-Non-Non-Non-Non-Non-Non-		

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64QAM_B66C(1745.1+1764.9)

Center Fre	eq 1.7550		Hz FGain:Low	Center F			d: 100/100	Radio St	AM Nar 11, 2020 d: None wice: BTS	Frequency Center Freq 1.755000000 GHz
10 dB/div	Ref Offsel Ref 30.0			1.1	_					
20.0 10.0	/	-		anny	porters		-	~		
20.0	in and	-	-		1	-	-	Lines	an mark	
300 43.0 50.0									-	
-600 Center 1.7	55 GHz							Sp	an 60 MHz	CF Ster
Res BW	680 kHz			#V	BW 2.2 M	AHz			eep 1 ms	6.000000 MH
Occup	ied Band	width			Total F	ower	29.5	dBm		<u>Auto</u> Man
		37.	353 MH	Ηz						Freq Offset 0 Hz
Transm	it Freq Er	ror	-122.18	kHz	OBW F	ower	99	.00 %		
x dB Ba	indwidth		42.99 N	IHz	x dB		-26.	00 dB		
4001							AYAOU			

Center Fre	eq 1.75540000	D GHz #FGain:Low	Center			100/100	Radio Sto		Frequency Center Frec 1.755400000 GH2
10 dB/div	Ref Offset 7.6 dE Ref 30.00 dB								
20.0 10.0		-	and the second	-	mann	2			
10.0	mhammana					hur	-	Arrow	
40.0 50.0									
Center 1.7 #Res BW			#V	/BW 1.2 M	IHz			an 50 MHz eep 1 ms	CF Step 5.000000 MH
Occup	ied Bandwid	th		Total P	ower	29.	9 dBm		Auto Mar
	2	2.744 M	Hz						Freq Offse
Transm	it Freq Error	-537.13	kHz	OBW P	ower	9	9.00 %		0 H:
x dB Ba	ndwidth	23.74 M	ИНz	x dB		-26	.00 dB		
MBQ 1						ATAO	n		

64QAM_B66C(1745.8+1757.5)

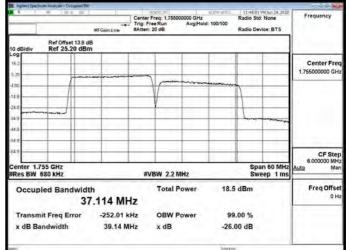
64QAM_B66C(1752.5+1764.2)

Center Fre	eq 1.75460			Trig: F	Freq: 1.754 ree Run : 30 dB	500000 GHz AvgiHold	100/100	Radio Str	PMMar 10, 2020 d: None wice: BTS	Frequency Center Freq 1.754800000 GHz
10 dB/div	Ref Offset Ref 30.0				_					
20.0		-		man		nynemin				
0.00 10.0 30.0 Newwo	to a state of the	instants	/		-		Welgere	-	- hand the second	
-30 0 40 0 -50 0										
Center 1.7				#	/BW 1.5	MHz			an 60 MHz eep 1 ms	CF Step 6.000000 MH
Occup	ied Band	width	17 1	ЛНг	Total	Power	29.8	8 dBm		6.000000 MHz <u>Auto</u> Man Freq Offset 0 Hz
	it Freq En ndwidth	ror		8 kHz	OBW x dB	Power		9.00 % .00 dB		
(80)							ATARO	n :		

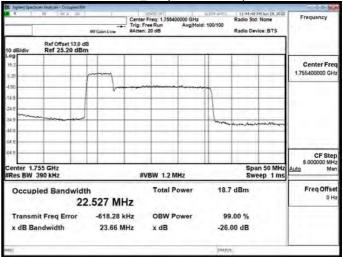
256QAM_B66(1720+1731.7)

Faynigilt Spec	Kitrum Anklyter - O(cupiet 6W	1	-1-	10.005-207		MIN MILL	(aucould	PM Jun 23, 2020	Frequency
Center Fr	req 1.722100000	GHz #FGain:Low	Trig: F	Freq: 1.722100 Free Run : 30 dB			Radio St		Frequency
10 dB/div	Ref 23.60 dBm								
136 360 6.40		-			~				Center Fre 1.722100000 GH
-16.4 -26.4									
146 A 146 A 56 A									
Center 1. #Res BW		1		VBW 1.8 M	17			an 70 MHz /eep 1 ms	CF Step
	oied Bandwidt			Total Po		18.	3 dBm		7.000000 MH2 Auto Man Freq Offset 0 Hz
	22 nit Freq Error andwidth	430.48 24.23 I	kHz	OBW Po x dB	wer		9.00 % .00 dB		
when (AYARD	n]		_

256QAM_B66(1745.1+1764.9)



256QAM_B66(1745.8+1757.5)



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256QAM_B66(1752.5+1764.2)

Center Fred	1.754600000		Center Freq: 1.7546 Trig: Free Run #Atten: 30 dB	>100/100	Radio De		Frequency	
10 dB/div	Ref 23.60 dBm				_			Center Fred 1.754600000 GHa
13.60 3.60		-		-				
6.40 16.4							1	
46.4				4				
56 4								
Center 1.75 Res BW 5			#VBW 1.81	MHz		Spa Sw	eep 1 ms	CF Step 7.000000 MH
Occupie	ed Bandwidt 22	h .822 MH	Total I	Power	18.	7 dBm		Auto Man Freq Offset 0 Hz
Transmit x dB Ban	Freq Error	427.81 kH		Power		9.00 %	1.1	
A UD Dail	uwiuu	24.24 mm	2 105		-20.			

Center Fre	eq 1.767100000	GHz #FGain:Low	Trig: I	Free Run 2:30 dB	Avg Ho	Autor Autor L bid: 100/100	Radio St	EM Jun 23, 2020 d: None wice: BTS	Frequency
10 dB/div	Ref 23.60 dBm		_				_		
13.60							-		Center Freq 1.767100000 GHz
6.40 16.4 26.4									
46.4			-	-		-	1	-	
66.4 66.4				-				-	
Center 1.7 #Res BW			#	VBW 1.8 M	AHz		Sp: Sw	an 70 MHz eep 1 ms	CF Step 7.000000 MHz
Occup	ied Bandwidt	h		Total P	ower	18.	0 dBm	1	<u>Auto</u> Man
	22	.898 N	Hz					- 1	Freq Offset
Transm	it Freq Error	410.64	kHz	OBW P	ower	9	9.00 %	1.1.1	0 Hz
x dB Ba	andwidth	24.26	MHz	x dB		-26	8b 00.		
00						SYAD			

256QAM_B66(1765+1776.7)

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OUT OF BAND EMISSION AT ANTENNA TERMINALS

Standard Applicable 8.1

FCC §22.917(a), §24.238(a), §27.53(h)

Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

FCC §27.53(c) for LTE B13

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB (-13dBm)

(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than

65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

FCC §27.53(g) for LTE B12, 13

Compliance for operations in the 600 MHz, 698-746 MHz, 746-758 MHz and the 776-788 MHz band with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC §27.53(h)(3) for LTE B4, 66

Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

FCC §27.53(m) (4) (6) for LTE B7, B41

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Measurement procedure. Compliance with these rules is based on the use of measurement nstrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed; for mobile digital stations, in the 1 megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 megahertz or 1 percent of emission bandwidth, as specified; or 1 megahertz or 2 percent for mobile digital stations, except in the band 2495-2496 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency

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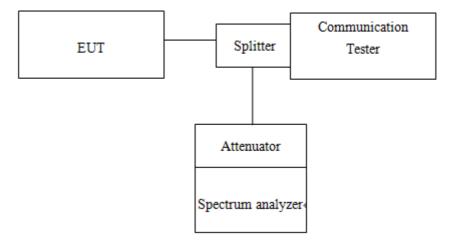
and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

FCC §96.41 , C63.26 Clause 5.7.

For channel and frequency assignments made by the SAS to CBSDs, the conducted power of any CBSD emission outside the fundamental emission bandwidth as specified in paragraph (e)(3) of this section (whether the emission is inside or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edges are the upper and lower SAS assigned channel edges are the upper and lower limits of any channel assigned to a CBSD by an SAS, or in the case of multiple contiguous channels, the upper and lower limits of the combined contiguous channels.

For CBSDs and End User Devices, the conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed -25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

8.2 Test SET-UP



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8.3 Measurement Procedure

8.3.1 Conducted Emission

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.

- 1. To connect Antenna Port of EUT to Spectrum.
- 2. Set RBW = 1MHz & VBW = 1MHz on Spectrum.
- 3. Allow trace to fully stabilize
- 4. Repeat above procedures until all default test channel measured were complete.

8.3.2 Band Edge

- 1. To connect Antenna Port of EUT to Spectrum.
- The band edge of low and high channels for the highest RF powers was measured. Setting RBW ≥ 1% EBW.
- 3. Allow trace to fully stabilize
- 4. Repeat above procedures until all default test channel measured were complete.

8.4 Measurement Equipment Used

Conduc	ted Emission (m	neasured at a	antenna port)	Test Site	
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.
TYPE		NUMBER	NUMBER	CAL.	
Spectrum Analyzer	KEYSIGHT	N9010A	MY51440113	07/15/2019	07/14/2020
Radio Communication Analyer	Anritsu	MT8821C	6261786084	01/18/2020	01/17/2021
Attenuator	Marvelous	MVE2213-10	RF30	11/20/2019	11/19/2020
DC Block	PASTERNACK	PE8210	RF32	11/20/2019	11/19/2020
Splitter	Woken	DOM35LW1 A2	RF83	11/20/2019	11/19/2020
Coaxial Cables	Woken	00100A1F1A 185C	RF229	11/20/2019	11/19/2020

8.5 Measurement Result:

Refer to next pages.

Note:

Mask measurements of B41C is used for demonstrating the compliance of both B41C and B7C due to the B41C operates in frequency 2498.8~2687.5 MHz can fully cover the B7C which is operating in 2502.5~2567.5MHz

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Emission_B5B_30MHz~3GHz_Low_CH

Keynight Spectrum Analyzia - Swage 3A					280
Start Freq 30.000000 MH	Z PNO: Fast ++	Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 100/100	04:46:58 24 Mar 27, 2020 TRACE 1 2.3 4 5 5 TYPE MUMANAN Det P NNNNN	Frequency
Ref Offset 7.4 dB 10 dB/div Ref 25.00 dBm	IFGain:Low	#Atten: 30 dB	Mk	r6 2.502 0 GHz -40.410 dBm	Auto Tune
500	4/2				Center Free 1.516000000 GH
500 -150 -250				-12.00 dBm	Start Fre 30.000000 MH
36.0 45.0 45.0 45.0	Inner			and an and a second	Stop Fre 3,000000000 GH
Start 30 MHz #Res BW 1.0 MHz	#VBW	50 MHz		Stop 3.000 GHz .733 ms (1001 pts)	CF Ste 297.000000 MH Auto Ma
4 N 1 6 N 1 8 N 1 7	826.8 MHz 834.0 MHz 1.663 6 GHz 1.668 0 GHz 2.480 4 GHz 2.602 0 GHz	22.084 dBm 17.474 dBm -42.834 dBm -42.964 dBm -39.762 dBm -40.410 dBm	NCTION FUNCTION WOTH	ENNOTION NAME	Freq Offse 0 H
8 9 10 11					

er Freg 1.515000000 GHz Frequ Avg Type: Log-Pw Avg Hold: 100/100 Trig: Free Ru PNNN Auto Tu Mkr6 2.517 0 GHz -41.382 dBm Ref Offset 7.4 dB Ref 25.00 dBr Center Fre 000 G 1.515000 Start Free 30.000000 M 6 Stop Free 3.000000000 GH enter 1,515 GHz Res BW 1.0 MHz CF Ster Span 2.970 GHz Sweep 2.733 ms (1001 pts) #VBW 50 MHz 297.0 OR THE S Freq Offs OH 39.892 41.382

Emission_B5B_30MHz~3GHz_Mid_CH

Emission_B5B_30MHz~3GHz_High_CH

Kojnight Spectrumy Amélymu - Swege	134				1 2 2 C				
Center Freq 1.515000	PNO: Fast +	Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 100/100	04 54:16 PM Mar 27, 2020 TRACE 1 2 3 4 5 5 TVPE MWWWW Der P N N N N	Frequency				
Ref Offset 7.4 dB Mkr6 2.532 0 GHz 10 dB/div Ref 25.00 dBm - 39.739 dBm									
15.0 5.0	72				Center Fre 1.515000000 GH				
-15.0	-			-13.00 uBm	StartFre				
-25.0 -36.0		1 march		and 6	30.000000 MH				
65.0 65.0 65.0					Stop Fre 3,000000000 GH				
Center 1.515 GHz #Res BW 1.0 MHz	#VB	W 50 MHz		Span 2.970 GHz 2.733 ms (1001 pts)	CF Ste 297.000000 MH Auto Ma				
1 N 1 2 N 1 3 N 1	836.8 MHz 844.0 MHz 1.673.6 GHz	21.893 dBm 17.209 dBm -43.191 dBm	INCTION FUNCTION WOTH	FUNCTIONWALUE	FregOffs				
4 N 1 5 N 1 8 N 1 7	1.688 0 GHz 2.510 4 GHz 2.632 0 GHz	-42.764 dBm -40.939 dBm -39.739 dBm			01				
8 9 10 11									
+1 #15			STATU	s F	L				

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Emission_B5B_3GHz~26GHz_Low_CH

		direction .						684,00-3	PERM	page 5	1.80
Frequency	04/9:09 PM Mar 27, 2020 TRACE 1 2.3 4 5 8 TYPE MWWWW Der P NNNNN	pe: Log-Pwr Id:>100/100	Av	Free Run	Trig: Fr	NO: Fast	000 GHz		eq 3	t Fre	tar
Auto Tun			1000	1: 30 dB	#Atten:	Gain:Low		_	_		_
	5 26.030 0 GHz -32.195 dBm	Mkrt						offset7. ef 25.00		B/div	l0 d
Center Fre		-	-	-	-				_		15.0
14.750000000 GHz Start Free		-	-	-	-		1		-		5.00
	-12.00 talim				-	1					500 15.0
Start Fre 3.00000000 GH	é	-					-				15.0
3.0000000 GH2		a sun	man	man	ton in the	www.	have		3	020	16.0
Stop Freq				-						1	45.0 95.0
26.50000000 GH		1									65.0
CF Ste 2.350000000 GH	Stop 26.50 GHz 0.20 ms (1001 pts)	Sweep 39		łz	V 50 MH	#VBW	1	z MHz		t 3.0 s BV	
<u>Auto</u> Ma	FUNCTION VALUE	UNCTION WOTH	FUNCTION		Ŷ		x			NOTE:	
Freg Offs				dBm	-42.102 -42.528 -40.435		3.336			NNN	2
0 H			-	dBm	-40.443	0 GHz				N	4
1.1.1.1			_								6 7 8
			_	-		-		-	+		9
				_	~	1		-			10 11
	- + I	STATUS		-					-	-	sin)

Emission_B5B_3GHz~26GHz_Mid_CH

Keynight Spectra	ni uzajimi - Smith	194		-			2.2.2.
Start Freq	3.00000000	00 GHz PNO: Fast ++	Trig: Free Run	Avg T Avg H	Type: Log-Pwr Iold: 100/100	104 51:02 PM Mar 27, 2020 THACE 1 2 3 4 5 8 TYPE MWWWWW DET P N N N N N	Frequency
10 dB/div F	Ref Offset 7.4 c		#Atten: 30 dB		Mkr	5 26.030 0 GHz -32.992 dBm	Auto Tune
99 15 D 5 CO							Center Fred 14.750000000 GH:
500 50 50 50 50 72 3 ⁸					and new denne	-12.00 ato-	Start Free 3.000000000 GH
60 60	14- Jan 200 - Printer	-1-10-15-50-5-50-5-50-5-50-5-50-5-50-5-	name and an and				Stop Free 26.50000000 GH
tart 3.00 G Res BW 1.		#VBW	50 MHz		Sweep 3	Stop 26.50 GHz 20 ms (1001 pts)	CF Step 2.350000000 GH Auto Ma
2 N 3 N 4 N		23 3.356 0 GHz 3.356 0 GHz 4.159 0 GHz 4.195 0 GHz 26.030 0 GHz	43.096 dBm 43.258 dBm 41.807 dBm -11.703 dBm -32.892 dBm	FUNCTION	EUSE (OR WARK)	FUNCTION VALUE	Freq Offse 0 H
n					STATUS	6	L

Emission B5B 3GHz~26GHz High CH

			_				14y10-3+	the party and		
Frequency	04:35:33 PM Mar 27, 2020 TRACE 1 2 3 4 5 6	Type: Log-Pwr Iold: 100/100	A	Trig: Free Run	2	0000 GHz	00000	1 3.0		Star
Auto Tune	DET P NNNN N	100100	-	#Atten: 30 dB	PNO: Fast ++- FGain:Low	IF	Offset 7,	Ref		
		-		_			25.00		Bidiv	0 di
Center Fre 14.750000000 GH							_		_	15.0
-	-13.00 dBm						_		-	5.00
Start Fre 3.000000000 GH	Ś							3	1.4.1	160 250 360
-		-		wanter	summe			when	V-V	15.0
Stop Fre 26.500000000 GH										55.0 65.0
CF Ste 2.35000000 GH	Stop 26.50 GHz 9.20 ms (1001 pts)	Sweep 39		50 MHz	#VBW	1	IHz		t 3.00 s BW	
Auto Ma	FUNCTION VALUE	FUNCTION WOTH	FUNCTION	Y I		x			10003	
Freq Offse				42.343 dBm 43.486 dBm 40.747 dBm 41.860 dBm	5 0 GHz 4 0 GHz 0 0 GHz	3.376 4.184 4.220	_	1 1	N N	1234
	1			-32.089 dBm	3.0 GHz	25.983		1	N	5 5 7 8 9 10
							_			9 10 11
	+			100				_		+ L

Report No.: E2/2019/A0032 Page 51 of 167

Emission_B7C_30MHz~3GHz_Low_CH

Keysepit Spejtrum ünekoir- Swept SA AL SO DC		S8065-3007	ALSON AUTO	10:16:47 PM Mar 19, 2020	Frequency			
Start Freq 30.000000 MH	z	Trig: Free Run	Avg Type: Log-Pwr Avg/Hold;>100/100	THACE 123458				
	PNO: Fast IFGain:Low	#Atten: 30 dB	Anglinois. > 100 100	Der P NNNN	Auto Tune			
Ref Offset 8 dB	dB/div Ref 25.00 dBm							
			1	2 ²	Contra Par			
5.00)	Center Fre 1.516000000 GH			
500	-							
25.0				->===	Start Free 30.000000 MH			
-36.0				I have	30.00000 mm			
45.0	and a dealer				Stop Fre			
65.0					3,000000000 GH			
Start 30 MHz #Res BW 1.0 MHz	VEW	io MHz	Dunan 2	Stop 3.000 GHz 733 ms (1001 pts)	CF Ste			
We water resource and	VDW :	1.0000	NCTION FUNCTION WOTH	FUNCTION WAVE	Auto Ma			
1 N 1 2 2 N 1 7 2	510 0 GHz 529 8 GHz	17.403 dBm 14.169 dBm			FregOffse			
3					OH			
6 7								
8 9 10								
10				· · ·				
HQ .			STATUS	-	here and the second sec			

Emission_B7C_30MHz~3GHz_Mid_CH ter Freq 1.515000000 GHz PNO: Fast ++ Atten: 30 dB PMMar 19, 202 ACE 1 2 3 4 5 YPE MYNYNN CMT P NNNN Frequ Avg Type: Log-Pw Avg/Hold: 100/100 Auto Tu Ref Offset 8 dB Ref 25.00 dB Center Fre 600 G 1.51600 Start Free 30.000000 M Stop Free 3.000000000 GH enter 1.515 GHz Res BW 1.0 MHz Span 2.970 GHz veep 2.733 ms (1001 pts) CF Ster VBW 50 MHz 297.0 DE TRO S NN 2.525 1 GHz 2.544 9 GHz 17.222 dB 16.389 dB 1 Freq Offs OH

Emission_B7C_30MHz~3GHz_High_CH

Keysiget Spectrum Analysis - Swept SA					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Start Freq 30.000000 Mi	IZ PNO: Fast -	Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 100/100	10:25:31 PM Mar 19, 2020 THACE 1 2 3 4 5 5 TYPE M WARMAN Der P N N N N N	Frequency			
Bat Official & dB Mkr2 2.560 0 GHz								
10 dB/div Ref 25.00 dBm	h			12.774 dBm				
15.0 5.00				* ²	Center Fre			
500								
-25.0				->= 00 (K-	Start Fre 30.000000 MH			
35.0			mannen	ana barradageaninat	Stop Fre			
65.0					3,000000000 GH			
Start 30 MHz Res BW 1.0 MHz	VBW	50 MHz	Sweep 2	Stop 3.000 GHz .733 ms (1001 pts)	CF Ste 297.000000 Mi Auto M			
INTERNOOF THE SOL	2.540 2 GHz	17.576 dBm	UNCTION FUNCTION WOTH	FUNCTION VALUE	CM12 III			
	2,560 0 GHz	12.774 dBm			Freq Offs			
6 7 8					1			
5 10 11		-						
esó l			STATU	s				

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Emission_B7C_3GHz~26GHz_Low_CH

tart Fre	q 3.000000		Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 100/100	TRACE 1 2 3 4 5 5 TYPE MUMANNY Der P NNNNN	Frequency
-	Ref Offset 8	IFGain:Low	#Atten: 30 dB	Mkr	3 25.983 0 GHz	Auto Tune
o dB/div	Ref 25.00	dBm			-32.300 dBm	
5.0						Center Fre 14.750000000 GH
00 5.0 5.0						Start Fre
5.0 5.0	Menum	untres allow the master	martmen	and a state of the second s	man and a	Stop Fre
art 3.00 Res BW	GHz 1.0 MHz	VBV	4 50 MHz	Sweep 3	Stop 26.50 GHz 9.20 ms (1001 pts)	CF Ste 2.350000000 GH
		5.020 0 GHz	-41.057 dBm	UNCTION FUNCTION WOTH	FUNCTION VALUE	Auto Ma
2 N 2 N 4 5 6 7	1	5.059 6 GHz 25.983 0 GHz	-40.046 dBm -32.300 dBm			Freq Offsi 0 H
6 7 8 9						1.00
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				STATUS		

Emission_B7C_3GHz~26GHz_Mid_CH

Keysigitt Spectrum Analyziin Timepe SA	1 1	1 199955-1007	1 Activity auto	10:22:34 PM Mar 19, 2020	
Center Freq 14.7500000	PNO: Fast ++	1	Avg Type: Log-Pwr Avg Hold: 100/100	TRACE 1 2 3 4 5 5 TYPE MUNINANA Der P NNNNN	Frequency
Ref Offset 8 dB	Auto Tune				
99 15.0 5.00					Center Fred 14.75000000 GHz
160 250				anie.	Start Free 3.00000000 GH
450 550	~~~~	and the second			Stop Free 26.50000000 GH:
enter 14,75 GHz Res BW 1.0 MHz	VBW	50 MHz	Sweep 3	Span 23.50 GHz 9.20 ms (1001 pts)	CF Step 2.350000000 GH Auto Mar
2 N f	5.050 2 GHz 5.089 8 GHz 5.842 0 GHz	-39.930 dBm -40.335 dBm -32.459 dBm	NETION FUNCTION MOTH	FUNCTION WALKE	Freq Offse 0 H:
9 9 10 11		_			

Emission B7C 3GHz~26GHz High CH

							um Andysia- 3		
Frequency	10:24:43 24 Mar 19, 2020 TBACE 1 2 3 4 5 5 TYPE MWWWWW DET P N N N N N	Log-Pwr 100/100	Avg	Trig: Free Run	GHz	000000 0	q 14.750		len
Auto Tun	Industry many solution								_
	Ref Offset 8 dB Mkr3 26.476 5 GHz dB/div Ref 25.00 dBm -32.468 dBm								
Center Fre					_		-	-	0g
14.750000000 GH					-		-		5,00
-		1			-	-	-	-	5 00
Start Fre 3.00000000 GH	-26.00.4 3		1	-					15.0
3.0000000 GP	Arth Constant of the second	manne		. una	Adarbarrator	-	02	1	36.0
Stop Fre							- P., wall/w	ma	45.0
26.50000000 GH		1							55.0 65.0
CF Ste 2 35000000 GH	Span 23.50 GHz 20 ms (1001 pts)	Sweep 39	1	0 MHz	VBW	-	5 GHz		
Auto Ma	EVINCTION WALVE	ACTION TERMINICTION WOTH		Y		x		NOR	-
Freq Offs		_		40.504 dBm 40.863 dBm -32.468 dBm	0 4 GHz 0 0 GHz 6 5 GHz	5.120	1	NNN	12
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	C	STATUS							só



Report No.: E2/2019/A0032 Page 52 of 167

Emission_B41C_30MHz~3GHz_Low_CH

AL SS 150 0		SEASE-INTY	ALCON MITCH	10:28:31 PM Nar 19, 2020	280			
Start Freq 30.00000			Avg Type: Log-Pwr Avg Hold: 100/100	THACE 1 2 3 4 5 6 TYPE MUMUNUM DET P NNNNN	Frequency			
If GalinLow #Atten: 30 dB Description in the second secon								
5(0)				2	Center Fre 1.516000000 GH			
500 150 150				es oix.	Start Fre 30.000000 Mi			
	******	p.ga.n.s.a.e	ang tang ang tang tang tang tang tang ta	an Morrison	Stop Fre 3,00000000 Gi			
tart 30 MHz Res BW 1.0 MHz	VBW	50 MHz	Sweep 2.	Stop 3.000 GHz 733 ms (1001 pts)	CF Ste 297.000000 MI Auto M			
1 N 1 7 2 N 1 7 3 4 6	2.499 3 GHz 2.511 0 GHz	22.155.dBm 16.258.dBm		TORCINA NEW C	Freq Offs 01			
7 8 9 10 11								
s0)			STATUS	C. T				

Emission_B41C_30MHz~3GHz_Mid_CH

AL	g 30.0000	0.00	i sexectori	Avg Type: Log-Pwr	10:32:43 PM Mar 19, 2020 TRACE 1 2 3 4 5 6	Frequency	
Start Fre	q 30.0000	PNO: Fast IFGain:Low	#Atten: 30 dB	Avg Hold: 100/100	DET P NNNNN		
10 dB/div	Ref Offset			M	16.226 dBm	Auto Tun	
15.0 5.00 5.00					2	Center Fre 1.51600000 GH	
16.0 -25.0 -36.0					A seito men	Start Fre 30.000000 Mi	
45.0 55.0	544,000,00 440.00	an a	an water an electronic con	and a side of the second s	and "annuality of	Stop Fr 3.000000000 Gi	
Start 30 f Res BW	AHZ 1.0 MHz	VBN	V 50 MHz	Sweep 2	Stop 3.000 GHz .733 ms (1001 pts)	CF Str 297.000000 M Auto M	
1 N 2 N 3 4 5		2.583 8 GHz 2.595 5 GHz	22.489 dBm 16.226 dBm	иестюн төлестон мотн	FUNCTION VALUE	Freq Offs	
6 7 8 9 10 11							
+ #10				STATU		-	

Emission_B41C_30MHz~3GHz_High_CH

Frequency	Z PM Mar 19, 2020		JACON MOTOR		-101155-01	_	1	00	1 50 0	*	1	AL.
(require)	HAGE 123455 TYPE MWWWWW Der P NNNNN		e: Log-Pwr 1: 100/100	Avg	Free Run		PNO: Fast +		000000	30.0	Freq	art
Auto Tur	80 0 GHz	r2 2.6	Mk		en: 30 dB	-	FGain:Low	B	ffset 8 d			
	281 0.8m	10	-	1	-	-	1	Bm	25.00 d	Ref	liv	
Center Fre 1.515000000 Gi	1		-			1	-			1	_	0
Start Fre							-			+		0
30.000000 Mi	-26.00 000	1				+			-	-	-	0
Stop Fr	hand and address	ment		and from the second	mana		-		minter	-	-	
3,000000000 G	_	-				-			_	-		0
CF Str 297.000000 M	o 3.000 GHz s (1001 pts)		Sweep 2		Hz	V 50 I	VBW		Hz		30 MI BW 1	
Auto M	CTION MALVE	FUN	NOTION WOTH	FUNCTION	90 dBm	-	3 GHz	2.666		SEL		
Freq Offs 01			_		90 dBm 81 dBm	16	0 0 GHz			1		
1		_	_	_	-	_		-				-
	-		_			_						
-		-	STATUS		-					-	-	

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Emission_B41C_3GHz~26GHz_Low_CH

tart Fre	q 3.000000		Trig: Free Run	Avg	Type: Log-Pwr Hold: 100/100	10:30:10 PM Mar 19, 2020 TBACE 1 2 3 4 5 5 TYPE MWWWWW DET P N N N N N	Frequency
	Ref Offset 8		#Atten: 30 dB		Mkr	3 25.936 0 GHz -32.156 dBm	Auto Tune
0 dB/div .99 15.0 5.00	Ref 25.00	dBm				-52.150 UBIN	Center Free 14.750000000 GH
60 50 50	A2					-36.00- 3	Start Fre 3.000000000 GH
5.0 6.0 6.0	alarenan	re+~		****	and and a second se		Stop Fre 26.50000000 GH
tart 3.00 Res BW	GHz 1.0 MHz	VBV	V 50 MHz	1	Sweep 3	Stop 26.50 GHz 9.20 ms (1001 pts)	CF Ste 2.350000000 GH Auto Ma
1 N 2 N 3 N 4 5 6		2 4 998 6 GHz 5 022 0 GHz 25 936 0 GHz	40.720 dBm 40.385 dBm -32.156 dBm	FUNCTION	FUNCTION WOTH	FUNCTION VALUE	Freq Offse 0 H
7 8 9 10				_			

Emission_B41C_3GHz~26GHz_Mid_CH

	toom Analyzin Brat	18 3A				2 2 2
Start Free	3.0000000	PNO: Fast +	Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 100/100	10:32:45 24 Mar 19, 2020 TRACE 1 2 3 4 5 5 TYPE MWWWWW DET P N N N N N	Frequency
10 dB/div	Ref Offset 8 d		#Atten: 30 dB	Mkr	3 26.006 5 GHz -32.791 dBm	Auto Tune
.09 15.0 5.00						Center Fred 14.750000000 GHz
50 50 50	A2			I a constituição a constituição	-sites	Start Free 3.000000000 GH
15.0	and and a second		- martine and the second			Stop Free 26.50000000 GH
tart 3.00 Res BW		VBW	50 MHz	Sweep 3	Stop 26.50 GHz 9.20 ms (1001 pts)	CF Ster 2.350000000 GH
1 N 2 N 4 5 6 7 8 9		5.167 5 GHz 5.191 0 GHz 26.006 5 GHz	40.947.dBm 41.284.dBm -32.791.dBm	NETION FUNCTION NOT	FUNCTION VALUE	Auto Mar Freq Offset 0 Ha
10 11 +			~	STATUS	· ·	

