



REPORT No.: SZ25060440W08

TEST REPORT

APPLICANT : Sun Cupid Technology (HK) Ltd.

PRODUCT NAME : 5G Smartphone

MODEL NAME : S6710X

MARKETING NAME : NUU B40, B40

BRAND NAME : NUU

FCC ID : 2ADINS6710X

STANDARD(S) : 47 CFR Part 2
47 CFR Part 96

RECEIPT DATE : 2025-07-03

TEST DATE : 2025-07-04 to 2025-08-14

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Change History		
Version	Date	Reason for change
1.0	2025-08-22	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Sun Cupid Technology (HK) Ltd.
Applicant Address:	16/F, CEO Tower, 77 Wing Hong Street, Cheung Sha Wan, Kowloon, HongKong.
Manufacturer:	Sun Cupid Technology (HK) Ltd.
Manufacturer Address:	16/F, CEO Tower, 77 Wing Hong Street, Cheung Sha Wan, Kowloon, HongKong.

1.2. Equipment Under Test (EUT) Description

Product Name:	5G Smartphone	
Sample No.:	4#, 23#	
Hardware Version:	S6710X-01	
Software Version:	S6710X-AM-V-MV25608-03	
Modulation Type:	QPSK, 16QAM, 64QAM	
Operation Band:	Band 48	
Frequency Range:	LTE Band 48	Tx: 3550MHz–3700MHz
		Rx: 3550MHz–3700MHz
Channel Bandwidth	LTE Band 48	5MHz, 10MHz, 15MHz, 20MHz
Antenna Type:	PIFA Antenna	
Antenna Gain:	LTE Band 48	-0.50dBi
Carrier Aggregation(UL):	Support	
Accessory Information:	Battery	
	Brand Name:	N/A
	Model No.:	BL-A60CT
	Serial No.:	N/A
	Capacity:	4900mAh
	Rated Voltage:	3.87V
	Charge Limit:	4.45V
	Manufacturer:	Huizhou Highpower Technology Co., Ltd.
	AC Adapter	
	Brand Name:	NUU



	Model No.:	552A-033G-1C
	Serial No.:	N/A
	Rated Output:	5.0V $\Rightarrow$ 3.0A; 9.0V $\Rightarrow$ 3.0A; 12.0V $\Rightarrow$ 2.5A; 15.0V $\Rightarrow$ 2.0A; 20.0V $\Rightarrow$ 1.5A PPS: 5.0-11.0V $\Rightarrow$ 3.0A; 5.0-16.0V $\Rightarrow$ 2.0A
	Rated Input:	100-240V $\sim$ 50/60Hz, 1.0A
	Manufacturer:	SHENZHEN BAIJUNDA ELECTRONICS CO.,LTD

Note 1: SIM 1 and SIM 2 is a chipset unit and tested as a single chipset. The SIM 1 is chosen for test.

Note 2: The EUT description presented in the report are provided by applicant and/or manufacturer, and the test laboratory is not responsible for the accuracy of the information. For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

1.3. Maximum E.R.P./E.I.R.P. and Emission Designator

LTE Band 48	Maximum E.R.P./E.I.R.P. (W)			Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
20	0.180	0.146	0.117	17M9G7D	17M9W7D	17M9W7D
15	0.178	0.144	0.116	13M4G7D	13M4W7D	13M4W7D
10	0.177	0.143	0.115	8M99G7D	8M97W7D	8M96W7D
5	0.175	0.141	0.114	4M50G7D	4M48W7D	4M49W7D



1.4. Test Standards and Results

The objective of the report is to perform testing according to Part 2 and Part 96 for the EUT FCC ID Certification:

No	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 96	CITIZENS BROADBAND RADIO SERVICE

Test detailed items/section required by FCC rules and results are as below:

Section	Description	Test Date	Test Engineer	Result	Remark
2.1046, 96.41(b)	Transmitter Conducted Output Power and E.R.P./E.I.R.P.	Aug. 13, 2025	Yu Xiaoming Liu Zhiting	PASS ^{Note3}	/
2.1049	Occupied Bandwidth	Jul. 29, 2025	Liu Huiyan	PASS	/
96.41(g)	Peak to Average Radio	Jul. 29, 2025	Liu Huiyan	PASS	/
2.1055	Frequency Stability	Aug. 14, 2025	Liu Huiyan	PASS	/
2.1051, 96.41(e)	Conducted Spurious Emissions	Jul. 30, 2025	Liu Huiyan	PASS	/
2.1051, 96.41(e)	Band Edge	Jul. 29, 2025	Liu Huiyan	PASS	/
2.1053, 96.41(e)	Radiated Spurious Emissions	Jul. 17, 2025	Zhong Xiangyun	PASS	/
96.47	End User Device Additional Requirements	Aug. 13, 2025	Liu Huiyan	PASS	/

Note 1: The tests were performed according to the method of measurements prescribed in KDB 971168 D01 v03 and ANSI/TIA-603-E-2016.

Note 2: Any additions, deviation, or exclusions from the method shall be noted in the "Remark".

Note 3: The antenna gain presented in the report are provided by applicant and/or manufacturer, and the test laboratory is not responsible for the accuracy of the information.



1.5. Environmental Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15-35
Relative Humidity (%):	30-60
Atmospheric Pressure (kPa):	86-106

2.47 CFR Part 2, Part 96 Requirements

2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P.

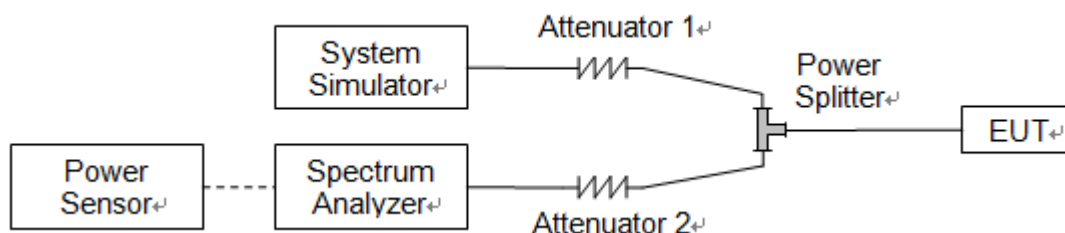
2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

The maximum effective isotropic radiated power (EIRP) and maximum Power Spectral Density (PSD) of any CBSD and End User Device must comply with the limits shown in the table as below.
Paragraph

Device	Maximum EIRP (dBm/10 megahertz)	Maximum PSD (dBm/MHz)
End User Device	23	n/a
Category A CBSD	30	20
Category B CBSD ¹	47	37

2.1.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.



2.1.3. Test procedure

KDB 971168 D01v03 Section 5.2 and ANSI/TIA-603-E-2016.

$EIRP \text{ (dBm)} = \text{Conducted Output Power (dBm)} + \text{Antenna Gain (dBi)}$

$ERP \text{ (dBm)} = EIPR \text{ (dBm)} - 2.15$

**2.1.4.Result****Conducted Output Power:**

LTE Band 48						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				55340	55990	56640
Frequency (MHz)				3560	3625	3690
20	QPSK	1	0	22.95	23.06	23.04
20	QPSK	1	49	22.79	22.78	22.98
20	QPSK	1	99	22.70	22.84	22.81
20	QPSK	50	0	21.95	21.97	22.07
20	QPSK	50	24	21.91	21.85	21.96
20	QPSK	50	50	21.93	21.96	22.00
20	QPSK	100	0	21.83	21.85	21.92
20	16QAM	1	0	22.10	22.06	22.14
20	16QAM	1	49	21.92	22.13	22.08
20	16QAM	1	99	21.79	22.12	21.97
20	16QAM	50	0	20.85	20.93	21.04
20	16QAM	50	24	20.90	20.84	20.99
20	16QAM	50	50	20.73	20.83	20.87
20	16QAM	100	0	20.79	20.92	20.88
20	64QAM	1	0	21.08	21.20	21.09
20	64QAM	1	49	21.11	21.06	21.01
20	64QAM	1	99	21.03	20.91	20.99
20	64QAM	50	0	19.99	19.98	20.12
20	64QAM	50	24	19.86	19.94	19.97
20	64QAM	50	50	19.78	20.04	20.08
20	64QAM	100	0	19.74	19.81	19.92



LTE Band 48						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				55315	55990	56665
Frequency (MHz)				3557.5	3625	3692.5
15	QPSK	1	0	22.90	23.01	22.99
15	QPSK	1	37	22.74	22.73	22.93
15	QPSK	1	74	22.65	22.79	22.76
15	QPSK	36	0	21.90	21.92	22.02
15	QPSK	36	20	21.86	21.80	21.91
15	QPSK	36	39	21.88	21.91	21.95
15	QPSK	75	0	21.78	21.80	21.87
15	16QAM	1	0	22.05	22.01	22.09
15	16QAM	1	37	21.87	22.08	22.03
15	16QAM	1	74	21.74	22.07	21.92
15	16QAM	36	0	20.80	20.88	20.99
15	16QAM	36	20	20.85	20.79	20.94
15	16QAM	36	39	20.68	20.78	20.82
15	16QAM	75	0	20.74	20.87	20.83
15	64QAM	1	0	21.03	21.15	21.04
15	64QAM	1	37	21.06	21.01	20.96
15	64QAM	1	74	20.98	20.86	20.94
15	64QAM	36	0	19.94	19.93	20.07
15	64QAM	36	20	19.81	19.89	19.92
15	64QAM	36	39	19.73	19.99	20.03
15	64QAM	75	0	19.69	19.76	19.87



LTE Band 48						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				55290	55990	56690
Frequency (MHz)				3555	3625	3695
10	QPSK	1	0	22.86	22.97	22.95
10	QPSK	1	25	22.70	22.69	22.89
10	QPSK	1	49	22.61	22.75	22.72
10	QPSK	25	0	21.86	21.88	21.98
10	QPSK	25	12	21.82	21.76	21.87
10	QPSK	25	25	21.84	21.87	21.91
10	QPSK	50	0	21.74	21.76	21.83
10	16QAM	1	0	22.01	21.97	22.05
10	16QAM	1	25	21.83	22.04	21.99
10	16QAM	1	49	21.70	22.03	21.88
10	16QAM	25	0	20.76	20.84	20.95
10	16QAM	25	12	20.81	20.75	20.90
10	16QAM	25	25	20.64	20.74	20.78
10	16QAM	50	0	20.70	20.83	20.79
10	64QAM	1	0	20.99	21.11	21.00
10	64QAM	1	25	21.02	20.97	20.92
10	64QAM	1	49	20.94	20.82	20.90
10	64QAM	25	0	19.90	19.89	20.03
10	64QAM	25	12	19.77	19.85	19.88
10	64QAM	25	25	19.69	19.95	19.99
10	64QAM	50	0	19.65	19.72	19.83



LTE Band 48						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				55265	55990	56175
Frequency (MHz)				3552.5	3625	3697.5
5	QPSK	1	0	22.81	22.92	22.90
5	QPSK	1	12	22.65	22.64	22.84
5	QPSK	1	24	22.56	22.70	22.67
5	QPSK	12	0	21.81	21.83	21.93
5	QPSK	12	7	21.77	21.71	21.82
5	QPSK	12	13	21.79	21.82	21.86
5	QPSK	25	0	21.69	21.71	21.78
5	16QAM	1	0	21.96	21.92	22.00
5	16QAM	1	12	21.78	21.99	21.94
5	16QAM	1	24	21.65	21.98	21.83
5	16QAM	12	0	20.71	20.79	20.90
5	16QAM	12	7	20.76	20.70	20.85
5	16QAM	12	13	20.59	20.69	20.73
5	16QAM	25	0	20.65	20.78	20.74
5	64QAM	1	0	20.94	21.06	20.95
5	64QAM	1	12	20.97	20.92	20.87
5	64QAM	1	24	20.89	20.77	20.85
5	64QAM	12	0	19.85	19.84	19.98
5	64QAM	12	7	19.72	19.80	19.83
5	64QAM	12	13	19.64	19.90	19.94
5	64QAM	25	0	19.60	19.67	19.78

**Effective Radiated Power and Effective Isotropic Radiated Power:**

LTE Band 48				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				55340		55990		56640	
Frequency (MHz)				3560		3625		3690	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	22.45	0.176	22.56	0.180	22.54	0.179
20	QPSK	1	49	22.29	0.169	22.28	0.169	22.48	0.177
20	QPSK	1	99	22.20	0.166	22.34	0.171	22.31	0.170
20	QPSK	50	0	21.45	0.140	21.47	0.140	21.57	0.144
20	QPSK	50	24	21.41	0.138	21.35	0.136	21.46	0.140
20	QPSK	50	50	21.43	0.139	21.46	0.140	21.50	0.141
20	QPSK	100	0	21.33	0.136	21.35	0.136	21.42	0.139
20	16QAM	1	0	21.60	0.145	21.56	0.143	21.64	0.146
20	16QAM	1	49	21.42	0.139	21.63	0.146	21.58	0.144
20	16QAM	1	99	21.29	0.135	21.62	0.145	21.47	0.140
20	16QAM	50	0	20.35	0.108	20.43	0.110	20.54	0.113
20	16QAM	50	24	20.40	0.110	20.34	0.108	20.49	0.112
20	16QAM	50	50	20.23	0.105	20.33	0.108	20.37	0.109
20	16QAM	100	0	20.29	0.107	20.42	0.110	20.38	0.109
20	64QAM	1	0	20.58	0.114	20.70	0.117	20.59	0.115
20	64QAM	1	49	20.61	0.115	20.56	0.114	20.51	0.112
20	64QAM	1	99	20.53	0.113	20.41	0.110	20.49	0.112
20	64QAM	50	0	19.49	0.089	19.48	0.089	19.62	0.092
20	64QAM	50	24	19.36	0.086	19.44	0.088	19.47	0.089
20	64QAM	50	50	19.28	0.085	19.54	0.090	19.58	0.091
20	64QAM	100	0	19.24	0.084	19.31	0.085	19.42	0.087



