Shenzhen Most Technology Service Co., Ltd.
No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China.

TEST REPORT

FCC Part 22 Subpart H / Part 24 Subpart E

Report Reference No.....:	**MTEB23040135-R6**
FCC ID.....:	**2BBV2-VT31**
Compiled by (position+printed name+signature) .:	File administrators Alisa Luo
Supervised by (position+printed name+signature) .:	Test Engineer Sunny Deng
Approved by (position+printed name+signature) .:	Manager Yvette Zhou
Date of issue.....:	April 28,2023
Testing Laboratory Name.....:	**Shenzhen Most Technology Service Co., Ltd.**
Address.....:	No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China.
Applicant's name.....:	**M/s Linkwell Telesystems Pvt. Ltd.**
Address.....:	B-45 & 46, Electronics Complex, Kushaiguda, Hyderabad-500062, Telangana, India
Test specification.....:	
Standard.....:	**FCC CFR Title 47 Part 2, Part 22H, Part 24E** **ANSI/TIA-603-E-2016** **KDB 971168 D01**

Test item description.....:	Tablet
Trade Mark.....:	VISIONTEK
Manufacturer.....:	**M/s Linkwell Telesystems Pvt. Ltd.**
Model/Type reference.....:	VT 31
Listed Models .....:	N/A
Ratings.....:	DC 3.8V(by Battery) DC 5V
Modulation .....:	GMSK/8PSK
Hardware version.....:	M866YC
Software version .....:	V1.0
Frequency.....	B2,B5
Result.....:	**PASS**

TEST REPORT

Equipment under Test	:	Tablet
Model /Type	:	VT 31
Listed Models		N/A
Remark		N/A
Applicant	:	**M/s Linkwell Telesystems Pvt. Ltd.**
Address	:	B-45 & 46, Electronics Complex, Kushaiguda, Hyderabad-500062, Telangana, India
Manufacturer	:	**M/s Linkwell Telesystems Pvt. Ltd.**
Address	:	B-45 & 46, Electronics Complex, Kushaiguda, Hyderabad-500062, Telangana, India

Test Result:	**PASS**

Contents

1 Revision History

Revision	Issue Date	Revisions	Revised By
00	2023-04-28	Initial Issue	Alisa Luo

2 SUMMARY

2.1 TEST STANDARDS

The tests were performed according to following standards:

FCC Part 2: FREQUENCY ALLOCA-TIONS AND RADIO TREATY MAT-TERS; GENERAL RULES AND REG-ULATIONS
FCC Part 22 Subpart H: PRIVATE LAND MOBILE RADIO SERVICES.
FCC Part 24 Subpart E: PUBLIC MOBILE SERVICES
ANSI/TIA-603-E-2016: Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.
ANSI C63.10-2013 Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
FCCKDB971168D01 Power Meas License Digital Systems

2.2 Test Description

Test Item	Section in CFR 47	Result
Effective(Isotropic) Radiated Output Power	§2.1046, §22.913(a)(2)	Pass
Peak-AverageRatio	§24.232(d)	Pass
Modulation Characteristics	§2.1047	Pass
Bandwidth	§2.1049	Pass
Band Edges Compliance	§2.1051, §24.238	Pass
Spurious Emissionat AntennaTerminals	§2.1051, §24.238	Pass
Field Strength of Spurious Radiation	Clause 7of KDB971168 D01 v02r02	Pass
Frequency Stability	§2.1055, §22.355, §24.235	Pass

2.3 Address of the test laboratory

Shenzhen Most Technology Service Co., Ltd.
No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China.
The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.4:2014 and CISPR 16-1-4:2010 SVSWR requirement for radiated emission above 1GHz.

2.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 0031192610

Shenzhen Most Technology Service Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

A2LA-Lab Cert. No.: 6343.01

Shenzhen Most Technology Service Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

2.5 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01"Electromagnetic compatibilityand Radio spectrum Matters (ERM);Uncertainties in the measurementof mobile radio equipment characteristics;Part 1"and TR-100028-02 "Electromagnetic compatibilityand Radio spectrum Matters (ERM);Uncertainties in the measurementof mobile radio equipment characteristics;Part 2 " and is documented in the Shenzhen Most Technology Service Co., Ltd.quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Most Technology Service Co., Ltd.is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.10 dB	(1)
Radiated Emission	1~18GHz	4.32 dB	(1)
Radiated Emission	18-40GHz	5.54 dB	(1)
Conducted Disturbance	0.15~30MHz	3.12 dB	(1)
Conducted Power	9KHz~18GHz	0.61 dB	(1)
Spurious RF Conducted Emission	9KHz~40GHz	1.22 dB	(1)
Band Edge Compliance of RF Emission	9KHz~40GHz	1.22 dB	(1)
Occupied Bandwidth	9KHz~40GHz	-	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95%
(2) confidence level using a coverage factor of k=1.96.

3 GENERAL INFORMATION

3.1 Environmental conditions

Date of receipt of test sample	:	2023.04.11
Testing commenced on	:	2023.04.11
Testing concluded on	:	2023.04.28

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

Normal Temperature:	25°C
Relative Humidity:	55 %
Air Pressure:	101 kPa

3.2 General Description of EUT

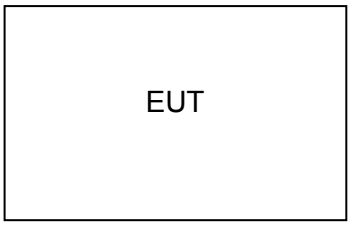
Product Name:	Tablet
Model/Type reference:	VT 31
Power Supply：	DC 3.8V(by Battery) DC 5V
Testing sample ID：	MT23040072
LTE	
Operation Band:	B5,B38,B40,B41
Release Version:	Release 9
Modilation Type:	QPSK, 16QAM
Support Bandwidth:	Band 5: 1.4MHz, 3MHz, 5MHz,10MHz, Band 38: 5MHz, 10MHz,15MHz, 20MHz, Band 40: 5MHz, 10MHz Band 41: 5MHz, 10MHz,15MHz, 20MHz,
TX/RXFrequency Range:	Band 5: 824MHz-849MHz/869MHz-894MHz Band 38:2570MHz-2620MHz, 2570MHz-2620MHz Band 40:2305MHz-2315MHz,2350MHz-2360MHz Band 41:2496MHz-2690MHz,2496MHz-2690MHz
Antenna type:	PIFA antenna
Antenna gain:	Band 5: -5.69dBi Band38: 1.86dBi Band 40: 0.97dBi Band 41: 2.46dBi

Note: For more details, refer to the user's manual of the EUT.

3.3 Description of Test Modes and Test Frequency

The EUT has been tested under typical operating condition. The CUM500 used to control the EUT staying in continuous transmitting and receiving mode for testing. Regards to the frequency band operation : the lowest、middle and highest frequency of channel were selected to perform the test, then shown on this report.

3.4 Block Diagram of Test Setup



3.5 Test Item (Equipment Under Test) Description*

Short designation	EUT Name	EUT Description	Serial number	Hardware status	Software status
EUT A					
EUT B					

*: declared by the applicant. According to customers information EUTs A and B are the same devices.

3.6 Auxiliary Equipment (AE) Description

AE short designation	EUT Name (if available)	EUT Description	Serial number (if available)	Software (if used)
AE 1	-			
AE 2	-			

3.7 Antenna Information*

Short designation	Antenna Name	Antenna Type	Frequency Range	Serial number	Antenna Peak Gain
Antenna 1	---	PIFA Antenna	/	---	Band 5: -5.69dBi Band38: 1.86dBi Band40: 0.97dBi Band41: 2.46dBi
Antenna 2					

*: declared by the applicant.

3.8 Equipments Used during the Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Firmware versions	Last Cal.	Cal. Interval
1.	L.I.S.N.	R&S	ENV216	100093	/	2023/03/17	1 Year
2	Three-phase artificial power network	Schwarzback Mess	NNLK8129	8129178	/	2023/03/17	1 Year
3.	Receiver	R&S	ESCI	100492	V3.0-10-2	2023/03/17	1 Year
4	Receiver	R&S	ESPI	101202	V3.0-10-2	2023/03/17	1 Year
5	Spectrum analyzer	Agilent	9020A	MT-E306	A14.16	2023/03/17	1 Year
6	Bilong Antenna	Sunol Sciences	JB3	A121206	/	2023/03/17	1 Year
7	Horn antenna	HF Antenna	HF Antenna	MT-E158	/	2023/03/17	1 Year
8	Loop antenna	Beijing Daze	ZN30900B	/	/	2023/03/17	1 Year
9	Horn antenna	R&S	OBH100400	26999002	/	2023/03/17	1 Year
10	Wireless Communication Test Set	R&S	CMW500	/	CMW-BASE-3.7.21	2023/03/17	1 Year
11	Spectrum analyzer	R&S	FSP	100019	V4.40 SP2	2023/03/17	1 Year
12	High gain antenna	Schwarzbeck	LB-180400KF	MT-E389	/	2023/03/17	1 Year
13	Preamplifier	Schwarzbeck	BBV 9743	MT-E390	/	2023/03/17	1 Year
14	Pre-amplifier	EMCI	EMC051845SE	MT-E391	/	2023/03/17	1 Year
15	Pre-amplifier	Agilent	83051A	MT-E392	/	2023/03/17	1 Year
16	High pass filter unit	Tonscend	JS0806-F	MT-E393	/	2023/03/17	1 Year
17	RF Cable(below1GHz)	Times	9kHz-1GHz	MT-E394	/	2023/03/17	1 Year
18	RF Cable(above 1GHz)	Times	1-40G	MT-E395	/	2023/03/17	1 Year
19	RF Cable (9KHz-40GHz)	Tonscend	170660	N/A	/	2023/03/17	1 Year
20	Spectrum Analyzer	Keysight	N9010B	MY60242508	/	2023/04/10	1 Year

Note: The Cal.Interval was one year.

3.9 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **2BA65-VT31** filing to comply with of the FCC Part 22 and Part 24 Rules.

3.10 Modifications

No modifications were implemented to meet testing criteria.

3.11 Environmental conditions

Radiated Emission:

Temperature:	23 ° C
Humidity:	48 %
Atmospheric pressure:	950-1050mbar

Conducted testing：

Temperature:	24 ° C
Humidity:	45 %
Atmospheric pressure:	950-1050mbar

4 TEST CONDITIONS AND RESULTS

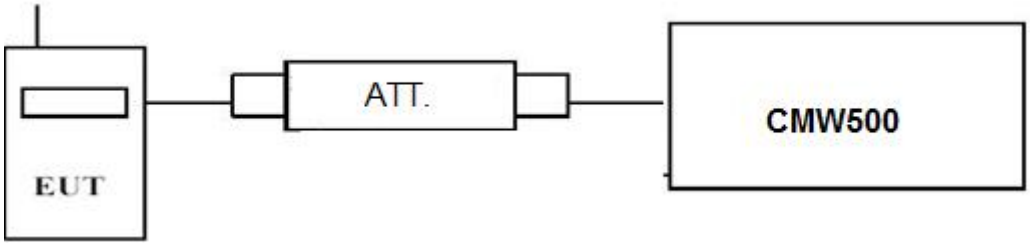
4.1 Output Power

4.1.1 Coducted Output Power

TEST APPLICABLE

During the process of testing, the EUT was controlled via R&S Digital Radio Communication tester (CMW500) to ensure max power transmission and proper modulation. This result contains output power and EIRP measurements for the EUT. In all cases, output power is within the specified limits.

TEST CONFIGURATION



TEST PROCEDURE

Conducted Power Measurement:

a) Place the EUT on a bench and set it in transmitting mode.
b) Connect a low loss RF cable from the antenna port to a CMW500 by an Att.
c) EUT Communicate with CMW500 then selects a channel for testing.
d) Add a correction factor to the display CMW500, and then test.

TEST RESULTS
compliance *

Conducted output power

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Gain (dB)	Verdict
Band5	1.4	20407	1	#0	QPSK	22.33	-5.69	PASS
Band5	1.4	20407	1	#Mid	QPSK	22.41	-5.69	PASS
Band5	1.4	20407	1	#Max	QPSK	22.40	-5.69	PASS
Band5	1.4	20407	3	#0	QPSK	22.49	-5.69	PASS
Band5	1.4	20407	3	#Mid	QPSK	22.43	-5.69	PASS
Band5	1.4	20407	3	#Max	QPSK	22.53	-5.69	PASS
Band5	1.4	20407	6	#0	QPSK	21.57	-5.69	PASS
Band5	1.4	20407	1	#0	QAM16	21.69	-5.69	PASS
Band5	1.4	20407	1	#Mid	QAM16	21.68	-5.69	PASS
Band5	1.4	20407	1	#Max	QAM16	21.76	-5.69	PASS
Band5	1.4	20407	3	#0	QAM16	21.92	-5.69	PASS
Band5	1.4	20407	3	#Mid	QAM16	21.92	-5.69	PASS
Band5	1.4	20407	3	#Max	QAM16	21.91	-5.69	PASS
Band5	1.4	20407	6	#0	QAM16	20.99	-5.69	PASS
Band5	1.4	20525	1	#0	QPSK	22.42	-5.69	PASS
Band5	1.4	20525	1	#Mid	QPSK	22.49	-5.69	PASS
Band5	1.4	20525	1	#Max	QPSK	22.46	-5.69	PASS
Band5	1.4	20525	3	#0	QPSK	22.64	-5.69	PASS
Band5	1.4	20525	3	#Mid	QPSK	22.63	-5.69	PASS
Band5	1.4	20525	3	#Max	QPSK	22.65	-5.69	PASS
Band5	1.4	20525	6	#0	QPSK	21.73	-5.69	PASS
Band5	1.4	20525	1	#0	QAM16	21.81	-5.69	PASS
Band5	1.4	20525	1	#Mid	QAM16	21.83	-5.69	PASS
Band5	1.4	20525	1	#Max	QAM16	21.85	-5.69	PASS
Band5	1.4	20525	3	#0	QAM16	22.05	-5.69	PASS
Band5	1.4	20525	3	#Mid	QAM16	22.08	-5.69	PASS
Band5	1.4	20525	3	#Max	QAM16	22.15	-5.69	PASS
Band5	1.4	20525	6	#0	QAM16	21.16	-5.69	PASS
Band5	1.4	20643	1	#0	QPSK	22.43	-5.69	PASS
Band5	1.4	20643	1	#Mid	QPSK	22.48	-5.69	PASS
Band5	1.4	20643	1	#Max	QPSK	22.41	-5.69	PASS
Band5	1.4	20643	3	#0	QPSK	22.63	-5.69	PASS
Band5	1.4	20643	3	#Mid	QPSK	22.58	-5.69	PASS
Band5	1.4	20643	3	#Max	QPSK	22.57	-5.69	PASS
Band5	1.4	20643	6	#0	QPSK	21.72	-5.69	PASS
Band5	1.4	20643	1	#0	QAM16	21.54	-5.69	PASS
Band5	1.4	20643	1	#Mid	QAM16	21.53	-5.69	PASS
Band5	1.4	20643	1	#Max	QAM16	21.52	-5.69	PASS
Band5	1.4	20643	3	#0	QAM16	21.99	-5.69	PASS
Band5	1.4	20643	3	#Mid	QAM16	21.98	-5.69	PASS
Band5	1.4	20643	3	#Max	QAM16	21.95	-5.69	PASS
Band5	1.4	20643	6	#0	QAM16	21.14	-5.69	PASS
Band5	3	20415	1	#0	QPSK	22.17	-5.69	PASS
Band5	3	20415	1	#Mid	QPSK	22.30	-5.69	PASS
Band5	3	20415	1	#Max	QPSK	22.29	-5.69	PASS
Band5	3	20415	8	#0	QPSK	21.71	-5.69	PASS
Band5	3	20415	8	#Mid	QPSK	21.75	-5.69	PASS
Band5	3	20415	8	#Max	QPSK	21.79	-5.69	PASS
Band5	3	20415	15	#0	QPSK	21.76	-5.69	PASS
Band5	3	20415	1	#0	QAM16	21.88	-5.69	PASS
Band5	3	20415	1	#Mid	QAM16	21.94	-5.69	PASS
Band5	3	20415	1	#Max	QAM16	21.98	-5.69	PASS
Band5	3	20415	8	#0	QAM16	21.02	-5.69	PASS
Band5	3	20415	8	#Mid	QAM16	21.02	-5.69	PASS
Band5	3	20415	8	#Max	QAM16	21.02	-5.69	PASS
Band5	3	20415	15	#0	QAM16	21.06	-5.69	PASS
Band5	3	20525	1	#0	QPSK	22.37	-5.69	PASS
Band5	3	20525	1	#Mid	QPSK	22.40	-5.69	PASS
Band5	3	20525	1	#Max	QPSK	22.47	-5.69	PASS
Band5	3	20525	8	#0	QPSK	21.83	-5.69	PASS
Band5	3	20525	8	#Mid	QPSK	21.89	-5.69	PASS
Band5	3	20525	8	#Max	QPSK	21.93	-5.69	PASS
Band5	3	20525	15	#0	QPSK	21.87	-5.69	PASS

