

VARIANT FCC TEST REPORT

(PART 90)

Applicant:	Honeywell International Inc
Address:	9680 Old Bailes Road, Fort Mill, SC 29707 United States

Manufacturer or Supplier	Honeywell International Inc
Address	9680 Old Bailes Road, Fort Mill, SC 29707 United States
Product	Mobile Computer
Brand Name	Honeywell
Model Name	CT45P-L1N-2
FCC ID	HD5-CT45PL1N2
Date of tests	Oct, 09, 2025 ~ Nov. 18, 2025

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

☒ **FCC Part 90, Subpart R, S**
☒ **ANSI/TIA/EIA-603- D**
☒ **FCC Part 2**

☒ **ANSI/TIA/EIA-603-E**
☒ **ANSI C63.26-2015**

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

Prepared by Hanwen Xu Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
	
Date: Nov. 18, 2025	Date: Nov. 18, 2025

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P21080006RF19	Original release	Sep. 07, 2021
PSU-NQN2509250114RF10	Based on the original report W7L-P21080006RF19(FCC ID: HD5-CT45PL1N2). The new product add alternate parts, the electrical specs of the alternate part is equivalent to the current part. This report update the SW version, retest power and RF, verify RSE worst case. So this report updates power, RF and RSE worst case(LTE B26 5MHz_CH26715), other data please refer to original report.	Nov. 18, 2025



1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

The EUT has been tested according to the following specifications:

Ref Std.Clause	Test Items	Result (Pass/Fail)	Remark
§2.1046	Conducted Output Power	Reporting only	-
-	Peak-to-Average Ratio	Reporting only	-
§2.1049	Occupied Bandwidth	Reporting only	-
§2.1053 §90.543(e)(2) § 90.691(a)	Conducted Band Edge Measurement	PASS	-
§2.1051 §90.210(n) § 90.691(a)	Emission Masks	PASS	-
§2.1053 §90.543(e)(3) § 90.691(a)	Conducted Spurious Emissions	PASS	-
§2.1055 §90.539(e) § 90.213	Frequency Stability Temperature & Voltage	PASS	-
§2.1053 §90.543(e)(3) §90.543(f) §90.691	Radiated Spurious Emissions	PASS	Under limit 21.29dB at 1584.000MHz

*Test Lab Information Reference

Lab A:

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

Lab Address:

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

Accredited Test Lab Cert 6613.01

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

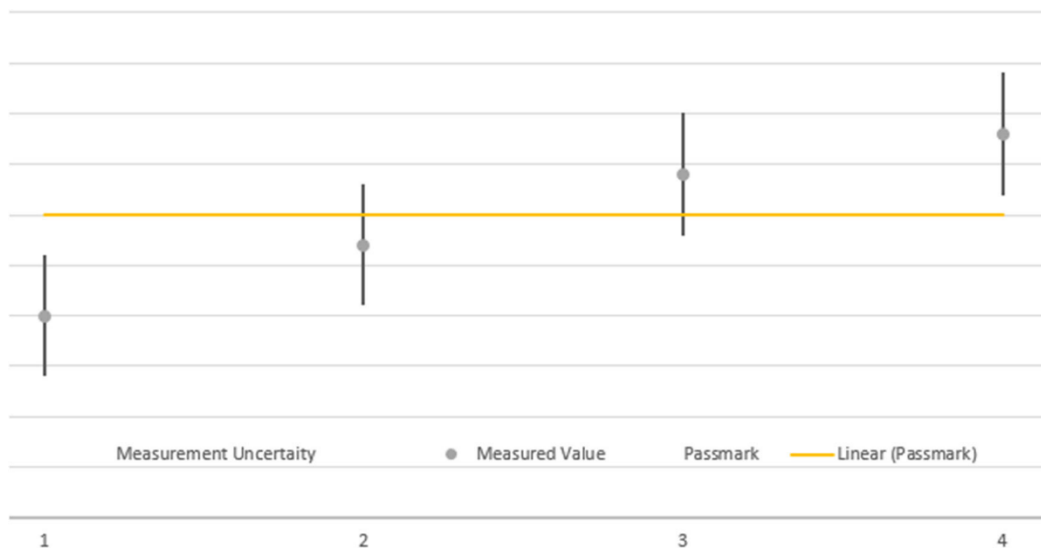


1.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.66dB
Radiated emissions	9KHz ~ 30MHz	2.68dB
	30MHz ~ 1GHz	3.26dB
	1GHz ~ 18GHz	4.48dB
	18GHz ~ 40GHz	4.12dB

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



The verdicts in this test report are given according the above diagram:

Case	Measured Value	Uncertainty Range	Verdict
1	below pass mark	below pass mark	Passed
2	below pass mark	within pass mark	Passed
3	above pass mark	within pass mark	Failed
4	above pass mark	above pass mark	Failed

That means, the laboratory applies, as decision rule (see ISO/IEC 17025:2017), the so-called shared risk principle.



1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Pre-Amplifier	R&S	SCU18F1	100815	Aug.29,25	Aug.28,27
Pre-Amplifier	R&S	SCU08F1	101028	Jan.22,24	Jan.21,26
Vector Signal Generator	R&S	SMBV100B	102176	Mar.29,24	Mar.28,26
Signal Generator	R&S	SMB100A	182185	Mar.29,24	Mar.28,26
3m Fully-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-01Chamber	Nov.24,22	Nov.23,25
3m Semi-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-02Chamber	Aug.20,25	Aug.19,28
EMI TEST Receiver	R&S	ESR26	101734	Mar.28,24	Mar.27,26
EMI TEST Receiver	R&S	ESW44	101973	Mar.28,24	Mar.27,26
Bilog Antenna	SCHWARZBECK	VULB 9163	1264	Jul.04,25	Jul.03,27
Horn Antenna	ETS-LINDGREN	3117	227836	Aug.20,25	Aug.19,27
Horn Antenna (18GHz-40GHz)	Steatite Q-par Antennas	QMS 00880	23486	Jul.15,24	Jul.14,26
Horn Antenna	Steatite Q-par Antennas	QMS 00208	23485	Mar.22,25	Mar.21,27
Loop Antenna	SCHWARZ	HFH2-Z2/Z2E	100976	Feb.22,25	Feb.21,27
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.19,24	Jun.18,26
Test Software	EMC32	EMC32	N/A	N/A	N/A
6DB attenuator	Tonscend Technology Co., Ltd	N/A	23062787	N/A	N/A
Test Software	ELEKTRA	ELEKTRA4.32	N/A	N/A	N/A
Open Switch and Control Unit	R&S	OSP220	101964	N/A	N/A
DC Source	HYELEC	HY3010B	551016	Aug.30,25	Aug.29,27
Hygrothermograph	DELI	20210528	SZ014	Mar.18,25	Mar.17,27
PC	LENOVO	E14	HRSW0024	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-7.00M	N/A	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-4.00M	N/A	N/A	N/A
CABLE	R&S	W13.02	N/A	Apr.26,25	Apr.25,26
CABLE	R&S	W12.14	N/A	Apr.26,25	Apr.25,26
CABLE	R&S	J12J103539-00-1	SEP-03-20-069	Apr.26,25	Apr.25,26
CABLE	R&S	J12J103539-00-1	SEP-03-20-070	Apr.26,25	Apr.25,26
Temperature Chamber	votsch	VT4002	58566078100050	May.30,24	May.29,26



NOTE:

1. The calibration interval of the above test instruments is 12/ 24/ 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/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 434559; The Designation No. is CN1325.



2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT*	Mobile Computer	
BRAND NAME*	Honeywell	
MODEL NAME*	CT45P-L1N-2	
NOMINAL VOLTAGE*	5Vdc (adapter) 3.85Vdc (Lithium-ion cell, battery)	
MODULATION TECHNOLOGY*	LTE	QPSK, 16QAM, 64QAM
FREQUENCY RANGE	LTE Band 14 Channel Bandwidth: 5MHz	790.5MHz ~ 795.5MHz
	LTE Band 14 Channel Bandwidth: 10MHz	793MHz
	LTE Band 26 (Channel Bandwidth: 1.4MHz)	814.7MHz ~ 823.3MHz
	LTE Band 26 (Channel Bandwidth: 3MHz)	815.5MHz ~ 822.5MHz
	LTE Band 26 (Channel Bandwidth: 5MHz)	816.5MHz ~ 821.5MHz
	LTE Band 26 (Channel Bandwidth: 10MHz)	819MHz
EMISSION DESIGNATOR	LTE Band 14 Channel Bandwidth: 5MHz	QPSK: 4M50G7D
		16QAM: 4M49W7D
		64QAM: 4M49W7D
	LTE Band 14 Channel Bandwidth: 10MHz	QPSK: 8M94G7D
		16QAM: 8M93W7D
		64QAM: 8M93W7D
	LTE Band 26 (Channel Bandwidth: 1.4MHz)	QPSK: 1M09G7D
		16QAM: 1M10W7D
		64QAM: 1M10W7D
	LTE Band 26 (Channel Bandwidth: 3MHz)	QPSK: 2M70G7D
		16QAM: 2M69W7D
		64QAM: 2M70W7D
	LTE Band 26 (Channel Bandwidth: 5MHz)	QPSK: 4M49G7D
		16QAM: 4M49W7D
		64QAM: 4M49W7D
	LTE Band 26 (Channel Bandwidth: 10MHz)	QPSK: 8M93G7D
		16QAM: 8M92W7D
		64QAM: 8M91W7D
MAX. EIRP POWER	LTE Band 14 Channel Bandwidth: 5MHz	144.88mW
	LTE Band 14 Channel Bandwidth: 10MHz	145.21mW
	LTE Band 26 (Channel Bandwidth: 1.4MHz)	223.87mW



	LTE Band 26 (Channel Bandwidth: 3MHz)	220.80mW
	LTE Band 26 (Channel Bandwidth: 5MHz)	225.94mW
	LTE Band 26 (Channel Bandwidth: 10MHz)	228.56mW
ANTENNA GAIN*	☒ Provided by client	
	LTE B14	1dBi
	LTE B26	2.67dBi
ANTENNA TYPE*	PIFA Antenna	
HW VERSION*	V1.0	
SW VERSION*	OS.11.003-HON.11.003	
I/O PORTS*	Refer to user's manual	
DATA CABLE*	USB cable: unshielded without ferrite, 1.25 meter Earphone cable: unshielded without ferrite, 1.27 meter	
EXTREME TEMPERATURE*	-10-55 °C	
EXTREME VOLTAGE*	3.4V- 4.4V	

NOTE:

- *Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, Test Lab is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.
- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

MODULATION MODE	TX FUNCTION
LTE	1TX/1RX

- For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
- This product includes the following three SKU which hardware is exactly same, the difference is described as following, Sample 1 was full test, sample 2 verify the worst case, check worst case Radiated emission:

SAMPLE	EUT CONFIGURATION INFORMATION
1	SKU ID:CT45-L1N-37D120G ,Assembled Scanner Imager: 7-S0703
2	SKU ID:CT45-L1N-38D120G ,Assembled Scanner Imager: 8 - N6803/S0803
3	SKU ID: CT45-L1N-37D220G , Assembled with Scanner: 7-S0703 for China Only with Android non-GMS



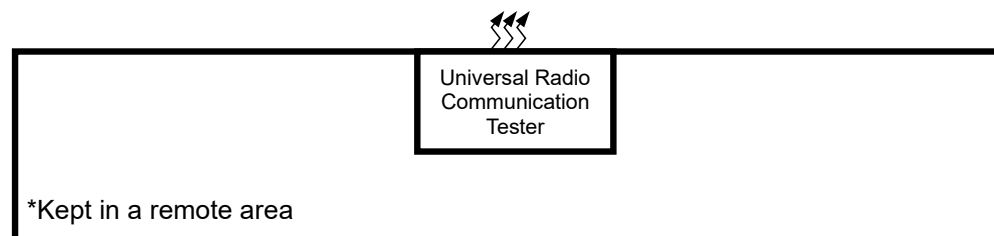
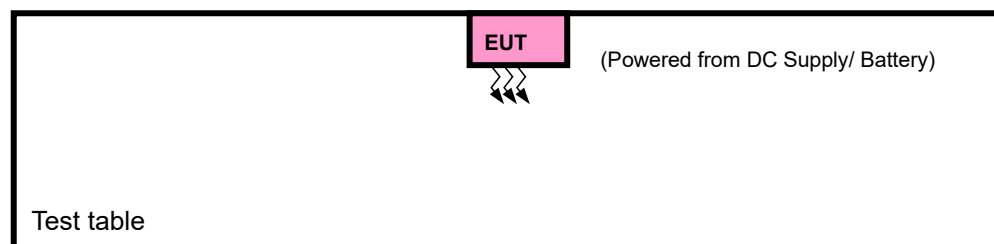
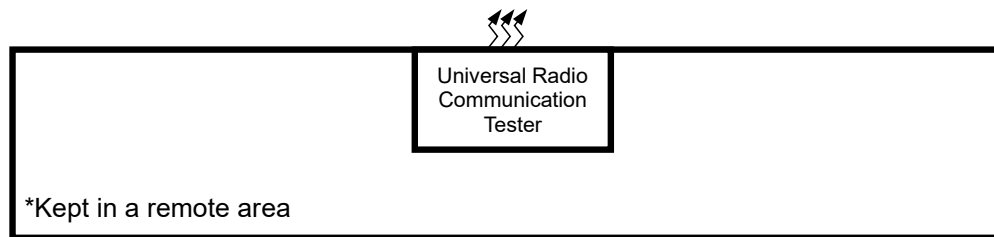
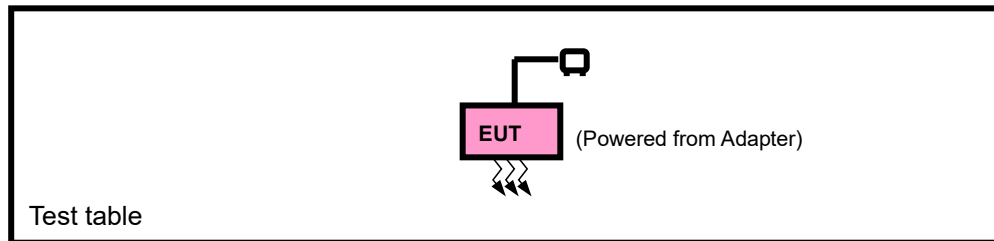
6. List of Accessory:

ACCESSORIES	BRAND	MODEL	SPECIFICATION
Battery	Honeywell	CT50-BTSC	Capacity : 3.85vdc 4020mAh
AC Adapter	HONOR	ADS-12B-06 05010E	I/P:100-240Vac, 0.3A O/P: 5Vdc, 2A
USB Cable	Honeywell	CT40-SN	Shielded, 1.25meter
Earphone	VIVO	NA	Shielded, 1.27meter
LCD Panel	CASIL	CTM10801920T01	5.0" FHD(1928*1080)



2.2 CONFIGURATION OF SYSTEM UNDER TEST

FOR RADIATION EMISSION TEST





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	HYELEC	HY3010B	551016	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	USB Line: Shielded, Detachable 1.25m;
2	DC Line: Unshielded, Detachable 1.0m

2.4 DESCRIPTION OF TEST MODES

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/EIRP and radiated emission was found when positioned on X-plane for LTE. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
A	EUT + Adapter + USB Cable with LTE link
B	EUT + DC Supply with LTE link

LTE BAND 14 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	23305 to 23355	23305, 23330, 23355	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		23330	23330	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	23330	23330	10MHz	QPSK	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	23305 to 23355	23305, 23330, 23355	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		23330	23330	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	23305 to 23355	23305, 23330, 23355	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
		23330	23330	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
A	BAND EDGE	23305 to 23355	23305	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset
			23355	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
		23300	23330	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						50 RB / 0 RB Offset
						1 RB / 49 RB Offset
						/
A	CONDUCTED EMISSION	23305 to 23355	23305, 23330, 23355	5MHz	QPSK,	1 RB / 0 RB Offset
		23330	23330	10MHz	QPSK	1 RB / 0 RB Offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst

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case was found in QPSK modulation.

