



REPORT No.: SZ24070051W06

TEST REPORT

APPLICANT : FJ Dynamics Co.,Ltd.

PRODUCT NAME : FJDynamics AG1 Guidance System

MODEL NAME : MG100, AG1

BRAND NAME : FJDynamics

FCC ID : 2A2LL-MG100

STANDARD(S) : 47 CFR Part 2
47 CFR Part 22, Subpart H
47 CFR Part 27, Subpart M

RECEIPT DATE : 2024-07-17

TEST DATE : 2024-07-25 to 2024-08-19

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DIRECTORY

1. Technical Information	3
1.1. Applicant and Manufacturer Information	3
1.2. Equipment Under Test (EUT) Description	3
1.3. Maximum E.R.P./E.I.R.P. and Emission Designator	5
1.4. Test Standards and Results	6
1.5. Environmental Conditions	7
2. 47 CFR Part 2, Part 22H, Part 27M Requirements	8
2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P.	8
2.2. Occupied Bandwidth	41
2.3. Frequency Stability	62
2.4. Conducted Spurious Emissions	66
2.5. Band Edge	81
2.6. Radiated Spurious Emissions	95
Annex A Test Uncertainty	110
Annex B Testing Laboratory Information	111

Change History		
Version	Date	Reason for change
1.0	2024-09-29	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	FJ Dynamics Co.,Ltd.
Applicant Address:	Floor 21, Das Tower, No. 28, 1st South Keji Road, High-tech Zone, Yuehai Subdistrict, Nanshan District, Shenzhen, China
Manufacturer:	FJ Dynamics Co.,Ltd.
Manufacturer Address:	Floor 21, Das Tower, No. 28, 1st South Keji Road, High-tech Zone, Yuehai Subdistrict, Nanshan District, Shenzhen, China

1.2. Equipment Under Test (EUT) Description

Product Name:	FJDynamics AG1 Guidance System	
Sample No.:	25#	
Hardware Version:	F30-MB-V1.1	
Software Version:	TP1A.220624.014release-keys	
Modulation Type:	QPSK, 16QAM	
Carrier Aggregation:	Not Support	
Operation Band:	Band 5 / 7 / 38 / 41	
Frequency Range:	LTE Band 5	Tx: 824MHz–849MHz
		Rx: 869MHz–894MHz
	LTE Band 7	Tx: 2500MHz–2570MHz
		Rx: 2620MHz–2690MHz
	LTE Band 38	Tx: 2570MHz–2620MHz
		Rx: 2570MHz–2620MHz
	LTE Band 41	Tx: 2455MHz –2655MHz
		Rx: 2455MHz –2655MHz
Channel Bandwidth:	LTE Band 5	1.4MHz, 3MHz, 5MHz, 10MHz
	LTE Band 7	5 MHz, 10MHz, 15MHz, 20MHz
	LTE Band 38	5 MHz, 10MHz, 15MHz, 20MHz
	LTE Band 41	5 MHz, 10MHz, 15MHz, 20MHz
Antenna Type:	PIFA Antenna	
Antenna Gain:	LTE Band 5	-1.67dBi
	LTE Band 7	1.27dBi



	LTE Band 38	1.59dBi
	LTE Band 41	-1.54dBi
Accessory Information:	Battery	
	Brand Name:	Super Ring
	Model No.:	29120120
	Serial No.:	N/A
	Capacity:	6000mAh
	Rated Voltage:	3.8V
	Charge Limit:	4.35V
	Manufacturer:	Shenzhen Super Ring Battery Technology Co. , Ltd.
	AC Adapter	
	Brand Name:	N/A
	Model No.:	MDL010-0502000ZU
	Serial No.:	N/A
	Rated Output:	5V $\Rightarrow$ 2A
	Rated Input:	100-240V $\sim$ 50/60Hz, 0.45A
	Manufacturer:	Shenzhen Midland Technology Co., Ltd

Note 1: According to the certificate holder, they declared that the models AG1 and MG100 are the same products. These two models only differ in model name. The main measuring model is MG100, only the results for MG100 were recorded in this report.

Note 2: 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 5	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
10	0.086	0.075	8M95G7D	8M93W7D
5	0.086	0.077	4M47G7D	4M48W7D
3	0.086	0.077	2M72G7D	2M72W7D
1.4	0.086	0.076	1M10G7D	1M10W7D
LTE Band 7	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
20	0.281	0.234	17M9G7D	17M9W7D
15	0.280	0.234	13M4G7D	13M4W7D
10	0.278	0.231	8M96G7D	8M95W7D
5	0.281	0.233	4M47G7D	4M48W7D
LTE Band 38	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
20	0.308	0.250	17M9G7D	17M9W7D
15	0.305	0.249	13M5G7D	13M4W7D
10	0.305	0.247	8M95G7D	8M95W7D
5	0.305	0.249	4M48G7D	4M47W7D
LTE Band 41	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
20	0.150	0.126	17M9G7D	17M9W7D
15	0.150	0.124	13M4G7D	13M4W7D
10	0.149	0.124	8M94G7D	8M95W7D
5	0.149	0.123	4M47G7D	4M48W7D



1.4. Test Standards and Results

The objective of the report is to perform testing according to Part 2, Part 22, Part 27 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 22	Public Mobile Services
4	47 CFR Part 27	Miscellaneous Wireless Communications Services

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

Section	Description	Test Date	Test Engineer	Result	Method Determination /Remark
2.1046 22.913(a)(2) 27.50(h)(2)	Transmitter Conducted Output Power and E.R.P./E.I.R.P.	Aug. 05&19, 2024	Chen Hao Gan Jing	PASS	No deviation
2.1049	Occupied Bandwidth	Jul. 25&29, 2024	Gan Jing	PASS	No deviation
2.1055 22.355 27.54	Frequency Stability	Aug. 16, 2024	Gan Jing	PASS	No deviation
2.1051 22.917(a) 27.53(m)(4)	Conducted Spurious Emissions	Jul. 25&29, 2024	Gan Jing	PASS	No deviation
2.1051 22.917(a) 27.53(m)(4)	Band Edge	Jul. 25&29, 2024	Gan Jing	PASS	No deviation
2.1053 22.917(a) 27.53(m)(4)	Radiated Spurious Emissions	Aug. 01, 2024	Li Hanbin	PASS	No deviation

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: Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

Note 3: When the test result is a critical value, we will use the measurement uncertainty give the



judgment result based on the 95% confidence intervals.
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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 22H, Part 27M Requirements

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

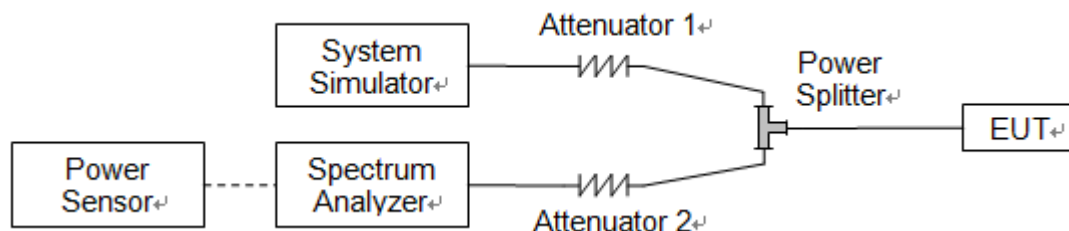
2.1.1. Requirement

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).

According to FCC section 22.913 (a)(2) for LTE Band 5, the E.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC section 27.50 (h)(2) for LTE Band 7/38/41, Mobile and other user stations. Mobile stations are limited to 2 watts E.I.R.P. All user stations are limited to 2 watts transmitter output power.

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.

$E.I.R.P. \text{ (dBm)} = \text{Conducted Output Power (dBm)} + \text{Antenna Gain (dBi)}$

$E.R.P. \text{ (dBm)} = E.I.R.P. \text{ (dBm)} - 2.15$

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

LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	23.17	23.19	23.12
10	QPSK	1	25	23.16	23.18	23.11
10	QPSK	1	49	23.08	23.15	23.12
10	QPSK	25	0	22.22	22.34	22.23
10	QPSK	25	12	22.26	22.20	22.18
10	QPSK	25	25	22.23	22.26	22.19
10	QPSK	50	0	22.26	22.27	22.16
10	16QAM	1	0	22.53	22.44	22.27
10	16QAM	1	25	22.41	22.50	22.45
10	16QAM	1	49	22.51	22.28	22.55
10	16QAM	25	0	21.34	21.29	21.33
10	16QAM	25	12	21.43	21.28	21.27
10	16QAM	25	25	21.30	21.33	21.35
10	16QAM	50	0	21.28	21.30	21.26



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	23.09	23.14	23.05
5	QPSK	1	12	23.13	23.14	23.08
5	QPSK	1	24	22.99	23.14	23.11
5	QPSK	12	0	22.18	22.24	22.13
5	QPSK	12	7	22.32	22.13	22.14
5	QPSK	12	13	22.22	22.19	22.10
5	QPSK	25	0	22.21	22.19	22.06
5	16QAM	1	0	22.49	22.38	22.21
5	16QAM	1	12	22.48	22.60	22.40
5	16QAM	1	24	22.53	22.68	22.54
5	16QAM	12	0	21.33	21.20	21.27
5	16QAM	12	7	21.39	21.19	21.19
5	16QAM	12	13	21.26	21.31	21.33
5	16QAM	25	0	21.18	21.26	21.25



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	23.16	23.17	23.10
3	QPSK	1	8	23.09	23.13	23.05
3	QPSK	1	14	23.00	23.14	23.04
3	QPSK	8	0	22.16	22.33	22.18
3	QPSK	8	4	22.24	22.11	22.17
3	QPSK	8	7	22.14	22.24	22.12
3	QPSK	15	0	22.17	22.23	22.10
3	16QAM	1	0	22.47	22.39	22.20
3	16QAM	1	8	22.47	22.64	22.44
3	16QAM	1	14	22.49	22.69	22.50
3	16QAM	8	0	21.26	21.25	21.28
3	16QAM	8	4	21.35	21.21	21.23
3	16QAM	8	7	21.29	21.24	21.31
3	16QAM	15	0	21.27	21.24	21.17



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	23.15	23.15	23.06
1.4	QPSK	1	3	23.06	23.08	23.10
1.4	QPSK	1	5	23.07	23.13	23.03
1.4	QPSK	3	0	22.13	22.29	22.17
1.4	QPSK	3	1	22.27	22.15	22.09
1.4	QPSK	3	3	22.20	22.20	22.09
1.4	QPSK	6	0	22.24	22.23	22.08
1.4	16QAM	1	0	22.43	22.42	22.23
1.4	16QAM	1	3	22.46	22.62	22.43
1.4	16QAM	1	5	22.51	22.62	22.47
1.4	16QAM	3	0	21.32	21.22	21.29
1.4	16QAM	3	1	21.33	21.23	21.19
1.4	16QAM	3	3	21.25	21.25	21.31
1.4	16QAM	6	0	21.19	21.21	21.17



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20850	21100	21350
Frequency (MHz)				2510	2535	2560
20	QPSK	1	0	23.16	23.22	23.18
20	QPSK	1	49	23.08	23.15	23.20
20	QPSK	1	99	23.19	23.20	23.21
20	QPSK	50	0	22.29	22.42	22.41
20	QPSK	50	24	22.36	22.41	22.40
20	QPSK	50	50	22.39	22.38	22.40
20	QPSK	100	0	22.44	22.45	22.37
20	16QAM	1	0	22.30	22.24	22.29
20	16QAM	1	49	22.37	22.36	22.28
20	16QAM	1	99	22.38	22.43	22.39
20	16QAM	50	0	21.28	21.43	21.49
20	16QAM	50	24	21.32	21.37	21.29
20	16QAM	50	50	21.31	21.42	21.27
20	16QAM	100	0	21.30	21.35	21.40



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20825	21100	21375
Frequency (MHz)				2507.5	2535	2562.5
15	QPSK	1	0	23.10	23.20	23.14
15	QPSK	1	37	23.00	23.07	23.12
15	QPSK	1	74	23.12	23.17	23.19
15	QPSK	36	0	22.26	22.41	22.33
15	QPSK	36	20	22.26	22.39	22.34
15	QPSK	36	39	22.33	22.37	22.38
15	QPSK	75	0	22.36	22.33	22.28
15	16QAM	1	0	22.26	22.23	22.21
15	16QAM	1	37	22.32	22.27	22.27
15	16QAM	1	74	22.35	22.42	22.29
15	16QAM	36	0	21.21	21.41	21.48
15	16QAM	36	20	21.29	21.28	21.24
15	16QAM	36	39	21.27	21.41	21.20
15	16QAM	75	0	21.28	21.34	21.39



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20800	21100	21400
Frequency (MHz)				2505	2535	2565
10	QPSK	1	0	23.04	23.17	23.15
10	QPSK	1	25	23.04	23.13	23.10
10	QPSK	1	49	23.11	23.11	23.14
10	QPSK	25	0	22.21	22.40	22.31
10	QPSK	25	12	22.31	22.37	22.35
10	QPSK	25	25	22.34	22.28	22.39
10	QPSK	50	0	22.43	22.40	22.35
10	16QAM	1	0	22.22	22.20	22.21
10	16QAM	1	25	22.33	22.34	22.18
10	16QAM	1	49	22.32	22.34	22.37
10	16QAM	25	0	21.26	21.34	21.47
10	16QAM	25	12	21.29	21.34	21.19
10	16QAM	25	25	21.28	21.34	21.21
10	16QAM	50	0	21.25	21.34	21.39



LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20775	21100	21425
Frequency (MHz)				2502.5	2535	2567.5
5	QPSK	1	0	23.10	23.21	23.08
5	QPSK	1	12	23.05	23.11	23.17
5	QPSK	1	24	23.13	23.16	23.15
5	QPSK	12	0	22.26	22.38	22.34
5	QPSK	12	7	22.35	22.39	22.34
5	QPSK	12	13	22.31	22.34	22.37
5	QPSK	25	0	22.36	22.39	22.29
5	16QAM	1	0	22.29	22.15	22.22
5	16QAM	1	12	22.34	22.31	22.22
5	16QAM	1	24	22.30	22.41	22.35
5	16QAM	12	0	21.26	21.33	21.41
5	16QAM	12	7	21.24	21.33	21.23
5	16QAM	12	13	21.23	21.33	21.20
5	16QAM	25	0	21.21	21.25	21.34



LTE Band 38						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				37850	38000	38150
Frequency (MHz)				2580	2595	2610
20	QPSK	1	0	23.26	23.30	23.28
20	QPSK	1	49	23.13	23.26	23.10
20	QPSK	1	99	23.25	23.22	23.04
20	QPSK	50	0	22.25	22.32	22.27
20	QPSK	50	24	22.28	22.29	22.15
20	QPSK	50	50	22.25	22.18	22.11
20	QPSK	100	0	22.28	22.31	22.18
20	16QAM	1	0	22.38	22.39	22.27
20	16QAM	1	49	22.28	22.31	22.35
20	16QAM	1	99	22.20	22.24	22.21
20	16QAM	50	0	21.25	21.32	21.13
20	16QAM	50	24	21.33	21.28	21.30
20	16QAM	50	50	21.15	21.20	21.13
20	16QAM	100	0	21.24	21.25	21.19



LTE Band 38						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				37825	38000	38175
Frequency (MHz)				2577.5	2595	2612.5
15	QPSK	1	0	23.01	23.26	23.17
15	QPSK	1	37	23.09	23.23	23.02
15	QPSK	1	74	23.16	23.12	23.01
15	QPSK	36	0	22.27	22.35	22.24
15	QPSK	36	20	22.36	22.32	22.20
15	QPSK	36	39	22.35	22.22	22.20
15	QPSK	75	0	22.22	22.14	22.16
15	16QAM	1	0	22.37	22.35	22.20
15	16QAM	1	37	22.21	22.24	22.27
15	16QAM	1	74	22.17	22.17	22.14
15	16QAM	36	0	21.24	21.30	21.06
15	16QAM	36	20	21.23	21.25	21.27
15	16QAM	36	39	21.11	21.18	21.11
15	16QAM	75	0	21.20	21.16	21.10



LTE Band 38						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				37800	38000	38200
Frequency (MHz)				2575	2595	2615
10	QPSK	1	0	23.08	23.25	23.13
10	QPSK	1	25	23.10	23.24	23.05
10	QPSK	1	49	23.21	23.14	23.06
10	QPSK	25	0	22.30	22.41	22.27
10	QPSK	25	12	22.37	22.37	22.19
10	QPSK	25	25	22.34	22.22	22.16
10	QPSK	50	0	22.32	22.32	22.27
10	16QAM	1	0	22.32	22.34	22.26
10	16QAM	1	25	22.25	22.25	22.31
10	16QAM	1	49	22.17	22.21	22.20
10	16QAM	25	0	21.19	21.28	21.08
10	16QAM	25	12	21.26	21.25	21.27
10	16QAM	25	25	21.05	21.16	21.04
10	16QAM	50	0	21.18	21.19	21.13



LTE Band 38						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				37775	38000	38225
Frequency (MHz)				2572.5	2595	2617.5
5	QPSK	1	0	23.00	23.25	23.18
5	QPSK	1	12	23.07	23.24	23.06
5	QPSK	1	24	23.16	23.17	23.01
5	QPSK	12	0	22.28	22.38	22.29
5	QPSK	12	7	22.26	22.21	22.13
5	QPSK	12	13	22.17	22.16	22.01
5	QPSK	25	0	22.27	22.21	22.14
5	16QAM	1	0	22.35	22.38	22.22
5	16QAM	1	12	22.27	22.29	22.30
5	16QAM	1	24	22.19	22.14	22.11
5	16QAM	12	0	21.20	21.24	21.09
5	16QAM	12	7	21.29	21.25	21.26
5	16QAM	12	13	21.12	21.15	21.10
5	16QAM	25	0	21.15	21.18	21.14



LTE Band 41						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				40340	40740	41140
Frequency (MHz)				2565	2605	2645
20	QPSK	1	0	23.25	23.31	23.14
20	QPSK	1	49	23.16	23.06	23.04
20	QPSK	1	99	23.25	23.21	23.03
20	QPSK	50	0	22.48	22.49	22.22
20	QPSK	50	24	22.44	22.35	22.17
20	QPSK	50	50	22.46	22.31	22.04
20	QPSK	100	0	22.45	22.36	22.14
20	16QAM	1	0	22.53	22.49	22.44
20	16QAM	1	49	22.46	22.43	22.39
20	16QAM	1	99	22.39	22.48	22.36
20	16QAM	50	0	21.54	21.36	21.21
20	16QAM	50	24	21.48	21.39	21.24
20	16QAM	50	50	21.45	21.24	21.20
20	16QAM	100	0	21.36	21.39	21.34



LTE Band 41						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				40315	40740	41165
Frequency (MHz)				2562.5	2605	2647.5
15	QPSK	1	0	23.20	23.30	23.05
15	QPSK	1	37	23.15	23.04	23.05
15	QPSK	1	74	23.16	23.11	23.02
15	QPSK	36	0	22.37	22.45	22.21
15	QPSK	36	20	22.33	22.31	22.11
15	QPSK	36	39	22.45	22.28	22.02
15	QPSK	75	0	22.36	22.28	22.07
15	16QAM	1	0	22.49	22.38	22.38
15	16QAM	1	37	22.37	22.41	22.29
15	16QAM	1	74	22.35	22.38	22.24
15	16QAM	36	0	21.47	21.28	21.16
15	16QAM	36	20	21.47	21.33	21.21
15	16QAM	36	39	21.34	21.15	21.19
15	16QAM	75	0	21.32	21.38	21.31



LTE Band 41						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				40290	40740	41190
Frequency (MHz)				2560	2605	2650
10	QPSK	1	0	23.16	23.26	23.05
10	QPSK	1	25	23.08	23.02	23.04
10	QPSK	1	49	23.21	23.11	23.06
10	QPSK	25	0	22.44	22.41	22.15
10	QPSK	25	12	22.43	22.34	22.07
10	QPSK	25	25	22.45	22.29	22.02
10	QPSK	50	0	22.41	22.35	22.09
10	16QAM	1	0	22.49	22.40	22.37
10	16QAM	1	25	22.40	22.33	22.30
10	16QAM	1	49	22.36	22.47	22.30
10	16QAM	25	0	21.43	21.28	21.12
10	16QAM	25	12	21.45	21.34	21.13
10	16QAM	25	25	21.38	21.17	21.10
10	16QAM	50	0	21.26	21.35	21.32



LTE Band 41						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				40265	40740	41215
Frequency (MHz)				2557.5	2605	2652.5
5	QPSK	1	0	23.14	23.28	23.13
5	QPSK	1	12	23.14	23.06	23.09
5	QPSK	1	24	23.20	23.09	23.08
5	QPSK	12	0	22.44	22.42	22.16
5	QPSK	12	7	22.36	22.27	22.13
5	QPSK	12	13	22.34	22.24	22.03
5	QPSK	25	0	22.34	22.29	22.03
5	16QAM	1	0	22.43	22.43	22.42
5	16QAM	1	12	22.36	22.32	22.32
5	16QAM	1	24	22.28	22.36	22.26
5	16QAM	12	0	21.43	21.32	21.10
5	16QAM	12	7	21.37	21.32	21.15
5	16QAM	12	13	21.37	21.17	21.12
5	16QAM	25	0	21.31	21.34	21.28

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

LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20450		20525		20600	
Frequency (MHz)				829		836.5		844	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	19.35	0.086	19.37	0.086	19.30	0.085
10	QPSK	1	25	19.34	0.086	19.36	0.086	19.29	0.085
10	QPSK	1	49	19.26	0.084	19.33	0.086	19.30	0.085
10	QPSK	25	0	18.40	0.069	18.52	0.071	18.41	0.069
10	QPSK	25	12	18.44	0.070	18.38	0.069	18.36	0.069
10	QPSK	25	25	18.41	0.069	18.44	0.070	18.37	0.069
10	QPSK	50	0	18.44	0.070	18.45	0.070	18.34	0.068
10	16QAM	1	0	18.71	0.074	18.62	0.073	18.45	0.070
10	16QAM	1	25	18.59	0.072	18.68	0.074	18.63	0.073
10	16QAM	1	49	18.69	0.074	18.46	0.070	18.73	0.075
10	16QAM	25	0	17.52	0.056	17.47	0.056	17.51	0.056
10	16QAM	25	12	17.61	0.058	17.46	0.056	17.45	0.056
10	16QAM	25	25	17.48	0.056	17.51	0.056	17.53	0.057
10	16QAM	50	0	17.46	0.056	17.48	0.056	17.44	0.055



REPORT No.: SZ24070051W06

LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20425		20525		20625	
Frequency (MHz)				826.5		836.5		846.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	19.27	0.085	19.32	0.086	19.23	0.084
5	QPSK	1	12	19.31	0.085	19.32	0.086	19.26	0.084
5	QPSK	1	24	19.17	0.083	19.32	0.086	19.29	0.085
5	QPSK	12	0	18.36	0.069	18.42	0.070	18.31	0.068
5	QPSK	12	7	18.50	0.071	18.31	0.068	18.32	0.068
5	QPSK	12	13	18.40	0.069	18.37	0.069	18.28	0.067
5	QPSK	25	0	18.39	0.069	18.37	0.069	18.24	0.067
5	16QAM	1	0	18.67	0.074	18.56	0.072	18.39	0.069
5	16QAM	1	12	18.66	0.073	18.78	0.076	18.58	0.072
5	16QAM	1	24	18.71	0.074	18.86	0.077	18.72	0.074
5	16QAM	12	0	17.51	0.056	17.38	0.055	17.45	0.056
5	16QAM	12	7	17.57	0.057	17.37	0.055	17.37	0.055
5	16QAM	12	13	17.44	0.055	17.49	0.056	17.51	0.056
5	16QAM	25	0	17.36	0.054	17.44	0.055	17.43	0.055



