

VARIANT FCC TEST REPORT

(PART 22)

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 22, Subpart H**
☒ **ANSI/TIA/EIA-603-D**
☒ **ANSI/TIA/EIA-603-E**

☒ **FCC Part 2**
☒ **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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TABLE OF CONTENTS

RELEASE CONTROL RECORD	4
1 SUMMARY OF TEST RESULTS	5
1.1 MEASUREMENT UNCERTAINTY	6
1.2 TEST SITE AND INSTRUMENTS	7
2 GENERAL INFORMATION	8
2.1 GENERAL DESCRIPTION OF EUT	8
2.2 CONFIGURATION OF SYSTEM UNDER TEST	11
2.3 DESCRIPTION OF SUPPORT UNITS	12
2.4 TEST ITEM AND TEST CONFIGURATION	13
2.5 EUT OPERATING CONDITIONS	17
2.6 GENERAL DESCRIPTION OF APPLIED STANDARDS	17
3 TEST TYPES AND RESULTS	18
3.1 OUTPUT POWER MEASUREMENT	18
3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT	18
3.1.2 TEST PROCEDURES	18
3.1.3 TEST SETUP	19
3.1.4 TEST RESULTS	19
3.2 FREQUENCY STABILITY MEASUREMENT	34
3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT	34
3.2.2 TEST PROCEDURE	34
3.2.3 TEST SETUP	34
3.2.4 TEST RESULTS	34
3.3 OCCUPIED BANDWIDTH MEASUREMENT	35
3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT	35
3.3.2 TEST SETUP	35
3.3.3 TEST PROCEDURES	35
3.4 BAND EDGE MEASUREMENT	35
3.4.1 LIMITS OF BAND EDGE MEASUREMENT	35
3.4.2 TEST SETUP	36
3.4.3 TEST PROCEDURES	37
3.4.4 TEST RESULTS	37
3.5 CONDUCTED SPURIOUS EMISSIONS	38
3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT	38
3.5.2 TEST PROCEDURE	38
3.5.3 TEST SETUP	38
3.5.4 TEST RESULTS	38
3.6 RADIATED EMISSION MEASUREMENT	39
3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT	39
3.6.2 TEST PROCEDURES	39
3.6.3 DEVIATION FROM TEST STANDARD	39
3.6.4 TEST SETUP	40
3.6.5 TEST RESULTS	42
3.7 PEAK TO AVERAGE RATIO	46
3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT	46
3.7.2 TEST SETUP	46
3.7.3 TEST PROCEDURES	46
3.7.4 TEST RESULTS	47
4 PHOTOGRAPHS OF THE TEST CONFIGURATION	48
5 INFORMATION ON THE TESTING LABORATORIES	49



6 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB 50

7 APPENDIX:	51
GSM850	51
PEAK-TO-AVERAGE RATIO(CCDF)	51
TEST RESULT	51
TEST GRAPHS	52
26DB BANDWIDTH AND OCCUPIED BANDWIDTH	55
TEST RESULT	55
TEST GRAPHS	56
TEST RESULT	59
TEST GRAPHS	60
BAND EDGE	65
TEST RESULT	65
TEST GRAPHS	66
CONDUCTED SPURIOUS EMISSION	69
TEST RESULT	69
TEST GRAPHS	70
FREQUENCY STABILITY	75
TEST RESULT	75
WCDMA BAND V	77
PEAK-TO-AVERAGE RATIO(CCDF)	77
TEST RESULT	77
TEST GRAPHS	78
26DB BANDWIDTH AND OCCUPIED BANDWIDTH	80
TEST RESULT	80
TEST GRAPHS	81
BAND EDGE	86
TEST RESULT	86
TEST GRAPHS	87
CONDUCTED SPURIOUS EMISSION	88
TEST RESULT	88
TEST GRAPHS	89
FREQUENCY STABILITY	91
TEST RESULT	91
LTE BAND 26_PART22(INCLUDING LTE BAND 5)	93
PEAK-TO-AVERAGE RATIO(CCDF)	93
TEST RESULT	93
26DB BANDWIDTH AND OCCUPIED BANDWIDTH	126
TEST RESULT	126
BAND EDGE	160
TEST RESULT	160
TEST GRAPHS	162
CONDUCTED SPURIOUS EMISSION	183
TEST RESULT	183
TEST GRAPHS	184
FREQUENCY STABILITY	190

**RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P21080006RF15	Original release	Sep. 01, 2021
PSU-NQN2509250114RF06	Based on the original report W7L-P21080006RF15(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 (GSM850_CH128), 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:

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)	Equivalent Isotropic 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
§2.1051 §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.

*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.

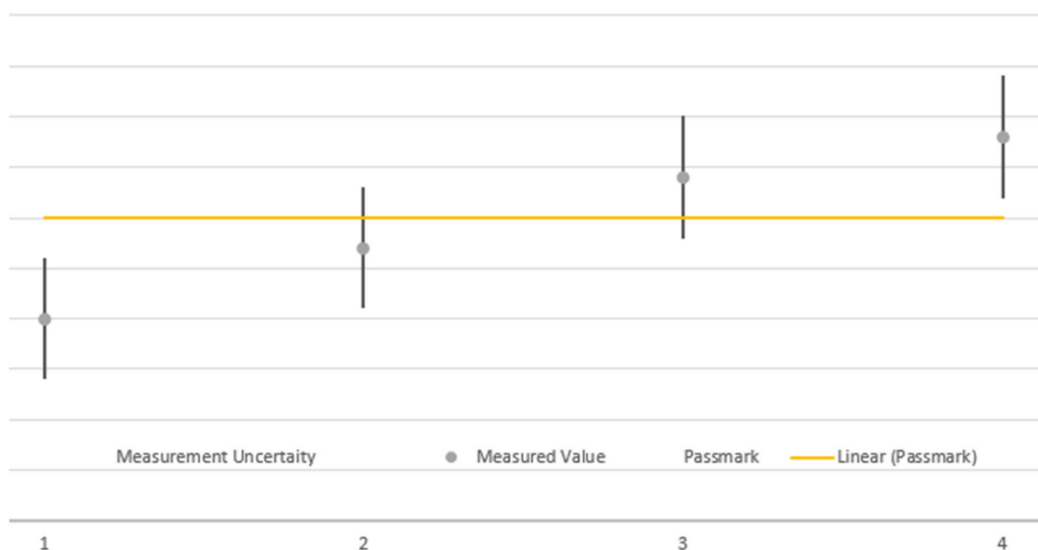


1.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	UNCERTAINTY
Maximum Peak Output Power	$\pm 2.06\text{dB}$
Frequency Stability	$\pm 76.97\text{Hz}$
Radiated emissions (9KHz~30MHz)	$\pm 2.68\text{dB}$
Radiated emissions (30MHz~1GHz)	$\pm 4.98\text{dB}$
Radiated emissions (1GHz ~6GHz)	$\pm 4.70\text{dB}$
Radiated emissions (6GHz ~18GHz)	$\pm 4.60\text{dB}$
Radiated emissions (18GHz ~40GHz)	$\pm 4.12\text{dB}$
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 $k=2$.



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 TYPE	GSM/EDGE	GMSK,8PSK
	WCDMA	BPSK,QPSK
	LTE	QPSK, 16QAM, 64QAM
FREQUENCY RANGE	GSM/EDGE	824.2MHz ~ 848.8MHz
	WCDMA	826.4MHz ~ 846.6MHz
	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
	LTE Band 26 (Channel Bandwidth: 1.4MHz)	824.7MHz ~ 848.3MHz
	LTE Band 26 (Channel Bandwidth: 3MHz)	825.5MHz ~ 847.5MHz
	LTE Band 26 (Channel Bandwidth: 5MHz)	826.5MHz ~ 846.5MHz
	LTE Band 26 (Channel Bandwidth: 10MHz)	829MHz ~ 844MHz
	LTE Band 26 (Channel Bandwidth: 15MHz)	831.5MHz ~ 841.5MHz
MAX. ERP POWER	GSM850	755.09mW
	EDGE850	212.32mW
	WCDMA B5	115.61mW
	LTE Band 5 (Channel Bandwidth: 1.4MHz)	112.46mW
	LTE Band 5 (Channel Bandwidth: 3MHz)	113.76mW
	LTE Band 5 (Channel Bandwidth: 5MHz)	115.61mW
	LTE Band 5 (Channel Bandwidth: 10MHz)	116.41mW
	LTE Band 26 (Channel Bandwidth: 1.4MHz)	239.88mW
	LTE Band 26 (Channel Bandwidth: 3MHz)	237.68mW



	LTE Band 26 (Channel Bandwidth: 5MHz)	237.68mW
	LTE Band 26 (Channel Bandwidth: 10MHz)	234.96mW
	LTE Band 26 (Channel Bandwidth: 15MHz)	240.44mW
EMISSION DESIGNATORGOGN	GSM850	246KGXW
	EDGE850	245KG7W
	WCDMA B5	4M14F9W
	LTE Band 26 (Channel Bandwidth: 1.4MHz)	QPSK: 1M09G7D
		16QAM: 1M09W7D
		64QAM: 1M10W7D
	LTE Band 26 (Channel Bandwidth: 3MHz)	QPSK: 2M70G7D
		16QAM: 2M70W7D
		64QAM: 2M70W7D
	LTE Band 26 (Channel Bandwidth: 5MHz)	QPSK: 4M50G7D
		16QAM: 4M50W7D
		64QAM: 4M49W7D
	LTE Band 26 (Channel Bandwidth: 10MHz)	QPSK: 8M97G7D
		16QAM: 8M97W7D
		64QAM: 8M95W7D
	LTE Band 26 (Channel Bandwidth: 15MHz)	QPSK: 13M5G7D
		16QAM: 13M5W7D
		64QAM: 13M5W7D
ANTENNA GAIN*	☒ Provided by client	
	GSM850	-0.56dBi
	WCDMA V	-0.56dBi
	LTE B5	-0.56dBi
	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	
CABLE SUPPLIED*	USB cable: shielded 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.



3. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receivers.

MODULATION MODE	TX FUNCTION
GSM/EDGE	1TX/1RX
WCDMA	1TX/1RX
LTE	1TX/1RX

4. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in the test report.
5. 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

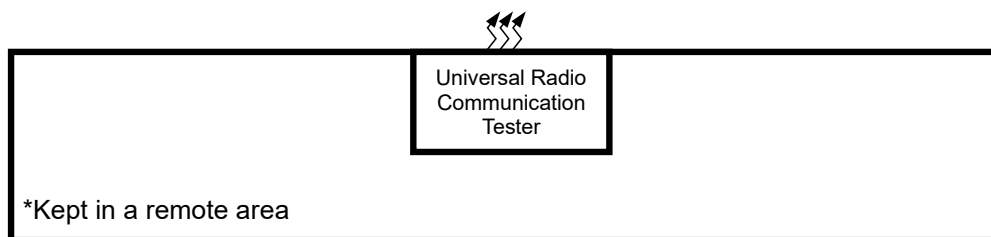
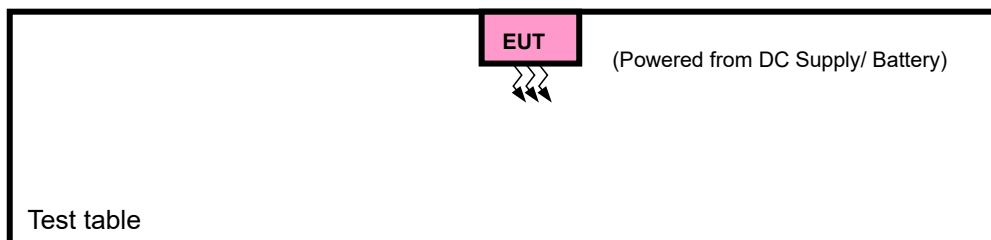
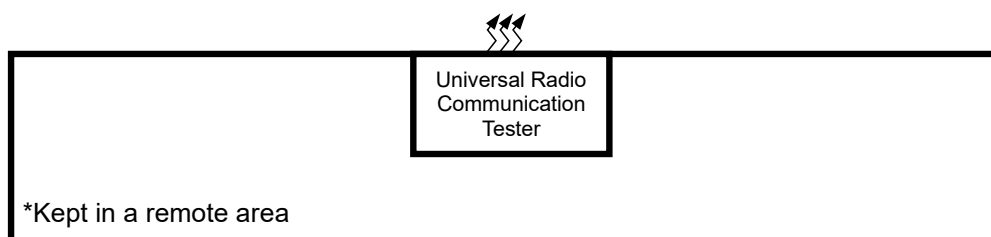
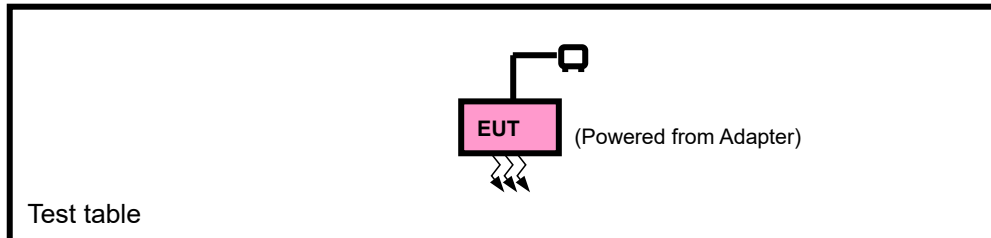
6. List of Accessory:

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





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 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 /WCDMA /LTE. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
A	EUT + Adapter with GSM or WCDMA or LTE link
B	EUT + DC Supply with GSM or WCDMA or LTE link

GSM MODE

EUT CONFIGURE MODE	TEST ITEM	Available Channel	Tested Channel	MODE
A	ERP	128 to 251	128, 189, 251	GSM,EDGE
B	FREQUENCY STABILITY	128 to 251	128, 189, 251	GSM,EDGE
A	OCCUPIED BANDWIDTH	128 to 251	128, 189, 251	GSM,EDGE
A	BAND EDGE	128 to 251	128, 251	GSM,EDGE
A	CONDUCTED EMISSION	128 to 251	128, 189, 251	GSM,EDGE
A	RADIATED EMISSION	128 to 251	128, 189, 251	GSM,EDGE
A	PEAK TO AVERAGE RATIO	128 to 251	128, 189, 251	GSM,EDGE

WCDMA MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
A	ERP	4132 to 4233	4132, 4182, 4233	WCDMA
B	FREQUENCY STABILITY	4132 to 4233	4132, 4182, 4233	WCDMA
A	OCCUPIED BANDWIDTH	4132 to 4233	4132, 4182, 4233	WCDMA
A	BAND EDGE	4132 to 4233	4132, 4233	WCDMA
A	CONDCUDED EMISSION	4132 to 4233	4132, 4182, 4233	WCDMA
A	RADIATED EMISSION	4132 to 4233	4132, 4182, 4233	WCDMA
A	PEAK TO AVERAGE RATIO	4132 to 4233	4132, 4182, 4233	WCDMA



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, 64QAM	1 RB / 0 RB offset
		20415 to 20635	20415, 20525, 20635	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
		20425 to 20625	20425, 20525, 20625	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
		20450 to 20600	20450, 20525, 20600	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset

Note:

1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.
2. LTE Band 5 are covered by LTE Band 26, Because it is a subset of LTE Band 26 with the same output power and supported bandwidths, So the test data please refer to LTE Band 26

LTE BAND 26 MODE

EUT CONFIGURE MODE	TEST ITEM	Available Channel	Tested Channel	Channel bandwidth	modulation	mode
A	ERP	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
		26805 to 27025	26805, 26915, 27025	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
		26815 to 27015	26815, 26915, 27015	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
		26840 to 26990	26840, 26915, 26990	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
		26865 to 26965	26865, 26915, 26965	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
B	FREQUENCY STABILITY	26865 to 26965	26865, 26915, 26965	15MHz	QPSK	75 RB / 0 RB offset
A	OCCUPIED BANDWIDTH	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK, 16QAM, 64QAM	6 RB / 0 RB offset
		26805 to 27025	26805, 26915, 27025	3MHz	QPSK, 16QAM, 64QAM	15 RB / 0 RB offset
		26815 to 27015	26815, 26915, 27015	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB offset
		26840 to 26990	26840, 26915, 26990	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB offset
		26865 to 26965	26865, 26915, 26965	15MHz	QPSK, 16QAM, 64QAM	75 RB / 0 RB offset
A	PEAK TO AVERAGE RATIO	26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset 6 RB / 0 RB offset
		26805 to 27025	26805, 26915, 27025	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset 15 RB / 0 RB offset
		26815 to 27015	26815, 26915, 27015	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset 25 RB / 0 RB offset
		26840 to 26990	26840, 26915, 26990	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset 50 RB / 0 RB offset
		26865 to 26965	26865, 26915, 26965	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset 75 RB / 0 RB offset
A	BAND EDGE	26797 to 27033	26797	1.4 MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB offset
						6 RB / 0 RB offset



		26797 to 27033	27033	1.4 MHz	QPSK,16QAM,64QAM	1 RB / 5 RB offset
						6 RB / 0 RB offset
		26805 to 27025	26805	3 MHz	QPSK,16QAM,64QAM	1 RB / 0 RB offset
						15 RB / 0 RB offset
		26805 to 27025	27025	3 MHz	QPSK,16QAM,64QAM	1 RB / 14 RB offset
						15 RB / 0 RB offset
		26815 to 27015	26815	5MHz	QPSK,16QAM,64QAM	1 RB / 0 RB offset
						25 RB / 0 RB offset
		26815 to 27015	27015	5MHz	QPSK,16QAM,64QAM	1 RB / 24 RB offset
						25 RB / 0 RB offset
A	CONDCUDED EMISSION	26840 to 26990	26840	10MHz	QPSK,16QAM,64QAM	1 RB / 0 RB offset
						50 RB / 0 RB offset
		26840 to 26990	26990	10MHz	QPSK,16QAM,64QAM	1 RB / 49 RB offset
						50 RB / 0 RB offset
		26865 to 26965	26865	15MHz	QPSK,16QAM,64QAM	1 RB / 0 RB offset
						75 RB / 0 RB offset
		26865 to 26965	26965	15MHz	QPSK,16QAM,64QAM	1 RB / 74 RB offset
						75 RB / 0 RB offset
		26797 to 27033	26797, 26915, 27033	1.4MHz	QPSK	1 RB / 0 RB offset
		26805 to 27025	26805, 26915, 27025	3MHz	QPSK	1 RB / 0 RB offset
A	RADIATED EMISSION	26815 to 27015	26815, 26915, 27015	5MHz	QPSK	1 RB / 0 RB offset
		26840 to 26990	26840, 26915, 26990	10MHz	QPSK	1 RB / 0 RB offset
		26865 to 26965	26865, 26915, 26965	15MHz	QPSK	1 RB / 0 RB offset
		26797 to 27033	26915	1.4MHz	QPSK	1 RB / 0 RB offset
		26805 to 27025	26915	3MHz	QPSK	1 RB / 0 RB offset
		26815 to 27015	26915	5MHz	QPSK	1 RB / 0 RB offset
		26840 to 26990	26915	10MHz	QPSK	1 RB / 0 RB offset
		26865 to 26965	26865, 26915, 26965	15MHz	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
ERP	23deg. C, 70%RH	DC 5V By Adapter	Hanwen Xu
FREQUENCY STABILITY	23deg. C, 70%RH	DC 3.4V/ 3.85V/ 4.4V By DC Source	Hanwen Xu
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC 5V By Adapter	Hanwen Xu
BAND EDGE	23deg. C, 70%RH	DC 5V By Adapter	Hanwen Xu
CONDCUDED EMISSION	23deg. C, 70%RH	DC 5V By Adapter	Hanwen Xu
RADIATED EMISSION	23deg. C, 70%RH	DC 5V By Adapter	Hanwen Xu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	DC 5V By Adapter	Hanwen Xu

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

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:

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

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:

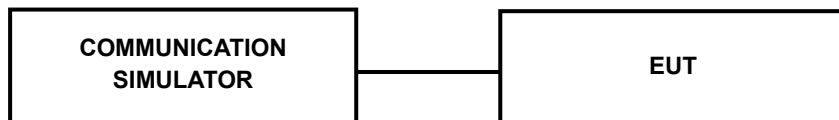
The EUT was set up for the maximum power with WCDMA link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.



3.1.3 TEST SETUP

EIRP / ERP Measurement:

CONDUCTED POWER MEASUREMENT:



3.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm):

Band	GSM850		
Channel	128	189	251
Frequency (MHz)	824.2	836.4	848.8
GSM	31.22	31.17	31.40
GPRS 1Tx Slot	31.27	31.17	31.49
GPRS 2Tx Slot	30.16	30.14	30.17
GPRS 3Tx Slot	27.37	27.38	27.47
GPRS 4Tx Slot	24.89	24.83	24.93
EDGE 1Tx Slot	25.94	25.98	25.95
EDGE 2Tx Slot	23.84	23.99	23.96
EDGE 3Tx Slot	21.63	21.73	21.60
EDGE 4Tx Slot	19.57	19.64	19.60

Band	WCDMA V		
TX Channel	4132	4182	4233
Rx Channel	4357	4407	4458
Frequency (MHz)	826.4	836.4	846.6
RMC 12.2K	23.31	23.34	23.32
HSDPA Subtest-1	22.17	22.31	22.24
HSDPA Subtest-2	22.24	22.28	22.22
HSDPA Subtest-3	21.73	21.77	21.71
HSDPA Subtest-4	21.69	21.75	21.66
DC-HSDPA Subtest-1	22.33	22.41	22.40
DC-HSDPA Subtest-2	22.33	22.35	22.28
DC-HSDPA Subtest-3	21.69	21.81	21.69
DC-HSDPA Subtest-4	21.76	21.80	21.68
HSUPA Subtest-1	22.24	22.36	22.34
HSUPA Subtest-2	21.28	21.39	21.30
HSUPA Subtest-3	22.28	22.34	22.28
HSUPA Subtest-4	21.29	21.33	21.32
HSUPA Subtest-5	22.41	22.42	22.28



LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		20450	20525	20600
		Frequency (MHz)		829	836.5	844
10	QPSK	1	0	23.19	22.89	23.14
		1	24	23.14	22.74	22.78
		1	49	23.37	23.05	23.33
		25	0	22.36	22.01	22.22
		25	12	22.16	21.83	22.11
		25	25	22.14	21.87	22.07
		50	0	21.98	21.86	21.89
	16QAM	1	0	22.33	22.09	22.24
		1	24	22.19	21.96	22.06
		1	49	22.36	22.05	22.34
		25	0	20.99	20.86	20.92
		25	12	21.16	20.93	21.01
		25	25	21.11	20.81	21.06
		50	0	21.02	20.85	20.89
	64QAM	1	0	21.34	21.06	21.30
		1	24	21.22	20.98	21.02
		1	49	21.36	21.09	21.28
		25	0	20.03	19.88	19.98
		25	12	20.16	19.93	20.14
		25	25	20.26	19.97	20.14
		50	0	20.24	19.92	20.11



LTE Band 5						
BW [MHz]	Modulation	Channel		20425	20525	20625
		Frequency (MHz)		826.5	836.5	846.5
5	QPSK	1	0	23.11	22.75	23.10
		1	12	23.10	22.71	22.67
		1	24	23.34	23.01	23.20
		12	0	22.26	22.00	22.15
		12	6	22.02	21.80	22.02
		12	13	22.04	21.83	21.96
		25	0	21.90	21.85	21.82
	16QAM	1	0	22.18	22.07	22.17
		1	12	22.12	21.95	21.97
		1	24	22.30	21.93	22.28
		12	0	20.87	20.73	20.85
		12	6	21.13	20.89	20.88
		12	13	21.07	20.72	20.94
		25	0	20.96	20.81	20.80
	64QAM	1	0	21.32	21.03	21.18
		1	12	21.18	20.91	20.93
		1	24	21.31	21.07	21.16
		12	0	19.91	19.74	19.91
		12	6	20.09	19.79	20.11
		12	13	20.19	19.84	20.05
		25	0	20.14	19.87	20.00



LTE Band 5						
BW [MHz]	Modulation	Channel		20415	20525	20635
		Frequency (MHz)		825.5	836.5	847.5
3	QPSK	1	0	23.06	22.88	23.10
		1	7	22.99	22.69	22.69
		1	14	23.24	22.98	23.27
		8	0	22.26	21.95	22.12
		8	3	22.07	21.82	22.04
		8	7	22.12	21.74	21.99
		15	0	21.97	21.81	21.86
	16QAM	1	0	22.21	22.00	22.14
		1	7	22.06	21.81	21.95
		1	14	22.30	21.90	22.28
		8	0	20.85	20.72	20.80
		8	3	21.15	20.87	20.98
		8	7	20.98	20.66	21.04
		15	0	20.99	20.70	20.81
	64QAM	1	0	21.23	20.94	21.29
		1	7	21.07	20.91	20.92
		1	14	21.24	21.04	21.21
		8	0	19.95	19.73	19.85
		8	3	20.11	19.87	20.04
		8	7	20.16	19.84	20.00
		15	0	20.21	19.77	20.03



LTE Band 5						
BW [MHz]	Modulation	Channel		20407	20525	20643
		Frequency (MHz)		824.7	836.5	848.3
1.4	QPSK	1	0	23.06	22.81	23.07
		1	2	23.10	22.70	22.75
		1	5	23.22	22.97	23.19
		3	0	23.03	22.81	22.91
		3	1	22.92	22.64	22.82
		3	3	22.85	22.60	22.81
		6	0	21.89	21.79	21.75
	16QAM	1	0	22.20	22.08	22.23
		1	2	22.13	21.95	22.02
		1	5	22.30	21.98	22.33
		3	0	21.73	21.53	21.62
		3	1	21.93	21.74	21.74
		3	3	21.90	21.58	21.75
		6	0	20.93	20.75	20.84
	64QAM	1	0	21.19	21.01	21.26
		1	2	21.16	20.88	20.99
		1	5	21.27	20.95	21.23
		3	0	20.74	20.59	20.66
		3	1	20.90	20.64	20.87
		3	3	21.01	20.77	20.94
		6	0	20.21	19.81	19.98



LTE Band 26						
BW [MHz]	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		26865	26915	26965
		Frequency (MHz)		831.5	836.5	841.5
15	QPSK	1	0	23.08	23.06	23.09
		1	37	22.82	22.77	22.88
		1	74	23.18	23.29	22.55
		36	0	22.11	22.21	22.24
		36	19	21.92	21.97	21.98
		36	39	21.90	21.73	21.91
		75	0	21.55	21.83	21.85
	16QAM	1	0	22.12	22.23	22.07
		1	37	22.01	22.11	21.77
		1	74	22.29	22.04	22.01
		36	0	21.17	21.08	20.97
		36	19	21.00	20.87	20.72
		36	39	20.78	20.73	20.53
		75	0	20.62	20.78	20.86
	64QAM	1	0	21.17	21.09	21.08
		1	37	20.97	21.02	20.96
		1	74	21.26	21.16	20.66
		36	0	20.11	20.05	20.02
		36	19	19.95	19.84	19.71
		36	39	19.90	19.77	19.69
		75	0	19.89	19.83	19.90



LTE Band 26						
BW [MHz]	Modulation	Channel		26840	26915	26990
		Frequency (MHz)		829	836.5	844
10	QPSK	1	0	23.07	23.00	22.99
		1	24	22.67	22.68	22.74
		1	49	23.09	23.19	22.51
		25	0	21.98	22.20	22.17
		25	12	21.77	21.83	21.91
		25	25	21.77	21.71	21.83
		50	0	21.65	21.76	21.71
	16QAM	1	0	22.08	22.20	22.05
		1	24	21.92	22.06	21.71
		1	49	22.24	21.99	21.91
		25	0	21.05	20.95	20.91
		25	12	20.85	20.79	20.68
		25	25	20.67	20.70	20.62
		50	0	20.66	20.64	20.76
	64QAM	1	0	21.13	20.94	20.94
		1	24	20.89	20.94	20.87
		1	49	21.14	21.13	20.57
		25	0	20.00	20.02	19.99
		25	12	19.90	19.69	19.66
		25	25	19.85	19.74	19.66
		50	0	19.84	19.79	19.79