LTE Band 48				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				55315		55990		56665	
Frequency (MHz)				3557.5		3625		3692.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	22.40	0.174	22.51	0.178	22.49	0.177
15	QPSK	1	37	22.24	0.167	22.23	0.167	22.43	0.175
15	QPSK	1	74	22.15	0.164	22.29	0.169	22.26	0.168
15	QPSK	36	0	21.40	0.138	21.42	0.139	21.52	0.142
15	QPSK	36	20	21.36	0.137	21.30	0.135	21.41	0.138
15	QPSK	36	39	21.38	0.137	21.41	0.138	21.45	0.140
15	QPSK	75	0	21.28	0.134	21.30	0.135	21.37	0.137
15	16QAM	1	0	21.55	0.143	21.51	0.142	21.59	0.144
15	16QAM	1	37	21.37	0.137	21.58	0.144	21.53	0.142
15	16QAM	1	74	21.24	0.133	21.57	0.144	21.42	0.139
15	16QAM	36	0	20.30	0.107	20.38	0.109	20.49	0.112
15	16QAM	36	20	20.35	0.108	20.29	0.107	20.44	0.111
15	16QAM	36	39	20.18	0.104	20.28	0.107	20.32	0.108
15	16QAM	75	0	20.24	0.106	20.37	0.109	20.33	0.108
15	64QAM	1	0	20.53	0.113	20.65	0.116	20.54	0.113
15	64QAM	1	37	20.56	0.114	20.51	0.112	20.46	0.111
15	64QAM	1	74	20.48	0.112	20.36	0.109	20.44	0.111
15	64QAM	36	0	19.44	0.088	19.43	0.088	19.57	0.091
15	64QAM	36	20	19.31	0.085	19.39	0.087	19.42	0.087
15	64QAM	36	39	19.23	0.084	19.49	0.089	19.53	0.090
15	64QAM	75	0	19.19	0.083	19.26	0.084	19.37	0.086



LTE Band 48				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				55290		55990		56690	
Frequency (MHz)				3555		3625		3695	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	22.36	0.172	22.47	0.177	22.45	0.176
10	QPSK	1	25	22.20	0.166	22.19	0.166	22.39	0.173
10	QPSK	1	49	22.11	0.163	22.25	0.168	22.22	0.167
10	QPSK	25	0	21.36	0.137	21.38	0.137	21.48	0.141
10	QPSK	25	12	21.32	0.136	21.26	0.134	21.37	0.137
10	QPSK	25	25	21.34	0.136	21.37	0.137	21.41	0.138
10	QPSK	50	0	21.24	0.133	21.26	0.134	21.33	0.136
10	16QAM	1	0	21.51	0.142	21.47	0.140	21.55	0.143
10	16QAM	1	25	21.33	0.136	21.54	0.143	21.49	0.141
10	16QAM	1	49	21.20	0.132	21.53	0.142	21.38	0.137
10	16QAM	25	0	20.26	0.106	20.34	0.108	20.45	0.111
10	16QAM	25	12	20.31	0.107	20.25	0.106	20.40	0.110
10	16QAM	25	25	20.14	0.103	20.24	0.106	20.28	0.107
10	16QAM	50	0	20.20	0.105	20.33	0.108	20.29	0.107
10	64QAM	1	0	20.49	0.112	20.61	0.115	20.50	0.112
10	64QAM	1	25	20.52	0.113	20.47	0.111	20.42	0.110
10	64QAM	1	49	20.44	0.111	20.32	0.108	20.40	0.110
10	64QAM	25	0	19.40	0.087	19.39	0.087	19.53	0.090
10	64QAM	25	12	19.27	0.085	19.35	0.086	19.38	0.087
10	64QAM	25	25	19.19	0.083	19.45	0.088	19.49	0.089
10	64QAM	50	0	19.15	0.082	19.22	0.084	19.33	0.086



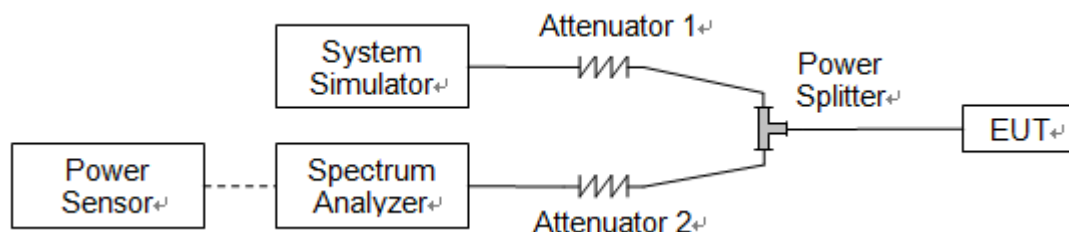
LTE Band 48				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				55265		55990		56175	
Frequency (MHz)				3552.5		3625		3697.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.31	0.170	22.42	0.175	22.40	0.174
5	QPSK	1	12	22.15	0.164	22.14	0.164	22.34	0.171
5	QPSK	1	24	22.06	0.161	22.20	0.166	22.17	0.165
5	QPSK	12	0	21.31	0.135	21.33	0.136	21.43	0.139
5	QPSK	12	7	21.27	0.134	21.21	0.132	21.32	0.136
5	QPSK	12	13	21.29	0.135	21.32	0.136	21.36	0.137
5	QPSK	25	0	21.19	0.132	21.21	0.132	21.28	0.134
5	16QAM	1	0	21.46	0.140	21.42	0.139	21.50	0.141
5	16QAM	1	12	21.28	0.134	21.49	0.141	21.44	0.139
5	16QAM	1	24	21.15	0.130	21.48	0.141	21.33	0.136
5	16QAM	12	0	20.21	0.105	20.29	0.107	20.40	0.110
5	16QAM	12	7	20.26	0.106	20.20	0.105	20.35	0.108
5	16QAM	12	13	20.09	0.102	20.19	0.104	20.23	0.105
5	16QAM	25	0	20.15	0.104	20.28	0.107	20.24	0.106
5	64QAM	1	0	20.44	0.111	20.56	0.114	20.45	0.111
5	64QAM	1	12	20.47	0.111	20.42	0.110	20.37	0.109
5	64QAM	1	24	20.39	0.109	20.27	0.106	20.35	0.108
5	64QAM	12	0	19.35	0.086	19.34	0.086	19.48	0.089
5	64QAM	12	7	19.22	0.084	19.30	0.085	19.33	0.086
5	64QAM	12	13	19.14	0.082	19.40	0.087	19.44	0.088
5	64QAM	25	0	19.10	0.081	19.17	0.083	19.28	0.085

2.2. Occupied Bandwidth

2.2.1. Requirement

According to FCC section 2.1049, 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 radiated by a given emission. Occupied bandwidth is also known as the 99% emission bandwidth.

2.2.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

2.2.3. Test procedure

KDB 971168 D01v03 Section 4.1 and ANSI/TIA-603-E-2016.

**2.2.4. Test Result**

LTE Band	BW(MHz)	Channel Level	Channel	Frequency (MHz)	Modulation	99% BW (MHz)	26dB BW (MHz)	Verdict
B48	5	Low	55265	3552.5	QPSK	4.4769	4.8512	PASS
B48	5	Low	55265	3552.5	16QAM	4.4845	4.9561	PASS
B48	5	Low	55265	3552.5	64QAM	4.4921	4.8967	PASS
B48	5	Mid	55990	3625	QPSK	4.4966	4.8991	PASS
B48	5	Mid	55990	3625	16QAM	4.4833	4.8485	PASS
B48	5	Mid	55990	3625	64QAM	4.4895	4.8374	PASS
B48	5	High	56715	3697.5	QPSK	4.4798	4.8440	PASS
B48	5	High	56715	3697.5	16QAM	4.4775	4.9490	PASS
B48	5	High	56715	3697.5	64QAM	4.4905	4.8217	PASS
B48	10	Low	55290	3555	QPSK	8.9858	9.6037	PASS
B48	10	Low	55290	3555	16QAM	8.9561	9.9610	PASS
B48	10	Low	55290	3555	64QAM	8.9627	10.3443	PASS
B48	10	Mid	55990	3625	QPSK	8.9892	9.5949	PASS
B48	10	Mid	55990	3625	16QAM	8.9709	9.8820	PASS
B48	10	Mid	55990	3625	64QAM	8.9411	10.2827	PASS
B48	10	High	56690	3695	QPSK	8.9293	9.5741	PASS
B48	10	High	56690	3695	16QAM	8.9258	9.6209	PASS
B48	10	High	56690	3695	64QAM	8.9479	9.7295	PASS
B48	15	Low	55315	3557.5	QPSK	13.432	14.650	PASS
B48	15	Low	55315	3557.5	16QAM	13.441	14.656	PASS
B48	15	Low	55315	3557.5	64QAM	13.424	14.510	PASS
B48	15	Mid	55990	3625	QPSK	13.384	14.464	PASS
B48	15	Mid	55990	3625	16QAM	13.402	14.573	PASS
B48	15	Mid	55990	3625	64QAM	13.396	14.368	PASS
B48	15	High	56665	3692.5	QPSK	13.445	14.747	PASS
B48	15	High	56665	3692.5	16QAM	13.430	14.149	PASS
B48	15	High	56665	3692.5	64QAM	13.410	14.421	PASS
B48	20	Low	55340	3560	QPSK	17.871	19.459	PASS
B48	20	Low	55340	3560	16QAM	17.915	19.299	PASS
B48	20	Low	55340	3560	64QAM	17.886	19.144	PASS
B48	20	Mid	55990	3625	QPSK	17.913	19.012	PASS
B48	20	Mid	55990	3625	16QAM	17.861	19.234	PASS
B48	20	Mid	55990	3625	64QAM	17.875	18.847	PASS



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B48	20	High	56640	3690	QPSK	17.925	19.162	PASS
B48	20	High	56640	3690	16QAM	17.852	18.915	PASS
B48	20	High	56640	3690	64QAM	17.882	19.146	PASS



B48 / 5MHz / QPSK/ Low CH



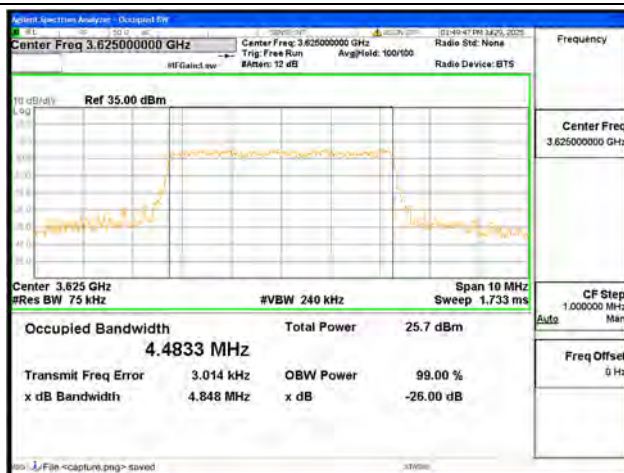
B48 / 5MHz / 16QAM/ Low CH



B48 / 5MHz / 64QAM/ Low CH



B48 / 5MHz / QPSK/ Mid CH



B48 / 5MHz / 16QAM/ Mid CH



B48 / 5MHz / 64QAM/ Mid CH



B48 / 5MHz / QPSK/ High CH



B48 / 5MHz / 16QAM/ High CH



B48 / 5MHz / 64QAM/ High CH



B48 / 10MHz / QPSK/ Low CH



B48 / 10MHz / 16QAM/ Low CH



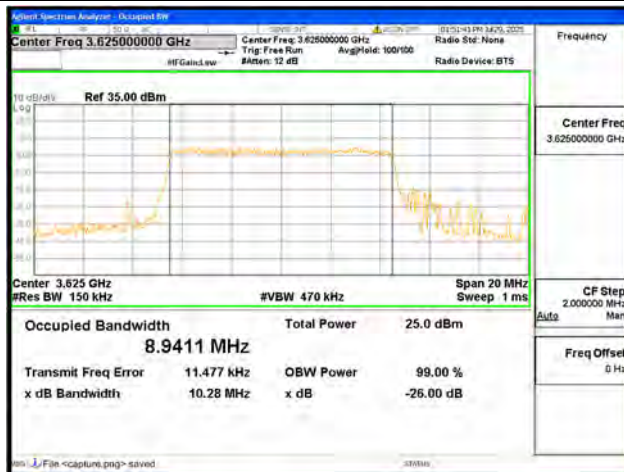
B48 / 10MHz / 64QAM/ Low CH



B48 / 10MHz / QPSK/ Mid CH



B48 / 10MHz / 16QAM/ Mid CH



B48 / 10MHz / 64QAM/ Mid CH



B48 / 10MHz / QPSK/ High CH



B48 / 10MHz / 16QAM/ High CH



B48 / 10MHz / 64QAM/ High CH



B48 / 15MHz / QPSK/ Low CH



B48 / 15MHz / 16QAM/ Low CH



B48 / 15MHz / 64QAM/ Low CH



B48 / 15MHz / QPSK/ Mid CH



B48 / 15MHz / 16QAM/ Mid CH



B48 / 15MHz / 64QAM/ Mid CH



B48 / 15MHz / QPSK/ High CH



B48 / 15MHz / 16QAM/ High CH



B48 / 15MHz / 64QAM/ High CH



B48 / 20MHz / QPSK/ Low CH



B48 / 20MHz / 16QAM/ Low CH



B48 / 20MHz / 64QAM/ Low CH



B48 / 20MHz / QPSK/ Mid CH



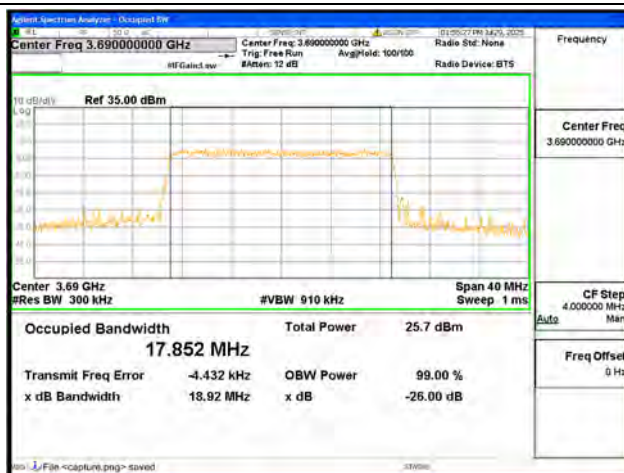
B48 / 20MHz / 16QAM/ Mid CH



B48 / 20MHz / 64QAM/ Mid CH



B48 / 20MHz / QPSK/ High CH



B48 / 20MHz / 16QAM/ High CH



B48 / 20MHz / 64QAM/ High CH

2.3. Frequency Stability

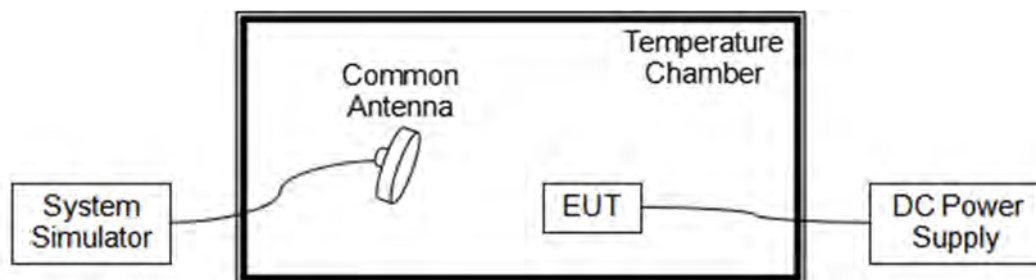
2.3.1. Requirement

According to FCC section 2.1055 & 90.213, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

- (a) The temperature is varied from -30°C to $+50^{\circ}\text{C}$ at intervals of not more than 10°C .
- (b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

Note: The operating temperature of EUT is from -20°C to 60°C , which are specified by the applicant.

