



REPORT No.: SZ26030443W01

TEST REPORT

APPLICANT : Shanghai Sunmi Technology Co.,Ltd.

PRODUCT NAME : Handheld Wireless Terminal

MODEL NAME : T8F1B

BRAND NAME : SUNMI

STANDARD(S) : 47 CFR Part 27, Subpart D

RECEIPT DATE : 2026-03-31

TEST DATE : 2026-03-31 to 2026-04-01

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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	6
2. 47 CFR Part 2, Part 27 D Requirements	8
2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P.	8
2.2. Occupied Bandwidth	21
2.3. Frequency Stability	30
2.4. Conducted Spurious Emissions	33
2.5. Band Edge	40
2.6. Radiated Spurious Emissions	47
Annex A Test Uncertainty	70
Annex B Testing Laboratory Information	71
Notes	74

Change History		
Version	Date	Reason for change
1.0	2026-04-07	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Shanghai Sunmi Technology Co.,Ltd.
Applicant Address:	Room 505,No.388,Song Hu Road,Yang Pu District,Shanghai,China
Manufacturer:	Shanghai Sunmi Technology Co.,Ltd.
Manufacturer Address:	Room 505,No.388,Song Hu Road,Yang Pu District,Shanghai,China

1.2. Equipment Under Test (EUT) Description

Product Name:	Handheld Wireless Terminal	
Sample No.:	1#, 2#	
Hardware Version:	V01	
Software Version:	4.0.1	
Modulation Type:	QPSK, 16QAM, 64QAM	
Carrier Aggregation:	Not Support	
Operation Band:	Band 30 / 40	
Frequency Range:	LTE Band 30	Tx: 2305MHz–2315MHz
		Rx: 2350MHz–2360MHz
	LTE Band 40 Block A	Tx: 2305MHz–2315MHz
		Rx: 2305MHz–2315MHz
Channel Bandwidth:	LTE Band 40 Block B	Tx: 2350MHz–2360MHz
		Rx: 2350MHz–2360MHz
Channel Bandwidth:	LTE Band 30	5 MHz, 10MHz
	LTE Band 40	5 MHz, 10MHz
Antenna Type:	Inverted F Antenna	
Antenna Gain:	LTE Band 30	-0.88dBi
	LTE Band 40 Block A	-0.88dBi
	LTE Band 40 Block B	-0.72dBi
Accessory Information:	Battery 1	



REPORT No.: SZ26030443W01

	Brand Name:	SUMMI
	Model No.:	HPPC
	Serial No.:	N/A
	Capacity:	5000mAh
	Rated Voltage:	3.87V
	Charge Limit:	4.45V
	Manufacturer:	Guangdong Highpower New Energy Technology Co., Ltd.

Note 1: 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 30	Maximum E.R.P./E.I.R.P. (W)			Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10	0.168	0.140	0.111	8M96G7D	8M95W7D	8M96W7D
5	0.169	0.134	0.099	4M49G7D	4M49W7D	4M50W7D
LTE Band 40 Block A	Maximum E.R.P./E.I.R.P. (W)			Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10	0.164	0.125	0.105	8M98G7D	8M95W7D	8M95W7D
5	0.164	0.131	0.105	4M49G7D	4M49W7D	4M50W7D
LTE Band 40 Block B	Maximum E.R.P./E.I.R.P. (W)			Emission Designator (99%OBW)		
BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
10	0.165	0.132	0.106	8M95G7D	8M95W7D	8M93W7D
5	0.164	0.134	0.106	4M49G7D	4M49W7D	4M50W7D



1.4. Test Standards and Results

The objective of the report is to perform testing according to Part 2, Part 22, Part 24, 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
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	Remark
2.1046 27.50(a)(3)	Transmitter Conducted Output Power and E.R.P./E.I.R.P.	Apr. 02, 2026	Liu Huiyan	PASS	/
2.1049	Occupied Bandwidth	Apr. 01, 2026	Liu Huiyan	PASS	/
2.1055 27.54	Frequency Stability	Apr. 01, 2026	Liu Huiyan	PASS	/
2.1051 27.53(a)(4)	Conducted Spurious Emissions	Apr. 01, 2026	Liu Huiyan	PASS	/
2.1051 27.53(a)(4)	Band Edge	Mar. 31, 2026	Liu Huiyan	PASS	/
2.1053 27.53(a)(4)	Radiated Spurious Emissions	Apr. 01, 2026	Gao Jianrou	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:



REPORT No.: SZ26030443W01

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

2.47 CFR Part 2, Part 27 D Requirements

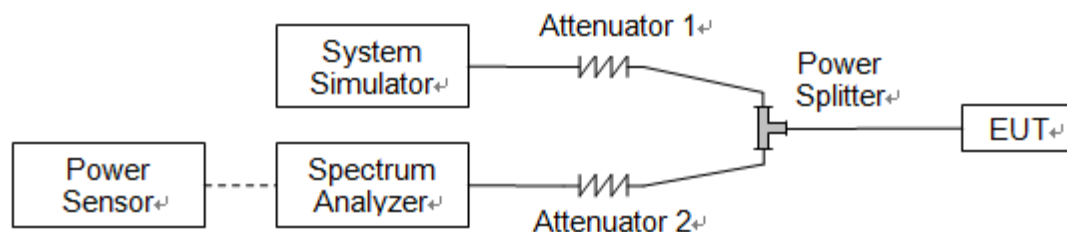
2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P.

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 27.50 (a)(3) for LTE Band 30/40, For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average E.I.R.P. must not exceed 50 mill watts within any 1 megahertz of authorized bandwidth.

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. (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)

E.R.P. (dBm) = E.I.R.P. (dBm) - 2.15

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

LTE Band 30						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				/	27710	/
Frequency (MHz)				/	2310	/
10	QPSK	1	0	/	23.05	/
10	QPSK	1	25	/	23.13	/
10	QPSK	1	49	/	23.08	/
10	QPSK	25	0	/	22.16	/
10	QPSK	25	12	/	22.16	/
10	QPSK	25	25	/	21.99	/
10	QPSK	50	0	/	22.09	/
10	16QAM	1	0	/	22.30	/
10	16QAM	1	25	/	22.35	/
10	16QAM	1	49	/	22.32	/
10	16QAM	25	0	/	21.20	/
10	16QAM	25	12	/	21.15	/
10	16QAM	25	25	/	20.98	/
10	16QAM	50	0	/	21.09	/
10	64QAM	1	0	/	21.20	/
10	64QAM	1	25	/	21.34	/
10	64QAM	1	49	/	21.12	/
10	64QAM	25	0	/	20.22	/
10	64QAM	25	12	/	20.16	/
10	64QAM	25	25	/	20.03	/
10	64QAM	50	0	/	20.14	/



LTE Band 30						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				27685	27710	27735
Frequency (MHz)				2307.5	2310	2312.5
5	QPSK	1	0	22.78	22.89	22.89
5	QPSK	1	12	23.12	23.17	23.15
5	QPSK	1	24	23.00	23.01	23.02
5	QPSK	12	0	22.08	22.14	22.15
5	QPSK	12	7	22.14	21.97	22.13
5	QPSK	12	13	22.05	22.05	22.01
5	QPSK	25	0	22.09	22.05	22.10
5	16QAM	1	0	21.89	22.06	21.93
5	16QAM	1	12	22.14	22.04	22.16
5	16QAM	1	24	22.08	22.01	22.05
5	16QAM	12	0	21.04	21.10	21.14
5	16QAM	12	7	21.12	21.13	21.12
5	16QAM	12	13	21.03	21.02	21.00
5	16QAM	25	0	21.10	21.14	21.08
5	64QAM	1	0	20.74	20.67	20.75
5	64QAM	1	12	20.76	20.78	20.82
5	64QAM	1	24	20.69	20.68	20.63
5	64QAM	12	0	20.15	20.17	20.16
5	64QAM	12	7	20.13	20.21	20.18
5	64QAM	12	13	20.11	20.09	20.03
5	64QAM	25	0	20.12	20.14	20.14



LTE Band 40, Block A						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				/	38750	/
Frequency (MHz)				/	2310	/
10	QPSK	1	0	/	23.02	/
10	QPSK	1	25	/	23.03	/
10	QPSK	1	49	/	22.91	/
10	QPSK	25	0	/	21.94	/
10	QPSK	25	12	/	22.01	/
10	QPSK	25	25	/	21.98	/
10	QPSK	50	0	/	21.96	/
10	16QAM	1	0	/	21.86	/
10	16QAM	1	25	/	21.84	/
10	16QAM	1	49	/	21.84	/
10	16QAM	25	0	/	20.82	/
10	16QAM	25	12	/	20.85	/
10	16QAM	25	25	/	21.01	/
10	16QAM	50	0	/	21.00	/
10	64QAM	1	0	/	21.05	/
10	64QAM	1	25	/	21.10	/
10	64QAM	1	49	/	20.97	/
10	64QAM	25	0	/	20.02	/
10	64QAM	25	12	/	20.10	/
10	64QAM	25	25	/	20.07	/
10	64QAM	50	0	/	19.99	/



LTE Band 40, Block A						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				38725	38750	38775
Frequency (MHz)				2307.5	2310	2312.5
5	QPSK	1	0	22.93	22.92	22.93
5	QPSK	1	12	23.04	22.97	23.03
5	QPSK	1	24	22.42	22.85	22.84
5	QPSK	12	0	21.92	21.93	21.93
5	QPSK	12	7	22.03	21.99	22.00
5	QPSK	12	13	21.88	21.94	21.94
5	QPSK	25	0	21.93	21.96	21.95
5	16QAM	1	0	21.75	21.48	21.57
5	16QAM	1	12	21.63	21.67	21.67
5	16QAM	1	24	22.04	21.76	21.86
5	16QAM	12	0	20.92	20.93	20.96
5	16QAM	12	7	21.00	20.99	20.97
5	16QAM	12	13	20.96	20.97	20.95
5	16QAM	25	0	20.98	21.01	21.00
5	64QAM	1	0	20.97	20.99	20.98
5	64QAM	1	12	21.09	21.09	21.10
5	64QAM	1	24	20.95	20.95	20.94
5	64QAM	12	0	19.98	19.96	19.98
5	64QAM	12	7	20.06	20.04	20.02
5	64QAM	12	13	19.97	20.00	19.99
5	64QAM	25	0	20.03	20.05	20.04



LTE Band 40, Block B						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				/	39200	/
Frequency (MHz)				/	2355	/
10	QPSK	1	0	/	22.90	/
10	QPSK	1	25	/	22.81	/
10	QPSK	1	49	/	22.50	/
10	QPSK	25	0	/	21.82	/
10	QPSK	25	12	/	21.83	/
10	QPSK	25	25	/	21.77	/
10	QPSK	50	0	/	21.85	/
10	16QAM	1	0	/	21.77	/
10	16QAM	1	25	/	21.76	/
10	16QAM	1	49	/	21.92	/
10	16QAM	25	0	/	20.84	/
10	16QAM	25	12	/	20.86	/
10	16QAM	25	25	/	20.86	/
10	16QAM	50	0	/	20.70	/
10	64QAM	1	0	/	20.98	/
10	64QAM	1	25	/	20.97	/
10	64QAM	1	49	/	20.81	/
10	64QAM	25	0	/	19.88	/
10	64QAM	25	12	/	19.94	/
10	64QAM	25	25	/	19.91	/
10	64QAM	50	0	/	19.87	/



LTE Band 40, Block B						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				39175	39200	39225
Frequency (MHz)				2352.5	2355	2357.5
5	QPSK	1	0	22.80	22.74	22.73
5	QPSK	1	12	22.87	22.86	22.83
5	QPSK	1	24	22.62	22.69	22.68
5	QPSK	12	0	21.79	21.79	21.72
5	QPSK	12	7	21.88	21.80	21.81
5	QPSK	12	13	21.78	21.78	21.73
5	QPSK	25	0	21.78	21.75	21.75
5	16QAM	1	0	21.87	21.92	21.89
5	16QAM	1	12	21.96	21.96	22.00
5	16QAM	1	24	21.90	21.61	21.86
5	16QAM	12	0	20.82	20.53	20.77
5	16QAM	12	7	20.88	20.83	20.83
5	16QAM	12	13	20.80	20.68	20.78
5	16QAM	25	0	20.84	20.84	20.83
5	64QAM	1	0	20.87	20.84	20.81
5	64QAM	1	12	20.97	20.97	20.91
5	64QAM	1	24	20.81	20.75	20.76
5	64QAM	12	0	19.83	19.83	19.78
5	64QAM	12	7	19.89	19.85	19.84
5	64QAM	12	13	19.84	19.83	19.81
5	64QAM	25	0	19.90	19.88	19.86



