RF TEST REPORT

Applicant	ZTE Corporation
FCC ID	SRQ-Z6750M
Product	5G NR Multi-Mode Mobile Phone
Model	Z6750M
Report No.	R2008A0534-R6V1
Issue Date	October 29, 2020

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2019)/ FCC CFR47 Part 27C (2019)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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Version	Revision description	Issue Date
Rev.0	/	October 26, 2020
Rev.1	Update description in Chapter 5.1.	October 29, 2020
Note This revised report (Report No.: R2008A0534-R6V1) supersedes and replaces the previously issued report (Report No.: R2008A0534-R6). Please discard or destroy the previously issued report and dispose of it accordingly.		

Summary of Measurement Results

Number	Test Case	Clause in FCC rules	Verdict
1	RF Power Output and Effective Isotropic Radiated Power	2.1046/ 27.50(d)(4)	PASS
2	Occupied Bandwidth	2.1049	PASS
3	Band Edge Compliance	27.53(h)	PASS
4	Peak-to-Average Power Ratio	27.50(d)/KDB971168 D01(5.7)	PASS
5	Frequency Stability	2.1055 / 27.54	PASS
6	Spurious Emissions at Antenna Terminals	2.1051 /27.53(h)	PASS
7	Radiates Spurious Emission	2.1053 /27.53(h)	PASS
Date of Testing: August 14, 2020 ~ October 12, 2020			
Date of Sample Received: August 14, 2020			
Note: PASS: The EUT complies with the essential requirements in the standard. FAIL: The EUT does not comply with the essential requirements in the standard. All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.			

1 Test Laboratory

1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **TA technology (shanghai) co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein .Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2. Test facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

1.3 Testing Location

Company:	TA Technology (Shanghai) Co., Ltd.
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City:	Shanghai
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2 General Description of Equipment under Test

2.1 Applicant and Manufacturer Information

Applicant	ZTE Corporation
Applicant address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China
Manufacturer	ZTE Corporation
Manufacturer address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

2.2 General information

EUT Description			
Model	Z6750M		
IMEI	865633050021551		
Hardware Version	Z6750MHW1.0		
Software Version	Z6750MV1.0.0B01		
Power Supply	Battery/AC adapter		
Antenna Type	Internal Antenna		
Antenna Gain	-0.73 dBi		
Test Mode(s)	EN-DC_2A_n66; EN-DC_5A_n66; EN-DC_13A_n66		
Test Modulation	CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM; DFT-s OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM		
Maximum E.I.R.P.	EN-DC_2A_n66:	23.04 dBm	
	EN-DC_5A_n66:	23.03 dBm	
	EN-DC_13A_n66:	22.94 dBm	
Rated Power Supply Voltage:	4.0V		
Extreme Voltage	Minimum: 3.5V Maximum: 4.4V		
Extreme Temperature	Lowest: -30°C Highest: +50°C		
Operating Voltage	Minimum: 3.5V Maximum: 4.4V		
Operating Temperature	Lowest: -10°C Highest: +55°C		
Frequency Range(s)	Mode	Tx (MHz)	Rx (MHz)
	NR Band n66	1710 ~ 1780	2110 ~ 2200
EUT Accessory			
Battery	Manufacturer: COSMX Model: Li3939T44P8h756547		
Adapter 1	Manufacturer: SHENZHEN RUIJING INDUSTRIAL CO LTD Model: STC-A5930A1-Z		
Adapter 2	Manufacturer: Jiangsu Chenyang Electron Co., Ltd.		

	Model: STC-A5930A1-Z
USB Cable 1	Manufacturer: kingpower-tech Model: USB-TC30-W-100-M
USB Cable 2	Manufacturer: Luxshare Precision industry Co., Ltd. Model: USB-TC30-W-100-M
Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant. 2. There is more than USB cable, each one should be applied throughout the compliance test respectively, and however, only the worst case (USB cable 1) will be recorded in this report.	

3 Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test standards:

FCC CFR47 Part 27C (2019)

ANSI C63.26 (2015)

Reference standard:

FCC CFR47 Part 2 (2019)

KDB 971168 D01 Power Meas License Digital Systems v03r01

4 Test Configuration

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes. EUT stand-up position (Z axis), lie-down position (X, Y axis). Receiver antenna polarization (horizontal and vertical), the worst emission was found in position (X axis, vertical polarization) and the worst case was recorded.

All mode and data rates and positions and RB size and modulations were investigated.
Subsequently, only the worst case emissions are reported.
The following testing in NR is set based on the maximum RF Output Power.
The following testing in different Bandwidth is set to detailin the following table:
Test modes are chosen to be reported as the worst case configuration below for NR n66:

Test items	Modes	Bandwidth (MHz)				Modulation				RB			Test Channel		
		5	10	15	20	QPSK	16 QAM	64 QAM	256 QAM	1	50%	100%	L	M	H
RF Power Output and Effective Isotropic Radiated Power	EN-DC_2A_n66	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	EN-DC_5A_n66	O	O	O	O	O	O	O	O	O	O	O	O	O	O
	EN-DC_13A_n66	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Occupied Bandwidth	EN-DC_2A_n66	-	-	-	O	O	O	O	O	-	-	O	O	O	O
	EN-DC_5A_n66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EN-DC_13A_n66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Band Edge Compliance	EN-DC_2A_n66	-	-	-	O	O	O	O	O	O	-	O	O	-	O
	EN-DC_5A_n66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EN-DC_13A_n66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Peak-to-Average Power Ratio	EN-DC_2A_n66	-	-	-	O	O	O	O	O	-	-	O	O	O	O
	EN-DC_5A_n66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EN-DC_13A_n66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Frequency Stability	EN-DC_2A_n66	O	O	O	O	O	O	O	O	-	-	O	-	O	-
	EN-DC_5A_n66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EN-DC_13A_n66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spurious Emissions at Antenna Terminals	EN-DC_2A_n66	O	O	O	O	O	-	-	-	-	-	O	O	O	O
	EN-DC_5A_n66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EN-DC_13A_n66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Radiates Spurious Emission	EN-DC_2A_n66	O	O	-	-	O	-	-	-	O	-	-	-	O	-
	EN-DC_5A_n66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	EN-DC_13A_n66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note	1. The mark “O” means that this configuration is chosen for testing. 2. The mark “-” means that this configuration is not testing. 3. Sub 6GHz operates using 15kHz Subcarrier Spacing with both CP-OFDM and DFT-s OFDM waveforms. The band supports QPSK, 16QAM, 64QAM, and 256QAM modulation. The test data provided in this report represents the worst case configurations.														

5 Test Case Results

5.1 RF Power Output and Effective Isotropic Radiated Power

Ambient condition

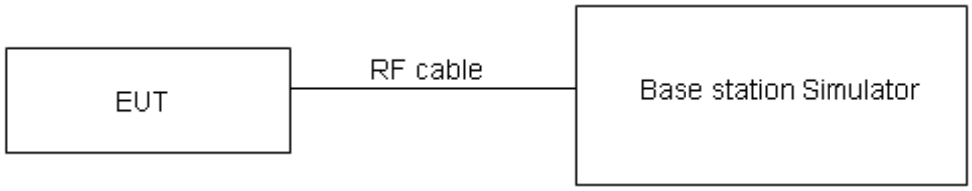
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

During the process of the testing, The EUT was connected to the Base Station Simulator with a known loss. The EUT is controlled by the Base Station Simulator test set to ensure max power transmission with proper modulation.

ERP can then be calculated as follows:
EIRP (dBm) = Output Power (dBm) - Losses (dB) + Antenna Gain (dBi)
where:dBd refers to gain relative to an ideal dipole.
EIRP (dBm) = ERP (dBm) + 2.15 (dB.)

Test Setup



Limits

No specific RF power output requirements in part 2.1046.

Rule Part 27.50(d) (4) specifies that “Fixed, mobile and portable (hand-held) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP”

Part 27.50(d)(4)Limit	≤ 1 W (30 dBm)

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U=0.4 dB for RF power output, k = 2, U= 1.19 dB for ERP/EIRP.

Test Results

Test Freq Description	EN-DC_2A_n66							Results(dBm)	
	SCS (kHz)	NR BW (MHz)	Modulation	Modulation(LTE)	RB allocation	NR Test Freq (MHz)	NR Test CH	Conducted	EIRP
High	15	5	QPSK	Band2-10MHZ-1880-QPSK-1#49	Edge_1RB_Right	1777.5	355500	23.36	22.63
Low	15	5	QPSK	Band2-10MHZ-1880-QPSK-50#0	Inner_Full	1712.5	342500	23.52	22.79
Middle	15	5	QPSK	Band2-10MHZ-1880-QPSK-50#0	Inner_Full	1745	349000	23.55	22.82
High	15	5	QPSK	Band2-10MHZ-1880-QPSK-50#0	Inner_Full	1777.5	355500	23.49	22.76
Low	15	5	QPSK	Band2-10MHZ-1880-QPSK-1#0	Edge_1RB_Left	1712.5	342500	23.18	22.45
High	15	10	QPSK	Band2-10MHZ-1880-QPSK-1#49	Edge_1RB_Right	1775	355000	23.50	22.77
Low	15	10	QPSK	Band2-10MHZ-1880-QPSK-50#0	Inner_Full	1715	343000	23.63	22.90
Middle	15	10	QPSK	Band2-10MHZ-1880-QPSK-50#0	Inner_Full	1745	349000	23.65	22.92
High	15	10	QPSK	Band2-10MHZ-1880-QPSK-50#0	Inner_Full	1775	355000	23.54	22.81
Low	15	10	QPSK	Band2-10MHZ-1880-QPSK-1#0	Edge_1RB_Left	1715	343000	23.48	22.75
High	15	15	QPSK	Band2-10MHZ-1880-QPSK-1#49	Edge_1RB_Right	1772.5	354500	23.40	22.67
Low	15	15	QPSK	Band2-10MHZ-1880-QPSK-50#0	Inner_Full	1717.5	343500	23.66	22.93
Middle	15	15	QPSK	Band2-10MHZ-1880-QPSK-50#0	Inner_Full	1745	349000	23.49	22.76
High	15	15	QPSK	Band2-10MHZ-1880-QPSK-50#0	Inner_Full	1772.5	354500	23.49	22.76
Low	15	15	QPSK	Band2-10MHZ-1880-QPSK-1#0	Edge_1RB_Left	1717.5	343500	23.45	22.72
High	15	20	QPSK	Band2-10MHZ-1880-QPSK-1#49	Edge_1RB_Right	1770	354000	23.36	22.63
Low	15	20	QPSK	Band2-10MHZ-1880-QPSK-50#0	Inner_Full	1720	344000	23.77	23.04
Middle	15	20	QPSK	Band2-10MHZ-1880-QPSK-50#0	Inner_Full	1745	349000	23.49	22.76
High	15	20	QPSK	Band2-10MHZ-1880-QPSK-50#0	Inner_Full	1770	354000	23.59	22.86
Low	15	20	QPSK	Band2-10MHZ-1880-	Edge_1RB_Left	1720	344000	23.49	22.76

				QPSK-1#0					
High	15	5	16QAM	Band2-10MHZ-1880-QPSK -1#49	Edge_1RB_Right	1777.5	355500	22.77	22.04
Low	15	5	16QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1712.5	342500	22.20	21.47
Middle	15	5	16QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1745	349000	22.49	21.76
High	15	5	16QAM	Band2-10MHZ-1880-16QAM-50#0	Inner_Full	1777.5	355500	22.46	21.73
Low	15	5	16QAM	Band2-10MHZ-1880-QPSK -1#0	Edge_1RB_Left	1712.5	342500	22.53	21.80
High	15	10	16QAM	Band2-10MHZ-1880-QPSK -1#49	Edge_1RB_Right	1775	355000	23.62	22.89
Low	15	10	16QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1715	343000	22.65	21.92
Middle	15	10	16QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1745	349000	22.53	21.80
High	15	10	16QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1775	355000	22.54	21.81
Low	15	10	16QAM	Band2-10MHZ-1880-QPSK -1#0	Edge_1RB_Left	1715	343000	22.67	21.94
High	15	15	16QAM	Band2-10MHZ-1880-QPSK -1#49	Edge_1RB_Right	1772.5	354500	22.79	22.06
Low	15	15	16QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1717.5	343500	22.72	21.99
Middle	15	15	16QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1745	349000	22.56	21.83
High	15	15	16QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1772.5	354500	22.53	21.80
Low	15	15	16QAM	Band2-10MHZ-1880-QPSK -1#0	Edge_1RB_Left	1717.5	343500	22.32	21.59
High	15	20	16QAM	Band2-10MHZ-1880-QPSK -1#49	Edge_1RB_Right	1770	354000	23.31	22.58
Low	15	20	16QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1720	344000	22.74	22.01
Middle	15	20	16QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1745	349000	22.57	21.84
High	15	20	16QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1770	354000	22.52	21.79
Low	15	20	16QAM	Band2-10MHZ-1880-16QAM-1#0	Edge_1RB_Left	1720	344000	22.78	22.05
High	15	5	64QAM	Band2-10MHZ-1880-QPSK -1#49	Edge_1RB_Right	1777.5	355500	21.79	21.06
Low	15	5	64QAM	Band2-10MHZ-1880-	Inner_Full	1712.5	342500	22.02	21.29