LTE BAND 26 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	26697 to 26783	26697, 26740, 26783	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		26705 to 26775	26705, 26740, 26775	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		26715 to 26765	26715, 26740, 26765	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		26740	26740	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	26740	26740	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	26697 to 26783	26697, 26740, 26783	1.4MHz	QPSK, 16QAM, 64QAM	6 RB / 0 RB Offset
		26705 to 26775	26705, 26740, 26775	3MHz	QPSK, 16QAM, 64QAM	15 RB / 0 RB Offset
		26715 to 26765	26715, 26740, 26765	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		26740	26740	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	26697 to 26783	26697, 26740, 26783	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 6 RB / 0 RB Offse
		26705 to 26775	26705, 26740, 26775	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 15 RB / 0 RB Offse
		26715 to 26765	26715, 26740, 26765	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offse
		26740	26740	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
A	BAND EDGE	26697 to 26783	26697	1.4MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset 6 RB / 0 RB Offset
			26783	1.4MHz	QPSK,16QAM,64QAM	1 RB / 5 RB Offset 6 RB / 0 RB Offset
		26705 to 26775	26705	3MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset 15 RB / 0 RB Offset
			26775	3MHz	QPSK,16QAM,64QAM	1 RB / 14 RB Offset 15 RB / 0 RB Offset
		26715 to 26765	26715	5MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
			26765	5MHz	QPSK,16QAM,64QAM	1 RB / 24 RB Offset 25 RB / 0 RB Offset
		26740	26740	10MHz	QPSK,16QAM,64QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
			26740	10MHz	QPSK,16QAM,64QAM	1 RB / 49 RB Offset 50 RB / 0 RB Offset
A	CONDUCTED EMISSION	26697 to 26783	26697, 26740, 26783	1.4MHz	QPSK	1 RB / 0 RB Offset
		26705 to 26775	26705, 26740, 26775	3MHz	QPSK	1 RB / 0 RB Offset
		26715 to 26765	26715, 26740, 26765	5MHz	QPSK	1 RB / 0 RB Offset
		26740	26740	10MHz	QPSK	1 RB / 0 RB Offset
A	RADIATED EMISSION	26715 to 26765	26715	5MHz	QPSK	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.



TEST CONDITION			
TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
EIRP(ERP)	24deg. C, 60%RH	DC 5V By Adapter	Hanwen Xu
FREQUENCY STABILITY	24deg. C, 61%RH	DC 3.4V/ 3.85V/ 4.4V By DC Source	Hanwen Xu
OCCUPIED BANDWIDTH	24deg. C, 61%RH	DC 5V By Adapter	Hanwen Xu
BAND EDGE	24deg. C, 61%RH	DC 5V By Adapter	Hanwen Xu
CONDUCTED EMISSION	24deg. C, 61%RH	DC 5V By Adapter	Hanwen Xu
RADIATED EMISSION	23deg. C, 70%RH	DC 5V By Adapter	Hanwen Xu



2.5 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 90

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

47 CFR 90.542(a)(6)

Control stations and mobile stations transmitting in the 758–768 MHz band and the 788–798 MHz band are limited to 30 watts ERP.

47 CFR 90.542(a)(7)

Portable stations (hand-held devices) transmitting in the 758–768 MHz band and the 788–798 MHz band are limited to 3 watts ERP.

Per FCC Part 90.635(a)(b)

The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).

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:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_T - L_C$$

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

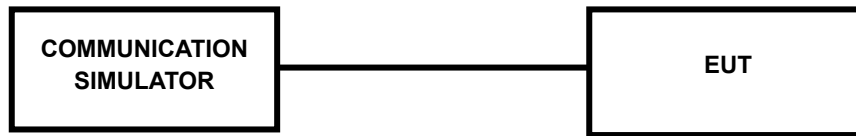
CONDUCTED POWER MEASUREMENT:

- The EUT was set up for the maximum power with LTE 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.



3.1.3 TEST SETUP

CONDUCTED POWER MEASUREMENT:



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



BUREAU VERITAS Test Report No.: PSU-NQN2509250114RF10

3.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

LTE Band 14						
BW [MHz]	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel			23330	
		Frequency (MHz)			793	
10	QPSK	1	0		22.77	
		1	24		22.76	
		1	49		22.72	
		25	0		22.21	
		25	12		22.04	
		25	25		21.79	
		50	0		21.84	
	16QAM	1	0		21.89	
		1	24		22.08	
		1	49		22.04	
		25	0		21.11	
		25	12		21.05	
		25	25		20.87	
		50	0		20.82	
	64QAM	1	0		20.86	
		1	24		21.08	
		1	49		21.06	
		25	0		20.05	
		25	12		19.92	
		25	25		20.01	
		50	0		20.02	



LTE Band 14						
BW [MHz]	Modulation	Channel		23305	23330	23355
		Frequency (MHz)		790.5	793	795.5
5	QPSK	1	0	22.75	22.71	22.76
		1	12	22.72	22.70	22.70
		1	24	22.57	22.58	22.68
		12	0	22.19	22.11	22.16
		12	6	22.00	21.99	22.02
		12	13	21.71	21.70	21.78
		25	0	21.75	21.76	21.82
	16QAM	1	0	21.87	21.87	21.79
		1	12	22.04	22.01	22.07
		1	24	21.96	21.97	21.99
		12	0	21.07	21.02	21.04
		12	6	20.96	20.93	21.02
		12	13	20.74	20.74	20.75
		25	0	20.76	20.75	20.68
	64QAM	1	0	20.71	20.84	20.73
		1	12	21.03	21.01	21.01
		1	24	20.96	20.99	20.95
		12	0	20.03	20.04	19.94
		12	6	19.79	19.83	19.86
		12	13	19.97	19.92	19.93
		25	0	19.97	20.01	19.90



LTE Band 26						
BW [MHz]	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel			26740	
		Frequency (MHz)			819	
10	QPSK	1	0		22.51	
		1	24		22.87	
		1	49		23.07	
		25	0		22.12	
		25	12		21.81	
		25	25		21.84	
		50	0		22.09	
	16QAM	1	0		21.55	
		1	24		22.20	
		1	49		22.32	
		25	0		21.07	
		25	12		20.82	
		25	25		20.90	
		50	0		21.10	
	64QAM	1	0		20.52	
		1	24		21.06	
		1	49		21.23	
		25	0		20.04	
		25	12		19.97	
		25	25		19.90	
		50	0		20.14	



LTE Band 26						
BW [MHz]	Modulation	Channel		26715	26740	26765
		Frequency (MHz)		816.5	819	821.5
5	QPSK	1	0	22.65	22.61	22.64
		1	12	22.86	22.85	22.78
		1	24	23.02	23.00	23.01
		12	0	22.11	22.03	22.05
		12	6	21.75	21.66	21.75
		12	13	21.76	21.78	21.81
		25	0	21.97	22.00	22.05
	16QAM	1	0	21.66	21.64	21.64
		1	12	22.05	22.07	22.08
		1	24	22.25	22.26	22.25
		12	0	21.00	21.01	20.93
		12	6	20.75	20.74	20.71
		12	13	20.88	20.84	20.85
		25	0	20.96	21.08	21.03
	64QAM	1	0	20.59	20.63	20.65
		1	12	20.96	20.95	20.99
		1	24	21.17	21.12	21.09
		12	0	19.99	19.91	19.96
		12	6	19.93	19.86	19.86
		12	13	19.85	19.84	19.87
		25	0	20.12	20.04	20.03



LTE Band 26						
BW [MHz]	Modulation	Channel		26705	26740	26775
		Frequency (MHz)		815.5	819	822.5
3	QPSK	1	0	22.64	22.59	23.87
		1	7	22.82	22.73	24.00
		1	14	22.92	22.87	23.72
		8	0	22.08	21.96	22.97
		8	3	21.63	21.51	22.88
		8	7	21.70	21.73	22.80
		15	0	21.83	21.86	22.93
	16QAM	1	0	21.65	21.52	22.90
		1	7	21.94	22.01	23.01
		1	14	22.16	22.15	22.93
		8	0	20.92	20.92	21.82
		8	3	20.69	20.73	21.89
		8	7	20.74	20.72	21.77
		15	0	20.86	20.94	21.82
	64QAM	1	0	20.52	20.60	22.16
		1	7	20.88	20.80	22.45
		1	14	21.03	21.11	22.21
		8	0	19.85	19.81	20.86
		8	3	19.79	19.79	21.05
		8	7	19.71	19.81	20.78
		15	0	20.11	19.89	20.81



LTE Band 26						
BW [MHz]	Modulation	Channel		26697	26740	26783
		Frequency (MHz)		814.7	819	823.3
1.4	QPSK	1	0	22.57	22.53	22.55
		1	2	22.83	22.81	22.67
		1	5	22.98	22.98	22.91
		3	0	22.86	22.70	22.80
		3	1	22.46	22.40	22.54
		3	3	22.49	22.55	22.62
		6	0	21.91	21.99	22.04
	16QAM	1	0	21.61	21.54	21.63
		1	2	21.97	22.06	22.03
		1	5	22.23	22.25	22.22
		3	0	21.72	21.69	21.65
		3	1	21.51	21.41	21.44
		3	3	21.61	21.60	21.63
		6	0	20.85	21.03	20.94
	64QAM	1	0	20.55	20.52	20.61
		1	2	20.95	20.80	20.88
		1	5	21.07	21.01	21.04
		3	0	20.76	20.70	20.73
		3	1	20.70	20.66	20.55
		3	3	20.57	20.56	20.57
		6	0	20.06	19.97	19.98

**ERP**

LTE Band 14							
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	Limit (W)
10M-QPSK	23330	793	22.77	1	21.62	145.21	3
10M- 16QAM	23330	793	22.08	1	20.93	123.88	3
10M- 64QAM	23330	793	21.08	1	19.93	98.40	3
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	Limit (W)
5M-QPSK	23305	790.5	22.75	1	21.60	144.54	3
	23330	793	22.71	1	21.56	143.22	3
	23355	795.5	22.76	1	21.61	144.88	3
5M-16QAM	23305	790.5	22.04	1	20.89	122.74	3
	23330	793	22.01	1	20.86	121.90	3
	23355	795.5	22.07	1	20.92	123.59	3
5M-64QAM	23305	790.5	21.03	1	19.88	97.27	3
	23330	793	21.01	1	19.86	96.83	3
	23355	795.5	21.01	1	19.86	96.83	3



Part90_LTE Band 26							
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	Limit (W)
10M-QPSK	26740	819	23.07	2.67	23.59	228.56	100
10M- 16QAM	26740	819	22.32	2.67	22.84	192.31	100
10M- 64QAM	26740	819	21.23	2.67	21.75	149.62	100
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	Limit (W)
5M-QPSK	26715	816.5	23.02	2.67	23.54	225.94	100
	26740	819	23.00	2.67	23.52	224.91	100
	26765	821.5	23.01	2.67	23.53	225.42	100
5M-16QAM	26715	816.5	22.25	2.67	22.77	189.23	100
	26740	819	22.26	2.67	22.78	189.67	100
	26765	821.5	22.25	2.67	22.77	189.23	100
5M-64QAM	26715	816.5	21.17	2.67	21.69	147.57	100
	26740	819	21.12	2.67	21.64	145.88	100
	26765	821.5	21.09	2.67	21.61	144.88	100



Part90_LTE Band 26							
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	Limit (W)
3M-QPSK	26705	815.5	22.92	2.67	23.44	220.80	100
	26740	819	22.87	2.67	23.39	218.27	100
	26775	822.5	24.00	2.67	24.52	283.14	100
3M-16QAM	26705	815.5	22.16	2.67	22.68	185.35	100
	26740	819	22.15	2.67	22.67	184.93	100
	26775	822.5	23.01	2.67	23.53	225.42	100
3M-64QAM	26705	815.5	21.03	2.67	21.55	142.89	100
	26740	819	21.11	2.67	21.63	145.55	100
	26775	822.5	22.45	2.67	22.97	198.15	100
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	Limit (W)
1.4M-QPSK	26697	814.7	22.98	2.67	23.50	223.87	100
	26740	819	22.98	2.67	23.50	223.87	100
	26783	823.3	22.91	2.67	23.43	220.29	100
1.4M- 16QAM	26697	814.7	22.23	2.67	22.75	188.36	100
	26740	819	22.25	2.67	22.77	189.23	100
	26783	823.3	22.22	2.67	22.74	187.93	100
1.4M- 64QAM	26697	814.7	21.07	2.67	21.59	144.21	100
	26740	819	21.01	2.67	21.53	142.23	100
	26783	823.3	21.04	2.67	21.56	143.22	100

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).



3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

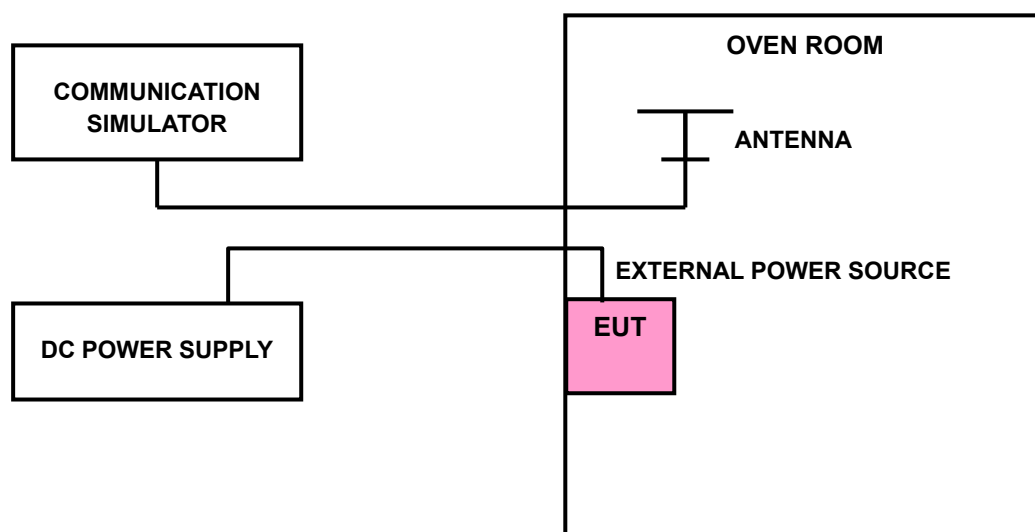
The frequency stability of mobile, portable and control transmitters operating in the wideband segment must be 1.25 parts per million or better when AFC is locked to a base station, and 5 parts per million or better when AFC is not locked

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





3.2.4 TEST RESULTS

Please Refer to Appendix of this test report.

Note: VL = Low voltage(3.4V); VN/NV = Normal voltage(3.85V); VH = High voltage(4.4V); NT = Normal temperature (25°C)

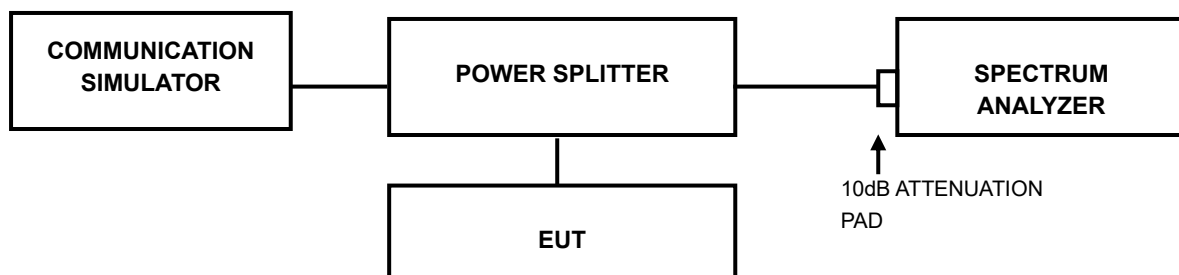


3.3 OCCUPIED BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

3.3.2 TEST SETUP



3.3.3 TEST PROCEDURES

- The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
- Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

3.3.4 TEST RESULTS

Please Refer to Appendix of this test report.



3.4 EMISSION MASK MEASUREMENT

3.4.1 LIMITS OF EMISSION MASK MEASUREMENT

According to FCC part 90.543(e) shall be tested the emission mask.

(e) For operations in the 758–768 MHz and the 788–798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than $76 + 10 \log (P)$ dB in a 6.25 kHz band segment, for base and fixed stations.

(2) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.

(3) On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least $43 + 10 \log (P)$ dB.

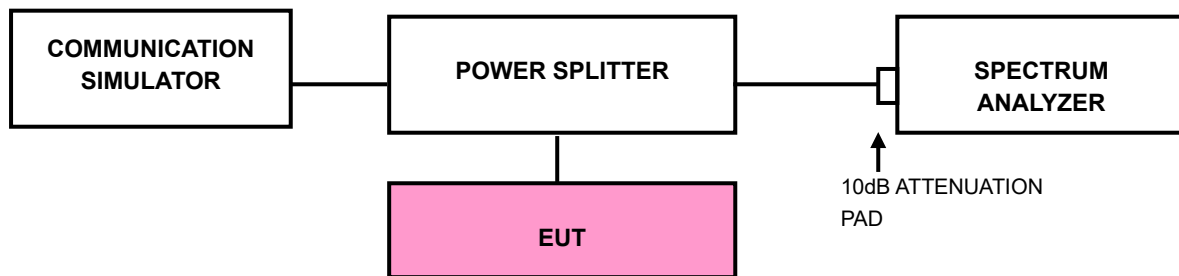
(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

According to FCC part 90.691 shall be tested the emission mask. For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

3.4.2 TEST SETUP





3.4.3 TEST PROCEDURES

- a) Connect the transmitter to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
- b) Tune the analyzer to the nominal center frequency of the emission bandwidth (EBW).
- c) Set the resolution bandwidth (RBW) $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
- d) Beyond the 1MHz band from the band edge, RBW=1MHz was used.
- e) Set the video bandwidth (VBW) to $\geq 3 \times$ RBW.
- f) Select the average power (RMS) display detector.
- g) Set the number of measurement points to ≥ 1001 .
- h) Use auto-coupled sweep time.
- i) Perform the measurement over an interval of time when the transmission is continuous and at its maximum power level.
- j) The RF fundamental frequency should be excluded against the limit line in the operating frequency band and use RBW is 10KHz or 100KHz.
- k) Record the max trace plot into the test report.