LTE Band 26						
BW [MHz]	Modulation	Channel		26815	26915	27015
		Frequency (MHz)		826.5	836.5	846.5
5	QPSK	1	0	22.93	23.03	23.06
		1	12	22.76	22.64	22.76
		1	24	23.06	23.24	22.54
		12	0	22.08	22.19	22.12
		12	6	21.85	21.96	21.92
		12	13	21.76	21.72	21.82
		25	0	21.57	21.82	21.76
	16QAM	1	0	22.11	22.12	21.96
		1	12	21.96	22.08	21.65
		1	24	22.20	21.93	21.97
		12	0	21.15	21.00	20.85
		12	6	20.94	20.74	20.62
		12	13	20.69	20.63	20.53
		25	0	20.53	20.63	20.74
	64QAM	1	0	21.14	21.07	21.05
		1	12	20.89	20.89	20.83
		1	24	21.13	21.04	20.51
		12	0	20.04	19.94	19.96
		12	6	19.94	19.80	19.68
		12	13	19.86	19.67	19.59
		25	0	19.88	19.82	19.76



LTE Band 26						
BW [MHz]	Modulation	Channel		26805	26915	27025
		Frequency (MHz)		825.5	836.5	847.5
3	QPSK	1	0	22.96	22.96	23.00
		1	7	22.71	22.75	22.80
		1	14	23.05	23.24	22.52
		8	0	22.03	22.08	22.20
		8	3	21.87	21.82	21.93
		8	7	21.80	21.61	21.87
		15	0	21.53	21.72	21.72
	16QAM	1	0	22.10	22.15	21.92
		1	7	21.97	21.96	21.63
		1	14	22.24	21.90	21.94
		8	0	21.04	21.04	20.84
		8	3	20.88	20.84	20.60
		8	7	20.69	20.58	20.54
		15	0	20.57	20.68	20.80
	64QAM	1	0	21.13	20.95	21.05
		1	7	20.91	20.87	20.91
		1	14	21.15	21.06	20.52
		8	0	20.10	20.01	19.89
		8	3	19.80	19.80	19.57
		8	7	19.84	19.75	19.62
		15	0	19.78	19.78	19.75



LTE Band 26						
BW [MHz]	Modulation	Channel		26797	26915	27033
		Frequency (MHz)		824.7	836.5	848.3
1.4	QPSK	1	0	22.94	22.97	23.03
		1	2	22.70	22.74	22.87
		1	5	23.11	23.28	22.51
		3	0	22.86	22.99	22.91
		3	1	22.62	22.68	22.77
		3	3	22.69	22.55	22.59
		6	0	21.54	21.68	21.81
	16QAM	1	0	21.97	22.13	21.92
		1	2	21.90	22.06	21.75
		1	5	22.28	21.92	21.98
		3	0	21.97	21.87	21.76
		3	1	21.80	21.68	21.57
		3	3	21.55	21.57	21.54
		6	0	20.54	20.75	20.71
	64QAM	1	0	21.02	21.05	21.02
		1	2	20.96	20.99	20.81
		1	5	21.14	21.02	20.60
		3	0	20.86	20.77	20.72
		3	1	20.69	20.52	20.57
		3	3	20.71	20.57	20.53
		6	0	19.84	19.70	19.85



ERP POWER (dBm)

GSM 850						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
128	824.2	31.27	-0.56	28.56	717.79	7
189	836.4	31.17	-0.56	28.46	701.46	7
251	848.8	31.49	-0.56	28.78	755.09	7

EDGE 850						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
128	824.2	25.94	-0.56	23.23	210.38	7
189	836.4	25.98	-0.56	23.27	212.32	7
251	848.8	25.95	-0.56	23.24	210.86	7

WCDMA B5						
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
4132	826.4	23.31	-0.56	20.60	114.82	7
4182	836.4	23.34	-0.56	20.63	115.61	7
4233	846.6	23.32	-0.56	20.61	115.08	7



LTE BAND 5

LTE Band 5							
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
10M-QPSK	20450	829	23.37	-0.56	20.66	116.41	7
	20525	836.5	23.05	-0.56	20.34	108.14	7
	20600	844	23.33	-0.56	20.62	115.35	7
10M- 16QAM	20450	829	22.36	-0.56	19.65	92.26	7
	20525	836.5	22.09	-0.56	19.38	86.70	7
	20600	844	22.34	-0.56	19.63	91.83	7
10M- 64QAM	20450	829	21.36	-0.56	18.65	73.28	7
	20525	836.5	21.09	-0.56	18.38	68.87	7
	20600	844	21.30	-0.56	18.59	72.28	7
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
5M-QPSK	20425	826.5	23.34	-0.56	20.63	115.61	7
	20525	836.5	23.01	-0.56	20.30	107.15	7
	20625	846.5	23.20	-0.56	20.49	111.94	7
5M-16QAM	20425	826.5	22.30	-0.56	19.59	90.99	7
	20525	836.5	22.07	-0.56	19.36	86.30	7
	20625	846.5	22.28	-0.56	19.57	90.57	7
5M-64QAM	20425	826.5	21.32	-0.56	18.61	72.61	7
	20525	836.5	21.07	-0.56	18.36	68.55	7
	20625	846.5	21.18	-0.56	18.47	70.31	7



LTE Band 5							
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
3M-QPSK	20415	825.5	23.24	-0.56	20.53	112.98	7
	20525	836.5	22.98	-0.56	20.27	106.41	7
	20635	847.5	23.27	-0.56	20.56	113.76	7
3M-16QAM	20415	825.5	22.30	-0.56	19.59	90.99	7
	20525	836.5	22.00	-0.56	19.29	84.92	7
	20635	847.5	22.28	-0.56	19.57	90.57	7
3M-64QAM	20415	825.5	21.24	-0.56	18.53	71.29	7
	20525	836.5	21.04	-0.56	18.33	68.08	7
	20635	847.5	21.29	-0.56	18.58	72.11	7
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
1.4M-QPSK	20407	824.7	23.22	-0.56	20.51	112.46	7
	20525	836.5	22.97	-0.56	20.26	106.17	7
	20643	848.3	23.19	-0.56	20.48	111.69	7
1.4M- 16QAM	20407	824.7	22.30	-0.56	19.59	90.99	7
	20525	836.5	22.08	-0.56	19.37	86.50	7
	20643	848.3	22.33	-0.56	19.62	91.62	7
1.4M- 64QAM	20407	824.7	21.27	-0.56	18.56	71.78	7
	20525	836.5	21.01	-0.56	18.30	67.61	7
	20643	848.3	21.26	-0.56	18.55	71.61	7



LTE Band 26

FCC Part22 _LTE Band 26							
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
15M-QPSK	26865	831.5	23.18	2.67	23.70	234.42	7
	26915	836.5	23.29	2.67	23.81	240.44	7
	26965	841.5	23.09	2.67	23.61	229.61	7
15M- 16QAM	26865	831.5	22.29	2.67	22.81	190.99	7
	26915	836.5	22.23	2.67	22.75	188.36	7
	26965	841.5	22.07	2.67	22.59	181.55	7
15M- 64QAM	26865	831.5	21.26	2.67	21.78	150.66	7
	26915	836.5	21.16	2.67	21.68	147.23	7
	26965	841.5	21.08	2.67	21.60	144.54	7
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
10M-QPSK	26840	829	23.09	2.67	23.61	229.61	7
	26915	836.5	23.19	2.67	23.71	234.96	7
	26990	844	22.99	2.67	23.51	224.39	7
10M- 16QAM	26840	829	22.24	2.67	22.76	188.80	7
	26915	836.5	22.20	2.67	22.72	187.07	7
	26990	844	22.05	2.67	22.57	180.72	7
10M- 64QAM	26840	829	21.14	2.67	21.66	146.55	7
	26915	836.5	21.13	2.67	21.65	146.22	7
	26990	844	20.94	2.67	21.46	139.96	7
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
5M-QPSK	26815	826.5	23.06	2.67	23.58	228.03	7
	26915	836.5	23.24	2.67	23.76	237.68	7
	27015	846.5	23.06	2.67	23.58	228.03	7
5M-16QAM	26815	826.5	22.20	2.67	22.72	187.07	7
	26915	836.5	22.12	2.67	22.64	183.65	7
	27015	846.5	21.97	2.67	22.49	177.42	7
5M-64QAM	26815	826.5	21.14	2.67	21.66	146.55	7
	26915	836.5	21.07	2.67	21.59	144.21	7
	27015	846.5	21.05	2.67	21.57	143.55	7



BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
3M-QPSK	26805	825.5	23.05	2.67	23.57	227.51	7
	26915	836.5	23.24	2.67	23.76	237.68	7
	27025	847.5	23.00	2.67	23.52	224.91	7
3M-16QAM	26805	825.5	22.24	2.67	22.76	188.80	7
	26915	836.5	22.15	2.67	22.67	184.93	7
	27025	847.5	21.94	2.67	22.46	176.20	7
3M-64QAM	26805	825.5	21.15	2.67	21.67	146.89	7
	26915	836.5	21.06	2.67	21.58	143.88	7
	27025	847.5	21.05	2.67	21.57	143.55	7
BW [MHz] Modulation	Channel	Frequency (MHz)	Conducted Power (dBm)	Gain (dB)	ERP (dBm)	ERP (mW)	FCC Limit (W)
1.4M-QPSK	26797	824.7	23.11	2.67	23.63	230.67	7
	26915	836.5	23.28	2.67	23.80	239.88	7
	27033	848.3	23.03	2.67	23.55	226.46	7
1.4M- 16QAM	26797	824.7	22.28	2.67	22.80	190.55	7
	26915	836.5	22.13	2.67	22.65	184.08	7
	27033	848.3	21.98	2.67	22.50	177.83	7
1.4M- 64QAM	26797	824.7	21.14	2.67	21.66	146.55	7
	26915	836.5	21.05	2.67	21.57	143.55	7
	27033	848.3	21.02	2.67	21.54	142.56	7

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



3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

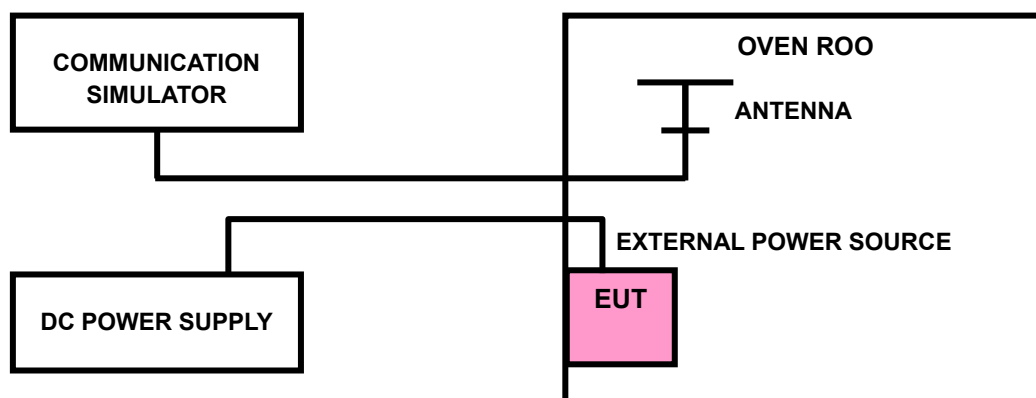
1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

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



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)

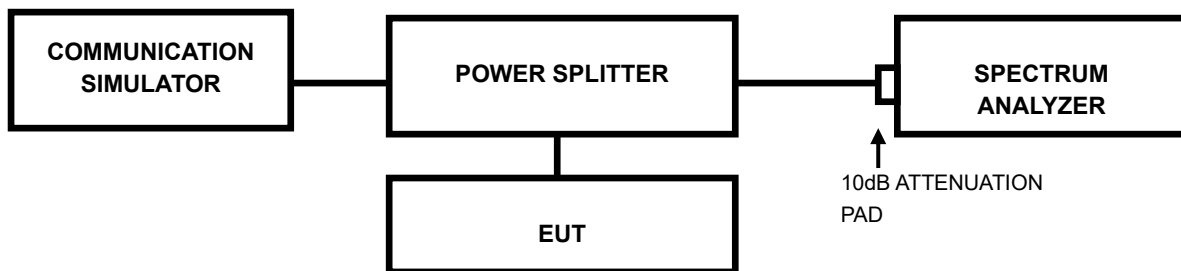


3.3 OCCUPIED BANDWIDTH MEASUREMENT

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.

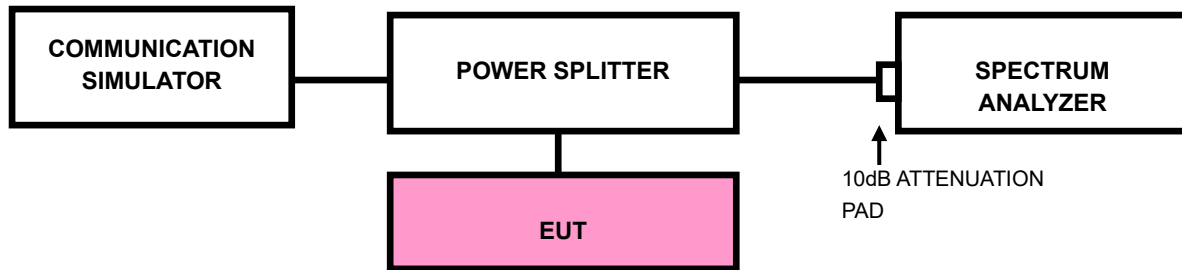
3.4 BAND EDGE MEASUREMENT

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) Connect the transmitter to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
- c) Tune the analyzer to the nominal center frequency of the emission bandwidth

(EBW)
- d) .Set the resolution bandwidth (RBW) $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
- e) Beyond the 1MHz band from the band edge, RBW=1MHz was used.
- f) Set the video bandwidth (VBW) to $\geq 3 \times$ RBW.
- g) Select the average power (RMS) display detector.
- h) Set the number of measurement points to ≥ 1001 .
- i) Use auto-coupled sweep time.
- j) Perform the measurement over an interval of time when the transmission is continuous and at its maximum power level.
- k) The RF fundamental frequency should be excluded against the limit line in the operating frequency band and use RBW is 10KHz or 100KHz.
- l) 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

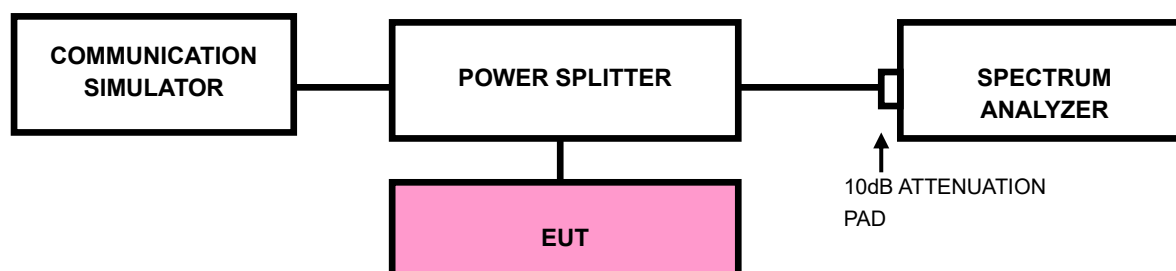
3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

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

- The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- 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

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.

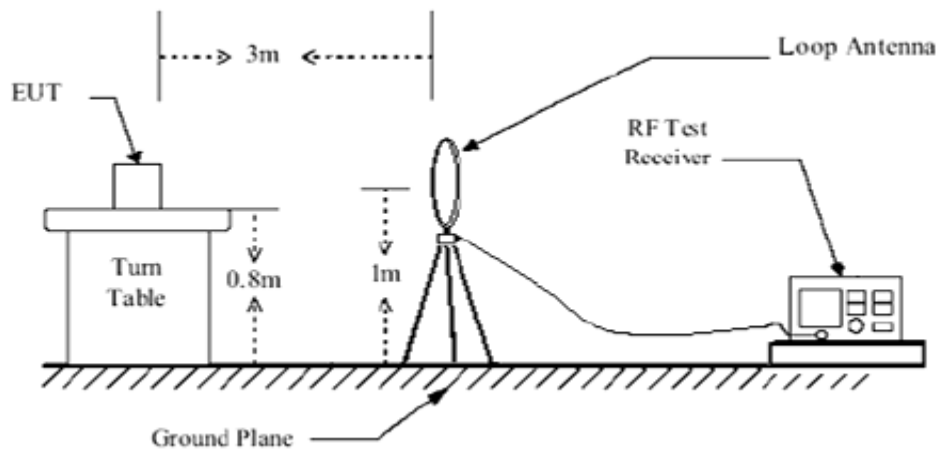
3.6.3 DEVIATION FROM TEST STANDARD

No deviation

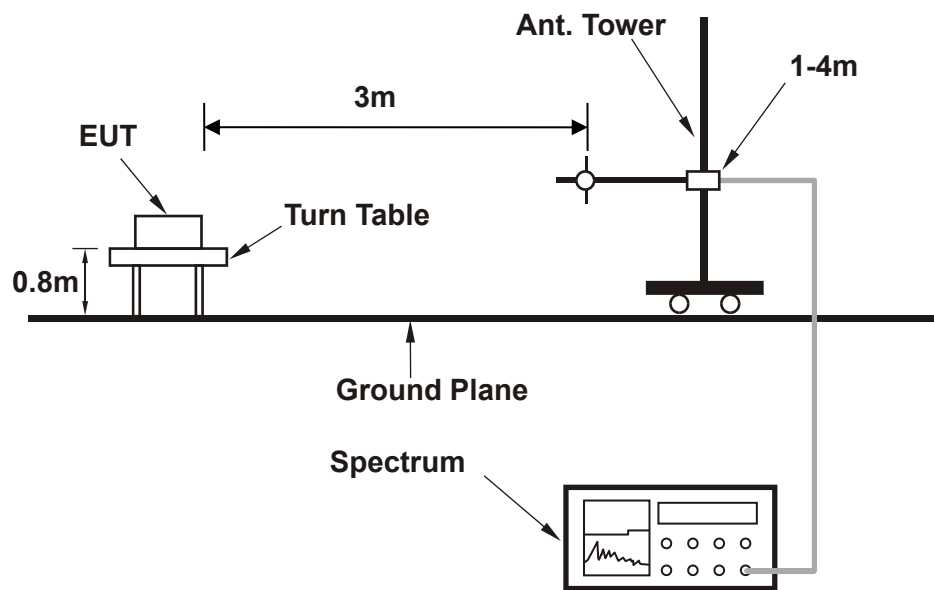


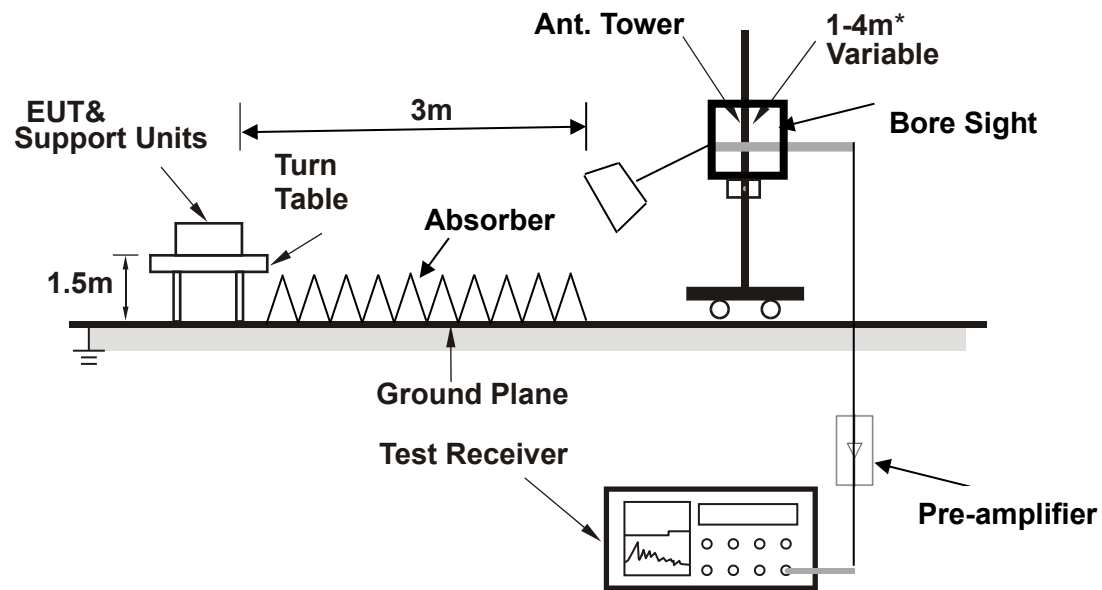
3.6.4 TEST SETUP

< Frequency Range below 30MHz >



< Frequency Range 30MHz~1GHz >





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

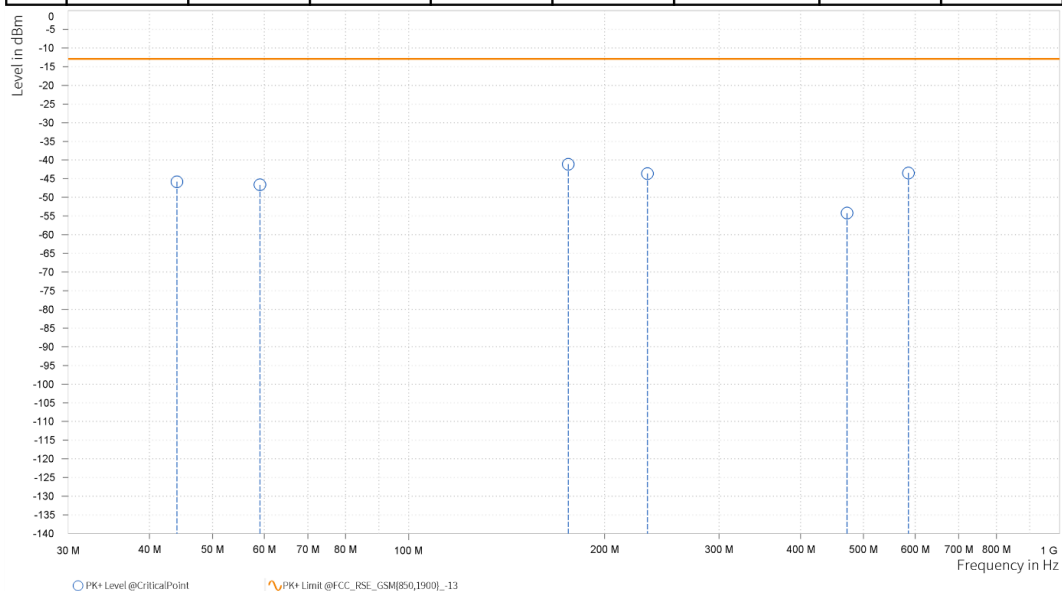
NOTE : The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

BELOW 1GHz WORST-CASE DATA

GSM 850			
MODE	TX channel 128	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 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]
1	44.065	-45.82	-13.00	32.82	3.60	H	107.3	2.00
1	59.100	-46.63	-13.00	33.63	0.80	H	159.8	2.00
1	175.985	-41.11	-13.00	28.11	-3.50	H	45.8	1.00
1	232.730	-43.61	-13.00	30.61	6.67	H	54.7	2.00
1	471.835	-54.21	-13.00	41.21	6.12	H	261.5	2.00
1	585.810	-43.45	-13.00	30.45	5.11	H	149.8	1.00

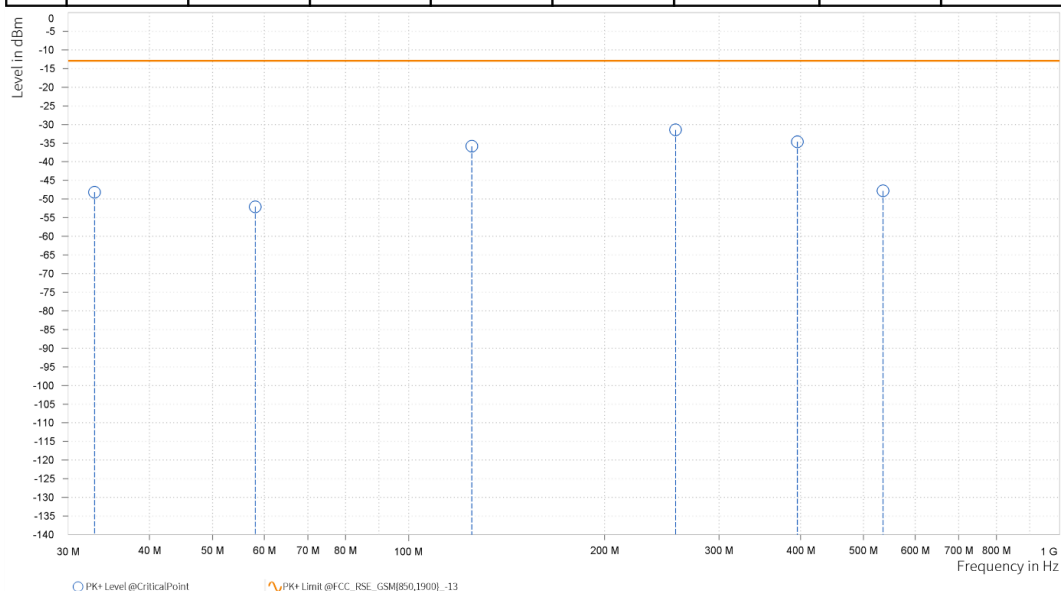




MODE	TX channel 128	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

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	32.910	-48.15	-13.00	35.15	-1.80	V	98.5	1.00
1	58.130	-52.07	-13.00	39.07	1.02	V	1	1.00
1	125.060	-35.84	-13.00	22.84	-1.67	V	359	1.00
1	256.980	-31.47	-13.00	18.47	-0.04	V	149.8	1.00
1	395.690	-34.61	-13.00	21.61	5.24	V	149.8	1.00
1	535.370	-47.82	-13.00	34.82	4.85	V	149.8	1.00

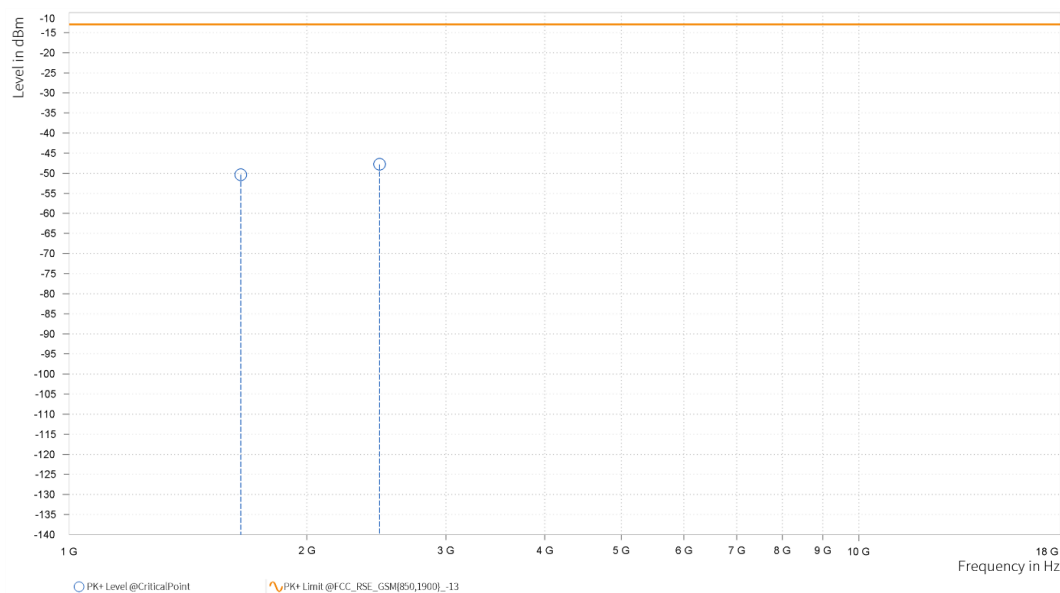


**ABOVE 1GHz DATA****Note:** For higher frequency, the emission is too low to be detected.**GSM 850**

MODE	TX channel 128	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 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	1,648.400	-50.35	-13.00	37.35	16.68	H	359	2.00
3	2,472.600	-47.80	-13.00	34.80	21.67	H	198.2	2.00

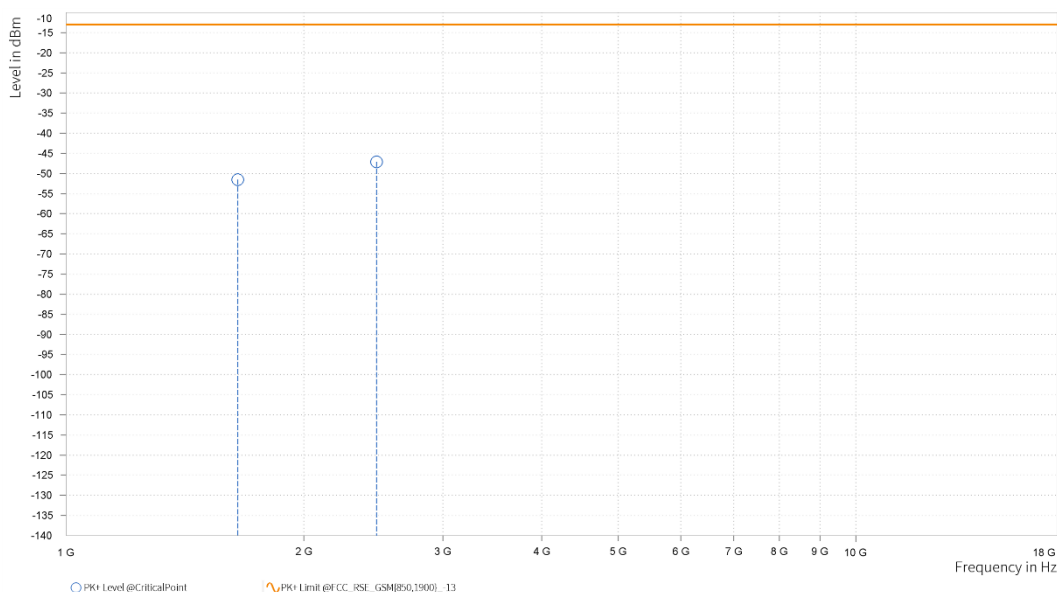




MODE	TX channel 128	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		

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	1,648.400	-51.52	-13.00	38.52	16.26	V	87.6	1.00
3	2,472.600	-47.09	-13.00	34.09	21.92	V	359	2.00

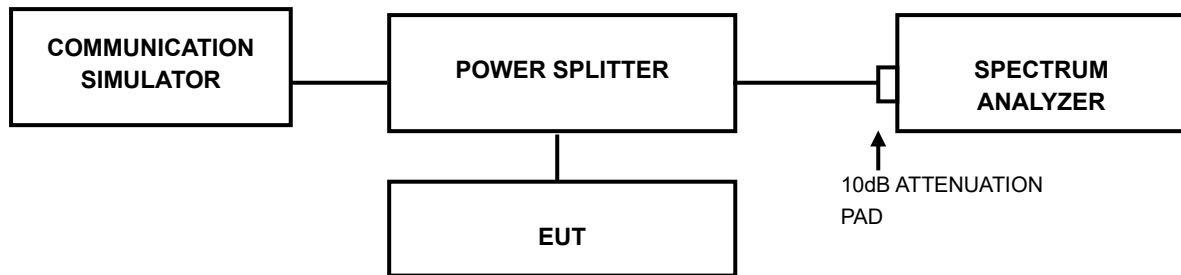


3.7 PEAK TO AVERAGE RATIO

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%.