Emission_B41C_3GHz~26GHz_High_CH

tart Freq 3.0000	50 D. DC	Trig: Free Run	Avg Type: Log-Pwr Avg Hold:>100/100	10:37:02 PM Mar 19, 2020 TRACE 1 2 3 4 5 6 TYPE MWWWWW Der P N N N N	Frequency
Ref Offs			Mkr	3 26.453 0 GHz -32.150 dBm	Auto Tune
99 150 500					Center Free 14.750000000 GH
50 50 50				-36.00.8 3	Start Fre 3.000000000 GH
15.0 member 15.0	26************************************				Stop Fre 26.50000000 GH
tart 3.00 GHz Res BW 1.0 MHz	VBW	50 MHz	Sweep 3	Stop 26.50 GHz 9.20 ms (1001 pts)	CF Ste 2.350000000 GH Auto Ma
9	6 336 6 GHz 5 360 0 GHz 26 463 0 GHz	-41.310 dBm -41.077 dBm -32.150 dBm	I FUNCTION MOTH	FAIDCTRONVALUE	Freq Offse 0 H
8 9 10 11		_	atAttis		

Report No.: E2/2019/A0032 Page 53 of 167

Emission_B48C_30MHz~3GHz_Low_CH

			100
Z Trig: Free Run	Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 5 5	Frequency
IFGain:Low #Atten: 30 dB	Mkr		Auto Tune
			Center Free 1.515000000 GH
		1.con	Start Free 30.000000 MH
			Stop Free 3.000000000 GH
#VBW 50 MHz*			CF Step 297.000000 MH Auto Mar
2.809.9 GHz -43.903 dBm			Freq Offse 0 H
	STATUS		
	PNO: Fast - Tig: Free Run IFGeint.ow #Atten: 30 dB	IZ Trig: Free Run IFGainLow Avg Type: RMS AvgHold: 180100 Mkr Mkr Image: State and the state a	Iz Avg Type: RMS The Elizable is a set of the elizable is a set

Emission_B48C_30MHz~3GHz_Mid_CH

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Frequency	AM Nay 15, 2920		Type: RMS Hold: 100/100	4	Trig: Free Run		0 MHz		eq 30	t Fre	Sta
	DET A NNNN N	-	Hold: 100/100	-	#Atten: 30 dB	PND: Fast - FGain:Low	15				
Auto Tune	79 2 GHz 046 dBm		M					Offset 7.		Bidiv	10 d
Center Fre		-		-				-	-	-	7.80
1.515000000 GH											-2.20
Start Fre		-	-	-		-			-	-	-22.2
30.000000 MH	1 -000 00-					-	-	-			42.2
Stop Fre			Leave to the second	AL ALLARA		recount	- Acres	- مطار	men		-52.2
3.000000000 GH		-	-	-		-			_	-	.73.2
CF Ste 297.000000 MH	3.000 GHz (1001 pts)		Sweep 3		/ 50 MHz*	#VB		MHz	MHz V 1.0 M	t 30 s BW	
Auto Ma	TIONVILUE	E FLA	FUNCTIONWOTH	FUNCTION	-45.046 dBm	2 GHz	2 670				MKE
Freq Offse					40.040 00m	e one	4,913			a	23
						-		_		-	4 5 6 7 8
		-				-		_	-		9 10 11
		-		_	1				-		1 ha
-		8	STATU		and the second s						MERS

Emission B48C 30MHz~3GHz High CH

Keynight Sp	ectors Analyzer-								
A Tart Fre	g 30.0000		Treat assess			RMS	TRAC	# Nay 15, 2020	Frequency
laitire	q 50.0000	PNO: Fas IFGain:Lo		Run 0 dB	Avg Hold: 100/10		(D)	TANNNN N	
0 dB/div	Ref Offset Ref 17.8					Mk		8 0 GHz 09 dBm	Auto Tun
09 7.80 2.20									Center Fre 1.515000000 GH
222 222 222							•1	+0.00 30%	Start Fre 30.000000 MP
22 22 22	*****		and and a state of the state of	e-fueigini	**********		nimenales.		Stop Fre 3.000000000 G
tart 30 / Res BW	1.0 MHz	#\	BW 50 MHz*	-	NCTION FUR		.533 ms (.000 GHz 1001 pts)	CF Ste 297.000000 Mi Auto M
1 N 2 3	1	2.608 0 GHz	-45.509 dE	Im					Freq Offs
4 5 6 7				-	-				01
8 9 10				-					
n T	+ 1		100	-			-	- + [*]	
93						STATUS			

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Emission_B48C_3GHz~26GHz_Low_CH

								Godyre-Ba		y Hight Sq	Di ke
Frequency	AM Nay 15, 2020 ACE 1, 2, 3, 4, 9, 5 THE MWWWWW DET A NNNNN		g Type: RMS Hold: 100/100	n	Trig: Free Ru	ND: Fast -+	000 GHz		eq 3.	t Fre	Sta
Auto Tune	07 0 GHz 806 dBm	cr5 25.6	Mk		#Atten: 30 di	Gain:Low	IF 8 dB	f Offset 7.		Bidiv	
Center Freq 14.750000000 GHz										2	7 80 -2 20 -12 2
Start Freq 3.000000000 GHz	5							~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			-12.2
Stop Freq 26.50000000 GHz								with			-52 2 -52 2 -73 2
CF Step 2.350000000 GHz Auto Man	26.50 GHz (1001 pts)	39.20 m			50 MHz*	#VBW		MHz	1 1.0	t 3.00 s BW	#Re
Freq Offset 0 Hz	TON VEOL			FUM	9,279 dBm 9,279 dBm 49,803 dBm 50,000 dBm 42,806 dBm	5 GHz 0 GHz 6 GHz 0 GHz 0 GHz	3.565	-		N N N N N	1 2 3 4 5 6 7 8 9 10 11
		rus	STATE								+ L

Emission_B48C_3GHz~26GHz_Mid_CH

D' Fast Trig: Free Run Avg Hold: 100/100 THE MWWWW	Frequency
amLow #Atten: 30 dB	Auto Tun
	Center Fre
300	Start Fre
28.50	Stop Fre
	CF Ste
GHz 10,104 dBm	Ma
CHr 6 769 dBm	Freq Offse 0 H
status	

Emission B48C 3GHz~26GHz High CH

Keynight Spectrum Analyzer - Ba					
tart Freq 3.000000	000 GHz PND: Fast	Trig: Free Run	Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4 5 8	Frequency
	IFGainLow	#Atten: 30 dB	A CARLES AND A CARLES AND A	DETANNNNN	Auto Tun
Ref Offset 7.			Mkr	5 25.630 5 GHz -42.462 dBm	Auto Tun
og ¥2			1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		
20					Center Fre 14.75000000 GH
22					14.750000000 GP
22					10000
22					Start Fre 3 00000000 GH
22 0 0	*				3,000,0000 34
22 Manuella	muni	- marine			-
22					Stop Fre 26.50000000 GH
22					20,0000000000
tart 3.00 GHz				Stop 26.50 GHz	CF Ste
Res BW 1.0 MHz	#VB	V 50 MHz*	Sweep 3	9.20 ms (1001 pts)	2.350000000 GH Auto Ma
IN T	3.678 3 GHz	12,154 dBm	NETION FUNCTION WOTH	FLACTION VALUE	Cierce .
2 N 1 1	3.690 0 GHz	12.154 dBm			Freq Offse
4 N 1	7.356 6 GHz 7.380 0 GHz	-49.426 dBm -49.897 dBm			OH
6 N f	25.630 5 GHz	-42.462 dBm			
6 7 8 9			-		/
9					
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n			STATU		

Report No.: E2/2019/A0032 Page 54 of 167

Emission_B66B_30MHz~3GHz_Low_CH

Keysigin Spectrum Analyzin - Prepr SA					12.84
Start Freq 30.000000 MH	PNO: Fast +++ Tri	g: Free Run	Avg Type: Log-Pwr Avg Hold: 100/100	10:41:50 PM Mar 19, 2020 TRACE 1 2 3 4 5 6 TYPE MWWWW DET P NNNNN	Frequency
Ref Offset 7.6 dB 10 dB/div Ref 25.00 dBm	IFGain:Low BA	tten: 30 dB	Mk	r2 1.726 8 GHz 20.378 dBm	Auto Tune
150 5.00		2			Center Fre 1.515000000 GH
500 -150 -250 				-13 00 dBM	Start Fre 30.000000 MH
the second se	ang a tan ang ang ang ang ang ang ang ang ang a			and the second	Stop Fre 3.00000000 GH
Start 30 MHz #Res BW 1.0 MHz	VBW 50 N		Sweep 2	Stop 3.000 GHz 733 ms (1001 pts)	CF Ste 297.000000 MH Auto Ma
1 N f 1	717 5 GHz 19.	824 dBm 378 dBm			Freq Offse 0 H
7 8 9 10 11					
esá			STATUS	C	

Emission_B66B_30MHz~3GHz_Mid_CH

a schröss obstanni mention- and	a pre				and the second se
Center Freq 1.51500	0000 GHz	Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 100/100	10:44:07 PM Mar 19, 2020 THACE 1 2 3 4 5 6	Frequency
	PNO: Fast + IFGain:Low	#Atten: 30 dB		THE MUNIT	Auto Tun
10 dB/div Ref 25.00 d				20.429 dBm	1.1
15.0			2		Center Fre
-500				-13.00 00m	
-35.0		-1			Start Fre 30.000000 MH
-45.0		- and the second second	farmer - reacher	and when a start when	Stop Fre
-65.0					3,00000000 GH
Center 1.515 GHz #Res BW 1.0 MHz	VBW	50 MHz	Sweep 2	Span 2.970 GHz .733 ms (1001 pts)	CF Ste 297.000000 MP
MARE MODE THE ISOL	1.752 5 GHz	20.192 dBm	NCTION FUNCTION WOTH	FUNCTIONVALUE	<u>Auto</u> Ma
2 N 7 3 4 6	1.761 9 GHz	20.429 dBm			Freq Offs 0)
6 7 8	-				1.1.1
9 10 11	_				
(*) MSG			STATU	+	-

Emission_B66B_30MHz~3GHz_High_CH

Start Freq	30.00000		Trig: Free Ru	Avg Avg	Type: Log-Pwr Hold: 100/100	THAT	E 1 2 3 4 5 5 E MUNICIPALITIES	Frequency
10 dB/div	Ref Offset 7.	5 dB			Mk	r2 1.777 17.1	0 GHz 52 dBm	Auto Tun
15.0 5.00				2				Center Fre 1.515000000 GH
-5.00 -16.0 -25.0							-13.00 dBm	Start Fre
-35.0 -45.0 -45.0 -65.0 -65.0	utor-oter	a sa dhé da Farjin inga		and former	and the second second		hangi kangan dike ^{ng}	Stop Fre 3,00000000 GH
Start 30 MH #Res BW 1.		VBN	V 50 MHz	1	Sweep 2			CF Ste 297.000000 M
1 N 2 N 3 4 5	200 m 1 1	1.767 7 GHz 1.777 0 GHz	18.984 dBm 17.152 dBm	FUNCTION	FUNCTION WOTH	EVINCTION		Auto Ma Freq Offs 0)
6 7 8 9 10 11								
*(*(1	*		_	STATU		= + .	

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Emission_B66B_3GHz~26GHz_Low_CH

	pettion Analysia					12.84	
tart Fre	eq 3.00000	00000 GHz	Trig: Free Run	Avg Type: Log-Pwr Avg/Hold:>100/100	10:41:08 PH Har 19, 2020 TRACE 1 2 3 4 5 6	Frequency	
		PNO: Fast IF Gain: Low	#Atten: 30 dB	and the series	DET P NNNNN	Auto Tune	
0 dB/div	Ref Offset Ref 25.0			Mkr	3 26.053 5 GHz -32.427 dBm	Auto Tun	
0.0					1		
50	-					Center Free	
5.00	-					14.750000000 GH	
:00				-	-13 20 (20)	-	
5.0					-13.00 (00%)	Start Free	
26.0	_				2 A	3.00000000 GH	
50 72			1	distant in the last	-		
50	interes	men marked man	manner				
50	_			1	1 11 12 1	Stop Fre	
6.0				0.000	1.11.12.1	26.500000000 GH	
10.0				(Dec. 1)			
tart 3.0 Res BW	0 GHz / 1.0 MHz	VBV	50 MHz	Sweep 3	Stop 26.50 GHz 9.20 ms (1001 pts)	CF Step 2.35000000 GH	
KR MODEL	NO SEL	X.		NETION FUNCTION WOTH	FUNCTION VALUE	Auto Mar	
1 N 2 N	1	3,435 0 GHz 3,453 6 GHz	-42.765 dBm				
3 N	1	26.053 5 GHz	-42.765 dBm -32.427 dBm			Freq Offse	
4						OH	
6					1		
7							
5 6 7 8 9	1				-		
10	-						
-	4.4	A		1			
uń.				STATU	8		

Emission_B66B_3GHz~26GHz_Mid_CH

	thing disafund - See					2 × 21
Start Free	3.000000		Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 100/100	10:45 29 PM Mar 19, 2020 TRACE 1 2 3 4 5 5 TYPE MWWWWW Der P NNNNN	Frequency
10 dB/div	Ref Offset 7.6	IFGain:Low	#Atten: 30 dB	Mkr	3 25.983 0 GHz -31.781 dBm	Auto Tune
.09 15.0 5.00						Center Freq 14.75000000 GHz
500 16.0 25.0 36.0 ~2					-13.00 dBm	Start Freq 3.00000000 GHz
15.0 50 15.0	and the second second	1996 an amp a suind s y prova	and an and the second sec			Stop Free 26.50000000 GH:
tart 3.00 Res BW		VBW	/ 50 MHz	Sweep 3	Stop 26.50 GHz 9.20 ms (1001 pts)	CF Ster 2.35000000 GH
1 N 2 N 4 5 7 8 9 9		3,505,2 GHz 3,523 8 GHz 25,983 0 GHz	-42.772 dBm -42.903 dBm -51.781 dBm	FUNCTION FUNCTION WOTH	FUIDI DONATANE	Auto Mar Freq Offsel 0 Ha
10 11 +				STÁTUS	+.	

Emission_B66B_3GHz~26GHz_High_CH

Ref Offset 7 5 dB Trig: Free Run Betweit: 30 dB Aughtelie: 100100 Trig: Free Run Ref Offset 7 5 dB Auto T Ref Offset 7 5 dB 3.3.177 dBm Genter F Genter F Genter F 50 -3.3.177 dBm -3.3.177 dBm Genter F Genter F 50 -3.3.000000000 Genter F Genter F Genter F 50 -3.3.000000000 Genter F Genter F Genter F 50 -3.3.000000000 Genter F Genter F Genter F 50 -3.0.00000000 -3.0.00000000 Genter F Genter F 50 -3.0.0000000000000000000000000000000000		thing Analyzin Th		-		-		
Ref Offset 7.5 dB Mkr3 25.936 0 GHz Auto T 0dB/dv Ref 25.00 dBm -33.177 dBm Center F 50			0000 GHz		Avg	Type: Log-Pwr	TRACE IS TAKE	Frequency
Ref Offset 7 6 dB MKR3 25.936 0 GHz 28/3dV -33.177 dBm 90 -33.177 dBm 91 -33.177 dBm 92 -33.177 dBm 93 -3000000 94 -3000000 95 -3000000 96 -3000000 97 -3000000 98 -3000000 99 -3000000 90 -3000000 91 -3000000 92 -30000000 93 -30000000 94 -30000000 95 -30000000 92 -30000000 92 -30000000 92 -30000000 92 -30000000 92 -30000000 100 -4000000000 110 1 110 1 110 1 110 1 110 1 110 1 110 1 <	-	_			Argin	TOID. TOUR THE	DerPNNNN	
50 Center F 60						Mkr		
10 14,75000000 14,75000000 14,75000000 14,75000000 Start F 10 3,0000000 10 14,75000000 10 14,75000000 11 3,0000000 11 3,0000000 11 14,75000000 11 3,0000000 11 3,0000000 11 3,0000000 11 14,75000000 11 3,0000000 11 3,0000000 11 3,0000000 11 3,0000000 11 14,75000000 11 14,750000000 11 14,750000000 11 14,750000000 11 14,750000000 12 13,0000000 13 14,750000000 14 14,750000000 14 14,750000000 14 14,750000000 14 14,750000000 14 14,750000000 14 14,7500000000		1.1.1.1						Center Free
50 30000000 50 30000000 50 50 50 <td></td> <td>_</td> <td></td> <td>_</td> <td>_</td> <td>-</td> <td></td> <td>14.750000000 GH</td>		_		_	_	-		14.750000000 GH
Start F Start F 30000000 30000000 30000000 30000000 30000000 2 30000000 2 30000000 2 30000000 2 30000000 2 30000000 2 30000000 2 30000000 2 30000000 2 30000000 2 30000000 2 30000000 2 30000000 2 30000000 2 300000000 2 300000000 2 300000000 2 300000000 2 300000000 2 300000000 2 300000000 2 300000000 2 300000000 2 300000000 2 300000000 2 300000000 2 300000000 2 3000000000 2 30000	00	_			_	-		-
0 0	5,0	-			-	-	-13.00 dBm	Start Free
Stop Stop <th< td=""><td></td><td>_</td><td></td><td></td><td></td><td></td><td>↓³</td><td>3.000000000 GH</td></th<>		_					↓ ³	3.000000000 GH
Stop 7 Stop 7<	AL.	min		man and and and and and and and and and a	er and a service	mununul	Naturaliante	
S0 26 50000000 trart 3.00 GHz Stop 26.50 GHz Res BW 1.0 MHz VBW 50 MHz Sweep 39.20 ms (1001 pts) 21 N 1 3.555 4 GHz 42.01 dBm 2 N 1 25.936 0 GHz 43.145 dBm 4 1 25.936 0 GHz -33.177 dBm 6 9 9 9					10.7			Stop Free
Kes BW 1.0 MHz VBW 50 MHz Sweep 39.20 ms (1001 pts) 2.3000000 Auto 20 Model from 263 X Y Patientian Auto Auto <td></td> <td>-</td> <td></td> <td></td> <td>1</td> <td>1</td> <td></td> <td>26.50000000 GH</td>		-			1	1		26.50000000 GH
View View Pallection Pallection			VI	W 50 MHz	1	Sweep 3		CF Step 2.35000000 GH
Z. N. f 3.554 0 GHz 43.145 dBm Freq Of N. f 26.936 0 GHz -33.177 dBm Freq Of 4 6 - - - 5 - - - - 6 - - - - - 9 - - - - - -		150	x	Y	FUNCTION	FUNCTION WOTH	FUNCTION VALUE	Auto Ma
	2 N	f	3.554 0 GHz	-43.145 dBm				
	4	1	25.936 0 GHz	-33.177 dBm		-		Preq Offse
	6							
9	9							
1	0							
1	41			-		-	+	-



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Emission_B66C_30MHz~3GHz_Low_CH

Keysiget Spectrum Analyzer - Swept SA				2 2 2
Start Freq 30.000000 MH	PNO: Fast ++- Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 100/100	10:52:01 PM Mar 19, 2020 TRACE 1 2 3 4 5 6 TYPE MUMUMUM Der P NNNNN	Frequency
Ref Offset 7.6 dB 10 dB/div Ref 25.00 dBm	IFGein:Low #Atten: 30 dB	M	r2 1.731 7 GHz 18.270 dBm	Auto Tun
150 5.00		2		Center Fre 1.515000000 GH
-50			-13.00 dBm	Start Fre 30.000000 MH
		J. James at man 1993	a stand states a frank a sur	Stop Fre 3.000000000 GH
Start 30 MHz #Res BW 1.0 MHz	VBW 50 MHz	Sweep 2	Stop 3.000 GHz 2.733 ms (1001 pts)	CF Ste 297.000000 Mi Auto Ma
1 N 1 1 1	720 0 GHz 17,313 dBm 731 7 GHz 18,270 dBm	PURCHON PURCHON WORK		Freq Offs 0 F
7 8 9 10 11				
мń		STATU	s	

Emission_B66C_30MHz~3GHz_Mid_CH

addright obstantion manager.					
Start Freq 30.0000		Trig: Free Run	Avg Type: Log-Pwr AvgHold: 100/100	10:58:50 PM Nar 19, 2020 TRACE 1 2 3 4 5 8 TYPE MWWWW Det P N NN N N	Frequency
Ref Offset	IFGein:Low 7.6 dB	#Atten: 30 dB	The second second	1.764 2 GHz 18.926 dBm	Auto Tun
150 5(0			2		Center Fre 1.515000000 GH
500 -160 -250 				-13.00 dBm	Start Fre 30.000000 Mi
650 650 650		here and the second sec		nalati ti tanalar yakar	Stop Fre 3.000000000 GH
Start 30 MHz #Res BW 1.0 MHz	VBW	i0 MHz	Sweep 2.73	Stop 3.000 GHz 13 ms (1001 pts)	CF Ste 297.000000 Mi Auto Mi
1 N 1 1 2 N 1 7 3 4 5	1.752 5 GHz 1.764 2 GHz	18.733 dBm 18.926 dBm	TION	FAIRFTONVALVE -	Freq Offs
6 7 8 9 10 11					
+ l			STATUS	+	

Emission_B66C_30MHz~3GHz_High_CH

Neyropii Spectr			-39(5)		L. Auton huto	11:01:53 PM Nar 19	2020
Start Freq		0 MHz PNO: Fast		Avg Avg	Type: Log-Pwr Hold: 100/100	THACE 1 2 3	Frequency
	Ref Offset 7.		#Atten: 30 dE		Mk	r2 1.776 7 G	Hz Auto Tun
15.0 5.00				¥2			Center Fro 1.516000000 Gi
500 160 250	-			1		-121	Start Fro
35.0 45.0 (3 1.4.4.4 55.0	wanter	en an	b	nd from	and and a stand and a stand and		Stop Fr 3,00000000 G
Start 30 MH Res BW 1.		VB	W 50 MHz		Sweep 2	Stop 3.000 733 ms (1001	pts) 297.000000 M
1 N 2 N 3	500 1 1	x 1.765 0 GHz 1.776 7 GHz	17.695 dBm 16.883 dBm	FUNCTION	FUNCTION WOTH	EVINCTION VALUE	Freg Offs
4 5 6 7					-		0
8 9 10 11							3
and the state of t					*	-	+

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Emission_B66C_3GHz~26GHz_Low_CH

Peak Search	10:54:12 PM Nar 19, 2020 THACE 1 2 3 4 5 8 TVPE M WWWWW Der P N N N N N	pe: Log-Pwr old: 100/100	Avg	Trig: Free Run	GHz	000000 0	865500	r 3 25.	ker
NextPea	25.865 5 GHz	Mkr3		#Atten: 30 dB	Gain:Low	IF			_
1.00	-33.055 dBm	mare					f Offset 7.6		B/di
		-			-			_	-
Next Pk Righ			-	+ +		-		-	1
_	-13.00 dBm							_	E
Next Pk Le	.3		1.000					_	
				Le de la	-			2	A
1000 A.C.				munited	-m2"s Waged	indirect.	بالمعالية المحالية	A.L.M.	2
Marker Delt			1						
									Ľ
MkrC	Stop 26.50 GHz 20 ms (1001 pts)	Sweep 39		50 MHz	VBW			.00 GH 3W 1.0	
	FUNCTION VALUE	FUNCTION WOTH	FUNCTION	Y		x	1	E THE SE	
1.77. 1.97.00.				-43,456 dBm -42,398 dBm -33,055 dBm	4 GHz			1	NNN
Mkr-RefL				-33,066 dBm	5 GHZ	20.000	-	11	R
_					-				
Mor									
1 of							-		-
	+	STATUS						-	-

Emission_B66C_3GHz~26GHz_Mid_CH

AL	······································		S8955-300	1Long hore	10:58:09 PM Mar 19, 2020	Frequency
start Fre	q 3.00000	PNO: Fast	Trig: Free Run	Avg Type: Log-Pwr Avg Hold: 100/100	THACE 1 2 3 4 3 5 TYPE MWWWW DET P NNNNN	Frequency
0 dB/div	Ref Offset 7 Ref 25.00	.6 dB		Mkr	3 25.912 5 GHz -32.430 dBm	Auto Tune
.99 15.0 5.00						Center Freq 14.75000000 GHz
5.00					-13.00 00m	StartFree
25.0 35.0 AZ						3.000000000 GHz
5.0		and the second second	and the second second	- wienen mit and and and		Stop Fred
5.0	-					26,50000000 GHz
Start 3.0 Res BW	GHz 1.0 MHz	VBN	V 50 MHz	Sweep 3	Stop 26.50 GHz 9.20 ms (1001 pts)	CF Step 2.35000000 GHz
1 N		3.505 0 GHz	-43.856 dBm	UNCTION FUNCTION WOTH	EUNCTION VALUE	<u>Auto</u> Man
2 N 3 N 4 5	1	3.528 4 GHz 25.912 5 GHz	42.009 dBm -32.430 dBm			Freq Offset 0 Hz
6 7 8		-				
9 10 11						
*	_				-	-

Emission B66C 3GHz~26GHz High CH

						ge3A	ûndyzir îns	t Speitting	
Frequency	TRACE 1 2 3 4 5 6	Type: Log-Pwr told: 100/100	Ave	Trig: Free Run		000 GHz	0000000	req 3.	art f
	DET P NNNNN	TOTAL TOTAL TOTAL	A.V	#Atten: 30 dB	NO: Fast +• Gain:Low	IF			
Auto Tur	3 25.983 0 GHz -31.664 dBm	Mkr3					Offset 7.6		dB/d
Center Fre							-	_	ľ
14.750000000 GH		-							0
-		-	_		-		_	_	0
Start Fre	-13.00 dBm	-					-	-	0
3.00000000 GH	¢,		10		-				0
	ALL ALL AND ALL ALL	unannin	Australia	an reserve		- marine	مستعسم	hum	3
Stop Fre					1				Ē
26.50000000 GH		11 1. 0	1				_		-
CF Ste 2.35000000 GF	Stop 26.50 GHz 9.20 ms (1001 pts)	Sweep 39		50 MHz	VBW			.00 GH W 1.0	
Auto Ma	FUNCTION VALUE	FUNCTION WOTH	FUNCTION	-42.864 dBm	0 GHz	2 630			N
Freq Offs				42.864 dBm -42.804 dBm -31.664 dBm	4 GHz			1	N
1.00						-	-		
							-		-
	· · ·		_	~				11	-
Law	0	STATUS							

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Mask_B41C_CH_Low_1RB0

AL	q 2.4950000		Induarded I	Avg Type	RMS	11:23:50 PM Mar 19,7 TRACE 1 2 3 4	Frequency
PASS		PND: Fast IFGain:Low	Trig: Free Run #Atten: 30 dB	Avg Hold	100/100	DET A NNT	Auto Tune
0 dB/div	Ref Offset 8 dB Ref 25.40 dBm	1			_		-
Trace	1 Pass		Λ				Center Fre 2.495000000 GH
5.40 4.80				A			Start Fre 2.470000000 GH
145 246					A		Stop Fre 2.52000000 GH
46		A		1		AAA	CF Ste 6.000000 MH Auto Ma
52.5 MYXXXX	man	WW	1 hr	W V	Nº V	NUVVV	FreqOffse
Center 2.49		TVBW	1.0 MHz*		Sween 1	Span 50,00 M ,000 ms (1001 p	
IND NO.	JO NIL	#4D44	1.0 minž		Statue		

Mask_B41C_CH_Low_Full

	um Analyzie - Sough S					0100
	q 2.4950000	00 GHz	Trig: Free Run	Avg Type: RMS Avg Hold: 100/100	TRACE 1 2 3 4	s = Frequency
PASS		PND: Fast IFGain.Low	#Atten: 30 dB	er glenner i ver he	DET A NNN	Auto Tun
0 dB/div	Ref Offset 8 dB Ref 25.40 dBr	n				-
Trace 1	1 Pass					Center Fre 2.495000000 GH
5.40 1.00				horas	port and the second	Start Fre 2.47000000 GH
24.0						Stop Fre 2.52000000 GH
346 143		www.www.www.www.	man			CF Ste 5.000000 MH Auto Ma
515						Freq Offse
64,6				100		
Center 2.49 #Res BW 3		#VBW	1.0 MHz*	Sweep	Span 50,00 M 1,000 ms (1001 p	
H123				51	TUE	

Mask_B41C_CH_High_1RBMax

TRACE 1 2 3 4 5 THE A WAYNAW DET A NNNN Freq uency Avg Type: RMS Avg/Hold: 100/100 PND: Fast --- Trig: Free Run #Atten: 30 dB Auto Tu Ref Offset 8 dB Ref 25.40 dBr Trace 1 Pass Center Fre 2 69000000 GH Start Fre 2.66 5000000 GH Stop Fre 2.71500000 G CF Ste 5.000000 Ma they MA, Freq Offse OH er 2.69000 GHz Span 50.00 M Res BW 300 kHz #VBW 1.0 MHz* Sweep 1,000 ms (1001 pts

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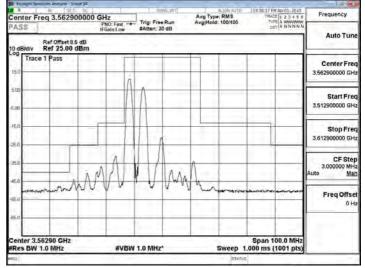
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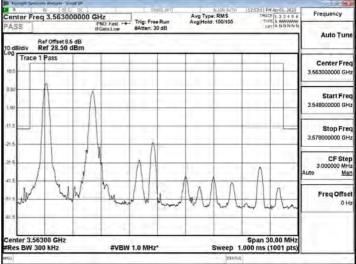
Mask_B41C_CH_High_Full

	peinten Endyter B									
Center F	Freq 2.6900	00000 GI	łz	1	WE MT	Avg Type	RMS	TRACE		Frequency
PASS	1	P	ND: Fast	#Atten: 3		Avg[Hold	100/100	TYPE	ANNINA	Auto Tune
10 dB/div	Ref Offset 8 Ref 25.40									Auto Turk
154	ce 1 Pass				_					Center Free 2.690000000 GH
4.00	h	mum	man	wind						Start Free 2.665000000 GH
246									1	Stop Fre 2.715000000 GH
34.5					meridia	Newsen	Nurmina			CF Ster 5.000000 MH Auto Ma
54.5					_				Junio	Freq Offse 0 H
54.5			-	1						100
	.69000 GHz / 300 kHz		#VBW	1.0 MHz	e .		Sweep 1.	Span 50. 000 ms (10		
(C2N)		_					ETATUE			-

