

FCC TEST REPORT

Product Name: Titan Secure Base Controller

Trade Mark:



Model No.: TS-01-02-03

Report Number: 25071118985RFM-1

Test Standards: FCC 47 CFR Part 22
FCC 47 CFR Part 24
FCC 47 CFR Part 27

FCC ID: 2BMES-TS01-02-03

Test Result: PASS

Date of Issue: January 29, 2026

Prepared for:

Titan Secure, Inc.

2261 Market Street STE 10873, San Francisco, CA 94114, United States

Prepared by:

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UTTR-RF-FCC4G-V1.1

Version

Version No.	Date	Description
V1.0	January 29, 2026	Original



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1. GENERAL INFORMATION

1.1 CLIENT INFORMATION

Applicant:	Titan Secure, Inc.
Address of Applicant:	2261 Market Street STE 10873, San Francisco, CA 94114, United States
Manufacturer:	Titan Secure (Pty) Ltd.
Address of Manufacturer:	Plot 1073 Erasmus Street, Mnandi Agricultural Holdings Centurion 0157, South Africa

1.2 EUT INFORMATION

1.2.1 General Description of EUT

Product Name:	Titan Secure Base Controller		
Model No.:	TS-01-02-03		
Trade Mark:			
DUT Stage:	Identical Prototype		
EUT Supports Function: (Provided by the customer)	2.4 GHz ISM Band:	Bluetooth V5.2	
		IEEE 802.11b/g/n (only Rx)	
	5 GHz U-NII Bands:	5 150 - 5 250 MHz: IEEE 802.11a/n/ac (only Rx)	
	E-UTRA Bands:	FDD Band 2/ 4/ 5	
	RNSS Bands:	1559-1610 MHz	BDS/ Galileo/ GLONASS/ GPS
Software Version:	3.0.8 (Provided by the customer)		
Hardware Version:	2.21 (Provided by the customer)		
Sample Received Date:	July 9, 2025		
Sample Tested Date:	August 5, 2025 to September 5, 2025		
Remark: The above EUT's information was provided by customer. Please refer to the specifications or user's manual for more detailed description.			

1.2.2 Description of Accessories

Battery	
Model No.:	A01560-LP603449-PCM-NTC-LD
Battery Type:	Rechargeable Li-ion Battery
Rated Voltage:	3.7 Vdc
Rated Capacity:	1100 mAh

Harness	
Cable Type:	Unshielded without ferrite
Length:	2 Meter

1.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

Support Networks:	Single Carrier: LTE Band 2/4/5	
Type of Modulation:	QPSK, 16QAM	
Antenna Type: (Provided by the customer)	Chip Antenna	
Antenna Gain: (Provided by the customer)	LTE Band 2:	1.9 dBi
	LTE Band 4:	1.9 dBi
	LTE Band 5:	1.8 dBi
Sample No.:	Radiated: S202507096448-ZJA04/7	
	Conducted: S202507096448-ZJA02/7	
UE Category:	Category 1	
Normal Test Voltage:	12 VDC	
Extreme Test Voltage:	10.8 to 13.2 Vac	
Extreme Test Temperature:	-30 °C to +55 °C	

Summary of Results:								
Bands	BW	Modulation	Frequency Range	Max RF Output Power (dBm)		ERP/EIRP	99% BW	Emission Designator
	(MHz)		(MHz)	Conducted (Average)	ERP/EIRP (Average)	(W)	(MHz)	
2	1.4	QPSK	1850.7-1909.3	13.76	15.66	0.0368	1.1261	1M13G7D
		16QAM		13.43	15.33	0.0341	1.1186	1M12W7D
	3	QPSK	1851.5-1908.5	13.58	15.48	0.0353	2.7115	2M71G7D
		16QAM		13.53	15.43	0.0349	2.7073	2M71W7D
	5	QPSK	1852.5-1907.5	13.94	15.84	0.0384	4.5014	4M50G7D
		16QAM		13.75	15.65	0.0367	4.5171	4M52W7D
	10	QPSK	1855.0-1905.0	13.79	15.69	0.0371	8.9368	8M94G7D
		16QAM		13.68	15.58	0.0361	5.5786	5M58W7D
	15	QPSK	1857.5-1902.5	13.76	15.66	0.0368	13.60	13M6G7D
		16QAM		13.68	15.58	0.0361	8.0884	8M09W7D
	20	QPSK	1860.0-1900.0	13.70	15.60	0.0363	18.204	18M2G7D
		16QAM		13.53	15.43	0.0349	9.6475	9M65W7D
4	1.4	QPSK	1710.7-1754.3	13.83	15.73	0.0374	1.1065	1M11G7D
		16QAM		13.58	15.48	0.0353	1.1069	1M11W7D
	3	QPSK	1711.5-1753.5	14.07	15.97	0.0395	2.6953	2M70G7D
		16QAM		13.74	15.64	0.0366	2.6974	2M70W7D
	5	QPSK	1712.5-1752.5	14.23	16.13	0.0410	4.4949	4M49G7D
		16QAM		14.10	16.00	0.0398	4.5173	4M52W7D
	10	QPSK	1715-1750	14.77	16.67	0.0465	8.9438	8M94G7D
		16QAM		14.71	16.61	0.0458	5.4907	5M49W7D
	15	QPSK	1717.5-1747.5	14.88	16.78	0.0476	13.608	13M6G7D
		16QAM		14.79	16.69	0.0467	6.878	6M88W7D
	20	QPSK	1720-1745	15.14	17.04	0.0506	18.102	18M1G7D
		16QAM		15.00	16.90	0.0490	8.9229	8M92W7D
5	1.4	QPSK	824.7-848.3	14.70	14.35	0.0272	1.1017	1M10G7D
		16QAM		14.36	14.01	0.0252	1.1200	1M12W7D
	3	QPSK	825.5-847.5	14.43	14.08	0.0256	2.6929	2M69G7D
		16QAM		14.31	13.96	0.0249	2.6917	2M69W7D
	5	QPSK	826.5-846.5	14.62	14.27	0.0267	4.5035	4M50G7D
		16QAM		14.44	14.09	0.0256	4.5028	4M50W7D
	10	QPSK	829-844	14.59	14.24	0.0265	8.9989	9M00G7D
		16QAM		14.50	14.15	0.0260	5.8070	5M81W7D

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1.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested with associated equipment below.

1) Support Equipment

Description	Manufacturer	Model No.	Serial Number	Supplied by
PC	DELL	Vostro 3890	N/A	UnionTrust
Mouse	DELL	MS111	CN-011D3V-738	UnionTrust
Keyboard	DELL	KB212-B	N/A	UnionTrust
Display	DELL	E1916HVI	N/A	UnionTrust
Tag-Connect cable	Tag-Connect	TC2030-CTX-NL	N/A	Titan Secure, Inc.
J-LINK	Segger	E323202	2423	Titan Secure, Inc.

2) Support Cable

Cable No.	Description	Connector	Length	Supplied by
1	USB Cable	Type-A to USB Micro-B	1 Meter, Unshielded without ferrite	UnionTrust
2	SMA Cable	SMA	0.1 Meter	UnionTrust

1.5 TEST LOCATION

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F, Block A, Building 6th, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, China

Telephone: +86 (0) 755 2823 0888

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1.6 TEST FACILITY

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

CNAS-Lab Code: L9069

The measuring equipment utilized to perform the tests documented in this report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable under the ISO/IEC 17025 to international or national standards. Equipment has been calibrated by accredited calibration laboratories.

A2LA-Lab Certificate No.: 4312.01

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

ISED Wireless Device Testing Laboratories

CAB identifier: CN0032

FCC Accredited Lab.

Designation Number: CN1194

Test Firm Registration Number: 259480

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1.7 DEVIATION FROM STANDARDS

None.

1.8 ABNORMALITIES FROM STANDARD CONDITIONS

None.

1.9 OTHER INFORMATION REQUESTED BY THE CUSTOMER

None.