BUREAU VERITAS Test Report No.: PSU-NQN2509250114RF06

3.7.4 TEST RESULTS

Please Refer to Appendix of this test report.



4 PHOTOGRAPHS OF THE TEST CONFIGURATION

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



5 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



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.



7 APPENDIX:

GSM850

PEAK-TO-AVERAGE RATIO(CCDF)

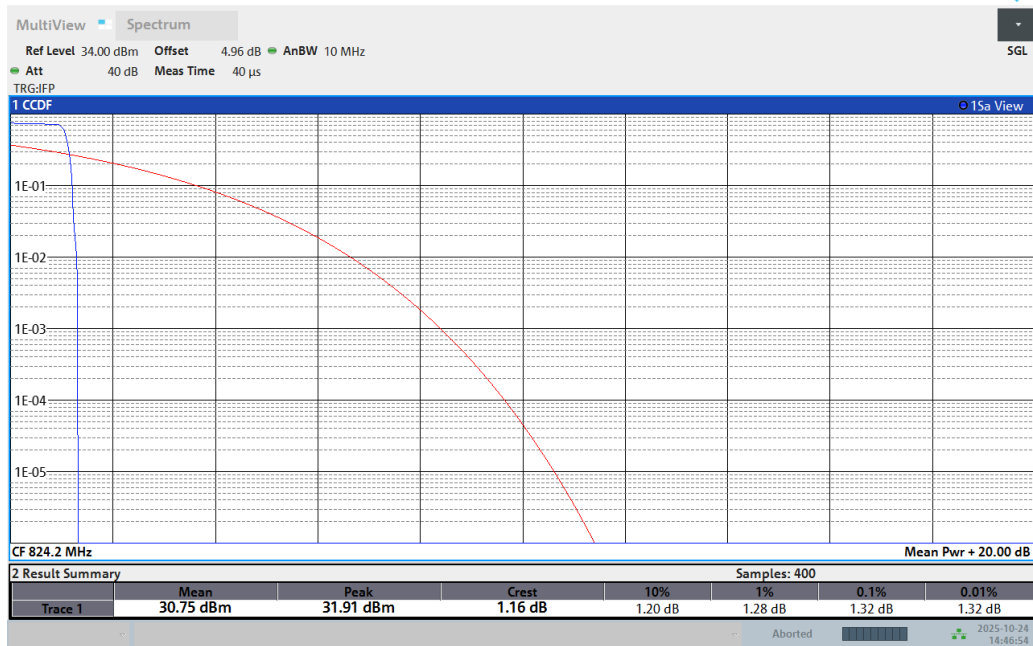
Test Result

Band	Channel	Result(dB)	Limit(dB)	Verdict
GSM850	128	1.32	13	PASS
GSM850	190	1.24	13	PASS
GSM850	251	1.24	13	PASS
EGPRS850	128	1.10	13	PASS
EGPRS850	190	3.76	13	PASS
EGPRS850	251	3.02	13	PASS

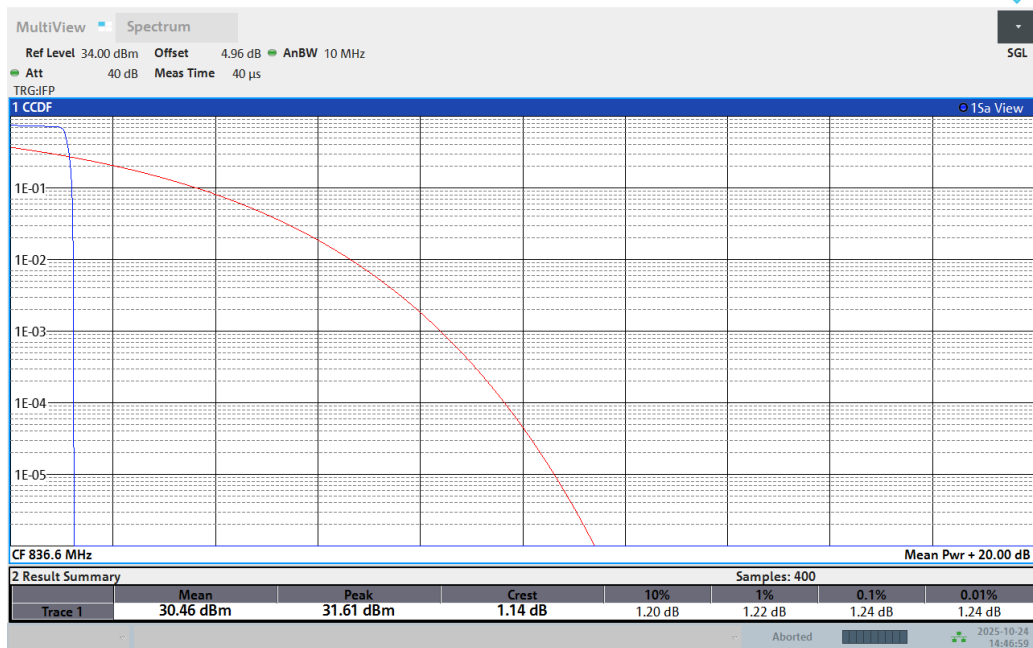


Test Graphs

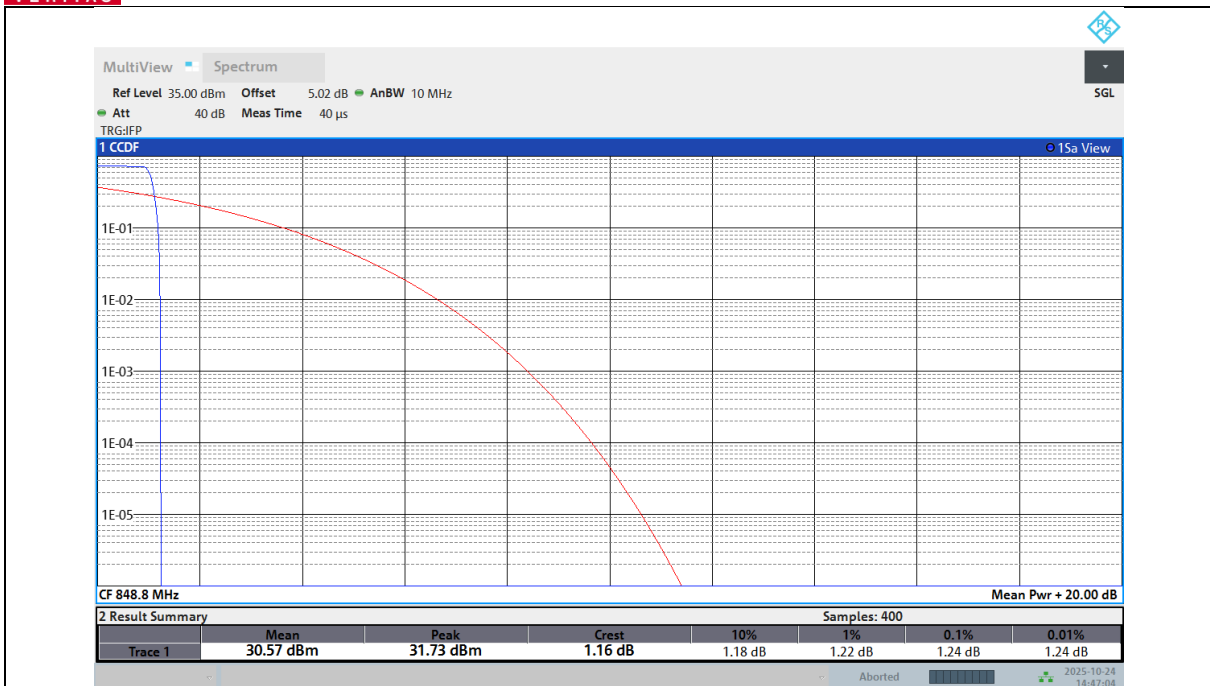
GSM850-128



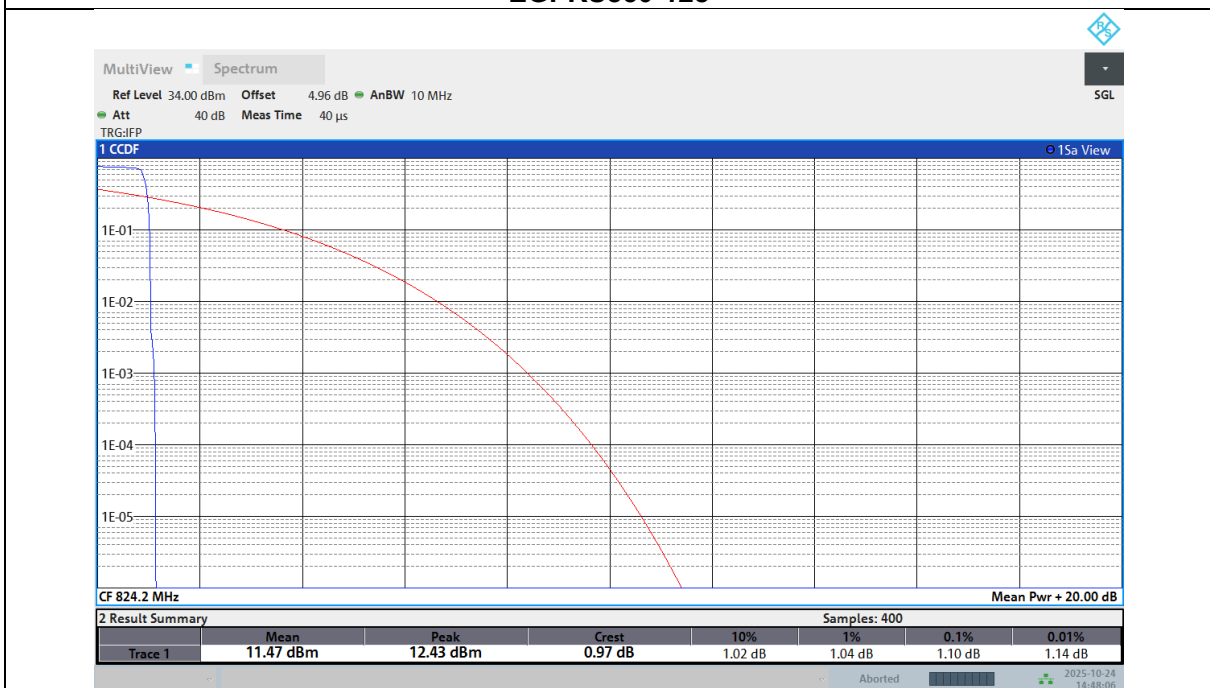
GSM850-190



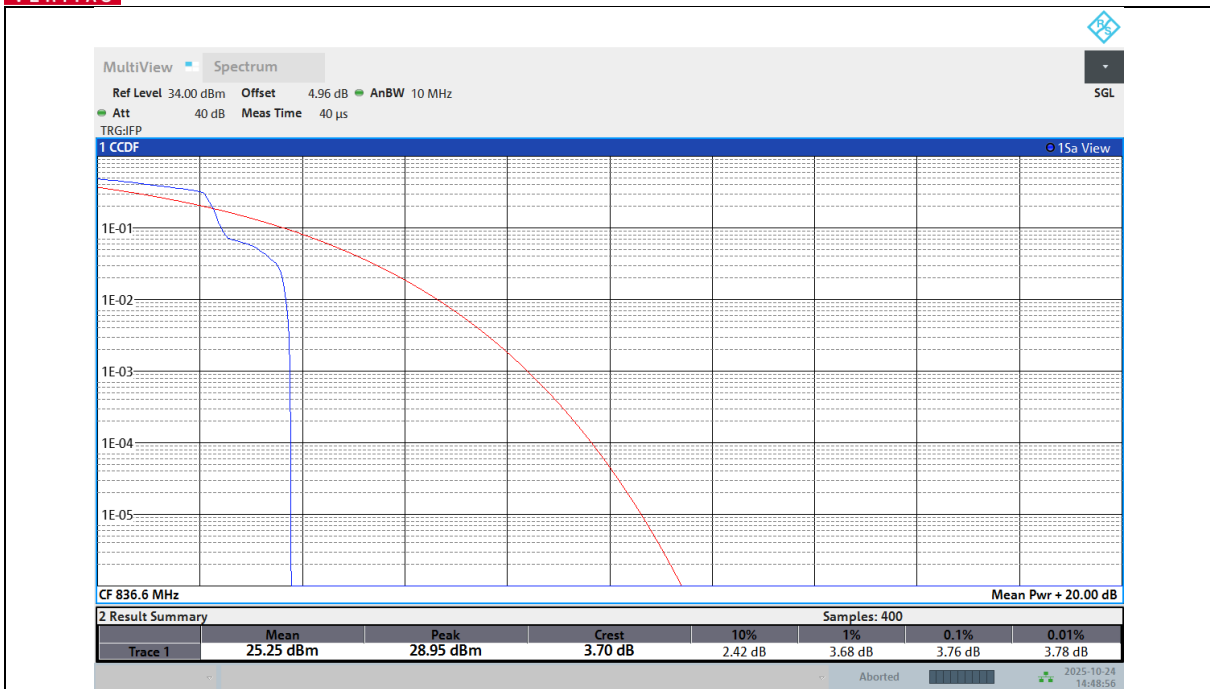
GSM850-251



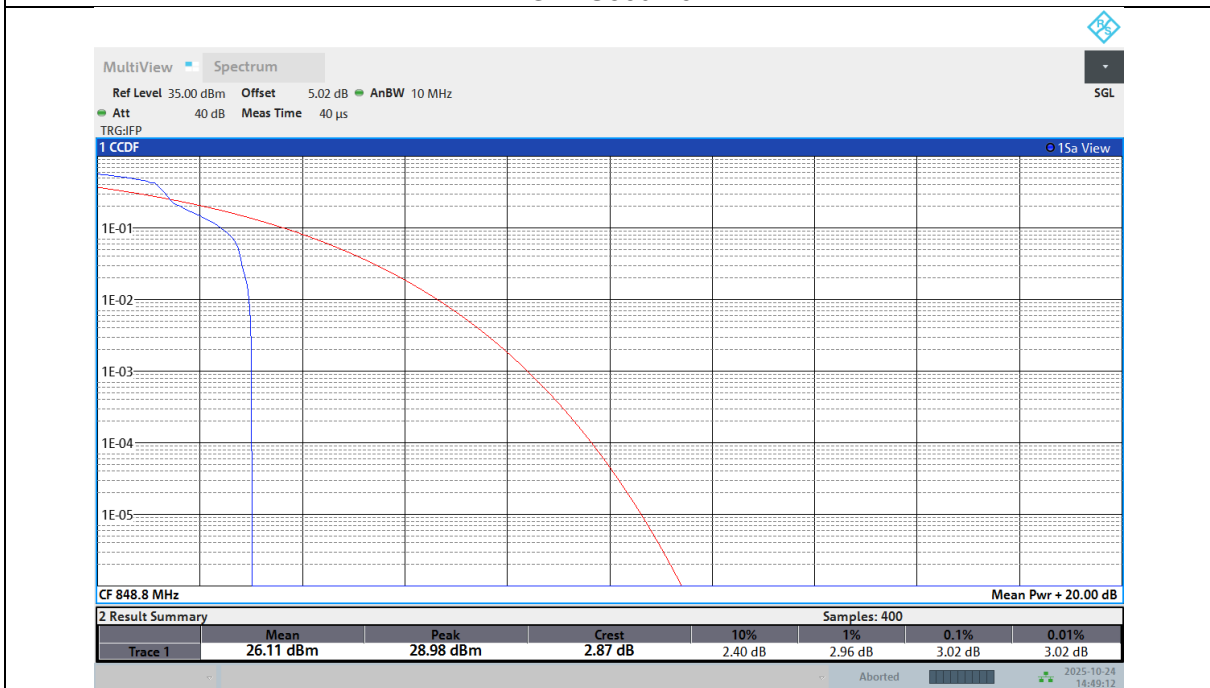
EGPRS850-128



EGPRS850-190



EGPRS850-251





26dB Bandwidth and Occupied Bandwidth

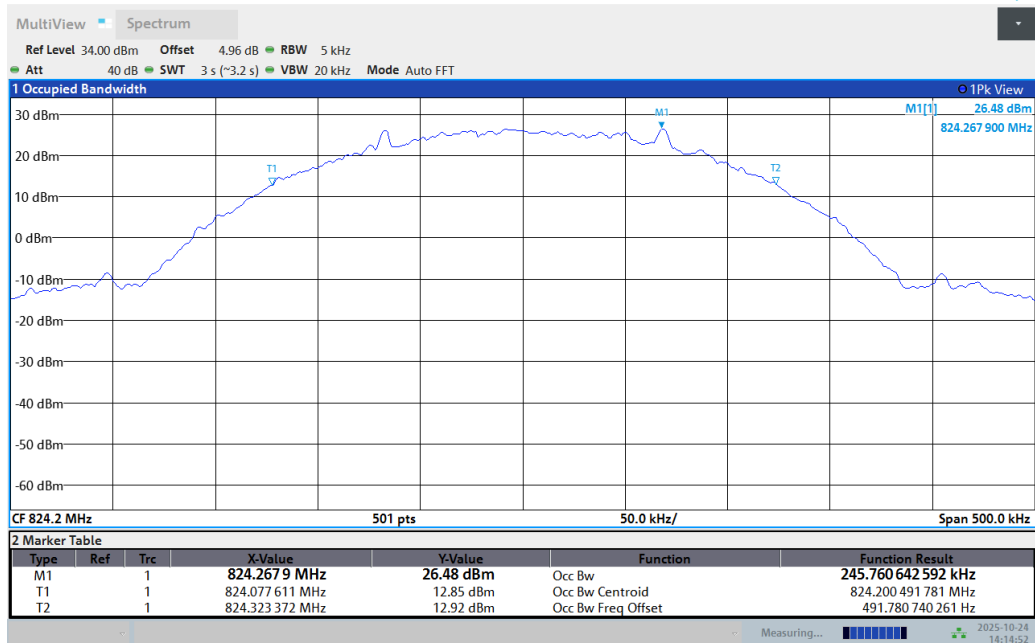
Test Result

Band	Channel	Occupied Bandwidth(MHz)	Verdict
GSM850	128	245.761	PASS
GSM850	190	245.122	PASS
GSM850	251	245.504	PASS
EGPRS850	128	243.255	PASS
EGPRS850	190	244.014	PASS
EGPRS850	251	244.762	PASS