2.3.2. Test Description



The EUT which is powered by the DC Power Supply directly, is located in the Temperature Chamber. The EUT is commanded by the System Simulator (SS) to operate at the maximum output power. A call is established between the EUT and the SS via a Common Antenna.

2.3.3. Test procedure

KDB 971168 D01v03 Section 9.0 and ANSI/TIA-603-E-2016.



2.3.4. Test Result

The nominal, highest and lowest extreme voltages are separately 3.87V, 4.45V and 3.4V, which are specified by the applicant; the normal temperature here used is 20°C.

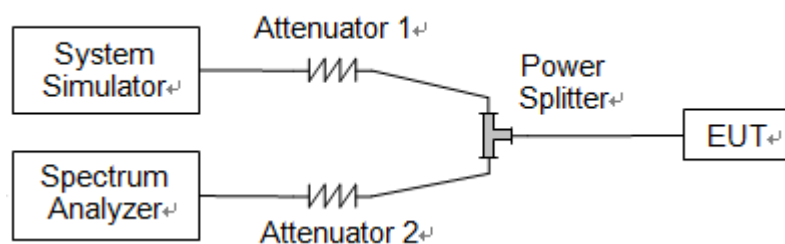
LTE Band 48, 256QAM, QPSK, Channel 55990, Frequency 3625.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	-2	-0.001	PASS
Normal		-20	15	0.004	
Normal		-10	18	0.005	
Normal		0	15	0.004	
Normal		+10	-16	-0.004	
Normal		+20	6	0.002	
Normal		+30	20	0.006	
Normal		+40	-13	-0.004	
Normal		+50	-14	-0.004	
Normal		+60	2	0.001	
High	4.45	+20	15	0.004	PASS
BATT.ENDPOINT	3.40	+20	20	0.006	

2.4. Peak to Average Radio

2.4.1. Requirement

According to FCC 96.41(g), the peak-to-average power ratio (PAPR) of any CBSD transmitter output power must not exceed 13 dB.

2.4.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

2.4.3. Test procedure

KDB 971168 D01v03 Section 5.7 and ANSI/TIA-603-E-2016.

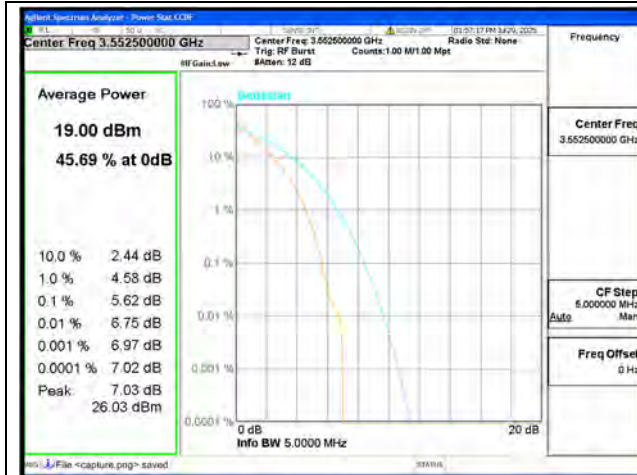
2.4.4. Test Result



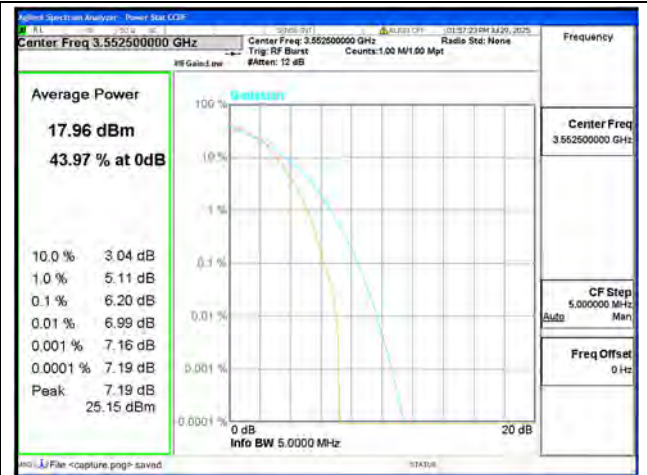
LTE Band	BW(MHz)	Channel Level	Channel	Frequency (MHz)	Modulation	Peak to Average Radio(dB)	Verdict
B48	5	Low	55265	3552.5	QPSK	5.62	PASS
B48	5	Low	55265	3552.5	16QAM	6.20	PASS
B48	5	Low	55265	3552.5	64QAM	6.63	PASS
B48	5	Mid	55990	3625	QPSK	5.58	PASS
B48	5	Mid	55990	3625	16QAM	6.19	PASS
B48	5	Mid	55990	3625	64QAM	6.81	PASS
B48	5	High	56715	3697.5	QPSK	5.59	PASS
B48	5	High	56715	3697.5	16QAM	6.18	PASS
B48	5	High	56715	3697.5	64QAM	6.62	PASS
B48	10	Low	55290	3555	QPSK	5.53	PASS
B48	10	Low	55290	3555	16QAM	6.15	PASS
B48	10	Low	55290	3555	64QAM	6.57	PASS
B48	10	Mid	55990	3625	QPSK	5.51	PASS
B48	10	Mid	55990	3625	16QAM	6.17	PASS
B48	10	Mid	55990	3625	64QAM	6.57	PASS
B48	10	High	56690	3695	QPSK	5.48	PASS
B48	10	High	56690	3695	16QAM	6.11	PASS
B48	10	High	56690	3695	64QAM	6.53	PASS
B48	15	Low	55315	3557.5	QPSK	5.46	PASS
B48	15	Low	55315	3557.5	16QAM	6.07	PASS
B48	15	Low	55315	3557.5	64QAM	6.41	PASS
B48	15	Mid	55990	3625	QPSK	5.43	PASS
B48	15	Mid	55990	3625	16QAM	6.10	PASS
B48	15	Mid	55990	3625	64QAM	6.45	PASS
B48	15	High	56665	3692.5	QPSK	5.34	PASS
B48	15	High	56665	3692.5	16QAM	6.03	PASS
B48	15	High	56665	3692.5	64QAM	6.42	PASS
B48	20	Low	55340	3560	QPSK	5.55	PASS
B48	20	Low	55340	3560	16QAM	6.31	PASS
B48	20	Low	55340	3560	64QAM	6.45	PASS
B48	20	Mid	55990	3625	QPSK	5.60	PASS
B48	20	Mid	55990	3625	16QAM	6.34	PASS
B48	20	Mid	55990	3625	64QAM	6.42	PASS
B48	20	High	56640	3690	QPSK	5.55	PASS
B48	20	High	56640	3690	16QAM	6.31	PASS



B48	20	High	56640	3690	64QAM	6.39	PASS
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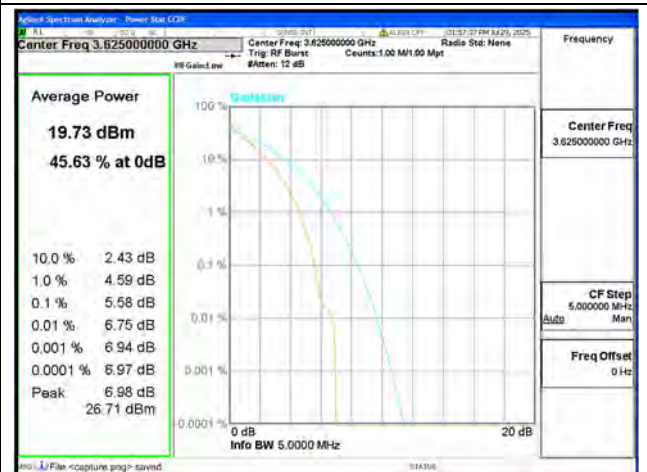
B48 / 5MHz / Low CH / QPSK