				QPSK -50#0					
Middle	15	5	64QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1745	349000	22.06	21.33
High	15	5	64QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1777.5	355500	22.03	21.30
Low	15	5	64QAM	Band2-10MHZ-1880-QPSK -1#0	Edge_1RB_Left	1712.5	342500	21.35	20.62
High	15	10	64QAM	Band2-10MHZ-1880-QPSK -1#49	Edge_1RB_Right	1775	355000	21.73	21.00
Low	15	10	64QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1715	343000	22.02	21.29
Middle	15	10	64QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1745	349000	22.03	21.30
High	15	10	64QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1775	355000	22.01	21.28
Low	15	10	64QAM	Band2-10MHZ-1880-QPSK -1#0	Edge_1RB_Left	1715	343000	21.76	21.03
High	15	15	64QAM	Band2-10MHZ-1880-QPSK -1#49	Edge_1RB_Right	1772.5	354500	21.81	21.08
Low	15	15	64QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1717.5	343500	22.16	21.43
Middle	15	15	64QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1745	349000	22.05	21.32
High	15	15	64QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1772.5	354500	22.06	21.33
Low	15	15	64QAM	Band2-10MHZ-1880-QPSK -1#0	Edge_1RB_Left	1717.5	343500	21.99	21.26
High	15	20	64QAM	Band2-10MHZ-1880-QPSK -1#49	Edge_1RB_Right	1770	354000	21.77	21.04
Low	15	20	64QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1720	344000	22.18	21.45
Middle	15	20	64QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1745	349000	21.97	21.24
High	15	20	64QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1770	354000	22.01	21.28
Low	15	20	64QAM	Band2-10MHZ-1880-QPSK -1#0	Edge_1RB_Left	1720	344000	21.92	21.19
High	15	5	256QAM	Band2-10MHZ-1880-QPSK -1#49	Edge_1RB_Right	1777.5	355500	19.84	19.11
Low	15	5	256QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1712.5	342500	19.91	19.18
Middle	15	5	256QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1745	349000	19.91	19.18
High	15	5	256QAM	Band2-10MHZ-1880-	Inner_Full	1777.5	355500	19.87	19.14

				QPSK -50#0					
Low	15	5	256QAM	Band2-10MHZ-1880-QPSK -1#0	Edge_1RB_Left	1712.5	342500	19.41	18.68
High	15	10	256QAM	Band2-10MHZ-1880-QPSK -1#49	Edge_1RB_Right	1775	355000	19.63	18.90
Low	15	10	256QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1715	343000	19.99	19.26
Middle	15	10	256QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1745	349000	20.05	19.32
High	15	10	256QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1775	355000	20.01	19.28
Low	15	10	256QAM	Band2-10MHZ-1880-QPSK -1#0	Edge_1RB_Left	1715	343000	19.73	19.00
High	15	15	256QAM	Band2-10MHZ-1880-QPSK -1#49	Edge_1RB_Right	1772.5	354500	20.14	19.41
Low	15	15	256QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1717.5	343500	20.18	19.45
Middle	15	15	256QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1745	349000	20.04	19.31
High	15	15	256QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1772.5	354500	20.03	19.30
Low	15	15	256QAM	Band2-10MHZ-1880-QPSK -1#0	Edge_1RB_Left	1717.5	343500	19.97	19.24
High	15	20	256QAM	Band2-10MHZ-1880-QPSK -1#49	Edge_1RB_Right	1770	354000	20.03	19.30
Low	15	20	256QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1720	344000	20.15	19.42
Middle	15	20	256QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1745	349000	20.06	19.33
High	15	20	256QAM	Band2-10MHZ-1880-QPSK -50#0	Inner_Full	1770	354000	20.01	19.28
Low	15	20	256QAM	Band2-10MHZ-1880-QPSK -1#0	Edge_1RB_Left	1720	344000	19.88	19.15

Test Freq Description	EN-DC_5A_n66							Results(dBm)	
	SCS (kHz)	NR BW (MHz)	Modulation	Modulation(LTE)	RB allocation	NR Test Freq (MHz)	NR Test CH	Conducted	EIRP
High	15	5	QPSK	Band5-10MHZ-836.5-QPSK-1#49	Edge_1RB_Right	1777.5	355500	23.35	22.62
Low	15	5	QPSK	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1712.5	342500	23.63	22.90
Middle	15	5	QPSK	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1745	349000	23.53	22.80
High	15	5	QPSK	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1777.5	355500	23.50	22.77
Low	15	5	QPSK	Band5-10MHZ-836.5-QPSK-1#0	Edge_1RB_Left	1712.5	342500	23.51	22.78
High	15	10	QPSK	Band5-10MHZ-836.5-QPSK-1#49	Edge_1RB_Right	1775	355000	23.58	22.85
Low	15	10	QPSK	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1715	343000	23.68	22.95
Middle	15	10	QPSK	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1745	349000	23.65	22.92
High	15	10	QPSK	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1775	355000	23.64	22.91
Low	15	10	QPSK	Band5-10MHZ-836.5-QPSK-1#0	Edge_1RB_Left	1715	343000	23.55	22.82
High	15	15	QPSK	Band5-10MHZ-836.5-QPSK-1#49	Edge_1RB_Right	1772.5	354500	23.49	22.76
Low	15	15	QPSK	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1717.5	343500	23.76	23.03
Middle	15	15	QPSK	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1745	349000	23.57	22.84
High	15	15	QPSK	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1772.5	354500	23.55	22.82
Low	15	15	QPSK	Band5-10MHZ-836.5-QPSK-1#0	Edge_1RB_Left	1717.5	343500	23.39	22.66
High	15	20	QPSK	Band5-10MHZ-836.5-QPSK-1#49	Edge_1RB_Right	1770	354000	23.39	22.66
Low	15	20	QPSK	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1720	344000	23.67	22.94
Middle	15	20	QPSK	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1745	349000	23.58	22.85
High	15	20	QPSK	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1770	354000	23.57	22.84
Low	15	20	QPSK	Band5-10MHZ-836.5-QPSK-1#0	Edge_1RB_Left	1720	344000	23.46	22.73
High	15	5	16QAM	Band5-10MHZ-836.	Edge_1RB_Right	1777.5	355500	22.15	21.42

				5- QPSK -1#49					
Low	15	5	16QAM	Band5-10MHZ-836. 5- QPSK -50#0	Inner_Full	1712.5	342500	22.57	21.84
Middle	15	5	16QAM	Band5-10MHZ-836. 5- QPSK -50#0	Inner_Full	1745	349000	22.52	21.79
High	15	5	16QAM	Band5-10MHZ-836. 5- QPSK -50#0	Inner_Full	1777.5	355500	22.52	21.79
Low	15	5	16QAM	Band5-10MHZ-836. 5- QPSK -1#0	Edge_1RB_Left	1712.5	342500	22.66	21.93
High	15	10	16QAM	Band5-10MHZ-836. 5- QPSK -1#49	Edge_1RB_Right	1775	355000	22.95	22.22
Low	15	10	16QAM	Band5-10MHZ-836. 5- QPSK -50#0	Inner_Full	1715	343000	22.59	21.86
Middle	15	10	16QAM	Band5-10MHZ-836. 5- QPSK -50#0	Inner_Full	1745	349000	22.64	21.91
High	15	10	16QAM	Band5-10MHZ-836. 5- QPSK -50#0	Inner_Full	1775	355000	22.51	21.78
Low	15	10	16QAM	Band5-10MHZ-836. 5- QPSK -1#0	Edge_1RB_Left	1715	343000	22.27	21.54
High	15	15	16QAM	Band5-10MHZ-836. 5 -QPSK -1#49	Edge_1RB_Right	1772.5	354500	22.89	22.16
Low	15	15	16QAM	Band5-10MHZ-836. 5- QPSK -50#0	Inner_Full	1717.5	343500	22.66	21.93
Middle	15	15	16QAM	Band5-10MHZ-836. 5- QPSK -50#0	Inner_Full	1745	349000	22.55	21.82
High	15	15	16QAM	Band5-10MHZ-836. 5- QPSK -50#0	Inner_Full	1772.5	354500	22.58	21.85
Low	15	15	16QAM	Band5-10MHZ-836. 5- QPSK -1#0	Edge_1RB_Left	1717.5	343500	22.75	22.02
High	15	20	16QAM	Band5-10MHZ-836. 5- QPSK -1#49	Edge_1RB_Right	1770	354000	23.33	22.60
Low	15	20	16QAM	Band5-10MHZ-836. 5-QPSK-50#0	Inner_Full	1720	344000	22.71	21.98
Middle	15	20	16QAM	Band5-10MHZ-836. 5-QPSK-50#0	Inner_Full	1745	349000	22.57	21.84
High	15	20	16QAM	Band5-10MHZ-836. 5-QPSK-50#0	Inner_Full	1770	354000	22.51	21.78
Low	15	20	16QAM	Band5-10MHZ-836. 5-QPSK-1#0	Edge_1RB_Left	1720	344000	22.83	22.10
High	15	5	64QAM	Band5-10MHZ-836. 5-QPSK-1#49	Edge_1RB_Right	1777.5	355500	21.72	20.99
Low	15	5	64QAM	Band5-10MHZ-836. 5-QPSK-50#0	Inner_Full	1712.5	342500	22.13	21.40
Middle	15	5	64QAM	Band5-10MHZ-836.	Inner_Full	1745	349000	22.01	21.28

				5-QPSK-50#0					
High	15	5	64QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1777.5	355500	22.06	21.33
Low	15	5	64QAM	Band5-10MHZ-836.5-QPSK-1#0	Edge_1RB_Left	1712.5	342500	21.80	21.07
High	15	10	64QAM	Band5-10MHZ-836.5-QPSK-1#49	Edge_1RB_Right	1775	355000	21.97	21.24
Low	15	10	64QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1715	343000	22.10	21.37
Middle	15	10	64QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1745	349000	22.07	21.34
High	15	10	64QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1775	355000	22.09	21.36
Low	15	10	64QAM	Band5-10MHZ-836.5-QPSK-1#0	Edge_1RB_Left	1715	343000	21.79	21.06
High	15	15	64QAM	Band5-10MHZ-836.5-QPSK-1#49	Edge_1RB_Right	1772.5	354500	21.81	21.08
Low	15	15	64QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1717.5	343500	22.20	21.47
Middle	15	15	64QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1745	349000	22.09	21.36
High	15	15	64QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1772.5	354500	22.04	21.31
Low	15	15	64QAM	Band5-10MHZ-836.5-QPSK-1#0	Edge_1RB_Left	1717.5	343500	21.85	21.12
High	15	20	64QAM	Band5-10MHZ-836.5-64QAM-1#49	Edge_1RB_Right	1770	354000	21.86	21.13
Low	15	20	64QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1720	344000	22.21	21.48
Middle	15	20	64QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1745	349000	22.03	21.30
High	15	20	64QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1770	354000	22.02	21.29
Low	15	20	64QAM	Band5-10MHZ-836.5-QPSK-1#0	Edge_1RB_Left	1720	344000	21.94	21.21
High	15	5	256QAM	Band5-10MHZ-836.5-QPSK-1#49	Edge_1RB_Right	1777.5	355500	19.83	19.10
Low	15	5	256QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1712.5	342500	19.99	19.26
Middle	15	5	256QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1745	349000	20.03	19.30
High	15	5	256QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1777.5	355500	19.96	19.23
Low	15	5	256QAM	Band5-10MHZ-836.	Edge_1RB_Left	1712.5	342500	19.70	18.97