REPORT No.: SZ24070051W06

LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20415		20525		20635	
Frequency (MHz)				825.5		836.5		847.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	19.34	0.086	19.35	0.086	19.28	0.085
3	QPSK	1	8	19.27	0.085	19.31	0.085	19.23	0.084
3	QPSK	1	14	19.18	0.083	19.32	0.086	19.22	0.084
3	QPSK	8	0	18.34	0.068	18.51	0.071	18.36	0.069
3	QPSK	8	4	18.42	0.070	18.29	0.067	18.35	0.068
3	QPSK	8	7	18.32	0.068	18.42	0.070	18.30	0.068
3	QPSK	15	0	18.35	0.068	18.41	0.069	18.28	0.067
3	16QAM	1	0	18.65	0.073	18.57	0.072	18.38	0.069
3	16QAM	1	8	18.65	0.073	18.82	0.076	18.62	0.073
3	16QAM	1	14	18.67	0.074	18.87	0.077	18.68	0.074
3	16QAM	8	0	17.44	0.055	17.43	0.055	17.46	0.056
3	16QAM	8	4	17.53	0.057	17.39	0.055	17.41	0.055
3	16QAM	8	7	17.47	0.056	17.42	0.055	17.49	0.056
3	16QAM	15	0	17.45	0.056	17.42	0.055	17.35	0.054



LTE Band 5				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20407		20525		20643	
Frequency (MHz)				824.7		836.5		848.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	19.33	0.086	19.33	0.086	19.24	0.084
1.4	QPSK	1	3	19.24	0.084	19.26	0.084	19.28	0.085
1.4	QPSK	1	5	19.25	0.084	19.31	0.085	19.21	0.083
1.4	QPSK	3	0	18.31	0.068	18.47	0.070	18.35	0.068
1.4	QPSK	3	1	18.45	0.070	18.33	0.068	18.27	0.067
1.4	QPSK	3	3	18.38	0.069	18.38	0.069	18.27	0.067
1.4	QPSK	6	0	18.42	0.070	18.41	0.069	18.26	0.067
1.4	16QAM	1	0	18.61	0.073	18.60	0.072	18.41	0.069
1.4	16QAM	1	3	18.64	0.073	18.80	0.076	18.61	0.073
1.4	16QAM	1	5	18.69	0.074	18.80	0.076	18.65	0.073
1.4	16QAM	3	0	17.50	0.056	17.40	0.055	17.47	0.056
1.4	16QAM	3	1	17.51	0.056	17.41	0.055	17.37	0.055
1.4	16QAM	3	3	17.43	0.055	17.43	0.055	17.49	0.056
1.4	16QAM	6	0	17.37	0.055	17.39	0.055	17.35	0.054



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20850		21100		21350	
Frequency (MHz)				2510		2535		2560	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	24.43	0.277	24.49	0.281	24.45	0.279
20	QPSK	1	49	24.35	0.272	24.42	0.277	24.47	0.280
20	QPSK	1	99	24.46	0.279	24.47	0.280	24.48	0.281
20	QPSK	50	0	23.56	0.227	23.69	0.234	23.68	0.233
20	QPSK	50	24	23.63	0.231	23.68	0.233	23.67	0.233
20	QPSK	50	50	23.66	0.232	23.65	0.232	23.67	0.233
20	QPSK	100	0	23.71	0.235	23.72	0.236	23.64	0.231
20	16QAM	1	0	23.57	0.228	23.51	0.224	23.56	0.227
20	16QAM	1	49	23.64	0.231	23.63	0.231	23.55	0.226
20	16QAM	1	99	23.65	0.232	23.70	0.234	23.66	0.232
20	16QAM	50	0	22.55	0.180	22.70	0.186	22.76	0.189
20	16QAM	50	24	22.59	0.182	22.64	0.184	22.56	0.180
20	16QAM	50	50	22.58	0.181	22.69	0.186	22.54	0.179
20	16QAM	100	0	22.57	0.181	22.62	0.183	22.67	0.185



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20825		21100		21375	
Frequency (MHz)				2507.5		2535		2562.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	24.37	0.274	24.47	0.280	24.41	0.276
15	QPSK	1	37	24.27	0.267	24.34	0.272	24.39	0.275
15	QPSK	1	74	24.39	0.275	24.44	0.278	24.46	0.279
15	QPSK	36	0	23.53	0.225	23.68	0.233	23.60	0.229
15	QPSK	36	20	23.53	0.225	23.66	0.232	23.61	0.230
15	QPSK	36	39	23.60	0.229	23.64	0.231	23.65	0.232
15	QPSK	75	0	23.63	0.231	23.60	0.229	23.55	0.226
15	16QAM	1	0	23.53	0.225	23.50	0.224	23.48	0.223
15	16QAM	1	37	23.59	0.229	23.54	0.226	23.54	0.226
15	16QAM	1	74	23.62	0.230	23.69	0.234	23.56	0.227
15	16QAM	36	0	22.48	0.177	22.68	0.185	22.75	0.188
15	16QAM	36	20	22.56	0.180	22.55	0.180	22.51	0.178
15	16QAM	36	39	22.54	0.179	22.68	0.185	22.47	0.177
15	16QAM	75	0	22.55	0.180	22.61	0.182	22.66	0.185



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20800		21100		21400	
Frequency (MHz)				2505		2535		2565	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	24.31	0.270	24.44	0.278	24.42	0.277
10	QPSK	1	25	24.31	0.270	24.40	0.275	24.37	0.274
10	QPSK	1	49	24.38	0.274	24.38	0.274	24.41	0.276
10	QPSK	25	0	23.48	0.223	23.67	0.233	23.58	0.228
10	QPSK	25	12	23.58	0.228	23.64	0.231	23.62	0.230
10	QPSK	25	25	23.61	0.230	23.55	0.226	23.66	0.232
10	QPSK	50	0	23.70	0.234	23.67	0.233	23.62	0.230
10	16QAM	1	0	23.49	0.223	23.47	0.222	23.48	0.223
10	16QAM	1	25	23.60	0.229	23.61	0.230	23.45	0.221
10	16QAM	1	49	23.59	0.229	23.61	0.230	23.64	0.231
10	16QAM	25	0	22.53	0.179	22.61	0.182	22.74	0.188
10	16QAM	25	12	22.56	0.180	22.61	0.182	22.46	0.176
10	16QAM	25	25	22.55	0.180	22.61	0.182	22.48	0.177
10	16QAM	50	0	22.52	0.179	22.61	0.182	22.66	0.185



LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20775		21100		21425	
Frequency (MHz)				2502.5		2535		2567.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	24.37	0.274	24.48	0.281	24.35	0.272
5	QPSK	1	12	24.32	0.270	24.38	0.274	24.44	0.278
5	QPSK	1	24	24.40	0.275	24.43	0.277	24.42	0.277
5	QPSK	12	0	23.53	0.225	23.65	0.232	23.61	0.230
5	QPSK	12	7	23.62	0.230	23.66	0.232	23.61	0.230
5	QPSK	12	13	23.58	0.228	23.61	0.230	23.64	0.231
5	QPSK	25	0	23.63	0.231	23.66	0.232	23.56	0.227
5	16QAM	1	0	23.56	0.227	23.42	0.220	23.49	0.223
5	16QAM	1	12	23.61	0.230	23.58	0.228	23.49	0.223
5	16QAM	1	24	23.57	0.228	23.68	0.233	23.62	0.230
5	16QAM	12	0	22.53	0.179	22.60	0.182	22.68	0.185
5	16QAM	12	7	22.51	0.178	22.60	0.182	22.50	0.178
5	16QAM	12	13	22.50	0.178	22.60	0.182	22.47	0.177
5	16QAM	25	0	22.48	0.177	22.52	0.179	22.61	0.182



LTE Band 38				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37850		38000		38150	
Frequency (MHz)				2580		2595		2610	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	24.85	0.305	24.89	0.308	24.87	0.307
20	QPSK	1	49	24.72	0.296	24.85	0.305	24.69	0.294
20	QPSK	1	99	24.84	0.305	24.81	0.303	24.63	0.290
20	QPSK	50	0	23.84	0.242	23.91	0.246	23.86	0.243
20	QPSK	50	24	23.87	0.244	23.88	0.244	23.74	0.237
20	QPSK	50	50	23.84	0.242	23.77	0.238	23.70	0.234
20	QPSK	100	0	23.87	0.244	23.90	0.245	23.77	0.238
20	16QAM	1	0	23.97	0.249	23.98	0.250	23.86	0.243
20	16QAM	1	49	23.87	0.244	23.90	0.245	23.94	0.248
20	16QAM	1	99	23.79	0.239	23.83	0.242	23.80	0.240
20	16QAM	50	0	22.84	0.192	22.91	0.195	22.72	0.187
20	16QAM	50	24	22.92	0.196	22.87	0.194	22.89	0.195
20	16QAM	50	50	22.74	0.188	22.79	0.190	22.72	0.187
20	16QAM	100	0	22.83	0.192	22.84	0.192	22.78	0.190



LTE Band 38				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37825		38000		38175	
Frequency (MHz)				2577.5		2595		2612.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	24.60	0.288	24.85	0.305	24.76	0.299
15	QPSK	1	37	24.68	0.294	24.82	0.303	24.61	0.289
15	QPSK	1	74	24.75	0.299	24.71	0.296	24.60	0.288
15	QPSK	36	0	23.86	0.243	23.94	0.248	23.83	0.242
15	QPSK	36	20	23.95	0.248	23.91	0.246	23.79	0.239
15	QPSK	36	39	23.94	0.248	23.81	0.240	23.79	0.239
15	QPSK	75	0	23.81	0.240	23.73	0.236	23.75	0.237
15	16QAM	1	0	23.96	0.249	23.94	0.248	23.79	0.239
15	16QAM	1	37	23.80	0.240	23.83	0.242	23.86	0.243
15	16QAM	1	74	23.76	0.238	23.76	0.238	23.73	0.236
15	16QAM	36	0	22.83	0.192	22.89	0.195	22.65	0.184
15	16QAM	36	20	22.82	0.191	22.84	0.192	22.86	0.193
15	16QAM	36	39	22.70	0.186	22.77	0.189	22.70	0.186
15	16QAM	75	0	22.79	0.190	22.75	0.188	22.69	0.186



LTE Band 38				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37800		38000		38200	
Frequency (MHz)				2575		2595		2615	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	24.67	0.293	24.84	0.305	24.72	0.296
10	QPSK	1	25	24.69	0.294	24.83	0.304	24.64	0.291
10	QPSK	1	49	24.80	0.302	24.73	0.297	24.65	0.292
10	QPSK	25	0	23.89	0.245	24.00	0.251	23.86	0.243
10	QPSK	25	12	23.96	0.249	23.96	0.249	23.78	0.239
10	QPSK	25	25	23.93	0.247	23.81	0.240	23.75	0.237
10	QPSK	50	0	23.91	0.246	23.91	0.246	23.86	0.243
10	16QAM	1	0	23.91	0.246	23.93	0.247	23.85	0.243
10	16QAM	1	25	23.84	0.242	23.84	0.242	23.90	0.245
10	16QAM	1	49	23.76	0.238	23.80	0.240	23.79	0.239
10	16QAM	25	0	22.78	0.190	22.87	0.194	22.67	0.185
10	16QAM	25	12	22.85	0.193	22.84	0.192	22.86	0.193
10	16QAM	25	25	22.64	0.184	22.75	0.188	22.63	0.183
10	16QAM	50	0	22.77	0.189	22.78	0.190	22.72	0.187



LTE Band 38				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				37775		38000		38225	
Frequency (MHz)				2572.5		2595		2617.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	24.59	0.288	24.84	0.305	24.77	0.300
5	QPSK	1	12	24.66	0.292	24.83	0.304	24.65	0.292
5	QPSK	1	24	24.75	0.299	24.76	0.299	24.60	0.288
5	QPSK	12	0	23.87	0.244	23.97	0.249	23.88	0.244
5	QPSK	12	7	23.85	0.243	23.80	0.240	23.72	0.236
5	QPSK	12	13	23.76	0.238	23.75	0.237	23.60	0.229
5	QPSK	25	0	23.86	0.243	23.80	0.240	23.73	0.236
5	16QAM	1	0	23.94	0.248	23.97	0.249	23.81	0.240
5	16QAM	1	12	23.86	0.243	23.88	0.244	23.89	0.245
5	16QAM	1	24	23.78	0.239	23.73	0.236	23.70	0.234
5	16QAM	12	0	22.79	0.190	22.83	0.192	22.68	0.185
5	16QAM	12	7	22.88	0.194	22.84	0.192	22.85	0.193
5	16QAM	12	13	22.71	0.187	22.74	0.188	22.69	0.186
5	16QAM	25	0	22.74	0.188	22.77	0.189	22.73	0.187



LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				40340		40740		41140	
Frequency (MHz)				2565		2605		2645	
				dBm	W	dBm	W	dBm	W
20	QPSK	1	0	21.71	0.148	21.77	0.150	21.60	0.145
20	QPSK	1	49	21.62	0.145	21.52	0.142	21.50	0.141
20	QPSK	1	99	21.71	0.148	21.67	0.147	21.49	0.141
20	QPSK	50	0	20.94	0.124	20.95	0.124	20.68	0.117
20	QPSK	50	24	20.90	0.123	20.81	0.121	20.63	0.116
20	QPSK	50	50	20.92	0.124	20.77	0.119	20.50	0.112
20	QPSK	100	0	20.91	0.123	20.82	0.121	20.60	0.115
20	16QAM	1	0	20.99	0.126	20.95	0.124	20.90	0.123
20	16QAM	1	49	20.92	0.124	20.89	0.123	20.85	0.122
20	16QAM	1	99	20.85	0.122	20.94	0.124	20.82	0.121
20	16QAM	50	0	20.00	0.100	19.82	0.096	19.67	0.093
20	16QAM	50	24	19.94	0.099	19.85	0.097	19.70	0.093
20	16QAM	50	50	19.91	0.098	19.70	0.093	19.66	0.092
20	16QAM	100	0	19.82	0.096	19.85	0.097	19.80	0.095



LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				40315		40740		41165	
Frequency (MHz)				2562.5		2605		2647.5	
				dBm	W	dBm	W	dBm	W
15	QPSK	1	0	21.66	0.147	21.76	0.150	21.51	0.142
15	QPSK	1	37	21.61	0.145	21.50	0.141	21.51	0.142
15	QPSK	1	74	21.62	0.145	21.57	0.144	21.48	0.141
15	QPSK	36	0	20.83	0.121	20.91	0.123	20.67	0.117
15	QPSK	36	20	20.79	0.120	20.77	0.119	20.57	0.114
15	QPSK	36	39	20.91	0.123	20.74	0.119	20.48	0.112
15	QPSK	75	0	20.82	0.121	20.74	0.119	20.53	0.113
15	16QAM	1	0	20.95	0.124	20.84	0.121	20.84	0.121
15	16QAM	1	37	20.83	0.121	20.87	0.122	20.75	0.119
15	16QAM	1	74	20.81	0.121	20.84	0.121	20.70	0.117
15	16QAM	36	0	19.93	0.098	19.74	0.094	19.62	0.092
15	16QAM	36	20	19.93	0.098	19.79	0.095	19.67	0.093
15	16QAM	36	39	19.80	0.095	19.61	0.091	19.65	0.092
15	16QAM	75	0	19.78	0.095	19.84	0.096	19.77	0.095



LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				40290		40740		41190	
Frequency (MHz)				2560		2605		2650	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	21.62	0.145	21.72	0.149	21.51	0.142
10	QPSK	1	25	21.54	0.143	21.48	0.141	21.50	0.141
10	QPSK	1	49	21.67	0.147	21.57	0.144	21.52	0.142
10	QPSK	25	0	20.90	0.123	20.87	0.122	20.61	0.115
10	QPSK	25	12	20.89	0.123	20.80	0.120	20.53	0.113
10	QPSK	25	25	20.91	0.123	20.75	0.119	20.48	0.112
10	QPSK	50	0	20.87	0.122	20.81	0.121	20.55	0.114
10	16QAM	1	0	20.95	0.124	20.86	0.122	20.83	0.121
10	16QAM	1	25	20.86	0.122	20.79	0.120	20.76	0.119
10	16QAM	1	49	20.82	0.121	20.93	0.124	20.76	0.119
10	16QAM	25	0	19.89	0.097	19.74	0.094	19.58	0.091
10	16QAM	25	12	19.91	0.098	19.80	0.095	19.59	0.091
10	16QAM	25	25	19.84	0.096	19.63	0.092	19.56	0.090
10	16QAM	50	0	19.72	0.094	19.81	0.096	19.78	0.095



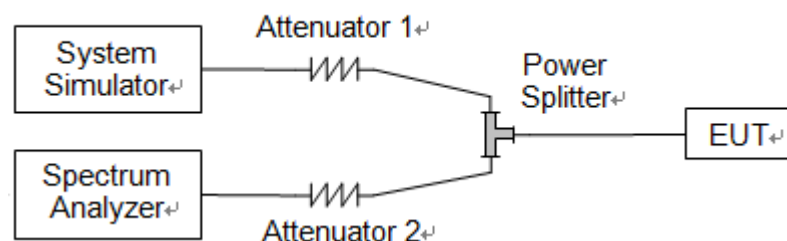
LTE Band 41				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				40265		40740		41215	
Frequency (MHz)				2557.5		2605		2652.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	21.60	0.145	21.74	0.149	21.59	0.144
5	QPSK	1	12	21.60	0.145	21.52	0.142	21.55	0.143
5	QPSK	1	24	21.66	0.147	21.55	0.143	21.54	0.143
5	QPSK	12	0	20.90	0.123	20.88	0.122	20.62	0.115
5	QPSK	12	7	20.82	0.121	20.73	0.118	20.59	0.115
5	QPSK	12	13	20.80	0.120	20.70	0.117	20.49	0.112
5	QPSK	25	0	20.80	0.120	20.75	0.119	20.49	0.112
5	16QAM	1	0	20.89	0.123	20.89	0.123	20.88	0.122
5	16QAM	1	12	20.82	0.121	20.78	0.120	20.78	0.120
5	16QAM	1	24	20.74	0.119	20.82	0.121	20.72	0.118
5	16QAM	12	0	19.89	0.097	19.78	0.095	19.56	0.090
5	16QAM	12	7	19.83	0.096	19.78	0.095	19.61	0.091
5	16QAM	12	13	19.83	0.096	19.63	0.092	19.58	0.091
5	16QAM	25	0	19.77	0.095	19.80	0.095	19.74	0.094

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
B5	1.4	Low	20407	824.7	QPSK	1.0911	1.2422	PASS
B5	1.4	Low	20407	824.7	16QAM	1.0974	1.2438	PASS
B5	1.4	Mid	20525	836.5	QPSK	1.0962	1.2373	PASS
B5	1.4	Mid	20525	836.5	16QAM	1.1027	1.2509	PASS
B5	1.4	High	20643	848.3	QPSK	1.0951	1.2376	PASS
B5	1.4	High	20643	848.3	16QAM	1.0999	1.2505	PASS
B5	3	Low	20415	825.5	QPSK	2.7166	3.0500	PASS
B5	3	Low	20415	825.5	16QAM	2.7156	3.0684	PASS
B5	3	Mid	20525	836.5	QPSK	2.7185	3.0536	PASS
B5	3	Mid	20525	836.5	16QAM	2.7172	3.0459	PASS
B5	3	High	20635	847.5	QPSK	2.7155	3.0361	PASS
B5	3	High	20635	847.5	16QAM	2.7077	3.0444	PASS
B5	5	Low	20425	826.5	QPSK	4.4635	4.8828	PASS
B5	5	Low	20425	826.5	16QAM	4.4717	4.8642	PASS
B5	5	Mid	20525	836.5	QPSK	4.4748	4.8744	PASS
B5	5	Mid	20525	836.5	16QAM	4.4758	4.8937	PASS
B5	5	High	20625	846.5	QPSK	4.4627	4.8912	PASS
B5	5	High	20625	846.5	16QAM	4.4640	4.9106	PASS
B5	10	Low	20450	829	QPSK	8.9461	9.7561	PASS
B5	10	Low	20450	829	16QAM	8.9256	9.6900	PASS
B5	10	Mid	20525	836.5	QPSK	8.9532	9.7511	PASS
B5	10	Mid	20525	836.5	16QAM	8.9321	9.7426	PASS
B5	10	High	20600	844	QPSK	8.9518	9.7242	PASS
B5	10	High	20600	844	16QAM	8.9272	9.6607	PASS



LTE Band	BW(MHz)	Channel Level	Channel	Frequency (MHz)	Modulation	99% BW (MHz)	26dB BW (MHz)	Verdict
B7	5	Low	20775	2502.5	QPSK	4.4705	4.8958	PASS
B7	5	Low	20775	2502.5	16QAM	4.4768	4.8482	PASS
B7	5	Mid	21100	2535	QPSK	4.4704	4.8796	PASS
B7	5	Mid	21100	2535	16QAM	4.4663	4.8686	PASS
B7	5	High	21425	2567.5	QPSK	4.4730	4.8885	PASS
B7	5	High	21425	2567.5	16QAM	4.4685	4.8772	PASS
B7	10	Low	20800	2505	QPSK	8.9496	9.7708	PASS
B7	10	Low	20800	2505	16QAM	8.9490	9.7445	PASS
B7	10	Mid	21100	2535	QPSK	8.9568	9.7774	PASS
B7	10	Mid	21100	2535	16QAM	8.9281	9.6984	PASS
B7	10	High	21400	2565	QPSK	8.9364	9.7054	PASS
B7	10	High	21400	2565	16QAM	8.9407	9.6837	PASS
B7	15	Low	20825	2507.5	QPSK	13.441	14.548	PASS
B7	15	Low	20825	2507.5	16QAM	13.415	14.683	PASS
B7	15	Mid	21100	2535	QPSK	13.397	14.485	PASS
B7	15	Mid	21100	2535	16QAM	13.407	14.714	PASS
B7	15	High	21375	2562.5	QPSK	13.404	14.711	PASS
B7	15	High	21375	2562.5	16QAM	13.410	14.668	PASS
B7	20	Low	20850	2510	QPSK	17.908	19.457	PASS
B7	20	Low	20850	2510	16QAM	17.931	19.464	PASS
B7	20	Mid	21100	2535	QPSK	17.848	19.182	PASS
B7	20	Mid	21100	2535	16QAM	17.884	19.393	PASS
B7	20	High	21350	2560	QPSK	17.907	19.434	PASS
B7	20	High	21350	2560	16QAM	17.886	19.499	PASS



LTE Band	BW(MHz)	Channel Level	Channel	Frequency (MHz)	Modulation	99% BW (MHz)	26dB BW (MHz)	Verdict
B38	5	Low	37775	2572.5	QPSK	4.4697	4.8594	PASS
B38	5	Low	37775	2572.5	16QAM	4.4679	4.8559	PASS
B38	5	Mid	38000	2595	QPSK	4.4758	4.8567	PASS
B38	5	Mid	38000	2595	16QAM	4.4726	4.9497	PASS
B38	5	High	38225	2617.5	QPSK	4.4713	4.8714	PASS
B38	5	High	38225	2617.5	16QAM	4.4718	4.8644	PASS
B38	10	Low	37800	2575	QPSK	8.9489	9.7179	PASS
B38	10	Low	37800	2575	16QAM	8.9361	9.6006	PASS
B38	10	Mid	38000	2595	QPSK	8.9409	9.6817	PASS
B38	10	Mid	38000	2595	16QAM	8.9337	9.6097	PASS
B38	10	High	38200	2615	QPSK	8.9316	9.6805	PASS
B38	10	High	38200	2615	16QAM	8.9495	9.6634	PASS
B38	15	Low	37825	2577.5	QPSK	13.450	14.549	PASS
B38	15	Low	37825	2577.5	16QAM	13.429	14.538	PASS
B38	15	Mid	38000	2595	QPSK	13.443	14.592	PASS
B38	15	Mid	38000	2595	16QAM	13.425	14.674	PASS
B38	15	High	38175	2612.5	QPSK	13.421	14.542	PASS
B38	15	High	38175	2612.5	16QAM	13.445	14.783	PASS
B38	20	Low	37850	2580	QPSK	17.902	19.174	PASS
B38	20	Low	37850	2580	16QAM	17.900	19.346	PASS
B38	20	Mid	38000	2595	QPSK	17.907	19.497	PASS
B38	20	Mid	38000	2595	16QAM	17.842	19.286	PASS
B38	20	High	38150	2610	QPSK	17.872	19.324	PASS
B38	20	High	38150	2610	16QAM	17.864	19.468	PASS