B48 / 5MHz / Low CH / 16QAM



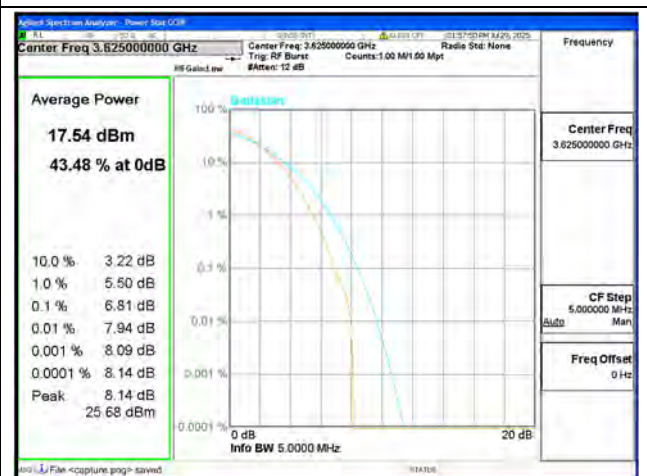
B48 / 5MHz / Low CH / 64QAM



B48 / 5MHz / Mid CH / QPSK



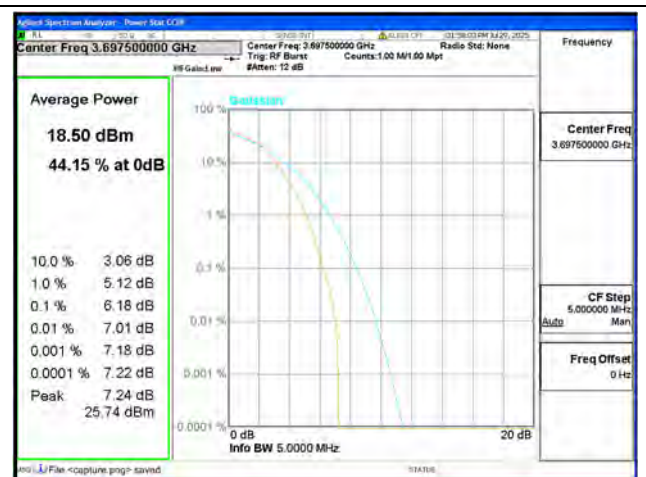
B48 / 5MHz / Mid CH / 16QAM



B48 / 5MHz / Mid CH / 64QAM



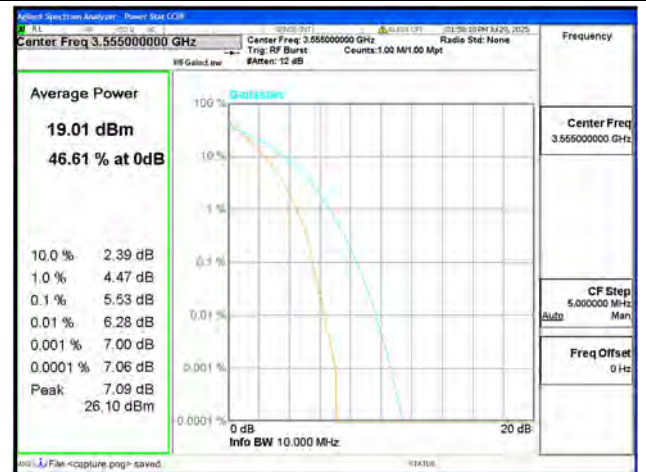
B48 / 5MHz / High CH / QPSK



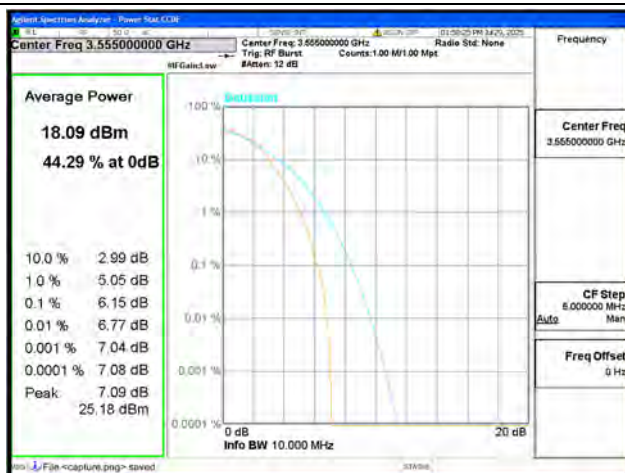
B48 / 5MHz / High CH / 16QAM



B48 / 5MHz / High CH / 64QAM



B48 / 10MHz / Low CH / QPSK



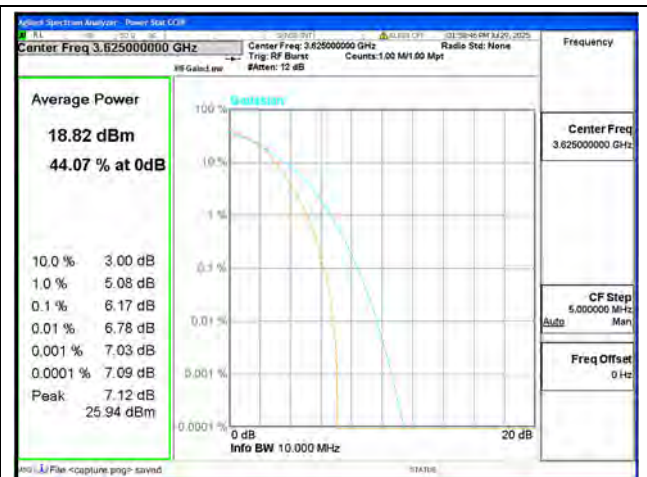
B48 / 10MHz / Low CH / 16QAM



B48 / 10MHz / Low CH / 64QAM



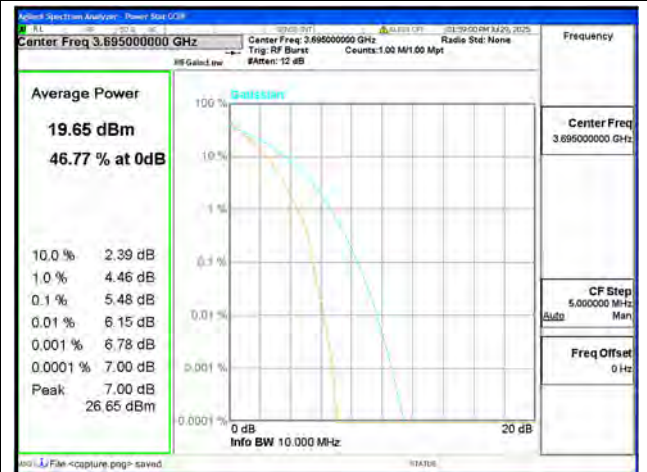
B48 / 10MHz / Mid CH / QPSK



B48 / 10MHz / Mid CH / 16QAM



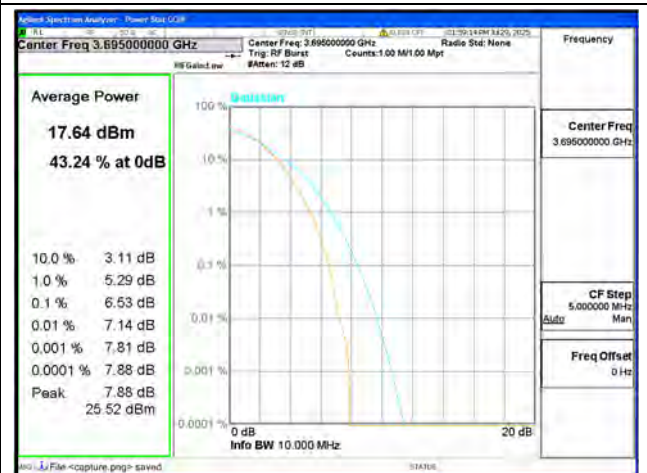
B48 / 10MHz / Mid CH / 64QAM



B48 / 10MHz / High CH / QPSK



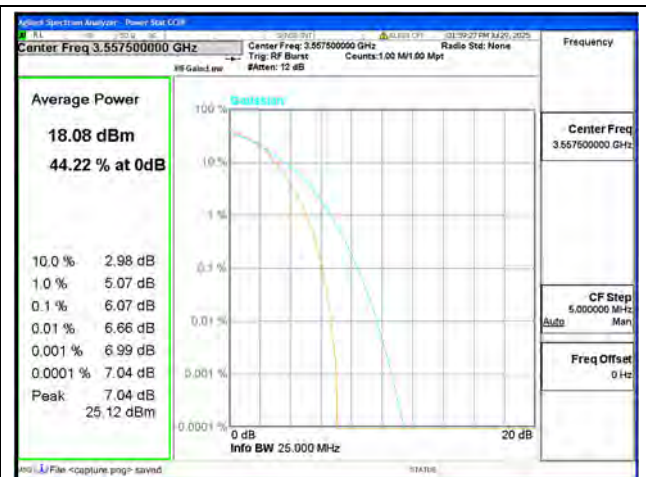
B48 / 10MHz / High CH / 16QAM



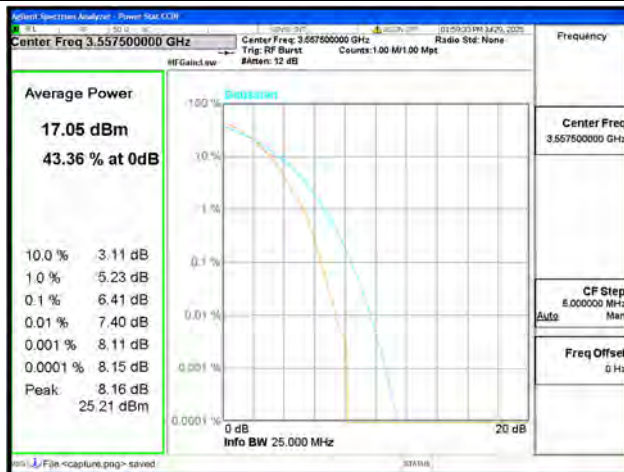
B48 / 10MHz / High CH / 64QAM



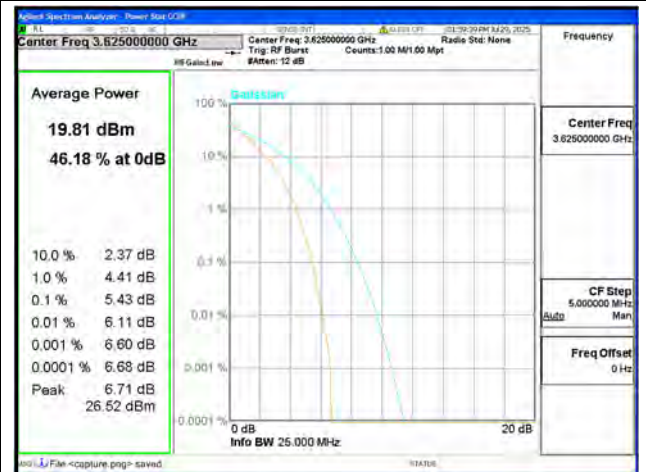
B48 / 15MHz / Low CH / QPSK



B48 / 15MHz / Low CH / 16QAM



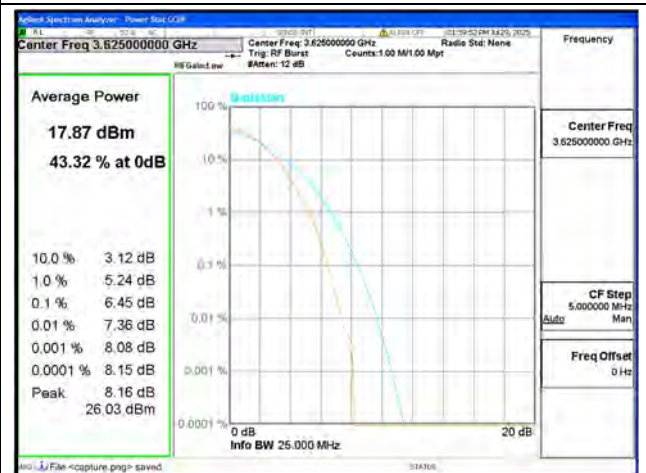
B48 / 15MHz / Low CH / 64QAM



B48 / 15MHz / Mid CH / QPSK



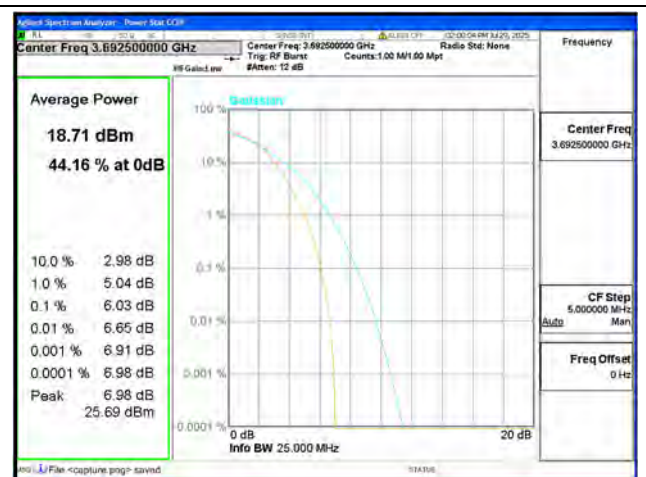
B48 / 15MHz / Mid CH / 16QAM



B48 / 15MHz / Mid CH / 64QAM



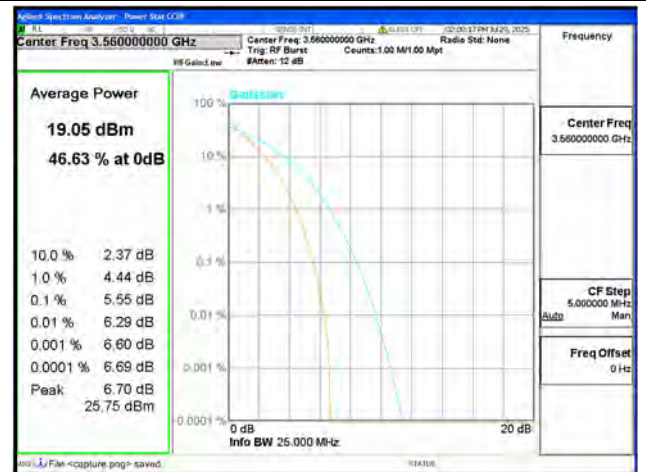
B48 / 15MHz / High CH / QPSK



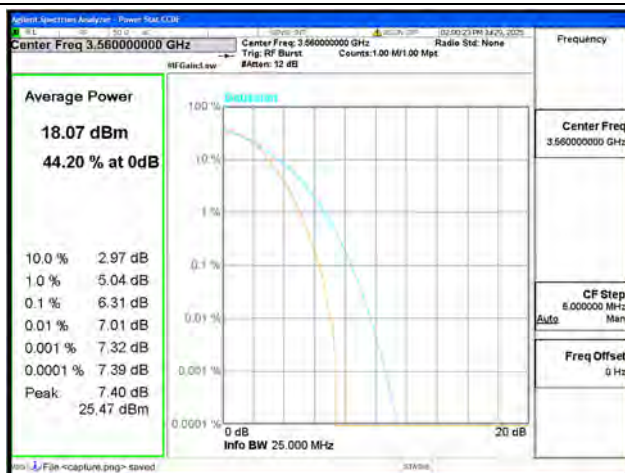
B48 / 15MHz / High CH / 16QAM



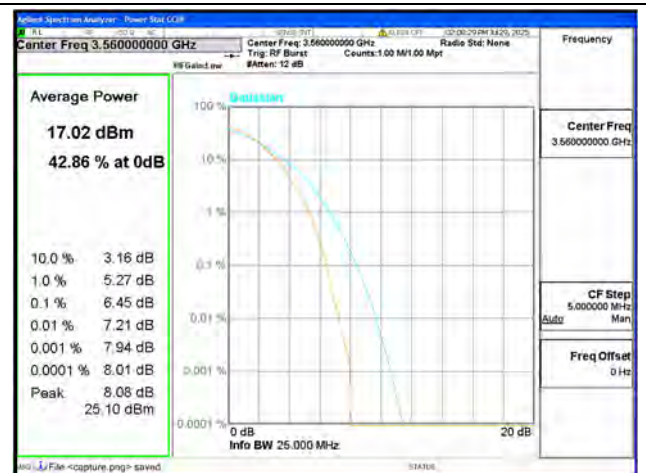
B48 / 15MHz / High CH / 64QAM



B48 / 20MHz / Low CH / QPSK



B48 / 20MHz / Low CH / 16QAM



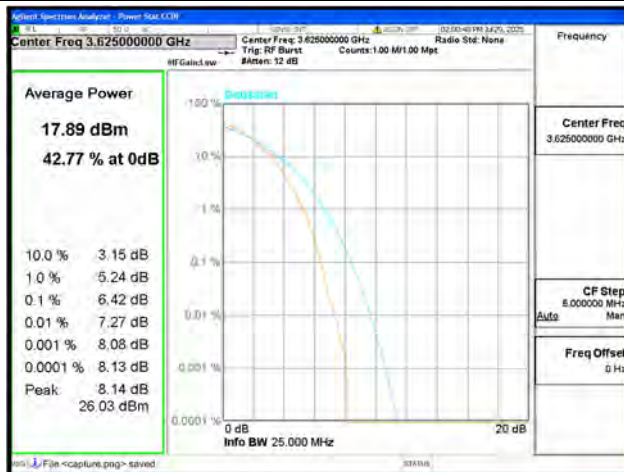
B48 / 20MHz / Low CH / 64QAM



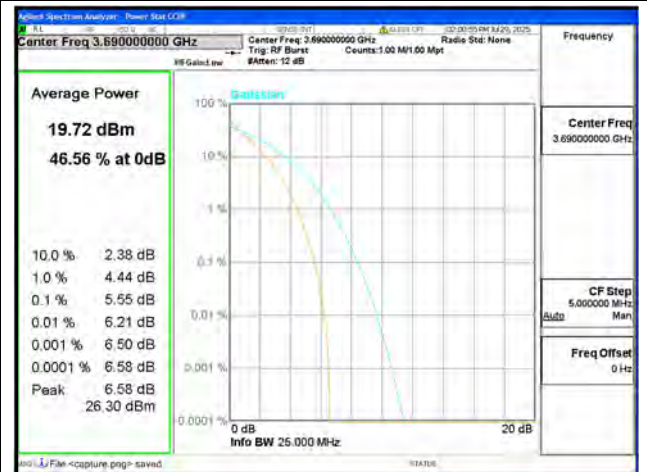
B48 / 20MHz / Mid CH / QPSK



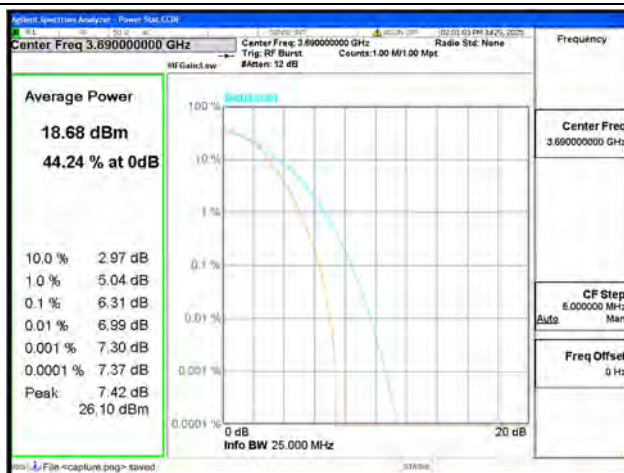
B48 / 20MHz / Mid CH / 16QAM



B48 / 20MHz / Mid CH / 64QAM



B48 / 20MHz / High CH / QPSK



B48 / 20MHz / High CH / 16QAM



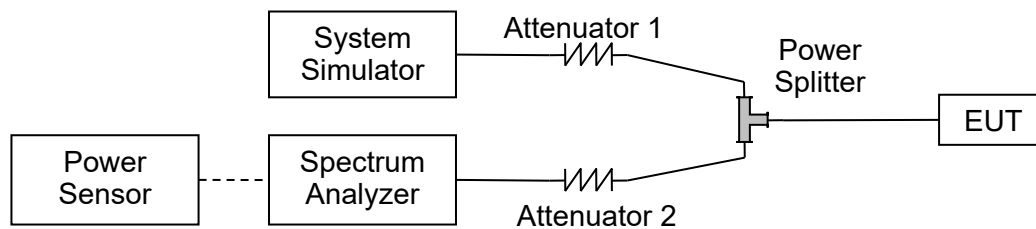
B48 / 20MHz / High CH / 64QAM

2.5. Conducted Spurious Emissions

2.5.1. Requirement

According to FCC section 96.41(e), the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz .

2.5.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

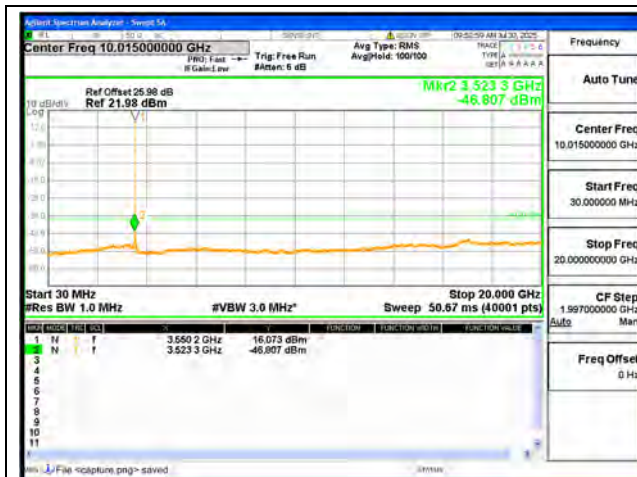
2.5.1. Test procedure

KDB 971168 D01v03 Section 6.0 and ANSI/TIA-603-E-2016.