Band5	3	20525	1	#0	QAM16	21.79	-5.69	PASS
Band5	3	20525	1	#Mid	QAM16	21.85	-5.69	PASS
Band5	3	20525	1	#Max	QAM16	21.92	-5.69	PASS
Band5	3	20525	8	#0	QAM16	21.12	-5.69	PASS
Band5	3	20525	8	#Mid	QAM16	21.16	-5.69	PASS
Band5	3	20525	8	#Max	QAM16	21.17	-5.69	PASS
Band5	3	20525	15	#0	QAM16	21.13	-5.69	PASS
Band5	3	20635	1	#0	QPSK	22.45	-5.69	PASS
Band5	3	20635	1	#Mid	QPSK	22.49	-5.69	PASS
Band5	3	20635	1	#Max	QPSK	22.43	-5.69	PASS
Band5	3	20635	8	#0	QPSK	21.93	-5.69	PASS
Band5	3	20635	8	#Mid	QPSK	21.93	-5.69	PASS
Band5	3	20635	8	#Max	QPSK	21.86	-5.69	PASS
Band5	3	20635	15	#0	QPSK	21.92	-5.69	PASS
Band5	3	20635	1	#0	QAM16	21.60	-5.69	PASS
Band5	3	20635	1	#Mid	QAM16	21.50	-5.69	PASS
Band5	3	20635	1	#Max	QAM16	21.51	-5.69	PASS
Band5	3	20635	8	#0	QAM16	21.17	-5.69	PASS
Band5	3	20635	8	#Mid	QAM16	21.13	-5.69	PASS
Band5	3	20635	8	#Max	QAM16	21.11	-5.69	PASS
Band5	3	20635	15	#0	QAM16	21.24	-5.69	PASS
Band5	5	20425	1	#0	QPSK	22.42	-5.69	PASS
Band5	5	20425	1	#Mid	QPSK	22.53	-5.69	PASS
Band5	5	20425	1	#Max	QPSK	22.52	-5.69	PASS
Band5	5	20425	12	#0	QPSK	21.86	-5.69	PASS
Band5	5	20425	12	#Mid	QPSK	21.91	-5.69	PASS
Band5	5	20425	12	#Max	QPSK	21.83	-5.69	PASS
Band5	5	20425	25	#0	QPSK	21.90	-5.69	PASS
Band5	5	20425	1	#0	QAM16	22.03	-5.69	PASS
Band5	5	20425	1	#Mid	QAM16	22.12	-5.69	PASS
Band5	5	20425	1	#Max	QAM16	22.11	-5.69	PASS
Band5	5	20425	12	#0	QAM16	21.09	-5.69	PASS
Band5	5	20425	12	#Mid	QAM16	21.10	-5.69	PASS
Band5	5	20425	12	#Max	QAM16	21.08	-5.69	PASS
Band5	5	20425	25	#0	QAM16	21.19	-5.69	PASS
Band5	5	20525	1	#0	QPSK	22.52	-5.69	PASS
Band5	5	20525	1	#Mid	QPSK	22.62	-5.69	PASS
Band5	5	20525	1	#Max	QPSK	22.70	-5.69	PASS
Band5	5	20525	12	#0	QPSK	21.92	-5.69	PASS
Band5	5	20525	12	#Mid	QPSK	21.99	-5.69	PASS
Band5	5	20525	12	#Max	QPSK	22.08	-5.69	PASS
Band5	5	20525	25	#0	QPSK	22.02	-5.69	PASS
Band5	5	20525	1	#0	QAM16	22.09	-5.69	PASS
Band5	5	20525	1	#Mid	QAM16	22.14	-5.69	PASS
Band5	5	20525	1	#Max	QAM16	22.26	-5.69	PASS
Band5	5	20525	12	#0	QAM16	21.20	-5.69	PASS
Band5	5	20525	12	#Mid	QAM16	21.26	-5.69	PASS
Band5	5	20525	12	#Max	QAM16	21.35	-5.69	PASS
Band5	5	20525	25	#0	QAM16	21.26	-5.69	PASS
Band5	5	20625	1	#0	QPSK	22.78	-5.69	PASS
Band5	5	20625	1	#Mid	QPSK	22.72	-5.69	PASS
Band5	5	20625	1	#Max	QPSK	22.62	-5.69	PASS
Band5	5	20625	12	#0	QPSK	22.06	-5.69	PASS
Band5	5	20625	12	#Mid	QPSK	22.03	-5.69	PASS
Band5	5	20625	12	#Max	QPSK	21.98	-5.69	PASS
Band5	5	20625	25	#0	QPSK	22.06	-5.69	PASS
Band5	5	20625	1	#0	QAM16	22.57	-5.69	PASS
Band5	5	20625	1	#Mid	QAM16	22.55	-5.69	PASS
Band5	5	20625	1	#Max	QAM16	22.42	-5.69	PASS
Band5	5	20625	12	#0	QAM16	21.35	-5.69	PASS
Band5	5	20625	12	#Mid	QAM16	21.33	-5.69	PASS
Band5	5	20625	12	#Max	QAM16	21.27	-5.69	PASS
Band5	5	20625	25	#0	QAM16	21.34	-5.69	PASS
Band5	10	20450	1	#0	QPSK	22.54	-5.69	PASS
Band5	10	20450	1	#Mid	QPSK	22.60	-5.69	PASS
Band5	10	20450	1	#Max	QPSK	22.64	-5.69	PASS
Band5	10	20450	25	#0	QPSK	21.95	-5.69	PASS
Band5	10	20450	25	#Mid	QPSK	21.90	-5.69	PASS
Band5	10	20450	25	#Max	QPSK	21.93	-5.69	PASS
Band5	10	20450	50	#0	QPSK	21.98	-5.69	PASS

Band5	10	20450	1	#0	QAM16	21.60	-5.69	PASS
Band5	10	20450	1	#Mid	QAM16	21.65	-5.69	PASS
Band5	10	20450	1	#Max	QAM16	21.73	-5.69	PASS
Band5	10	20450	25	#0	QAM16	21.22	-5.69	PASS
Band5	10	20450	25	#Mid	QAM16	21.19	-5.69	PASS
Band5	10	20450	25	#Max	QAM16	21.19	-5.69	PASS
Band5	10	20450	50	#0	QAM16	21.24	-5.69	PASS
Band5	10	20525	1	#0	QPSK	22.50	-5.69	PASS
Band5	10	20525	1	#Mid	QPSK	22.63	-5.69	PASS
Band5	10	20525	1	#Max	QPSK	22.88	-5.69	PASS
Band5	10	20525	25	#0	QPSK	21.89	-5.69	PASS
Band5	10	20525	25	#Mid	QPSK	22.04	-5.69	PASS
Band5	10	20525	25	#Max	QPSK	22.14	-5.69	PASS
Band5	10	20525	50	#0	QPSK	22.05	-5.69	PASS
Band5	10	20525	1	#0	QAM16	22.19	-5.69	PASS
Band5	10	20525	1	#Mid	QAM16	22.23	-5.69	PASS
Band5	10	20525	1	#Max	QAM16	22.52	-5.69	PASS
Band5	10	20525	25	#0	QAM16	21.19	-5.69	PASS
Band5	10	20525	25	#Mid	QAM16	21.30	-5.69	PASS
Band5	10	20525	25	#Max	QAM16	21.42	-5.69	PASS
Band5	10	20525	50	#0	QAM16	21.30	-5.69	PASS
Band5	10	20600	1	#0	QPSK	22.77	-5.69	PASS
Band5	10	20600	1	#Mid	QPSK	22.86	-5.69	PASS
Band5	10	20600	1	#Max	QPSK	22.69	-5.69	PASS
Band5	10	20600	25	#0	QPSK	22.19	-5.69	PASS
Band5	10	20600	25	#Mid	QPSK	22.17	-5.69	PASS
Band5	10	20600	25	#Max	QPSK	22.04	-5.69	PASS
Band5	10	20600	50	#0	QPSK	22.16	-5.69	PASS
Band5	10	20600	1	#0	QAM16	22.17	-5.69	PASS
Band5	10	20600	1	#Mid	QAM16	22.30	-5.69	PASS
Band5	10	20600	1	#Max	QAM16	22.09	-5.69	PASS
Band5	10	20600	25	#0	QAM16	21.44	-5.69	PASS
Band5	10	20600	25	#Mid	QAM16	21.43	-5.69	PASS
Band5	10	20600	25	#Max	QAM16	21.33	-5.69	PASS
Band5	10	20600	50	#0	QAM16	21.44	-5.69	PASS

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Gain (dB)	Verdict
Band38	5	37775	1	#0	QPSK	18.86	1.86	PASS
Band38	5	37775	1	#Mid	QPSK	18.82	1.86	PASS
Band38	5	37775	1	#Max	QPSK	18.79	1.86	PASS
Band38	5	37775	12	#0	QPSK	18.19	1.86	PASS
Band38	5	37775	12	#Mid	QPSK	18.14	1.86	PASS
Band38	5	37775	12	#Max	QPSK	18.14	1.86	PASS
Band38	5	37775	25	#0	QPSK	18.15	1.86	PASS
Band38	5	37775	1	#0	QAM16	18.73	1.86	PASS
Band38	5	37775	1	#Mid	QAM16	18.66	1.86	PASS
Band38	5	37775	1	#Max	QAM16	18.72	1.86	PASS
Band38	5	37775	12	#0	QAM16	17.43	1.86	PASS
Band38	5	37775	12	#Mid	QAM16	17.45	1.86	PASS
Band38	5	37775	12	#Max	QAM16	17.42	1.86	PASS
Band38	5	37775	25	#0	QAM16	17.41	1.86	PASS
Band38	5	38000	1	#0	QPSK	18.49	1.86	PASS
Band38	5	38000	1	#Mid	QPSK	18.45	1.86	PASS
Band38	5	38000	1	#Max	QPSK	18.40	1.86	PASS
Band38	5	38000	12	#0	QPSK	17.72	1.86	PASS
Band38	5	38000	12	#Mid	QPSK	17.71	1.86	PASS
Band38	5	38000	12	#Max	QPSK	17.71	1.86	PASS
Band38	5	38000	25	#0	QPSK	17.77	1.86	PASS
Band38	5	38000	1	#0	QAM16	18.05	1.86	PASS
Band38	5	38000	1	#Mid	QAM16	17.96	1.86	PASS
Band38	5	38000	1	#Max	QAM16	17.93	1.86	PASS
Band38	5	38000	12	#0	QAM16	16.96	1.86	PASS
Band38	5	38000	12	#Mid	QAM16	16.91	1.86	PASS
Band38	5	38000	12	#Max	QAM16	16.95	1.86	PASS
Band38	5	38000	25	#0	QAM16	17.07	1.86	PASS
Band38	5	38225	1	#0	QPSK	20.09	1.86	PASS
Band38	5	38225	1	#Mid	QPSK	19.96	1.86	PASS
Band38	5	38225	1	#Max	QPSK	20.19	1.86	PASS
Band38	5	38225	12	#0	QPSK	17.89	1.86	PASS
Band38	5	38225	12	#Mid	QPSK	17.92	1.86	PASS
Band38	5	38225	12	#Max	QPSK	17.91	1.86	PASS
Band38	5	38225	25	#0	QPSK	17.93	1.86	PASS
Band38	5	38225	1	#0	QAM16	18.11	1.86	PASS
Band38	5	38225	1	#Mid	QAM16	18.04	1.86	PASS
Band38	5	38225	1	#Max	QAM16	18.23	1.86	PASS
Band38	5	38225	12	#0	QAM16	17.19	1.86	PASS
Band38	5	38225	12	#Mid	QAM16	17.21	1.86	PASS
Band38	5	38225	12	#Max	QAM16	17.22	1.86	PASS
Band38	5	38225	25	#0	QAM16	17.15	1.86	PASS
Band38	10	37800	1	#0	QPSK	18.91	1.86	PASS
Band38	10	37800	1	#Mid	QPSK	18.83	1.86	PASS
Band38	10	37800	1	#Max	QPSK	18.86	1.86	PASS
Band38	10	37800	25	#0	QPSK	18.15	1.86	PASS
Band38	10	37800	25	#Mid	QPSK	18.14	1.86	PASS
Band38	10	37800	25	#Max	QPSK	18.14	1.86	PASS
Band38	10	37800	50	#0	QPSK	18.19	1.86	PASS
Band38	10	37800	1	#0	QAM16	18.63	1.86	PASS
Band38	10	37800	1	#Mid	QAM16	18.54	1.86	PASS
Band38	10	37800	1	#Max	QAM16	18.59	1.86	PASS
Band38	10	37800	25	#0	QAM16	17.48	1.86	PASS
Band38	10	37800	25	#Mid	QAM16	17.46	1.86	PASS
Band38	10	37800	25	#Max	QAM16	17.45	1.86	PASS
Band38	10	37800	50	#0	QAM16	17.44	1.86	PASS
Band38	10	38000	1	#0	QPSK	18.68	1.86	PASS
Band38	10	38000	1	#Mid	QPSK	18.45	1.86	PASS
Band38	10	38000	1	#Max	QPSK	18.44	1.86	PASS
Band38	10	38000	25	#0	QPSK	17.83	1.86	PASS
Band38	10	38000	25	#Mid	QPSK	17.77	1.86	PASS
Band38	10	38000	25	#Max	QPSK	17.79	1.86	PASS
Band38	10	38000	50	#0	QPSK	17.85	1.86	PASS
Band38	10	38000	1	#0	QAM16	18.01	1.86	PASS
Band38	10	38000	1	#Mid	QAM16	17.78	1.86	PASS
Band38	10	38000	1	#Max	QAM16	17.80	1.86	PASS
Band38	10	38000	25	#0	QAM16	17.11	1.86	PASS
Band38	10	38000	25	#Mid	QAM16	17.07	1.86	PASS

Band38	10	38000	25	#Max	QAM16	17.06	1.86	PASS
Band38	10	38000	50	#0	QAM16	17.14	1.86	PASS
Band38	10	38200	1	#0	QPSK	20.05	1.86	PASS
Band38	10	38200	1	#Mid	QPSK	20.08	1.86	PASS
Band38	10	38200	1	#Max	QPSK	20.28	1.86	PASS
Band38	10	38200	25	#0	QPSK	17.81	1.86	PASS
Band38	10	38200	25	#Mid	QPSK	17.88	1.86	PASS
Band38	10	38200	25	#Max	QPSK	17.95	1.86	PASS
Band38	10	38200	50	#0	QPSK	17.88	1.86	PASS
Band38	10	38200	1	#0	QAM16	17.67	1.86	PASS
Band38	10	38200	1	#Mid	QAM16	17.79	1.86	PASS
Band38	10	38200	1	#Max	QAM16	17.91	1.86	PASS
Band38	10	38200	25	#0	QAM16	17.08	1.86	PASS
Band38	10	38200	25	#Mid	QAM16	17.16	1.86	PASS
Band38	10	38200	25	#Max	QAM16	17.26	1.86	PASS
Band38	10	38200	50	#0	QAM16	17.15	1.86	PASS
Band38	15	37825	1	#0	QPSK	18.87	1.86	PASS
Band38	15	37825	1	#Mid	QPSK	18.71	1.86	PASS
Band38	15	37825	1	#Max	QPSK	18.85	1.86	PASS
Band38	15	37825	36	#0	QPSK	18.02	1.86	PASS
Band38	15	37825	36	#Mid	QPSK	17.99	1.86	PASS
Band38	15	37825	36	#Max	QPSK	18.09	1.86	PASS
Band38	15	37825	75	#0	QPSK	18.04	1.86	PASS
Band38	15	37825	1	#0	QAM16	18.23	1.86	PASS
Band38	15	37825	1	#Mid	QAM16	18.04	1.86	PASS
Band38	15	37825	1	#Max	QAM16	18.22	1.86	PASS
Band38	15	37825	36	#0	QAM16	17.36	1.86	PASS
Band38	15	37825	36	#Mid	QAM16	17.34	1.86	PASS
Band38	15	37825	36	#Max	QAM16	17.39	1.86	PASS
Band38	15	37825	75	#0	QAM16	17.24	1.86	PASS
Band38	15	38000	1	#0	QPSK	18.71	1.86	PASS
Band38	15	38000	1	#Mid	QPSK	18.48	1.86	PASS
Band38	15	38000	1	#Max	QPSK	18.32	1.86	PASS
Band38	15	38000	36	#0	QPSK	17.77	1.86	PASS
Band38	15	38000	36	#Mid	QPSK	17.68	1.86	PASS
Band38	15	38000	36	#Max	QPSK	17.62	1.86	PASS
Band38	15	38000	75	#0	QPSK	17.70	1.86	PASS
Band38	15	38000	1	#0	QAM16	18.10	1.86	PASS
Band38	15	38000	1	#Mid	QAM16	17.84	1.86	PASS
Band38	15	38000	1	#Max	QAM16	17.71	1.86	PASS
Band38	15	38000	36	#0	QAM16	16.97	1.86	PASS
Band38	15	38000	36	#Mid	QAM16	16.88	1.86	PASS
Band38	15	38000	36	#Max	QAM16	16.83	1.86	PASS
Band38	15	38000	75	#0	QAM16	16.95	1.86	PASS
Band38	15	38175	1	#0	QPSK	19.98	1.86	PASS
Band38	15	38175	1	#Mid	QPSK	19.99	1.86	PASS
Band38	15	38175	1	#Max	QPSK	20.30	1.86	PASS
Band38	15	38175	36	#0	QPSK	17.64	1.86	PASS
Band38	15	38175	36	#Mid	QPSK	17.75	1.86	PASS
Band38	15	38175	36	#Max	QPSK	17.88	1.86	PASS
Band38	15	38175	75	#0	QPSK	17.72	1.86	PASS
Band38	15	38175	1	#0	QAM16	18.07	1.86	PASS
Band38	15	38175	1	#Mid	QAM16	18.13	1.86	PASS
Band38	15	38175	1	#Max	QAM16	18.42	1.86	PASS
Band38	15	38175	36	#0	QAM16	16.91	1.86	PASS
Band38	15	38175	36	#Mid	QAM16	17.05	1.86	PASS
Band38	15	38175	36	#Max	QAM16	17.15	1.86	PASS
Band38	15	38175	75	#0	QAM16	16.98	1.86	PASS
Band38	20	37850	1	#0	QPSK	18.77	1.86	PASS
Band38	20	37850	1	#Mid	QPSK	18.84	1.86	PASS
Band38	20	37850	1	#Max	QPSK	18.65	1.86	PASS
Band38	20	37850	50	#0	QPSK	18.18	1.86	PASS
Band38	20	37850	50	#Mid	QPSK	18.20	1.86	PASS
Band38	20	37850	50	#Max	QPSK	18.17	1.86	PASS
Band38	20	37850	100	#0	QPSK	18.16	1.86	PASS
Band38	20	37850	1	#0	QAM16	18.32	1.86	PASS
Band38	20	37850	1	#Mid	QAM16	18.36	1.86	PASS
Band38	20	37850	1	#Max	QAM16	18.16	1.86	PASS
Band38	20	37850	50	#0	QAM16	17.49	1.86	PASS
Band38	20	37850	50	#Mid	QAM16	17.49	1.86	PASS

