TEST REPORT

APPLICANT	:	Reliance Communications, LLC
PRODUCT NAME	:	Orbic Speed Pro 5G
MODEL NAME	:	R575L5
BRAND NAME	:	Orbic
FCC ID	:	2ABGH-R575L5
STANDARD(S)	:	47 CFR Part 2 47 CFR Part 22 47 CFR Part 24 47 CFR Part 27 47 CFR Part 96
RECEIPT DATE	:	2024-06-20
TEST DATE	:	2024-08-02 to 2024-08-30
ISSUE DATE	:	2025-01-24

Edited by: Gan Jing (Rapporteur)

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Change History		
Version	Date	Reason for change
1.0	2025-01-24	First edition

1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Reliance Communications, LLC
Applicant Address:	555 Wireless Blvd. Hauppauge, NY 11788, USA
Manufacturer:	MeiG Smart Technology Co., Ltd
Manufacturer Address:	2nd Floor,Office Building,No.5 Lingxia Road,Fenghuang,Fuyong Street,Bao'an District,Shenzhen

1.2. Equipment Under Test (EUT) Description

Product Name:	Orbic Speed Pro 5G	
Sample No.:	2#	
Hardware Version:	V1.0	
Software Version:	R575L5_v1.0.35_BVZ	
Modulation Type:	QPSK, 16QAM, 64QAM	
Operation Band:	Uplink:2A_4A; 2A_5A; 2A_7A; 2A_13A; 2A_66A; 4A_5A; 4A_13A; 5A_66A; 7A_13A; 7A_66A; 13A_66A; 5B; 7C; 48C; 66B; 66C	
Frequency Range:	Band 2	Tx: 1850MHz–1910MHz
		Rx: 1930MHz–1990MHz
	Band 4	Tx: 1710MHz–1755MHz
		Rx: 2110MHz–2155MHz
	Band 5	Tx: 824MHz–849MHz
		Rx: 869MHz–894MHz
	Band 7	Tx: 2500MHz–2570MHz
		Rx: 2620MHz–2670MHz
	Band 13	Tx: 777MHz–787MHz
		Rx: 746MHz–756MHz
	Band 66	Tx: 1710MHz –1780MHz
		Rx: 2110MHz–2200MHz
	LTE 5B	Tx: 824MHz–849MHz
		Rx: 869MHz–894MHz
	LTE 7C	Tx: 2500MHz–2570MHz
		Rx: 2620MHz–2670MHz

	LTE 48C	Tx: 3550MHz–3700MHz
		Rx: 3550MHz–3700MHz
	LTE 66B	Tx: 1710MHz –1780MHz
		Rx: 2110MHz–2200MHz
	LTE 66C	Tx: 1710MHz –1780MHz
		Rx: 2110MHz–2200MHz
Channel Bandwidth:	Band 2	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	Band 4	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	Band 5	1.4MHz, 3MHz, 5MHz, 10MHz
	Band 7	5 MHz, 10MHz, 15MHz, 20MHz
	Band 13	5 MHz, 10MHz
	Band 66	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE 5B	3MHz+5MHz,5MHz+3MHz,5MHz+10MHz, 10MHz+5MHz,10MHz+10MHz
	LTE 7C	10MHz+20MHz,20MHz+10MHz,15MHz+10MHz 15MHz+15MHz,15MHz+20MHz,20MHz+15MHz20 MHz+20MHz
	LTE 48C	5MHz+20MHz,20MHz+5MHz,10MHz+20MHz,20M Hz+10MHz,15MHz+20MHz,20MHz+15MHz,20MH z+20MHz
	LTE 66B	5MHz+5MHz,5MHz+10MHz,10MHz+5MHz,5MHz+ 15MHz,15MHz+5MHz,10MHz+10MHz
	LTE 66C	5MHz+20MHz,20MHz+5MHz,10MHz+15MHz, 15MHz+10MHz,10MHz+20MHz,20MHz+10MHz 15MHz+15MHz,15MHz+20MHz,20MHz+15MHz,2 0MHz+20MHz
Antenna Type:	PIFA Antenna	
Antenna Gain:	Band 2	ANT0:1.75dBi, ANT4: 1.72dBi
	Band 4	ANT0:1. 5dBi, ANT4: 1.84dBi
	Band 5	ANT0: 0.86dBi
	Band 7	ANT0: 1.92dBi
	Band 13	ANT0: 0.8dBi
	Band 48	ANT2:0.7dBi, ANT5: 0.8dBi
	Band 66	ANT0: 1.62dBi, ANT4: 1.91dBi
Accessory Information:	Battery	
	Brand Name:	Orbic
	Model No.:	OABA014GL1

	Serial No.:	N/A
	Capacity:	5000mAh
	Rated Voltage:	3.85V
	Charge Limit:	4.4V
	Manufacturer:	Shenzhen Aerospace Electronic Co.,Ltd
	AC Adapter	
	Brand Name:	Orbic
	Model No.:	OACH023US1
	Serial No.:	N/A
	Rated Output:	100-240V~50/60HZ, 0.5A
	Rated Input:	5V⎓3A or 9V⎓5A or 12V⎓1.5A
	Manufacturer 1:	WATAI ELECTRONICS PRIVATE LIMITED
	Manufacturer 2:	KANGYIN ELECTRONIC TECHNOLOGY CO.,LTD
	USB Cable :	
	Model No.:	OAUC023US1
	Manufacturer:	KANGYIN ELECTRONIC TECHNOLOGY CO.,LTD

Note1: 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

Channel bandwidth	Maximum ERP/EIRP（W）			
CA_5B	QPSK	16QAM	64QAM	256QAM
20+20	0.244	/	/	/
CA_7C	QPSK	16QAM	64QAM	256QAM
20+20	0.305	/	/	/
CA_48C	QPSK	16QAM	64QAM	256QAM
20+20	0.154	/	/	/
CA_66B	QPSK	16QAM	64QAM	256QAM
10+10	0.309	/	/	/
CA_66C	QPSK	16QAM	64QAM	256QAM
20+20	0.305	/	/	/
CA_2A-4A	QPSK	16QAM	64QAM	256QAM
20+20	0.310	/	/	/
CA_2A-5A	QPSK	16QAM	64QAM	256QAM
20+10	0.309	/	/	/
CA_2A-7A	QPSK	16QAM	64QAM	256QAM
20+20	0.312	/	/	/
CA_2A-13A	QPSK	16QAM	64QAM	256QAM
20+10	0.308	/	/	/
CA_2A-66A	QPSK	16QAM	64QAM	256QAM
20+20	0.314	/	/	/
CA_4A-5A	QPSK	16QAM	64QAM	256QAM
20+10	0.318	/	/	
CA_4A-13A	QPSK	16QAM	64QAM	256QAM
20+10	0.321	/	/	/
CA_5A-66A	QPSK	16QAM	64QAM	256QAM
10+20	0.313	/	/	/
CA_13A-66A	QPSK	16QAM	64QAM	256QAM
10+20	0.317	/	/	/
CA_7A-13A	QPSK	16QAM	64QAM	256QAM
20+10	0.311	/	/	/
CA_7A-66A	QPSK	16QAM	64QAM	256QAM
20+20	0.307	/	/	/

Channel bandwidth	Emission Designator (99%OBW)			
LTE 5B	QPSK	16QAM	64QAM	256QAM
3+5	7M52G7D	7M52W7D	7M54W7D	3+5
5+3	7M58G7D	7M55W7D	7M56W7D	5+3
5+10	14M0G7D	13M9W7D	13M9W7D	5+10
10+5	14M0G7D	14M0W7D	14M0W7D	10+5
10+10	18M9G7D	18M8W7D	18M8W7D	10+10
LTE 7C	QPSK	16QAM	64QAM	256QAM
10+20	27M7G7D	27M7W7D	27M8W7D	10+20
15+10	23M2G7D	23M1W7D	23M1W7D	15+10
15+15	28M3G7D	28M3W7D	28M3W7D	15+15
15+20	32M6G7D	32M7W7D	32M6W7D	15+20
20+10	27M8G7D	27M7W7D	27M8W7D	20+10
20+15	32M6G7D	32M6W7D	32M6W7D	20+15
20+20	37M6G7D	37M6W7D	37M5W7D	20+20
LTE 48C	QPSK	16QAM	64QAM	256QAM
5+20	22M9G7D	22M8W7D	22M8W7D	5+20
10+20	27M7G7D	27M8W7D	27M7W7D	10+20
15+20	32M5G7D	32M6W7D	32M6W7D	15+20
20+5	22M8G7D	22M8W7D	22M9W7D	20+5
20+10	27M7G7D	27M7W7D	27M8W7D	20+10
20+15	32M6G7D	32M6W7D	32M6W7D	20+15
20+20	37M4G7D	37M6W7D	37M5W7D	20+20
LTE 66B	QPSK	16QAM	64QAM	256QAM
5+5	9M29G7D	9M29W7D	9M28W7D	5+5
5+10	14M0G7D	13M9W7D	13M9W7D	5+10
5+15	18M3G7D	18M3W7D	18M3W7D	5+15
10+5	14M0G7D	14M0W7D	13M9W7D	10+5
10+10	18M9G7D	18M9W7D	18M9W7D	10+10
15+5	18M3G7D	18M3W7D	18M3W7D	15+5
LTE 66C	QPSK	16QAM	64QAM	256QAM
5+20	22M9G7D	22M8W7D	22M8W7D	5+20
10+15	23M1G7D	23M1W7D	23M1W7D	10+15
10+20	27M7G7D	27M7W7D	27M6W7D	10+20
15+10	23M1G7D	23M1W7D	23M1W7D	15+10
15+15	28M3G7D	28M3W7D	28M3W7D	15+15
15+20	32M6G7D	32M6W7D	32M6W7D	15+20

20+5	22M9G7D	22M9W7D	22M9W7D	20+5
20+10	27M7G7D	27M7W7D	27M8W7D	20+10
20+15	32M6G7D	32M6W7D	32M6W7D	20+15
20+20	37M5G7D	37M5W7D	37M5W7D	20+20

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, Part 90 and Part 96 for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22	Public Mobile Services
3	47 CFR Part 24	Personal Communications Services
4	47 CFR Part 27	Miscellaneous Wireless Communications Services
6	47 CFR Part 96	CITIZENS BROADBAND RADIO SERVICE

B2			
Item	**FCC Rule No.**	**Requirements**	**Result**
Effective (Isotropic) Radiated Power Output Data	§2.1046, §24.232(c)	EIRP ≤ 2 W	PASS
Peak-Average Ratio	§24.232(d)	Limit≤13 dB	PASS
Bandwidth	§2.1049	OBW: No limit EBW: No limit	PASS
Band Edges Compliance	§2.1051, §24.238(a)(b)	Refer to section 2.6	PASS
Spurious Emission at Antenna Terminals	§2.1051, §24.238(a)(b)	≤ -13 dBm/1MHz	PASS
Field Strength of Spurious Radiation	§2.1053, §24.238(a)	≤ -13 dBm/1MHz	PASS
Frequency Stability	§2.1055, §24.235	No limit	N/A

B4 & B66			
Item	**FCC Rule No.**	**Requirements**	**Result**
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(d)(4)	EIRP ≤1 W	PASS
Peak-Average Ratio	§27.50(d) (5)	Limit≤13 dB	PASS

Bandwidth	§2.1049	OBW: No limit. EBW: No limit.	PASS
Band Edges Compliance	§2.1051, §27.53(h)(1) §27.53(h)(3)(i)	Refer to section 2.6	PASS
Spurious Emission at Antenna Terminals	§2.1051, §27.53(h)(1)	≤ -13 dBm/1MHz	PASS
Field Strength of Spurious Radiation	§2.1053, §27.53(h)(1)	≤ -13 dBm/1MHz.	PASS
Frequency Stability	§2.1055, §27.54	No limit	N/A

B5			
Item	**FCC Rule No.**	**Requirements**	**Result**
Effective (Isotropic) Radiated Power Output Data	§2.1046, §22.913(a)(5)	ERP ≤ 7W	PASS
Peak-Average Ratio	N/A	N/A	N/A
Bandwidth	§2.1049	OBW: No limit EBW: No limit	PASS
Band Edges Compliance	§2.1051, §22.917(a)(b)	Refer to section 2.6	PASS
Spurious Emission at Antenna Terminals	§2.1051, §22.917(a)	≤ -13 dBm/1MHz	PASS
Field Strength of Spurious Radiation	§2.1053, §22.355	≤ -13 dBm/1MHz	PASS
Frequency Stability	§2.1055, §22.355	≤ ±2.5ppm	PASS

B13			
Item	**FCC Rule No.**	**Requirements**	**Result**
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(b)(10)	ERP ≤3W	PASS
Peak-Average Ratio	N/A	N/A	N/A

Bandwidth	§2.1049	OBW: No limit EBW: No limit	PASS
Band Edges Compliance	§2.1051, §27.53(c)(2)	Refer to section 2.6	PASS
Spurious Emission at Antenna Terminals	§2.1051, §27.53(c)(2)	≤ -13 dBm/1MHz	PASS
Field Strength of Spurious Radiation	§2.1053, §27.53(c)(2)	≤ -13 dBm/1MHz	PASS
Frequency Stability	§2.1055, §27.54	No limit	N/A

B48			
Item	**FCC Rule No.**	**Requirements**	**Result**
Effective (Isotropic) Radiated Power Output Data	§2.1046, §96.41(b)	Refer to section 2.1	PASS
Peak-Average Ratio	N/A	N/A	N/A
Bandwidth	§2.1049	OBW: No limit EBW: No limit	PASS
Band Edges Compliance	§2.1051, §96.41(e)	Refer to section 2.6	PASS
Spurious Emission at Antenna Terminals	§2.1051, §96.41(e)	≤ -40 dBm/1MHz	PASS
Field Strength of Spurious Radiation	§2.1053, §96.41(e)	≤ -40 dBm/1MHz	PASS
Frequency Stability	§2.1055, §27.54	No limit	N/A

B7			
Item	**FCC Rule No.**	**Requirements**	**Result**
Effective (Isotropic) Radiated Power Output Data	§2.1046, §27.50(h)(2)	EIRP ≤2W	PASS
Bandwidth	§2.1049	OBW: No limit EBW: No limit	PASS
Band Edges Compliance	§2.1051, §27.53(m)(4)	Refer to section 2.6	PASS

Spurious Emission at Antenna Terminals	§2.1051, §27.53(m)(4)	≤ -25 dBm/1MHz	PASS
Field Strength of Spurious Radiation	§2.1053, §27.53(m)(4)	≤ -25 dBm/1MHz	PASS
Frequency Stability	§2.1055, §27.54	No limit	N/A

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

Test Item	**Test Engineer**	**Result**	**Method Determination /Remark**
Transmitter Conducted Output Power and E.R.P./E.I.R.P.	Yu Xiaoming Li Huaijie	PASS	No deviation
Occupied Bandwidth	Gan Jing	PASS	No deviation
Frequency Stability	Gan Jing	PASS(note5)	No deviation
Peak to Average Radio	Gan Jing	PASS	No deviation
Conducted Spurious Emissions	Gan Jing	PASS	No deviation
Band Edge	Gan Jing	PASS	No deviation
Radiated Spurious Emissions	Li Huaijie	PASS	No deviation

Note 1: The tests were performed according to the method of measurements prescribed in KDB971168 D01 v03 and ANSI/TIA-603-E-2016.

Note 2: The path loss during the RF test is calibrated to correct the results by the offset setting in the test equipments. The ref offset 23.5dB contains two parts that cable loss 13.5dB and Attenuator 10dB.

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.

Note 4: 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 5: The frequency stability of Carrier aggregation bands are referred to its corresponding single band, the test results refer to the test report.

1.5. Environmental Conditions

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

Temperature (°C):	15-35
Relative Humidity (%):	30-60

2. Summary Test Results And Description

2.1. Transmitter Conducted Output Power

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 24.232 (c) for LTE Band 2,Mobile and portable stations are limited to 2 watts E.I.R.P. and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

According to FCC section 27.50 (d)(4) for LTE Band 4/66, Fixed, mobile and portable (hand-held) stations in the 1710-1755MHz band are limited to 1wat E.I.R.P.

According to FCC section 27.50 (h)(2) for LTE Band 7, 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.

According to FCC section22.913 (a)(2) for LTE Band 5, the E.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

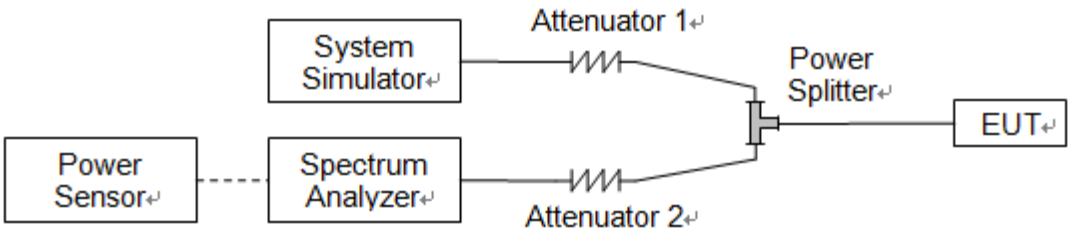
According to FCC section 27.50 (b)(10)for LTE Band 13, Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts E.R.P.

According to FCC section 27.50 (c)(10)for LTE Band 12,Portable stations (hand-held devices) operating in the 704-716MHz band are limited to 3watts E.R.P.

According to FCC section 96.41(b) for LTE Band 48, the maximum effective isotropic radiated power (EIRP) and maximum Power Spectral Density (PSD) of any CBSD and End User Device must comply with the limits shown in the table in this paragraph (b):

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

2.1.2. Test Description



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

2.1.3. Test Procedure

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

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

CA_5B_ANT0								
Combination:10MHz+10MHz(50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
			RB Size	RB Offset	RB Size	RB Offset		
20450	20549	QPSK	1	0	0	0	1	22.95
20476	20575	QPSK	1	0	0	0	1	23.02
20501	20600	QPSK	1	0	0	0	1	22.88
20450	20549	16QAM	1	0	0	0	1	22.28
20476	20575	16QAM	1	0	0	0	1	22.31
20501	20600	16QAM	1	0	0	0	1	22.19
20450	20549	64QAM	1	0	0	0	1	21.18
20476	20575	64QAM	1	0	0	0	1	21.33
20501	20600	64QAM	1	0	0	0	1	21.22
20450	20549	256QAM	1	0	0	0	1	18.27
20476	20575	256QAM	1	0	0	0	1	18.31
20501	20600	256QAM	1	0	0	0	1	18.24
20450	20549	QPSK	25	0	0	0	1	22.16
20476	20575	QPSK	25	0	0	0	1	22.22
20501	20600	QPSK	25	0	0	0	1	22.08

CA_7C_ANT0								
Combination:10MHz+10MHz(50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
			RB Size	RB Offset	RB Size	RB Offset		
20850	21048	QPSK	1	0	0	0	1	22.78
21001	21199	QPSK	1	0	0	0	1	22.93
21152	21350	QPSK	1	0	0	0	1	22.82
20850	21048	16QAM	1	0	0	0	1	21.81
21001	21199	16QAM	1	0	0	0	1	21.90
21152	21350	16QAM	1	0	0	0	1	21.83

20850	21048	64QAM	1	0	0	0	1	21.04
21001	21199	64QAM	1	0	0	0	1	21.09
21152	21350	64QAM	1	0	0	0	1	20.95
20850	21048	256QAM	1	0	0	0	1	18.04
21001	21199	256QAM	1	0	0	0	1	18.07
21152	21350	256QAM	1	0	0	0	1	17.89
20850	21048	QPSK	50	0	0	0	1	21.91
21001	21199	QPSK	50	0	0	0	1	22.01
21152	21350	QPSK	50	0	0	0	1	21.86

CA_48C_ANT5								
Combination:20MHz+20MHz(100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
			RB Size	RB Offset	RB Size	RB Offset		
55340	55538	QPSK	1	0	0	0	1	21.03
55891	56089	QPSK	1	0	0	0	1	21.08
56442	56640	QPSK	1	0	0	0	1	20.95
55340	55538	16QAM	1	0	0	0	1	20.11
55891	56089	16QAM	1	0	0	0	1	20.12
56442	56640	16QAM	1	0	0	0	1	20.03
55340	55538	64QAM	1	0	0	0	1	19.14
55891	56089	64QAM	1	0	0	0	1	19.19
56442	56640	64QAM	1	0	0	0	1	19.08
55340	55538	256QAM	1	0	0	0	1	18.19
55891	56089	256QAM	1	0	0	0	1	18.22
56442	56640	256QAM	1	0	0	0	1	18.10
55340	55538	QPSK	50	0	0	0	1	20.05
55891	56089	QPSK	50	0	0	0	1	20.06
56442	56640	QPSK	50	0	0	0	1	19.99

CA_66B_ANT0								
Combination: 10MHz+10MHz(50RB+50RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
			RB Size	RB Offset	RB Size	RB Offset		
132022	132121	QPSK	1	0	0	0	1	22.88
132373	132472	QPSK	1	0	0	0	1	22.99
132523	132622	QPSK	1	0	0	0	1	22.91
132022	132121	16QAM	1	0	0	0	1	22.18
132373	132472	16QAM	1	0	0	0	1	22.31
132523	132622	16QAM	1	0	0	0	1	22.09
132022	132121	64QAM	1	0	0	0	1	21.96
132373	132472	64QAM	1	0	0	0	1	21.02
132523	132622	64QAM	1	0	0	0	1	21.05
132022	132121	256QAM	1	0	0	0	1	18.16
132373	132472	256QAM	1	0	0	0	1	18.21
132523	132622	256QAM	1	0	0	0	1	18.04
132022	132121	QPSK	25	0	0	0	1	22.05
132373	132472	QPSK	25	0	0	0	1	22.11
132523	132622	QPSK	25	0	0	0	1	22.12

CA_66C								
Combination:20MHz+20MHz(100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)
			RB Size	RB Offset	RB Size	RB Offset		
132072	132270	QPSK	1	0	0	0	1	22.93
132323	132521	QPSK	1	0	0	0	1	22.85
132374	132572	QPSK	1	0	0	0	1	22.87
132072	132270	16QAM	1	0	0	0	1	21.96
132323	132521	16QAM	1	0	0	0	1	21.85
132374	132572	16QAM	1	0	0	0	1	21.78
132072	132270	64QAM	1	0	0	0	1	21.03
132323	132521	64QAM	1	0	0	0	1	20.95
132374	132572	64QAM	1	0	0	0	1	20.88
132072	132270	256QAM	1	0	0	0	1	18.09

132323	132521	256QAM	1	0	0	0	1	18.02
132374	132572	256QAM	1	0	0	0	1	17.94
132072	132270	QPSK	50	0	0	0	1	21.87
132323	132521	QPSK	50	0	0	0	1	21.85
132374	132572	QPSK	50	0	0	0	1	21.79