LTE Band 30				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				/		27710		/	
Frequency (MHz)				/		2310		/	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	/	/	22.17	0.165	/	/
10	QPSK	1	25	/	/	22.25	0.168	/	/
10	QPSK	1	49	/	/	22.20	0.166	/	/
10	QPSK	25	0	/	/	21.28	0.134	/	/
10	QPSK	25	12	/	/	21.28	0.134	/	/
10	QPSK	25	25	/	/	21.11	0.129	/	/
10	QPSK	50	0	/	/	21.21	0.132	/	/
10	16QAM	1	0	/	/	21.42	0.139	/	/
10	16QAM	1	25	/	/	21.47	0.140	/	/
10	16QAM	1	49	/	/	21.44	0.139	/	/
10	16QAM	25	0	/	/	20.32	0.108	/	/
10	16QAM	25	12	/	/	20.27	0.106	/	/
10	16QAM	25	25	/	/	20.10	0.102	/	/
10	16QAM	50	0	/	/	20.21	0.105	/	/
10	64QAM	1	0	/	/	20.32	0.108	/	/
10	64QAM	1	25	/	/	20.46	0.111	/	/
10	64QAM	1	49	/	/	20.24	0.106	/	/
10	64QAM	25	0	/	/	19.34	0.086	/	/
10	64QAM	25	12	/	/	19.28	0.085	/	/
10	64QAM	25	25	/	/	19.15	0.082	/	/
10	64QAM	50	0	/	/	19.26	0.084	/	/



LTE Band 30				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				27685		27710		27735	
Frequency (MHz)				2307.5		2310		2312.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	21.90	0.155	22.01	0.159	22.01	0.159
5	QPSK	1	12	22.24	0.167	22.29	0.169	22.27	0.169
5	QPSK	1	24	22.12	0.163	22.13	0.163	22.14	0.164
5	QPSK	12	0	21.20	0.132	21.26	0.134	21.27	0.134
5	QPSK	12	7	21.26	0.134	21.09	0.129	21.25	0.133
5	QPSK	12	13	21.17	0.131	21.17	0.131	21.13	0.130
5	QPSK	25	0	21.21	0.132	21.17	0.131	21.22	0.132
5	16QAM	1	0	21.01	0.126	21.18	0.131	21.05	0.127
5	16QAM	1	12	21.26	0.134	21.16	0.131	21.28	0.134
5	16QAM	1	24	21.20	0.132	21.13	0.130	21.17	0.131
5	16QAM	12	0	20.16	0.104	20.22	0.105	20.26	0.106
5	16QAM	12	7	20.24	0.106	20.25	0.106	20.24	0.106
5	16QAM	12	13	20.15	0.104	20.14	0.103	20.12	0.103
5	16QAM	25	0	20.22	0.105	20.26	0.106	20.20	0.105
5	64QAM	1	0	19.86	0.097	19.79	0.095	19.87	0.097
5	64QAM	1	12	19.88	0.097	19.90	0.098	19.94	0.099
5	64QAM	1	24	19.81	0.096	19.80	0.095	19.75	0.094
5	64QAM	12	0	19.27	0.085	19.29	0.085	19.28	0.085
5	64QAM	12	7	19.25	0.084	19.33	0.086	19.30	0.085
5	64QAM	12	13	19.23	0.084	19.21	0.083	19.15	0.082
5	64QAM	25	0	19.24	0.084	19.26	0.084	19.26	0.084



LTE Band 40, Block A				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				/		38750		/	
Frequency (MHz)				/		2310		/	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	/	/	22.14	0.164	/	/
10	QPSK	1	25	/	/	22.15	0.164	/	/
10	QPSK	1	49	/	/	22.03	0.160	/	/
10	QPSK	25	0	/	/	21.06	0.128	/	/
10	QPSK	25	12	/	/	21.13	0.130	/	/
10	QPSK	25	25	/	/	21.10	0.129	/	/
10	QPSK	50	0	/	/	21.08	0.128	/	/
10	16QAM	1	0	/	/	20.98	0.125	/	/
10	16QAM	1	25	/	/	20.96	0.125	/	/
10	16QAM	1	49	/	/	20.96	0.125	/	/
10	16QAM	25	0	/	/	19.94	0.099	/	/
10	16QAM	25	12	/	/	19.97	0.099	/	/
10	16QAM	25	25	/	/	20.13	0.103	/	/
10	16QAM	50	0	/	/	20.12	0.103	/	/
10	64QAM	1	0	/	/	20.17	0.104	/	/
10	64QAM	1	25	/	/	20.22	0.105	/	/
10	64QAM	1	49	/	/	20.09	0.102	/	/
10	64QAM	25	0	/	/	19.14	0.082	/	/
10	64QAM	25	12	/	/	19.22	0.084	/	/
10	64QAM	25	25	/	/	19.19	0.083	/	/
10	64QAM	50	0	/	/	19.11	0.081	/	/



LTE Band 40, Block A				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				38725		38750		38775	
Frequency (MHz)				2307.5		2310		2312.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.05	0.160	22.04	0.160	22.05	0.160
5	QPSK	1	12	22.16	0.164	22.09	0.162	22.15	0.164
5	QPSK	1	24	21.54	0.143	21.97	0.157	21.96	0.157
5	QPSK	12	0	21.04	0.127	21.05	0.127	21.05	0.127
5	QPSK	12	7	21.15	0.130	21.11	0.129	21.12	0.129
5	QPSK	12	13	21.00	0.126	21.06	0.128	21.06	0.128
5	QPSK	25	0	21.05	0.127	21.08	0.128	21.07	0.128
5	16QAM	1	0	20.87	0.122	20.60	0.115	20.69	0.117
5	16QAM	1	12	20.75	0.119	20.79	0.120	20.79	0.120
5	16QAM	1	24	21.16	0.131	20.88	0.122	20.98	0.125
5	16QAM	12	0	20.04	0.101	20.05	0.101	20.08	0.102
5	16QAM	12	7	20.12	0.103	20.11	0.103	20.09	0.102
5	16QAM	12	13	20.08	0.102	20.09	0.102	20.07	0.102
5	16QAM	25	0	20.10	0.102	20.13	0.103	20.12	0.103
5	64QAM	1	0	20.09	0.102	20.11	0.103	20.10	0.102
5	64QAM	1	12	20.21	0.105	20.21	0.105	20.22	0.105
5	64QAM	1	24	20.07	0.102	20.07	0.102	20.06	0.101
5	64QAM	12	0	19.10	0.081	19.08	0.081	19.10	0.081
5	64QAM	12	7	19.18	0.083	19.16	0.082	19.14	0.082
5	64QAM	12	13	19.09	0.081	19.12	0.082	19.11	0.081
5	64QAM	25	0	19.15	0.082	19.17	0.083	19.16	0.082



LTE Band 40, Block B				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				/		39200		/	
Frequency (MHz)				/		2355		/	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	/	/	22.18	0.165	/	/
10	QPSK	1	25	/	/	22.09	0.162	/	/
10	QPSK	1	49	/	/	21.78	0.151	/	/
10	QPSK	25	0	/	/	21.10	0.129	/	/
10	QPSK	25	12	/	/	21.11	0.129	/	/
10	QPSK	25	25	/	/	21.05	0.127	/	/
10	QPSK	50	0	/	/	21.13	0.130	/	/
10	16QAM	1	0	/	/	21.05	0.127	/	/
10	16QAM	1	25	/	/	21.04	0.127	/	/
10	16QAM	1	49	/	/	21.20	0.132	/	/
10	16QAM	25	0	/	/	20.12	0.103	/	/
10	16QAM	25	12	/	/	20.14	0.103	/	/
10	16QAM	25	25	/	/	20.14	0.103	/	/
10	16QAM	50	0	/	/	19.98	0.100	/	/
10	64QAM	1	0	/	/	20.26	0.106	/	/
10	64QAM	1	25	/	/	20.25	0.106	/	/
10	64QAM	1	49	/	/	20.09	0.102	/	/
10	64QAM	25	0	/	/	19.16	0.082	/	/
10	64QAM	25	12	/	/	19.22	0.084	/	/
10	64QAM	25	25	/	/	19.19	0.083	/	/
10	64QAM	50	0	/	/	19.15	0.082	/	/



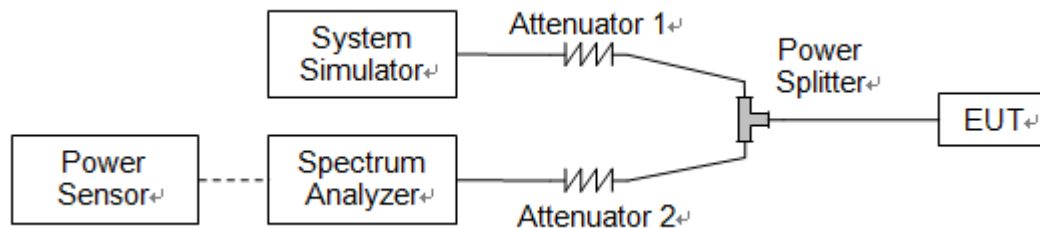
LTE Band 40, Block B				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				39175		39200		39225	
Frequency (MHz)				2352.5		2355		2357.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.08	0.161	22.02	0.159	22.01	0.159
5	QPSK	1	12	22.15	0.164	22.14	0.164	22.11	0.163
5	QPSK	1	24	21.90	0.155	21.97	0.157	21.96	0.157
5	QPSK	12	0	21.07	0.128	21.07	0.128	21.00	0.126
5	QPSK	12	7	21.16	0.131	21.08	0.128	21.09	0.129
5	QPSK	12	13	21.06	0.128	21.06	0.128	21.01	0.126
5	QPSK	25	0	21.06	0.128	21.03	0.127	21.03	0.127
5	16QAM	1	0	21.15	0.130	21.20	0.132	21.17	0.131
5	16QAM	1	12	21.24	0.133	21.24	0.133	21.28	0.134
5	16QAM	1	24	21.18	0.131	20.89	0.123	21.14	0.130
5	16QAM	12	0	20.10	0.102	19.81	0.096	20.05	0.101
5	16QAM	12	7	20.16	0.104	20.11	0.103	20.11	0.103
5	16QAM	12	13	20.08	0.102	19.96	0.099	20.06	0.101
5	16QAM	25	0	20.12	0.103	20.12	0.103	20.11	0.103
5	64QAM	1	0	20.15	0.104	20.12	0.103	20.09	0.102
5	64QAM	1	12	20.25	0.106	20.25	0.106	20.19	0.104
5	64QAM	1	24	20.09	0.102	20.03	0.101	20.04	0.101
5	64QAM	12	0	19.11	0.081	19.11	0.081	19.06	0.081
5	64QAM	12	7	19.17	0.083	19.13	0.082	19.12	0.082
5	64QAM	12	13	19.12	0.082	19.11	0.081	19.09	0.081
5	64QAM	25	0	19.18	0.083	19.16	0.082	19.14	0.082

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.