1.10 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

No.	Item	Measurement Uncertainty
1	Conducted Output Power	±0.7 dB
2	99%&26dB Bandwidth	±1.86 %
3	Emission Mask	±2.7 dBm
4	Spurious emissions at antenna terminals	±2.7 dBm
5	Field strength of spurious radiation	30 MHz-1 GHz: ±4.9 dB 1 GHz-18 GHz: ±4.8 dB 18 GHz-40 GHz: ±5.1 dB
6	Frequency stability	±6.5 x 10 ⁻⁸
7	Humidity	±3.9 %
8	Temperature	±0.62 °C
9	DC Voltages	±0.68 %

2. TEST SUMMARY

FCC 47 CFR Part 24 Test Cases (Band 2)			
Test Item	Test Requirement	Test Method	Result
Equivalent Isotropic Radiated Power (EIRP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 24.232(c)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 24.232(c)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 24.232(d)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h) & FCC 47 CFR Part 24.238(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 24.238(a)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 24.238(a)(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 24.238(a)(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 24.235	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS

FCC 47 CFR Part 27 Test Cases (LTE Band 4)			
Test Item	Test Requirement	Test Method	Result
Equivalent Isotropic Radiated Power (EIRP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(d)(4)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(d)(4)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 27.50(d)(5)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h) & FCC 47 CFR Part 27.53(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 27.53(h)(1)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 27.53(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 27.53(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 27.54	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS

FCC 47 CFR Part 22 Test Cases (Band 5)			
Test Item	Test Requirement	Test Method	Result
Effective Radiated Power (ERP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 22.913(a)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 22.913(a)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 22.913(a)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 22.917(a)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 22.917(a)(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 22.917(a)(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 22.355	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS

Disclaimer and Explanations:

The declared of product specification and data (e.g. antenna gain, RF specification, etc) for EUT presented in the report are provided by the customer, and the customer takes all the responsibilities for the accuracy of product specification.

3. EQUIPMENT LIST

Radiated Emission Test Equipment List						
Used	Equipment	Manufacturer	Model No.	Serial Number	Cal. date	Cal. Due date
☒	3m SAC	ETS-LINDGREN	3M	Euroshiedpn-CT001270-1317	11-Nov-2023	10-Nov-2026
☒	Receiver	R&S	ESIB26	100114	25-Oct-2024	24-Oct-2025
☐	Loop Antenna	ETS-LINDGREN	6502	00202525	28-Oct-2024	27-Oct-2025
☒	Broadband Antenna	ETS-LINDGREN	3142E	00201566	29-Oct-2024	28-Oct-2025
☒	6dB Attenuator	Talent	RA6A5-N-18	18103001	29-Oct-2024	28-Oct-2025
☒	Preamplifier	HP	8447F	2805A02960	25-Oct-2024	24-Oct-2025
☒	Double-Ridged Waveguide Horn Antenna (Pre-amplifier)	ETS-LINDGREN	3117-PA	00201541	29-Mar-2025	28-Mar-2026
☒	Pre-amplifier	ETS-LINDGREN	00118385	00201874	28-Mar-2025	27-Mar-2026
☒	Double-Ridged Waveguide Horn Antenna (Pre-amplifier)	ETS-LINDGREN	3116C-PA	00202652	28-Oct-2024	27-Oct-2025
☒	Pre-amplifier	ETS-LINDGREN	00118384	00202652	28-Oct-2024	27-Oct-2025
☒	Multi device Controller	ETS-LINDGREN	7006-001	00160105	N/A	N/A
☒	Test Software	Audix	e3	Software Version: 9.160323		

RF Conducted Test Equipment List						
Used	Equipment	Manufacturer	Model No.	Serial Number	Cal. date	Cal. Due date
☒	EXA Spectrum Analyzer	KEYSIGHT	N9020A	MY51286807	25-Oct-2024	24-Oct-2025
☒	DC Source	KIKUSUI	PWR400L	LK003024	13-Jun-2025	12-Jun-2026
☒	Digital multimeter	FLUKE	15B+	30701460WS15	29-Oct-2024	28-Oct-2025
☒	Temp & Humidity chamber	Votisch	VT4002	58566133290020	28-Mar-2025	27-Mar-2026
☒	Wideband Radio Communication Tester	R&S	CMW500	119583	28-Mar-2025	27-Mar-2026
☐	Wideband Radio Communication Tester	R&S	CMW500	120932	28-Mar-2025	27-Mar-2026
☒	Test Software	Tonscend	JS1120 RF Auto Test System	Software Version: 3.1.46(234G)		

4. TEST CONFIGURATION

4.1 ENVIRONMENTAL CONDITIONS FOR TESTING

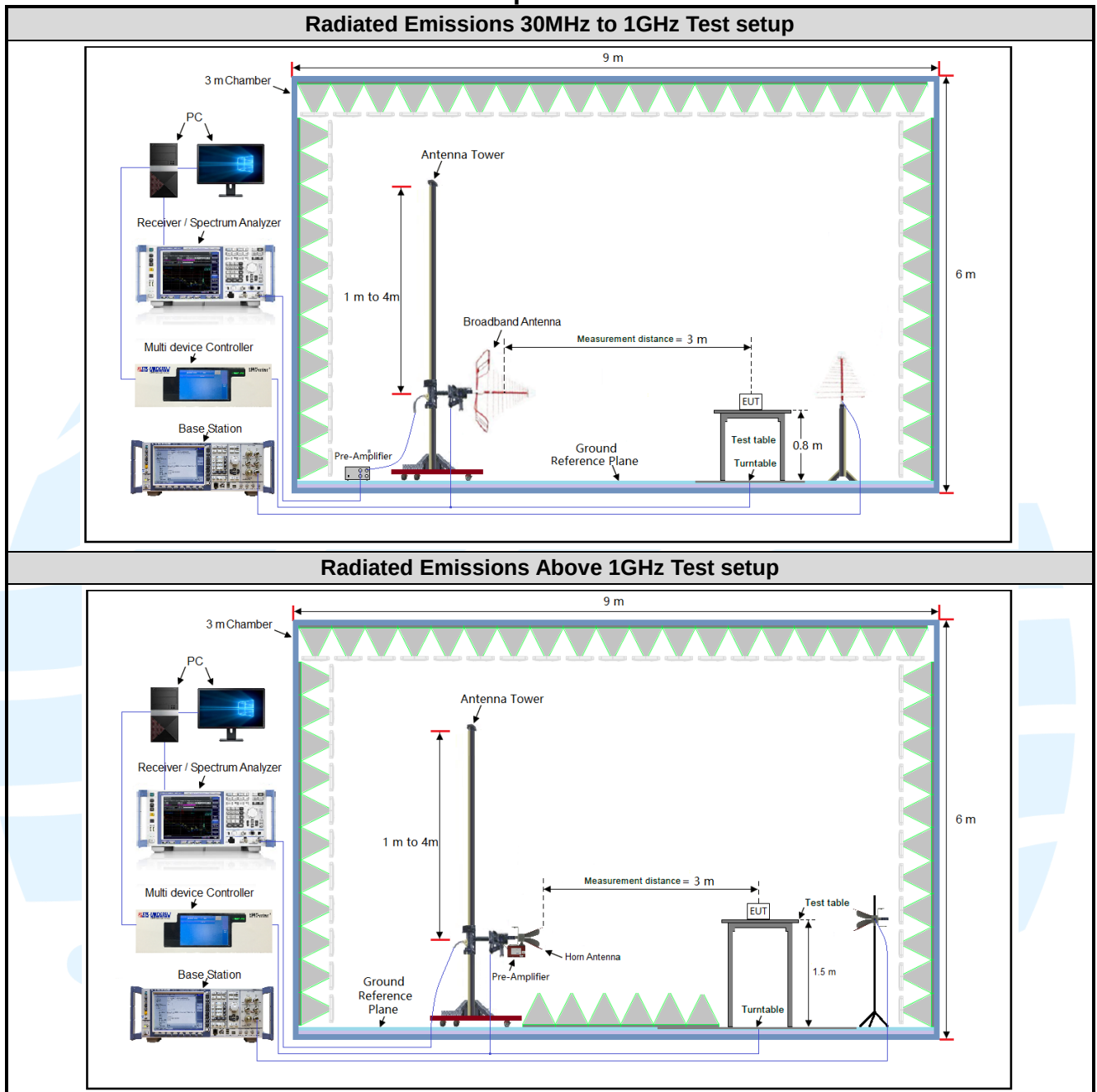
Test Environment	Selected Values During Tests		
Test Condition	Ambient		
	Temperature (°C)	Voltage (Vac)	Relative Humidity (%)
TN/VN	+15 to +35	12	20 to 75
TL/VL	-30	10.8	20 to 75
TH/VL	+55	10.8	20 to 75
TL/VH	-30	13.2	20 to 75
TH/VH	+55	13.2	20 to 75

Remark:

