



Test Report No.: W7L-P22110018RF01



Certificate #6613.01

FCC TEST REPORT

(PART 22)

Applicant:	MUNIC
Address:	100 Avenue de Stalingrad 94800 Villejuif – France

Manufacturer or Supplier:	MUNIC
Address:	100 Avenue de Stalingrad 94800 Villejuif – France
Product:	telematics embedded system
Brand Name:	MUNIC
Model Name:	C4D-4G4USAD_V8+
FCC ID:	A6GC4D-4G4USV8-4
Date of tests:	Nov. 28, 2022 ~Dec. 12, 2022

The tests have been carried out according to the requirements of the following standard:

- ☒ **FCC PART 22, Subpart H** ☒ **FCC Part 2**
☒ **ANSI/TIA/EIA-603-D** ☒ **ANSI C63.26-2015**
☒ **ANSI/TIA/EIA-603-E**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Chao Wu Engineer / Mobile Department	Approved by Peibo Sun Manager / Mobile Department
 Date: Dec. 12, 2022	 Date: Dec. 12, 2022

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P22110018RF01	Original release	Dec. 12, 2022

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 22 & Part 2			
STANDARD SECTION	TEST TYPE	RESULT	Test lab*
§2.1046	Conducted Output Power	Compliance	A
§22.913 (a)(5)	Effective Radiated Power	Compliance	A
§2.1055 §22.355	Frequency Stability	Compliance	A
§2.1049	Occupied Bandwidth	Compliance	A
§22.913 (d)	Peak to average ratio*	Compliance	A
§22.917(a)	Band Edge Measurements	Compliance	A
§2.1051 §22.917(a)	Conducted Spurious Emissions	Compliance	A
§2.1053 §22.917(a)	Radiated Spurious Emissions	Compliance	A

* Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01.

• **NOTE** : This report refers to the data of W7L-P22050013RF01(FCC ID:A6GC4D-4G4USV8-3, Date of Grant: Jul. 07, 2022, model name: C4D-4G4USAC_V8+), the difference of C4D-4G4USAC_V8+ and C4D-4G4USAD_V8+ is C4D-4G4USAD_V8+ change the GNSS chipset: MPN : UBX-M8030 changed to MPN : UBX-M10050-KB and change model name. In this report only verify power and RSE worst case. So this report only replaces the RSE data of LTE B5.

*Test Lab Information Reference

Lab A:

Huarui 7Layers High Technology (Suzhou) Co., Ltd.

Lab Address:

Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province

Accredited Test Lab Cert 6613.01

The FCC Site Registration No. is 434559; The Designation No. is CN1325.

1.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	UNCERTAINTY
Maximum Peak Output Power	$\pm 2.06\text{dB}$
Frequency Stability	$\pm 76.97\text{Hz}$
Radiated emissions (30MHz~1GMHz)	$\pm 4.98\text{dB}$
Radiated emissions (1GMHz ~6GMHz)	$\pm 4.70\text{dB}$
Radiated emissions (6GMHz ~18GMHz)	$\pm 4.60\text{dB}$
Radiated emissions (18GMHz ~40GMHz)	$\pm 4.12\text{dB}$
Conducted emissions	$\pm 4.01\text{dB}$
Occupied Channel Bandwidth	$\pm 43.58\text{KHz}$
Band Edge Measurements	$\pm 4.70\text{dB}$
Peak to average ratio	$\pm 0.76\text{dB}$

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

1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Pre-Amplifier	R&S	SCU18F1	100815	Aug.30,22	Aug.29,23
Pre-Amplifier	R&S	SCU08F1	101028	Sep.16,22	Sep.15,23
Vector Signal Generator	R&S	SMBV100B	102176	Feb.16,22	Fed.15,23
Signal Generator	R&S	SMB100A	182185	Feb.16,22	Fed.15,23
3m Fully-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-E MC-01Chamber	Nov.12,22	Nov.11,24
3m Semi-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-E MC-02Chamber	Nov.12,22	Nov.11,24
EMI TEST Receiver	R&S	ESR26	101734	Feb.25,22	Feb.24,23
EMI TEST Receiver	R&S	ESW44	101973	Feb.25,22	Feb.24,23
Bilog Antenna	SCHWARZBECK	VULB 9163	1264	Feb.28,22	Feb.27,23
Horn Antenna	ETS-LINDGREN	3117	227836	Aug.22,22	Aug.21,23
Horn Antenna (18GHz-40GHz)	Steatite Q-par Antennas	QMS 00880	23486	Feb.23,22	Feb.22,23
Horn Antenna	Steatite Q-par Antennas	QMS 00208	23485	Aug.22,22	Aug.21,23



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Loop Antenna	SCHWARZ	HFH2-Z2/Z2E	100976	Feb.23,22	Feb.22,23
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.27,22	Jun.26,23
Test Software	EMC32	EMC32	N/A	N/A	N/A
Test Software	ELEKTRA	ELEKTRA4.32	N/A	N/A	N/A
Open Switch and Control Unit	R&S	OSP220	101964	Oct.01,22	Sep.30,23
DC Source	HYELEC	HY3010B	551016	Aug.31,22	Aug.30,23
Hygrothermograph	DELI	20210528	SZ014	Sep.6,22	Sep.5,23
PC	LENOVO	E14	HRSW0024	N/A	N/A
TMC-AMI18843A(CABL E)	R&S	HF290-NMNM-7.00 M	N/A	N/A	N/A
TMC-AMI18843A(CABL E)	R&S	HF290-NMNM-4.00 M	N/A	N/A	N/A
CABLE	R&S	W13.02	N/A	Oct.31,22	Apr.29,23
CABLE	R&S	W12.14	N/A	Oct.31,22	Apr.29,23
CABLE	R&S	J12J103539-00-1	SEP-03-20-0 69	Oct.31,22	Apr.29,23
CABLE	R&S	J12J103539-00-1	SEP-03-20-0 70	Oct.31,22	Apr.29,23
Temperature Chamber	votsch	VT4002	58566078100 050	May.31,22	May.30,23

- NOTE:** 1.The calibration interval of the above test instruments is 6 months or 12 months or 24 months and the calibrations are traceable to CEPREI/CHINA, GREGT/CHINA and NIM/CHINA.
2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.
3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	telematics embedded system	
BRAND NAME	MUNIC	
MODEL NAME	C4D-4G4USAD_V8+	
NOMINAL VOLTAGE	DC13.7V	
MODULATION TYPE	LTE	QPSK, 16QAM
FREQUENCY RANGE	LTE Band 5 (Channel Bandwidth: 1.4MHz)	824.7MHz ~ 848.3MHz
	LTE Band 5 (Channel Bandwidth: 3MHz)	825.5MHz ~ 847.5MHz
	LTE Band 5 (Channel Bandwidth: 5MHz)	826.5MHz ~ 846.5MHz
	LTE Band 5 (Channel Bandwidth: 10MHz)	829MHz ~ 844MHz
MAX. EIRP POWER	LTE Band 5 (Channel Bandwidth: 1.4MHz)	62.81mW
	LTE Band 5 (Channel Bandwidth: 3MHz)	62.66mW
	LTE Band 5 (Channel Bandwidth: 5MHz)	62.81mW
	LTE Band 5 (Channel Bandwidth: 10MHz)	63.53mW
EMISSION DESIGNATOR GOGN	LTE Band 5 (Channel Bandwidth: 1.4MHz)	QPSK: 1M10G7D
		16QAM: 1M09W7D
	LTE Band 5 (Channel Bandwidth: 3MHz)	QPSK: 2M70G7D
		16QAM: 2M70W7D
	LTE Band 5 (Channel Bandwidth: 5MHz)	QPSK: 4M50G7D
		16QAM: 4M51W7D
	LTE Band 5 (Channel Bandwidth: 10MHz)	QPSK: 8M98G7D
		16QAM: 8M97W7D
ANTENNA TYPE	Fixed Internal Antenna with -3.67 dBi gain for LTE B5	
HW VERSION	D3	
SW VERSION	SW.018	
I/O PORTS	Refer to user's manual	
CABLE SUPPLIED	N/A	
EXTREME TEMPERATURE	-20-50 °C	
EXTREME VOLTAGE	DC8V - DC18V	



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NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

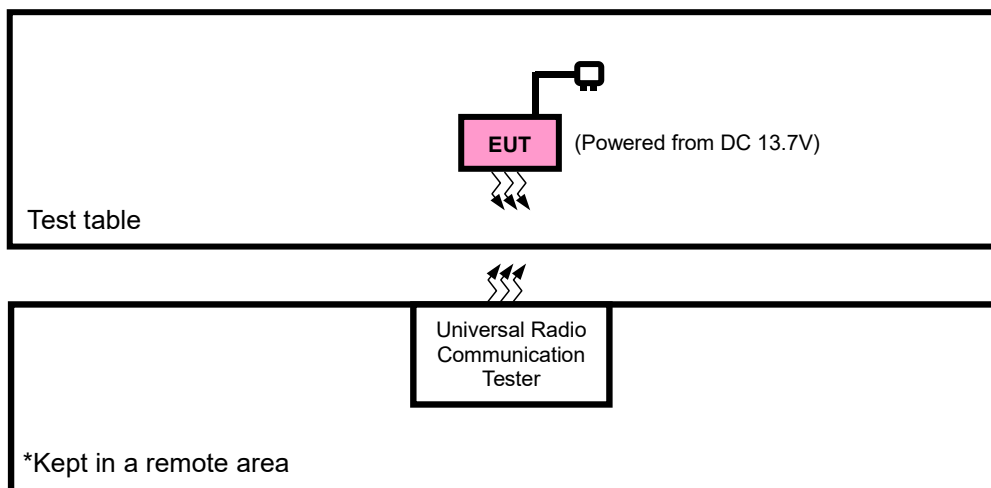
MODULATION MODE	TX FUNCTION
LTE	1TX/1RX

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

List of Accessory:

ACCESSORIES	BRAND	MODEL	SPECIFICATION
Battery	Howell	352535H	Capacity : Li-ion, 270mAh

2.2 CONFIGURATION OF SYSTEM UNDER TEST FOR RADIATION EMISSION





2.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	DC source	Kikusui/JP	PMX18-5A	0000001	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	DC Line: Unshielded, Detachable 1.0m

2.4 TEST ITEM AND TEST CONFIGURATION

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case in ERP and radiated emission was found when positioned on X-plane for GSM /EDGE /LTE. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
A	EUT + DC Source with LTE link

LTE BAND 5 MODE

EUT CONFIGURE MODE	TEST ITEM	Available Channel	Tested Channel	Channel bandwidth	modulation	mode
A	ERP	20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK,16QAM	1 RB / 0 RB Offset
		20415 to 20635	20415, 20525, 20635	3MHz	QPSK,16QAM	1 RB / 0 RB Offset
		20425 to 20625	20425, 20525, 20625	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
		20450 to 20600	20450, 20525, 20600	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
A	FREQUENCY STABILITY	20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK,16QAM	6 RB / 0 RB Offset
		20415 to 20635	20415, 20525, 20635	3MHz	QPSK,16QAM	15 RB / 0 RB Offset
		20425 to 20625	20425, 20525, 20625	5MHz	QPSK,16QAM	25 RB / 0 RB Offset
		20450 to 20600	20450, 20525, 20600	10MHz	QPSK,16QAM	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK,16QAM	6 RB / 0 RB Offset
		20415 to 20635	20415, 20525, 20635	3MHz	QPSK,16QAM	15 RB / 0 RB Offset
		20425 to 20625	20425, 20525, 20625	5MHz	QPSK,16QAM	25 RB / 0 RB Offset
		20450 to 20600	20450, 20525, 20600	10MHz	QPSK,16QAM	50 RB / 0 RB Offset
A	BAND EDGE	20407 to 20643	20407	1.4 MHz	QPSK,16QAM	1 RB / 0 RB Offset
						6 RB / 0 RB Offset
		20407 to 20643	20643	1.4 MHz	QPSK,16QAM	1 RB / 5 RB Offset
						6 RB / 0 RB Offset
		20415 to 20635	20415	3 MHz	QPSK,16QAM	1 RB / 0 RB Offset
						15 RB / 0 RB Offset
		20415 to 20635	20635	3 MHz	QPSK,16QAM	1 RB / 14 RB Offset
						15 RB / 0 RB Offset
		20425 to 20625	20425	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset
		20425 to 20625	20625	5MHz	QPSK,16QAM	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
		20450 to 20600	20450	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
						50 RB / 0 RB Offset
		20450 to 20600	20600	10MHz	QPSK,16QAM	1 RB / 49 RB Offset
						50 RB / 0 RB Offset

A	CONDUCTED EMISSION	20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK,16QAM	1 RB / 0 RB Offset
		20415 to 20635	20415, 20525, 20635	3MHz	QPSK,16QAM	1 RB / 0 RB Offset
		20425 to 20625	20425, 20525, 20625	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
		20450 to 20600	20450, 20525, 20600	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	20407 to 20643	20525	1.4MHz	QPSK	1 RB / 0 RB Offset
		20415 to 20635	20525	3MHz	QPSK	1 RB / 0 RB Offset
		20425 to 20625	20425,20525,20625	5MHz	QPSK	1 RB / 0 RB Offset
		20450 to 20600	20525	10MHz	QPSK	1 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK,16QAM	1 RB / 0 RB Offset
		20415 to 20635	20415, 20525, 20635	3MHz	QPSK,16QAM	1 RB / 0 RB Offset
		20425 to 20625	20425, 20525, 20625	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
		20450 to 20600	20450, 20525, 20600	10MHz	QPSK,16QAM	1 RB / 0 RB Offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.



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TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP	23deg. C, 70%RH	DC 13.7V	Jace Hu
FREQUENCY STABILITY	23deg. C, 70%RH	DC 13.7V	James Fu
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC 13.7V	James Fu
BAND EDGE	23deg. C, 70%RH	DC 13.7V	James Fu
CONDUCTED EMISSION	23deg. C, 70%RH	DC 13.7V	James Fu
RADIATED EMISSION	23deg. C, 70%RH	DC 13.7V	Jace Hu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	DC 13.7V	James Fu

2.5 EUT OPERATING CONDITIONS

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency



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2.6 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 2

FCC 47 CFR Part 22

KDB 971168 D01 Power Meas License Digital Systems v03r01

ANSI/TIA/EIA-603-D

ANSI/TIA/EIA-603-E

ANSI C63.26-2015

NOTE: All test items have been performed and recorded as per the above standards.

3 TEST TYPES AND RESULTS

3.1 OUTPUT POWER MEASUREMENT

3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

Mobile / Portable station are limited to 7 watts e.r.p.

3.1.2 TEST PROCEDURES

EIRP / ERP MEASUREMENT:

Per KDB 971168 D01 Power Meas License Digital Systems v03r01 or subclause 5.2.5.5 of ANSI C63.26-2015, the relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_{\text{T}} - L_{\text{C}}$$

Where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively

(expressed in the same units as P_{Meas} , typically dBW or dBm);

P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

G_{T} = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

L_{C} = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

CONDUCTED POWER MEASUREMENT:

The EUT was set up for the maximum power with WCDMA link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.



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3.1.3 TEST SETUP

EIRP / ERP Measurement:

CONDUCTED POWER MEASUREMENT:



3.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

LTE Band 5

Band/BW	Modulation	RB Size	RB Offset	Low CH 20407	Mid CH 20525	High CH 20643	MPR
				Frequency 824.7 MHz	Frequency 836.5 MHz	Frequency 848.3 MHz	
5/ 1.4	QPSK	1	0	23.31	23.40	23.80	0
		1	2	23.28	23.12	23.56	0
		1	5	23.22	23.17	23.27	0
		3	0	23.30	23.18	23.53	0
		3	1	23.30	23.21	23.29	0
		3	3	23.34	23.12	23.46	0
		6	0	22.42	22.27	22.47	1
	16QAM	1	0	22.61	22.69	22.50	1
		1	2	22.95	22.66	22.48	1
		1	5	22.78	22.51	22.21	1
		3	0	22.31	22.31	22.41	1
		3	1	22.32	22.32	22.36	1
		3	3	22.45	22.23	22.54	1
		6	0	21.25	21.26	21.41	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 20415	Mid CH 20525	High CH 20635	MPR
				Frequency 825.5 MHz	Frequency 836.5 MHz	Frequency 847.5 MHz	
5/ 3	QPSK	1	0	23.33	23.42	23.79	0
		1	7	23.24	23.13	23.56	0
		1	14	23.18	23.17	23.27	0
		8	0	22.29	22.21	22.53	1
		8	3	22.23	22.21	22.31	1
		8	7	22.31	22.19	22.50	1
		15	0	22.39	22.28	22.41	1
	16QAM	1	0	22.58	22.75	22.53	1
		1	7	22.92	22.69	22.46	1
		1	14	22.81	22.51	22.21	1
		8	0	21.27	21.32	21.41	2
		8	3	21.37	21.27	21.39	2
		8	7	21.47	21.21	21.50	2
		15	0	21.25	21.20	21.44	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 20425	Mid CH 20525	High CH 20625	MPR
				Frequency 826.5 MHz	Frequency 836.5 MHz	Frequency 846.5 MHz	
5/ 5	QPSK	1	0	23.34	23.37	23.80	0
		1	12	23.29	23.10	23.56	0
		1	24	23.19	23.16	23.31	0
		12	0	22.32	22.21	22.50	1
		12	6	22.23	22.22	22.32	1
		12	13	22.35	22.15	22.51	1
		25	0	22.37	22.31	22.44	1
	16QAM	1	0	22.59	22.71	22.53	1
		1	12	22.89	22.72	22.45	1
		1	24	22.81	22.51	22.20	1
		12	0	21.27	21.30	21.38	2
		12	6	21.34	21.31	21.35	2
		12	13	21.42	21.23	21.53	2
		25	0	21.25	21.21	21.41	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 20450	Mid CH 20525	High CH 20600	MPR
				Frequency 829 MHz	Frequency 836.5 MHz	Frequency 844 MHz	
5/ 10	QPSK	1	0	23.39	23.44	23.85	0
		1	24	23.31	23.18	23.58	0
		1	49	23.24	23.24	23.32	0
		25	0	22.36	22.26	22.55	1
		25	12	22.31	22.23	22.37	1
		25	25	22.39	22.20	22.52	1
		50	0	22.43	22.33	22.49	1
	16QAM	1	0	22.66	22.76	22.55	1
		1	24	22.97	22.74	22.50	1
		1	49	22.83	22.59	22.22	1
		25	0	21.35	21.36	21.46	2
		25	12	21.40	21.33	21.41	2
		25	25	21.49	21.28	21.55	2
		50	0	21.31	21.28	21.46	2

EIRP POWER (dBm)

LTE BAND 5

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20407	824.7	23.34	-3.67	17.52	56.49	7
20525	836.5	23.4	-3.67	17.58	57.28	7
20643	848.3	23.8	-3.67	17.98	62.81	7

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20407	824.7	22.95	-3.67	17.13	51.64	7
20525	836.5	22.69	-3.67	16.87	48.64	7
20643	848.3	22.54	-3.67	16.72	46.99	7

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20415	825.5	23.33	-3.67	17.51	56.36	7
20525	836.5	23.42	-3.67	17.6	57.54	7
20635	847.5	23.79	-3.67	17.97	62.66	7

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20415	825.5	22.92	-3.67	17.1	51.29	7
20525	836.5	22.75	-3.67	16.93	49.32	7
20635	847.5	22.53	-3.67	16.71	46.88	7

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20425	826.5	23.34	-3.67	17.52	56.49	7
20525	836.5	23.37	-3.67	17.55	56.89	7
20625	846.5	23.8	-3.67	17.98	62.81	7

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20425	826.5	22.89	-3.67	17.07	50.93	7
20525	836.5	22.72	-3.67	16.9	48.98	7
20625	846.5	22.53	-3.67	16.71	46.88	7

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20450	829	23.39	-3.67	17.57	57.15	7
20525	836.5	23.44	-3.67	17.62	57.81	7
20600	844	23.85	-3.67	18.03	63.53	7

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20450	829	22.97	-3.67	17.15	51.88	7
20525	836.5	22.76	-3.67	16.94	49.43	7
20600	844	22.55	-3.67	16.73	47.1	7

3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

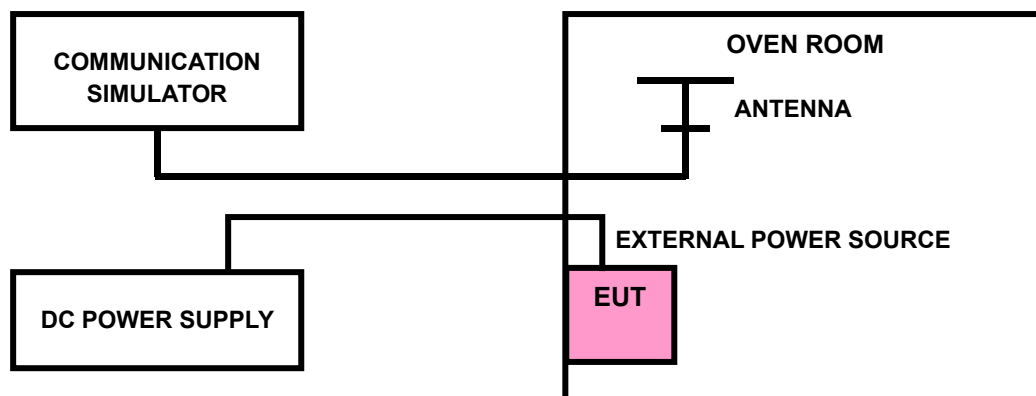
1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

3.2.2 TEST PROCEDURE

- Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the $\pm 0.5^{\circ}\text{C}$ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

NOTE: The frequency error was recorded frequency error from the communication simulator.

3.2.3 TEST SETUP





Test Report No.: W7L-P22110018RF01

3.2.4 TEST RESULTS

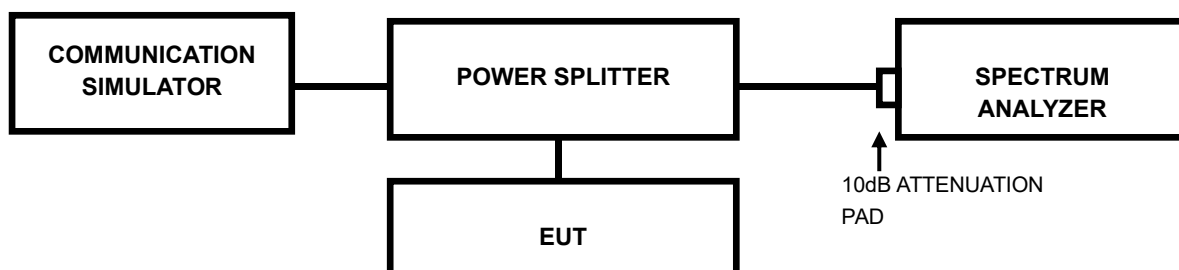
Please Refer to Appendix A Of this test report.

3.3 OCCUPIED BANDWIDTH MEASUREMENT

3.3.1 TEST PROCEDURES

The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

3.3.2 TEST SETUP





Test Report No.: W7L-P22110018RF01

3.3.3 TEST RESULTS

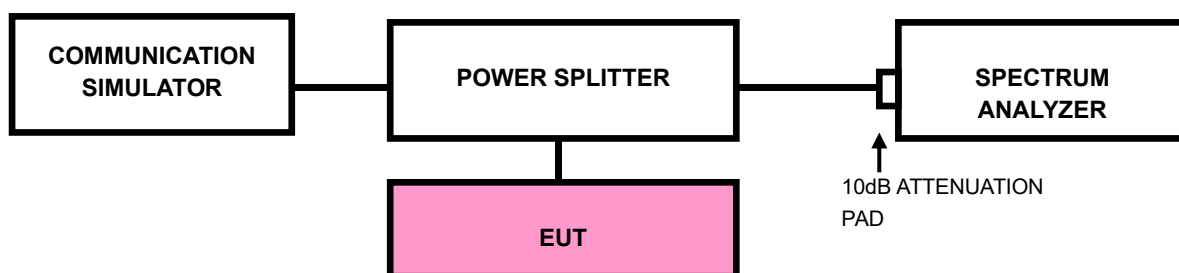
Please Refer to Appendix A Of this test report.

3.4 BAND EDGE MEASUREMENT

3.4.1 LIMITS OF BAND EDGE MEASUREMENT

Power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

3.4.2 TEST SETUP





3.4.3 TEST PROCEDURES

- a. All measurements were done at low and high operational frequency range.
- b. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz.
RBW of the spectrum is 10kHz and VBW of the spectrum is 30kHz (LTE bandwidth for (1.4M/3M/5M/10M)1RB/0RB&1RB/MAXRB).
- c. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz.
RBW of the spectrum is $\geq 1\% \cdot \text{EBW kHz}$ and VBW of the spectrum is $3 \cdot \text{RBW kHz}$. (LTE bandwidth 1.4M/3M/5M/10M).
- d. Record the max trace plot into the test report.