				5-QPSK-1#0					
High	15	10	256QAM	Band5-10MHZ-836.5-QPSK-1#49	Edge_1RB_Right	1775	355000	20.03	19.30
Low	15	10	256QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1715	343000	20.09	19.36
Middle	15	10	256QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1745	349000	20.13	19.40
High	15	10	256QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1775	355000	20.15	19.42
Low	15	10	256QAM	Band5-10MHZ-836.5-QPSK-1#0	Edge_1RB_Left	1715	343000	19.86	19.13
High	15	15	256QAM	Band5-10MHZ-836.5-QPSK-1#49	Edge_1RB_Right	1772.5	354500	19.94	19.21
Low	15	15	256QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1717.5	343500	20.26	19.53
Middle	15	15	256QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1745	349000	20.08	19.35
High	15	15	256QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1772.5	354500	20.12	19.39
Low	15	15	256QAM	Band5-10MHZ-836.5-QPSK-1#0	Edge_1RB_Left	1717.5	343500	19.85	19.12
High	15	20	256QAM	Band5-10MHZ-836.5-QPSK-1#49	Edge_1RB_Right	1770	354000	19.95	19.22
Low	15	20	256QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1720	344000	20.13	19.40
Middle	15	20	256QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1745	349000	20.10	19.37
High	15	20	256QAM	Band5-10MHZ-836.5-QPSK-50#0	Inner_Full	1770	354000	19.98	19.25
Low	15	20	256QAM	Band5-10MHZ-836.5-QPSK-1#0	Edge_1RB_Left	1720	344000	19.94	19.21

Test Freq Description	EN-DC_13A_n66							Results(dBm)	
	SCS (kHz)	NR BW (MHz)	Modulation	Modulation(LTE)	RB allocation	NR Test Freq (MHz)	NR Test CH	Conducted	EIRP
High	15	5	QPSK	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1777.5	355500	23.35	22.62
Low	15	5	QPSK	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1712.5	342500	23.59	22.86
Middle	15	5	QPSK	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	23.55	22.82
High	15	5	QPSK	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1777.5	355500	23.52	22.79
Low	15	5	QPSK	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1712.5	342500	23.31	22.58
High	15	10	QPSK	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1775	355000	23.50	22.77
Low	15	10	QPSK	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1715	343000	23.57	22.84
Middle	15	10	QPSK	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	23.64	22.91
High	15	10	QPSK	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1775	355000	23.53	22.80
Low	15	10	QPSK	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1715	343000	23.40	22.67
High	15	15	QPSK	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1772.5	354500	23.49	22.76
Low	15	15	QPSK	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1717.5	343500	23.66	22.93
Middle	15	15	QPSK	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	23.52	22.79
High	15	15	QPSK	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1772.5	354500	23.51	22.78
Low	15	15	QPSK	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1717.5	343500	23.40	22.67
High	15	20	QPSK	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1770	354000	23.41	22.68
Low	15	20	QPSK	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1720	344000	23.67	22.94
Middle	15	20	QPSK	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	23.49	22.76
High	15	20	QPSK	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1770	354000	23.37	22.64
Low	15	20	QPSK	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1720	344000	23.49	22.76
High	15	5	16QAM	Band13-10MHZ-78	Edge_1RB_Right	1777.5	355500	22.65	21.92

				2-QPSK-1#49					
Low	15	5	16QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1712.5	342500	22.48	21.75
Middle	15	5	16QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	22.55	21.82
High	15	5	16QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1777.5	355500	22.50	21.77
Low	15	5	16QAM	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1712.5	342500	22.61	21.88
High	15	10	16QAM	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1775	355000	22.87	22.14
Low	15	10	16QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1715	343000	22.60	21.87
Middle	15	10	16QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	22.62	21.89
High	15	10	16QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1775	355000	22.52	21.79
Low	15	10	16QAM	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1715	343000	22.39	21.66
High	15	15	16QAM	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1772.5	354500	22.81	22.08
Low	15	15	16QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1717.5	343500	22.68	21.95
Middle	15	15	16QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	22.54	21.81
High	15	15	16QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1772.5	354500	22.53	21.80
Low	15	15	16QAM	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1717.5	343500	22.39	21.66
High	15	20	16QAM	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1770	354000	23.42	22.69
Low	15	20	16QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1720	344000	22.66	21.93
Middle	15	20	16QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	22.57	21.84
High	15	20	16QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1770	354000	22.54	21.81
Low	15	20	16QAM	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1720	344000	22.79	22.06
High	15	5	64QAM	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1777.5	355500	21.83	21.10
Low	15	5	64QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1712.5	342500	22.08	21.35
Middle	15	5	64QAM	Band13-10MHZ-78	Inner_Full	1745	349000	22.05	21.32

				2-QPSK-50#0					
High	15	5	64QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1777.5	355500	22.06	21.33
Low	15	5	64QAM	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1712.5	342500	21.84	21.11
High	15	10	64QAM	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1775	355000	21.88	21.15
Low	15	10	64QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1715	343000	22.07	21.34
Middle	15	10	64QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	22.09	21.36
High	15	10	64QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1775	355000	22.01	21.28
Low	15	10	64QAM	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1715	343000	21.79	21.06
High	15	15	64QAM	Band13-10MHZ-78 2QPSK-1#49	Edge_1RB_Right	1772.5	354500	21.88	21.15
Low	15	15	64QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1717.5	343500	22.18	21.45
Middle	15	15	64QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	22.11	21.38
High	15	15	64QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1772.5	354500	21.98	21.25
Low	15	15	64QAM	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1717.5	343500	21.80	21.07
High	15	20	64QAM	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1770	354000	21.81	21.08
Low	15	20	64QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1720	344000	22.19	21.46
Middle	15	20	64QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	21.99	21.26
High	15	20	64QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1770	354000	21.99	21.26
Low	15	20	64QAM	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1720	344000	21.93	21.20
High	15	5	256QAM	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1777.5	355500	19.89	19.16
Low	15	5	256QAM	Band13-10MHZ-78 2QPSK-50#0	Inner_Full	1712.5	342500	19.95	19.22
Middle	15	5	256QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	19.94	19.21
High	15	5	256QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1777.5	355500	19.90	19.17
Low	15	5	256QAM	Band13-10MHZ-78	Edge_1RB_Left	1712.5	342500	19.86	19.13

				2-QPSK-1#0					
High	15	10	256QAM	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1775	355000	20.05	19.32
Low	15	10	256QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1715	343000	20.08	19.35
Middle	15	10	256QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	20.10	19.37
High	15	10	256QAM	Band13-10MHZ-78 2-256QAM-50#0	Inner_Full	1775	355000	20.06	19.33
Low	15	10	256QAM	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1715	343000	19.75	19.02
High	15	15	256QAM	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1772.5	354500	20.10	19.37
Low	15	15	256QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1717.5	343500	20.19	19.46
Middle	15	15	256QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	20.04	19.31
High	15	15	256QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1772.5	354500	20.02	19.29
Low	15	15	256QAM	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1717.5	343500	19.79	19.06
High	15	20	256QAM	Band13-10MHZ-78 2-QPSK-1#49	Edge_1RB_Right	1770	354000	19.91	19.18
Low	15	20	256QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1720	344000	20.11	19.38
Middle	15	20	256QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1745	349000	20.05	19.32
High	15	20	256QAM	Band13-10MHZ-78 2-QPSK-50#0	Inner_Full	1770	354000	19.98	19.25
Low	15	20	256QAM	Band13-10MHZ-78 2-QPSK-1#0	Edge_1RB_Left	1720	344000	19.93	19.20

5.2 Occupied Bandwidth

Ambient condition

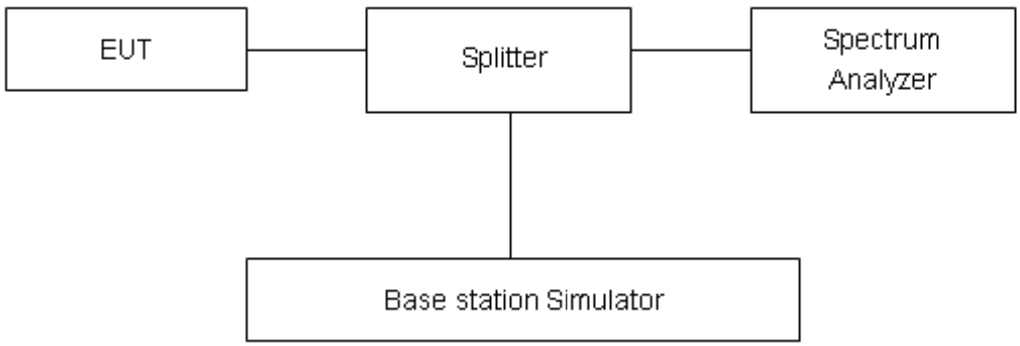
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The occupied bandwidth is measured using spectrum analyzer.
RBW is set to 470 kHz, VBW is set to 1.5MHz for EN-DC_2A_n66 (20MHz),

99% power and -26dBc occupied bandwidths are recorded. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

No specific occupied bandwidth requirements in part 2.1049.

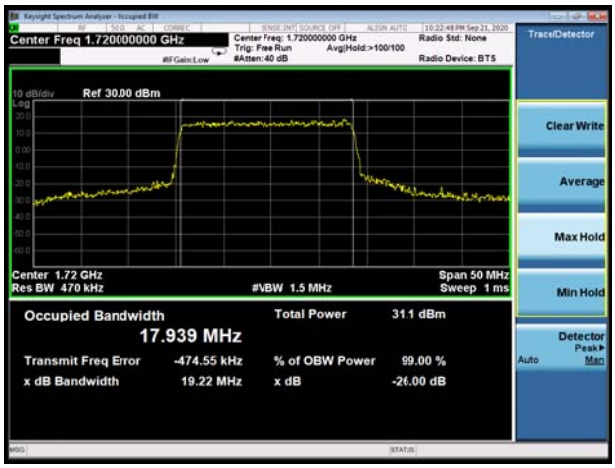
Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U=624Hz.

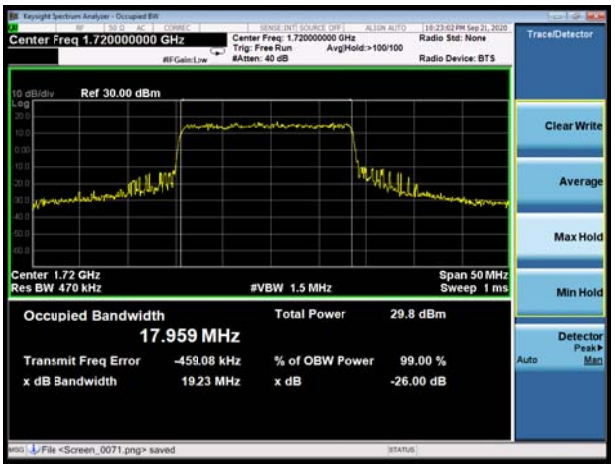
Test Result

EN-DC_2A_n66						
RB	**Modulation**	**Bandwidth (MHz)**	**Channel**	**Frequency (MHz)**	**99% Power Bandwidth(MHz)**	**-26dBc Bandwidth(MHz)**
100%	QPSK	20	344000	1720	17.939	19.22
			349000	1745	17.937	19.30
			354000	1770	17.933	19.23
	16QAM	20	344000	1720	17.959	19.23
			349000	1745	17.982	19.27
			354000	1770	17.951	19.08
	64QAM	20	344000	1720	17.929	19.56
			349000	1745	17.928	19.13
			354000	1770	17.926	19.20
	256QAM	20	344000	1720	17.944	19.38
			349000	1745	17.952	19.25
			354000	1770	17.937	19.20