3.4.4 TEST RESULTS

Please Refer to Appendix of this test report.



3.5 CONDUCTED SPURIOUS EMISSIONS

3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

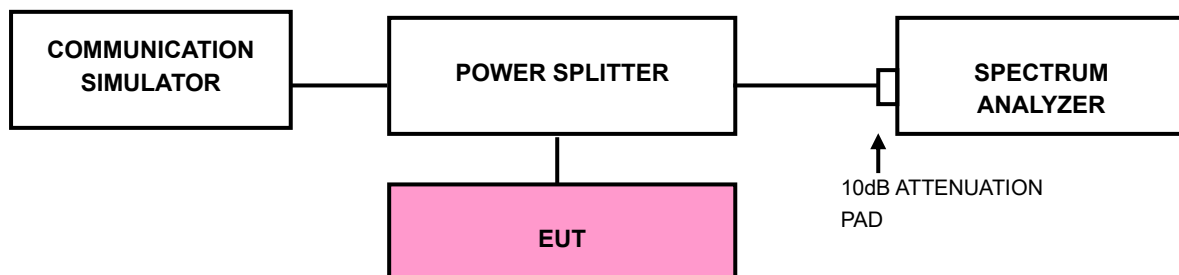
(1) The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB. The limit of emission equal to -13dBm

(2) For operations in the 763–775 MHz and 793–805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

3.5.2 TEST PROCEDURE

- a. The EUT makes a phone call to the communication simulator. All measurements were done at middle 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





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 of this test report.



3.6 RADIATED EMISSION MEASUREMENT

3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

(1) The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB. The limit of emission equal to -13dBm

(2) For operations in the 763–775 MHz and 793–805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

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 of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

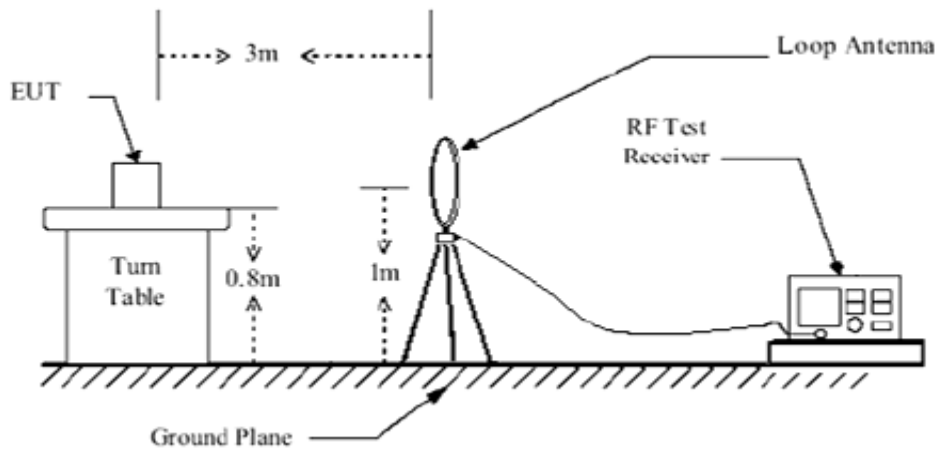
3.6.3 DEVIATION FROM TEST STANDARD

No deviation

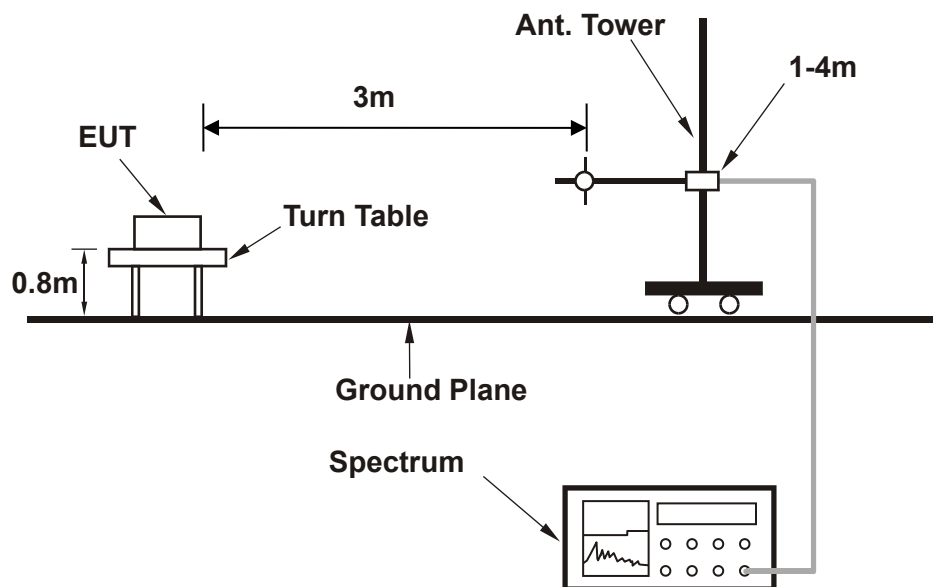


3.6.4 TEST SETUP

<Below 30MHz>

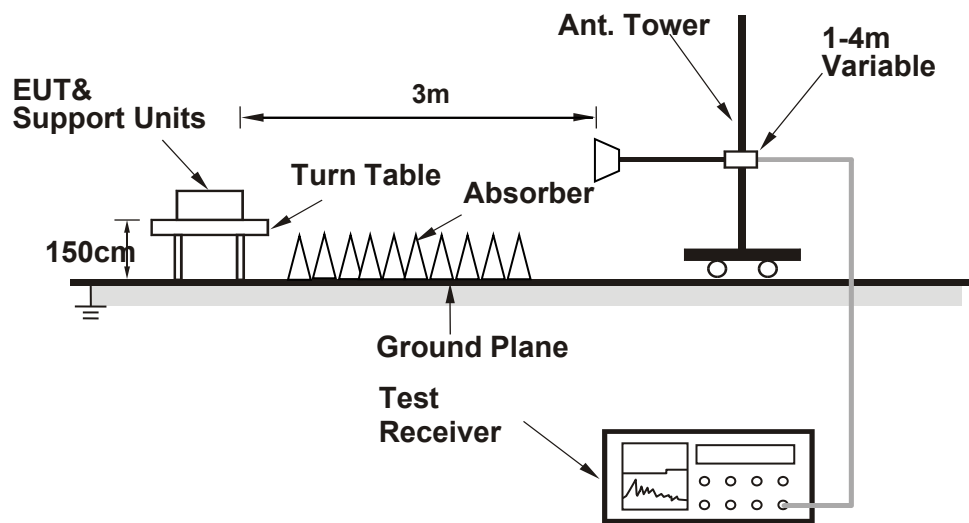


< Frequency Range 30MHz~1GHz >





< Frequency Range above 1GHz >



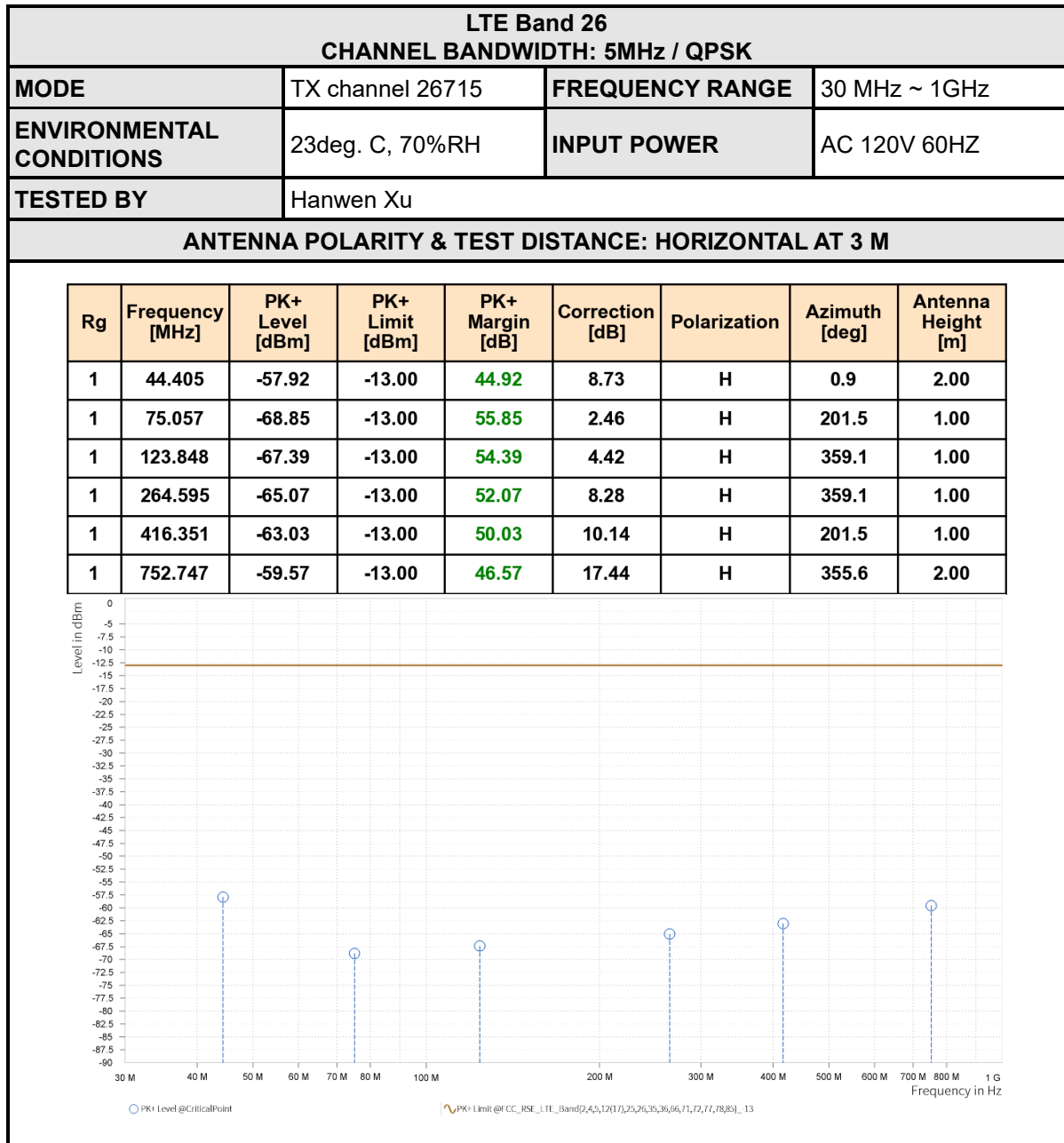
For the actual test configuration, please refer to the attached file (Test Setup Photo).



3.6.5 TEST RESULTS

BELOW 1GHz WORST-CASE DATA

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

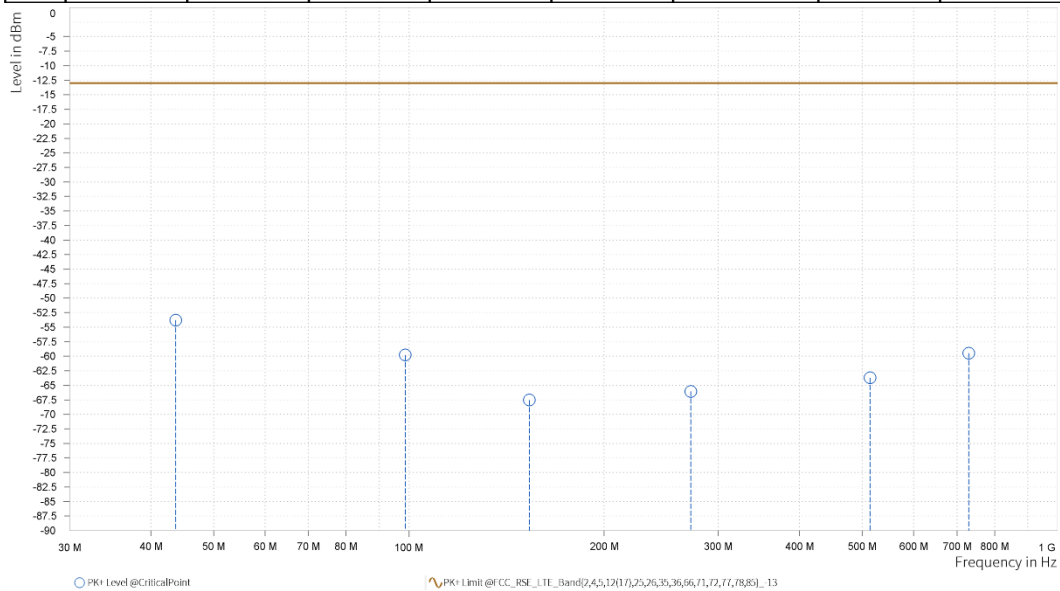




MODE	TX channel 26715	FREQUENCY RANGE	30 MHz ~ 1GHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Hanwen Xu		

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	43.726	-53.82	-13.00	40.82	10.97	V	258.9	2.00
1	98.676	-59.79	-13.00	46.79	9.77	V	1.5	2.00
1	153.336	-67.53	-13.00	54.53	3.00	V	197.8	1.00
1	271.918	-66.05	-13.00	53.05	7.69	V	359	2.00
1	514.127	-63.71	-13.00	50.71	11.40	V	258.9	2.00
1	729.564	-59.46	-13.00	46.46	16.54	V	1	2.00





ABOVE 1GHz

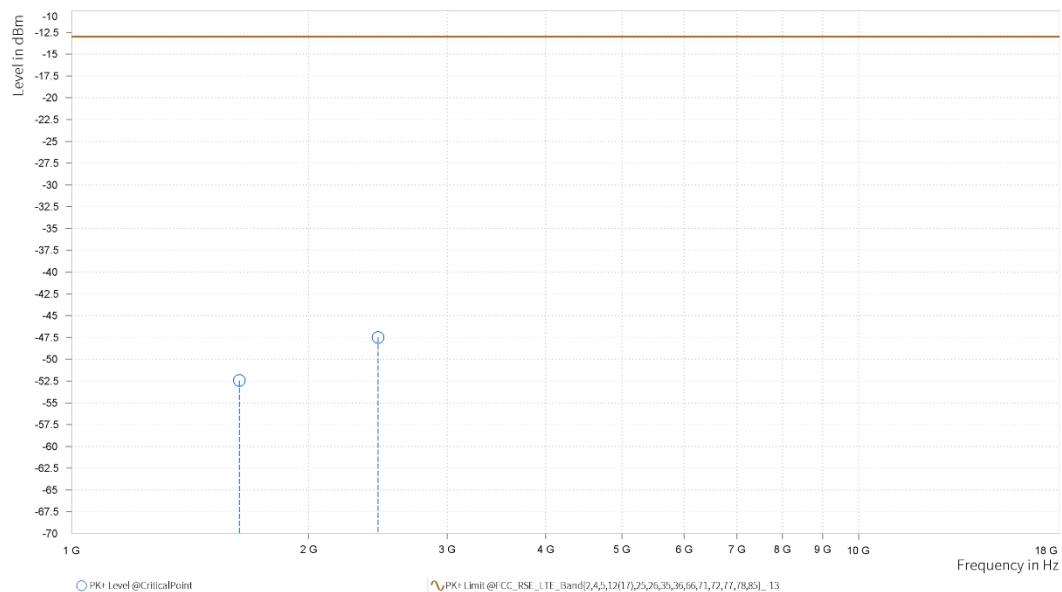
Note: For higher frequency, the emission is too low to be detected.