Band38	20	37850	50	#Max	QAM16	17.50	1.86	PASS
Band38	20	37850	100	#0	QAM16	17.41	1.86	PASS
Band38	20	38000	1	#0	QPSK	18.68	1.86	PASS
Band38	20	38000	1	#Mid	QPSK	18.45	1.86	PASS
Band38	20	38000	1	#Max	QPSK	19.98	1.86	PASS
Band38	20	38000	50	#0	QPSK	17.89	1.86	PASS
Band38	20	38000	50	#Mid	QPSK	17.85	1.86	PASS
Band38	20	38000	50	#Max	QPSK	17.82	1.86	PASS
Band38	20	38000	100	#0	QPSK	17.80	1.86	PASS
Band38	20	38000	1	#0	QAM16	18.16	1.86	PASS
Band38	20	38000	1	#Mid	QAM16	17.87	1.86	PASS
Band38	20	38000	1	#Max	QAM16	17.76	1.86	PASS
Band38	20	38000	50	#0	QAM16	17.15	1.86	PASS
Band38	20	38000	50	#Mid	QAM16	17.10	1.86	PASS
Band38	20	38000	50	#Max	QAM16	17.05	1.86	PASS
Band38	20	38000	100	#0	QAM16	17.08	1.86	PASS
Band38	20	38150	1	#0	QPSK	18.22	1.86	PASS
Band38	20	38150	1	#Mid	QPSK	19.96	1.86	PASS
Band38	20	38150	1	#Max	QPSK	20.25	1.86	PASS
Band38	20	38150	50	#0	QPSK	17.64	1.86	PASS
Band38	20	38150	50	#Mid	QPSK	17.87	1.86	PASS
Band38	20	38150	50	#Max	QPSK	17.99	1.86	PASS
Band38	20	38150	100	#0	QPSK	17.81	1.86	PASS
Band38	20	38150	1	#0	QAM16	17.62	1.86	PASS
Band38	20	38150	1	#Mid	QAM16	17.88	1.86	PASS
Band38	20	38150	1	#Max	QAM16	18.09	1.86	PASS
Band38	20	38150	50	#0	QAM16	16.90	1.86	PASS
Band38	20	38150	50	#Mid	QAM16	17.12	1.86	PASS
Band38	20	38150	50	#Max	QAM16	17.27	1.86	PASS
Band38	20	38150	100	#0	QAM16	17.08	1.86	PASS

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Gain (dB)	Verdict
Band40(2350-2360)	5	39175	1	#0	QPSK	20.09	0.97	PASS
Band40(2350-2360)	5	39175	1	#Mid	QPSK	20.02	0.97	PASS
Band40(2350-2360)	5	39175	1	#Max	QPSK	20.03	0.97	PASS
Band40(2350-2360)	5	39175	12	#0	QPSK	20.46	0.97	PASS
Band40(2350-2360)	5	39175	12	#Mid	QPSK	20.41	0.97	PASS
Band40(2350-2360)	5	39175	12	#Max	QPSK	21.47	0.97	PASS
Band40(2350-2360)	5	39175	25	#0	QPSK	22.50	0.97	PASS
Band40(2350-2360)	5	39175	1	#0	QAM16	20.67	0.97	PASS
Band40(2350-2360)	5	39175	1	#Mid	QAM16	20.59	0.97	PASS
Band40(2350-2360)	5	39175	1	#Max	QAM16	21.62	0.97	PASS
Band40(2350-2360)	5	39175	12	#0	QAM16	19.70	0.97	PASS
Band40(2350-2360)	5	39175	12	#Mid	QAM16	19.64	0.97	PASS
Band40(2350-2360)	5	39175	12	#Max	QAM16	19.73	0.97	PASS
Band40(2350-2360)	5	39175	25	#0	QAM16	19.86	0.97	PASS
Band40(2350-2360)	5	39200	1	#0	QPSK	20.03	0.97	PASS
Band40(2350-2360)	5	39200	1	#Mid	QPSK	19.99	0.97	PASS
Band40(2350-2360)	5	39200	1	#Max	QPSK	20.98	0.97	PASS
Band40(2350-2360)	5	39200	12	#0	QPSK	19.40	0.97	PASS
Band40(2350-2360)	5	39200	12	#Mid	QPSK	19.37	0.97	PASS
Band40(2350-2360)	5	39200	12	#Max	QPSK	20.44	0.97	PASS
Band40(2350-2360)	5	39200	25	#0	QPSK	20.46	0.97	PASS
Band40(2350-2360)	5	39200	1	#0	QAM16	19.64	0.97	PASS
Band40(2350-2360)	5	39200	1	#Mid	QAM16	19.63	0.97	PASS
Band40(2350-2360)	5	39200	1	#Max	QAM16	20.63	0.97	PASS
Band40(2350-2360)	5	39200	12	#0	QAM16	20.71	0.97	PASS
Band40(2350-2360)	5	39200	12	#Mid	QAM16	20.67	0.97	PASS
Band40(2350-2360)	5	39200	12	#Max	QAM16	20.76	0.97	PASS
Band40(2350-2360)	5	39200	25	#0	QAM16	20.75	0.97	PASS
Band40(2350-2360)	5	39225	1	#0	QPSK	21.02	0.97	PASS
Band40(2350-2360)	5	39225	1	#Mid	QPSK	21.10	0.97	PASS
Band40(2350-2360)	5	39225	1	#Max	QPSK	21.03	0.97	PASS
Band40(2350-2360)	5	39225	12	#0	QPSK	20.39	0.97	PASS
Band40(2350-2360)	5	39225	12	#Mid	QPSK	20.37	0.97	PASS
Band40(2350-2360)	5	39225	12	#Max	QPSK	20.42	0.97	PASS

Band40(2350-2360)	5	39225	25	#0	QPSK	20.45	0.97	PASS
Band40(2350-2360)	5	39225	1	#0	QAM16	21.92	0.97	PASS
Band40(2350-2360)	5	39225	1	#Mid	QAM16	20.95	0.97	PASS
Band40(2350-2360)	5	39225	1	#Max	QAM16	20.95	0.97	PASS
Band40(2350-2360)	5	39225	12	#0	QAM16	19.70	0.97	PASS
Band40(2350-2360)	5	39225	12	#Mid	QAM16	18.67	0.97	PASS
Band40(2350-2360)	5	39225	12	#Max	QAM16	18.73	0.97	PASS
Band40(2350-2360)	5	39225	25	#0	QAM16	19.74	0.97	PASS
Band40(2350-2360)	10	39200	1	#0	QPSK	21.12	0.97	PASS
Band40(2350-2360)	10	39200	1	#Mid	QPSK	21.06	0.97	PASS
Band40(2350-2360)	10	39200	1	#Max	QPSK	21.04	0.97	PASS
Band40(2350-2360)	10	39200	25	#0	QPSK	20.47	0.97	PASS
Band40(2350-2360)	10	39200	25	#Mid	QPSK	20.46	0.97	PASS
Band40(2350-2360)	10	39200	25	#Max	QPSK	20.53	0.97	PASS
Band40(2350-2360)	10	39200	50	#0	QPSK	20.54	0.97	PASS
Band40(2350-2360)	10	39200	1	#0	QAM16	20.88	0.97	PASS
Band40(2350-2360)	10	39200	1	#Mid	QAM16	20.72	0.97	PASS
Band40(2350-2360)	10	39200	1	#Max	QAM16	19.83	0.97	PASS
Band40(2350-2360)	10	39200	25	#0	QAM16	18.78	0.97	PASS
Band40(2350-2360)	10	39200	25	#Mid	QAM16	18.79	0.97	PASS
Band40(2350-2360)	10	39200	25	#Max	QAM16	18.88	0.97	PASS
Band40(2350-2360)	10	39200	50	#0	QAM16	18.84	0.97	PASS

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Gain (dB)	Verdict
Band40(2305-2315)	5	38725	1	#0	QPSK	19.72	0.97	PASS
Band40(2305-2315)	5	38725	1	#Mid	QPSK	19.62	0.97	PASS
Band40(2305-2315)	5	38725	1	#Max	QPSK	19.65	0.97	PASS
Band40(2305-2315)	5	38725	12	#0	QPSK	19.18	0.97	PASS
Band40(2305-2315)	5	38725	12	#Mid	QPSK	19.08	0.97	PASS
Band40(2305-2315)	5	38725	12	#Max	QPSK	19.10	0.97	PASS
Band40(2305-2315)	5	38725	25	#0	QPSK	19.18	0.97	PASS
Band40(2305-2315)	5	38725	1	#0	QAM16	19.60	0.97	PASS
Band40(2305-2315)	5	38725	1	#Mid	QAM16	19.56	0.97	PASS
Band40(2305-2315)	5	38725	1	#Max	QAM16	19.59	0.97	PASS
Band40(2305-2315)	5	38725	12	#0	QAM16	18.74	0.97	PASS
Band40(2305-2315)	5	38725	12	#Mid	QAM16	18.68	0.97	PASS
Band40(2305-2315)	5	38725	12	#Max	QAM16	18.67	0.97	PASS
Band40(2305-2315)	5	38725	25	#0	QAM16	18.72	0.97	PASS
Band40(2305-2315)	5	38750	1	#0	QPSK	19.65	0.97	PASS
Band40(2305-2315)	5	38750	1	#Mid	QPSK	19.71	0.97	PASS
Band40(2305-2315)	5	38750	1	#Max	QPSK	14.61	0.97	PASS
Band40(2305-2315)	5	38750	12	#0	QPSK	14.06	0.97	PASS
Band40(2305-2315)	5	38750	12	#Mid	QPSK	20.00	0.97	PASS
Band40(2305-2315)	5	38750	12	#Max	QPSK	20.03	0.97	PASS
Band40(2305-2315)	5	38750	25	#0	QPSK	20.10	0.97	PASS
Band40(2305-2315)	5	38750	1	#0	QAM16	20.23	0.97	PASS
Band40(2305-2315)	5	38750	1	#Mid	QAM16	20.26	0.97	PASS
Band40(2305-2315)	5	38750	1	#Max	QAM16	21.14	0.97	PASS
Band40(2305-2315)	5	38750	12	#0	QAM16	21.61	0.97	PASS
Band40(2305-2315)	5	38750	12	#Mid	QAM16	20.56	0.97	PASS
Band40(2305-2315)	5	38750	12	#Max	QAM16	20.57	0.97	PASS
Band40(2305-2315)	5	38750	25	#0	QAM16	19.66	0.97	PASS
Band40(2305-2315)	5	38775	1	#0	QPSK	19.58	0.97	PASS
Band40(2305-2315)	5	38775	1	#Mid	QPSK	19.61	0.97	PASS
Band40(2305-2315)	5	38775	1	#Max	QPSK	19.55	0.97	PASS
Band40(2305-2315)	5	38775	12	#0	QPSK	19.06	0.97	PASS
Band40(2305-2315)	5	38775	12	#Mid	QPSK	19.97	0.97	PASS
Band40(2305-2315)	5	38775	12	#Max	QPSK	20.05	0.97	PASS

Band40(2305-2315)	5	38775	25	#0	QPSK	20.04	0.97	PASS
Band40(2305-2315)	5	38775	1	#0	QAM16	20.23	0.97	PASS
Band40(2305-2315)	5	38775	1	#Mid	QAM16	21.29	0.97	PASS
Band40(2305-2315)	5	38775	1	#Max	QAM16	20.19	0.97	PASS
Band40(2305-2315)	5	38775	12	#0	QAM16	21.64	0.97	PASS
Band40(2305-2315)	5	38775	12	#Mid	QAM16	20.63	0.97	PASS
Band40(2305-2315)	5	38775	12	#Max	QAM16	20.63	0.97	PASS
Band40(2305-2315)	5	38775	25	#0	QAM16	20.55	0.97	PASS
Band40(2305-2315)	10	38750	1	#0	QPSK	20.75	0.97	PASS
Band40(2305-2315)	10	38750	1	#Mid	QPSK	22.62	0.97	PASS
Band40(2305-2315)	10	38750	1	#Max	QPSK	21.65	0.97	PASS
Band40(2305-2315)	10	38750	25	#0	QPSK	20.17	0.97	PASS
Band40(2305-2315)	10	38750	25	#Mid	QPSK	20.07	0.97	PASS
Band40(2305-2315)	10	38750	25	#Max	QPSK	20.10	0.97	PASS
Band40(2305-2315)	10	38750	50	#0	QPSK	20.20	0.97	PASS
Band40(2305-2315)	10	38750	1	#0	QAM16	21.50	0.97	PASS
Band40(2305-2315)	10	38750	1	#Mid	QAM16	22.27	0.97	PASS
Band40(2305-2315)	10	38750	1	#Max	QAM16	21.39	0.97	PASS
Band40(2305-2315)	10	38750	25	#0	QAM16	21.74	0.97	PASS
Band40(2305-2315)	10	38750	25	#Mid	QAM16	21.71	0.97	PASS
Band40(2305-2315)	10	38750	25	#Max	QAM16	21.71	0.97	PASS
Band40(2305-2315)	10	38750	50	#0	QAM16	21.74	0.97	PASS

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Gain (dB)	Verdict
Band41	5	39675	1	#0	QPSK	20.92	2.46	PASS
Band41	5	39675	1	#Mid	QPSK	21.03	2.46	PASS
Band41	5	39675	1	#Max	QPSK	20.00	2.46	PASS
Band41	5	39675	12	#0	QPSK	18.32	2.46	PASS
Band41	5	39675	12	#Mid	QPSK	21.55	2.46	PASS
Band41	5	39675	12	#Max	QPSK	19.84	2.46	PASS
Band41	5	39675	25	#0	QPSK	18.39	2.46	PASS
Band41	5	39675	1	#0	QAM16	18.93	2.46	PASS
Band41	5	39675	1	#Mid	QAM16	19.24	2.46	PASS
Band41	5	39675	1	#Max	QAM16	19.92	2.46	PASS
Band41	5	39675	12	#0	QAM16	20.05	2.46	PASS
Band41	5	39675	12	#Mid	QAM16	18.23	2.46	PASS
Band41	5	39675	12	#Max	QAM16	19.38	2.46	PASS
Band41	5	39675	25	#0	QAM16	20.97	2.46	PASS
Band41	5	40620	1	#0	QPSK	18.53	2.46	PASS
Band41	5	40620	1	#Mid	QPSK	18.51	2.46	PASS
Band41	5	40620	1	#Max	QPSK	18.42	2.46	PASS
Band41	5	40620	12	#0	QPSK	17.82	2.46	PASS
Band41	5	40620	12	#Mid	QPSK	20.77	2.46	PASS
Band41	5	40620	12	#Max	QPSK	17.78	2.46	PASS
Band41	5	40620	25	#0	QPSK	17.83	2.46	PASS
Band41	5	40620	1	#0	QAM16	18.13	2.46	PASS
Band41	5	40620	1	#Mid	QAM16	18.11	2.46	PASS
Band41	5	40620	1	#Max	QAM16	18.00	2.46	PASS
Band41	5	40620	12	#0	QAM16	17.11	2.46	PASS
Band41	5	40620	12	#Mid	QAM16	17.06	2.46	PASS
Band41	5	40620	12	#Max	QAM16	22.07	2.46	PASS
Band41	5	40620	25	#0	QAM16	17.09	2.46	PASS
Band41	5	41565	1	#0	QPSK	20.24	2.46	PASS
Band41	5	41565	1	#Mid	QPSK	20.05	2.46	PASS
Band41	5	41565	1	#Max	QPSK	20.24	2.46	PASS
Band41	5	41565	12	#0	QPSK	19.65	2.46	PASS
Band41	5	41565	12	#Mid	QPSK	19.61	2.46	PASS
Band41	5	41565	12	#Max	QPSK	19.65	2.46	PASS
Band41	5	41565	25	#0	QPSK	19.65	2.46	PASS
Band41	5	41565	1	#0	QAM16	20.05	2.46	PASS
Band41	5	41565	1	#Mid	QAM16	19.85	2.46	PASS
Band41	5	41565	1	#Max	QAM16	20.05	2.46	PASS
Band41	5	41565	12	#0	QAM16	20.16	2.46	PASS
Band41	5	41565	12	#Mid	QAM16	17.16	2.46	PASS
Band41	5	41565	12	#Max	QAM16	20.17	2.46	PASS
Band41	5	41565	25	#0	QAM16	19.18	2.46	PASS
Band41	10	39700	1	#0	QPSK	18.38	2.46	PASS
Band41	10	39700	1	#Mid	QPSK	18.39	2.46	PASS
Band41	10	39700	1	#Max	QPSK	18.08	2.46	PASS
Band41	10	39700	25	#0	QPSK	19.58	2.46	PASS
Band41	10	39700	25	#Mid	QPSK	19.90	2.46	PASS
Band41	10	39700	25	#Max	QPSK	18.98	2.46	PASS
Band41	10	39700	50	#0	QPSK	20.61	2.46	PASS
Band41	10	39700	1	#0	QAM16	18.38	2.46	PASS
Band41	10	39700	1	#Mid	QAM16	19.60	2.46	PASS
Band41	10	39700	1	#Max	QAM16	20.52	2.46	PASS
Band41	10	39700	25	#0	QAM16	19.35	2.46	PASS
Band41	10	39700	25	#Mid	QAM16	20.55	2.46	PASS
Band41	10	39700	25	#Max	QAM16	20.16	2.46	PASS
Band41	10	39700	50	#0	QAM16	20.11	2.46	PASS
Band41	10	40620	1	#0	QPSK	19.71	2.46	PASS
Band41	10	40620	1	#Mid	QPSK	20.54	2.46	PASS
Band41	10	40620	1	#Max	QPSK	19.53	2.46	PASS
Band41	10	40620	25	#0	QPSK	20.90	2.46	PASS
Band41	10	40620	25	#Mid	QPSK	18.83	2.46	PASS
Band41	10	40620	25	#Max	QPSK	18.85	2.46	PASS
Band41	10	40620	50	#0	QPSK	20.92	2.46	PASS
Band41	10	40620	1	#0	QAM16	19.05	2.46	PASS
Band41	10	40620	1	#Mid	QAM16	18.89	2.46	PASS
Band41	10	40620	1	#Max	QAM16	18.85	2.46	PASS
Band41	10	40620	25	#0	QAM16	18.22	2.46	PASS
Band41	10	40620	25	#Mid	QAM16	18.14	2.46	PASS