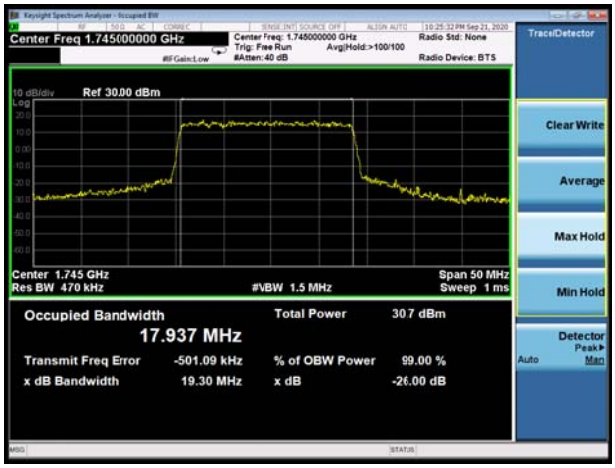
EN-DC_2A_n66 QPSK 20MHz CH-Low



EN-DC_2A_n66 16QAM 20MHz CH-Low

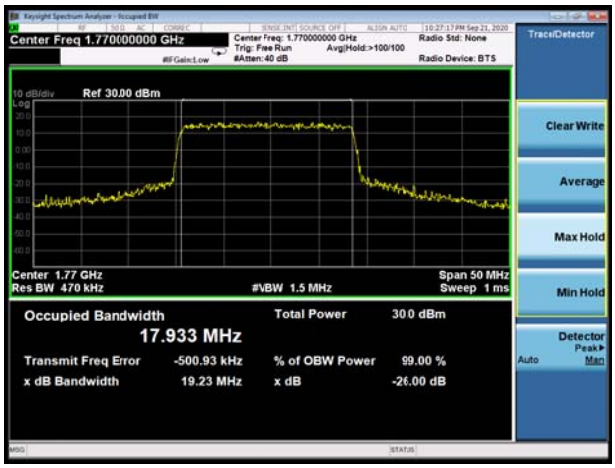


EN-DC_2A_n66 QPSK 20MHz CH-Middle

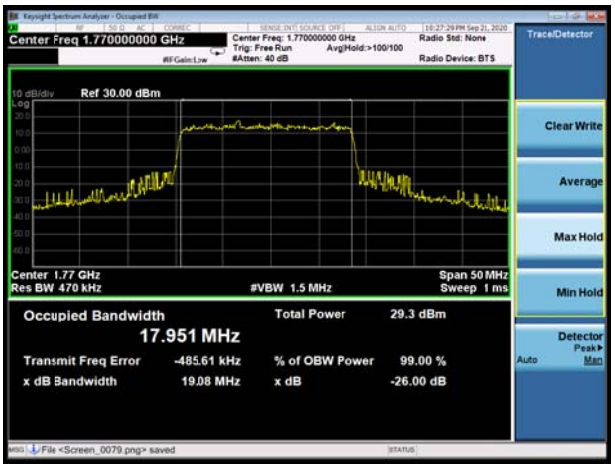


EN-DC_2A_n66 16QAM 20MHz CH-Middle

EN-DC_2A_n66 QPSK 20MHz CH-High



EN-DC_2A_n66 16QAM 20MHz CH-High

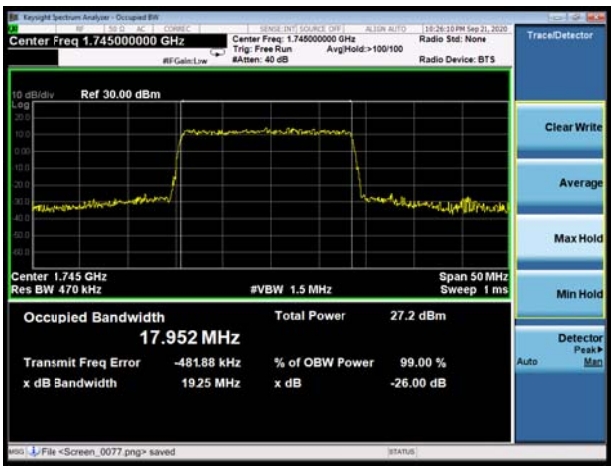


EN-DC_2A_n66 64QAM 20MHz CH-Low

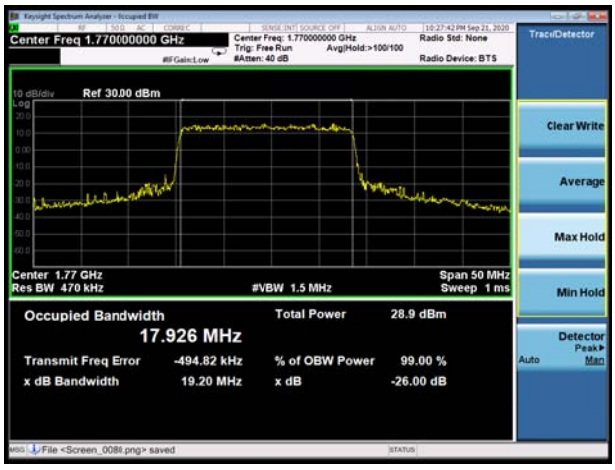
EN-DC_2A_n66 256QAM 20MHz CH-Low

EN-DC_2A_n66 64QAM 20MHz CH-Middle

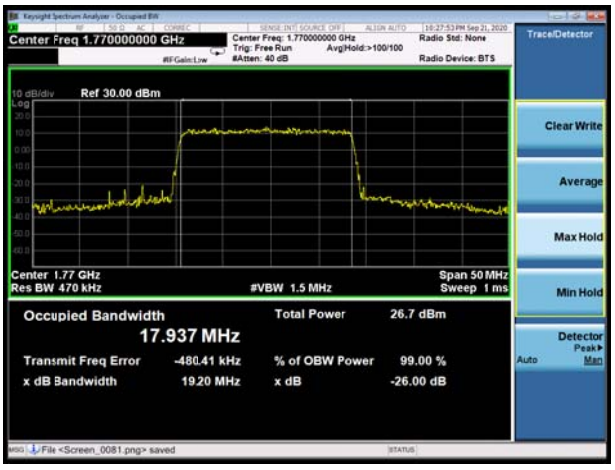
EN-DC_2A_n66 256QAM 20MHz CH-Middle



EN-DC_2A_n66 64QAM 20MHz CH-High



EN-DC_2A_n66 256QAM 20MHz CH-High



5.3 Band Edge Compliance

Ambient condition

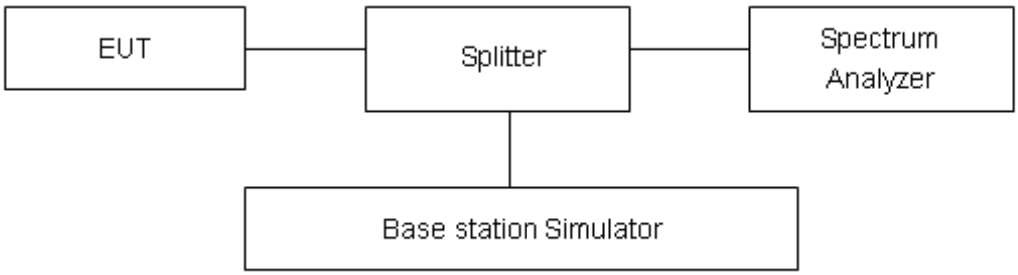
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The band edge of the lowest and highest channels were measured.
The testing follows KDB 971168 D01 v03r01 Section 6.0
The EUT was connected to spectrum analyzer and system simulator via a power divider.
The band edges of low and high channels for the highest RF powers were measured.
RBW is set to 240 kHz, VBW is set to 820 kHz for EN-DC_2A_n66 (20MHz).

on spectrum analyzer.
Set spectrum analyzer with RMS detector.
The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
Checked that all the results comply with the emission limit line.

Test Setup



Limits

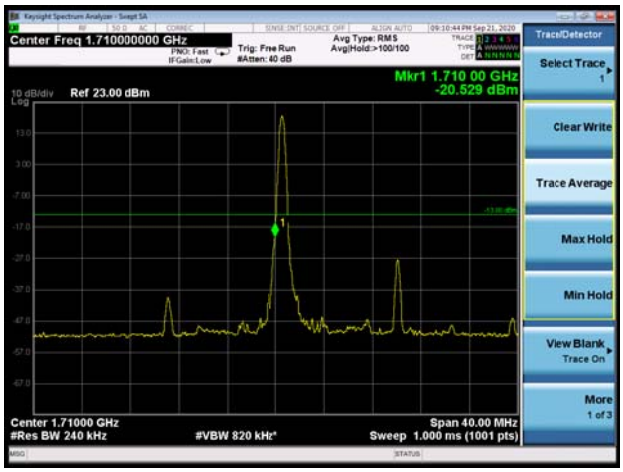
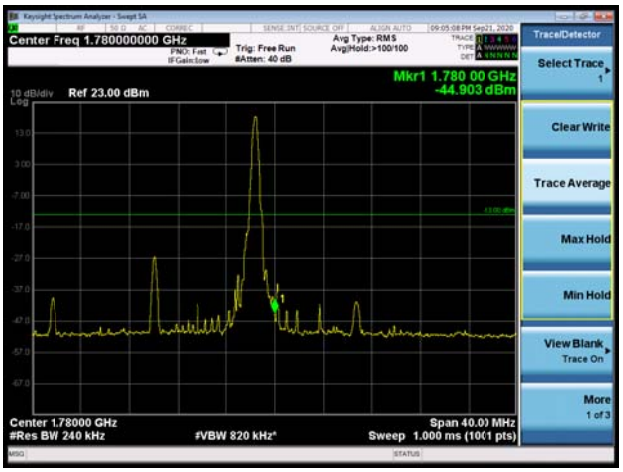
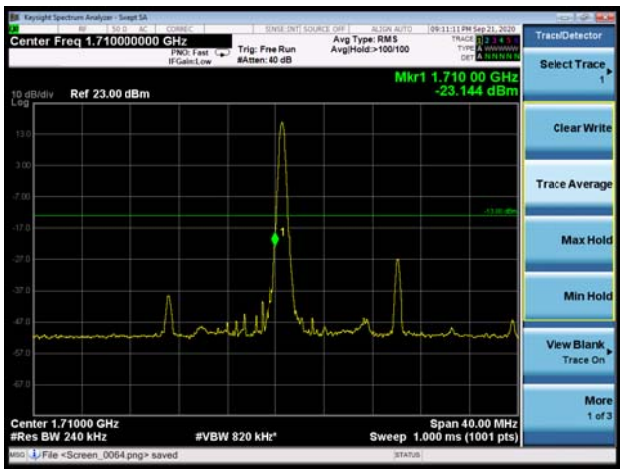
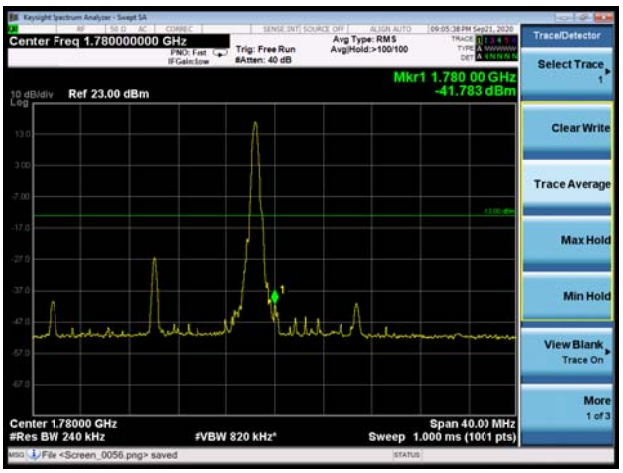
Rule Part 27.53(h) specifies that " for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 $\log_{10}$ (P) dB"

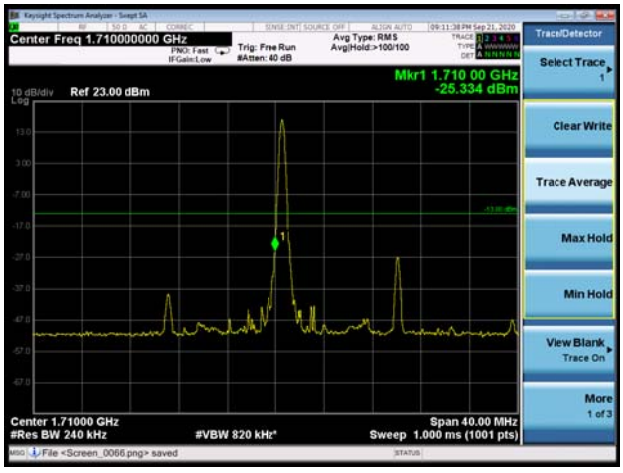
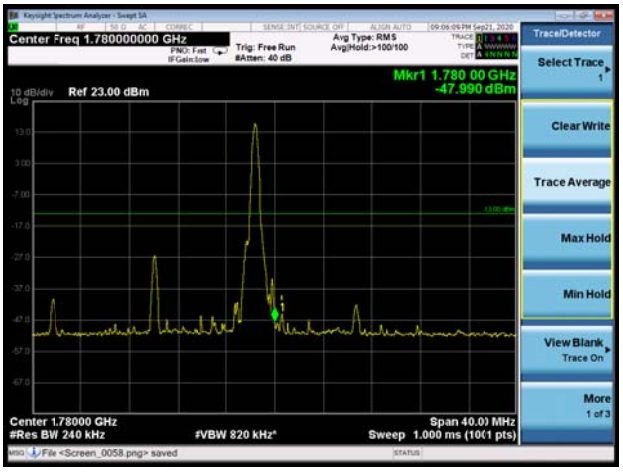
Measurement Uncertainty