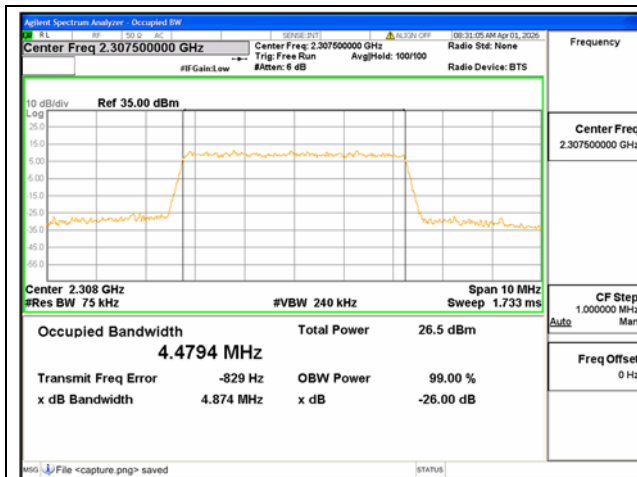
**2.2.4. Test Result**

LTE Band	BW(MHz)	Channel Level	Channel	Frequency (MHz)	Modulation	99% BW (MHz)	26dB BW (MHz)	Verdict
B30	5	Low	27685	2307.5	QPSK	4.4794	4.8742	PASS
B30	5	Low	27685	2307.5	16QAM	4.4895	4.8542	PASS
B30	5	Low	27685	2307.5	64QAM	4.4859	4.8565	PASS
B30	5	Mid	27710	2310	QPSK	4.4871	4.8914	PASS
B30	5	Mid	27710	2310	16QAM	4.4899	4.8630	PASS
B30	5	Mid	27710	2310	64QAM	4.4963	4.8752	PASS
B30	5	High	27735	2312.5	QPSK	4.4868	4.8862	PASS
B30	5	High	27735	2312.5	16QAM	4.4885	4.8896	PASS
B30	5	High	27735	2312.5	64QAM	4.4970	4.8748	PASS
B30	10	Mid	27710	2310	QPSK	8.9606	9.6424	PASS
B30	10	Mid	27710	2310	16QAM	8.9480	9.5921	PASS
B30	10	Mid	27710	2310	64QAM	8.9607	9.6607	PASS

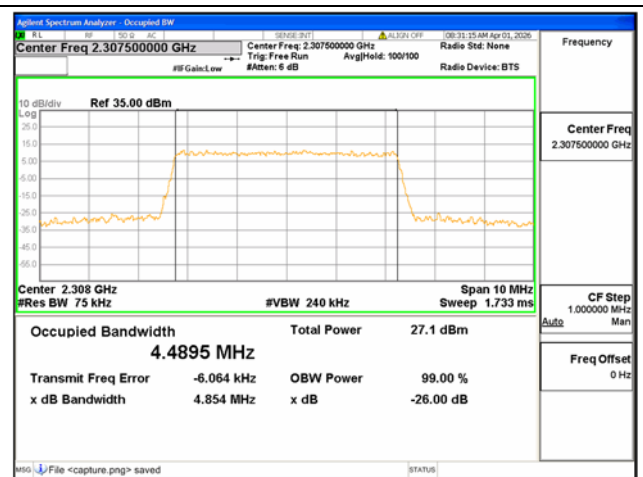


LTE Band	BW(MHz)	Channel Level	Channel	Frequency (MHz)	Modulation	99% BW (MHz)	26dB BW (MHz)	Verdict
B40-1	5	Low	38725	2307.5	QPSK	4.4785	4.8473	PASS
B40-1	5	Low	38725	2307.5	16QAM	4.4867	4.8524	PASS
B40-1	5	Low	38725	2307.5	64QAM	4.4901	4.8471	PASS
B40-1	5	Mid	38750	2310	QPSK	4.4927	4.8623	PASS
B40-1	5	Mid	38750	2310	16QAM	4.4906	4.8960	PASS
B40-1	5	Mid	38750	2310	64QAM	4.4944	4.8479	PASS
B40-1	5	High	38775	2312.5	QPSK	4.4887	4.8817	PASS
B40-1	5	High	38775	2312.5	16QAM	4.4899	4.9286	PASS
B40-1	5	High	38775	2312.5	64QAM	4.4975	4.8227	PASS
B40-1	10	Mid	38750	2310	QPSK	8.9790	9.5559	PASS
B40-1	10	Mid	38750	2310	16QAM	8.9487	9.8074	PASS
B40-1	10	Mid	38750	2310	64QAM	8.9528	9.8009	PASS

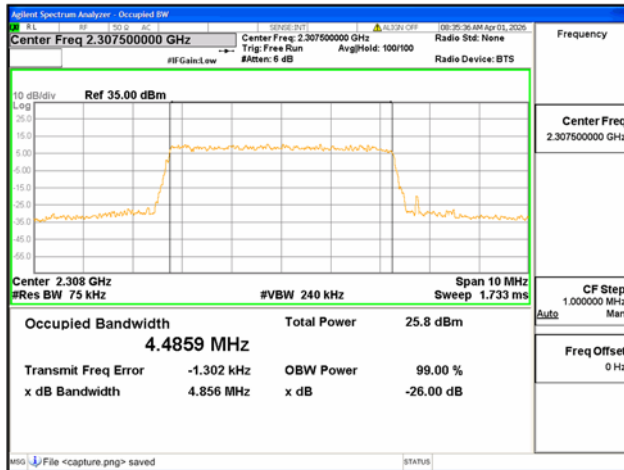
LTE Band	BW(MHz)	Channel Level	Channel	Frequency (MHz)	Modulation	99% BW (MHz)	26dB BW (MHz)	Verdict
B40-2	5	Low	39175	2352.5	QPSK	4.4773	4.8625	PASS
B40-2	5	Low	39175	2352.5	16QAM	4.4813	4.8239	PASS
B40-2	5	Low	39175	2352.5	64QAM	4.4942	4.8363	PASS
B40-2	5	Mid	39200	2355	QPSK	4.4840	4.8793	PASS
B40-2	5	Mid	39200	2355	16QAM	4.4834	4.8680	PASS
B40-2	5	Mid	39200	2355	64QAM	4.4767	4.8316	PASS
B40-2	5	High	39225	2357.5	QPSK	4.4888	4.8378	PASS
B40-2	5	High	39225	2357.5	16QAM	4.4873	4.8723	PASS
B40-2	5	High	39225	2357.5	64QAM	4.4966	4.8653	PASS
B40-2	10	Mid	39200	2355	QPSK	8.9477	9.6276	PASS
B40-2	10	Mid	39200	2355	16QAM	8.9493	9.6172	PASS
B40-2	10	Mid	39200	2355	64QAM	8.9344	9.7083	PASS