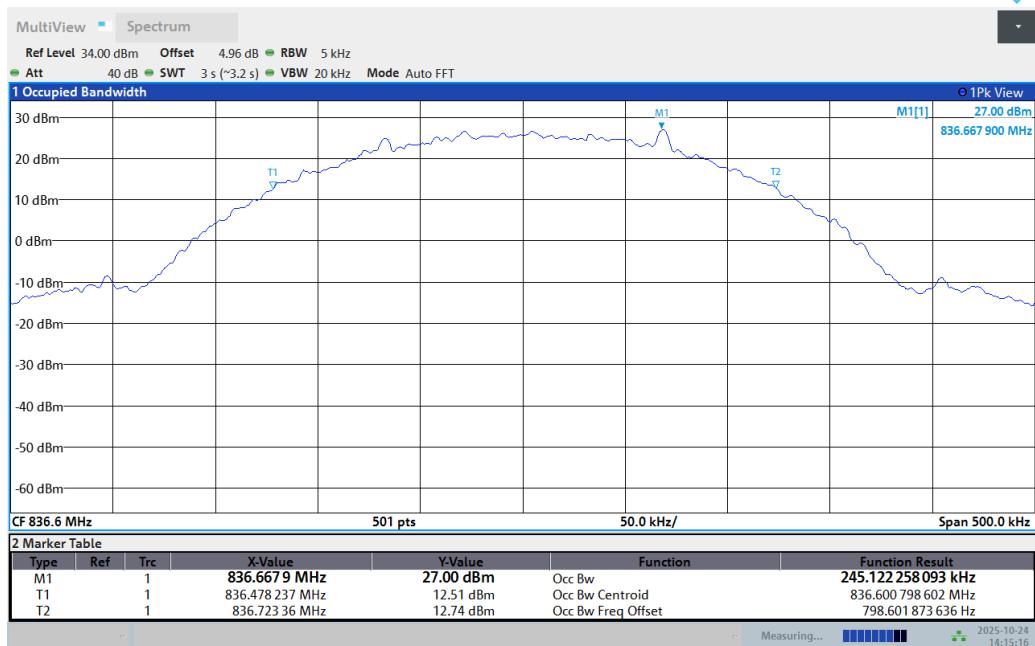


BUREAU VERITAS Test Report No.: PSU-NQN2509250114RF06
Test Graphs

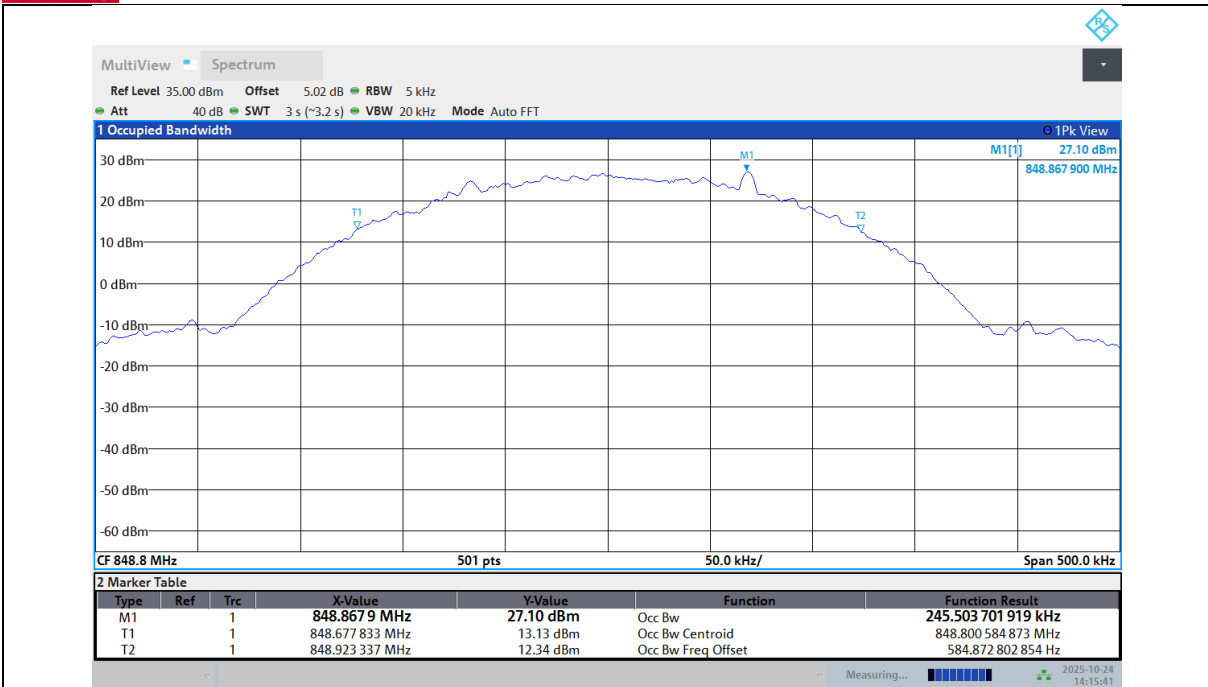
GSM850-128



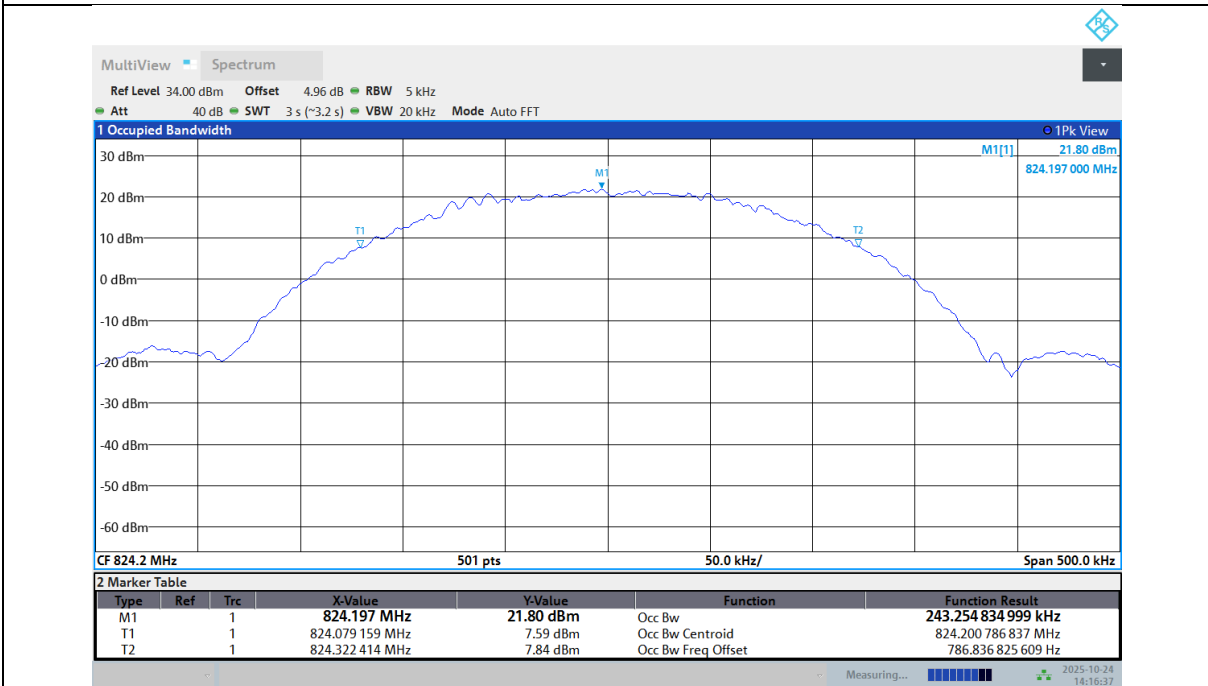
GSM850-190



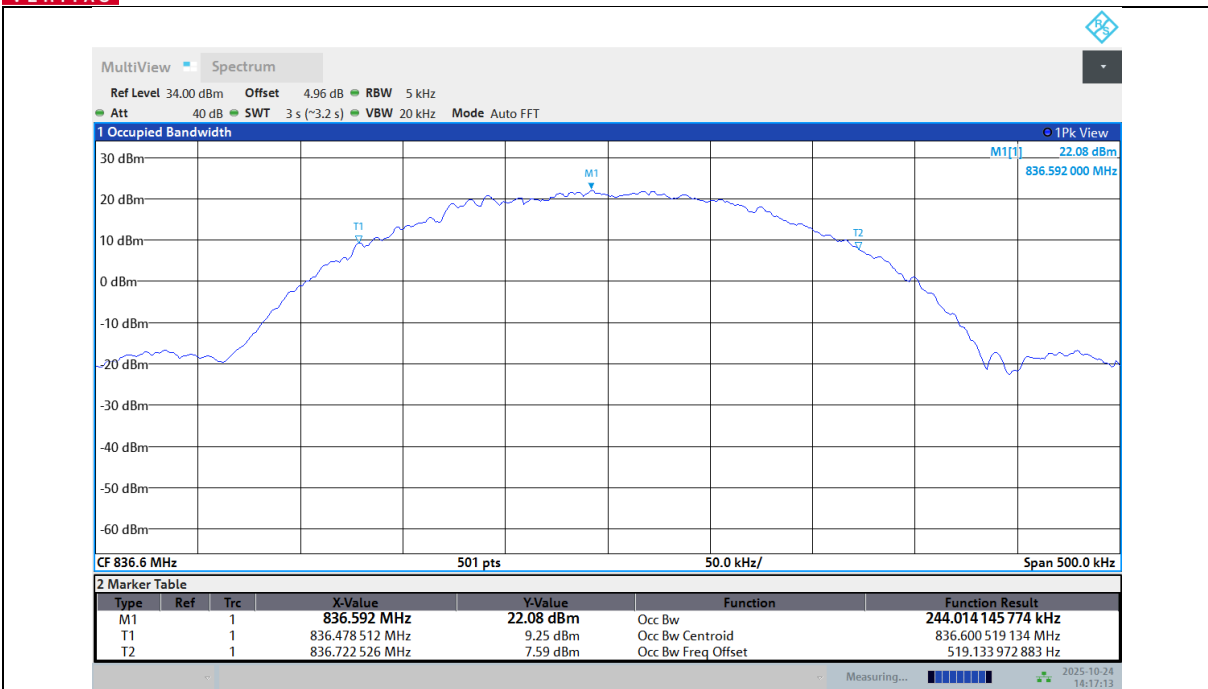
GSM850-251



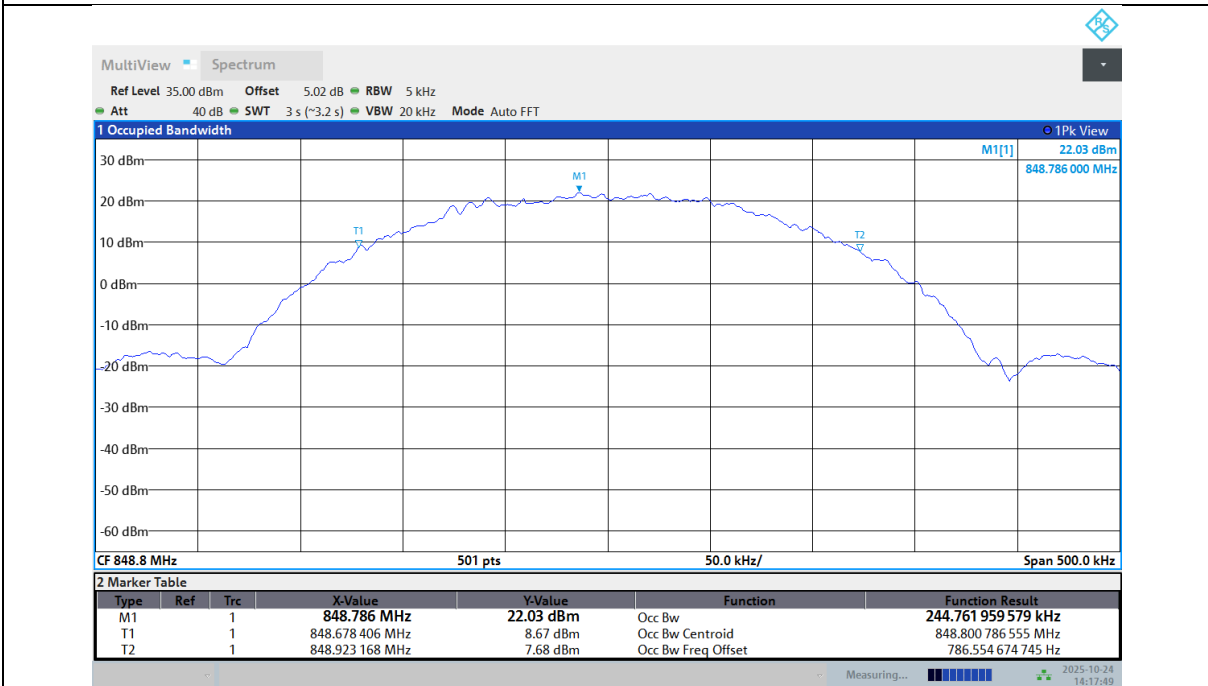
EGPRS850-128



EGPRS850-190



EGPRS850-251





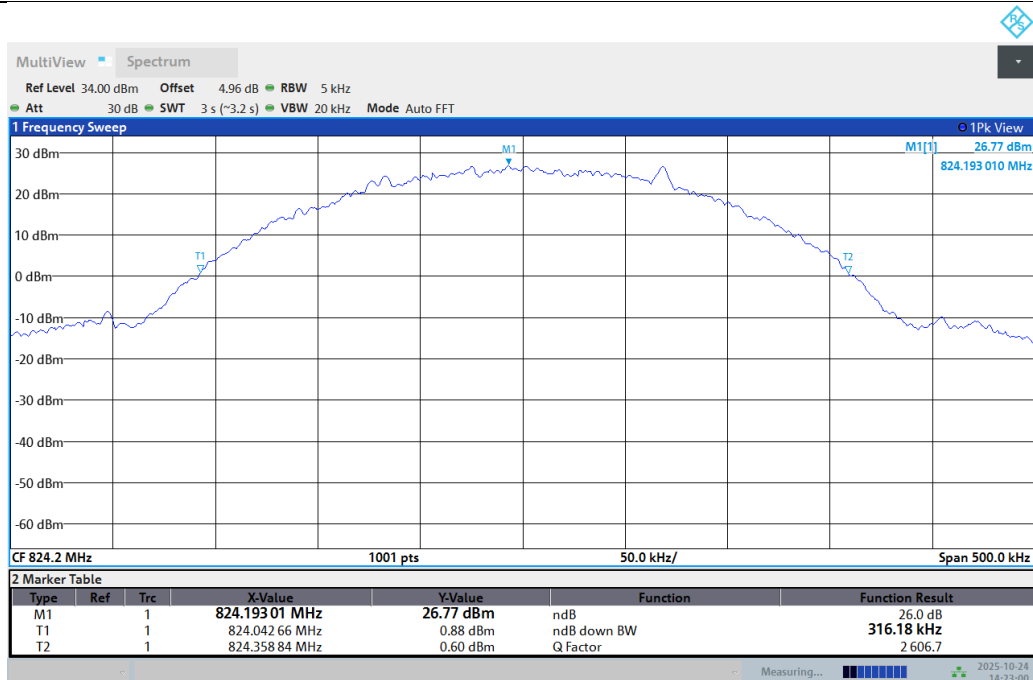
Test Result

Band	Channel	26dB Bandwidth(kHz)	Verdict
GSM850	128	316.18	PASS
GSM850	190	314.69	PASS
GSM850	251	313.19	PASS

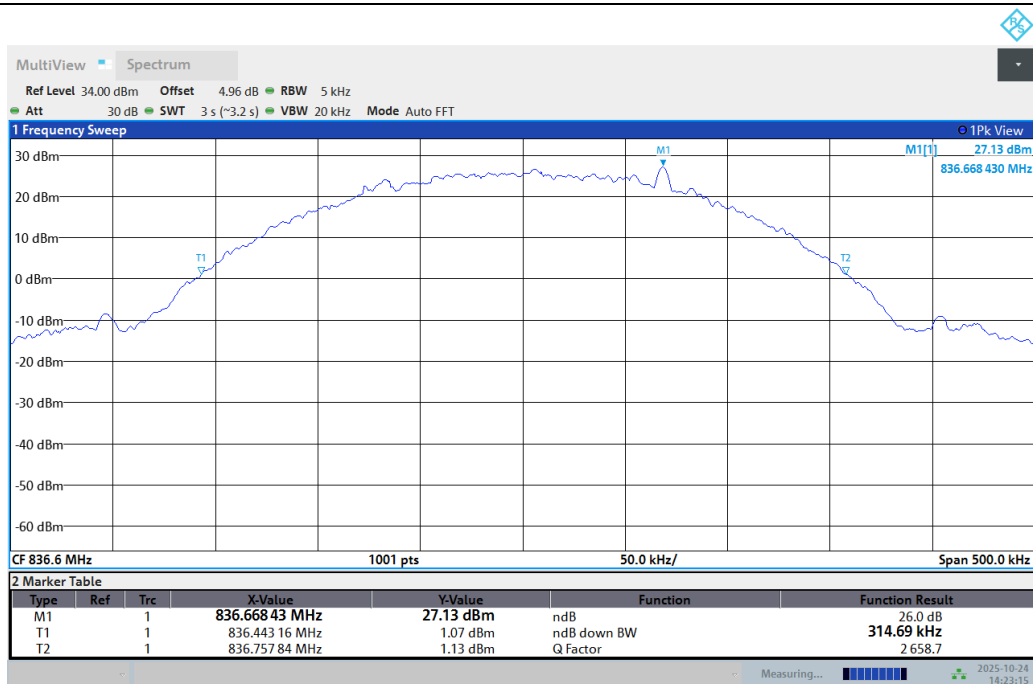


Test Graphs

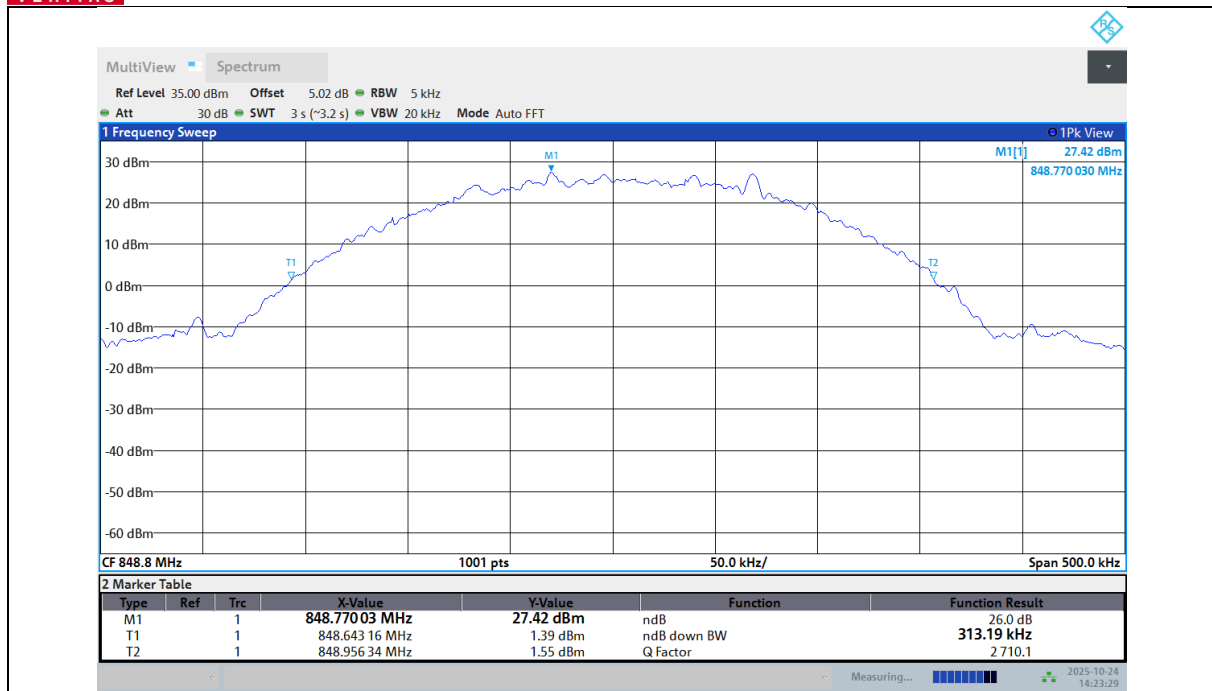
GSM850-128



GSM850-190



GSM850-251



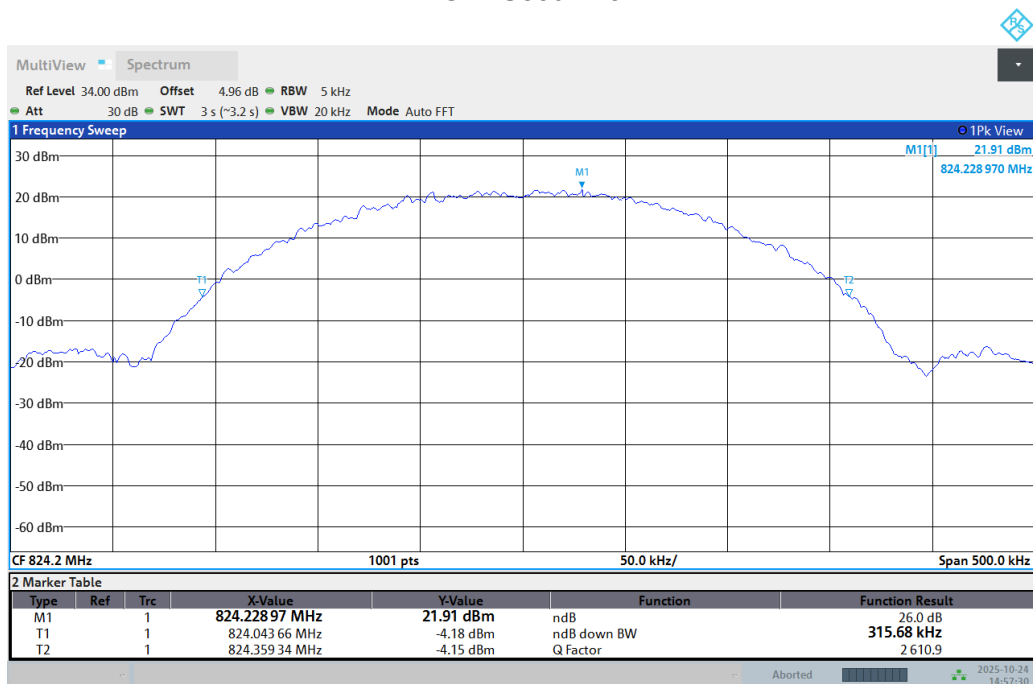


EGPRS850(-26dBc)

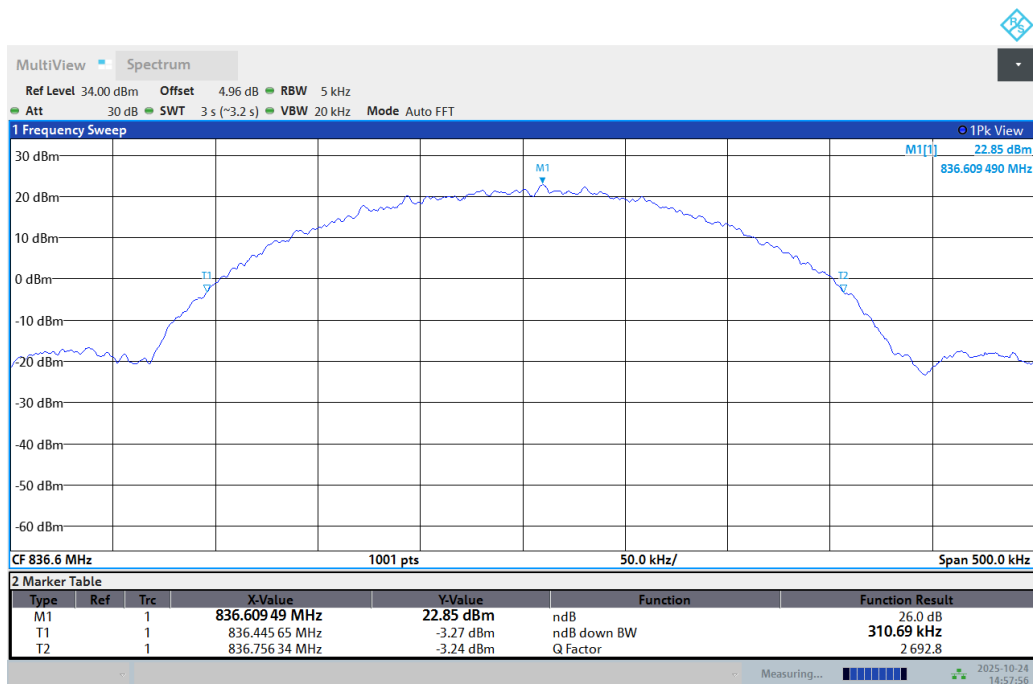
Band	Channel	26dB Bandwidth(kHz)	Verdict
EGPRS850	128	315.68	PASS
EGPRS850	190	310.69	PASS
EGPRS850	251	311.19	PASS



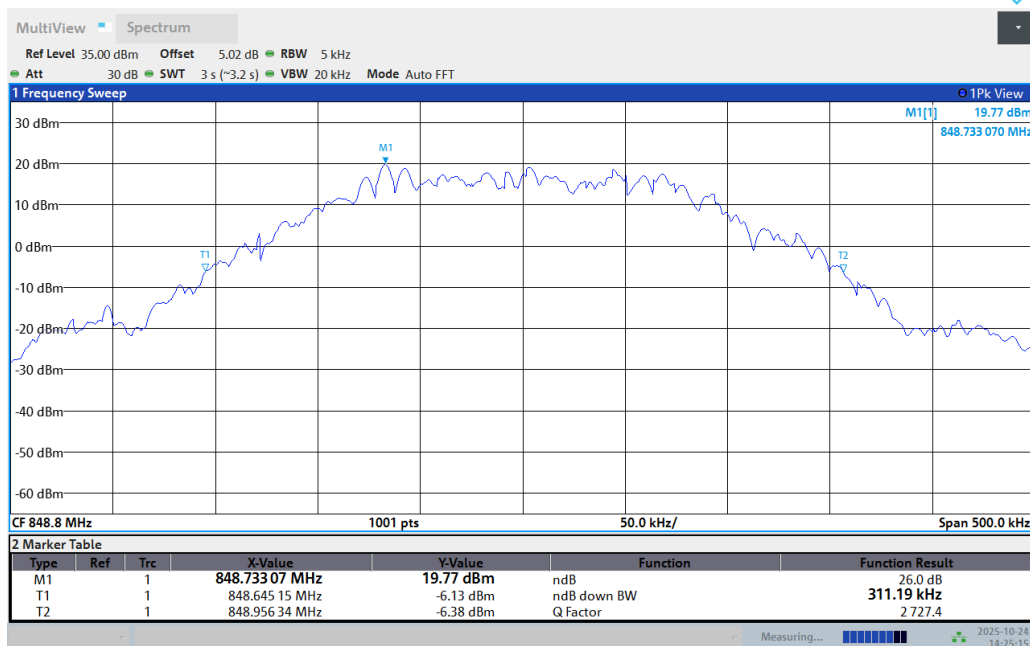
EGPRS850-128



EGPRS850-190



EGPRS850-251





BAND EDGE

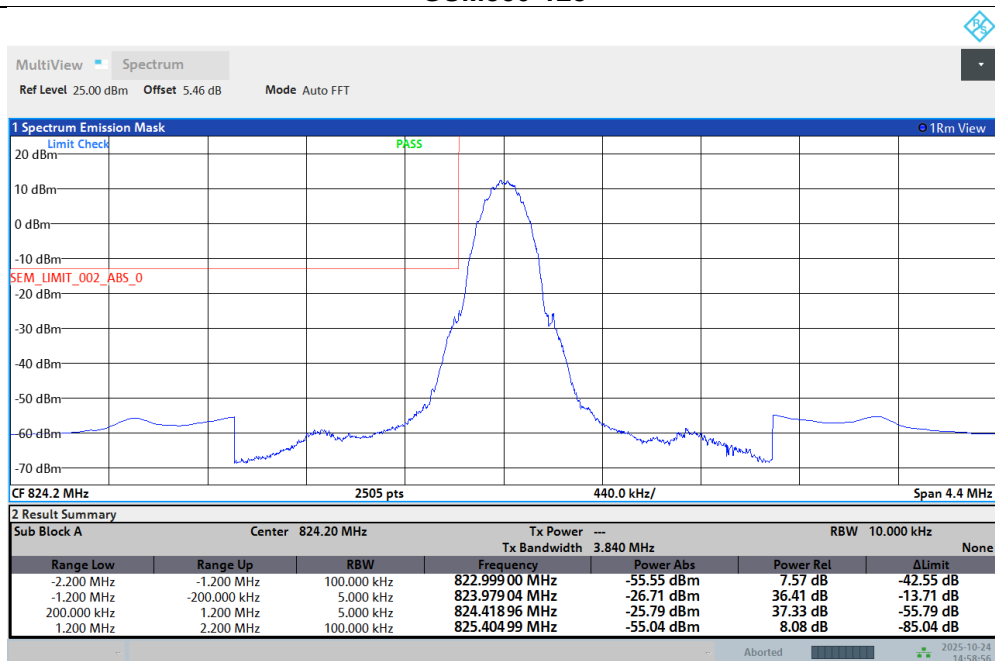
Test Result

Band	Channel	Frequency (MHz)	Result(dBm)	Limit(dBm)	Verdict
GSM850	128	823.979	-26.71	-13	PASS
GSM850	251	849.019	-26.93	-13	PASS

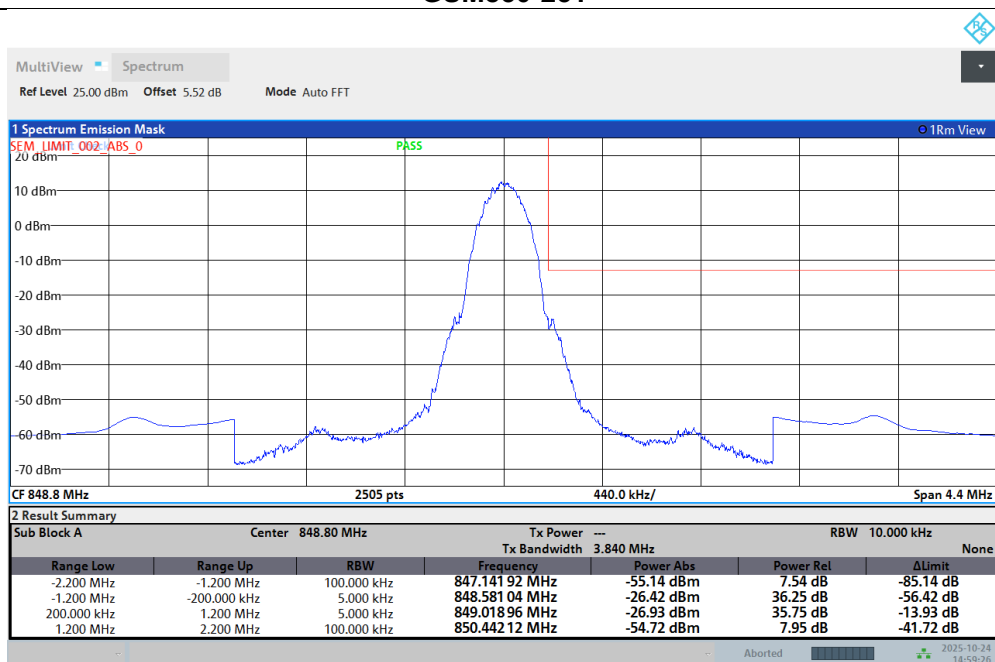


Test Graphs

GSM850-128



GSM850-251





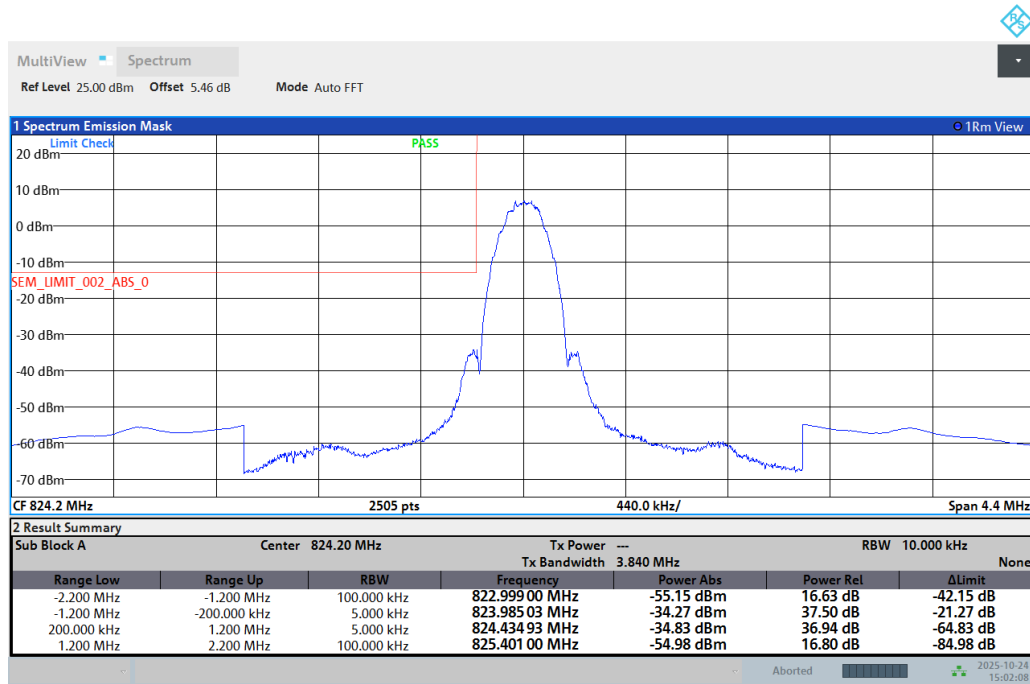
BUREAU VERITAS Test Report No.: PSU-NQN2509250114RF06