Band41	10	40620	25	#Max	QAM16	18.13	2.46	PASS
Band41	10	40620	50	#0	QAM16	17.21	2.46	PASS
Band41	10	41540	1	#0	QPSK	20.38	2.46	PASS
Band41	10	41540	1	#Mid	QPSK	20.25	2.46	PASS
Band41	10	41540	1	#Max	QPSK	20.34	2.46	PASS
Band41	10	41540	25	#0	QPSK	20.73	2.46	PASS
Band41	10	41540	25	#Mid	QPSK	19.70	2.46	PASS
Band41	10	41540	25	#Max	QPSK	20.71	2.46	PASS
Band41	10	41540	50	#0	QPSK	19.78	2.46	PASS
Band41	10	41540	1	#0	QAM16	19.53	2.46	PASS
Band41	10	41540	1	#Mid	QAM16	21.41	2.46	PASS
Band41	10	41540	1	#Max	QAM16	19.51	2.46	PASS
Band41	10	41540	25	#0	QAM16	18.29	2.46	PASS
Band41	10	41540	25	#Mid	QAM16	17.25	2.46	PASS
Band41	10	41540	25	#Max	QAM16	18.25	2.46	PASS
Band41	10	41540	50	#0	QAM16	17.27	2.46	PASS
Band41	15	39725	1	#0	QPSK	18.10	2.46	PASS
Band41	15	39725	1	#Mid	QPSK	18.19	2.46	PASS
Band41	15	39725	1	#Max	QPSK	18.92	2.46	PASS
Band41	15	39725	36	#0	QPSK	20.00	2.46	PASS
Band41	15	39725	36	#Mid	QPSK	20.36	2.46	PASS
Band41	15	39725	36	#Max	QPSK	20.66	2.46	PASS
Band41	15	39725	75	#0	QPSK	20.10	2.46	PASS
Band41	15	39725	1	#0	QAM16	18.40	2.46	PASS
Band41	15	39725	1	#Mid	QAM16	19.33	2.46	PASS
Band41	15	39725	1	#Max	QAM16	19.63	2.46	PASS
Band41	15	39725	36	#0	QAM16	19.02	2.46	PASS
Band41	15	39725	36	#Mid	QAM16	19.49	2.46	PASS
Band41	15	39725	36	#Max	QAM16	20.89	2.46	PASS
Band41	15	39725	75	#0	QAM16	20.83	2.46	PASS
Band41	15	40620	1	#0	QPSK	18.73	2.46	PASS
Band41	15	40620	1	#Mid	QPSK	18.60	2.46	PASS
Band41	15	40620	1	#Max	QPSK	20.08	2.46	PASS
Band41	15	40620	36	#0	QPSK	17.82	2.46	PASS
Band41	15	40620	36	#Mid	QPSK	17.74	2.46	PASS
Band41	15	40620	36	#Max	QPSK	17.71	2.46	PASS
Band41	15	40620	75	#0	QPSK	17.76	2.46	PASS
Band41	15	40620	1	#0	QAM16	18.10	2.46	PASS
Band41	15	40620	1	#Mid	QAM16	17.95	2.46	PASS
Band41	15	40620	1	#Max	QAM16	19.81	2.46	PASS
Band41	15	40620	36	#0	QAM16	18.16	2.46	PASS
Band41	15	40620	36	#Mid	QAM16	20.07	2.46	PASS
Band41	15	40620	36	#Max	QAM16	20.03	2.46	PASS
Band41	15	40620	75	#0	QAM16	19.99	2.46	PASS
Band41	15	41515	1	#0	QPSK	20.52	2.46	PASS
Band41	15	41515	1	#Mid	QPSK	21.22	2.46	PASS
Band41	15	41515	1	#Max	QPSK	20.36	2.46	PASS
Band41	15	41515	36	#0	QPSK	19.74	2.46	PASS
Band41	15	41515	36	#Mid	QPSK	22.60	2.46	PASS
Band41	15	41515	36	#Max	QPSK	19.64	2.46	PASS
Band41	15	41515	75	#0	QPSK	19.68	2.46	PASS
Band41	15	41515	1	#0	QAM16	19.93	2.46	PASS
Band41	15	41515	1	#Mid	QAM16	19.58	2.46	PASS
Band41	15	41515	1	#Max	QAM16	19.76	2.46	PASS
Band41	15	41515	36	#0	QAM16	17.27	2.46	PASS
Band41	15	41515	36	#Mid	QAM16	20.18	2.46	PASS
Band41	15	41515	36	#Max	QAM16	17.16	2.46	PASS
Band41	15	41515	75	#0	QAM16	20.27	2.46	PASS
Band41	20	39750	1	#0	QPSK	18.99	2.46	PASS
Band41	20	39750	1	#Mid	QPSK	19.10	2.46	PASS
Band41	20	39750	1	#Max	QPSK	20.89	2.46	PASS
Band41	20	39750	50	#0	QPSK	20.14	2.46	PASS
Band41	20	39750	50	#Mid	QPSK	20.19	2.46	PASS
Band41	20	39750	50	#Max	QPSK	19.06	2.46	PASS
Band41	20	39750	100	#0	QPSK	20.01	2.46	PASS
Band41	20	39750	1	#0	QAM16	21.33	2.46	PASS
Band41	20	39750	1	#Mid	QAM16	19.27	2.46	PASS
Band41	20	39750	1	#Max	QAM16	19.29	2.46	PASS
Band41	20	39750	50	#0	QAM16	18.21	2.46	PASS
Band41	20	39750	50	#Mid	QAM16	20.31	2.46	PASS

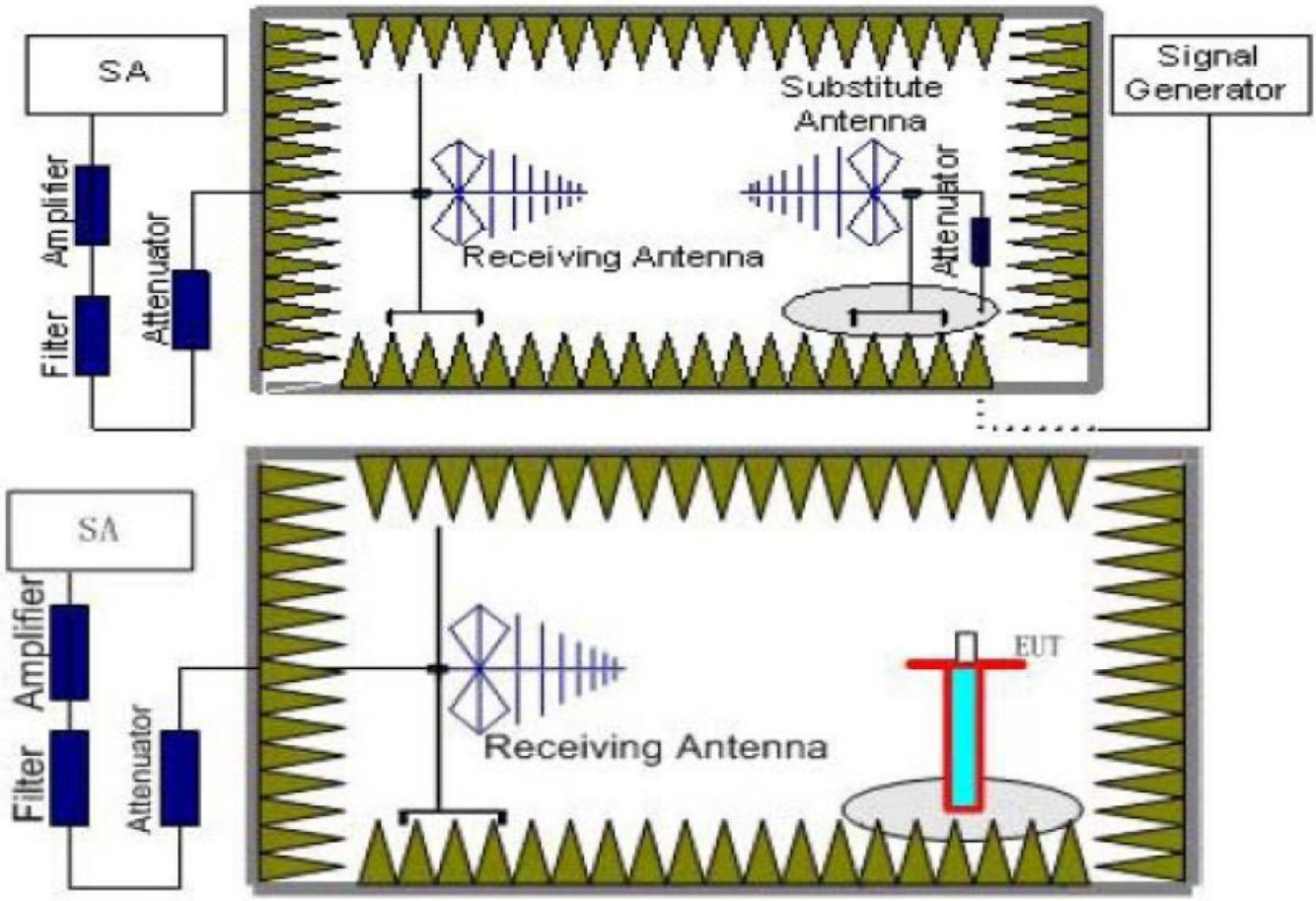
Band41	20	39750	50	#Max	QAM16	19.28	2.46	PASS
Band41	20	39750	100	#0	QAM16	20.86	2.46	PASS
Band41	20	40620	1	#0	QPSK	18.71	2.46	PASS
Band41	20	40620	1	#Mid	QPSK	18.56	2.46	PASS
Band41	20	40620	1	#Max	QPSK	20.02	2.46	PASS
Band41	20	40620	50	#0	QPSK	19.98	2.46	PASS
Band41	20	40620	50	#Mid	QPSK	20.93	2.46	PASS
Band41	20	40620	50	#Max	QPSK	17.90	2.46	PASS
Band41	20	40620	100	#0	QPSK	20.91	2.46	PASS
Band41	20	40620	1	#0	QAM16	18.14	2.46	PASS
Band41	20	40620	1	#Mid	QAM16	17.99	2.46	PASS
Band41	20	40620	1	#Max	QAM16	22.81	2.46	PASS
Band41	20	40620	50	#0	QAM16	17.30	2.46	PASS
Band41	20	40620	50	#Mid	QAM16	17.23	2.46	PASS
Band41	20	40620	50	#Max	QAM16	20.20	2.46	PASS
Band41	20	40620	100	#0	QAM16	17.15	2.46	PASS
Band41	20	41490	1	#0	QPSK	20.48	2.46	PASS
Band41	20	41490	1	#Mid	QPSK	20.35	2.46	PASS
Band41	20	41490	1	#Max	QPSK	20.27	2.46	PASS
Band41	20	41490	50	#0	QPSK	20.02	2.46	PASS
Band41	20	41490	50	#Mid	QPSK	19.85	2.46	PASS
Band41	20	41490	50	#Max	QPSK	19.79	2.46	PASS
Band41	20	41490	100	#0	QPSK	19.88	2.46	PASS
Band41	20	41490	1	#0	QAM16	19.94	2.46	PASS
Band41	20	41490	1	#Mid	QAM16	19.79	2.46	PASS
Band41	20	41490	1	#Max	QAM16	19.75	2.46	PASS
Band41	20	41490	50	#0	QAM16	17.58	2.46	PASS
Band41	20	41490	50	#Mid	QAM16	18.44	2.46	PASS
Band41	20	41490	50	#Max	QAM16	17.33	2.46	PASS
Band41	20	41490	100	#0	QAM16	20.45	2.46	PASS

4.1.2. Radiated Output Power

LIMIT

This is the test for the maximum radiated power from the EUT.
Rule Part 22H.232(b) specifies, "Mobile/portable stations are limited to 7 watts e.i.r.p.

TEST CONFIGURATION



TEST PROCEDURE

1. EUT was placed on a 1.50 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.50m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.
2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
3. The EUT is then put into continuously transmitting mode at its maximum power level during the test.Set Test Receiver or Spectrum RBW=1MHz,VBW=3MHz, And the maximum value of the receiver should be recorded as (P_r).
4. The EUT shall be replaced by a substitution antenna.In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal

source for the frequency band of interest isconnected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (P_{Mea}) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

5. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (P_{cl}) ,the Substitution Antenna Gain (G_a) and the Amplifier Gain (P_{Ag}) should be recorded after test. The measurement results are obtained as described below: Power(EIRP)=P_{Mea}- P_{Ag} - P_{cl}+ G_a
   We used SMF100A micowave signal generator which signal level can up to 33dBm,so we not used power
   Amplifier for substituation test; The measurement results are amend as described below: Power(EIRP)=P_{Mea}- P_{cl}+ G_a
6. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
7. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP-2.15dBi.

TEST RESULTS

Radiated Measurement:

Remark:

1. *We measured all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE FDD Band 5; recorded worst case for each Channel Bandwidth of LTE FDD Band 5.*
2. *EIRP=P_{Mea}(dBm)-P_{cl}(dB)+P_{Ag}(dB)+G_a(dBi)*
3. *We measured both Horizontal and Vertical direction, recorded worst case direction.*

LTE FDD Band 5_Channel Bandwidth 1.4MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
824.7	-20.71	3.41	10.24	33.60	19.72	33.01	13.29	V
836.5	-21.67	3.49	10.24	33.60	18.68	33.01	14.33	V
848.3	-21.32	3.55	10.23	33.60	18.96	33.01	14.05	V

LTE FDD Band 5_Channel Bandwidth 3MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
825.5	-21.23	3.41	10.24	33.60	19.2	33.01	13.81	V
836.5	-22.13	3.49	10.24	33.60	18.22	33.01	14.79	V
847.5	-21.09	3.55	10.23	33.60	19.19	33.01	13.82	V

LTE FDD Band 5_Channel Bandwidth 5MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
826.5	-20.95	3.41	10.24	33.60	19.48	33.01	13.53	V
836.5	-21.62	3.49	10.24	33.60	18.73	33.01	14.28	V
846.5	-21.22	3.55	10.23	33.60	19.06	33.01	13.95	V

LTE FDD Band 5_Channel Bandwidth 10MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
829.0	-21.19	3.41	10.24	33.60	19.24	33.01	13.77	V
836.5	-22.06	3.49	10.24	33.60	18.29	33.01	14.72	V
844.0	-21.42	3.55	10.23	33.60	18.86	33.01	14.15	V

LTE FDD Band 5_Channel Bandwidth 1.4MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
824.7	-20.34	3.41	10.24	33.6	20.09	38.45	18.36	V
836.5	-21.22	3.49	10.24	33.6	19.13	38.45	19.32	V
848.3	-21.76	3.55	10.23	33.6	18.52	38.45	19.93	V

LTE FDD Band 5_Channel Bandwidth 3MHz_16QAM

Frequency	P_{Mea}	P_{cl}	G_a	P_{Ag}	Burst	Limit	Margin	Polarization

(MHz)	(dBm)	(dB)	Antenna Gain(dB)	(dB)	Average EIRP (dBm)	(dBm)	(dB)	
825.5	-21.34	3.41	10.24	33.6	19.09	38.45	19.36	V
836.5	-22.48	3.49	10.24	33.6	17.87	38.45	20.58	V
847.5	-20.96	3.55	10.23	33.6	19.32	38.45	19.13	V