LTE BAND 26

CHANNEL BANDWIDTH	5MHz / QPSK	MODE	TX channel 26715
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

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	1,633.500	-52.45	-13.00	39.45	18.16	H	68.9	1.00
3	2,450.250	-47.50	-13.00	34.50	24.45	H	1	1.00

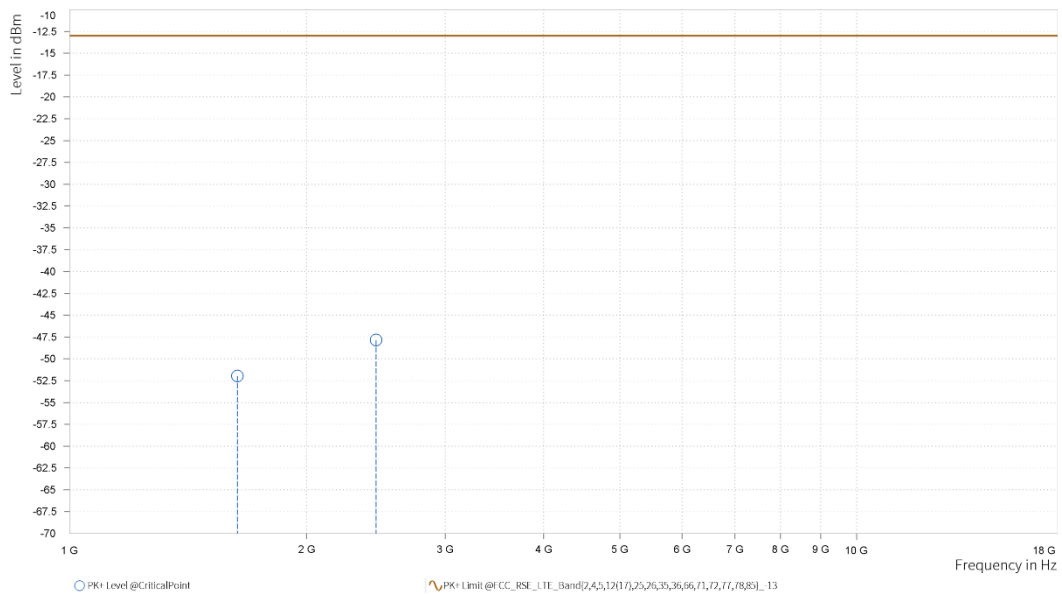




CHANNEL BANDWIDTH	5MHz / QPSK	MODE	TX channel 26715
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

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	1,633.500	-51.98	-13.00	38.98	17.81	V	1	1.00
3	2,450.250	-47.85	-13.00	34.85	24.24	V	135.8	1.00

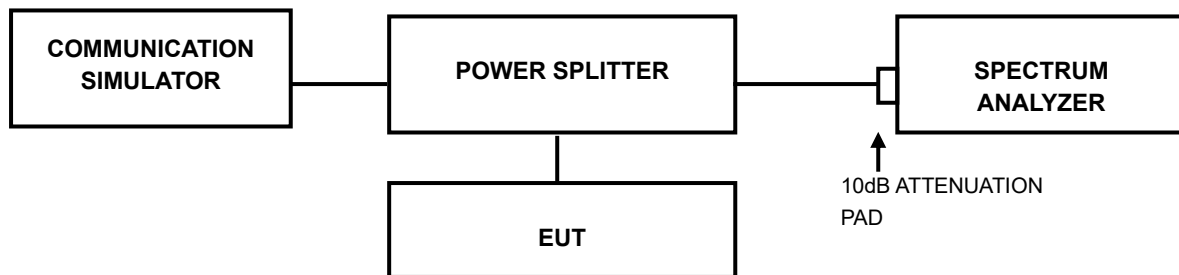


3.7 PEAK TO AVERAGE RATIO

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%.

3.7.4 TEST RESULTS

Please Refer to Appendix of this test report.



4 INFORMATION ON THE TESTING LABORATORIES

We, Huarui 7layers High Technology (Suzhou) Co., Ltd. ,were founded in 2020 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

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

Lab Address:

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province, China
Accredited Test Lab Cert 6613.01

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

Suzhou EMC/RF Lab:

Tel: +86 (0557) 368 1008



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

No modifications were made to the EUT by the lab during the test.



6 APPENDIX

LTE BAND 14

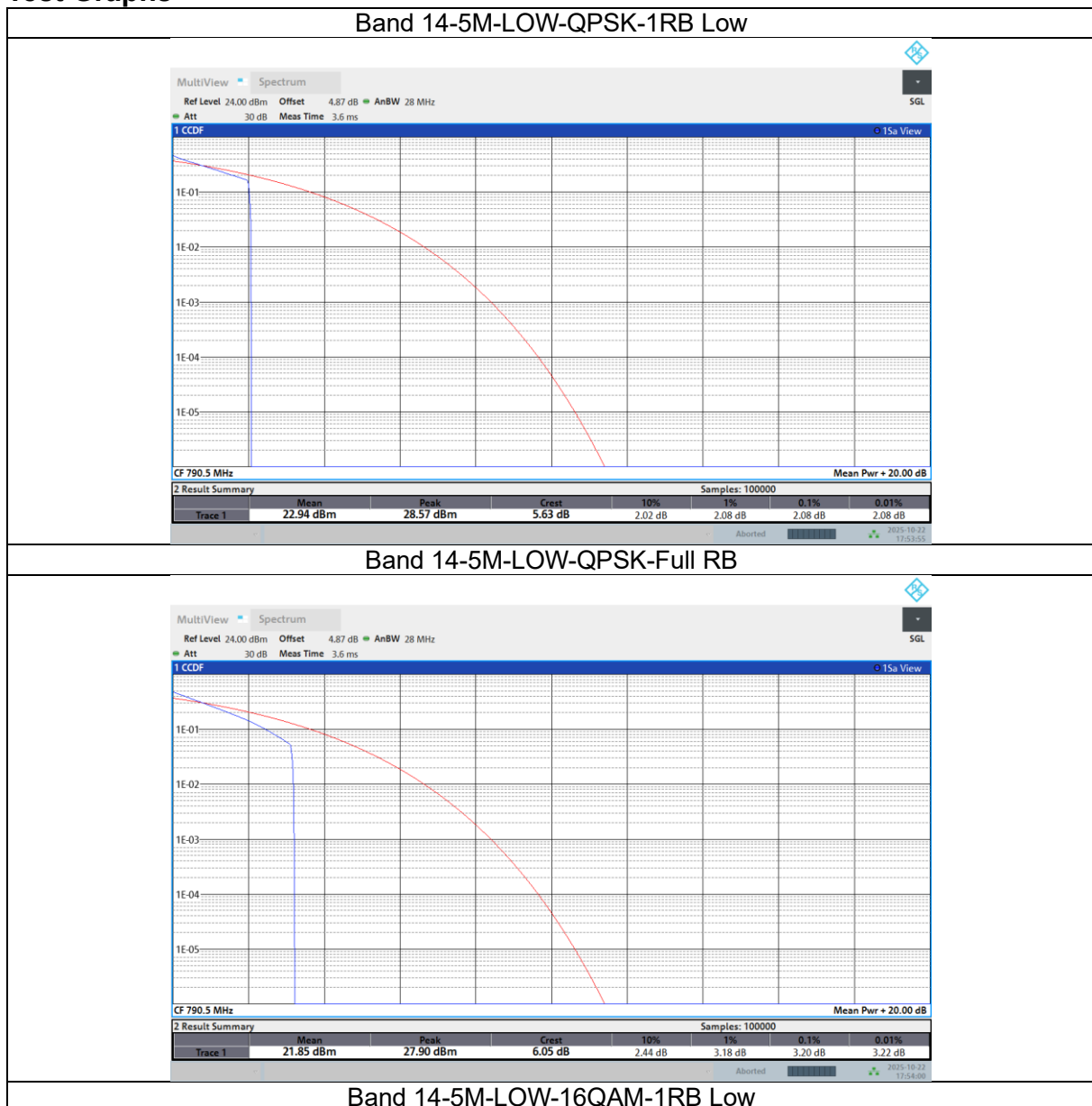
PEAK-TO-AVERAGE RATIO(CCDF)

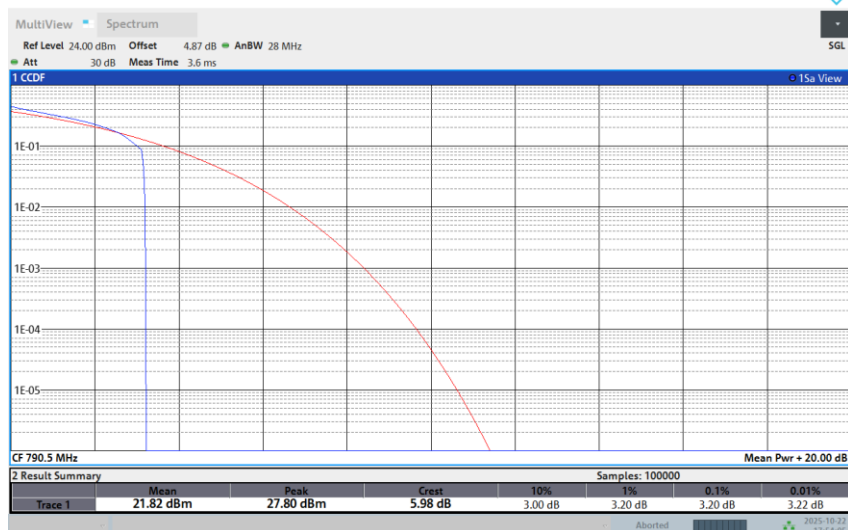
Test Result

Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
5MHz	QPSK	23305	1RB Low	2.08	13	PASS
5MHz	QPSK	23305	Full RB	3.20	13	PASS
5MHz	16QAM	23305	1RB Low	3.20	13	PASS
5MHz	16QAM	23305	Full RB	4.24	13	PASS
5MHz	64QAM	23305	1RB Low	3.96	13	PASS
5MHz	64QAM	23305	Full RB	5.26	13	PASS
5MHz	QPSK	23330	1RB Low	2.08	13	PASS
5MHz	QPSK	23330	Full RB	3.20	13	PASS
5MHz	16QAM	23330	1RB Low	3.12	13	PASS
5MHz	16QAM	23330	Full RB	4.24	13	PASS
5MHz	64QAM	23330	1RB Low	4.24	13	PASS
5MHz	64QAM	23330	Full RB	5.18	13	PASS
5MHz	QPSK	23355	1RB Low	2.26	13	PASS
5MHz	QPSK	23355	Full RB	3.12	13	PASS
5MHz	16QAM	23355	1RB Low	2.74	13	PASS
5MHz	16QAM	23355	Full RB	4.06	13	PASS
5MHz	64QAM	23355	1RB Low	4.14	13	PASS
5MHz	64QAM	23355	Full RB	5.18	13	PASS
10MHz	QPSK	23330	1RB Low	2.26	13	PASS
10MHz	QPSK	23330	Full RB	3.20	13	PASS
10MHz	16QAM	23330	1RB Low	2.56	13	PASS
10MHz	16QAM	23330	Full RB	4.24	13	PASS
10MHz	64QAM	23330	1RB Low	3.68	13	PASS
10MHz	64QAM	23330	Full RB	5.18	13	PASS
10MHz	QPSK	23330	1RB Low	2.26	13	PASS
10MHz	QPSK	23330	Full RB	3.30	13	PASS
10MHz	16QAM	23330	1RB Low	2.64	13	PASS
10MHz	16QAM	23330	Full RB	4.24	13	PASS
10MHz	64QAM	23330	1RB Low	3.68	13	PASS
10MHz	64QAM	23330	Full RB	5.08	13	PASS
10MHz	QPSK	23330	1RB Low	2.18	13	PASS
10MHz	QPSK	23330	Full RB	3.30	13	PASS
10MHz	16QAM	23330	1RB Low	3.20	13	PASS
10MHz	16QAM	23330	Full RB	4.24	13	PASS
10MHz	64QAM	23330	1RB Low	3.58	13	PASS
10MHz	64QAM	23330	Full RB	5.18	13	PASS