EGPRS850

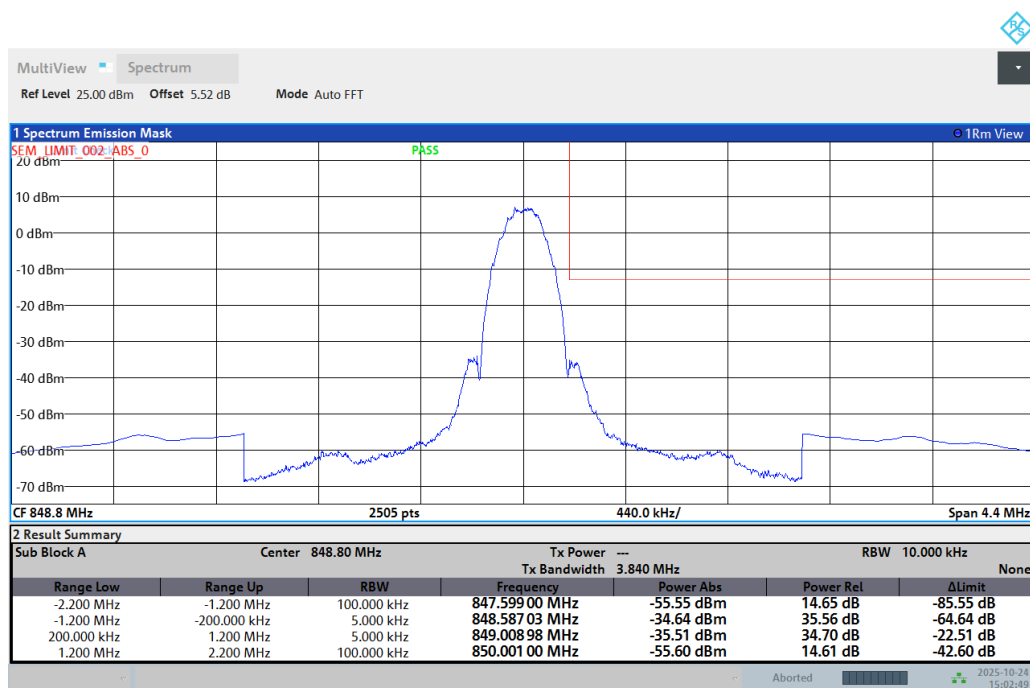
Band	Channel	Frequency (MHz)	Result(dBm)	Limit(dBm)	Verdict
EGPRS850	128	823.985	-34.27	-13	PASS
EGPRS850	251	849.009	-35.51	-13	PASS



EGPRS850-128



EGPRS850-251





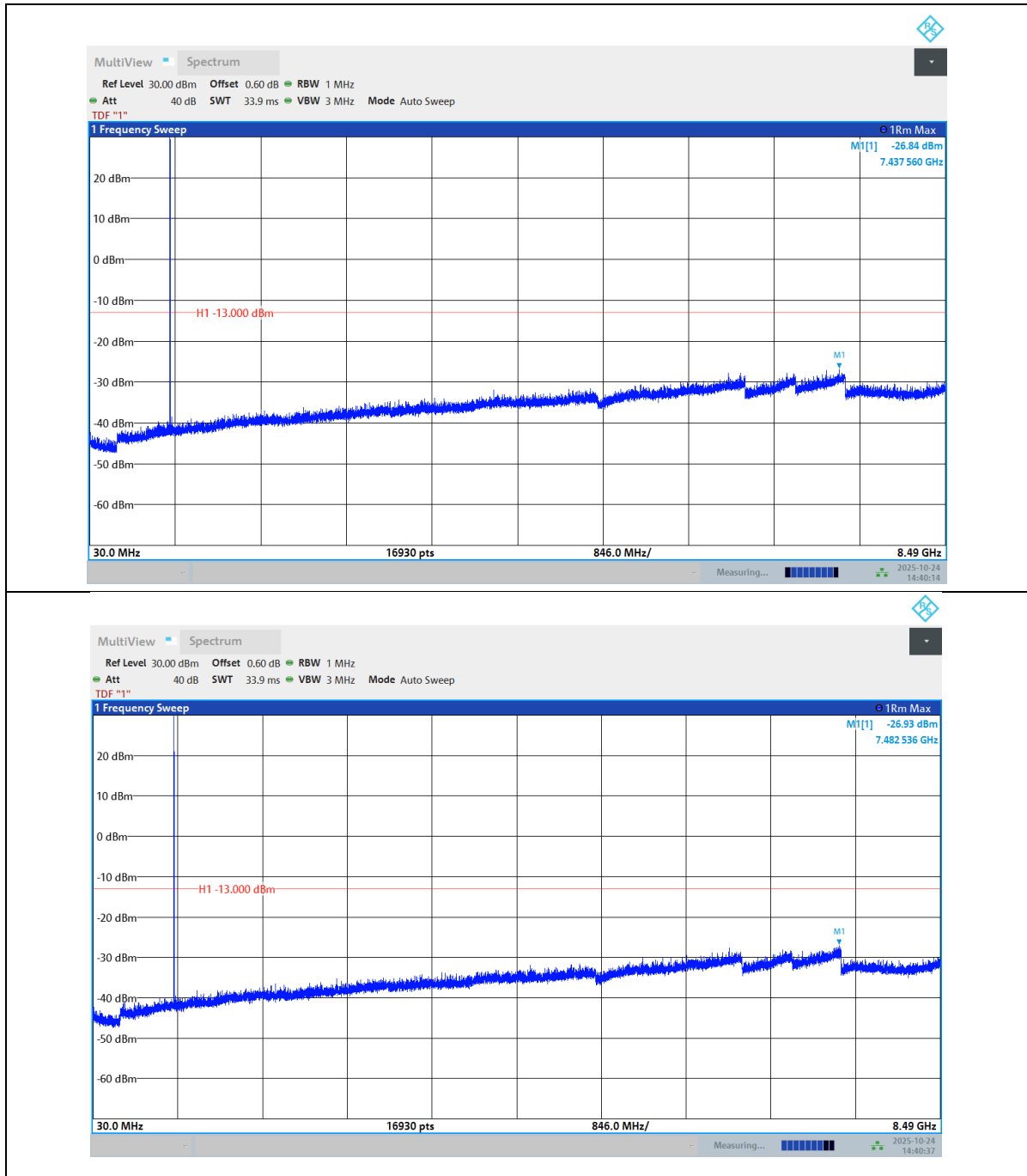
Conducted Spurious Emission

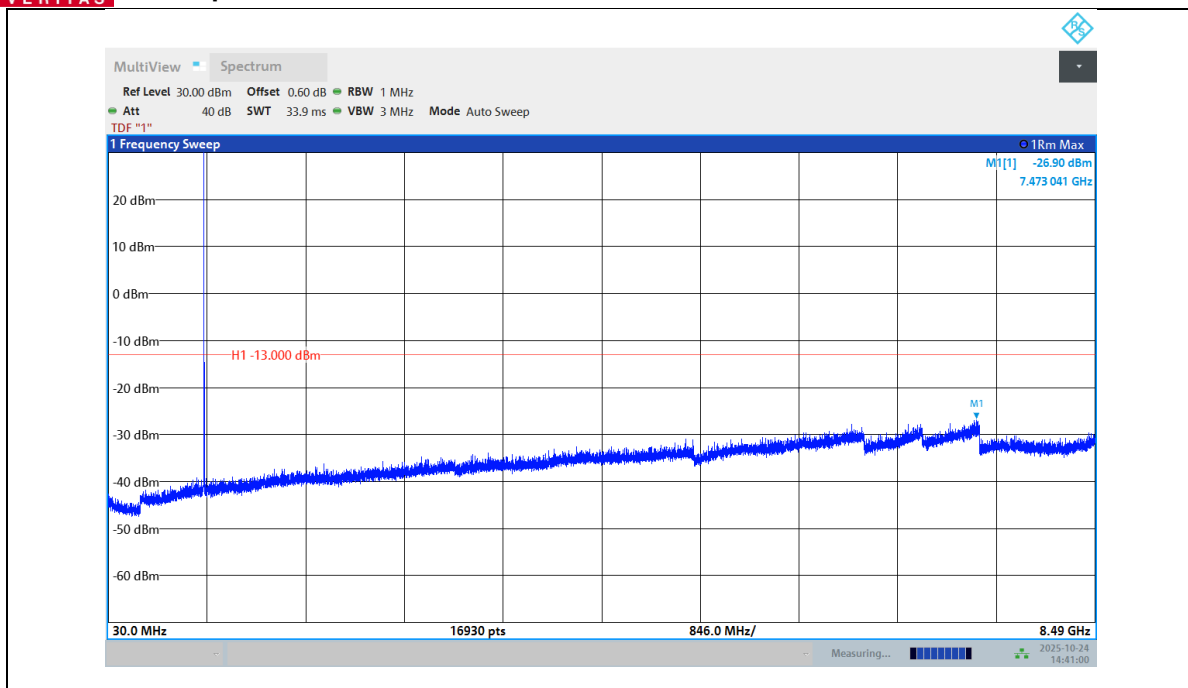
Test Result

Band	Channel	Frequency Range(MHz)	Result	Limit(dBm)	Verdict
GSM850	128	30-8490	See Graph	-13	PASS
GSM850	190	30-8490	See Graph	-13	PASS
GSM850	251	30-8490	See Graph	-13	PASS



Test Graphs



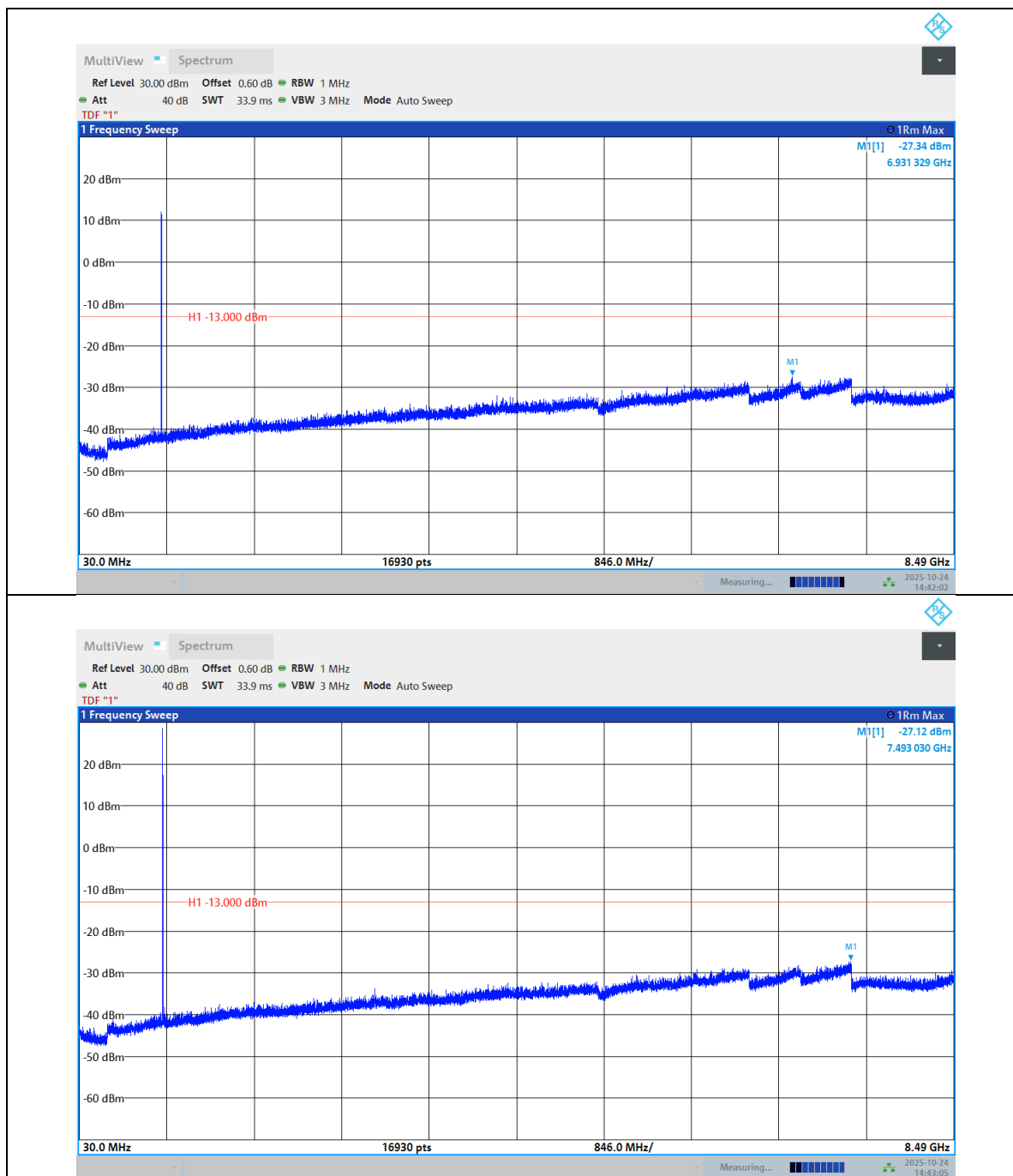


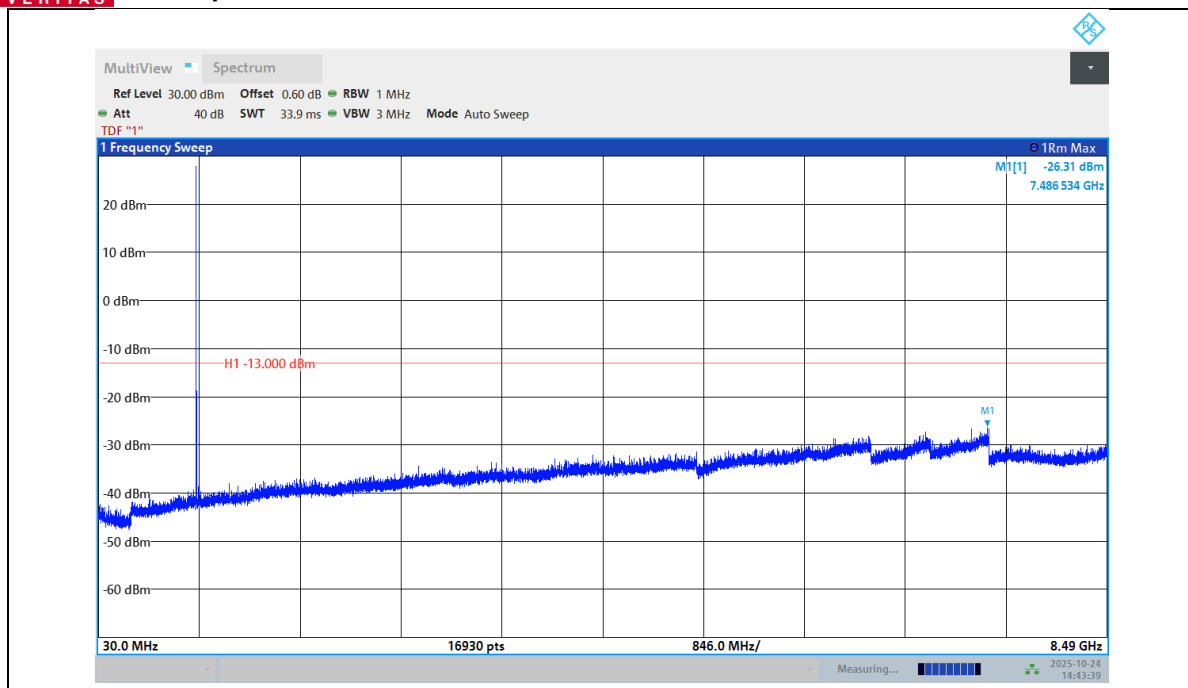


BUREAU VERITAS Test Report No.: PSU-NQN2509250114RF06

EGPRS850

Band	Channel	Frequency Range(MHz)	Result(dBm)	Limit(dBm)	Verdict
EGPRS850	128	30-8490	See Graph	-13	PASS
EGPRS850	190	30-8490	See Graph	-13	PASS
EGPRS850	251	30-8490	See Graph	-13	PASS







Frequency Stability

Test Result

Voltage							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	LV	NT	-104.68	-0.1270	±2.5	PASS
GSM850	128	NV	NT	15.44	0.0187	±2.5	PASS
GSM850	128	HV	NT	-10.72	-0.0130	±2.5	PASS
GSM850	190	LV	NT	-128.13	-0.1532	±2.5	PASS
GSM850	190	NV	NT	-88.32	-0.1056	±2.5	PASS
GSM850	190	HV	NT	-100.32	-0.1199	±2.5	PASS
GSM850	251	LV	NT	-140.00	-0.1649	±2.5	PASS
GSM850	251	NV	NT	-156.42	-0.1843	±2.5	PASS
GSM850	251	HV	NT	-116.21	-0.1369	±2.5	PASS



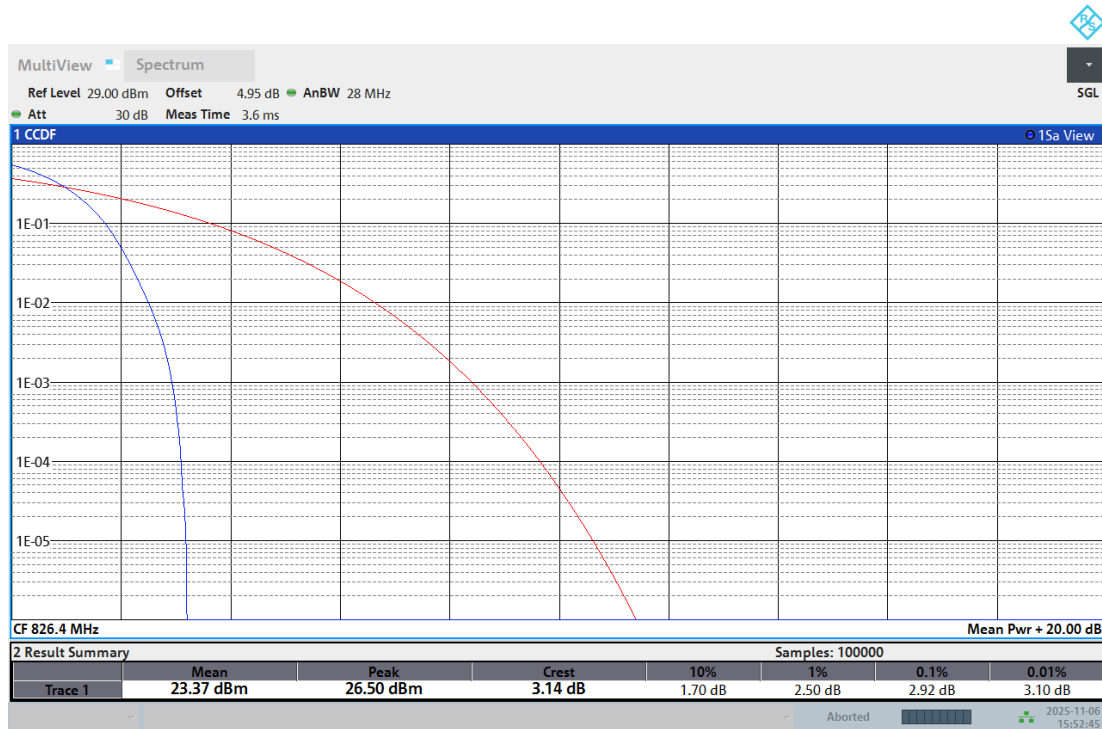
Temperature							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	NV	-30	-62.29	-0.0756	±2.5	PASS
GSM850	128	NV	-20	-73.20	-0.0888	±2.5	PASS
GSM850	128	NV	-10	-179.76	-0.2181	±2.5	PASS
GSM850	128	NV	0	-171.27	-0.2078	±2.5	PASS
GSM850	128	NV	10	-105.68	-0.1282	±2.5	PASS
GSM850	128	NV	20	-64.03	-0.0777	±2.5	PASS
GSM850	128	NV	30	-157.51	-0.1911	±2.5	PASS
GSM850	128	NV	40	-159.96	-0.1941	±2.5	PASS
GSM850	128	NV	50	-91.36	-0.1108	±2.5	PASS
GSM850	190	NV	-30	-148.75	-0.1778	±2.5	PASS
GSM850	190	NV	-20	-54.25	-0.0649	±2.5	PASS
GSM850	190	NV	-10	18.66	0.0223	±2.5	PASS
GSM850	190	NV	0	-41.27	-0.0493	±2.5	PASS
GSM850	190	NV	10	-146.06	-0.1746	±2.5	PASS
GSM850	190	NV	20	-43.80	-0.0524	±2.5	PASS
GSM850	190	NV	30	-117.74	-0.1408	±2.5	PASS
GSM850	190	NV	40	-91.48	-0.1094	±2.5	PASS
GSM850	190	NV	50	-75.00	-0.0897	±2.5	PASS
GSM850	251	NV	-30	-90.24	-0.1063	±2.5	PASS
GSM850	251	NV	-20	18.21	0.0215	±2.5	PASS
GSM850	251	NV	-10	-46.61	-0.0549	±2.5	PASS
GSM850	251	NV	0	-44.75	-0.0527	±2.5	PASS
GSM850	251	NV	10	-140.33	-0.1653	±2.5	PASS
GSM850	251	NV	20	-141.09	-0.1662	±2.5	PASS
GSM850	251	NV	30	-89.32	-0.1052	±2.5	PASS
GSM850	251	NV	40	-125.00	-0.1473	±2.5	PASS
GSM850	251	NV	50	-91.66	-0.1080	±2.5	PASS

**WCDMA BAND V****PEAK-TO-AVERAGE RATIO(CCDF)****Test Result**

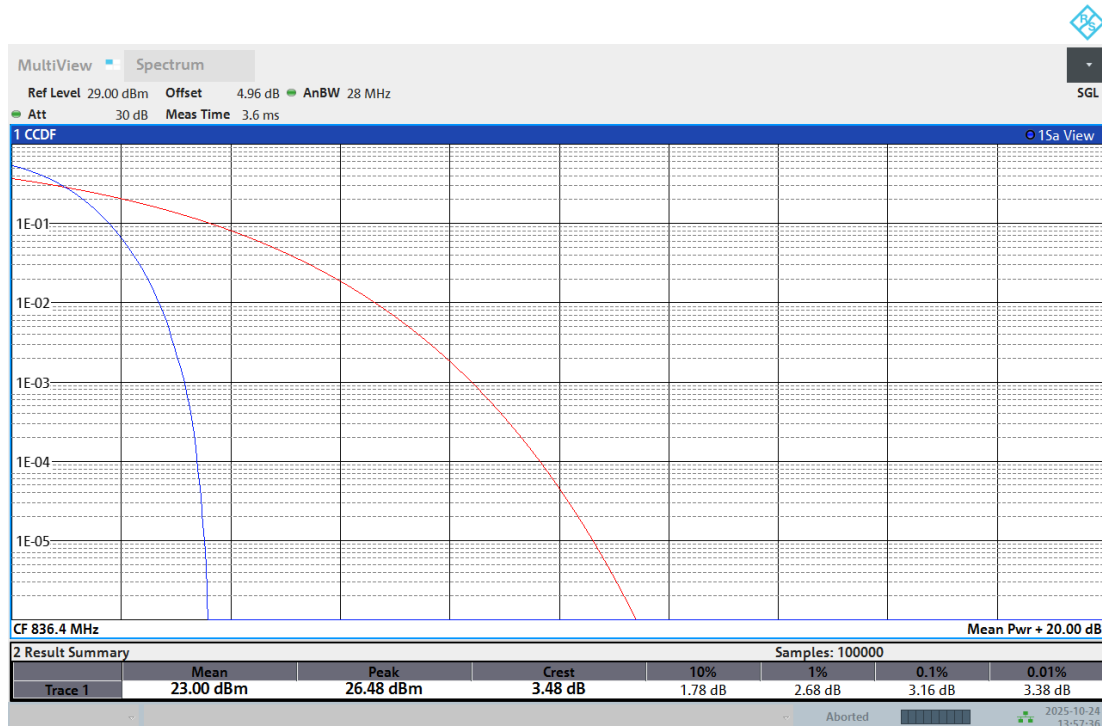
Band	Channel	Peak-to-Average Ratio(dB)	Limit(dBm)	Verdict
Band V	4132	2.92	13	PASS
Band V	4182	3.16	13	PASS
Band V	4233	2.92	13	PASS

Test Graphs

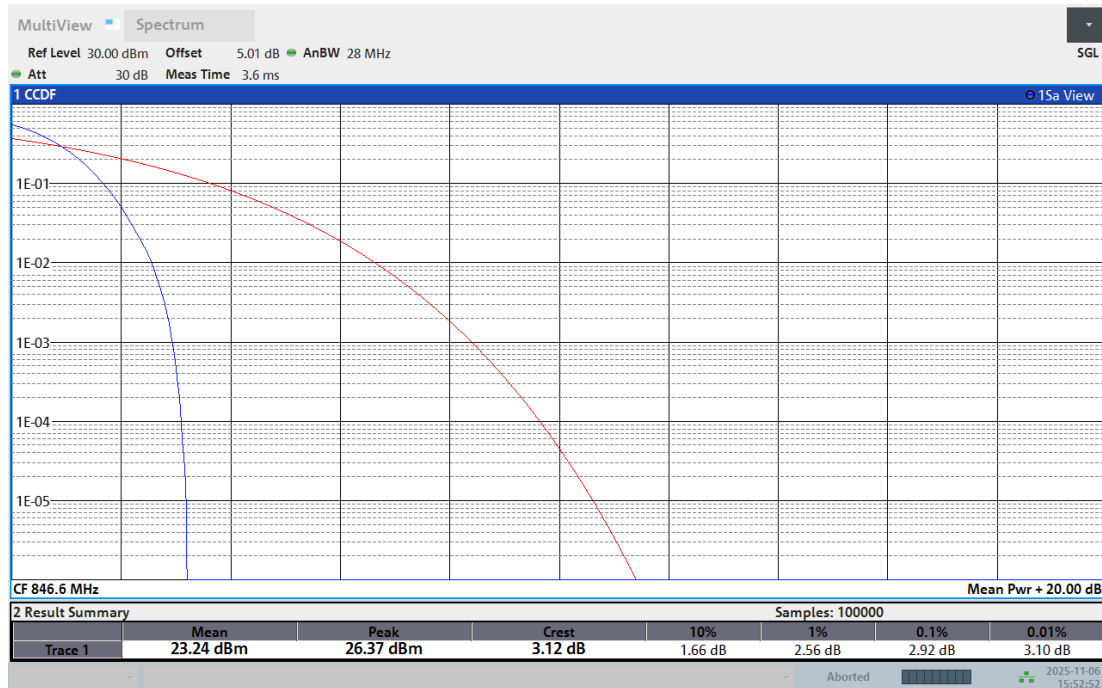
Channel-4132-PASS



Channel-4182-PASS



Channel-4233-PASS





26DB BANDWIDTH AND OCCUPIED BANDWIDTH

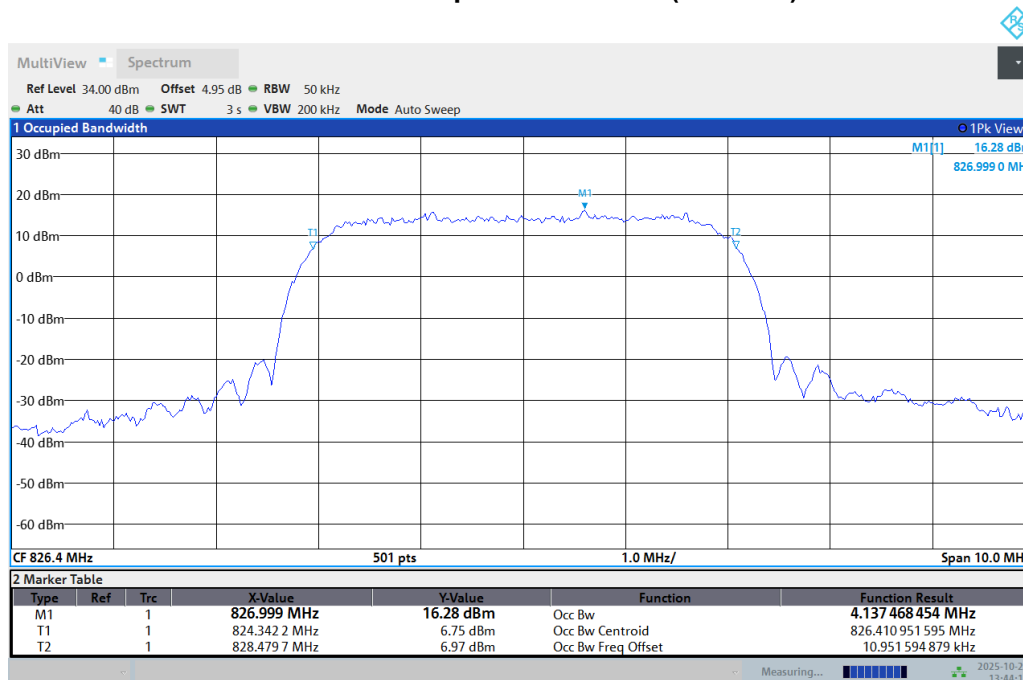
Test Result

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)
826.4	4.137
836.4	4.107
846.6	4.091