Configure	CA Configuration	PCC				
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/Offset)
Inter-band	CA_2A-4A	2	20	18700	1860	QPSK/1#0
	CA_2A-5A	2	20	18700	1860	QPSK/1#0
	CA_2A-7A	2	20	18700	1860	QPSK/1#0
	CA_2A-13A	2	20	18700	1860	QPSK/1#0
	CA_2A-66A	2	20	18700	1860	QPSK/1#0
	CA_4A-5A	4	20	20050	1720	QPSK/1#0
	CA_4A-13A	4	20	20050	1720	QPSK/1#0
	CA_5A-66A	5	10	20450	829	QPSK/1#0
	CA_13A-66A	13	10	23230	782	QPSK/1#0
	CA_7A-13A	7	20	20850	2510	QPSK/1#0
	CA_7A-66A	7	20	20850	2510	QPSK/1#0

SCC				
Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Measured Power(dBm)
4	20	20300	1745	23.07
5	10	20600	844	23.15
7	20	21350	2560	23.02
13	10	23230	782	23.14
66	20	132572	1770	23.06
5	20	20525	836.5	23.19
13	10	23230	782	23.22
66	20	132572	1770	23.05
66	20	132572	1770	23.10
13	10	23230	782	23.01
66	20	132572	1770	22.95

Effective Radiated Power and Effective Isotropic Radiated Power

LTE CA_5B _ANT0											
Combination:10MHz+10MHz(50RB+50RB)											
PCC Channel	PCC UL Fre.(MHz)	SCC Channel	SCC UL Fre.(MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)	Measured EIRP(W)
					RB Size	RB Offset	RB Size	RB Offset			
20450	829	20549	838.9	QPSK	1	0	100	0	1	23.81	0.240
20476	831.6	20575	841.5	QPSK	1	0	100	0	1	23.88	0.244
20501	834.1	20600	844	QPSK	1	0	100	0	1	23.74	0.237
20450	829	20549	838.9	16QAM	1	0	0	0	1	23.14	0.206
20476	831.6	20575	841.5	16QAM	1	0	0	0	1	23.17	0.207
20501	834.1	20600	844	16QAM	1	0	0	0	1	23.05	0.202
20450	829	20549	838.9	64QAM	1	0	0	0	1	22.04	0.160
20476	831.6	20575	841.5	64QAM	1	0	0	0	1	22.19	0.166
20501	834.1	20600	844	64QAM	1	0	0	0	1	22.08	0.161
20450	829	20549	838.9	256QAM	1	0	0	0	1	19.13	0.082
20476	831.6	20575	841.5	256QAM	1	0	0	0	1	19.17	0.083
20501	834.1	20600	844	256QAM	1	0	0	0	1	19.10	0.081
20501	834.1	20600	844	QPSK	25	25	0	0	1	23.02	0.200
20501	834.1	20600	844	QPSK	25	25	0	0	1	23.08	0.203

20501	834.1	20600	844	QPSK	25	25	0	0	1	22.94	0.197

LTE CA_7C _ANT0											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC UL Fre.(MHz)	SCC Channel	SCC UL Fre.(MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)	Measured EIRP(W)
					RB Size	RB Offset	RB Size	RB Offset			
20850	2510	21048	2529.8	QPSK	1	0	0	0	1	24.70	0.295
21001	2525.1	21199	2544.9	QPSK	1	0	0	0	1	24.85	0.305
21152	2540.2	21350	2560	QPSK	1	0	0	0	1	24.74	0.298
20850	829	21048	838.9	16QAM	1	0	0	0	1	23.73	0.236
21001	831.6	21199	841.5	16QAM	1	0	0	0	1	23.82	0.241
21152	834.1	21350	844	16QAM	1	0	0	0	1	23.75	0.237
20850	829	21048	838.9	64QAM	1	0	0	0	1	22.96	0.198
21001	831.6	21199	841.5	64QAM	1	0	0	0	1	23.01	0.200
21152	834.1	21350	844	64QAM	1	0	0	0	1	22.87	0.194
20850	829	21048	838.9	256QAM	1	0	0	0	1	19.96	0.099
21001	831.6	21199	841.5	256QAM	1	0	0	0	1	19.99	0.100
21152	834.1	21350	844	256QAM	1	0	0	0	1	19.81	0.096
20850	834.1	21048	844	QPSK	50	0	0	0	1	23.83	0.242
21001	834.1	21199	844	QPSK	50	0	0	0	1	23.93	0.247

21152	834.1	21350	844	QPSK	50	0	0	0	1	23.78	0.239

LTE CA_48C _ANT5											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC UL Fre.(MHz)	SCC Channel	SCC UL Fre.(MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)	Measured EIRP(W)
					RB Size	RB Offset	RB Size	RB Offset			
55340	3560.0	55538	3579.8	QPSK	1	0	100	0	1	21.83	0.152
55891	3615.1	56089	3634.9	QPSK	1	0	100	0	1	21.88	0.154
56442	3670.2	56640	3690.0	QPSK	1	0	100	0	1	21.75	0.150
55340	3560.0	55538	3579.8	16QAM	1	0	0	0	1	20.91	0.123
55891	3615.1	56089	3634.9	16QAM	1	0	0	0	1	20.92	0.124
56442	3670.2	56640	3690.0	16QAM	1	0	0	0	1	20.83	0.121
55340	3560.0	55538	3579.8	64QAM	1	0	0	0	1	19.94	0.099
55891	3615.1	56089	3634.9	64QAM	1	0	0	0	1	19.99	0.100
56442	3670.2	56640	3690.0	64QAM	1	0	0	0	1	19.88	0.097
55340	3560.0	55538	3579.8	256QAM	1	0	0	0	1	18.99	0.079
55891	3615.1	56089	3634.9	256QAM	1	0	0	0	1	19.02	0.080
56442	3670.2	56640	3690.0	256QAM	1	0	0	0	1	18.90	0.078
55340	3560.0	55538	55340	QPSK	50	0	0	0	1	20.85	0.122
5589	361	5608	558	QPSK	50	0	0	0	1	20.86	0.122

1	5.1	9	91								
56442	3670.2	56640	56442	QPSK	50	0	0	0	1	20.79	0.120

LTE CA_66B _ANT0											
Combination:10MHz+10MHz(50RB+50RB)											
PCC Channel	PCC UL Fre.(MHz)	SCC Channel	SCC UL Fre.(MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)	Measured EIRP(W)
					RB Size	RB Offset	RB Size	RB Offset			
132047	1717.5	132140	1726.8	QPSK	1	0	0	0	1	24.79	0.301
132398	1752.6	132491	1761.9	QPSK	1	0	0	0	1	24.90	0.309
132549	1767.7	132642	1777	QPSK	1	0	0	0	1	24.82	0.303
132047	1717.5	132140	1726.8	16QAM	1	0	0	0	1	24.09	0.256
132398	1752.6	132491	1761.9	16QAM	1	0	0	0	1	24.22	0.264
132549	1767.7	132642	1777	16QAM	1	0	0	0	1	24.00	0.251
132047	1717.5	132140	1726.8	64QAM	1	0	0	0	1	23.87	0.244
132398	1752.6	132491	1761.9	64QAM	1	0	0	0	1	22.93	0.196
132549	1767.7	132642	1777	64QAM	1	0	0	0	1	22.96	0.198
132047	1717.5	132140	1726.8	256QAM	1	0	0	0	1	20.07	0.102
132398	1752.6	132491	1761.9	256QAM	1	0	0	0	1	20.12	0.103
132549	1767.7	132642	1777	256QAM	1	0	0	0	1	19.95	0.099
132047	1717.5	132140	132047	QPSK	25	0	0	0	1	23.96	0.249
1323	175	1324	1323	QPSK	25	0	0	0	1	24.02	0.252

98	2.6	91	98								
132549	1767.7	132642	132549	QPSK	25	0	0	0	1	24.03	0.253

LTE CA_66C _ANT0											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC UL Fre.(MHz)	SCC Channel	SCC UL Fre.(MHz)	Modulation	PCC		SCC		Total RB Size	Measured Power(dBm)	Measured EIRP(W)
					RB Size	RB Offset	RB Size	RB Offset			
132047	1720	132140	1739.8	QPSK	1	0	100	0	1	24.84	0.305
132398	1745.1	132491	1764.9	QPSK	1	0	100	0	1	24.76	0.299
132549	1750.2	132642	1770	QPSK	1	0	100	0	1	24.78	0.301
132047	1720	132140	1739.8	16QAM	1	0	0	0	1	23.87	0.244
132398	1745.1	132491	1764.9	16QAM	1	0	0	0	1	23.76	0.238
132549	1750.2	132642	1770	16QAM	1	0	0	0	1	23.69	0.234
132047	1720	132140	1739.8	64QAM	1	0	0	0	1	22.94	0.197
132398	1745.1	132491	1764.9	64QAM	1	0	0	0	1	22.86	0.193
132549	1750.2	132642	1770	64QAM	1	0	0	0	1	22.79	0.190
132047	1720	132140	1739.8	256QAM	1	0	0	0	1	20.00	0.100
132398	1745.1	132491	1764.9	256QAM	1	0	0	0	1	19.93	0.098
132549	1750.2	132642	1770	256QAM	1	0	0	0	1	19.85	0.097
132047	1720	132140	1739.8	QPSK	50	0	0	0	1	23.78	0.239

132398	1745.1	132491	1764.9	QPSK	50	0	0	0	1	23.76	0.238
132549	1750.2	132642	1770	QPSK	50	0	0	0	1	23.70	0.234

Configure	CA Configuration	PCC				
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/Offset)
Inter-band	CA_2A-4A	2	20	18700	1860	QPSK/1#0
	CA_2A-5A	2	20	18700	1860	QPSK/1#0
	CA_2A-7A	2	20	18700	1860	QPSK/1#0
	CA_2A-13A	2	20	18700	1860	QPSK/1#0
	CA_2A-66A	2	20	18700	1860	QPSK/1#0
	CA_4A-5A	4	20	20050	1720	QPSK/1#0
	CA_4A-13A	4	20	20050	1720	QPSK/1#0
	CA_5A-66A	5	10	20450	829	QPSK/1#0
	CA_13A-66A	13	10	23230	782	QPSK/1#0
	CA_7A-13A	7	20	20850	2510	QPSK/1#0
	CA_7A-66A	7	20	20850	2510	QPSK/1#0

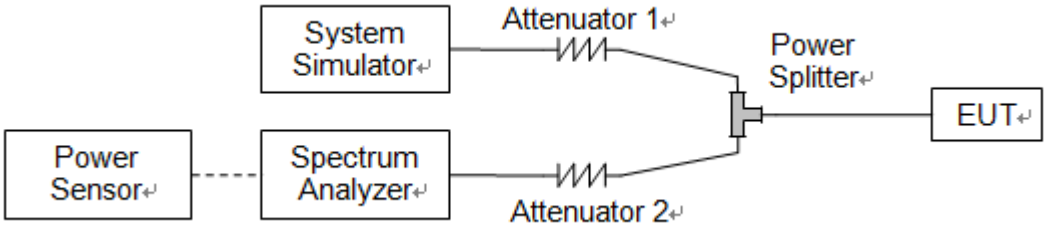
SCC					
Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Measured Power(dBm)	EIRP(W)
4	20	20300	1745	24.91	0.310
5	10	20600	844	24.90	0.309
7	20	21350	2560	24.94	0.312
13	10	23230	782	24.89	0.308
66	20	132572	1770	24.97	0.314
5	20	20525	836.5	25.03	0.318
13	10	23230	782	25.06	0.321
66	20	132572	1770	24.96	0.313
66	20	132572	1770	25.01	0.317
13	10	23230	782	24.93	0.311
66	20	132572	1770	24.87	0.307

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	PCC CH	SCC CH	Modulation	99% BW (MHz)	26dB BW (MHz)	Verdict
5B	3+5	Low	20416	20455	QPSK	7.4707	8.0317	PASS
5B	3+5	Low	20416	20455	16QAM	7.4852	8.0298	PASS
5B	3+5	Low	20416	20455	64QAM	7.4780	8.0071	PASS
5B	3+5	Mid	20501	20540	QPSK	7.5224	8.0748	PASS
5B	3+5	Mid	20501	20540	16QAM	7.5211	9.8803	PASS
5B	3+5	Mid	20501	20540	64QAM	7.5370	9.6782	PASS
5B	3+5	High	20586	20625	QPSK	7.5109	7.9916	PASS
5B	3+5	High	20586	20625	16QAM	7.4887	9.2970	PASS
5B	3+5	High	20586	20625	64QAM	7.5111	7.9685	PASS
5B	5+3	Low	20425	20464	QPSK	7.4872	8.1460	PASS
5B	5+3	Low	20425	20464	16QAM	7.4802	8.0685	PASS
5B	5+3	Low	20425	20464	64QAM	7.4897	8.2238	PASS
5B	5+10	Low	20428	20500	QPSK	13.903	14.839	PASS
5B	5+10	Low	20428	20500	16QAM	13.868	14.750	PASS
5B	5+10	Low	20428	20500	64QAM	13.881	14.780	PASS
5B	5+3	Mid	20510	20549	QPSK	7.5791	13.7943	PASS
5B	5+3	Mid	20510	20549	16QAM	7.5471	14.1221	PASS
5B	5+3	Mid	20510	20549	64QAM	7.5641	13.4317	PASS
5B	5+10	Mid	20478	20550	QPSK	13.916	14.799	PASS
5B	5+10	Mid	20478	20550	16QAM	13.870	14.753	PASS
5B	5+10	Mid	20478	20550	64QAM	13.866	14.811	PASS
5B	5+3	High	20595	20634	QPSK	7.5253	8.1243	PASS
5B	5+3	High	20595	20634	16QAM	7.5141	8.1372	PASS
5B	5+3	High	20595	20634	64QAM	7.4988	8.1017	PASS
5B	5+10	High	20528	20600	QPSK	13.966	14.883	PASS
5B	5+10	High	20528	20600	16QAM	13.908	14.901	PASS
5B	5+10	High	20528	20600	64QAM	13.927	14.904	PASS
5B	10+5	Low	20450	20522	QPSK	13.994	15.041	PASS
5B	10+5	Low	20450	20522	16QAM	13.919	14.885	PASS
5B	10+5	Low	20450	20522	64QAM	13.941	15.001	PASS
5B	10+10	Low	20450	20549	QPSK	18.808	20.067	PASS
5B	10+10	Low	20450	20549	16QAM	18.825	20.138	PASS
5B	10+10	Low	20450	20549	64QAM	18.776	20.118	PASS
5B	10+5	Mid	20500	20572	QPSK	13.949	14.943	PASS
5B	10+5	Mid	20500	20572	16QAM	13.929	14.970	PASS

5B	10+5	Mid	20500	20572	64QAM	13.927	15.005	PASS
5B	10+10	Mid	20476	20575	QPSK	18.827	20.110	PASS
5B	10+10	Mid	20476	20575	16QAM	18.846	19.994	PASS
5B	10+10	Mid	20476	20575	64QAM	18.808	20.089	PASS
5B	10+5	High	20550	20622	QPSK	13.981	15.046	PASS
5B	10+5	High	20550	20622	16QAM	13.965	15.093	PASS
5B	10+5	High	20550	20622	64QAM	13.995	15.069	PASS
5B	10+10	High	20501	20600	QPSK	18.918	20.196	PASS
5B	10+10	High	20501	20600	16QAM	18.839	20.192	PASS
5B	10+10	High	20501	20600	64QAM	18.799	20.074	PASS

LTE Band	BW(MHz)	Channel Level	PCC CH	SCC CH	Modulation	99% BW (MHz)	26dB BW (MHz)	Verdict
7C	10+20	Low	20805	20949	QPSK	27.690	28.892	PASS
7C	10+20	Low	20805	20949	16QAM	27.618	29.019	PASS
7C	10+20	Low	20805	20949	64QAM	27.668	28.811	PASS
7C	10+20	Mid	21006	21150	QPSK	27.692	29.063	PASS
7C	10+20	Mid	21006	21150	16QAM	27.655	29.138	PASS
7C	10+20	Mid	21006	21150	64QAM	27.755	29.081	PASS
7C	10+20	High	21206	21350	QPSK	27.709	28.856	PASS
7C	10+20	High	21206	21350	16QAM	27.568	28.944	PASS
7C	10+20	High	21206	21350	64QAM	27.589	28.882	PASS
7C	15+10	Low	20825	20945	QPSK	23.154	24.210	PASS
7C	15+10	Low	20825	20945	16QAM	23.069	24.280	PASS
7C	15+10	Low	20825	20945	64QAM	23.101	24.430	PASS
7C	15+15	Low	20825	20975	QPSK	28.322	29.733	PASS
7C	15+15	Low	20825	20975	16QAM	28.289	29.679	PASS
7C	15+15	Low	20825	20975	64QAM	28.223	29.574	PASS
7C	15+20	Low	20828	20999	QPSK	32.509	34.228	PASS
7C	15+20	Low	20828	20999	16QAM	32.553	34.250	PASS
7C	15+20	Low	20828	20999	64QAM	32.524	34.259	PASS
7C	15+10	Mid	21051	21171	QPSK	23.123	24.232	PASS
7C	15+10	Mid	21051	21171	16QAM	23.084	24.506	PASS
7C	15+10	Mid	21051	21171	64QAM	23.071	24.270	PASS
7C	15+15	Mid	21025	21175	QPSK	28.329	29.842	PASS
7C	15+15	Mid	21025	21175	16QAM	28.349	29.722	PASS
7C	15+15	Mid	21025	21175	64QAM	28.319	29.697	PASS

7C	15+20	Mid	21003	21174	QPSK	32.581	34.071	PASS
7C	15+20	Mid	21003	21174	16QAM	32.655	34.177	PASS
7C	15+20	Mid	21003	21174	64QAM	32.550	34.261	PASS
7C	15+10	High	21277	21397	QPSK	23.121	24.313	PASS
7C	15+10	High	21277	21397	16QAM	23.067	24.583	PASS
7C	15+10	High	21277	21397	64QAM	23.003	24.302	PASS
7C	15+15	High	21225	21375	QPSK	28.260	29.618	PASS
7C	15+15	High	21225	21375	16QAM	28.182	29.689	PASS
7C	15+15	High	21225	21375	64QAM	28.278	29.705	PASS
7C	15+20	High	21179	21350	QPSK	32.551	34.187	PASS
7C	15+20	High	21179	21350	16QAM	32.548	34.175	PASS
7C	15+20	High	21179	21350	64QAM	32.525	34.211	PASS
7C	20+10	Low	20850	20994	QPSK	27.713	29.151	PASS
7C	20+10	Low	20850	20994	16QAM	27.655	29.100	PASS
7C	20+10	Low	20850	20994	64QAM	27.659	29.121	PASS
7C	20+15	Low	20850	21021	QPSK	32.542	34.473	PASS
7C	20+15	Low	20850	21021	16QAM	32.598	34.339	PASS
7C	20+15	Low	20850	21021	64QAM	32.514	34.462	PASS
7C	20+20	Low	20850	21048	QPSK	37.479	39.245	PASS
7C	20+20	Low	20850	21048	16QAM	37.568	39.653	PASS
7C	20+20	Low	20850	21048	64QAM	37.494	39.322	PASS
7C	20+10	Mid	21051	21195	QPSK	27.775	29.091	PASS
7C	20+10	Mid	21051	21195	16QAM	27.739	29.412	PASS
7C	20+10	Mid	21051	21195	64QAM	27.776	29.359	PASS
7C	20+15	Mid	21026	21197	QPSK	32.602	34.340	PASS
7C	20+15	Mid	21026	21197	16QAM	32.629	34.458	PASS
7C	20+15	Mid	21026	21197	64QAM	32.644	34.446	PASS
7C	20+20	Mid	21001	21199	QPSK	37.605	39.382	PASS
7C	20+20	Mid	21001	21199	16QAM	37.500	39.302	PASS
7C	20+20	Mid	21001	21199	64QAM	37.527	39.533	PASS
7C	20+10	High	21251	21395	QPSK	27.784	29.180	PASS
7C	20+10	High	21251	21395	16QAM	27.672	29.146	PASS
7C	20+10	High	21251	21395	64QAM	27.747	29.274	PASS
7C	20+15	High	21201	21372	QPSK	32.536	34.381	PASS
7C	20+15	High	21201	21372	16QAM	32.614	34.197	PASS
7C	20+15	High	21201	21372	64QAM	32.527	34.148	PASS
7C	20+20	High	21152	21350	QPSK	37.478	39.364	PASS
7C	20+20	High	21152	21350	16QAM	37.494	39.368	PASS

7C	20+20	High	21152	21350	64QAM	37.464	39.363	PASS

LTE Band	BW(MHz)	Channel Level	PCC CH	SCC CH	Modulation	99% BW (MHz)	26dB BW (MHz)	Verdict
48C	5+20	Low	55273	55390	QPSK	22.790	24.026	PASS
48C	5+20	Low	55273	55390	16QAM	22.793	23.635	PASS
48C	5+20	Low	55273	55390	64QAM	22.799	23.747	PASS
48C	5+20	Mid	55898	56015	QPSK	22.857	23.669	PASS
48C	5+20	Mid	55898	56015	16QAM	22.710	23.616	PASS
48C	5+20	Mid	55898	56015	64QAM	22.726	23.661	PASS
48C	5+20	High	56523	56640	QPSK	22.734	23.541	PASS
48C	5+20	High	56523	56640	16QAM	22.695	23.553	PASS
48C	5+20	High	56523	56640	64QAM	22.632	23.592	PASS
48C	10+20	Low	55295	55439	QPSK	27.672	28.893	PASS
48C	10+20	Low	55295	55439	16QAM	27.683	29.002	PASS
48C	10+20	Low	55295	55439	64QAM	27.726	28.838	PASS
48C	10+20	Mid	55896	56040	QPSK	27.732	28.574	PASS
48C	10+20	Mid	55896	56040	16QAM	27.759	28.785	PASS
48C	10+20	Mid	55896	56040	64QAM	27.494	28.671	PASS
48C	10+20	High	56496	56640	QPSK	27.626	28.822	PASS
48C	10+20	High	56496	56640	16QAM	27.617	28.791	PASS
48C	10+20	High	56496	56640	64QAM	27.679	28.923	PASS
48C	15+20	Low	55318	55489	QPSK	32.535	33.579	PASS
48C	15+20	Low	55318	55489	16QAM	32.578	33.913	PASS
48C	15+20	Low	55318	55489	64QAM	32.596	33.989	PASS
48C	15+20	Mid	55893	56064	QPSK	32.521	33.863	PASS
48C	15+20	Mid	55893	56064	16QAM	32.549	33.886	PASS
48C	15+20	Mid	55893	56064	64QAM	32.505	33.898	PASS
48C	15+20	High	56469	56640	QPSK	32.538	34.205	PASS
48C	15+20	High	56469	56640	16QAM	32.496	34.258	PASS
48C	15+20	High	56469	56640	64QAM	32.460	33.868	PASS
48C	20+5	Low	55340	55457	QPSK	22.809	23.984	PASS
48C	20+5	Low	55340	55457	16QAM	22.787	24.121	PASS
48C	20+5	Low	55340	55457	64QAM	22.763	23.845	PASS
48C	20+10	Low	55340	55484	QPSK	27.691	29.430	PASS
48C	20+10	Low	55340	55484	16QAM	27.738	29.671	PASS
48C	20+10	Low	55340	55484	64QAM	27.714	29.839	PASS