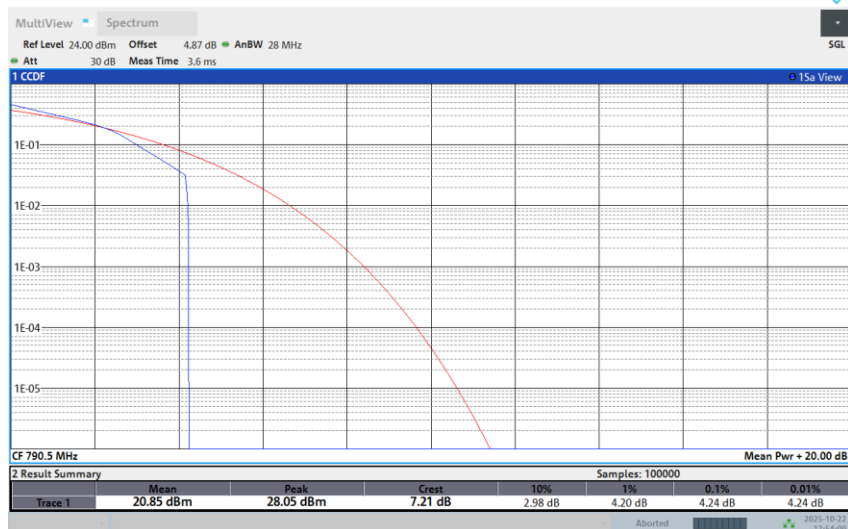


Test Graphs

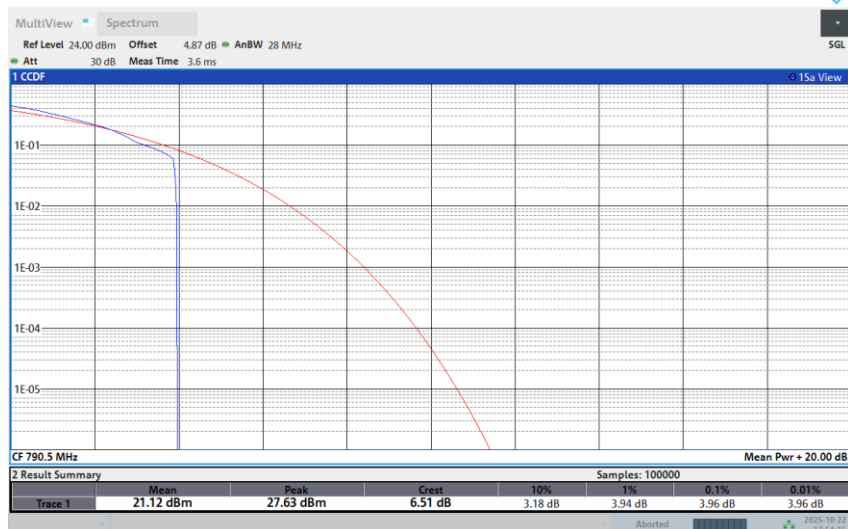




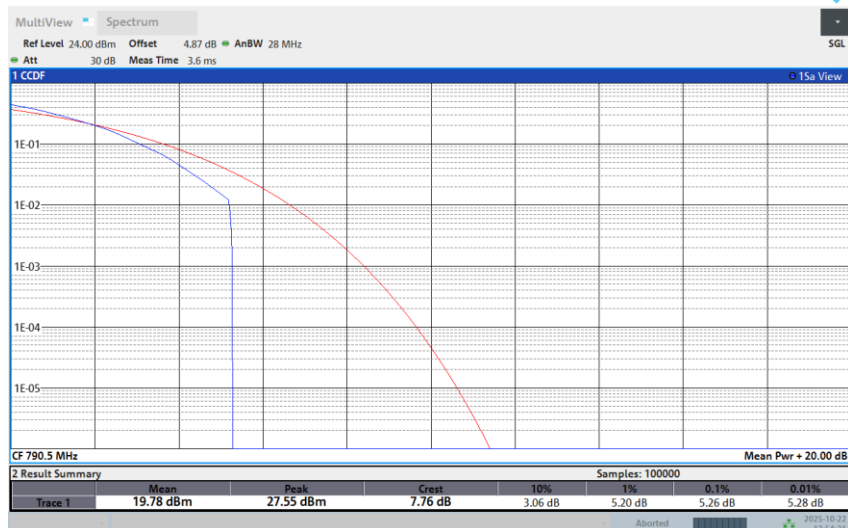
Band 14-5M-LOW-16QAM-Full RB



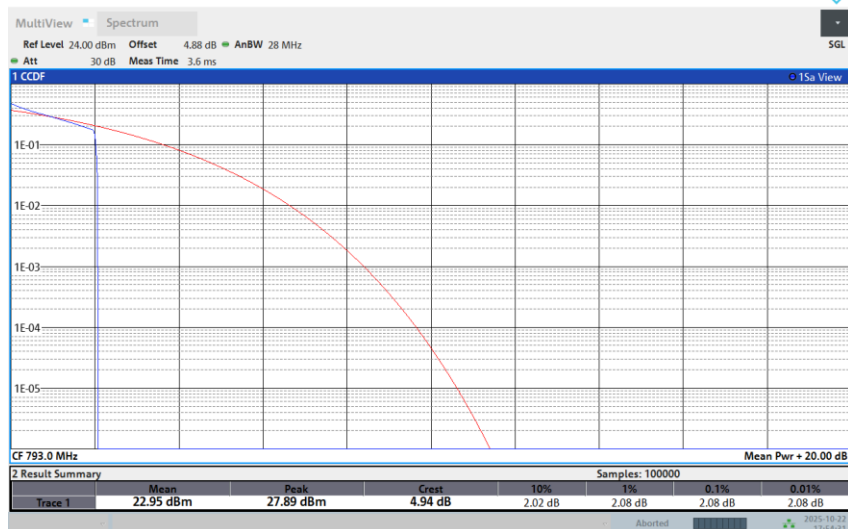
Band 14-5M-LOW-64QAM-1RB Low



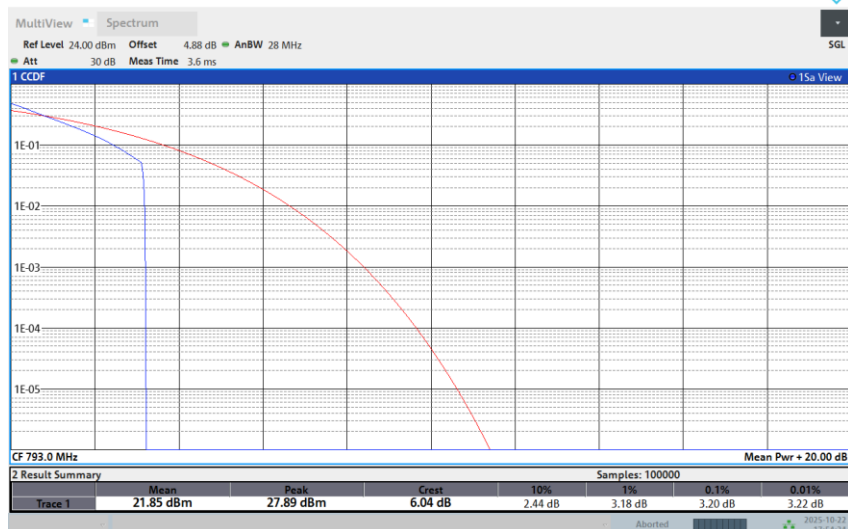
Band 14-5M-LOW-64QAM-Full RB



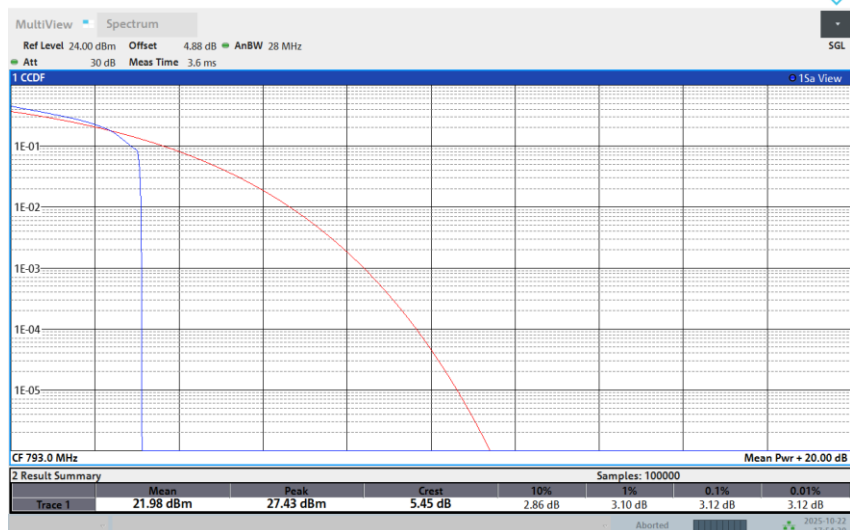
Band 14-5M-MID-QPSK-1RB Low



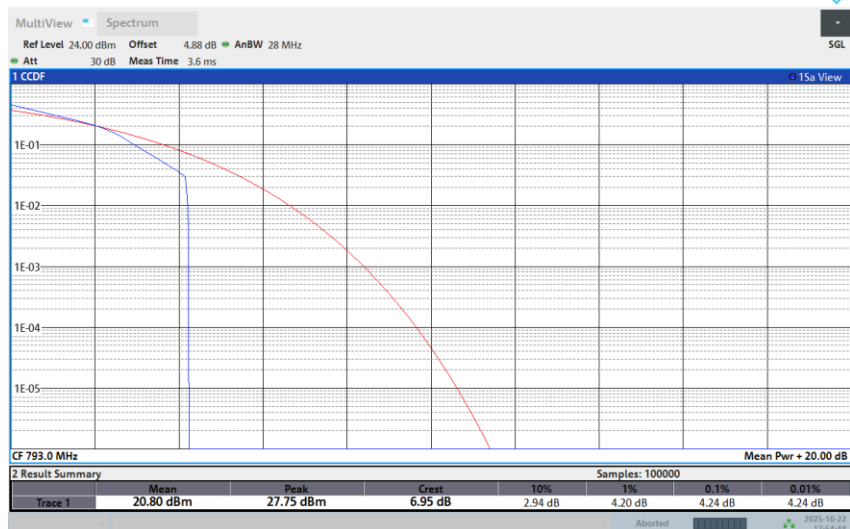
Band 14-5M-MID-QPSK-Full RB



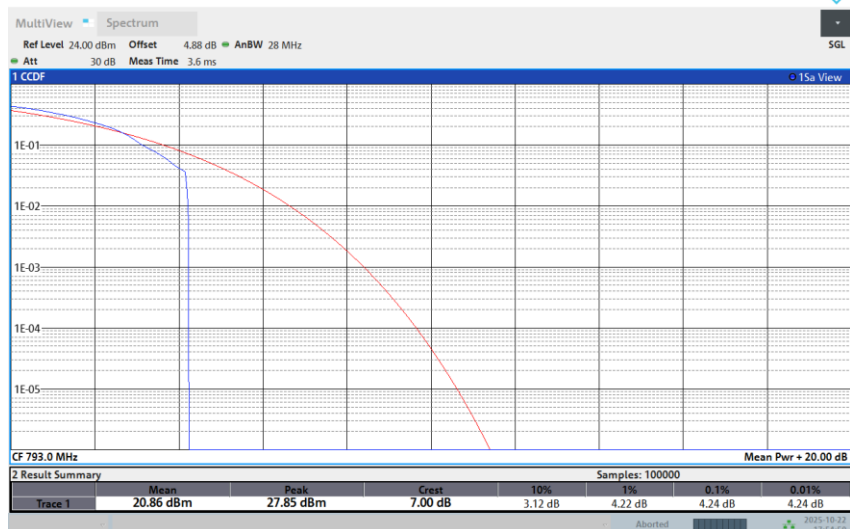
Band 14-5M-MID-16QAM-1RB Low



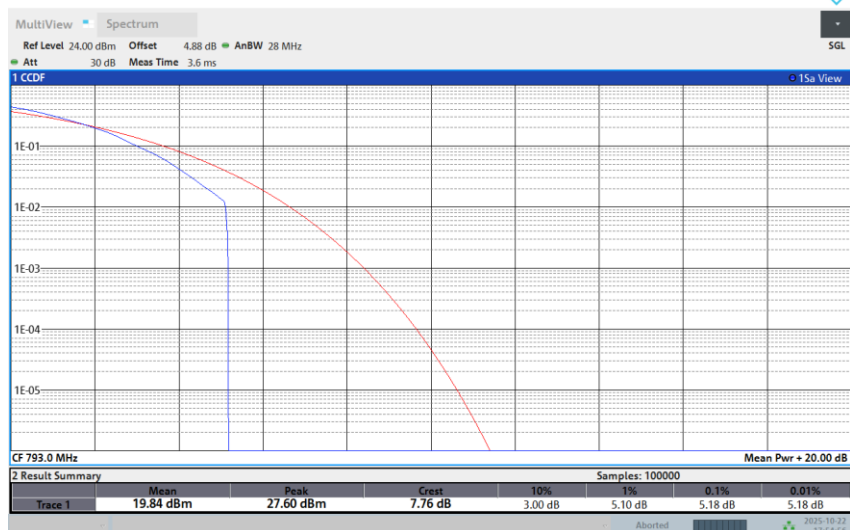
Band 14-5M-MID-16QAM-Full RB



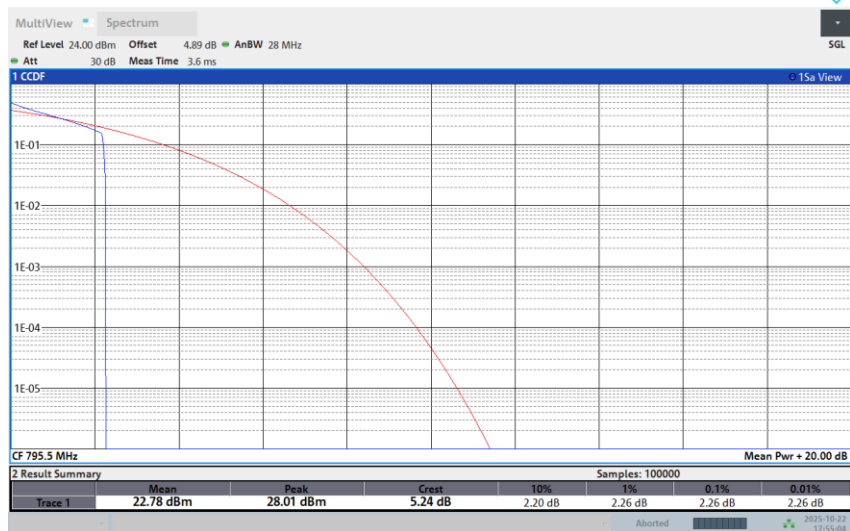
Band 14-5M-MID-64QAM-1RB Low



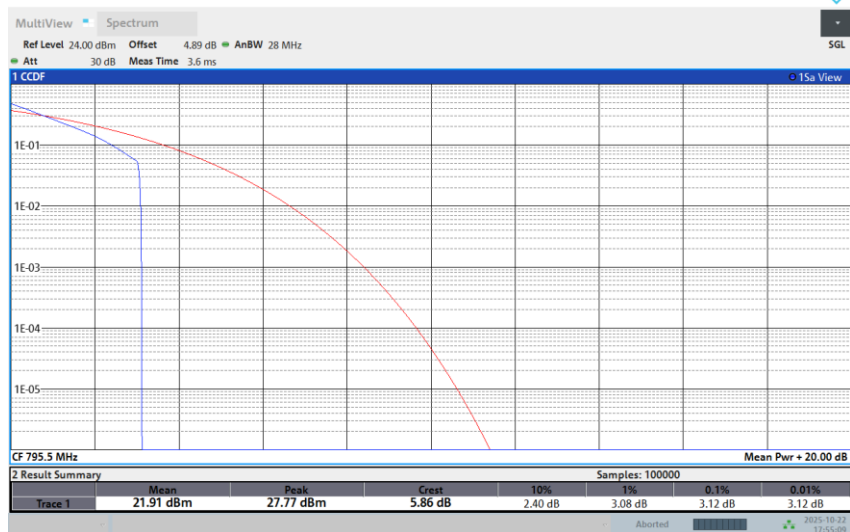
Band 14-5M-MID-64QAM-Full RB



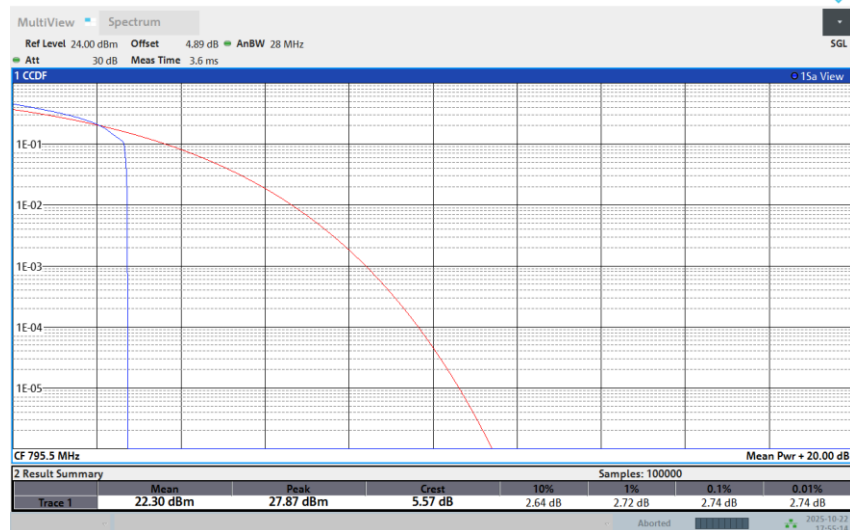
Band 14-5M-HIGH-QPSK-1RB Low



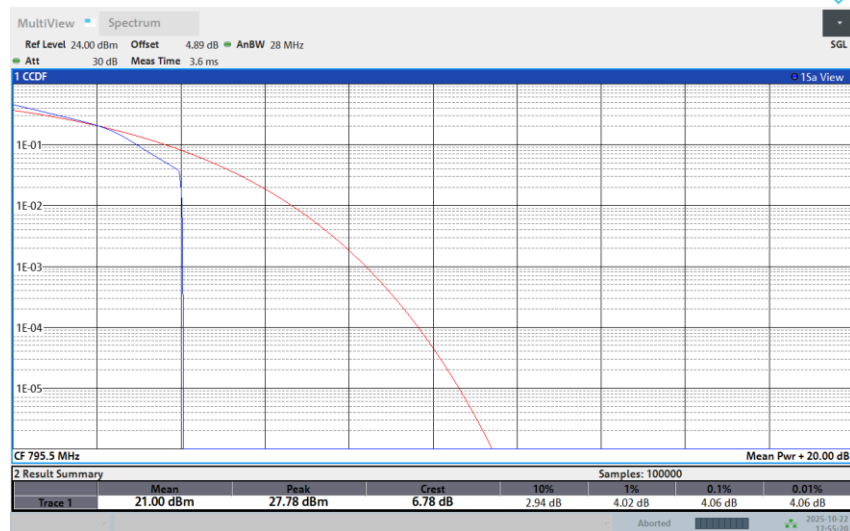