LTE Band	BW(MHz)	Channel Level	Channel	Frequency (MHz)	Modulation	99% BW (MHz)	26dB BW (MHz)	Verdict
B41	5	Low	40265	2557.5	QPSK	4.4698	4.8624	PASS
B41	5	Low	40265	2557.5	16QAM	4.4745	4.8620	PASS
B41	5	Mid	40740	2605	QPSK	4.4697	4.8766	PASS
B41	5	Mid	40740	2605	16QAM	4.4753	4.9276	PASS
B41	5	High	41215	2652.5	QPSK	4.4692	4.8722	PASS
B41	5	High	41215	2652.5	16QAM	4.4696	4.9165	PASS
B41	10	Low	40290	2560	QPSK	8.9356	9.6543	PASS
B41	10	Low	40290	2560	16QAM	8.9374	9.6172	PASS
B41	10	Mid	40740	2605	QPSK	8.9388	9.6747	PASS
B41	10	Mid	40740	2605	16QAM	8.9450	9.6641	PASS
B41	10	High	41190	2650	QPSK	8.9257	9.6727	PASS
B41	10	High	41190	2650	16QAM	8.9372	9.6523	PASS
B41	15	Low	40315	2562.5	QPSK	13.432	14.410	PASS
B41	15	Low	40315	2562.5	16QAM	13.417	14.377	PASS
B41	15	Mid	40740	2605	QPSK	13.438	14.561	PASS
B41	15	Mid	40740	2605	16QAM	13.436	14.562	PASS
B41	15	High	41165	2647.5	QPSK	13.417	14.536	PASS
B41	15	High	41165	2647.5	16QAM	13.422	14.667	PASS
B41	20	Low	40340	2565	QPSK	17.875	19.344	PASS
B41	20	Low	40340	2565	16QAM	17.863	19.202	PASS
B41	20	Mid	40740	2605	QPSK	17.902	19.442	PASS
B41	20	Mid	40740	2605	16QAM	17.864	19.387	PASS
B41	20	High	41140	2645	QPSK	17.906	19.451	PASS
B41	20	High	41140	2645	16QAM	17.864	19.521	PASS



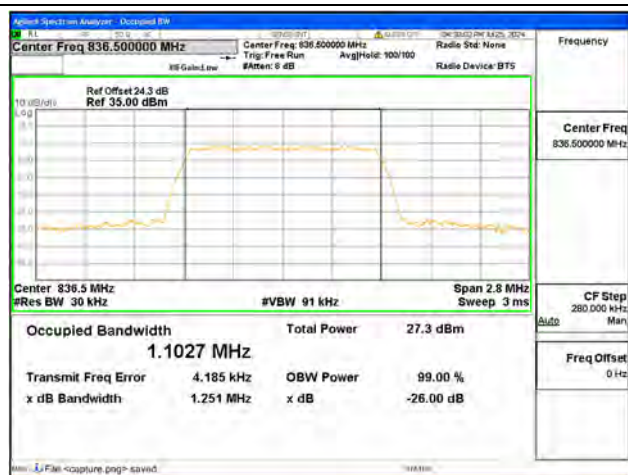
B5 / 1.4MHz / QPSK/ Low CH



B5 / 1.4MHz / 16QAM/ Low CH



B5 / 1.4MHz / QPSK/ Mid CH



B5 / 1.4MHz / 16QAM/ Mid CH



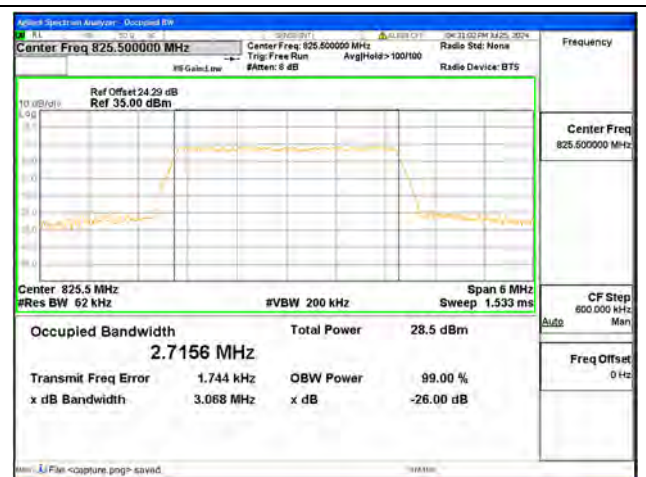
B5 / 1.4MHz / QPSK/ High CH



B5 / 1.4MHz / 16QAM/ High CH



B5 / 3MHz / QPSK/ Low CH



B5 / 3MHz / 16QAM/ Low CH



B5 / 3MHz / QPSK/ Mid CH



B5 / 3MHz / 16QAM/ Mid CH



B5 / 3MHz / QPSK/ High CH



B5 / 3MHz / 16QAM/ High CH



B5 / 5MHz / QPSK/ Low CH



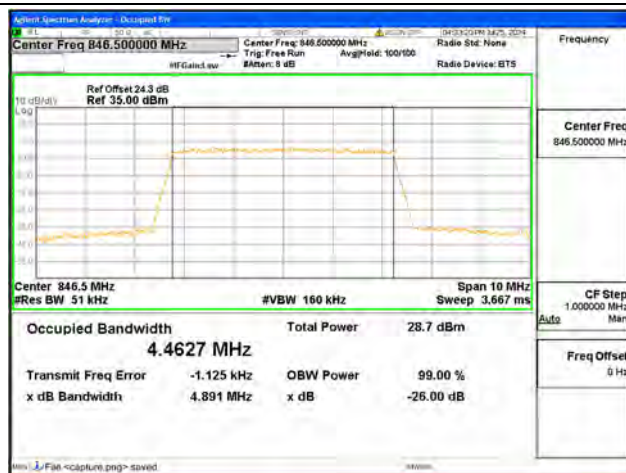
B5 / 5MHz / 16QAM/ Low CH



B5 / 5MHz / QPSK/ Mid CH



B5 / 5MHz / 16QAM/ Mid CH



B5 / 5MHz / QPSK/ High CH



B5 / 5MHz / 16QAM/ High CH



B5 / 10MHz / QPSK/ Low CH



B5 / 10MHz / 16QAM/ Low CH



B5 / 10MHz / QPSK/ Mid CH



B5 / 10MHz / 16QAM/ Mid CH



B5 / 10MHz / QPSK/ High CH



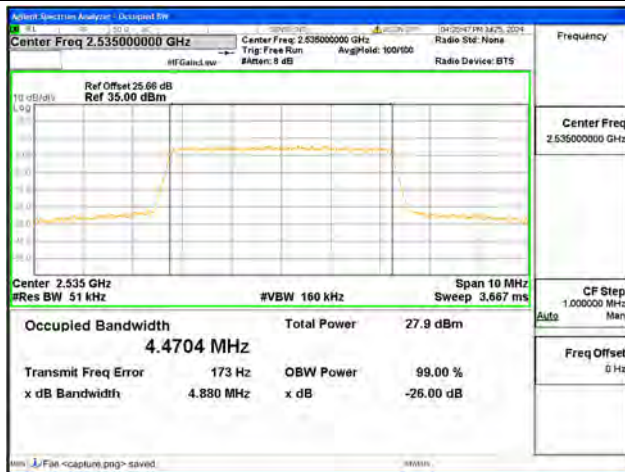
B5 / 10MHz / 16QAM/ High CH



B7 / 5MHz / QPSK/ Low CH



B7 / 5MHz / 16QAM/ Low CH



B7 / 5MHz / QPSK/ Mid CH



B7 / 5MHz / 16QAM/ Mid CH



B7 / 5MHz / QPSK/ High CH



B7 / 5MHz / 16QAM/ High CH



B7 / 10MHz / QPSK/ Low CH



B7 / 10MHz / 16QAM/ Low CH



B7 / 10MHz / QPSK/ Mid CH



B7 / 10MHz / 16QAM/ Mid CH



B7 / 10MHz / QPSK/ High CH



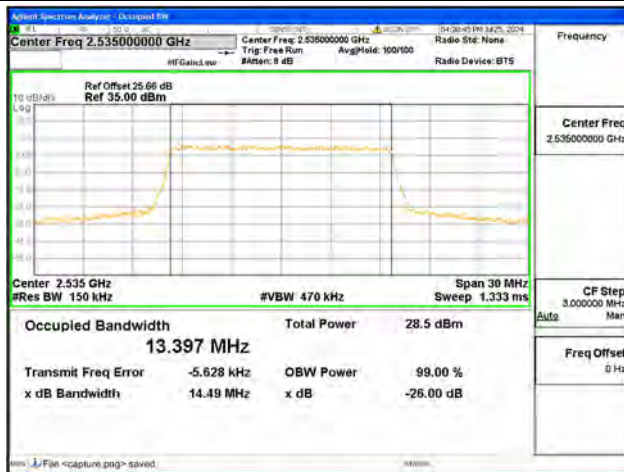
B7 / 10MHz / 16QAM/ High CH



B7 / 15MHz / QPSK/ Low CH



B7 / 15MHz / 16QAM/ Low CH



B7 / 15MHz / QPSK/ Mid CH



B7 / 15MHz / 16QAM/ Mid CH



B7 / 15MHz / QPSK/ High CH



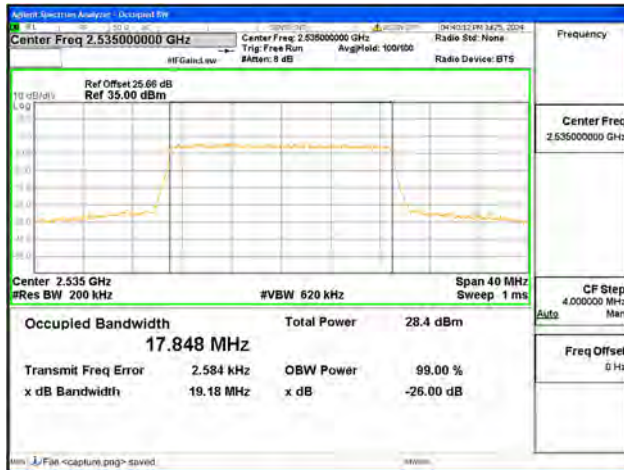
B7 / 15MHz / 16QAM/ High CH



B7 / 20MHz / QPSK/ Low CH



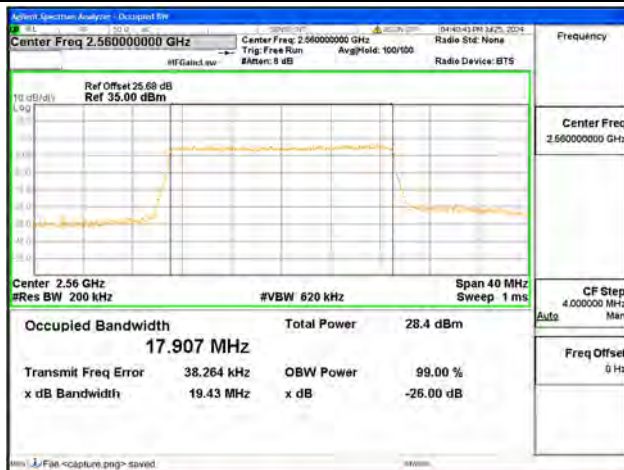
B7 / 20MHz / 16QAM/ Low CH



B7 / 20MHz / QPSK/ Mid CH



B7 / 20MHz / 16QAM/ Mid CH



B7 / 20MHz / QPSK/ High CH



B7 / 20MHz / 16QAM/ High CH



B38 / 5MHz / QPSK/ Low CH



B38 / 5MHz / 16QAM/ Low CH



B38 / 5MHz / QPSK/ Mid CH



B38 / 5MHz / 16QAM/ Mid CH



B38 / 5MHz / QPSK/ High CH



B38 / 5MHz / 16QAM/ High CH



B38 / 10MHz / QPSK/ Low CH



B38 / 10MHz / 16QAM/ Low CH



B38 / 10MHz / QPSK/ Mid CH



B38 / 10MHz / 16QAM/ Mid CH



B38 / 10MHz / QPSK/ High CH



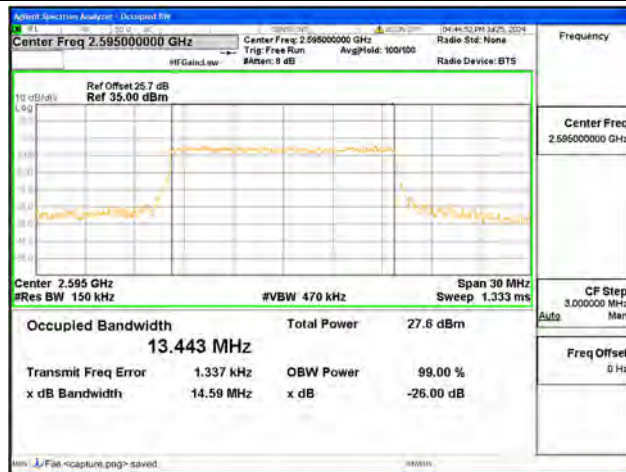
B38 / 10MHz / 16QAM/ High CH



B38 / 15MHz / QPSK/ Low CH



B38 / 15MHz / 16QAM/ Low CH



B38 / 15MHz / QPSK/ Mid CH



B38 / 15MHz / 16QAM/ Mid CH



B38 / 15MHz / QPSK/ High CH



B38 / 15MHz / 16QAM/ High CH



B38 / 20MHz / QPSK/ Low CH



B38 / 20MHz / 16QAM/ Low CH



B38 / 20MHz / QPSK/ Mid CH



B38 / 20MHz / 16QAM/ Mid CH



B38 / 20MHz / QPSK/ High CH



B38 / 20MHz / 16QAM/ High CH



B41 / 5MHz / QPSK/ Low CH



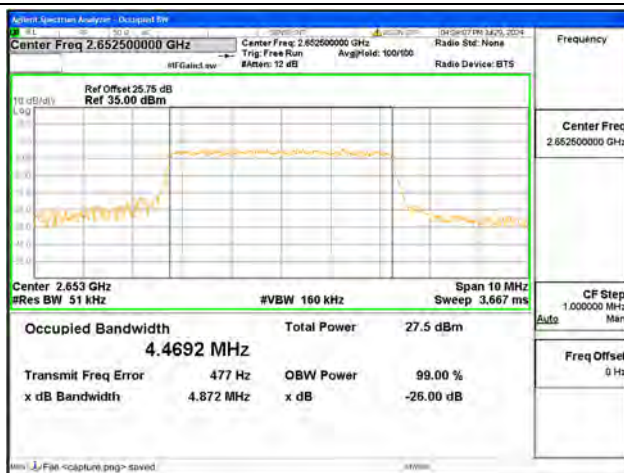
B41 / 5MHz / 16QAM/ Low CH



B41 / 5MHz / QPSK/ Mid CH



B41 / 5MHz / 16QAM/ Mid CH



B41 / 5MHz / QPSK/ High CH



B41 / 5MHz / 16QAM/ High CH



B41 / 10MHz / QPSK/ Low CH



B41 / 10MHz / 16QAM/ Low CH



B41 / 10MHz / QPSK/ Mid CH



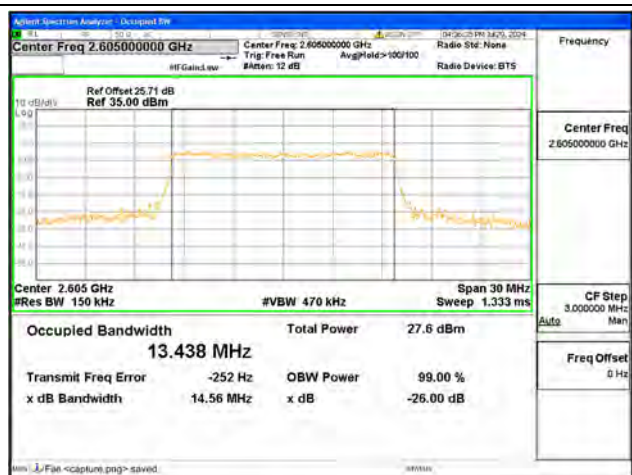
B41 / 10MHz / 16QAM/ Mid CH



B41 / 10MHz / QPSK/ High CH



B41 / 10MHz / 16QAM/ High CH





B41 / 20MHz / QPSK/ Low CH



B41 / 20MHz / 16QAM/ Low CH



B41 / 20MHz / QPSK/ Mid CH



B41 / 20MHz / 16QAM/ Mid CH



B41 / 20MHz / QPSK/ High CH



B41 / 20MHz / 16QAM/ High CH

2.3. Frequency Stability

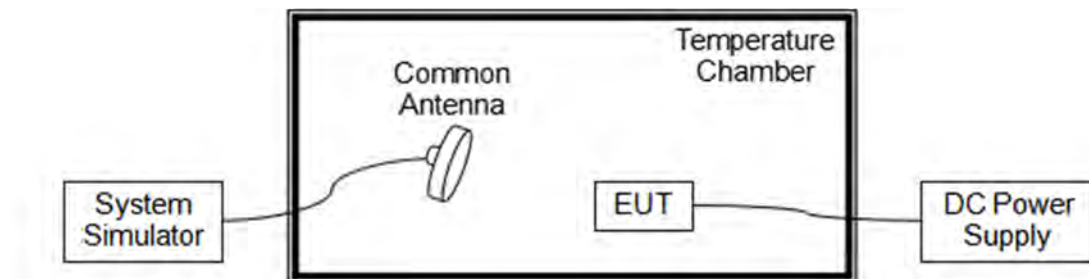
2.3.1. Requirement

According to FCC section 2.1055, 24.235, 27.54, 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 70°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 3.8V, 4.35V and 3.5V, which are specified by the applicant; the normal temperature here used is 20°C.

LTE Band 5, QPSK, Channel 20525, Frequency 836.5MHz Limit=±2.5ppm					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
Normal	3.80	+20(Ref)	-9	-0.011	PASS
Normal		-20	14	0.017	
Normal		-10	19	0.023	
Normal		0	6	0.007	
Normal		+10	19	0.023	
Normal		+20	20	0.024	
Normal		+30	15	0.018	
Normal		+40	-12	-0.014	
Normal		+50	17	0.020	
Normal		+60	17	0.020	
Normal		+70	18	0.022	
High	4.35	+20	19	0.023	
BATT.ENDPOINT	3.50	+20	17	0.020	



LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz Limit= Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
Normal	3.80	+20(Ref)	13	0.005	PASS
Normal		-20	-5	-0.002	
Normal		-10	14	0.006	
Normal		0	-17	-0.007	
Normal		+10	4	0.002	
Normal		+20	19	0.007	
Normal		+30	6	0.002	
Normal		+40	19	0.007	
Normal		+50	18	0.007	
Normal		+60	-14	-0.006	
Normal		+70	-8	-0.003	
High	4.35	+20	13	0.005	
BATT.ENDPOINT	3.50	+20	-14	-0.006	

LTE Band 38, QPSK, Channel 38000, Frequency 2595MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
Normal	3.80	+20(Ref)	16	0.006	PASS
Normal		-20	20	0.008	
Normal		-10	13	0.005	
Normal		0	16	0.006	
Normal		+10	20	0.008	
Normal		+20	15	0.006	
Normal		+30	-16	-0.006	
Normal		+40	19	0.007	
Normal		+50	-23	-0.009	
Normal		+60	11	0.004	
Normal		+70	13	0.005	
High	4.35	+20	3	0.001	
BATT.ENDPOINT	3.50	+20	16	0.006	



LTE Band 41, QPSK, Channel 40620, Frequency 2593MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
Normal	3.80	+20(Ref)	17	0.007	PASS
Normal		-20	-2	-0.001	
Normal		-10	13	0.005	
Normal		0	14	0.005	
Normal		+10	17	0.007	
Normal		+20	20	0.008	
Normal		+30	16	0.006	
Normal		+40	15	0.006	
Normal		+50	-13	-0.005	
Normal		+60	-14	-0.005	
Normal		+70	8	0.003	
High	4.35	+20	17	0.007	
BATT.ENDPOINT	3.50	+20	18	0.007	

2.4. Conducted Spurious Emissions

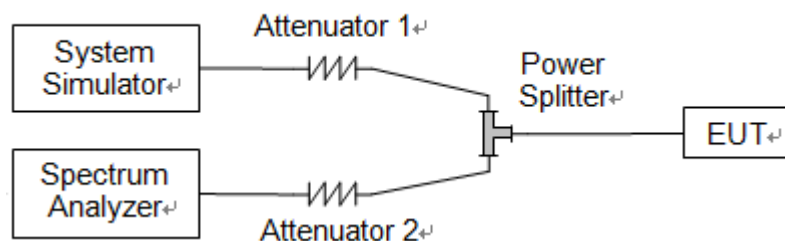
2.4.1. Requirement

According to FCC section 2.1051, 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. This calculated to be -13dBm.

Additional requirement for LTE Band 7/38/41:

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 $55 + 10 \log(P)$ dB. This calculated to be -25dBm.