Mask_B48C_CH_Low_1RB0-1



Mask_B48C_CH_Low_1RB0-3



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Mask_B48C_CH_Low_Full-1

Keysight Spectrum Goodyner- Sound St.							
Center Freq 3.56290000	PND-East -+-	Trig: Free Run	Avg Type: I Avg Hold: 1	IGN 8/10 RMS 00/100	TRACE T	23435 WNNNN	Frequency
Ref Offset 8.5 dB 10 dB/div Ref 25.00 dBm	IFGain.Low	#Atten: 30 dB			DETA	NUNNN	Auto Tune
150 Trace 1 Pass							Center Free 3,562900000 GH
500		Junior	-			1	Start Free 3.512900000 GH
						1	Stop Free 3.612900000 GH
	-damanensed		manage	why have	halpoleonin		CF Step 3.000000 MH Auto Ma
45.0							Freq Offse 0 H
e5.0 Center 3.56290 GHz					Span 100		-
#Res BW 1.0 MHz	#VBW 1	1.0 MHz*	SI	weep 1.	.000 ms (10	01 pts)	

Mask_B48C_CH_Low_Full-3

Keysign Spectro	n ûndyter (Sou	#92							
Center Free	3.56300	0000 G	Hz PND: Fast -+	Trig: Free Run	Avg Type Avg Hold	RMS	TRJ	PM Apr 01, 2020	Frequency
PASS	ef Offset 8.5	-	Gain:Low	#Atten: 30 dB			0	DETANNNN	Auto Tune
10 dB/div R	ef 28.50 d		_			_	_	-	
18.5	Pass	_							Center Free 3.563000000 GH
6.50	menno	1							Start Fre 3.548000000 GH
U.S.		V	14 ⁷ 14 ¹ 21 ¹ 41 ¹ 41 ¹ 41		~~~~~	******	horman		Stop Fre 3.578000000 GH
315 window								horas	CF Ste 3.000000 MH Auto Ma
515			-				-		Freq Offse 0 H
81.5				la de la como	1.00	20		1	-
Center 3.563 #Res BW 30			#VBW	1.0 MHz*	1	Sweep 1		30,00 MHz (1001 pts)	
uiteg i						STATUS			-

Mask B48C CH Mid 1RB0-1

TRACE 1 2 3 4 5 THE A WANNER DET A WANNER nter Freq 3.625400000 GHz Frequency Avg Type: RMS Avg/Hold: 100/100 Trig: Free Run Auto Tu Ref Offset 8.5 dB Ref 25.00 dBr div Trace 1 F Center Fre 3.625400000 GH Start Fre 3.575400000 GH Stop Fre 3.676400000 GH CF Ste 3.000000 M N.A Ma Freq Offse OH er 3.62540 GHz Span 100.0 M Sweep 1.000 ms (1001 pts #VBW 1.0 MHz* Res BW 1.0 MHz

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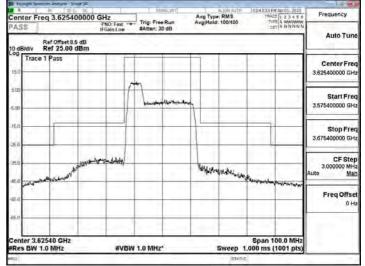
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Mask_B48C_CH_Mid_1RB0-3

enter Fred	3.62540000	0 GHz	Trat grass	Avg Type: RMS	10248:17 PM Apr01.2020 TRACE 1.2.3.4.5.5	Frequency
	ef Offset 8.5 dB	PND: Fast IFGain.Low	Trig: Free Run #Atten: 30 dB	Avg Hold: 100/100	DET A NNNNN	Auto Tune
odB/div R Og Trace 1	ef 25.00 dBm Pass					Center Freq 3.625400000 GHz
5.00		Λ				Start Free 3.610900000 GHz
50			- 0-			Stop Free 3.639900000 GH
50		1	All	λ. Λ.,	Λ	CF Ste 3.000000 MH Auto <u>Ma</u>
5.0 4.4	كالمهالة	Muder	1 W June	INT	and forthing	Freq Offse 0 H
enter 3.625 Res BW 30		#VBW	1.0 MHz*	Sweep	Span 29.00 MHz 1.000 ms (1001 pts)	$\{ [\cdot] :$

Mask_B48C_CH_Mid_Full-1



Mask B48C CH Mid Full-3

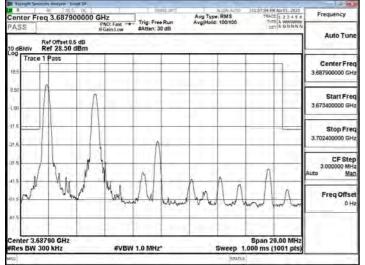
q 3.62540	0000 GH	łz	1	Rin Dun	Avg Type	RMS	TRAC	M Apr01, 2020	Frequency
	P IF	ND: First Gain:Low			CARIELEND	. 100 100	D	ANNNN	Auto Tun
1 Pass									Center Fre 3,625400000 GH
Jawahayan		an Lawre		www.uk	h the safe of	Linker	t.mist.		Start Fre 3.610900000 GH
	<u> </u>	alsa uu		3		1 x x	mary		Stop Fre 3.639900000 GP
1								home	CF Ste 3.000000 Mi Auto Mi
									Freq Offs 0 H
540 GHz							Span 2	9,00 MHz	
	Ref Orfset 8.5 Ref 23.00 d 1 Pass	g 3.625400000 GP P Ref Offset 8.6 dB Ref 25.00 dBm 1 Pass ///////////////////////////////////	rg 3.625400000 GHz PHOF Next +- HGain Low Ref Offset 8.6 dB Ref 25.00 dBm 1 Plase Anymhymy Mile Anymhymy Mile Anymhym Mile Anymh	I Plase Trig: Pre- BATEN: 3 Ref Offset 8.6 dB Ref 25.00 dBm 1 Plase Antonio An	I Pase Antonyo Alexandro Contractor Contract	In g. 3.625400000 GHz HitCstan Low Trig: Free Run HitCstan Low Trig: Free Run Ref Offset 8.5 dB Ref 25.00 dB I Plase Avg Held Avg	Ing 3.625400000 GHz HOSENLOW HOSENLOW Trig: Pree Run Ref Offset 8.5 dB Ref 25.00 dB TP Jase Arg Type-RMS Arg Type-RMS A	Ing. Se25400000 GHz Arg Type. RMS True RATE: 30 dB Ref Offset8.5 dB Ref 25.00 dBm True RATE: 30 dB True RATE: 30 dB 1 Pass Image: Sea dB Imag	Image: Section Control of Contro

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Mask_B48C_CH_High_1RB0-1

Keysers Spectruk	No Analysis - South	DC]			TB	WE INT	-	N IGN BUTO	102:31:59 PM Apr 01, 2020	
Center Fred	3.687900	000 GH	O: Fast	-	Trig: Fre	eRun	Avg T Avg H	ype: RMS ald: 100/100	TRACE 1 2 3 4 5 5 TIFE A WANNAW	Frequency
	ef Offset 8.5 d	IFG	ain Low	-	#Atten: 3	30 dB			DETANNAN	Auto Tune
00	ef 25.00 dB	ßm	_	_	_	-	1	-		-
Trace 1	Pass	-	-							Center Free 3,687900000 GH
000		1.1		A	Á					
				/	A					Start Fre 3.637900000 GH
50						-	+-	1-		Stop Fre 3.737900000 GH
5.0	P. 1				111					
50		n mt	A		1.11	LAN	A.			CF Ste 3.000000 MH Auto <u>Ma</u>
5.0	mm	JW V	J - V-		.0	9.00	a de	munn		Freq Offse
6.0			-		-		-			-
enter 3.687 Res BW 1.0		-	#V	BW	1.0 MHz		1	Sweep 1	Span 100.0 MHz .000 ms (1001 pts)	
110		-					-	STATU		

Mask_B48C_CH_High_1RB0-3



Mask B48C CH High Full-1

Keysiget Spentrum Geolycer			-		
Center Freq 3.6879		Trig: Free Run	Avg Type: RMS Avg Hold: 100/100	101232:51 FM Apr01, 2020 TRACE 1, 2, 3, 4, 9, 9 TVFR A WWWWW DIT A WWWWW	Frequency
ASS Ref Offset 8	IFGainLow	#Atten: 30 dB		DET A NUMBER	Auto Tune
Trace 1 Pass	dBm				Center Free 3,687900000 GH
500		Journay	-		Start Fre 3.637900000 GH
80					Stop Fre 3.737900000 GH
50	and the second s		Warmandhing	Werenand	CF Ste 3.000000 MH Auto Ma
5.0 ·····					Freq Offse 0 H
65.0 Center 3.68790 GHz		1		Span 100.0 MHz	
Res BW 1.0 MHz	#VBV	V 1.0 MHz*	Sweep	1,000 ms (1001 pts)	

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Mask_B48C_CH_High_Full-3

Xerron See	tauni prodygan cilin								100 million	<u>, sieu</u>
enter Fr	eq 3.68790		Hz		95-E-19-T)	Avg Type	RMS	TRA	H Apr 01, 2020	Frequency
ASS		F	ND: Fast +-	Trig: Free #Atten: 3		Avg/Hold:	100/100	1	TE A WANNAW	Auto Tun
dB/div	Ref Offset 8.8									Auto Tun
Trace	1 Pass		·						1000	Center Free
18	-		-		-		-			3,687900000 GH
50				_				_		
1	Mananan	man				-				Start Fre 3 573400000 GH
90.	1	11.	argunung			. Water	in the second			3.573400000 GH
1.5	11	1 M	and how and how	In Area and		Venily a We		turner		Stop Fre
1.5	1					-				3.702400000 GH
	1	1.1.1								CF Ste
5	11			-	-	-	-			3,000000 MH Auto Ma
15 Mare	/	-	-	-	-	-			N.	
15	10.11	123							Manutan .	FreqOffse
		1		1				1		0 H
1.5	-	-		-					-	1.00
	8790 GHz							0	0.00 100	
Res BW 3			#VBW	1.0 MHz		4	Sweep 1		29.00 MHz (1001 pts)	
9							IETATUR	1		

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Band edge_B5B_CH_Low_1RB0

Frequency	15 PM Nar 27, 2020		JUJON JUTCI		ANS IN	. 9			50 0	×.		N . 7
Frequency	HACE 1 2 3 4 5 5 TYPE A WWWW		ype: RMS lold: 100/100		ee Run	Trig: Fre	Hz PNO: Wide +	0000 M	324.00	Freq 8	nter F	Cer
Auto Tun	DETANNNNN		101020		30 dB	#Atten:	IFGain:Low		_		_	_
Auto Tul	.000 MHz .223 dBm		Mk						Offset 7.		B/div	10 d
Center Fre 824.000000 MH			-		-		-			-	-	150
12.55	-13.00 tilling	1		1				-	_	-		500
Start Fre 822 500000 MH	horne	'n	-	4	1,1				_		-	-35.0
Stop Fre					×	ant	- Martha		and and			451
825 500000 MH	-	-					-		-		-	-66.0
CF Ste 300.000 kH	s (1001 pts)		Sweep 1		z*	V 620 kHz	#VB			24,000 V 200 H		
Auto Ma	CTION WALVE	Fulic	FUNCTION WOTH	FUNCTION	Bm	-42 223 d	000 MHz	824	-		N	
Freq Offse												2345
1.0				_						-		6789
						~	1	_				10 11
		ic i	STATE									RÁ)

Band edge_B5B_CH_Low_Full

Frequency	04:12:55 PM Mar 27, 2020 TRACE 1 2 3 4 5 6	e: RMS 1: 100/100	AvgT	Free Run	Trini	z	0000 MH	24.00	Freq 83	nter l	Cen
Auto Tun	DET A NNNNN		Avgine	1: 30 dB		NO: Wide ++ Gain:Low	p IF	_			
	-38.495 dBm	MK						Offset 7 25.00		B/div	
Center Fre			-	-	-	-		_	-	-	15.0
824,000000 MH			1					-			5.00
Start Fre	-13.00 (89)		1		-	_	-	_	-	-	15.0
822.500000 MH		-	-	1 1				_	-	-	-25.0
		-		-						and the second	-36.0
Stop Fre 825 500000 MH				-					-		-85.0
CF Ste 300.000 kH	Span 3.000 MHz 00 ms (1001 pts)	Sween 1	-	Hz*	W 620 k	#VBI			24.000 V 200 k	ter 8	Cen
Auto Ma		малонимоте	CT10N	E	Y		x		TRC SCU	MOOT	1038
Freq Offse			-	dBm	-38,49	0 MHz	824.00	-	1	N	23
OH		-	_								4
1.119-0				-							6 7 8
			-					_			9
			-	-				-	11	- 1	11
		STATUS									ыğ

Band edge_B5B_CH_High_1RBMax

Frequency	04.01:44 PM Nar 27, 2020	JUJON JUTO		1 3865.00		0 00	en únahanir in ⊛\$0.0	
	THACE 1 2 3 4 5 8 TYPE A WINNIN P	Type: RMS Hold: 100/100		Trig: Free Run	HZ PNC: Wide - IFGain:Low		q 849.000	ter Fre
Auto Tur	1 849.000 MHz -35.244 dBm	Mki		WARKEN: SO OD	IF Gain:Low	A dB	Ref Offset 7.	B/div
Center Fre					4			
	-13.00 dBm					1		
Start Fre 847.500000 MH		_		mai			- Mark	-
Stop Fre								
						-		
CF Ste 300.000 kł Auto Ma	Span 3.000 MHz .000 ms (1001 pts)			W 620 kHz*	#VB			s BW 2
	FUNCTION VALUE	FUNCTION WOTH	FUNCTION	-35.244 dBm	000 MHz	849.0	1	NODE THE
Freq Offs 01					-			
					1			
	C 1	STATUS						

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Band edge_B5B_CH_High_Full

							m Andymer Se	gitt Speijtri	R Kep	
Frequency	04:00:55 PM Mar 27, 2020 TRACE 1 2 3 4 5 8 TYPE A WWWW DET A N N N N N	g Type: RMS alHold: 100/100		Trig: Free Ru	Z NO: Wide ++	0000 MH	g 849.00	er Fre	ent	
Auto Tune		1999 A.	#Atten: 30 dB			IFGain:Low				
Auto Tu	-35.605 dBm	Mki					Ref Offset 7 Ref 25.00		0 dB	
Center Fre		-	-	-	-		-	_	15.0	
849.000000 MH			-		- 1				5.00	
	-13.00 dBm				1				50	
Start Fre 847,500000 MH					1	12.1			5.0	
047.000000 mit		minim		Ward	-	-		-	36.0	
Stop Fre			-		-	-	-	-	15.0	
850.500000 MH		1000	-						50	
CF Ste	Span 3.000 MHz .000 ms (1001 pts)	Swaap 1		620 kHz*	#\/D14		000 MHz	er 849.	ent	
Auto Ma		ачеер т	FUN	OZO KHZ	*****	×				
Francis			_	-35.605 dBm	00 MHz	849.00	1	4	1 2 3	
Freq Offs		-			-		-		4	
		-	_		-		-		5 6 7	
		-	_		_		-		8 9	
		-					-		10	
	÷.	-	-	~~~					(i) (g)	
		STATUS								

Band edge_B66B_CH_Low_1RB0



Band edge B66B CH Low Full

Aprilate Spee	crises Analyzar		Jana J	иуе_воо	<u></u>		_	0 0 0
Start Fre		000000 GH	PNO: Fast -	Trig: Free Ru	Avg Avg	Type: RMS Hold: 100/100	1 02:47:41 PM Mar 10,202 TRAILE 1 2 3 4 5 TVTE A WWWW DET A NNN N	Frequency
0 dB/div	Ref Offse		FGain:Low	EAtten: 30 db		Mkr1	1.710 000 GH	Auto Tune
5.00			-					Center Fred 1.710000000 GH:
5.00 15.0 25.0						~	.1100 80	Start Fred 1.709000000 GH
50 50 50								Stop Free 1.711000000 GH
	9000 GH 300 kHz	z	#VB	W 1.0 MHz*		Sweep 1	Stop 1.711000 GH: .000 ms (1001 pts	Z CF Ste 200.000 kH Auto Ma
1 N 2 3 4 5	100 2000 f	1.710 0	00 GHz	-27.378 dBm	Tenenov	FUNCTION WOTH	FUNCTION WALKE	Freq Offse
4 6 7 8 9 10								
5Q						STATU	i .	

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Band edge_B66B_CH_High_1RBmax

Aginet Spectrum			_		-				-	
Center Free		00000 GHz	Fast ->-	22.200	Run	Avg Typ Avg/Hold	e: RMS	784	PM Mar 10, 2020	Frequency
		PNO: IFGair	haat	#Atten: 30			100		ET A NINNIN	Auto Tune
	Ref Offset 7 Ref 25.00				-		MIKE		00 GHz 50 dBm	
15.0		-			-	-	-	-		Center Free
5.00			_							1.78000000 GH
-15.0	1						-		-13.00 stim	1
25.0			1		_	-		-		Start Free 1.779000000 GH
36.0			1º		1		-	-		
-45.0				hmu	mater	Mr	maria	Lat.	neason no	Stop Free
-65.0	_							1	naccond ve	1.781000000 GH
Center 1.78 #Res BW 30		2	-	1.0 MHz*	-		Curren d		.000 MHz 1001 pts)	CF Step
WARES BW JU		x	#VBW	1.0 MHZ	I IUM		sweep i			Auto Mar
2	ſ	1.780 000 G	Hz	-49.960 dBr	n		_			Freq Offse
3 4 5	-		-		-	-	_			0 H
6 7	-		-		-		_	-		1
8	_		-		-			1		
10	-		-		-		-			
1							No.		- F.	
ASG .			_				STATU	5	_	

Band edge_B66B_CH_High_Full

Agilant Spectnum Analyzes - Sough \$4					1010
Center Freq 1.78000000	0 GHz	Free Run	Avg Type: RMS Avg/Hold: 100/100	02:53:06 PM Mar 10, 2020 TRACE 1 2 3 4 5 6 TVTE A WWWWW	Frequency
Ref Offset 7.6 dB		en: 30 dB		1.780 000 GHz	Auto Tun
10 dB/div Ref 25.00 dBm				-24.846 dBm	
15.0		-			Center Fre
500					1.78000000 GH
15.0		-1		-13.50 38m	Start Fre
-25.0					1.779000000 GH
45.0					Stop Fre
65.0					1.781000000 GH
Center 1.780000 GHz #Res BW 300 kHz	#VBW 1.01	MHz*	Sweep 1.	Span 2.000 MHz 000 ms (1001 pts)	CF Ste 200.000 ki
MARI MODEL THE SET			TION FUNCTION WOTH	FUNCTION VALUE	Auto Ma
1 N f 1.7 2 3 4 6	80 000 GHz -24.8	46 dBm			Freq Offs
6 7 8			_		-
9 10 11					
A CARL		- · ·	1		

Band edge_B66C_CH_Low_1RB0

100	11:18:45 PM Nar 19, 2020	Auton Jutor		1 - 1996-55-310		Segral	ettimi Analyzi	Nuyrepill Sp AL	
Frequency	THACE 1 2 3 4 5 5 TYPE A WAYNAN DET A NANAN	Type: RMS lold: 100/100	Avg	Trig: Free Run	Hz PNO: Fast +	0000000 G			
Auto Tune	1.710 000 GHz -41.480 dBm	Mkr1		#Atten: 30 dB	FGain:Low	C 422 - 11	Ref Offs Ref 25.	dB/div	10 0
Center Free 1.710000000 GH		A		_				0	157
Start Free 1.707500000 GH	-1200 am		m	1.4				10	-16.0
Stop Free 1,712500000 GH			-	and the second second	abbe	Ame	مساسه	10 -00	-45.0 -65.0
CF Ste 500.000 kH Auto Ma	Span 5,000 MHz 000 ms (1001 pts)	Sweep 1.	FUNCTION	1.0 MHz*	-	×	710000 G 300 kHz	tes BW	#Re
Freq Offse 0 H				41.480 dBm	00 GHz	1,710.0	1	3	2345
1									6 7 8 9 10 11
	+ C	STÂTUS					_	1	+ i vsń

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Band edge_B66C_CH_Low_Full

Keysigitt Spectrum Analyzie					
Center Freq 1.71	0000000 GHz	Trig: Free Run	Avg Type: RMS Avg/Hold: 100/100	THACE 1 2 3 4 5 6 TYPE A WANNER	Frequency
	PNO: Fast + IFGain:Low	#Atten: 30 dB		1.710 000 GHz	Auto Tun
Ref Offse 10 dB/div Ref 25.0			MIKT	-30.974 dBm	
15.0					Center Fre
5.00		1111			1.710000000 GH
160				-13.00 dBm	
25.0		1	ASM	1	Start Fre 1.707500000 GH
36.0 0.00			~		
-45.0					Stop Fre
-65.0				1	1,712500000 GH
The second second				Constant States	
Center 1.710000 G #Res BW 300 kHz		W 1.0 MHz*	Sweep 1	Span 5.000 MHz .000 ms (1001 pts)	CF Ste 500.000 kH
	1.710 000 GHz	-30.974 dBm	UNCTION FUNCTION WOTH	FUNCTION VALUE	Auto Ma
2 3 4 5	3,710 000 GHZ	-30.974 GBm			Freq Offse
6 7					
8					
8					

Band edge_B66C_CH_High_1RBMax

2 4 4							trianj Analyznin - So	
Frequency	THACE 1 2 3 4 5 6 TYPE A WAYNN N	E RMS 100/100	Avgit	Trig: Free Run #Atten: 30 dB	PNO: Fast ++	D DC	≫ [\$00	NC. 1
Auto Tun	780 000 GHz	Reroffset 7.5 dB Mkr1 1.780 000 GHz 10 dBidly Ref 25.00 dBm -28.346 dBm -28.346 dBm						
Center Fre 1.78000000 GH					1	1	-	
Start Fre 1.777500000 GH	-13.00 00m				/	4	/	
Stop Fre 1.782500000 GH								
CF Ste 500.000 kH Auto Ma	pan 5.000 MHz 0 ms (1001 pts)			1.0 MHz*	#VBW	z	80000 GHz 300 kHz	s BW
Freq Offse	FUNCTIONNALISE	ACTION WOTH	UNCTION	-28.346 dBm	0 0 GHz	1.7	1	N
		STATUS						

Band edge B66C CH High Full

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Frequency	TRACE 1 2 3 4 5 6	ALSON NUTO		Free Run	1.	z	0000 GH	.78000	Freq 1		Cer
	DET A NNNNN	d: 100/100	Avg	Free Run en: 30 dB		NO: Fast + Sain:Low	PN				
Auto Tun	Ref Offset 7.6 dB Mkr1 1.780 000 GHz 10 dB/dlv Ref 25.00 dBm -27.286 dBm										
Center Fre											15.0
1.780000000 GH		-	-	-	+-		mm			100	5.66
	-10.00 tilbin					1			-	1	50
Start Fre 1.777500000 G				•1	and the second	1	1.1				5.0
			-		1			-	-	0	36.0
Stop Fre			1	-	+		-	-	-		45.0
1,782500000 GH											35.0
CF Ster 500.000 kH	Span 5.000 MHz 10 ms (1001 pts)	Sweep 1.	1	1Hz*	W 1.0	#VB	-	00 GHz Hz	1.7800 N 300	nter es Bl	er
<u>Auto</u> Ma	FUNCTION VALUE	INCTION WIDTH	NUMBER	6 dBm	.27	O CHA	1,780			N N	100
Freq Offse 0 H											2345
1.1.1											5 6 7 8 9
1.000	!				_						9 10 11
	+	STATUS							-		6



FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

9.1 **Standard Applicable**

According to FCC §2.1053,

FCC §22.917(a), §24.238(a), §27.53(h)

Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

FCC §27.53(c) for LTE B13

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P) dB (-13 dBm)$

FCC §27.53 (f) for LTE B13

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC §27.53(c) (5) & FCC §27.53(q) for LTE B12, 13

Compliance for operations in the 600 MHz, 698-746 MHz, 746-758 MHz and the 776-788 MHz band with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC §27.53(h)(3) for LTE B4, 66

Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

FCC §27.53(m) (4) (6) for LTE B7, 41

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Measurement procedure. Compliance with these rules is based on the use of measurement nstrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed; for mobile digital stations, in the 1 megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at

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least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 megahertz or 1 percent of emission bandwidth, as specified; or 1 megahertz or 2 percent for mobile digital stations, except in the band 2495-2496 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

FCC § 96.41, C63.26 Clause 5.7 for LTE B48

- 1. within 0 MHz to 10 MHz above and below the **assigned channel** \leq -13 dBm/MHz
- 2. greater than 10 MHz above and below the **assigned channel** \leq -25 dBm/MHz

any emission below 3530 MHz and above 3720 MHz ≤ -40 dBm/MHz

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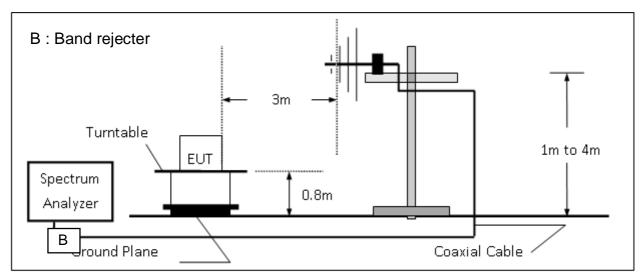
Table 2 — Unwanted Emissions for Mobile, Portable and Low-Power Fixed Subscriber Equipment

Frequency (MHz)	Attenuation (dB)
<2200	$43 + 10 \log_{10}(p)$
2200 - 2288	$70 + 10 \log_{10}(p)$
2288 - 2292	$67 + 10 \log_{10}(p)$
2292 - 2296	$61 + 10 \log_{10}(p)$
2296 - 2300	$55 + 10 \log_{10}(p)$
2300 - 2305	$43 + 10 \log_{10}(p)$
2305 - 2320	43 + 10 log10(p)Note
2320 - 2324	$55 + 10 \log_{10}(p)$
2324 - 2328	$61 + 10 \log_{10}(p)$
2328 - 2337	$67 + 10 \log_{10}(p)$
2337 - 2341	$61 + 10 \log_{10}(p)$
2341 - 2345	$55 + 10 \log_{10}(p)$
2345 - 2360	$43 + 10 \log_{10}(p)^{Note}$
2360 - 2365	$43 + 10 \log_{10}(p)$
2365 - 2395	$70 + 10 \log_{10}(p)$
>2395	$43 + 10 \log_{10}(p)$

Note: Measured at the edges of the highest and lowest frequency range(s) in which the equipment is designed to operate. See Section 1.2 for the permitted frequency ranges for various equipment types.

9.2 EUT Setup

Radiated Emission Test Set-Up, Frequency Below 1000MHz



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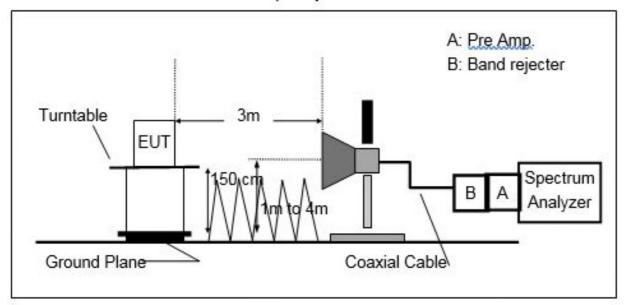
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Radiated Emission Test Set-UP Frequency Over 1 GHz



9.3 Measurement Procedure:

The EUT was placed on a non-conductive; the measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The frequency range up to tenth harmonic was investigated for each of three fundamental frequencies (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method.

The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.