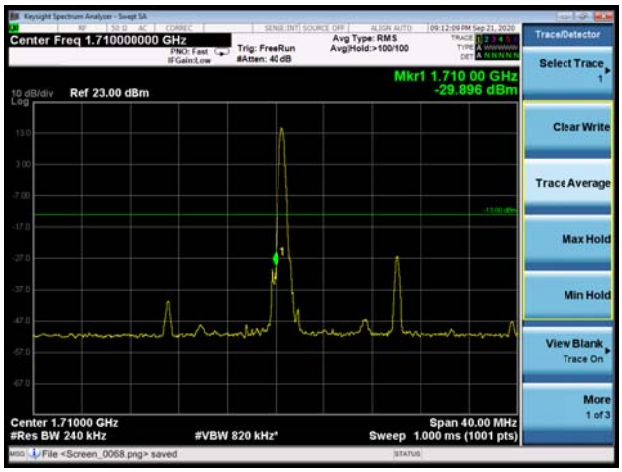
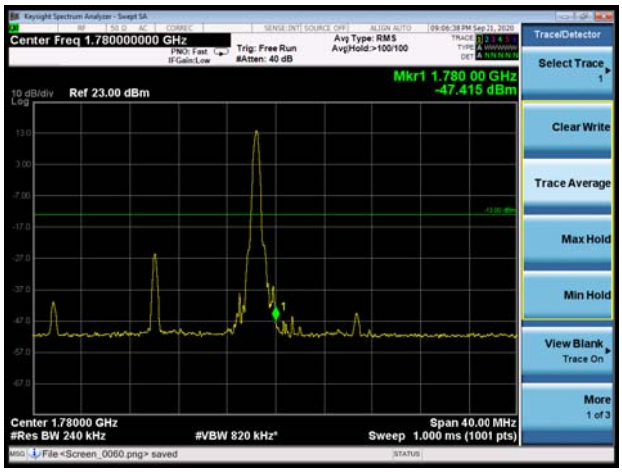
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U=0.684dB.

Test Result

All the test traces in the plots shows the test results clearly.

EN-DC_2A_n66 20MHz QPSK 1RB CH-Low	EN-DC_2A_n66 20MHz QPSK 1RB CH-High
	
EN-DC_2A_n66 20MHz QPSK 100%RB CH-Low	EN-DC_2A_n66 20MHz QPSK 100%RB CH-High
	
EN-DC_2A_n66 20MHz 16QAM 1RB CH-Low	EN-DC_2A_n66 20MHz 16QAM 1RB CH-High
	

EN-DC_2A_n66 20MHz 16QAM 100%RB CH-Low	EN-DC_2A_n66 20MHz 16QAM 100%RB CH-High
	
EN-DC_2A_n66 20MHz 64QAM 1RB CH-Low	EN-DC_2A_n66 20MHz 64QAM 1RB CH-High
	
EN-DC_2A_n66 20MHz 64QAM 100%RB CH-Low	EN-DC_2A_n66 20MHz 64QAM 100%RB CH-High
	

EN-DC_2A_n66 20MHz 256QAM 1RB CH-Low	EN-DC_2A_n66 20MHz 256QAM 1RB CH-High
	
EN-DC_2A_n66 20MHz 256QAM 100%RB CH-Low	EN-DC_2A_n66 20MHz 256QAM 100%RB CH-High
	

5.4 Peak-to-Average Power Ratio (PAPR)

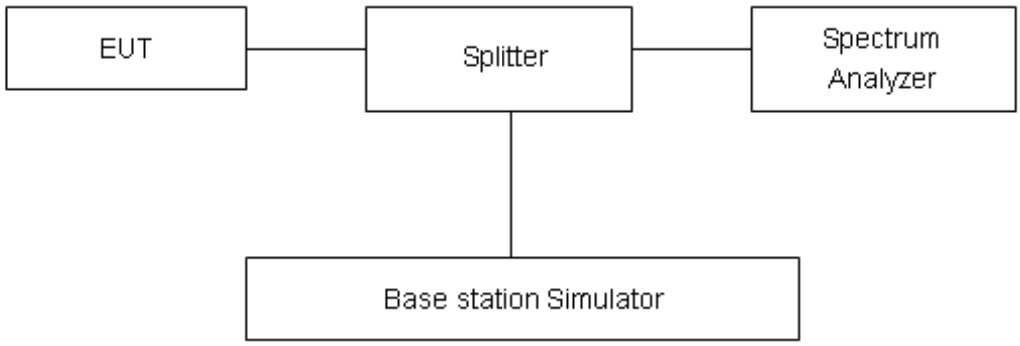
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

Measure the total peak power and record as PPk. And measure the total average power and record as PAvg. Both the peak and average power levels must be expressed in the same logarithmic units (*e.g.*, dBm). Determine the PAPR from:
PAPR (dB) = PPk (dBm) - PAvg (dBm).

Test Setup



Limits

Rule Part 27.50(d)(5) Equipment employed must be authorized in accordance with the provisions of 24.51. Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (d)(6) of this section. 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.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for thenormal distribution is with the coverage factor k = 2, U= 0.4 dB.

Test Results

EN-DC_2A_n66								
Modulation	**Bandwidth (MHz)**	**Channel**	**Frequency (MHz)**	**Peak (dBm)**	**Avg (dBm)**	**PAPR (dB)**	**Limit (dB)**	**Conclusion**
QPSK	20	344000	1720	27.42	17.63	9.79	≤13	PASS
		349000	1745	26.99	17.03	9.96	≤13	PASS
		354000	1770	26.41	17.38	9.03	≤13	PASS
16QAM	20	344000	1720	27.37	17.48	9.89	≤13	PASS
		349000	1745	26.99	16.87	10.12	≤13	PASS
		354000	1770	26.39	15.91	10.48	≤13	PASS
64QAM	20	344000	1720	27.18	15.50	11.68	≤13	PASS
		349000	1745	26.78	15.18	11.60	≤13	PASS
		354000	1770	26.24	14.58	11.66	≤13	PASS
256QAM	20	344000	1720	25.69	15.04	10.65	≤13	PASS
		349000	1745	25.23	14.31	10.92	≤13	PASS
		354000	1770	24.68	13.75	10.93	≤13	PASS

5.5 Frequency Stability

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

Frequency Stability (Temperature Variation)

The temperature inside the climate chamber is varied from -30°C to +50°C in 10°C step size.

(1)With all power removed, the temperature was decreased to -10°C and permitted to stabilize for three hours.

(2)Measure the carrier frequency with the test equipment in a “call mode”. These measurements should be made within 1 minute of powering up the mobile station, to prevent significant self warming.

(3) Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, un-powered, before making measurements.

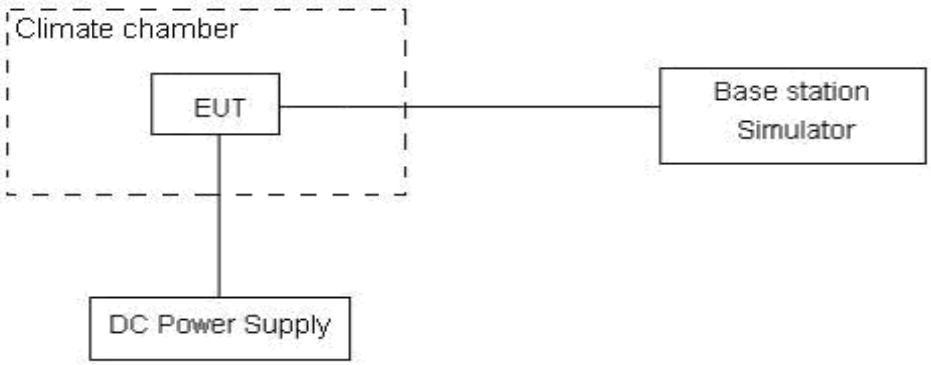
Frequency Stability (Voltage Variation)

The frequency stability shall be measured with variation of primary supply voltage as follows:

Primary Supply Voltage: The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

This transceiver is specified to operate with an input voltage of between 3.5 V and 4.4 V, with a nominal voltage of 4.0V.

Test setup



Limits

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75％ confidence level for the normal distribution is with the coverage factor k = 3,U=0.01ppm.

Test Result

EN-DC_2A_n66										
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	5MHz									
Temperature	Voltage	256QAM	64QAM	16QAM	QPSK	256QAM	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	2.42	16.28	6.05	12.42	0.00129	0.00866	0.00322	0.00661	PASS
Extreme（50℃）		3.04	10.27	13.06	14.04	0.00162	0.00546	0.00695	0.00747	PASS
Extreme（40℃）		1.97	14.52	8.59	8.97	0.00105	0.00772	0.00457	0.00477	PASS
Extreme（30℃）		5.33	8.14	5.12	13.33	0.00284	0.00433	0.00272	0.00709	PASS
Extreme（20℃）		14.85	10.82	5.35	12.85	0.00790	0.00575	0.00284	0.00683	PASS
Extreme（10℃）		16.13	9.06	13.46	15.13	0.00858	0.00482	0.00716	0.00805	PASS
Extreme（0℃）		14.55	8.97	17.92	17.55	0.00774	0.00477	0.00953	0.00933	PASS
Extreme（-10℃）		15.64	16.99	3.90	9.64	0.00832	0.00904	0.00207	0.00513	PASS
Extreme（-20℃）		3.48	12.00	10.76	15.48	0.00185	0.00638	0.00572	0.00823	PASS
Extreme（-30℃）		4.67	3.22	2.52	17.67	0.00249	0.00171	0.00134	0.00940	PASS
25℃	LV	8.19	1.46	7.62	1.19	0.00436	0.00077	0.00405	0.00063	PASS
	HV	10.58	5.25	5.33	8.58	0.00563	0.00280	0.00283	0.00457	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	10MHz									
Temperature	Voltage	256QAM	64QAM	16QAM	QPSK	256QAM	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	9.16	5.61	6.88	12.16	0.00487	0.00298	0.00366	0.00647	PASS
Extreme（50℃）		7.95	9.41	13.93	6.95	0.00423	0.00501	0.00741	0.00370	PASS
Extreme（40℃）		10.14	15.70	6.80	14.14	0.00539	0.00835	0.00362	0.00752	PASS
Extreme（30℃）		17.45	7.14	13.86	9.45	0.00928	0.00380	0.00737	0.00503	PASS
Extreme（20℃）		10.34	4.94	9.72	6.34	0.00550	0.00263	0.00517	0.00337	PASS
Extreme（10℃）		13.39	1.11	6.00	11.39	0.00712	0.00059	0.00319	0.00606	PASS
Extreme（0℃）		6.93	13.96	15.51	8.93	0.00369	0.00743	0.00825	0.00475	PASS
Extreme（-10℃）		9.30	15.57	5.21	8.30	0.00495	0.00828	0.00277	0.00441	PASS
Extreme（-20℃）		12.47	15.74	15.28	5.47	0.00663	0.00837	0.00813	0.00291	PASS
Extreme（-30℃）		7.36	15.91	4.85	17.36	0.00392	0.00846	0.00258	0.00923	PASS
25℃	LV	5.98	10.50	13.55	7.98	0.00318	0.00558	0.00721	0.00425	PASS
	HV	6.46	16.84	3.24	3.46	0.00344	0.00896	0.00173	0.00184	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	15MHz									
Temperature	Voltage	256QAM	64QAM	16QAM	QPSK	256QAM	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	3.25	5.77	4.94	10.25	0.00173	0.00307	0.00263	0.00545	PASS
Extreme（50℃）		10.42	6.89	3.01	15.42	0.00554	0.00367	0.00160	0.00820	PASS