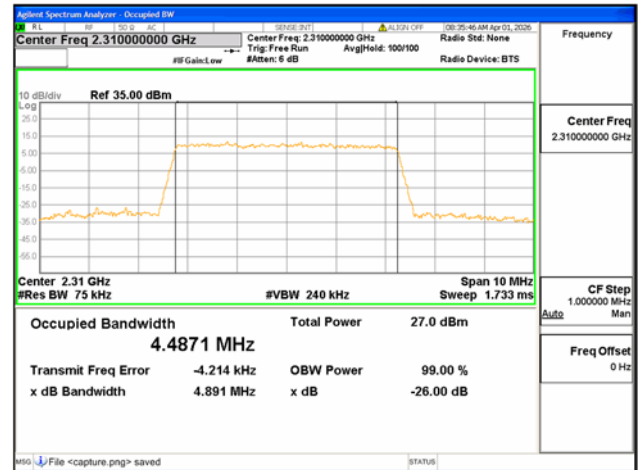
B30 / 5MHz / QPSK/ Low CH



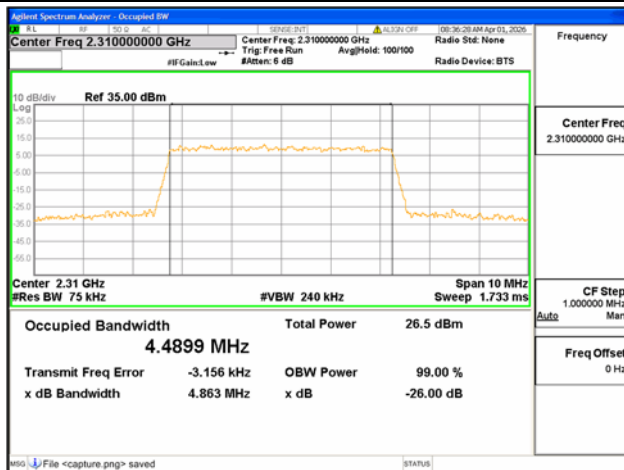
B30 / 5MHz / 16QAM/ Low CH



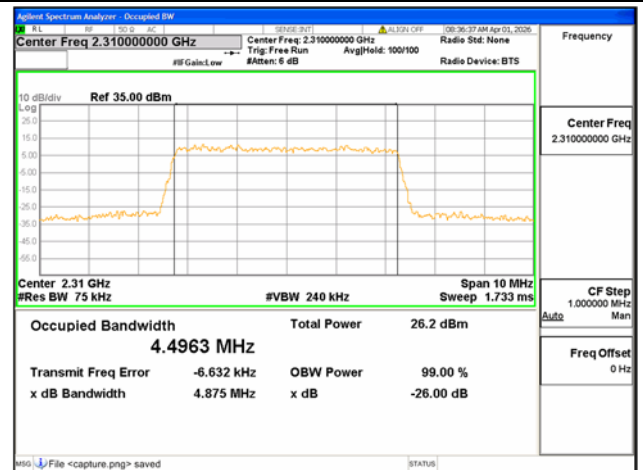
B30 / 5MHz / 64QAM/ Low CH



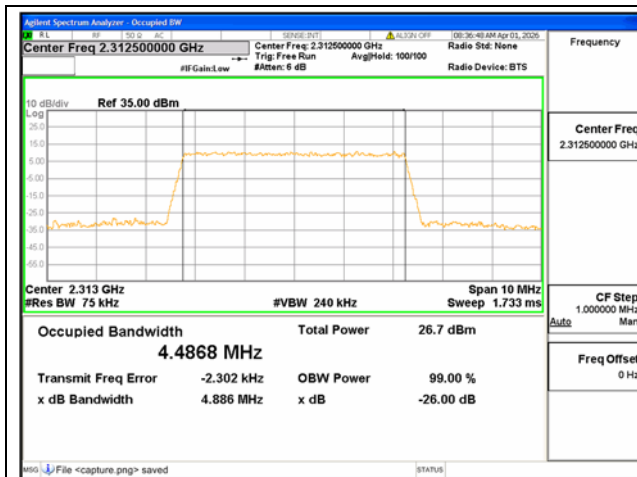
B30 / 5MHz / QPSK/ Mid CH



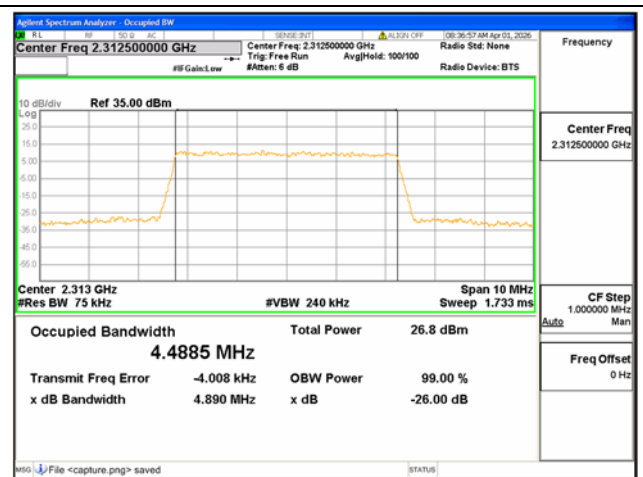
B30 / 5MHz / 16QAM/ Mid CH



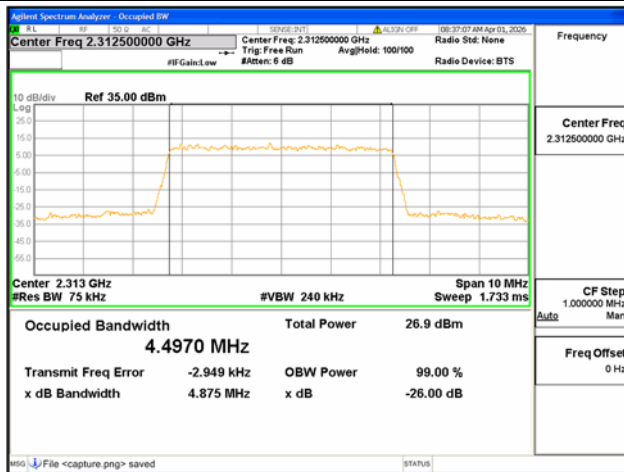
B30 / 5MHz / 64QAM/ Mid CH



B30 / 5MHz / QPSK/ High CH



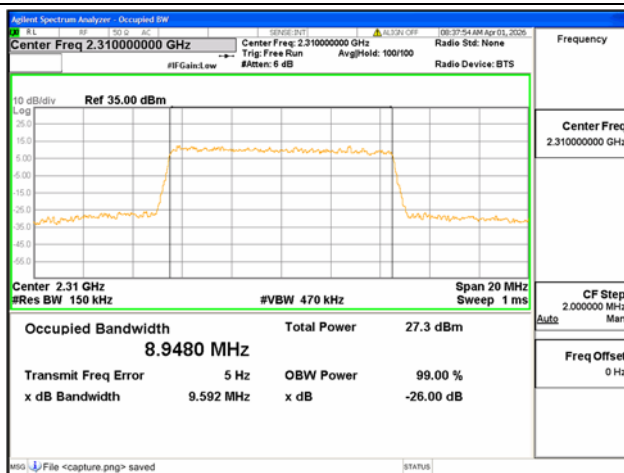
B30 / 5MHz / 16QAM/ High CH



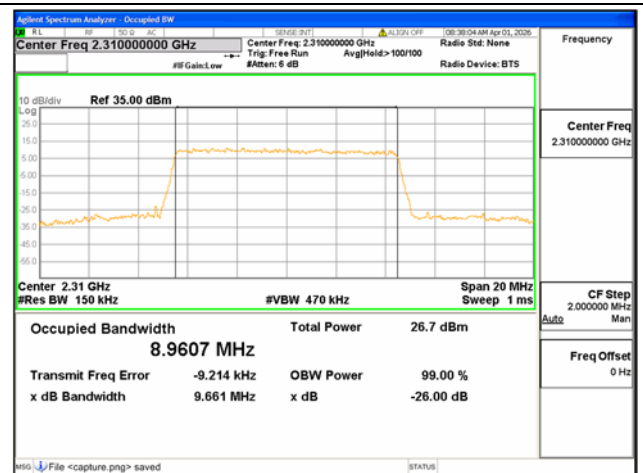
B30 / 5MHz / 64QAM/ High CH



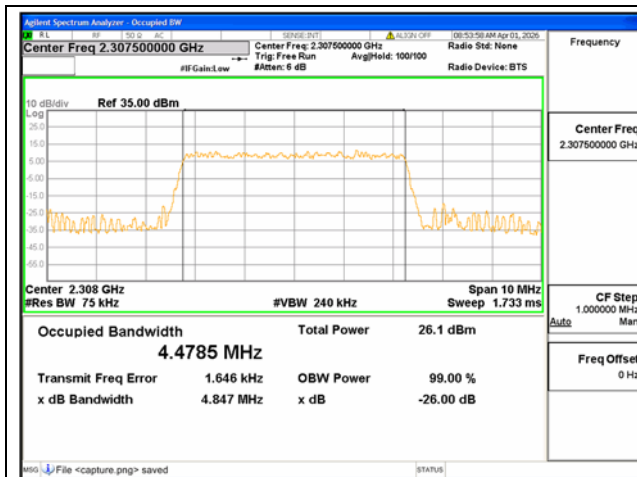
B30 / 10MHz / QPSK/ Mid CH



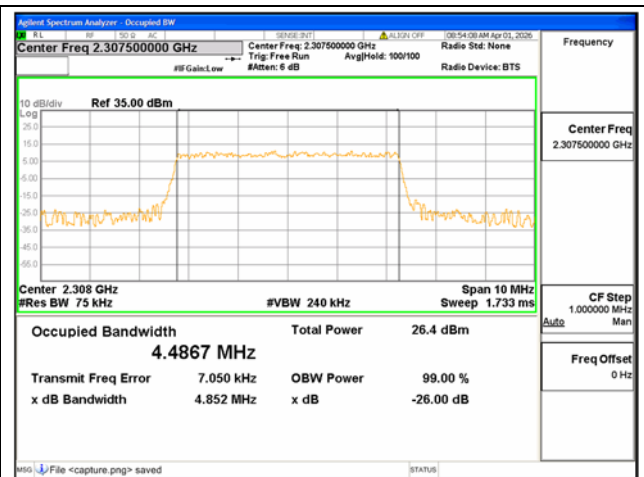
B30 / 10MHz / 16QAM/ Mid CH



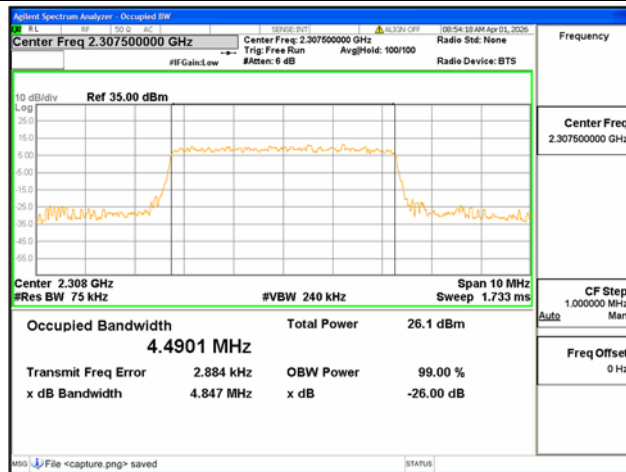
B30 / 10MHz / 64QAM/ Mid CH



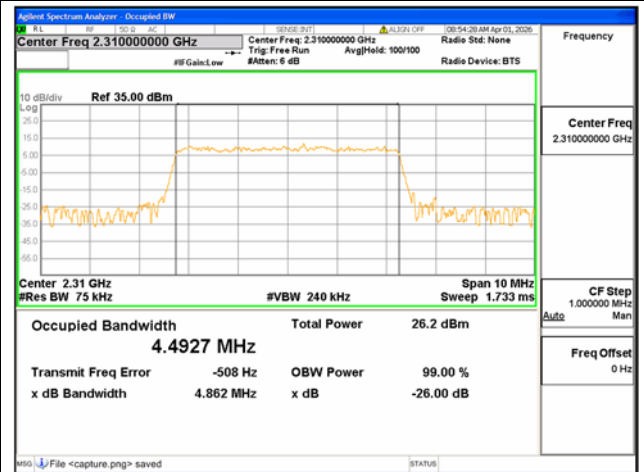
B40-1 / 5MHz / QPSK/ Low CH



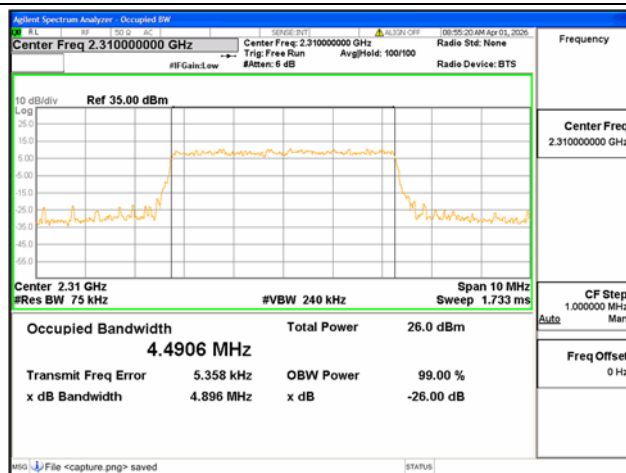
B40-1 / 5MHz / 16QAM/ Low CH



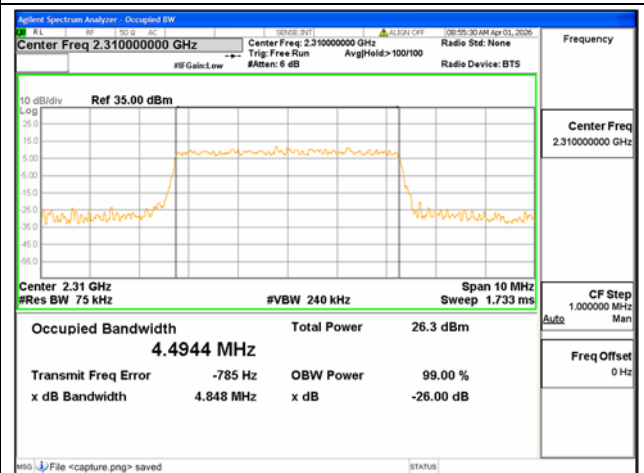
B40-1 / 5MHz / 64QAM/ Low CH



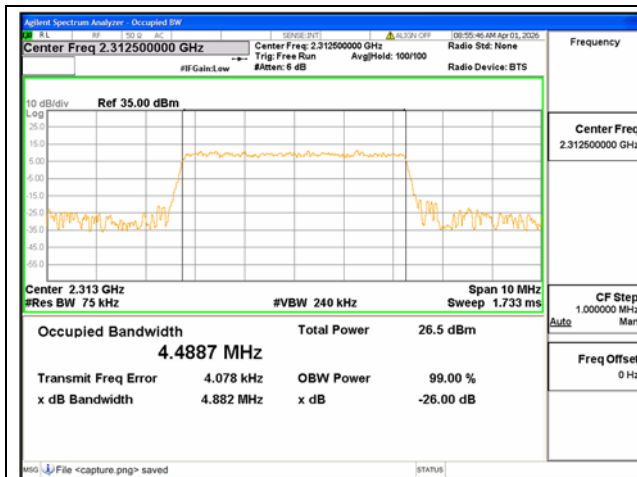
B40-1 / 5MHz / QPSK/ Mid CH



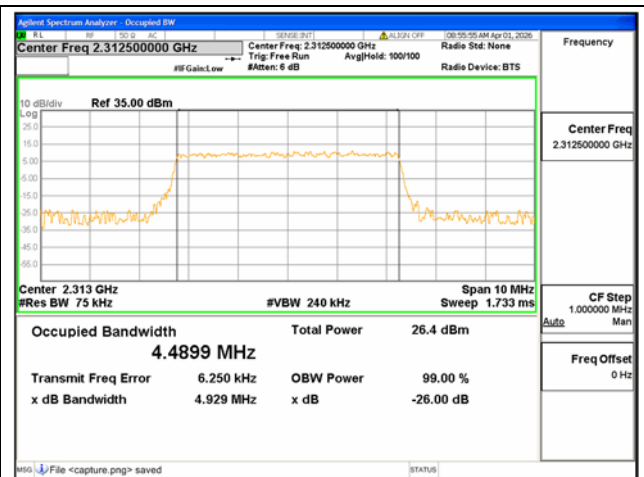
B40-1 / 5MHz / 16QAM/ Mid CH



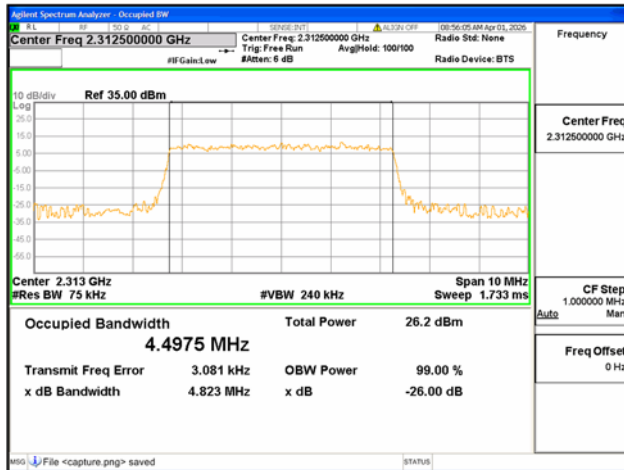
B40-1 / 5MHz / 64QAM/ Mid CH



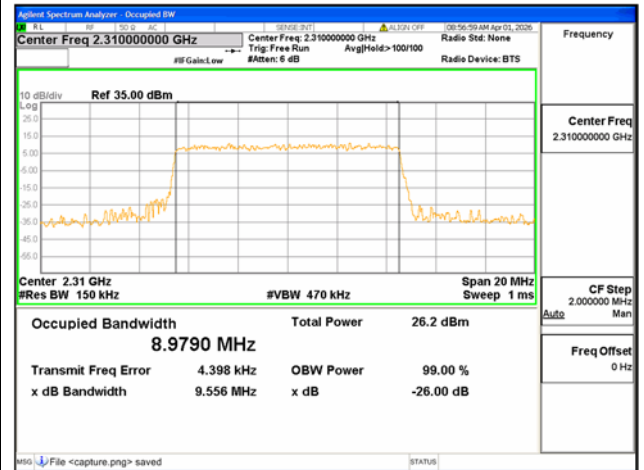
B40-1 / 5MHz / QPSK / High CH



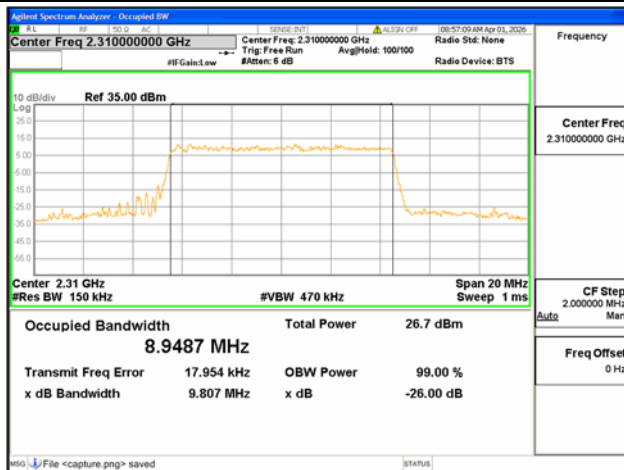
B40-1 / 5MHz / 16QAM / High CH



B40-1 / 5MHz / 64QAM / High CH