2.5.2. Test Result





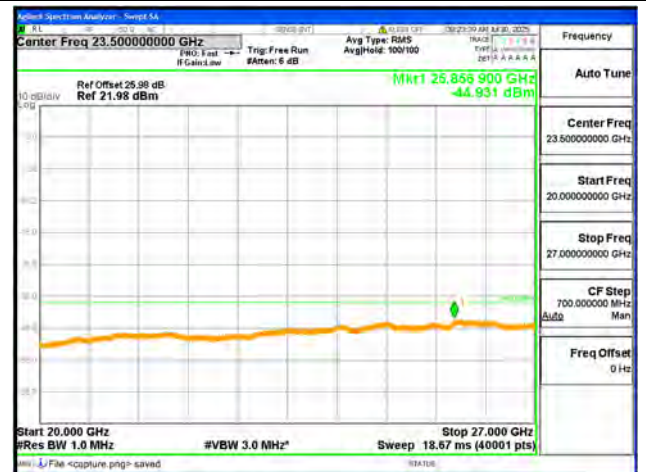
B48-30M-20G / 10MHz / Low CH / QPSK



B48-20G-37G / 10MHz / Low CH / QPSK



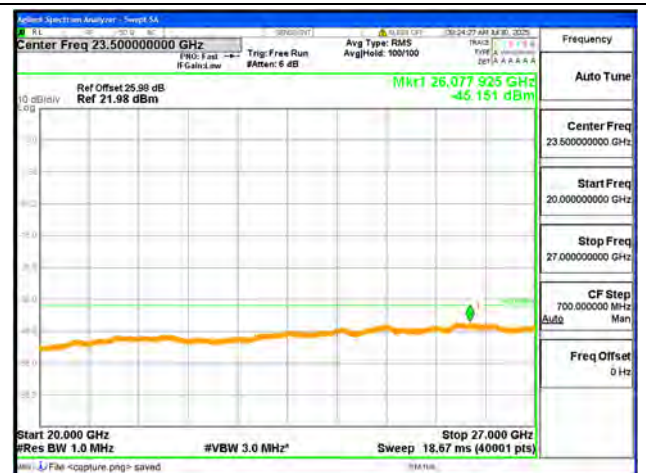
B48-30M-20G / 10MHz / Mid CH / QPSK



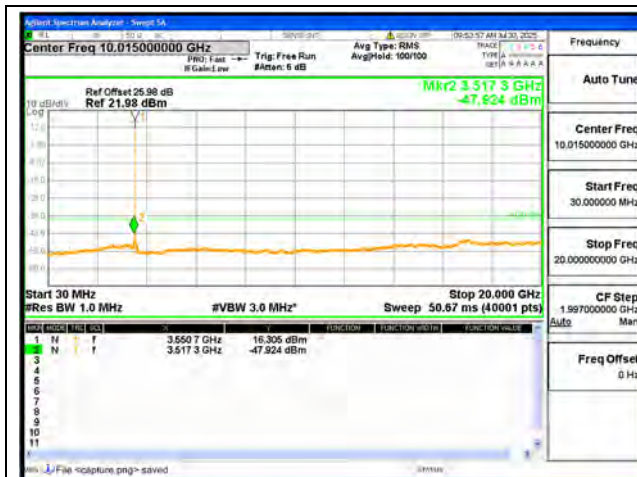
B48-20G-37G / 10MHz / Mid CH / QPSK



B48-30M-20G / 10MHz / High CH / QPSK



B48-20G-37G / 10MHz / High CH / QPSK



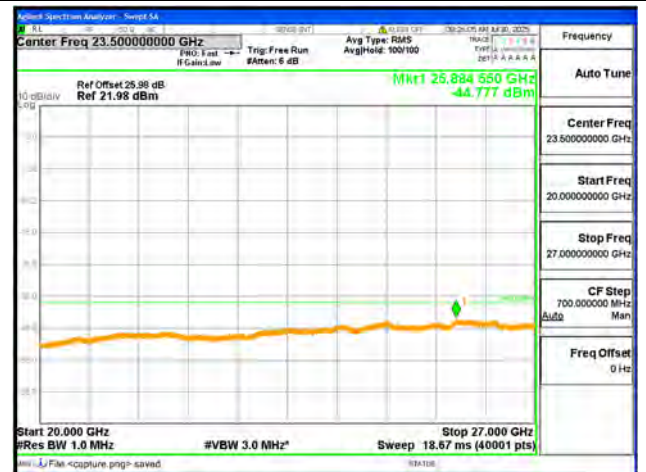
B48-30M-20G / 15MHz / Low CH / QPSK



B48-20G-37G / 15MHz / Low CH / QPSK



B48-30M-20G / 15MHz / Mid CH / QPSK



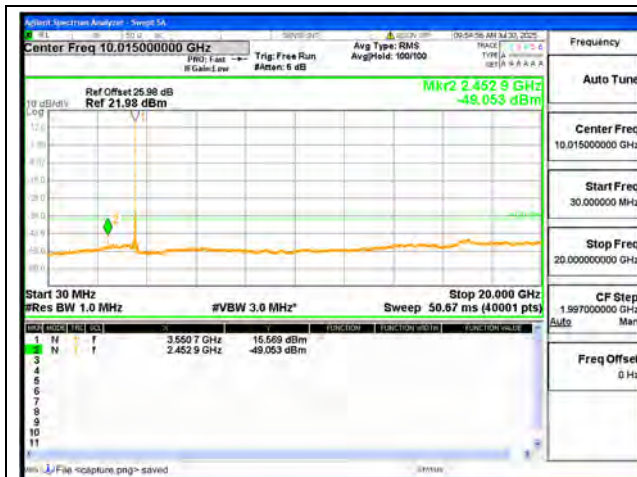
B48-20G-37G / 15MHz / Mid CH / QPSK



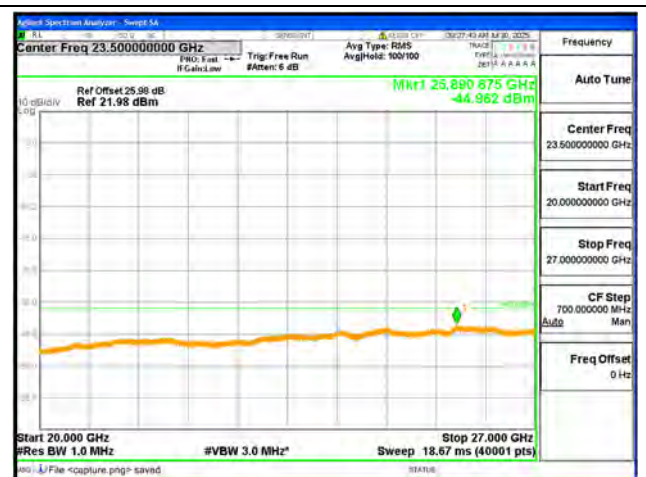
B48-30M-20G / 15MHz / High CH / QPSK



B48-20G-37G / 15MHz / High CH / QPSK



B48-30M-20G / 20MHz / Low CH / QPSK



B48-20G-37G / 20MHz / Low CH / QPSK



B48-30M-20G / 20MHz / Mid CH / QPSK



B48-20G-37G / 20MHz / Mid CH / QPSK



B48-30M-20G / 20MHz / High CH / QPSK



B48-20G-37G / 20MHz / High CH / QPSK



2.6. Band Edge

2.6.1. Requirement

Part 96.41(e)(1)(i)

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, the conducted power of any CBSD emission shall not exceed -25 dBm/MHz.

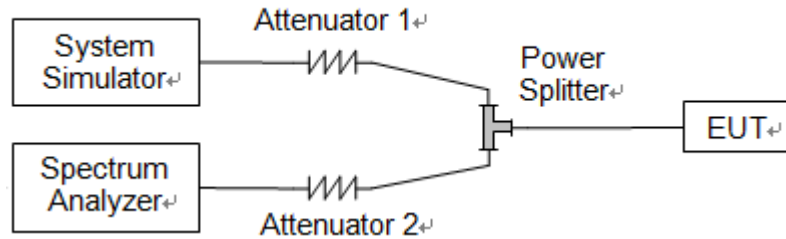
Part 96.41(e)(1)(ii)

For channel and frequency assignments made by a CBSD to End User Devices, the conducted power of any End User Device emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0 to B megahertz (where B is the bandwidth in megahertz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B megahertz below the lower CBSD-assigned channel edge. At all frequencies greater than B megahertz above the upper CBSD assigned channel edge and less than B megahertz below the lower CBSD-assigned channel edge, the conducted power of any End User Device emission shall not exceed -25 dBm/MHz.

Part 96.41(e)(2)

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 -40 dBm/MHz.

2.6.2. Test Description



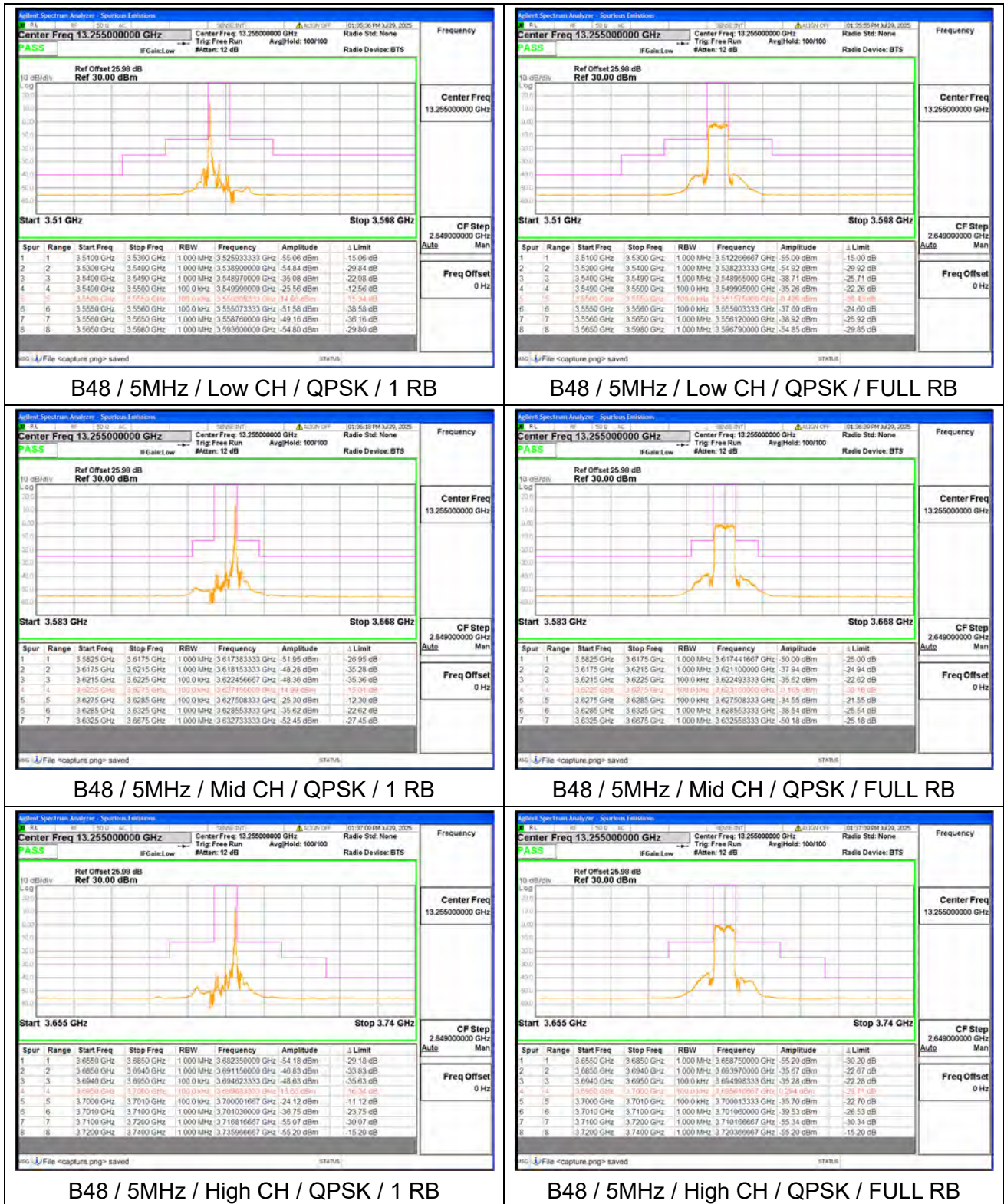
The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

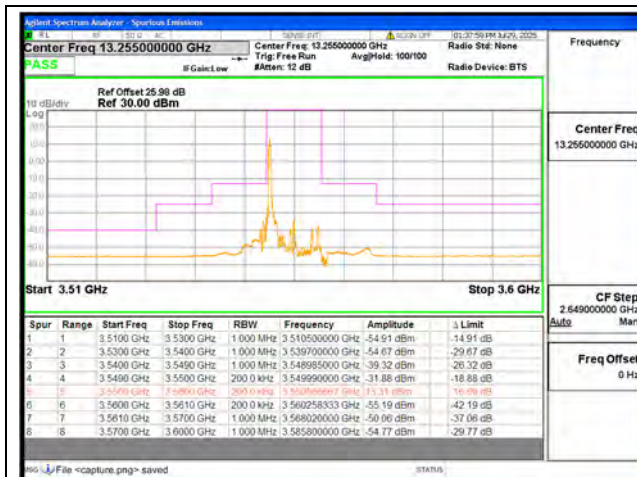
2.6.3. Test procedure

KDB 971168 D01v03 Section 6.0 and ANSI/TIA-603-E-2016.