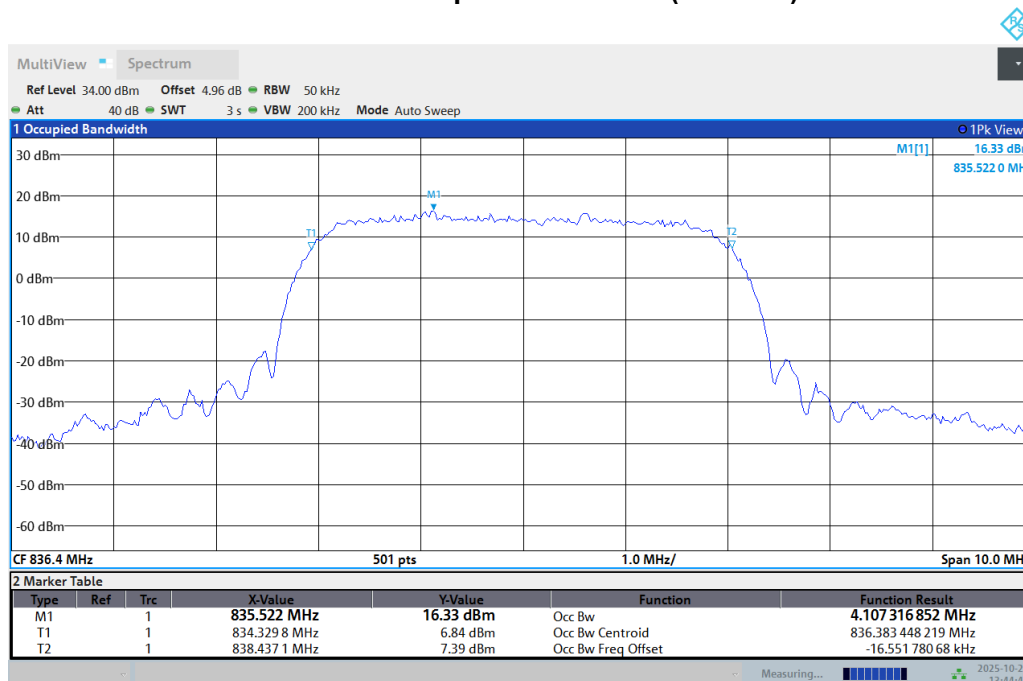


Test Graphs

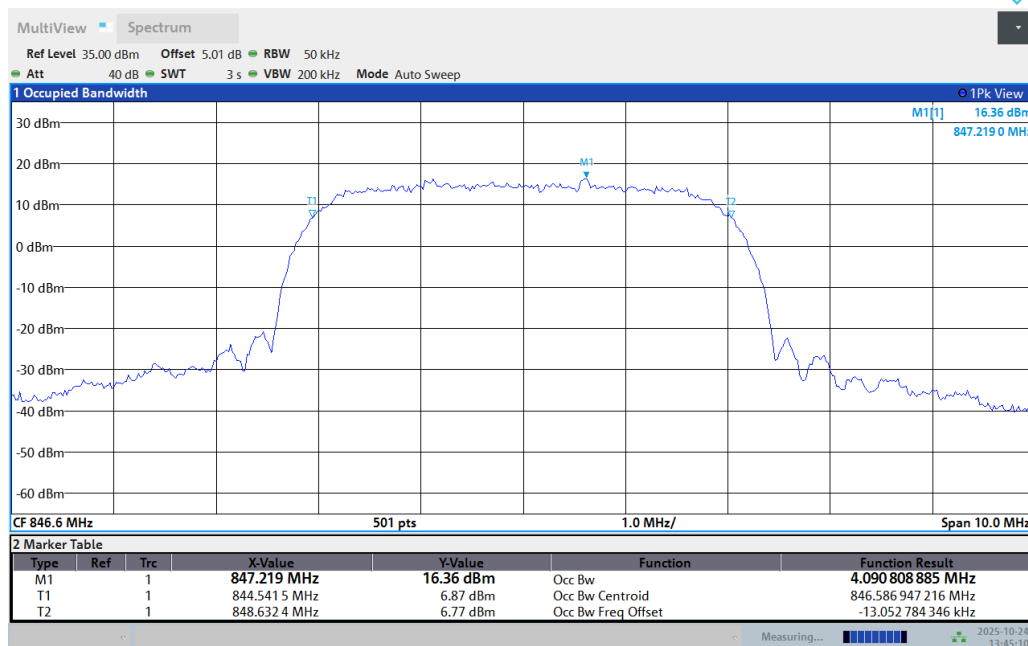
Channel 4132-Occupied Bandwidth (99% BW)



Channel 4182-Occupied Bandwidth (99% BW)



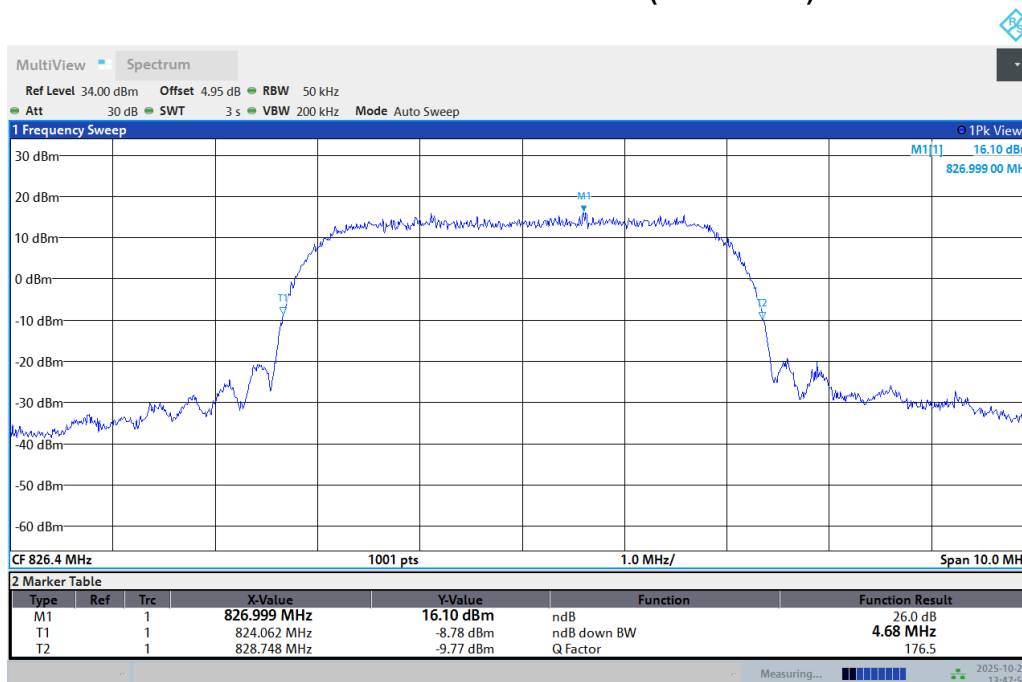
Channel 4233-Occupied Bandwidth (99% BW)



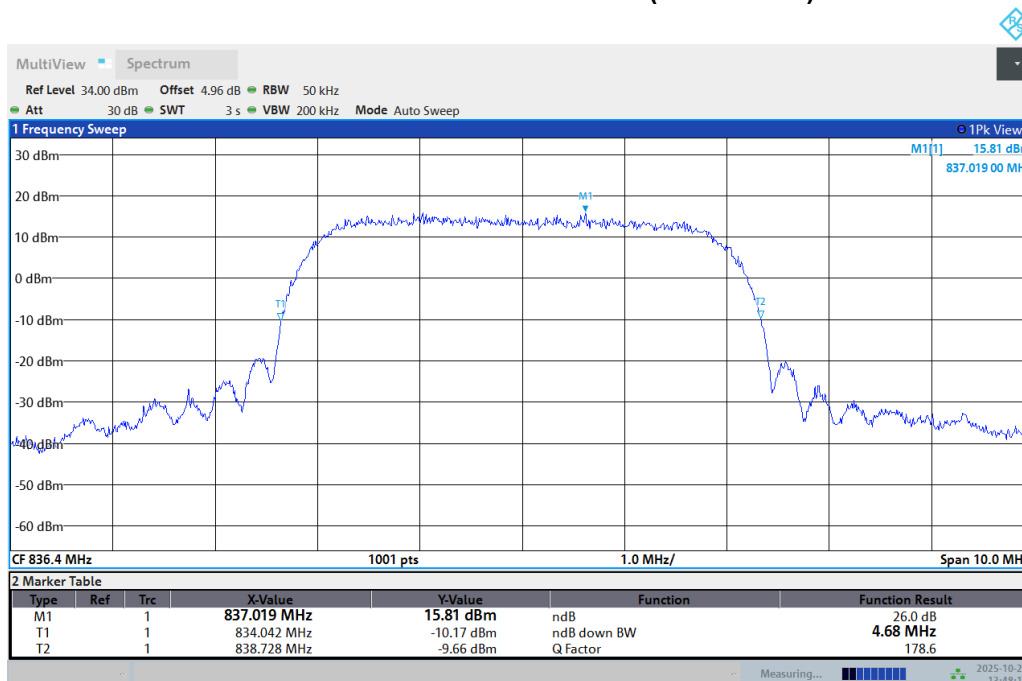


Frequency (MHz)	Emission Bandwidth (-26dBc)(MHz)
826.4	4.68
836.4	4.68
846.6	4.67

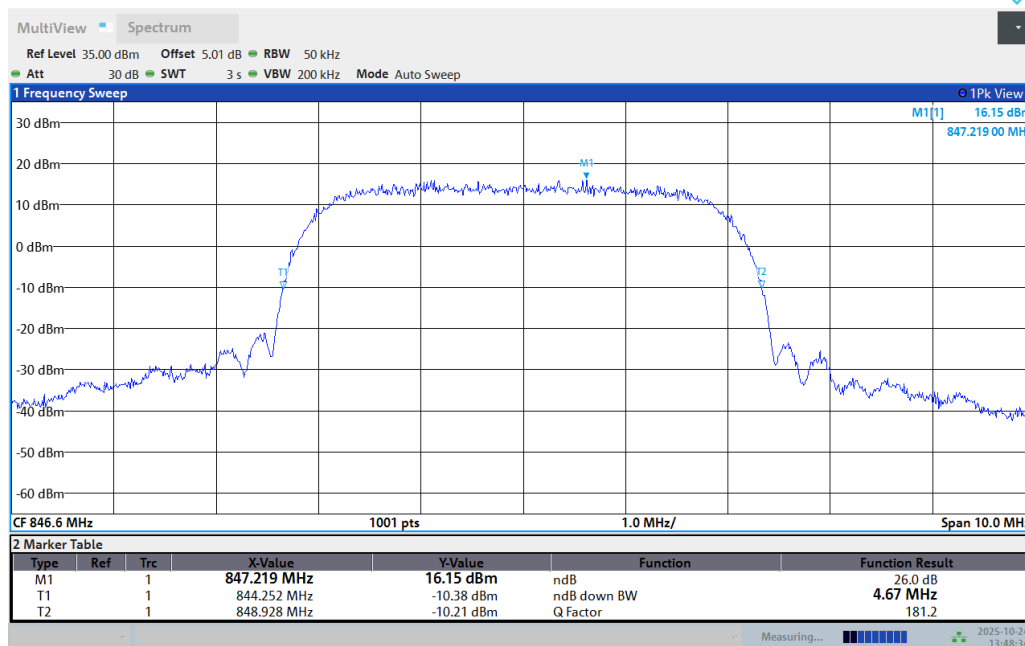
Channel 4132-Emission Bandwidth (-26dBc BW)



Channel 4182-Emission Bandwidth (-26dBc BW)



Channel 4233-Emission Bandwidth (-26dBc BW)





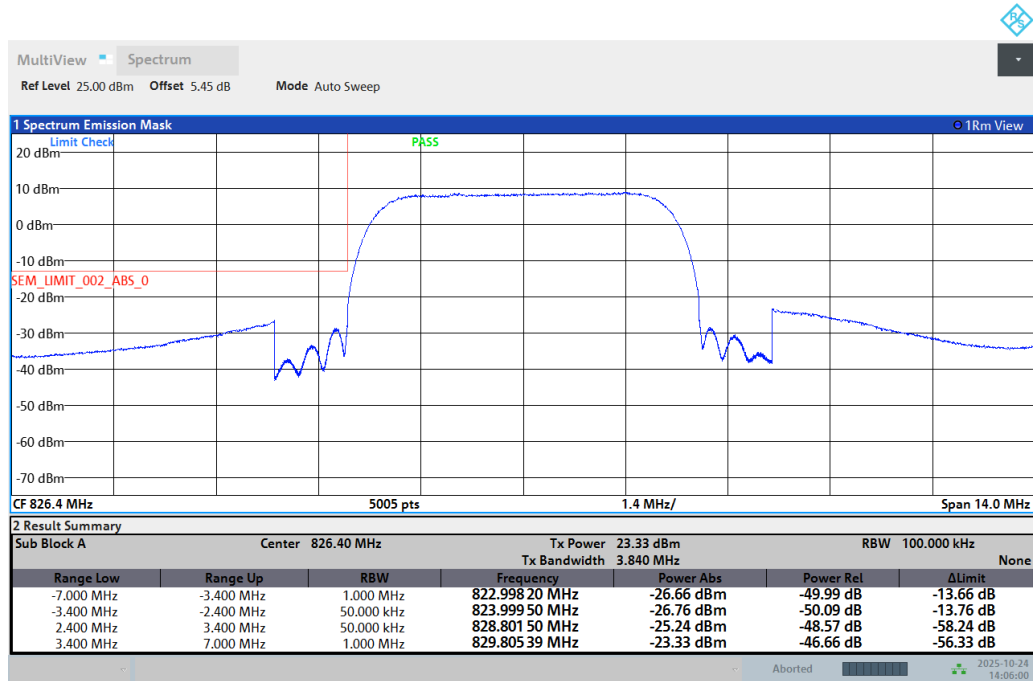
BAND EDGE

Test Result

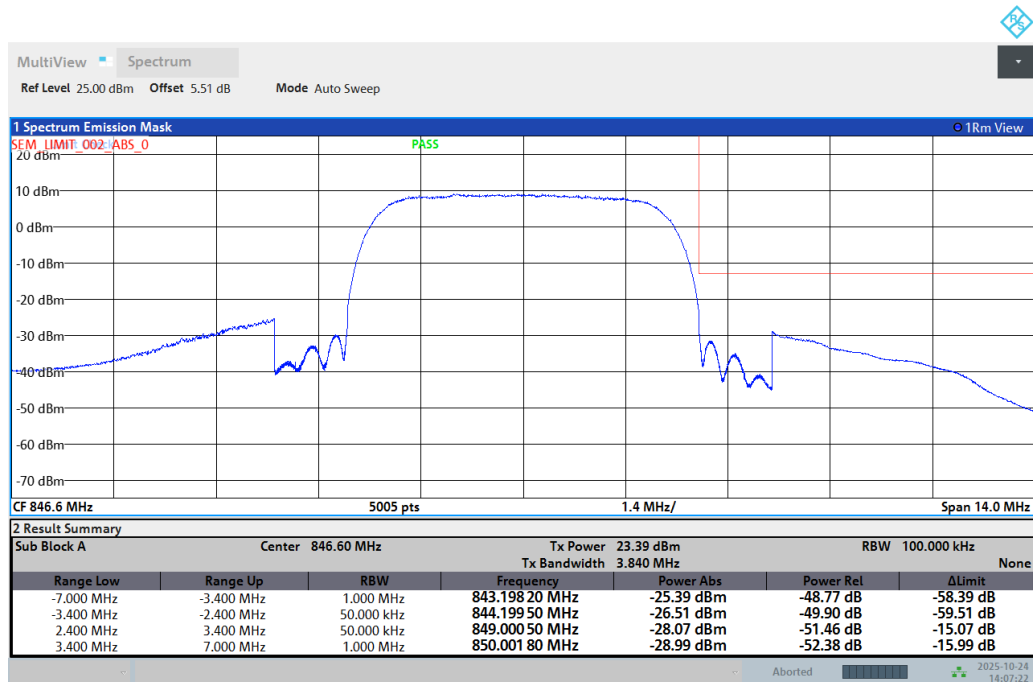
Band	Channel	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band V	4132	822.9982	-26.66	-13	PASS
Band V	4233	849.00	-28.07	-13	PASS

Test Graphs

Channel 4132



Channel 4233





BUREAU VERITAS Test Report No.: PSU-NQN2509250114RF06
CONDUCTED SPURIOUS EMISSION

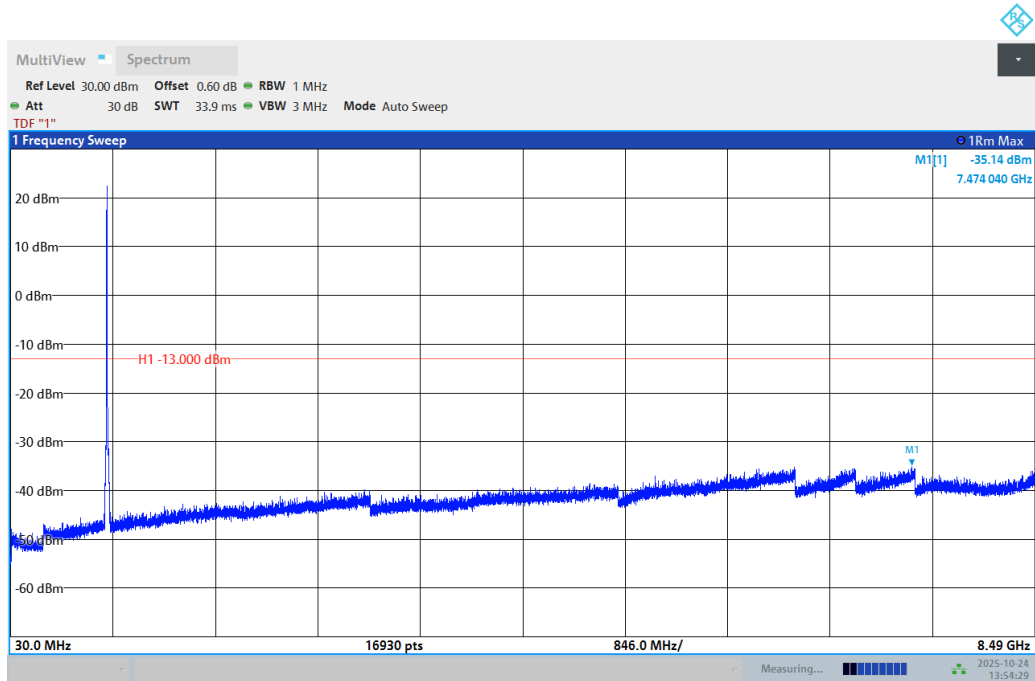
Test Result

Band	Channel	Frequency Range (Mhz)	Result (dBm)	Limit (dBm)	Verdict
Band V	4132	30~8490MHz	See Graph	-13	PASS
Band V	4182	30~8490MHz	See Graph	-13	PASS
Band V	4233	30~8490MHz	See Graph	-13	PASS

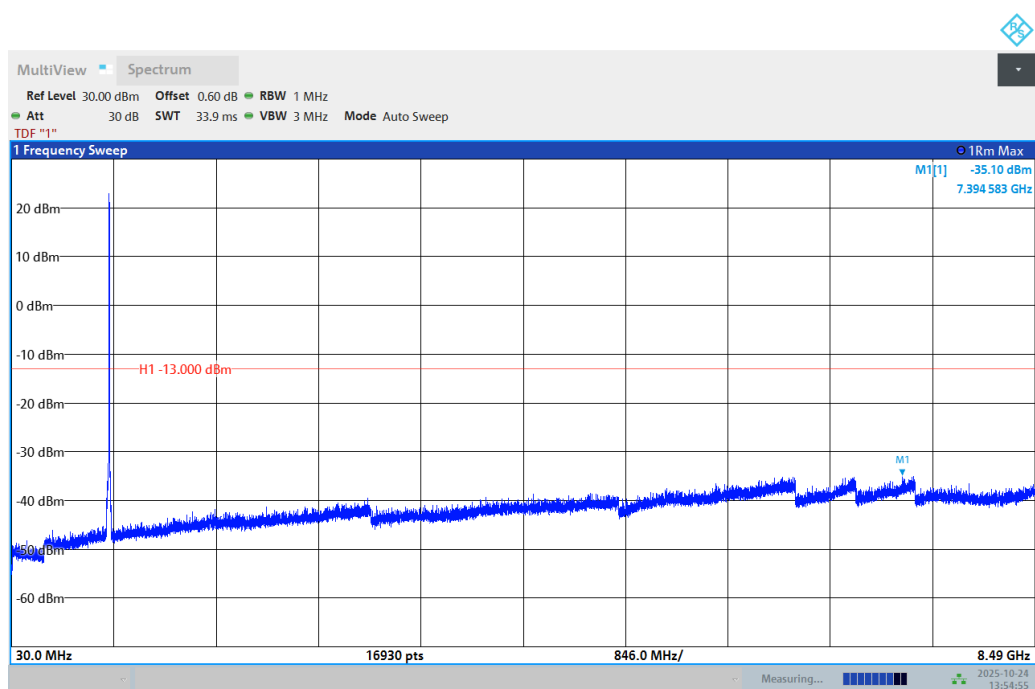


Test Graphs

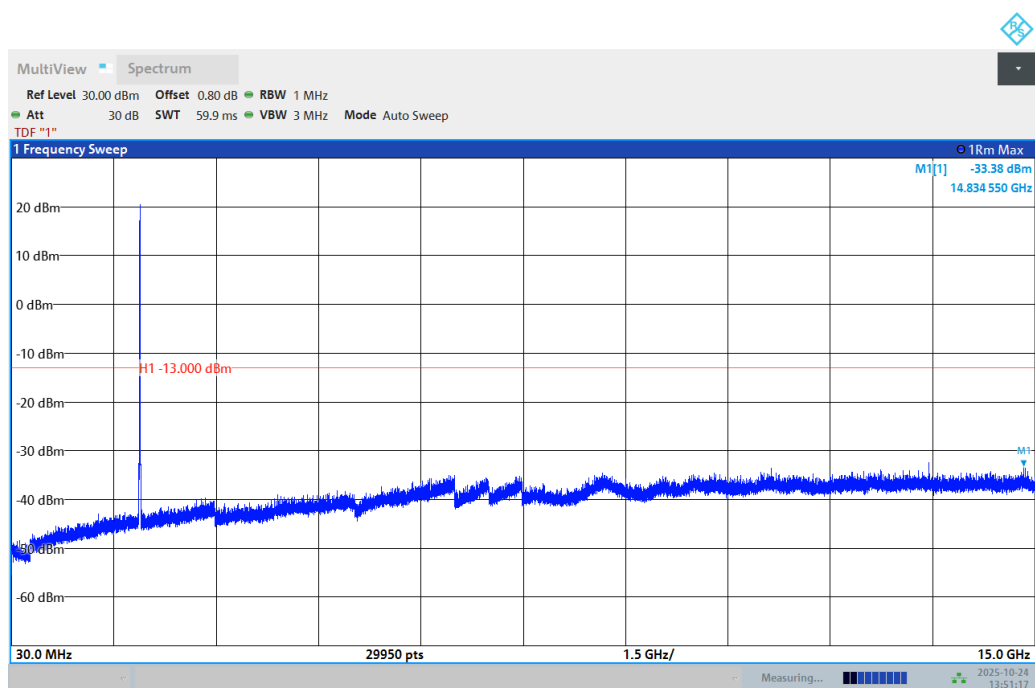
Channel 4132:30MHZ - 8490MHZ



Channel 4182:30MHZ - 8490MHZ



Channel 4233:30MHZ - 8490MHZ





Frequency Stability

Test Result

Voltage							
Band	Channel	Voltage(Vdc)	Temperature(°C)	Deviation(Hz)	Deviation(ppm)	Limit(ppm)	Verdict
Band V	4132	LV	NT	-97.32	-0.1178	±2.5	PASS
Band V	4132	NV	NT	9.21	0.0111	±2.5	PASS
Band V	4132	HV	NT	-120.46	-0.1458	±2.5	PASS
Band V	4182	LV	NT	-104.33	-0.1247	±2.5	PASS
Band V	4182	NV	NT	-113.54	-0.1357	±2.5	PASS
Band V	4182	HV	NT	-125.62	-0.1502	±2.5	PASS
Band V	4233	LV	NT	-151.64	-0.1791	±2.5	PASS
Band V	4233	NV	NT	-155.59	-0.1838	±2.5	PASS
Band V	4233	HV	NT	3.45	0.0041	±2.5	PASS



Voltage							
Band	Channel	Voltage(Vdc)	Temperature(°C)	Deviation(Hz)	Deviation(ppm)	Limit(ppm)	Verdict
Band V	4132	NV	-30	-70.91	-0.0858	±2.5	PASS
Band V	4132	NV	-20	-148.19	-0.1793	±2.5	PASS
Band V	4132	NV	-10	-157.95	-0.1911	±2.5	PASS
Band V	4132	NV	0	-123.66	-0.1496	±2.5	PASS
Band V	4132	NV	10	-24.68	-0.0299	±2.5	PASS
Band V	4132	NV	20	1.14	0.0014	±2.5	PASS
Band V	4132	NV	30	-34.75	-0.0420	±2.5	PASS
Band V	4132	NV	40	-95.85	-0.1160	±2.5	PASS
Band V	4132	NV	50	-24.93	-0.0302	±2.5	PASS
Band V	4182	NV	-30	-19.12	-0.0229	±2.5	PASS
Band V	4182	NV	-20	-51.96	-0.0621	±2.5	PASS
Band V	4182	NV	-10	-72.61	-0.0868	±2.5	PASS
Band V	4182	NV	0	-15.16	-0.0181	±2.5	PASS
Band V	4182	NV	10	-28.72	-0.0343	±2.5	PASS
Band V	4182	NV	20	-129.78	-0.1551	±2.5	PASS
Band V	4182	NV	30	-136.23	-0.1628	±2.5	PASS
Band V	4182	NV	40	-169.34	-0.2024	±2.5	PASS
Band V	4182	NV	50	7.06	0.0084	±2.5	PASS
Band V	4233	NV	-30	-160.47	-0.1895	±2.5	PASS
Band V	4233	NV	-20	-93.81	-0.1108	±2.5	PASS
Band V	4233	NV	-10	-175.76	-0.2076	±2.5	PASS
Band V	4233	NV	0	-27.21	-0.0321	±2.5	PASS
Band V	4233	NV	10	19.60	0.0232	±2.5	PASS
Band V	4233	NV	20	-31.61	-0.0373	±2.5	PASS
Band V	4233	NV	30	-36.26	-0.0428	±2.5	PASS
Band V	4233	NV	40	9.45	0.0112	±2.5	PASS
Band V	4233	NV	50	-139.79	-0.1651	±2.5	PASS