ERP (dBm) = SG Level(dBm) + Antenna Gain(dBd) + Cable Loss(dB)

EIRP (dBm) = SG Level(dBm) + Antenna Gain(dBi) + Cable Loss(dB)

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9.4 **Measurement Equipment Used:**

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Broadband Antenna	TESEQ	CBL 6112D	35240	09/09/2019	09/08/2020
Horn Antenna	Schwarzbeck	BBHA9120D	1187	01/10/2020	01/09/2021
Horn Antenna	SCHWAZBECK	BBHA9170	185	08/07/2019	08/06/2020
EMI Test Receiver	R&S	ESU 40	100363	04/15/2019	04/14/2020
Radio Communica- tion Analyer	Anritsu	MT8821C	6261786084	01/18/2020	01/17/2021
Pre-Amplifier	EMC Instruments	EMC330	980096	11/20/2019	11/19/2020
Pre-Amplifier	EMC Instruments	EMC0011830	980199	11/20/2019	11/19/2020
Pre-Amplifier	EMC Instruments	EMC184045B	980135	11/20/2019	11/19/2020
Notch Filter	Woken	EWT-54-0037	RF54	11/20/2019	11/19/2020
Notch Filter	Woken	EWT-54-0038	RF55	11/20/2019	11/19/2020
Coaxial Cable	Huber Suhner	SUCOFLEX 104	MY17388/4	11/20/2019	11/19/2020
Coaxial Cable	Huber Suhner	RG 214/U	W22.03	11/20/2019	11/19/2020
Coaxial Cable	Huber Suhner	SUCOFLEX 104	MY17413/4	11/20/2019	11/19/2020

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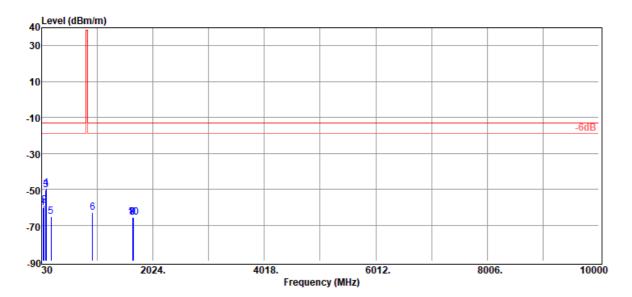
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9.5 **Measurement Result:**

Radiated Spurious Emission Measurement Result: LTE Band 5B Mode

Report Number	:E2/2019/A0032	Test Date	:2020-04-13
Operation Mode	:LTE B5B	Temp./Humi.	:24.3/58
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:826.8+834 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
56.19	-60.45	-43.25	-16.25	-0.95	-13.00	-47.45
76.56	-59.05	-48.46	-9.49	-1.10	-13.00	-46.05
105.66	-50.28	-42.05	-6.83	-1.40	-13.00	-37.28
112.45	-49.64	-41.02	-7.17	-1.45	-13.00	-36.64
202.66	-65.25	-61.17	-2.00	-2.08	-13.00	-52.25
939.86	-63.01	-56.53	-1.68	-4.80	-13.00	-50.01
1653.60	-65.74	-67.53	9.34	-7.55	-13.00	-52.74
1653.60	-65.74	-67.53	9.34	-7.55	-13.00	-52.74
1668.00	-65.53	-67.36	9.48	-7.65	-13.00	-52.53
1668.00	-65.53	-67.36	9.48	-7.65	-13.00	-52.53

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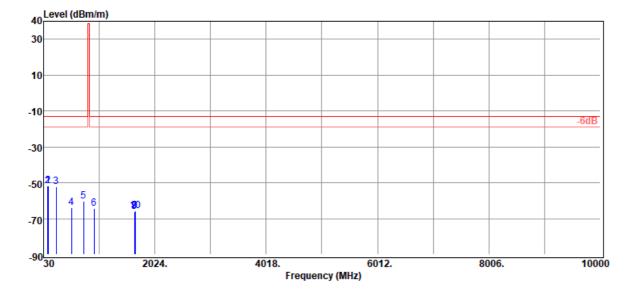
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B5B
Test Mode	:TX CH LOW
EUT Pol	:E2 Plan
Test Frequency	:826.8+834 MHz
Test Frequency	:826.8+834 MHz

Test Date	:2020-04-13
Temp./Humi.	:24.3/58
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
105.66	-51.86	-43.63	-6.83	-1.40	-13.00	-38.86
115.36	-51.86	-43.27	-7.14	-1.45	-13.00	-38.86
257.95	-52.17	-48.38	-1.53	-2.26	-13.00	-39.17
532.46	-63.87	-59.42	-1.21	-3.24	-13.00	-50.87
747.80	-60.16	-54.35	-1.62	-4.19	-13.00	-47.16
937.92	-64.47	-57.95	-1.70	-4.82	-13.00	-51.47
1653.60	-65.94	-67.73	9.34	-7.55	-13.00	-52.94
1653.60	-65.94	-67.73	9.34	-7.55	-13.00	-52.94
1668.00	-65.82	-67.65	9.48	-7.65	-13.00	-52.82
1668.00	-65.82	-67.65	9.48	-7.65	-13.00	-52.82

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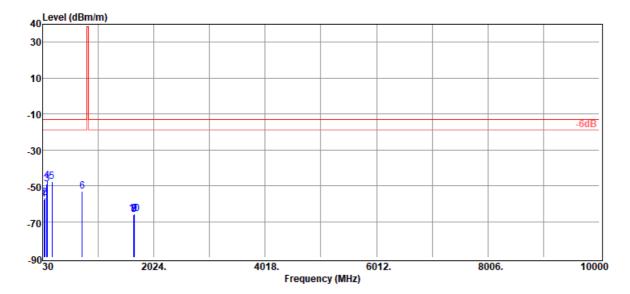
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:E2/2019/A0032
:LTE B5B
:TX CH MID
:E2 Plan
:831.8+839 MHz

Test Date	:2020-04-13
Temp./Humi.	:24.3/58
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
56.19	-57.58	-40.38	-16.25	-0.95	-13.00	-44.58
72.68	-56.80	-44.82	-10.94	-1.04	-13.00	-43.80
105.66	-49.01	-40.78	-6.83	-1.40	-13.00	-36.01
116.33	-47.43	-38.85	-7.13	-1.45	-13.00	-34.43
202.66	-47.92	-43.84	-2.00	-2.08	-13.00	-34.92
742.95	-53.29	-47.52	-1.58	-4.19	-13.00	-40.29
1663.60	-65.94	-67.76	9.44	-7.62	-13.00	-52.94
1663.60	-65.94	-67.76	9.44	-7.62	-13.00	-52.94
1678.00	-65.76	-67.63	9.58	-7.71	-13.00	-52.76
1678.00	-65.76	-67.63	9.58	-7.71	-13.00	-52.76

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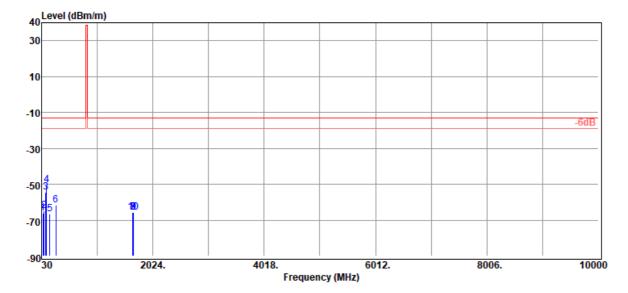
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B5B
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:831.8+839 MHz

Test Date	:2020-04-13
Temp./Humi.	:24.3/58
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
55.22	-66.28	-48.87	-16.48	-0.93	-13.00	-53.28
74.62	-64.78	-53.55	-10.16	-1.07	-13.00	-51.78
105.66	-54.37	-46.14	-6.83	-1.40	-13.00	-41.37
117.30	-50.62	-42.08	-7.09	-1.45	-13.00	-37.62
174.53	-66.47	-59.28	-5.45	-1.74	-13.00	-53.47
284.14	-61.59	-57.49	-1.65	-2.45	-13.00	-48.59
1663.60	-65.73	-67.55	9.44	-7.62	-13.00	-52.73
1663.60	-65.73	-67.55	9.44	-7.62	-13.00	-52.73
1678.00	-65.79	-67.66	9.58	-7.71	-13.00	-52.79
1678.00	-65.79	-67.66	9.58	-7.71	-13.00	-52.79

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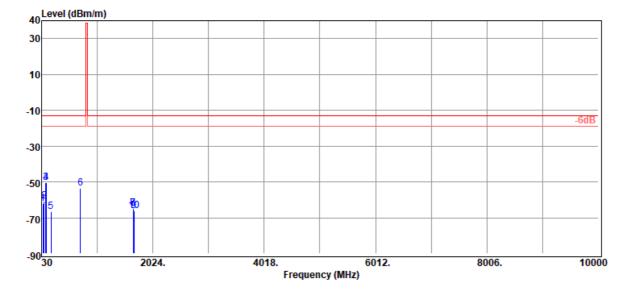
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B5B
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:836.8+844 MHz

Test Date	:2020-04-13
Temp./Humi.	:24.3/58
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
54.05	04.00	44.00	40.70	0.00	40.00	10.00
54.25	-61.93	-44.28	-16.73	-0.92	-13.00	-48.93
77.53	-60.55	-50.28	-9.15	-1.12	-13.00	-47.55
105.66	-50.42	-42.19	-6.83	-1.40	-13.00	-37.42
112.45	-50.43	-41.81	-7.17	-1.45	-13.00	-37.43
197.81	-66.58	-62.31	-2.24	-2.03	-13.00	-53.58
729.37	-53.68	-47.94	-1.46	-4.28	-13.00	-40.68
1673.60	-64.82	-66.68	9.54	-7.68	-13.00	-51.82
1673.60	-64.82	-66.68	9.54	-7.68	-13.00	-51.82
1688.00	-65.97	-67.88	9.68	-7.77	-13.00	-52.97
1688.00	-65.97	-67.88	9.68	-7.77	-13.00	-52.97

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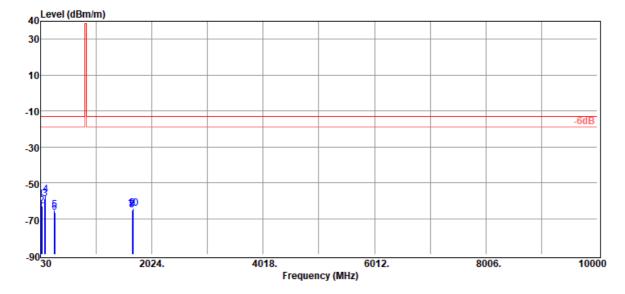
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B5B
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:836.8+844 MHz

Test Date	:2020-04-13
Temp./Humi.	:24.3/58
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
39.70	-59.59	-39.60	-19.14	-0.85	-13.00	-46.59
56.19	-63.10	-45.90	-16.25	-0.95	-13.00	-50.10
105.66	-58.91	-50.68	-6.83	-1.40	-13.00	-45.91
118.27	-56.84	-48.31	-7.08	-1.45	-13.00	-43.84
277.35	-65.30	-61.26	-1.67	-2.37	-13.00	-52.30
286.08	-66.64	-62.52	-1.65	-2.47	-13.00	-53.64
1673.60	-65.38	-67.24	9.54	-7.68	-13.00	-52.38
1673.60	-65.38	-67.24	9.54	-7.68	-13.00	-52.38
1688.00	-64.36	-66.27	9.68	-7.77	-13.00	-51.36
1688.00	-64.36	-66.27	9.68	-7.77	-13.00	-51.36

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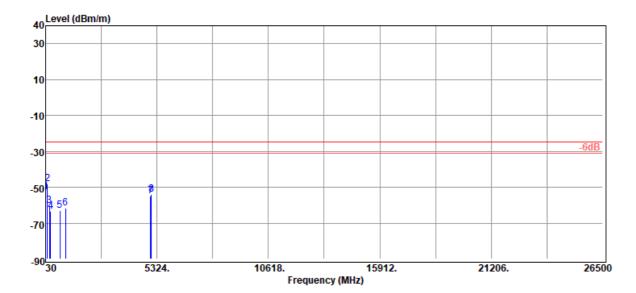
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Radiated Spurious Emission Measurement Result: LTE Band 7C Mode

Report Number	:E2/2019/A0032	Test Date	:2020-03-18
Operation Mode	:LTE B7C	Temp./Humi.	:23.7/58
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:2510+2529.8 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
48.43	-52.50	-33.75	-17.89	-0.86	-25.00	-27.50
118.27	-48.25	-39.72	-7.08	-1.45	-25.00	-23.25
205.57	-60.11	-56.16	-1.87	-2.08	-25.00	-35.11
272.50	-63.48	-59.54	-1.63	-2.31	-25.00	-38.48
716.76	-63.03	-57.77	-1.36	-3.90	-25.00	-38.03
973.81	-61.72	-55.01	-1.59	-5.12	-25.00	-36.72
5020.00 5059.60	-54.88 -54.02	-55.88 -54.85	12.46 12.40	-11.46 -11.57	-25.00 -25.00	-29.88 -29.02

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

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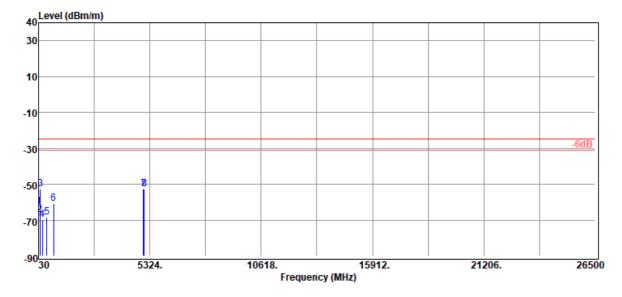
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B7C
Test Mode	:TX CH LOW
EUT Pol	:E2 Plan
Test Frequency	:2510+2529.8 MHz

Test Date	:2020-03-18
Temp./Humi.	:23.7/58
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
31.94	-62.46	-41.44	-20.36	-0.66	-25.00	-37.46
91.11	-66.88	-59.85	-5.85	-1.18	-25.00	-41.88
119.24	-52.79	-44.30	-7.04	-1.45	-25.00	-27.79
204.60	-69.64	-65.64	-1.92	-2.08	-25.00	-44.64
417.03	-68.23	-63.79	-1.28	-3.16	-25.00	-43.23
747.80	-60.58	-54.77	-1.62	-4.19	-25.00	-35.58
5020.00	-52.56	-53.56	12.46	-11.46	-25.00	-27.56
5059.60	-52.76	-53.59	12.40	-11.57	-25.00	-27.76

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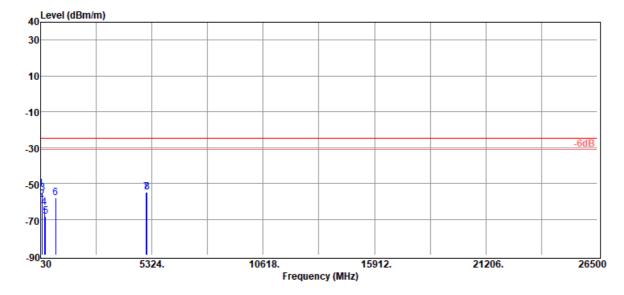
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B7C
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:2525.1+2544.9 MHz

:2020-03-18
:23.7/58
:VERTICAL
:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
10.10		~~~~	10.00		05.00	~~~~
46.49	-53.08	-33.93	-18.29	-0.86	-25.00	-28.08
101.78	-58.79	-51.00	-6.44	-1.35	-25.00	-33.79
118.27	-55.49	-46.96	-7.08	-1.45	-25.00	-30.49
207.51	-63.28	-59.45	-1.75	-2.08	-25.00	-38.28
274.44	-68.29	-64.31	-1.65	-2.33	-25.00	-43.29
747.80	-57.88	-52.07	-1.62	-4.19	-25.00	-32.88
5050.20	-54.73	-55.59	12.40	-11.54	-25.00	-29.73
5089.80	-54.76	-55.51	12.40	-11.65	-25.00	-29.76

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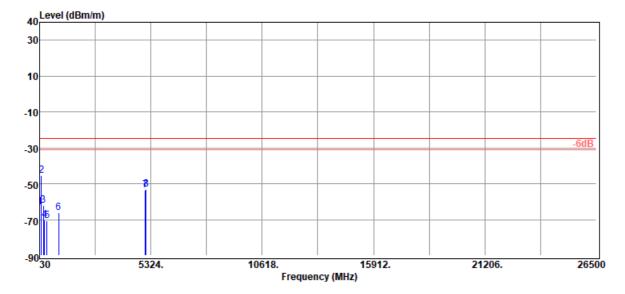
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B7C
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:2525.1+2544.9 MHz

Test Date	:2020-03-18
Temp./Humi.	:23.7/58
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
37.76	-63.14	-42.99	-19.35	-0.80	-25.00	-38.14
119.24	-45.57	-37.08	-7.04	-1.45	-25.00	-20.57
206.54	-62.29	-58.40	-1.81	-2.08	-25.00	-37.29
274.44	-69.99	-66.01	-1.65	-2.33	-25.00	-44.99
375.32	-70.45	-66.02	-1.56	-2.87	-25.00	-45.45
935.98	-65.96	-59.41	-1.71	-4.84	-25.00	-40.96
5050.20	-53.46	-54.32	12.40	-11.54	-25.00	-28.46
5089.80	-53.13	-53.88	12.40	-11.65	-25.00	-28.13

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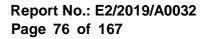
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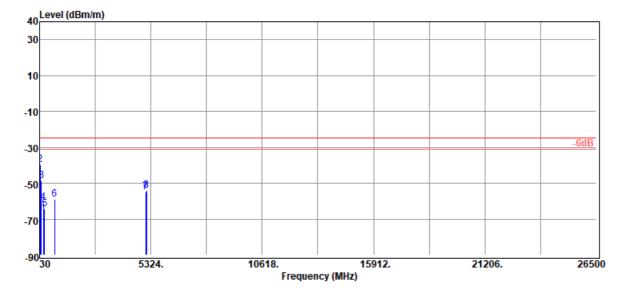
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:E2/2019/A0032
:LTE B7C
:TX CH HIGH
:E2 Plan
:2540.2+2560 MHz

Test Date	:2020-03-18
Temp./Humi.	:23.7/58
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-54.58	-34.37	-19.43	-0.78	-25.00	-29.58
49.40	-39.79	-21.20	-17.73	-0.86	-25.00	-14.79
118.27	-48.72	-40.19	-7.08	-1.45	-25.00	-23.72
206.54	-60.60	-56.71	-1.81	-2.08	-25.00	-35.60
274.44	-64.49	-60.51	-1.65	-2.33	-25.00	-39.49
746.83	-58.88	-53.08	-1.61	-4.19	-25.00	-33.88
5080.40	-54.92	-55.69	12.40	-11.63	-25.00	-29.92
5120.00	-54.17	-54.87	12.44	-11.74	-25.00	-29.17

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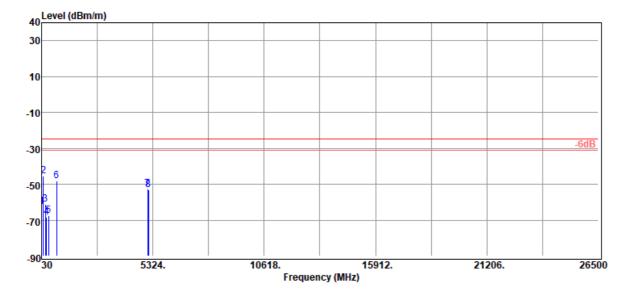
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B7C
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:2540.2+2560 MHz

Test Date	:2020-03-18
Temp./Humi.	:23.7/58
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
46.49	-62.43	-43.28	-18.29	-0.86	-25.00	-37.43
119.24	-45.27	-36.78	-7.04	-1.45	-25.00	-20.27
206.54	-61.02	-57.13	-1.81	-2.08	-25.00	-36.02
273.47	-68.18	-64.22	-1.64	-2.32	-25.00	-43.18
365.62	-67.46	-63.20	-1.49	-2.77	-25.00	-42.46
741.01	-48.32	-42.56	-1.57	-4.19	-25.00	-23.32
5080.40	-52.57	-53.34	12.40	-11.63	-25.00	-27.57
5120.00	-53.21	-53.91	12.44	-11.74	-25.00	-28.21

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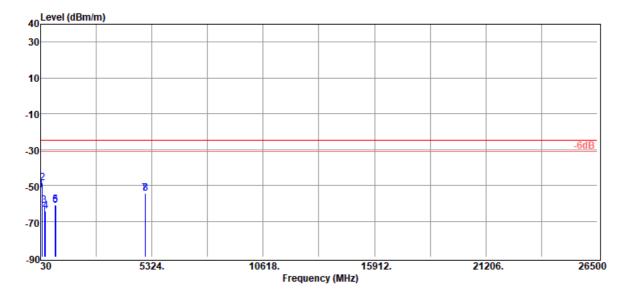
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Radiated Spurious Emission Measurement Result: LTE Band 41C Mode

Report Number	:E2/2019/A0032	Test Date	:2020-03-17
Operation Mode	:LTE B41C	Temp./Humi.	:23.5/57
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:2499.3+2511 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
48.43	-52.70	-33.95	-17.89	-0.86	-25.00	-27.70
118.27	-48.76	-40.23	-7.08	-1.45	-25.00	-23.76
206.54	-61.13	-57.24	-1.81	-2.08	-25.00	-36.13
273.47	-64.25	-60.29	-1.64	-2.32	-25.00	-39.25
734.22	-60.74	-55.06	-1.42	-4.26	-25.00	-35.74
747.80	-61.34	-55.53	-1.62	-4.19	-25.00	-36.34
4998.60	-54.28	-55.38	12.51	-11.41	-25.00	-29.28
5022.00	-54.44	-55.44	12.46	-11.46	-25.00	-29.44

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

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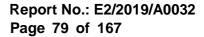
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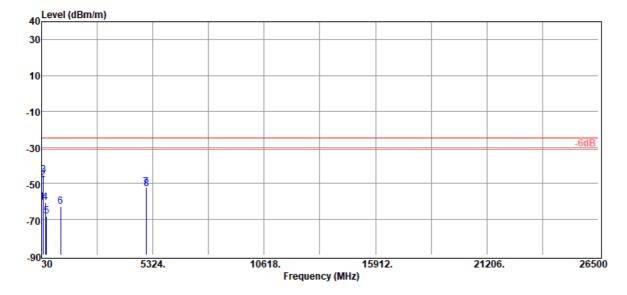
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B41C
Test Mode	:TX CH LOW
EUT Pol	:E2 Plan
Test Frequency	:2499.3+2511 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
44.55	-60.56	-41.19	-18.51	-0.86	-25.00	-35.56
99.84	-48.22	-40.67	-6.22	-1.33	-25.00	-23.22
119.24	-45.25	-36.76	-7.04	-1.45	-25.00	-20.25
205.57	-60.98	-57.03	-1.87	-2.08	-25.00	-35.98
274.44	-68.49	-64.51	-1.65	-2.33	-25.00	-43.49
947.62	-63.21	-56.75	-1.66	-4.80	-25.00	-38.21
4998.60	-52.28	-53.38	12.51	-11.41	-25.00	-27.28
5022.00	-52.89	-53.89	12.46	-11.46	-25.00	-27.89

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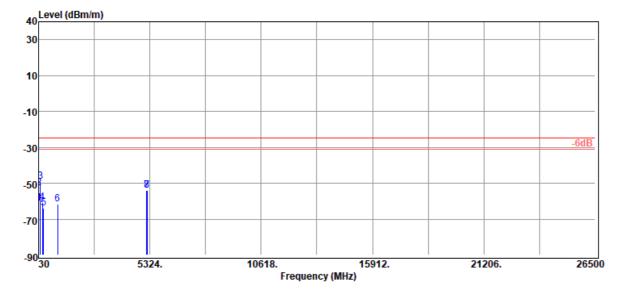
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:E2/2019/A0032
:LTE B41C
:TX CH MID
:E2 Plan
:2583.8+2595.5 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
00.70	04.00	44.07	10.10	0 70	05.00	~~~~
36.79	-61.28	-41.07	-19.43	-0.78	-25.00	-36.28
48.43	-52.72	-33.97	-17.89	-0.86	-25.00	-27.72
118.27	-49.07	-40.54	-7.08	-1.45	-25.00	-24.07
206.54	-60.65	-56.76	-1.81	-2.08	-25.00	-35.65
276.38	-63.89	-59.87	-1.66	-2.36	-25.00	-38.89
946.65	-61.86	-55.41	-1.65	-4.80	-25.00	-36.86
5167.60	-54.14	-54.81	12.57	-11.90	-25.00	-29.14
5191.00	-53.84	-54.53	12.66	-11.97	-25.00	-28.84

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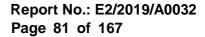
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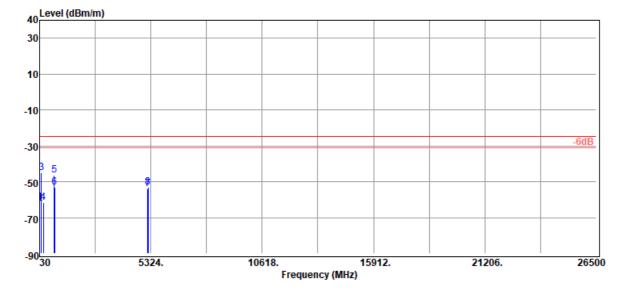
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B41C
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:2583.8+2595.5 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
32.91	-61.81	-41.04	-20.09	-0.68	-25.00	-36.81
45.52	-62.22	-41.04	-20.09	-0.86	-25.00	-37.22
118.27	-45.22	-36.69	-7.08	-0.00	-25.00	-20.22
206.54	-61.55	-57.66	-1.81	-2.08	-25.00	-36.55
734.22	-46.14	-40.46	-1.42	-4.26	-25.00	-21.14
746.83	-53.13	-47.33	-1.61	-4.19	-25.00	-28.13
5167.60	-54.08	-54.75	12.57	-11.90	-25.00	-29.08
5191.00	-53.22	-53.91	12.66	-11.97	-25.00	-28.22

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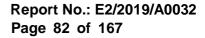
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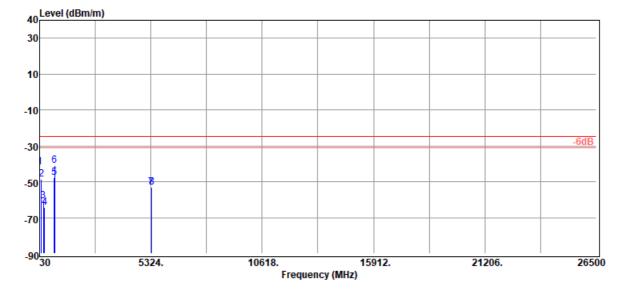
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B41C
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:2668.3+2680 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
47.46	-41.78	-22.85	-18.07	-0.86	-25.00	-16.78
118.27	-48.59	-40.06	-7.08	-1.45	-25.00	-23.59
204.60	-60.90	-56.90	-1.92	-2.08	-25.00	-35.90
278.32	-64.33	-60.26	-1.68	-2.39	-25.00	-39.33
734.22	-47.70	-42.02	-1.42	-4.26	-25.00	-22.70
745.86	-40.90	-35.10	-1.61	-4.19	-25.00	-15.90
5336.60	-53.22	-55.09	13.45	-11.58	-25.00	-28.22
5360.00	-53.21	-55.19	13.46	-11.48	-25.00	-28.21

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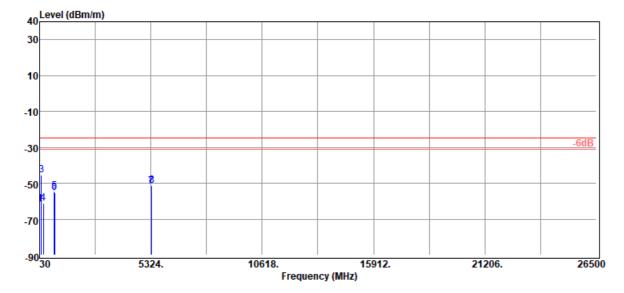
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B41C
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:2668.3+2680 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
33.88	-61.70	-41.15	-19.84	-0.71	-25.00	-36.70
45.52	-61.88	-42.64	-18.38	-0.86	-25.00	-36.88
119.24	-45.24	-36.75	-7.04	-1.45	-25.00	-20.24
207.51	-61.14	-57.31	-1.75	-2.08	-25.00	-36.14
732.28	-54.56	-48.84	-1.44	-4.28	-25.00	-29.56
746.83	-55.26	-49.46	-1.61	-4.19	-25.00	-30.26
5336.60	-51.80	-53.67	13.45	-11.58	-25.00	-26.80
5360.00	-51.30	-53.28	13.46	-11.48	-25.00	-26.30

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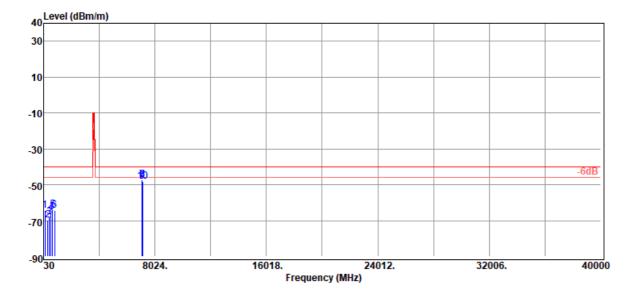
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Radiated Spurious Emission Measurement Result: LTE Band 48C Mode

Report Number	:E2/2019/A0032	Test Date	:2020-04-07
Operation Mode	:LTE B48C	Temp./Humi.	:22.3/54
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:3553.3+3565 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
129.91	-64.58	-55.66	-7.26	-1.66	-40.00	-24.58
343.31	-69.63	-65.51	-1.49	-2.63	-40.00	-29.63
459.71	-67.92	-63.24	-1.29	-3.39	-40.00	-27.92
565.44	-65.51	-60.75	-1.31	-3.45	-40.00	-25.51
675.05	-63.77	-58.56	-1.25	-3.96	-40.00	-23.77
829.28	-64.23	-58.21	-1.48	-4.54	-40.00	-24.23
7106.60	-47.41	-46.50	11.30	-12.21	-40.00	-7.41
7106.60	-47.41	-46.50	11.30	-12.21	-40.00	-7.41
7130.00	-48.38	-47.45	11.30	-12.23	-40.00	-8.38
7130.00	-48.38	-47.45	11.30	-12.23	-40.00	-8.38

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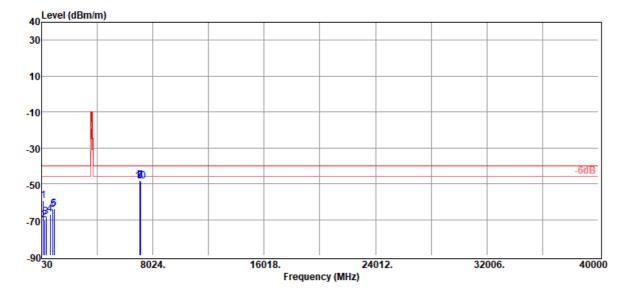
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:E2/2019/A0032
:LTE B48C
:TX CH LOW
:E2 Plan
:3553.3+3565 MHz

Test Date	:2020-04-07
Temp./Humi.	:22.3/54
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
					10.00	
159.98	-59.56	-50.92	-6.96	-1.68	-40.00	-19.56
248.25	-70.28	-66.41	-1.64	-2.23	-40.00	-30.28
355.92	-68.59	-64.66	-1.35	-2.58	-40.00	-28.59
649.83	-67.20	-62.12	-1.28	-3.80	-40.00	-27.20
849.65	-64.32	-58.46	-1.35	-4.51	-40.00	-24.32
935.98	-63.96	-57.41	-1.71	-4.84	-40.00	-23.96
7106.60	-48.16	-47.25	11.30	-12.21	-40.00	-8.16
7106.60	-48.16	-47.25	11.30	-12.21	-40.00	-8.16
7130.00	-48.44	-47.51	11.30	-12.23	-40.00	-8.44
7130.00	-48.44	-47.51	11.30	-12.23	-40.00	-8.44

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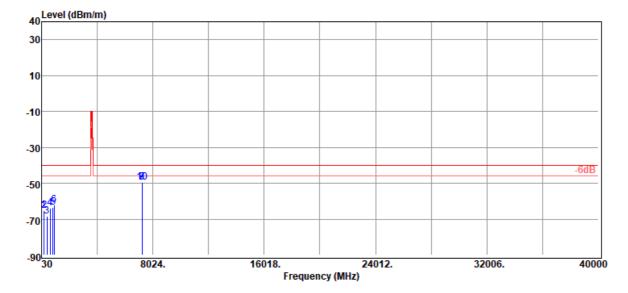
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B48C
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:3615.8+3627.5 MHz

Test Date	:2020-04-07
Temp./Humi.	:22.3/54
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
183.26	-65.15	-59.52	-3.85	-1.78	-40.00	-25.15
227.88	-65.45	-61.94	-1.32	-2.19	-40.00	-25.45
414.12	-68.41	-63.93	-1.30	-3.18	-40.00	-28.41
646.92	-63.86	-58.65	-1.32	-3.89	-40.00	-23.86
841.89	-63.52	-57.62	-1.37	-4.53	-40.00	-23.52
936.95	-62.28	-55.75	-1.70	-4.83	-40.00	-22.28
7231.60	-49.30	-48.19	11.24	-12.35	-40.00	-9.30
7231.60	-49.30	-48.19	11.24	-12.35	-40.00	-9.30
7255.00	-49.53	-48.31	11.19	-12.41	-40.00	-9.53
7255.00	-49.53	-48.31	11.19	-12.41	-40.00	-9.53

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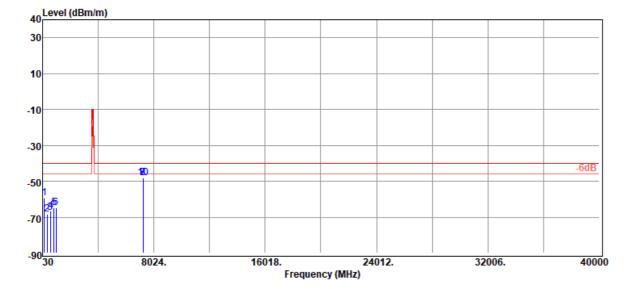
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:E2/2019/A0032
:LTE B48C
:TX CH MID
:E2 Plan
:3615.8+3627.5 MHz