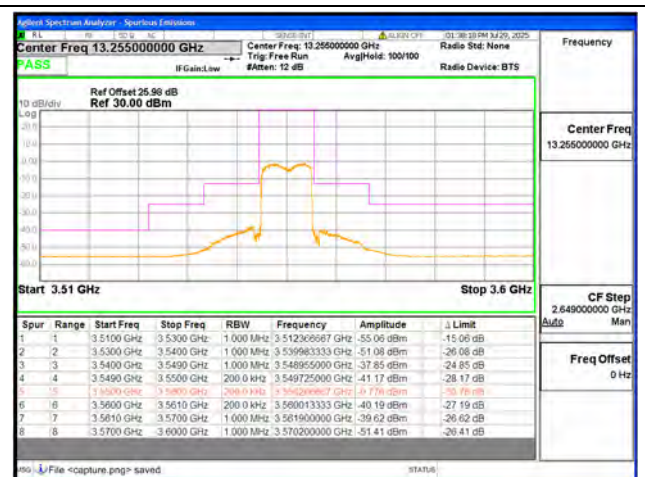


2.6.4. Test Result

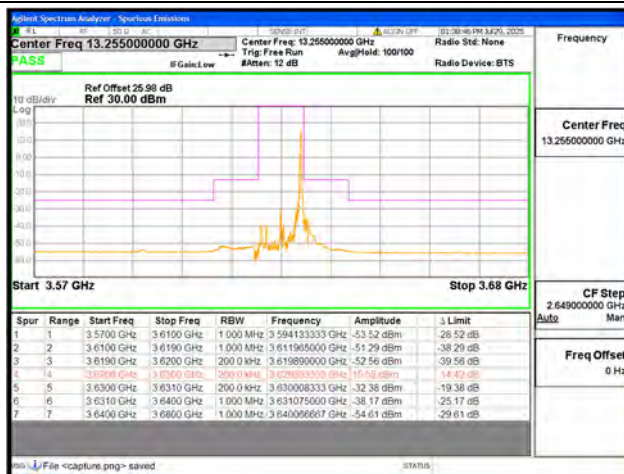




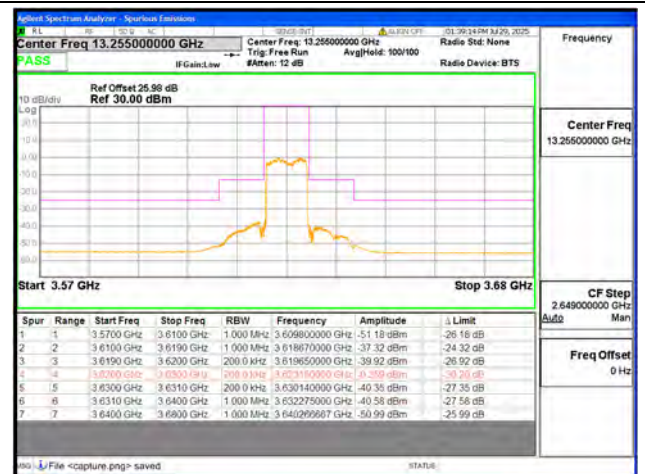
B48 / 10MHz / Low CH / QPSK / 1 RB



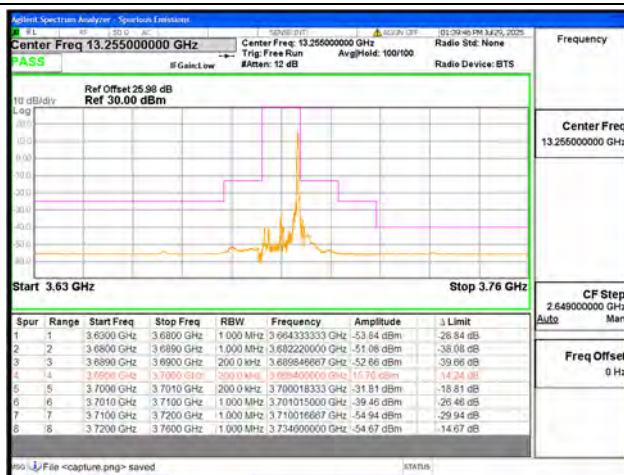
B48 / 10MHz / Low CH / QPSK / FULL RB



B48 / 10MHz / Mid CH / QPSK / 1 RB



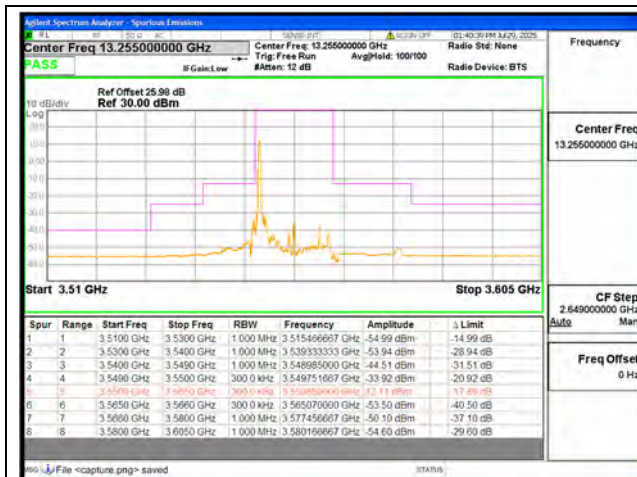
B48 / 10MHz / Mid CH / QPSK / FULL RB



B48 / 10MHz / High CH / QPSK / 1 RB



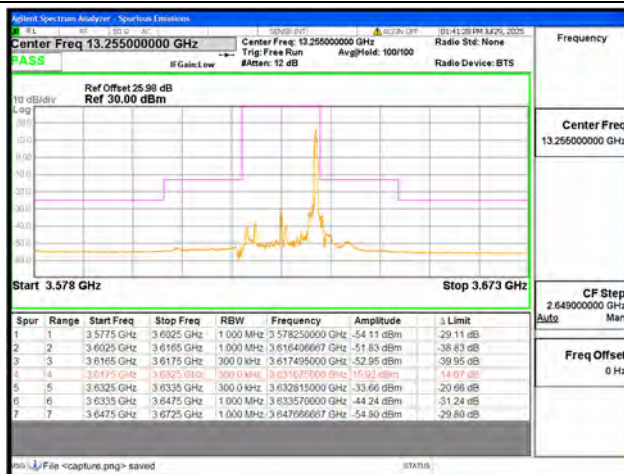
B48 / 10MHz / High CH / QPSK / FULL RB



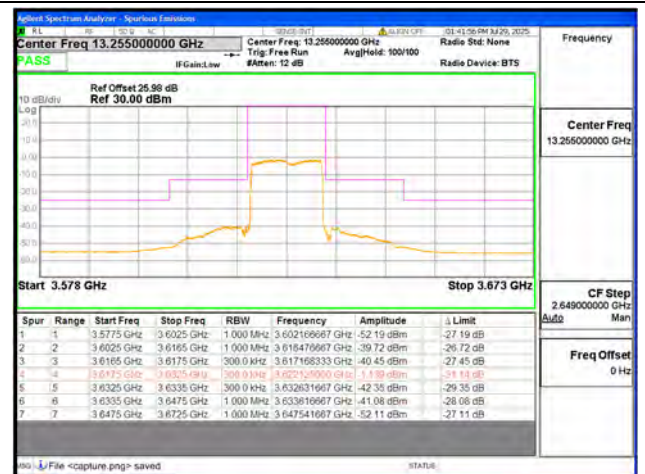
B48 / 15MHz / Low CH / QPSK / 1 RB



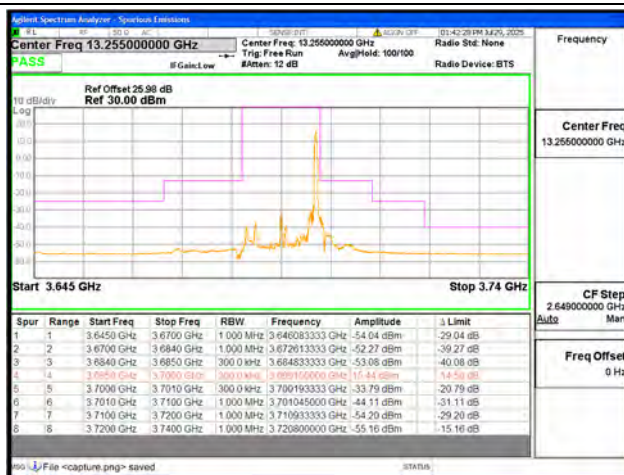
B48 / 15MHz / Low CH / QPSK / FULL RB



B48 / 15MHz / Mid CH / QPSK / 1 RB



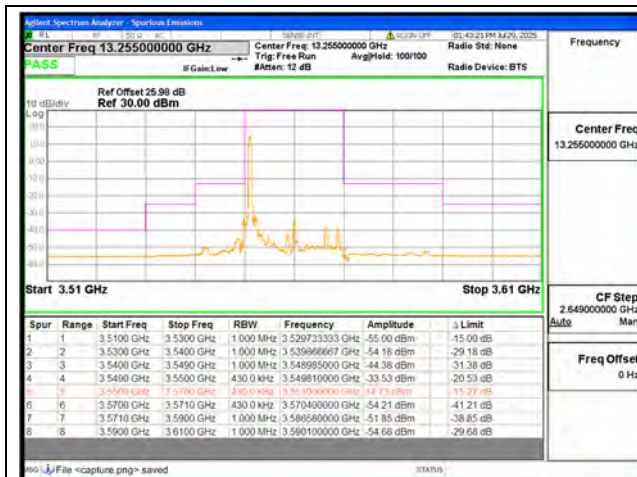
B48 / 15MHz / Mid CH / QPSK / FULL RB



B48 / 15MHz / High CH / QPSK / 1 RB



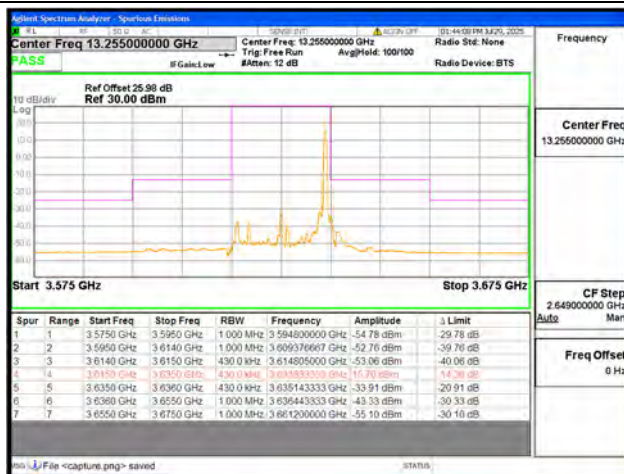
B48 / 15MHz / High CH / QPSK / FULL RB



B48 / 20MHz / Low CH / QPSK / 1 RB



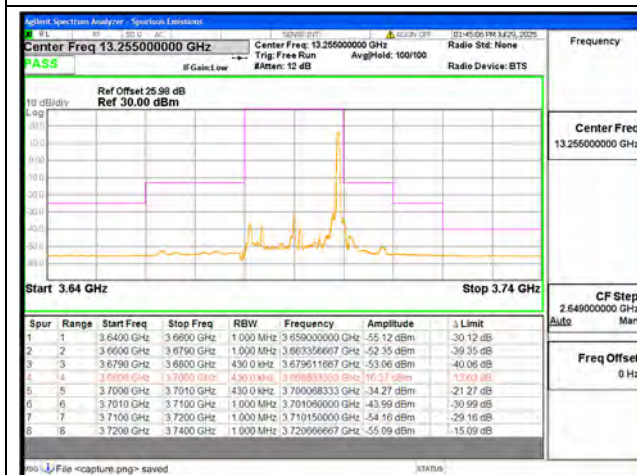
B48 / 20MHz / Low CH / QPSK / FULL RB



B48 / 20MHz / Mid CH / QPSK / 1 RB



B48 / 20MHz / Mid CH / QPSK / FULL RB



B48 / 20MHz / High CH / QPSK / 1 RB



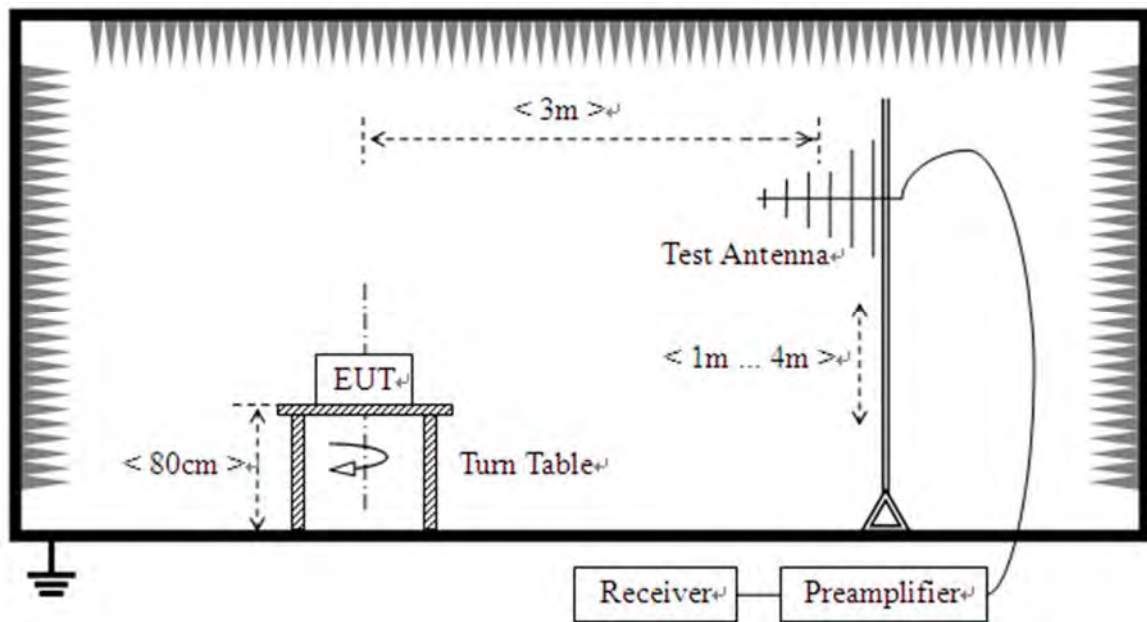
B48 / 20MHz / High CH / QPSK / FULL RB

2.7. Radiated Spurious Emissions

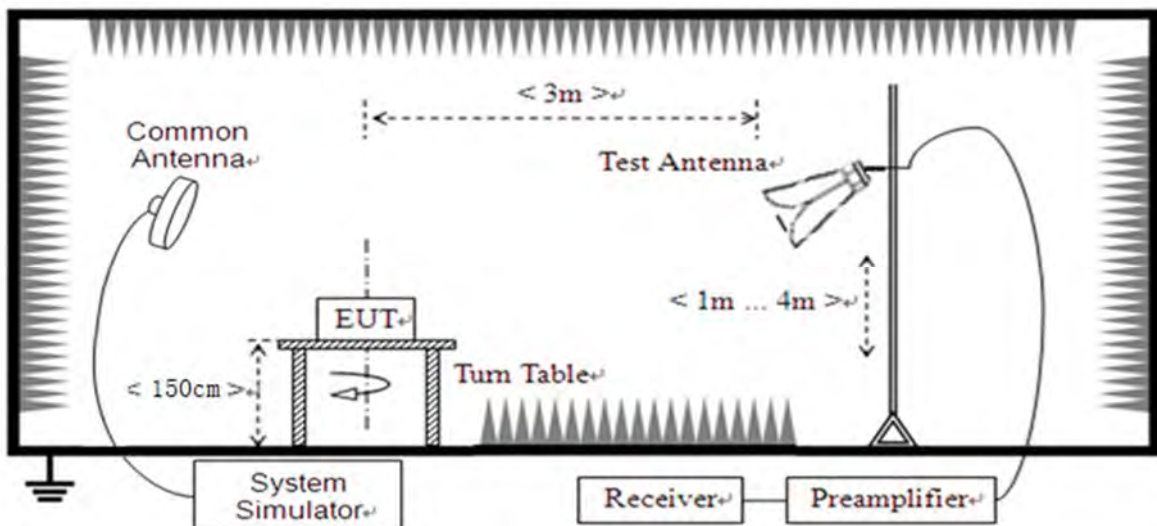
2.7.1. Requirement

The power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz .