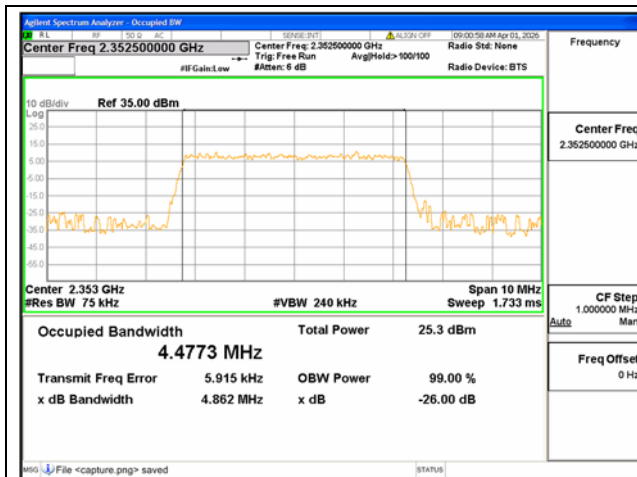
B40-1 / 10MHz / QPSK / Mid CH



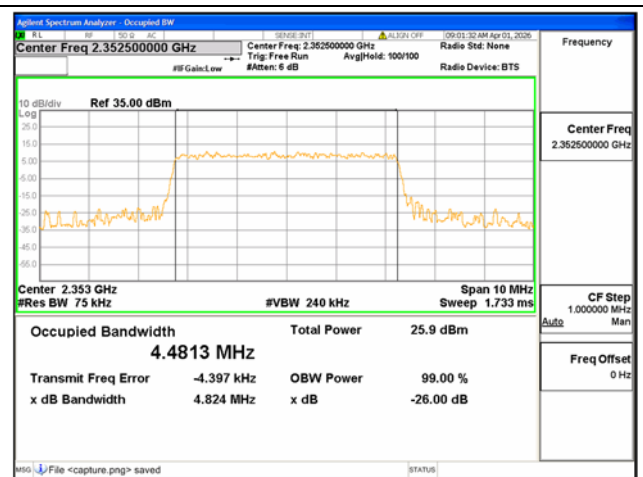
B40-1 / 10MHz / 16QAM / Mid CH



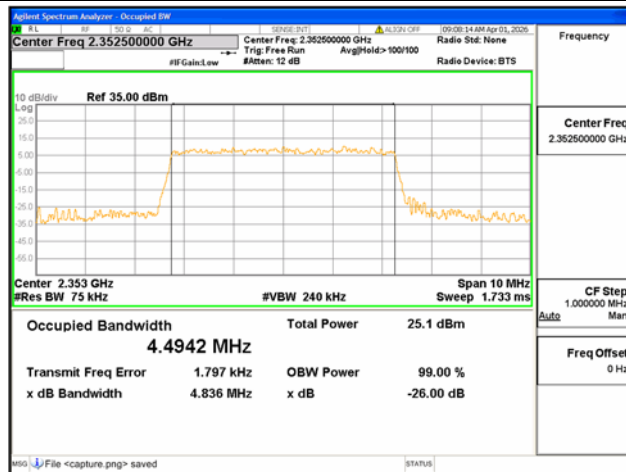
B40-1 / 10MHz / 64QAM / Mid CH



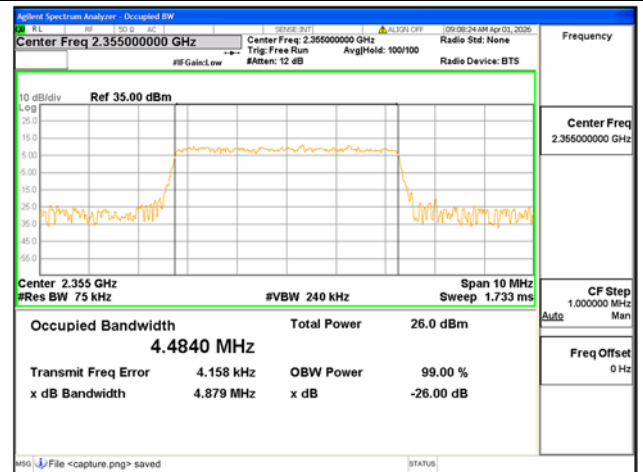
B40-2 / 5MHz / QPSK/ Low CH



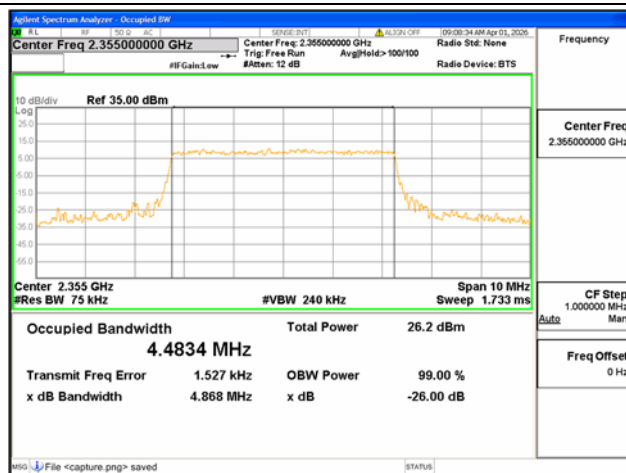
B40-2 / 5MHz / 16QAM/ Low CH



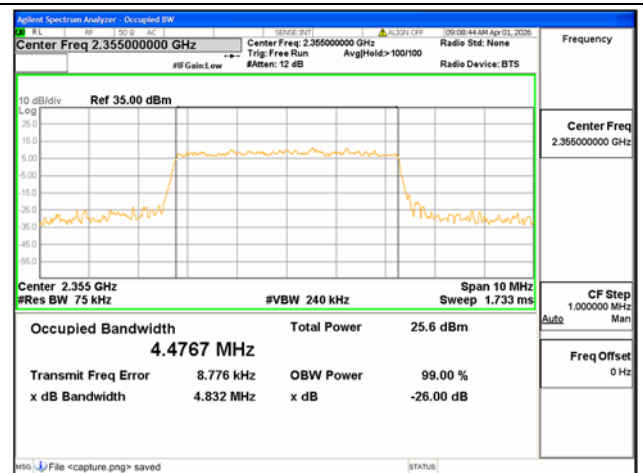
B40-2 / 5MHz / 64QAM/ Low CH



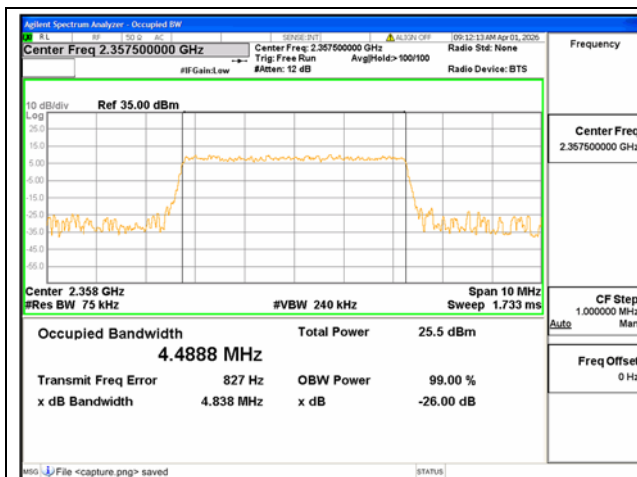
B40-2 / 5MHz / QPSK/ Mid CH



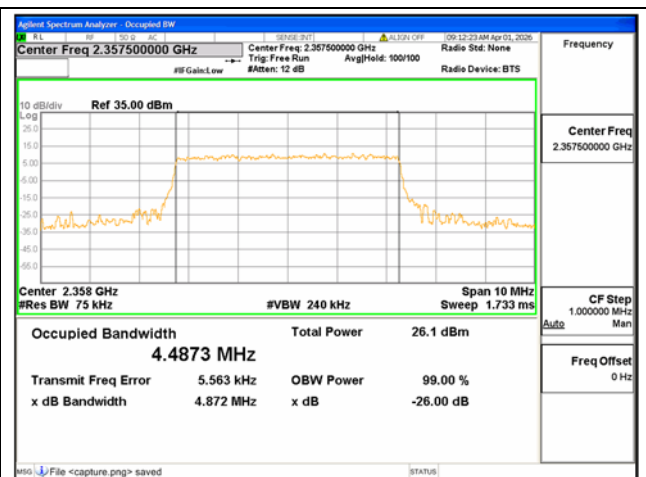
B40-2 / 5MHz / 16QAM/ Mid CH



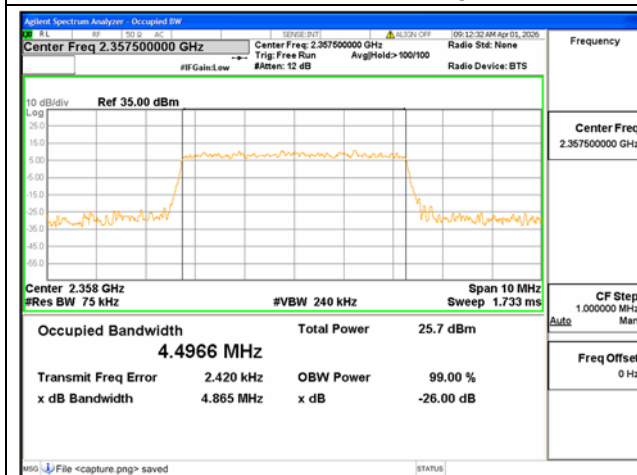
B40-2 / 5MHz / 64QAM/ Mid CH



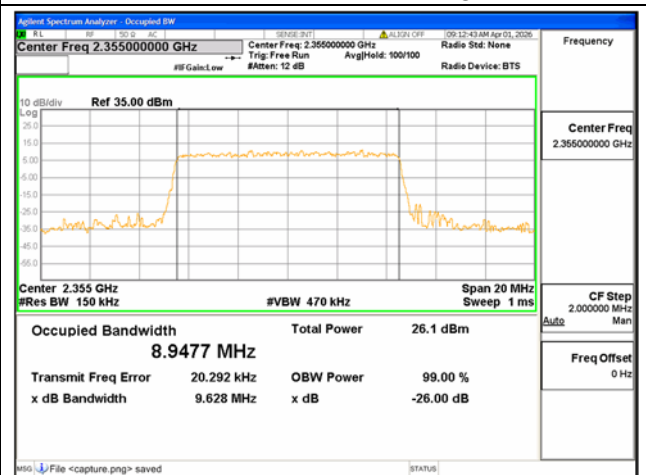
B40-2 / 5MHz / QPSK / High CH



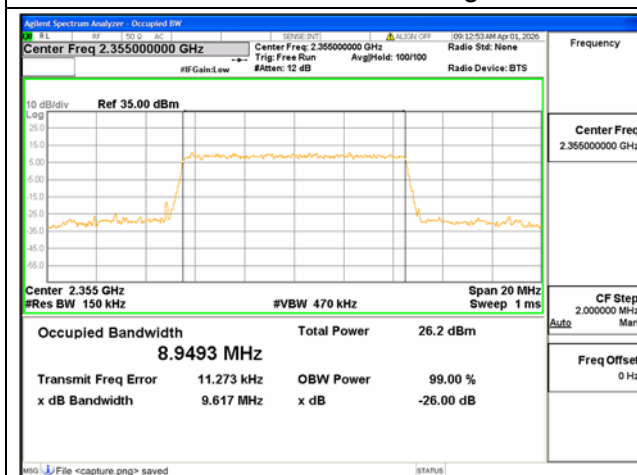
B40-2 / 5MHz / 16QAM / High CH



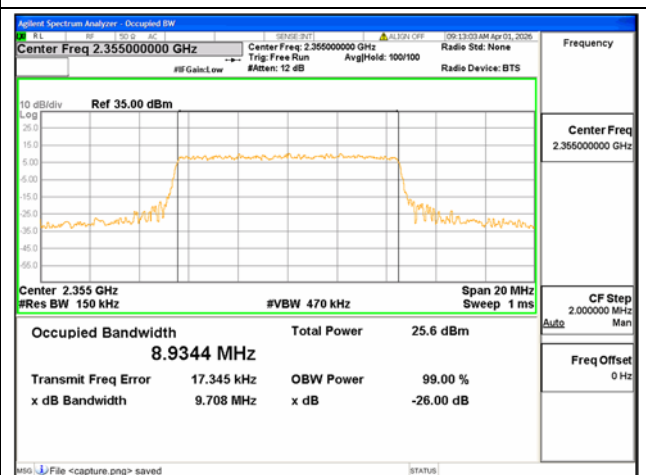
B40-2 / 5MHz / 64QAM / High CH



B40-2 / 10MHz / QPSK / Mid CH



B40-2 / 10MHz / 16QAM / Mid CH



B40-2 / 10MHz / 64QAM / Mid CH

2.3. Frequency Stability

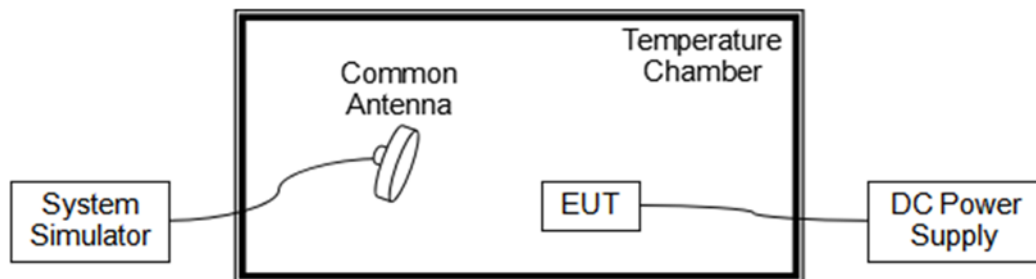
2.3.1. Requirement

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 55°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 3.6V, which are specified by the applicant; the normal temperature here used is 20°C.

LTE Band 30, 64QAM, Channel 27710, Frequency 2310.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp(°C)	Fre. Dev.(Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	20	0.009	PASS