BUREAU VERITAS Test Report No.: PSU-NQN2509250114RF06

LTE BAND 26_PART22(INCLUDING LTE BAND 5)

PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
1.4MHz	QPSK	26797	1RB Low	2.56	13	PASS
1.4MHz	QPSK	26797	Full RB	3.86	13	PASS
1.4MHz	16QAM	26797	1RB Low	3.58	13	PASS
1.4MHz	16QAM	26797	Full RB	4.80	13	PASS
1.4MHz	64QAM	26797	1RB Low	4.44	13	PASS
1.4MHz	64QAM	26797	Full RB	5.18	13	PASS
1.4MHz	QPSK	26915	1RB Low	2.56	13	PASS
1.4MHz	QPSK	26915	Full RB	3.58	13	PASS
1.4MHz	16QAM	26915	1RB Low	3.30	13	PASS
1.4MHz	16QAM	26915	Full RB	4.52	13	PASS
1.4MHz	64QAM	26915	1RB Low	4.52	13	PASS
1.4MHz	64QAM	26915	Full RB	5.54	13	PASS
1.4MHz	QPSK	27033	1RB Low	5.16	13	PASS
1.4MHz	QPSK	27033	Full RB	5.78	13	PASS
1.4MHz	16QAM	27033	1RB Low	5.92	13	PASS
1.4MHz	16QAM	27033	Full RB	6.80	13	PASS
1.4MHz	64QAM	27033	1RB Low	6.84	13	PASS
1.4MHz	64QAM	27033	Full RB	6.80	13	PASS
3MHz	QPSK	26805	1RB Low	2.36	13	PASS
3MHz	QPSK	26805	Full RB	3.30	13	PASS
3MHz	16QAM	26805	1RB Low	3.68	13	PASS
3MHz	16QAM	26805	Full RB	4.24	13	PASS
3MHz	64QAM	26805	1RB Low	4.34	13	PASS
3MHz	64QAM	26805	Full RB	5.54	13	PASS
3MHz	QPSK	26915	1RB Low	2.56	13	PASS
3MHz	QPSK	26915	Full RB	3.48	13	PASS
3MHz	16QAM	26915	1RB Low	3.40	13	PASS
3MHz	16QAM	26915	Full RB	4.52	13	PASS
3MHz	64QAM	26915	1RB Low	4.24	13	PASS
3MHz	64QAM	26915	Full RB	5.54	13	PASS
3MHz	QPSK	27025	1RB Low	4.62	13	PASS
3MHz	QPSK	27025	Full RB	5.70	13	PASS
3MHz	16QAM	27025	1RB Low	5.56	13	PASS
3MHz	16QAM	27025	Full RB	6.38	13	PASS
3MHz	64QAM	27025	1RB Low	6.10	13	PASS
3MHz	64QAM	27025	Full RB	6.98	13	PASS
5MHz	QPSK	26815	1RB Low	2.36	13	PASS
5MHz	QPSK	26815	Full RB	3.58	13	PASS
5MHz	16QAM	26815	1RB Low	3.40	13	PASS
5MHz	16QAM	26815	Full RB	4.62	13	PASS
5MHz	64QAM	26815	1RB Low	4.14	13	PASS
5MHz	64QAM	26815	Full RB	5.54	13	PASS
5MHz	QPSK	26915	1RB Low	2.56	13	PASS
5MHz	QPSK	26915	Full RB	3.58	13	PASS
5MHz	16QAM	26915	1RB Low	3.40	13	PASS
5MHz	16QAM	26915	Full RB	4.42	13	PASS

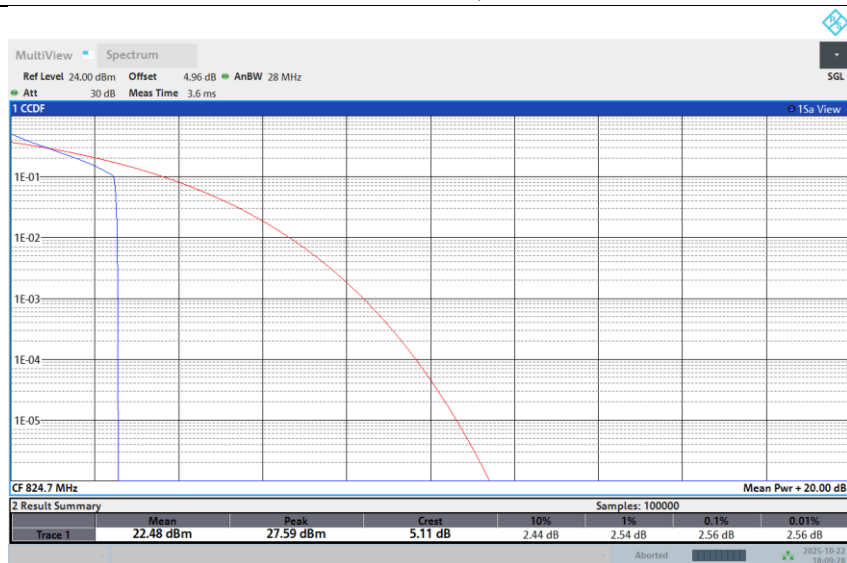


5MHz	64QAM	26915	1RB Low	4.42	13	PASS
5MHz	64QAM	26915	Full RB	5.54	13	PASS
5MHz	QPSK	27015	1RB Low	3.68	13	PASS
5MHz	QPSK	27015	Full RB	4.50	13	PASS
5MHz	16QAM	27015	1RB Low	4.24	13	PASS
5MHz	16QAM	27015	Full RB	5.44	13	PASS
5MHz	64QAM	27015	1RB Low	5.26	13	PASS
5MHz	64QAM	27015	Full RB	6.32	13	PASS
10MHz	QPSK	26840	1RB Low	2.26	13	PASS
10MHz	QPSK	26840	Full RB	3.58	13	PASS
10MHz	16QAM	26840	1RB Low	3.02	13	PASS
10MHz	16QAM	26840	Full RB	4.42	13	PASS
10MHz	64QAM	26840	1RB Low	4.24	13	PASS
10MHz	64QAM	26840	Full RB	5.44	13	PASS
10MHz	QPSK	26915	1RB Low	2.18	13	PASS
10MHz	QPSK	26915	Full RB	3.48	13	PASS
10MHz	16QAM	26915	1RB Low	3.02	13	PASS
10MHz	16QAM	26915	Full RB	4.42	13	PASS
10MHz	64QAM	26915	1RB Low	4.14	13	PASS
10MHz	64QAM	26915	Full RB	5.36	13	PASS
10MHz	QPSK	26990	1RB Low	2.26	13	PASS
10MHz	QPSK	26990	Full RB	3.48	13	PASS
10MHz	16QAM	26990	1RB Low	3.12	13	PASS
10MHz	16QAM	26990	Full RB	4.42	13	PASS
10MHz	64QAM	26990	1RB Low	4.34	13	PASS
10MHz	64QAM	26990	Full RB	5.36	13	PASS
15MHz	QPSK	26865	Full RB	4.06	13	PASS
15MHz	16QAM	26865	1RB Low	3.58	13	PASS
15MHz	16QAM	26865	Full RB	4.98	13	PASS
15MHz	64QAM	26865	1RB Low	4.62	13	PASS
15MHz	64QAM	26865	Full RB	6.08	13	PASS
15MHz	QPSK	26915	1RB Low	2.74	13	PASS
15MHz	QPSK	26915	Full RB	4.14	13	PASS
15MHz	16QAM	26915	1RB Low	4.04	13	PASS
15MHz	16QAM	26915	Full RB	5.16	13	PASS
15MHz	64QAM	26915	1RB Low	4.90	13	PASS
15MHz	64QAM	26915	Full RB	6.24	13	PASS
15MHz	QPSK	26965	1RB Low	3.02	13	PASS
15MHz	QPSK	26965	Full RB	4.14	13	PASS
15MHz	16QAM	26965	1RB Low	3.86	13	PASS
15MHz	16QAM	26965	Full RB	4.98	13	PASS
15MHz	64QAM	26965	1RB Low	4.70	13	PASS
15MHz	64QAM	26965	Full RB	6.00	13	PASS