3.4.4 TEST RESULTS

Please Refer to Appendix A Of this test report.

3.5 CONDUCTED SPURIOUS EMISSIONS

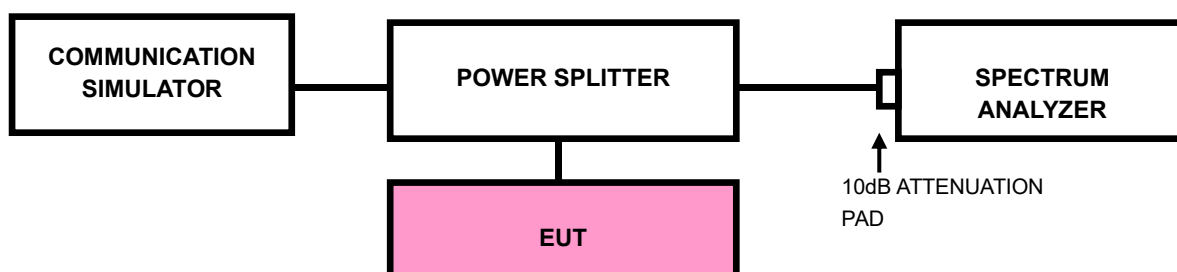
3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

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. The emission limit equal to -13dBm .

3.5.2 TEST PROCEDURE

- a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- b. Measuring frequency range is from 9kHz up to a frequency including its 10th harmonic. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

3.5.3 TEST SETUP





Test Report No.: W7L-P22110018RF01

3.5.4 TEST RESULTS

NOTE : The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

Please Refer to Appendix A Of this test report.



3.6 RADIATED EMISSION MEASUREMENT

3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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. The emission limit equal to -13dBm .

3.6.2 TEST PROCEDURES

- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G
- c. $\text{EIRP} = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole,
 $\text{E.R.P power} = \text{E.I.P.R power} - 2.15\text{dBi}$.

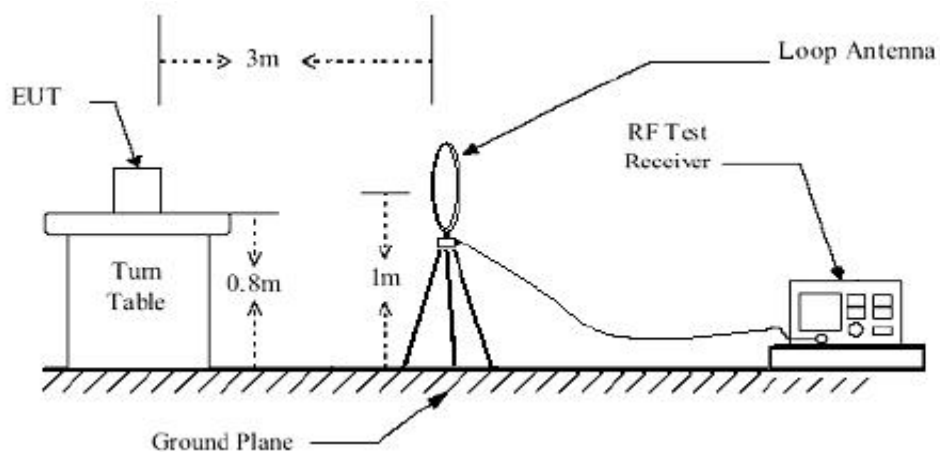
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

3.6.3 DEVIATION FROM TEST STANDARD

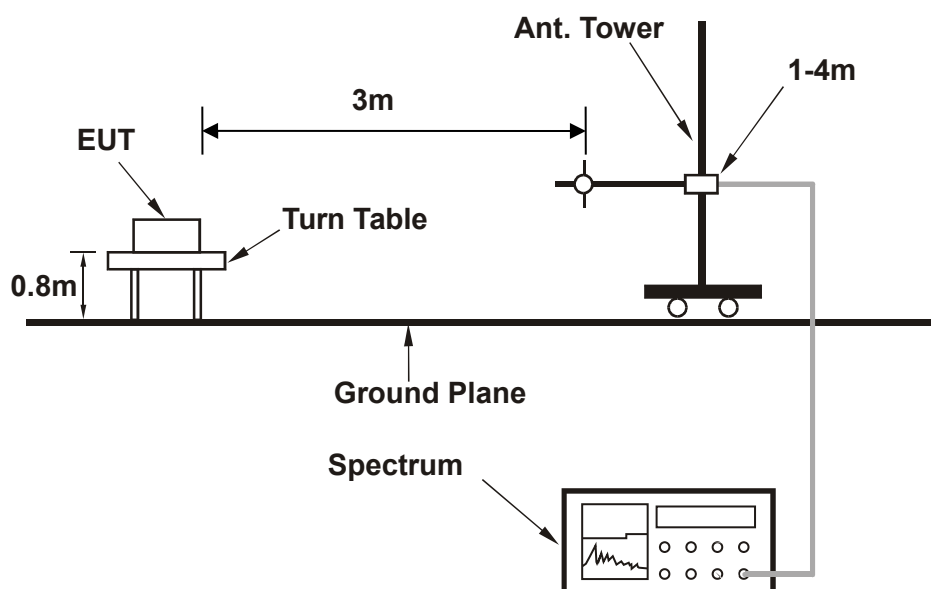
No deviation

3.6.4 TEST SETUP

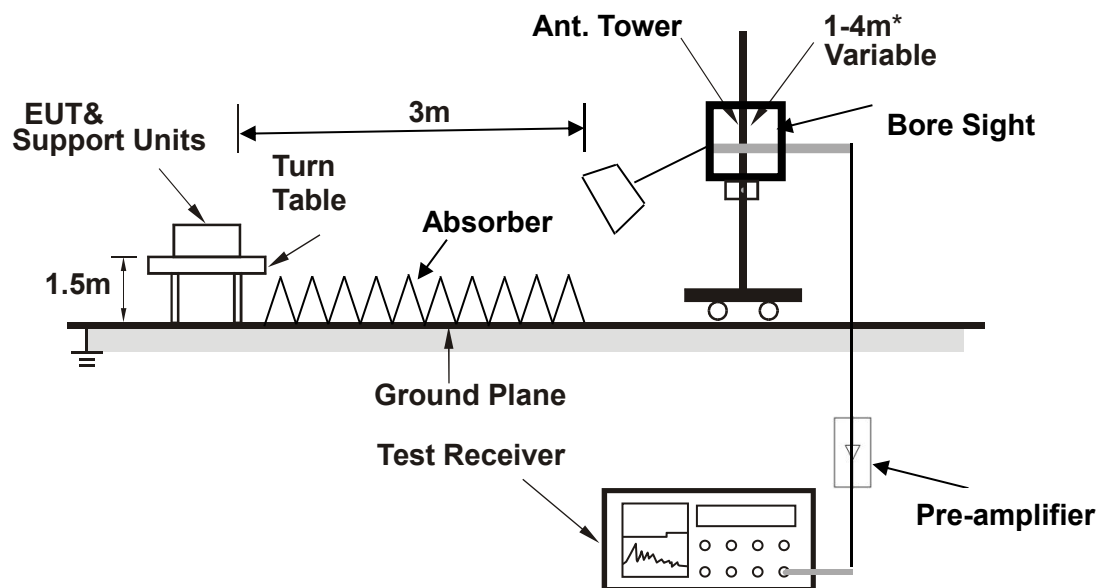
< Frequency Range below 30MHz >



< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



Note: Above 1G is a directional antenna

Depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.6.5 TEST RESULTS

NOTE : The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

BELOW 1GHz WORST-CASE DATA

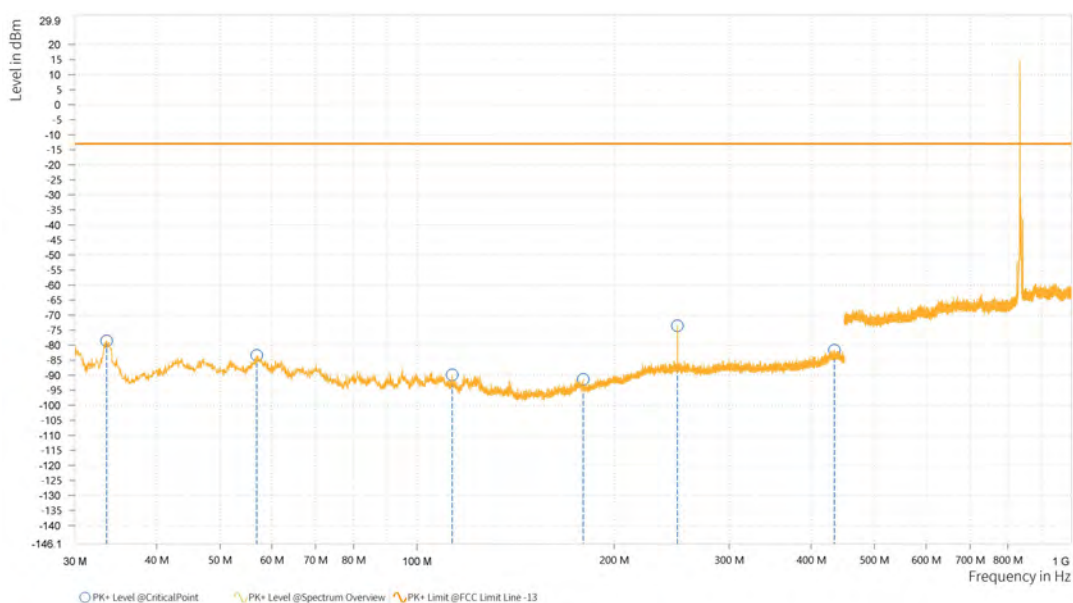
30 MHz – 1GHz data:

LTEB5

CHANNEL BANDWIDTH: 5MHz / QPSK

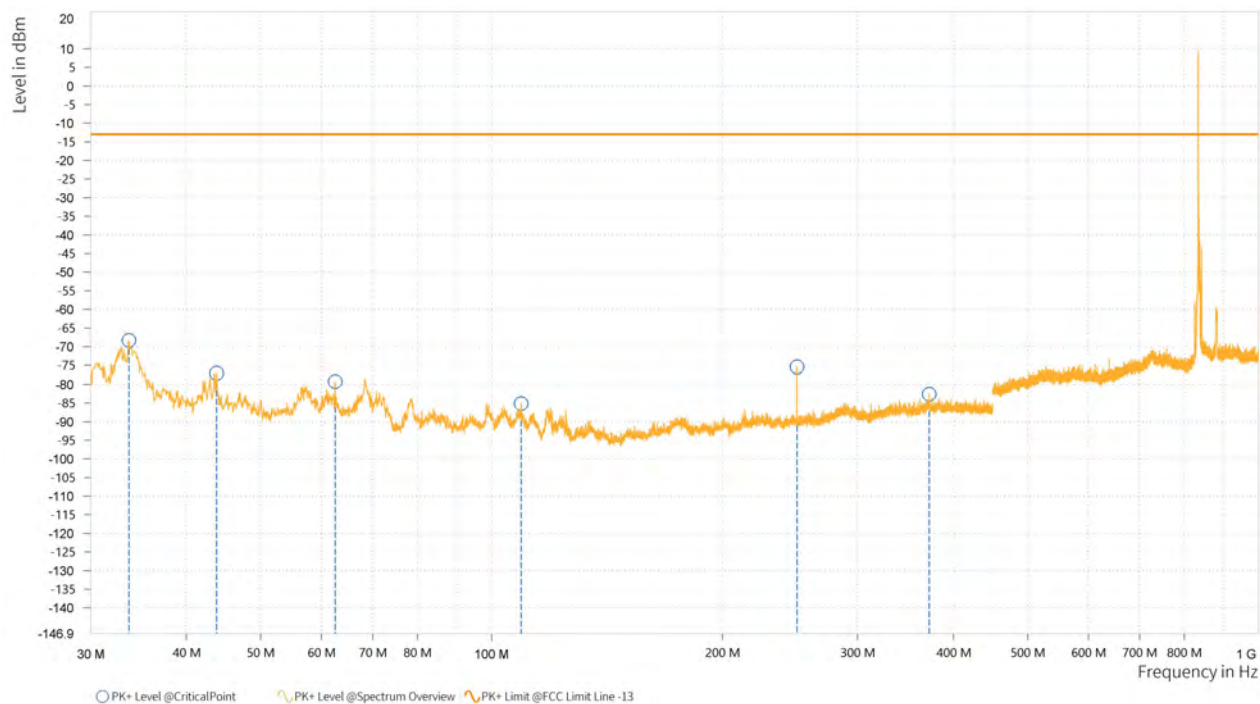
MODE	TX channel 20525	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	33.550	-78.54	-13.00	65.54	-9.38	H	360	1
1	56.900	-83.40	-13.00	70.40	-5.11	H	4.2	1
1	113.200	-89.85	-13.00	76.85	-12.81	H	4.2	1
1	179.450	-91.36	-13.00	78.36	-13.88	H	0	2
1	250.050	-73.53	-13.00	60.53	-7.42	H	359.9	2
1	434.400	-81.68	-13.00	68.68	-3.39	H	0	2



MODE	TX channel 20525	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	33.650	-68.32	-13.00	55.32	-11.35	V	4.2	1
1	43.800	-77.05	-13.00	64.05	-6.64	V	44.5	2
1	62.500	-79.25	-13.00	66.25	-7.22	V	44.5	2
1	109.300	-85.15	-13.00	72.15	-8.63	V	359.9	1
1	250.050	-75.37	-13.00	62.37	-9.48	V	359.9	2
1	372.000	-82.58	-13.00	69.58	-5.65	V	359.9	1





Test Report No.: W7L-P22110018RF01

ABOVE 1GHz DATA

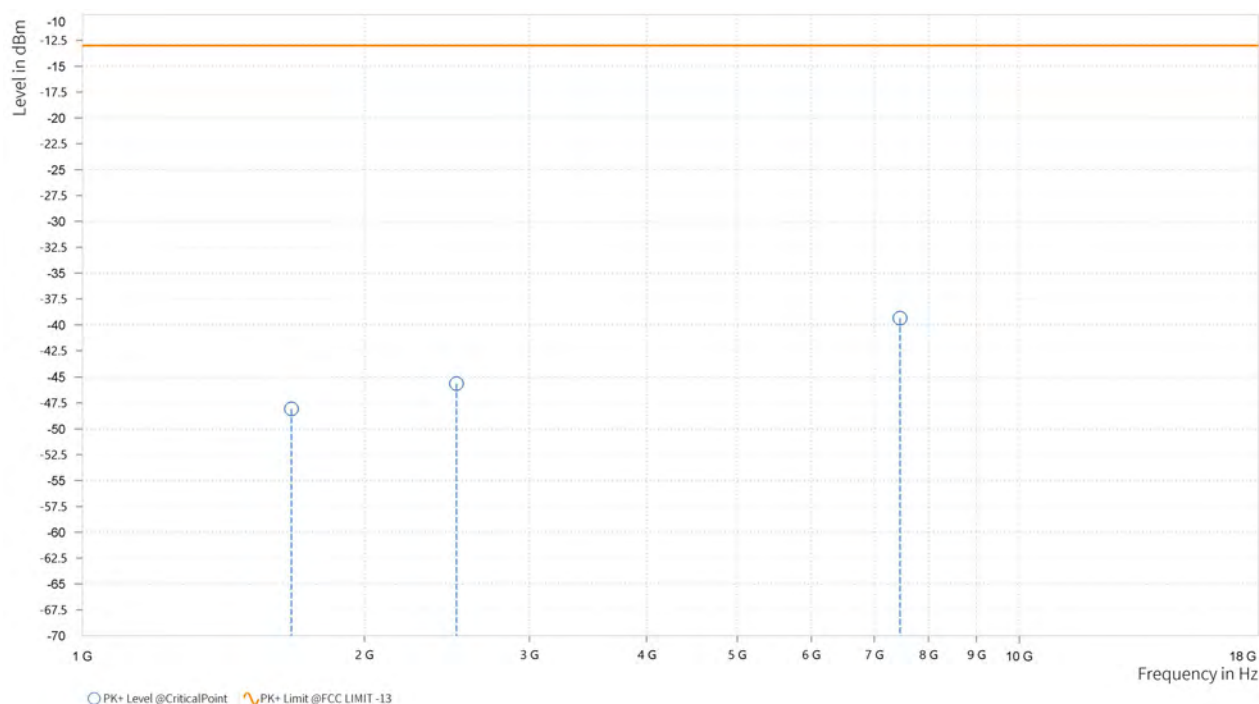
Note: For higher frequency, the emission is too low to be detected.

LTE Band 5

CHANNEL BANDWIDTH: 1.4MHz / QPSK

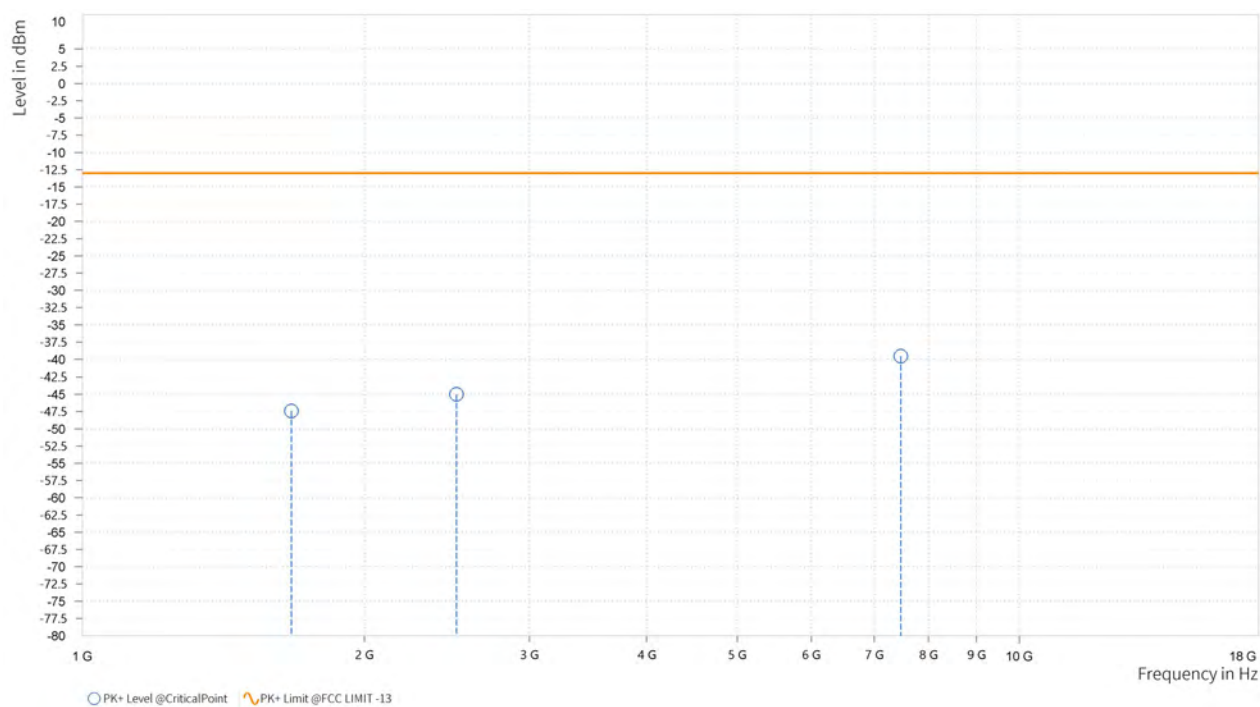
MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,672.000	-48.06	-13.00	35.06	15.09	H	297.8	2
3	2,508.000	-45.63	-13.00	32.63	20.18	H	239.3	2
5	7,458.000	-39.35	-13.00	26.35	31.72	H	359.9	1



MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

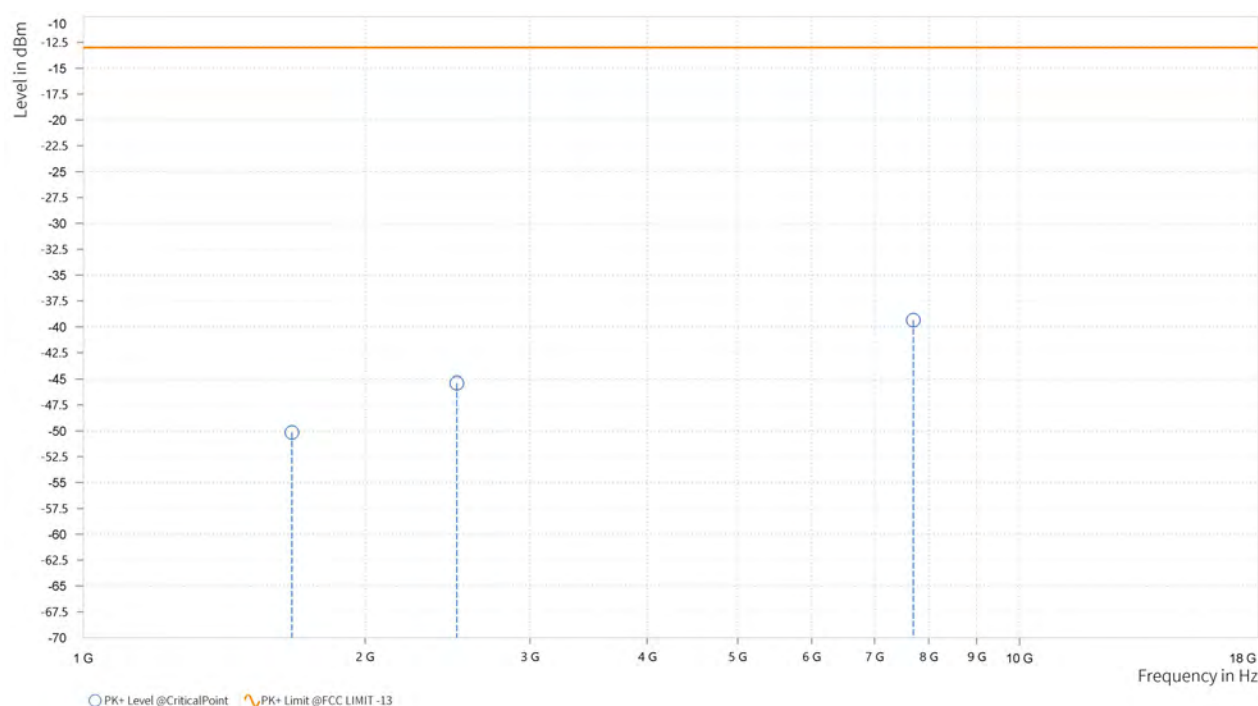
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,672.000	-47.39	-13.00	34.39	15.06	V	297.8	2
3	2,508.000	-45.01	-13.00	32.01	20.47	V	238.1	2
5	7,473.500	-39.55	-13.00	26.55	31.69	V	268.9	1