Normal		-20	19	0.008	
Normal		-10	16	0.007	
Normal		0	9	0.004	
Normal		+10	17	0.007	
Normal		+20	13	0.006	
Normal		+30	18	0.008	
Normal		+40	-17	-0.007	
Normal		+50	-23	-0.010	
Normal		+55	15	0.006	
High	4.45	+20	-14	-0.006	PASS
BATT.ENDPOINT	3.60	+20	9	0.004	

LTE Band 40-1, 64QAM, Channel 38750, Frequency 2310.0MHz					
Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	16	0.007	PASS
Normal		-20	-9	-0.004	
Normal		-10	14	0.006	
Normal		0	-3	-0.001	
Normal		+10	19	0.008	
Normal		+20	4	0.002	
Normal		+30	18	0.008	
Normal		+40	16	0.007	
Normal		+50	2	0.001	
Normal		+55	20	0.009	
High	4.45	+20	16	0.007	PASS
BATT.ENDPOINT	3.60	+20	14	0.006	



LTE Band 40-2, 64QAM, Channel 39200, Frequency 2355.0MHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
Normal	3.87	+20(Ref)	19	0.008	PASS
Normal		-20	-4	-0.002	
Normal		-10	19	0.008	
Normal		0	20	0.008	
Normal		+10	-19	-0.008	
Normal		+20	8	0.003	
Normal		+30	13	0.006	
Normal		+40	-11	-0.005	
Normal		+50	15	0.006	
Normal		+55	14	0.006	
High	4.45	+20	19	0.008	
BATT.ENDPOINT	3.60	+20	15	0.006	

2.4. Conducted Spurious Emissions

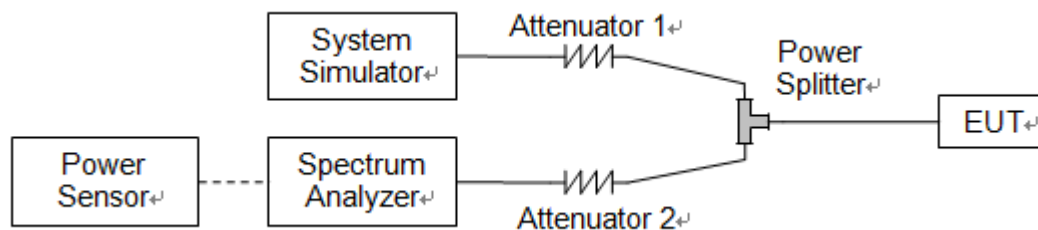
2.4.1. Requirement

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 30/40:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $70 + 10 \log(P)$ dB. This calculated to be -40dBm.

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.

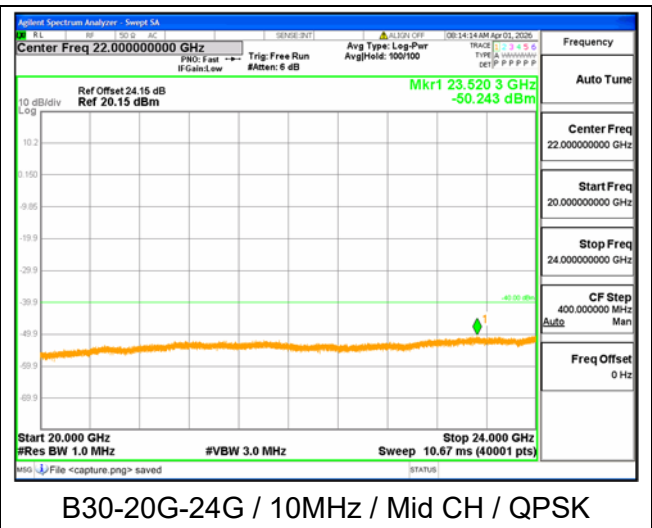
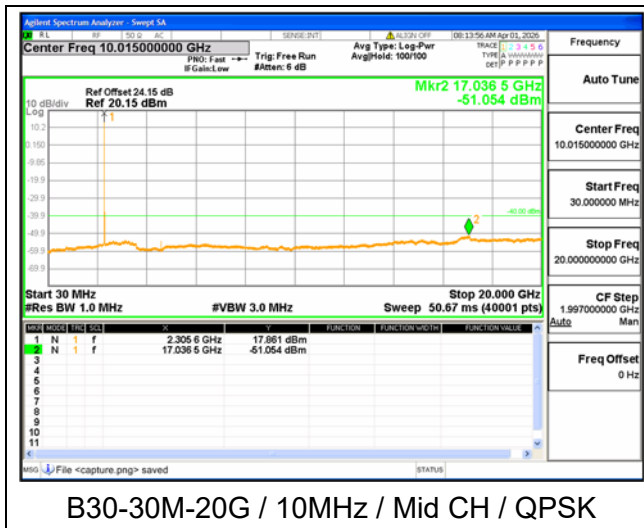