Test Date	:2020-04-07
Temp./Humi.	:22.3/54
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
163.86	-59.40	-51.04	-6.66	-1.70	-40.00	-19.40
358.83	-68.44	-64.47	-1.39	-2.58	-40.00	-28.44
591.63	-67.68	-62.43	-1.46	-3.79	-40.00	-27.68
635.28	-66.53	-61.19	-1.48	-3.86	-40.00	-26.53
854.50	-64.93	-59.03	-1.39	-4.51	-40.00	-24.93
991.27	-64.68	-58.23	-1.52	-4.93	-40.00	-24.68
7231.60	-48.10	-46.99	11.24	-12.35	-40.00	-8.10
7231.60	-48.10	-46.99	11.24	-12.35	-40.00	-8.10
7255.00	-48.05	-46.83	11.19	-12.41	-40.00	-8.05
7255.00	-48.05	-46.83	11.19	-12.41	-40.00	-8.05

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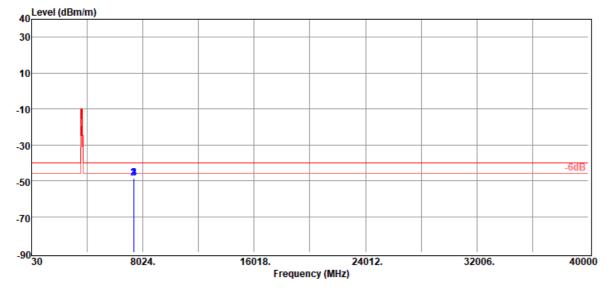
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B48C
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:3678.3+3690 MHz

Test Date	:2020-04-07
Temp./Humi.	:22.3/54
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
7356.60	-48.49	-46.93	11.11	-12.67	-40.00	-8.49
7356.60	-48.49	-46.93	11.11	-12.67	-40.00	-8.49
7380.00	-48.71	-47.15	11.16	-12.72	-40.00	-8.71
7380.00	-48.71	-47.15	11.16	-12.72	-40.00	-8.71

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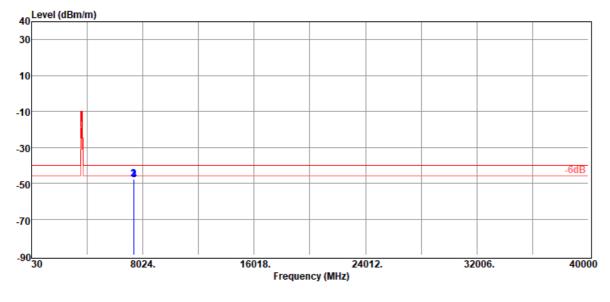
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:E2/2019/A0032
:LTE B48C
:TX CH HIGH
:E2 Plan
:3678.3+3690 MHz

Test Date	:2020-04-07
Temp./Humi.	:22.3/54
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
7356.60	-47.72	-46.16	11.11	-12.67	-40.00	-7.72
7356.60	-47.72	-46.16	11.11	-12.67	-40.00	-7.72
7380.00	-48.31	-46.75	11.16	-12.72	-40.00	-8.31
7380.00	-48.31	-46.75	11.16	-12.72	-40.00	-8.31

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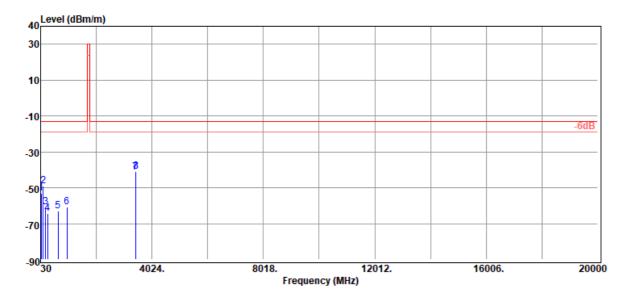
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Radiated Spurious Emission Measurement Result: LTE Band 66B Mode

Report Number	:E2/2019/A0032	Test Date	:2020-03-17
Operation Mode	:LTE B66B	Temp./Humi.	:23.5/57
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:1717.5+1726.8 MHz		



Freq. EIRP/ERP SG Antenna Cable Limit Margin **Output Level** Gain Loss dBm dBi/dBd MHz dBm dB dBm dB 48.43 -52.93-34.18-17.89-0.86 -13.00-39.93118.27 -48.86 -40.33 -7.08 -1.45 -13.00 -35.86 206.54 -60.67 -56.78 -1.81 -2.08-47.67 -13.00 276.38 -64.21 -60.19-1.66 -2.36-13.00-51.21 663.41 -63.18-58.13 -1.20-3.85 -50.18-13.00 -54.29 -47.73 979.63 -60.73-1.52 -4.92 -13.00 3435.00 -41.33 -42.7312.63 -11.23 -13.00-28.33-42.64 3453.60 -41.17 12.58 -11.11 -13.00 -28.17

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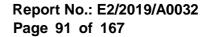
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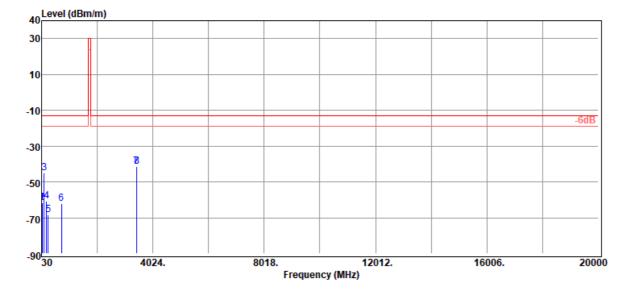
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B66B
Test Mode	:TX CH LOW
EUT Pol	:E2 Plan
Test Frequency	:1717.5+1726.8 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
30.00	-61.44	-39.93	-20.90	-0.61	-13.00	-48.44
45.52	-61.86	-42.62	-18.38	-0.86	-13.00	-48.86
119.24	-45.18	-36.69	-7.04	-1.45	-13.00	-32.18
206.54	-60.88	-56.99	-1.81	-2.08	-13.00	-47.88
273.47	-68.46	-64.50	-1.64	-2.32	-13.00	-55.46
746.83	-62.32	-56.52	-1.61	-4.19	-13.00	-49.32
3435.00	-41.50	-42.90	12.63	-11.23	-13.00	-28.50
3453.60	-41.38	-42.85	12.58	-11.11	-13.00	-28.38

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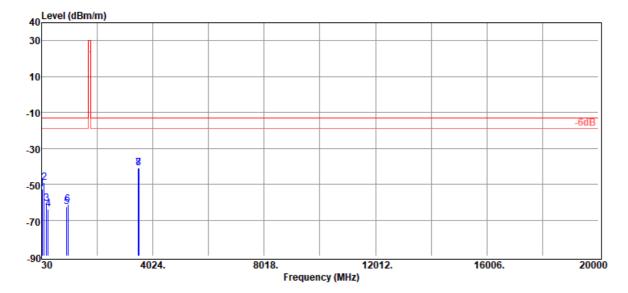
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B66B
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:1752.6+1761.9 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
48.43	-52.71	-33.96	-17.89	-0.86	-13.00	-39.71
118.27	-48.90	-40.37	-7.08	-1.45	-13.00	-35.90
205.57	-60.93	-56.98	-1.87	-2.08	-13.00	-47.93
274.44	-63.92	-59.94	-1.65	-2.33	-13.00	-50.92
936.95	-62.71	-56.18	-1.70	-4.83	-13.00	-49.71
980.60	-61.12	-54.70	-1.51	-4.91	-13.00	-48.12
3505.20	-40.84	-42.31	12.30	-10.83	-13.00	-27.84
3523.80	-40.86	-42.25	12.30	-10.91	-13.00	-27.86

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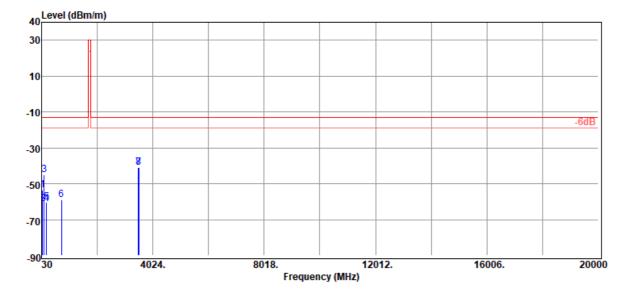
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B66B
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:1752.6+1761.9 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
61.04	-53.57	-37.65	-14.92	-1.00	-13.00	-40.57
68.80	-61.41	-37.05 -47.96	-14.92	-1.00	-13.00	-40.57
119.24	-45.22	-36.73	-7.04	-1.45	-13.00	-32.22
205.57	-61.24	-57.29	-1.87	-2.08	-13.00	-48.24
214.30	-60.24	-56.69	-1.42	-2.13	-13.00	-47.24
746.83	-58.74	-52.94	-1.61	-4.19	-13.00	-45.74
3505.20	-41.05	-42.52	12.30	-10.83	-13.00	-28.05
3523.80	-41.12	-42.51	12.30	-10.91	-13.00	-28.12

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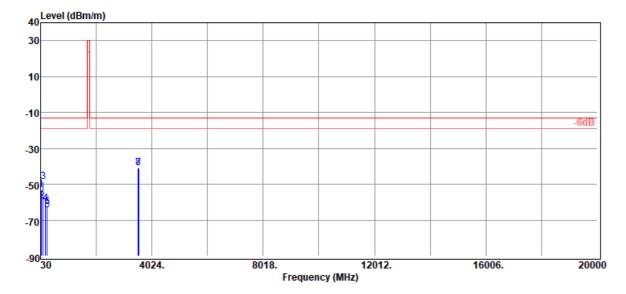
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B66B
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:1767.7+1777 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
47.46	-52.94	-34.01	-18.07	-0.86	-13.00	-39.94
64.92	-59.54	-44.83	-13.71	-1.00	-13.00	-39.94 -46.54
118.27	-48.84	-40.31	-7.08	-1.45	-13.00	-35.84
205.57	-60.83	-56.88	-1.87	-2.08	-13.00	-47.83
262.80	-64.32	-60.49	-1.56	-2.27	-13.00	-51.32
274.44	-62.62	-58.64	-1.65	-2.33	-13.00	-49.62
3535.40	-40.95	-42.28	12.30	-10.97	-13.00	-27.95
3554.00	-40.98	-42.22	12.29	-11.05	-13.00	-27.98

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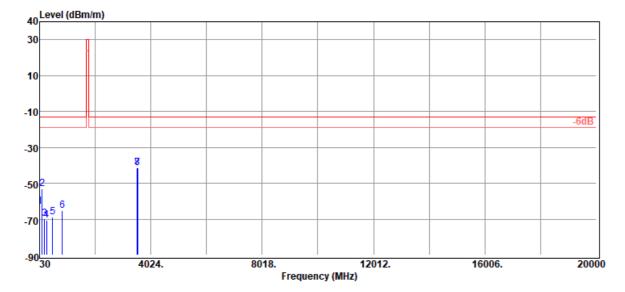
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B66B
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:1767.7+1777 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
37.76	-62.88	-42.73	-19.35	-0.80	-13.00	-49.88
119.24	-53.01	-44.52	-7.04	-1.45	-13.00	-40.01
205.57	-69.86	-65.91	-1.87	-2.08	-13.00	-56.86
276.38	-70.54	-66.52	-1.66	-2.36	-13.00	-57.54
494.63	-68.67	-64.13	-1.05	-3.49	-13.00	-55.67
852.56	-65.20	-59.31	-1.38	-4.51	-13.00	-52.20
3535.40	-41.20	-42.53	12.30	-10.97	-13.00	-28.20
3554.00	-41.22	-42.46	12.29	-11.05	-13.00	-28.22

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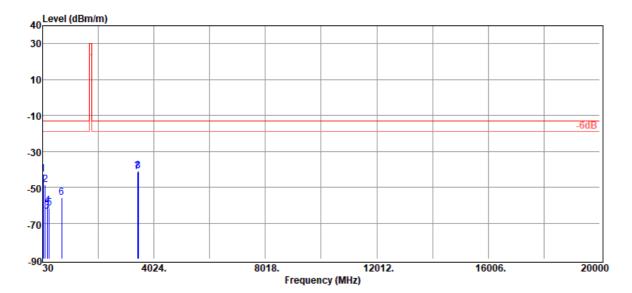
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Radiated Spurious Emission Measurement Result: LTE Band 66C Mode

Report Number	:E2/2019/A0032	Test Date	:2020-03-17
Operation Mode	:LTE B66C	Temp./Humi.	:23.5/57
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:1720+1731.7 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
49.40	-42.65	-24.06	-17.73	-0.86	-13.00	-29.65
118.27	-48.78	-40.25	-7.08	-1.45	-13.00	-35.78
197.81	-63.43	-59.16	-2.24	-2.03	-13.00	-50.43
205.57	-60.21	-56.26	-1.87	-2.08	-13.00	-47.21
271.53	-61.68	-57.77	-1.62	-2.29	-13.00	-48.68
711.91	-55.61	-50.38	-1.33	-3.90	-13.00	-42.61
3440.00	-41.22	-42.65	12.62	-11.19	-13.00	-28.22
3463.40	-41.09	-42.57	12.52	-11.04	-13.00	-28.09

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

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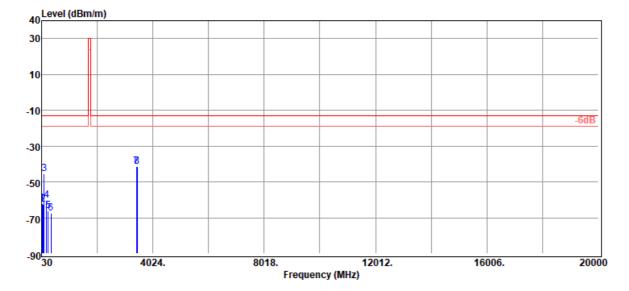
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B66C
Test Mode	:TX CH LOW
EUT Pol	:E2 Plan
Test Frequency	:1720+1731.7 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
45.52	-61.95	-42.71	-18.38	-0.86	-13.00	-48.95
86.26	-62.35	-54.52	-6.67	-1.16	-13.00	-49.35
119.24	-45.25	-36.76	-7.04	-1.45	-13.00	-32.25
206.54	-60.17	-56.28	-1.81	-2.08	-13.00	-47.17
272.50	-66.20	-62.26	-1.63	-2.31	-13.00	-53.20
369.50	-67.52	-63.15	-1.48	-2.89	-13.00	-54.52
3440.00	-41.49	-42.92	12.62	-11.19	-13.00	-28.49
3463.40	-41.37	-42.85	12.52	-11.04	-13.00	-28.37

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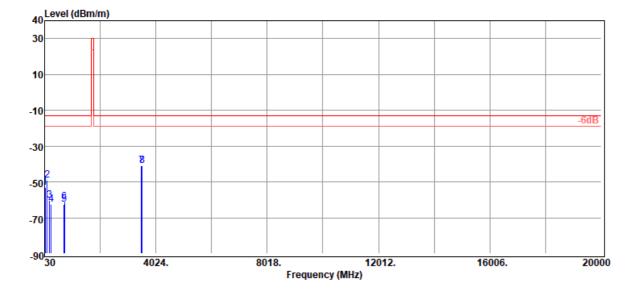
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B66C
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:1752.5+1764.2 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
47.46	-52.96	-34.03	-18.07	-0.86	-13.00	-39.96
118.27	-48.87	-40.34	-7.08	-1.45	-13.00	-35.87
205.57	-60.28	-56.33	-1.87	-2.08	-13.00	-47.28
274.44	-62.38	-58.40	-1.65	-2.33	-13.00	-49.38
734.22	-62.35	-56.67	-1.42	-4.26	-13.00	-49.35
745.86	-61.16	-55.36	-1.61	-4.19	-13.00	-48.16
3505.00	-40.84	-42.31	12.30	-10.83	-13.00	-27.84
3528.40	-40.93	-42.30	12.30	-10.93	-13.00	-27.93

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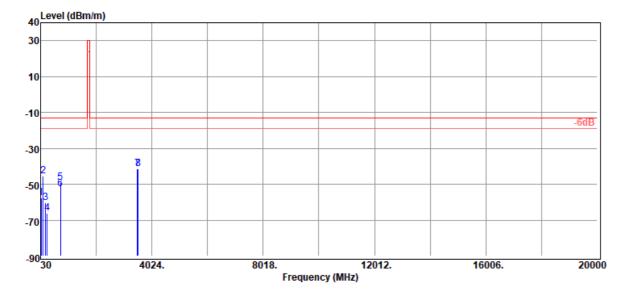
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B66C
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:1752.5+1764.2 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
45.52	-57.78	-38.54	-18.38	-0.86	-13.00	-44.78
118.27	-45.27	-36.74	-7.08	-1.45	-13.00	-32.27
205.57	-60.33	-56.38	-1.87	-2.08	-13.00	-47.33
275.41	-66.13	-62.13	-1.65	-2.35	-13.00	-53.13
738.10	-49.24	-43.53	-1.50	-4.21	-13.00	-36.24
747.80	-52.72	-46.91	-1.62	-4.19	-13.00	-39.72
3505.00	-41.20	-42.67	12.30	-10.83	-13.00	-28.20
3528.40	-41.22	-42.59	12.30	-10.93	-13.00	-28.22

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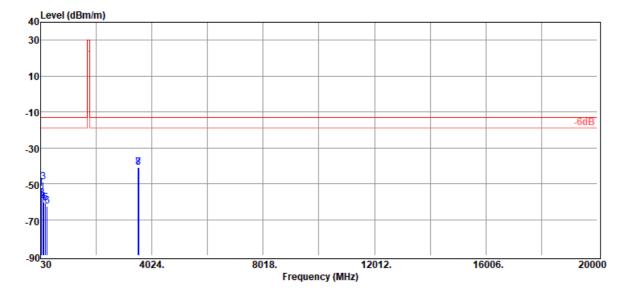
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:E2/2019/A0032
:LTE B66C
:TX CH HIGH
:E2 Plan
:1765+1776.7 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:VERTICAL
Engineer	:Enzo



EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
dBm	dBm	dBi/dBd	dB	dBm	dB
-52.64	-33.89	-17.89	-0.86	-13.00	-39.64
-57.85	-43.14	-13.71	-1.00	-13.00	-44.85
-48.89	-40.36	-7.08	-1.45	-13.00	-35.89
-60.47	-51.14	-7.66	-1.67	-13.00	-47.47
-60.96	-57.01	-1.87	-2.08	-13.00	-47.96
-62.56	-58.62	-1.63	-2.31	-13.00	-49.56
-40.98 -41.07	-42.34 -42.32	12.30 12.29	-10.94 -11.04	-13.00 -13.00	-27.98 -28.07
	dBm -52.64 -57.85 -48.89 -60.47 -60.96 -62.56	Output Level dBmOutput Level dBm-52.64-33.89-57.85-43.14-48.89-40.36-60.47-51.14-60.96-57.01-62.56-58.62-40.98-42.34	Output Level dBm Gain dBi/dBd -52.64 -33.89 -17.89 -57.85 -43.14 -13.71 -48.89 -40.36 -7.08 -60.47 -51.14 -7.66 -60.96 -57.01 -1.87 -62.56 -58.62 -1.63 -40.98 -42.34 12.30	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

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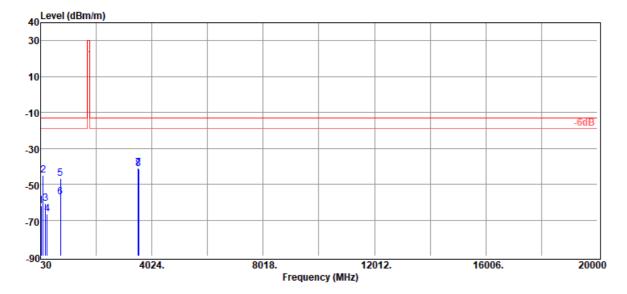
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B66C
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:1765+1776.7 MHz

Test Date	:2020-03-17
Temp./Humi.	:23.5/57
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
45.52	-62.12	-42.88	-18.38	-0.86	-13.00	-49.12
119.24	-45.11	-36.62	-7.04	-1.45	-13.00	-32.11
205.57	-60.57	-56.62	-1.87	-2.08	-13.00	-47.57
270.56	-66.79	-62.90	-1.61	-2.28	-13.00	-53.79
739.07	-46.69	-40.96	-1.53	-4.20	-13.00	-33.69
747.80	-57.09	-51.28	-1.62	-4.19	-13.00	-44.09
3530.00	-41.18	-42.54	12.30	-10.94	-13.00	-28.18
3553.40	-41.31	-42.56	12.29	-11.04	-13.00	-28.31

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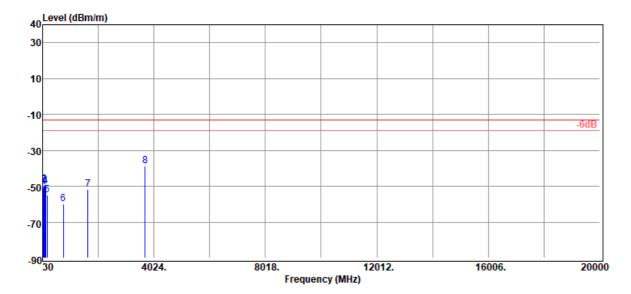
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Radiated Spurious Emission Measurement Result: LTE Band 2 + LTE Band 5 Mode

Report Number	:E2/2019/A0032	Test Date	:2020-02-17
Operation Mode	:LTE B2+B5	Temp./Humi.	:21.8/41
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:1852.5 MHz +826.5 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
59.10	-50.55	-34.06	-15.50	-0.99	-13.00	-37.55
77.53	-49.70	-39.43	-9.15	-1.12	-13.00	-36.70
116.33	-48.99	-40.41	-7.13	-1.45	-13.00	-35.99
145.43	-50.07	-40.77	-7.63	-1.67	-13.00	-37.07
200.72	-54.75	-50.58	-2.09	-2.08	-13.00	-41.75
772.05	-59.66	-53.72	-1.59	-4.35	-13.00	-46.66
1653.00	-51.57	-53.35	9.33	-7.55	-13.00	-38.57
3705.00	-38.92	-39.92	12.31	-11.31	-13.00	-25.92

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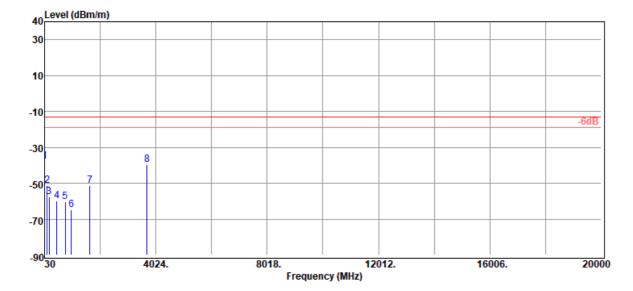
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:E2/2019/A0032	Т
:LTE B2+B5	Т
:TX CH LOW	A
:E2 Plan	E
:1852.5 MHz +826.5 MHz	
	:LTE B2+B5 :TX CH LOW :E2 Plan

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
35.82	-37.89	-17.49	-19.64	-0.76	-13.00	-24.89
117.30	-51.53	-42.99	-7.09	-1.45	-13.00	-38.53
190.05	-57.52	-52.70	-2.95	-1.87	-13.00	-44.52
464.56	-60.06	-55.50	-1.29	-3.27	-13.00	-47.06
772.05	-60.53	-54.59	-1.59	-4.35	-13.00	-47.53
987.39	-65.01	-58.60	-1.50	-4.91	-13.00	-52.01
1653.00	-51.43	-53.21	9.33	-7.55	-13.00	-38.43
3705.00	-39.67	-40.67	12.31	-11.31	-13.00	-26.67

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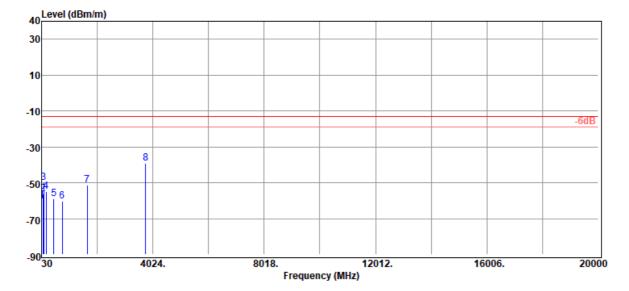
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B2+B5
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:1880 MHz +836.5 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
38.73	-60.40	-40.32	-19.25	-0.83	-13.00	-47.40
81.41	-56.08	-46.98	-7.94	-1.16	-13.00	-43.08
115.36	-49.76	-41.17	-7.14	-1.45	-13.00	-36.76
200.72	-55.02	-50.85	-2.09	-2.08	-13.00	-42.02
476.20	-59.05	-54.65	-1.29	-3.11	-13.00	-46.05
773.02	-60.22	-54.27	-1.57	-4.38	-13.00	-47.22
1673.00	-51.29	-53.14	9.53	-7.68	-13.00	-38.29
3760.00	-39.01	-40.35	12.42	-11.08	-13.00	-26.01

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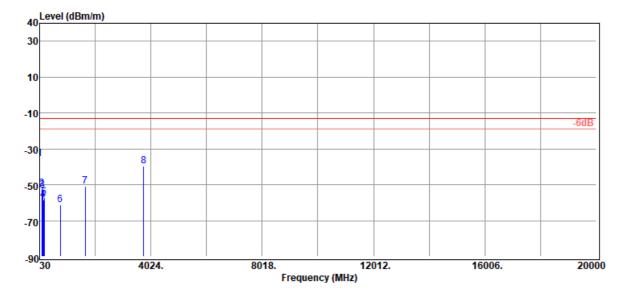
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:E2/2019/A0032
:LTE B2+B5
:TX CH MID
:E2 Plan
:1880 MHz +836.5 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
04.05	05.74	45.04	40.77	0.70	40.00	00.74
34.85	-35.71	-15.21	-19.77	-0.73	-13.00	-22.71
116.33	-52.20	-43.62	-7.13	-1.45	-13.00	-39.20
139.61	-53.13	-43.83	-7.64	-1.66	-13.00	-40.13
163.86	-58.56	-50.20	-6.66	-1.70	-13.00	-45.56
191.02	-57.15	-52.44	-2.82	-1.89	-13.00	-44.15
773.02	-61.40	-55.45	-1.57	-4.38	-13.00	-48.40
1673.00	-50.98	-52.83	9.53	-7.68	-13.00	-37.98
3760.00	-39.64	-40.98	12.42	-11.08	-13.00	-26.64

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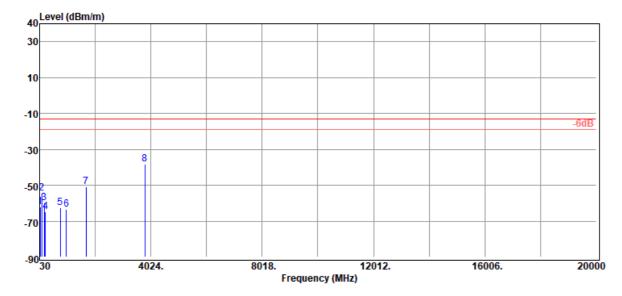
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Report Number	:E2/2019/A0032	Test
Operation Mode	:LTE B2+B5	Tem
Test Mode	:TX CH HIGH	Ante
EUT Pol	:E2 Plan	Eng
Test Frequency	:1907.5 MHz + 846.5 MHz	