CHANNEL BANDWIDTH: 3MHz / QPSK

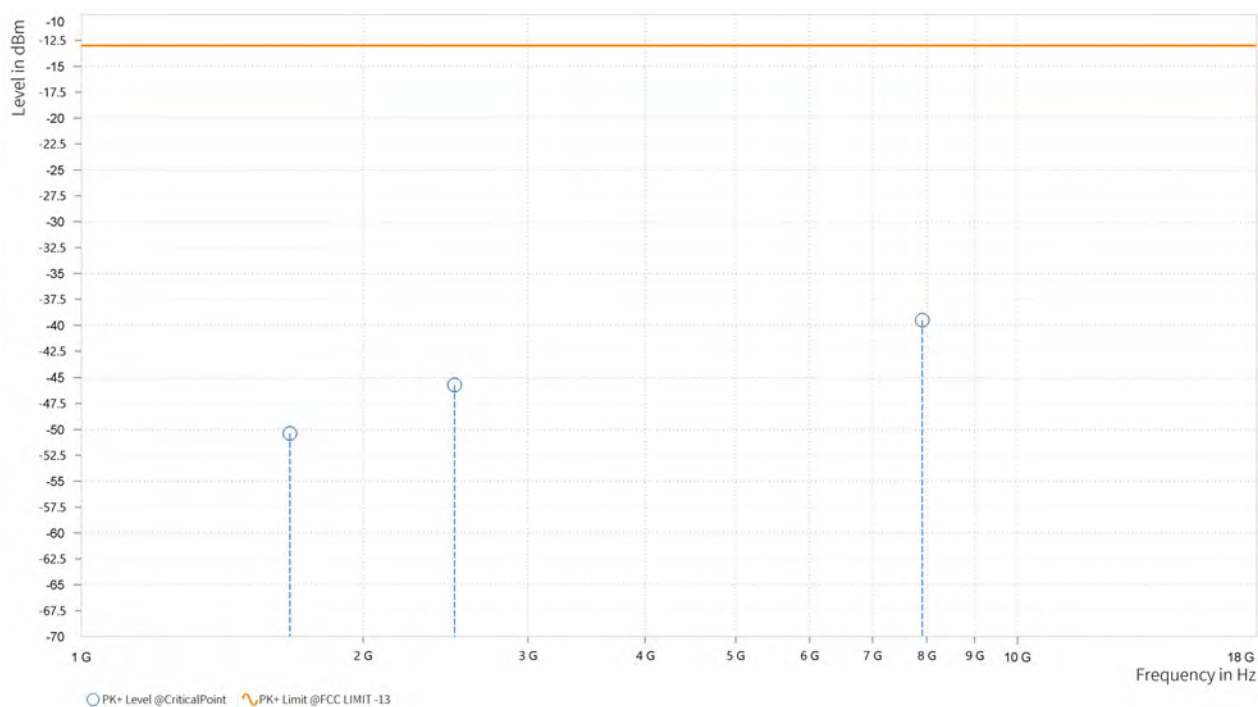
MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,670.500	-50.15	-13.00	37.15	15.02	H	297.9	2
3	2,506.000	-45.41	-13.00	32.41	20.42	H	237	2
5	7,703.000	-39.35	-13.00	26.35	32.74	H	0.1	1



MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,670.500	-50.38	-13.00	37.38	15.05	V	297.8	2
3	2,505.500	-45.70	-13.00	32.70	20.13	V	359.9	2
5	7,912.500	-39.52	-13.00	26.52	33.10	V	0.1	2

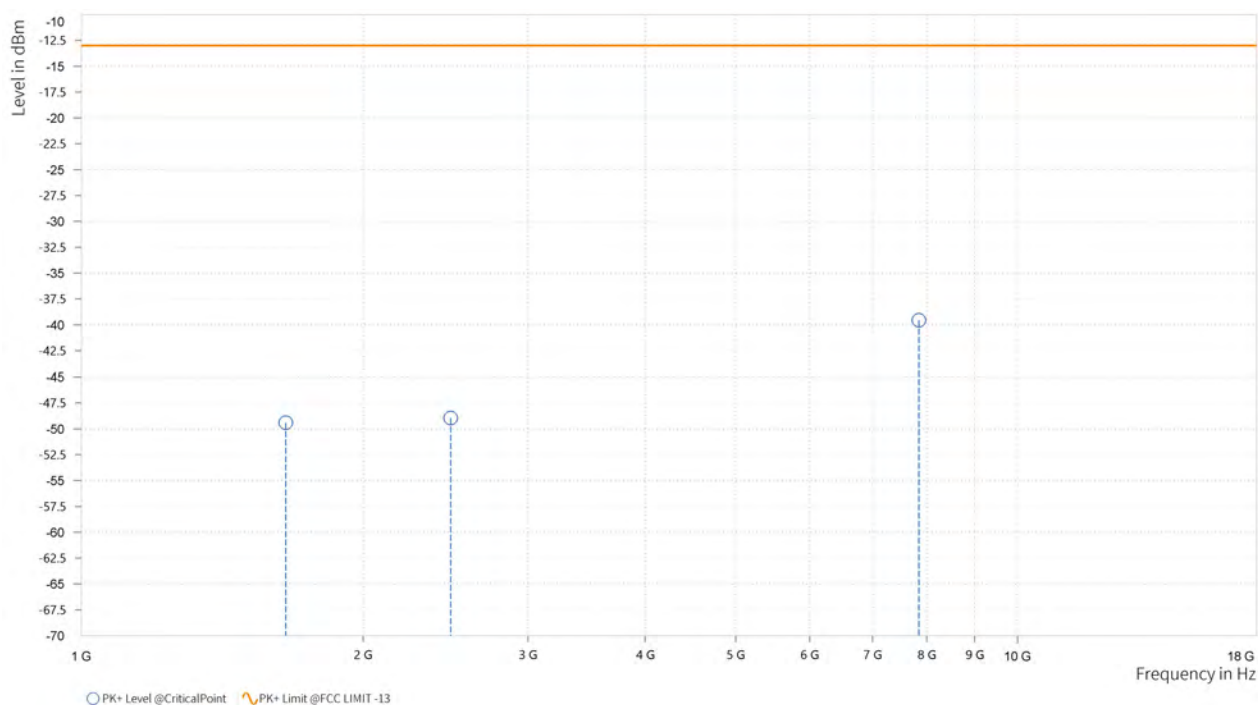


CHANNEL BANDWIDTH: 5MHz / QPSK

CH20425

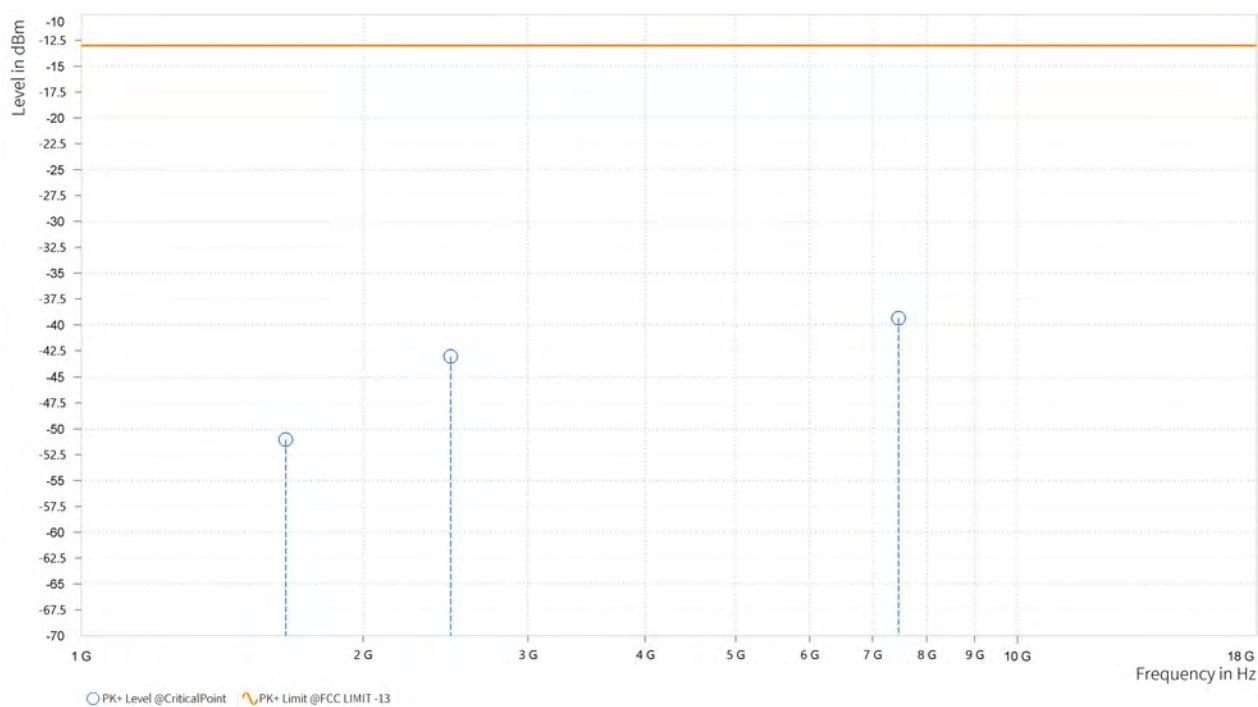
MODE	TX channel 20425	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,653.500	-49.40	-13.00	36.40	14.54	H	62	1
3	2,480.000	-48.94	-13.00	35.94	20.03	H	235.7	2
5	7,846.000	-39.57	-13.00	26.57	32.97	H	0.1	1



MODE	TX channel 20425	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

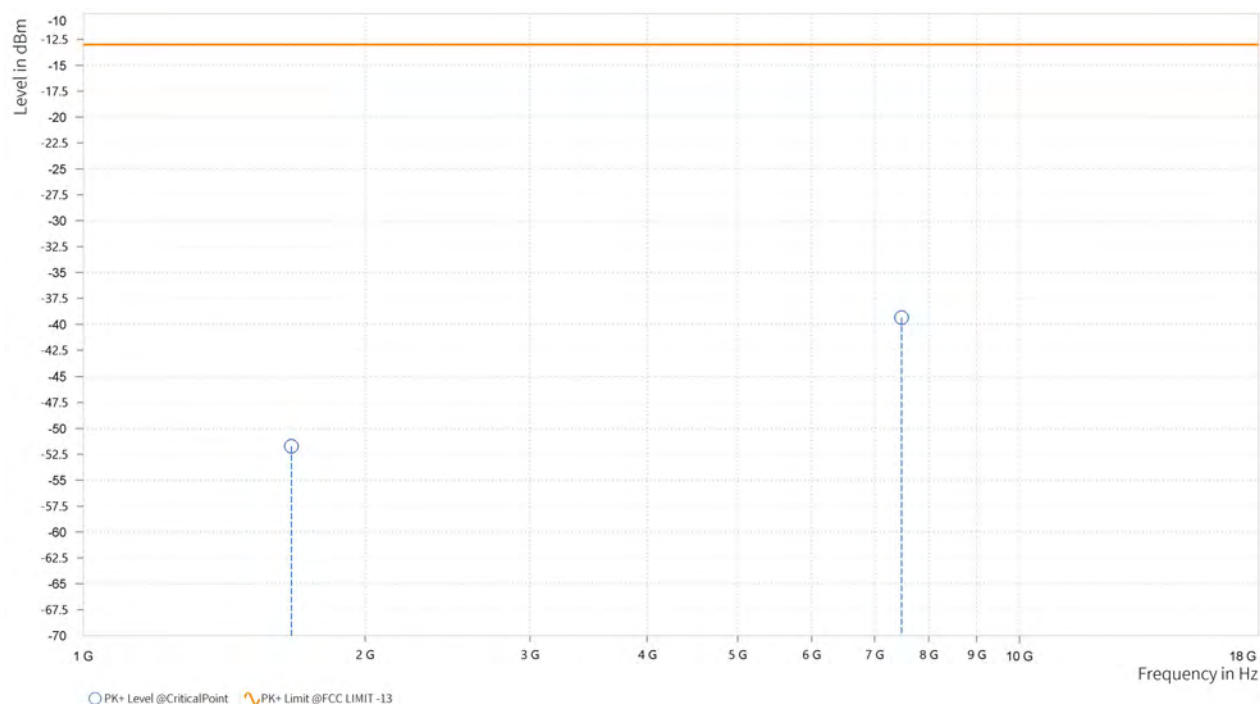
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,653.500	-51.05	-13.00	38.05	14.50	V	297.9	2
3	2,480.500	-43.07	-13.00	30.07	20.28	V	237	2
5	7,465.000	-39.35	-13.00	26.35	31.73	V	359.9	2



CH20525

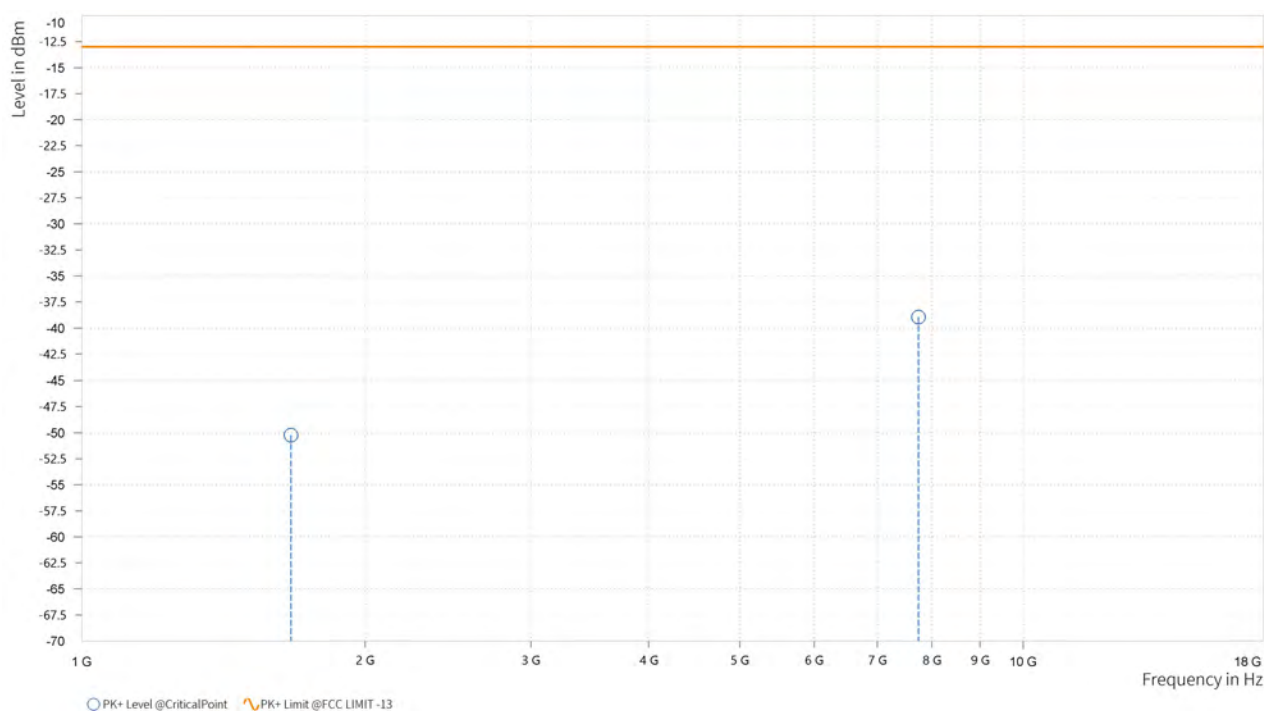
MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,668.500	-51.72	-13.00	38.72	14.98	H	359.9	2
5	7,481.500	-39.37	-13.00	26.37	31.74	H	0	2



MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

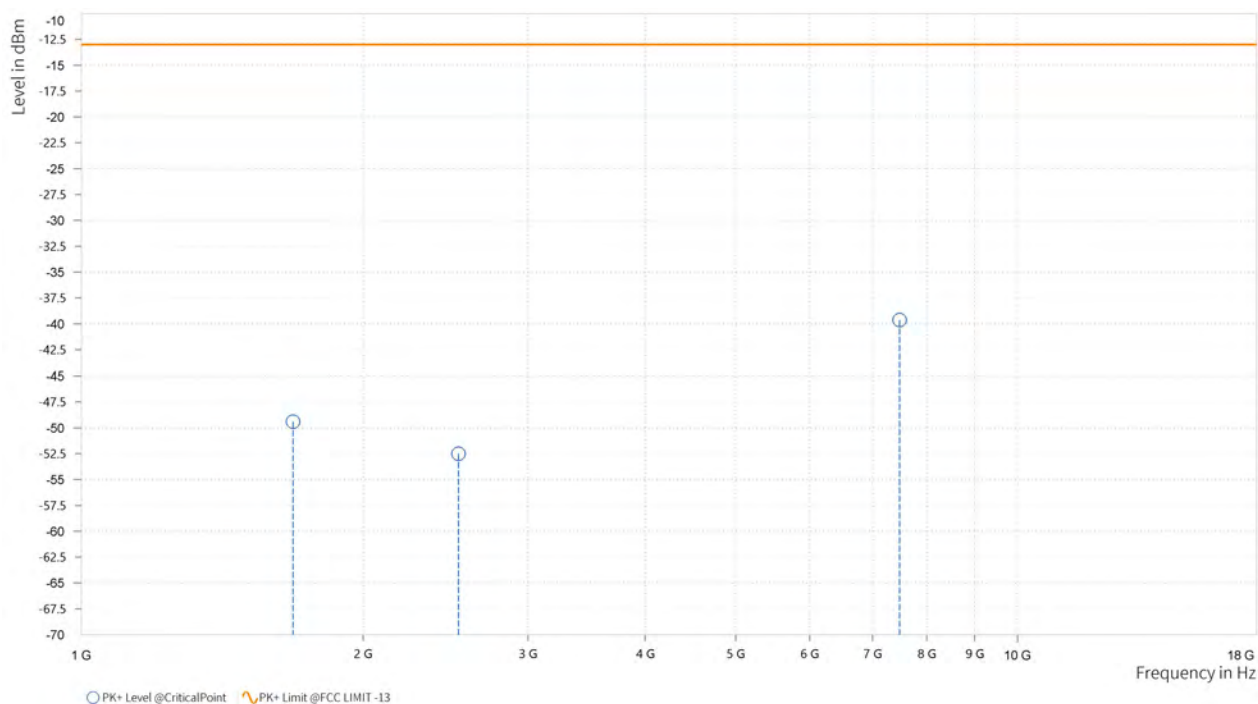
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,668.500	-50.24	-13.00	37.24	15.00	V	296.7	2
5	7,741.000	-38.95	-13.00	25.95	33.04	V	360	1



CH20625

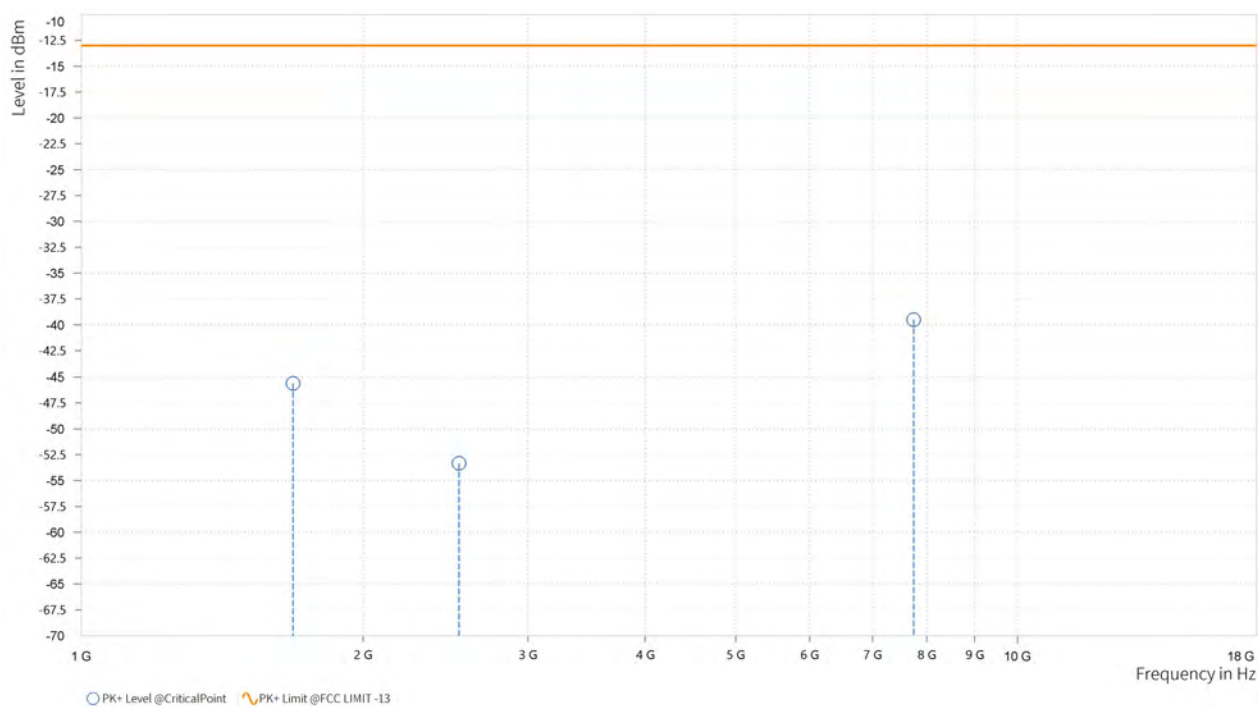
MODE	TX channel 20625	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,683.500	-49.40	-13.00	36.40	15.19	H	63.2	1
3	2,529.500	-52.50	-13.00	39.50	20.65	H	359.9	1
5	7,484.500	-39.64	-13.00	26.64	31.75	H	359.9	2



MODE	TX channel 20625	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,684.000	-45.60	-13.00	32.60	15.52	V	297.8	2
3	2,532.000	-53.33	-13.00	40.33	20.49	V	235.7	2
5	7,744.500	-39.51	-13.00	26.51	33.04	V	268.8	1



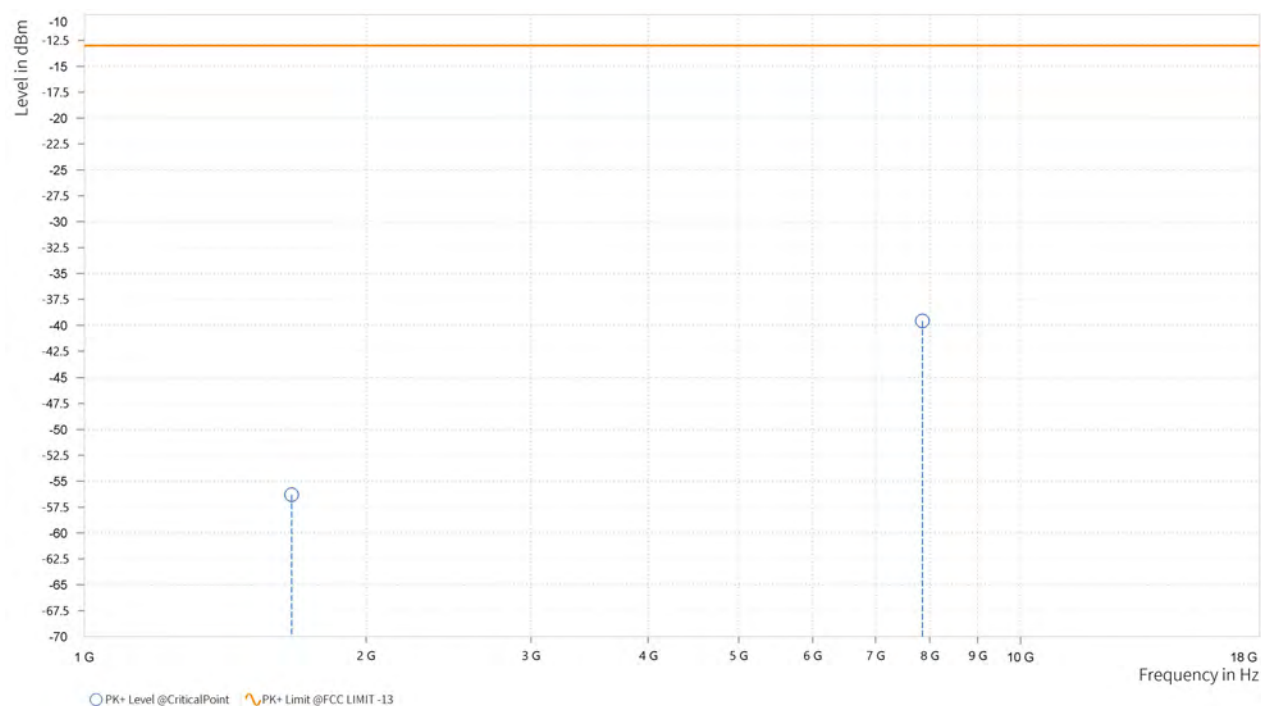


Test Report No.: W7L-P22110018RF01

CHANNEL BANDWIDTH: 10MHz / QPSK

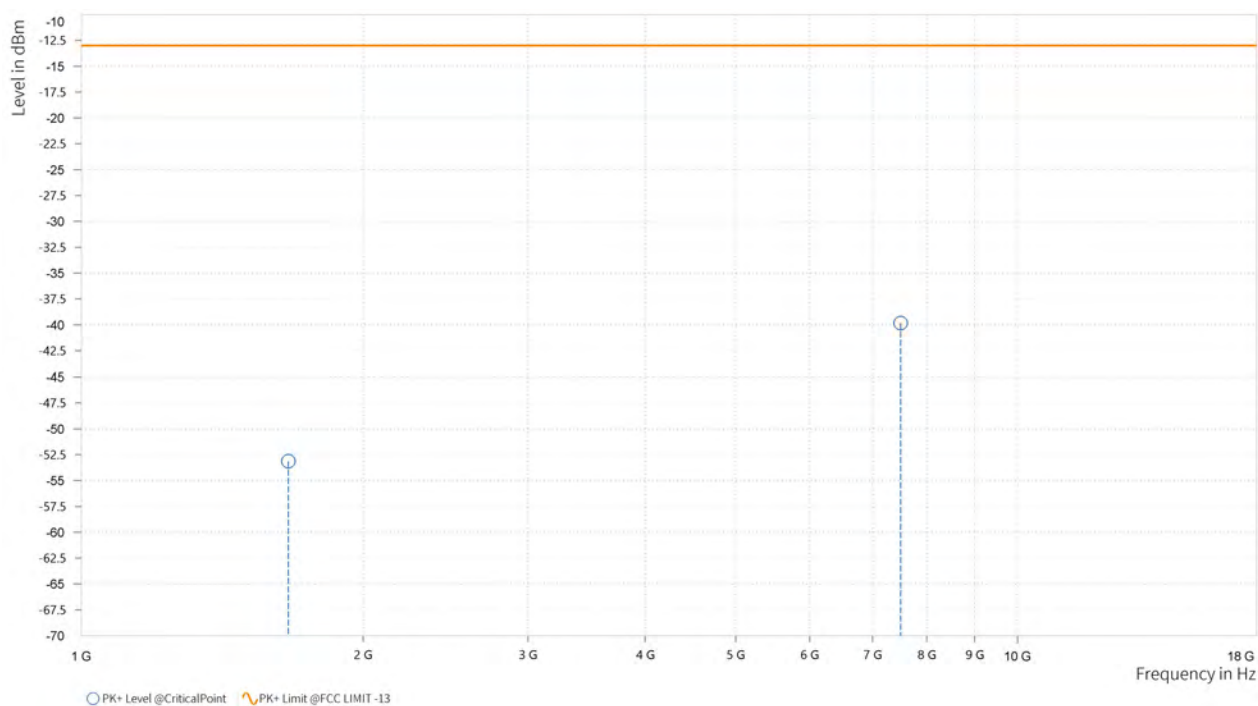
MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,665.000	-56.30	-13.00	43.30	14.90	H	359.9	2
5	7,856.000	-39.59	-13.00	26.59	32.98	H	359.9	1



MODE	TX channel 20525	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC13.7V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,664.500	-53.13	-13.00	40.13	14.90	V	72.9	1
5	7,500.000	-39.84	-13.00	26.84	31.90	V	64.9	2

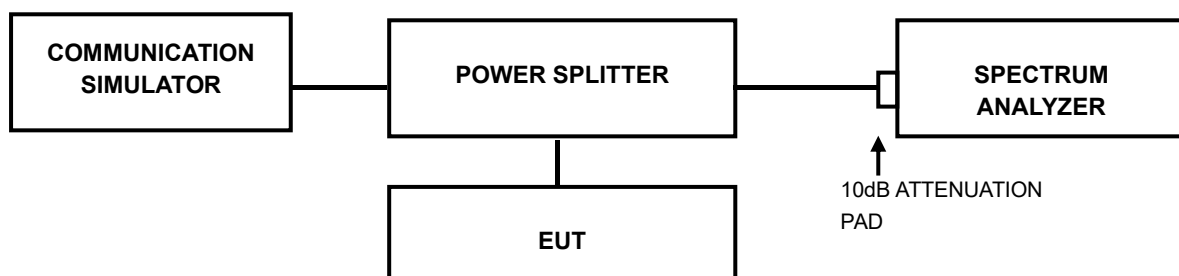


3.7 PEAK TO AVERAGE RATIO

3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

3.7.2 TEST SETUP



3.7.3 TEST PROCEDURES

1. Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.