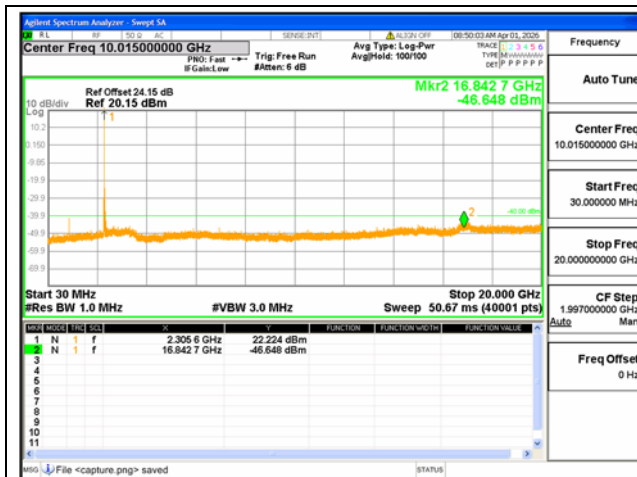
2.4.4. Test Result



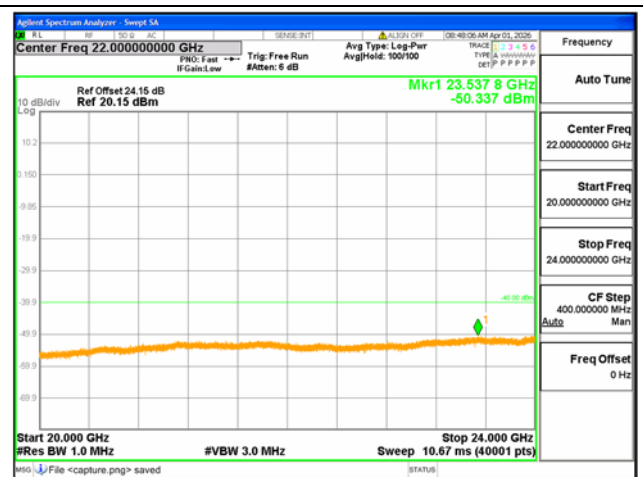


REPORT No.: SZ26030443W01

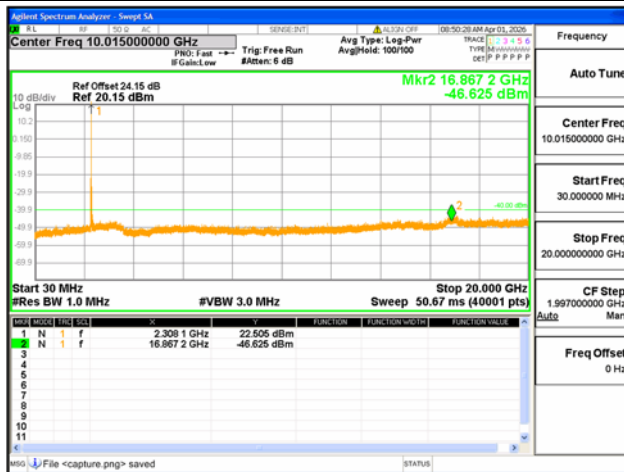




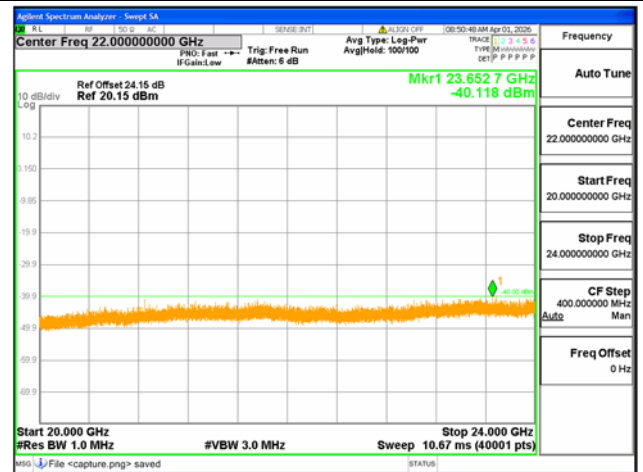
B40-1-30M-20G / 5MHz / Low CH / QPSK



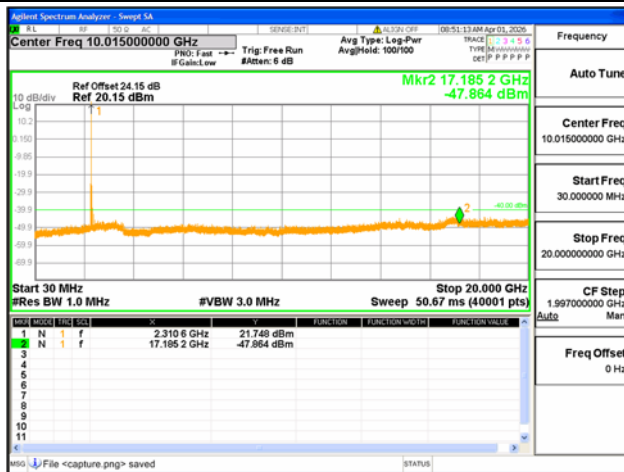
B40-1-20G-24G / 5MHz / Low CH / QPSK



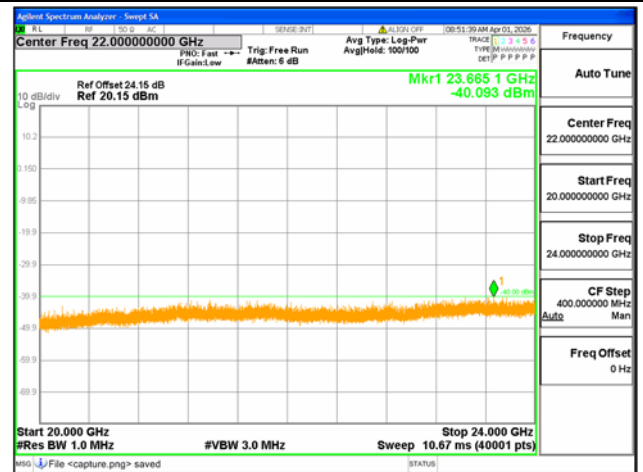
B40-1-30M-20G / 5MHz / Mid CH / QPSK



B40-1-20G-24G / 5MHz / Mid CH / QPSK



B40-1-30M-20G / 5MHz / High CH / QPSK



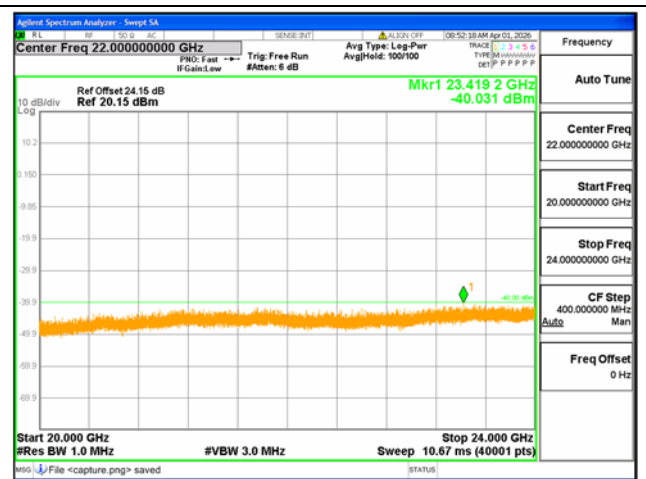
B40-1-20G-24G / 5MHz / High CH / QPSK



REPORT No.: SZ26030443W01



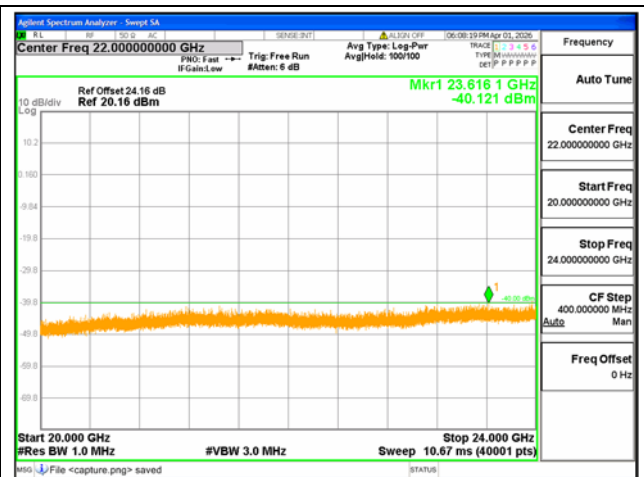
B40-1-30M-20G / 10MHz / Mid CH / QPSK



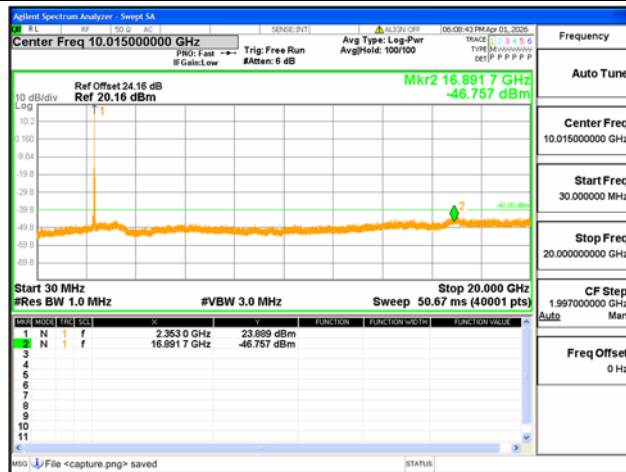
B40-1-20G-24G / 10MHz / Mid CH / QPSK



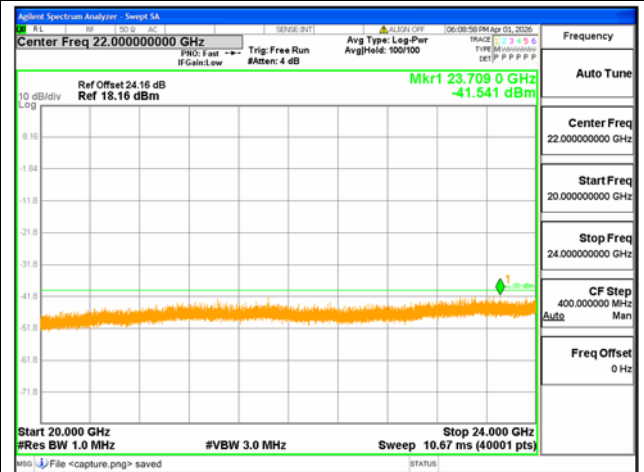
B40-2-30M-20G / 5MHz / Low CH / QPSK



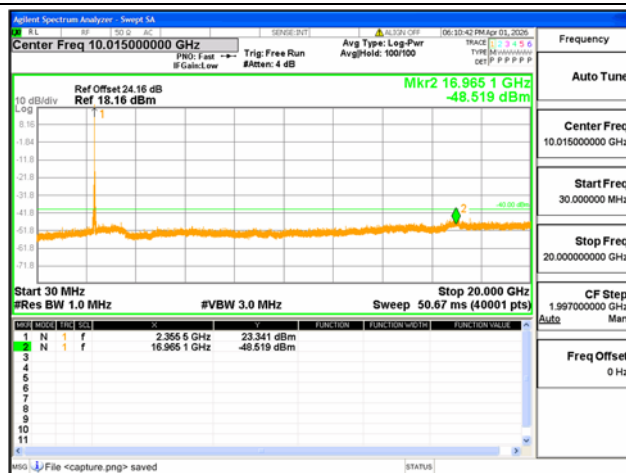
B40-2-20G-24G / 5MHz / Low CH / QPSK



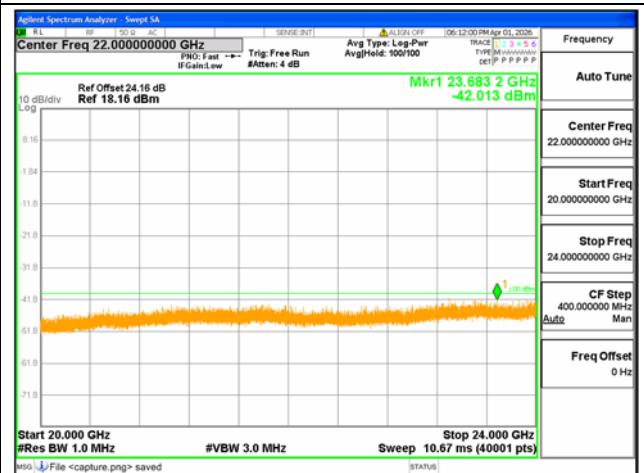
B40-2-30M-20G / 5MHz / Mid CH / QPSK



B40-2-20G-24G / 5MHz / Mid CH / QPSK



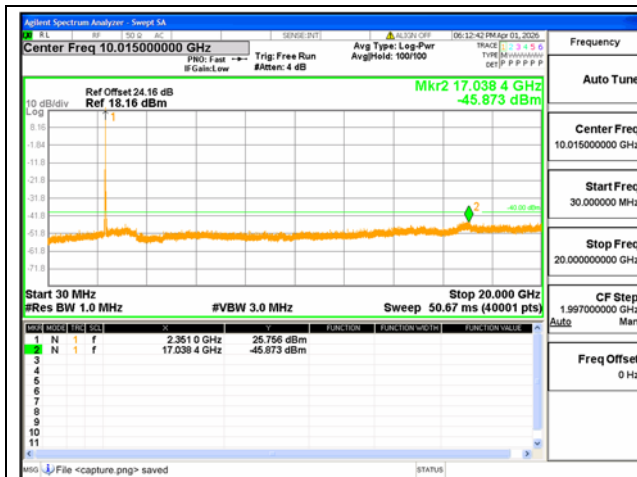
B40-2-30M-20G / 5MHz / High CH / QPSK



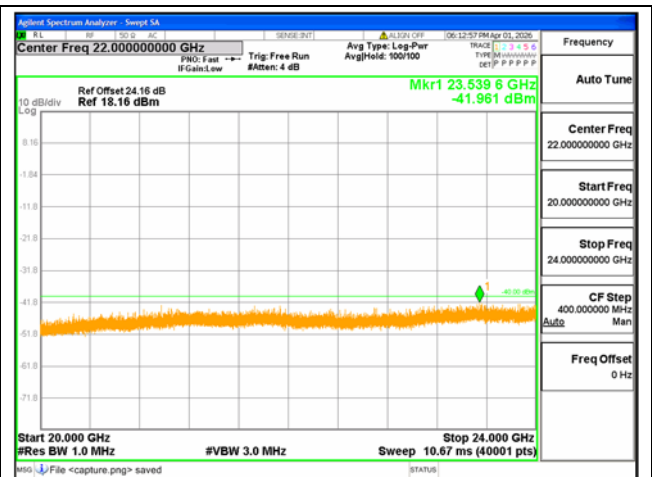
B40-2-20G-24G / 5MHz / High CH / QPSK



REPORT No.: SZ26030443W01



B40-2-30M-20G / 10MHz / Mid CH / QPSK



B40-2-20G-24G / 10MHz / Mid CH / QPSK

2.5. Band Edge

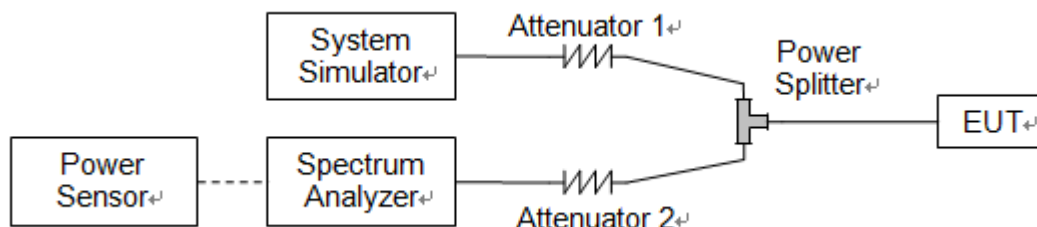
2.5.1. Requirement

Band 30/40

According to FCC section 27.53(a) (4), for mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

- (i) By a factor of not less than: $43 + 10 \log (P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log (P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log (P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log (P)$ dB on all frequencies between 2328 and 2337 MHz;
- (ii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log (P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log (P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log (P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log (P)$ dB below 2288 MHz;
- (iii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log (P)$ dB above 2365 MHz.