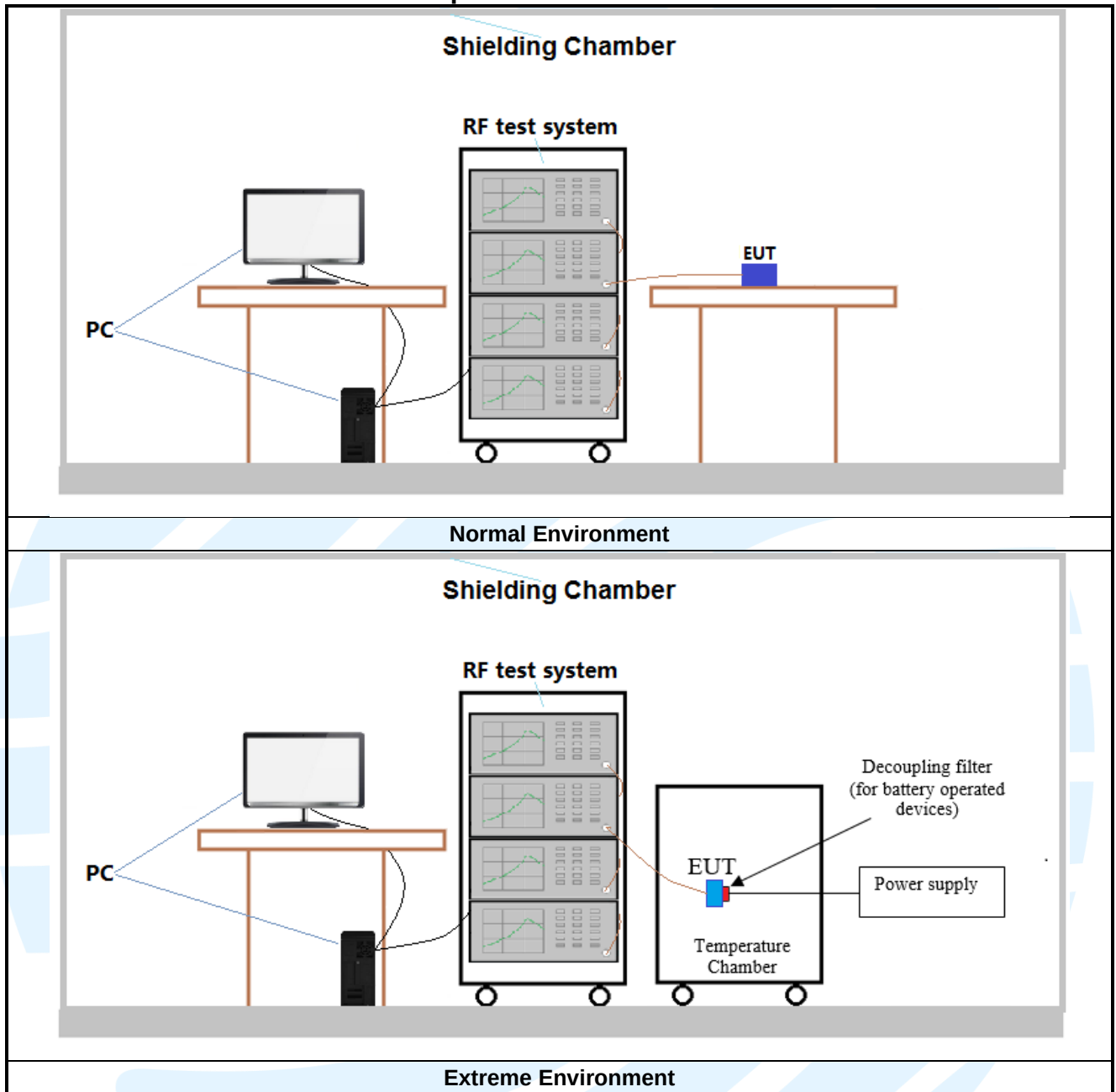
- 1) The EUT just work in such extreme temperature of -30 °C to +55 °C and the extreme voltage of 10.8 V to 13.2 V, so here the EUT is tested in the temperature of -30 °C to +55 °C and the voltage of 10.8 V to 13.2 V.
- 2) VN: Normal Voltage; TN: Normal Temperature;
TL: Low Extreme Test Temperature; TH: High Extreme Test Temperature;
VL: Low Extreme Test Voltage; VH: High Extreme Test Voltage.

4.2 TEST SETUP

4.2.1 For Radiated Emissions test setup



4.2.2 For Conducted RF test setup



4.3 TEST CHANNELS

Band	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink (MHz)
LTE Band 2 TX: 1850-1910MHz	Low Range	1.4	18607	1850.7
		3	18615	1851.5
		5	18625	1852.5
		10	18650	1855
		15	18675	1857.5
		20	18700	1860
	Middle Range	1.4/3/5/10/15/20	18900	1880
	High Range	1.4	19193	1909.3
		3	19185	1908.5
		5	19175	1907.5
		10	19150	1905
		15	19125	1902.5
		20	19100	1900
LTE Band 4 TX: 1710-1755MHz	Low Range	1.4	19957	1710.7
		3	19965	1711.5
		5	19975	1712.5
		10	20000	1715
		15	20025	1717.5
		20	20050	1720
	Middle Range	1.4/3/5/10/ 15/20	20175	1732.5
	High Range	1.4	20393	1754.3
		3	20385	1753.5
		5	20375	1752.5
		10	20350	1750
		15	20325	1747.5
		20	20300	1745
LTE band 5 TX: 824-849MHz	Low Range	1.4	20407	824.7
		3	20415	825.5
		5	20425	826.5
		10	20450	829
	Middle Range	1.4/3/5/10	20525	836.5
	High Range	1.4	20643	848.3
		3	20635	847.5
		5	20625	846.5
		10	20600	844

4.4 SYSTEM TEST CONFIGURATION

For emissions testing, the equipment under test (EUT) setup to transmit continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. During testing, radiated emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario. It was powered by 12Vdc. Only the worst case data were recorded in this test report.

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, X/Y/Z axis, and antenna ports.

All readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance. Analyzer resolution is 100 kHz or greater for frequencies below 1000MHz. The resolution is 1 MHz or greater for frequencies above 1000MHz. The spurious emissions more than 20 dB below the permissible value are not reported.

Radiated emission measurement were performed from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

4.5 PRE-SCAN

Pre-scan all bandwidth and RB, find worse case mode are chosen to the report, the LTE worse case mode applicability and tested channel detail as below:

Item	Band	Bandwidth(MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM (Note 1)	64QAM	1	Half	Full	L	M	H
Conducted output power	2	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒
	5	☒	☒	☒	☒	--	--	☒	☒	☐	☒	☒	☒	☒	☒	☒
99%&26dB Bandwidth	2	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	5	☒	☒	☒	☒	--	--	☒	☒	☐	☐	☐	☒	☒	☒	☒
peak-to-average ratio	2	☐	☐	☐	☐	☐	☒	☒	☒	☐	☒	☐	☒	☐	☒	☐
	4	☐	☐	☐	☐	☐	☒	☒	☒	☐	☒	☐	☒	☐	☒	☐
	5	☐	☐	☐	☒	--	--	☒	☒	☐	☒	☐	☒	☐	☒	☐
Band Edge at antenna terminals	2	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	5	☒	☒	☒	☒	--	--	☒	☒	☐	☒	☐	☒	☒	☐	☒
Spurious emissions at antenna terminals	2	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	5	☒	☒	☒	☒	--	--	☒	☒	☐	☒	☐	☐	☒	☒	☒
Field strength of spurious radiation	2	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	4	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	5	☐	☐	☐	☒	--	--	☒	☐	☐	☒	☐	☐	☒	☒	☒
Frequency stability	2	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	4	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	5	☐	☐	☐	☒	--	--	☒	☐	☐	☐	☐	☒	☐	☒	☐

Remark:

The mark "☒" means is chosen for testing; The mark "☐" means is not chosen for testing;

The mark "-" means is not supported bandwidth

Note 1: The maximum bandwidth of the 16-QAM mode is only supported up to 5MHz. For the bandwidth exceeding 5MHz, only 1RB or 27RB is tested.

5. RADIO TECHNICAL REQUIREMENTS SPECIFICATION

5.1 REFERENCE DOCUMENTS FOR TESTING

No.	Identity	Document Title
1	FCC 47 CFR Part 2	Frequency allocations and radio treaty matters; general rules and regulations
2	FCC 47 CFR Part 22	Public Mobile Services
3	FCC 47 CFR Part 27	Miscellaneous Wireless Communications Services
4	FCC 47 CFR Part 24	Personal Communications Services
5	ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
6	KDB 971168 D01	KDB 971168 D01 Power Meas License Digital Systems v03r01

5.2 CONDUCTED OUTPUT POWER

Test Requirement: FCC 47 CFR Part 2.1046(a)
LTE Band 2: FCC 47 CFR Part 24.232(c)
LTE Band 4: FCC 47 CFR Part 27.50(d)(4)
LTE Band 5: FCC 47 CFR Part 22.913(a)
Test Method: KDB 971168 D01v03r01 & ANSI C63.26-2015

Limit:

FCC 47 CFR Part 22.913(a):

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

FCC 47 CFR Part 24.232(c):

Mobile and portable stations are limited to 2 watts EIRP.