LTE FDD Band 5_Channel Bandwidth 5MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
826.5	-21.04	3.41	10.24	33.6	19.39	38.45	19.06	V
836.5	-21.88	3.49	10.24	33.6	18.47	38.45	19.98	V
846.5	-21.28	3.55	10.23	33.6	19	38.45	19.45	V

LTE FDD Band 5_Channel Bandwidth 10MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
829.0	-21.11	3.41	10.24	33.6	19.32	38.45	19.13	V
836.5	-21.67	3.49	10.24	33.6	18.68	38.45	19.77	V
844.0	-21.67	3.55	10.23	33.6	18.61	38.45	19.84	V

LTE FDD Band 38_Channel Bandwidth 5MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2572.5	-41.85	3.38	27.45	36.34	18.56	33.01	14.45	V
2595.0	-42.15	3.38	27.45	36.34	18.26	33.01	14.75	V
2617.5	-40.86	3.39	27.41	36.36	19.52	33.01	13.49	V

LTE FDD Band 38_Channel Bandwidth 10MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2575	-40.3	3.38	27.45	36.34	20.11	33.01	12.9	V
2595.0	-41.18	3.38	27.45	36.34	19.23	33.01	13.78	V
2615.0	-41.63	3.39	27.41	36.36	18.75	33.01	14.26	V

LTE FDD Band 38_Channel Bandwidth 15MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2577.5	-39.97	3.38	27.45	36.34	20.44	33.01	12.57	V
2595.0	-40.66	3.38	27.45	36.34	19.75	33.01	13.26	V
2612.5	-41.5	3.39	27.41	36.36	18.88	33.01	14.13	V

LTE FDD Band 38_Channel Bandwidth 20MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna	P_{Ag} (dB)	Burst Average	Limit (dBm)	Margin (dB)	Polarization

			Gain(dB)		EIRP (dBm)			
2580	-39.39	3.38	27.45	36.34	21.02	33.01	11.99	V
2595	-40.8	3.38	27.45	36.34	19.61	33.01	13.4	V
2610	-40.22	3.39	27.41	36.36	20.16	33.01	12.85	V

LTE FDD Band 38_Channel Bandwidth 5MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2572.5	-43.53	3.38	27.45	36.34	16.88	33.01	16.13	V
2595.0	-42	3.38	27.45	36.34	18.41	33.01	14.6	V
2617.5	-43.73	3.39	27.41	36.36	16.65	33.01	16.36	V

LTE FDD Band 38_Channel Bandwidth 10MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2575	-43.07	3.38	27.45	36.34	17.34	33.01	15.67	V
2595.0	-43.49	3.38	27.45	36.34	16.92	33.01	16.09	V
2615.0	-43.98	3.39	27.41	36.36	16.4	33.01	16.61	V

LTE FDD Band 38_Channel Bandwidth 15MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2577.5	-41.85	3.38	27.45	36.34	18.56	33.01	14.45	V
2595.0	-42.15	3.38	27.45	36.34	18.26	33.01	14.75	V
2612.5	-40.86	3.39	27.41	36.36	19.52	33.01	13.49	V

LTE FDD Band 38_Channel Bandwidth 20MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2580	-42.03	3.38	27.45	36.34	18.38	33.01	14.63	V
2595	-43.61	3.38	27.45	36.34	16.8	33.01	16.21	V
2610	-42.83	3.39	27.41	36.36	17.55	33.01	15.46	V

LTE FDD Band 40_Channel Bandwidth 5MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2307.5	-49.07	3.32	27.49	36.22	11.32	23.98	12.66	V
2310	-47.57	3.32	27.49	36.22	12.82	23.98	11.16	V
2312.5	-49.01	3.33	27.49	36.25	11.4	23.98	12.58	V

LTE FDD Band 40_Channel Bandwidth 10MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2310	-49.48	3.32	27.49	36.22	10.91	23.98	13.07	V

LTE FDD Band 40_Channel Bandwidth 5MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2307.5	-49.36	3.32	27.49	36.22	11.03	23.98	12.95	-49.36
2310	-48.58	3.32	27.49	36.22	11.81	23.98	12.17	-48.58
2312.5	-47.57	3.33	27.49	36.25	12.84	23.98	11.14	-47.57

LTE FDD Band 40_Channel Bandwidth 10MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2310	-49.78	3.32	27.49	36.22	10.61	23.98	13.37	V

LTE FDD Band 41_Channel Bandwidth 5MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2498.5	-51.18	3.38	27.45	36.34	9.23	33.01	23.78	V
2593	-51.6	3.38	27.45	36.34	8.81	33.01	24.2	V
2687.5	-51.41	3.39	27.41	36.36	8.97	33.01	24.04	V

LTE FDD Band 41_Channel Bandwidth 10MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2501	-52.58	3.38	27.45	36.34	7.83	33.01	25.18	V
2593	-52.23	3.38	27.45	36.34	8.18	33.01	24.83	V
2685	-52.46	3.39	27.41	36.36	7.92	33.01	25.09	V

LTE FDD Band 41_Channel Bandwidth 15MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2503	-50.67	3.38	27.45	36.34	9.74	33.01	23.27	V
2593	-51.02	3.38	27.45	36.34	9.39	33.01	23.62	V
2682.5	-52.94	3.39	27.41	36.36	7.44	33.01	25.57	V

LTE FDD Band 41_Channel Bandwidth 20MHz_QPSK

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2506	-51.7	3.38	27.45	36.34	8.71	33.01	24.3	V
2593	-51.23	3.38	27.45	36.34	9.18	33.01	23.83	V
2680	-53.21	3.39	27.41	36.36	7.17	33.01	25.84	V

LTE FDD Band 41_Channel Bandwidth 5MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2498.5	-51.93	3.38	27.45	36.34	8.48	33.01	24.53	V
2593	-52.44	3.38	27.45	36.34	7.97	33.01	25.04	V
2687.5	-51.15	3.39	27.41	36.36	9.23	33.01	23.78	V

LTE FDD Band 41_Channel Bandwidth 10MHz_16QAM

Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2501	-52.68	3.38	27.45	36.34	7.73	33.01	25.28	V
2593	-50.78	3.38	27.45	36.34	9.63	33.01	23.38	V
2685	-51.26	3.39	27.41	36.36	9.12	33.01	23.89	V

LTE FDD Band 41_Channel Bandwidth 15MHz_16QAM

Frequency	P_{Mea}	P_{cl}	G_a	P_{Ag}	Burst	Limit	Margin	Polarization

(MHz)	(dBm)	(dB)	Antenna Gain(dB)	(dB)	Average EIRP (dBm)	(dBm)	(dB)	
2503	-51.8	3.38	27.45	36.34	8.61	33.01	24.4	V
2593	-52.99	3.38	27.45	36.34	7.42	33.01	25.59	V
2682.5	-53.01	3.39	27.41	36.36	7.37	33.01	25.64	V

LTE FDD Band 41_Channel Bandwidth 20MHz_16QAM

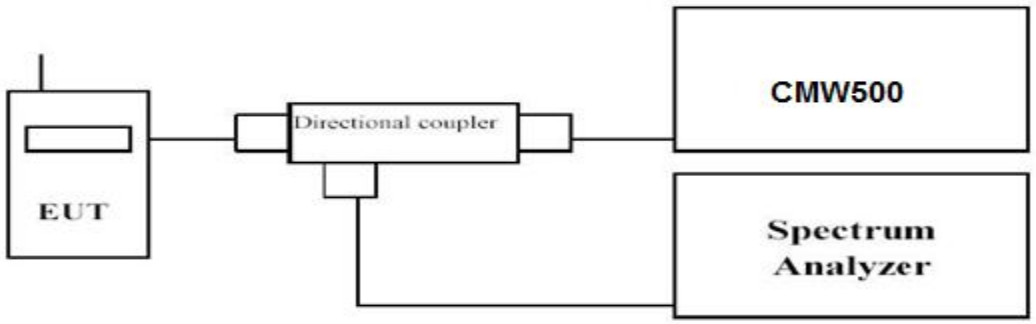
Frequency (MHz)	P_{Mea} (dBm)	P_{cl} (dB)	G_a Antenna Gain(dB)	P_{Ag} (dB)	Burst Average EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2506	-50.67	3.38	27.45	36.34	9.74	33.01	23.27	V
2593	-51.66	3.38	27.45	36.34	8.75	33.01	24.26	V
2680	-53.13	3.39	27.41	36.36	7.25	33.01	25.76	V

4.2 Peak-to-Average Ratio (PAR)

LIMIT

The Peak-to-Average Ratio (PAR) of the transmission may not exceed 13 dB.

TEST CONFIGURATION



TEST PROCEDURE

1. Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;
2. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
3. Set the number of counts to a value that stabilizes the measured CCDF curve;
4. Set the measurement interval as follows:
   1). for continuous transmissions, set to 1 ms,
   2). for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.
5. Record the maximum PAPR level associated with a probability of 0.1%.

TEST RESULTS

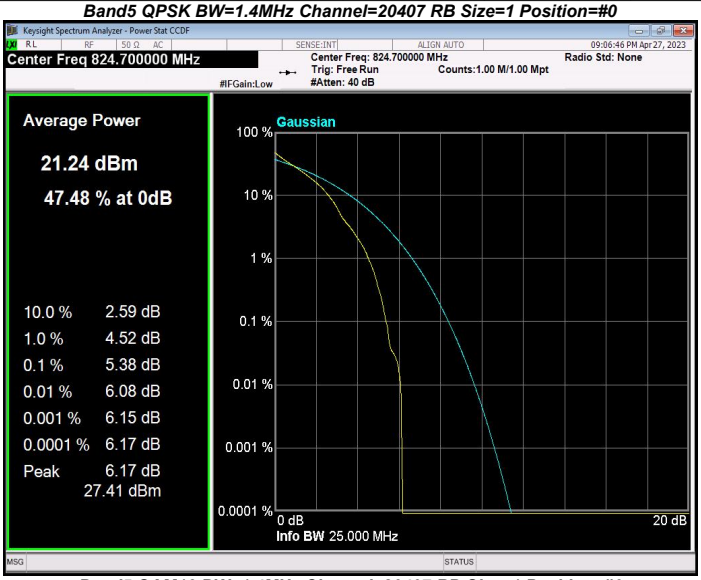
Peak-to-Average Ratio

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
Band5	1.4	20407	1	#0	QPSK	5.38	13	PASS
Band5	1.4	20407	1	#0	QAM16	6.37	13	PASS
Band5	1.4	20525	1	#0	QPSK	4.66	13	PASS
Band5	1.4	20525	1	#0	QAM16	5.26	13	PASS
Band5	1.4	20643	1	#0	QPSK	5.80	13	PASS
Band5	1.4	20643	1	#0	QAM16	6.44	13	PASS
Band5	3	20415	1	#0	QPSK	5.40	13	PASS
Band5	3	20415	1	#0	QAM16	6.31	13	PASS
Band5	3	20525	1	#0	QPSK	5.01	13	PASS
Band5	3	20525	1	#0	QAM16	6.15	13	PASS
Band5	3	20635	1	#0	QPSK	5.32	13	PASS
Band5	3	20635	1	#0	QAM16	5.87	13	PASS
Band5	5	20425	1	#0	QPSK	5.92	13	PASS
Band5	5	20425	1	#0	QAM16	5.98	13	PASS
Band5	5	20525	1	#0	QPSK	5.18	13	PASS
Band5	5	20525	1	#0	QAM16	5.68	13	PASS
Band5	5	20625	1	#0	QPSK	5.65	13	PASS
Band5	5	20625	1	#0	QAM16	6.25	13	PASS
Band5	10	20450	1	#0	QPSK	5.16	13	PASS
Band5	10	20450	1	#0	QAM16	5.70	13	PASS
Band5	10	20525	1	#0	QPSK	5.94	13	PASS
Band5	10	20525	1	#0	QAM16	6.88	13	PASS
Band5	10	20600	1	#0	QPSK	4.63	13	PASS
Band5	10	20600	1	#0	QAM16	5.40	13	PASS
Band38	5	37775	1	#0	QPSK	8.19	13	PASS
Band38	5	37775	1	#0	QAM16	10.28	13	PASS

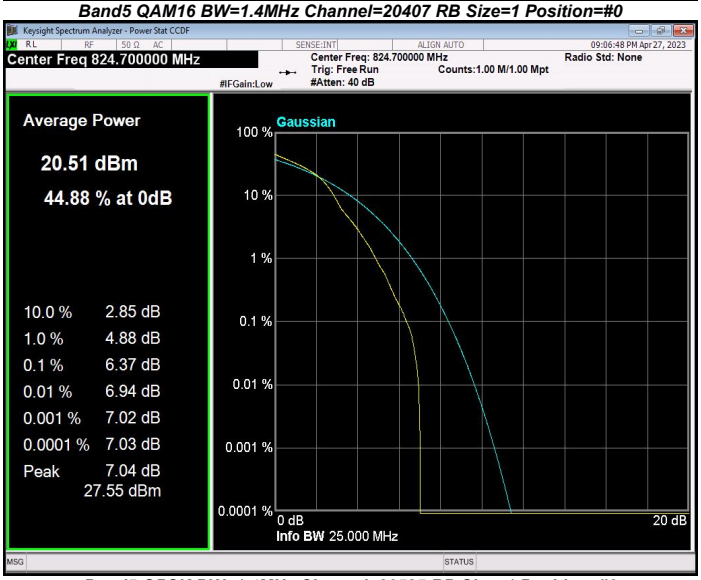
Band38	5	38000	1	#0	QPSK	8.83	13	PASS
Band38	5	38000	1	#0	QAM16	10.60	13	PASS
Band38	5	38225	1	#0	QPSK	9.11	13	PASS
Band38	5	38225	1	#0	QAM16	10.87	13	PASS
Band38	10	37800	1	#0	QPSK	9.14	13	PASS
Band38	10	37800	1	#0	QAM16	11.25	13	PASS
Band38	10	38000	1	#0	QPSK	9.13	13	PASS
Band38	10	38000	1	#0	QAM16	10.74	13	PASS
Band38	10	38200	1	#0	QPSK	9.22	13	PASS
Band38	10	38200	1	#0	QAM16	11.77	13	PASS
Band38	15	37825	1	#0	QPSK	9.76	13	PASS
Band38	15	37825	1	#0	QAM16	10.88	13	PASS
Band38	15	38000	1	#0	QPSK	9.19	13	PASS
Band38	15	38000	1	#0	QAM16	10.49	13	PASS
Band38	15	38175	1	#0	QPSK	8.68	13	PASS
Band38	15	38175	1	#0	QAM16	10.79	13	PASS
Band38	20	37850	1	#0	QPSK	8.96	13	PASS
Band38	20	37850	1	#0	QAM16	9.22	13	PASS
Band38	20	38000	1	#0	QPSK	9.20	13	PASS
Band38	20	38000	1	#0	QAM16	9.82	13	PASS
Band38	20	38150	1	#0	QPSK	9.02	13	PASS
Band38	20	38150	1	#0	QAM16	10.58	13	PASS
Band40(2350-2360)	5	39175	1	#0	QPSK	9.50	13	PASS
Band40(2350-2360)	5	39175	1	#0	QAM16	9.60	13	PASS
Band40(2350-2360)	5	39200	1	#0	QPSK	7.60	13	PASS
Band40(2350-2360)	5	39200	1	#0	QAM16	9.45	13	PASS
Band40(2350-2360)	5	39225	1	#0	QPSK	8.50	13	PASS
Band40(2350-2360)	5	39225	1	#0	QAM16	9.40	13	PASS
Band40(2350-2360)	10	39200	1	#0	QPSK	9.26	13	PASS
Band40(2350-2360)	10	39200	1	#0	QAM16	9.14	13	PASS
Band40(2305-2315)	5	38725	1	#0	QPSK	9.40	13	PASS
Band40(2305-2315)	5	38725	1	#0	QAM16	9.51	13	PASS
Band40(2305-2315)	5	38750	1	#0	QPSK	9.40	13	PASS
Band40(2305-2315)	5	38750	1	#0	QAM16	9.13	13	PASS
Band40(2305-2315)	5	38775	1	#0	QPSK	9.05	13	PASS
Band40(2305-2315)	5	38775	1	#0	QAM16	9.32	13	PASS
Band40(2305-2315)	10	38750	1	#0	QPSK	9.04	13	PASS
Band40(2305-2315)	10	38750	1	#0	QAM16	10.01	13	PASS
Band41	5	39675	1	#0	QPSK	6.74	13	PASS
Band41	5	39675	1	#0	QAM16	6.67	13	PASS
Band41	5	40620	1	#0	QPSK	8.74	13	PASS
Band41	5	40620	1	#0	QAM16	10.93	13	PASS
Band41	5	41565	1	#0	QPSK	7.66	13	PASS
Band41	5	41565	1	#0	QAM16	9.71	13	PASS
Band41	10	39700	1	#0	QPSK	6.08	13	PASS
Band41	10	39700	1	#0	QAM16	6.60	13	PASS
Band41	10	40620	1	#0	QPSK	9.49	13	PASS
Band41	10	40620	1	#0	QAM16	10.12	13	PASS
Band41	10	41540	1	#0	QPSK	7.99	13	PASS
Band41	10	41540	1	#0	QAM16	9.10	13	PASS
Band41	15	39725	1	#0	QPSK	8.27	13	PASS
Band41	15	39725	1	#0	QAM16	5.91	13	PASS
Band41	15	40620	1	#0	QPSK	9.07	13	PASS
Band41	15	40620	1	#0	QAM16	11.08	13	PASS