2.4.2. Test Description



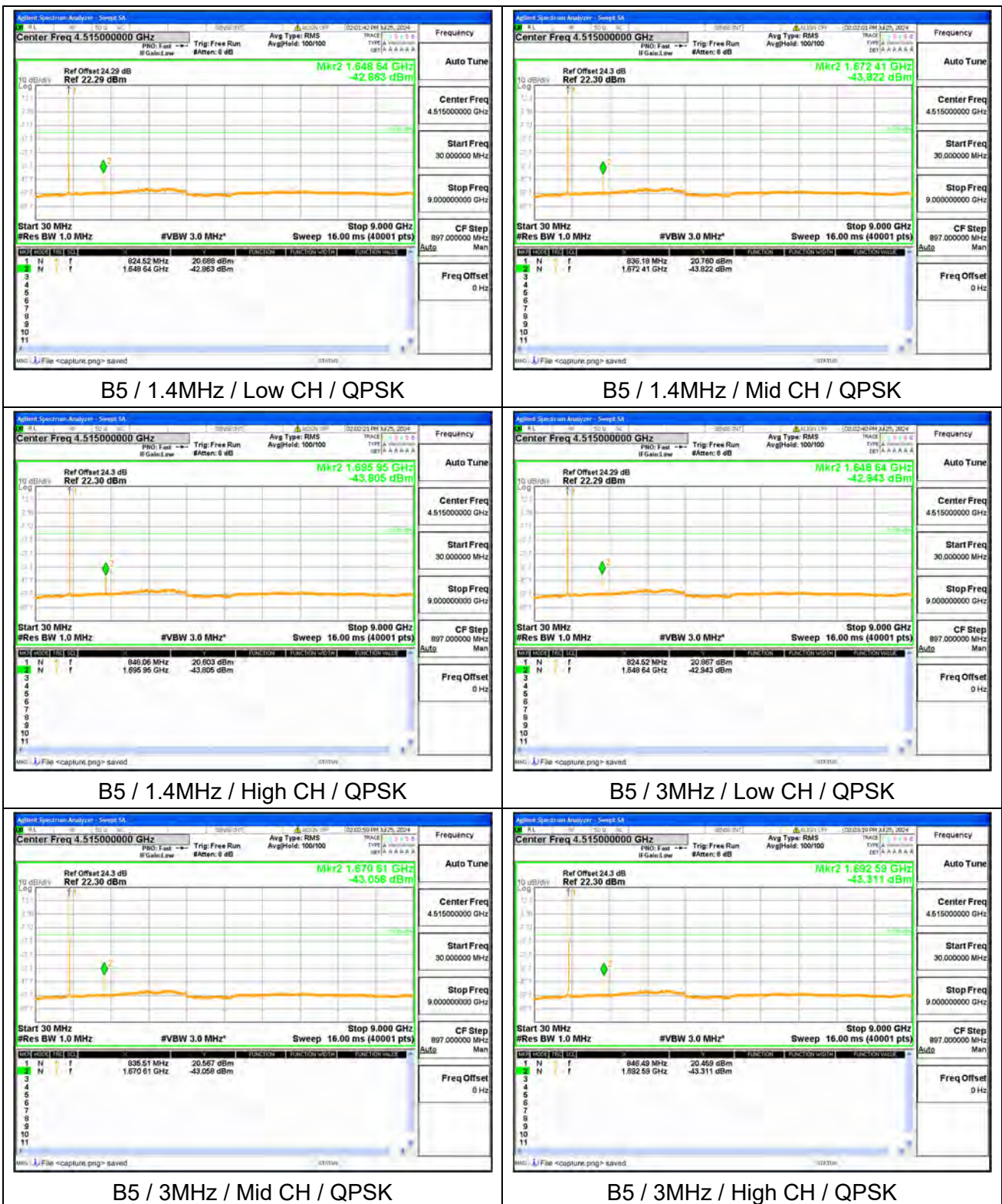
The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum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