48C	20+15	Low	55340	55511	QPSK	32.645	33.979	PASS
48C	20+15	Low	55340	55511	16QAM	32.506	34.105	PASS
48C	20+15	Low	55340	55511	64QAM	32.562	34.077	PASS
48C	20+20	Low	55340	55538	QPSK	37.415	39.821	PASS
48C	20+20	Low	55340	55538	16QAM	37.588	38.911	PASS
48C	20+20	Low	55340	55538	64QAM	37.487	39.146	PASS
48C	20+5	Mid	55965	56082	QPSK	22.782	23.730	PASS
48C	20+5	Mid	55965	56082	16QAM	22.823	24.097	PASS
48C	20+5	Mid	55965	56082	64QAM	22.861	24.214	PASS
48C	20+10	Mid	55941	56085	QPSK	27.741	29.072	PASS
48C	20+10	Mid	55941	56085	16QAM	27.663	28.833	PASS
48C	20+10	Mid	55941	56085	64QAM	27.618	28.941	PASS
48C	20+15	Mid	55916	56087	QPSK	32.598	33.853	PASS
48C	20+15	Mid	55916	56087	16QAM	32.601	33.824	PASS
48C	20+15	Mid	55916	56087	64QAM	32.567	34.078	PASS
48C	20+20	Mid	55891	56089	QPSK	37.366	39.338	PASS
48C	20+20	Mid	55891	56089	16QAM	37.511	39.272	PASS
48C	20+20	Mid	55891	56089	64QAM	37.422	38.978	PASS
48C	20+5	High	56590	56707	QPSK	22.821	23.939	PASS
48C	20+5	High	56590	56707	16QAM	22.808	23.587	PASS
48C	20+5	High	56590	56707	64QAM	22.784	23.969	PASS
48C	20+10	High	56541	56685	QPSK	27.632	28.898	PASS
48C	20+10	High	56541	56685	16QAM	27.662	29.129	PASS
48C	20+10	High	56541	56685	64QAM	27.764	29.247	PASS
48C	20+15	High	56491	56662	QPSK	32.623	33.754	PASS
48C	20+15	High	56491	56662	16QAM	32.609	34.725	PASS
48C	20+15	High	56491	56662	64QAM	32.521	33.882	PASS
48C	20+20	High	56442	56640	QPSK	37.407	39.040	PASS
48C	20+20	High	56442	56640	16QAM	37.435	39.132	PASS
48C	20+20	High	56442	56640	64QAM	37.484	39.300	PASS

LTE Band	BW(MHz)	Channel Level	PCC CH	SCC CH	Modulation	99% BW (MHz)	26dB BW (MHz)	Verdict
66B	5+5	Low	131997	132045	QPSK	9.285	9.976	PASS
66B	5+5	Low	131997	132045	16QAM	9.267	9.990	PASS
66B	5+5	Low	131997	132045	64QAM	9.276	10.083	PASS
66B	5+10	Low	132000	132072	QPSK	13.900	14.739	PASS

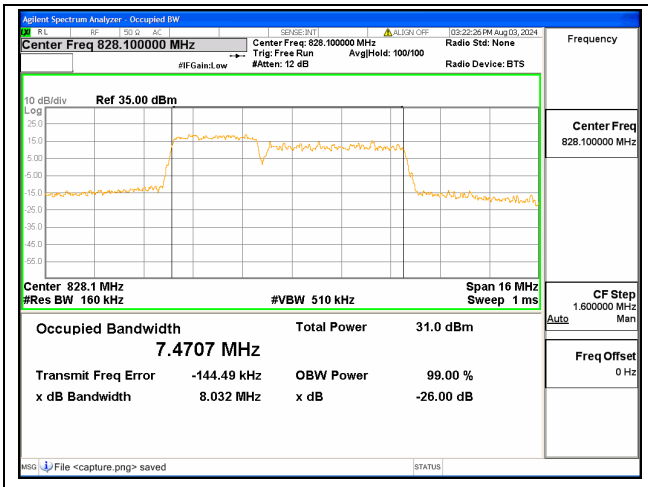
66B	5+10	Low	132000	132072	16QAM	13.880	14.703	PASS
66B	5+10	Low	132000	132072	64QAM	13.888	14.822	PASS
66B	5+15	Low	132002	132095	QPSK	18.331	19.320	PASS
66B	5+15	Low	132002	132095	16QAM	18.260	19.398	PASS
66B	5+15	Low	132002	132095	64QAM	18.230	19.415	PASS
66B	5+5	Mid	132398	132446	QPSK	9.272	9.996	PASS
66B	5+5	Mid	132398	132446	16QAM	9.294	10.044	PASS
66B	5+5	Mid	132398	132446	64QAM	9.258	10.022	PASS
66B	5+10	Mid	132375	132447	QPSK	13.977	14.926	PASS
66B	5+10	Mid	132375	132447	16QAM	13.897	14.745	PASS
66B	5+10	Mid	132375	132447	64QAM	13.921	14.743	PASS
66B	5+15	Mid	132353	132446	QPSK	18.284	19.405	PASS
66B	5+15	Mid	132353	132446	16QAM	18.221	19.256	PASS
66B	5+15	Mid	132353	132446	64QAM	18.275	19.264	PASS
66B	5+5	High	132599	132647	QPSK	9.295	10.007	PASS
66B	5+5	High	132599	132647	16QAM	9.274	9.957	PASS
66B	5+5	High	132599	132647	64QAM	9.268	9.994	PASS
66B	5+10	High	132550	132622	QPSK	13.861	14.828	PASS
66B	5+10	High	132550	132622	16QAM	13.904	14.815	PASS
66B	5+10	High	132550	132622	64QAM	13.882	14.794	PASS
66B	5+15	High	132504	132597	QPSK	18.206	19.332	PASS
66B	5+15	High	132504	132597	16QAM	18.156	19.273	PASS
66B	5+15	High	132504	132597	64QAM	18.194	19.180	PASS
66B	10+5	Low	132022	132094	QPSK	13.938	14.999	PASS
66B	10+5	Low	132022	132094	16QAM	13.910	15.041	PASS
66B	10+5	Low	132022	132094	64QAM	13.902	15.032	PASS
66B	10+10	Low	132022	132121	QPSK	18.843	20.183	PASS
66B	10+10	Low	132022	132121	16QAM	18.851	20.097	PASS
66B	10+10	Low	132022	132121	64QAM	18.846	20.032	PASS
66B	10+5	Mid	132397	132469	QPSK	13.952	15.080	PASS
66B	10+5	Mid	132397	132469	16QAM	13.953	15.030	PASS
66B	10+5	Mid	132397	132469	64QAM	13.905	15.047	PASS
66B	10+10	Mid	132373	132472	QPSK	18.875	20.276	PASS
66B	10+10	Mid	132373	132472	16QAM	18.917	20.178	PASS
66B	10+10	Mid	132373	132472	64QAM	18.855	20.138	PASS
66B	10+5	High	132572	132644	QPSK	13.930	15.002	PASS
66B	10+5	High	132572	132644	16QAM	13.902	14.909	PASS
66B	10+5	High	132572	132644	64QAM	13.949	15.084	PASS

66B	10+10	High	132523	132622	QPSK	18.797	20.024	PASS
66B	10+10	High	132523	132622	16QAM	18.785	20.129	PASS
66B	10+10	High	132523	132622	64QAM	18.764	20.075	PASS
66B	15+5	Low	132047	132140	QPSK	18.284	19.513	PASS
66B	15+5	Low	132047	132140	16QAM	18.291	19.671	PASS
66B	15+5	Low	132047	132140	64QAM	18.267	19.469	PASS
66B	15+5	Mid	132398	132491	QPSK	18.283	19.671	PASS
66B	15+5	Mid	132398	132491	16QAM	18.317	19.583	PASS
66B	15+5	Mid	132398	132491	64QAM	18.325	19.545	PASS
66B	15+5	High	132549	132642	QPSK	18.254	19.561	PASS
66B	15+5	High	132549	132642	16QAM	18.252	19.569	PASS
66B	15+5	High	132549	132642	64QAM	18.312	19.722	PASS

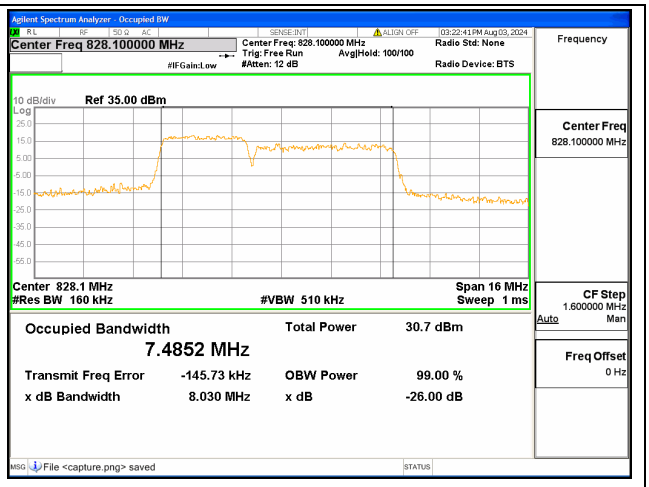
LTE Band	BW(MHz)	Channel Level	PCC CH	SCC CH	Modulation	99% BW (MHz)	26dB BW (MHz)	Verdict
66C	5+20	Low	132005	132122	QPSK	22.739	23.707	PASS
66C	5+20	Low	132005	132122	16QAM	22.773	23.713	PASS
66C	5+20	Low	132005	132122	64QAM	22.734	23.777	PASS
66C	5+20	Mid	132330	132447	QPSK	22.859	23.774	PASS
66C	5+20	Mid	132330	132447	16QAM	22.821	23.736	PASS
66C	5+20	Mid	132330	132447	64QAM	22.789	23.744	PASS
66C	5+20	High	132455	132572	QPSK	22.741	23.659	PASS
66C	5+20	High	132455	132572	16QAM	22.718	23.718	PASS
66C	5+20	High	132455	132572	64QAM	22.639	23.767	PASS
66C	10+15	Low	132025	132145	QPSK	23.006	24.360	PASS
66C	10+15	Low	132025	132145	16QAM	23.092	24.194	PASS
66C	10+15	Low	132025	132145	64QAM	23.071	24.199	PASS
66C	10+20	Low	132027	132171	QPSK	27.729	28.946	PASS
66C	10+20	Low	132027	132171	16QAM	27.635	28.892	PASS
66C	10+20	Low	132027	132171	64QAM	27.623	28.961	PASS
66C	10+15	Mid	132351	132471	QPSK	23.087	24.309	PASS
66C	10+15	Mid	132351	132471	16QAM	23.061	24.329	PASS
66C	10+15	Mid	132351	132471	64QAM	23.068	24.259	PASS
66C	10+20	Mid	132328	132472	QPSK	27.741	29.030	PASS
66C	10+20	Mid	132328	132472	16QAM	27.655	28.918	PASS
66C	10+20	Mid	132328	132472	64QAM	27.646	28.982	PASS
66C	10+15	High	132477	132597	QPSK	23.017	24.297	PASS

66C	10+15	High	132477	132597	16QAM	22.984	24.261	PASS
66C	10+15	High	132477	132597	64QAM	23.010	24.266	PASS
66C	10+20	High	132428	132572	QPSK	27.537	28.938	PASS
66C	10+20	High	132428	132572	16QAM	27.600	28.980	PASS
66C	10+20	High	132428	132572	64QAM	27.540	28.916	PASS
66C	15+10	Low	132047	132167	QPSK	23.082	24.554	PASS
66C	15+10	Low	132047	132167	16QAM	23.058	24.494	PASS
66C	15+10	Low	132047	132167	64QAM	23.090	24.363	PASS
66C	15+15	Low	132047	132197	QPSK	28.316	29.853	PASS
66C	15+15	Low	132047	132197	16QAM	28.266	29.621	PASS
66C	15+15	Low	132047	132197	64QAM	28.304	29.630	PASS
66C	15+20	Low	132050	132221	QPSK	32.546	34.126	PASS
66C	15+20	Low	132050	132221	16QAM	32.527	34.223	PASS
66C	15+20	Low	132050	132221	64QAM	32.618	34.188	PASS
66C	15+10	Mid	132373	132493	QPSK	23.099	24.344	PASS
66C	15+10	Mid	132373	132493	16QAM	23.120	24.522	PASS
66C	15+10	Mid	132373	132493	64QAM	23.080	24.398	PASS
66C	15+15	Mid	132347	132497	QPSK	28.344	29.758	PASS
66C	15+15	Mid	132347	132497	16QAM	28.339	29.768	PASS
66C	15+15	Mid	132347	132497	64QAM	28.318	29.787	PASS
66C	15+20	Mid	132325	132496	QPSK	32.523	34.298	PASS
66C	15+20	Mid	132325	132496	16QAM	32.608	34.235	PASS
66C	15+20	Mid	132325	132496	64QAM	32.586	34.225	PASS
66C	15+10	High	132499	132619	QPSK	23.032	24.416	PASS
66C	15+10	High	132499	132619	16QAM	22.994	24.356	PASS
66C	15+10	High	132499	132619	64QAM	23.108	24.405	PASS
66C	15+15	High	132447	132597	QPSK	28.306	29.539	PASS
66C	15+15	High	132447	132597	16QAM	28.217	29.708	PASS
66C	15+15	High	132447	132597	64QAM	28.253	29.753	PASS
66C	15+20	High	132401	132572	QPSK	32.578	34.174	PASS
66C	15+20	High	132401	132572	16QAM	32.459	34.041	PASS
66C	15+20	High	132401	132572	64QAM	32.517	34.349	PASS
66C	20+10	Low	132072	132216	QPSK	27.680	29.280	PASS
66C	20+10	Low	132072	132216	16QAM	27.721	29.062	PASS
66C	20+10	Low	132072	132216	64QAM	27.655	29.331	PASS
66C	20+15	Low	132072	132243	QPSK	32.565	34.369	PASS
66C	20+15	Low	132072	132243	16QAM	32.579	34.519	PASS
66C	20+15	Low	132072	132243	64QAM	32.601	34.331	PASS

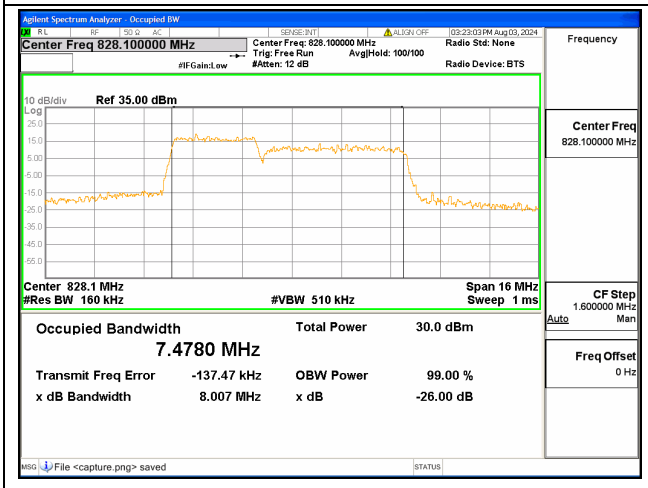
66C	20+5	Low	132072	132189	QPSK	22.788	23.857	PASS
66C	20+5	Low	132072	132189	16QAM	22.793	24.006	PASS
66C	20+5	Low	132072	132189	64QAM	22.810	24.046	PASS
66C	20+20	Low	132072	132270	QPSK	37.474	39.231	PASS
66C	20+20	Low	132072	132270	16QAM	37.413	39.280	PASS
66C	20+20	Low	132072	132270	64QAM	37.479	39.397	PASS
66C	20+10	Mid	132373	132517	QPSK	27.733	29.267	PASS
66C	20+10	Mid	132373	132517	16QAM	27.701	29.258	PASS
66C	20+10	Mid	132373	132517	64QAM	27.757	29.274	PASS
66C	20+15	Mid	132348	132519	QPSK	32.608	34.242	PASS
66C	20+15	Mid	132348	132519	16QAM	32.636	34.409	PASS
66C	20+15	Mid	132348	132519	64QAM	32.618	34.134	PASS
66C	20+5	Mid	132397	132514	QPSK	22.869	24.134	PASS
66C	20+5	Mid	132397	132514	16QAM	22.891	24.331	PASS
66C	20+5	Mid	132397	132514	64QAM	22.864	23.977	PASS
66C	20+20	Mid	132323	132521	QPSK	37.504	39.306	PASS
66C	20+20	Mid	132323	132521	16QAM	37.463	39.122	PASS
66C	20+20	Mid	132323	132521	64QAM	37.541	39.492	PASS
66C	20+10	High	132473	132617	QPSK	27.657	29.303	PASS
66C	20+10	High	132473	132617	16QAM	27.681	29.143	PASS
66C	20+10	High	132473	132617	64QAM	27.670	29.283	PASS
66C	20+15	High	132423	132594	QPSK	32.624	34.105	PASS
66C	20+15	High	132423	132594	16QAM	32.517	34.040	PASS
66C	20+15	High	132423	132594	64QAM	32.526	34.462	PASS
66C	20+5	High	132522	132639	QPSK	22.834	24.080	PASS
66C	20+5	High	132522	132639	16QAM	22.834	24.071	PASS
66C	20+5	High	132522	132639	64QAM	22.834	23.957	PASS
66C	20+20	High	132374	132572	QPSK	37.413	39.253	PASS
66C	20+20	High	132374	132572	16QAM	37.427	39.125	PASS
66C	20+20	High	132374	132572	64QAM	37.411	39.484	PASS