FCC 47 CFR Part 27.50(d)(4):

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

Test Procedure:

The EUT was set up for the maximum power with CMW500, and LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

5.2.1 LTE Band 2

			Conducted Power(dBm)					
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	18607	18900	19193	18607	18900	19193
			1850.7	1880	1909.3	1850.7	1880	1909.3
2	1.4	1@0	13.76	13.37	12.30	13.43	13.02	12.07
		1@3	13.56	13.19	12.39	13.33	12.84	12.16
		1@5	13.17	12.93	11.99	13.01	12.57	11.76
		3@0	13.61	13.50	12.58	13.34	13.14	12.29
		3@1	13.57	13.47	12.56	13.30	13.13	12.30
		3@3	13.11	13.02	12.27	12.86	12.69	12.02
		6@0	12.98	12.55	12.06	12.63	12.02	11.67
Band	Bandwidth (MHz)	RB	18615	18900	19185	18615	18900	19185
			1851.5	1880	1908.5	1851.5	1880	1908.5
2	3	1@0	13.58	13.22	12.75	13.53	12.88	12.48
		1@8	13.09	13.18	12.57	13.05	12.83	12.31
		1@14	12.32	13.00	12.10	12.36	12.68	11.87
		8@0	12.54	12.05	11.85	12.23	11.63	11.43
		8@4	12.57	12.07	11.84	12.25	11.63	11.42
		8@7	12.12	12.21	11.76	11.76	11.76	11.37
		15@0	12.62	12.60	12.23	12.33	12.13	11.76
Band	Bandwidth (MHz)	RB	18625	18900	19175	18625	18900	19175
			1852.5	1880	1907.5	1852.5	1880	1907.5
2	5	1@0	13.94	12.93	12.34	13.75	12.81	12.12
		1@12	13.07	13.32	12.79	12.96	13.17	12.48
		1@24	12.67	13.46	12.56	12.54	13.32	12.32
		12@0	13.07	12.56	12.08	12.63	12.18	11.65
		12@7	12.99	12.56	12.06	12.64	12.18	11.65
		12@13	12.09	12.93	12.31	11.90	12.55	11.97
		25@0	12.64	12.69	12.25	12.32	12.21	11.88
Band	Bandwidth (MHz)	RB	18650	18900	19150	18650	18900	19150
			1855	1880	1905	1855	1880	1905
2	10	1@0	13.79	12.47	10.91	13.68	12.20	10.64
		1@25	12.17	13.43	12.11	12.27	13.06	11.88
		1@49	10.90	13.17	12.52	11.07	12.88	12.31
		25@0	12.52	12.35	10.68	12.20	11.92	10.32
		25@12	12.58	12.33	10.66	12.26	11.92	10.31
		25@25	10.93	13.10	12.28	10.62	12.69	11.86
		50@0 / 27@0	11.64	12.52	11.62	11.57	11.97	11.64
Band	Bandwidth (MHz)	RB	18675	18900	19125	18675	18900	19125
			1857.5	1880	1902.5	1857.5	1880	1902.5
2	15	1@0	13.76	11.13	10.51	13.68	11.19	10.27
		1@37	11.51	13.32	11.48	11.61	13.18	11.20
		1@74	10.07	12.43	12.56	10.18	12.46	12.36
		36@0 / 27@0	11.15	12.30	10.78	11.16	12.29	10.76
		36@20	11.17	12.29	10.77	--	--	--
		36@39	11.16	12.29	10.76	--	--	--
		75@0	11.19	12.31	10.74	--	--	--
Band	Bandwidth (MHz)	RB	18700	18900	19100	18700	18900	19100
			1860	1880	1900	1860	1880	1900
2	20	1@0	13.70	10.80	11.21	13.53	10.77	11.25
		1@49	11.12	13.55	10.33	10.97	13.45	10.28
		1@99	9.98	12.24	12.75	9.83	12.40	12.54
		50@0 / 27@0	11.67	11.59	9.88	10.54	13.41	10.14
		50@24	11.64	11.50	9.80	--	--	--
		50@50	9.88	12.71	11.67	--	--	--
		100@0	10.72	11.91	10.84	--	--	--

5.2.2 LTE Band 4

			Conducted Power(dBm)					
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	19957	20175	20393	19957	20175	20393
			1710.7	1732.5	1754.3	1710.7	1732.5	1754.3
4	1.4	1@0	12.76	13.47	12.29	12.55	13.22	12.31
		1@3	13.07	13.55	12.41	12.84	13.32	12.39
		1@5	12.72	13.18	12.26	12.48	12.96	12.26
		3@0	13.11	13.82	12.46	12.94	13.57	12.31
		3@1	13.06	13.83	12.44	12.91	13.58	12.30
		3@3	12.84	13.48	12.12	12.65	13.19	11.94
		6@0	12.08	12.98	11.60	11.56	12.60	11.22
Band	Bandwidth (MHz)	RB	19965	20175	20385	19965	20175	20385
			1711.5	1732.5	1753.5	1711.5	1732.5	1753.5
4	3	1@0	12.82	14.07	12.29	12.76	13.74	12.01
		1@8	13.23	13.64	12.40	13.24	13.29	12.13
		1@14	13.22	12.97	12.15	13.28	12.66	11.90
		8@0	11.57	12.81	10.95	11.25	12.45	10.61
		8@4	11.58	12.86	10.97	11.26	12.38	10.62
		8@7	11.98	12.46	11.01	11.58	12.06	10.66
		15@0	12.27	13.02	11.46	11.91	12.55	11.06
Band	Bandwidth (MHz)	RB	19975	20175	20375	19975	20175	20375
			1712.5	1732.5	1752.5	1712.5	1732.5	1752.5
4	5	1@0	12.87	14.23	12.09	12.89	14.10	12.10
		1@12	13.72	13.56	12.33	13.62	13.50	12.24
		1@24	14.22	13.38	12.86	14.08	13.33	12.77
		12@0	12.43	13.48	11.26	12.04	13.14	10.93
		12@7	12.43	13.51	11.28	12.03	13.17	10.80
		12@13	13.14	12.92	11.89	12.75	12.51	11.56
		25@0	12.76	13.07	11.51	12.36	12.67	11.19
Band	Bandwidth (MHz)	RB	20000	20175	20350	20000	20175	20350
			1715	1732.5	1750	1715	1732.5	1750
4	10	1@0	13.05	14.43	12.38	12.99	14.08	12.12
		1@25	14.64	13.61	12.05	14.65	13.32	11.91
		1@49	14.77	12.98	12.65	14.71	12.74	12.49
		25@0	12.93	13.57	11.40	12.50	13.15	10.94
		25@12	12.92	13.60	11.32	12.51	13.21	10.97
		25@25	14.16	12.93	11.81	13.72	12.56	11.49
		50@0 / 27@0	13.71	13.07	11.37	12.64	12.94	11.72
Band	Bandwidth (MHz)	RB	20025	20175	20325	20025	20175	20325
			1717.5	1732.5	1747.5	1717.5	1732.5	1747.5
4	15	1@0	13.29	14.76	12.84	13.35	14.66	12.61
		1@37	14.88	13.48	12.28	14.79	13.51	12.09
		1@74	14.75	12.59	13.06	14.67	12.66	12.90
		36@0 / 27@0	14.02	13.11	11.97	14.01	13.13	11.98
		36@20	14.00	13.15	12.00	--	--	--
		36@39	13.98	13.17	12.01	--	--	--
		75@0	14.02	13.14	11.94	--	--	--
Band	Bandwidth (MHz)	RB	20050	20175	20300	20050	20175	20300
			1720	1732.5	1745	1720	1732.5	1745
4	20	1@0	13.48	15.14	13.57	13.34	15.00	13.35
		1@50	15.02	13.72	12.34	14.75	13.80	12.22
		1@99	14.24	12.28	12.83	14.00	12.49	12.68
		50@0 / 27@0	13.82	14.25	12.22	14.34	13.45	12.57
		50@25	13.79	14.18	12.25	--	--	--
		50@50	14.57	12.64	12.08	--	--	--
		100@0	14.19	13.18	11.73	--	--	--