2.7.2. Test Description



(For the test frequency from 30MHz to 1GHz)



(For the test frequency above 1GHz)



The EUT is located in a 3m Full-Anechoic Chamber, the cable loss, air loss and so on of the site as factors are pre-calibrated using the "Substitution" method, and calculated to correct the reading.

A call is established between the EUT and the SS via a Common Antenna. The EUT is commanded by the SS to operate at the maximum and minimum output power, and only the test result of the maximum output power was recorded.

In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground and the Turn Table is actuated to turn from 0° to 360° to determine the maximum value of the radiated power. The emission levels at both horizontal and vertical polarizations should be tested. The Filters consists of Notch Filters and High Pass Filter.

Note: when doing measurements above 1GHz, the EUT has been within the 3dB cone width of the horn antenna during horizontal antenna.

2.7.3.Test procedure

KDB 971168 D01v03 Section 5.8 and ANSI/TIA-603-E-2016.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video band width is set to 3MHz for peak measurements.



2.7.4. Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested to verify the out of band emissions.

The substitution corrections are obtained as described below:

$$A_{\text{SUBST}} = P_{\text{SUBST_TX}} - P_{\text{SUBST_RX}} - L_{\text{SUBST_CABLES}} + G_{\text{SUBST_TX_ANT}}$$

$$A_{\text{TOT}} = L_{\text{CABLES}} + A_{\text{SUBST}}$$

Where A_{SUBST} is the final substitution correction including receive antenna gain.

$P_{\text{SUBST_TX}}$ is signal generator level,

$P_{\text{SUBST_RX}}$ is receiver level,

$L_{\text{SUBST_CABLES}}$ is cable losses including TX cable,

$G_{\text{SUBST_TX_ANT}}$ is substitution antenna gain.

A_{TOT} is total correction factor including cable loss and substitution correction

During the test, the data of A_{TOT} was added in the test spectrum analyze, so spectrum analyze reading is the final values which contain the data of A_{TOT} .

Note1: The power of the EUT transmitting frequency should be ignored.

Note2: All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Note3: All bandwidth and modulation were considered and evaluated respectively by performing full test for each band, only the worst cases (Max Bandwidth and QPSK mode) were recorded in this test report.

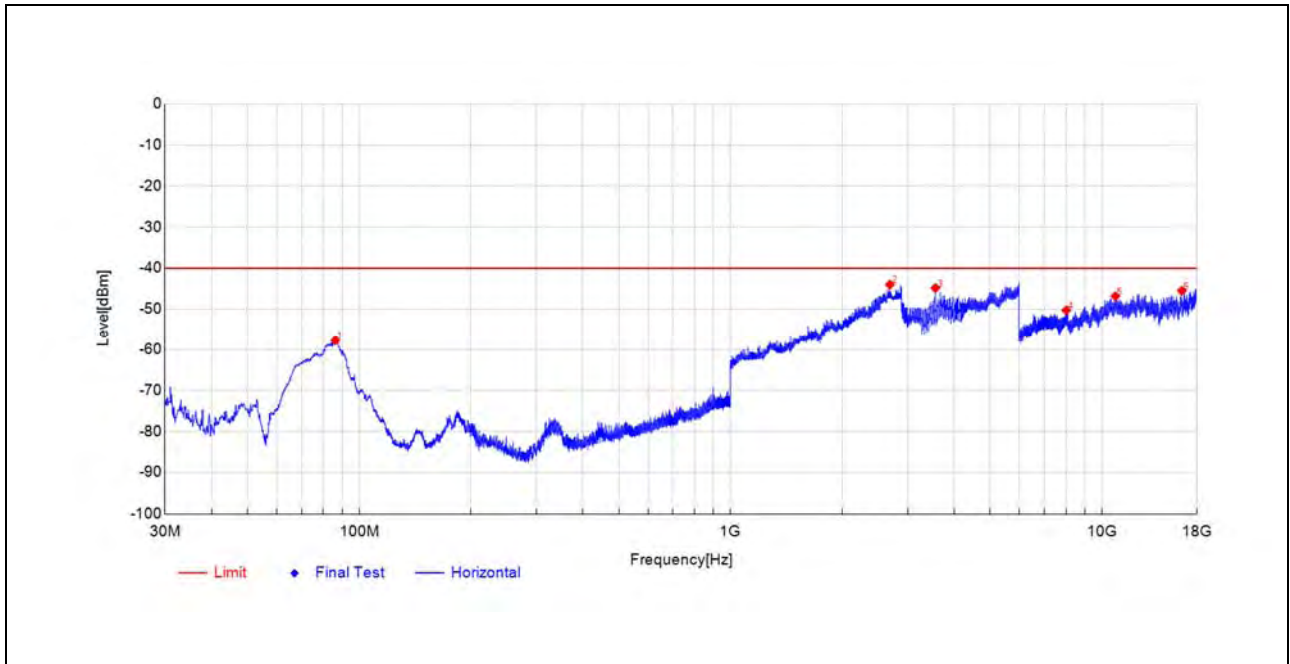
Note 4: N/A means the frequency is the basic frequency or the base station frequency, they are no need to verdict.

Note5: The amplitude of emissions(18GHz to 10th harmonics) which are attenuated more than 20 dB below the limit are not be reported.

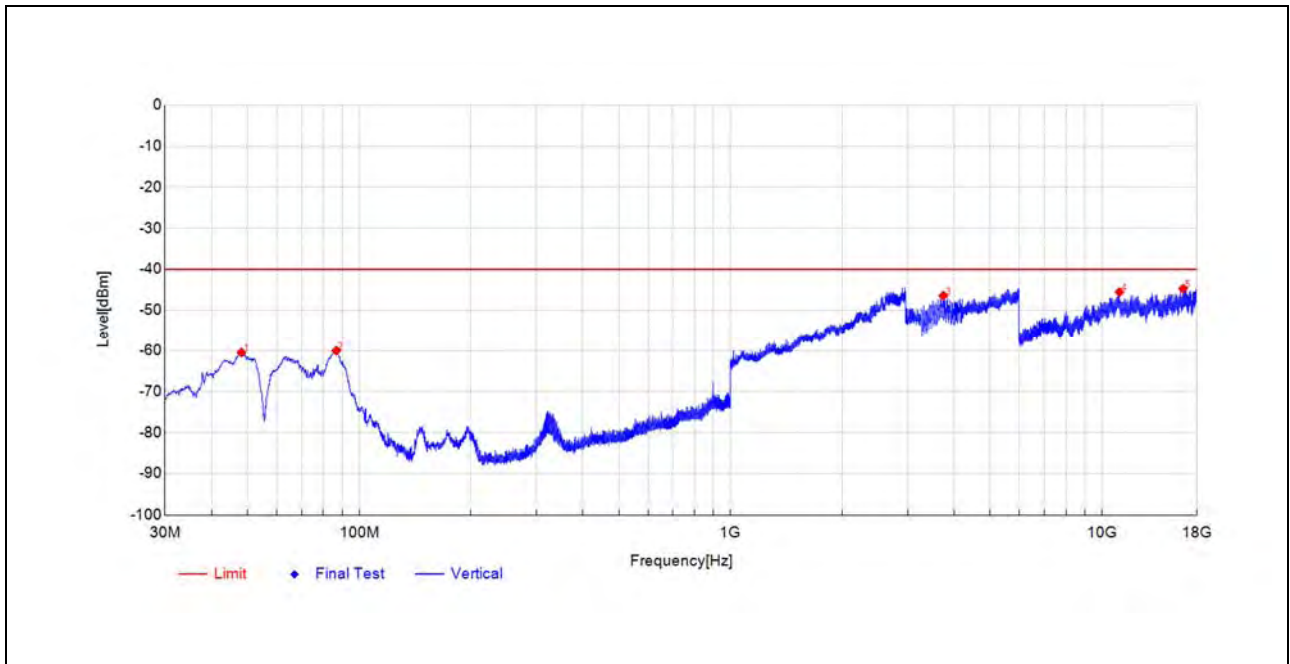


LTE Band 48

Plot for Low Channel

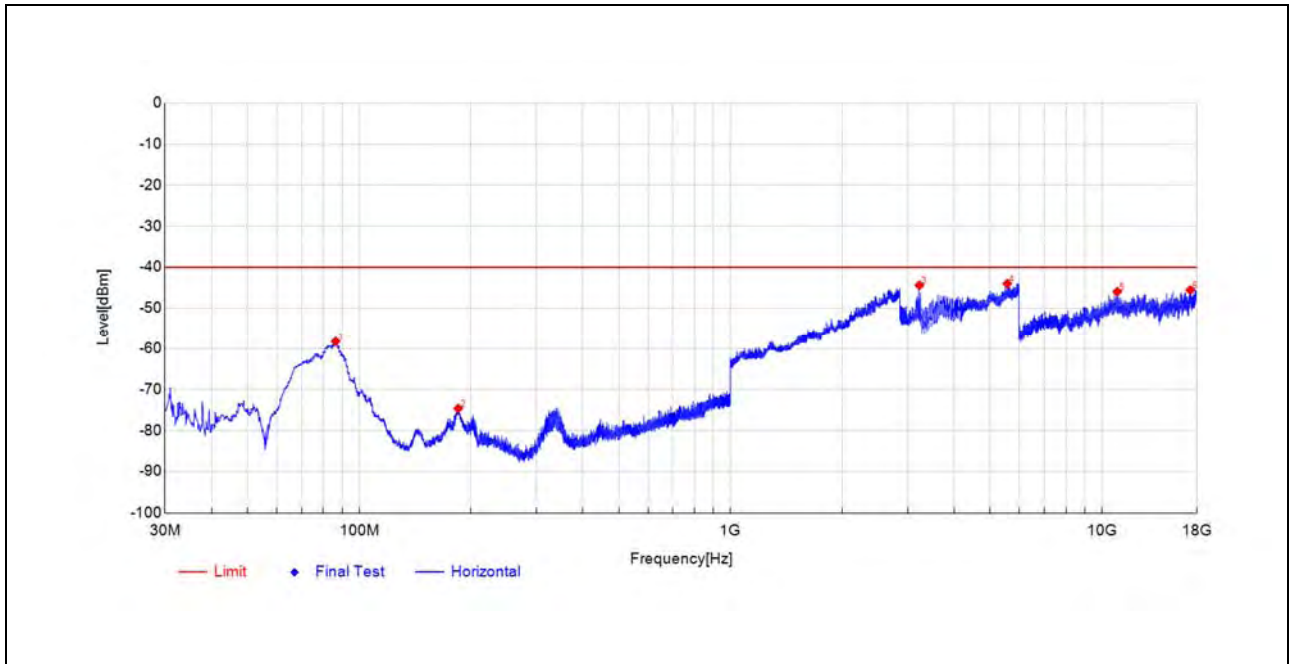


Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
86.267	-34.27	-57.76	-23.5	-40.0	17.8	Horizontal	PK	PASS
2685.137	-54.47	-44.02	10.5	-40.0	4.0	Horizontal	PK	PASS
3563.0938	-66.18	-44.82	21.4	-40.0	4.8	Horizontal	PK	PASS
8017.084	-63.63	-50.25	13.4	-40.0	10.3	Horizontal	PK	PASS
10866.202	-67.53	-46.83	20.7	-40.0	6.8	Horizontal	PK	PASS
16409.933	-70.93	-45.49	25.4	-40.0	5.5	Horizontal	PK	PASS

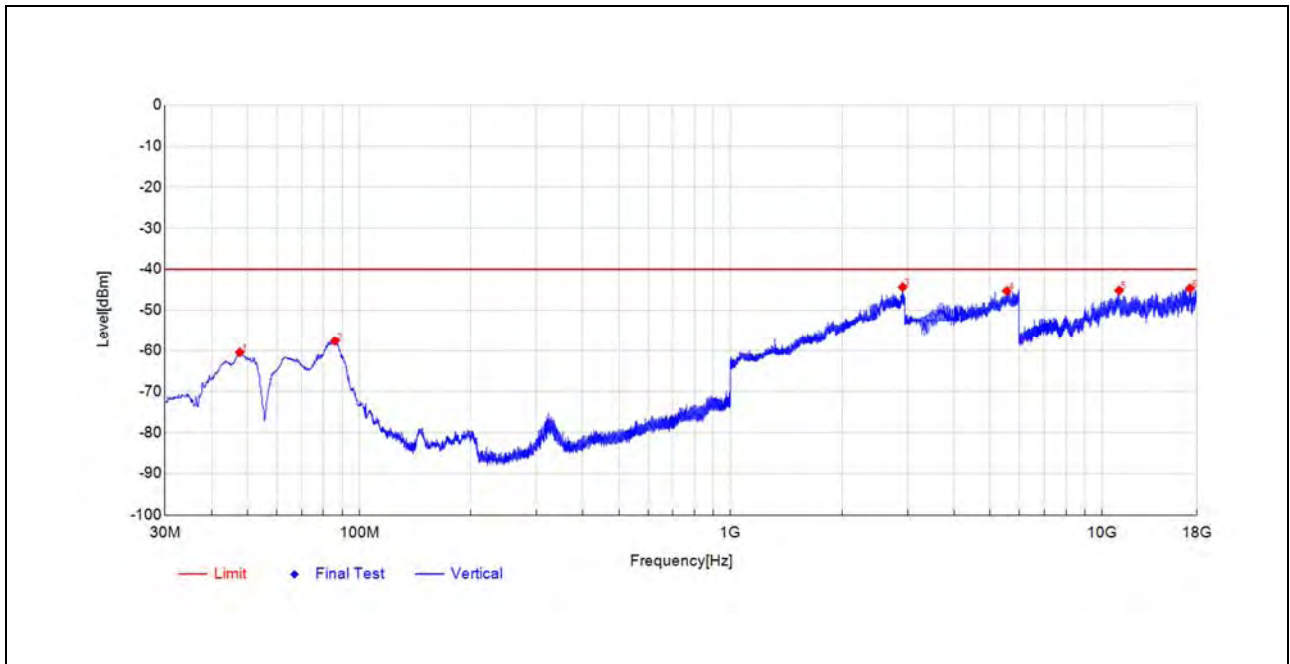


Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
48.1898	-41.41	-60.50	-19.1	-40.0	20.5	Vertical	PK	PASS
86.7521	-37.52	-60.06	-22.5	-40.0	20.1	Vertical	PK	PASS
3741.6236	-67.82	-46.42	21.4	-40.0	6.4	Vertical	PK	PASS
11154.214	-67.20	-45.54	21.7	-40.0	5.5	Vertical	PK	PASS
16541.439	-69.70	-44.72	25.0	-40.0	4.7	Vertical	PK	PASS