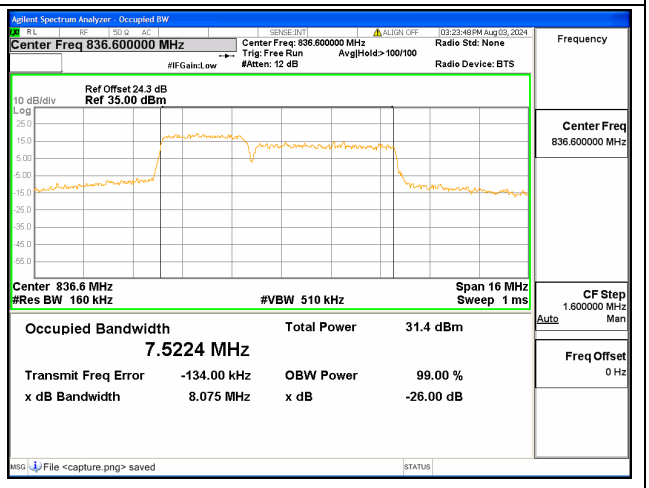
5B / 3+5MHz / QPSK/ Low CH



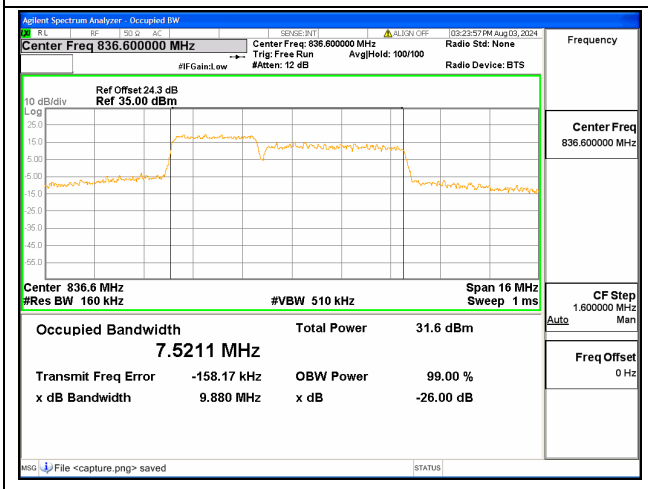
5B / 3+5MHz / 16QAM/ Low CH



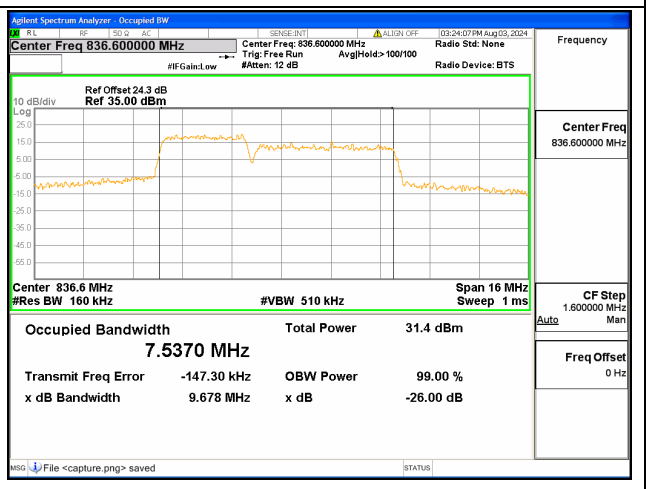
5B / 3+5MHz / 64QAM/ Low CH



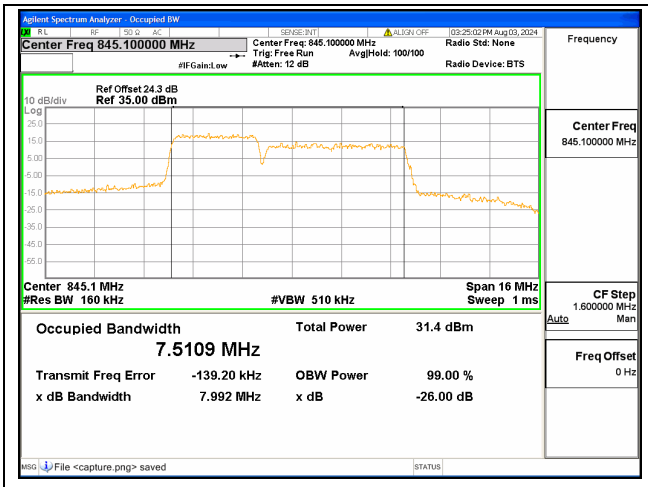
5B / 3+5MHz / QPSK/ Mid CH



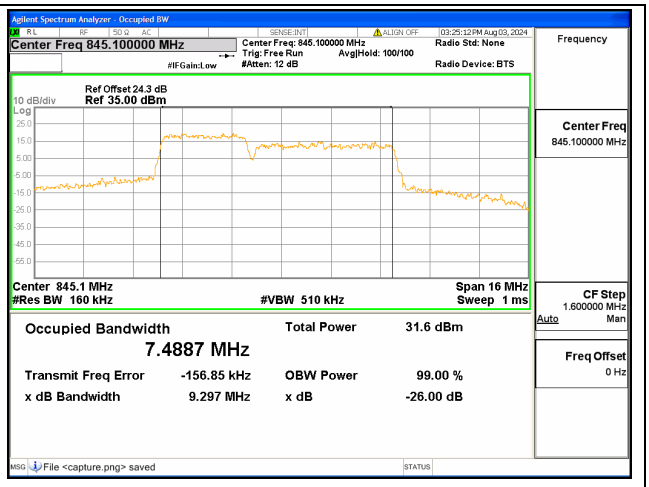
5B / 3+5MHz / 16QAM/ Mid CH



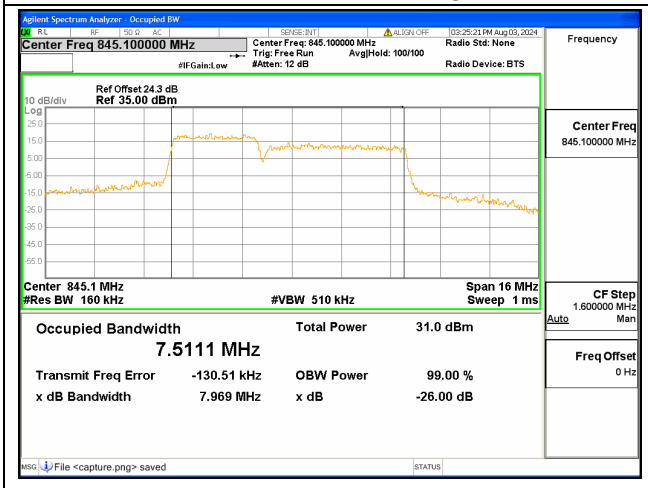
5B / 3+5MHz / 64QAM/ Mid CH



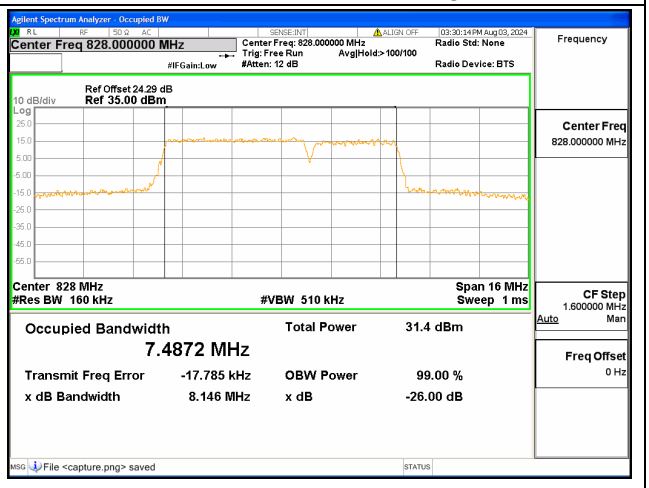
5B / 3+5MHz / QPSK/ High CH



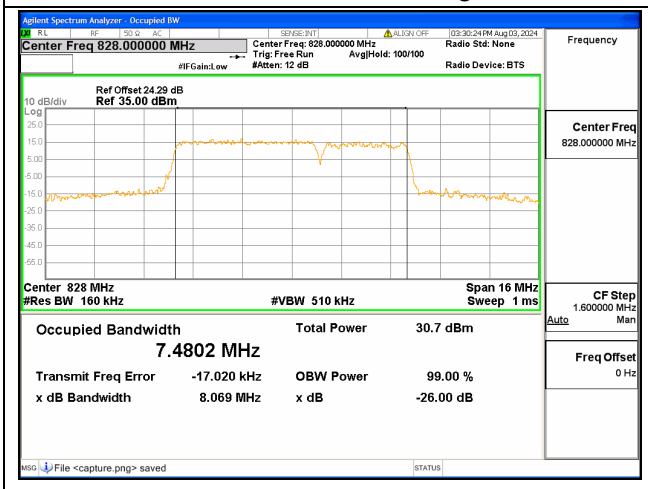
5B / 3+5MHz / 16QAM/ High CH



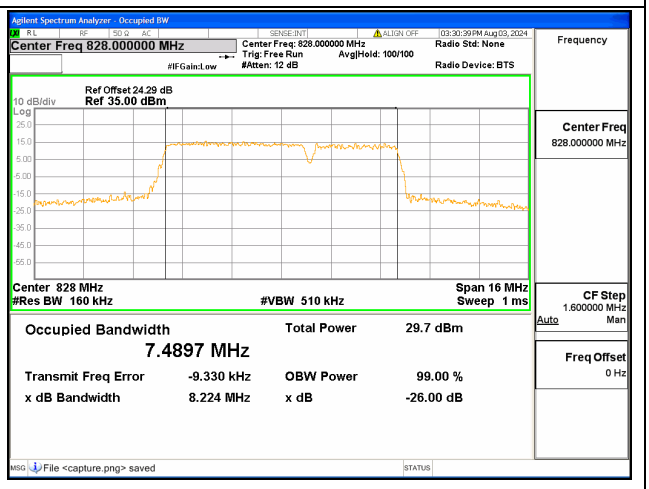
5B / 3+5MHz / 64QAM/ High CH



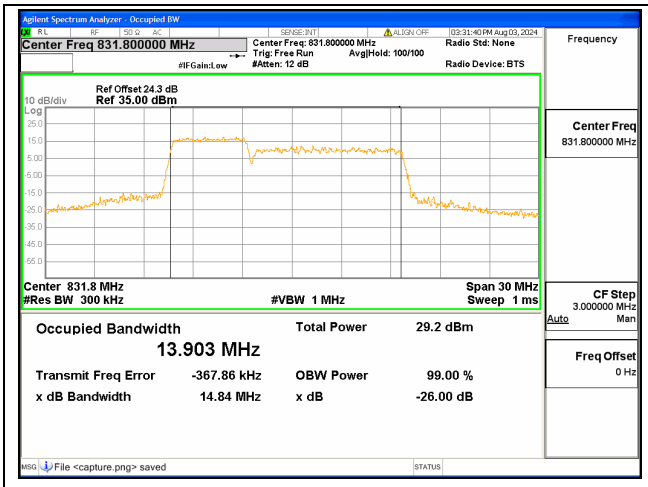
5B / 5+3MHz / QPSK/ Low CH



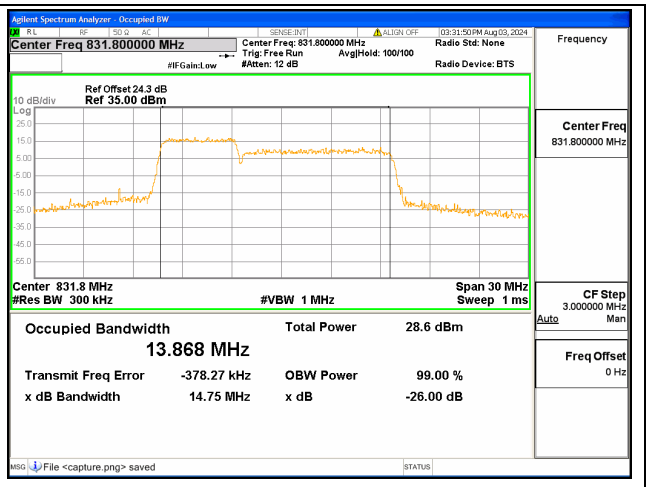
5B / 5+3MHz / 16QAM/ Low CH



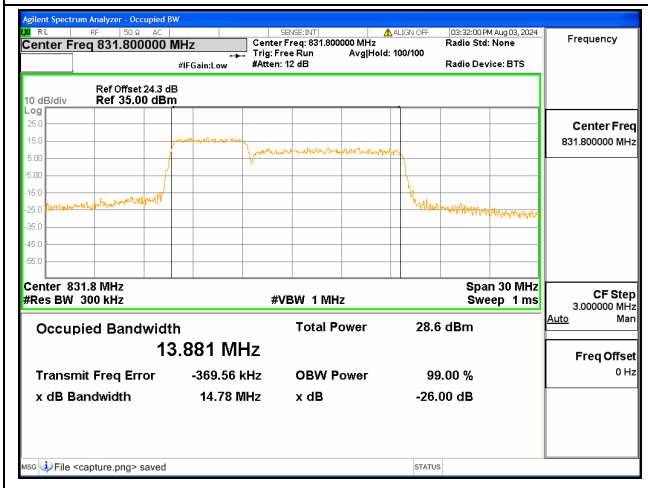
5B / 5+3MHz / 64QAM/ Low CH



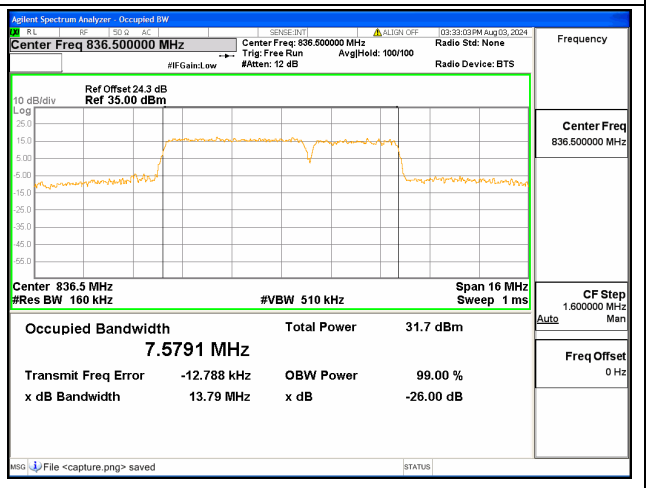
5B / 5+10MHz / QPSK/ Low CH



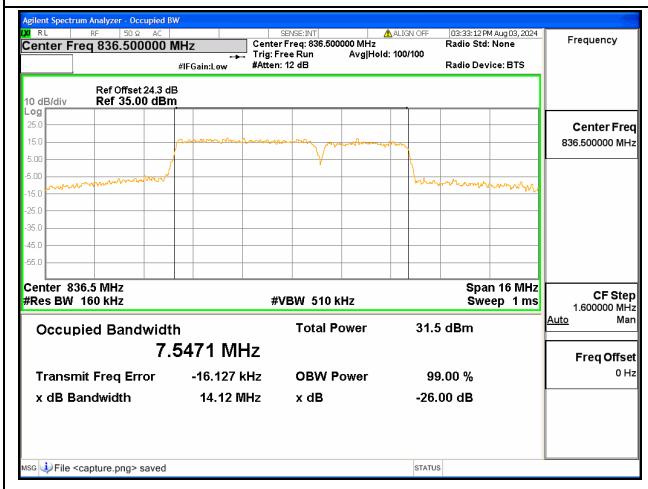
5B / 5+10MHz / 16QAM/ Low CH



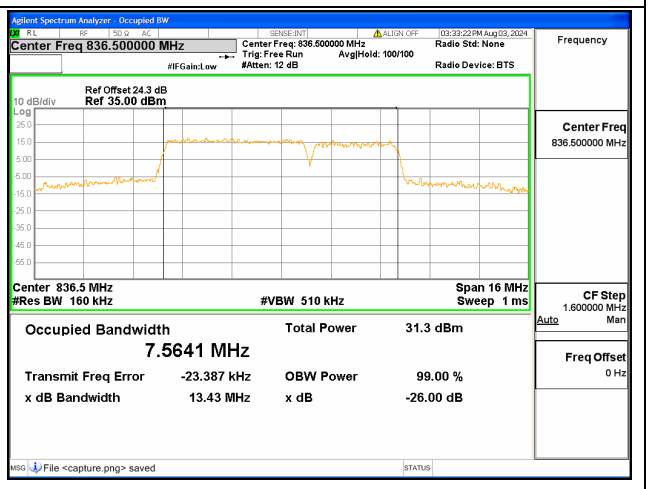
5B / 5+10MHz / 64QAM/ Low CH



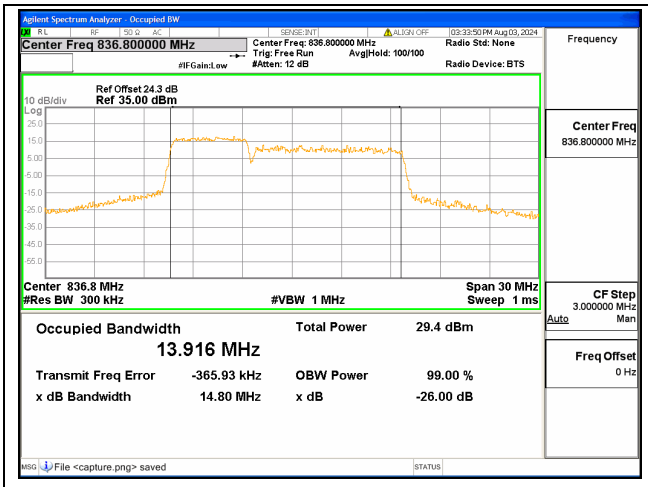
5B / 5+3MHz / QPSK/ Mid CH



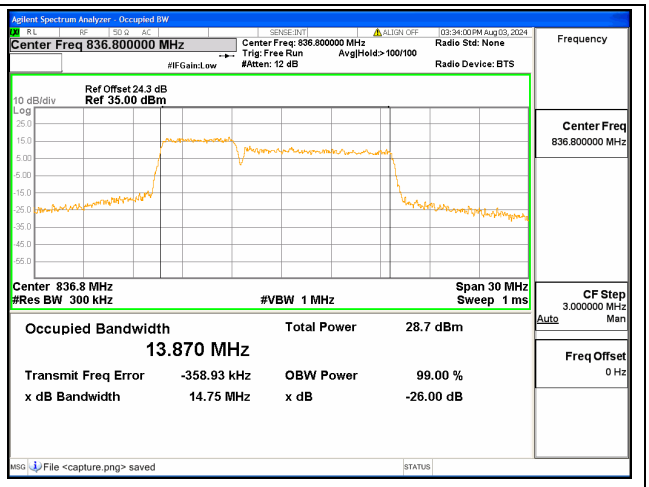
5B / 5+3MHz / 16QAM/ Mid CH



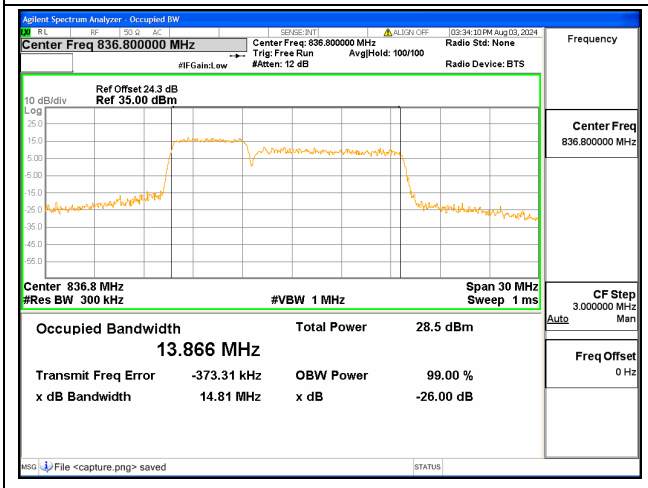
5B / 5+3MHz / 64QAM/ Mid CH



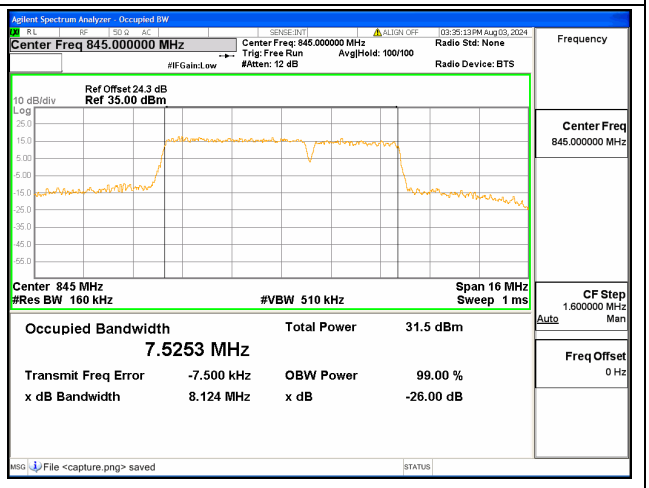
5B / 5+10MHz / QPSK/ Mid CH



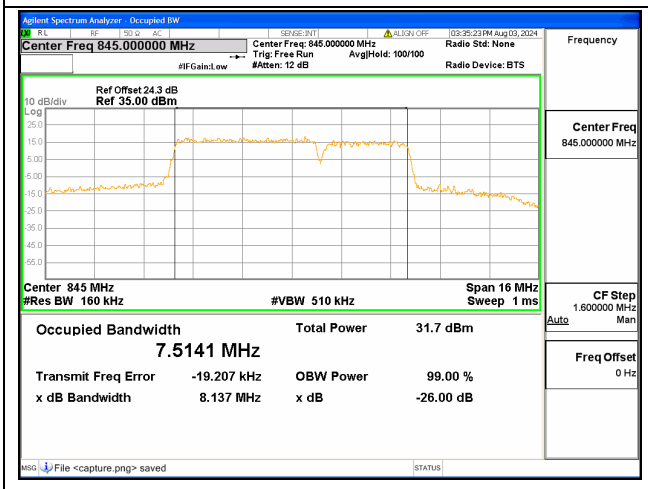
5B / 5+10MHz / 16QAM/ Mid CH



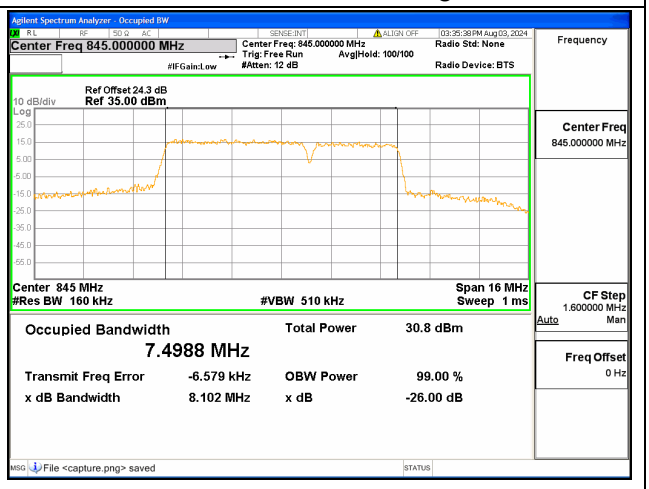
5B / 5+10MHz / 64QAM/ Mid CH



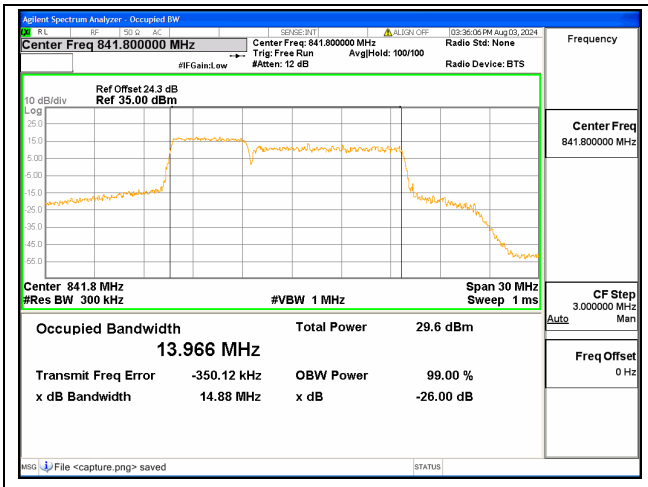
5B / 5+3MHz / QPSK/ High CH



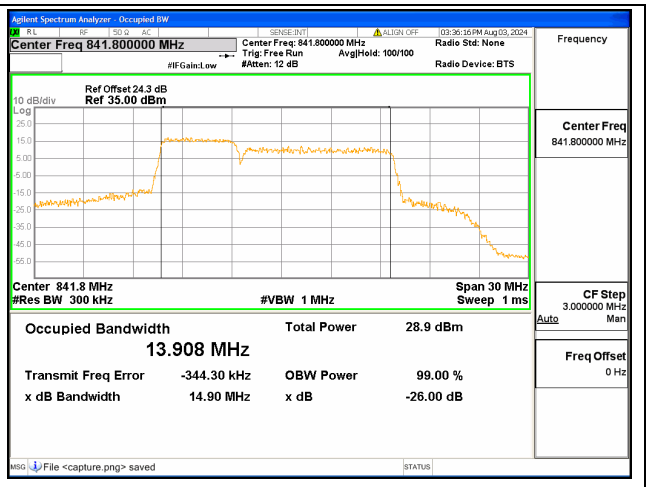