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
	~~~~					( a a =
55.22	-62.07	-44.66	-16.48	-0.93	-13.00	-49.07
116.33	-54.34	-45.76	-7.13	-1.45	-13.00	-41.34
199.75	-59.81	-55.61	-2.13	-2.07	-13.00	-46.81
242.43	-64.89	-60.86	-1.80	-2.23	-13.00	-51.89
772.05	-62.37	-56.43	-1.59	-4.35	-13.00	-49.37
988.36	-63.60	-57.18	-1.51	-4.91	-13.00	-50.60
1693.00	-51.05	-52.97	9.73	-7.81	-13.00	-38.05
3815.00	-38.32	-39.93	12.50	-10.89	-13.00	-25.32

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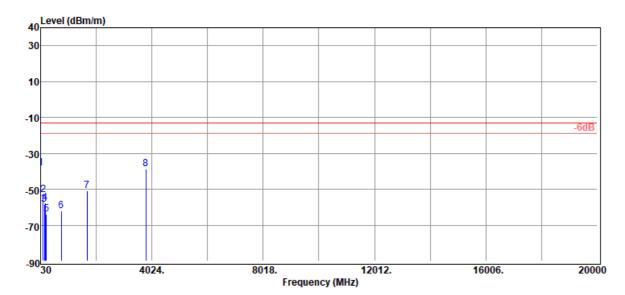
:2020-02-17

:HORIZONTAL

:21.8/41

:Enzo

Report Number	:E2/2019/A0032	Test Date
Operation Mode	:LTE B2+B5	Temp./Humi.
Test Mode	:TX CH HIGH	Antenna Pol.
EUT Pol	:E2 Plan	Engineer
Test Frequency	:1907.5 MHz + 846.5 MHz	



**EIRP/ERP** SG Cable Margin Freq. Antenna Limit **Output Level** Gain Loss dBi/dBd dB MHz dBm dBm dBm dB -25.27 33.88 -38.27 -17.72 -19.84-0.71 -13.00 117.30 -53.17 -44.63 -7.09 -1.45 -13.00 -40.17 166.77 -58.46 -50.24 -6.50 -1.72 -13.00 -45.46 190.05 -44.70 -57.70 -52.88 -2.95 -1.87 -13.00 242.43 -63.75-59.72-1.80 -2.23 -50.75-13.00-49.15772.05 -62.15-56.21-1.59-4.35-13.001693.00 -50.86 -52.78 9.73 -7.81 -13.00 -37.86 3815.00 -38.64 -40.2512.50 -10.89 -13.00 -25.64

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

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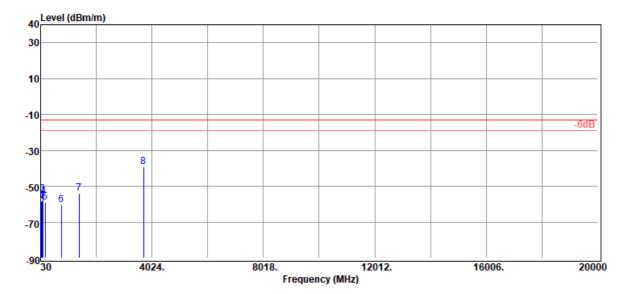
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## Radiated Spurious Emission Measurement Result: LTE Band 2 + LTE Band 12 Mode

Report Number	:E2/2019/A0032	Test Date	:2020-02-17
Operation Mode	:LTE B2+B12	Temp./Humi.	:21.8/41
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:1860 MHz+701.5 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
60.07	-58.67	-42.41	-15.26	-1.00	-13.00	-45.67
96.93	-58.24	-51.07	-5.89	-1.28	-13.00	-45.24
104.69	-54.59	-46.42	-6.78	-1.39	-13.00	-41.59
119.24	-55.63	-47.14	-7.04	-1.45	-13.00	-42.63
193.93	-59.14	-54.61	-2.58	-1.95	-13.00	-46.14
771.08	-60.21	-54.30	-1.60	-4.31	-13.00	-47.21
1403.00	-53.87	-54.36	7.02	-6.53	-13.00	-40.87
3720.00	-39.24	-40.33	12.34	-11.25	-13.00	-26.24

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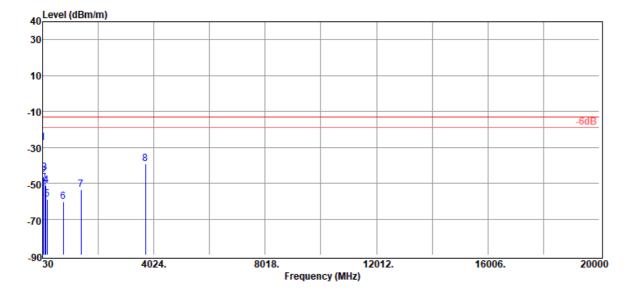
f (886-2) 2298-0488

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Report Number	:E2/2019/A0032
Operation Mode	:LTE B2+B12
Test Mode	:TX CH LOW
EUT Pol	:E2 Plan
Test Frequency	:1860 MHz+701.5 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
00.04	07.50	0.04	00.00	0.00	40.00	44.50
32.91	-27.58	-6.81	-20.09	-0.68	-13.00	-14.58
68.80	-46.31	-32.86	-12.45	-1.00	-13.00	-33.31
111.48	-44.13	-35.59	-7.09	-1.45	-13.00	-31.13
148.34	-51.11	-41.92	-7.51	-1.68	-13.00	-38.11
195.87	-58.93	-54.54	-2.40	-1.99	-13.00	-45.93
772.05	-60.31	-54.37	-1.59	-4.35	-13.00	-47.31
1403.00	-53.76	-54.25	7.02	-6.53	-13.00	-40.76
3720.00	-39.07	-40.16	12.34	-11.25	-13.00	-26.07

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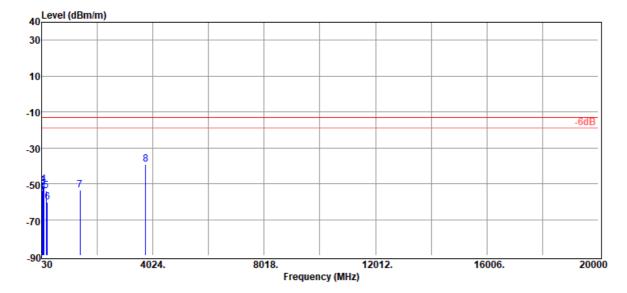
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B2+B12
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:1880 MHz +707.5 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
35.82	-54.95	-34.55	-19.64	-0.76	-13.00	-41.95
59.10	-53.36	-36.87	-15.50	-0.99	-13.00	-40.36
81.41	-51.47	-42.37	-7.94	-1.16	-13.00	-38.47
114.39	-50.35	-41.79	-7.11	-1.45	-13.00	-37.35
202.66	-54.11	-50.03	-2.00	-2.08	-13.00	-41.11
236.61	-60.29	-56.31	-1.76	-2.22	-13.00	-47.29
1415.00	-53.76	-54.33	7.12	-6.55	-13.00	-40.76
3760.00	-39.04	-40.38	12.42	-11.08	-13.00	-26.04

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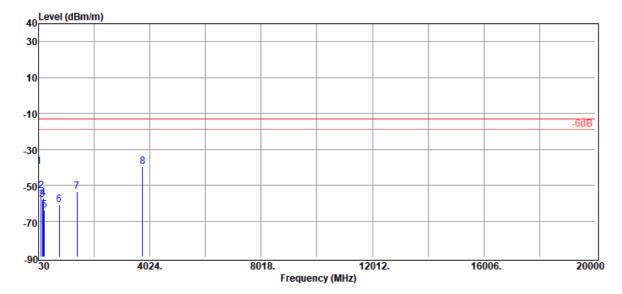
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B2+B12
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:1880 MHz +707.5 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
35.82	-39.45	-19.05	-19.64	-0.76	-13.00	-26.45
117.30	-53.25	-44.71	-7.09	-1.45	-13.00	-40.25
163.86	-58.11	-49.75	-6.66	-1.70	-13.00	-45.11
191.99	-57.11	-52.43	-2.77	-1.91	-13.00	-44.11
242.43	-63.86	-59.83	-1.80	-2.23	-13.00	-50.86
772.05	-60.66	-54.72	-1.59	-4.35	-13.00	-47.66
1415.00	-53.74	-54.31	7.12	-6.55	-13.00	-40.74
3760.00	-39.72	-41.06	12.42	-11.08	-13.00	-26.72

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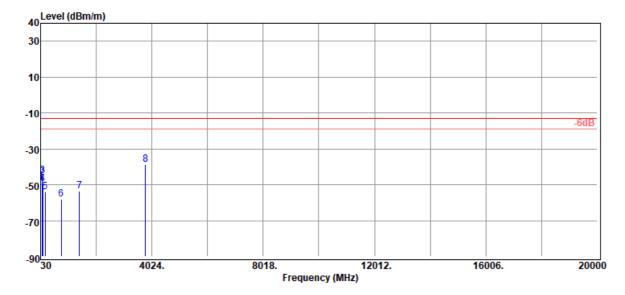
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:E2/2019/A0032
:LTE B2+B12
:TX CH HIGH
:E2 Plan
:1900 MHz +713.5 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
35.82	-49.06	-28.66	-19.64	-0.76	-13.00	-36.06
85.29	-46.01	-37.89	-6.96	-1.16	-13.00	-33.01
94.02	-44.82	-37.81	-5.78	-1.23	-13.00	-31.82
115.36	-49.67	-41.08	-7.14	-1.45	-13.00	-36.67
199.75	-54.21	-50.01	-2.13	-2.07	-13.00	-41.21
772.05	-58.21	-52.27	-1.59	-4.35	-13.00	-45.21
1427.00	-53.67	-54.32	7.22	-6.57	-13.00	-40.67
3800.00	-38.77	-40.35	12.50	-10.92	-13.00	-25.77

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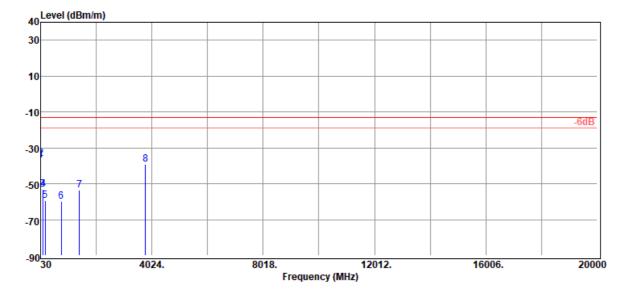
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f (886-2) 2298-0488
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Report Number	:E2/2019/A0032	Test Da
Operation Mode	:LTE B2+B12	Temp./ł
Test Mode	:TX CH HIGH	Antenn
EUT Pol	:E2 Plan	Engine
Test Frequency	:1900 MHz +713.5 MHz	

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
33.88	-37.13	-16.58	-19.84	-0.71	-13.00	-24.13
42.61	-36.21	-16.54	-18.81	-0.86	-13.00	-23.21
103.72	-53.07	-45.06	-6.64	-1.37	-13.00	-40.07
117.30	-53.15	-44.61	-7.09	-1.45	-13.00	-40.15
197.81	-59.58	-55.31	-2.24	-2.03	-13.00	-46.58
772.05	-60.02	-54.08	-1.59	-4.35	-13.00	-47.02
1427.00	-53.61	-54.26	7.22	-6.57	-13.00	-40.61
3800.00	-39.22	-40.80	12.50	-10.92	-13.00	-26.22

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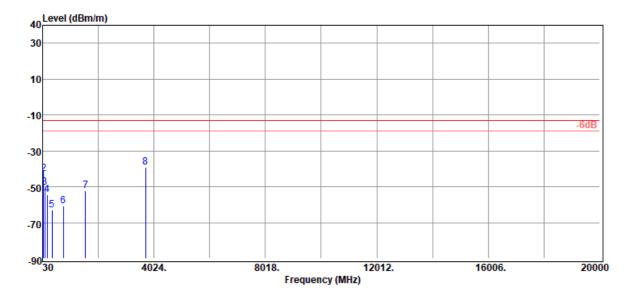
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# Radiated Spurious Emission Measurement Result: LTE Band 2 + LTE Band 13 Mode

Report Number	:E2/2019/A0032	Test Date	:2020-02-17
Operation Mode	:LTE B2+B13	Temp./Humi.	:21.8/41
Test Mode	:TX CH LOW + MID	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:1860 MHz +782 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
35.82	-46.78	-26.38	-19.64	-0.76	-13.00	-33.78
60.07	-42.87	-26.61	-15.26	-1.00	-13.00	-29.87
115.36	-50.42	-41.83	-7.14	-1.45	-13.00	-37.42
202.66	-54.24	-50.16	-2.00	-2.08	-13.00	-41.24
375.32	-63.06	-58.63	-1.56	-2.87	-13.00	-50.06
772.05	-60.54	-54.60	-1.59	-4.35	-13.00	-47.54
1564.00	-52.24	-53.95	8.74	-7.03	-13.00	-39.24
3720.00	-39.03	-40.12	12.34	-11.25	-13.00	-26.03

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

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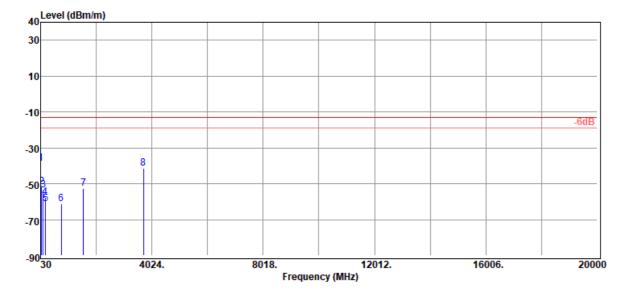
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B2+B13
Test Mode	:TX CH LOW + MID
EUT Pol	:E2 Plan
Test Frequency	:1860 MHz +782 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
33.88	-38.83	-18.28	-19.84	-0.71	-13.00	-25.83
61.04	-51.71	-35.79	-14.92	-1.00	-13.00	-38.71
117.30	-53.49	-44.95	-7.09	-1.45	-13.00	-40.49
195.87	-57.76	-53.37	-2.40	-1.99	-13.00	-44.76
215.27	-61.25	-57.73	-1.38	-2.14	-13.00	-48.25
772.05	-61.21	-55.27	-1.59	-4.35	-13.00	-48.21
1564.00	-52.56	-54.27	8.74	-7.03	-13.00	-39.56
3720.00	-41.21	-42.30	12.34	-11.25	-13.00	-28.21

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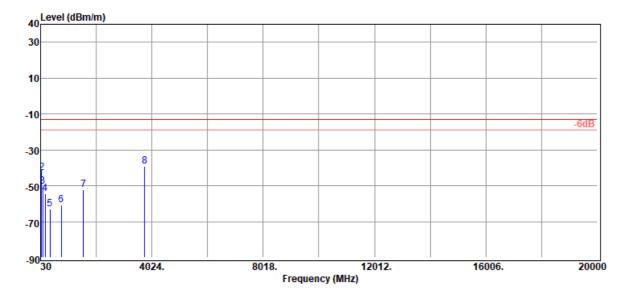
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B2+B13
Test Mode	:TX CH MID + MID
EUT Pol	:E2 Plan
Test Frequency	:1880 MHz +782 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
	UDIII	UDIII	udi/udu	uБ	UDIII	UD
35.82	-46.78	-26.38	-19.64	-0.76	-13.00	-33.78
60.07	-42.87	-26.61	-15.26	-1.00	-13.00	-29.87
115.36	-50.42	-41.83	-7.14	-1.45	-13.00	-37.42
202.66	-54.24	-50.16	-2.00	-2.08	-13.00	-41.24
375.32	-63.06	-58.63	-1.56	-2.87	-13.00	-50.06
772.05	-60.54	-54.60	-1.59	-4.35	-13.00	-47.54
1564.00	-52.21	-53.92	8.74	-7.03	-13.00	-39.21
3760.00	-39.16	-40.50	12.42	-11.08	-13.00	-26.16

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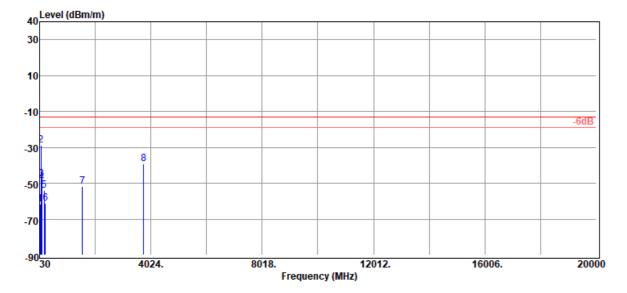
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B2+B13
Test Mode	:TX CH MID + MID
EUT Pol	:E2 Plan
Test Frequency	:1880 MHz +782 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
55.00	04 75	44.04	40.40	0.00	10.00	40.75
55.22	-61.75	-44.34	-16.48	-0.93	-13.00	-48.75
80.44	-28.60	-19.20	-8.24	-1.16	-13.00	-15.60
106.63	-47.72	-39.40	-6.91	-1.41	-13.00	-34.72
116.33	-49.69	-41.11	-7.13	-1.45	-13.00	-36.69
201.69	-54.11	-49.98	-2.05	-2.08	-13.00	-41.11
235.64	-61.35	-57.40	-1.74	-2.21	-13.00	-48.35
1564.00	-51.77	-53.48	8.74	-7.03	-13.00	-38.77
3760.00	-39.13	-40.47	12.42	-11.08	-13.00	-26.13

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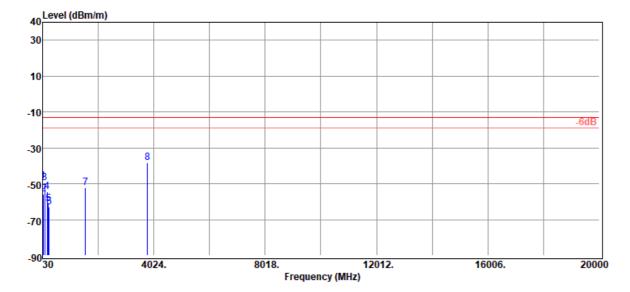
台灣檢驗科技股份有限公司

f (886-2) 2298-0488



Report Number	:E2/2019/A0032
Operation Mode	:LTE B2+B13
Test Mode	:TX CH HIGH + MID
EUT Pol	:E2 Plan
Test Frequency	:1900 MHz +782 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
35.82	-48.55	-28.15	-19.64	-0.76	-13.00	-35.55
66.86	-56.02	-20.15 -41.97	-13.05	-1.00	-13.00	-43.02
116.33	-49.50	-40.92	-7.13	-1.45	-13.00	-36.50
200.72	-54.55	-50.38	-2.09	-2.08	-13.00	-41.55
242.43	-61.16	-57.13	-1.80	-2.23	-13.00	-48.16
273.47	-63.00	-59.04	-1.64	-2.32	-13.00	-50.00
1564.00	-52.24	-53.95	8.74	-7.03	-13.00	-39.24
3800.00	-38.45	-40.03	12.50	-10.92	-13.00	-25.45

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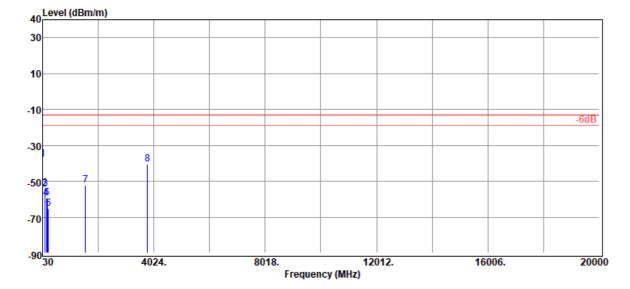
台灣檢驗科技股份有限公司

f (886-2) 2298-0488



Report Number	:E2/2019/A0032	
Operation Mode	:LTE B2+B13	
Test Mode	:TX CH HIGH + MID	
EUT Pol	:E2 Plan	
Test Frequency	:1900 MHz +782 MHz	

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
35.82	-37.80	-17.40	-19.64	-0.76	-13.00	-24.80
111.48	-54.57	-46.03	-7.09	-1.45	-13.00	-41.57
118.27	-53.85	-45.32	-7.08	-1.45	-13.00	-40.85
165.80	-59.60	-51.34	-6.55	-1.71	-13.00	-46.60
191.02	-59.35	-54.64	-2.82	-1.89	-13.00	-46.35
240.49	-65.32	-61.26	-1.83	-2.23	-13.00	-52.32
1564.00	-52.37	-54.08	8.74	-7.03	-13.00	-39.37
3800.00	-40.50	-42.08	12.50	-10.92	-13.00	-27.50

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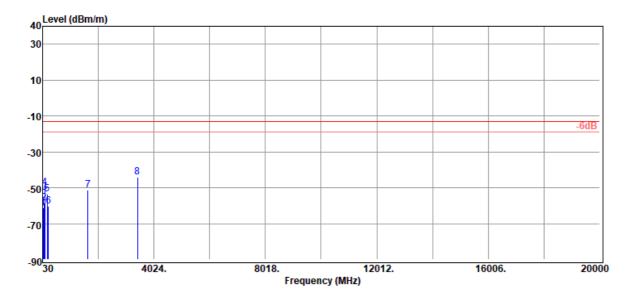
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f (886-2) 2298-0488



# Radiated Spurious Emission Measurement Result: LTE Band 4 + LTE Band 5 Mode

Report Number	:E2/2019/A0032	Test Date	:2020-02-17
Operation Mode	:LTE B4+B5	Temp./Humi.	:21.8/41
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:1720 MHz +826.5 MHz		



Freq. EIRP/ERP SG Antenna Cable Limit Margin **Output Level** Gain Loss dBm dBi/dBd dB MHz dBm dBm dB 49.40 -61.30 -42.71 -17.73-0.86 -48.30 -13.0076.56 -47.99 -1.10 -45.58 -58.58 -9.49 -13.00 104.69 -52.50 -44.33-6.78 -1.39-13.00-39.50 116.33 -49.93-41.35 -7.13 -1.45 -13.00-36.93 202.66 -53.59-49.51-2.00-2.08-13.00-40.59240.49 -60.53-1.83 -2.23 -47.53 -56.47 -13.00 1653.00 -51.50 -53.28 9.33 -7.55 -13.00-38.503440.00 -44.29 -11.19 -31.29 -45.72 12.62 -13.00

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

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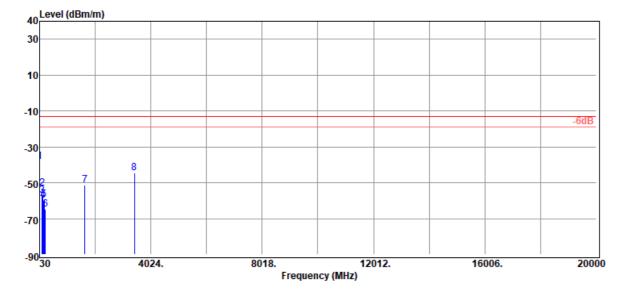
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Report Number	:E2/2019/A0032	Test Date
Operation Mode	:LTE B4+B5	Temp./Humi.
Test Mode	:TX CH LOW	Antenna Pol.
EUT Pol	:E2 Plan	Engineer
Test Frequency	:1720 MHz +826.5 MHz	

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
31.94	-38.24	-17.22	-20.36	-0.66	-13.00	-25.24
117.30	-53.31	-44.77	-7.09	-1.45	-13.00	-40.31
139.61	-57.24	-47.94	-7.64	-1.66	-13.00	-44.24
162.89	-59.68	-51.17	-6.81	-1.70	-13.00	-46.68
190.05	-59.24	-54.42	-2.95	-1.87	-13.00	-46.24
241.46	-64.81	-60.76	-1.82	-2.23	-13.00	-51.81
1653.00	-51.12	-52.90	9.33	-7.55	-13.00	-38.12
3440.00	-44.44	-45.87	12.62	-11.19	-13.00	-31.44

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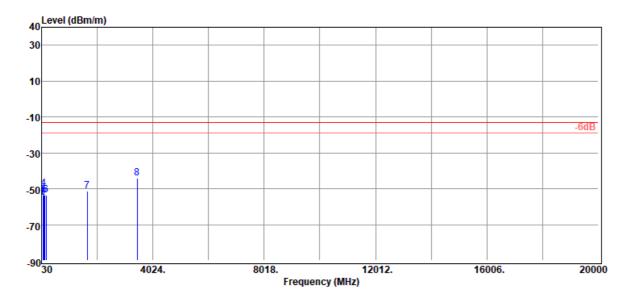
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Report Number	:E2/2019/A0032	Test Date	:2020-02-17
Operation Mode	:LTE B4+B5	Temp./Humi.	:21.8/41
Test Mode	:TX CH MID	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:1732.5 MHz +836.5 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
37.76	-54.25	-34.10	-19.35	-0.80	-13.00	-41.25
42.61	-55.09	-35.42	-18.81	-0.86	-13.00	-42.09
80.44	-53.46	-44.06	-8.24	-1.16	-13.00	-40.46
116.33	-50.19	-41.61	-7.13	-1.45	-13.00	-37.19
141.55	-53.78	-44.44	-7.68	-1.66	-13.00	-40.78
202.66	-53.76	-49.68	-2.00	-2.08	-13.00	-40.76
1673.00	-51.14	-52.99	9.53	-7.68	-13.00	-38.14
3465.00	-44.02	-45.50	12.51	-11.03	-13.00	-31.02

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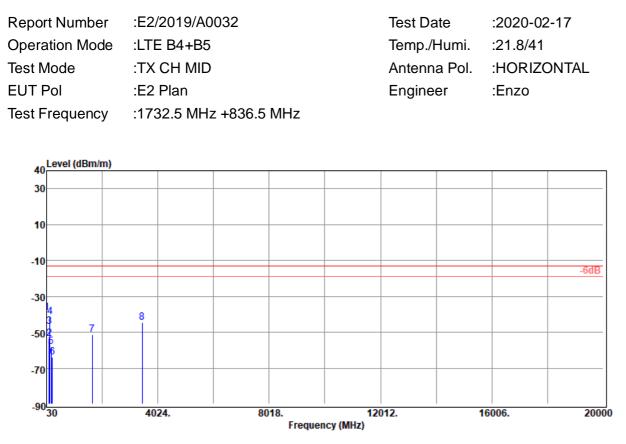
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Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
31.94	-39.07	-18.05	-20.36	-0.66	-13.00	-26.07
117.30	-53.45	-44.91	-7.09	-1.45	-13.00	-40.45
139.61	-47.02	-37.72	-7.64	-1.66	-13.00	-34.02
152.22	-41.48	-32.51	-7.29	-1.68	-13.00	-28.48
195.87	-58.17	-53.78	-2.40	-1.99	-13.00	-45.17
241.46	-63.93	-59.88	-1.82	-2.23	-13.00	-50.93
1673.00	-51.32	-53.17	9.53	-7.68	-13.00	-38.32
3465.00	-44.68	-46.16	12.51	-11.03	-13.00	-31.68

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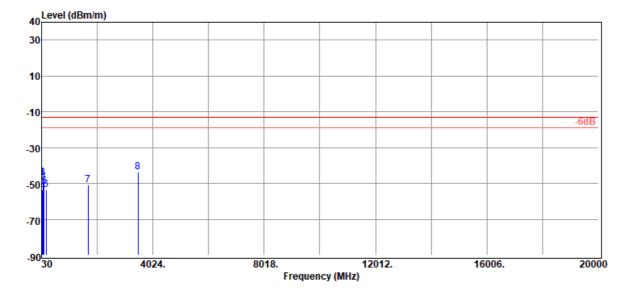
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B4+B5
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:1745 MHz +846.5 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-46.94	-26.73	-19.43	-0.78	-13.00	-33.94
50.37	-53.72	-35.35	-17.50	-0.87	-13.00	-40.72
86.26	-46.71	-38.88	-6.67	-1.16	-13.00	-33.71
116.33	-49.20	-40.62	-7.13	-1.45	-13.00	-36.20
130.88	-51.90	-42.95	-7.29	-1.66	-13.00	-38.90
202.66	-53.41	-49.33	-2.00	-2.08	-13.00	-40.41
1693.00	-50.86	-52.78	9.73	-7.81	-13.00	-37.86
3490.00	-43.62	-45.11	12.36	-10.87	-13.00	-30.62

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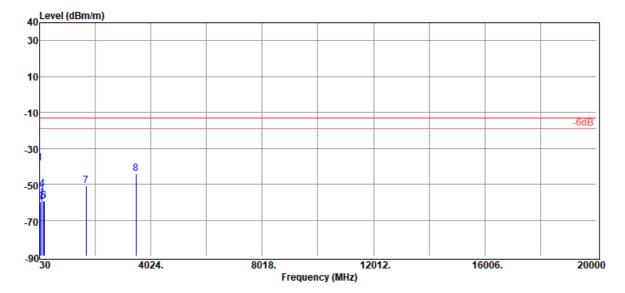
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B4+B5
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:1745 MHz +846.5 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
33.88	-38.36	-17.81	-19.84	-0.71	-13.00	-25.36
62.01	-59.90	-44.31	-14.59	-1.00	-13.00	-46.90
103.72	-56.14	-48.13	-6.64	-1.37	-13.00	-43.14
117.30	-52.81	-44.27	-7.09	-1.45	-13.00	-39.81
162.89	-59.33	-50.82	-6.81	-1.70	-13.00	-46.33
190.05	-59.53	-54.71	-2.95	-1.87	-13.00	-46.53
1693.00	-50.82	-52.74	9.73	-7.81	-13.00	-37.82
3490.00	-44.01	-45.50	12.36	-10.87	-13.00	-31.01

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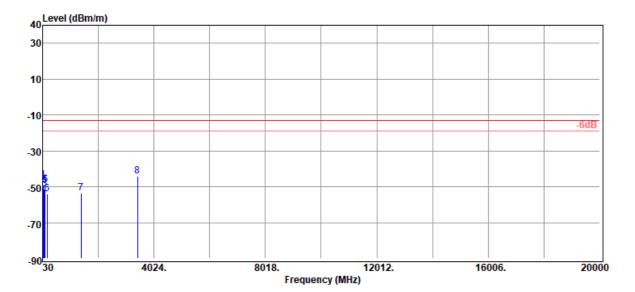
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# Radiated Spurious Emission Measurement Result: LTE Band 4 + LTE Band 12 Mode

Report Number	:E2/2019/A0032	Test Date	:2020-02-17
Operation Mode	:LTE B4+B12	Temp./Humi.	:21.8/41
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:1720 MHz+704 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-46.31	-26.10	-19.43	-0.78	-13.00	-33.31
57.16	-49.20	-32.18	-16.06	-0.96	-13.00	-36.20
88.20	-51.36	-43.89	-6.31	-1.16	-13.00	-38.36
116.33	-48.81	-40.23	-7.13	-1.45	-13.00	-35.81
123.12	-49.26	-40.70	-7.04	-1.52	-13.00	-36.26
202.66	-54.12	-50.04	-2.00	-2.08	-13.00	-41.12
1408.00	-53.76	-54.29	7.06	-6.53	-13.00	-40.76
3440.00	-44.19	-45.62	12.62	-11.19	-13.00	-31.19

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

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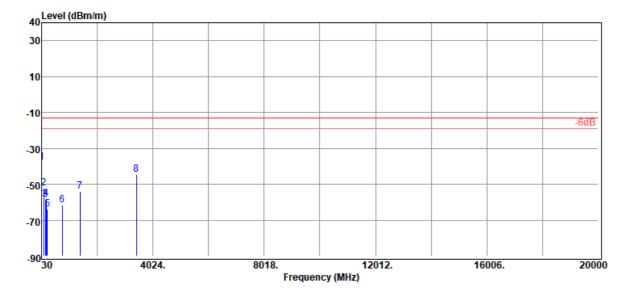
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B4+B12
Test Mode	:TX CH LOW
EUT Pol	:E2 Plan
Test Frequency	:1720 MHz+704 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
33.88	-37.79	-17.24	-19.84	-0.71	-13.00	-24.79
116.33	-52.35	-43.77	-7.13	-1.45	-13.00	-39.35
162.89	-58.33	-49.82	-6.81	-1.70	-13.00	-45.33
191.02	-58.06	-53.35	-2.82	-1.89	-13.00	-45.06
239.52	-63.78	-59.72	-1.83	-2.23	-13.00	-50.78
773.02	-61.66	-55.71	-1.57	-4.38	-13.00	-48.66
1408.00	-53.81	-54.34	7.06	-6.53	-13.00	-40.81
3440.00	-44.45	-45.88	12.62	-11.19	-13.00	-31.45

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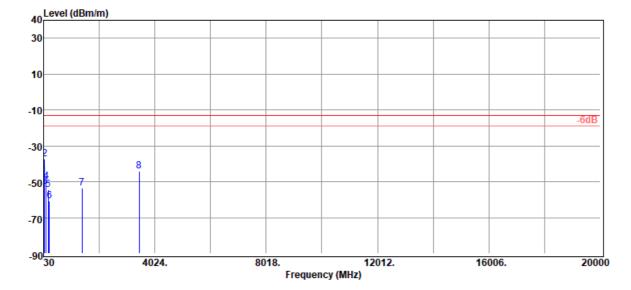
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B4+B12
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:1732.5 MHz +707.5 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
48.43	-46.44	-27.69	-17.89	-0.86	-13.00	-33.44
62.01	-37.32	-21.73	-14.59	-1.00	-13.00	-24.32
69.77	-52.88	-39.77	-12.11	-1.00	-13.00	-39.88
117.30	-49.84	-41.30	-7.09	-1.45	-13.00	-36.84
202.66	-54.49	-50.41	-2.00	-2.08	-13.00	-41.49
240.49	-60.75	-56.69	-1.83	-2.23	-13.00	-47.75
1415.00	-53.60	-54.17	7.12	-6.55	-13.00	-40.60
3465.00	-44.01	-45.49	12.51	-11.03	-13.00	-31.01

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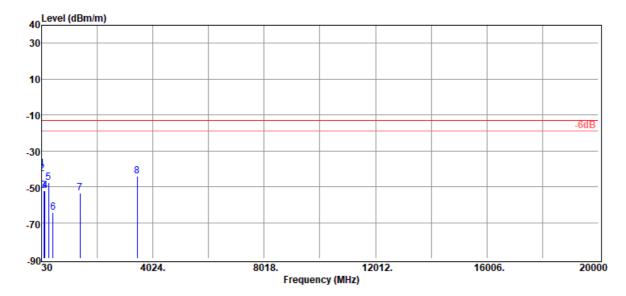
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Report Number	:E2/2019/A0032	Test Date	:2020-02-17
Operation Mode	:LTE B4+B12	Temp./Humi.	:21.8/41
Test Mode	:TX CH MID	Antenna Pol.	:HORIZONTAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:1732.5 MHz +707.5 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
35.82	-39.92	-19.52	-19.64	-0.76	-13.00	-26.92
41.64	-42.88	-23.10	-18.92	-0.86	-13.00	-29.88
116.33	-52.40	-43.82	-7.13	-1.45	-13.00	-39.40
147.37	-52.17	-42.93	-7.57	-1.67	-13.00	-39.17
287.05	-47.87	-43.73	-1.66	-2.48	-13.00	-34.87
445.16	-64.17	-59.88	-1.37	-2.92	-13.00	-51.17