Extreme（40℃）		14.28	1.11	8.88	14.28	0.00760	0.00059	0.00472	0.00760	PASS
Extreme（30℃）		14.13	15.39	8.43	1.13	0.00752	0.00819	0.00448	0.00060	PASS
Extreme（20℃）		17.67	16.19	1.73	16.67	0.00940	0.00861	0.00092	0.00887	PASS
Extreme（10℃）		11.52	1.87	14.54	11.52	0.00613	0.00100	0.00773	0.00613	PASS
Extreme（0℃）		1.42	1.53	13.57	11.42	0.00076	0.00081	0.00722	0.00608	PASS
Extreme（-10℃）		17.04	14.83	17.99	5.04	0.00906	0.00789	0.00957	0.00268	PASS
Extreme（-20℃）		14.39	2.51	17.74	4.39	0.00765	0.00134	0.00944	0.00233	PASS
Extreme（-30℃）		8.75	14.54	10.49	7.75	0.00465	0.00773	0.00558	0.00412	PASS
25℃	LV	12.37	10.78	3.43	16.37	0.00658	0.00573	0.00183	0.00871	PASS
	HV	3.67	8.60	1.14	10.67	0.00195	0.00457	0.00061	0.00568	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	20MHz									
Temperature	Voltage	256QAM	64QAM	16QAM	QPSK	256QAM	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	6.55	9.34	17.93	1.55	0.00348	0.00497	0.00954	0.00082	PASS
Extreme（50℃）		14.06	6.61	17.52	8.06	0.00748	0.00352	0.00932	0.00429	PASS
Extreme（40℃）		6.45	1.32	6.07	5.45	0.00343	0.00070	0.00323	0.00290	PASS
Extreme（30℃）		1.12	7.54	16.04	9.12	0.00059	0.00401	0.00853	0.00485	PASS
Extreme（20℃）		6.89	16.63	9.80	9.89	0.00366	0.00885	0.00521	0.00526	PASS
Extreme（10℃）		1.51	7.49	11.84	2.51	0.00080	0.00399	0.00630	0.00133	PASS
Extreme（0℃）		9.40	13.96	11.16	17.40	0.00500	0.00743	0.00594	0.00926	PASS
Extreme（-10℃）		6.40	4.09	14.55	13.40	0.00340	0.00217	0.00774	0.00713	PASS
Extreme（-20℃）		10.21	8.88	13.19	9.21	0.00543	0.00472	0.00702	0.00490	PASS
Extreme（-30℃）		3.67	5.43	9.60	5.67	0.00195	0.00289	0.00510	0.00301	PASS
25℃	LV	5.71	7.36	16.15	6.71	0.00304	0.00392	0.00859	0.00357	PASS
	HV	16.11	12.53	13.09	13.11	0.00857	0.00666	0.00696	0.00698	PASS

EN-DC_5A_n66										
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	5MHz									
Temperature	Voltage	256QAM	64QAM	16QAM	QPSK	256QAM	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	9.77	1.94	6.87	7.77	0.00520	0.00103	0.00366	0.00413	PASS
Extreme（50℃）		14.90	3.22	11.86	2.90	0.00792	0.00171	0.00631	0.00154	PASS
Extreme（40℃）		15.18	9.17	4.20	16.18	0.00807	0.00488	0.00223	0.00861	PASS
Extreme（30℃）		6.72	9.41	5.71	2.72	0.00358	0.00501	0.00303	0.00145	PASS
Extreme（20℃）		8.40	13.23	15.91	8.40	0.00447	0.00704	0.00846	0.00447	PASS
Extreme（10℃）		3.11	4.63	6.32	8.11	0.00165	0.00246	0.00336	0.00431	PASS
Extreme（0℃）		13.21	12.14	8.01	2.21	0.00703	0.00646	0.00426	0.00118	PASS
Extreme（-10℃）		8.59	14.41	14.19	6.59	0.00457	0.00766	0.00755	0.00351	PASS
Extreme（-20℃）		14.84	10.99	9.68	2.84	0.00789	0.00585	0.00515	0.00151	PASS

Extreme（-30℃）		16.55	16.00	8.55	13.55	0.00881	0.00851	0.00455	0.00721	PASS
25℃	LV	8.66	3.19	7.01	13.66	0.00461	0.00169	0.00373	0.00727	PASS
	HV	2.71	2.62	14.45	5.71	0.00144	0.00139	0.00769	0.00304	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	10MHz									
Temperature	Voltage	256QAM	64QAM	16QAM	QPSK	256QAM	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	15.43	3.82	15.84	6.43	0.00821	0.00203	0.00842	0.00342	PASS
Extreme（50℃）		6.85	2.96	10.18	10.85	0.00364	0.00157	0.00542	0.00577	PASS
Extreme（40℃）		17.82	6.48	4.29	1.82	0.00948	0.00345	0.00228	0.00097	PASS
Extreme（30℃）		12.81	5.34	15.87	15.81	0.00681	0.00284	0.00844	0.00841	PASS
Extreme（20℃）		15.02	1.58	14.18	17.02	0.00799	0.00084	0.00754	0.00905	PASS
Extreme（10℃）		6.16	11.94	3.95	11.16	0.00328	0.00635	0.00210	0.00594	PASS
Extreme（0℃）		7.42	12.34	12.95	7.42	0.00394	0.00656	0.00689	0.00394	PASS
Extreme（-10℃）		3.95	16.39	9.51	8.95	0.00210	0.00872	0.00506	0.00476	PASS
Extreme（-20℃）		8.73	10.06	8.51	9.73	0.00465	0.00535	0.00452	0.00518	PASS
Extreme（-30℃）		1.73	10.91	15.13	4.73	0.00092	0.00580	0.00805	0.00252	PASS
25℃	LV	1.55	3.39	11.74	16.55	0.00083	0.00180	0.00624	0.00880	PASS
	HV	6.89	7.58	5.90	1.89	0.00366	0.00403	0.00314	0.00100	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	15MHz									
Temperature	Voltage	256QAM	64QAM	16QAM	QPSK	256QAM	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	12.22	14.09	15.83	15.22	0.00650	0.00749	0.00842	0.00809	PASS
Extreme（50℃）		7.76	6.86	5.52	1.76	0.00413	0.00365	0.00294	0.00094	PASS
Extreme（40℃）		15.89	3.20	3.57	8.89	0.00845	0.00170	0.00190	0.00473	PASS
Extreme（30℃）		11.08	11.29	15.45	14.08	0.00589	0.00600	0.00822	0.00749	PASS
Extreme（20℃）		10.28	3.28	10.70	7.28	0.00547	0.00174	0.00569	0.00387	PASS
Extreme（10℃）		15.19	7.42	6.49	15.19	0.00808	0.00395	0.00345	0.00808	PASS
Extreme（0℃）		2.64	15.62	1.19	13.64	0.00140	0.00831	0.00063	0.00726	PASS
Extreme（-10℃）		3.54	3.55	14.47	15.54	0.00189	0.00189	0.00770	0.00827	PASS
Extreme（-20℃）		16.51	16.63	2.42	5.51	0.00878	0.00885	0.00129	0.00293	PASS
Extreme（-30℃）		6.85	11.46	4.81	5.85	0.00364	0.00610	0.00256	0.00311	PASS
25℃	LV	7.34	5.93	9.42	1.34	0.00390	0.00315	0.00501	0.00071	PASS
	HV	14.49	9.21	7.35	1.49	0.00771	0.00490	0.00391	0.00079	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	20MHz									
Temperature	Voltage	256QAM	64QAM	16QAM	QPSK	256QAM	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	3.55	11.01	15.50	3.55	0.00189	0.00586	0.00825	0.00189	PASS
Extreme（50℃）		15.74	13.85	5.73	13.74	0.00837	0.00736	0.00305	0.00731	PASS

Extreme（40℃）		15.37	9.48	3.03	4.37	0.00818	0.00504	0.00161	0.00233	PASS
Extreme（30℃）		16.24	11.85	2.97	10.24	0.00864	0.00630	0.00158	0.00545	PASS
Extreme（20℃）		17.24	12.97	11.54	14.24	0.00917	0.00690	0.00614	0.00757	PASS
Extreme（10℃）		17.39	1.92	15.14	12.39	0.00925	0.00102	0.00805	0.00659	PASS
Extreme（0℃）		15.65	13.55	14.87	11.65	0.00832	0.00721	0.00791	0.00620	PASS
Extreme（-10℃）		3.60	18.00	7.89	8.60	0.00191	0.00957	0.00420	0.00457	PASS
Extreme（-20℃）		12.79	11.71	16.57	3.79	0.00680	0.00623	0.00881	0.00202	PASS
Extreme（-30℃）		16.47	14.48	14.01	15.47	0.00876	0.00770	0.00745	0.00823	PASS
25℃	LV	3.43	12.88	5.78	2.43	0.00182	0.00685	0.00308	0.00129	PASS
	HV	7.44	1.15	11.28	14.44	0.00396	0.00061	0.00600	0.00768	PASS

EN-DC_13A_n66										
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	5MHz									
Temperature	Voltage	256QAM	64QAM	16QAM	QPSK	256QAM	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	11.95	5.13	12.90	10.95	0.00636	0.00273	0.00686	0.00582	PASS
Extreme（50℃）		3.61	7.21	11.64	2.61	0.00192	0.00383	0.00619	0.00139	PASS
Extreme（40℃）		13.02	11.45	7.51	10.02	0.00692	0.00609	0.00399	0.00533	PASS
Extreme（30℃）		4.69	13.94	12.99	10.69	0.00250	0.00742	0.00691	0.00569	PASS
Extreme（20℃）		8.21	14.66	12.84	17.21	0.00437	0.00780	0.00683	0.00916	PASS
Extreme（10℃）		12.64	4.73	8.67	11.64	0.00672	0.00252	0.00461	0.00619	PASS
Extreme（0℃）		6.55	6.74	15.81	15.55	0.00348	0.00359	0.00841	0.00827	PASS
Extreme（-10℃）		14.50	7.32	7.11	8.50	0.00771	0.00389	0.00378	0.00452	PASS
Extreme（-20℃）		6.56	7.07	17.25	10.56	0.00349	0.00376	0.00917	0.00562	PASS
Extreme（-30℃）		12.12	5.44	11.26	7.12	0.00644	0.00289	0.00599	0.00378	PASS
25℃	LV	8.59	6.81	1.75	7.59	0.00457	0.00362	0.00093	0.00404	PASS
	HV	2.12	14.71	9.38	4.12	0.00113	0.00782	0.00499	0.00219	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	10MHz									
Temperature	Voltage	256QAM	64QAM	16QAM	QPSK	256QAM	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	14.76	5.91	16.31	15.76	0.00785	0.00315	0.00868	0.00838	PASS
Extreme（50℃）		3.43	16.23	5.83	6.43	0.00183	0.00863	0.00310	0.00342	PASS
Extreme（40℃）		17.06	8.91	7.61	13.06	0.00908	0.00474	0.00405	0.00695	PASS
Extreme（30℃）		1.55	1.89	12.89	13.55	0.00083	0.00101	0.00686	0.00721	PASS
Extreme（20℃）		16.29	1.88	15.63	2.29	0.00866	0.00100	0.00831	0.00122	PASS
Extreme（10℃）		1.47	4.23	10.54	5.47	0.00078	0.00225	0.00561	0.00291	PASS
Extreme（0℃）		13.30	8.26	16.33	14.30	0.00707	0.00439	0.00869	0.00761	PASS
Extreme（-10℃）		1.84	10.36	4.62	2.84	0.00098	0.00551	0.00246	0.00151	PASS
Extreme（-20℃）		17.27	4.23	16.53	16.27	0.00919	0.00225	0.00879	0.00865	PASS