5B / 5+3MHz / 16QAM/ High CH



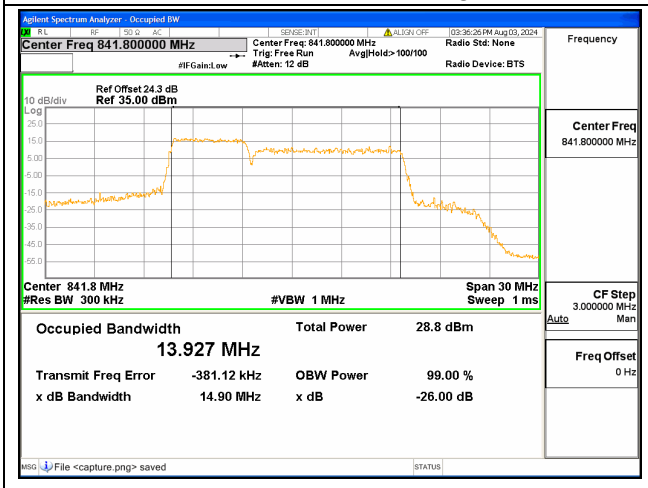
5B / 5+3MHz / 64QAM/ High CH



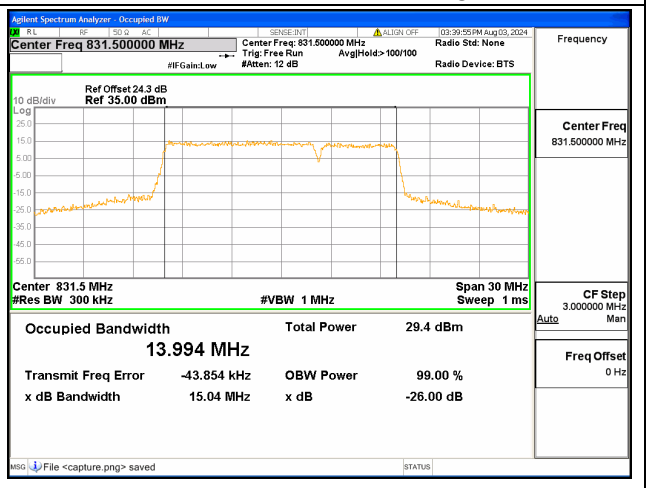
5B / 5+10MHz / QPSK/ High CH



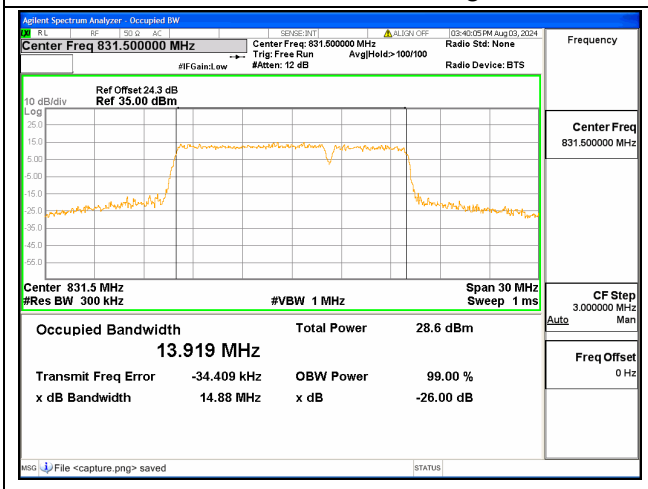
5B / 5+10MHz / 16QAM/ High CH



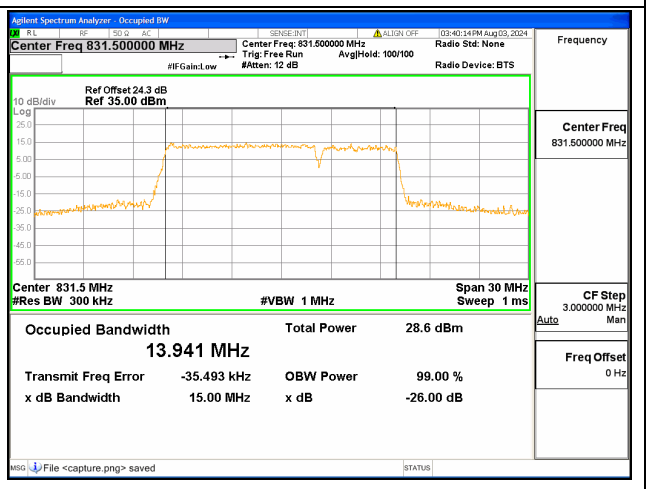
5B / 5+10MHz / 64QAM/ High CH



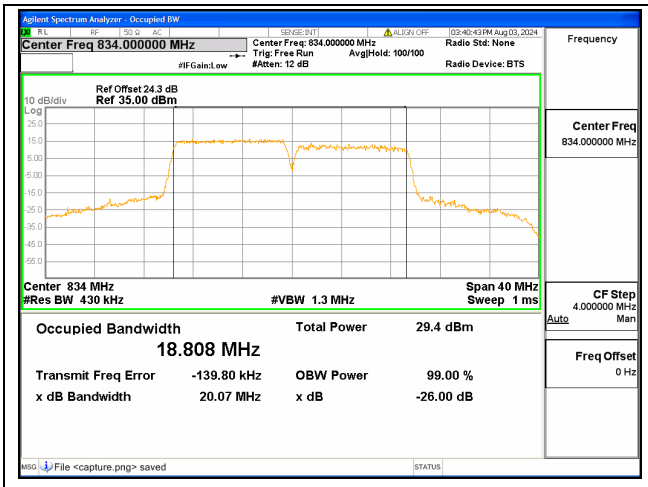
5B / 10+5MHz / QPSK/ Low CH



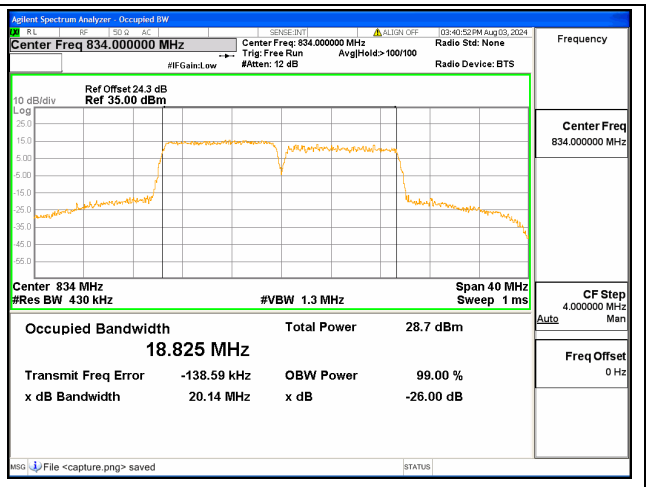
5B / 10+5MHz / 16QAM/ Low CH



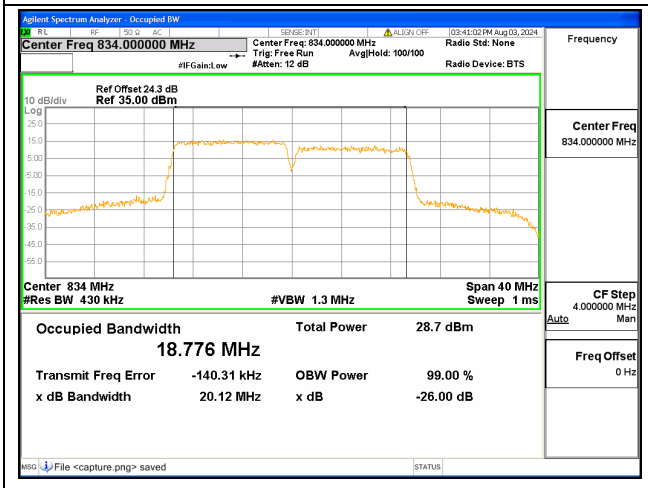
5B / 10+5MHz / 64QAM/ Low CH



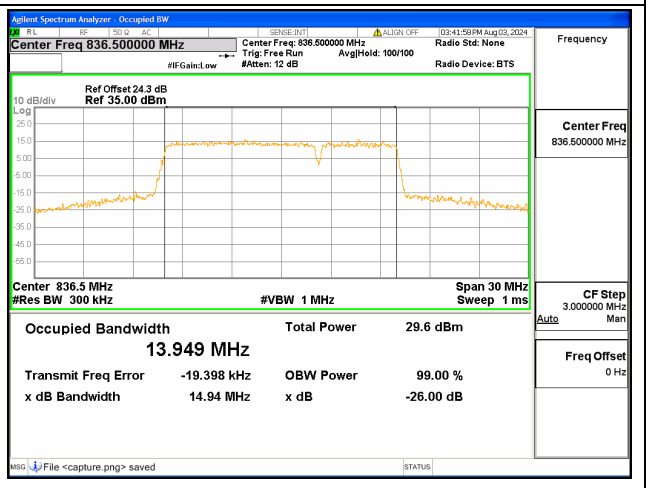
5B / 10+10MHz / QPSK/ Low CH



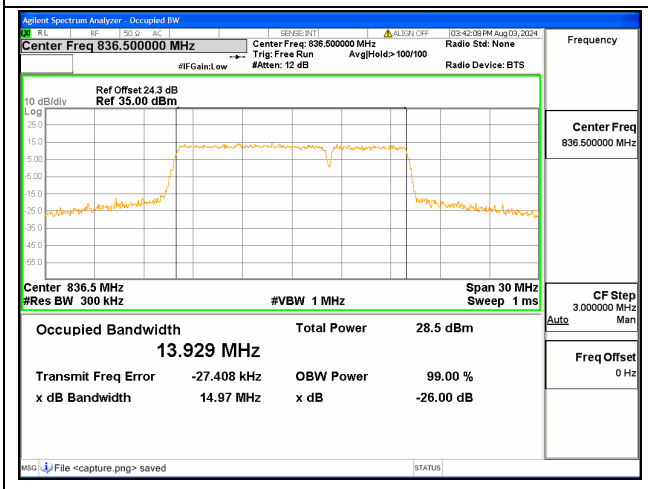
5B / 10+10MHz / 16QAM/ Low CH



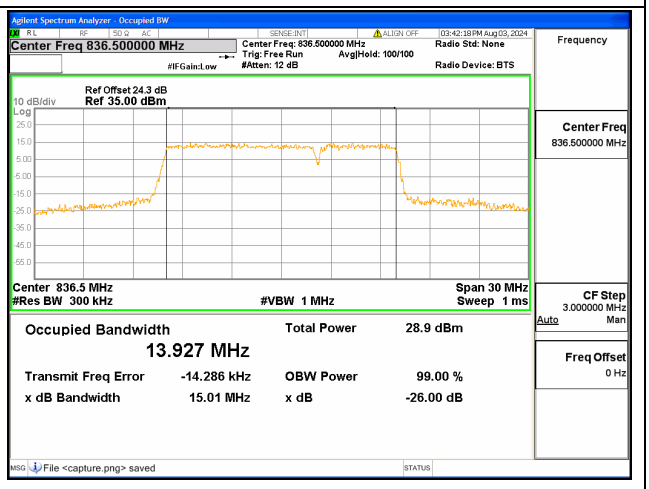
5B / 10+10MHz / 64QAM/ Low CH



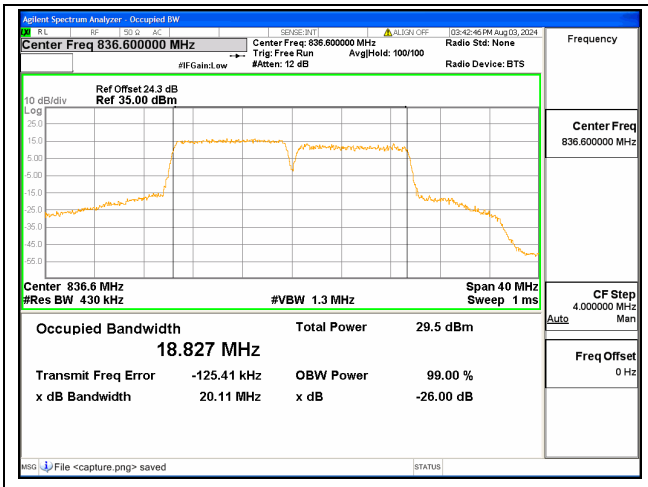
5B / 10+5MHz / QPSK/ Mid CH



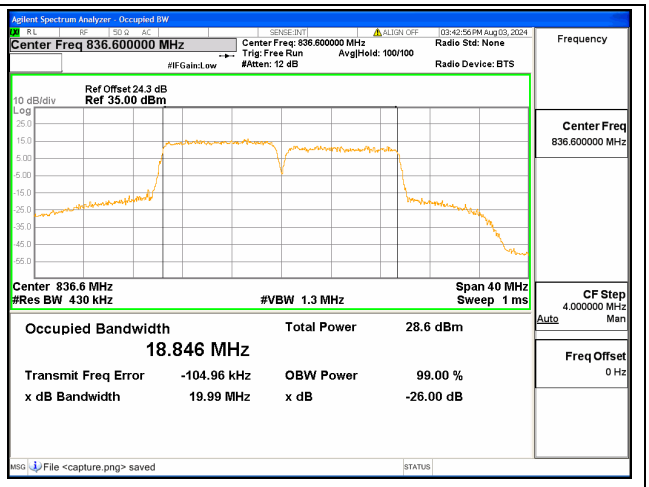
5B / 10+5MHz / 16QAM/ Mid CH



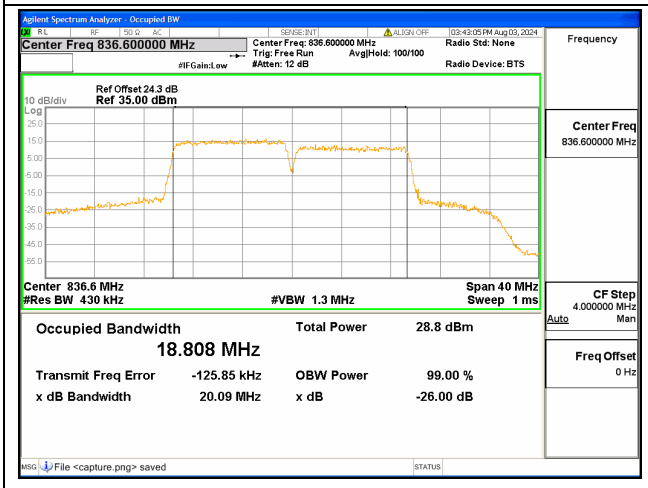
5B / 10+5MHz / 64QAM/ Mid CH



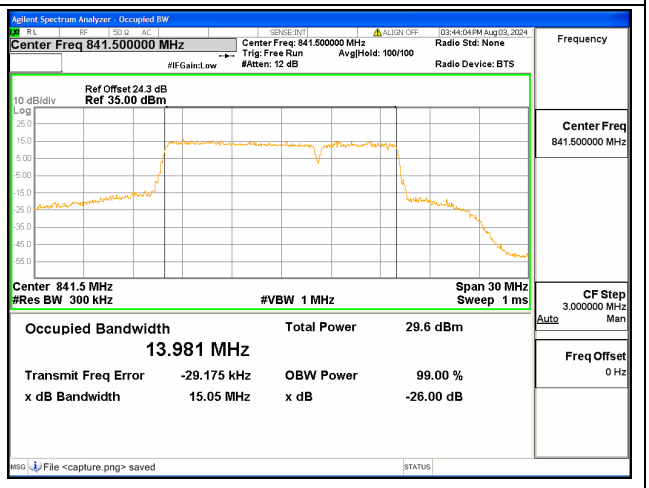
5B / 10+10MHz / QPSK/ Mid CH



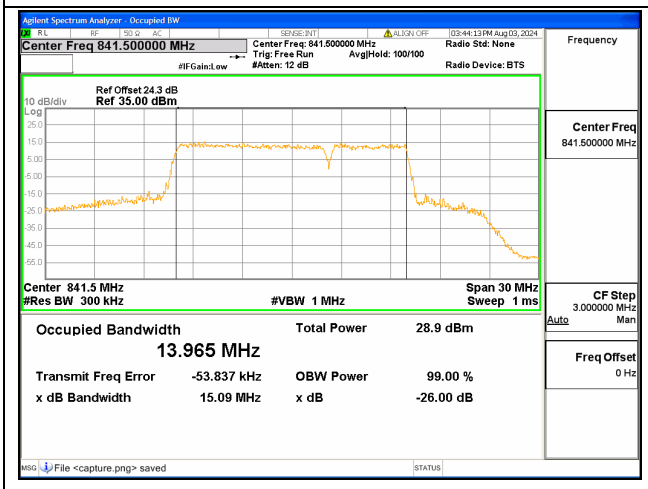
5B / 10+10MHz / 16QAM/ Mid CH



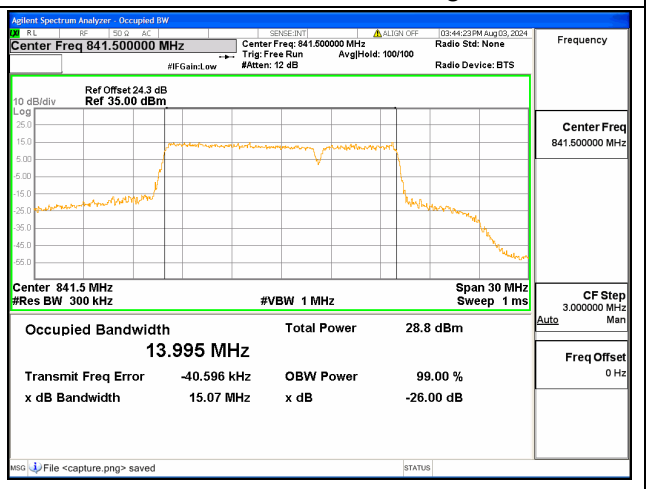
5B / 10+10MHz / 64QAM/ Mid CH



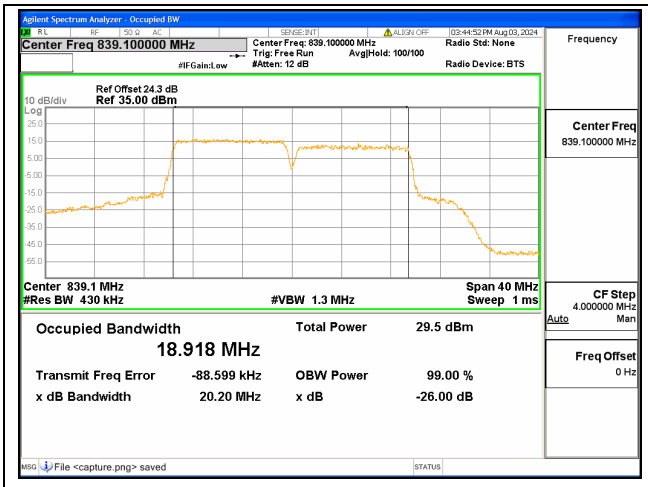
5B / 10+5MHz / QPSK/ High CH



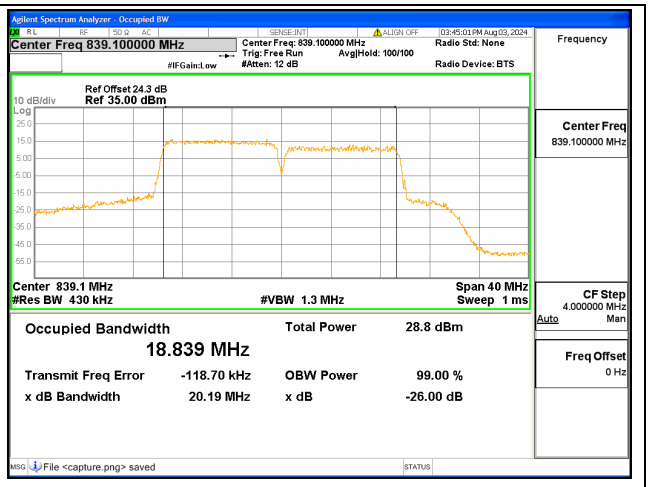
5B / 10+5MHz / 16QAM/ High CH



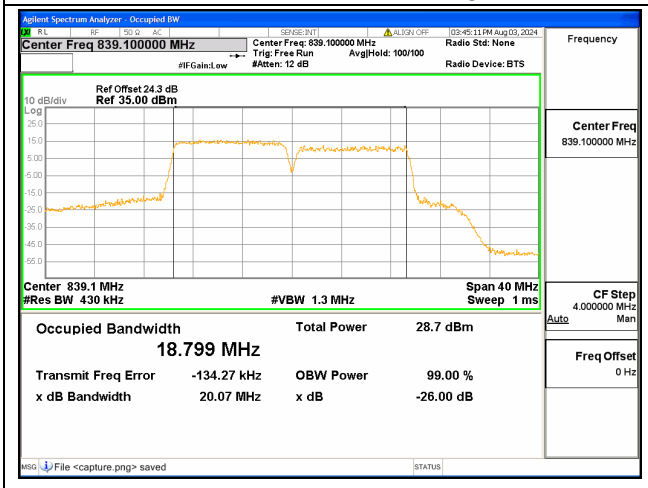
5B / 10+5MHz / 64QAM/ High CH



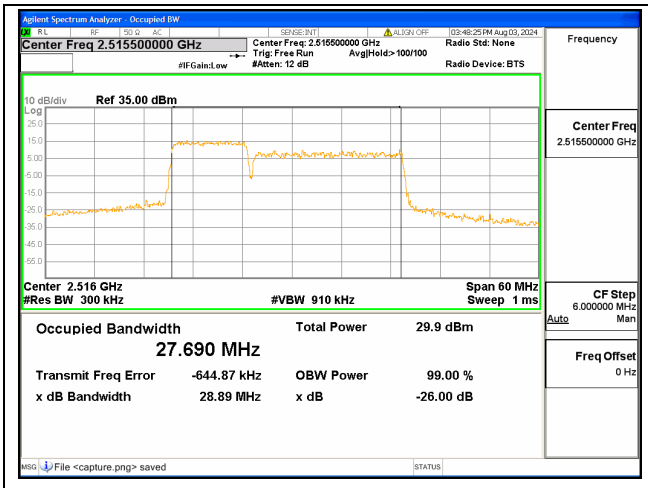
5B / 10+10MHz / QPSK/ High CH



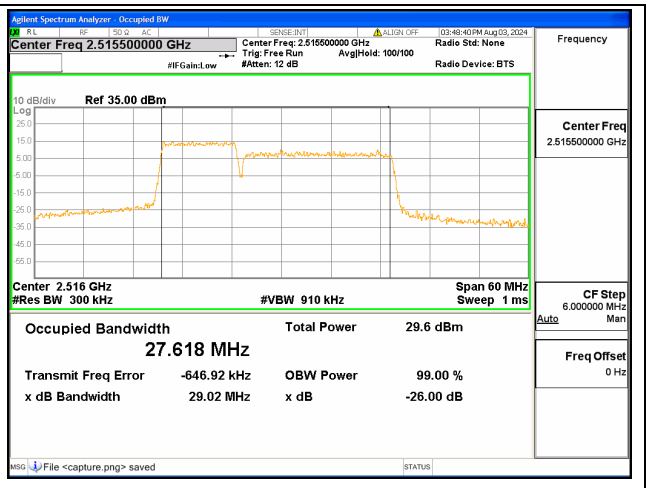
5B / 10+10MHz / 16QAM/ High CH



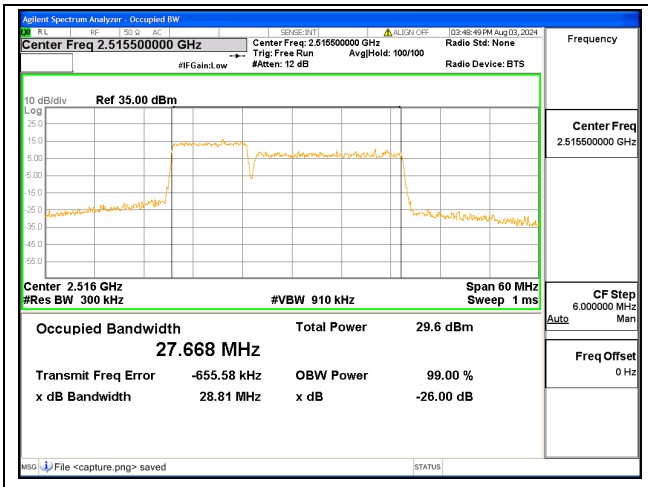