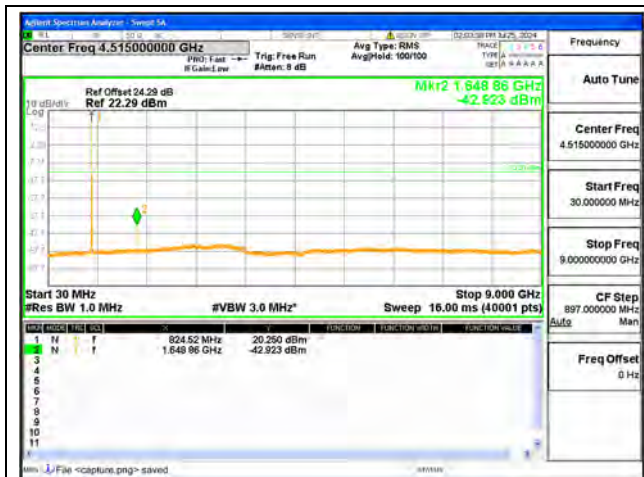
2.4.3. Test Procedure

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

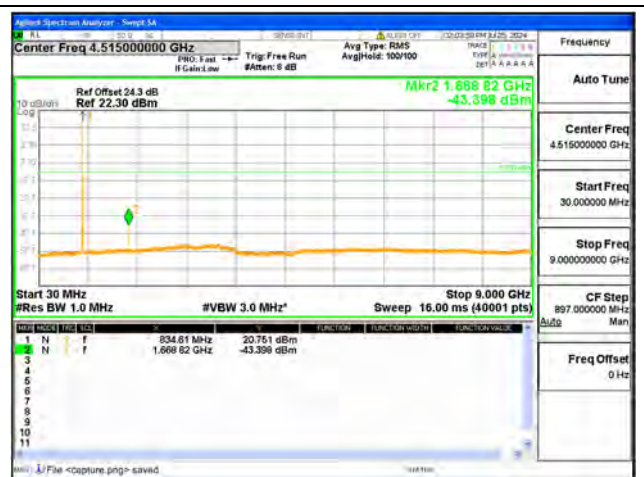


2.4.4. Test Result

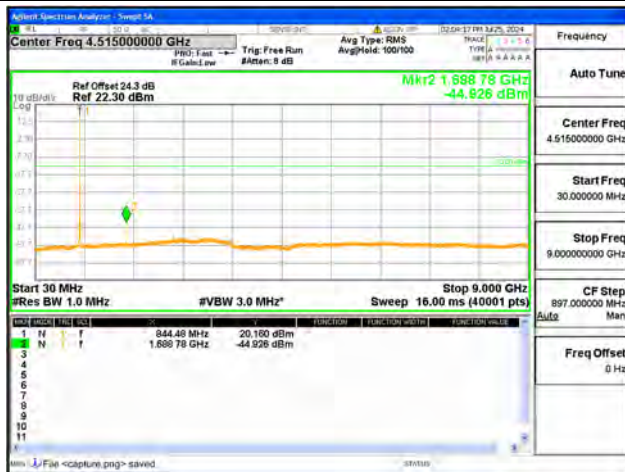




B5 / 5MHz / Low CH / QPSK



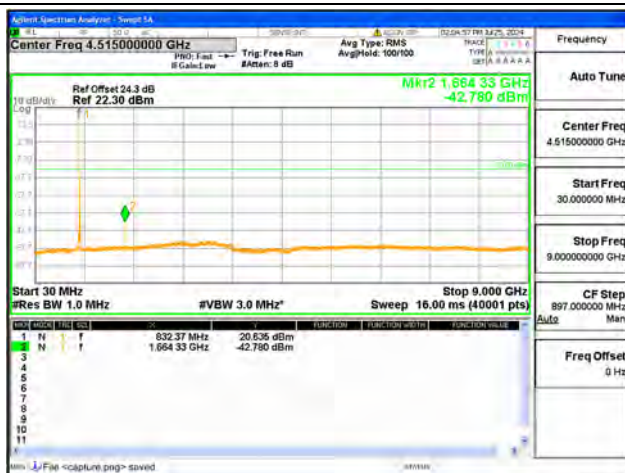
B5 / 5MHz / Mid CH / QPSK



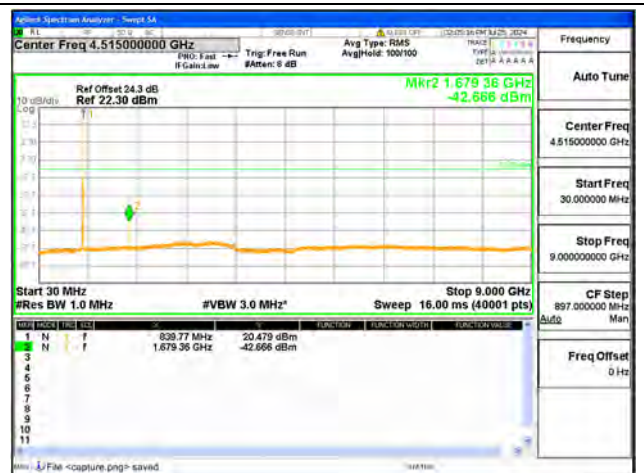
B5 / 5MHz / High CH / QPSK



B5 / 10MHz / Low CH / QPSK



B5 / 10MHz / Mid CH / QPSK



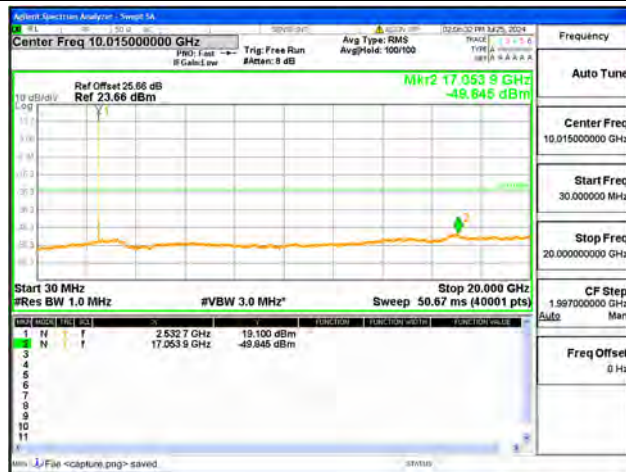
B5 / 10MHz / High CH / QPSK



B7-30M-20G / 5MHz / Low CH / QPSK



B7-20G-26G / 5MHz / Low CH / QPSK



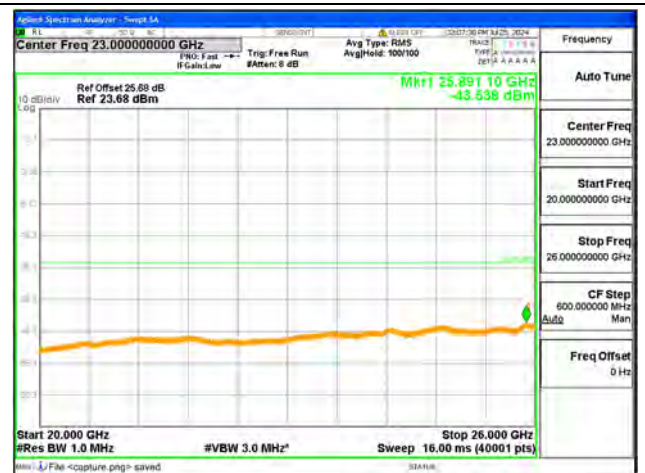
B7-30M-20G / 5MHz / Mid CH / QPSK



B7-20G-26G / 5MHz / Mid CH / QPSK



B7-30M-20G / 5MHz / High CH / QPSK



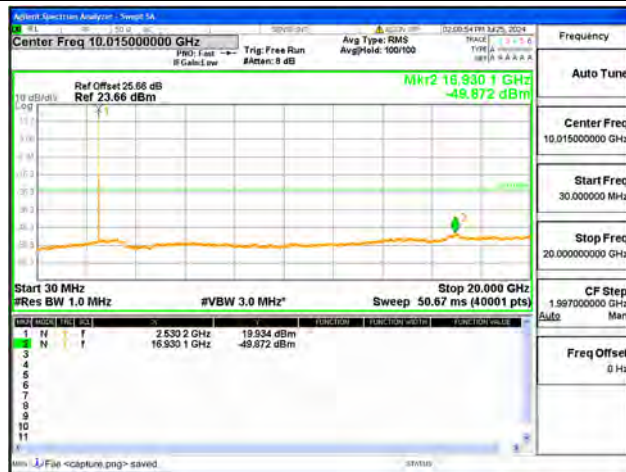
B7-20G-26G / 5MHz / High CH / QPSK



B7-30M-20G / 10MHz / Low CH / QPSK



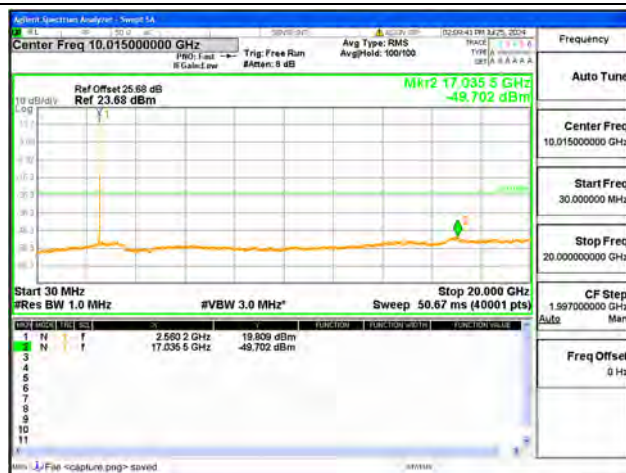
B7-20G-26G / 10MHz / Low CH / QPSK



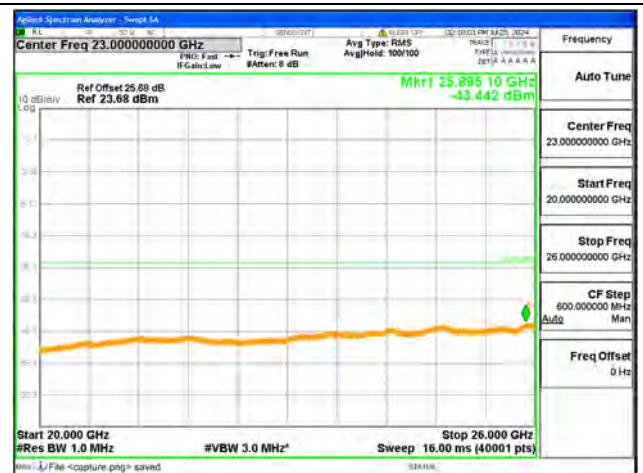
B7-30M-20G / 10MHz / Mid CH / QPSK



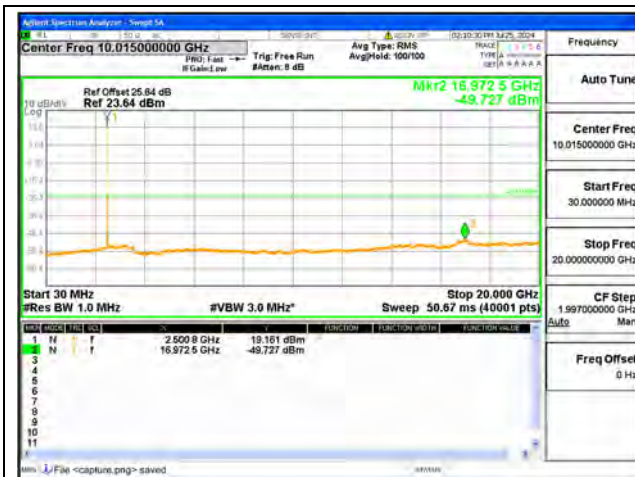
B7-20G-26G / 10MHz / Mid CH / QPSK



B7-30M-20G / 10MHz / High CH / QPSK



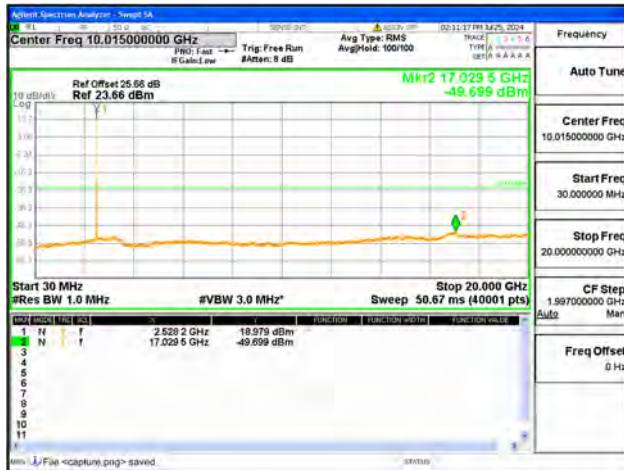
B7-20G-26G / 10MHz / High CH / QPSK



B7-30M-20G / 15MHz / Low CH / QPSK



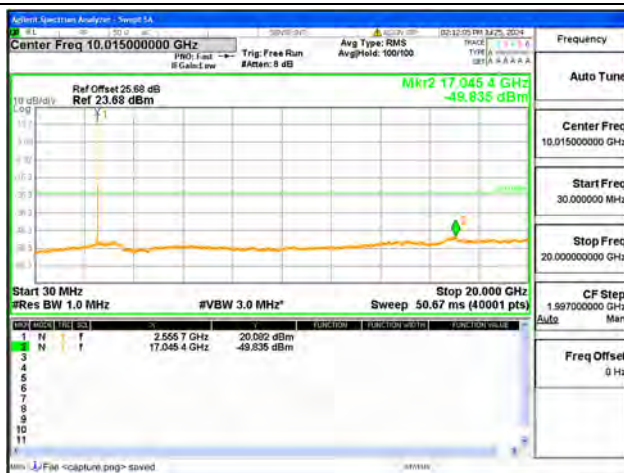
B7-20G-26G / 15MHz / Low CH / QPSK



B7-30M-20G / 15MHz / Mid CH / QPSK



B7-20G-26G / 15MHz / Mid CH / QPSK



B7-30M-20G / 15MHz / High CH / QPSK



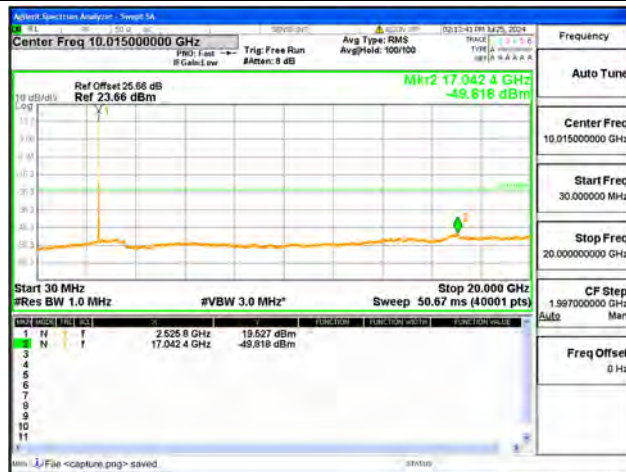
B7-20G-26G / 15MHz / High CH / QPSK



B7-30M-20G / 20MHz / Low CH / QPSK



B7-20G-26G / 20MHz / Low CH / QPSK



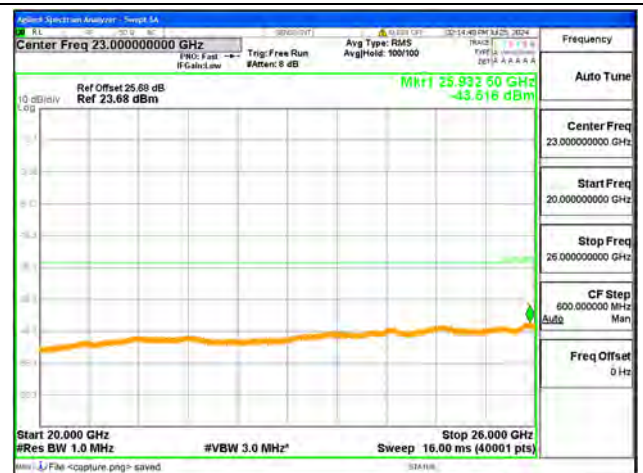
B7-30M-20G / 20MHz / Mid CH / QPSK



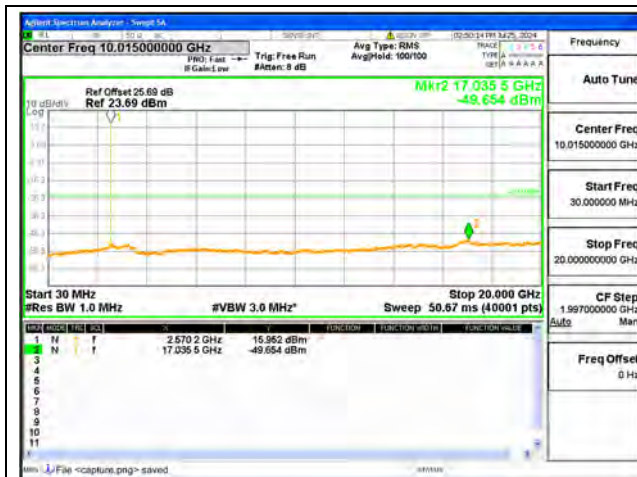
B7-20G-26G / 20MHz / Mid CH / QPSK



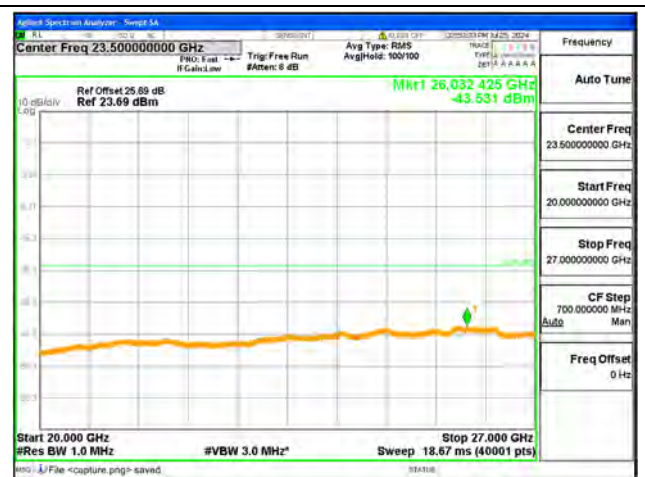
B7-30M-20G / 20MHz / High CH / QPSK



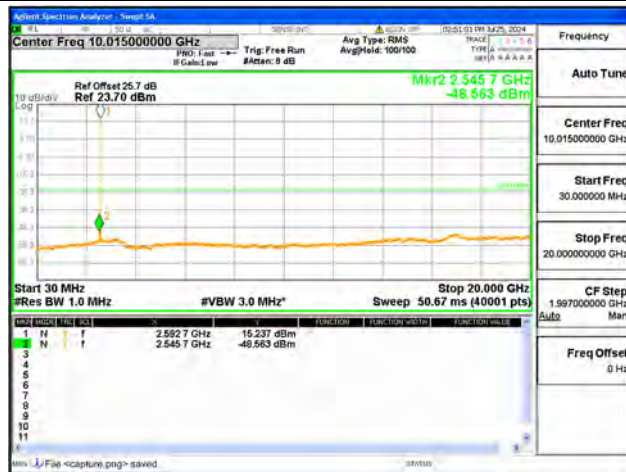
B7-20G-26G / 20MHz / High CH / QPSK



B38-30M-20G / 5MHz / Low CH / QPSK



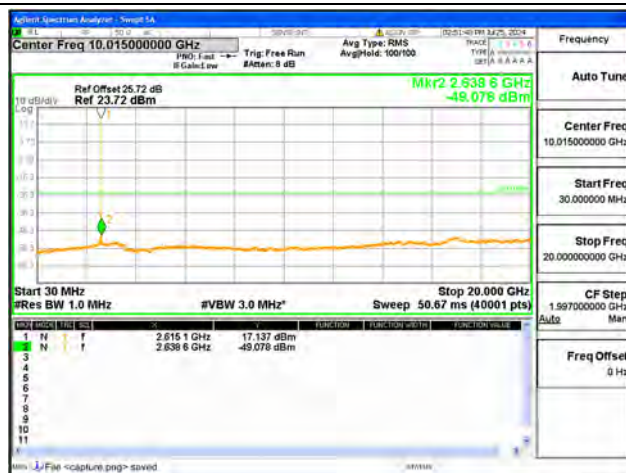
B38-20G-27G / 5MHz / Low CH / QPSK



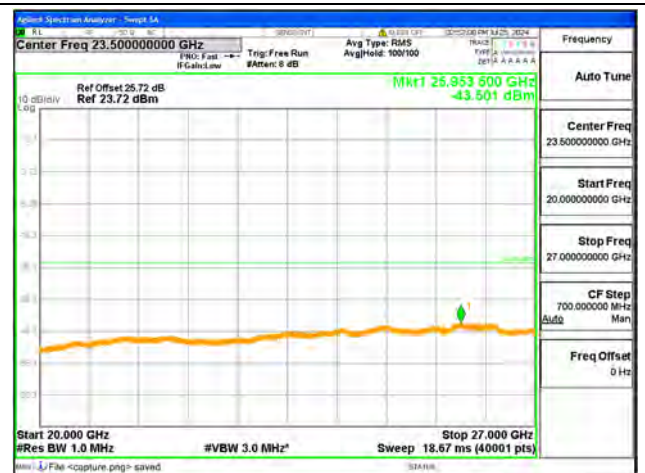
B38-30M-20G / 5MHz / Mid CH / QPSK



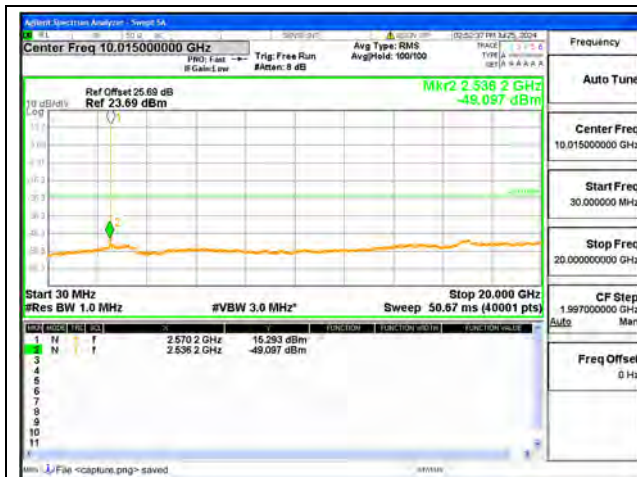
B38-20G-27G / 5MHz / Mid CH / QPSK



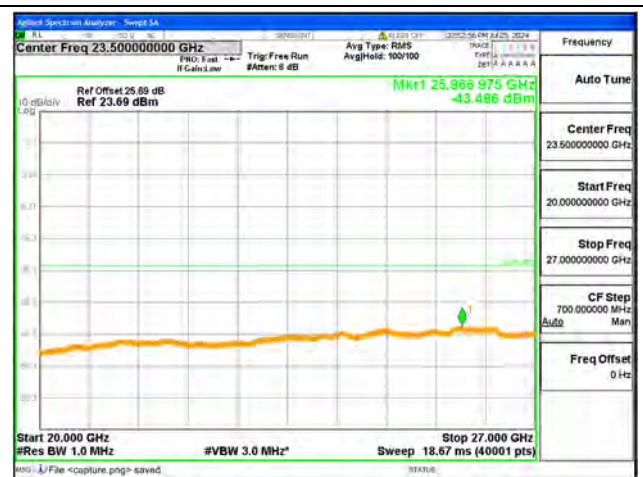
B38-30M-20G / 5MHz / High CH / QPSK



B38-20G-27G / 5MHz / High CH / QPSK



B38-30M-20G / 10MHz / Low CH / QPSK



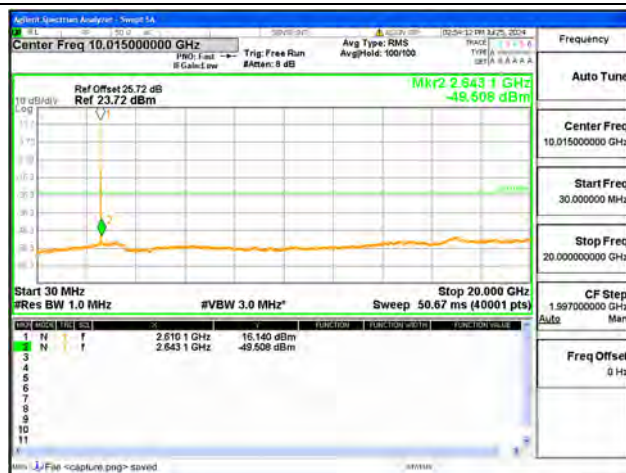
B38-20G-27G / 10MHz / Low CH / QPSK



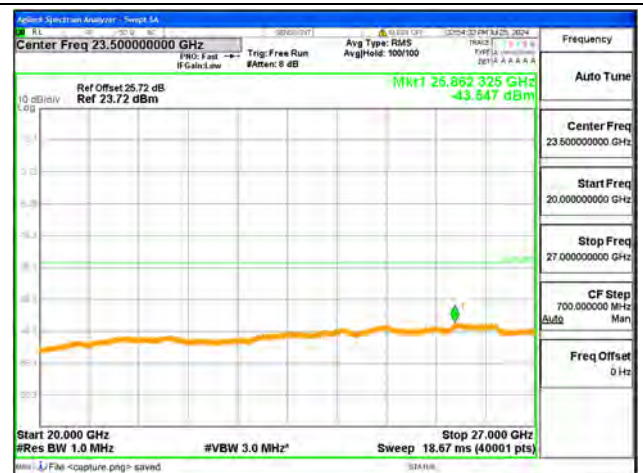
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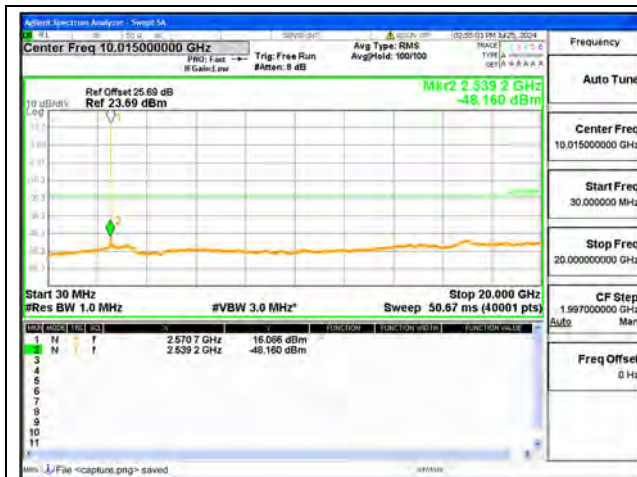
B38-20G-27G / 10MHz / Mid CH / QPSK



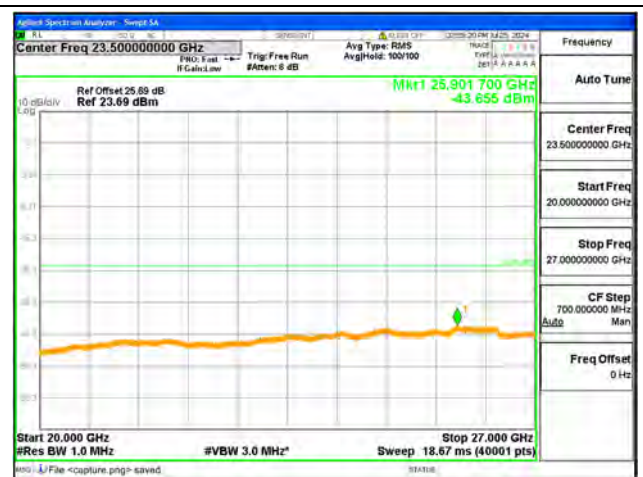
B38-30M-20G / 10MHz / High CH / QPSK



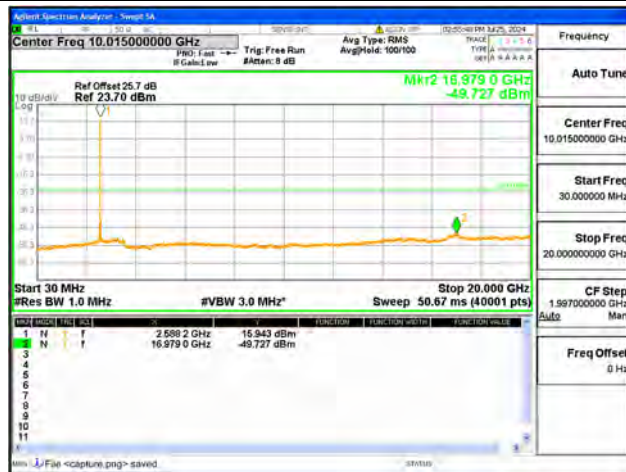
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B38-30M-20G / 15MHz / Low CH / QPSK



B38-20G-27G / 15MHz / Low CH / QPSK



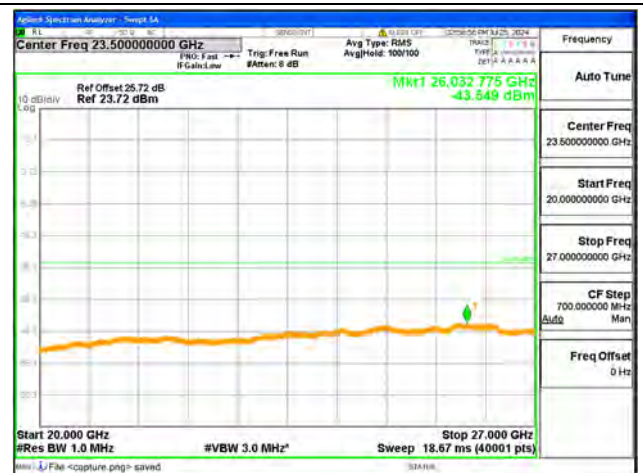
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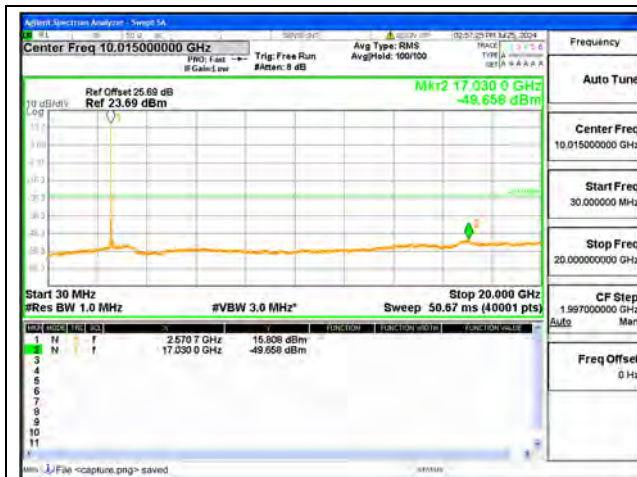
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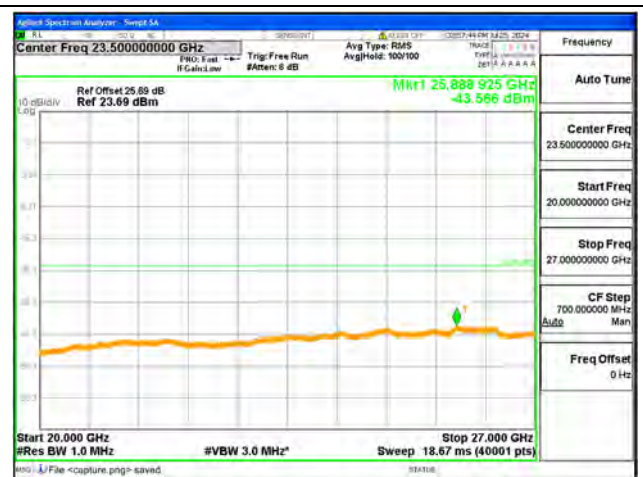
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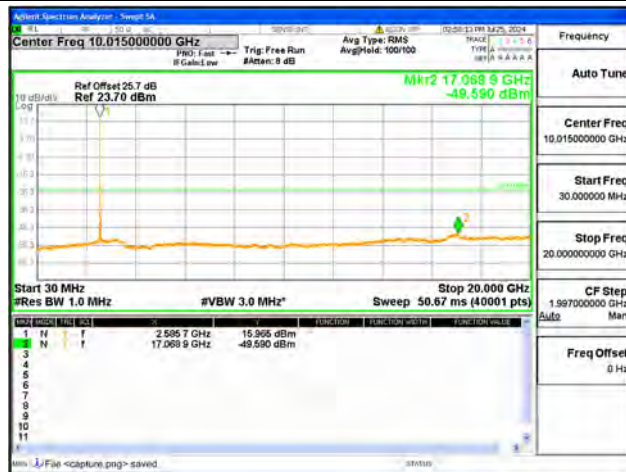
B38-20G-27G / 15MHz / High CH / QPSK



B38-30M-20G / 20MHz / Low CH / QPSK



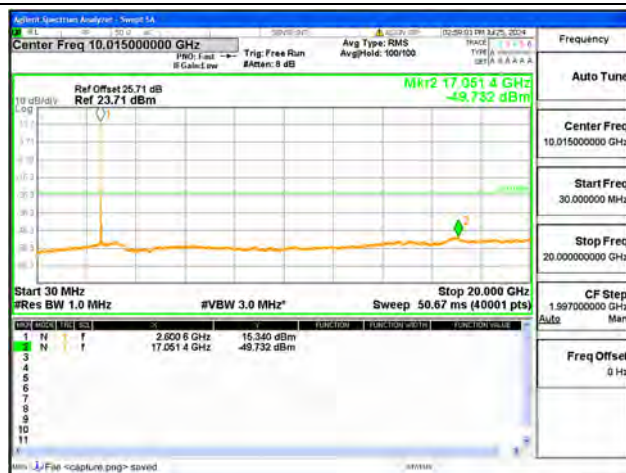
B38-20G-27G / 20MHz / Low CH / QPSK



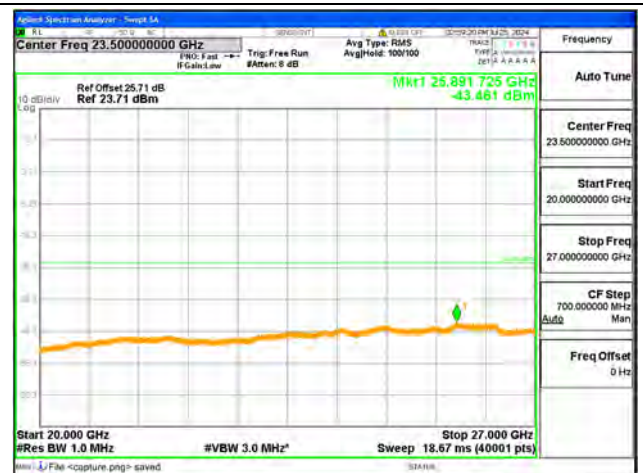
B38-30M-20G / 20MHz / Mid CH / QPSK



B38-20G-27G / 20MHz / Mid CH / QPSK



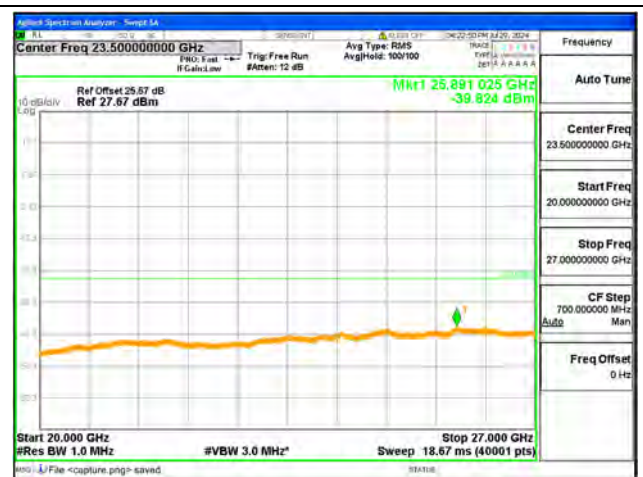
B38-30M-20G / 20MHz / High CH / QPSK



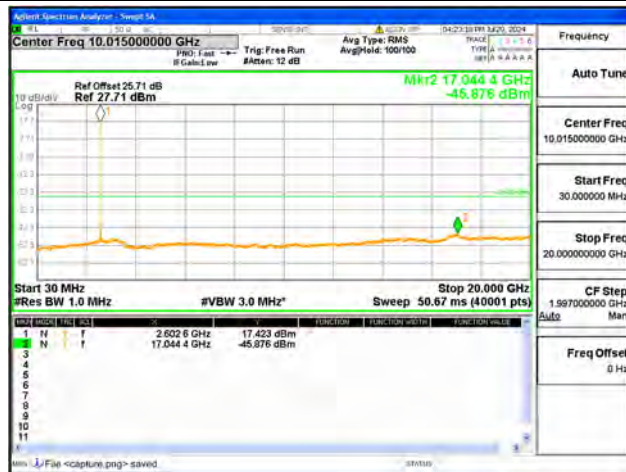
B38-20G-27G / 20MHz / High CH / QPSK



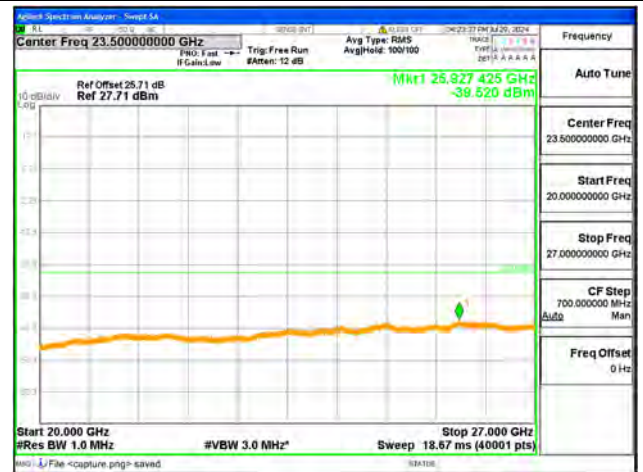
B41-30M-20G / 5MHz / Low CH / QPSK



B41-20G-27G / 5MHz / Low CH / QPSK



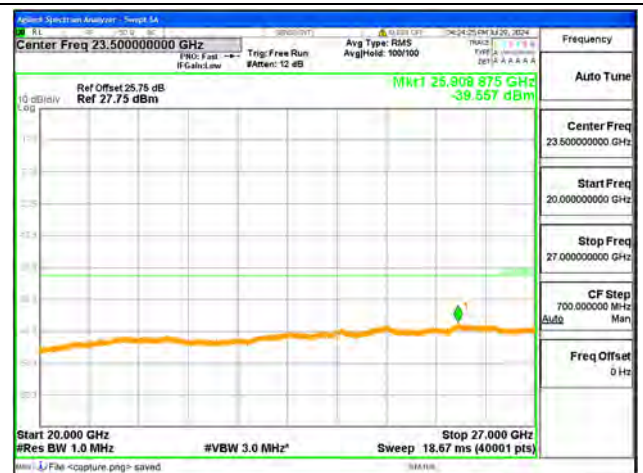
B41-30M-20G / 5MHz / Mid CH / QPSK



B41-20G-27G / 5MHz / Mid CH / QPSK



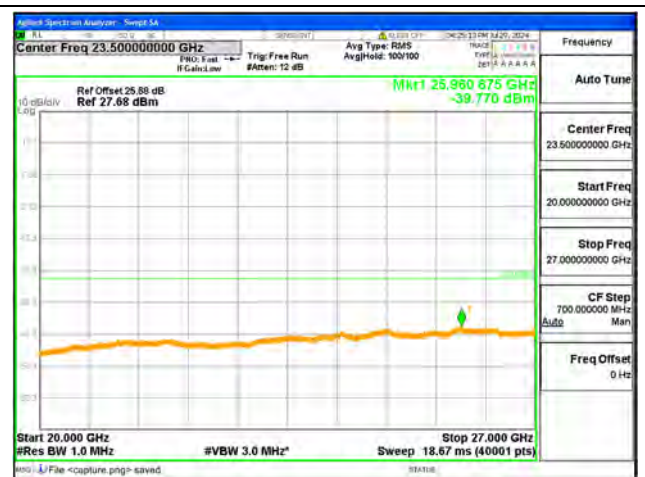
B41-30M-20G / 5MHz / High CH / QPSK



B41-20G-27G / 5MHz / High CH / QPSK



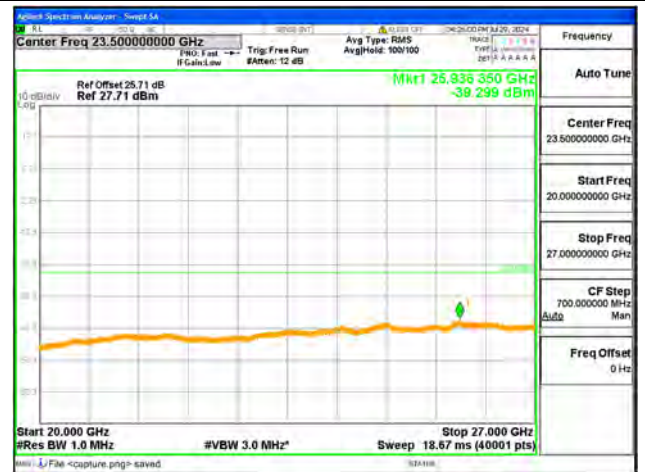
B41-30M-20G / 10MHz / Low CH / QPSK



B41-20G-27G / 10MHz / Low CH / QPSK



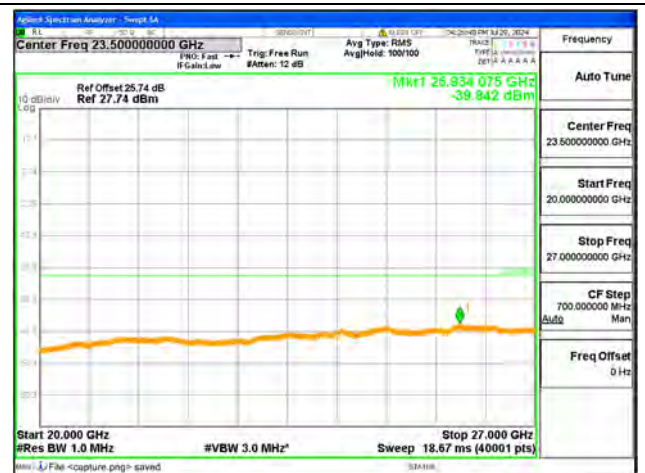
B41-30M-20G / 10MHz / Mid CH / QPSK



B41-20G-27G / 10MHz / Mid CH / QPSK



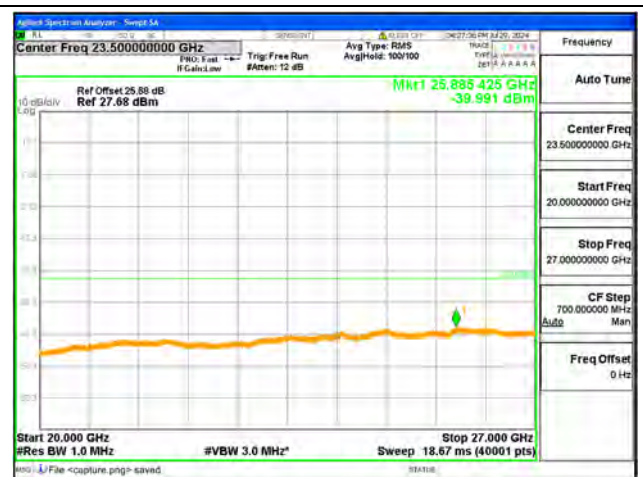
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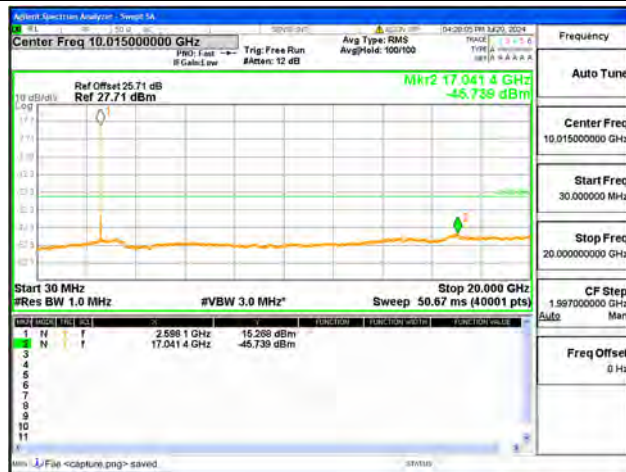
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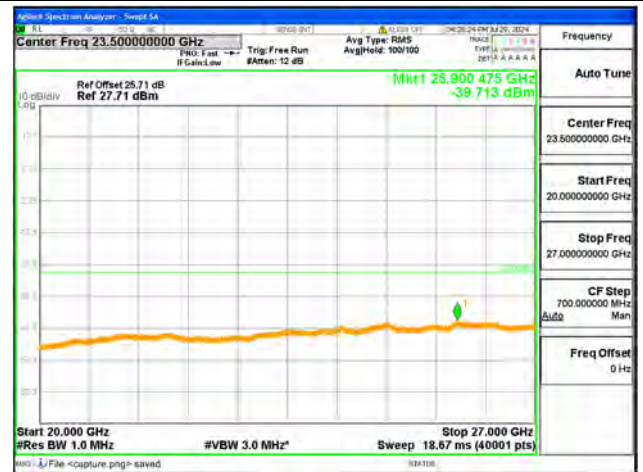
B41-30M-20G / 15MHz / Low CH / QPSK