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3.7.4 TEST RESULTS

Please Refer to Appendix A Of this test report.



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4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



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5 INFORMATION ON THE TESTING LABORATORIES

We, BV 7LAYERS COMMUNICATIONS TECHNOLOGY (SHENZHEN) CO. LTD., were founded in 2015 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Suzhou EMC/RF Lab:

Tel: +86 (0557) 368 1008



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6 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

NOTE: Please Refer to Appendix A Of this test report.



7 APPENDIX A

LTE BAND5

PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	3.52	13	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	4.36	13	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	4.13	13	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	4.75	13	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	3.71	13	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	4.46	13	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	4.55	13	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	5.24	13	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	5.09	13	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	5.64	13	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	4.66	13	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	5.38	13	PASS
Band5	3MHz	QPSK	20415	1RB#0	3.68	13	PASS
Band5	3MHz	QPSK	20415	15RB#0	4.56	13	PASS
Band5	3MHz	QPSK	20525	1RB#0	4.25	13	PASS
Band5	3MHz	QPSK	20525	15RB#0	4.85	13	PASS
Band5	3MHz	QPSK	20635	1RB#0	4.17	13	PASS
Band5	3MHz	QPSK	20635	15RB#0	4.79	13	PASS
Band5	3MHz	16QAM	20415	1RB#0	4.48	13	PASS
Band5	3MHz	16QAM	20415	15RB#0	5.41	13	PASS
Band5	3MHz	16QAM	20525	1RB#0	5.15	13	PASS
Band5	3MHz	16QAM	20525	15RB#0	5.75	13	PASS
Band5	3MHz	16QAM	20635	1RB#0	4.94	13	PASS
Band5	3MHz	16QAM	20635	15RB#0	5.78	13	PASS
Band5	5MHz	QPSK	20425	1RB#0	3.64	13	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.70	13	PASS
Band5	5MHz	QPSK	20525	1RB#0	4.46	13	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.90	13	PASS
Band5	5MHz	QPSK	20625	1RB#0	3.76	13	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.87	13	PASS
Band5	5MHz	16QAM	20425	1RB#0	4.36	13	PASS
Band5	5MHz	16QAM	20425	25RB#0	5.51	13	PASS
Band5	5MHz	16QAM	20525	1RB#0	5.39	13	PASS
Band5	5MHz	16QAM	20525	25RB#0	5.77	13	PASS
Band5	5MHz	16QAM	20625	1RB#0	4.54	13	PASS
Band5	5MHz	16QAM	20625	25RB#0	5.70	13	PASS
Band5	10MHz	QPSK	20450	1RB#0	3.71	13	PASS
Band5	10MHz	QPSK	20450	50RB#0	5.04	13	PASS
Band5	10MHz	QPSK	20525	1RB#0	4.46	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	4.77	13	PASS

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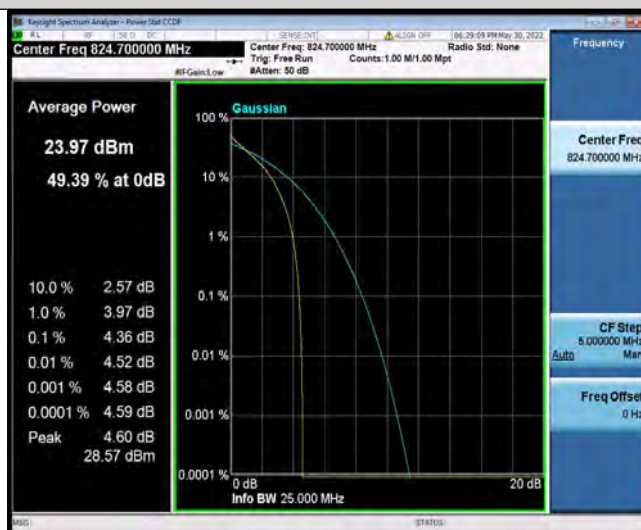
Band5	10MHz	QPSK	20600	1RB#0	3.61	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	4.79	13	PASS
Band5	10MHz	16QAM	20450	1RB#0	4.48	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	5.82	13	PASS
Band5	10MHz	16QAM	20525	1RB#0	5.36	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	5.72	13	PASS
Band5	10MHz	16QAM	20600	1RB#0	4.25	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	5.62	13	PASS

Test Graphs

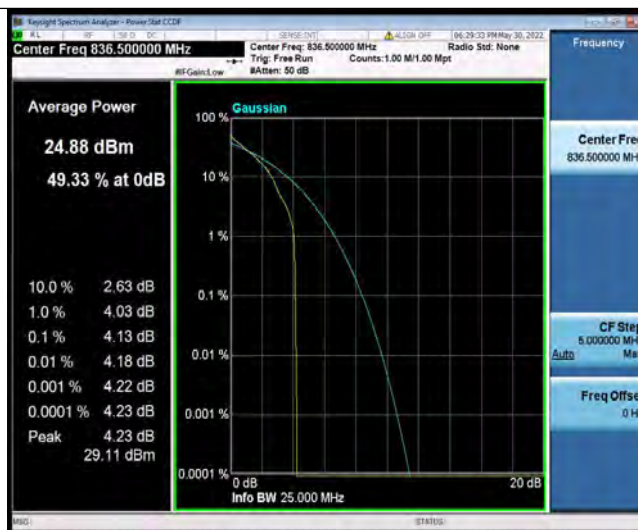
Band5-1.4MHz-QPSK-20407-1RB#0



Band5-1.4MHz-QPSK-20407-6RB#0



Band5-1.4MHz-QPSK-20525-1RB#0



Band5-1.4MHz-QPSK-20525-6RB#0



Band5-1.4MHz-QPSK-20643-1RB#0



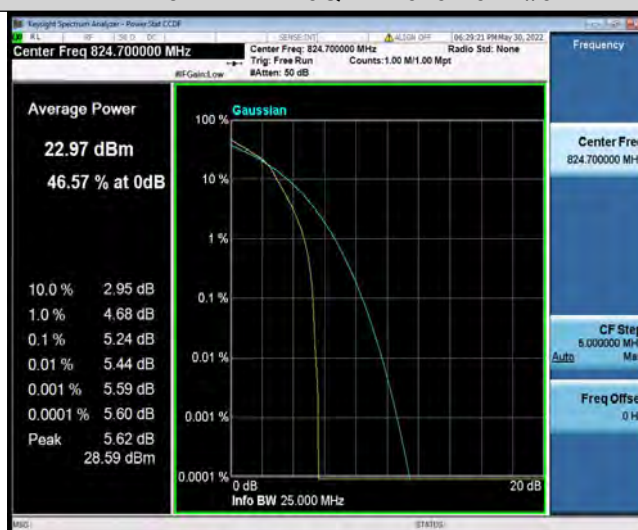
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Band5-1.4MHz-16QAM-20407-1RB#0



Band5-1.4MHz-16QAM-20407-6RB#0



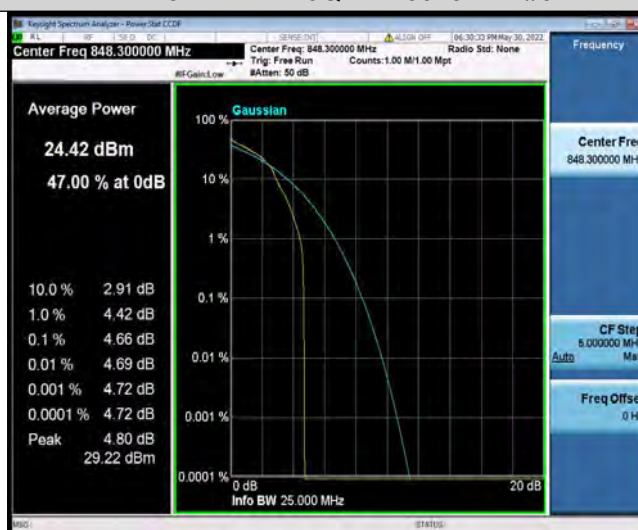
Band5-1.4MHz-16QAM-20525-1RB#0



Band5-1.4MHz-16QAM-20525-6RB#0



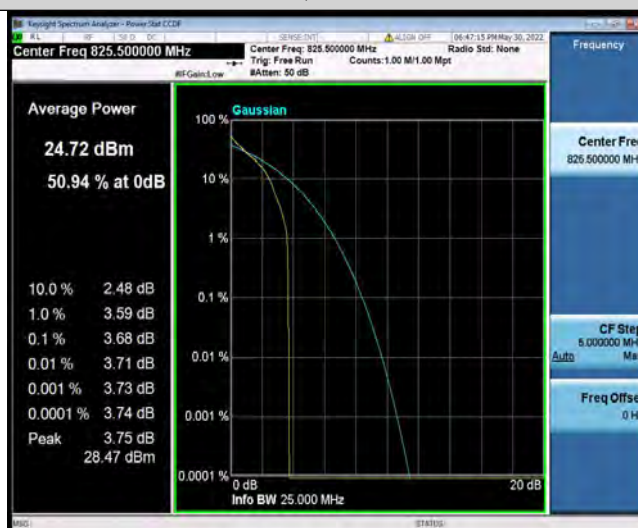
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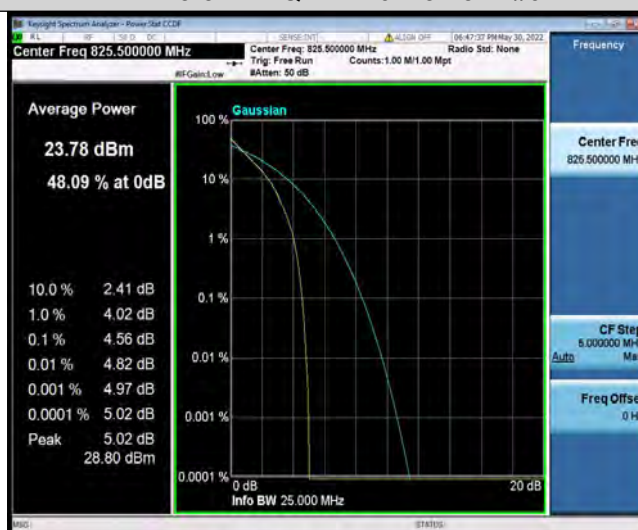
Band5-1.4MHz-16QAM-20643-6RB#0



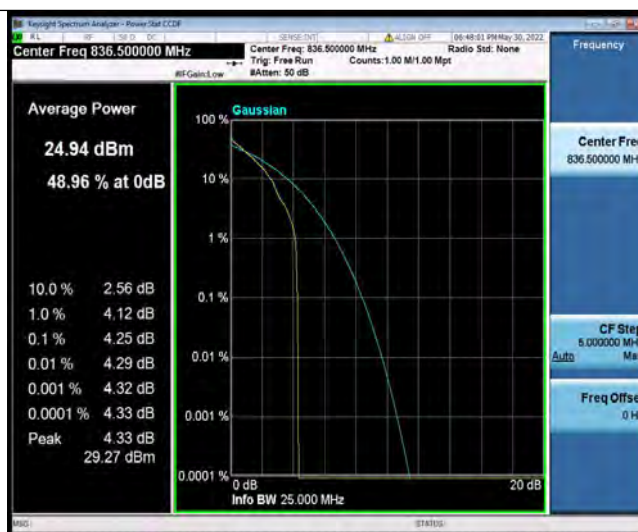
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Band5-3MHz-QPSK-20415-15RB#0



Band5-3MHz-QPSK-20525-1RB#0



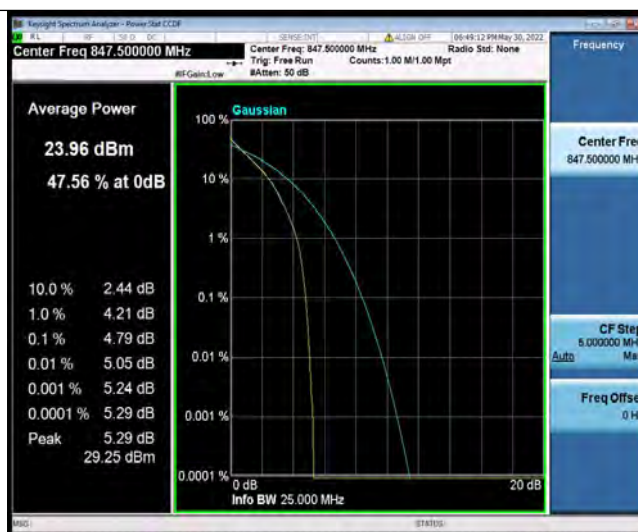
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Band5-3MHz-QPSK-20635-15RB#0



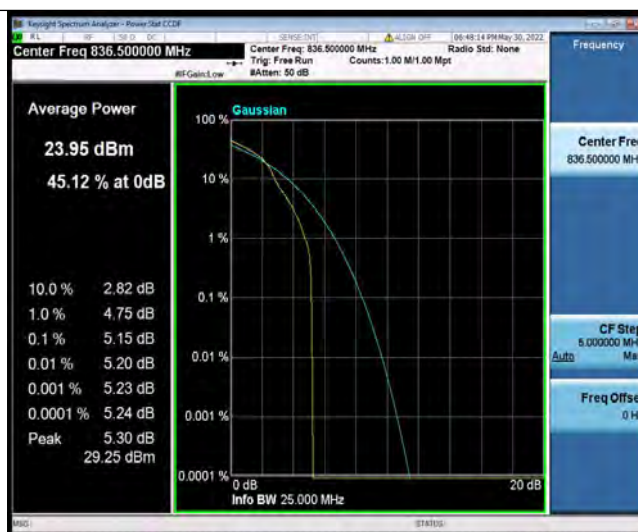
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Band5-3MHz-16QAM-20415-15RB#0



Band5-3MHz-16QAM-20525-1RB#0



Band5-3MHz-16QAM-20525-15RB#0



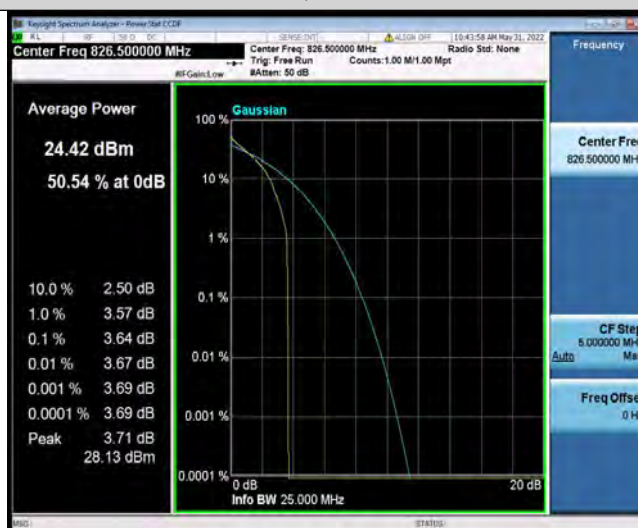
Band5-3MHz-16QAM-20635-1RB#0



Band5-3MHz-16QAM-20635-15RB#0



Band5-5MHz-QPSK-20425-1RB#0



Band5-5MHz-QPSK-20425-25RB#0



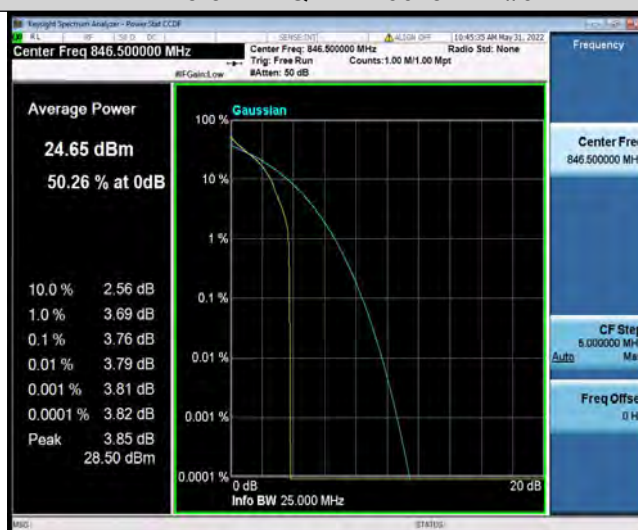
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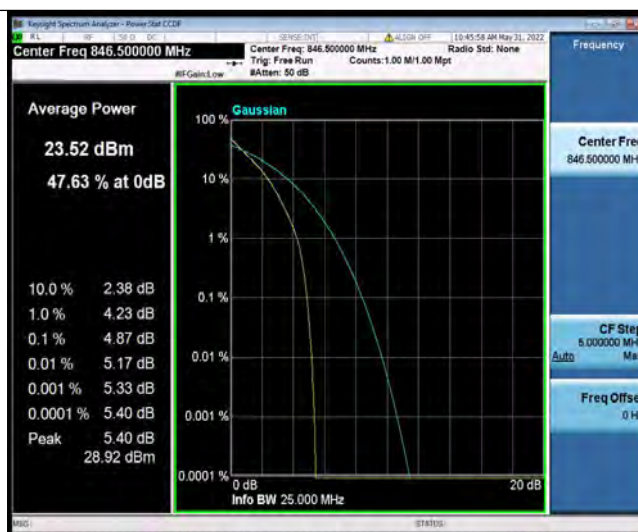
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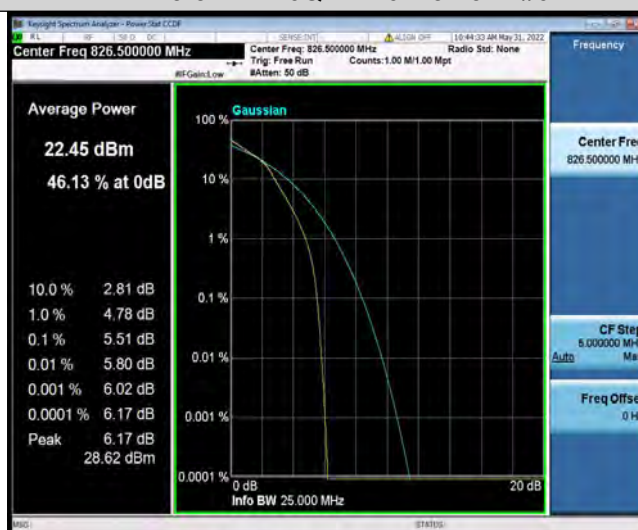
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Band5-5MHz-16QAM-20425-1RB#0



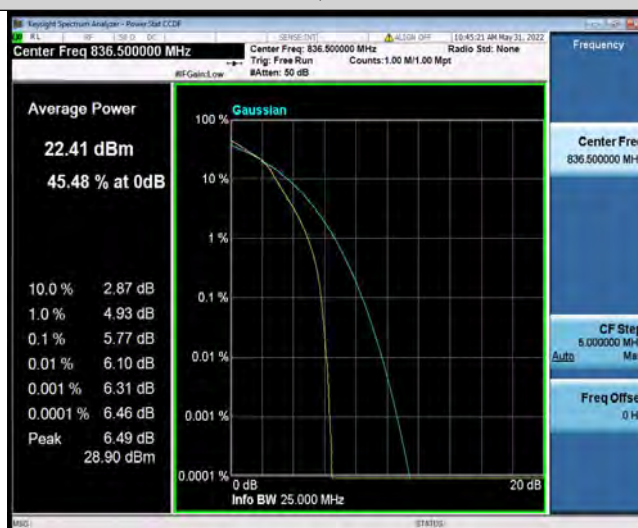
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Band5-5MHz-16QAM-20525-1RB#0



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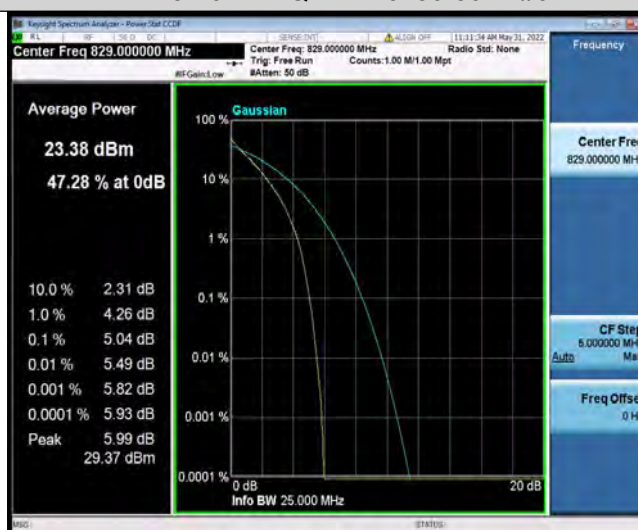
Band5-5MHz-16QAM-20625-25RB#0