5B / 10+10MHz / 64QAM/ High CH



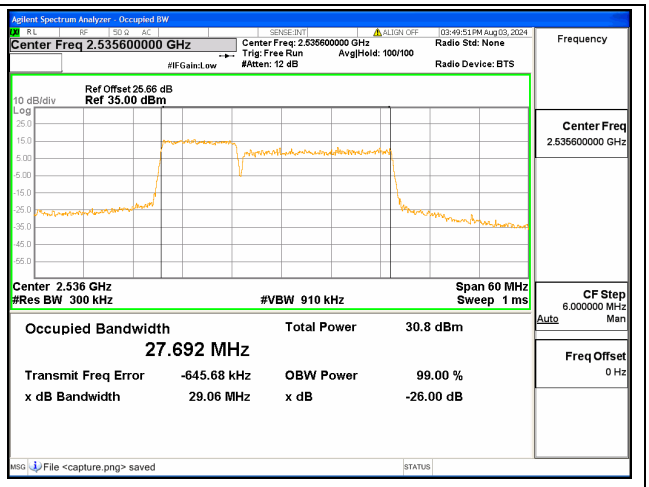
7C / 10+20MHz / QPSK/ Low CH



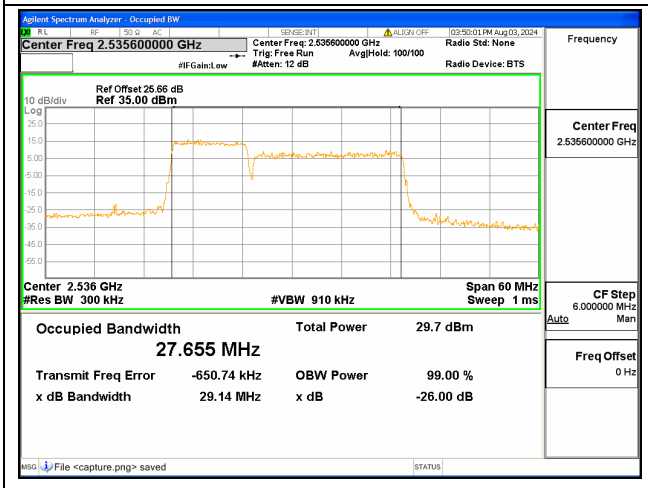
7C / 10+20MHz / 16QAM/ Low CH



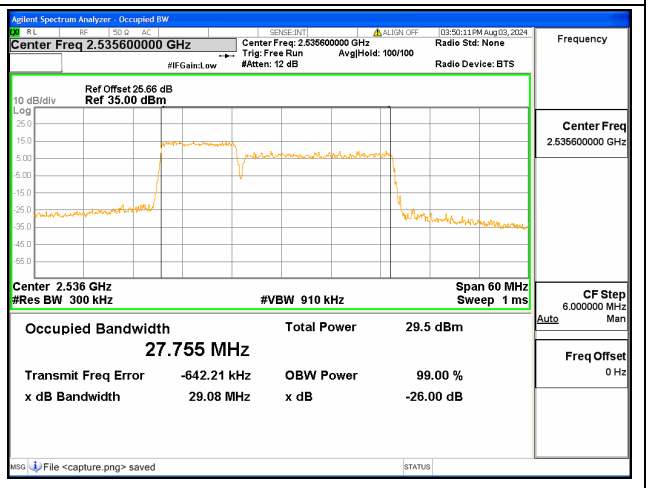
7C / 10+20MHz / 64QAM/ Low CH



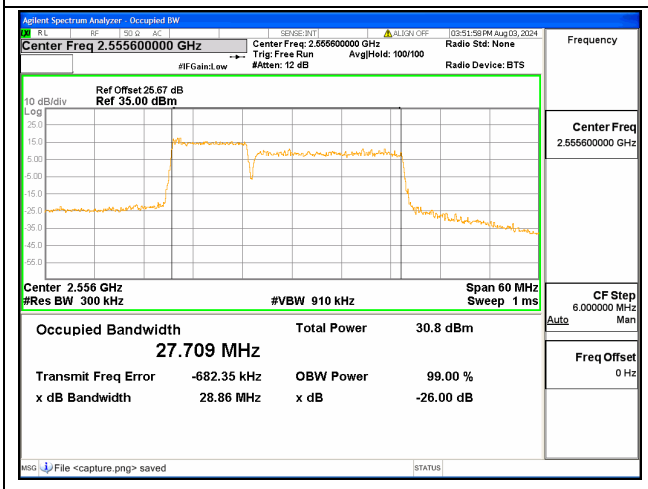
7C / 10+20MHz / QPSK/ Mid CH



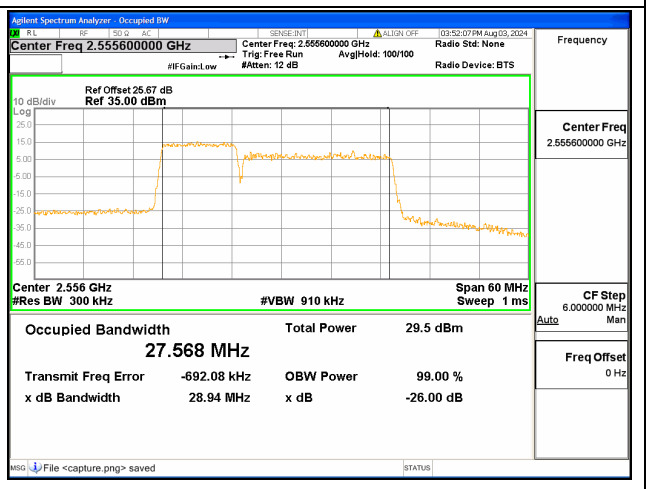
7C / 10+20MHz / 16QAM/ Mid CH



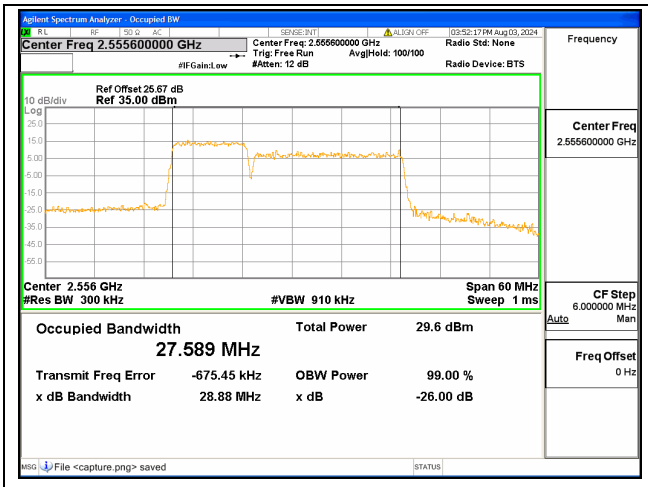
7C / 10+20MHz / 64QAM/ Mid CH



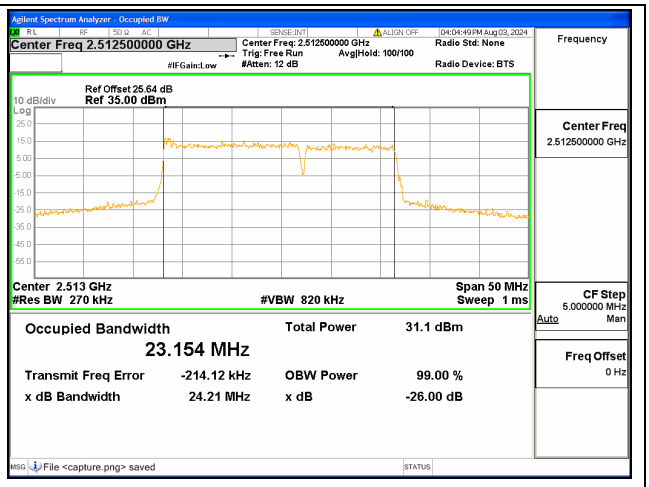
7C / 10+20MHz / QPSK/ High CH



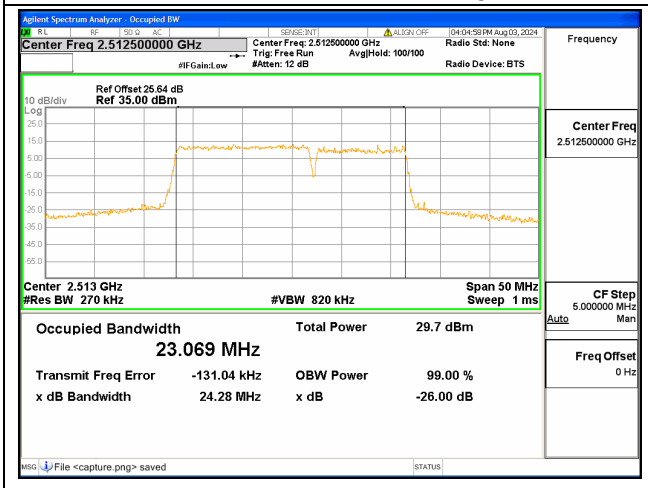
7C / 10+20MHz / 16QAM/ High CH



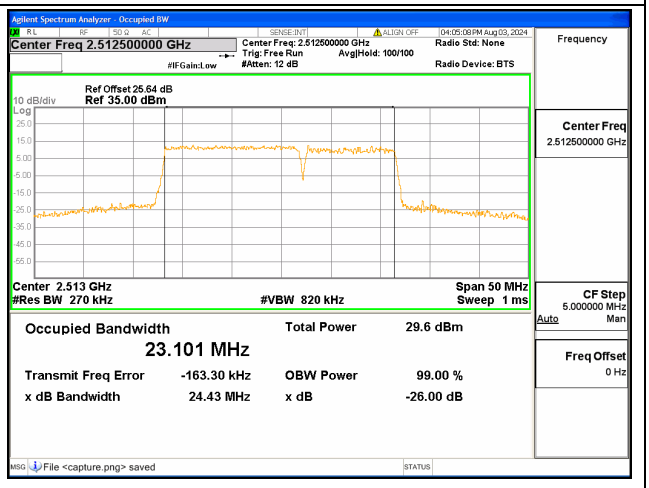
7C / 10+20MHz / 64QAM/ High CH



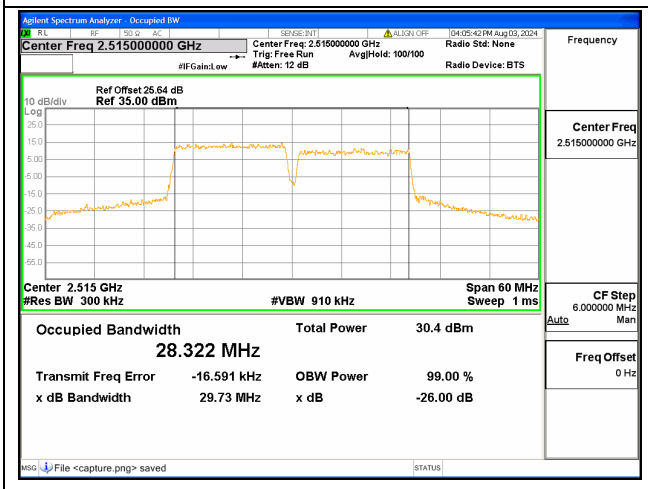
7C / 15+10MHz / QPSK/ Low CH



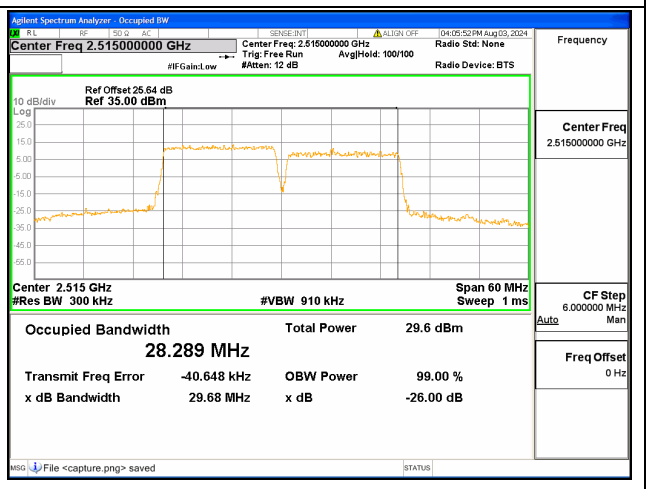
7C / 15+10MHz / 16QAM/ Low CH



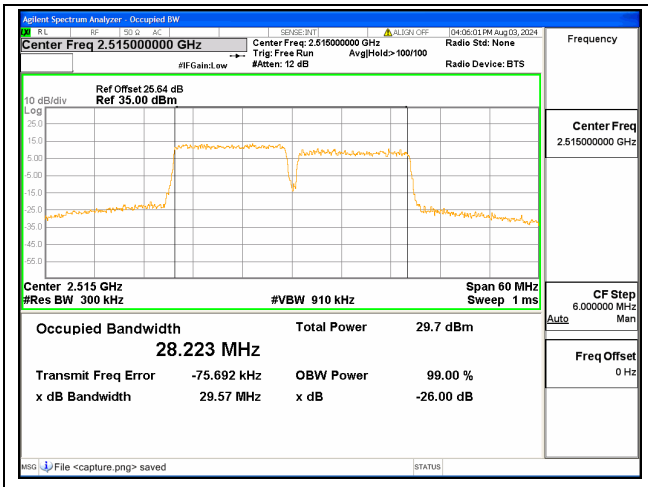
7C / 15+10MHz / 64QAM/ Low CH



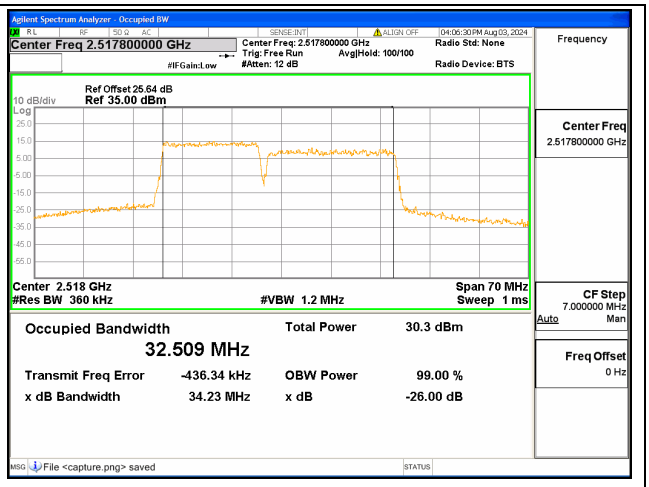
7C / 15+15MHz / QPSK/ Low CH



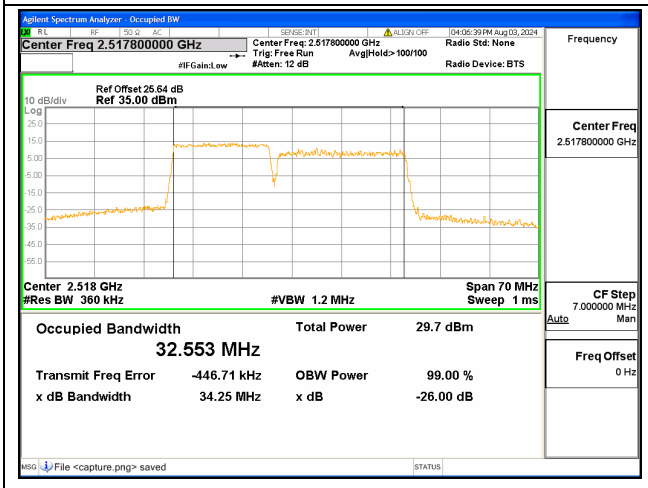
7C / 15+15MHz / 16QAM/ Low CH



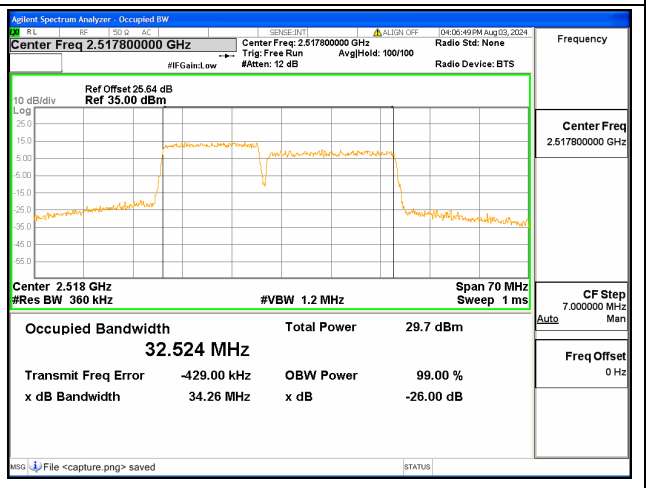
7C / 15+15MHz / 64QAM/ Low CH



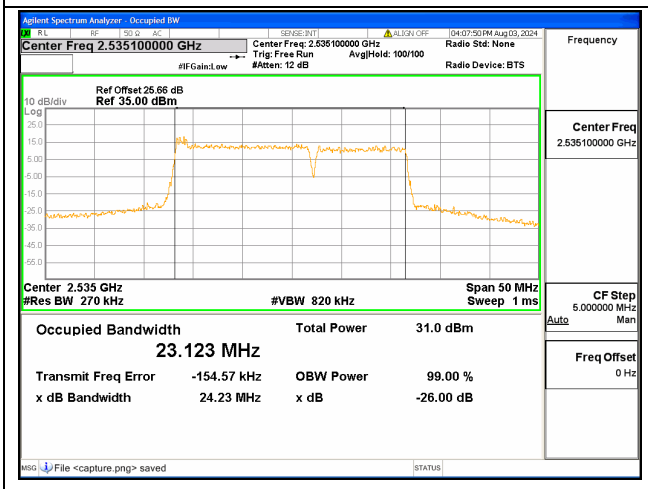
7C / 15+20MHz / QPSK/ Low CH



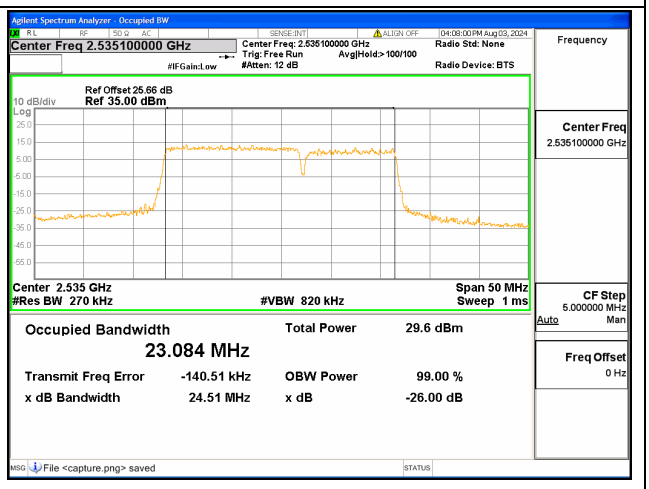
7C / 15+20MHz / 16QAM/ Low CH



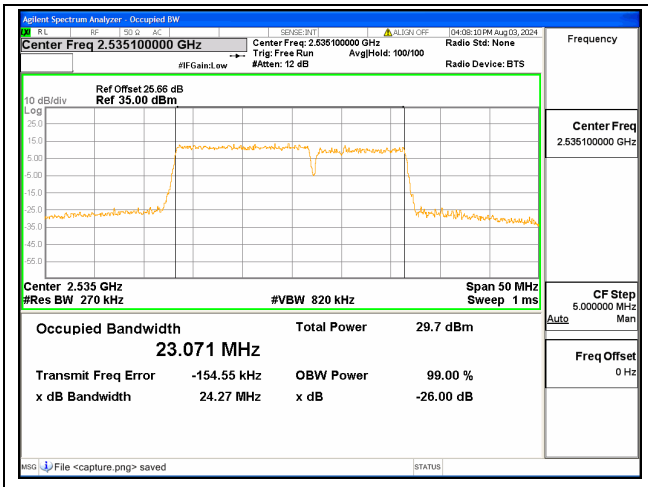
7C / 15+20MHz / 64QAM/ Low CH



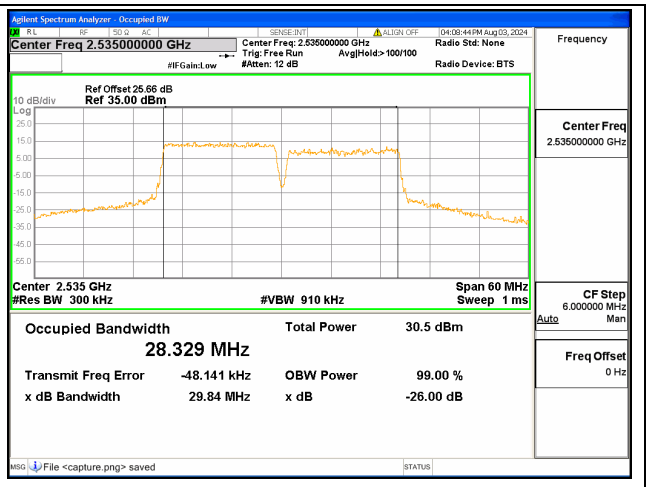
7C / 15+10MHz / QPSK/ Mid CH



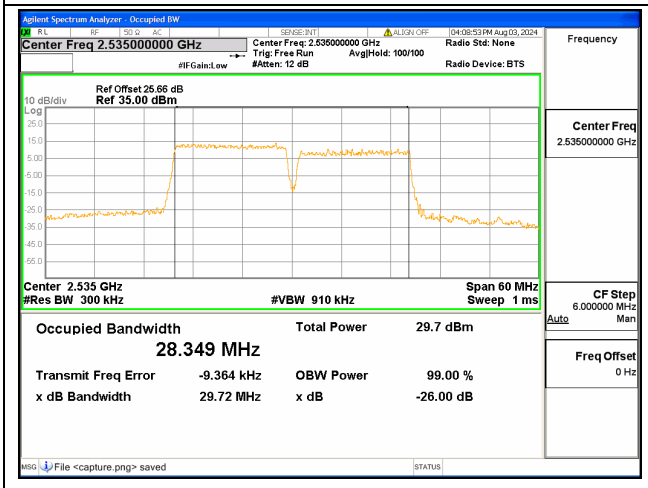
7C / 15+10MHz / 16QAM/ Mid CH



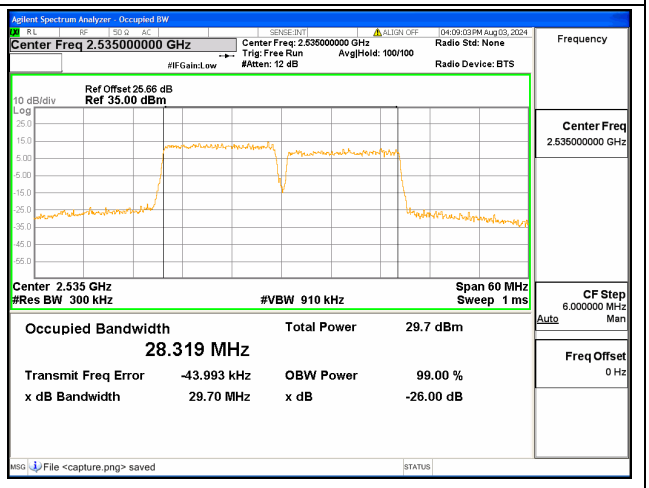
7C / 15+10MHz / 64QAM/ Mid CH



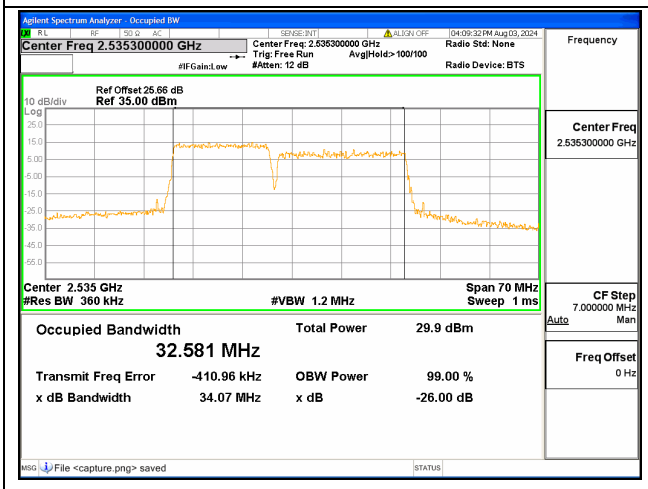