B41-20G-27G / 15MHz / Low CH / QPSK



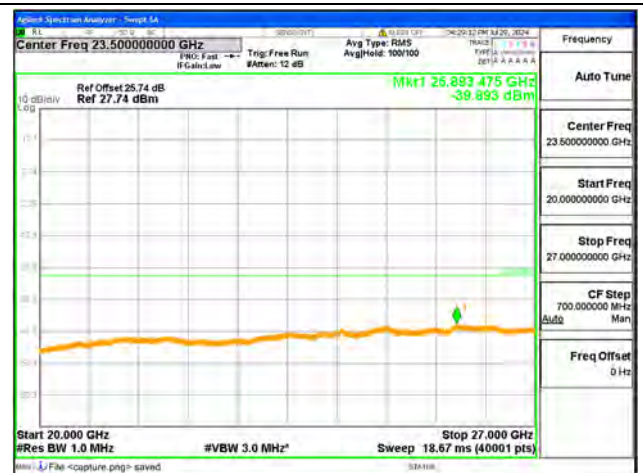
B41-30M-20G / 15MHz / Mid CH / QPSK



B41-20G-27G / 15MHz / Mid CH / QPSK



B41-30M-20G / 15MHz / High CH / QPSK



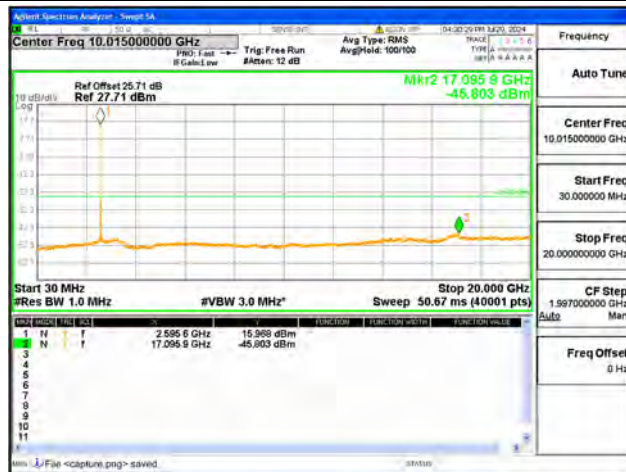
B41-20G-27G / 15MHz / High CH / QPSK



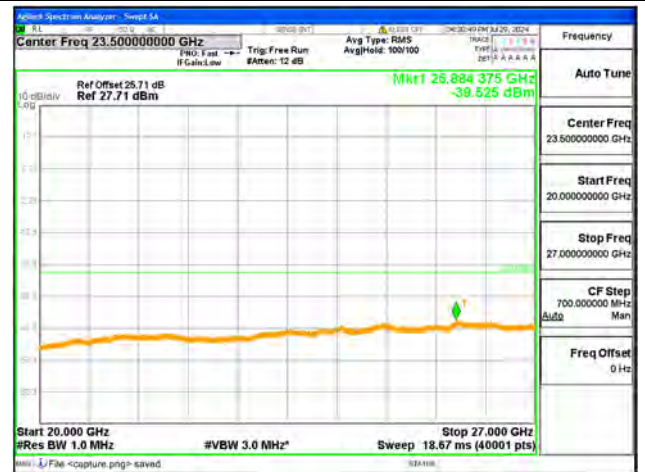
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B41-20G-27G / 20MHz / Low CH / QPSK



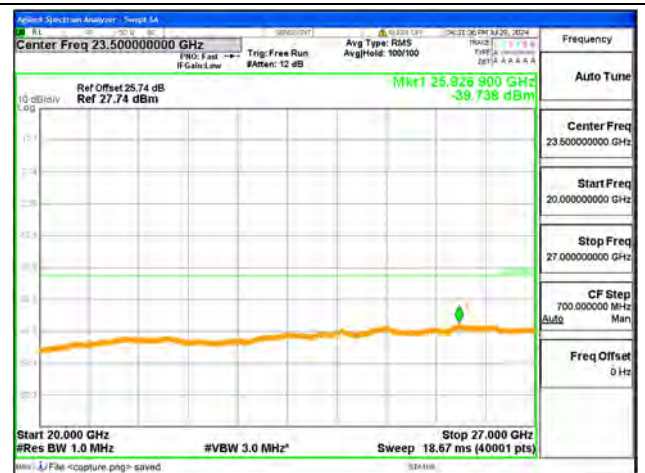
B41-30M-20G / 20MHz / Mid CH / QPSK



B41-20G-27G / 20MHz / Mid CH / QPSK



B41-30M-20G / 20MHz / High CH / QPSK



B41-20G-27G / 20MHz / High CH / QPSK



2.5. Band Edge

2.5.1. Requirement

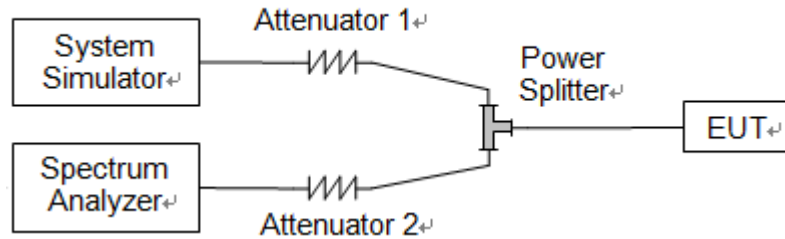
Band 5

According to FCC section 22.917(a), for operations in the 824–849MHz bands, 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 in a 100kHz bandwidth. However, in the 1 MHz 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.

Band 7/38/41

According to FCC section 27.53(m) (4), 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 than $43 + 10 \log(P)$ 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.

2.5.2. Description



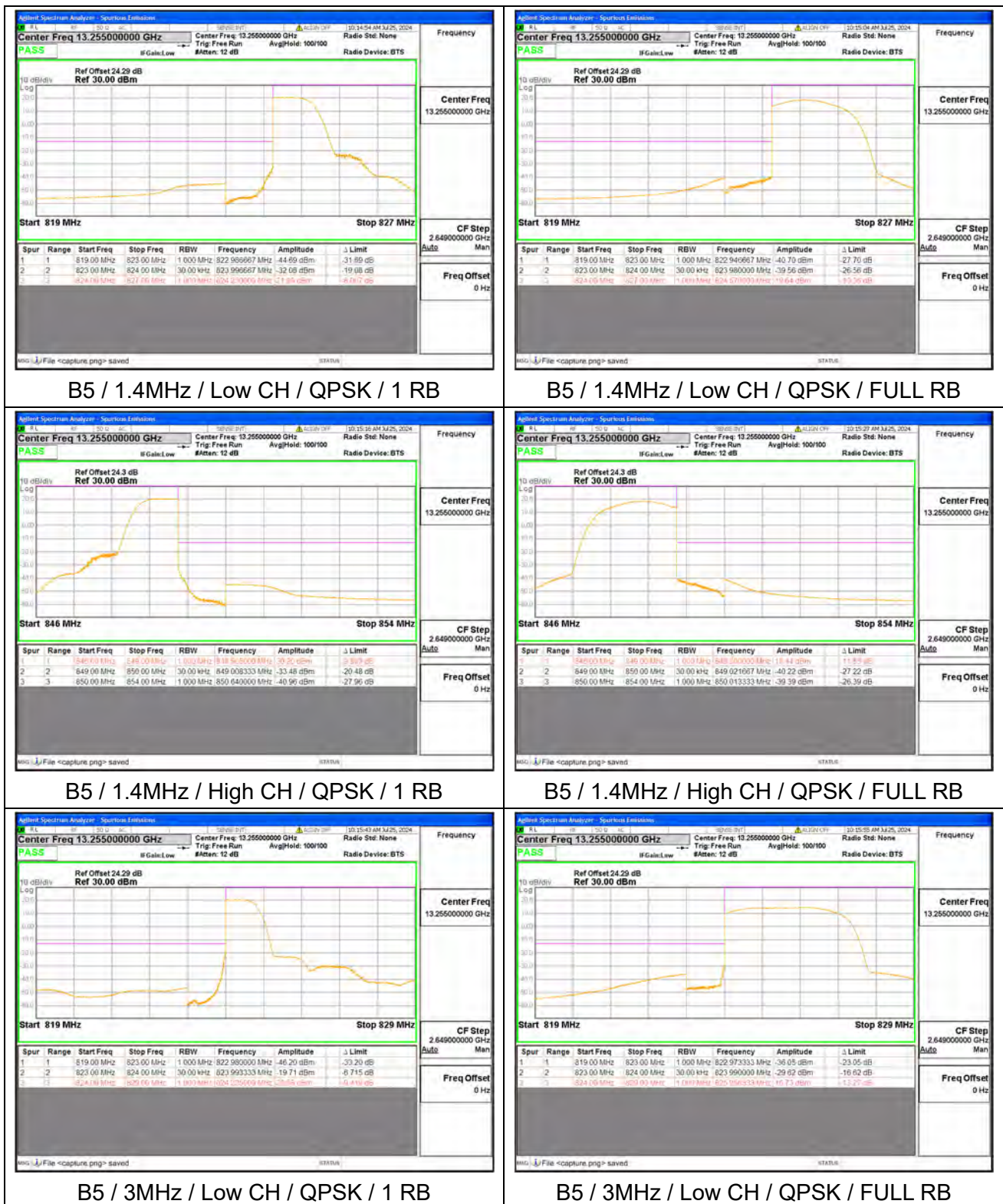
The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum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