5.2.3 LTE Band 5

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	20407	20525	20643	20407	20525	20643
			824.7	836.5	848.3	824.7	836.5	848.3
5	1.4	1@0	14.70	13.61	12.06	14.33	13.40	11.80
		1@3	14.58	14.00	12.11	14.36	13.64	11.87
		1@5	14.00	14.01	11.81	13.89	13.60	11.56
		3@0	14.69	13.97	12.11	14.36	13.70	12.00
		3@1	14.66	13.96	12.19	14.34	13.68	11.99
		3@3	14.20	13.89	11.98	13.92	13.57	11.73
		6@0	13.79	13.11	11.40	13.39	12.55	11.05
Band	Bandwidth (MHz)	RB	20415	20525	20635	20415	20525	20635
			825.5	836.5	847.5	825.5	836.5	847.5
5	3	1@0	14.43	13.33	12.39	14.31	13.11	12.11
		1@8	13.64	14.04	12.16	13.61	13.71	11.92
		1@14	12.37	14.07	11.75	12.30	13.72	11.53
		8@0	13.06	12.54	11.08	12.74	12.13	10.76
		8@4	13.11	12.54	11.09	12.77	12.13	10.77
		8@7	12.25	13.20	10.96	11.87	12.73	10.63
		15@0	13.10	13.27	11.43	12.79	12.81	11.06
Band	Bandwidth (MHz)	RB	20425	20525	20625	20425	20525	20625
			826.5	836.5	846.5	826.5	836.5	846.5
5	5	1@0	14.62	12.59	13.10	14.44	12.62	12.94
		1@12	13.03	14.08	12.33	12.90	13.95	12.21
		1@24	11.71	14.59	12.08	11.57	14.42	11.96
		12@0	13.42	12.48	11.69	13.07	12.16	11.38
		12@7	13.45	12.48	11.72	13.09	12.14	11.39
		12@13	11.42	13.70	11.36	11.08	13.31	11.04
		25@0	12.51	13.19	11.71	12.19	12.71	11.39
Band	Bandwidth (MHz)	RB	20450	20525	20600	20450	20525	20600
			829	836.5	844	829	836.5	844
5	10	1@0	14.59	11.27	14.49	14.50	11.13	14.22
		1@25	11.59	14.00	12.97	11.66	13.62	12.80
		1@49	11.44	14.16	11.93	11.57	13.81	11.73
		25@0	12.30	11.88	13.51	11.99	11.54	13.15
		25@12	12.33	11.87	13.55	11.98	11.54	13.17
		25@25	10.69	13.74	11.88	10.33	13.33	11.50
		50@0/ 27@0	11.71	13.16	12.62	10.54	12.57	11.64

5.3 ERP OR EIRP

Test Requirement: FCC 47 CFR Part 2.1046(a)
LTE Band 2: FCC 47 CFR Part 24.232(c)
LTE Band 4: FCC 47 CFR Part 27.50(d)(4)
LTE Band 5: FCC 47 CFR Part 22.913(a)
Test Method: KDB 971168 D01v03r01 Section 5.6 & ANSI C63.26-2015

Limit:

FCC 47 CFR Part 22.913(a):

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

FCC 47 CFR Part 24.232(c):

Mobile and portable stations are limited to 2 watts EIRP.

FCC 47 CFR Part 27.50(d)(4):

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

Test Procedure:

According to KDB 412172 D01 Power Approach,

- **ERP or EIRP = $P_T + G_T - L_c$**
- **ERP = EIRP - 2.15**

where

- **P_T** = transmitter output power, expressed in dBW, dBm, or PSD;
- **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.**

Test Setup: Refer to section 4.2.1 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

Test Data: See table below

Note: The maximum ERP/EIRP is calculated from max output power and antenna gain, the antenna gain provided by the customer, and the customer takes all the responsibilities for the accuracy of antenna gain.

5.3.1 LTE Band 2

Channel	Maximum EIRP (dBm)				Maximum EIRP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 1.4MHz									
Lowest	15.66	15.33	--	33.01	0.0368	0.0341	--	2	Pass
Middle	15.40	15.04	--	33.01	0.0347	0.0319	--	2	Pass
Highest	14.48	14.20	--	33.01	0.0281	0.0263	--	2	Pass
Channel Bandwidth: 3MHz									
Lowest	15.48	15.43	--	33.01	0.0353	0.0349	--	2	Pass
Middle	15.12	14.78	--	33.01	0.0325	0.0301	--	2	Pass
Highest	14.65	14.38	--	33.01	0.0292	0.0274	--	2	Pass
Channel Bandwidth: 5MHz									
Lowest	15.84	15.65	--	33.01	0.0384	0.0367	--	2	Pass
Middle	15.36	15.22	--	33.01	0.0344	0.0333	--	2	Pass
Highest	14.69	14.38	--	33.01	0.0294	0.0274	--	2	Pass
Channel Bandwidth: 10MHz									
Lowest	15.69	15.58	--	33.01	0.0371	0.0361	--	2	Pass
Middle	15.33	14.96	--	33.01	0.0341	0.0313	--	2	Pass
Highest	14.42	14.21	--	33.01	0.0277	0.0264	--	2	Pass
Channel Bandwidth: 15MHz									
Lowest	15.66	15.58	--	33.01	0.0368	0.0361	--	2	Pass
Middle	15.22	15.08	--	33.01	0.0333	0.0322	--	2	Pass
Highest	14.46	14.26	--	33.01	0.0279	0.0267	--	2	Pass
Channel Bandwidth: 20MHz									
Lowest	15.60	15.43	--	33.01	0.0363	0.0349	--	2	Pass
Middle	15.45	15.35	--	33.01	0.0351	0.0343	--	2	Pass
Highest	14.65	14.44	--	33.01	0.0292	0.0278	--	2	Pass

5.3.2 LTE Band 4

Channel	Maximum EIRP (dBm)				Maximum EIRP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 1.4MHz									
Lowest	15.01	14.84	--	30.00	0.0317	0.0305	--	1	Pass
Middle	15.73	15.48	--	30.00	0.0374	0.0353	--	1	Pass
Highest	14.36	14.29	--	30.00	0.0273	0.0269	--	1	Pass
Channel Bandwidth: 3MHz									
Lowest	15.13	15.18	--	30.00	0.0326	0.0330	--	1	Pass
Middle	15.97	15.64	--	30.00	0.0395	0.0366	--	1	Pass
Highest	14.30	14.03	--	30.00	0.0269	0.0253	--	1	Pass
Channel Bandwidth: 5MHz									
Lowest	16.12	15.98	--	30.00	0.0409	0.0396	--	1	Pass
Middle	16.13	16.00	--	30.00	0.0410	0.0398	--	1	Pass
Highest	14.76	14.67	--	30.00	0.0299	0.0293	--	1	Pass
Channel Bandwidth: 10MHz									
Lowest	16.67	16.61	--	30.00	0.0465	0.0458	--	1	Pass
Middle	16.33	15.98	--	30.00	0.0430	0.0396	--	1	Pass
Highest	14.55	14.39	--	30.00	0.0285	0.0275	--	1	Pass
Channel Bandwidth: 15MHz									
Lowest	16.78	16.69	--	30.00	0.0476	0.0467	--	1	Pass
Middle	16.66	16.56	--	30.00	0.0463	0.0453	--	1	Pass
Highest	14.96	14.80	--	30.00	0.0313	0.0302	--	1	Pass
Channel Bandwidth: 20MHz									
Lowest	16.92	16.65	--	30.00	0.0492	0.0462	--	1	Pass
Middle	17.04	16.90	--	30.00	0.0506	0.0490	--	1	Pass
Highest	15.47	15.25	--	30.00	0.0352	0.0335	--	1	Pass

5.3.3 LTE Band 5

Channel	Maximum ERP (dBm)				Maximum ERP (W)				Result
	QPSK	16QAM	64QAM	Limit (dBm)	QPSK	16QAM	64QAM	Limit (W)	
Channel Bandwidth: 1.4MHz									
Lowest	14.35	14.01	--	30.00	0.0272	0.0252	--	7	Pass
Middle	13.66	13.35	--	30.00	0.0232	0.0216	--	7	Pass
Highest	11.84	11.65	--	30.00	0.0153	0.0146	--	7	Pass
Channel Bandwidth: 3MHz									
Lowest	14.08	13.96	--	30.00	0.0256	0.0249	--	7	Pass
Middle	13.72	13.37	--	30.00	0.0236	0.0217	--	7	Pass
Highest	12.04	11.76	--	30.00	0.0160	0.0150	--	7	Pass
Channel Bandwidth: 5MHz									
Lowest	14.27	14.09	--	30.00	0.0267	0.0256	--	7	Pass
Middle	14.24	14.07	--	30.00	0.0265	0.0255	--	7	Pass
Highest	12.75	12.59	--	30.00	0.0188	0.0182	--	7	Pass
Channel Bandwidth: 10MHz									
Lowest	14.24	14.15	--	30.00	0.0265	0.0260	--	7	Pass
Middle	13.81	13.46	--	30.00	0.0240	0.0222	--	7	Pass
Highest	14.14	13.87	--	30.00	0.0259	0.0244	--	7	Pass

5.4 PEAK-TO-AVERAGE RATIO

Test Requirement: LTE Band 2: FCC 47 CFR Part 24.232(d)
LTE Band 4: FCC 47 CFR Part 27.50(d)(5)
LTE Band 5: FCC 47 CFR Part 22.913(a)

Test Method: KDB 971168 D01v03r01 Section 5.7

Limit: 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

Test Procedure:

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer.