7C / 15+15MHz / QPSK/ Mid CH



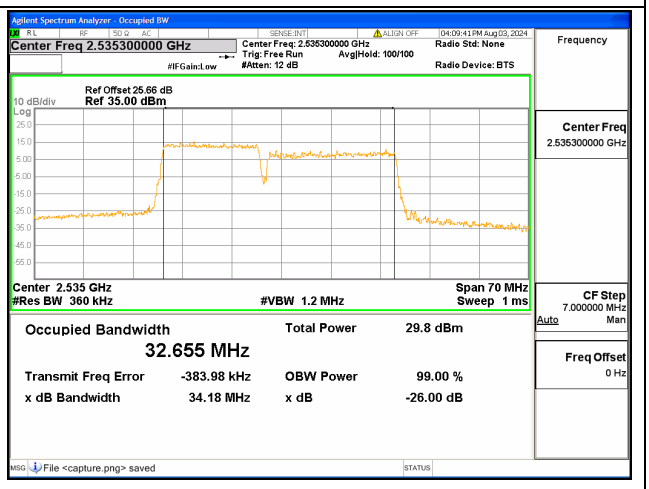
7C / 15+15MHz / 16QAM/ Mid CH



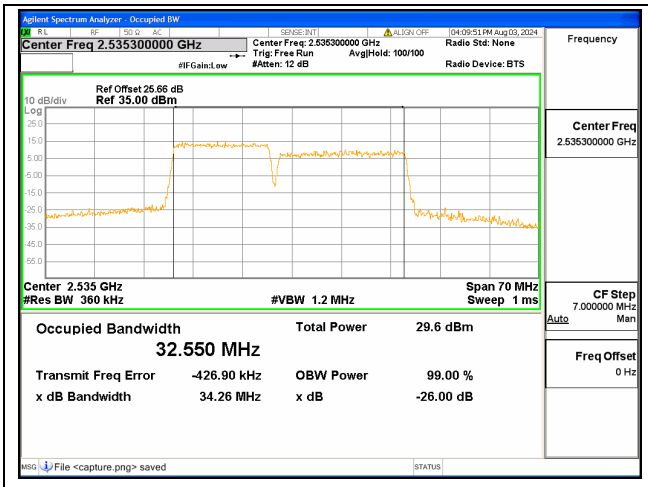
7C / 15+15MHz / 64QAM/ Mid CH



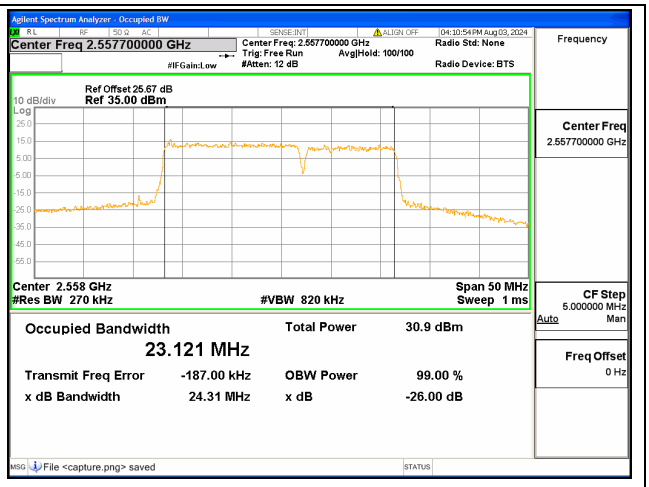
7C / 15+20MHz / QPSK/ Mid CH



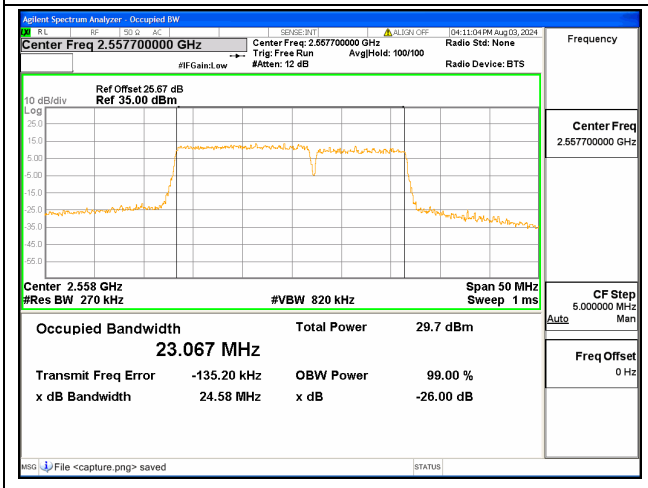
7C / 15+20MHz / 16QAM/ Mid CH



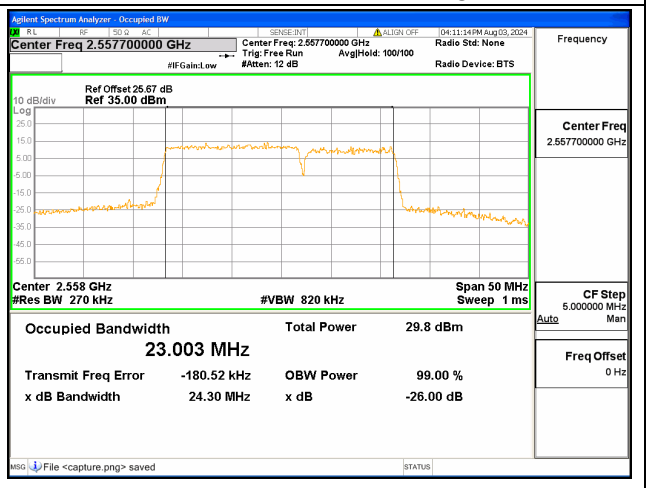
7C / 15+20MHz / 64QAM/ Mid CH



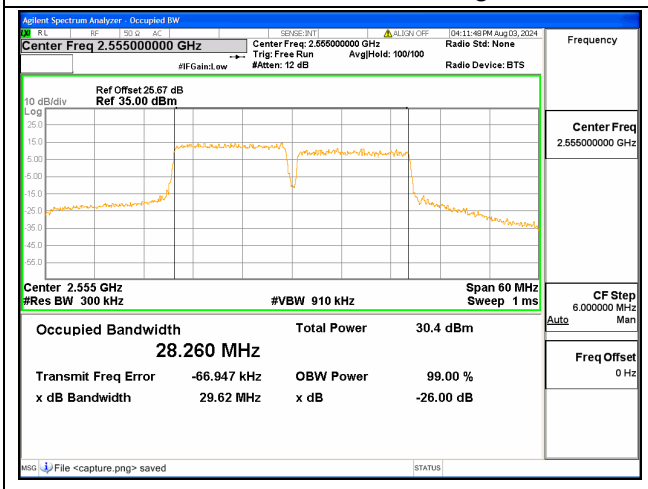
7C / 15+10MHz / QPSK/ High CH



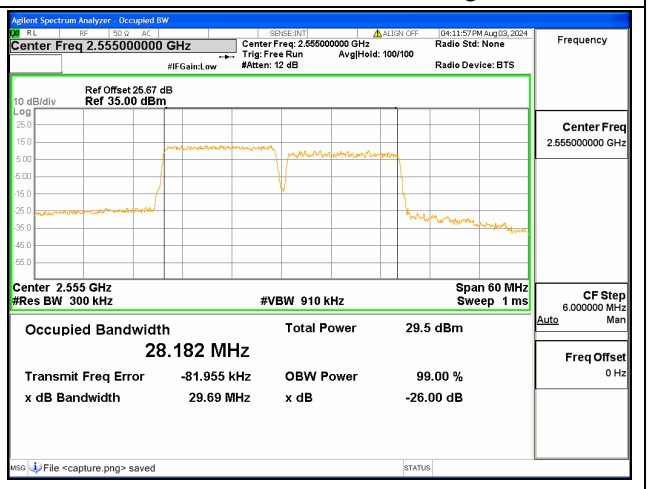
7C / 15+10MHz / 16QAM/ High CH



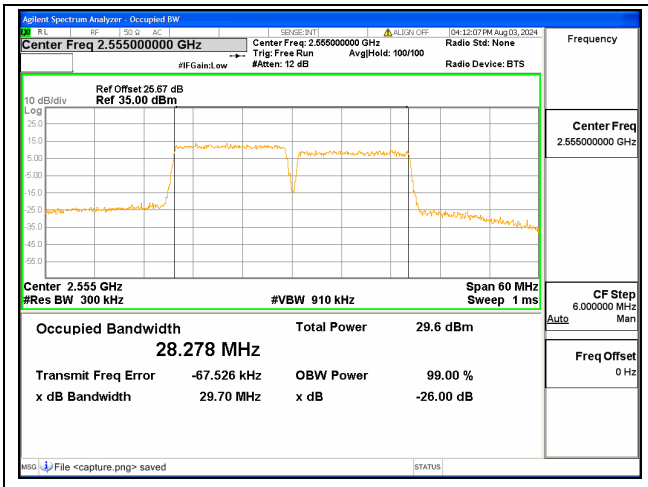
7C / 15+10MHz / 64QAM/ High CH



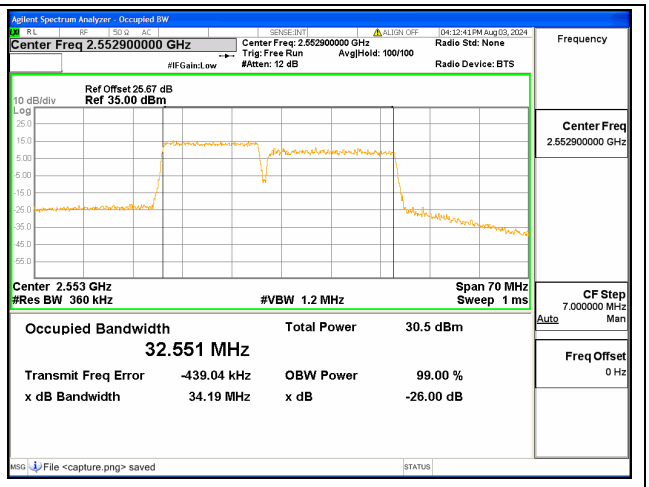
7C / 15+15MHz / QPSK/ High CH



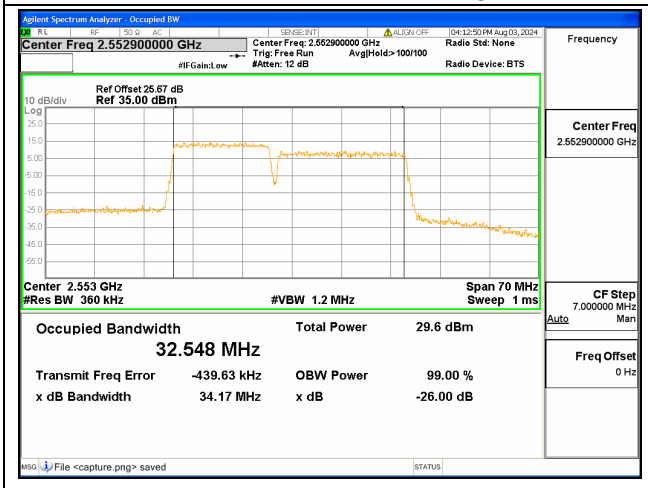
7C / 15+15MHz / 16QAM/ High CH



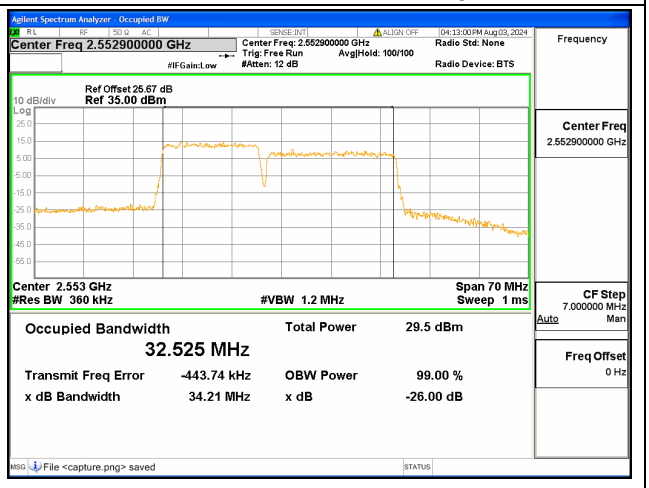
7C / 15+15MHz / 64QAM/ High CH



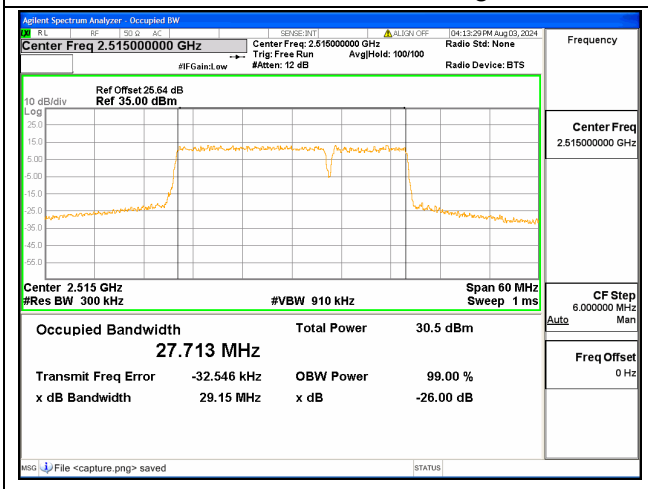
7C / 15+20MHz / QPSK/ High CH



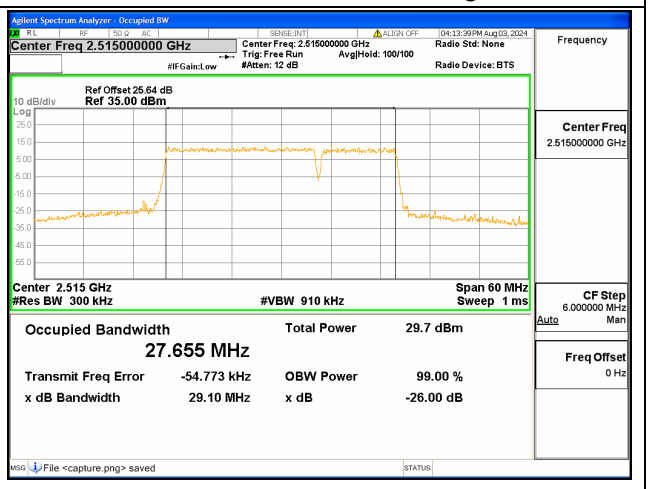
7C / 15+20MHz / 16QAM/ High CH



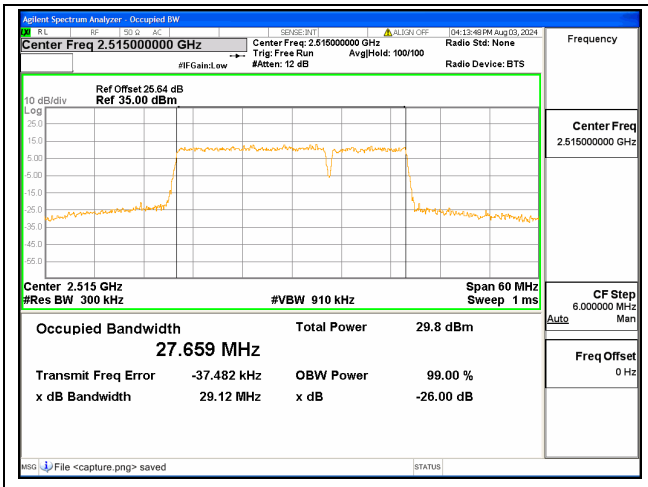
7C / 15+20MHz / 64QAM/ High CH



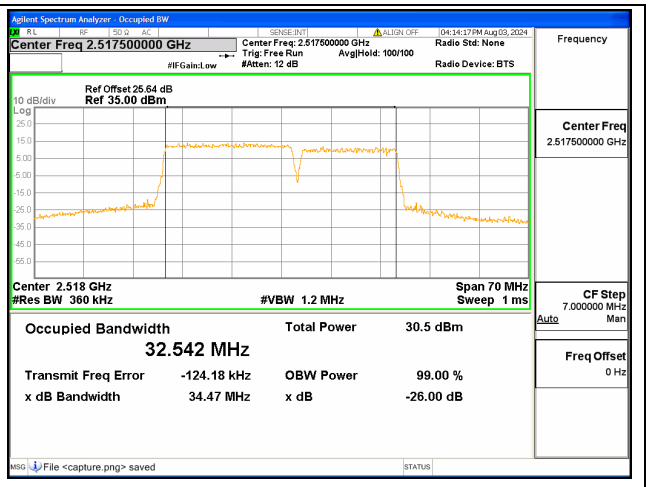
7C / 20+10MHz / QPSK/ Low CH



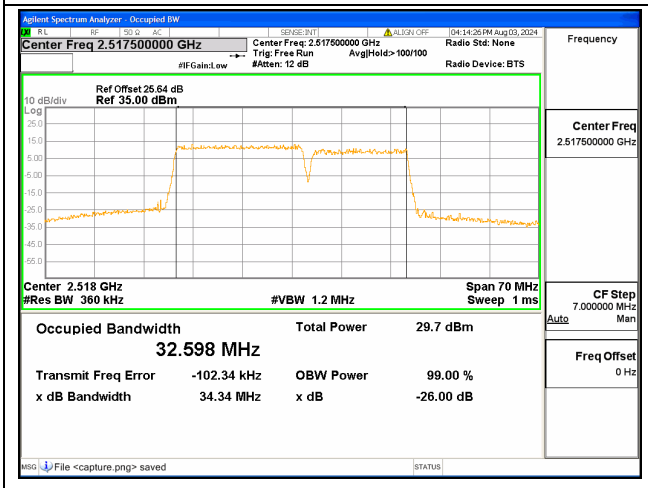
7C / 20+10MHz / 16QAM/ Low CH



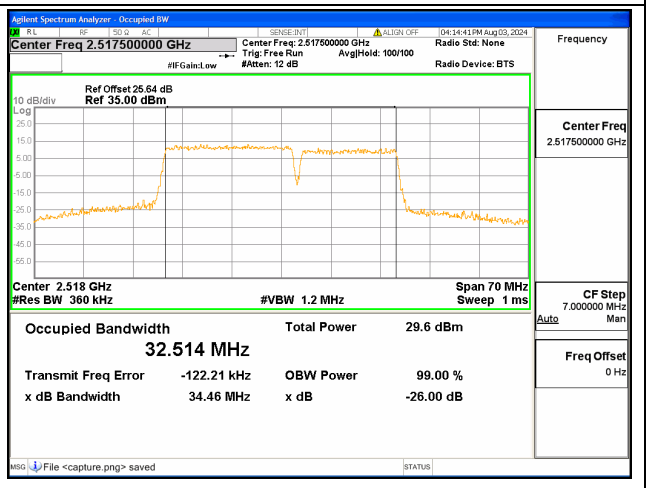
7C / 20+10MHz / 64QAM/ Low CH



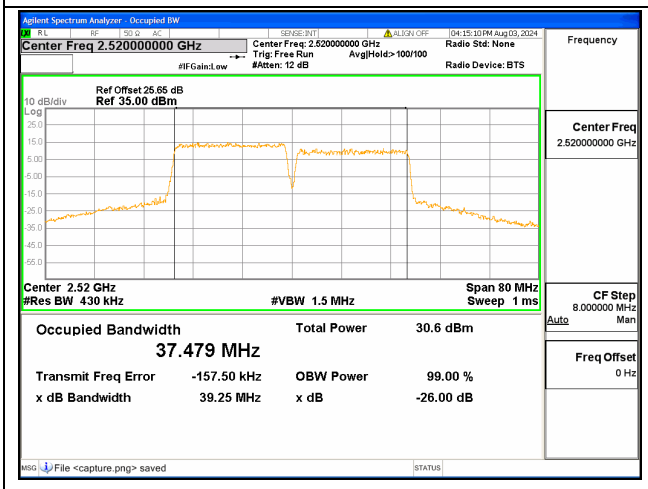
7C / 20+15MHz / QPSK/ Low CH



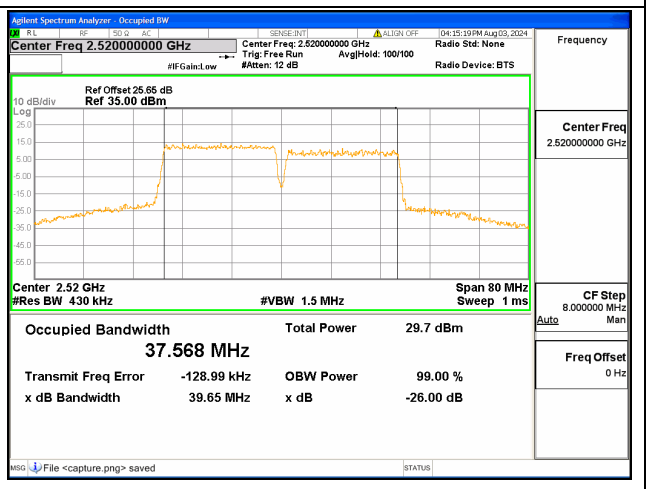
7C / 20+15MHz / 16QAM/ Low CH



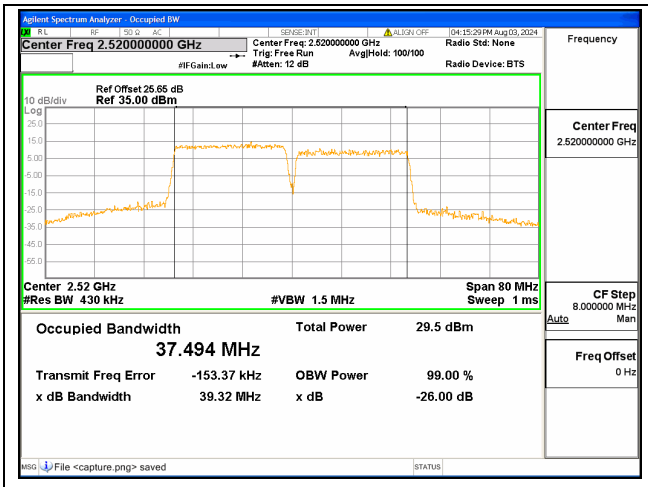
7C / 20+15MHz / 64QAM/ Low CH



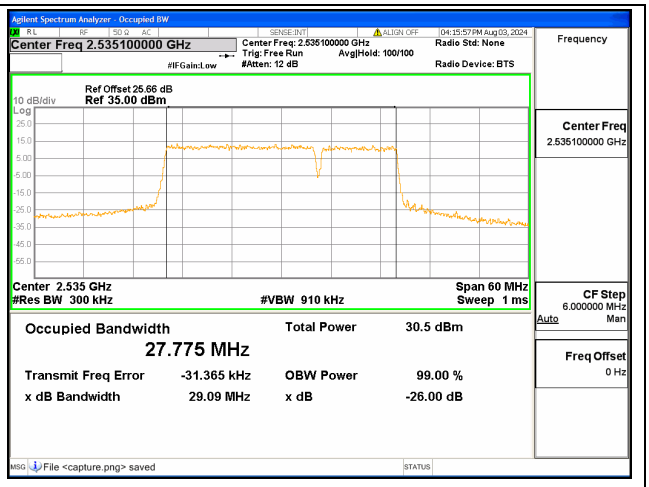
7C / 20+20MHz / QPSK/ Low CH



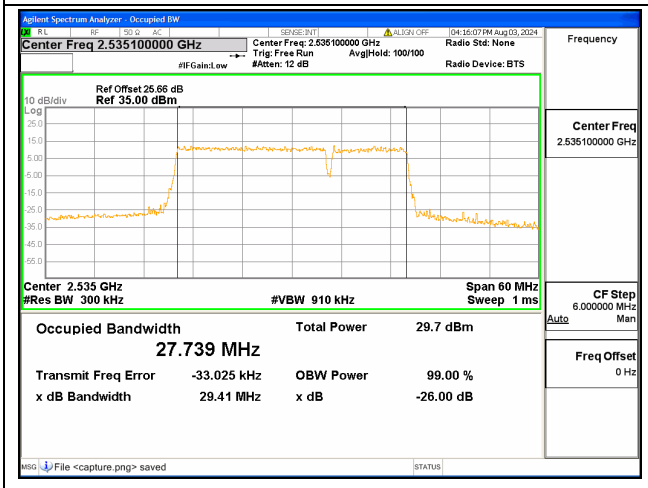