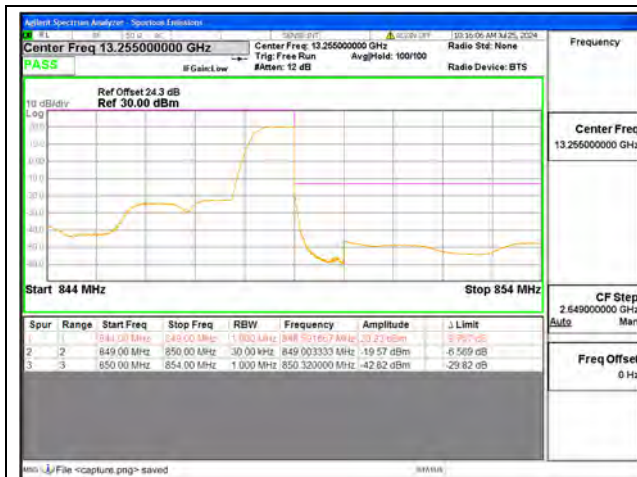
2.5.3. Test Procedure

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



2.5.4. Test Result

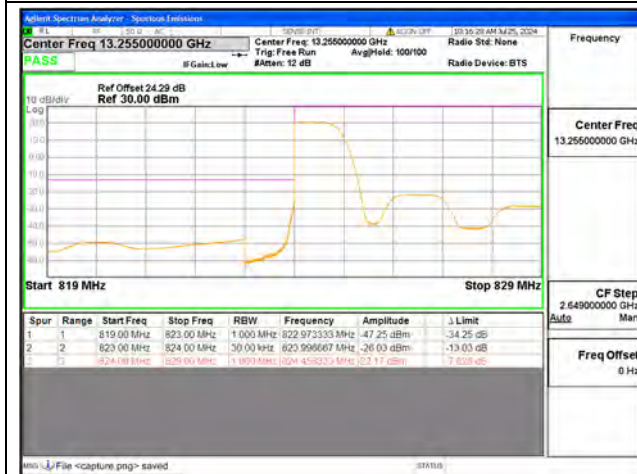




B5 / 3MHz / High CH / QPSK / 1 RB



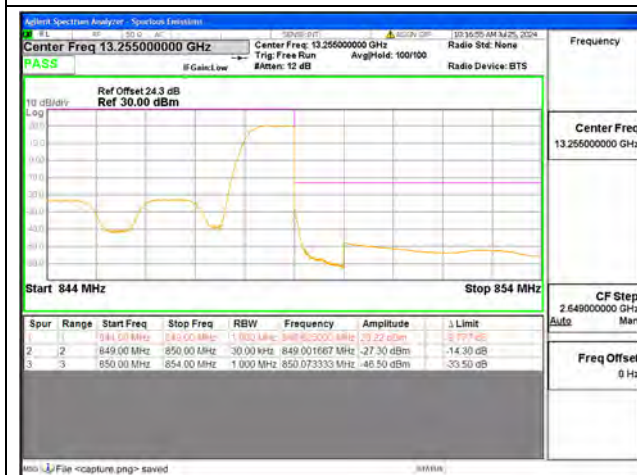
B5 / 3MHz / High CH / QPSK / FULL RB



B5 / 5MHz / Low CH / QPSK / 1 RB



B5 / 5MHz / Low CH / QPSK / FULL RB



B5 / 5MHz / High CH / QPSK / 1 RB



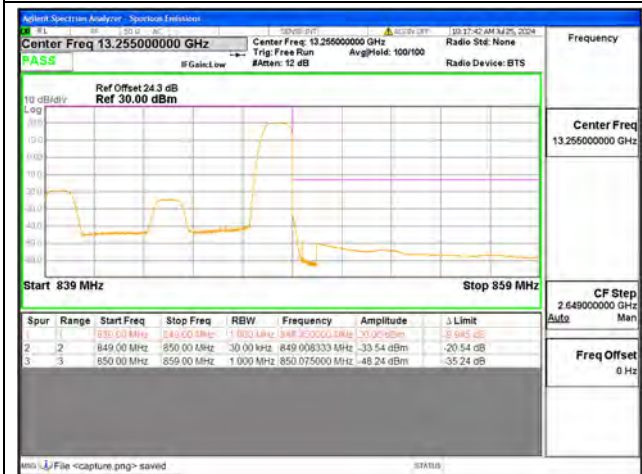
B5 / 5MHz / High CH / QPSK / FULL RB



B5 / 10MHz / Low CH / QPSK / 1 RB



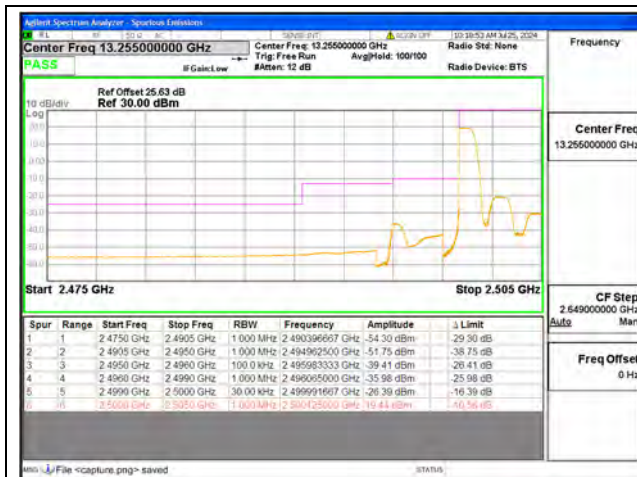
B5 / 10MHz / Low CH / QPSK / FULL RB



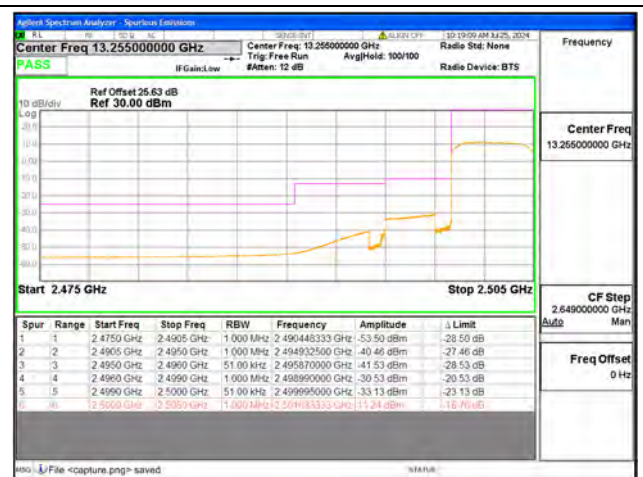
B5 / 10MHz / High CH / QPSK / 1 RB



B5 / 10MHz / High CH / QPSK / FULL RB



B7 / 5MHz / Low CH / QPSK / 1 RB



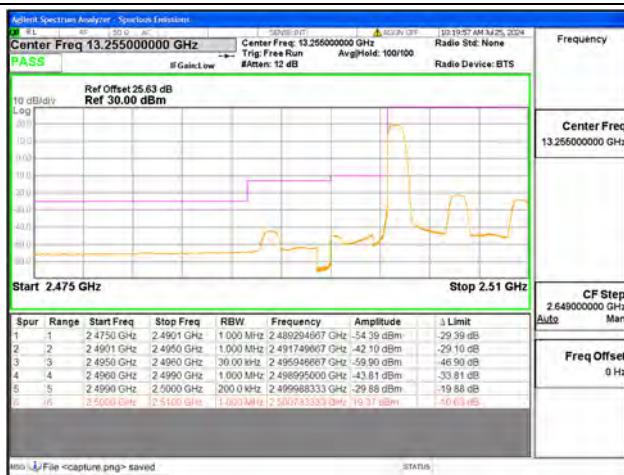
B7 / 5MHz / Low CH / QPSK / FULL RB



B7 / 5MHz / High CH / QPSK / 1 RB



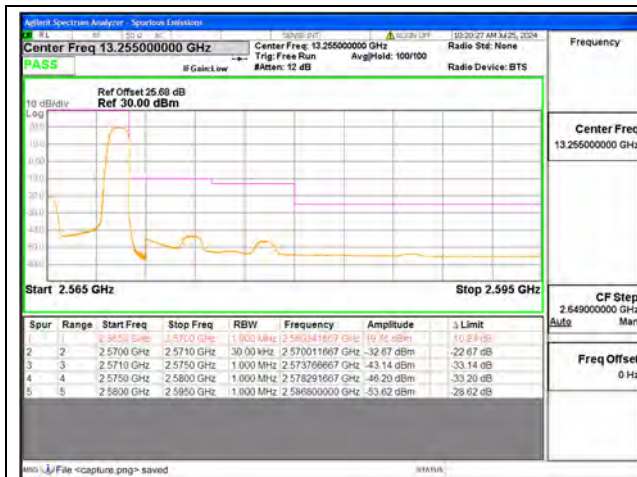
B7 / 5MHz / High CH / QPSK / FULL RB



B7 / 10MHz / Low CH / QPSK / 1 RB



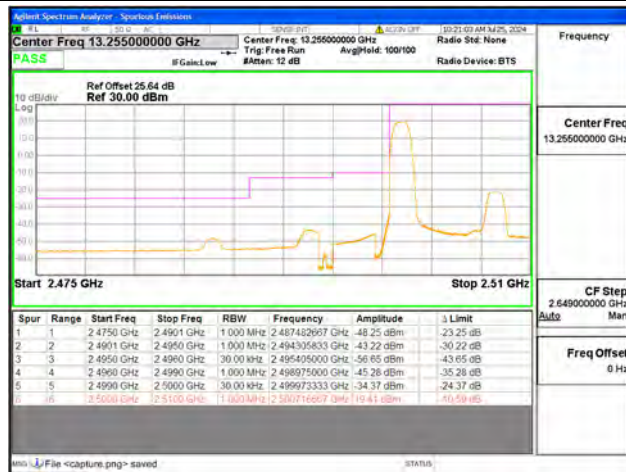
B7 / 10MHz / Low CH / QPSK / FULL RB



B7 / 10MHz / High CH / QPSK / 1 RB



B7 / 10MHz / High CH / QPSK / FULL RB



B7 / 15MHz / Low CH / QPSK / 1 RB



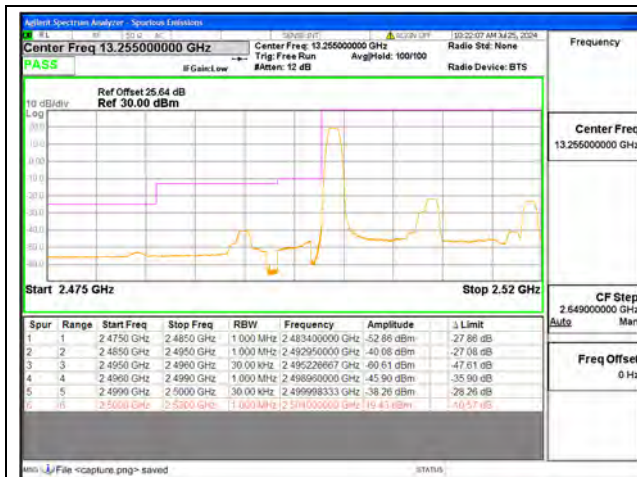
B7 / 15MHz / Low CH / QPSK / FULL RB



B7 / 15MHz / High CH / QPSK / 1 RB



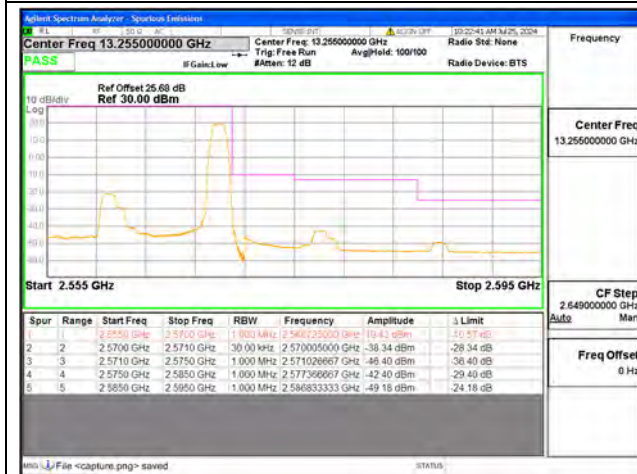
B7 / 15MHz / High CH / QPSK / FULL RB



B7 / 20MHz / Low CH / QPSK / 1 RB



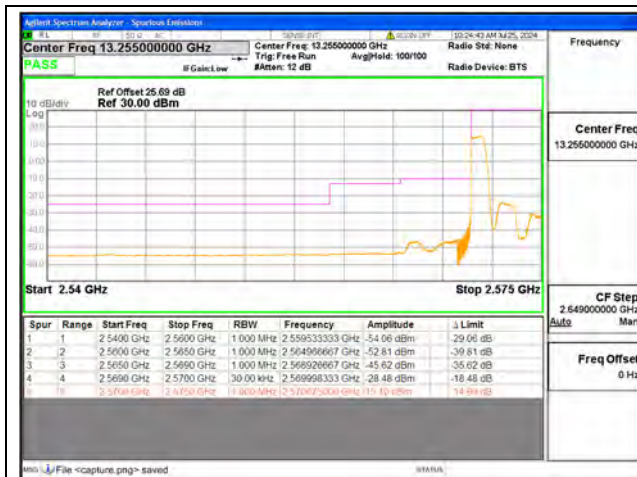
B7 / 20MHz / Low CH / QPSK / FULL RB



B7 / 20MHz / High CH / QPSK / 1 RB



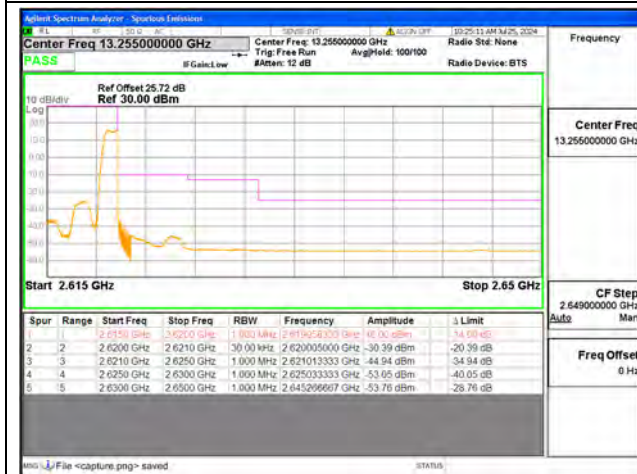
B7 / 20MHz / High CH / QPSK / FULL RB



B38 / 5MHz / Low CH / QPSK / 1 RB



B38 / 5MHz / Low CH / QPSK / FULL RB



B38 / 5MHz / High CH / QPSK / 1 RB



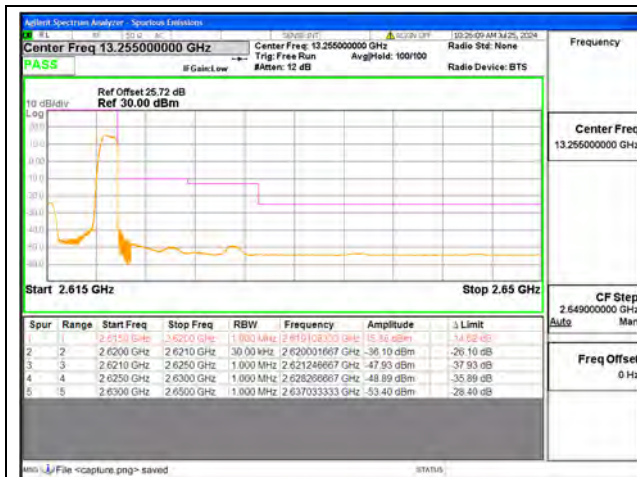
B38 / 5MHz / High CH / QPSK / FULL RB



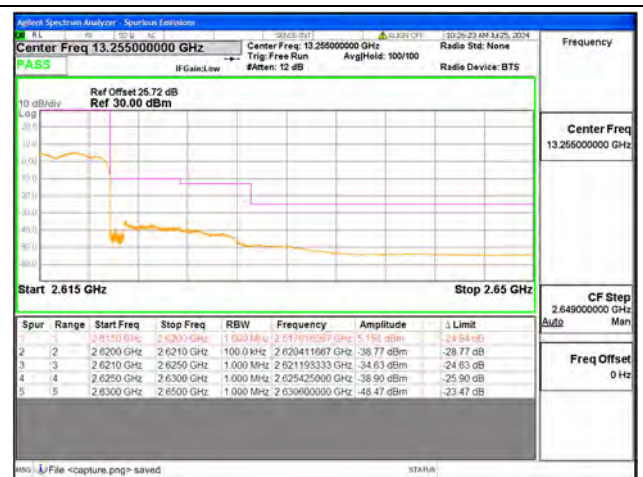
B38 / 10MHz / Low CH / QPSK / 1 RB



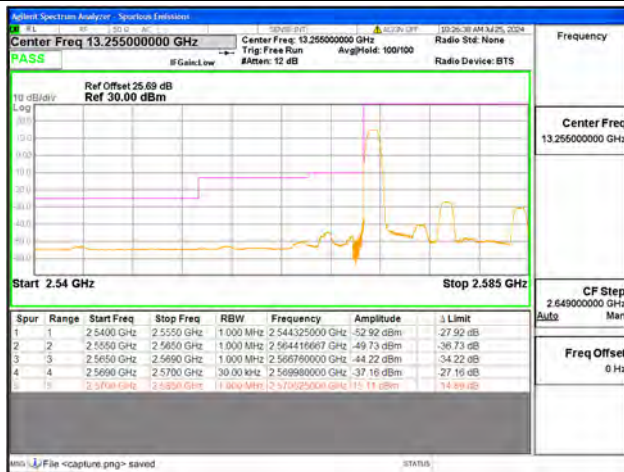
B38 / 10MHz / Low CH / QPSK / FULL RB



B38 / 10MHz / High CH / QPSK / 1 RB



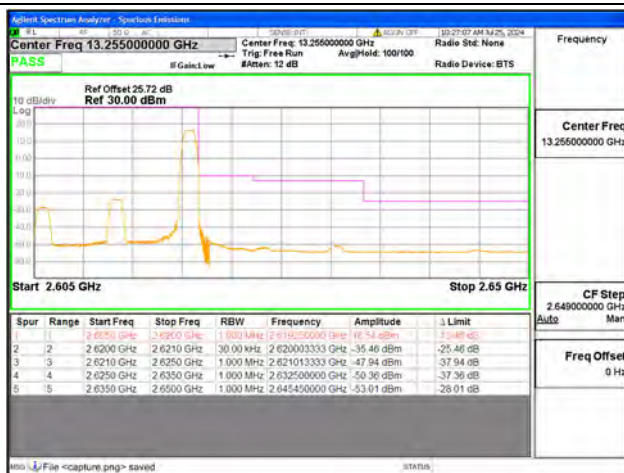
B38 / 10MHz / High CH / QPSK / FULL RB



B38 / 15MHz / Low CH / QPSK / 1 RB



B38 / 15MHz / Low CH / QPSK / FULL RB



B38 / 15MHz / High CH / QPSK / 1 RB



B38 / 15MHz / High CH / QPSK / FULL RB



B38 / 20MHz / Low CH / QPSK / 1 RB



B38 / 20MHz / Low CH / QPSK / FULL RB



B38 / 20MHz / High CH / QPSK / 1 RB



B38 / 20MHz / High CH / QPSK / FULL RB



B41 / 5MHz / Low CH / QPSK / 1 RB



B41 / 5MHz / Low CH / QPSK / FULL RB



B41 / 5MHz / High CH / QPSK / 1 RB



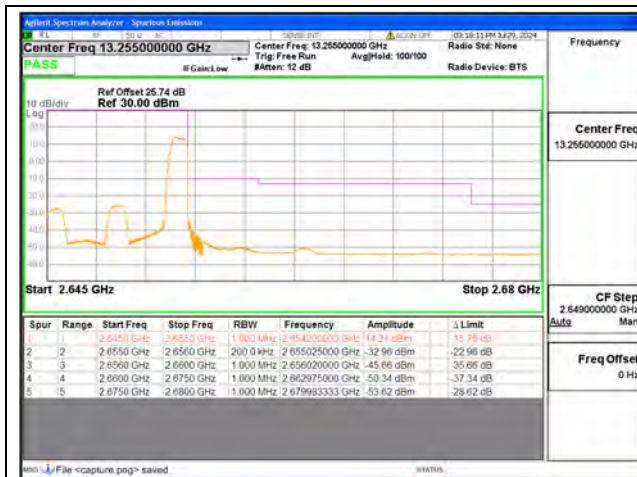
B41 / 5MHz / High CH / QPSK / FULL RB



B41 / 10MHz / Low CH / QPSK / 1 RB



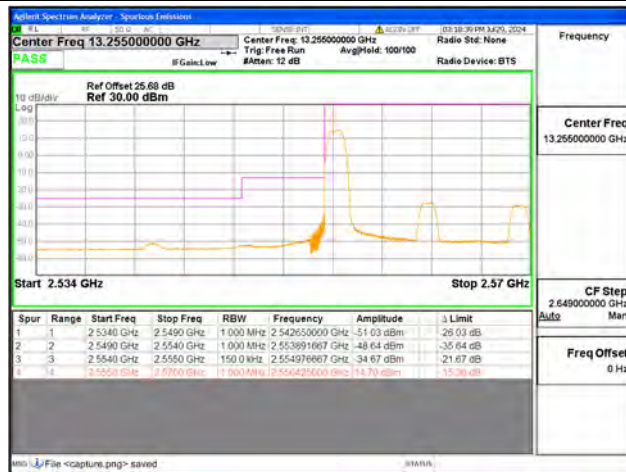
B41 / 10MHz / Low CH / QPSK / FULL RB



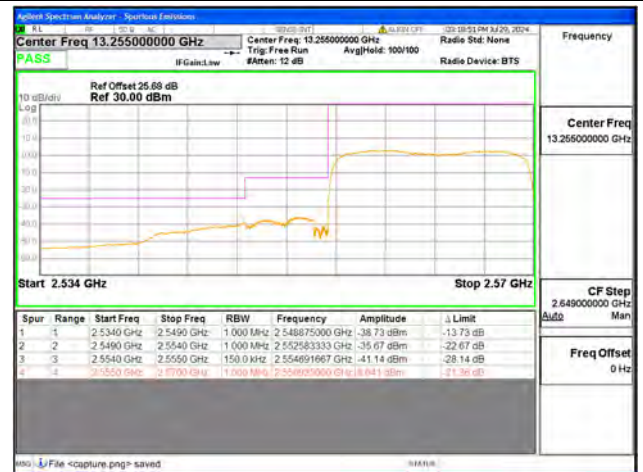
B41 / 10MHz / High CH / QPSK / 1 RB



B41 / 10MHz / High CH / QPSK / FULL RB



B41 / 15MHz / Low CH / QPSK / 1 RB



B41 / 15MHz / Low CH / QPSK / FULL RB



B41 / 15MHz / High CH / QPSK / 1 RB



B41 / 15MHz / High CH / QPSK / FULL RB



B41 / 20MHz / Low CH / QPSK / 1 RB



B41 / 20MHz / Low CH / QPSK / FULL RB



B41 / 20MHz / High CH / QPSK / 1 RB



B41 / 20MHz / High CH / QPSK / FULL RB

2.6. Radiated Spurious Emissions

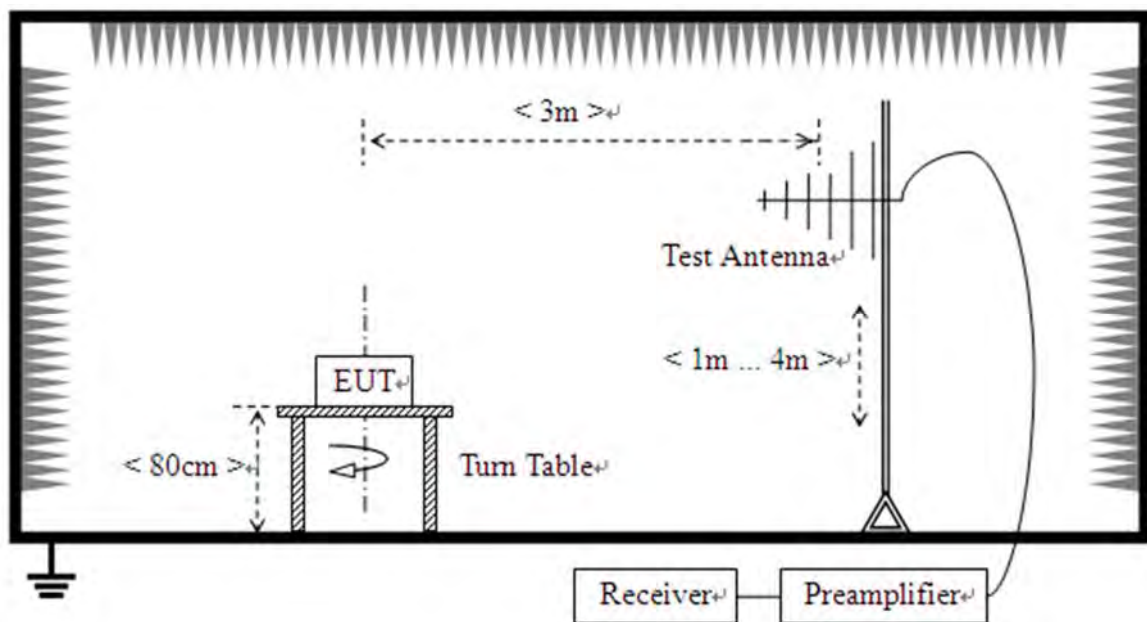
2.6.1. Requirement

According to FCC section 2.1051, 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. This calculated to be -13dBm.

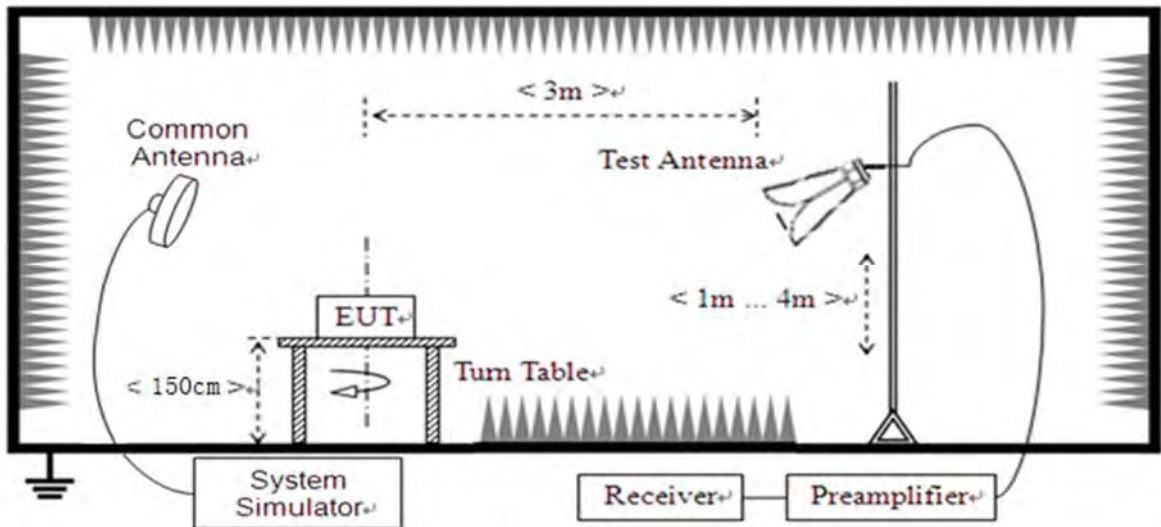
Additional requirement for LTE Band 7/38/41

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 $55 + 10 \log(P)$ dB. This calculated to be -25dBm.

2.6.2. 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.

2.6.3. 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.



2.6.4. 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.

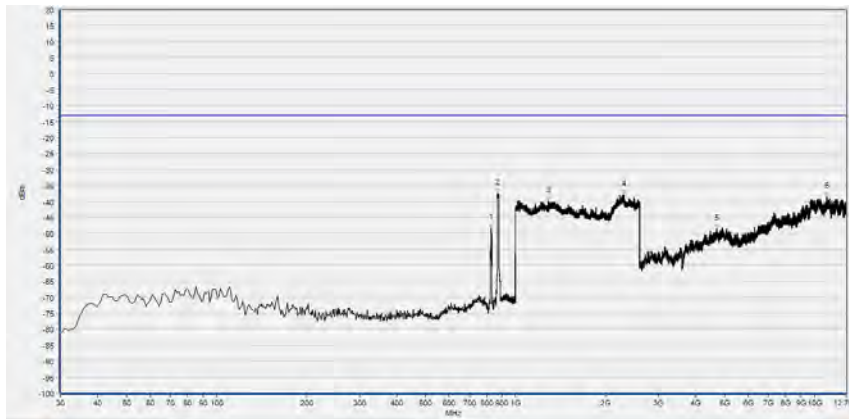
Note2: All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

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.

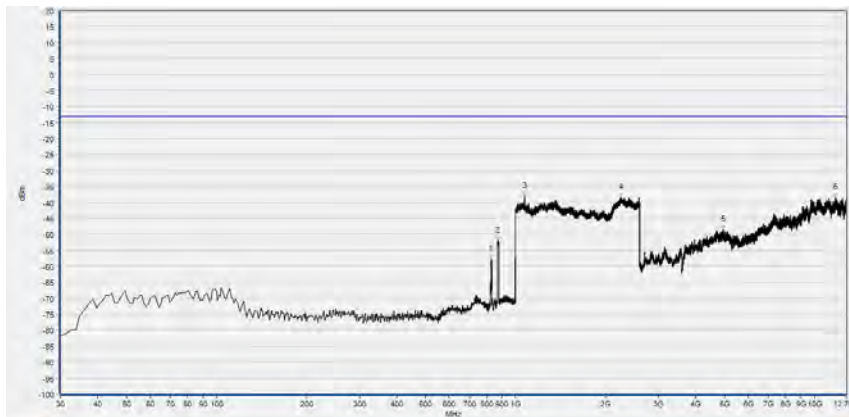
Note4: N/A means the frequency is the basic frequency or the base station frequency, they are no need to verdict.

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 5, 10MHz BW, Low Channel, QPSK

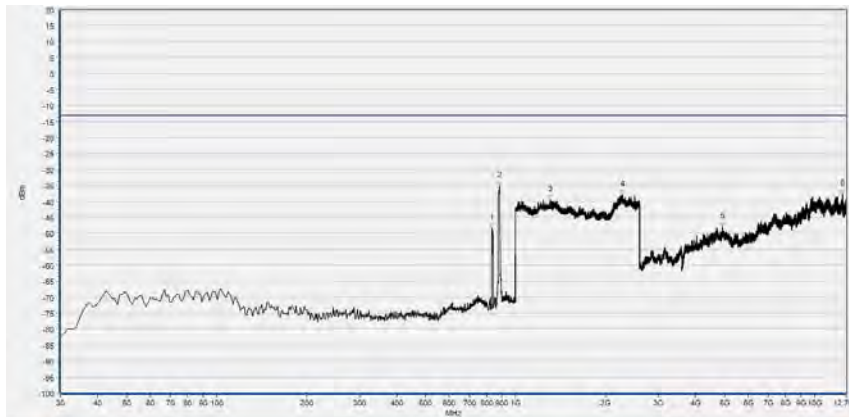


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	828.310	-48.43	-13.00	Horizontal	N/A
2	870.020	-37.47	-13.00	Horizontal	N/A
3	1285.554	-39.89	-13.00	Horizontal	PASS
4	2305.482	-37.81	-13.00	Horizontal	PASS
5	4715.276	-48.70	-13.00	Horizontal	PASS
6	10989.116	-38.54	-13.00	Horizontal	PASS

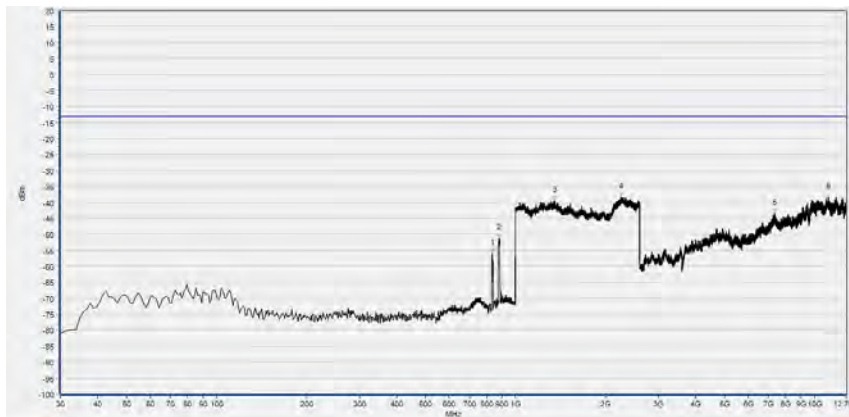


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	828.310	-57.68	-13.00	Vertical	N/A
2	871.960	-52.24	-13.00	Vertical	N/A
3	1072.349	-38.10	-13.00	Vertical	PASS
4	2247.219	-38.66	-13.00	Vertical	PASS
5	4938.616	-48.60	-13.00	Vertical	PASS
6	11771.731	-38.44	-13.00	Vertical	PASS

LTE Band 5, 10MHz BW, Mid Channel, QPSK

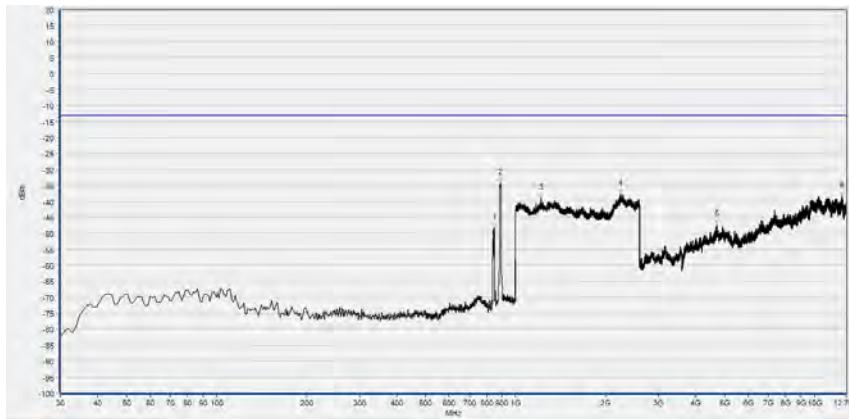


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	834.130	-48.48	-13.00	Horizontal	N/A
2	884.570	-35.14	-13.00	Horizontal	N/A
3	1306.042	-39.46	-13.00	Horizontal	PASS
4	2273.469	-37.93	-13.00	Horizontal	PASS
5	4918.312	-48.00	-13.00	Horizontal	PASS
6	12423.295	-37.65	-13.00	Horizontal	PASS

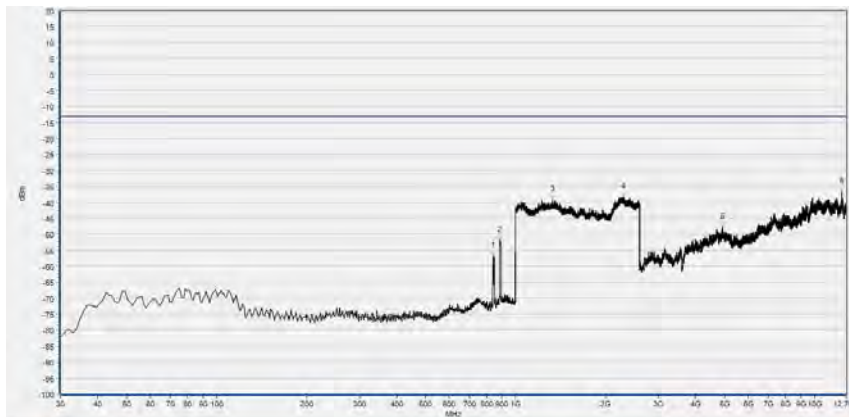


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	835.100	-55.93	-13.00	Vertical	N/A
2	880.690	-51.25	-13.00	Vertical	N/A
3	1351.501	-39.50	-13.00	Vertical	PASS
4	2247.859	-38.28	-13.00	Vertical	PASS
5	7365.830	-43.57	-13.00	Vertical	PASS
6	11092.480	-38.27	-13.00	Vertical	PASS

LTE Band 5, 10MHz BW, High Channel, QPSK

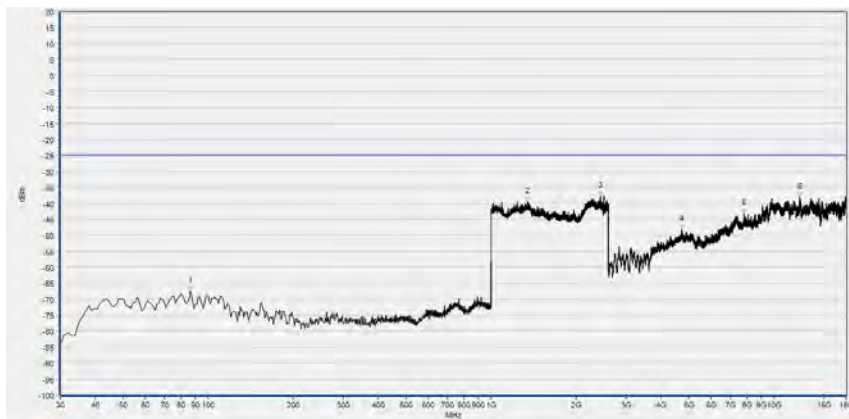


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	848.680	-48.35	-13.00	Horizontal	N/A
2	891.360	-34.31	-13.00	Horizontal	N/A
3	1217.687	-38.90	-13.00	Horizontal	PASS
4	2238.896	-37.76	-13.00	Horizontal	PASS
5	4713.430	-47.36	-13.00	Horizontal	PASS
6	12351.309	-38.32	-13.00	Horizontal	PASS