Plot for Mid Channel

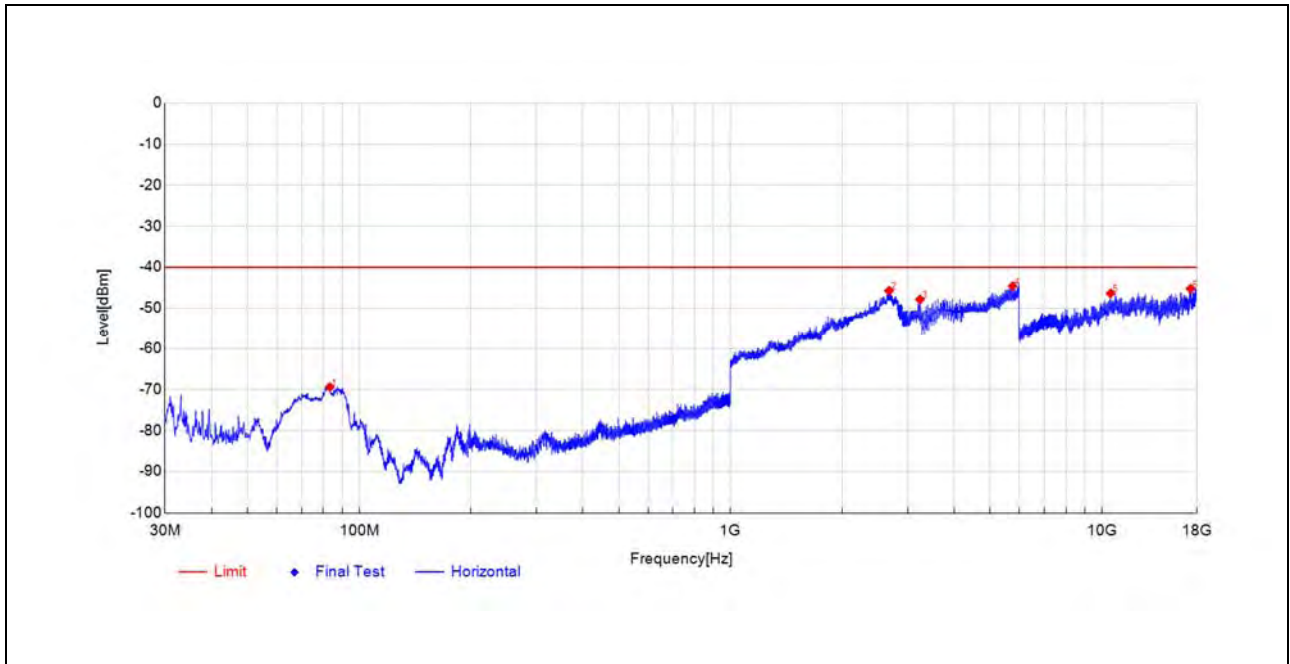


Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
86.3883	-34.78	-58.27	-23.5	-40.0	18.3	Horizontal	PK	PASS
184.6131	-54.36	-74.65	-20.3	-40.0	34.7	Horizontal	PK	PASS
3224.5374	-64.15	-44.39	19.8	-40.0	4.4	Horizontal	PK	PASS
5559.4266	-70.38	-43.99	26.4	-40.0	4.0	Horizontal	PK	PASS
10996.208	-66.61	-45.95	20.7	-40.0	6.0	Horizontal	PK	PASS
17289.970	-69.46	-45.55	23.9	-40.0	5.6	Horizontal	PK	PASS

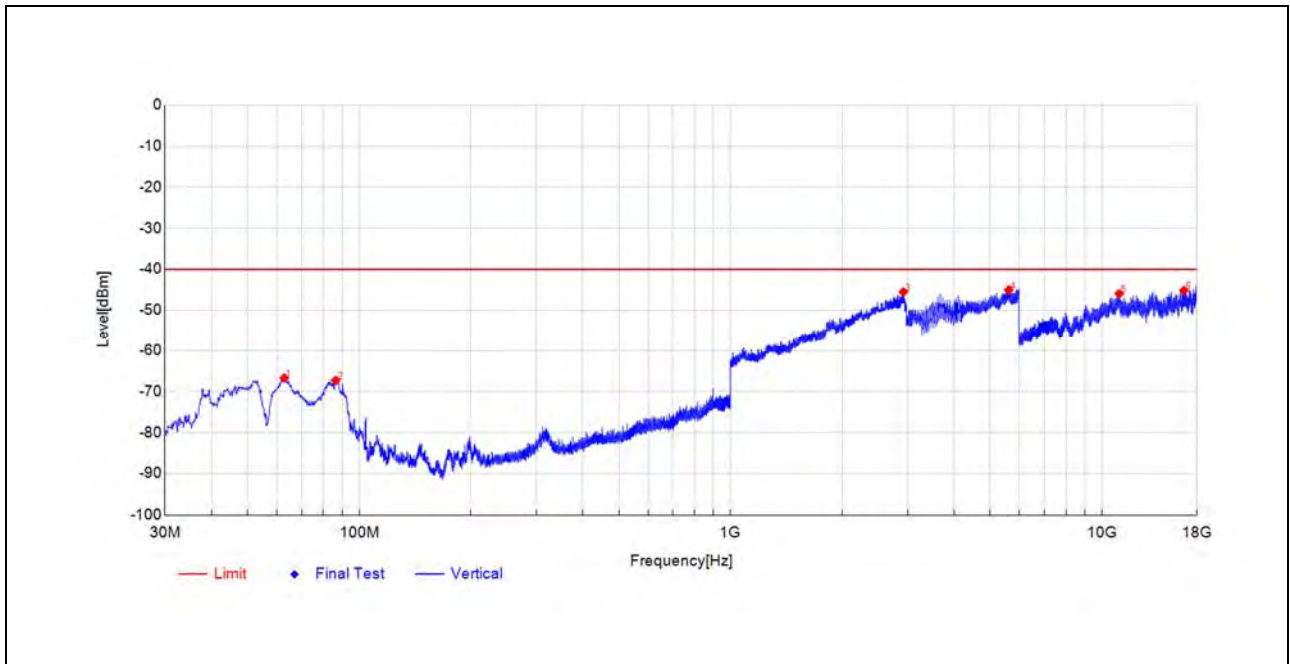


Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
47.7047	-41.23	-60.48	-19.3	-40.0	20.5	Vertical	PK	PASS
86.0245	-35.08	-57.68	-22.6	-40.0	17.7	Vertical	PK	PASS
2906.7814	-55.65	-44.35	11.3	-40.0	4.4	Vertical	PK	PASS
5542.4237	-71.25	-45.27	26.0	-40.0	5.3	Vertical	PK	PASS
11119.213	-67.00	-45.15	21.9	-40.0	5.2	Vertical	PK	PASS
17266.969	-69.09	-44.66	24.4	-40.0	4.7	Vertical	PK	PASS

Plot for High Channel



Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
83.3567	-45.79	-69.45	-23.7	-40.0	29.5	Horizontal	PK	PASS
2671.1342	-56.20	-45.71	10.5	-40.0	5.7	Horizontal	PK	PASS
3235.5393	-67.56	-47.84	19.7	-40.0	7.8	Horizontal	PK	PASS
5751.4586	-71.70	-44.58	27.1	-40.0	4.6	Horizontal	PK	PASS
10555.689	-65.70	-46.35	19.4	-40.0	6.4	Horizontal	PK	PASS
17319.971	-69.39	-45.22	24.2	-40.0	5.2	Horizontal	PK	PASS



Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
62.8629	-47.84	-66.74	-18.9	-40.0	26.7	Vertical	PK	PASS
86.3883	-44.73	-67.31	-22.6	-40.0	27.3	Vertical	PK	PASS
2919.1838	-56.28	-45.51	10.8	-40.0	5.5	Vertical	PK	PASS
5611.9353	-71.47	-45.03	26.4	-40.0	5.0	Vertical	PK	PASS
11127.213	-67.76	-45.96	21.8	-40.0	6.0	Vertical	PK	PASS
16624.442	-70.98	-45.16	25.8	-40.0	5.2	Vertical	PK	PASS



2.8. End User Device Additional Requirements (CBSD Protocol)

2.8.1. Requirement

According to FCC section Part 96.47,

- (a) End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation. An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.
- (b) Any device operated at higher power than specified for End User Devices in Part 96.41 will be classified as, and subject to, the operational requirements of a CBSD.

2.8.2. Test Description

End user device additional requirements (CBSD Protocol) are tested per the test procedures listed below. During testing, the EUT is connected to a certified CBSD (kingsignal LBS7320 FCC ID: 2AVFNLBS7320) as a companion device to show compliance with Part 96.47. End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation. An End User Device must discontinue operations, change frequencies, or change its operation power level within 10 seconds of receiving instructions from its associated CBSD.

2.8.3. Test Procedure

KDB 940660 D01 Part 96 CBRS Eqpt v02.

2.8.4. Test Result

The EUT was connected via an RF cable to a certified CBSD and spectrum analyzer
Test Graph 1:

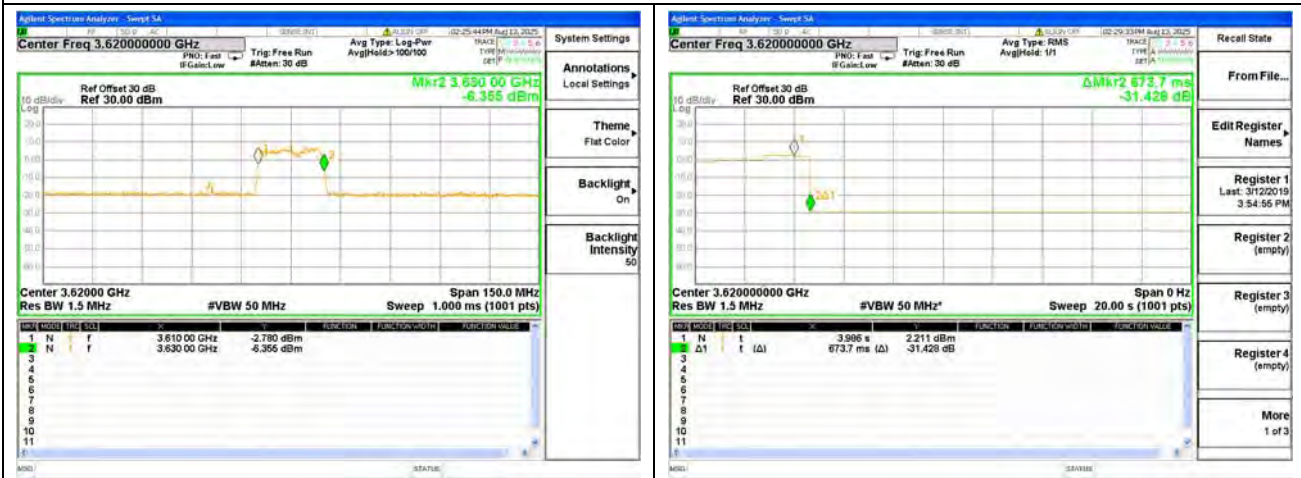
- a. Setup frequency with 3610MHz - 3630MHz
- b. Check EUT Tx frequency.
- c. Disable AP service and check EUT stop transmission within 10s.

Test Graph 2:

- a. Setup frequency with 3660MHz - 3680MHz
- b. Check EUT Tx frequency.
- c. Disable AP service and check EUT stop transmission within 10s



Test Graph 1



Note:

Marker 1: CBSD sends instructions to discontinue LTE operations.

Marker 2: EUT discontinues operation

Test Graph 2



Note:

Marker 1: CBSD sends instructions to discontinue LTE operations.

Marker 2: EUT discontinues operation



Annex A Test Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for test performed on the EUT as specified in CISPR 16-1-2:

Test Items	Uncertainty
Output Power	± 2.22 dB
Bandwidth	$\pm 5\%$
Conducted Spurious Emission	± 2.77 dB
Band Edge	± 2.77 dB
Equivalent Isotropic Radiated Power	± 2.22 dB
Radiated Spurious Emissions	± 6 dB

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



Annex B Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. Facilities and Accreditations

All measurement facilities used to collect the measurement data are located at FL.3, Building A, FeiYang Science Park, Block 67, BaoAn District, Shenzhen, 518101 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.10-2013 and CISPR Publication 22; the FCC designation number is CN1192, the test firm registration number is 226174.



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4. Test Equipment Utilized

4.1 Conducted Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Signal Analyzer	MY51511149	N9020A	Agilent	2025.05.15	2026.05.14
Communication Test Station	6200995016	MT8820C	Anritsu	2024.09.11	2025.09.10
Temperature Chamber	S022177101 00089002	KMT-36LF 1A0	KOMEG	2024.09.11	2025.09.10

4.2 List of Software Used

Description	Manufacturer	Software Version
MOR-2023E Test System	MORLAB	V7.99
JS32-RE	Tonscend	5.0.0

**4.3 Radiated Test Equipment**

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
System Simulator	152038	CMW500	R&S	2024.09.11	2025.09.10
Signal Analyzer	MY56060145	N9020A	Agilent	2025.05.13	2026.05.12
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2025.06.20	2026.06.19
Test Antenna - Horn	9120D-963	BBHA 9120D	Schwarzbeck	2025.05.16	2026.05.15
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2025.05.13	2026.05.12
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2025.05.13	2026.05.12
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2025.05.13	2026.05.12
RF Coaxial Cable (DC-40GHz)	22290045	QA360-40-KK- 0.5	Qualwave	2024.09.11	2025.09.10
RF Coaxial Cable (DC-40GHz)	22290046	QA360-40-KK F-2	Qualwave	2024.09.11	2025.09.10
RF Coaxial Cable (DC-18GHz)	22120181	QA500-18-NN -5	Qualwave	2024.09.11	2025.09.10
Preamplifier (10MHz-6GHz)	46732	S10M100L380 2	LUCIX CORP.	2025.05.13	2026.05.12
Preamplifier (2GHz-18GHz)	61171/61172	S020180L320 3	LUCIX CORP.	2025.05.13	2026.05.12
Preamplifier (18GHz-40GHz)	DS77209	DCLNA0118-4 0C-S	Decentest	2025.05.13	2026.05.12
Notch Filter	N/A	WRCGV -LTE 48	Wainwright	N/A	N/A
Anechoic Chamber	N/A	9m*6m*6m	CRT	2025.06.21	2028.06.20
Anechoic Chamber	N/A	9m*6m*6m	CRT	2022.11.30	2025.11.29

END OF REPORT