2.5.2. Test Description



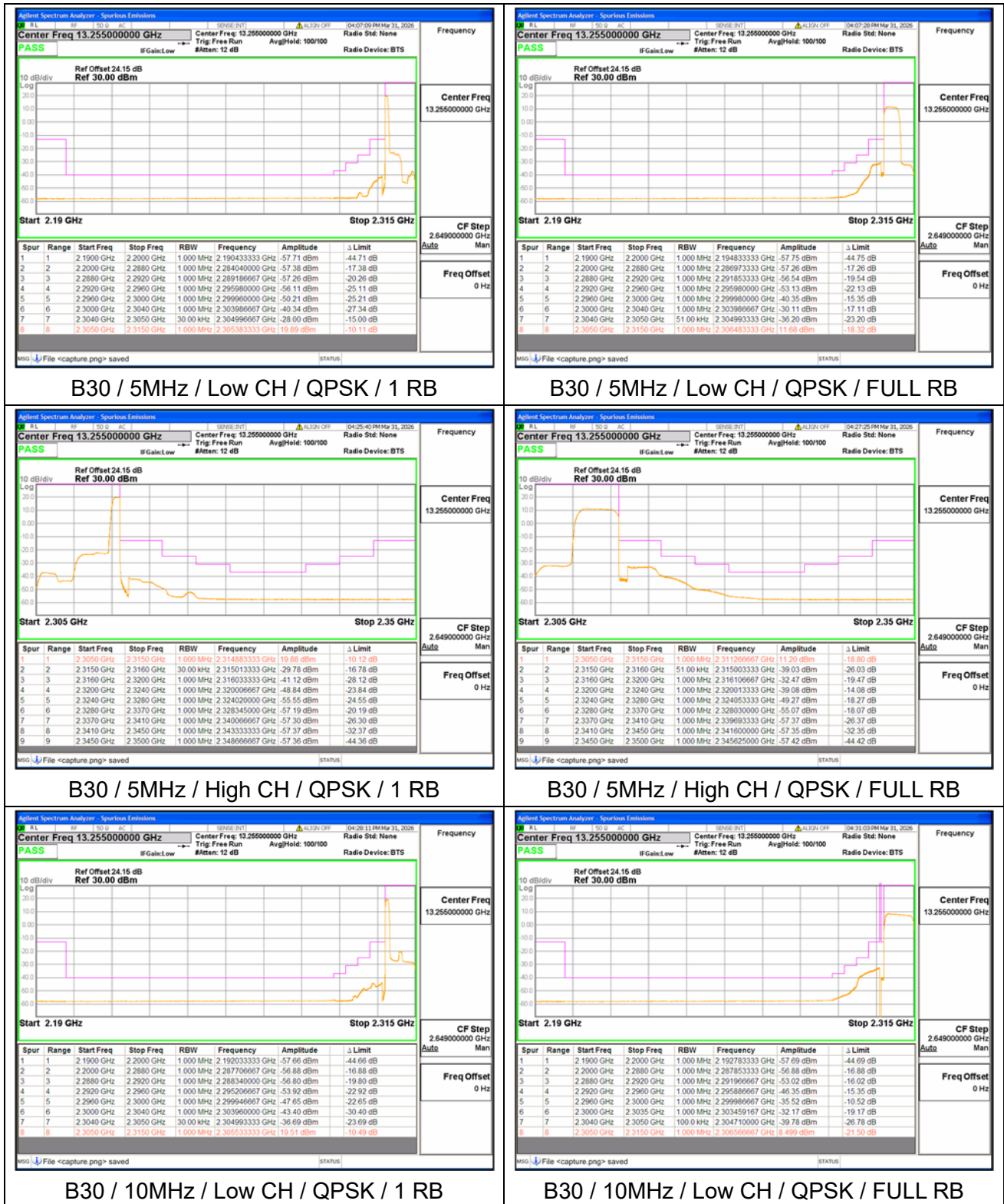
The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum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

2.5.3. Test Procedure

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

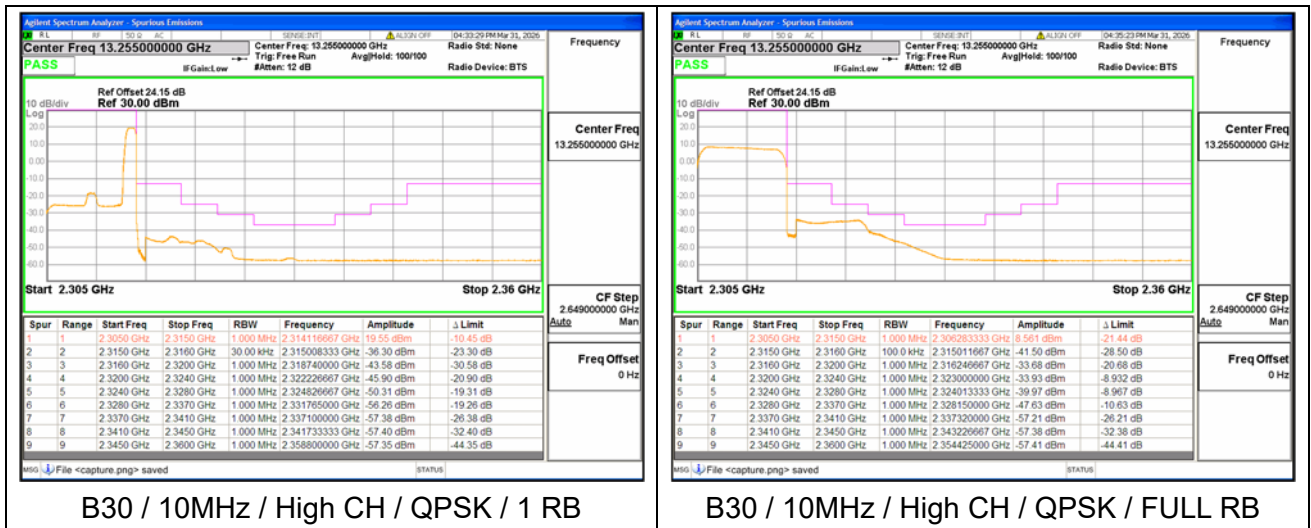


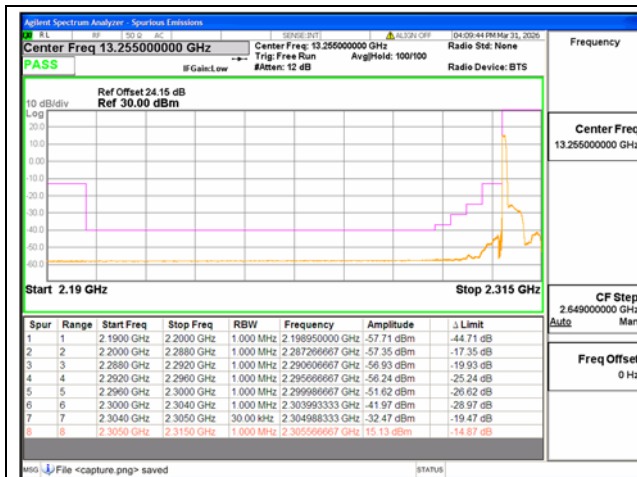
2.5.4. Test Result



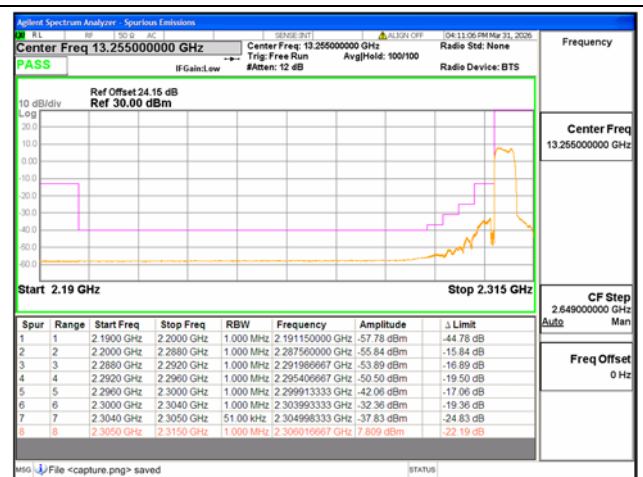


REPORT No.: SZ26030443W01

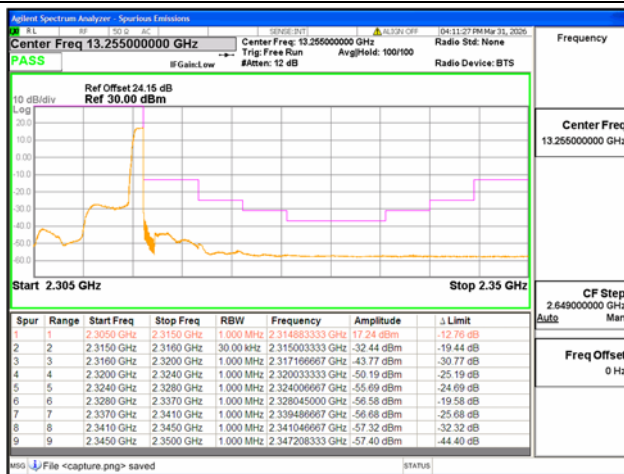




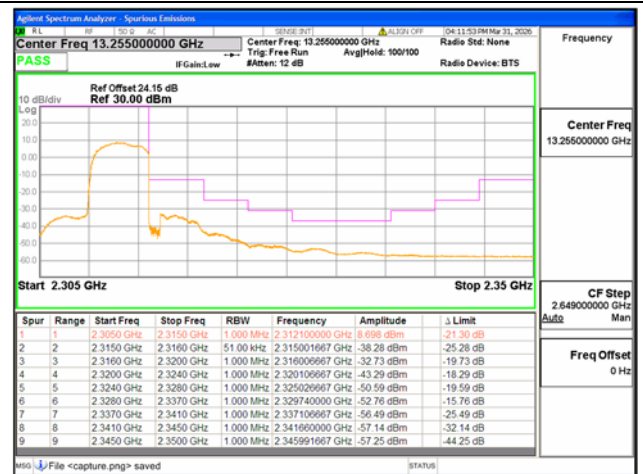
B40-1 / 5MHz / Low CH / QPSK / 1 RB



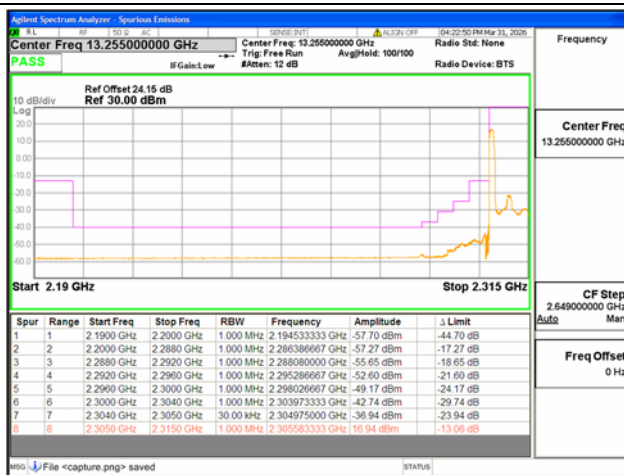
B40-1 / 5MHz / Low CH / QPSK / FULL RB



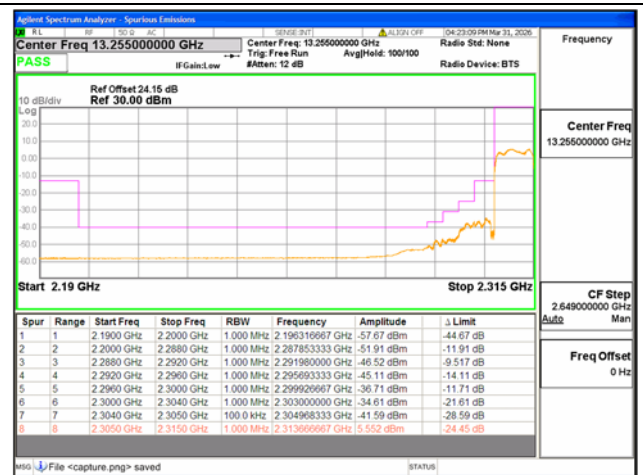
B40-1 / 5MHz / High CH / QPSK / 1 RB



B40-1 / 5MHz / High CH / QPSK / FULL RB



B40-1 / 10MHz / Low CH / QPSK / 1 RB



B40-1 / 10MHz / Low CH / QPSK / FULL RB