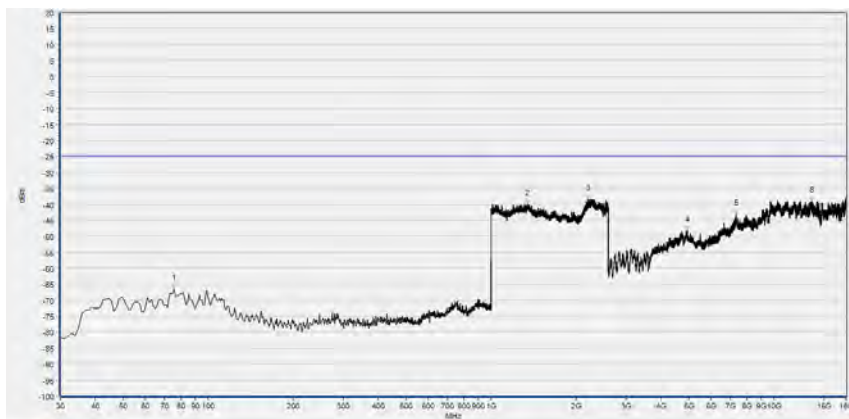


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	842.860	-56.82	-13.00	Vertical	N/A
2	885.540	-52.04	-13.00	Vertical	N/A
3	1332.293	-39.24	-13.00	Vertical	PASS
4	2294.598	-38.27	-13.00	Vertical	PASS
5	4931.233	-47.74	-13.00	Vertical	PASS
6	12342.080	-36.81	-13.00	Vertical	PASS

LTE Band 7, 20MHz BW, Low Channel, QPSK

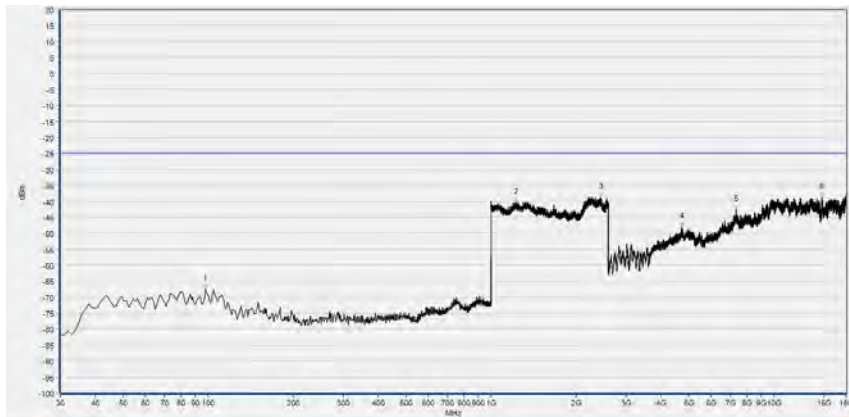


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	86.260	-67.30	-25.00	Horizontal	PASS
2	1343.177	-39.40	-25.00	Horizontal	PASS
3	2431.613	-37.72	-25.00	Horizontal	PASS
4	4714.384	-48.10	-25.00	Horizontal	PASS
5	7850.955	-43.34	-25.00	Horizontal	PASS
6	12368.176	-38.02	-25.00	Horizontal	PASS

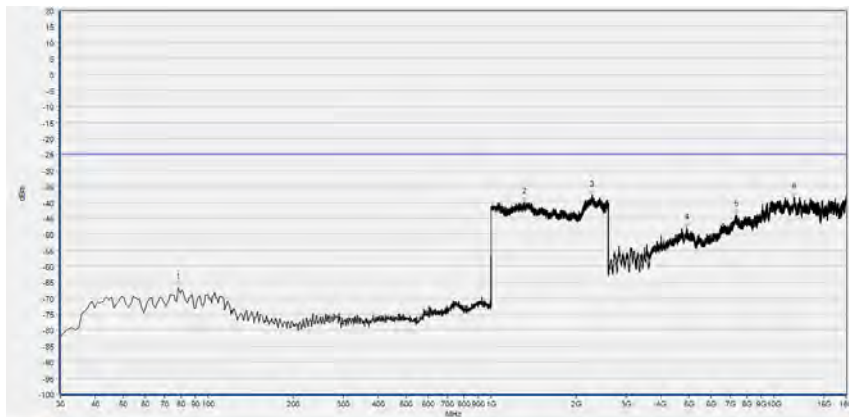


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	75.590	-66.40	-25.00	Vertical	PASS
2	1348.940	-39.81	-25.00	Vertical	PASS
3	2204.322	-38.42	-25.00	Vertical	PASS
4	4935.625	-48.09	-25.00	Vertical	PASS
5	7360.866	-43.07	-25.00	Vertical	PASS
6	13583.597	-38.96	-25.00	Vertical	PASS

LTE Band 7, 20MHz BW, Mid Channel, QPSK

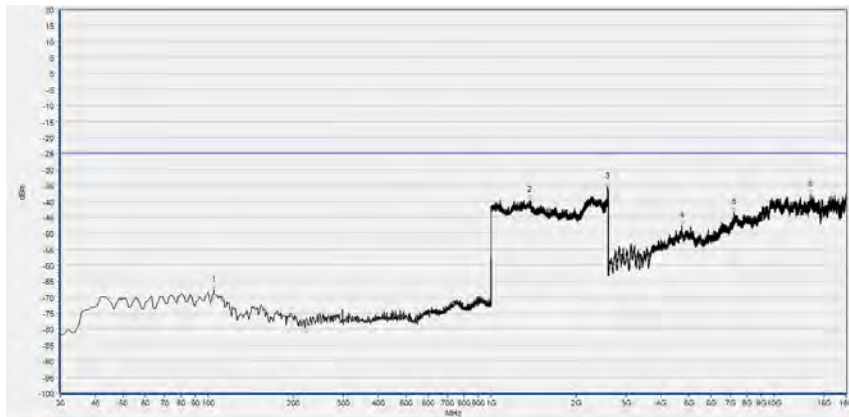


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	97.900	-67.28	-25.00	Horizontal	PASS
2	1225.370	-40.39	-25.00	Horizontal	PASS
3	2449.540	-38.80	-25.00	Horizontal	PASS
4	4717.185	-47.91	-25.00	Horizontal	PASS
5	7358.065	-42.48	-25.00	Horizontal	PASS
6	14765.412	-38.71	-25.00	Horizontal	PASS

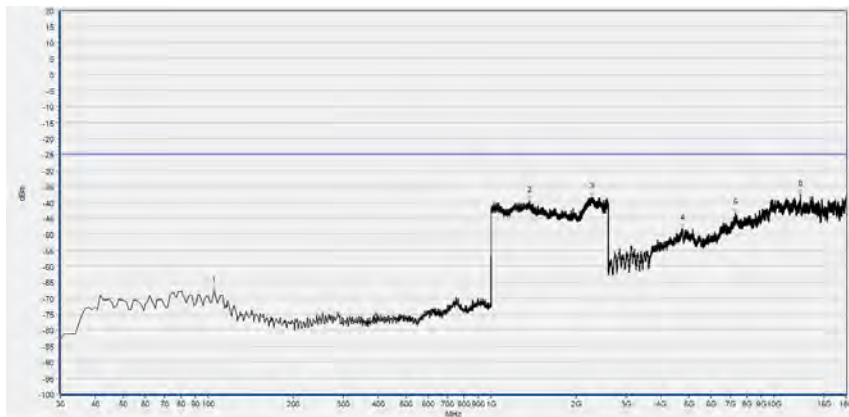


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	78.500	-66.69	-25.00	Vertical	PASS
2	1315.006	-39.98	-25.00	Vertical	PASS
3	2267.707	-37.64	-25.00	Vertical	PASS
4	4913.221	-47.98	-25.00	Vertical	PASS
5	7335.661	-43.83	-25.00	Vertical	PASS
6	11743.662	-38.30	-25.00	Vertical	PASS

LTE Band 7, 20MHz BW, High Channel, QPSK

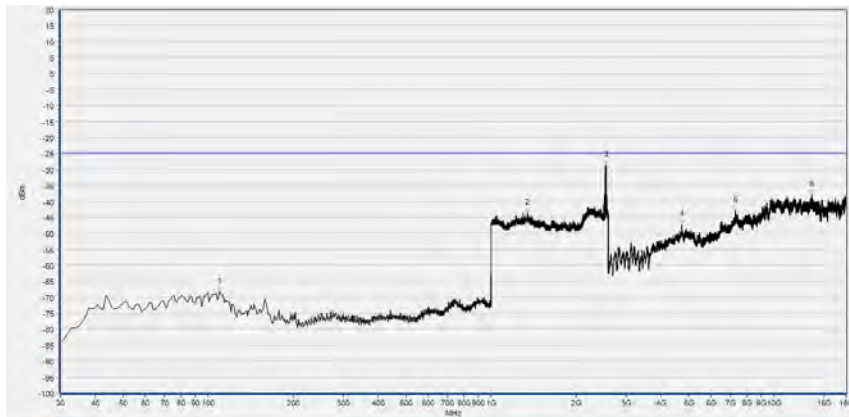


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	104.690	-67.87	-25.00	Horizontal	PASS
2	1366.867	-39.63	-25.00	Horizontal	PASS
3	2587.195	-35.35	-25.00	Horizontal	N/A
4	4717.185	-47.80	-25.00	Horizontal	PASS
5	7206.838	-43.39	-25.00	Horizontal	PASS
6	13449.173	-37.84	-25.00	Horizontal	PASS

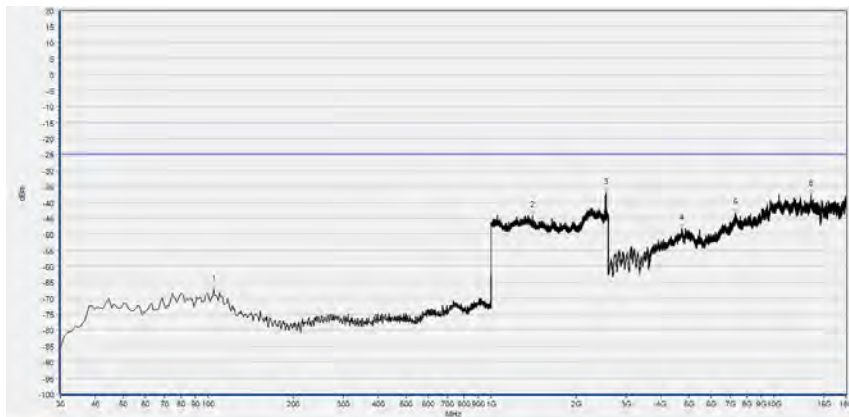


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	104.690	-67.88	-25.00	Vertical	PASS
2	1369.428	-39.36	-25.00	Vertical	PASS
3	2272.189	-38.28	-25.00	Vertical	PASS
4	4750.791	-48.24	-25.00	Vertical	PASS
5	7327.260	-43.20	-25.00	Vertical	PASS
6	12398.982	-37.37	-25.00	Vertical	PASS

LTE Band 38, 20MHz BW, Low Channel, QPSK



No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	109.540	-68.36	-25.00	Horizontal	PASS
2	1345.098	-43.70	-25.00	Horizontal	PASS
3	2548.780	-28.61	-25.00	Horizontal	N/A
4	4714.384	-47.27	-25.00	Horizontal	PASS
5	7307.656	-42.73	-25.00	Horizontal	PASS
6	13586.398	-37.83	-25.00	Horizontal	PASS



No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	104.690	-67.21	-25.00	Vertical	PASS
2	1398.880	-44.20	-25.00	Vertical	PASS
3	2555.182	-37.03	-25.00	Vertical	N/A
4	4736.789	-48.18	-25.00	Vertical	PASS
5	7316.057	-43.32	-25.00	Vertical	PASS
6	13572.395	-37.34	-25.00	Vertical	PASS

LTE Band 38, 20MHz BW, Mid Channel, QPSK

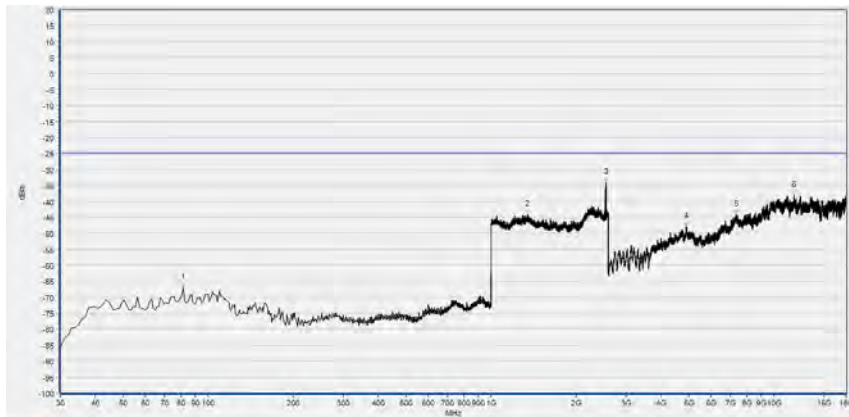


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	104.690	-67.68	-25.00	Horizontal	PASS
2	1363.025	-44.43	-25.00	Horizontal	PASS
3	2551.341	-34.78	-25.00	Horizontal	N/A
4	4722.786	-48.10	-25.00	Horizontal	PASS
5	7363.666	-43.61	-25.00	Horizontal	PASS
6	12404.583	-38.06	-25.00	Horizontal	PASS

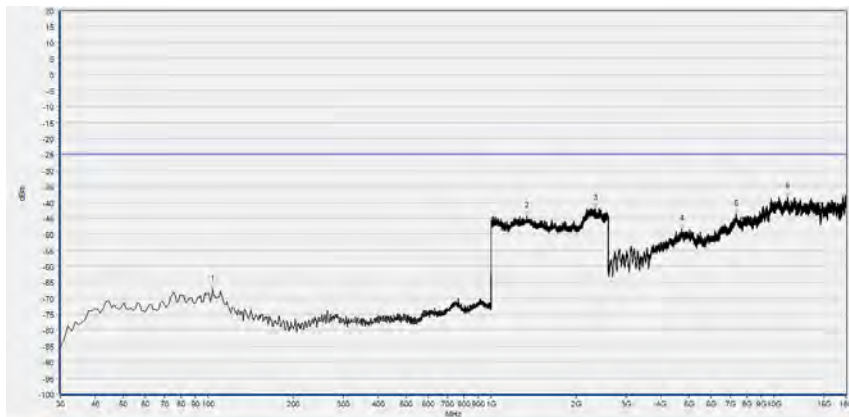


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	75.590	-67.48	-25.00	Vertical	PASS
2	1192.077	-43.71	-25.00	Vertical	PASS
3	2537.255	-38.88	-25.00	Vertical	PASS
4	4860.011	-47.70	-25.00	Vertical	PASS
5	7341.262	-43.28	-25.00	Vertical	PASS
6	13591.999	-38.31	-25.00	Vertical	PASS

LTE Band 38, 20MHz BW, High Channel, QPSK

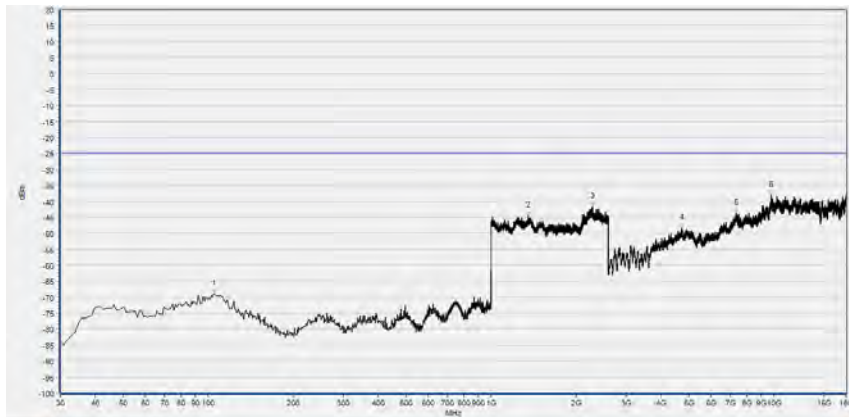


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	81.410	-66.90	-25.00	Horizontal	PASS
2	1347.659	-44.22	-25.00	Horizontal	PASS
3	2545.578	-34.02	-25.00	Horizontal	PASS
4	4882.415	-47.92	-25.00	Horizontal	PASS
5	7355.265	-44.07	-25.00	Horizontal	PASS
6	11791.271	-38.10	-25.00	Horizontal	PASS



No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	103.720	-67.23	-25.00	Vertical	PASS
2	1337.415	-44.34	-25.00	Vertical	PASS
3	2338.135	-41.99	-25.00	Vertical	PASS
4	4714.384	-48.39	-25.00	Vertical	PASS
5	7330.060	-43.64	-25.00	Vertical	PASS
6	11169.558	-38.23	-25.00	Vertical	PASS

LTE Band 41, 20MHz BW, Low Channel, QPSK

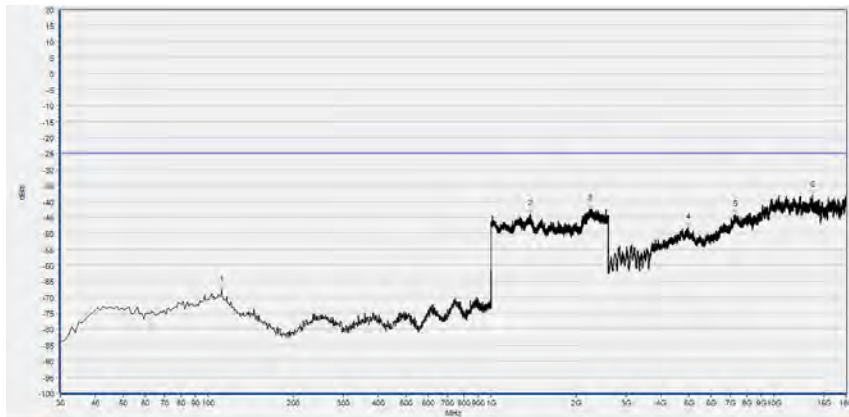


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	104.690	-69.01	-25.00	Horizontal	PASS
2	1353.421	-44.58	-25.00	Horizontal	PASS
3	2279.232	-41.60	-25.00	Horizontal	PASS
4	4714.384	-48.34	-25.00	Horizontal	PASS
5	7346.863	-43.69	-25.00	Horizontal	PASS
6	9800.109	-38.02	-25.00	Horizontal	PASS



No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	109.540	-68.56	-25.00	Vertical	PASS
2	1361.745	-44.45	-25.00	Vertical	PASS
3	2283.713	-41.52	-25.00	Vertical	N/A
4	4719.985	-48.47	-25.00	Vertical	PASS
5	7223.641	-43.43	-25.00	Vertical	PASS
6	15678.378	-37.79	-25.00	Vertical	PASS

LTE Band 41, 20MHz BW, Mid Channel, QPSK

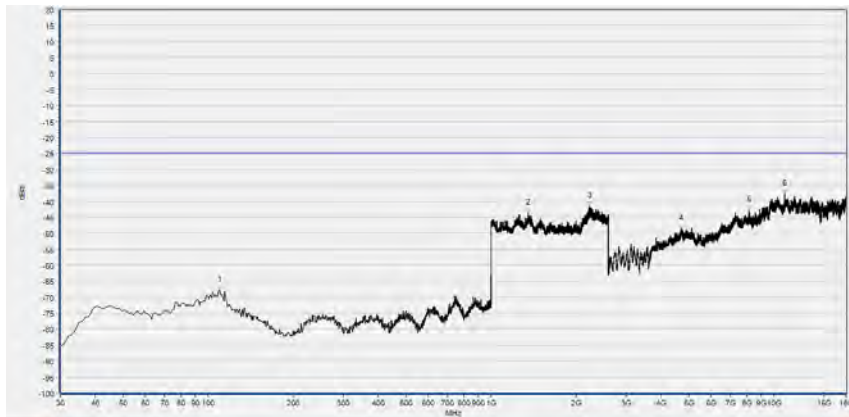


No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	111.480	-67.85	-25.00	Horizontal	PASS
2	1380.312	-43.80	-25.00	Horizontal	PASS
3	2236.975	-42.38	-25.00	Horizontal	PASS
4	4986.034	-48.11	-25.00	Horizontal	PASS
5	7299.254	-44.16	-25.00	Horizontal	PASS
6	13709.620	-38.11	-25.00	Horizontal	PASS



No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	111.480	-68.62	-25.00	Vertical	PASS
2	1361.104	-43.31	-25.00	Vertical	PASS
3	2242.097	-40.99	-25.00	Vertical	PASS
4	4714.384	-48.39	-25.00	Vertical	PASS
5	7316.057	-43.97	-25.00	Vertical	PASS
6	13583.597	-38.27	-25.00	Vertical	PASS

LTE Band 41, 20MHz BW, High Channel, QPSK



No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	109.540	-67.72	-25.00	Horizontal	PASS
2	1354.062	-43.68	-25.00	Horizontal	PASS
3	2229.292	-41.47	-25.00	Horizontal	PASS
4	4689.180	-48.69	-25.00	Horizontal	PASS
5	8153.410	-42.84	-25.00	Horizontal	PASS
6	10931.515	-37.73	-25.00	Horizontal	PASS



No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	107.600	-67.37	-25.00	Vertical	PASS
2	1369.428	-44.59	-25.00	Vertical	PASS
3	2220.968	-41.64	-25.00	Vertical	PASS
4	4714.384	-48.93	-25.00	Vertical	PASS
5	7391.671	-43.67	-25.00	Vertical	PASS
6	12368.176	-37.63	-25.00	Vertical	PASS



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.



REPORT No.: SZ24070051W06

4. Test Equipment Utilized

4.1 Conducted Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Signal Analyzer	MY51511149	N9020A	Agilent	2024.06.19	2025.06.18
Communication Test Station	6200995016	MT8820C	Anritsu	2023.09.19	2024.09.18
Temperature Chamber	S022177101 00089002	KMT-36LF 1A0	KOMEG	2023.09.19	2024.09.18

4.2 List of Software Used

Description	Manufacturer	Software Version
MOE-2023E Test System	MORLAB	V7.99
MORLAB EMCR	MORLAB	V1.2



REPORT No.: SZ24070051W06

4.3 Radiated Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
System Simulator	152038	CMW500	R&S	2023.10.17	2024.10.16
Signal Analyzer	MY56060145	N9020A	Agilent	2024.05.30	2025.05.29
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2024.06.22	2025.06.21
Test Antenna - Horn	9120D-963	BBHA 9120D	Schwarzbeck	2024.06.03	2025.06.02
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2024.05.30	2025.05.29
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2024.05.30	2025.05.29
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2024.05.30	2025.05.29
RF Coaxial Cable (DC-40GHz)	22290045	QA360-40-KK-0.5	Qualwave	2024.07.03	2025.07.02
RF Coaxial Cable (DC-40GHz)	22290046	QA360-40-KK F-2	Qualwave	2024.07.03	2025.07.02
Preamplifier (10MHz-6GHz)	46732	S10M100L380 2	LUCIX CORP.	2024.05.30	2025.05.29
Preamplifier (2GHz-18GHz)	61171/61172	S020180L320 3	LUCIX CORP.	2024.05.30	2025.05.29
Notch Filter	N/A	WRCGV -LTE B5	Wainwright	N/A	N/A
Notch Filter	N/A	WRCGV -LTE B7	Wainwright	N/A	N/A
Notch Filter	N/A	WRCGV -LTE B38	Wainwright	N/A	N/A
Notch Filter	N/A	WRCGV -LTE B41	Wainwright	N/A	N/A
Anechoic Chamber	N/A	9m*6m*6m	CRT	2022.05.10	2025.05.09

_____ END OF REPORT _____