1415.00	-53.59	-54.16	7.12	-6.55	-13.00	-40.59
3465.00	-44.14	-45.62	12.51	-11.03	-13.00	-31.14

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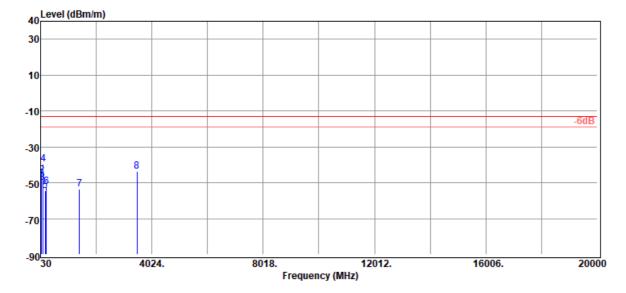
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B4+B12
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:1745 MHz +711 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
50.40	47 50	<u> </u>		0.07	10.00	04.50
58.13	-47.58	-30.87	-15.74	-0.97	-13.00	-34.58
70.74	-45.98	-33.25	-11.72	-1.01	-13.00	-32.98
116.33	-50.14	-41.56	-7.13	-1.45	-13.00	-37.14
128.94	-39.66	-30.79	-7.23	-1.64	-13.00	-26.66
201.69	-54.59	-50.46	-2.05	-2.08	-13.00	-41.59
236.61	-52.36	-48.38	-1.76	-2.22	-13.00	-39.36
1422.00	-53.50	-54.12	7.18	-6.56	-13.00	-40.50
3490.00	-43.67	-45.16	12.36	-10.87	-13.00	-30.67

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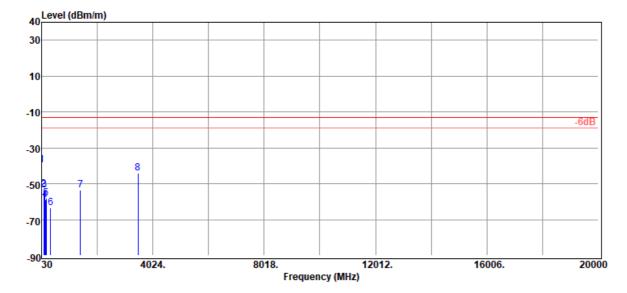
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B4+B12
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:1745 MHz +711 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
35.82	-39.44	-19.04	-19.64	-0.76	-13.00	-26.44
111.48	-53.13	-44.59	-7.09	-1.45	-13.00	-40.13
136.70	-53.70	-44.44	-7.60	-1.66	-13.00	-40.70
162.89	-58.82	-50.31	-6.81	-1.70	-13.00	-45.82
196.84	-57.88	-53.51	-2.36	-2.01	-13.00	-44.88
352.04	-63.43	-59.50	-1.35	-2.58	-13.00	-50.43
1422.00	-53.59	-54.21	7.18	-6.56	-13.00	-40.59
3490.00	-44.04	-45.53	12.36	-10.87	-13.00	-31.04

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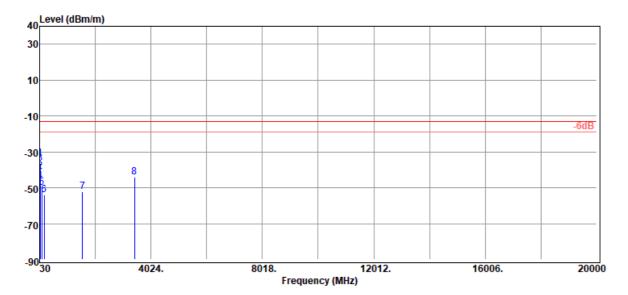
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### Radiated Spurious Emission Measurement Result: LTE Band 4 + LTE Band 13 Mode

Report Number	:E2/2019/A0032	Test Date	:2020-02-17
Operation Mode	:LTE B4+B13	Temp./Humi.	:21.8/41
Test Mode	:TX CH LOW+MID	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:1720 MHz + 782 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
35.82	-33.88	-13.48	-19.64	-0.76	-13.00	-20.88
42.61	-41.03	-21.36	-18.81	-0.86	-13.00	-28.03
48.43	-36.33	-17.58	-17.89	-0.86	-13.00	-23.33
56.19	-46.46	-29.26	-16.25	-0.95	-13.00	-33.46
116.33	-49.78	-41.20	-7.13	-1.45	-13.00	-36.78
202.66	-54.15	-50.07	-2.00	-2.08	-13.00	-41.15
1564.00	-52.15	-53.86	8.74	-7.03	-13.00	-39.15
3440.00	-44.22	-45.65	12.62	-11.19	-13.00	-31.22

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

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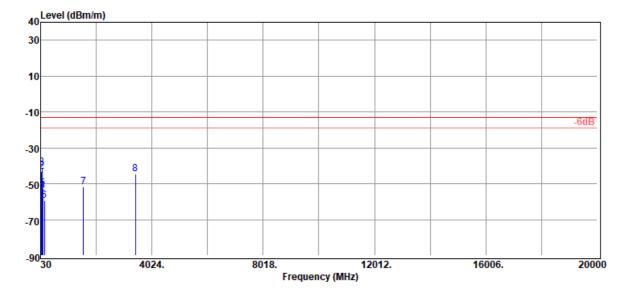
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B4+B13
Test Mode	:TX CH LOW+MID
EUT Pol	:E2 Plan
Test Frequency	:1720 MHz + 782 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
=			0.2.7 0.2 0			
36.79	-51.07	-30.86	-19.43	-0.78	-13.00	-38.07
68.80	-43.08	-29.63	-12.45	-1.00	-13.00	-30.08
83.35	-41.09	-32.48	-7.45	-1.16	-13.00	-28.09
104.69	-53.87	-45.70	-6.78	-1.39	-13.00	-40.87
114.39	-52.62	-44.06	-7.11	-1.45	-13.00	-39.62
166.77	-59.27	-51.05	-6.50	-1.72	-13.00	-46.27
1564.00	-51.89	-53.60	8.74	-7.03	-13.00	-38.89
3440.00	-44.37	-45.80	12.62	-11.19	-13.00	-31.37

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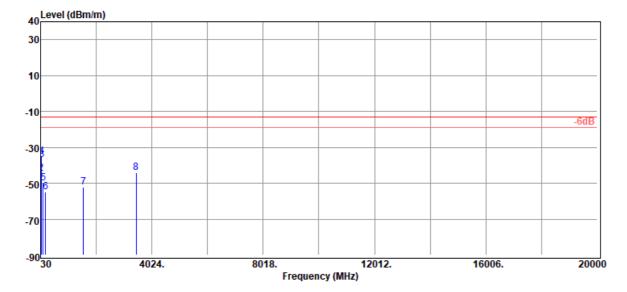
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Report Number	:E2/2019/A0032	Test Date
Operation Mode	:LTE B4+B13	Temp./Hun
Test Mode	:TX CH MID	Antenna P
EUT Pol	:E2 Plan	Engineer
Test Frequency	:1732.5 MHz + 782 MHz	

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-48.68	-28.47	-19.43	-0.78	-13.00	-35.68
46.49	-44.65	-25.50	-18.29	-0.86	-13.00	-31.65
59.10	-36.78	-20.29	-15.50	-0.99	-13.00	-23.78
65.89	-35.16	-20.86	-13.30	-1.00	-13.00	-22.16
117.30	-50.01	-41.47	-7.09	-1.45	-13.00	-37.01
203.63	-54.74	-50.70	-1.96	-2.08	-13.00	-41.74
1564.00	-52.20	-53.91	8.74	-7.03	-13.00	-39.20
3465.00	-44.00	-45.48	12.51	-11.03	-13.00	-31.00

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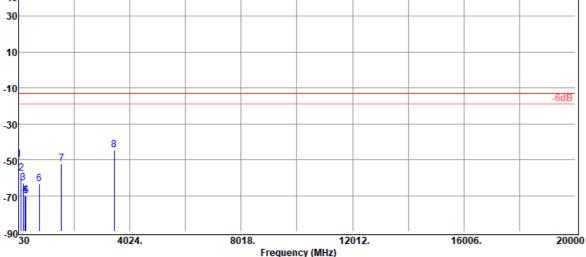
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Report Number	:E2/2019/A0	032			Test Da	ate	:2020-02	2-17
Operation Mode	tion Mode :LTE B4+B13		:LTE B4+B13			Humi.	:21.8/41	
Test Mode	:TX CH MID				Antenn	a Pol.	:HORIZO	ONTAL
EUT Pol	:E2 Plan				Engine	er	:Enzo	
Test Frequency	:1732.5 MHz	2 + 782 N	ЛНz					
40 Level (dBm/m)								
30								



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
30.97	-49.98	-28.73	-20.62	-0.63	-13.00	-36.98
119.24	-57.67	-49.18	-7.04	-1.45	-13.00	-44.67
201.69	-62.80	-58.67	-2.05	-2.08	-13.00	-49.80
272.50	-69.69	-65.75	-1.63	-2.31	-13.00	-56.69
295.78	-70.08	-66.04	-1.53	-2.51	-13.00	-57.08
773.02	-63.48	-57.53	-1.57	-4.38	-13.00	-50.48
1564.00	-52.40	-54.11	8.74	-7.03	-13.00	-39.40
3465.00	-44.54	-46.02	12.51	-11.03	-13.00	-31.54

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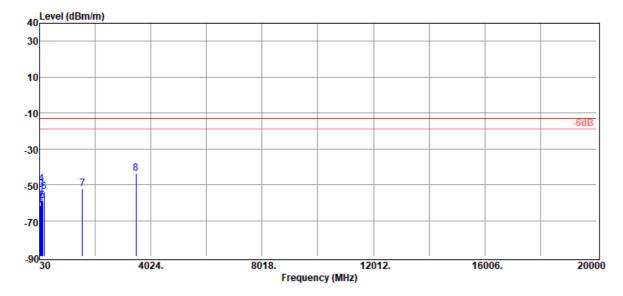
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B4+B13
Test Mode	:TX CH HIGH+MID
EUT Pol	:E2 Plan
Test Frequency	:1745 MHz + 782 MHz

:2020-02-17
:21.8/41
:VERTICAL
:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
55.22	-61.75	-44.34	-16.48	-0.93	-13.00	-48.75
84.32	-58.77	-50.42	-7.19	-1.16	-13.00	-45.77
103.72	-52.57	-44.56	-6.64	-1.37	-13.00	-39.57
116.33	-49.56	-40.98	-7.13	-1.45	-13.00	-36.56
139.61	-59.12	-49.82	-7.64	-1.66	-13.00	-46.12
200.72	-54.06	-49.89	-2.09	-2.08	-13.00	-41.06
1564.00	-52.15	-53.86	8.74	-7.03	-13.00	-39.15
3490.00	-43.75	-45.24	12.36	-10.87	-13.00	-30.75

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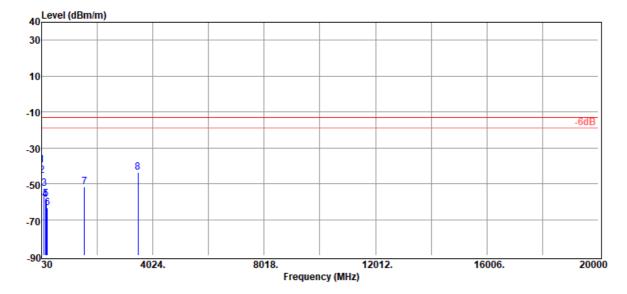
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B4+B13
Test Mode	:TX CH HIGH+MID
EUT Pol	:E2 Plan
Test Frequency	:1745 MHz + 782 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
32.91	-39.46	-18.69	-20.09	-0.68	-13.00	-26.46
41.64	-45.36	-25.58	-18.92	-0.86	-13.00	-32.36
117.30	-52.75	-44.21	-7.09	-1.45	-13.00	-39.75
163.86	-58.75	-50.39	-6.66	-1.70	-13.00	-45.75
191.99	-58.74	-54.06	-2.77	-1.91	-13.00	-45.74
239.52	-63.51	-59.45	-1.83	-2.23	-13.00	-50.51
1564.00	-51.92	-53.63	8.74	-7.03	-13.00	-38.92
3490.00	-43.86	-45.35	12.36	-10.87	-13.00	-30.86

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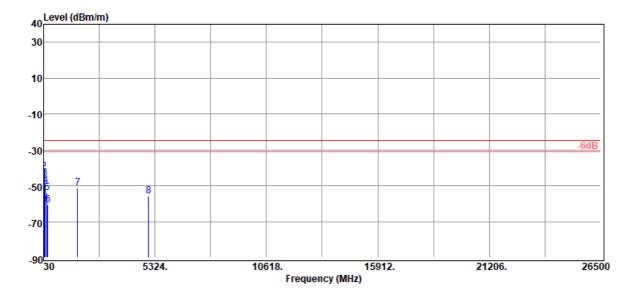
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# Radiated Spurious Emission Measurement Result: LTE Band 5 + LTE Band 7 Mode

Report Number	:E2/2019/A0032	Test Date	:2020-02-17
Operation Mode	:LTE B5+B7	Temp./Humi.	:21.8/41
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:829 MHz + 2510 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-46.51	-26.30	-19.43	-0.78	-25.00	-21.51
59.10	-42.16	-25.67	-15.50	-0.99	-25.00	-17.16
82.38	-45.72	-36.88	-7.68	-1.16	-25.00	-20.72
115.36	-50.12	-41.53	-7.14	-1.45	-25.00	-25.12
197.81	-54.20	-49.93	-2.24	-2.03	-25.00	-29.20
240.49	-60.67	-56.61	-1.83	-2.23	-25.00	-35.67
1658.00	-51.48	-53.28	9.38	-7.58	-25.00	-26.48
5020.00	-55.72	-56.72	12.46	-11.46	-25.00	-30.72

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

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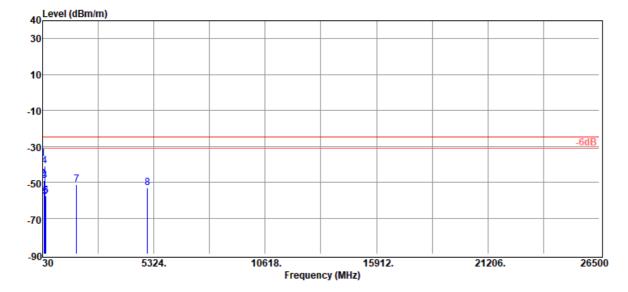
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B5+B7
Test Mode	:TX CH LOW
EUT Pol	:E2 Plan
Test Frequency	:829 MHz + 2510 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
36.79	-37.11	-16.90	-19.43	-0.78	-25.00	-12.11
43.58	-48.22	-28.65	-18.71	-0.86	-25.00	-23.22
114.39	-49.01	-40.45	-7.11	-1.45	-25.00	-24.01
141.55	-40.90	-31.56	-7.68	-1.66	-25.00	-15.90
161.92	-58.14	-49.60	-6.85	-1.69	-25.00	-33.14
191.02	-57.71	-53.00	-2.82	-1.89	-25.00	-32.71
1658.00	-51.30	-53.10	9.38	-7.58	-25.00	-26.30
5020.00	-52.98	-53.98	12.46	-11.46	-25.00	-27.98

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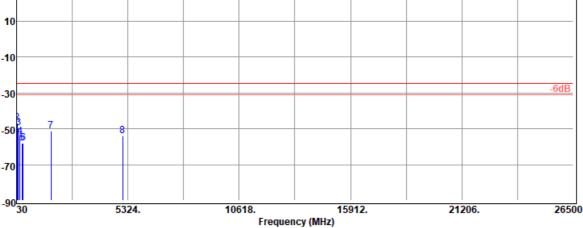
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Report Number	:E2/2019/A0	032			Test Da	ate	:2020-02	2-17
Operation Mode	:LTE B5+B7				Temp./l	Humi.	:21.8/41	
Test Mode	:TX CH MID				Antenn	a Pol.	:VERTIC	;AL
EUT Pol	:E2 Plan				Engine	er	:Enzo	
Test Frequency	:836.5 MHz	+ 2535 N	ЛНz					
40 Level (dBm/m)								
30								



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
60.07	-52.87	-36.61	-15.26	-1.00	-25.00	-27.87
65.89	-46.64	-32.34	-13.30	-1.00	-25.00	-21.64
117.30	-49.43	-40.89	-7.09	-1.45	-25.00	-24.43
200.72	-54.32	-50.15	-2.09	-2.08	-25.00	-29.32
294.81	-58.16	-54.10	-1.55	-2.51	-25.00	-33.16
350.10	-58.04	-54.10	-1.36	-2.58	-25.00	-33.04
1673.00	-51.14	-52.99	9.53	-7.68	-25.00	-26.14
5070.00	-53.92	-54.72	12.40	-11.60	-25.00	-28.92

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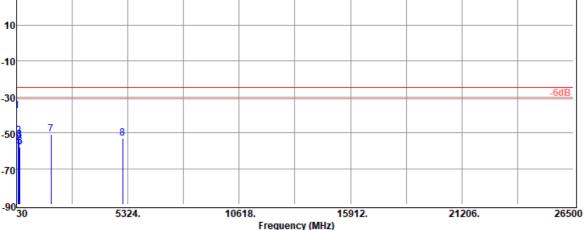
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Report Number	:E2/2019/A0	032		Test Da	te	:2020-02	-17
Operation Mode	:LTE B5+B7			Temp./ŀ	lumi.	:21.8/41	
Test Mode	:TX CH MID			Antenna	a Pol.	:HORIZC	NTAL
EUT Pol	:E2 Plan			Engine	ər	:Enzo	
Test Frequency	:836.5 MHz	+ 2535 N	1Hz				
40 Level (dBm/m)				 			
30							
30							
10							



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
00.00	07 77	17.00	40.04	0.74	05.00	40.77
33.88	-37.77	-17.22	-19.84	-0.71	-25.00	-12.77
116.33	-51.63	-43.05	-7.13	-1.45	-25.00	-26.63
146.40	-53.93	-44.63	-7.63	-1.67	-25.00	-28.93
149.31	-54.00	-44.86	-7.46	-1.68	-25.00	-29.00
162.89	-57.78	-49.27	-6.81	-1.70	-25.00	-32.78
195.87	-58.10	-53.71	-2.40	-1.99	-25.00	-33.10
1673.00	-50.98	-52.83	9.53	-7.68	-25.00	-25.98
5070.00	-53.05	-53.85	12.40	-11.60	-25.00	-28.05

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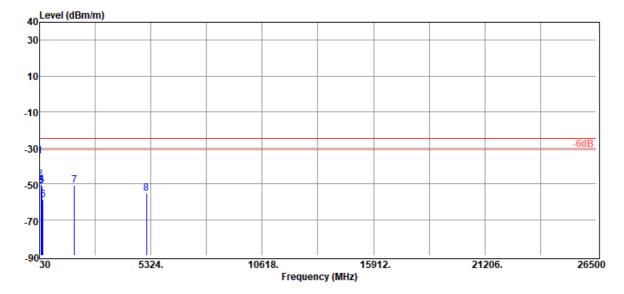
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No.134,Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號 t (886-2) 2299-3279 f (886-2) 2298-0488



:E2/2019/A0032
:LTE B5+B7
:TX CH HIGH
:E2 Plan
:844 MHz + 2560 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
38.73	-34.50	-14.42	-19.25	-0.83	-25.00	-9.50
45.52	-47.59	-28.35	-18.38	-0.86	-25.00	-22.59
99.84	-51.02	-43.47	-6.22	-1.33	-25.00	-26.02
117.30	-50.45	-41.91	-7.09	-1.45	-25.00	-25.45
139.61	-51.47	-42.17	-7.64	-1.66	-25.00	-26.47
201.69	-58.74	-54.61	-2.05	-2.08	-25.00	-33.74
1688.00	-51.01	-52.92	9.68	-7.77	-25.00	-26.01
5120.00	-55.19	-55.89	12.44	-11.74	-25.00	-30.19

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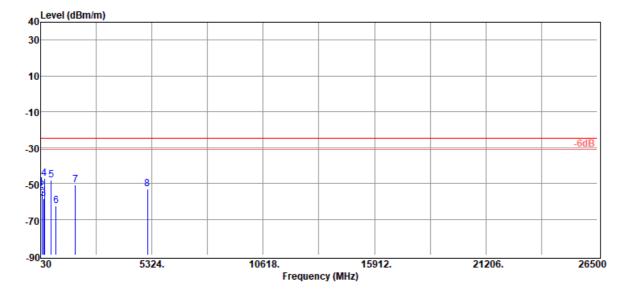
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f (886-2) 2298-0488



Report Number	:E2/2019/A0032
Operation Mode	:LTE B5+B7
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:844 MHz + 2560 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
34.85	-52.35	-31.85	-19.77	-0.73	-25.00	-27.35
104.69	-54.06	-45.89	-6.78	-1.39	-25.00	-29.06
166.77	-58.69	-50.47	-6.50	-1.72	-25.00	-33.69
210.42	-47.36	-43.70	-1.58	-2.08	-25.00	-22.36
546.04	-48.24	-43.37	-1.29	-3.58	-25.00	-23.24
773.02	-62.67	-56.72	-1.57	-4.38	-25.00	-37.67
1688.00	-50.84	-52.75	9.68	-7.77	-25.00	-25.84
5120.00	-53.32	-54.02	12.44	-11.74	-25.00	-28.32

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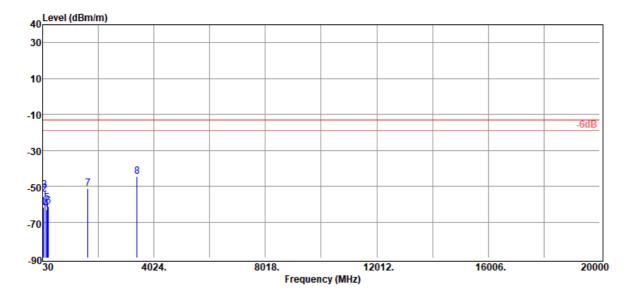
台灣檢驗科技股份有限公司

f (886-2) 2298-0488



## Radiated Spurious Emission Measurement Result: LTE Band 5 + LTE Band 66 Mode

Report Number	:E2/2019/A0032	Test Date	:2020-02-17
Operation Mode	:LTE B5+B66	Temp./Humi.	:21.8/41
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:829 MHz + 1745 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
55.22	-61.72	-44.31	-16.48	-0.93	-13.00	-48.72
104.69	-54.56	-46.39	-6.78	-1.39	-13.00	-41.56
115.36	-52.12	-43.53	-7.14	-1.45	-13.00	-39.12
161.92	-62.82	-54.28	-6.85	-1.69	-13.00	-49.82
201.69	-59.57	-55.44	-2.05	-2.08	-13.00	-46.57
237.58	-61.44	-57.44	-1.78	-2.22	-13.00	-48.44
1658.00	-51.39	-53.19	9.38	-7.58	-13.00	-38.39
3425.00	-44.56	-45.92	12.65	-11.29	-13.00	-31.56

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

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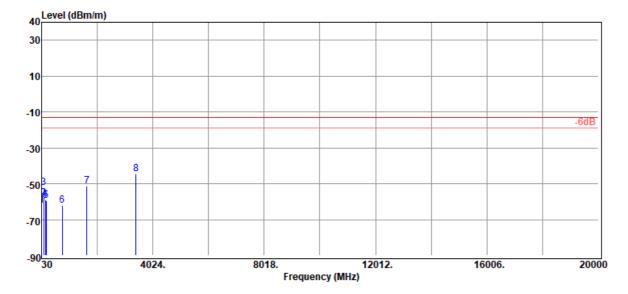
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f (886-2) 2298-0488



Report Number	:E2/2019/A0032
Operation Mode	:LTE B5+B66
Test Mode	:TX CH LOW
EUT Pol	:E2 Plan
Test Frequency	:829 MHz + 1745 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
39.70	-61.97	-41.98	-19.14	-0.85	-13.00	-48.97
104.69	-58.05	-49.88	-6.78	-1.39	-13.00	-45.05
116.33	-52.07	-43.49	-7.13	-1.45	-13.00	-39.07
165.80	-58.82	-50.56	-6.55	-1.71	-13.00	-45.82
193.93	-59.57	-55.04	-2.58	-1.95	-13.00	-46.57
773.02	-62.27	-56.32	-1.57	-4.38	-13.00	-49.27
1658.00	-51.12	-52.92	9.38	-7.58	-13.00	-38.12
3425.00	-44.56	-45.92	12.65	-11.29	-13.00	-31.56

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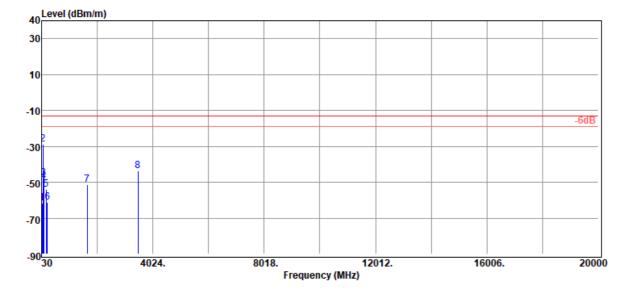
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Member of SGS Group



Report Number	:E2/2019/A0032	Test Date
Operation Mode	:LTE B5+B66	Temp./Humi.
Test Mode	:TX CH MID	Antenna Pol.
EUT Pol	:E2 Plan	Engineer
Test Frequency	:836.5 MHz + 1745 MHz	

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
<b>FF</b> 00	04 75	44.04	40.40	0.00	10.00	40.75
55.22	-61.75	-44.34	-16.48	-0.93	-13.00	-48.75
80.44	-28.60	-19.20	-8.24	-1.16	-13.00	-15.60
106.63	-47.72	-39.40	-6.91	-1.41	-13.00	-34.72
116.33	-49.69	-41.11	-7.13	-1.45	-13.00	-36.69
201.69	-54.11	-49.98	-2.05	-2.08	-13.00	-41.11
235.64	-61.35	-57.40	-1.74	-2.21	-13.00	-48.35
1673.00	-51.20	-53.05	9.53	-7.68	-13.00	-38.20
3490.00	-43.56	-45.05	12.36	-10.87	-13.00	-30.56

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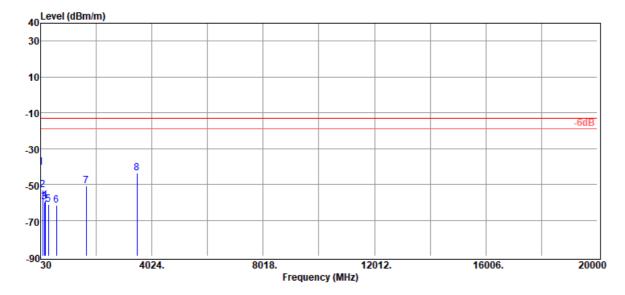
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Rep	ort Number	:E2/2019/A0032	Tes
Ope	ration Mode	:LTE B5+B66	Ter
Test	Mode	:TX CH MID	An
EUT	Pol	:E2 Plan	En
Test	Frequency	:836.5 MHz + 1745 MHz	

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
32.91	-40.37	-19.60	-20.09	-0.68	-13.00	-27.37
116.33	-53.01	-44.43	-7.13	-1.45	-13.00	-40.01
166.77	-59.85	-51.63	-6.50	-1.72	-13.00	-46.85
194.90	-58.76	-54.34	-2.45	-1.97	-13.00	-45.76
305.48	-61.19	-57.09	-1.46	-2.64	-13.00	-48.19
604.24	-61.46	-55.70	-1.78	-3.98	-13.00	-48.46
1673.00	-50.98	-52.83	9.53	-7.68	-13.00	-37.98
3490.00	-43.77	-45.26	12.36	-10.87	-13.00	-30.77

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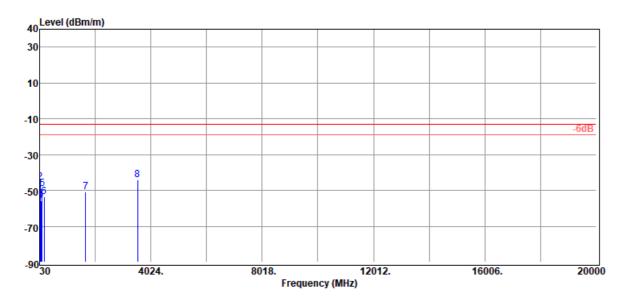
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Report Number	:E2/2019/A0032	Test Date	:2020-02-17
Operation Mode	:LTE B5+B66	Temp./Humi.	:21.8/41
Test Mode	:TX CH HIGH	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:844 MHz + 1777.5 MHz		



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
	UDIII	UDIII	udi/udu	uБ	UDIII	UD
33.88	-49.56	-29.01	-19.84	-0.71	-13.00	-36.56
54.25	-45.26	-27.61	-16.73	-0.92	-13.00	-32.26
69.77	-55.09	-41.98	-12.11	-1.00	-13.00	-42.09
82.38	-55.65	-46.81	-7.68	-1.16	-13.00	-42.65
119.24	-49.25	-40.76	-7.04	-1.45	-13.00	-36.25
202.66	-53.76	-49.68	-2.00	-2.08	-13.00	-40.76
1688.00	-51.09	-53.00	9.68	-7.77	-13.00	-38.09
3555.00	-43.98	-45.22	12.29	-11.05	-13.00	-30.98

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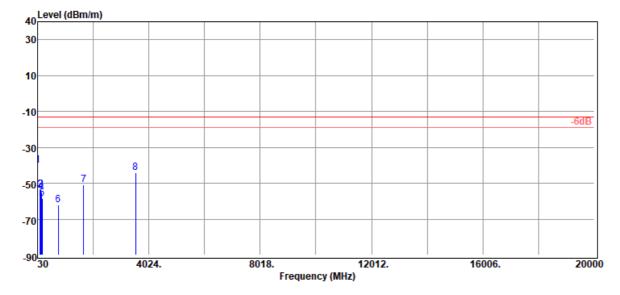
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B5+B66
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:844 MHz + 1777.5 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
32.91	-40.02	-19.25	-20.09	-0.68	-13.00	-27.02
118.27	-53.54	-45.01	-7.08	-1.45	-13.00	-40.54
147.37	-53.42	-44.18	-7.57	-1.67	-13.00	-40.42
164.83	-54.93	-46.62	-6.60	-1.71	-13.00	-41.93
196.84	-58.30	-53.93	-2.36	-2.01	-13.00	-45.30
772.05	-61.90	-55.96	-1.59	-4.35	-13.00	-48.90
1688.00	-50.77	-52.68	9.68	-7.77	-13.00	-37.77
3555.00	-44.16	-45.40	12.29	-11.05	-13.00	-31.16

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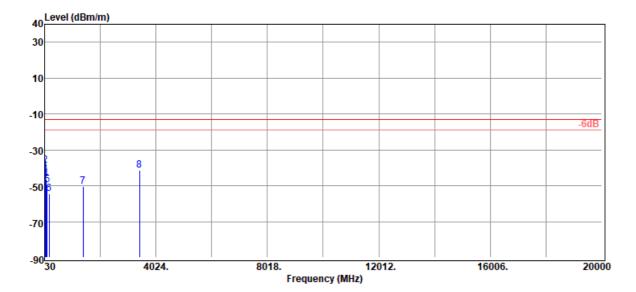
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### Radiated Spurious Emission Measurement Result: LTE Band 12 + LTE Band 66 Mode

Report Number	:E2/2019/A0032	Test Date	:2020-02-17
Operation Mode	:LTE B12+B66	Temp./Humi.	:21.8/41
Test Mode	:TX CH LOW	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:701.5 MHz + 1720 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
37.76	-41.43	-21.28	-19.35	-0.80	-13.00	-28.43
44.55	-38.67	-19.30	-18.51	-0.86	-13.00	-25.67
51.34	-43.35	-25.14	-17.33	-0.88	-13.00	-30.35
86.26	-46.46	-38.63	-6.67	-1.16	-13.00	-33.46
117.30	-49.48	-40.94	-7.09	-1.45	-13.00	-36.48
202.66	-54.64	-50.56	-2.00	-2.08	-13.00	-41.64
1403.00	-50.24	-50.73	7.02	-6.53	-13.00	-37.24
3440.00	-41.41	-42.84	12.62	-11.19	-13.00	-28.41

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Report Number Operation Mode Test Mode EUT Pol Test Frequency	:E2/2019/A0 :LTE B12+B :TX CH LOV :E2 Plan :701.5 MHz	66 V	Ηz		Test Da Temp./H Antenna Enginee	lumi. a Pol.	:2020-02 :21.8/41 :HORIZC :Enzo	
40 Level (dBm/m)								
30								
10								
-10								-6dB
-30	8							
-5027	°							
-70								
-90 <mark>30</mark>	4024.	80		12( 12(	)12.		16006.	20000

Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
34.85	-39.72	-19.22	-19.77	-0.73	-13.00	-26.72
116.33	-51.49	-42.91	-7.13	-1.45	-13.00	-38.49
151.25	-56.73	-47.70	-7.35	-1.68	-13.00	-43.73
162.89	-58.16	-49.65	-6.81	-1.70	-13.00	-45.16
191.02	-57.99	-53.28	-2.82	-1.89	-13.00	-44.99
240.49	-63.60	-59.54	-1.83	-2.23	-13.00	-50.60
1403.00	-50.29	-50.78	7.02	-6.53	-13.00	-37.29
3440.00	-41.68	-43.11	12.62	-11.19	-13.00	-28.68

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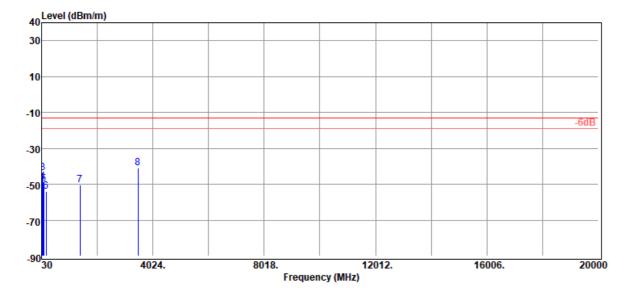