7C / 20+20MHz / 16QAM/ Low CH



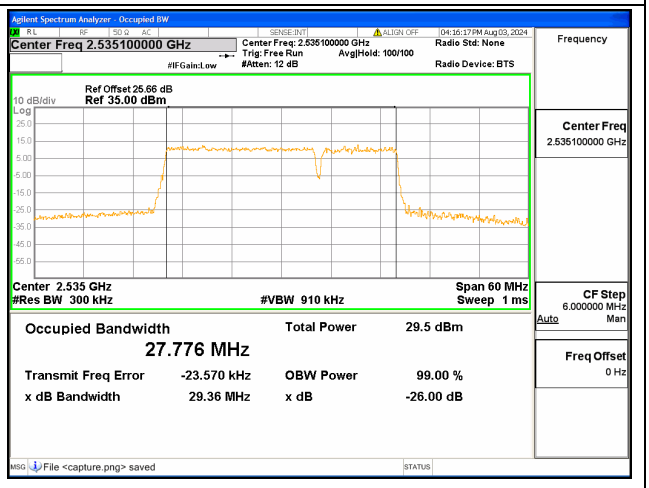
7C / 20+20MHz / 64QAM/ Low CH



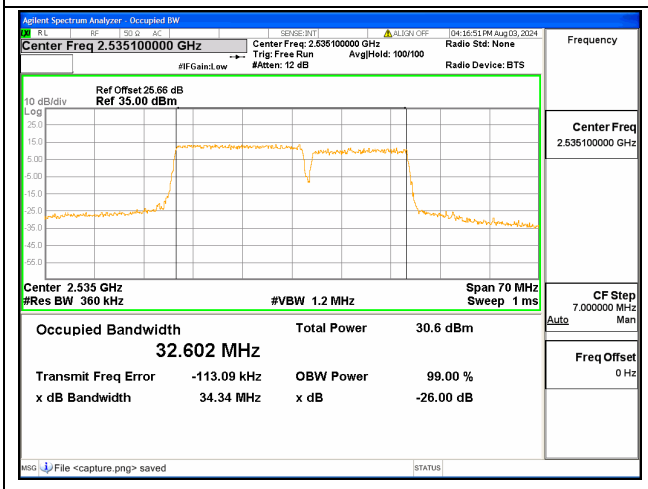
7C / 20+10MHz / QPSK/ Mid CH



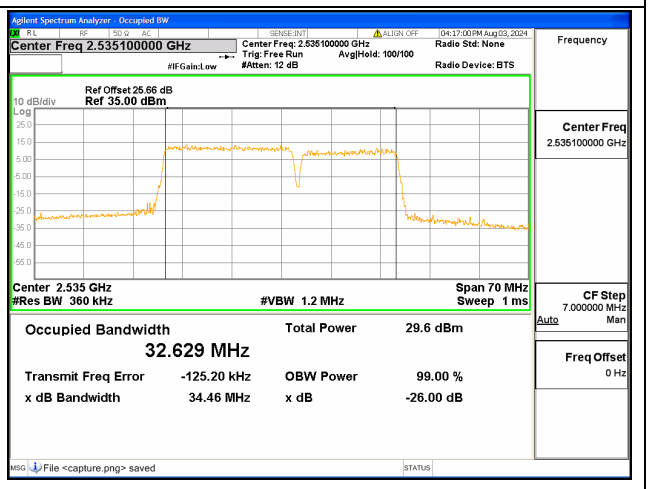
7C / 20+10MHz / 16QAM/ Mid CH



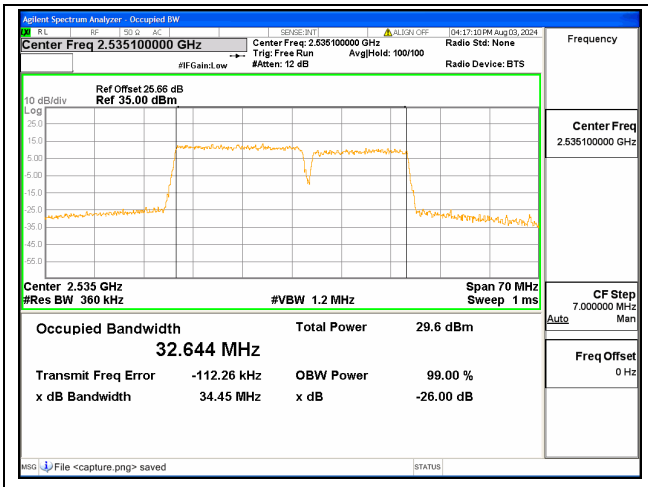
7C / 20+10MHz / 64QAM/ Mid CH



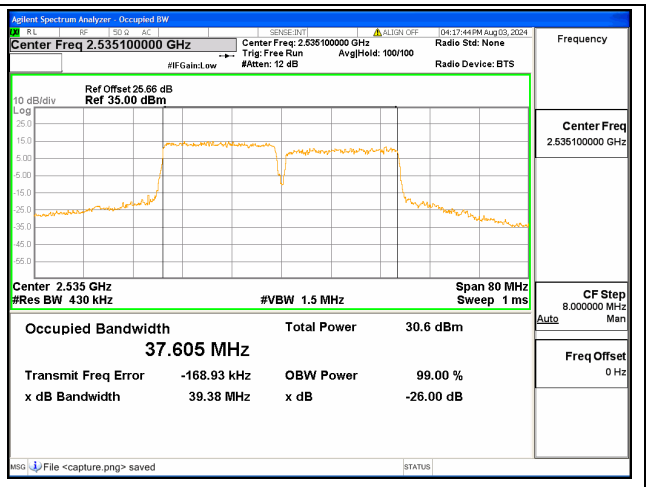
7C / 20+15MHz / QPSK/ Mid CH



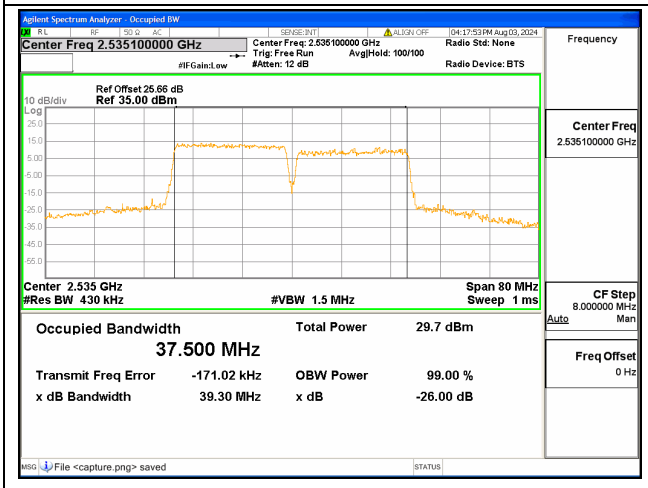
7C / 20+15MHz / 16QAM/ Mid CH



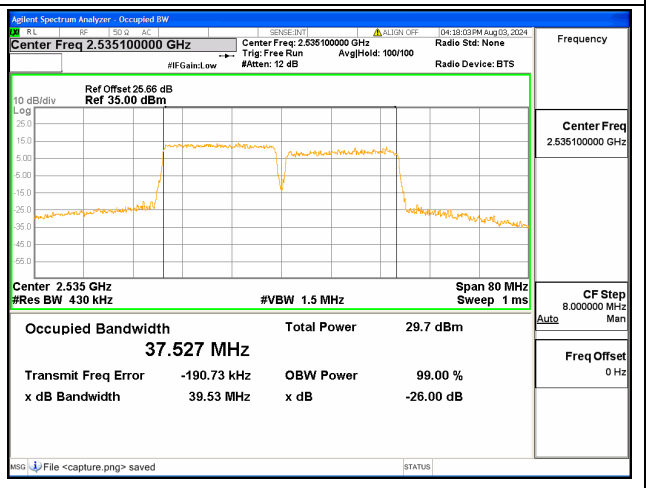
7C / 20+15MHz / 64QAM/ Mid CH



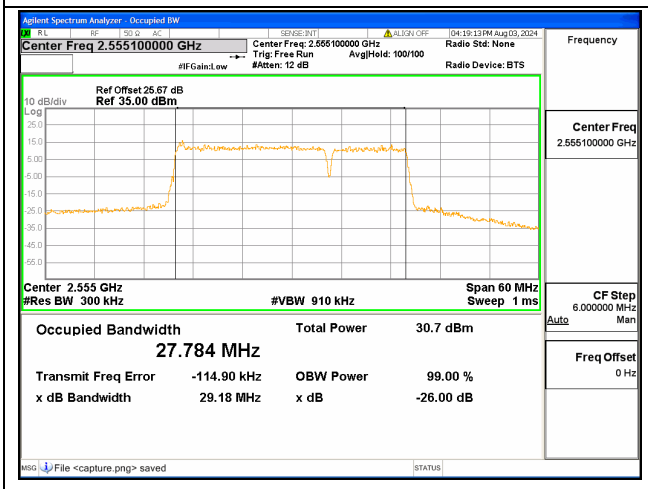
7C / 20+20MHz / QPSK/ Mid CH



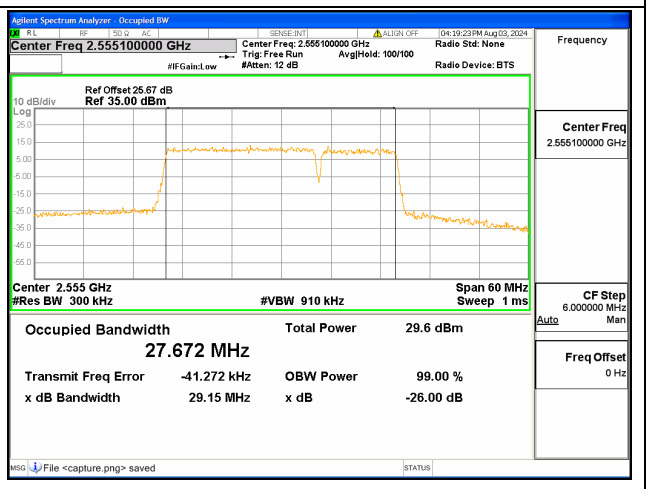
7C / 20+20MHz / 16QAM/ Mid CH



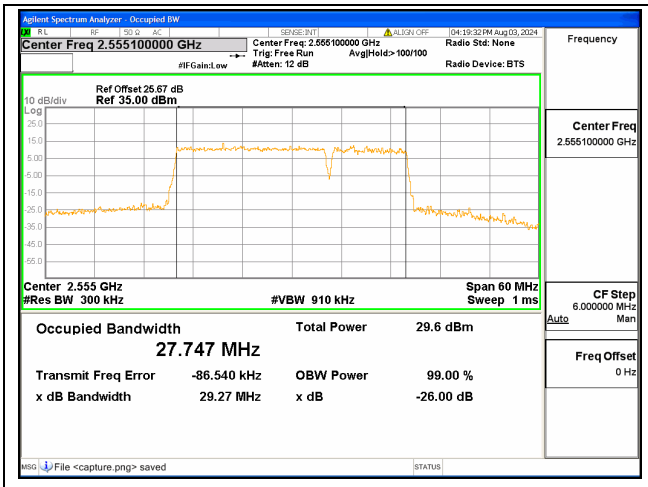
7C / 20+20MHz / 64QAM/ Mid CH



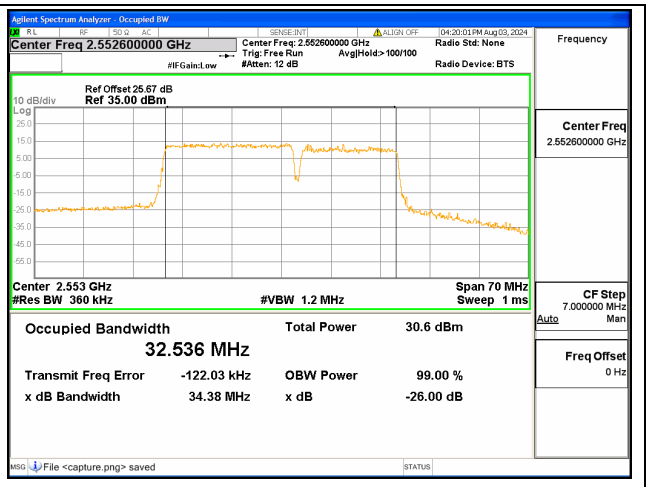
7C / 20+10MHz / QPSK/ High CH



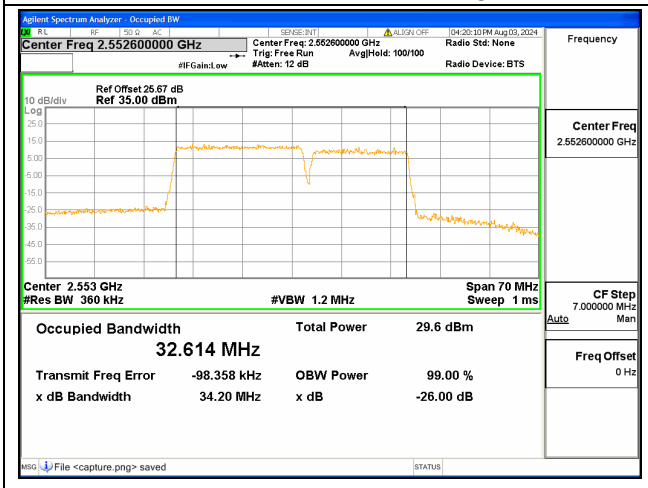
7C / 20+10MHz / 16QAM/ High CH



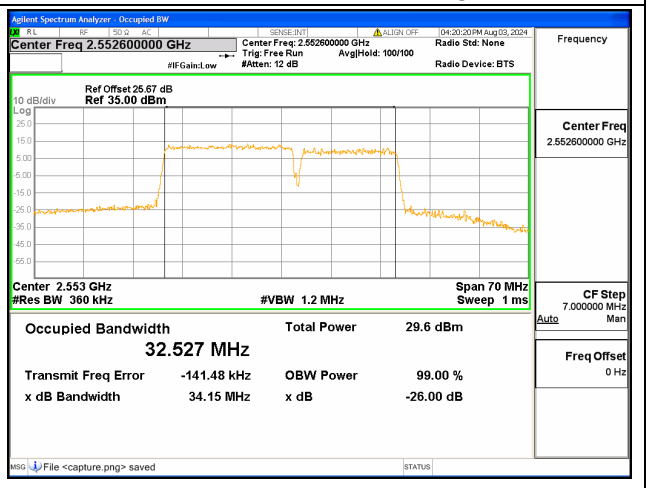
7C / 20+10MHz / 64QAM/ High CH



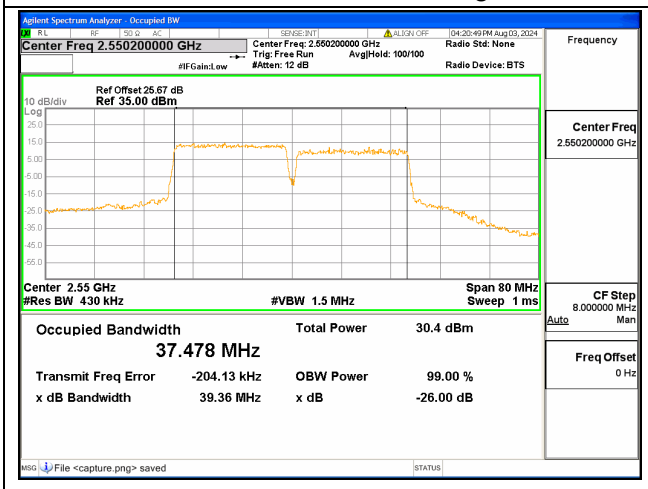
7C / 20+15MHz / QPSK/ High CH



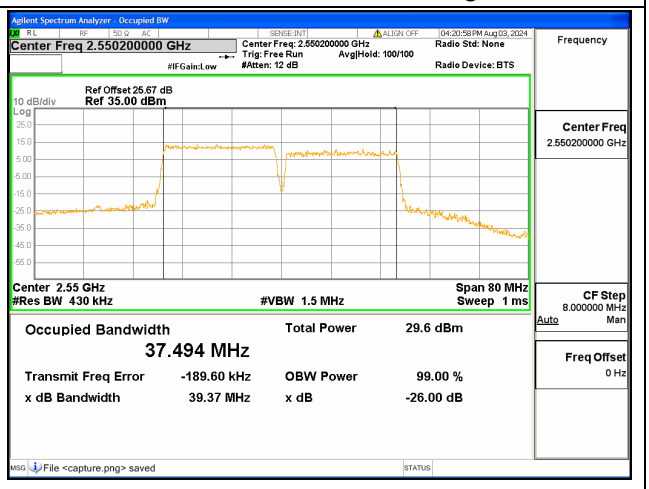
7C / 20+15MHz / 16QAM/ High CH



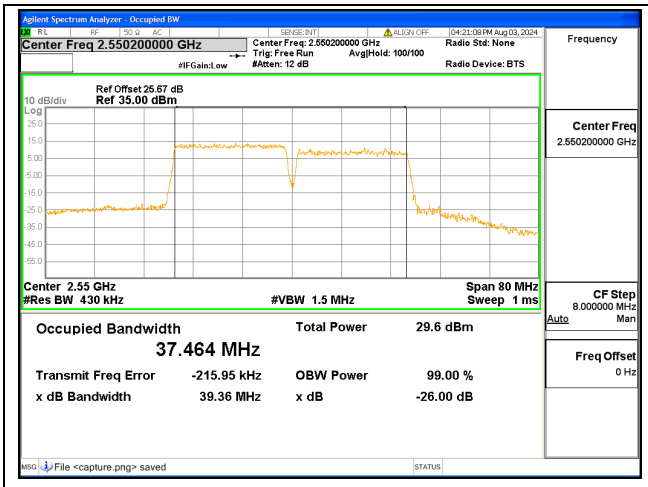
7C / 20+15MHz / 64QAM/ High CH



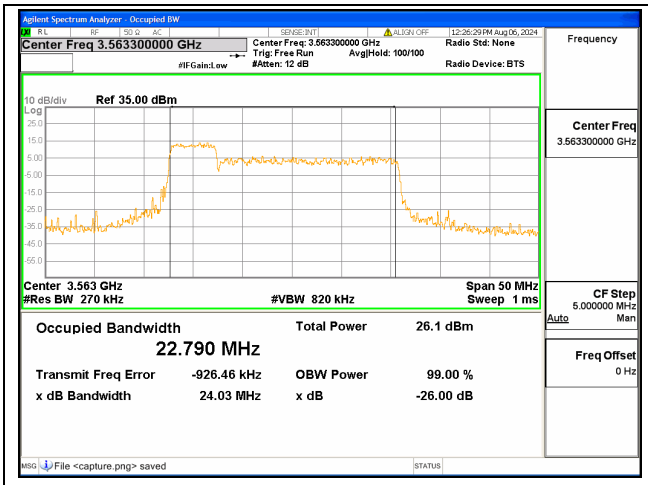
7C / 20+20MHz / QPSK/ High CH



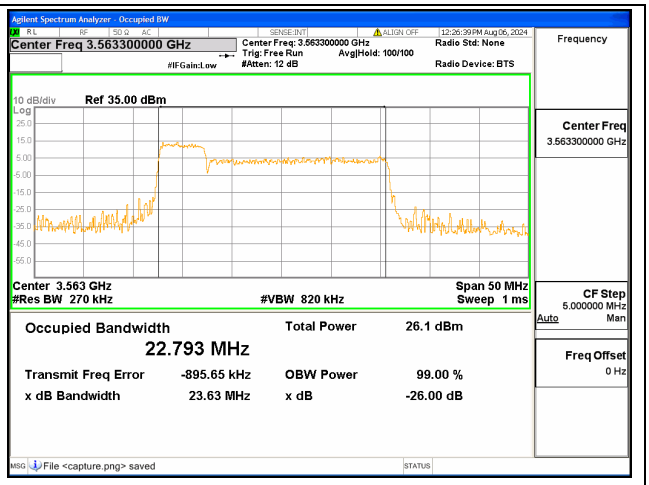
7C / 20+20MHz / 16QAM/ High CH



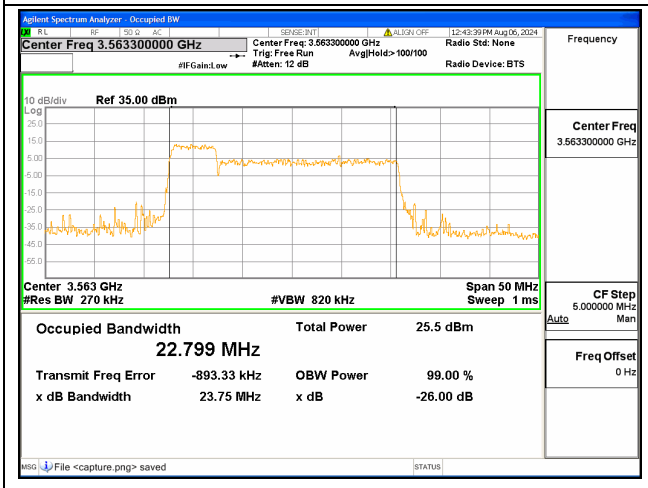
7C / 20+20MHz / 64QAM/ High CH



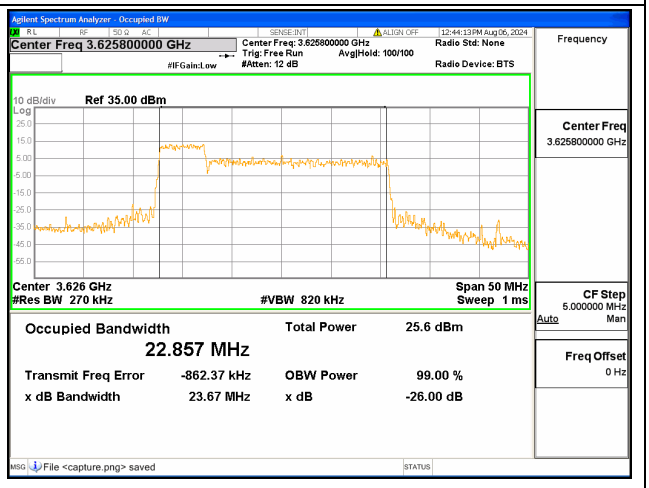
48C / 5+20MHz / QPSK/ Low CH



48C / 5+20MHz / 16QAM/ Low CH



48C / 5+20MHz / 64QAM/ Low CH



48C / 5+20MHz / QPSK/ Mid CH