Band5-10MHz-QPSK-20450-1RB#0



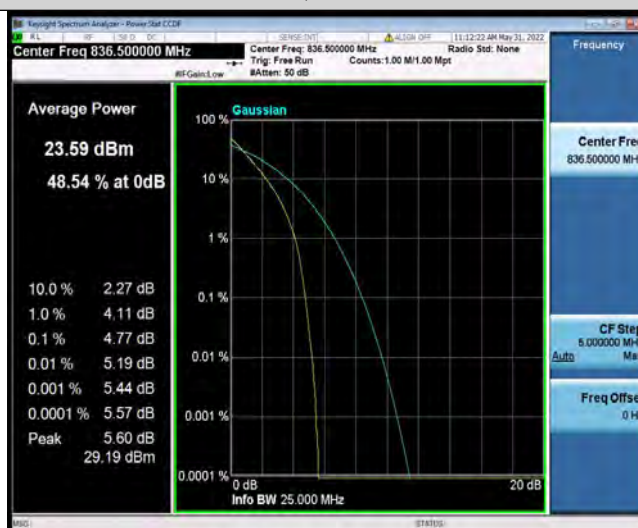
Band5-10MHz-QPSK-20450-50RB#0



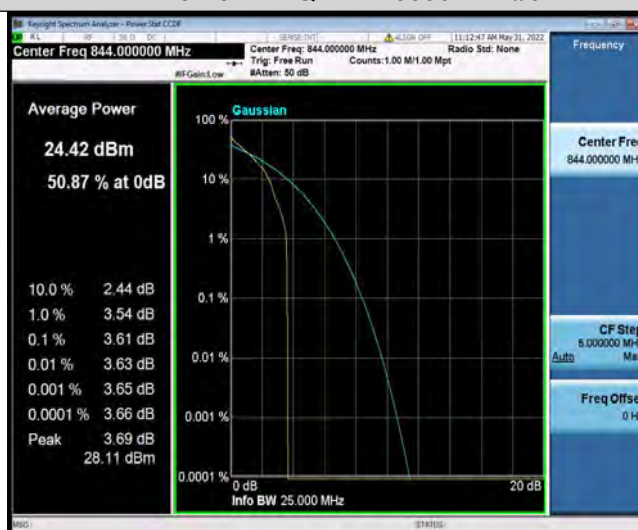
Band5-10MHz-QPSK-20525-1RB#0



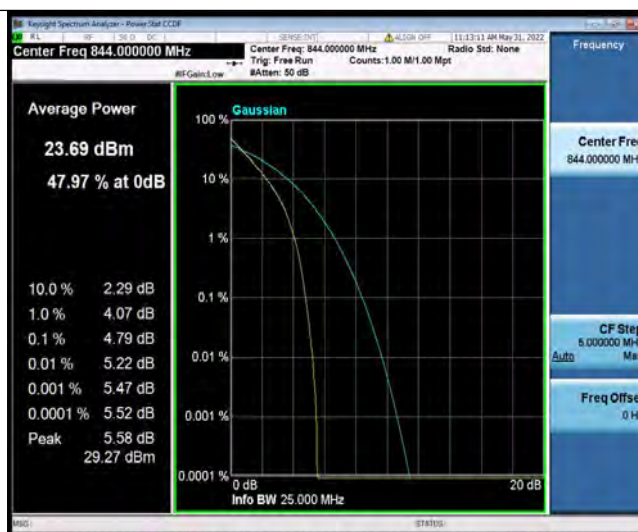
Band5-10MHz-QPSK-20525-50RB#0



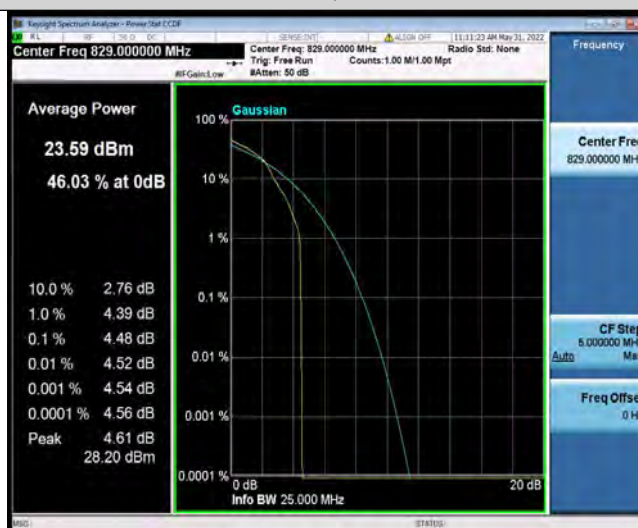
Band5-10MHz-QPSK-20600-1RB#0



Band5-10MHz-QPSK-20600-50RB#0



Band5-10MHz-16QAM-20450-1RB#0



Band5-10MHz-16QAM-20450-50RB#0



Band5-10MHz-16QAM-20525-1RB#0



Band5-10MHz-16QAM-20525-50RB#0



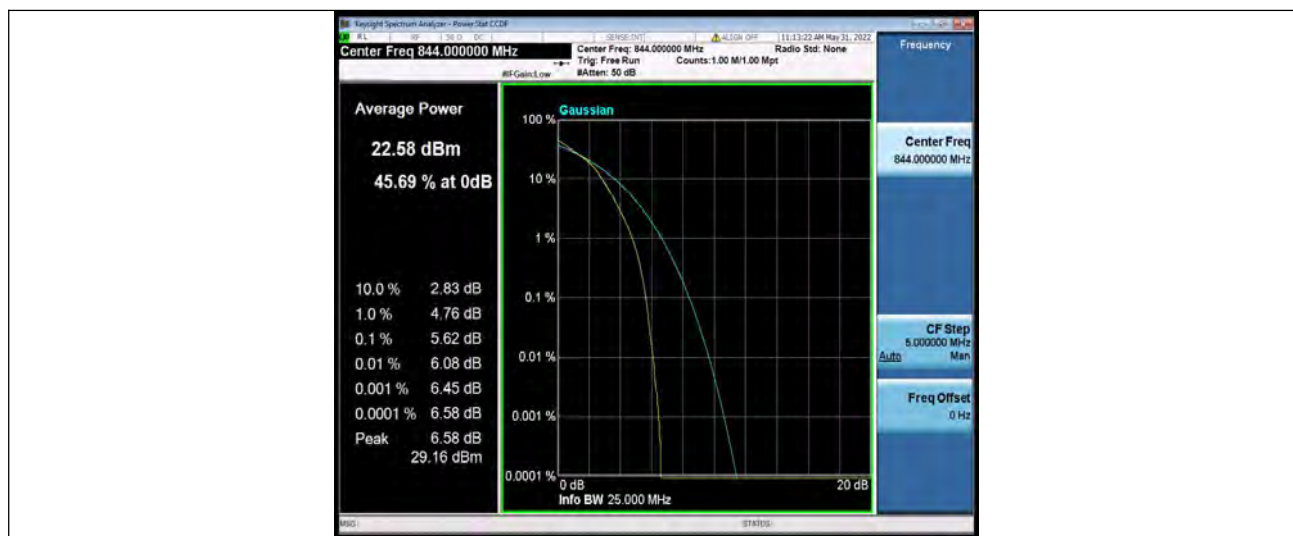
Band5-10MHz-16QAM-20600-1RB#0



Band5-10MHz-16QAM-20600-50RB#0



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26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.0947	1.260	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.0899	1.250	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.0961	1.246	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.0913	1.275	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.0894	1.236	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.0899	1.260	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.6998	2.917	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.6947	2.911	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.6904	2.879	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.6931	2.918	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.6968	2.893	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.6902	2.925	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.5005	4.902	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.4953	4.861	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.4949	4.867	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.5062	4.857	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.5041	4.872	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.5066	4.831	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.9728	9.534	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.9483	9.525	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.9801	9.573	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.9730	9.546	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.9468	9.500	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.9612	9.528	PASS



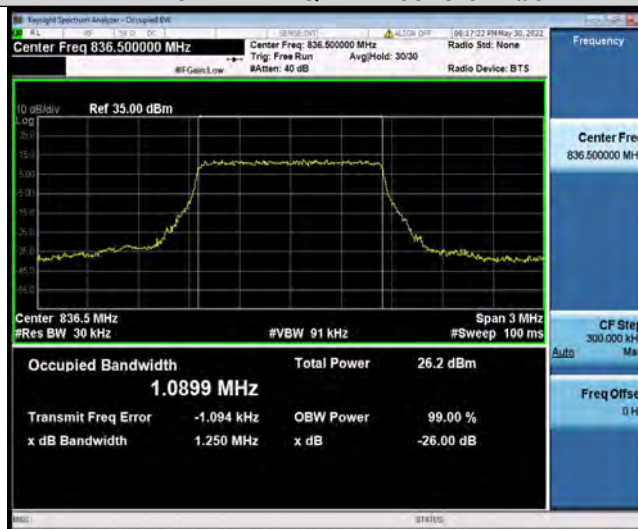
Test Report No.: W7L-P22110018RF01

Test Graphs

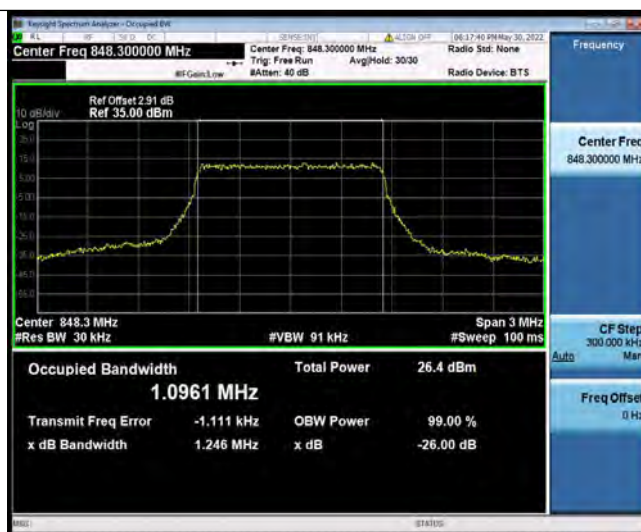
Band5-1.4MHz-QPSK-20407-6RB#0



Band5-1.4MHz-QPSK-20525-6RB#0



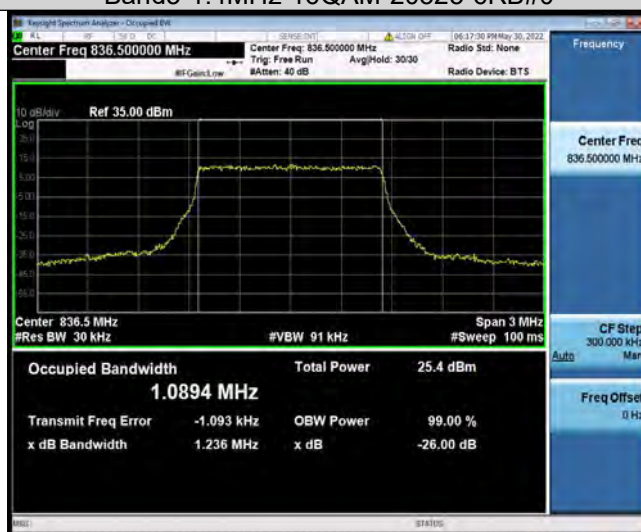
Band5-1.4MHz-QPSK-20643-6RB#0



Band5-1.4MHz-16QAM-20407-6RB#0



Band5-1.4MHz-16QAM-20525-6RB#0



Band5-1.4MHz-16QAM-20643-6RB#0



Band5-3MHz-QPSK-20415-15RB#0



Band5-3MHz-QPSK-20525-15RB#0



Band5-3MHz-QPSK-20635-15RB#0



Band5-3MHz-16QAM-20415-15RB#0



Band5-3MHz-16QAM-20525-15RB#0



Band5-3MHz-16QAM-20635-15RB#0



Band5-5MHz-QPSK-20425-25RB#0



Band5-5MHz-QPSK-20525-25RB#0



Band5-5MHz-QPSK-20625-25RB#0



Band5-5MHz-16QAM-20425-25RB#0



Band5-5MHz-16QAM-20525-25RB#0



Band5-5MHz-16QAM-20625-25RB#0



Band5-10MHz-QPSK-20450-50RB#0



Band5-10MHz-QPSK-20525-50RB#0



Band5-10MHz-QPSK-20600-50RB#0



Band5-10MHz-16QAM-20450-50RB#0



Band5-10MHz-16QAM-20525-50RB#0



Band5-10MHz-16QAM-20600-50RB#0





BAND EDGE

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	-21.52	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	-18.26	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	-17.57	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	-20.35	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	-21.28	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	-21.00	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	-17.59	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	-22.75	PASS
Band5	3MHz	QPSK	20415	1RB#0	-19.37	PASS
Band5	3MHz	QPSK	20415	15RB#0	-19.77	PASS
Band5	3MHz	QPSK	20635	1RB#14	-27.24	PASS
Band5	3MHz	QPSK	20635	15RB#0	-20.90	PASS
Band5	3MHz	16QAM	20415	1RB#0	-21.16	PASS
Band5	3MHz	16QAM	20415	15RB#0	-20.28	PASS
Band5	3MHz	16QAM	20635	1RB#14	-18.06	PASS
Band5	3MHz	16QAM	20635	15RB#0	-20.41	PASS
Band5	5MHz	QPSK	20425	1RB#0	-24.42	PASS
Band5	5MHz	QPSK	20425	25RB#0	-19.26	PASS
Band5	5MHz	QPSK	20625	1RB#24	-25.33	PASS
Band5	5MHz	QPSK	20625	25RB#0	-19.91	PASS
Band5	5MHz	16QAM	20425	1RB#0	-23.87	PASS
Band5	5MHz	16QAM	20425	25RB#0	-20.73	PASS
Band5	5MHz	16QAM	20625	1RB#24	-25.23	PASS
Band5	5MHz	16QAM	20625	25RB#0	-21.82	PASS
Band5	10MHz	QPSK	20450	1RB#0	-37.40	PASS
Band5	10MHz	QPSK	20450	50RB#0	-22.33	PASS
Band5	10MHz	QPSK	20600	1RB#49	-36.06	PASS
Band5	10MHz	QPSK	20600	50RB#0	-22.85	PASS
Band5	10MHz	16QAM	20450	1RB#0	-34.83	PASS
Band5	10MHz	16QAM	20450	50RB#0	-25.14	PASS
Band5	10MHz	16QAM	20600	1RB#49	-37.07	PASS
Band5	10MHz	16QAM	20600	50RB#0	-24.82	PASS

Test Graphs

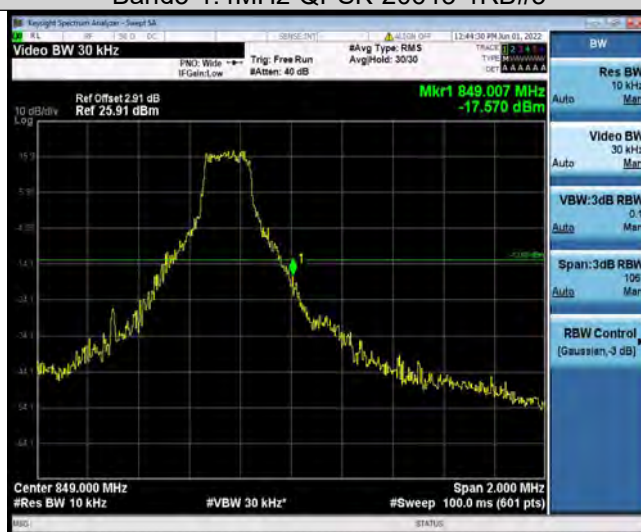
Band5-1.4MHz-QPSK-20407-1RB#0



Band5-1.4MHz-QPSK-20407-6RB#0



Band5-1.4MHz-QPSK-20643-1RB#5



Band5-1.4MHz-QPSK-20643-6RB#0



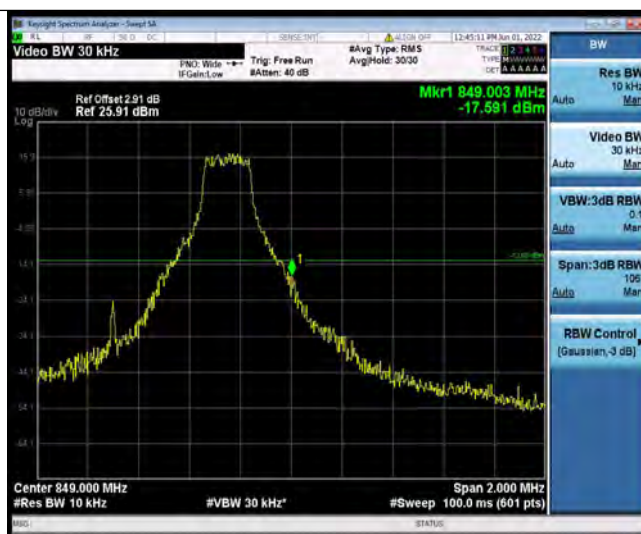
Band5-1.4MHz-16QAM-20407-1RB#0



Band5-1.4MHz-16QAM-20407-6RB#0



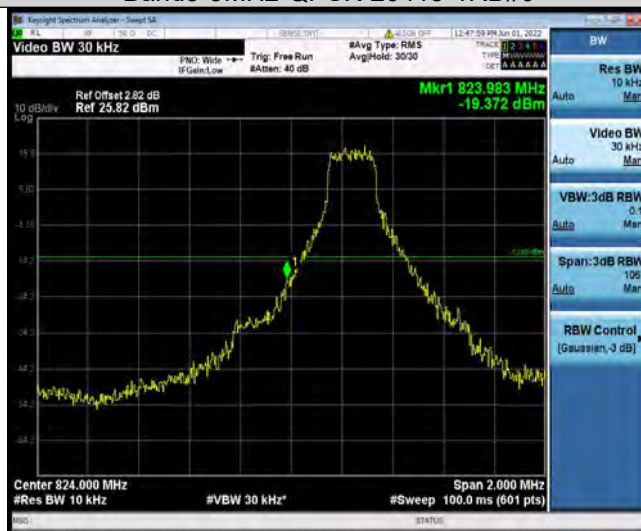
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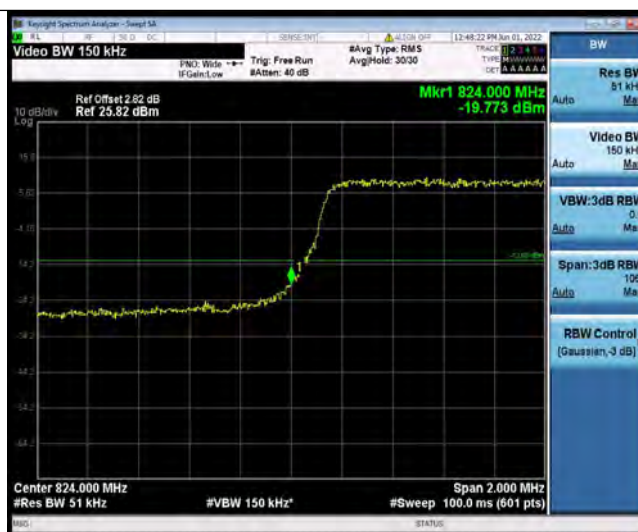
Band5-1.4MHz-16QAM-20643-6RB#0



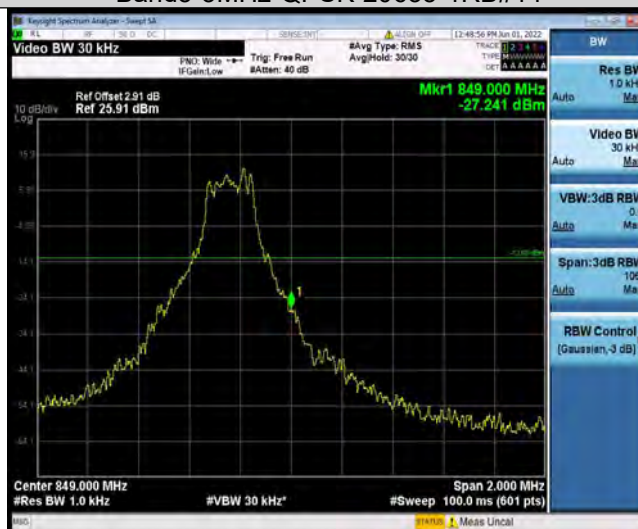
Band5-3MHz-QPSK-20415-1RB#0



Band5-3MHz-QPSK-20415-15RB#0



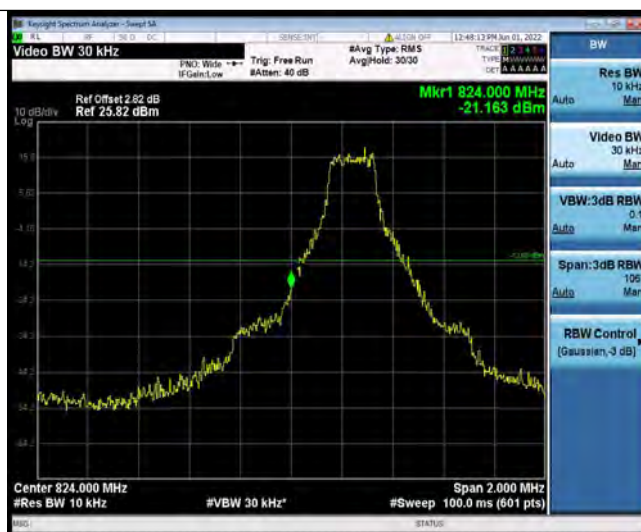
Band5-3MHz-QPSK-20635-1RB#14



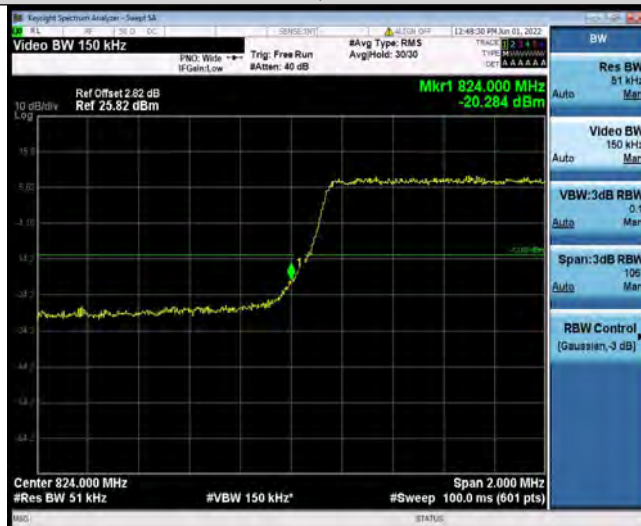
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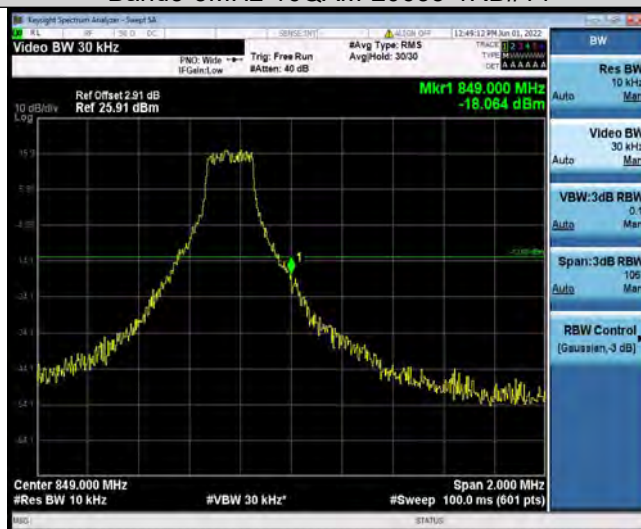
Band5-3MHz-16QAM-20415-1RB#0



Band5-3MHz-16QAM-20415-15RB#0



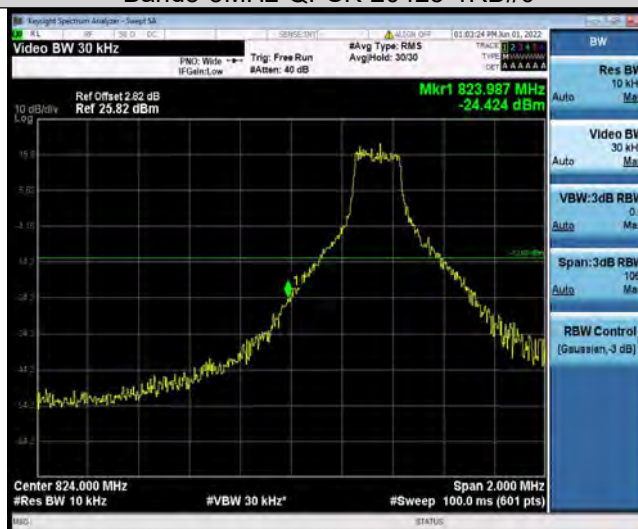
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Band5-3MHz-16QAM-20635-15RB#0