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

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band2	1.4MHz	QPSK	18607	1RB#0	3.59	13	PASS
Band2	1.4MHz	QPSK	18607	6RB#0	4.24	13	PASS
Band2	1.4MHz	QPSK	18900	1RB#0	2.86	13	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	3.66	13	PASS
Band2	1.4MHz	QPSK	19193	1RB#0	2.84	13	PASS
Band2	1.4MHz	QPSK	19193	6RB#0	3.48	13	PASS
Band2	1.4MHz	16QAM	18607	1RB#0	4.03	13	PASS
Band2	1.4MHz	16QAM	18607	6RB#0	4.78	13	PASS
Band2	1.4MHz	16QAM	18900	1RB#0	3.49	13	PASS
Band2	1.4MHz	16QAM	18900	6RB#0	4.21	13	PASS
Band2	1.4MHz	16QAM	19193	1RB#0	3.32	13	PASS
Band2	1.4MHz	16QAM	19193	6RB#0	3.93	13	PASS
Band2	3MHz	QPSK	18615	1RB#0	3.60	13	PASS
Band2	3MHz	QPSK	18615	15RB#0	4.85	13	PASS
Band2	3MHz	QPSK	18900	1RB#0	3.18	13	PASS
Band2	3MHz	QPSK	18900	15RB#0	4.31	13	PASS
Band2	3MHz	QPSK	19185	1RB#0	2.91	13	PASS
Band2	3MHz	QPSK	19185	15RB#0	4.26	13	PASS
Band2	3MHz	16QAM	18615	1RB#0	3.96	13	PASS
Band2	3MHz	16QAM	18615	15RB#0	5.46	13	PASS
Band2	3MHz	16QAM	18900	1RB#0	3.66	13	PASS
Band2	3MHz	16QAM	18900	15RB#0	4.87	13	PASS
Band2	3MHz	16QAM	19185	1RB#0	3.32	13	PASS
Band2	3MHz	16QAM	19185	15RB#0	4.72	13	PASS
Band2	5MHz	QPSK	18625	1RB#0	3.42	13	PASS
Band2	5MHz	QPSK	18625	25RB#0	5.16	13	PASS
Band2	5MHz	QPSK	18900	1RB#0	3.44	13	PASS
Band2	5MHz	QPSK	18900	25RB#0	4.40	13	PASS
Band2	5MHz	QPSK	19175	1RB#0	3.63	13	PASS
Band2	5MHz	QPSK	19175	25RB#0	4.36	13	PASS
Band2	5MHz	16QAM	18625	1RB#0	3.76	13	PASS
Band2	5MHz	16QAM	18625	25RB#0	5.62	13	PASS
Band2	5MHz	16QAM	18900	1RB#0	3.79	13	PASS
Band2	5MHz	16QAM	18900	25RB#0	4.87	13	PASS
Band2	5MHz	16QAM	19175	1RB#0	3.87	13	PASS
Band2	5MHz	16QAM	19175	25RB#0	4.86	13	PASS
Band2	10MHz	QPSK	18650	1RB#0	3.45	13	PASS
Band2	10MHz	QPSK	18650	50RB#0	5.53	13	PASS
Band2	10MHz	QPSK	18900	1RB#0	3.93	13	PASS
Band2	10MHz	QPSK	18900	50RB#0	4.37	13	PASS
Band2	10MHz	QPSK	19150	1RB#0	5.50	13	PASS
Band2	10MHz	QPSK	19150	50RB#0	4.99	13	PASS
Band2	10MHz	16QAM	18650	1RB#0	3.84	13	PASS
Band2	10MHz	16QAM	18900	1RB#0	4.47	13	PASS
Band2	10MHz	16QAM	19150	1RB#0	6.23	13	PASS
Band2	15MHz	QPSK	18675	1RB#0	3.60	13	PASS
Band2	15MHz	QPSK	18675	75RB#0	6.09	13	PASS
Band2	15MHz	QPSK	18900	1RB#0	4.79	13	PASS
Band2	15MHz	QPSK	18900	75RB#0	4.63	13	PASS
Band2	15MHz	QPSK	19125	1RB#0	5.73	13	PASS
Band2	15MHz	QPSK	19125	75RB#0	5.72	13	PASS
Band2	15MHz	16QAM	18675	1RB#0	3.90	13	PASS
Band2	15MHz	16QAM	18900	1RB#0	5.46	13	PASS
Band2	15MHz	16QAM	19125	1RB#0	6.39	13	PASS
Band2	20MHz	QPSK	18700	1RB#0	3.65	13	PASS
Band2	20MHz	QPSK	18700	100RB#0	5.87	13	PASS
Band2	20MHz	QPSK	18900	1RB#0	5.13	13	PASS
Band2	20MHz	QPSK	18900	100RB#0	4.35	13	PASS
Band2	20MHz	QPSK	19100	1RB#0	4.81	13	PASS
Band2	20MHz	QPSK	19100	100RB#0	5.57	13	PASS
Band2	20MHz	16QAM	18700	1RB#0	4.01	13	PASS

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Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band2	20MHz	16QAM	18900	1RB#0	5.60	13	PASS
Band2	20MHz	16QAM	19100	1RB#0	5.13	13	PASS
Band4	1.4MHz	QPSK	19957	1RB#0	4.99	13	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	5.57	13	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	3.25	13	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	3.96	13	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	5.34	13	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	5.45	13	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	5.57	13	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	6.22	13	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	3.60	13	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	4.41	13	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	5.98	13	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	6.35	13	PASS
Band4	3MHz	QPSK	19965	1RB#0	5.00	13	PASS
Band4	3MHz	QPSK	19965	15RB#0	5.50	13	PASS
Band4	3MHz	QPSK	20175	1RB#0	3.03	13	PASS
Band4	3MHz	QPSK	20175	15RB#0	4.52	13	PASS
Band4	3MHz	QPSK	20385	1RB#0	5.39	13	PASS
Band4	3MHz	QPSK	20385	15RB#0	5.57	13	PASS
Band4	3MHz	16QAM	19965	1RB#0	5.46	13	PASS
Band4	3MHz	16QAM	19965	15RB#0	6.32	13	PASS
Band4	3MHz	16QAM	20175	1RB#0	3.38	13	PASS
Band4	3MHz	16QAM	20175	15RB#0	5.03	13	PASS
Band4	3MHz	16QAM	20385	1RB#0	5.78	13	PASS
Band4	3MHz	16QAM	20385	15RB#0	6.28	13	PASS
Band4	5MHz	QPSK	19975	1RB#0	4.86	13	PASS
Band4	5MHz	QPSK	19975	25RB#0	5.59	13	PASS
Band4	5MHz	QPSK	20175	1RB#0	2.83	13	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.61	13	PASS
Band4	5MHz	QPSK	20375	1RB#0	5.43	13	PASS
Band4	5MHz	QPSK	20375	25RB#0	5.69	13	PASS
Band4	5MHz	16QAM	19975	1RB#0	5.25	13	PASS
Band4	5MHz	16QAM	19975	25RB#0	6.24	13	PASS
Band4	5MHz	16QAM	20175	1RB#0	3.14	13	PASS
Band4	5MHz	16QAM	20175	25RB#0	5.03	13	PASS
Band4	5MHz	16QAM	20375	1RB#0	5.62	13	PASS
Band4	5MHz	16QAM	20375	25RB#0	6.37	13	PASS
Band4	10MHz	QPSK	20000	1RB#0	4.91	13	PASS
Band4	10MHz	QPSK	20000	50RB#0	5.31	13	PASS
Band4	10MHz	QPSK	20175	1RB#0	2.67	13	PASS
Band4	10MHz	QPSK	20175	50RB#0	4.58	13	PASS
Band4	10MHz	QPSK	20350	1RB#0	4.89	13	PASS
Band4	10MHz	QPSK	20350	50RB#0	5.70	13	PASS
Band4	10MHz	16QAM	20000	1RB#0	5.25	13	PASS
Band4	10MHz	16QAM	20175	1RB#0	3.11	13	PASS
Band4	10MHz	16QAM	20350	1RB#0	5.20	13	PASS
Band4	15MHz	QPSK	20025	1RB#0	4.87	13	PASS
Band4	15MHz	QPSK	20025	75RB#0	5.21	13	PASS
Band4	15MHz	QPSK	20175	1RB#0	2.46	13	PASS
Band4	15MHz	QPSK	20175	75RB#0	4.79	13	PASS
Band4	15MHz	QPSK	20325	1RB#0	4.17	13	PASS
Band4	15MHz	QPSK	20325	75RB#0	5.84	13	PASS
Band4	15MHz	16QAM	20025	1RB#0	5.22	13	PASS
Band4	15MHz	16QAM	20175	1RB#0	2.91	13	PASS
Band4	15MHz	16QAM	20325	1RB#0	4.44	13	PASS
Band4	20MHz	QPSK	20050	1RB#0	4.74	13	PASS
Band4	20MHz	QPSK	20050	100RB#0	4.60	13	PASS
Band4	20MHz	QPSK	20175	1RB#0	2.55	13	PASS
Band4	20MHz	QPSK	20175	100RB#0	4.58	13	PASS
Band4	20MHz	QPSK	20300	1RB#0	3.36	13	PASS