Band41	15	41515	1	#0	QPSK	7.73	13	PASS
Band41	15	41515	1	#0	QAM16	9.57	13	PASS
Band41	20	39750	1	#0	QPSK	6.16	13	PASS
Band41	20	39750	1	#0	QAM16	6.77	13	PASS
Band41	20	40620	1	#0	QPSK	9.23	13	PASS
Band41	20	40620	1	#0	QAM16	10.19	13	PASS
Band41	20	41490	1	#0	QPSK	10.36	13	PASS
Band41	20	41490	1	#0	QAM16	9.15	13	PASS

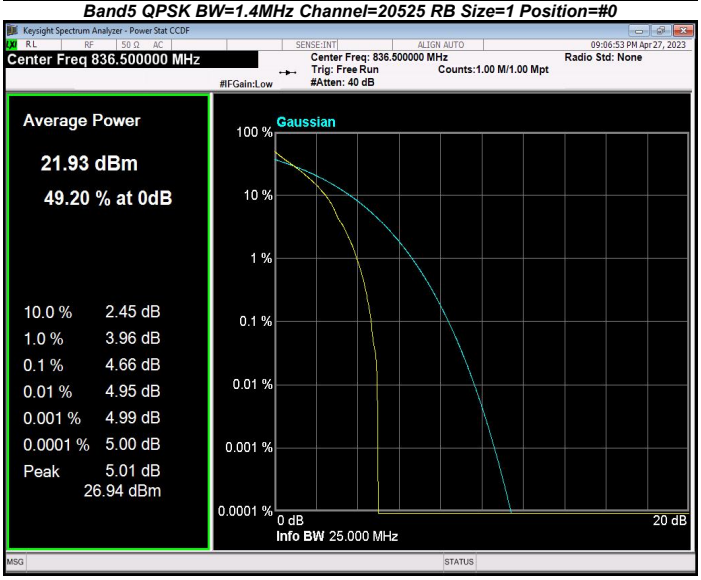
Band5 QPSK BW=1.4MHz Channel=20407 RB Size=1 Position=#0



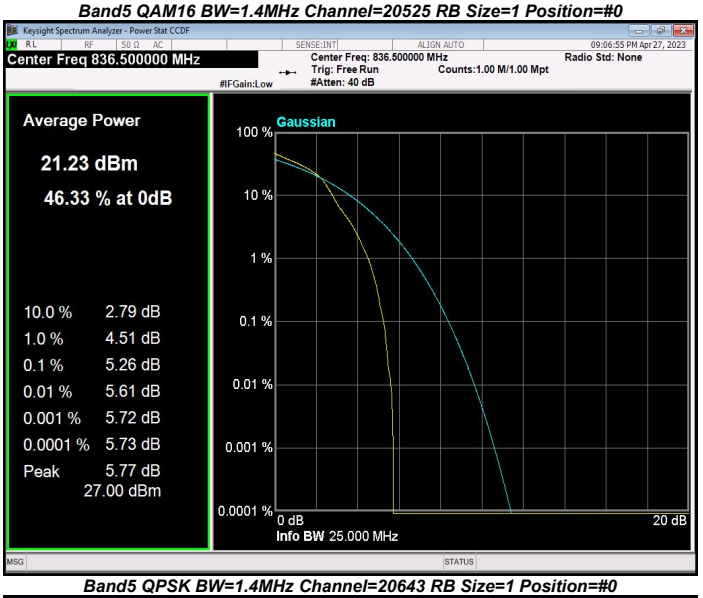
Band5 QAM16 BW=1.4MHz Channel=20407 RB Size=1 Position=#0



Band5 QPSK BW=1.4MHz Channel=20525 RB Size=1 Position=#0

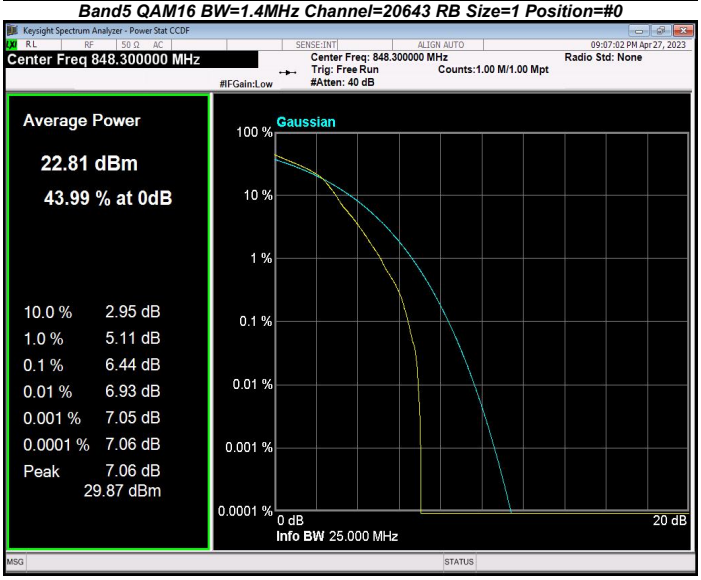


Band5 QAM16 BW=1.4MHz Channel=20525 RB Size=1 Position=#0

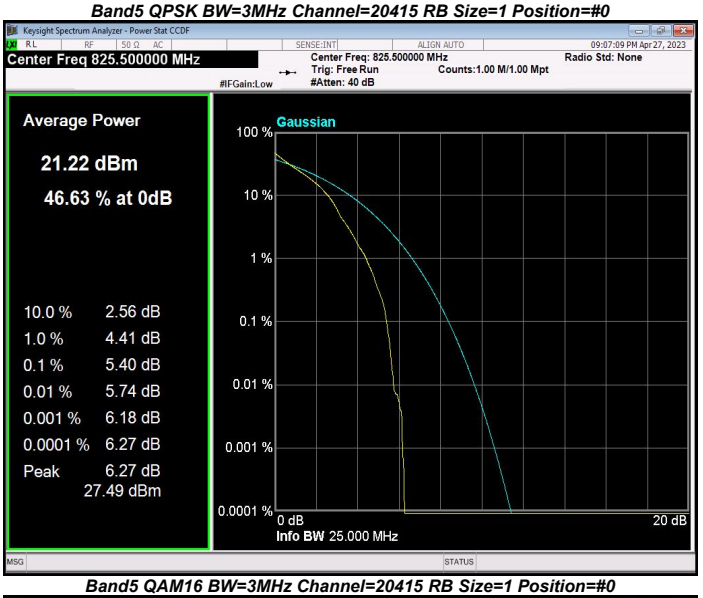


Band5 QPSK BW=1.4MHz Channel=20643 RB Size=1 Position=#0

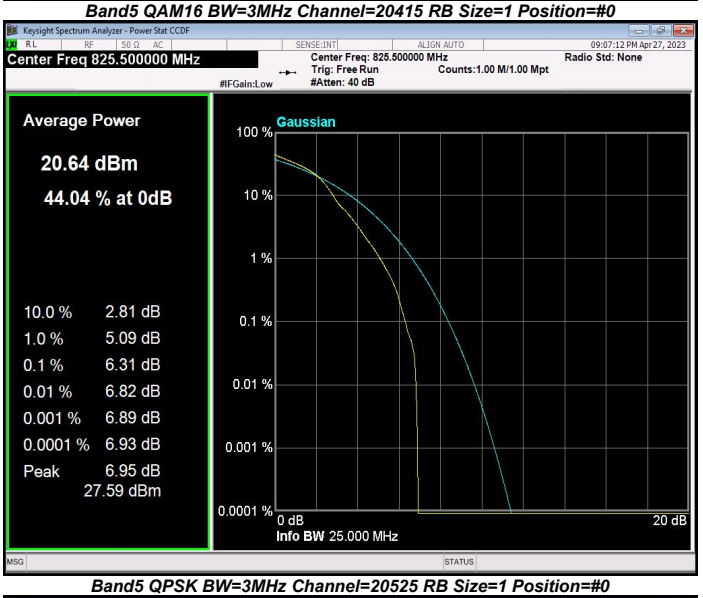
Band5 QAM16 BW=1.4MHz Channel=20643 RB Size=1 Position=#0



Band5 QPSK BW=3MHz Channel=20415 RB Size=1 Position=#0

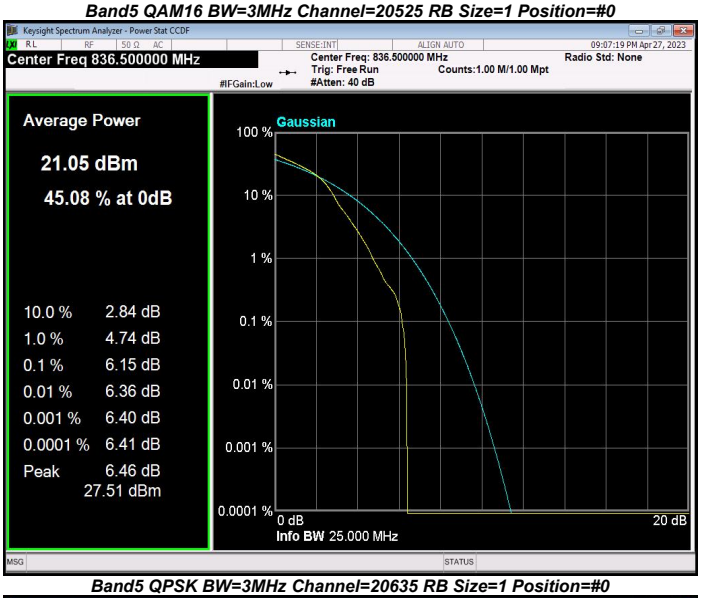


Band5 QAM16 BW=3MHz Channel=20415 RB Size=1 Position=#0



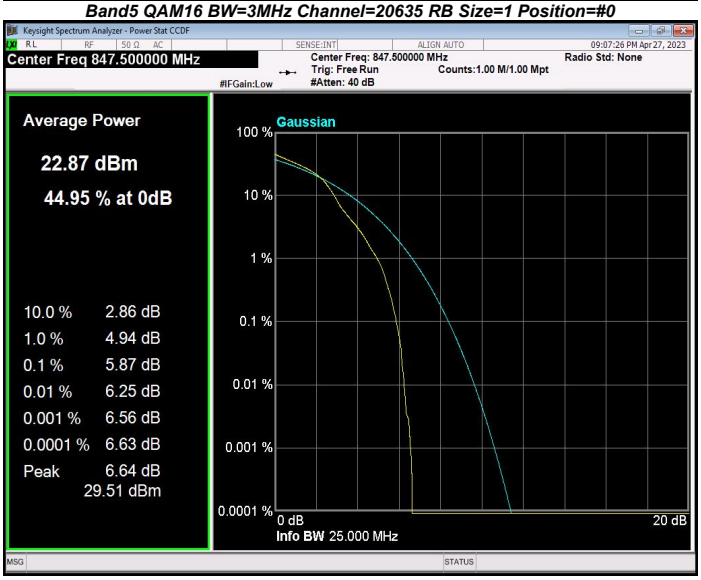
Band5 QPSK BW=3MHz Channel=20525 RB Size=1 Position=#0

Band5 QAM16 BW=3MHz Channel=20525 RB Size=1 Position=#0

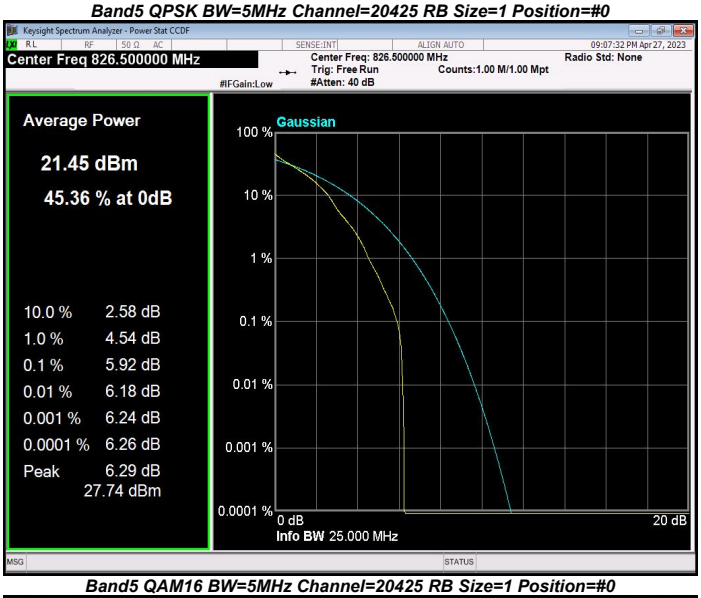


Band5 QPSK BW=3MHz Channel=20635 RB Size=1 Position=#0

Band5 QAM16 BW=3MHz Channel=20635 RB Size=1 Position=#0

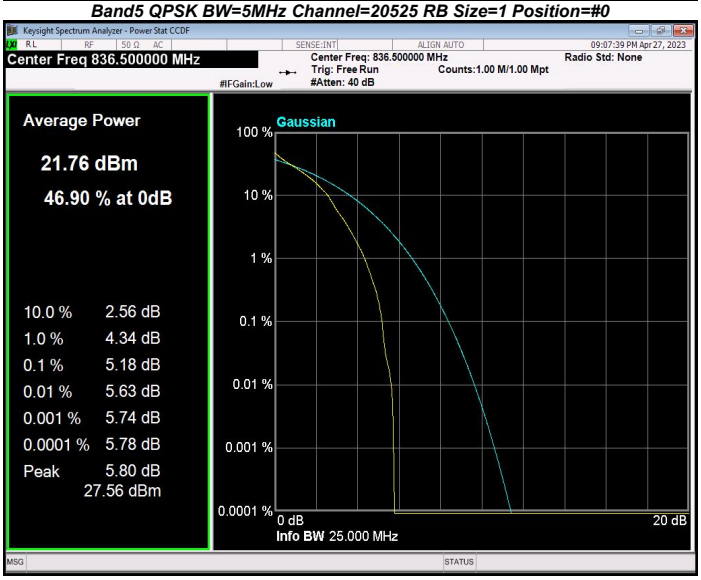


Band5 QPSK BW=5MHz Channel=20425 RB Size=1 Position=#0

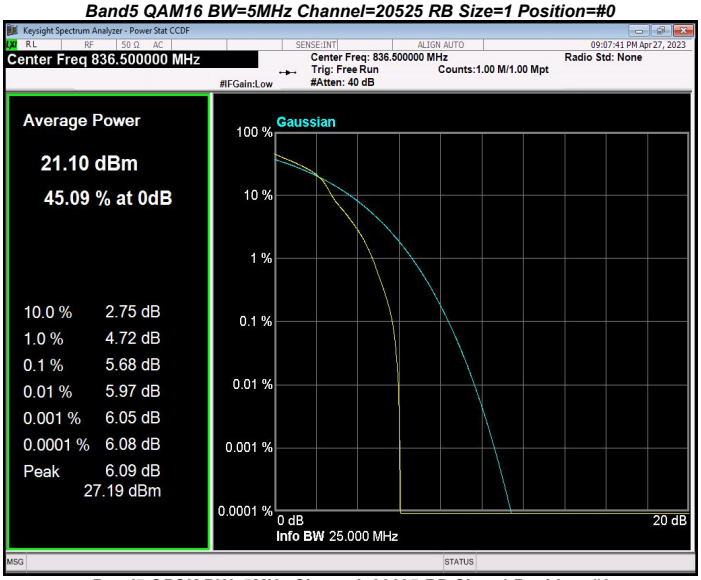


Band5 QAM16 BW=5MHz Channel=20425 RB Size=1 Position=#0

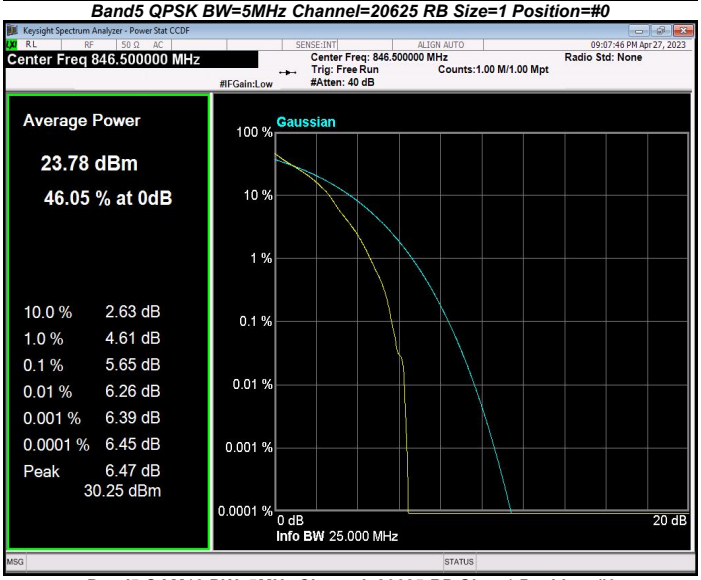
Band5 QPSK BW=5MHz Channel=20525 RB Size=1 Position=#0