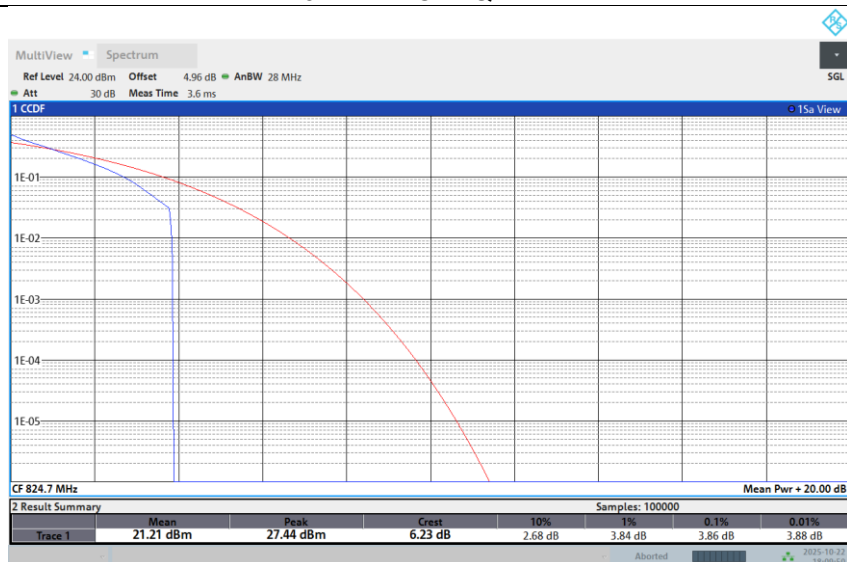


Test Graphs

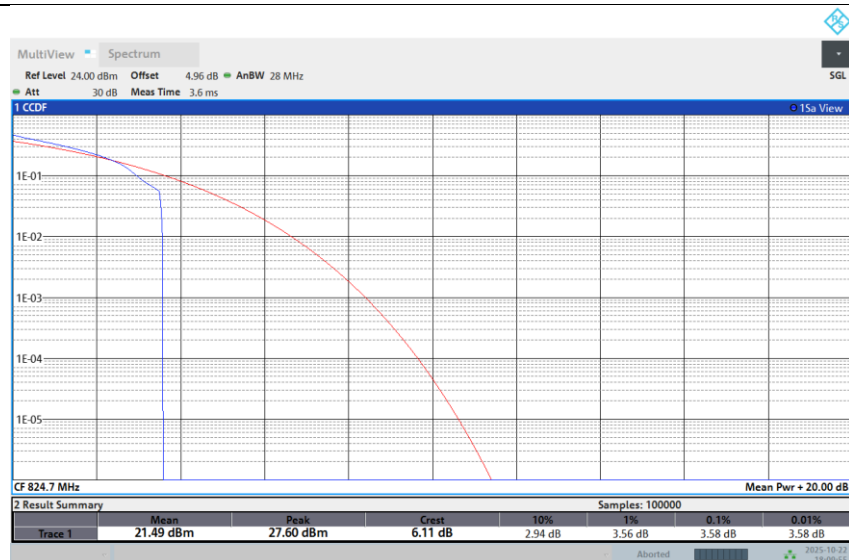
Band 26-1.4M-LOW-QPSK-1RB Low



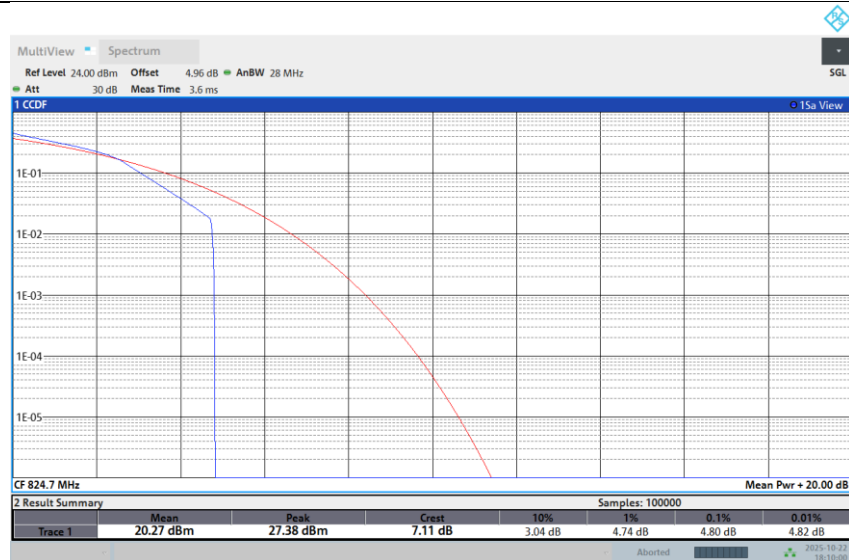
Band 26-1.4M-LOW-QPSK-Full RB



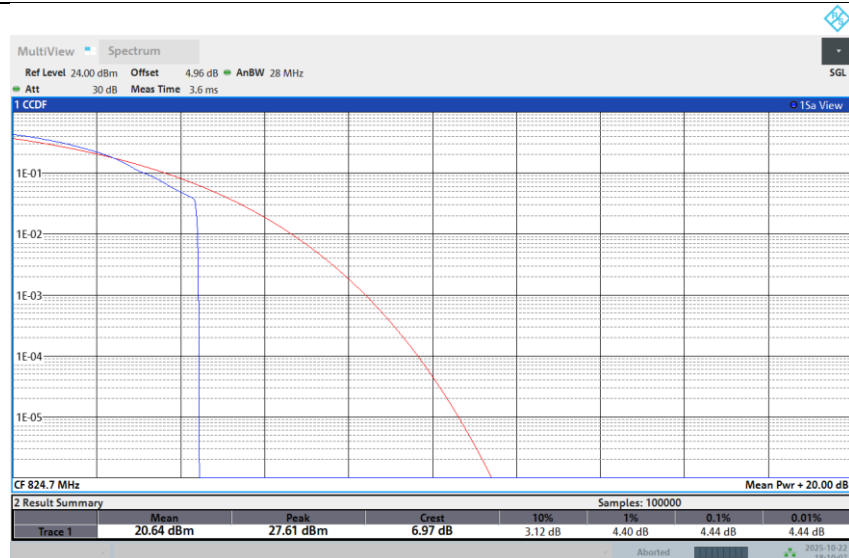
Band 26-1.4M-LOW-16QAM-1RB Low



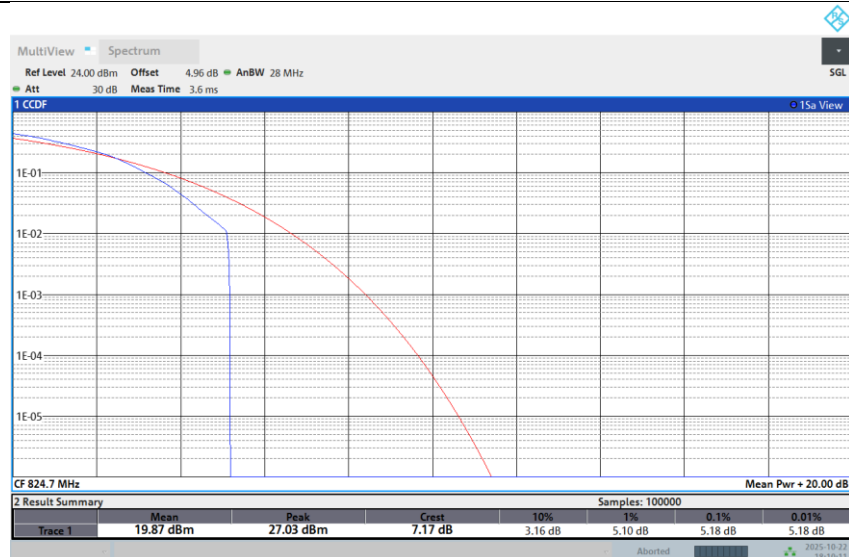
Band 26-1.4M-LOW-16QAM-Full RB



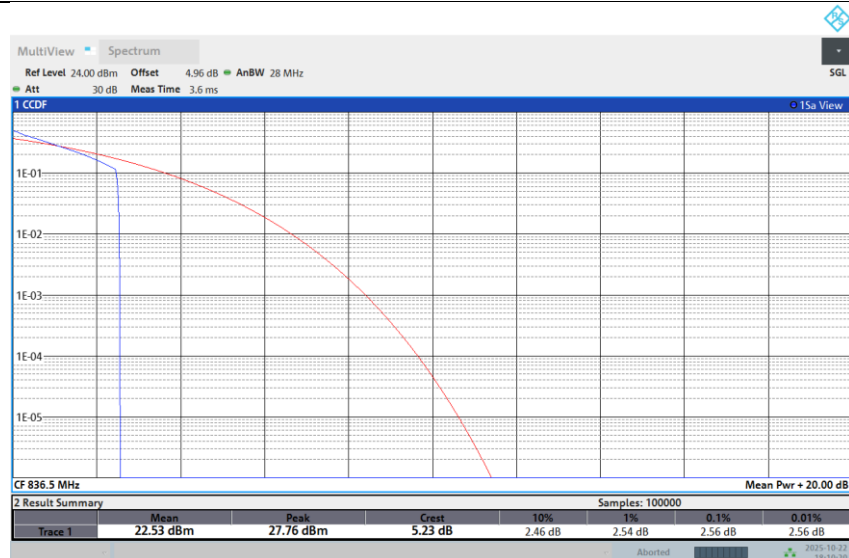
Band 26-1.4M-LOW-64QAM-1RB Low



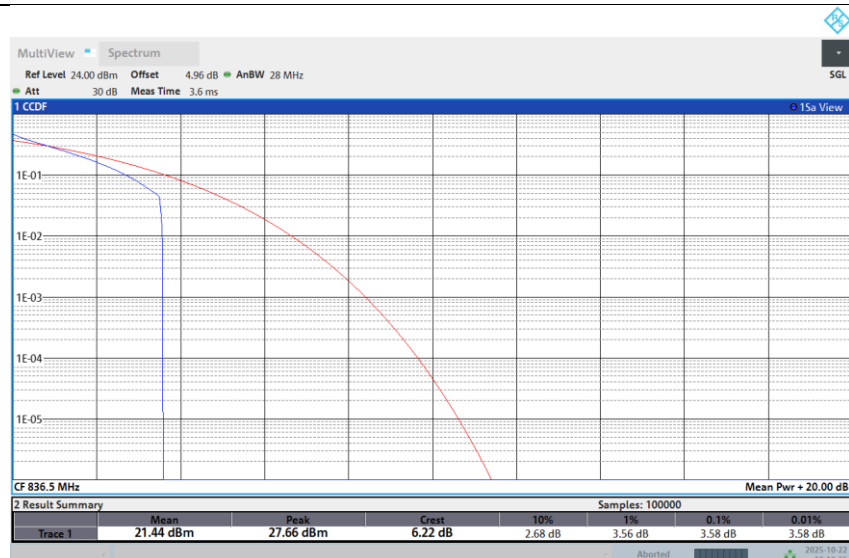
Band 26-1.4M-LOW-64QAM-Full RB



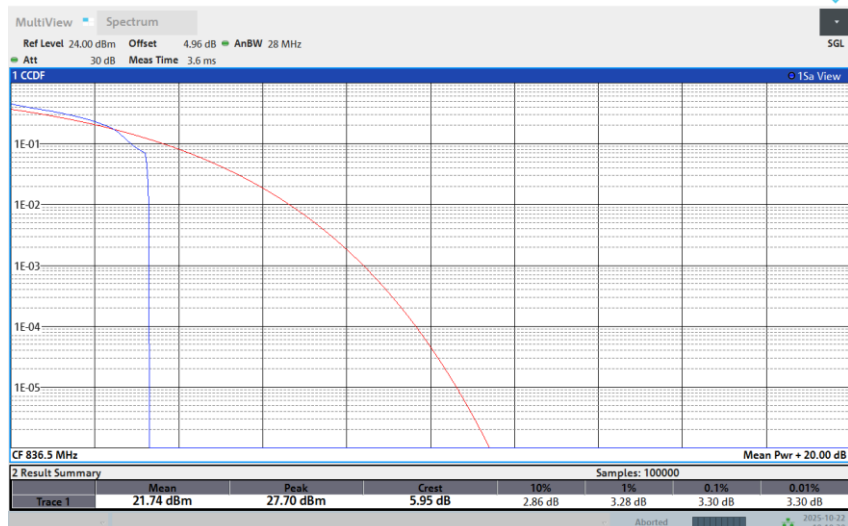
Band 26-1.4M-MID-QPSK-1RB Low



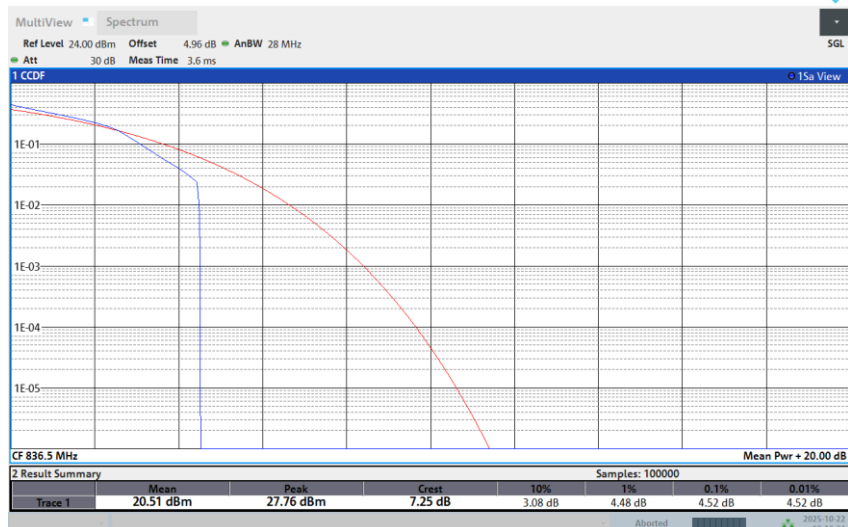
Band 26-1.4M-MID-QPSK-Full RB



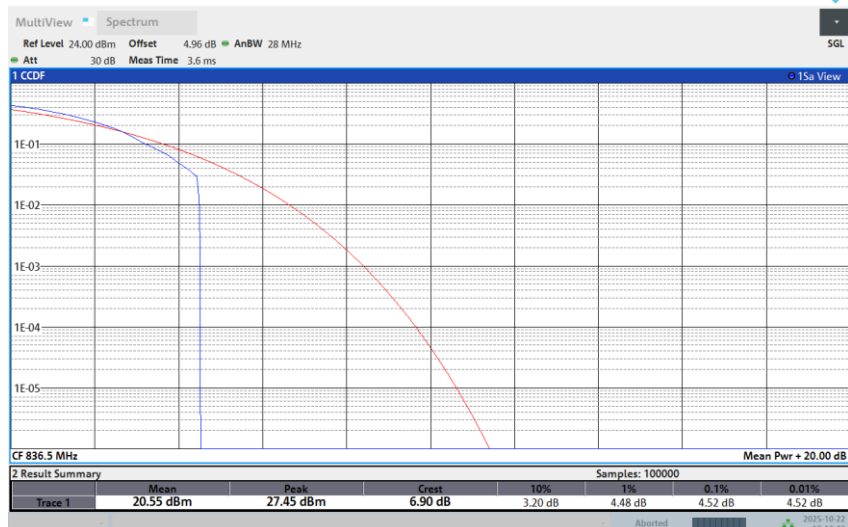
Band 26-1.4M-MID-16QAM-1RB Low



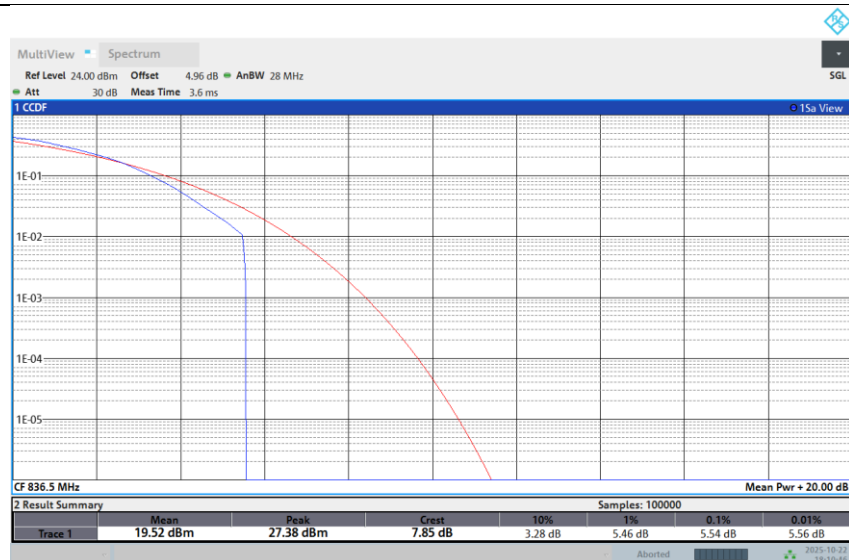
Band 26-1.4M-MID-16QAM-Full RB



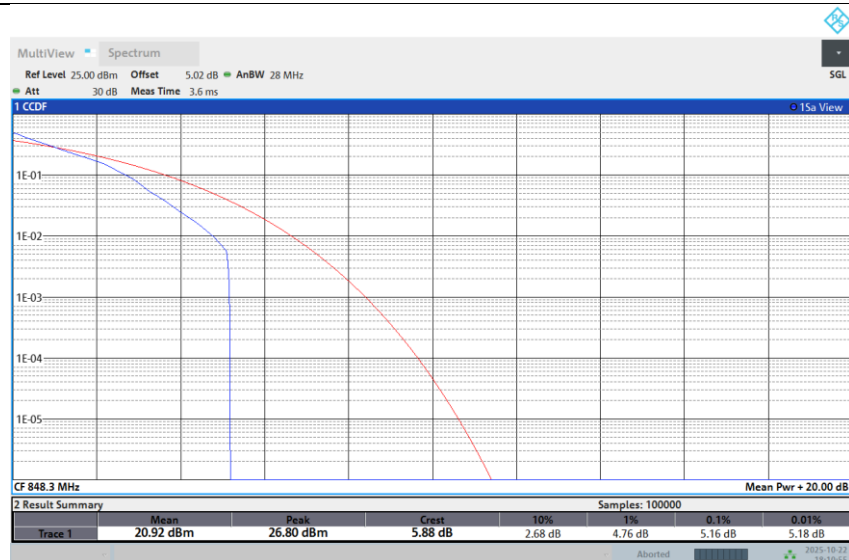
Band 26-1.4M-MID-64QAM-1RB Low



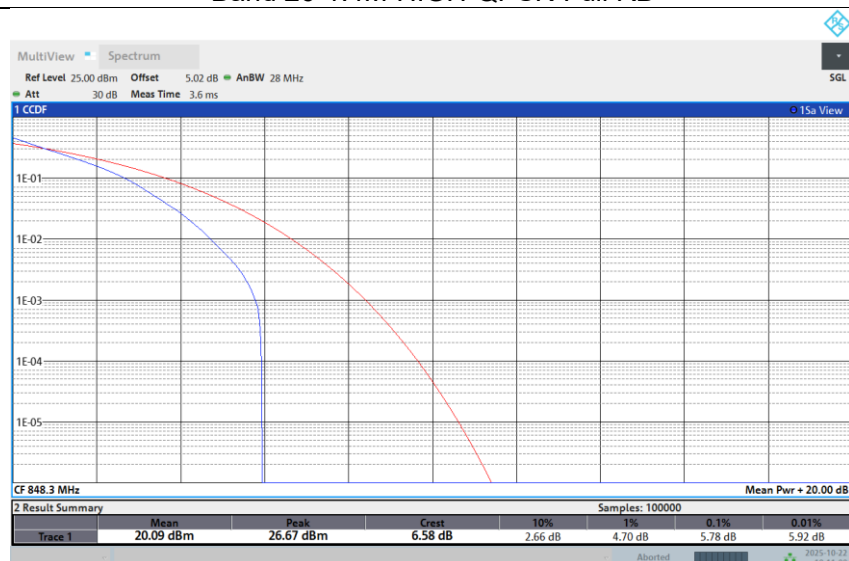
Band 26-1.4M-MID-64QAM-Full RB



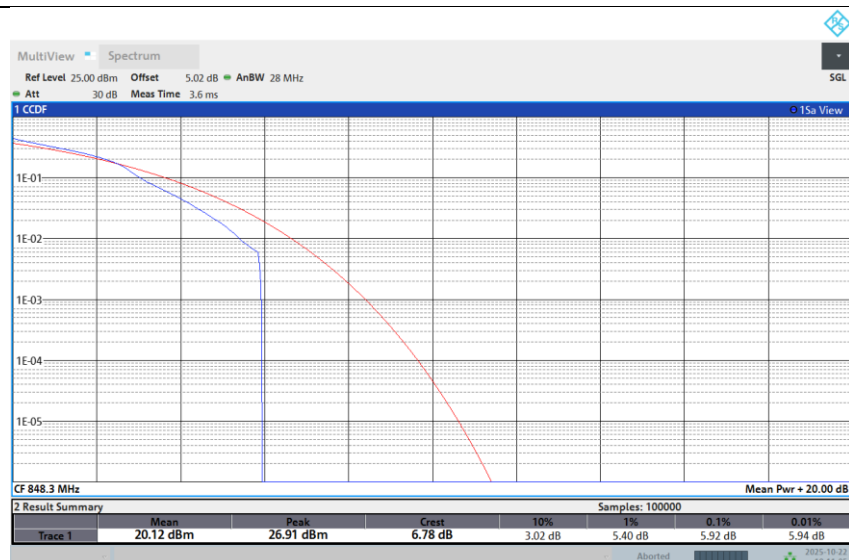
Band 26-1.4M-HIGH-QPSK-1RB Low



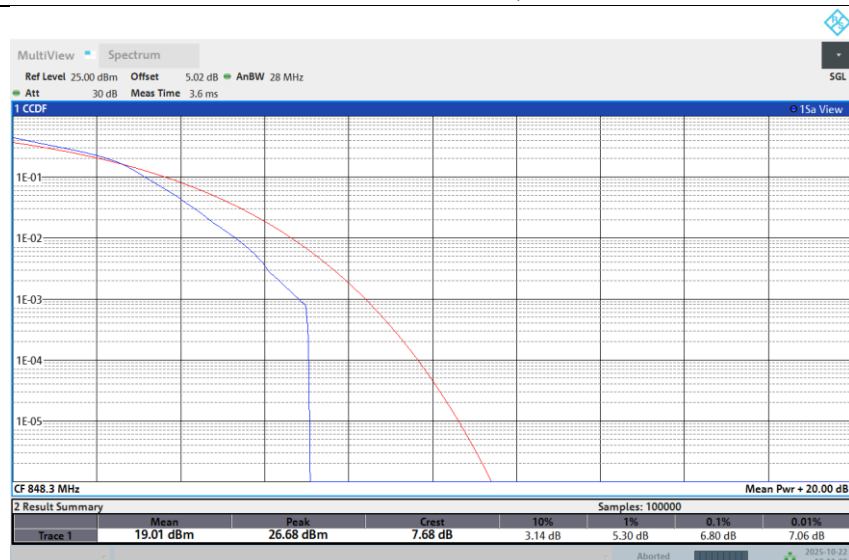
Band 26-1.4M-HIGH-QPSK-Full RB



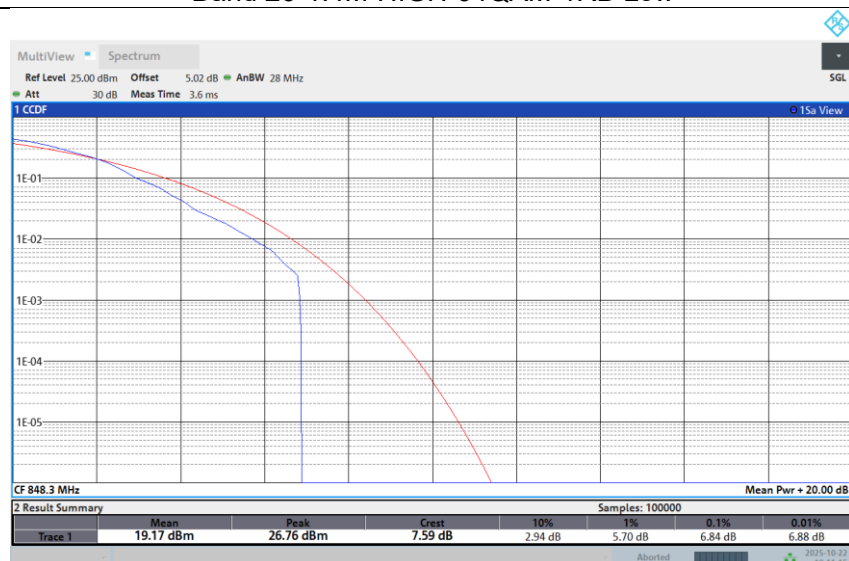
Band 26-1.4M-HIGH-16QAM-1RB Low



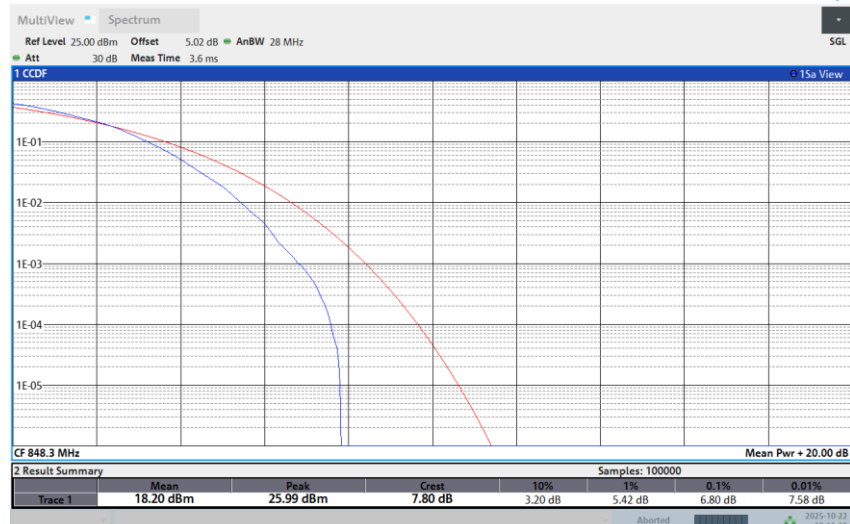
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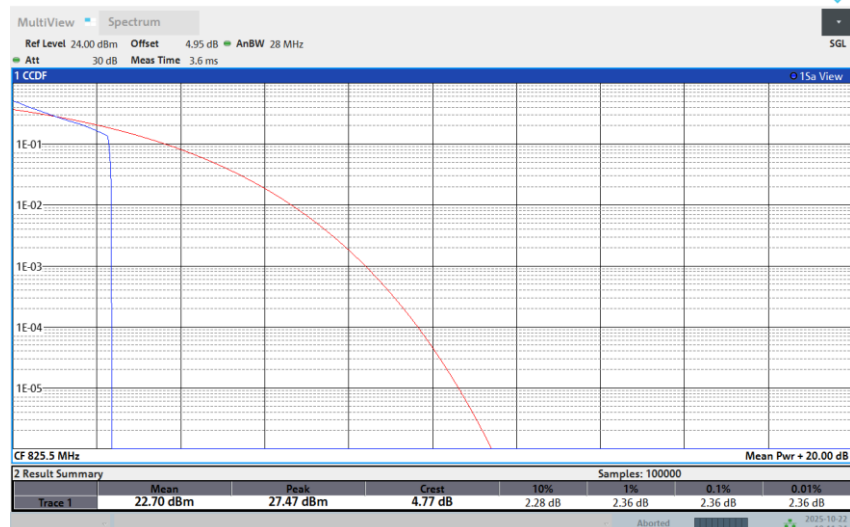
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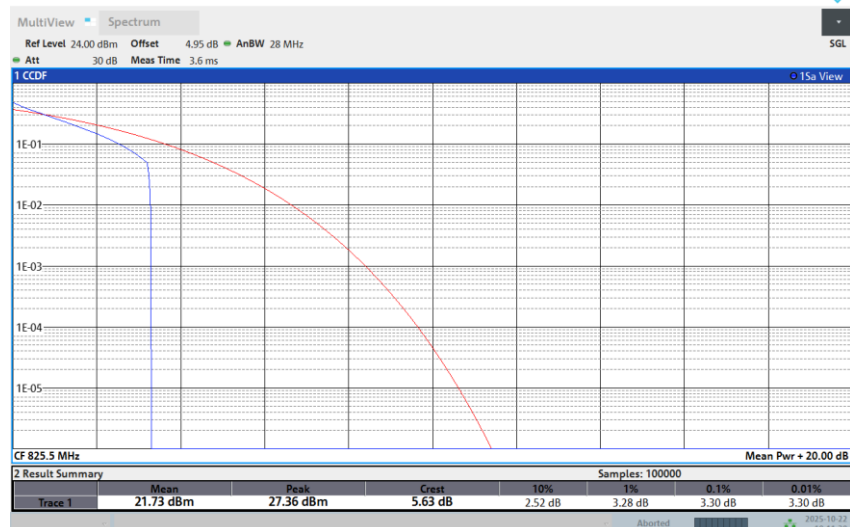
Band 26-1.4M-HIGH-64QAM-Full RB



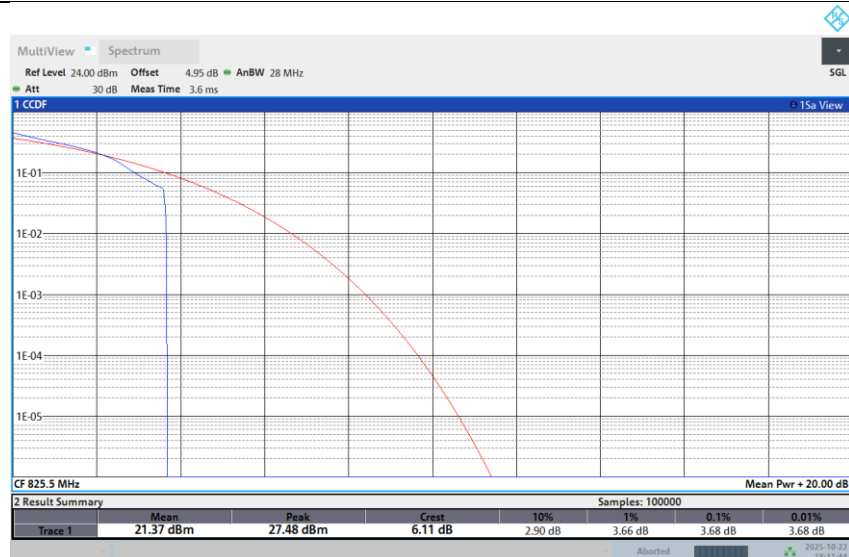
Band 26-3M-LOW-QPSK-1RB Low



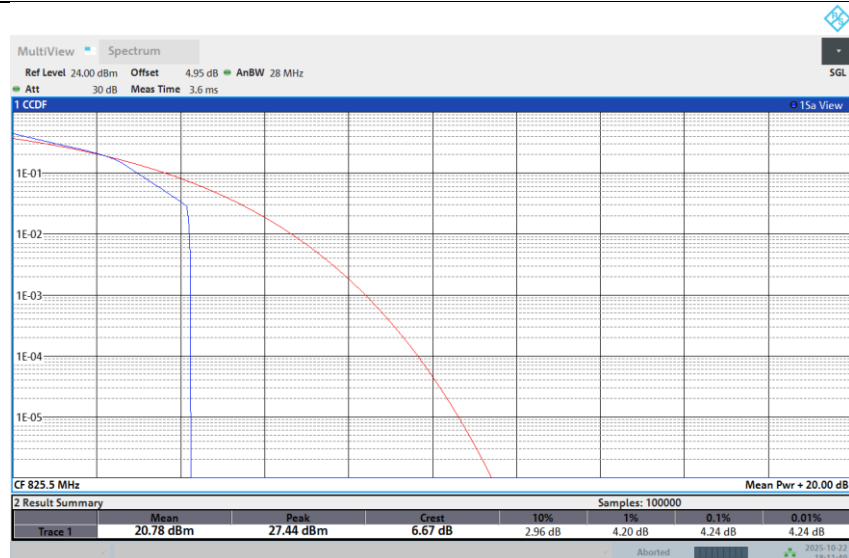
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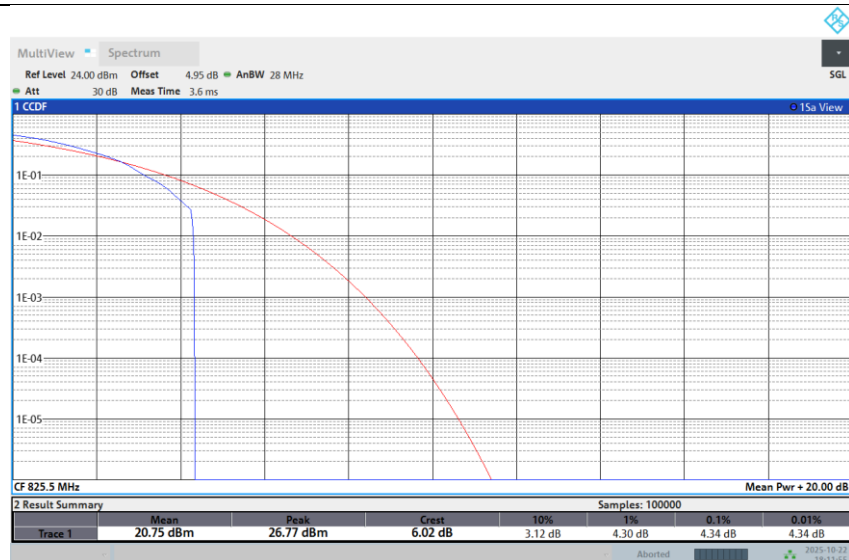
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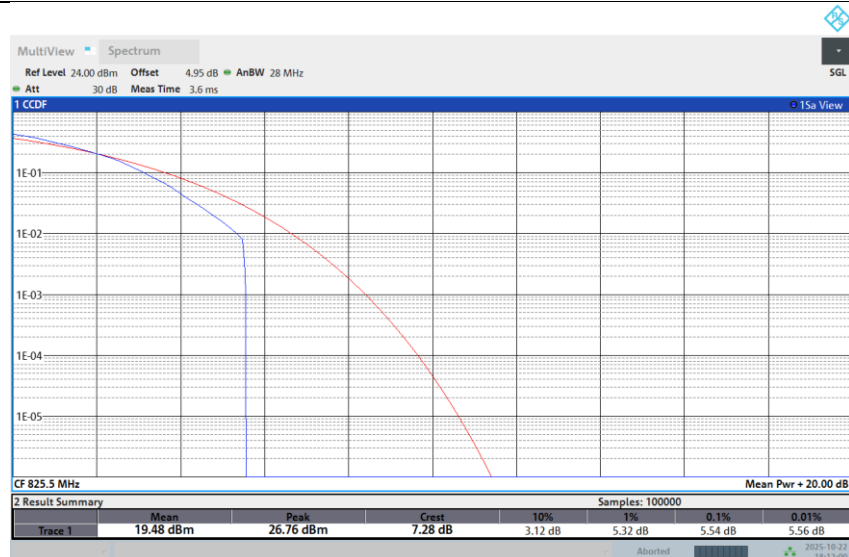
Band 26-3M-LOW-16QAM-Full RB



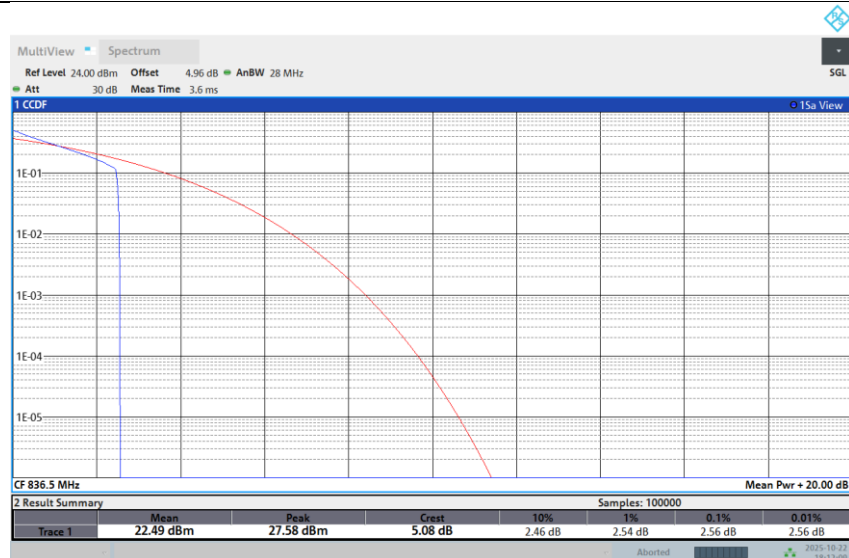
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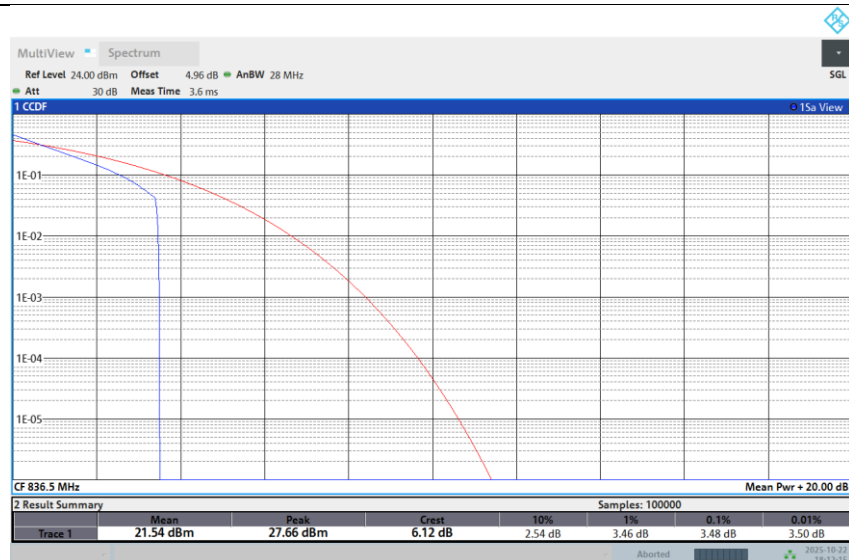
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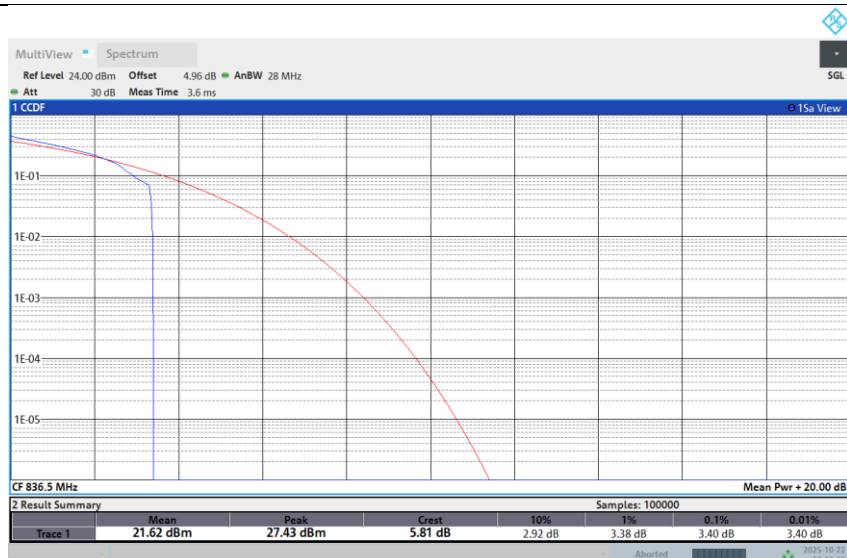
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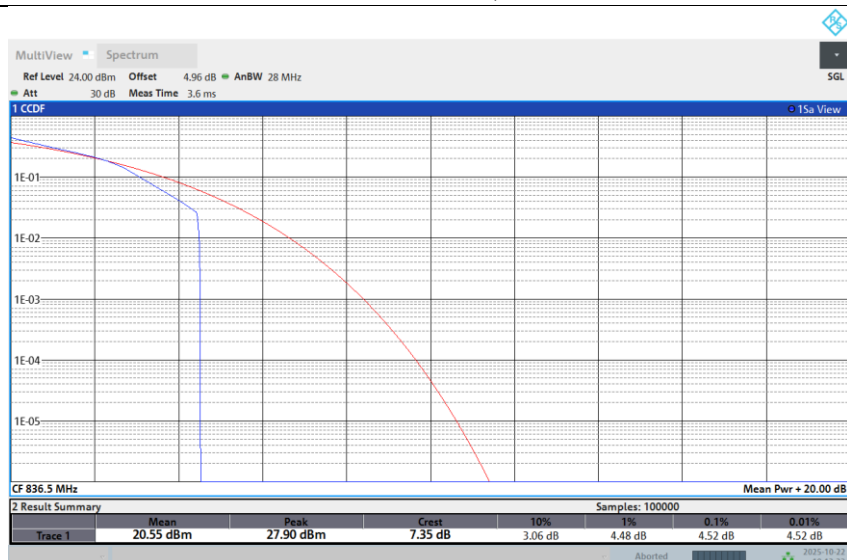
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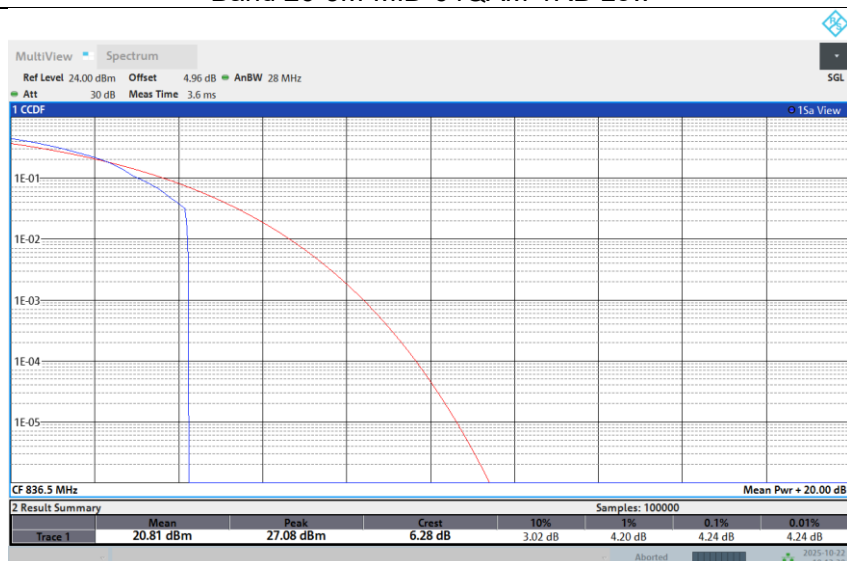
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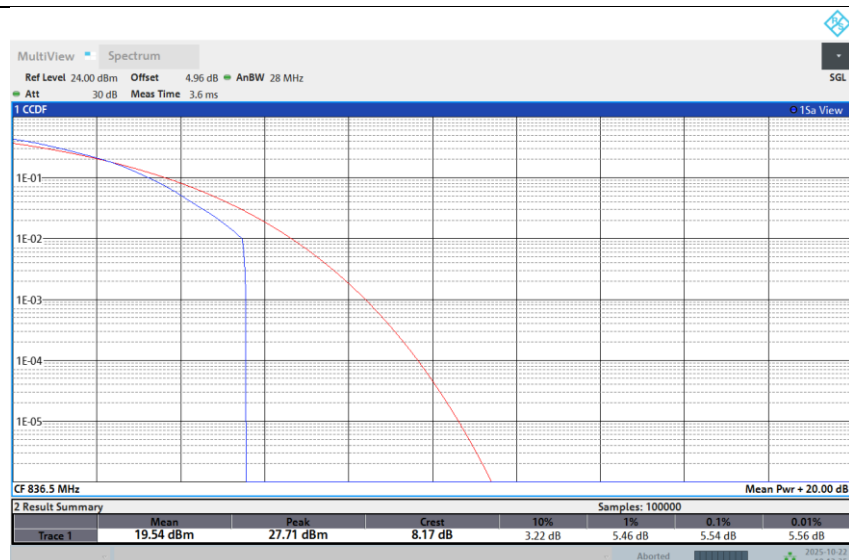
Band 26-3M-MID-16QAM-Full RB



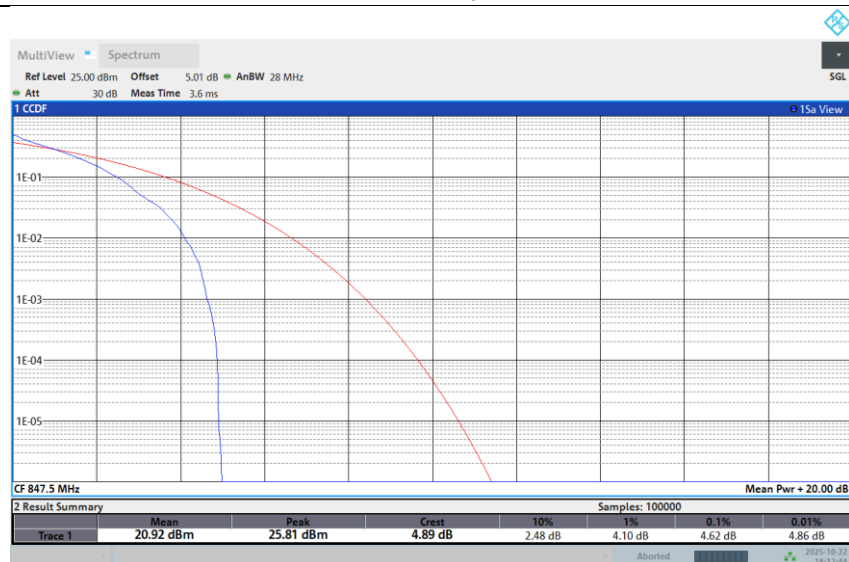
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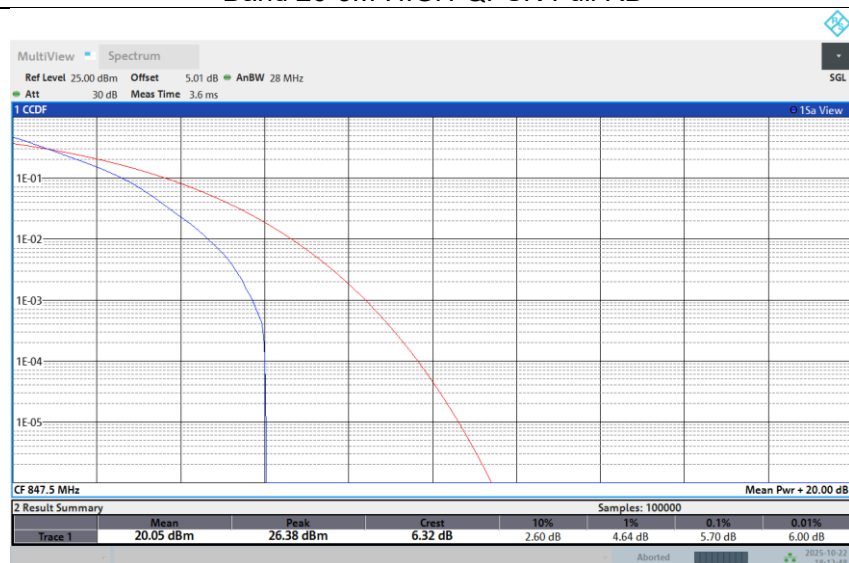
Band 26-3M-MID-64QAM-Full RB



Band 26-3M-HIGH-QPSK-1RB Low



Band 26-3M-HIGH-QPSK-Full RB



Band 26-3M-HIGH-16QAM-1RB Low