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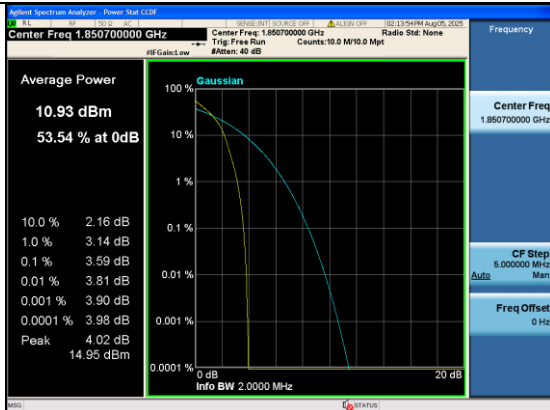
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Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band4	20MHz	QPSK	20300	100RB#0	5.52	13	PASS
Band4	20MHz	16QAM	20050	1RB#0	5.18	13	PASS
Band4	20MHz	16QAM	20175	1RB#0	2.99	13	PASS
Band4	20MHz	16QAM	20300	1RB#0	3.71	13	PASS
Band5	1.4MHz	QPSK	20407	1RB#0	2.82	13	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	3.91	13	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	3.62	13	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	4.14	13	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	4.98	13	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	5.11	13	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	3.19	13	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	4.35	13	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	4.22	13	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	4.73	13	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	5.35	13	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	5.89	13	PASS
Band5	3MHz	QPSK	20415	1RB#0	2.99	13	PASS
Band5	3MHz	QPSK	20415	15RB#0	4.83	13	PASS
Band5	3MHz	QPSK	20525	1RB#0	4.25	13	PASS
Band5	3MHz	QPSK	20525	15RB#0	4.61	13	PASS
Band5	3MHz	QPSK	20635	1RB#0	5.04	13	PASS
Band5	3MHz	QPSK	20635	15RB#0	5.27	13	PASS
Band5	3MHz	16QAM	20415	1RB#0	3.29	13	PASS
Band5	3MHz	16QAM	20415	15RB#0	5.45	13	PASS
Band5	3MHz	16QAM	20525	1RB#0	4.63	13	PASS
Band5	3MHz	16QAM	20525	15RB#0	5.20	13	PASS
Band5	3MHz	16QAM	20635	1RB#0	5.50	13	PASS
Band5	3MHz	16QAM	20635	15RB#0	5.94	13	PASS
Band5	5MHz	QPSK	20425	1RB#0	2.84	13	PASS
Band5	5MHz	QPSK	20425	25RB#0	5.30	13	PASS
Band5	5MHz	QPSK	20525	1RB#0	4.85	13	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.79	13	PASS
Band5	5MHz	QPSK	20625	1RB#0	4.70	13	PASS
Band5	5MHz	QPSK	20625	25RB#0	5.40	13	PASS
Band5	5MHz	16QAM	20425	1RB#0	3.14	13	PASS
Band5	5MHz	16QAM	20425	25RB#0	5.85	13	PASS
Band5	5MHz	16QAM	20525	1RB#0	5.11	13	PASS
Band5	5MHz	16QAM	20525	25RB#0	5.28	13	PASS
Band5	5MHz	16QAM	20625	1RB#0	4.84	13	PASS
Band5	5MHz	16QAM	20625	25RB#0	6.05	13	PASS
Band5	10MHz	QPSK	20450	1RB#0	2.81	13	PASS
Band5	10MHz	QPSK	20450	50RB#0	5.58	13	PASS
Band5	10MHz	QPSK	20525	1RB#0	5.10	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	4.74	13	PASS
Band5	10MHz	QPSK	20600	1RB#0	2.49	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.27	13	PASS
Band5	10MHz	16QAM	20450	1RB#0	3.20	13	PASS
Band5	10MHz	16QAM	20525	1RB#0	5.81	13	PASS
Band5	10MHz	16QAM	20600	1RB#0	2.85	13	PASS



Band2-1.4MHz-QPSK-18607-1RB#0-PASS



Band2-1.4MHz-QPSK-18607-6RB#0-PASS



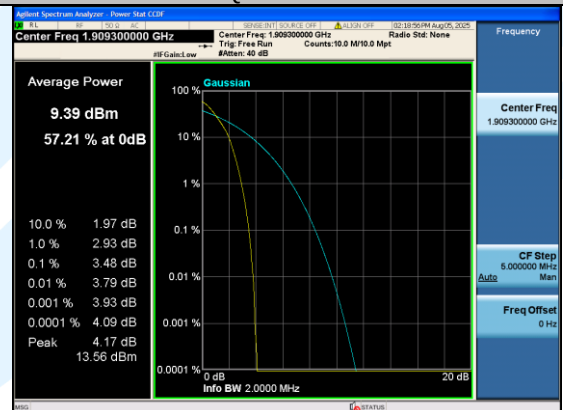
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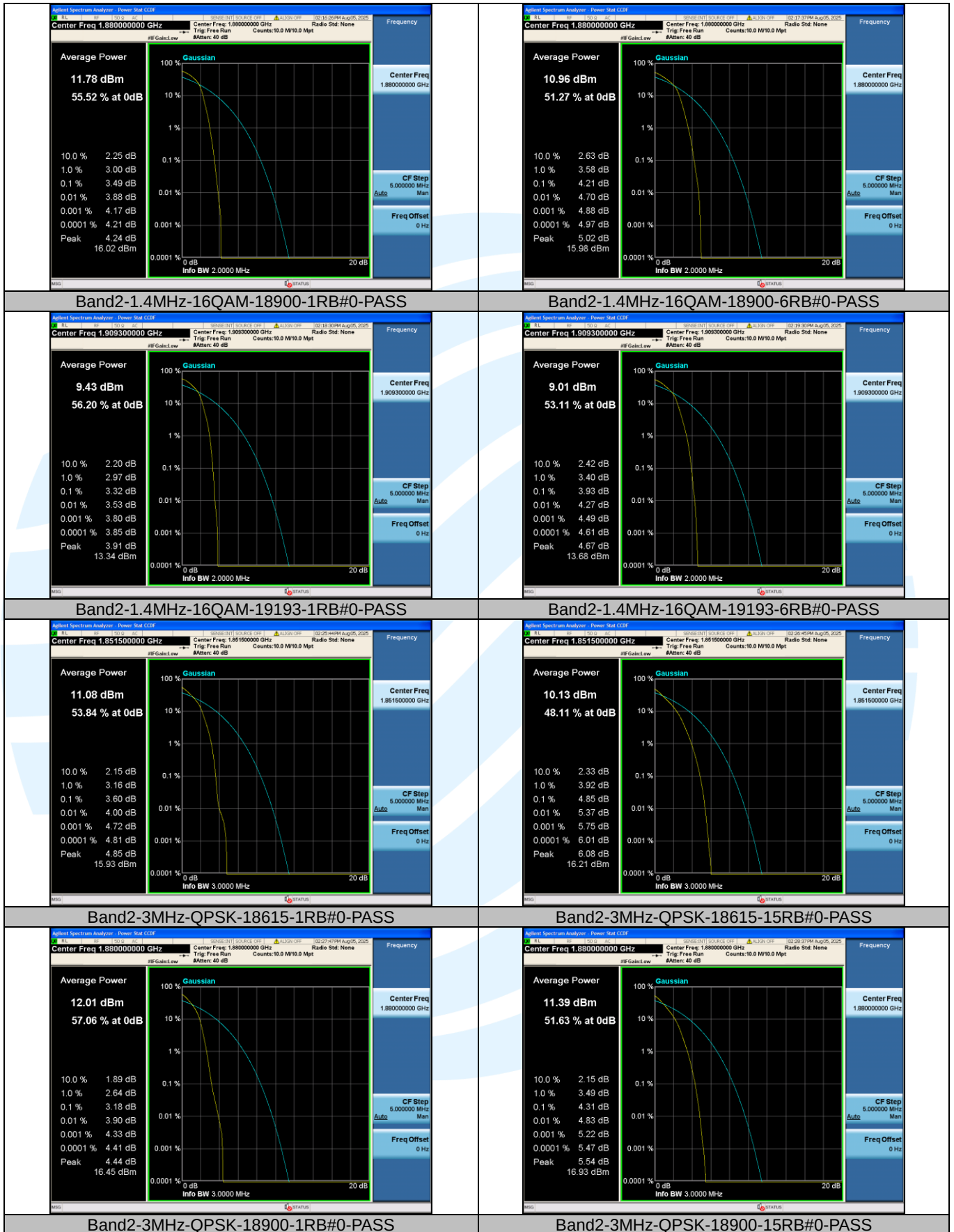
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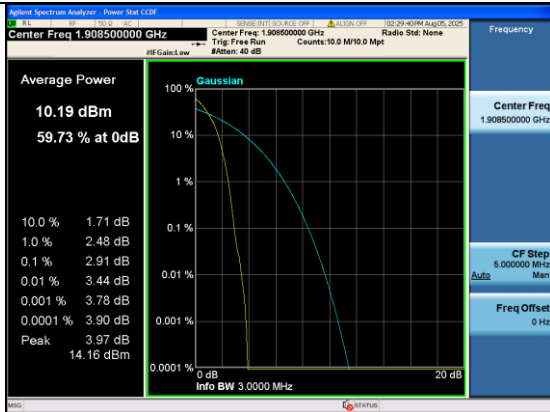