Extreme（-30℃）		14.74	15.96	7.84	3.74	0.00784	0.00849	0.00417	0.00199	PASS
25℃	LV	4.74	6.28	13.87	2.74	0.00252	0.00334	0.00738	0.00146	PASS
	HV	10.78	14.84	14.80	14.78	0.00574	0.00790	0.00787	0.00786	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	15MHz									
Temperature	Voltage	256QAM	64QAM	16QAM	QPSK	256QAM	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	5.85	17.27	12.63	17.85	0.00311	0.00919	0.00672	0.00950	PASS
Extreme（50℃）		8.29	11.21	12.73	7.29	0.00441	0.00596	0.00677	0.00388	PASS
Extreme（40℃）		2.11	4.83	2.46	7.11	0.00112	0.00257	0.00131	0.00378	PASS
Extreme（30℃）		3.13	15.92	3.66	15.13	0.00167	0.00847	0.00195	0.00805	PASS
Extreme（20℃）		15.25	17.88	3.29	3.25	0.00811	0.00951	0.00175	0.00173	PASS
Extreme（10℃）		1.94	11.85	17.10	15.94	0.00103	0.00630	0.00909	0.00848	PASS
Extreme（0℃）		11.38	5.12	16.20	11.38	0.00605	0.00273	0.00861	0.00605	PASS
Extreme（-10℃）		14.38	13.84	13.97	2.38	0.00765	0.00736	0.00743	0.00127	PASS
Extreme（-20℃）		11.06	17.08	5.47	10.06	0.00588	0.00909	0.00291	0.00535	PASS
Extreme（-30℃）		1.58	17.76	14.29	6.58	0.00084	0.00945	0.00760	0.00350	PASS
25℃	LV	10.35	2.34	11.80	4.35	0.00550	0.00124	0.00628	0.00231	PASS
	HV	10.18	9.20	15.28	15.18	0.00541	0.00489	0.00813	0.00807	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	20MHz									
Temperature	Voltage	256QAM	64QAM	16QAM	QPSK	256QAM	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	7.35	10.19	3.99	4.35	0.00391	0.00542	0.00212	0.00231	PASS
Extreme（50℃）		3.01	14.92	5.07	10.01	0.00160	0.00794	0.00269	0.00533	PASS
Extreme（40℃）		17.25	1.28	10.20	3.25	0.00917	0.00068	0.00542	0.00173	PASS
Extreme（30℃）		2.58	3.06	5.19	14.58	0.00137	0.00163	0.00276	0.00776	PASS
Extreme（20℃）		5.92	10.25	3.97	9.92	0.00315	0.00545	0.00211	0.00528	PASS
Extreme（10℃）		2.06	6.07	15.63	8.06	0.00110	0.00323	0.00831	0.00429	PASS
Extreme（0℃）		17.51	15.32	3.22	9.51	0.00931	0.00815	0.00171	0.00506	PASS
Extreme（-10℃）		7.05	12.97	8.56	1.05	0.00375	0.00690	0.00455	0.00056	PASS
Extreme（-20℃）		6.28	17.47	13.06	9.28	0.00334	0.00929	0.00695	0.00494	PASS
Extreme（-30℃）		11.05	17.33	10.32	11.05	0.00588	0.00922	0.00549	0.00588	PASS
25℃	LV	16.79	13.68	9.48	10.79	0.00893	0.00728	0.00504	0.00574	PASS
	HV	16.59	9.04	15.19	16.59	0.00882	0.00481	0.00808	0.00882	PASS

5.6 Spurious Emissions at Antenna Terminals

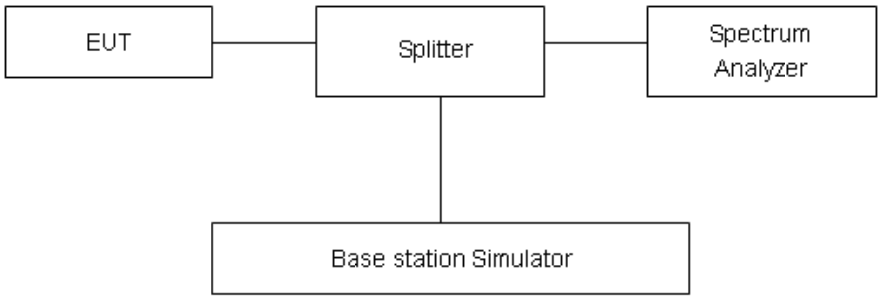
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The measurement is carried out using a spectrum analyzer. The spectrum analyzer scans from 9kHz to the 10th harmonic of the carrier. The peak detector is used.
RBW is set to 100kHz, VBW is set to 300kHz for 30MHz~1GHz
RBW is set to 1MHz, VBW is set to 3MHz for above 1GHz, Sweep is set to ATUO.
RBW is set to 1 kHz (0.009MHz~ 0.15 MHz),
RBW is set to 10 kHz (0.15 MHz~ 30 MHz)
RBW is set to 100 kHz (30MHz~1000 MHz)
RBW is set to 1000 kHz (above 1000MHz)
Of those disturbances below (limit – 20 dB), the mark is not required for the EUT.
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test setup



Limits

Rule Part 27.53(h) specifies that “for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10 (P) dB..”

Part 27.53(h) Limit	-13 dBm

Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75％ confidence level for the normal distribution is with the coverage factor *k* = 1.96.

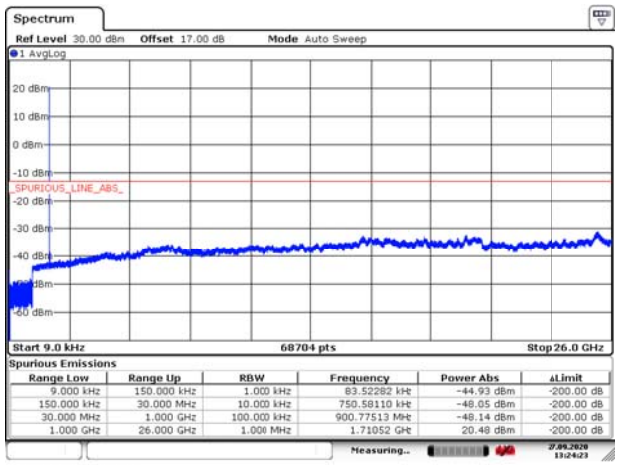
Frequency	Uncertainty
9kHz-1GHz	0.684 dB
1GHz-27GHz	1.407 dB

Test Result

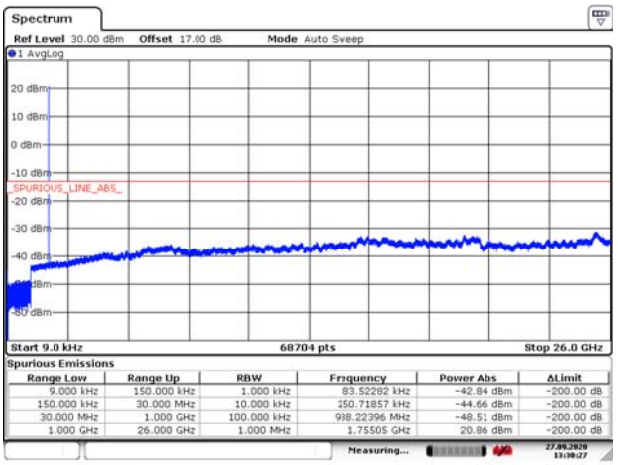
Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions more than 20 dB below the limit are not reported.

The signal beyond the limit is carrier.

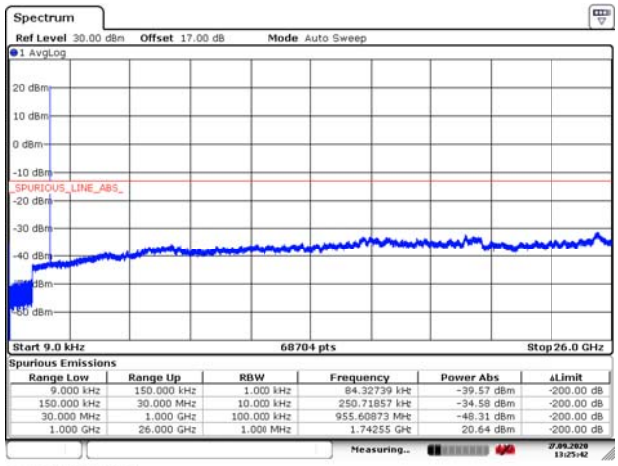
EN-DC_2A_n66 5MHz CH-Low 9kHz~26GHz



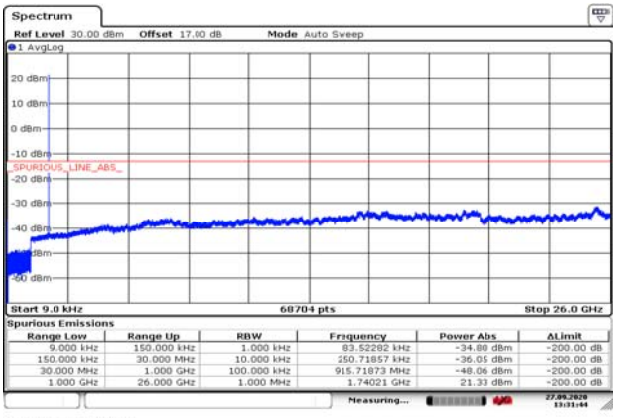
EN-DC_2A_n66 10MHz CH- Low 9kHz~26GHz



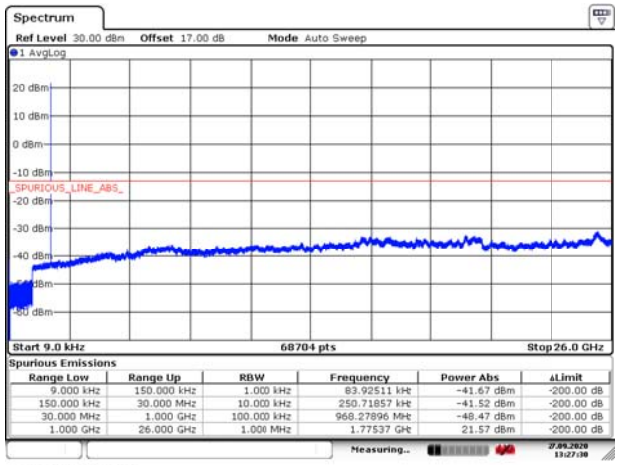
EN-DC_2A_n66 5MHz CH- Middle 9kHz~26GHz



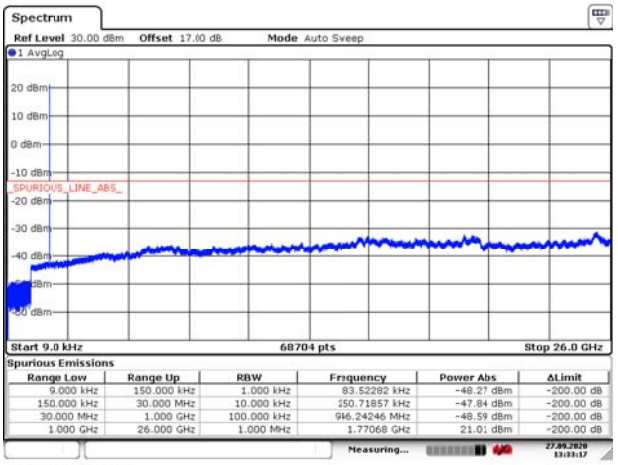
EN-DC_2A_n66 10MHz CH- Middle 9kHz~26GHz