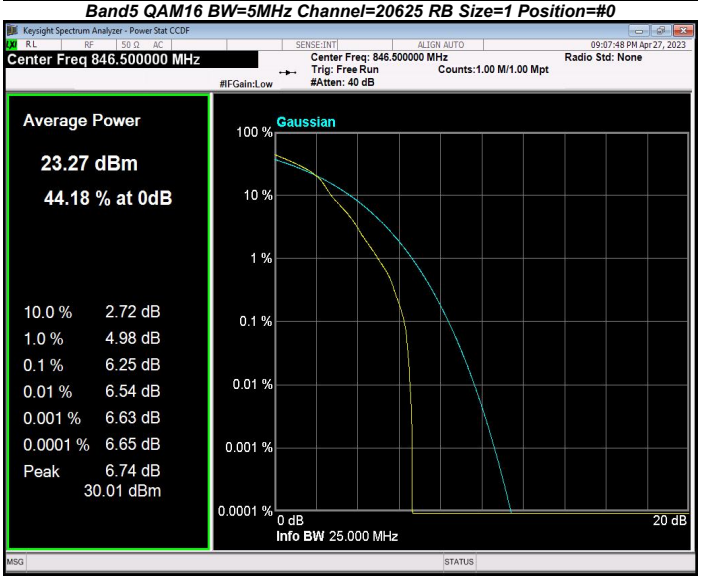
Band5 QAM16 BW=5MHz Channel=20525 RB Size=1 Position=#0



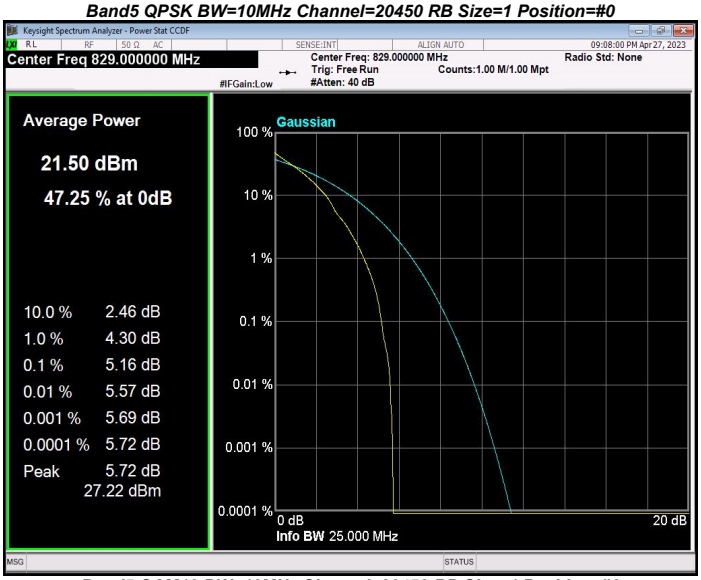
Band5 QPSK BW=5MHz Channel=20625 RB Size=1 Position=#0



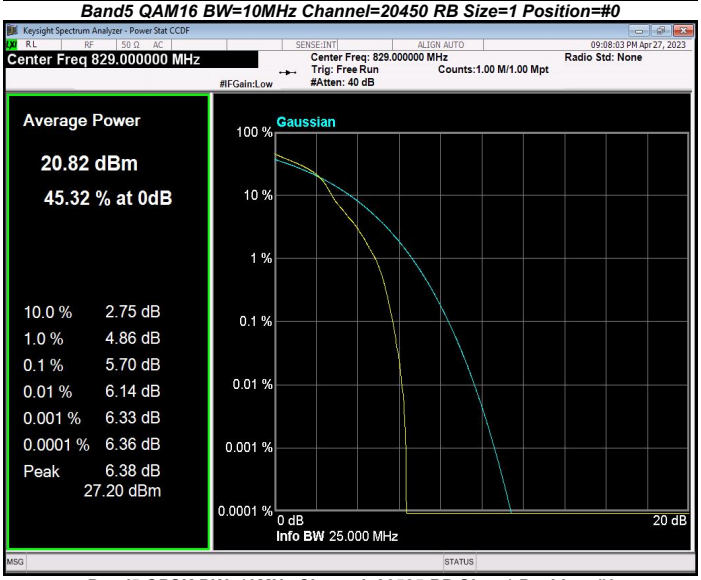
Band5 QAM16 BW=5MHz Channel=20625 RB Size=1 Position=#0



Band5 QPSK BW=10MHz Channel=20450 RB Size=1 Position=#0

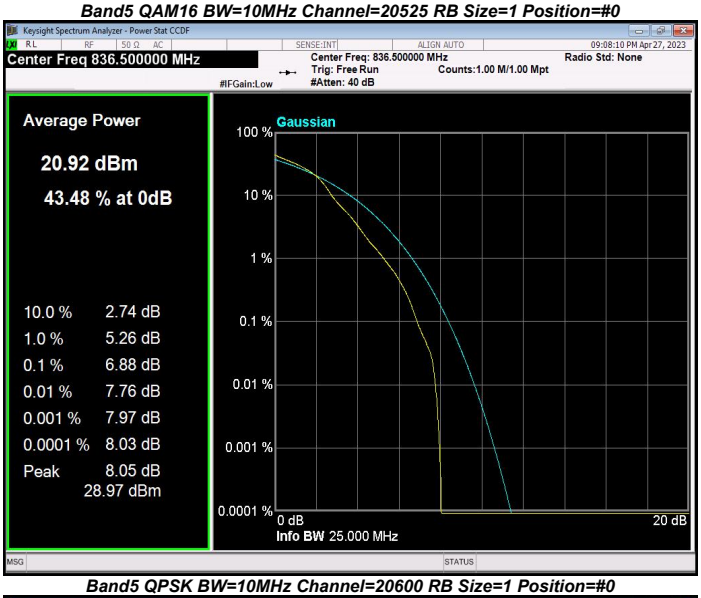


Band5 QAM16 BW=10MHz Channel=20450 RB Size=1 Position=#0

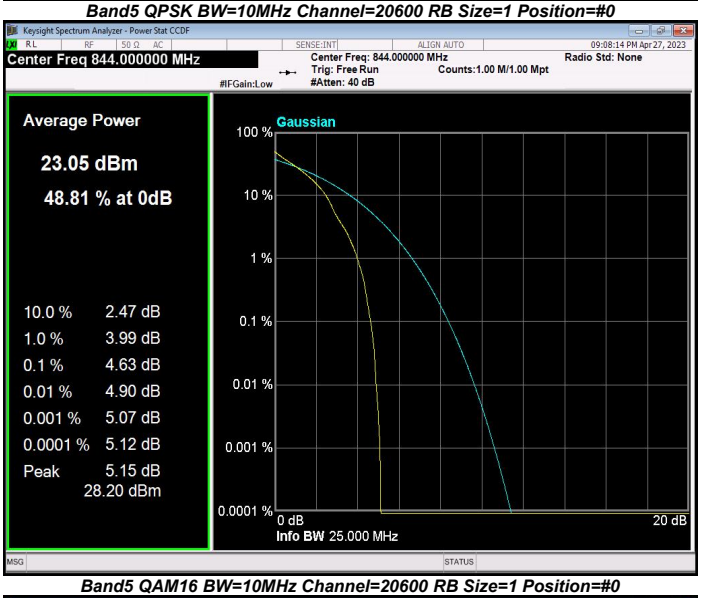


Band5 QPSK BW=10MHz Channel=20525 RB Size=1 Position=#0

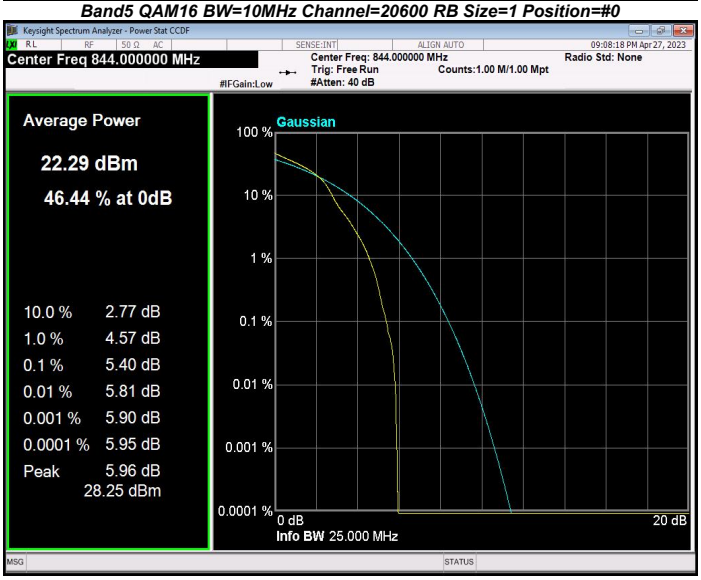
Band5 QAM16 BW=10MHz Channel=20525 RB Size=1 Position=#0



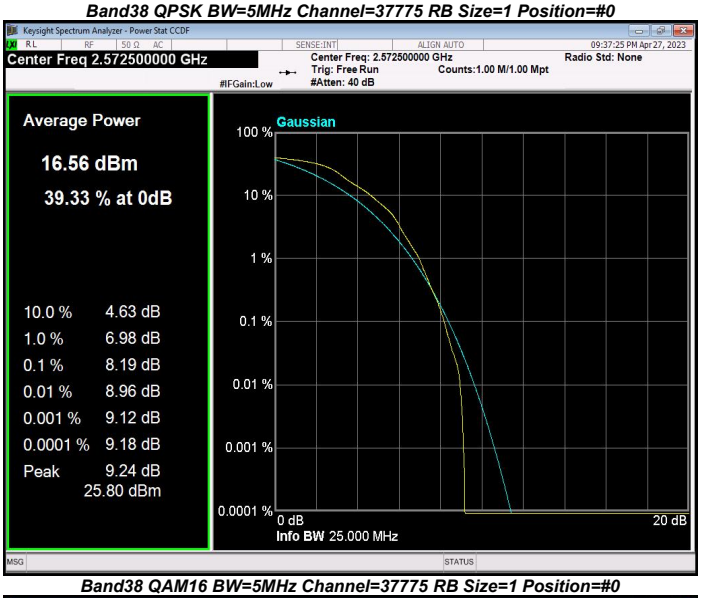
Band5 QPSK BW=10MHz Channel=20600 RB Size=1 Position=#0



Band5 QAM16 BW=10MHz Channel=20600 RB Size=1 Position=#0

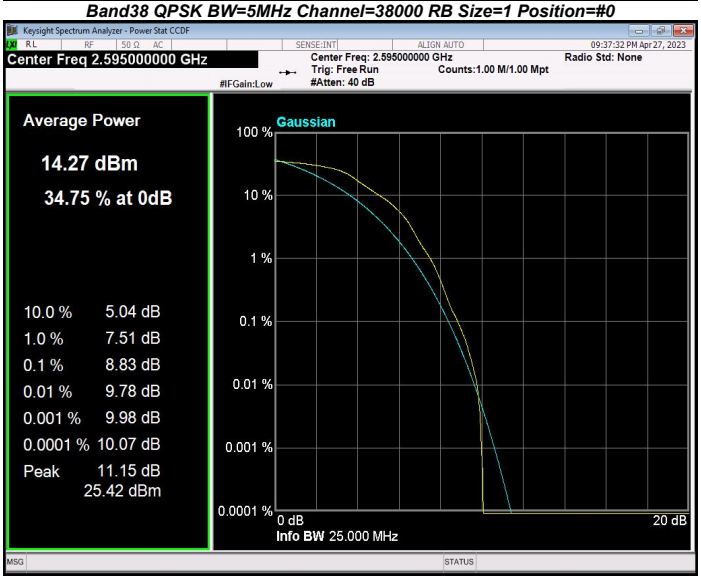


Band38 QPSK BW=5MHz Channel=37775 RB Size=1 Position=#0

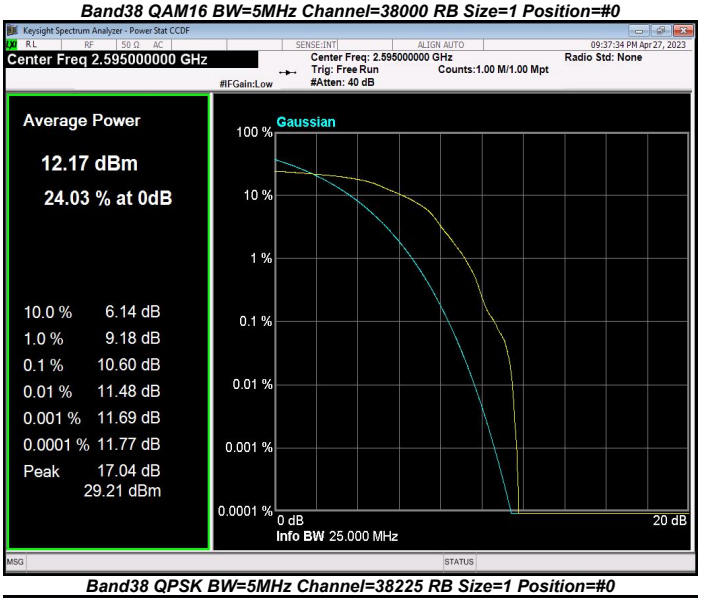


Band38 QAM16 BW=5MHz Channel=37775 RB Size=1 Position=#0

Band38 QPSK BW=5MHz Channel=38000 RB Size=1 Position=#0

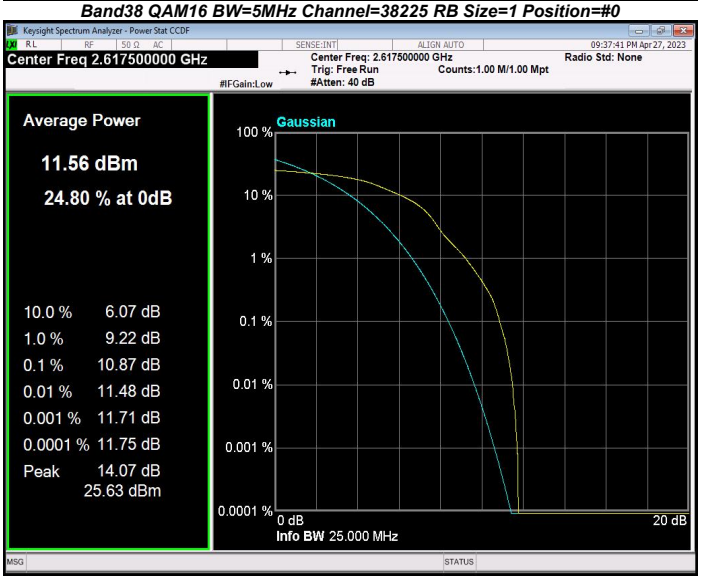


Band38 QAM16 BW=5MHz Channel=38000 RB Size=1 Position=#0

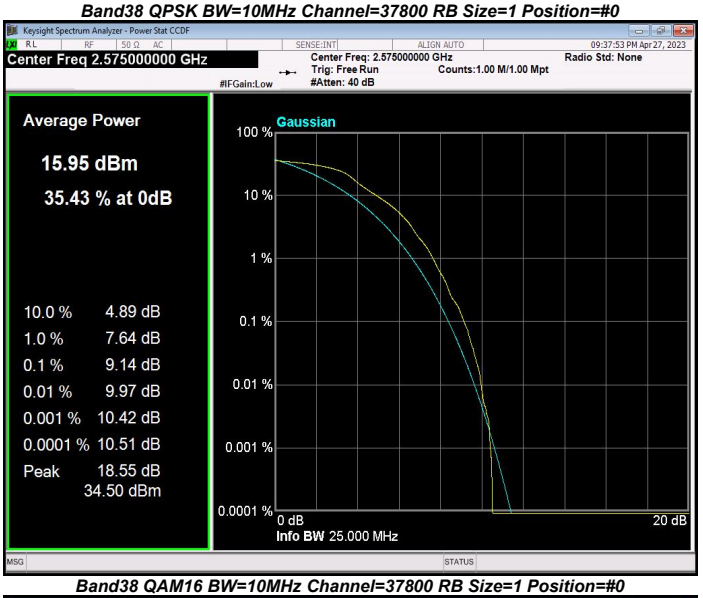


Band38 QPSK BW=5MHz Channel=38225 RB Size=1 Position=#0

Band38 QAM16 BW=5MHz Channel=38225 RB Size=1 Position=#0

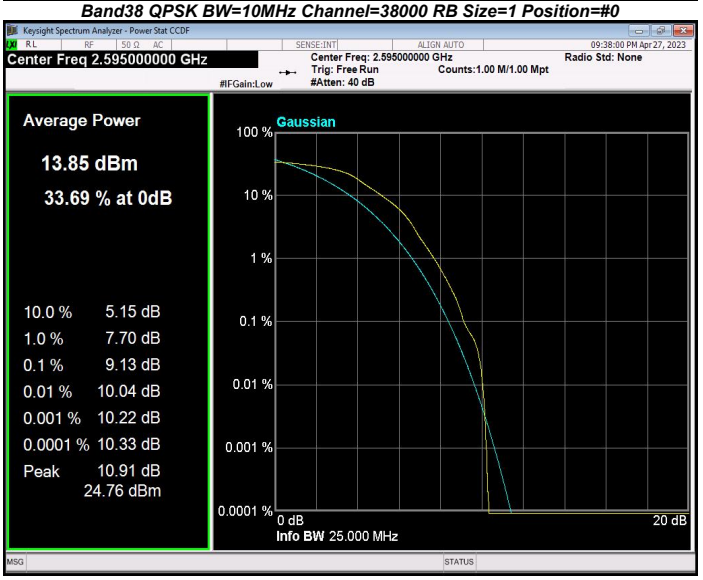


Band38 QPSK BW=10MHz Channel=37800 RB Size=1 Position=#0

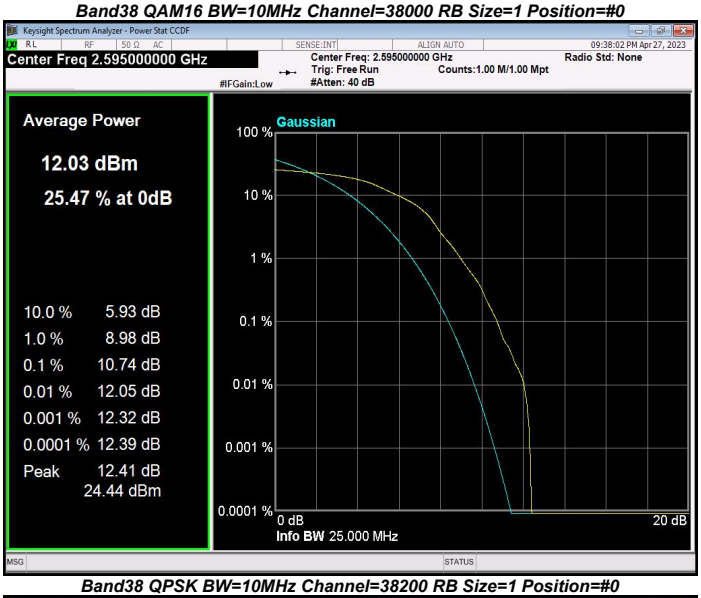


Band38 QAM16 BW=10MHz Channel=37800 RB Size=1 Position=#0

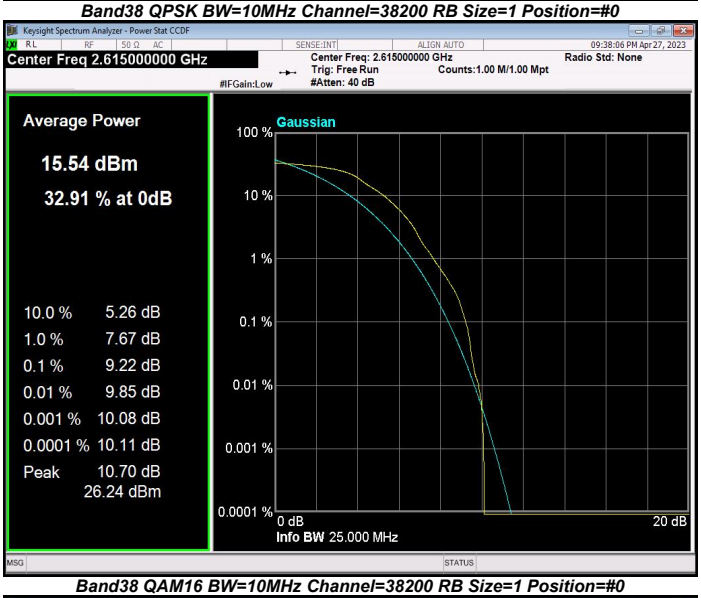
Band38 QPSK BW=10MHz Channel=38000 RB Size=1 Position=#0