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B12+B66
Test Mode	:TX CH MID
EUT Pol	:E2 Plan
Test Frequency	:707.5 MHz + 1745 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:VERTICAL
Engineer	:Enzo



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
IVITIZ	UDIII	UDIII	udi/udu	uБ	UDIII	UD
32.91	-53.34	-32.57	-20.09	-0.68	-13.00	-40.34
44.55	-50.72	-31.35	-18.51	-0.86	-13.00	-37.72
67.83	-43.88	-30.05	-12.83	-1.00	-13.00	-30.88
83.35	-48.76	-40.15	-7.45	-1.16	-13.00	-35.76
115.36	-50.15	-41.56	-7.14	-1.45	-13.00	-37.15
201.69	-53.80	-49.67	-2.05	-2.08	-13.00	-40.80
1415.00	-50.29	-50.86	7.12	-6.55	-13.00	-37.29
3490.00	-41.07	-42.56	12.36	-10.87	-13.00	-28.07

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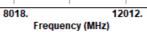
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4024.

Report Number Operation Mode Test Mode EUT Pol Test Frequency	:E2/2019/A0 :LTE B12+B :TX CH MID :E2 Plan :707.5 MHz	66	ЛНz	Test Da Temp.// Antenn Engine	Humi. a Pol.	:2020-02 :21.8/41 :HORIZO :Enzo	
40							
30							
10							
-10							2.10
							-6dB
-30							
-30	8						
6 56 7	ĭ						
-50							



16006.

20000

Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
IVITIZ	UDIII	UDIII	udi/udu	uВ	UDIII	uБ
35.82	-39.74	-19.34	-19.64	-0.76	-13.00	-26.74
57.16	-50.78	-33.76	-16.06	-0.96	-13.00	-37.78
68.80	-55.23	-41.78	-12.45	-1.00	-13.00	-42.23
116.33	-53.31	-44.73	-7.13	-1.45	-13.00	-40.31
138.64	-50.18	-40.85	-7.67	-1.66	-13.00	-37.18
152.22	-44.19	-35.22	-7.29	-1.68	-13.00	-31.19
1415.00	-50.12	-50.69	7.12	-6.55	-13.00	-37.12
3490.00	-41.26	-42.75	12.36	-10.87	-13.00	-28.26

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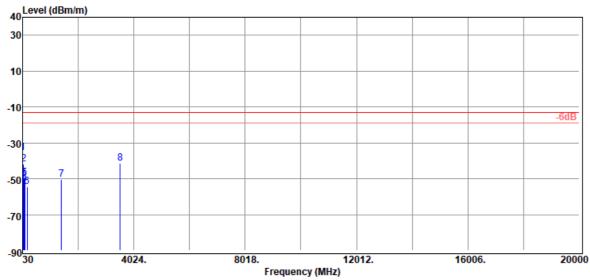
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Report Number	:E2/2019/A0032	Test Date	:2020-02-17
Operation Mode	:LTE B12+B66	Temp./Humi.	:21.8/41
Test Mode	:TX CH HIGH	Antenna Pol.	:VERTICAL
EUT Pol	:E2 Plan	Engineer	:Enzo
Test Frequency	:713.5 MHz + 1770 MHz		



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
07.70			10.25	0.00	12.00	22.02
37.76	-35.68	-15.53	-19.35	-0.80	-13.00	-22.68
64.92	-41.88	-27.17	-13.71	-1.00	-13.00	-28.88
81.41	-50.08	-40.98	-7.94	-1.16	-13.00	-37.08
104.69	-52.50	-44.33	-6.78	-1.39	-13.00	-39.50
116.33	-49.50	-40.92	-7.13	-1.45	-13.00	-36.50
202.66	-54.64	-50.56	-2.00	-2.08	-13.00	-41.64
1427.00	-50.19	-50.84	7.22	-6.57	-13.00	-37.19
3540.00	-41.20	-42.51	12.30	-10.99	-13.00	-28.20

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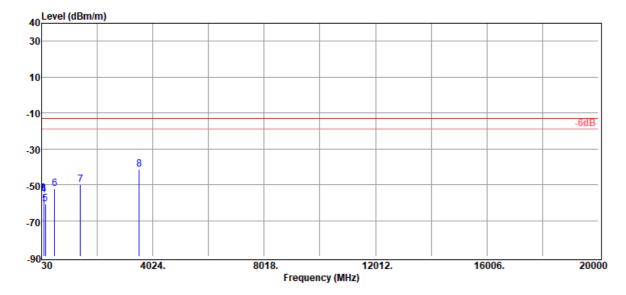
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Report Number	:E2/2019/A0032
Operation Mode	:LTE B12+B66
Test Mode	:TX CH HIGH
EUT Pol	:E2 Plan
Test Frequency	:713.5 MHz + 1770 MHz

Test Date	:2020-02-17
Temp./Humi.	:21.8/41
Antenna Pol.	:HORIZONTAL
Engineer	:Enzo



Freq.	EIRP/ERP	SG Output Level	Antenna Gain	Cable Loss	Limit	Margin
MHz	dBm	dBm	dBi/dBd	dB	dBm	dB
33.88	-54.81	-34.26	-19.84	-0.71	-13.00	-41.81
37.76	-54.88	-34.73	-19.35	-0.80	-13.00	-41.88
103.72	-55.11	-47.10	-6.64	-1.37	-13.00	-42.11
111.48	-55.60	-47.06	-7.09	-1.45	-13.00	-42.60
163.86	-60.70	-52.34	-6.66	-1.70	-13.00	-47.70
496.57	-52.17	-47.60	-1.08	-3.49	-13.00	-39.17
1427.00	-50.02	-50.67	7.22	-6.57	-13.00	-37.02
3540.00	-41.45	-42.76	12.30	-10.99	-13.00	-28.45

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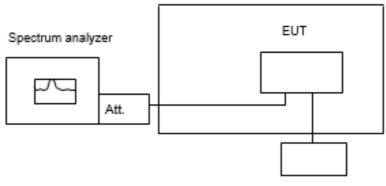
# **10 FREQUENCY STABILITY MEASUREMENT**

### 10.1 Standard Applicabl

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

### 10.2 Test Set-up

Temperature Chamber



Variable DC Power Supply

### **10.3 Measurement Procedure**

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

Set chamber temperature to  $25^{\circ}$ C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint as declared by the manufacturer, record the maximum frequency change.

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Note: Measurement setup for testing on Antenna connector

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## **10.4 Measurement Equipment Used**

Conduc	ted Emission (m	neasured at a	antenna port)	Test Site	
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.
TYPE		NUMBER	NUMBER	CAL.	
Spectrum Analyzer	KEYSIGHT	N9010A	MY51440113	07/15/2019	07/14/2020
Radio Communication Analyer	Anritsu	MT8821C	6261786084	01/18/2020	01/17/2021
Attenuator	Marvelous	MVE2213-10	RF30	11/20/2019	11/19/2020
DC Block	PASTERNACK	PE8210	RF32	11/20/2019	11/19/2020
Splitter	Woken	DOM35LW1 A2	RF83	11/20/2019	11/19/2020
Coaxial Cables	Woken	00100A1F1A 185C	RF229	11/20/2019	11/19/2020

#### 10.5 **Measurement Result**

Note: The battery is rated 3.3V dc.

Reference Freq.:		35B Mid annel	834	MHz 10M QPSK CH 20500
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	Freq.	ERROR vs. V	OLTAGE	
3.465	25	834.000012	12	2091
3.3	25	834.000015	15	2091
3.135	25	834.000020	20	2091
2.9 (End Point)	25	834.000017	17	2091
	Fre	q. ERROR vs.	Temp.	
3.3	-30	833.999997	-3	2091
3.3	-20	833.999993	-7	2091
3.3	-10	833.999989	-11	2091
3.3	0	833.999980	-20	2091
3.3	10	834.000008	8	2091
3.3	20	833.999994	-6	2091
3.3	30	833.999986	-14	2091
3.3	40	833.999994	-6	2091
3.3	50	833.999996	-4	2091

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Reference Freq.:		B7C Mid	2525.6	MHz 10M QPSK CH 21006
		annel	8	
Power Supply Vdc	Temp. (℃)			Limit = +/- 2.5 ppm (Hz)
		ERROR vs. V		
3.465	25	2525.600016		6338
3.3	25	2525.600014		6338
3.135	25	2525.600012	12	6338
2.9 (End Point)	25	2525.600006	6	6338
	Fre	q. ERROR vs.	Temp.	
3.3	-30	2525.600005	5	6338
3.3	-20	2525.599991	-9	6338
3.3	-10	2525.599986	-14	6338
3.3	0	2525.599981	-19	6338
3.3	10	2525.600005	5	6338
3.3	20	2525.599983	-17	6338
3.3	30	2525.599987	-13	6338
3.3	40	2525.599991	-9	6338
3.3	50	2525.599983	-17	6338
Reference Freq .:		41C Mid annel	2583.8	MHz 5M QPSK CH 40528
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	Freq.	ERROR vs. VO	OLTAGE	
3.465	25	2583.800008	8	6488
3.3	25	2583.800019	19	6488
3.135	25	2583.800018	18	6488
2.9	25	2583.800013	13	6488
(End Point)	23	2303.000013	15	0400
	Fre	q. ERROR vs.	Temp.	
3.3	-30	2583.799991	-9	6488
3.3	-20	2583.799986	-14	6488
3.3	-10	2583.799988	-12	6488
3.3	0	2583.799986	-14	6488
3.3	10	2583.800009	9	6488
3.3	20	2583.799985	-15	6488
3.3	30	2583.799981	-19	6488
3.3	40	2583.799995	-5	6488
3.3	50	2583.800008	8	6488

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Reference Freq.:		348C Mid annel	3615.8	MHz 5M QPSK CH 55898				
Power Supply Vdc	Temp. (°C)	T	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)				
		ERROR vs. V	. ,					
3.465	25	3615.800011	11	6488				
3.3	25	3615.800015	15	6488				
3.135	25	3615.800011	11	6488				
2.9 (End Point)	25	3615.800008	8	6488				
, , , , , , , , , , , , , , , , , , ,	Freq. ERROR vs. Temp.							
3.3	-30	3615.799984	-	6488				
3.3	-20	3615.799989	-11	6488				
3.3	-10	3615.799992	-8	6488				
3.3	0	3615.800008	8	6488				
3.3	10	3615.800009	9	6488				
3.3	20	3615.800011	11	6488				
3.3	30	3615.800015	15	6488				
3.3	40	3615.800014	14	6488				
3.3	50	3615.800011	11	6488				
Reference Freq.:		66B Mid annel	1753	MHz 5M QPSK CH 132398				
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)				
	Freq.	ERROR vs. V	OLTAGE					
3.465	25	1752.600027	27	6488				
3.3	25	1752.600016	16	6488				
3.135	25	1752.600014	14	6488				
2.9 (End Point)	25	1752.600016	16	6488				
	Free	q. ERROR vs.	Temp.					
3.3		1752.599985	-15	6488				
3.3	-20	1752.599981	-19	6488				
3.3	-10	1752.599972	-28	6488				
3.3	0	1752.599984	-16	6488				
3.3	10	1752.600005	5	6488				
3.3	20	1752.599986	-14	6488				
3.3	30	1752.599989	-11	6488				
3.3	40	1752.599991	-9	6488				

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Reference Freq.:		866C Mid annel	1746	MHz 5M QPSK CH 132330
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	Freq.	ERROR vs. V	OLTAGE	
3.465	25	1745.800021	21	6488
3.3	25	1745.800014	14	6488
3.135	25	1745.800011	11	6488
2.9 (End Point)	25	1745.800011	11	6488
	Fre	q. ERROR vs.	Temp.	
3.3	-30	1745.799989	-11	6488
3.3	-20	1745.799983	-17	6488
3.3	-10	1745.799979	-21	6488
3.3	0	1745.799989	-11	6488
3.3	10	1745.800001	1	6488
3.3	20	1745.799989	-11	6488
3.3	30	1745.799993	-7	6488
3.3	40	1745.799996	-4	6488
3.3	50	1745.800006	6	6488

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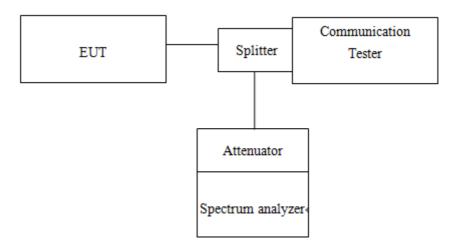


# 11 PEAK TO AVERAGE RATIO

## 11.1 Standard Applicable

The peak-to-average ratio (PAR) of the transmission may not exceed 13dB.

## 11.2 Test SET-UP



### 11.3 Measurement Procedure

- 1. KDB 971168 D01 is employed as the following procedure is proper adjusted accordingly:
- 2. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth; & internal =1ms
- 3. Set the number of counts to a value that stabilizes the measured CCDF curve.

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### 11.4 Measurement Equipment Used

Conduc	Conducted Emission (measured at antenna port) Test Site								
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.				
Spectrum Analyzer	KEYSIGHT	N9010A	MY51440113	07/15/2019	07/14/2020				
Radio Communication Analyer	Anritsu	MT8821C	6261786084	01/18/2020	01/17/2021				
Attenuator	Marvelous	MVE2213-10	RF30	11/20/2019	11/19/2020				
DC Block	PASTERNACK	PE8210	RF32	11/20/2019	11/19/2020				
Splitter	Woken	DOM35LW1A2	RF83	11/20/2019	11/19/2020				
Coaxial Cables	Woken	00100A1F1A18 5C	RF229	11/20/2019	11/19/2020				

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### 11.5 Measurement Result

	First B	and	Freq.		Second	Band	Freq.	PAP	R
	Band width	Channel	(MHz)		Band width	Channel	(MHz)	256QAM	Limit
5B	5 MHz	20428	826.8	+	10 MHz	20500	834	8.30	13
	5 MHz	20478	831.8		10 MHz	20550	839	7.87	13
	5 MHz	20528	836.8		10 MHz	20600	844	7.81	13
	First B	and	Freq.		Second	Band	Freq.	PAP	R
	Band width	Channel	(MHz)		Band width	Channel	(MHz)	256QAM	Limit
7C	20 MHz	20850	2510	+	20 MHz	21048	2529.8	8.09	13
	20 MHz	21001	2525.1		20 MHz	21199	2544.9	7.97	13
	20 MHz	21152	2540.2		20 MHz	21350	2560	7.85	13
	First B	and	Freq.		Second	Band	Freq.	PAP	R
	Band width	Channel	(MHz)		Band width	Channel	(MHz)	256QAM	Limit
41C	5 MHz	39683	2499.3	+	20 MHz	39800	2511	9.51	13
	5 MHz	40528	2583.8		20 MHz	40645	2595.5	9.75	13
	5 MHz	41373	2668.3		20 MHz	41490	2680	10.51	13
	First B	and	Freq.		Second	Band	Freq.	PAP	R
	First B Band width	and Channel	Freq. (MHz)		Second Band width	Band Channel	Freq. (MHz)	PAP 256QAM	R Limit
48C				+					
48C	Band width	Channel	(MHz)	+	Band width	Channel	(MHz)	256QAM	Limit
48C	Band width 5 MHz	<b>Channel</b> 55273	(MHz) 3553.3	+	Band width 20 MHz	<b>Channel</b> 55390	<b>(MHz)</b> 3565	<b>256QAM</b> 11.08	Limit 13
48C	Band width 5 MHz 5 MHz	<b>Channel</b> 55273 55898 56523	(MHz) 3553.3 3615.8	+	Band width 20 MHz 20 MHz	<b>Channel</b> 55390 56015 56640	(MHz) 3565 3627.5	<b>256QAM</b> 11.08 9.75	Limit 13 13 13
48C	Band width 5 MHz 5 MHz 5 MHz	<b>Channel</b> 55273 55898 56523	(MHz) 3553.3 3615.8 3678.3	+	Band width 20 MHz 20 MHz 20 MHz	<b>Channel</b> 55390 56015 56640	(MHz) 3565 3627.5 3690	<b>256QAM</b> 11.08 9.75 10.41	Limit 13 13 13
48C 66B	Band width 5 MHz 5 MHz 5 MHz First B	Channel 55273 55898 56523 and	(MHz) 3553.3 3615.8 3678.3 Freq.	+ +	Band width 20 MHz 20 MHz 20 MHz Second	Channel           55390           56015           56640           Band	(MHz) 3565 3627.5 3690 Freq.	256QAM 11.08 9.75 10.41 PAP	Limit 13 13 13 R
	Band width 5 MHz 5 MHz 5 MHz First B Band width	Channel           55273           55898           56523           and           Channel	(MHz) 3553.3 3615.8 3678.3 Freq. (MHz)		Band width 20 MHz 20 MHz 20 MHz Second Band width	Channel           55390           56015           56640           Band           Channel	(MHz) 3565 3627.5 3690 Freq. (MHz)	256QAM 11.08 9.75 10.41 PAP 256QAM	Limit 13 13 13 R Limit
	Band width 5 MHz 5 MHz 5 MHz First B Band width 15 MHz	Channel           55273           55898           56523           and           Channel           132047	(MHz) 3553.3 3615.8 3678.3 Freq. (MHz) 1717.5		Band width 20 MHz 20 MHz 20 MHz Second Band width 5 MHz	Channel           55390           56015           56640           Band           Channel           132140	(MHz) 3565 3627.5 3690 Freq. (MHz) 1726.8	256QAM 11.08 9.75 10.41 PAP 256QAM 7.16	Limit 13 13 13 R Limit 13
	Band width 5 MHz 5 MHz 5 MHz First B Band width 15 MHz 15 MHz	Channel         55273         55898         56523         and         Channel         132047         132398         132549	(MHz) 3553.3 3615.8 3678.3 Freq. (MHz) 1717.5 1752.6		Band width 20 MHz 20 MHz 20 MHz Second Band width 5 MHz 5 MHz	Channel         55390         56015         56640         Band         Channel         132140         132491         132642	(MHz) 3565 3627.5 3690 Freq. (MHz) 1726.8 1761.9	256QAM 11.08 9.75 10.41 PAP 256QAM 7.16 7.08	Limit 13 13 13 R Limit 13 13 13
	Band width 5 MHz 5 MHz 5 MHz First B Band width 15 MHz 15 MHz 15 MHz	Channel         55273         55898         56523         and         Channel         132047         132398         132549	(MHz) 3553.3 3615.8 3678.3 Freq. (MHz) 1717.5 1752.6 1767.7		Band width 20 MHz 20 MHz 20 MHz <b>Second</b> Band width 5 MHz 5 MHz 5 MHz	Channel         55390         56015         56640         Band         Channel         132140         132491         132642	(MHz) 3565 3627.5 3690 Freq. (MHz) 1726.8 1761.9 1777	256QAM 11.08 9.75 10.41 <b>PAP</b> 256QAM 7.16 7.08 6.88	Limit 13 13 13 R Limit 13 13 13
	Band width 5 MHz 5 MHz 5 MHz First B Band width 15 MHz 15 MHz 15 MHz 5 MHz	Channel         55273         55898         56523         and         Channel         132047         132398         132549         and	<ul> <li>(MHz)</li> <li>3553.3</li> <li>3615.8</li> <li>3678.3</li> <li>Freq.</li> <li>(MHz)</li> <li>1717.5</li> <li>1752.6</li> <li>1767.7</li> <li>Freq.</li> </ul>		Band width 20 MHz 20 MHz 20 MHz <b>Second</b> Band width 5 MHz 5 MHz 5 MHz 5 MHz	Channel         55390         56015         56640         Band         Channel         132140         132491         132642         and	(MHz) 3565 3627.5 3690 Freq. (MHz) 1726.8 1761.9 1777 Freq.	256QAM 11.08 9.75 10.41 <b>PAP</b> 256QAM 7.16 7.08 6.88 PAP	Limit 13 13 13 8 Limit 13 13 13 13 R
66B	Band width 5 MHz 5 MHz 5 MHz First B Band width 15 MHz 15 MHz 15 MHz First B Band width	Channel         55273         55898         56523         and         Channel         132047         132398         132549         and         Channel	(MHz) 3553.3 3615.8 3678.3 Freq. (MHz) 1717.5 1752.6 1767.7 Freq. (MHz)	+	Band width 20 MHz 20 MHz 20 MHz Second Band width 5 MHz 5 MHz 5 MHz 5 MHz 5 MHz Band width	Channel         55390         56015         56640         Band         Channel         132140         132491         132642         and         Channel	(MHz) 3565 3627.5 3690 Freq. (MHz) 1726.8 1761.9 1777 Freq. (MHz)	256QAM 11.08 9.75 10.41 <b>PAP</b> 256QAM 7.16 7.08 6.88 PAP 256QAM	Limit 13 13 13 R Limit 13 13 13 R Limit

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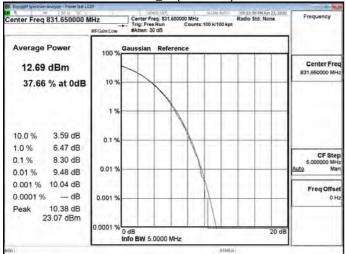
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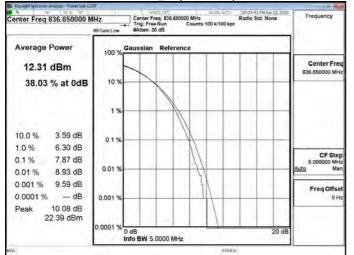
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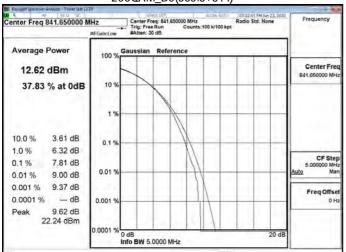
#### 256QAM_B5(826.8+834)



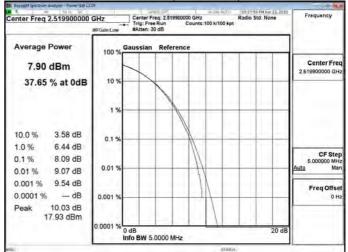
#### 256QAM_B5(831.8+839)



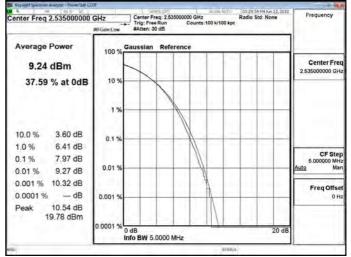
#### 256QAM_B5(836.8+844)



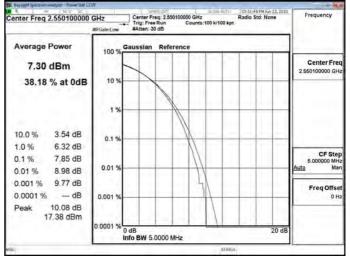
### 256QAM_B7(2510+2529.8)



#### 256QAM_B7(2525.1+2544.9)



#### 256QAM_B7(2540.2+2560)



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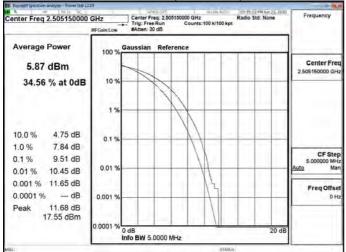
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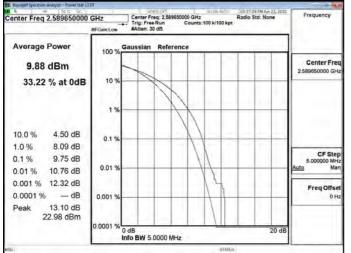
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#### 256QAM_B41(2499.3+2511)



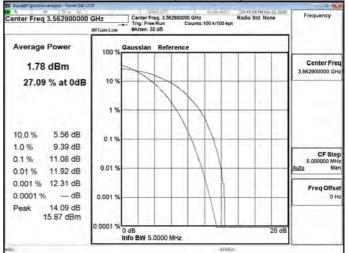
#### 256QAM_B41(2583.8+2595.5)



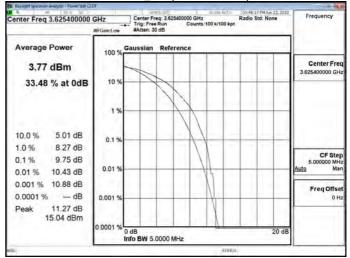
#### 256QAM_B41(2668.3+2680)

Center Free; 2. 674150000 GHz Radio Std: None Trig: Free Run Counts: 100 k/100 kpt w #Atter: 30 dB enter Freq 2.674150000 GHz Average Power Gaussian Reference 100 % Center Fre 3.48 dBm 30.34 % at 0dB 10 % 1% 10.0 % 5.28 dB 0.1 9 1.0 % 8.75 dB CF Step 01% 10.51 dB 0.01 % 0.01 % 11.38 dB 0.001 % 12.06 dB Freq Offs 0.0001 % - dB 0.001 % 0 H 12.83 dB Peak 16.31 dBm 0.0001 % 0 dB Info BW 5.0000 MHz 20 dB

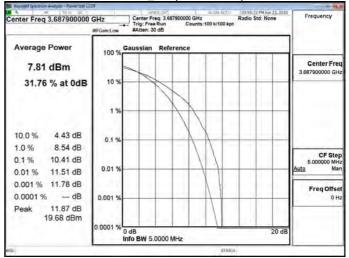
#### 256QAM_B48(3553.3+3565)



#### 256QAM_B48(3615.8+3627.5)



#### 256QAM_B48(3678.3+3690)



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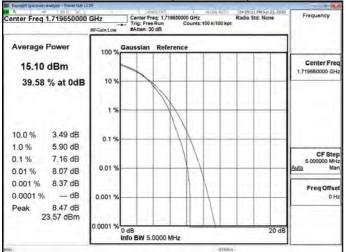
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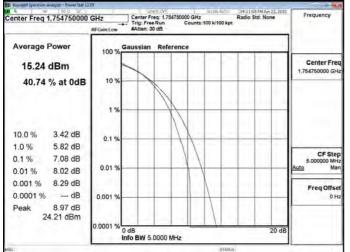
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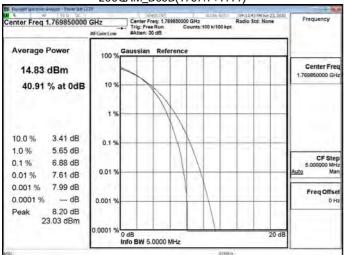
### 256QAM_B66B(1717.5+1726.8)



#### 256QAM_B66B(1752.6+1761.9)



### 256QAM_B66B(1767.7+1777)



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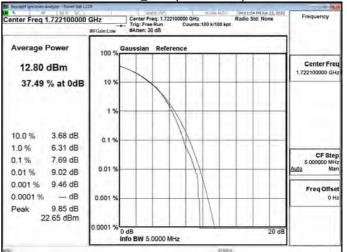
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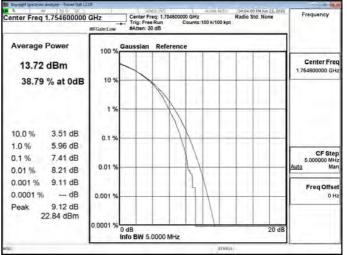
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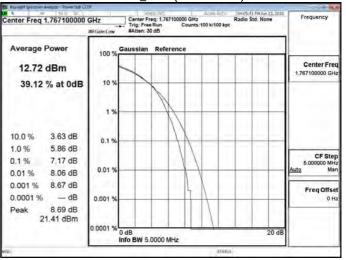
#### 256QAM_B66C(1720+1731.7)



#### 256QAM_B66C(1752.5+1764.2)



#### 256QAM_B66C(1765+1776.7)





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~ End of Report ~

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