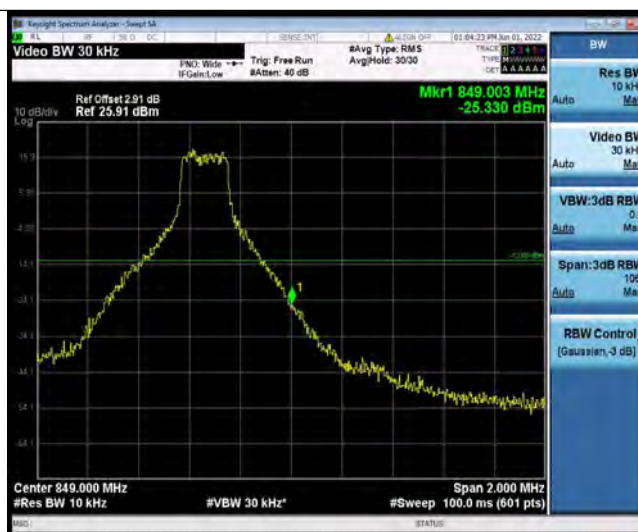
Band5-5MHz-QPSK-20425-1RB#0



Band5-5MHz-QPSK-20425-25RB#0



Band5-5MHz-QPSK-20625-1RB#24



Band5-5MHz-QPSK-20625-25RB#0



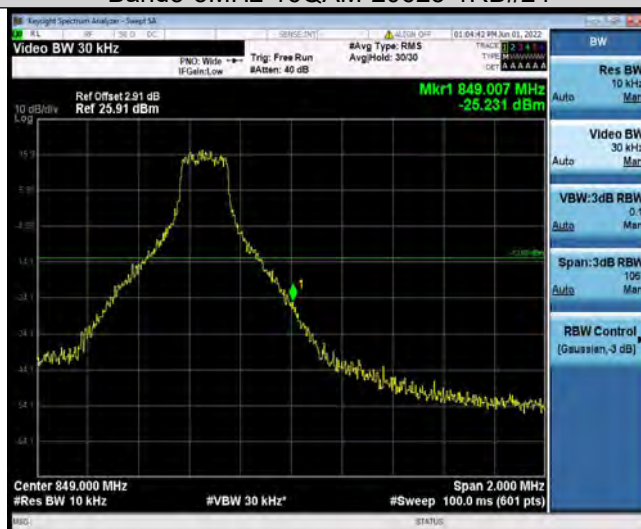
Band5-5MHz-16QAM-20425-1RB#0



Band5-5MHz-16QAM-20425-25RB#0



Band5-5MHz-16QAM-20625-1RB#24



Band5-5MHz-16QAM-20625-25RB#0



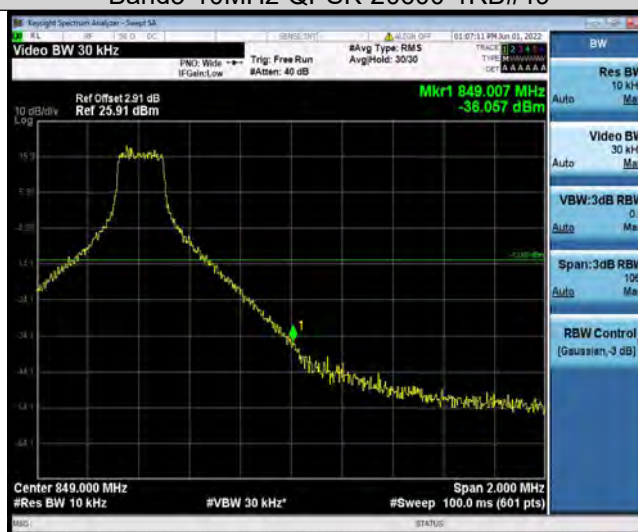
Band5-10MHz-QPSK-20450-1RB#0



Band5-10MHz-QPSK-20450-50RB#0



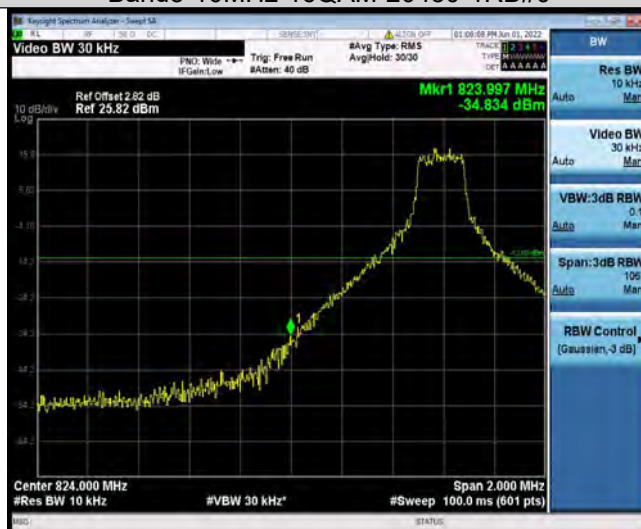
Band5-10MHz-QPSK-20600-1RB#49



Band5-10MHz-QPSK-20600-50RB#0



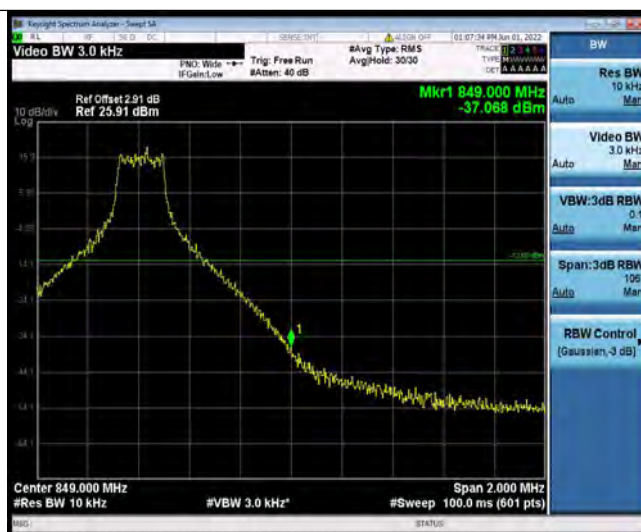
Band5-10MHz-16QAM-20450-1RB#0



Band5-10MHz-16QAM-20450-50RB#0



Band5-10MHz-16QAM-20600-1RB#49



Band5-10MHz-16QAM-20600-50RB#0



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Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	Range1:30~1000MHz	-49.5	PASS
Band5	1.4MHz	QPSK	20407	1RB#0	Range2:1000~10000MHz	-35.52	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	Range1:30~1000MHz	-49.25	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	Range2:1000~10000MHz	-32.39	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	Range1:30~1000MHz	-49.73	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	Range2:1000~10000MHz	-28.32	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	Range1:30~1000MHz	-50.34	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	Range2:1000~10000MHz	-36.36	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	Range1:30~1000MHz	-49.26	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	Range2:1000~10000MHz	-30.16	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	Range1:30~1000MHz	-48.97	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	Range2:1000~10000MHz	-31.14	PASS
Band5	3MHz	QPSK	20415	1RB#0	Range1:30~1000MHz	-49.56	PASS
Band5	3MHz	QPSK	20415	1RB#0	Range2:1000~10000MHz	-32.14	PASS
Band5	3MHz	QPSK	20525	1RB#0	Range1:30~1000MHz	-49.72	PASS
Band5	3MHz	QPSK	20525	1RB#0	Range2:1000~10000MHz	-32.23	PASS
Band5	3MHz	QPSK	20635	1RB#0	Range1:30~1000MHz	-49.23	PASS
Band5	3MHz	QPSK	20635	1RB#0	Range2:1000~10000MHz	-32.06	PASS
Band5	3MHz	16QAM	20415	1RB#0	Range1:30~1000MHz	-49.96	PASS
Band5	3MHz	16QAM	20415	1RB#0	Range2:1000~10000MHz	-31.81	PASS
Band5	3MHz	16QAM	20525	1RB#0	Range1:30~1000MHz	-50.63	PASS
Band5	3MHz	16QAM	20525	1RB#0	Range2:1000~10000MHz	-29.33	PASS
Band5	3MHz	16QAM	20635	1RB#0	Range1:30~1000MHz	-50.26	PASS
Band5	3MHz	16QAM	20635	1RB#0	Range2:1000~10000MHz	-35.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	Range1:30~1000MHz	-49.76	PASS
Band5	5MHz	QPSK	20425	1RB#0	Range2:1000~10000MHz	-36.1	PASS
Band5	5MHz	QPSK	20525	1RB#0	Range1:30~1000MHz	-49.38	PASS
Band5	5MHz	QPSK	20525	1RB#0	Range2:1000~10000MHz	-33.16	PASS
Band5	5MHz	QPSK	20625	1RB#0	Range1:30~1000MHz	-49.76	PASS
Band5	5MHz	QPSK	20625	1RB#0	Range2:1000~10000MHz	-30.24	PASS
Band5	5MHz	16QAM	20425	1RB#0	Range1:30~1000MHz	-49.65	PASS
Band5	5MHz	16QAM	20425	1RB#0	Range2:1000~10000MHz	-33.05	PASS
Band5	5MHz	16QAM	20525	1RB#0	Range1:30~1000MHz	-49.76	PASS
Band5	5MHz	16QAM	20525	1RB#0	Range2:1000~10000MHz	-31.23	PASS
Band5	5MHz	16QAM	20625	1RB#0	Range1:30~1000MHz	-48.98	PASS
Band5	5MHz	16QAM	20625	1RB#0	Range2:1000~10000MHz	-29.69	PASS
Band5	10MHz	QPSK	20450	1RB#0	Range1:30~1000MHz	-50.03	PASS
Band5	10MHz	QPSK	20450	1RB#0	Range2:1000~10000MHz	-29.62	PASS
Band5	10MHz	QPSK	20525	1RB#0	Range1:30~1000MHz	-50.41	PASS
Band5	10MHz	QPSK	20525	1RB#0	Range2:1000~10000MHz	-28.29	PASS
Band5	10MHz	QPSK	20600	1RB#0	Range1:30~1000MHz	-50.36	PASS
Band5	10MHz	QPSK	20600	1RB#0	Range2:1000~10000MHz	-35.24	PASS
Band5	10MHz	16QAM	20450	1RB#0	Range1:30~1000MHz	-49.91	PASS
Band5	10MHz	16QAM	20450	1RB#0	Range2:1000~10000MHz	-37.16	PASS

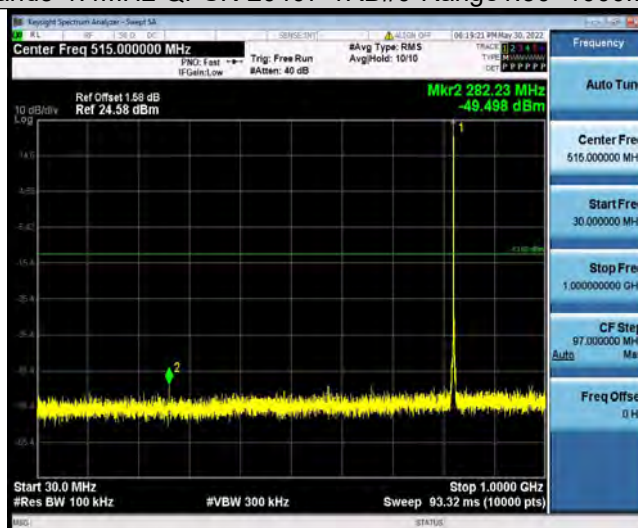


Test Report No.: W7L-P22110018RF01

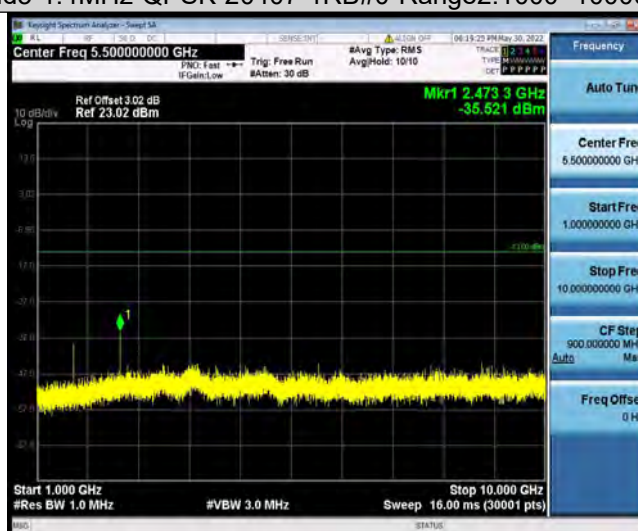
Band5	10MHz	16QAM	20525	1RB#0	Range1:30~1000MHz	-50.16	PASS
Band5	10MHz	16QAM	20525	1RB#0	Range2:1000~10000MHz	-28.88	PASS
Band5	10MHz	16QAM	20600	1RB#0	Range1:30~1000MHz	-50.46	PASS
Band5	10MHz	16QAM	20600	1RB#0	Range2:1000~10000MHz	-36.04	PASS

Test Graphs

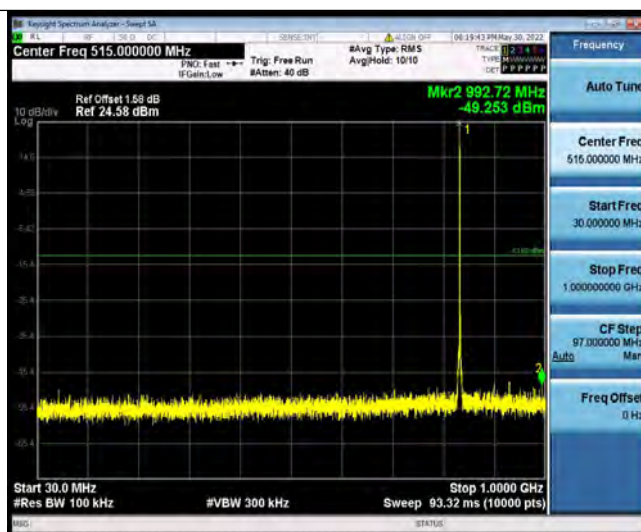
Band5-1.4MHz-QPSK-20407-1RB#0-Range1:30~1000MHz



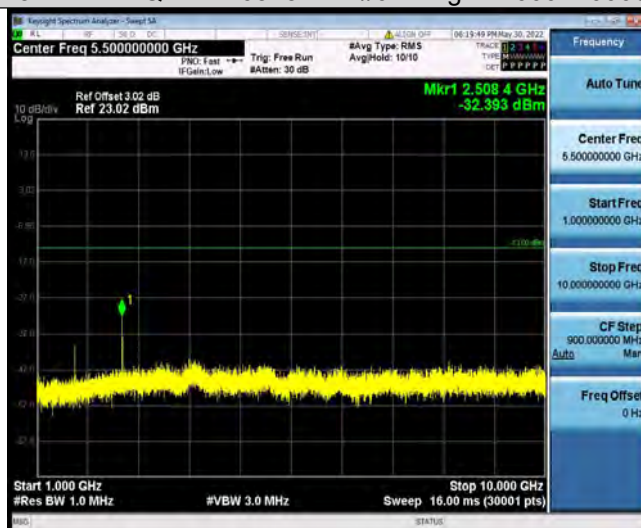
Band5-1.4MHz-QPSK-20407-1RB#0-Range2:1000~10000MHz



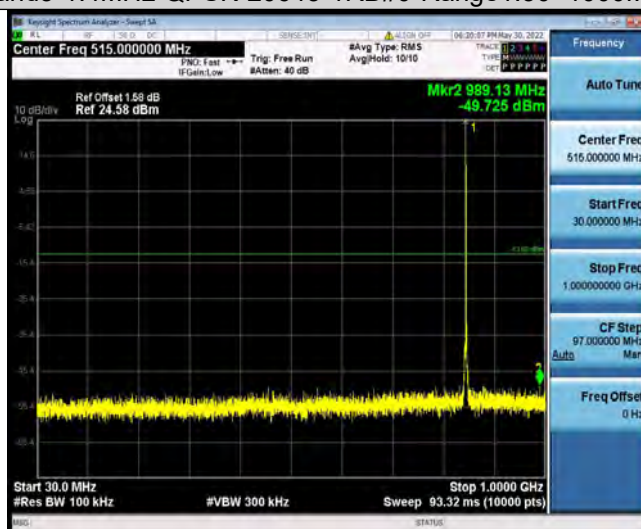
Band5-1.4MHz-QPSK-20525-1RB#0-Range1:30~1000MHz



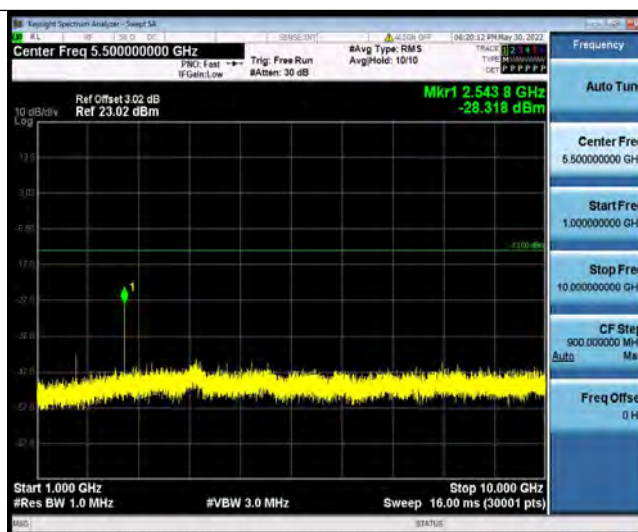
Band5-1.4MHz-QPSK-20525-1RB#0-Range2:1000~10000MHz



Band5-1.4MHz-QPSK-20643-1RB#0-Range1:30~1000MHz



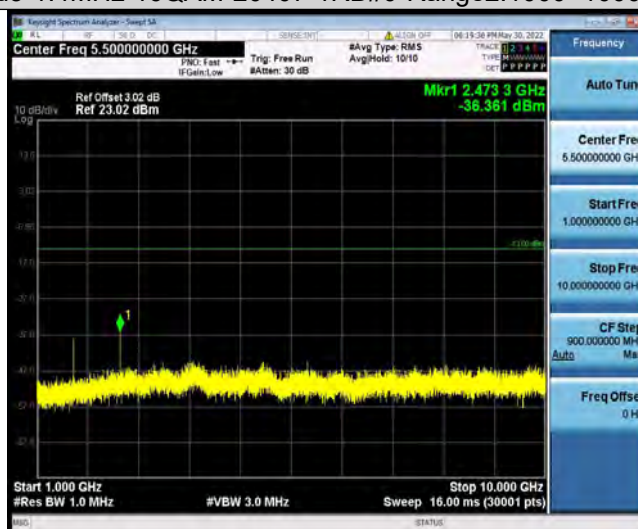
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Band5-1.4MHz-16QAM-20407-1RB#0-Range1:30~1000MHz



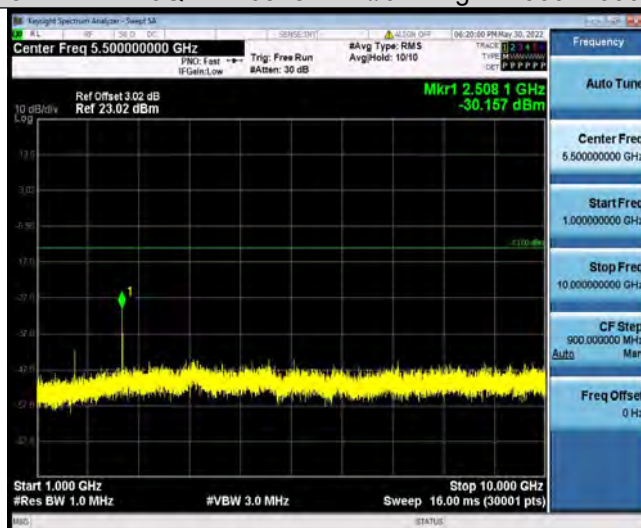
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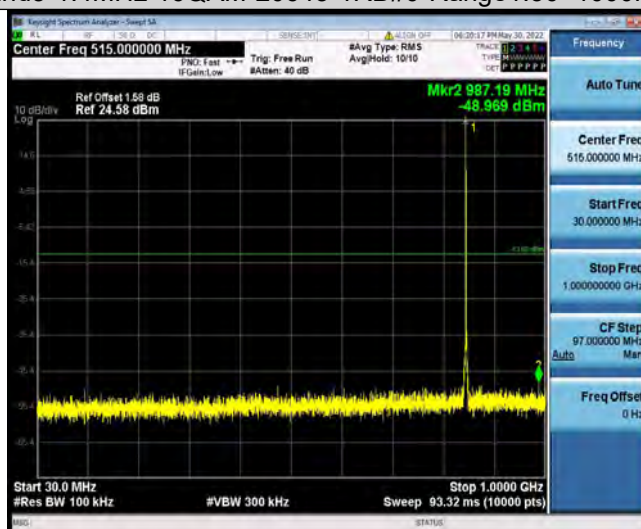
Band5-1.4MHz-16QAM-20525-1RB#0-Range1:30~1000MHz



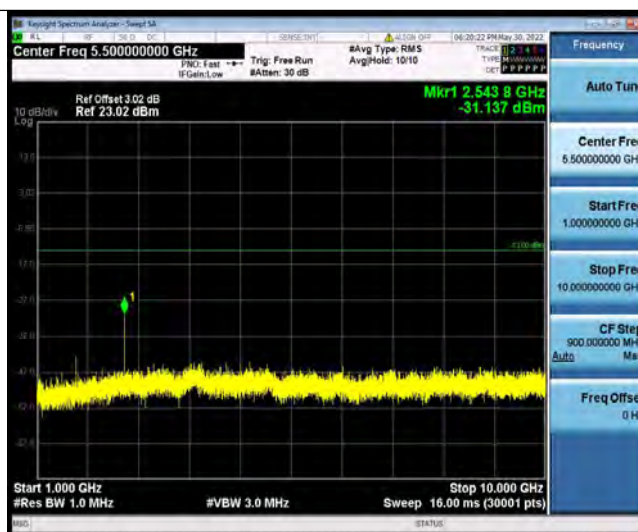
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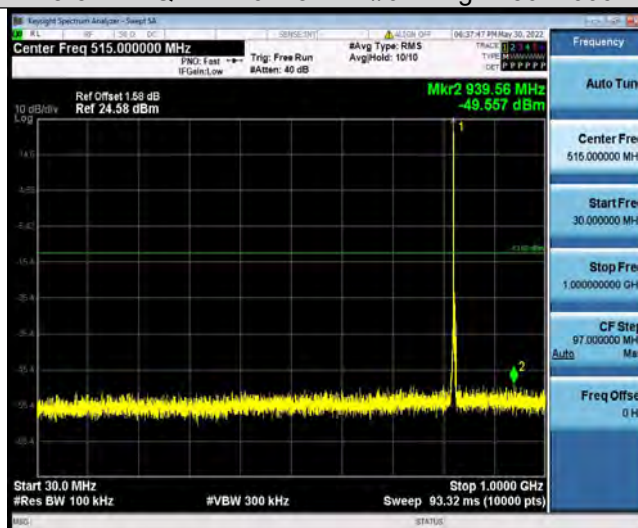
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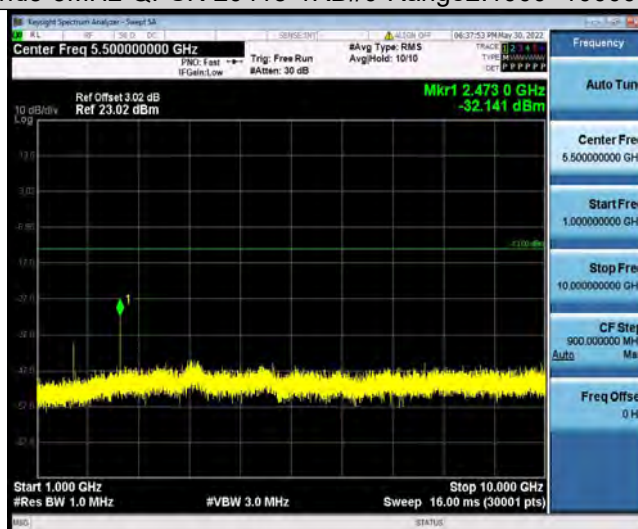
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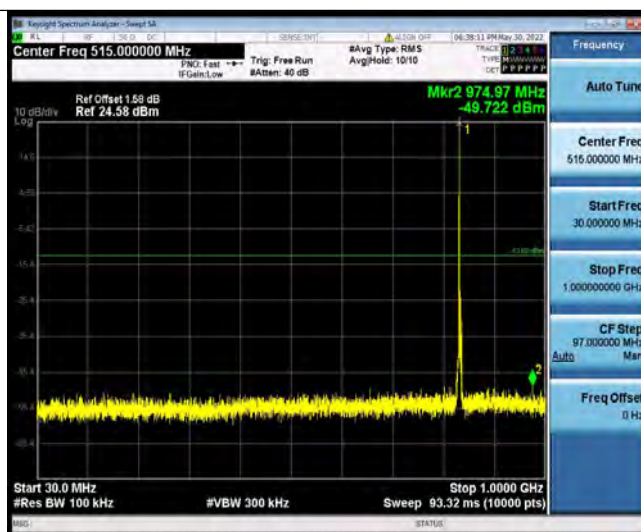
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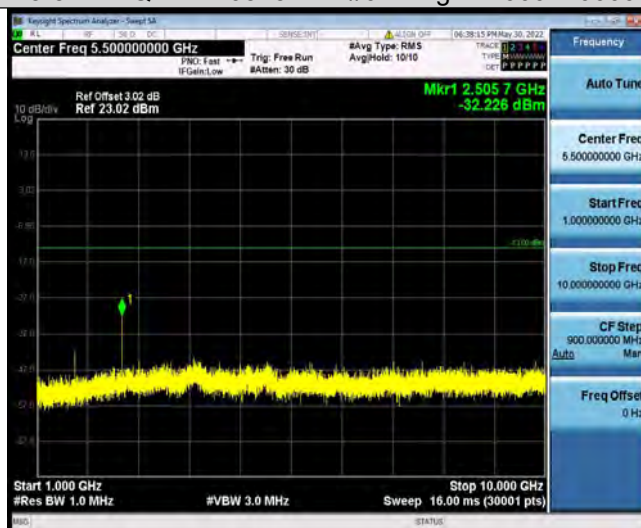
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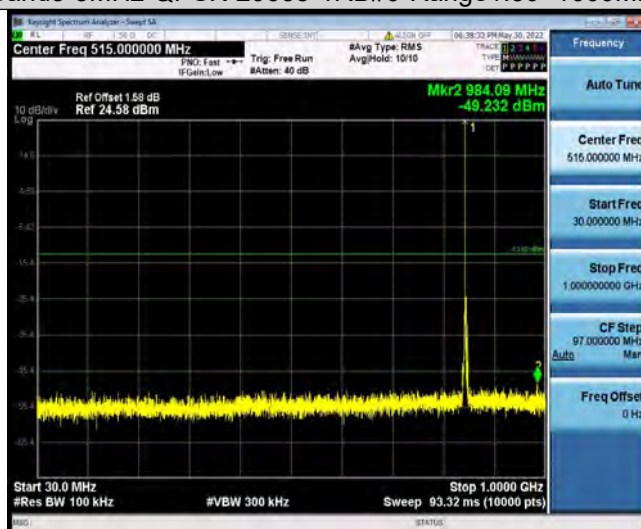
Band5-3MHz-QPSK-20525-1RB#0-Range1:30~1000MHz