Band 14-5M-HIGH-QPSK-Full RB



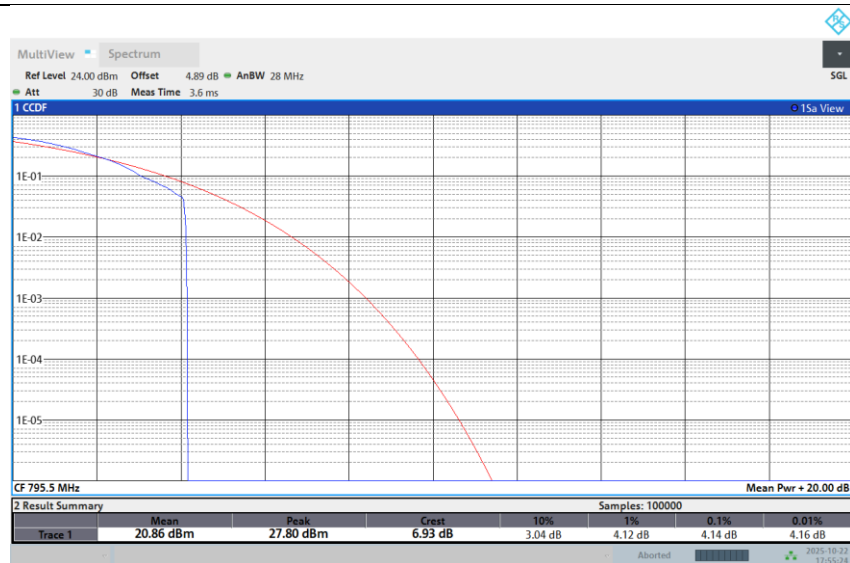
Band 14-5M-HIGH-16QAM-1RB Low



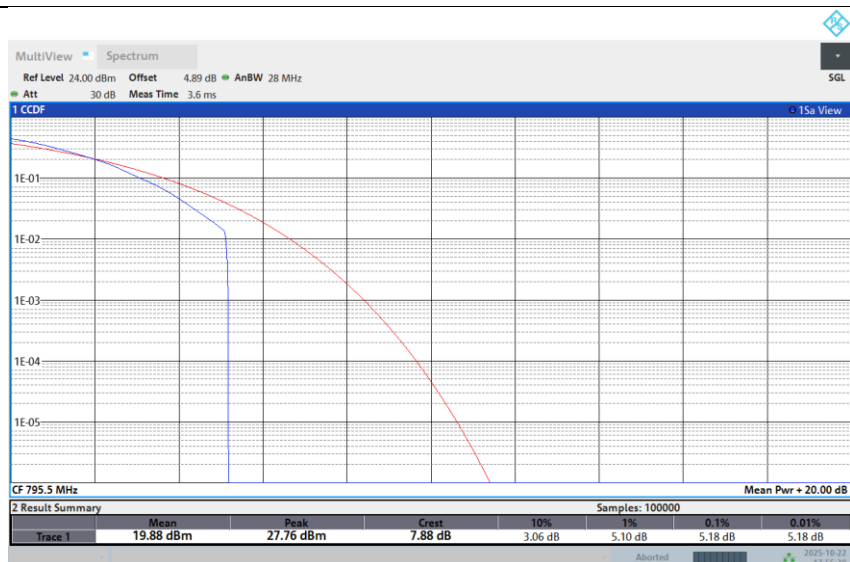
Band 14-5M-HIGH-16QAM-Full RB



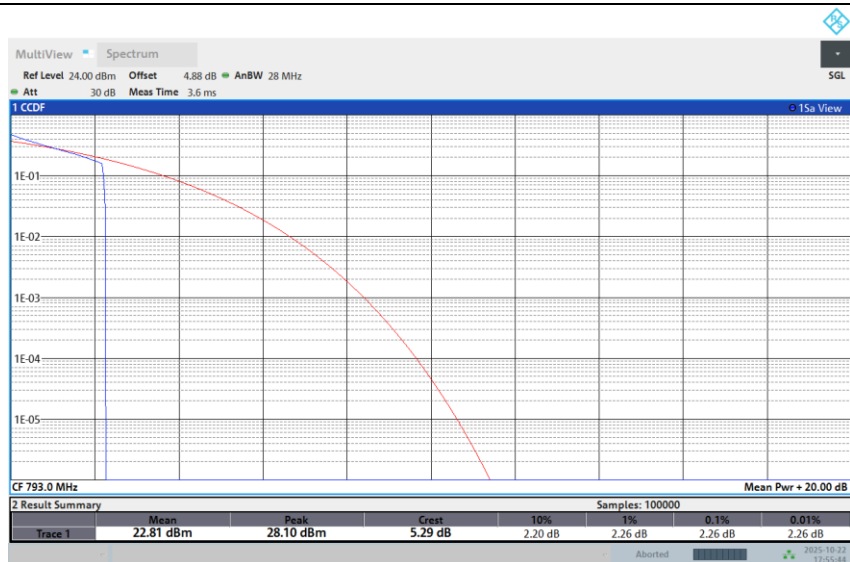
Band 14-5M-HIGH-64QAM-1RB Low



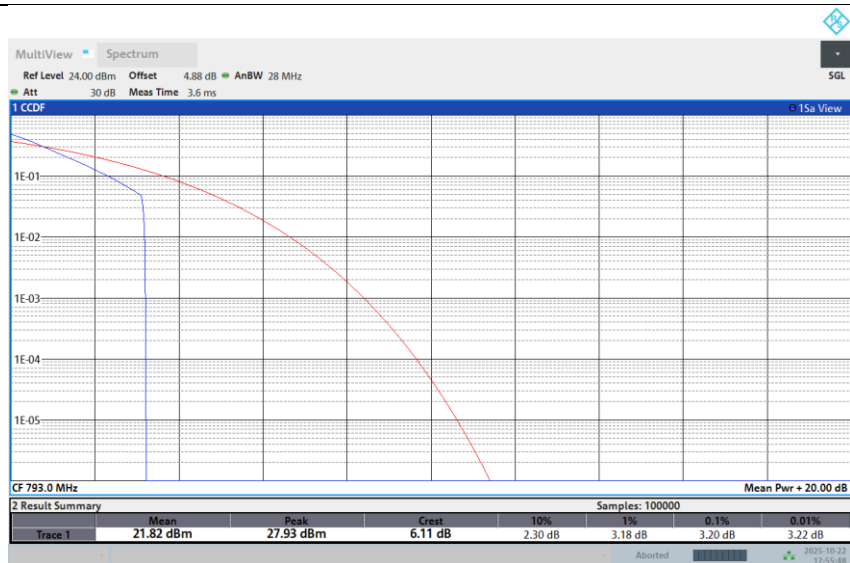
Band 14-5M-HIGH-64QAM-Full RB



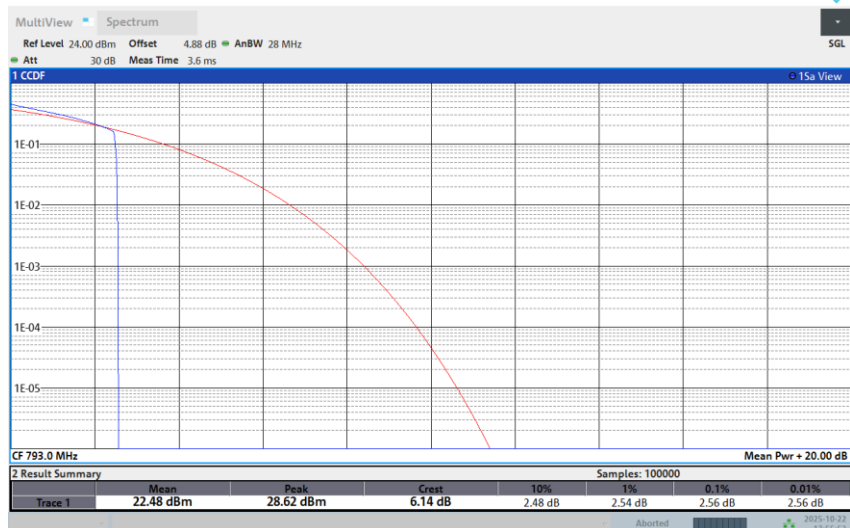
Band 14-10M-LOW-QPSK-1RB Low



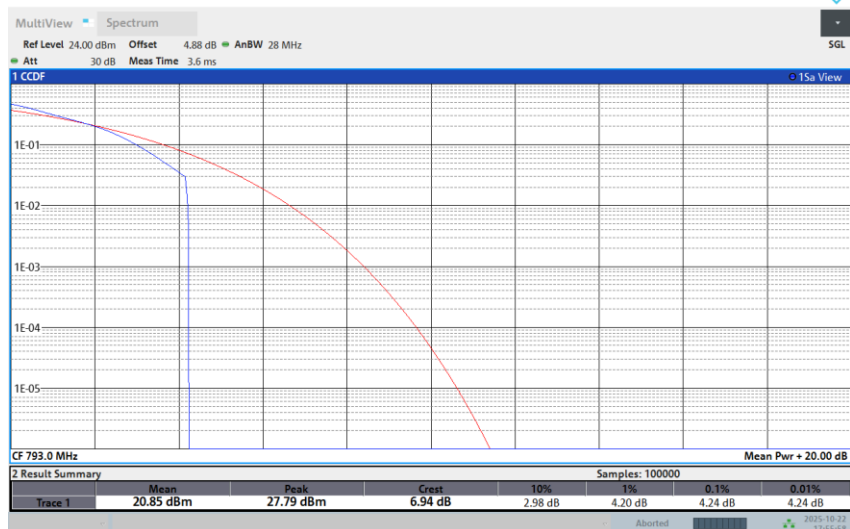
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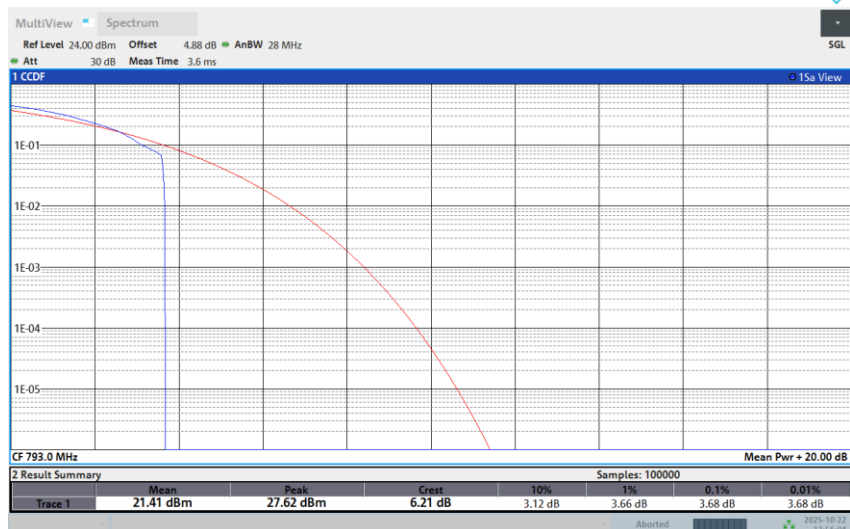
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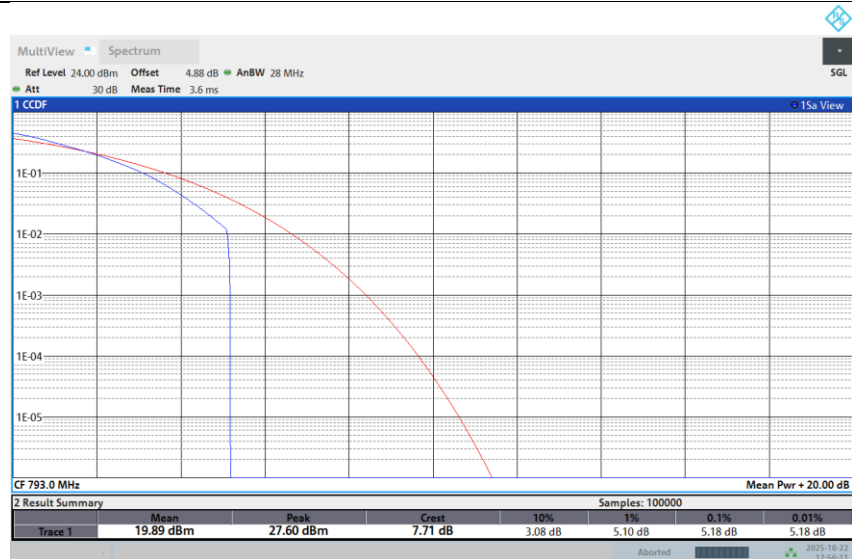
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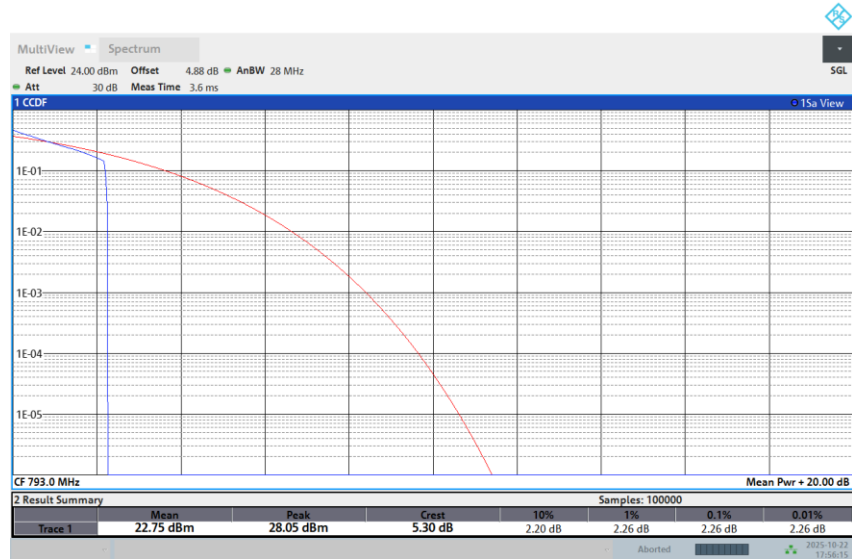
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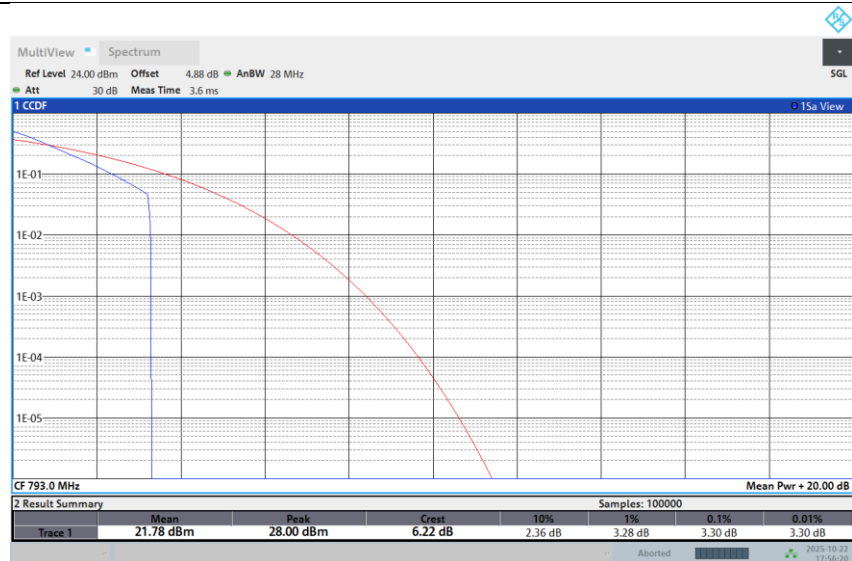
Band 14-10M-LOW-64QAM-Full RB