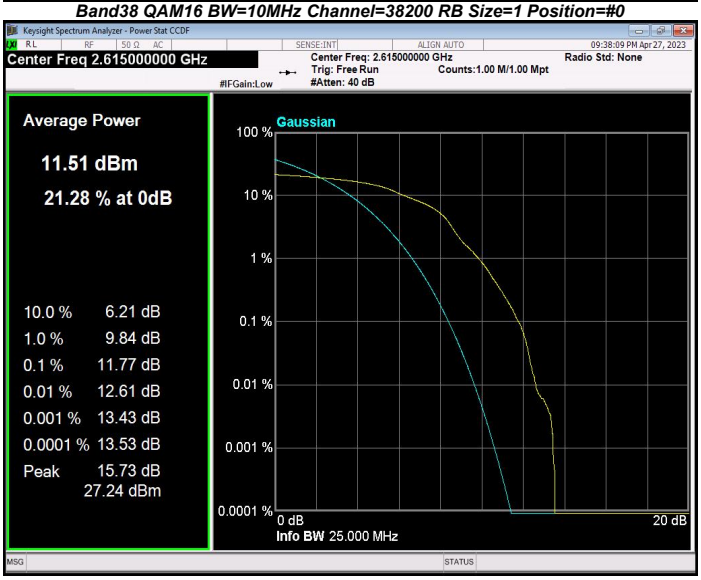
Band38 QAM16 BW=10MHz Channel=38000 RB Size=1 Position=#0



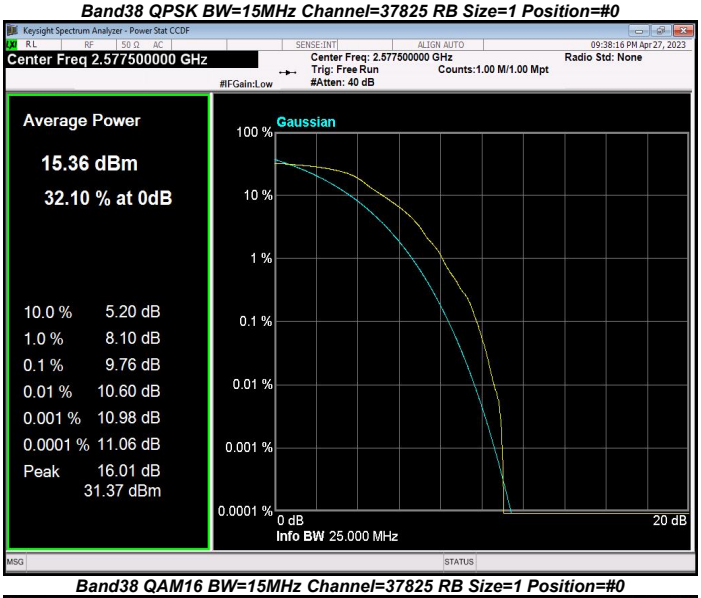
Band38 QPSK BW=10MHz Channel=38200 RB Size=1 Position=#0



Band38 QAM16 BW=10MHz Channel=38200 RB Size=1 Position=#0

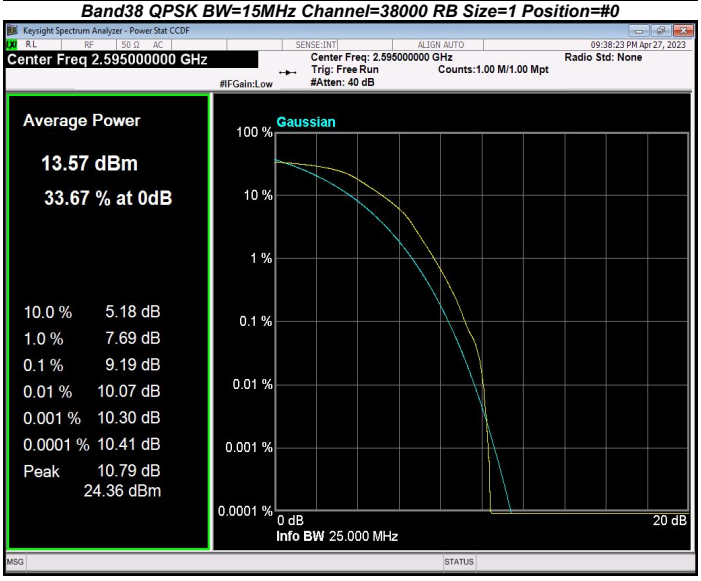


Band38 QPSK BW=15MHz Channel=37825 RB Size=1 Position=#0

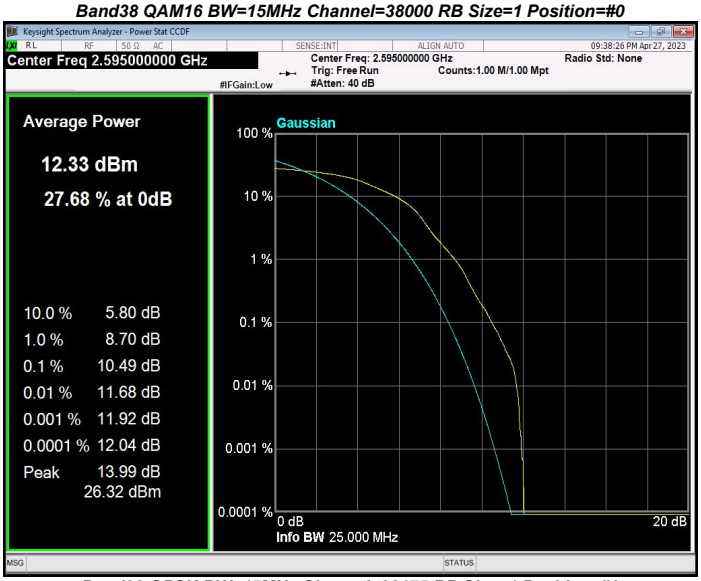


Band38 QAM16 BW=15MHz Channel=37825 RB Size=1 Position=#0

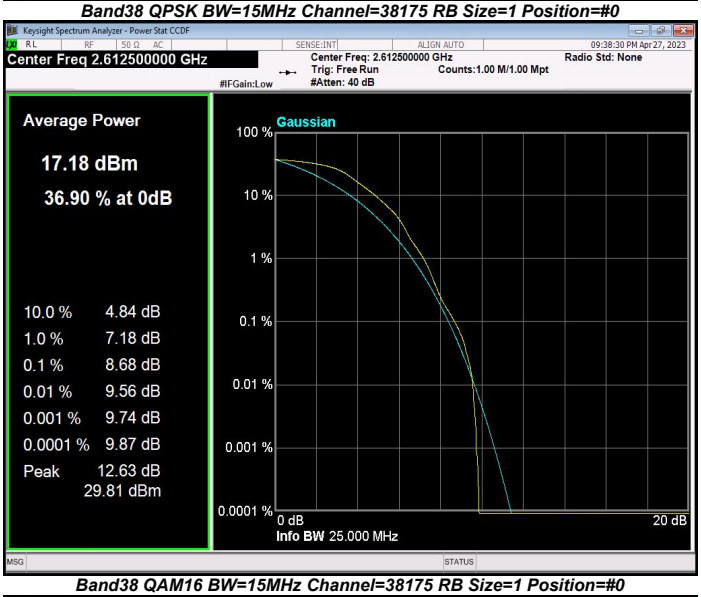
Band38 QPSK BW=15MHz Channel=38000 RB Size=1 Position=#0



Band38 QAM16 BW=15MHz Channel=38000 RB Size=1 Position=#0

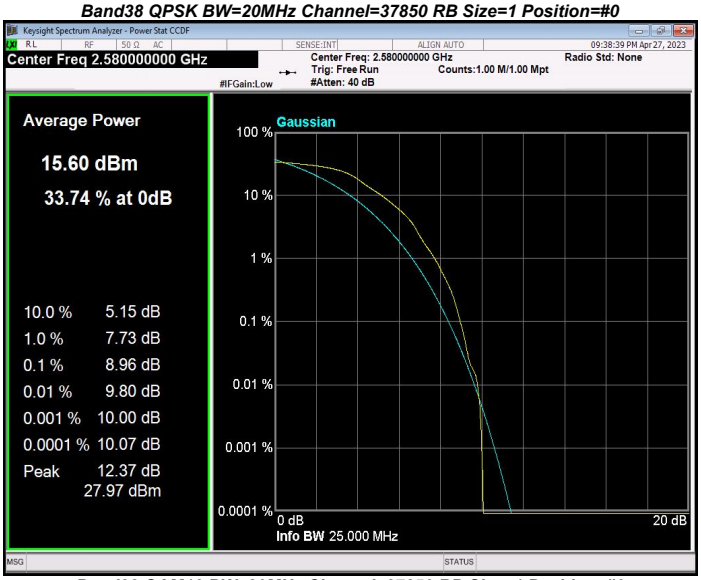


Band38 QPSK BW=15MHz Channel=38175 RB Size=1 Position=#0

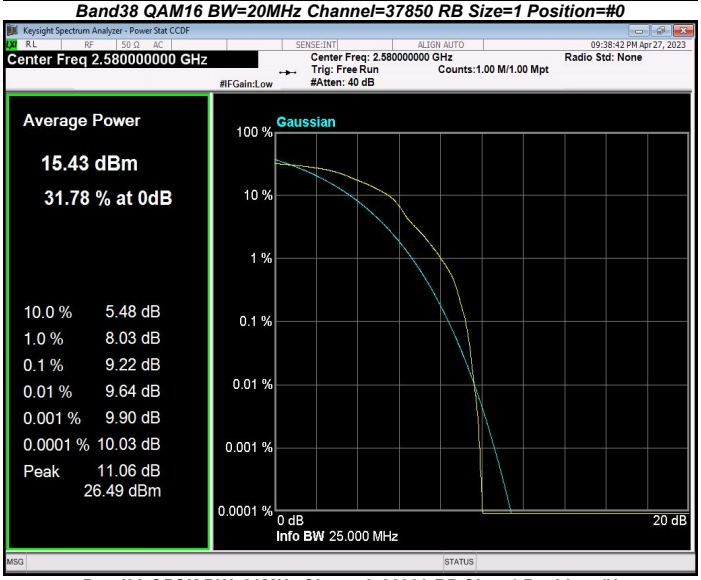


Band38 QAM16 BW=15MHz Channel=38175 RB Size=1 Position=#0

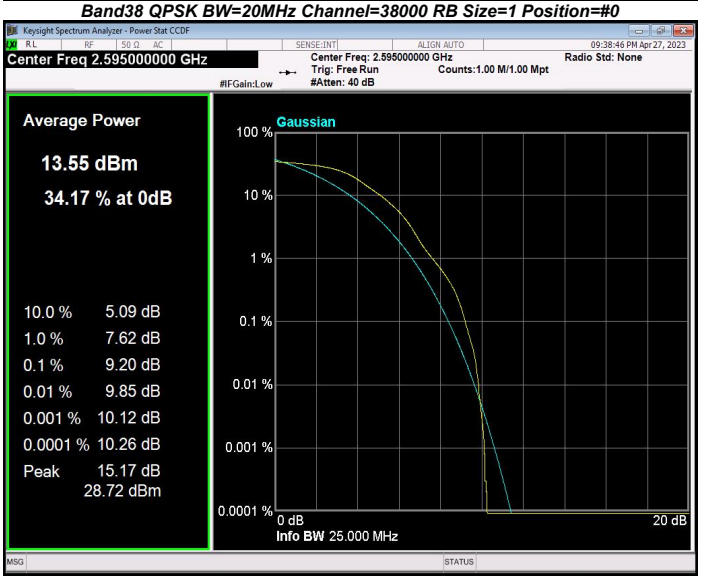
Band38 QPSK BW=20MHz Channel=37850 RB Size=1 Position=#0



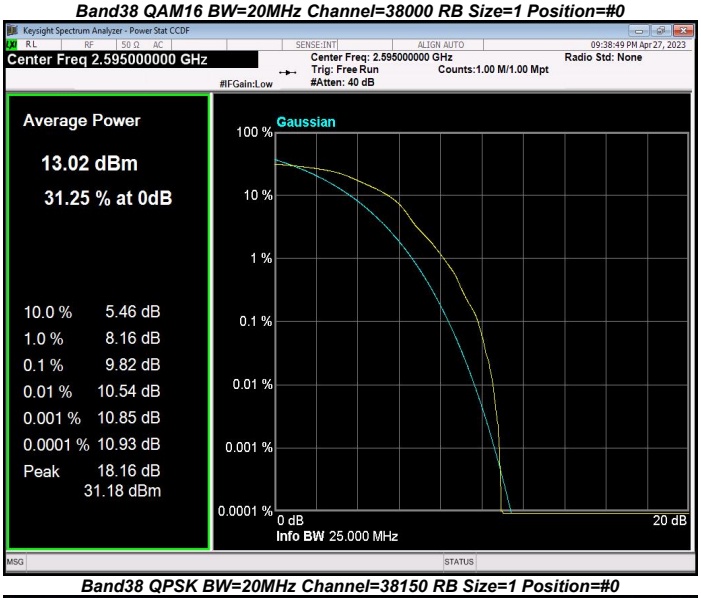
Band38 QAM16 BW=20MHz Channel=37850 RB Size=1 Position=#0



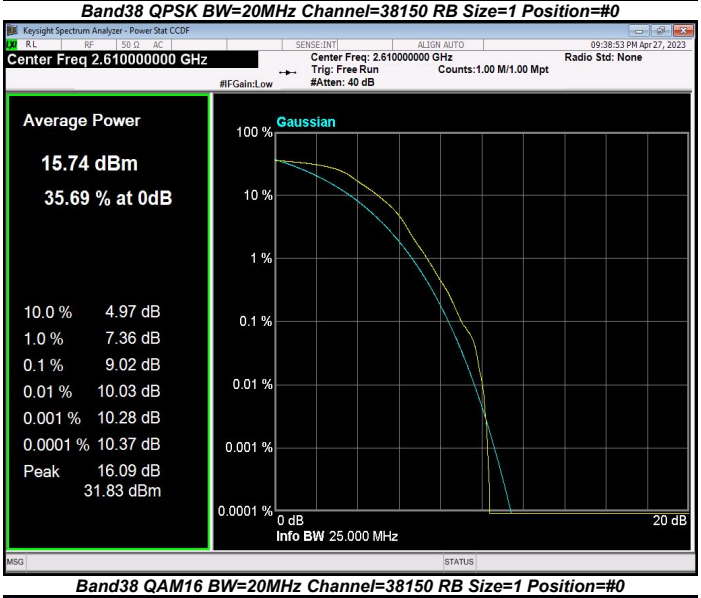
Band38 QPSK BW=20MHz Channel=38000 RB Size=1 Position=#0



Band38 QAM16 BW=20MHz Channel=38000 RB Size=1 Position=#0



Band38 QPSK BW=20MHz Channel=38150 RB Size=1 Position=#0



Band38 QAM16 BW=20MHz Channel=38150 RB Size=1 Position=#0