Band5-3MHz-QPSK-20525-1RB#0-Range2:1000~10000MHz



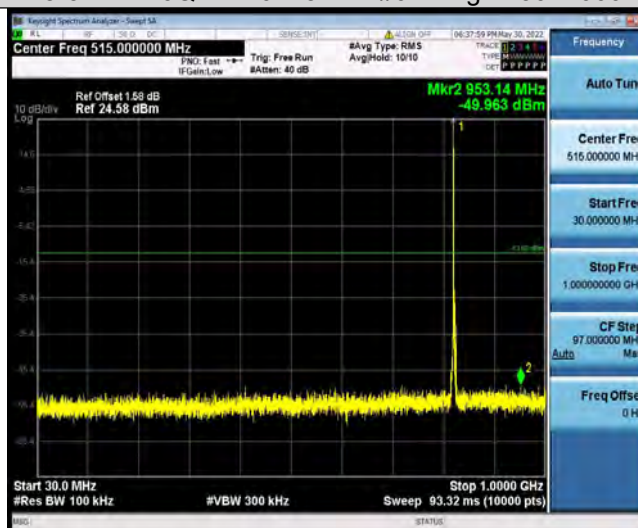
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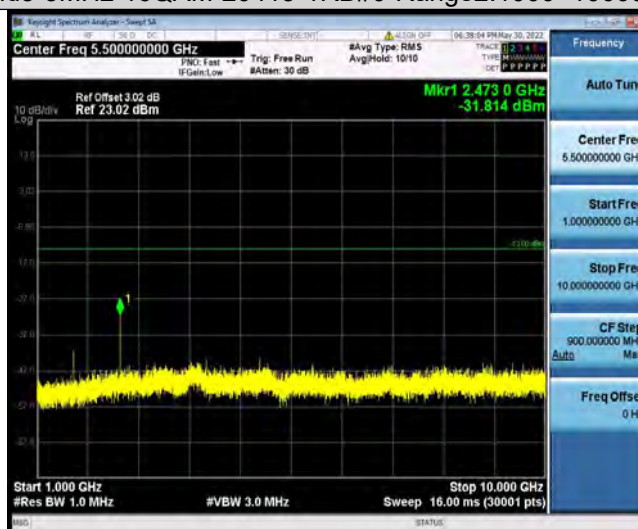
Band5-3MHz-QPSK-20635-1RB#0-Range2:1000~10000MHz



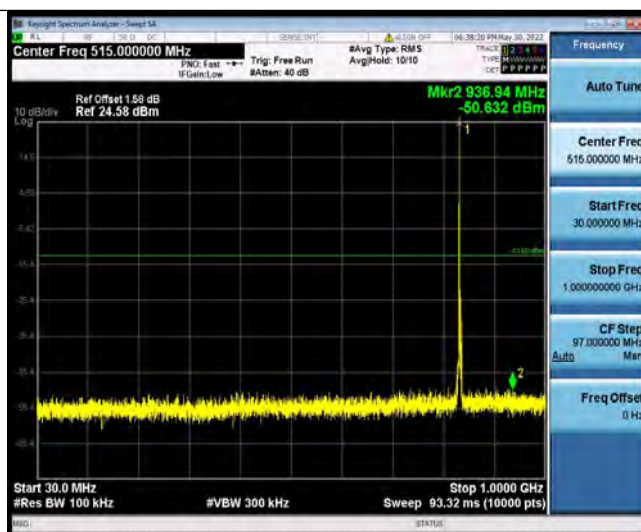
Band5-3MHz-16QAM-20415-1RB#0-Range1:30~1000MHz



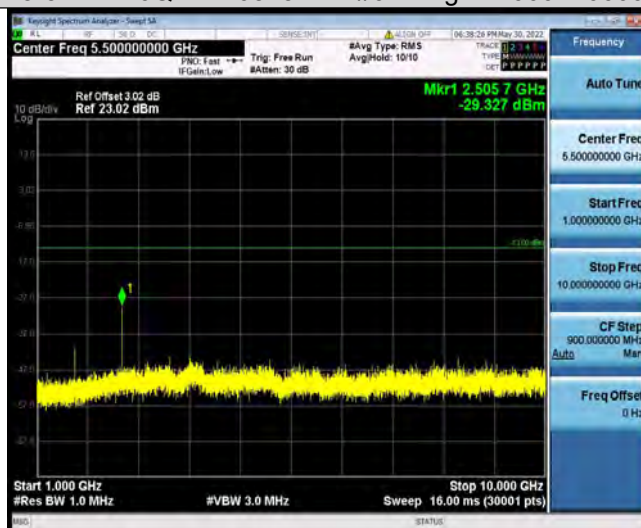
Band5-3MHz-16QAM-20415-1RB#0-Range2:1000~10000MHz



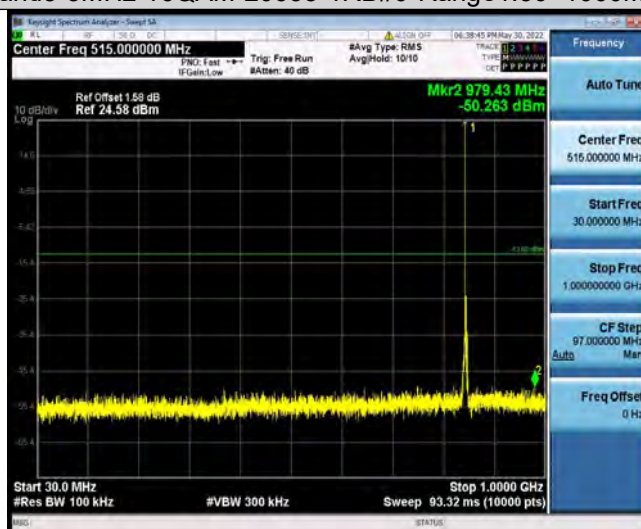
Band5-3MHz-16QAM-20525-1RB#0-Range1:30~1000MHz



Band5-3MHz-16QAM-20525-1RB#0-Range2:1000~10000MHz



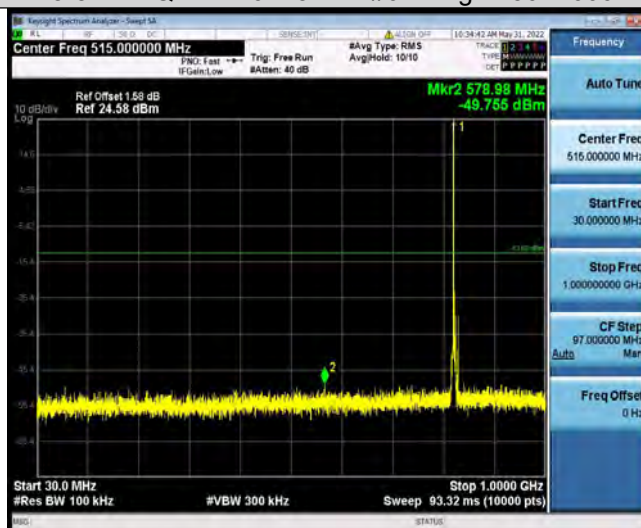
Band5-3MHz-16QAM-20635-1RB#0-Range1:30~1000MHz



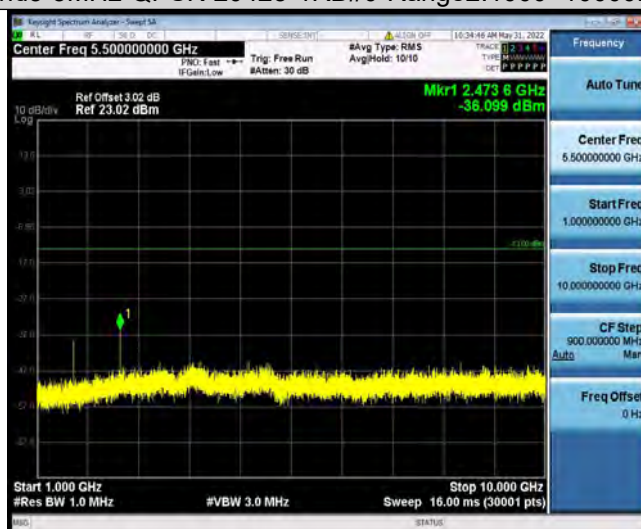
Band5-3MHz-16QAM-20635-1RB#0-Range2:1000~10000MHz



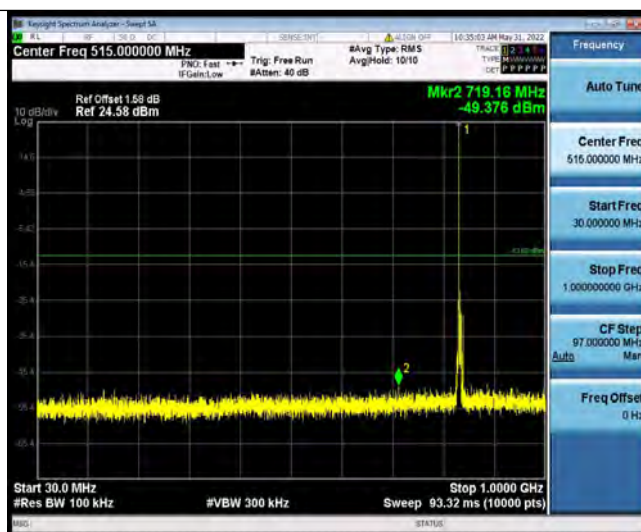
Band5-5MHz-QPSK-20425-1RB#0-Range1:30~1000MHz



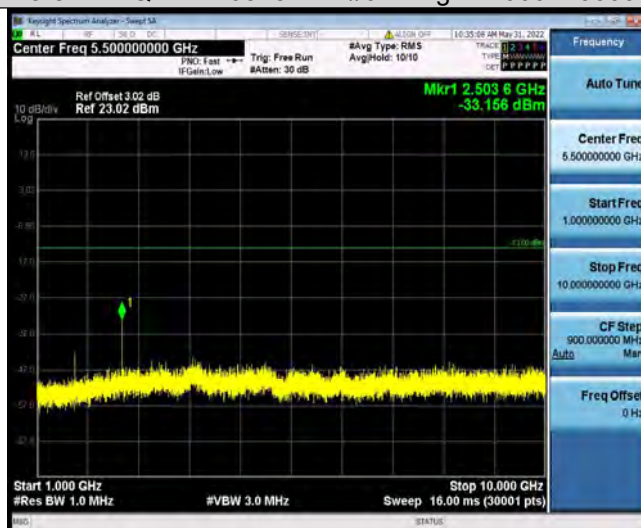
Band5-5MHz-QPSK-20425-1RB#0-Range2:1000~10000MHz



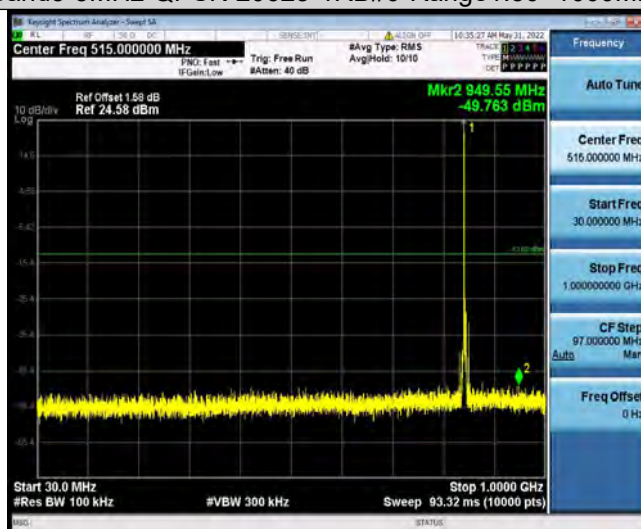
Band5-5MHz-QPSK-20525-1RB#0-Range1:30~1000MHz



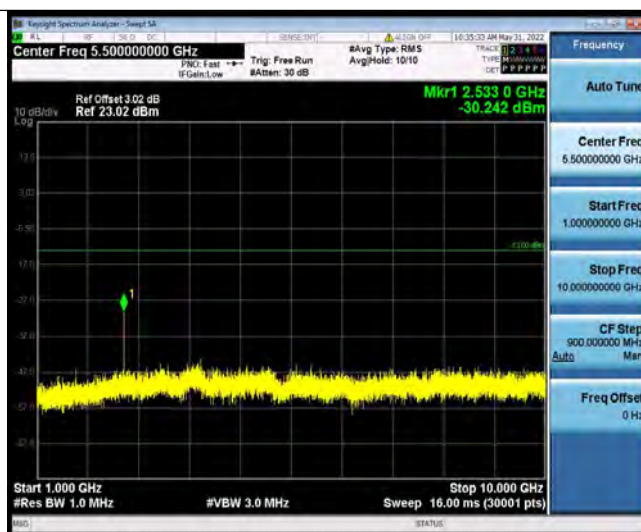
Band5-5MHz-QPSK-20525-1RB#0-Range2:1000~10000MHz



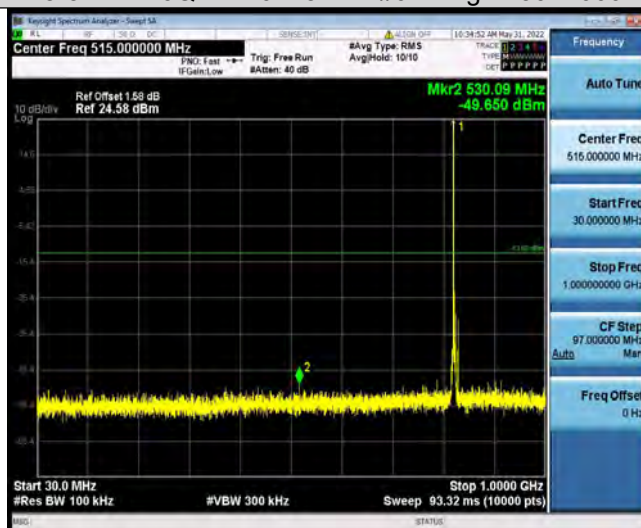
Band5-5MHz-QPSK-20625-1RB#0-Range1:30~1000MHz



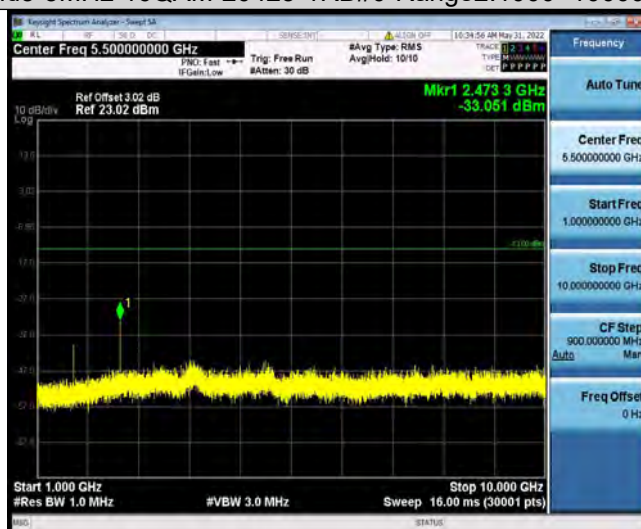
Band5-5MHz-QPSK-20625-1RB#0-Range2:1000~10000MHz



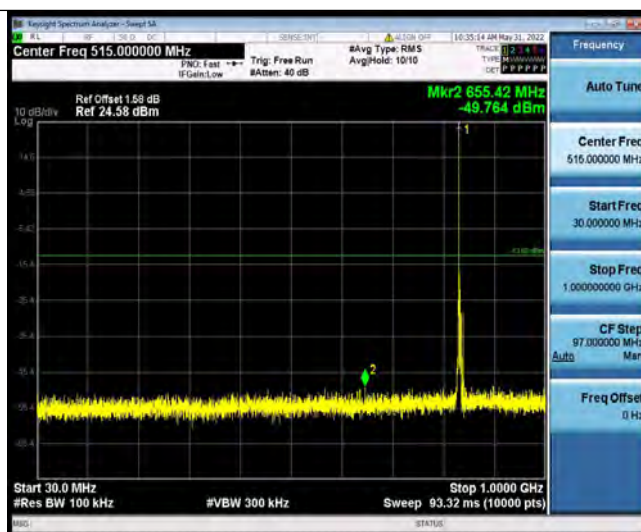
Band5-5MHz-16QAM-20425-1RB#0-Range1:30~1000MHz



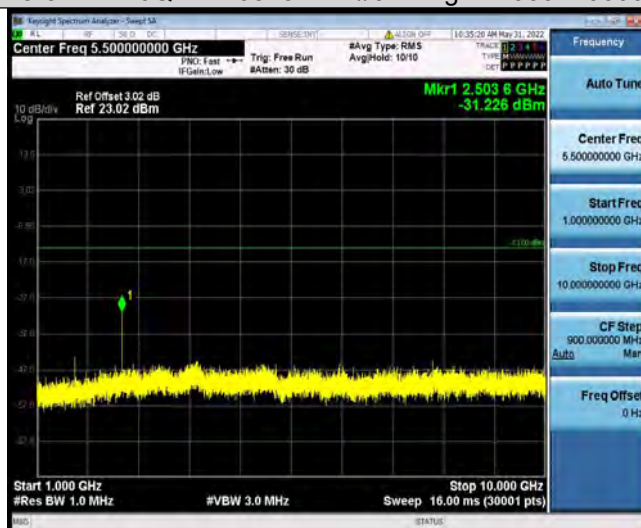
Band5-5MHz-16QAM-20425-1RB#0-Range2:1000~10000MHz



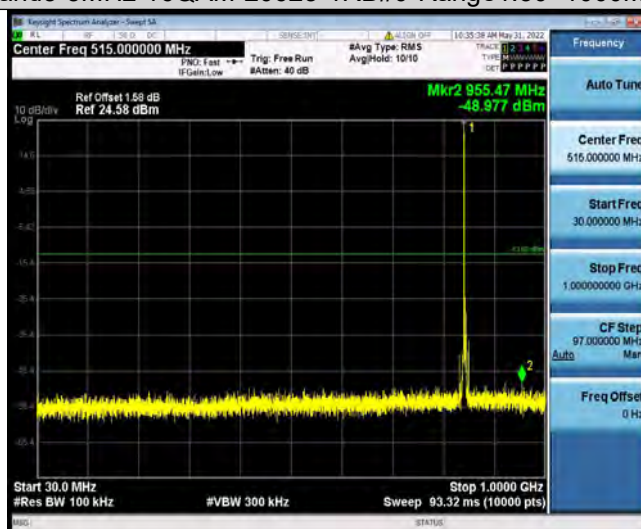
Band5-5MHz-16QAM-20525-1RB#0-Range1:30~1000MHz



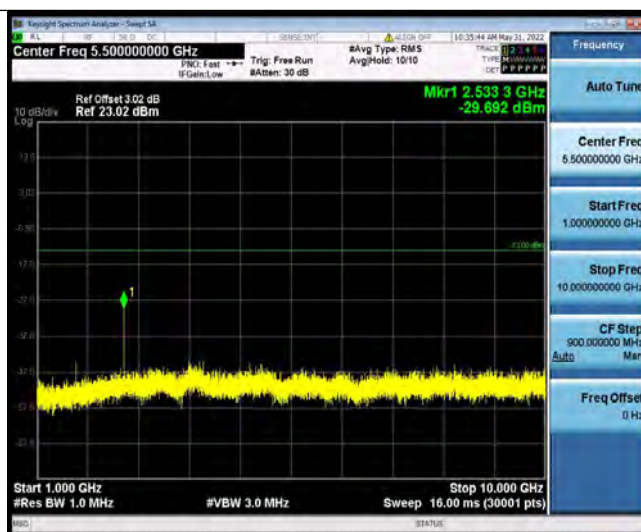
Band5-5MHz-16QAM-20525-1RB#0-Range2:1000~10000MHz



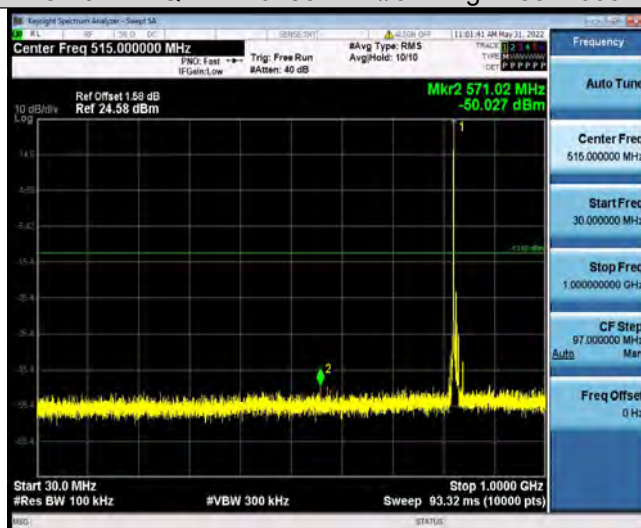
Band5-5MHz-16QAM-20625-1RB#0-Range1:30~1000MHz



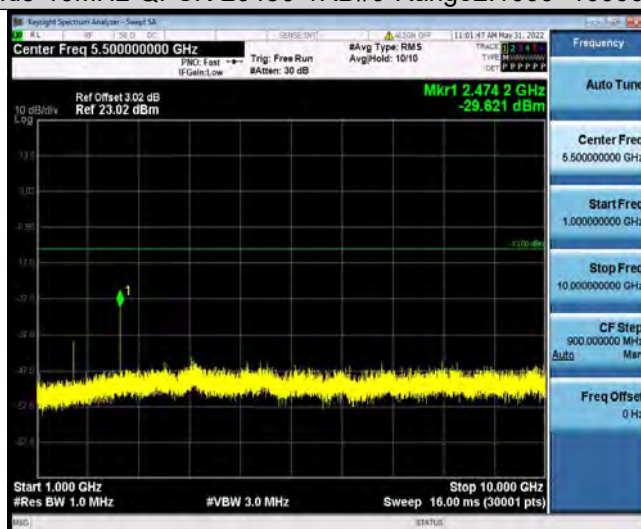
Band5-5MHz-16QAM-20625-1RB#0-Range2:1000~10000MHz