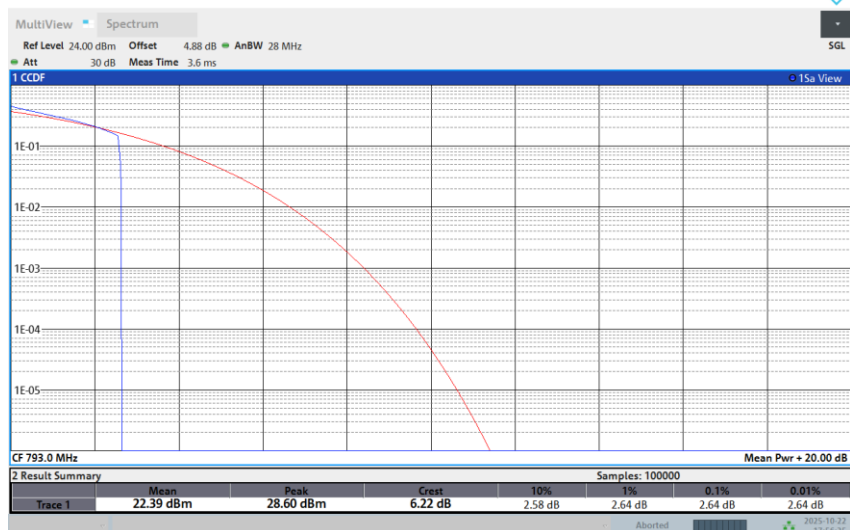
Band 14-10M-MID-QPSK-1RB Low



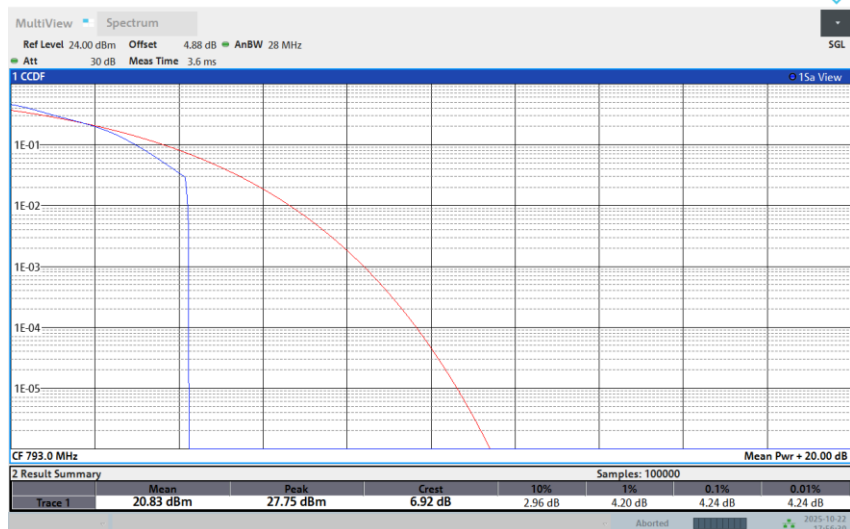
Band 14-10M-MID-QPSK-Full RB



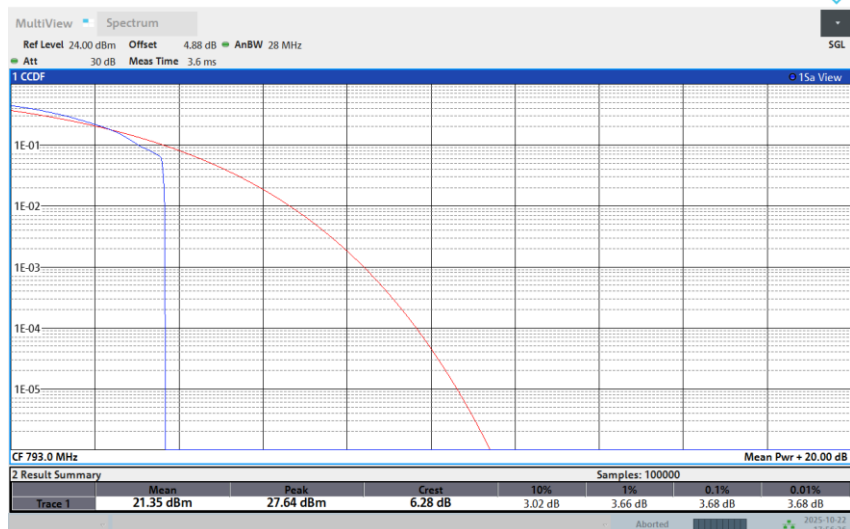
Band 14-10M-MID-16QAM-1RB Low



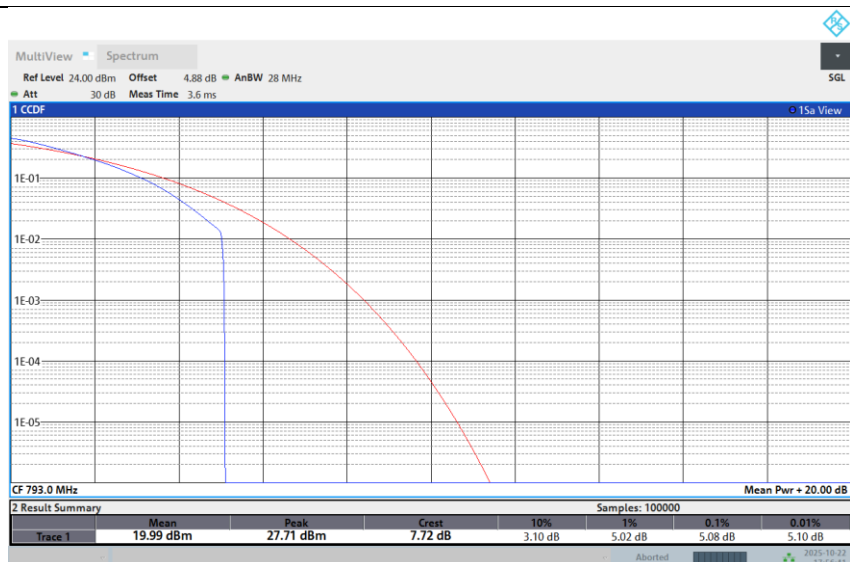
Band 14-10M-MID-16QAM-Full RB



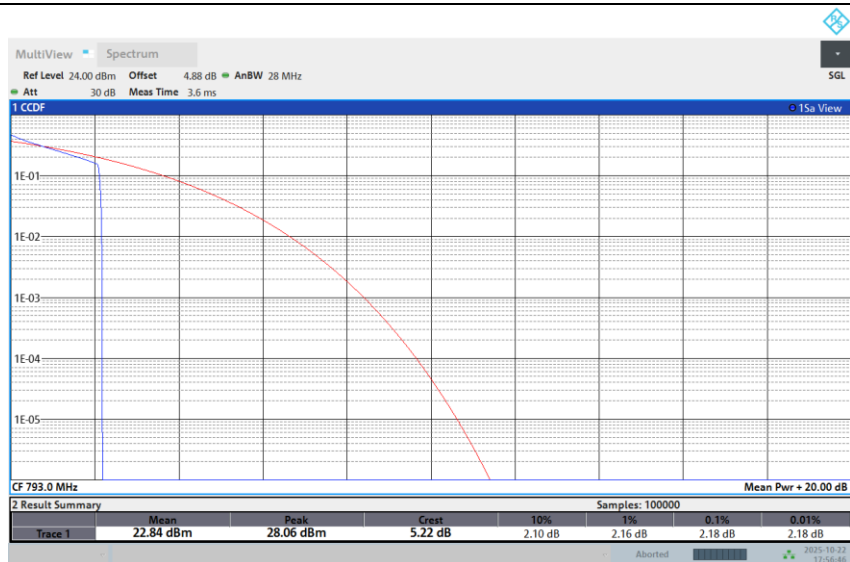
Band 14-10M-MID-64QAM-1RB Low



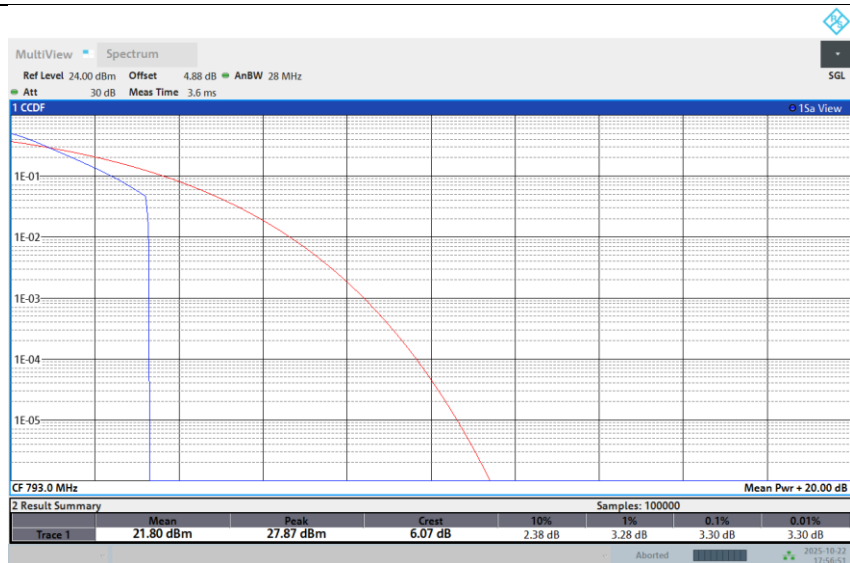
Band 14-10M-MID-64QAM-Full RB



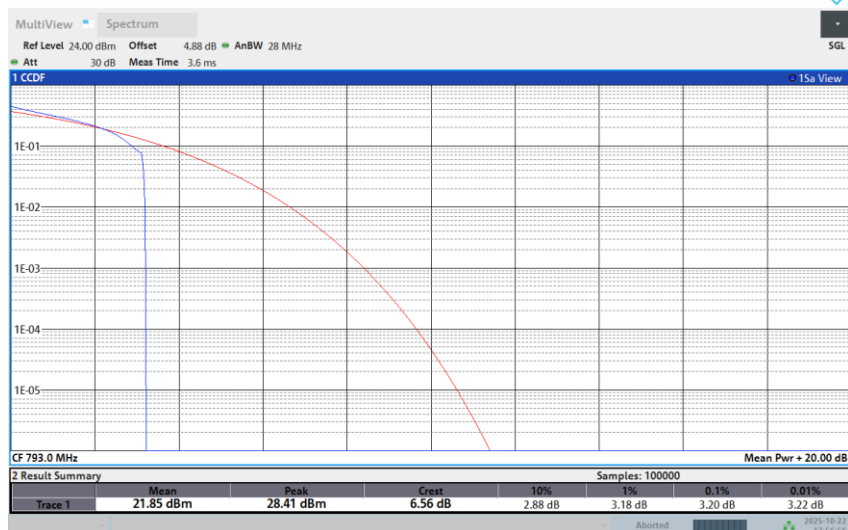
Band 14-10M-HIGH-QPSK-1RB Low



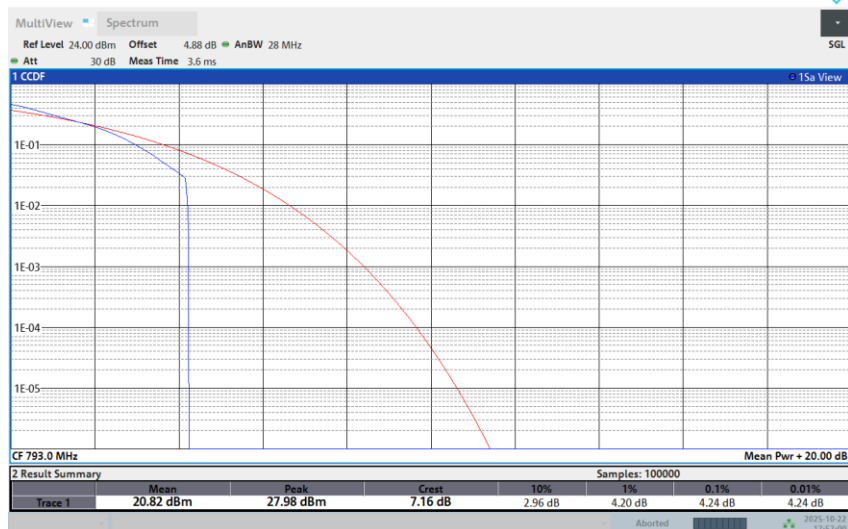
Band 14-10M-HIGH-QPSK-Full RB



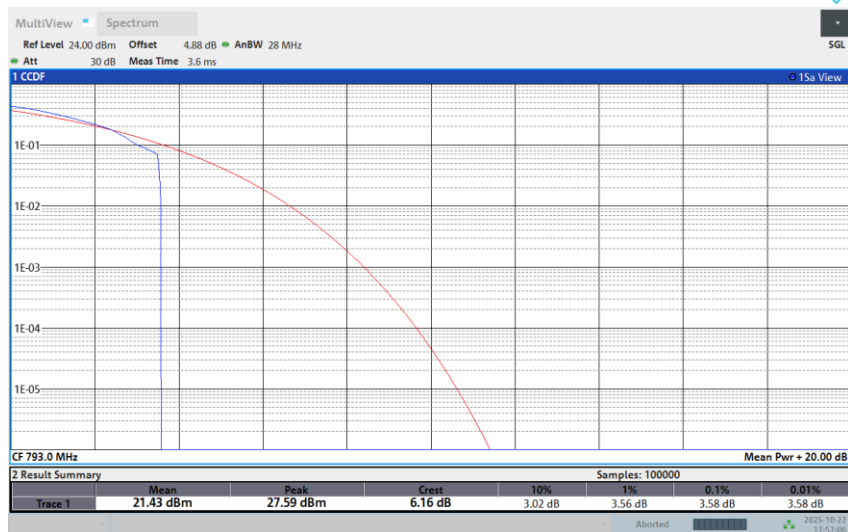
Band 14-10M-HIGH-16QAM-1RB Low



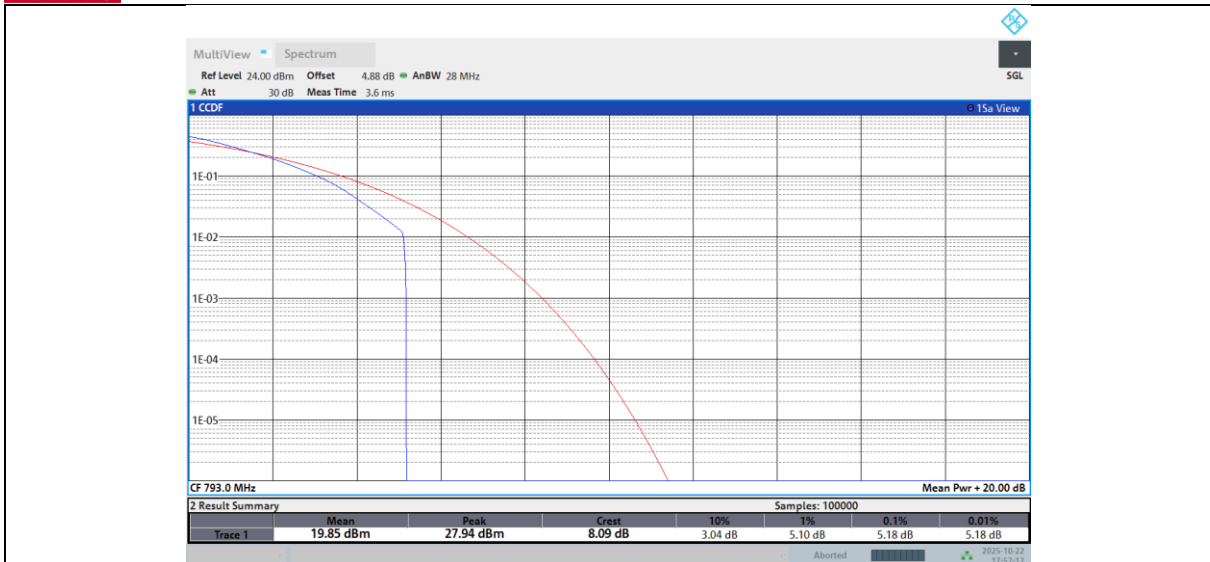
Band 14-10M-HIGH-16QAM-Full RB



Band 14-10M-HIGH-64QAM-1RB Low



Band 14-10M-HIGH-64QAM-Full RB





BUREAU VERITAS Test Report No.: PSU-NQN2509250114RF10
26DB BANDWIDTH AND OCCUPIED BANDWIDTH

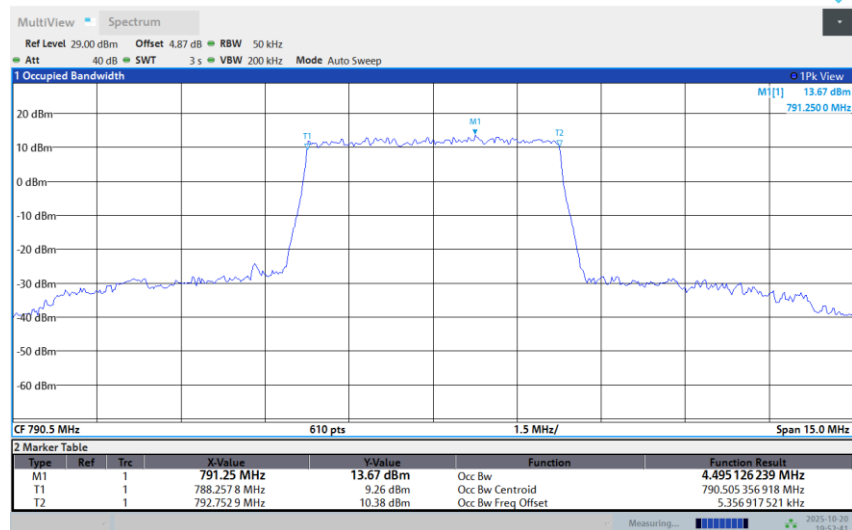
Test Result

Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth(MHz)	Verdict
5MHz	QPSK	23305	Full RB	4.495	PASS
5MHz	16QAM	23305	Full RB	4.482	PASS
5MHz	64QAM	23305	Full RB	4.485	PASS
5MHz	QPSK	23330	Full RB	4.490	PASS
5MHz	16QAM	23330	Full RB	4.489	PASS
5MHz	64QAM	23330	Full RB	4.482	PASS
5MHz	QPSK	23355	Full RB	4.474	PASS
5MHz	16QAM	23355	Full RB	4.482	PASS
5MHz	64QAM	23355	Full RB	4.477	PASS
10MHz	QPSK	23330	Full RB	8.937	PASS
10MHz	16QAM	23330	Full RB	8.932	PASS
10MHz	64QAM	23330	Full RB	8.925	PASS