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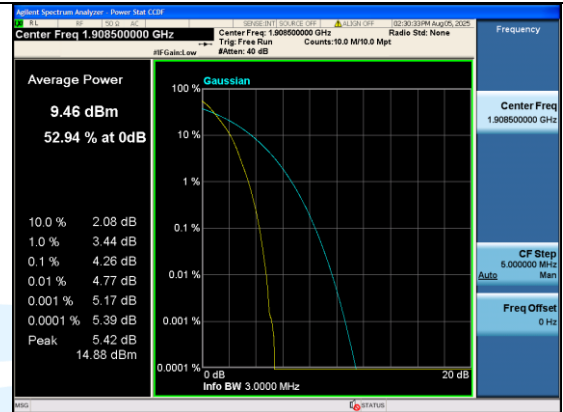


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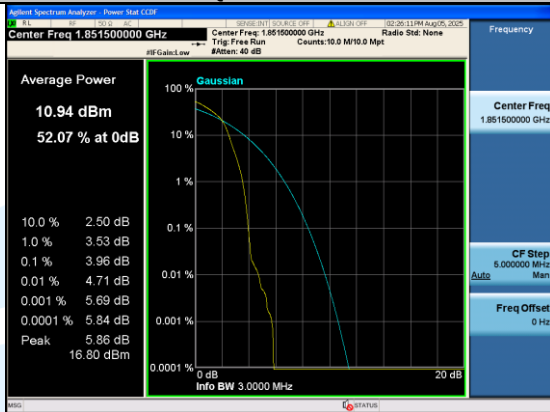




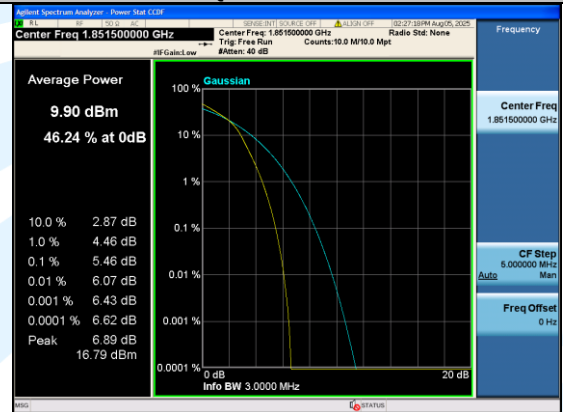
Band2-3MHz-QPSK-19185-1RB#0-PASS



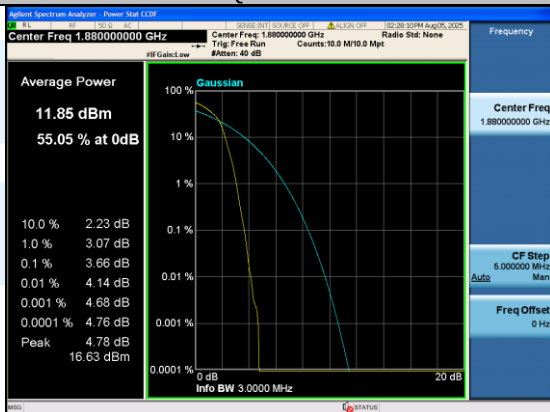
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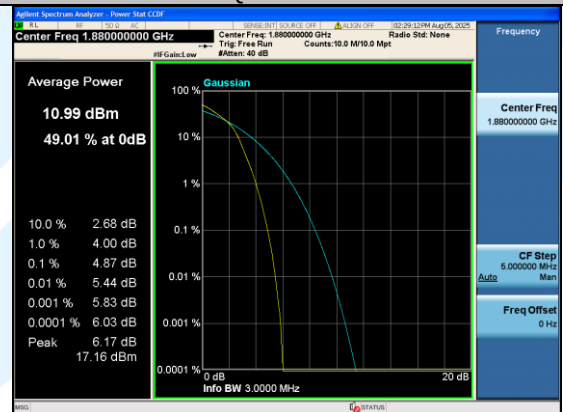
Band2-3MHz-16QAM-18615-1RB#0-PASS



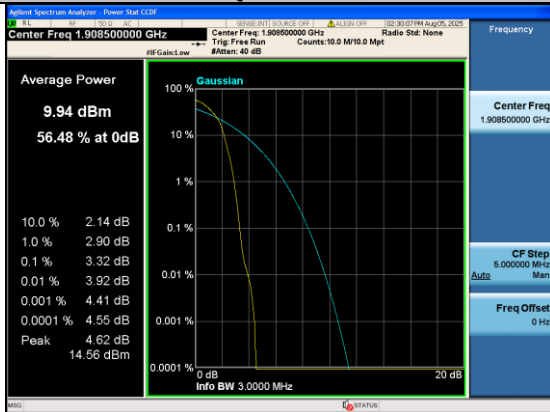
Band2-3MHz-16QAM-18615-15RB#0-PASS



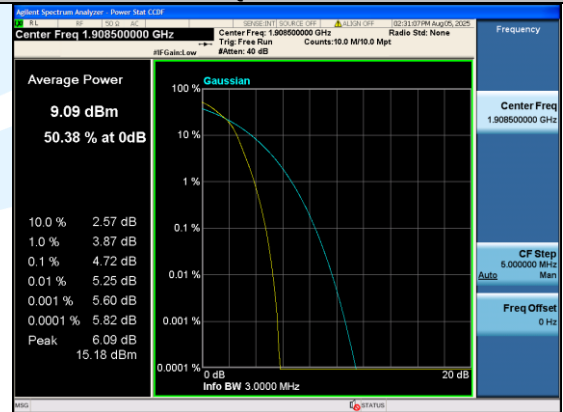
Band2-3MHz-16QAM-18900-1RB#0-PASS



Band2-3MHz-16QAM-18900-15RB#0-PASS



Band2-3MHz-16QAM-19185-1RB#0-PASS



Band2-3MHz-16QAM-19185-15RB#0-PASS