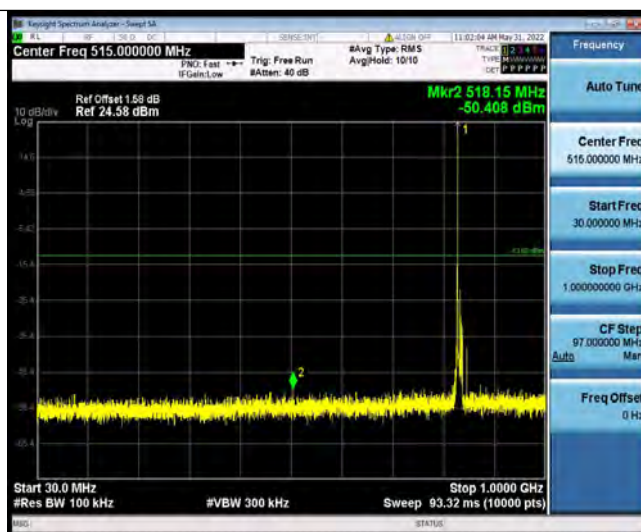
Band5-10MHz-QPSK-20450-1RB#0-Range1:30~1000MHz



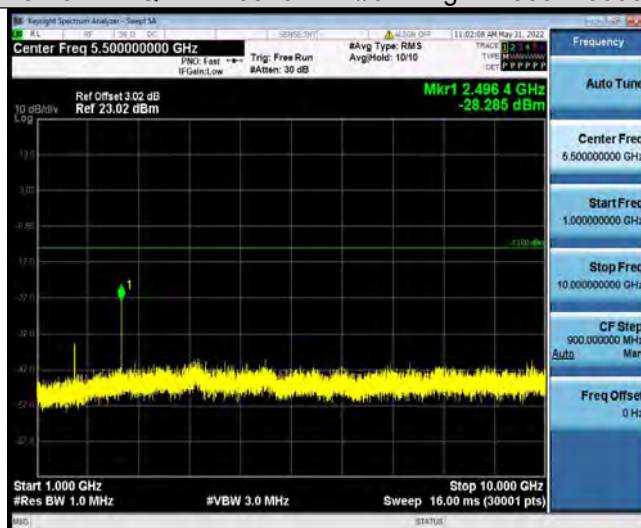
Band5-10MHz-QPSK-20450-1RB#0-Range2:1000~10000MHz



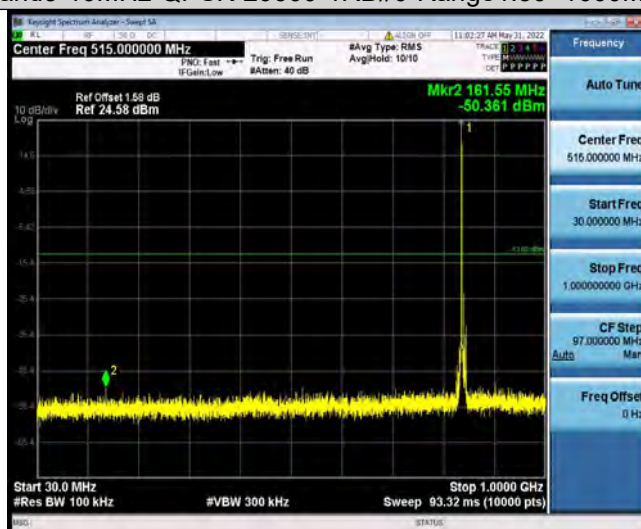
Band5-10MHz-QPSK-20525-1RB#0-Range1:30~1000MHz



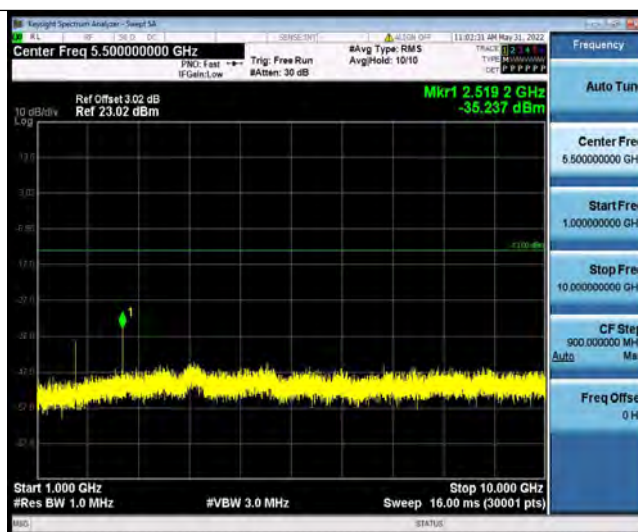
Band5-10MHz-QPSK-20525-1RB#0-Range2:1000~10000MHz



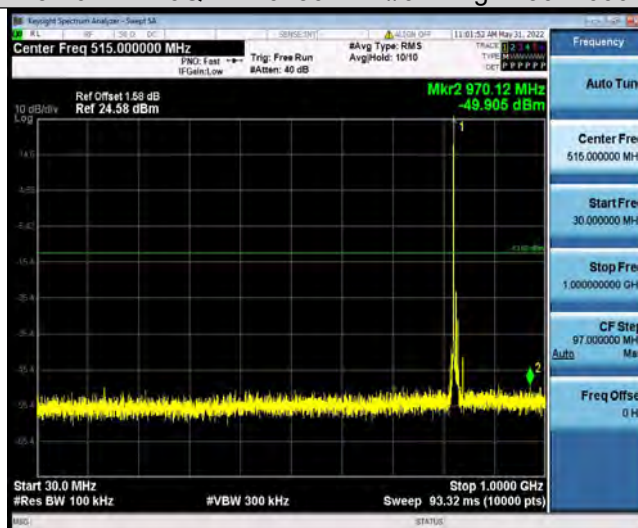
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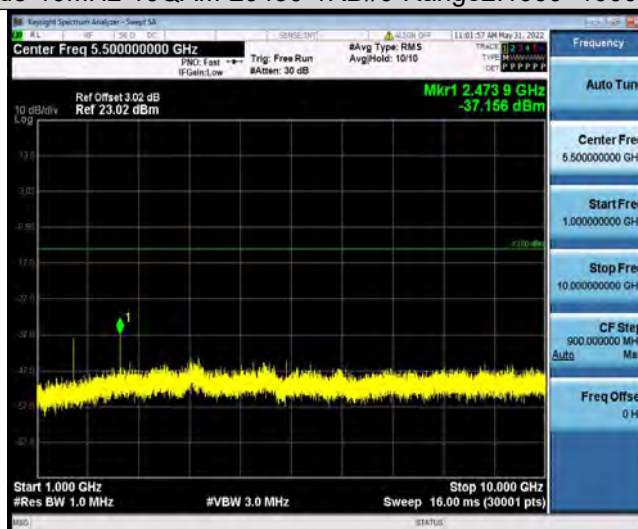
Band5-10MHz-QPSK-20600-1RB#0-Range2:1000~10000MHz



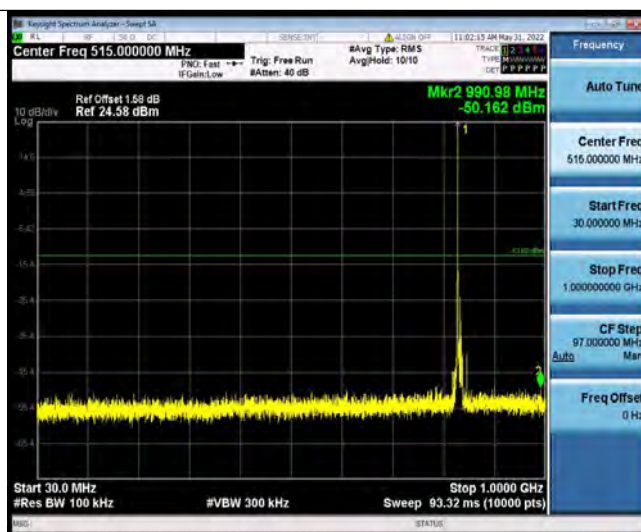
Band5-10MHz-16QAM-20450-1RB#0-Range1:30~1000MHz



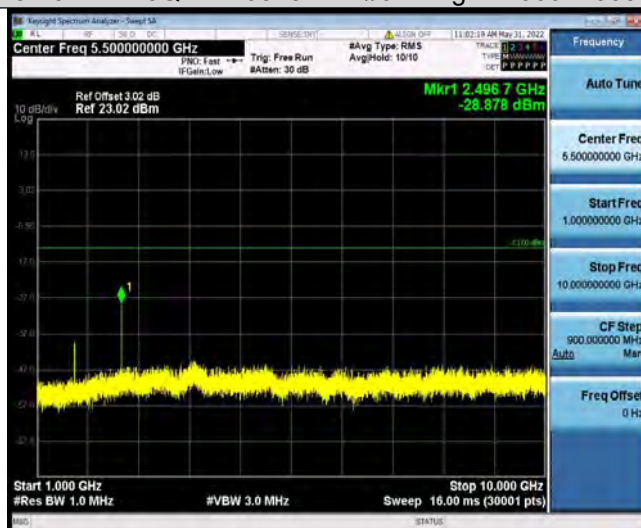
Band5-10MHz-16QAM-20450-1RB#0-Range2:1000~10000MHz



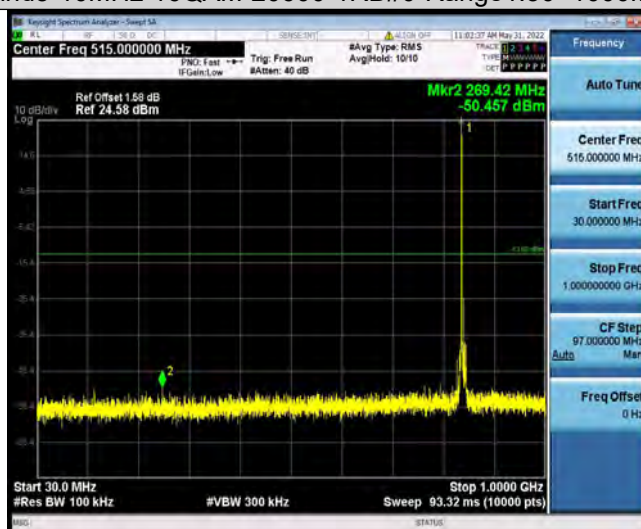
Band5-10MHz-16QAM-20525-1RB#0-Range1:30~1000MHz



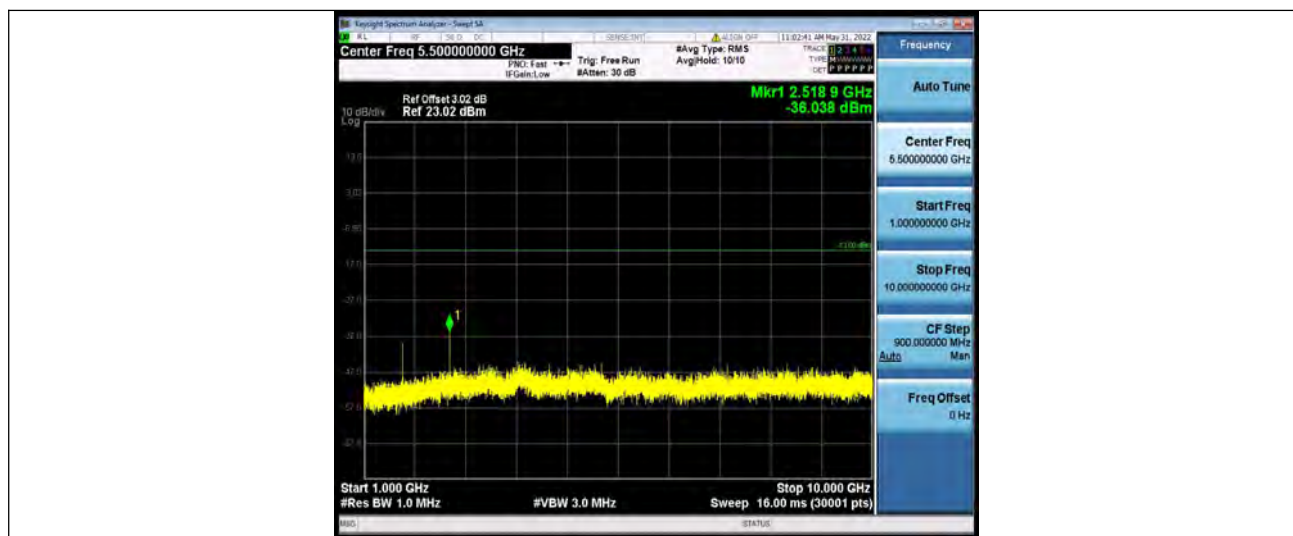
Band5-10MHz-16QAM-20525-1RB#0-Range2:1000~10000MHz



Band5-10MHz-16QAM-20600-1RB#0-Range1:30~1000MHz



Band5-10MHz-16QAM-20600-1RB#0-Range2:1000~10000MHz





Test Report No.: W7L-P22110018RF01

FREQUENCY STABILITY

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	VL	NT	-3.83	-0.004644	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	VN	NT	-1.50	-0.001819	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	VH	NT	-2.93	-0.003553	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	VL	NT	-2.17	-0.002594	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	VN	NT	2.98	0.003562	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	VH	NT	-0.96	-0.001148	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	VL	NT	-2.07	-0.002440	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	VN	NT	-2.27	-0.002676	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	VH	NT	-3.63	-0.004279	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	VL	NT	-1.76	-0.002134	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	VN	NT	-2.49	-0.003019	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	VH	NT	-4.55	-0.005517	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	VL	NT	-1.70	-0.002032	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	VN	NT	-2.35	-0.002809	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	VH	NT	2.95	0.003527	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	VL	NT	1.39	0.001639	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	VN	NT	-2.86	-0.003371	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	VH	NT	-2.49	-0.002935	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	VL	NT	2.03	0.002459	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	VN	NT	-0.97	-0.001175	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	VH	NT	-2.07	-0.002508	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	VL	NT	1.65	0.001973	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	VN	NT	-2.33	-0.002785	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	VH	NT	-1.34	-0.001602	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	VL	NT	-3.18	-0.003752	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	VN	NT	-4.19	-0.004944	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	VH	NT	-3.12	-0.003681	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	VL	NT	-2.40	-0.002907	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	VN	NT	-2.62	-0.003174	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	VH	NT	1.37	0.001660	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	VL	NT	-2.39	-0.002857	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	VN	NT	1.49	0.001781	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	VH	NT	-1.02	-0.001219	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	VL	NT	1.37	0.001617	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	VN	NT	-2.29	-0.002702	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	VH	NT	-1.67	-0.001971	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	VL	NT	-2.69	-0.003255	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	VN	NT	-3.65	-0.004416	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	VH	NT	-4.15	-0.005021	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	VL	NT	-3.12	-0.003730	±2.5	PASS



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Band5	5MHz	QPSK	20525	25RB#0	VN	NT	-2.43	-0.002905	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	VH	NT	-2.00	-0.002391	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	VL	NT	-2.40	-0.002835	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	VN	NT	-2.99	-0.003532	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	VH	NT	-2.20	-0.002599	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	VL	NT	-2.09	-0.002529	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	VN	NT	-3.18	-0.003848	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	VH	NT	-3.48	-0.004211	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	VL	NT	-1.96	-0.002343	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	VN	NT	-2.92	-0.003491	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	VH	NT	-4.06	-0.004854	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	VL	NT	-2.16	-0.002552	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	VN	NT	-2.63	-0.003107	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	VH	NT	-3.16	-0.003733	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VL	NT	-1.44	-0.001737	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VN	NT	-2.66	-0.003209	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VH	NT	-2.19	-0.002642	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-1.93	-0.002307	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	2.09	0.002499	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-3.46	-0.004136	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VL	NT	2.25	0.002666	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VN	NT	-3.03	-0.003590	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VH	NT	-1.34	-0.001588	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VL	NT	-1.42	-0.001713	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VN	NT	-3.30	-0.003981	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VH	NT	2.75	0.003317	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VL	NT	2.70	0.003228	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VN	NT	1.53	0.001829	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VH	NT	2.06	0.002463	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VL	NT	2.17	0.002571	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VN	NT	-2.62	-0.003104	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VH	NT	-2.99	-0.003543	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	NV	-30	-1.97	-0.002389	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	-20	-3.89	-0.004717	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	0	1.44	0.001746	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	10	-2.39	-0.002898	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	20	-2.20	-0.002668	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	30	-4.22	-0.005117	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	40	-3.32	-0.004026	±2.5	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	NV	50	-2.06	-0.002498	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	-30	-2.47	-0.002953	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	-20	-1.04	-0.001243	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	0	-1.36	-0.001626	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	10	-3.05	-0.003646	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	20	-2.52	-0.003013	±2.5	PASS



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Band5	1.4MHz	QPSK	20525	6RB#0	NV	30	2.27	0.002714	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	40	-3.20	-0.003825	±2.5	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	NV	50	-3.53	-0.004220	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	-30	-2.16	-0.002546	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	-20	-2.79	-0.003289	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	0	-2.93	-0.003454	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	10	-2.06	-0.002428	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	20	-2.06	-0.002428	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	30	-2.50	-0.002947	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	40	-2.62	-0.003089	±2.5	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	NV	50	-2.16	-0.002546	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	-30	-3.91	-0.004741	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	-20	-2.70	-0.003274	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	0	-3.16	-0.003832	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	10	-2.65	-0.003213	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	20	-3.48	-0.004220	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	30	-4.16	-0.005044	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	40	-4.66	-0.005651	±2.5	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	NV	50	-3.75	-0.004547	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	-30	-2.65	-0.003168	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	-20	-2.05	-0.002451	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	0	-2.85	-0.003407	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	10	-2.68	-0.003204	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	20	-3.68	-0.004399	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	30	-3.05	-0.003646	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	40	-2.07	-0.002475	±2.5	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	NV	50	-2.95	-0.003527	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	-30	-2.52	-0.002971	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	-20	-2.56	-0.003018	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	0	1.49	0.001756	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	10	-2.27	-0.002676	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	20	2.16	0.002546	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	30	-2.59	-0.003053	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	40	-2.66	-0.003136	±2.5	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	NV	50	-2.56	-0.003018	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	-30	2.63	0.003186	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	-20	-3.32	-0.004022	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	0	1.96	0.002374	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	10	-1.46	-0.001769	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	20	1.36	0.001647	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	30	-1.75	-0.002120	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	40	3.03	0.003671	±2.5	PASS
Band5	3MHz	QPSK	20415	15RB#0	NV	50	-1.69	-0.002047	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	-30	-1.99	-0.002379	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	-20	1.67	0.001996	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	0	-2.06	-0.002463	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	10	1.52	0.001817	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	20	-2.32	-0.002773	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	30	1.79	0.002140	±2.5	PASS
Band5	3MHz	QPSK	20525	15RB#0	NV	40	1.85	0.002212	±2.5	PASS



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Band5	3MHz	QPSK	20525	15RB#0	NV	50	-2.32	-0.002773	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	-30	-1.77	-0.002088	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	-20	-2.70	-0.003186	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	0	-1.87	-0.002206	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	10	-3.05	-0.003599	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	20	-3.03	-0.003575	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	30	-2.90	-0.003422	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	40	-3.39	-0.004000	±2.5	PASS
Band5	3MHz	QPSK	20635	15RB#0	NV	50	-2.20	-0.002596	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	-30	-1.69	-0.002047	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	-20	-1.75	-0.002120	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	0	-1.32	-0.001599	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	10	-2.09	-0.002532	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	20	-2.55	-0.003089	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	30	1.42	0.001720	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	40	-1.39	-0.001684	±2.5	PASS
Band5	3MHz	16QAM	20415	15RB#0	NV	50	1.72	0.002084	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	-30	-1.59	-0.001901	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	-20	-1.30	-0.001554	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	0	1.37	0.001638	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	10	-2.82	-0.003371	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	20	1.63	0.001949	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	30	2.57	0.003072	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	40	-2.68	-0.003204	±2.5	PASS
Band5	3MHz	16QAM	20525	15RB#0	NV	50	-1.89	-0.002259	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	-30	-4.31	-0.005086	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	-20	-2.45	-0.002891	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	0	-2.83	-0.003339	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	10	-2.73	-0.003221	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	20	-2.43	-0.002867	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	30	-2.95	-0.003481	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	40	-4.56	-0.005381	±2.5	PASS
Band5	3MHz	16QAM	20635	15RB#0	NV	50	-1.92	-0.002265	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	-30	-4.46	-0.005396	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	-20	-2.60	-0.003146	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	0	-3.08	-0.003727	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	10	-4.41	-0.005336	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	20	-3.72	-0.004501	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	30	-3.08	-0.003727	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	40	-3.18	-0.003848	±2.5	PASS
Band5	5MHz	QPSK	20425	25RB#0	NV	50	-3.55	-0.004295	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	-30	-2.36	-0.002821	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	-20	-2.45	-0.002929	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	0	-1.96	-0.002343	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	10	2.37	0.002833	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	20	-2.19	-0.002618	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	30	-2.42	-0.002893	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	40	-2.66	-0.003180	±2.5	PASS
Band5	5MHz	QPSK	20525	25RB#0	NV	50	-3.48	-0.004160	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	-30	-2.98	-0.003520	±2.5	PASS



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Band5	5MHz	QPSK	20625	25RB#0	NV	-20	-3.86	-0.004560	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	0	1.52	0.001796	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	10	-2.90	-0.003426	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	20	-2.49	-0.002942	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	30	2.22	0.002623	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	40	-0.96	-0.001134	±2.5	PASS
Band5	5MHz	QPSK	20625	25RB#0	NV	50	-3.46	-0.004087	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	-30	-3.18	-0.003848	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	-20	-4.32	-0.005227	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	0	-4.49	-0.005433	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	10	-2.17	-0.002626	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	20	-3.96	-0.004791	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	30	-3.22	-0.003896	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	40	-3.28	-0.003969	±2.5	PASS
Band5	5MHz	16QAM	20425	25RB#0	NV	50	-3.25	-0.003932	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	-30	-1.06	-0.001267	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	-20	-1.72	-0.002056	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	0	-3.12	-0.003730	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	10	-3.68	-0.004399	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	20	-2.37	-0.002833	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	30	2.85	0.003407	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	40	-2.62	-0.003132	±2.5	PASS
Band5	5MHz	16QAM	20525	25RB#0	NV	50	-3.69	-0.004411	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	-30	-1.95	-0.002304	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	-20	1.67	0.001973	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	0	-3.00	-0.003544	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	10	1.90	0.002245	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	20	-1.65	-0.001949	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	30	-3.15	-0.003721	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	40	-1.70	-0.002008	±2.5	PASS
Band5	5MHz	16QAM	20625	25RB#0	NV	50	-3.08	-0.003639	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-30	-2.03	-0.002449	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-20	-1.85	-0.002232	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	0	-2.98	-0.003595	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	10	-1.73	-0.002087	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	20	-2.22	-0.002678	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	30	-2.63	-0.003172	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	40	-1.20	-0.001448	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	50	1.14	0.001375	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	-1.26	-0.001506	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	-3.00	-0.003586	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-3.38	-0.004041	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-2.22	-0.002654	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	-3.02	-0.003610	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	-1.04	-0.001243	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	-1.70	-0.002032	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	1.54	0.001841	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-30	1.72	0.002038	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-20	-1.53	-0.001813	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	0	2.55	0.003021	±2.5	PASS



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Band5	10MHz	QPSK	20600	50RB#0	NV	10	-1.54	-0.001825	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	20	-2.53	-0.002998	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	30	-2.22	-0.002630	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	40	1.40	0.001659	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	50	-2.95	-0.003495	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-30	3.08	0.003715	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-20	1.37	0.001653	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	0	2.06	0.002485	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	10	1.79	0.002159	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	20	-2.49	-0.003004	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	30	-1.29	-0.001556	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	40	1.50	0.001809	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	50	-1.62	-0.001954	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-30	1.53	0.001829	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-20	0.87	0.001040	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	0	-3.42	-0.004088	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	10	-1.87	-0.002236	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	20	2.12	0.002534	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	30	1.99	0.002379	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	40	-2.57	-0.003072	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	50	1.26	0.001506	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-30	3.55	0.004206	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-20	-3.55	-0.004206	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	0	-1.70	-0.002014	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	10	1.60	0.001896	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	20	-3.05	-0.003614	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	30	-1.65	-0.001955	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	40	-2.46	-0.002915	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	50	-2.05	-0.002429	±2.5	PASS

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