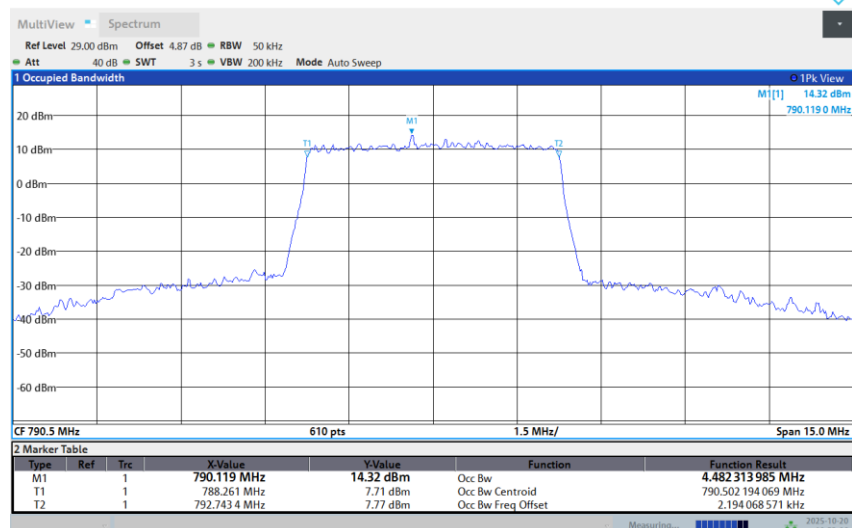


Test Graphs

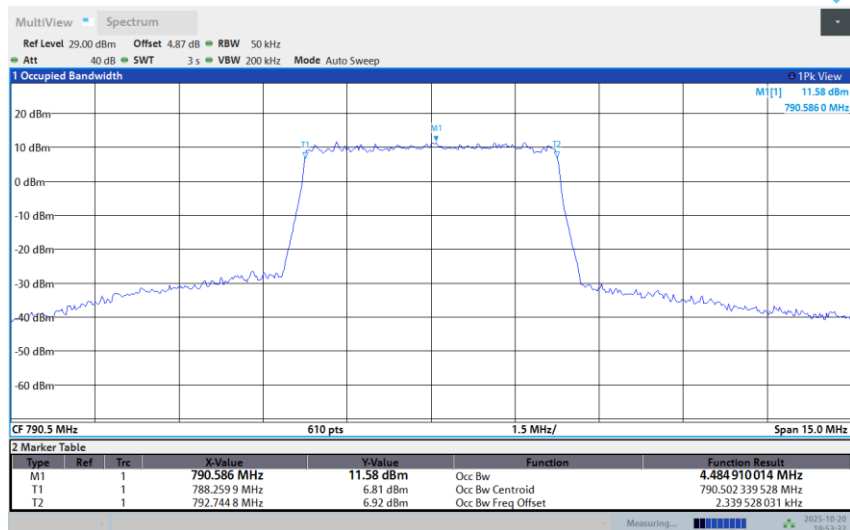
Band 14-5M-LOW-QPSK-Full RB



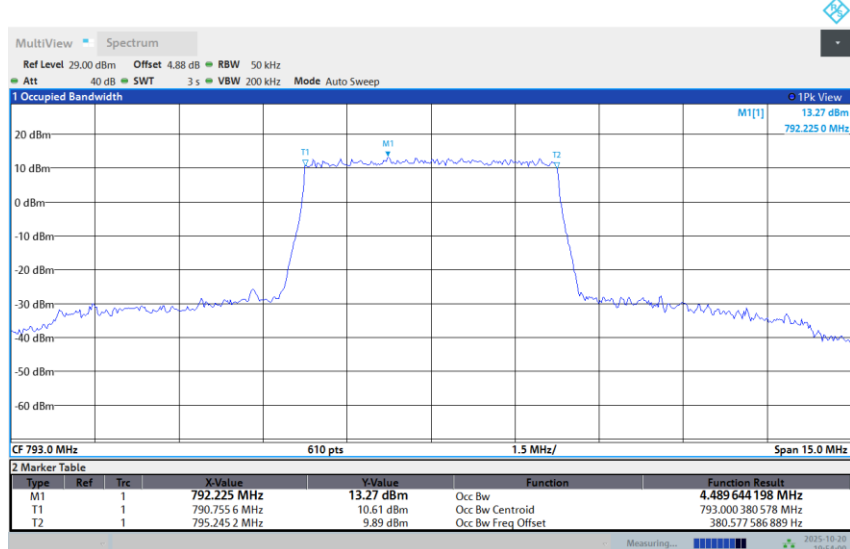
Band 14-5M-LOW-16QAM-Full RB



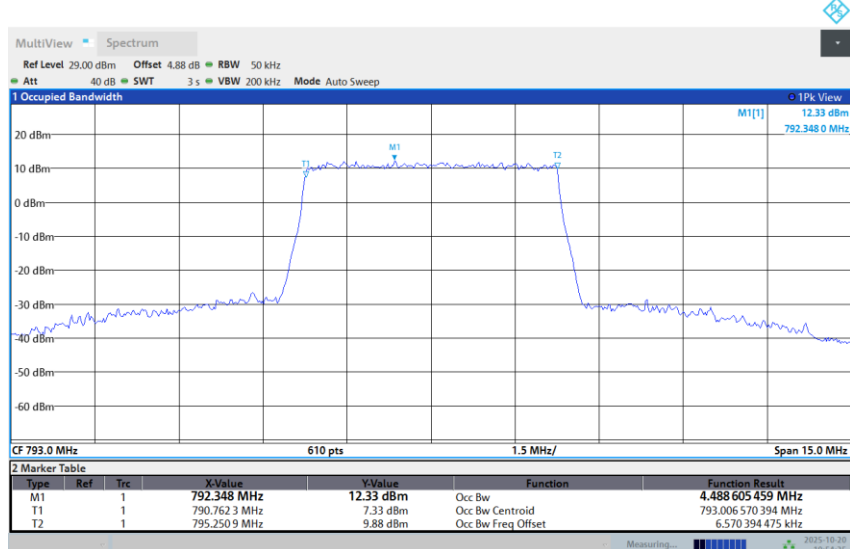
Band 14-5M-LOW-64QAM-Full RB



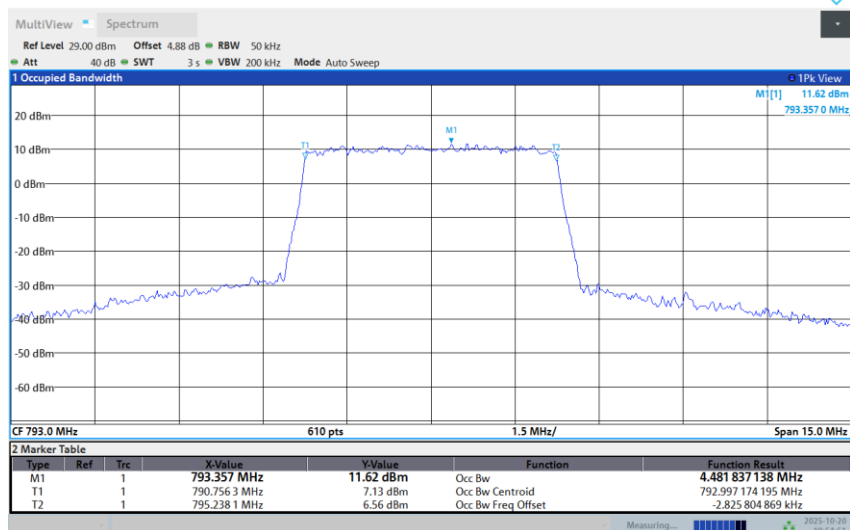
Band 14-5M-MID-QPSK-Full RB



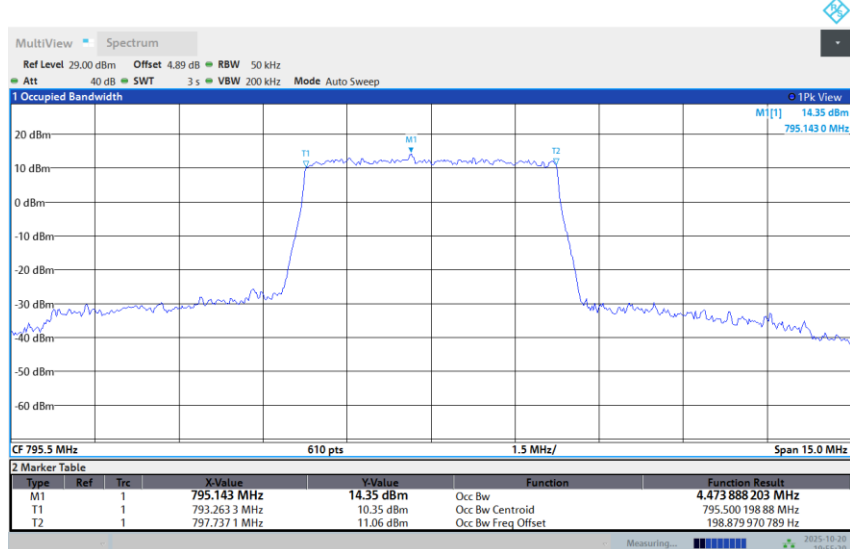
Band 14-5M-MID-16QAM-Full RB



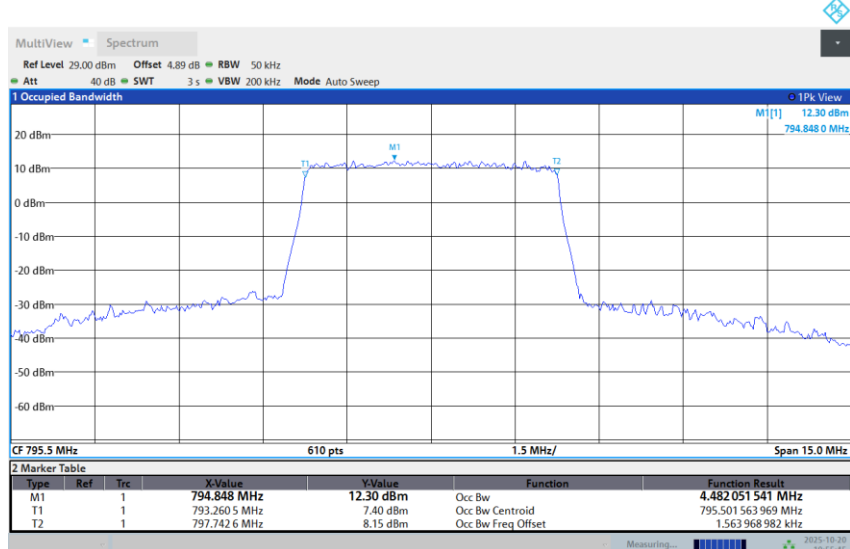
Band 14-5M-MID-64QAM-Full RB



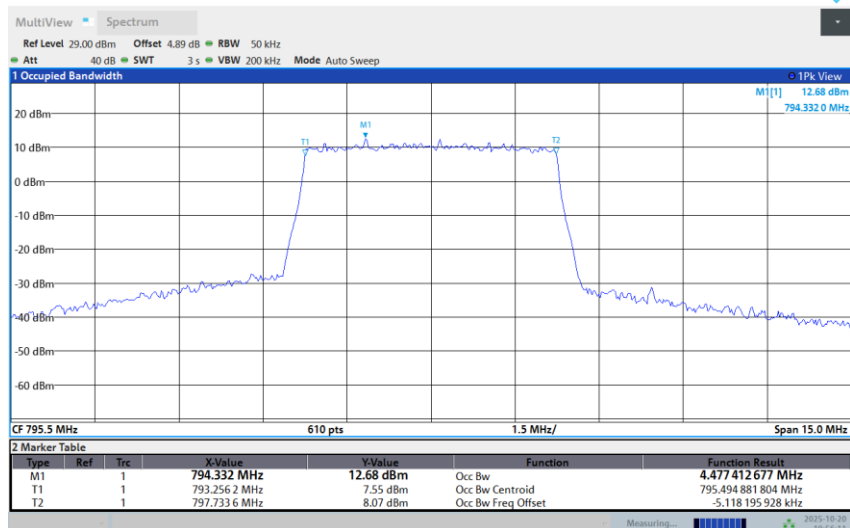
Band 14-5M-HIGH-QPSK-Full RB



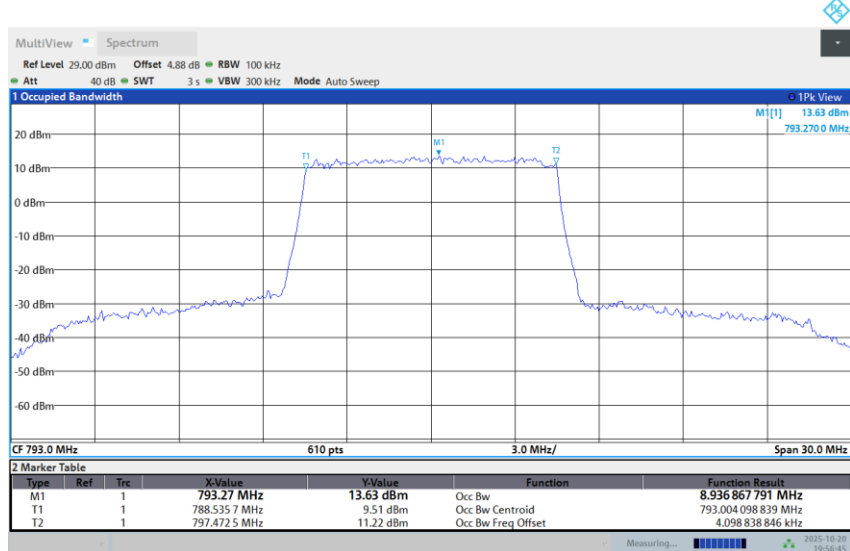
Band 14-5M-HIGH-16QAM-Full RB



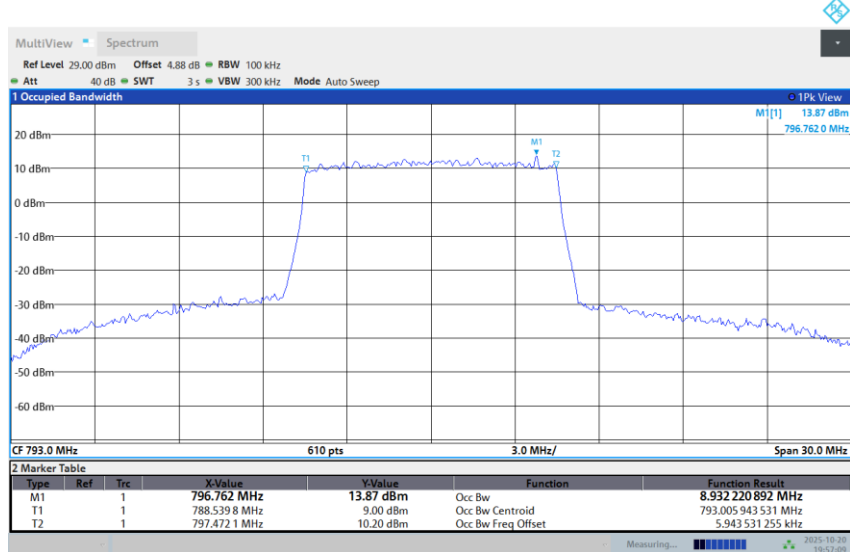
Band 14-5M-HIGH-64QAM-Full RB



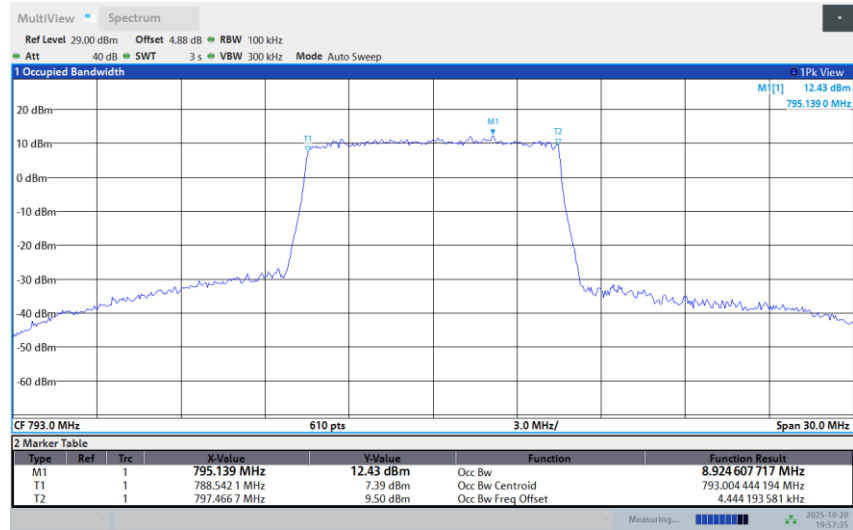
Band 14-10M-LOW-QPSK-Full RB



Band 14-10M-LOW-16QAM-Full RB



Band 14-10M-LOW-64QAM-Full RB





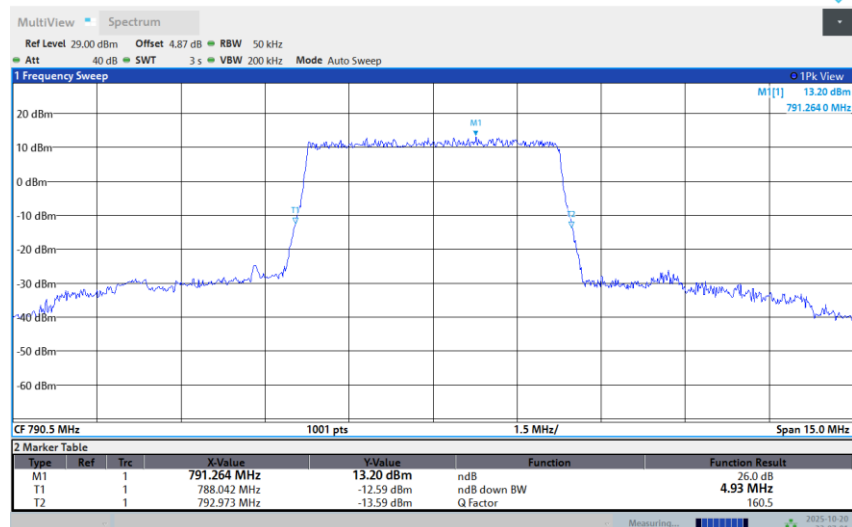
Test Result

Bandwidth	Modulation	Channel	RB Configuration	26dB Bandwidth(MHz)	Verdict
5MHz	QPSK	23305	Full RB	4.93	PASS
5MHz	16QAM	23305	Full RB	4.86	PASS
5MHz	64QAM	23305	Full RB	4.92	PASS
5MHz	QPSK	23330	Full RB	4.88	PASS
5MHz	16QAM	23330	Full RB	4.90	PASS
5MHz	64QAM	23330	Full RB	4.90	PASS
5MHz	QPSK	23355	Full RB	4.88	PASS
5MHz	16QAM	23355	Full RB	4.93	PASS
5MHz	64QAM	23355	Full RB	4.87	PASS
10MHz	QPSK	23330	Full RB	9.74	PASS
10MHz	16QAM	23330	Full RB	9.62	PASS
10MHz	64QAM	23330	Full RB	9.59	PASS

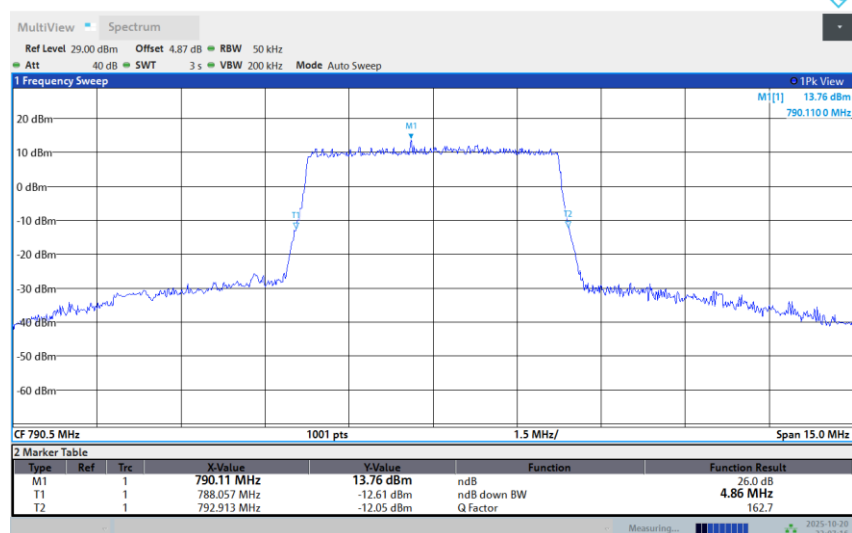


Test Graphs

Band 14-5M-LOW-QPSK-Full RB



Band 14-5M-LOW-16QAM-Full RB



Band 14-5M-LOW-64QAM-Full RB