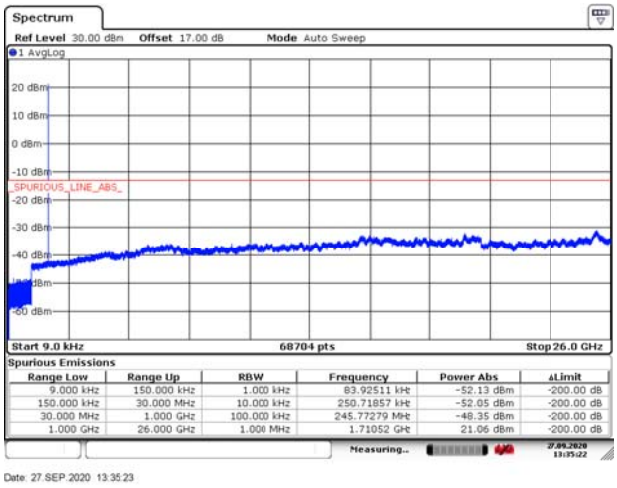
EN-DC_2A_n66 5MHz CH- High 9kHz~26GHz



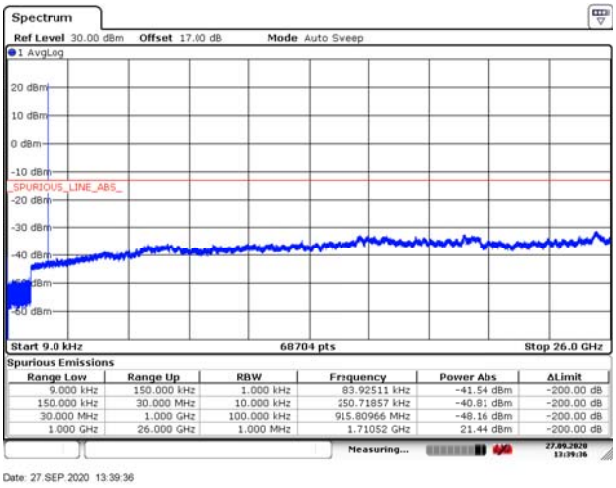
EN-DC_2A_n66 10MHz CH-High 9kHz~26GHz



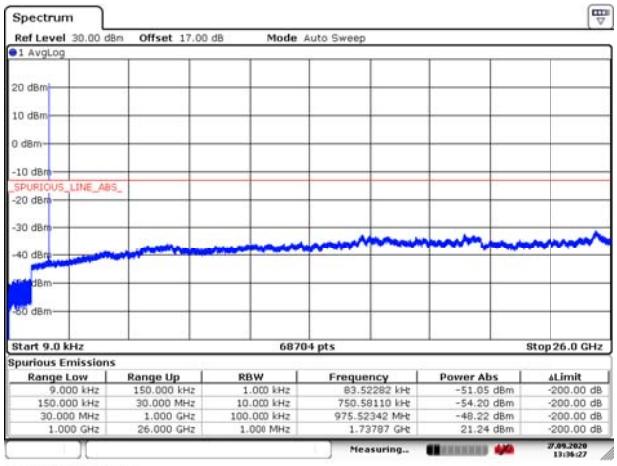
EN-DC_2A_n66 15MHz CH- Low 9kHz~26GHz



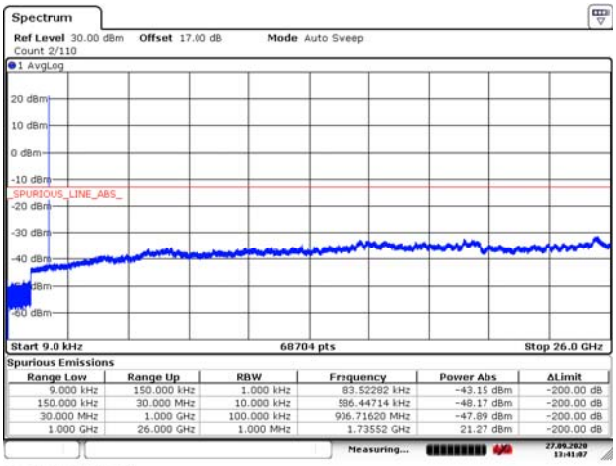
EN-DC_2A_n66 20MHz CH-Low 9kHz~26GHz



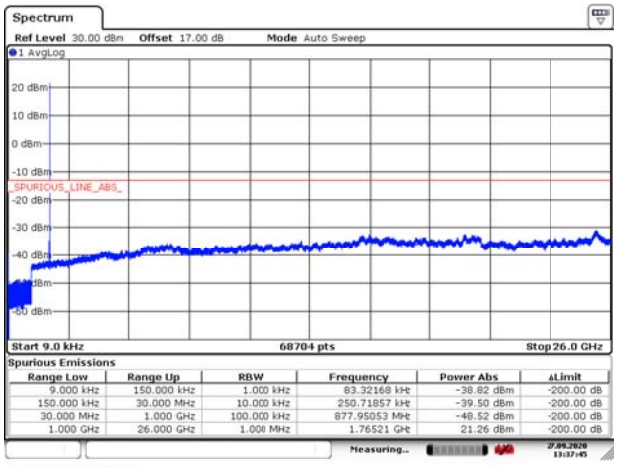
EN-DC_2A_n66 15MHz CH- Middle 9kHz~26GHz



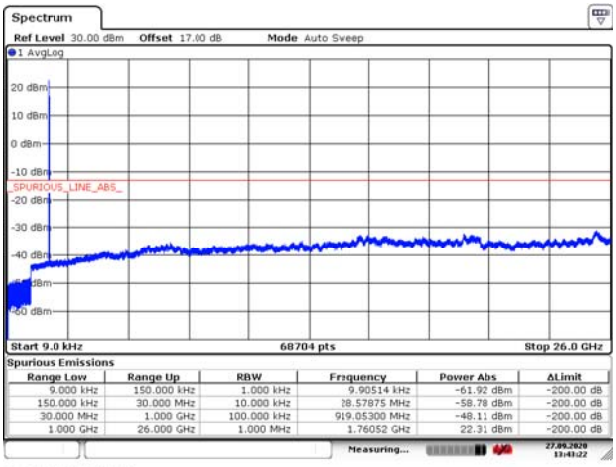
EN-DC_2A_n66 20MHz CH- Middle 9kHz~26GHz



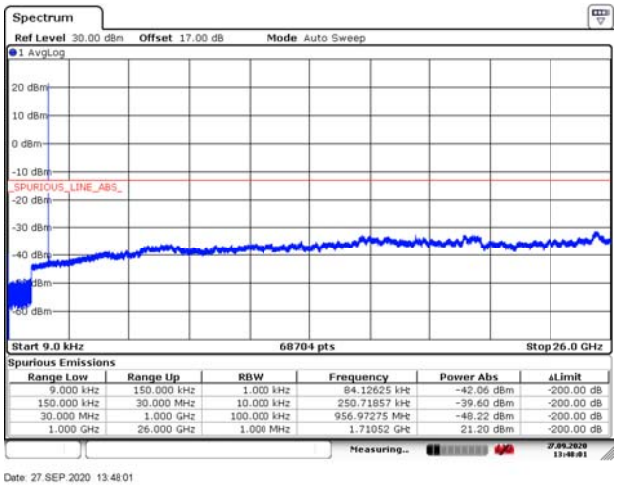
EN-DC_2A_n66 15MHz CH-High 9kHz~26GHz



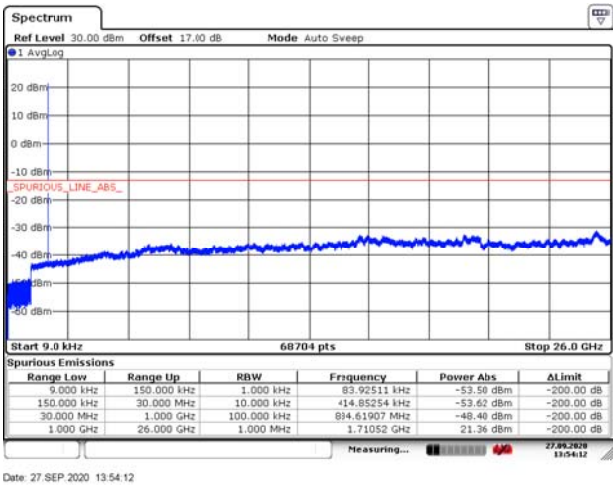
EN-DC_2A_n66 20MHz CH- High 9kHz~26GHz



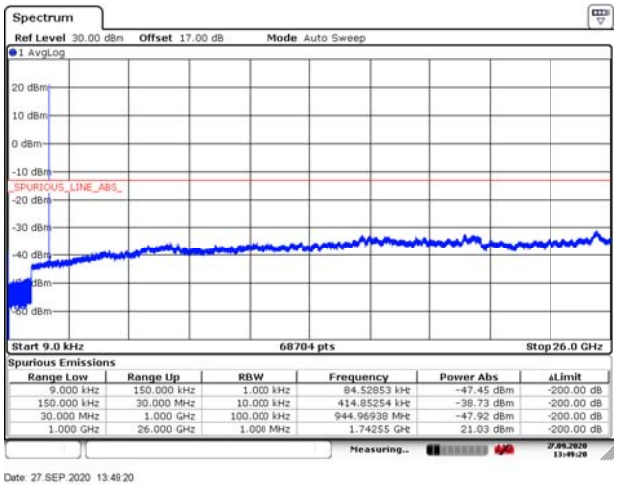
EN-DC_5A_n66 5MHz CH-Low 9kHz~26GHz



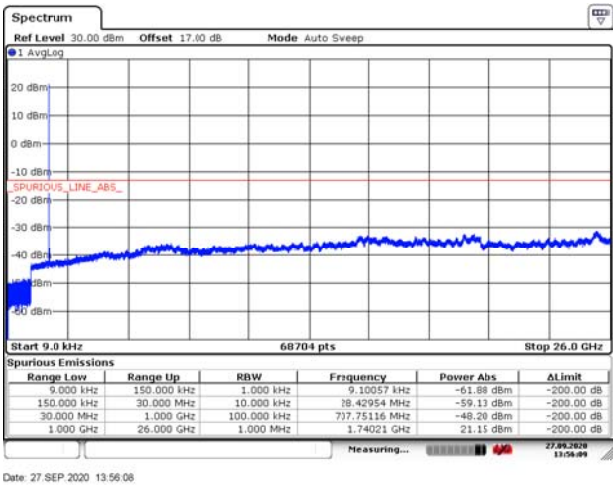
EN-DC_5A_n66 10MHz CH- Low 9kHz~26GHz



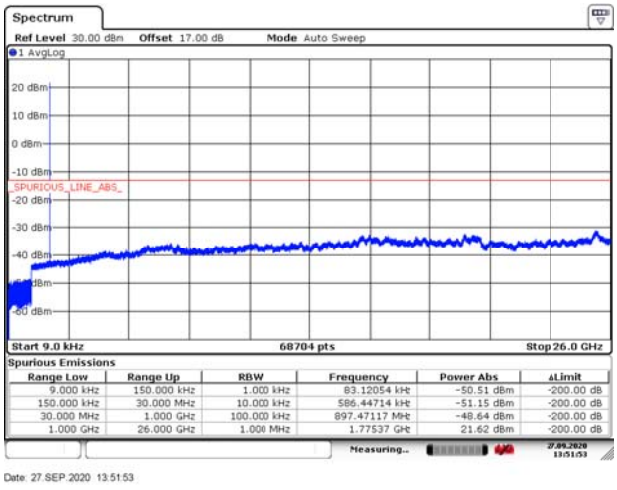
EN-DC_5A _n66 5MHz CH- Middle 9kHz~26GHz



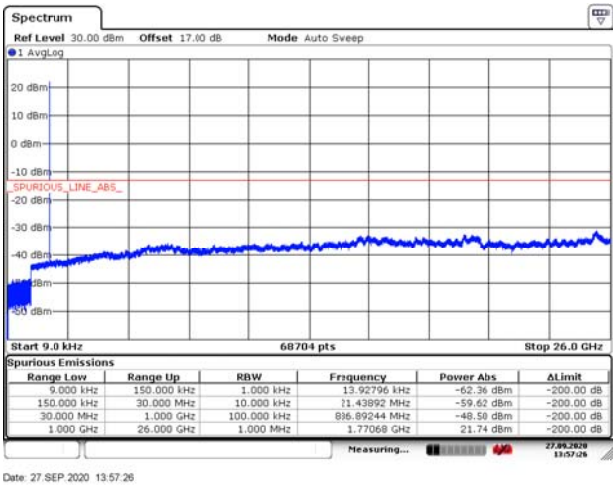
EN-DC_5A _n66 10MHz CH- Middle 9kHz~26GHz



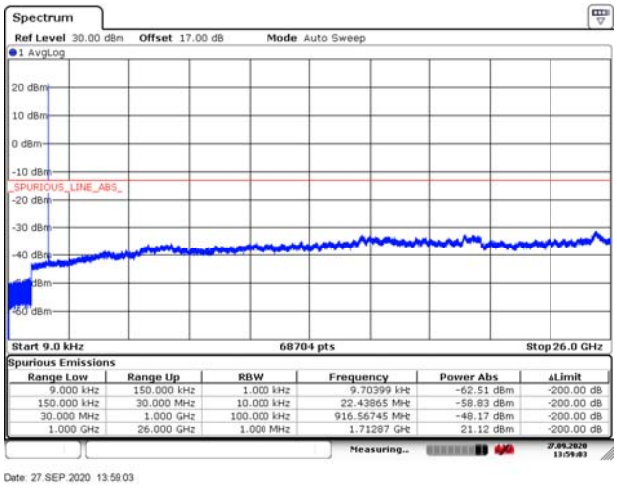
EN-DC_5A _n66 5MHz CH- High 9kHz~26GHz



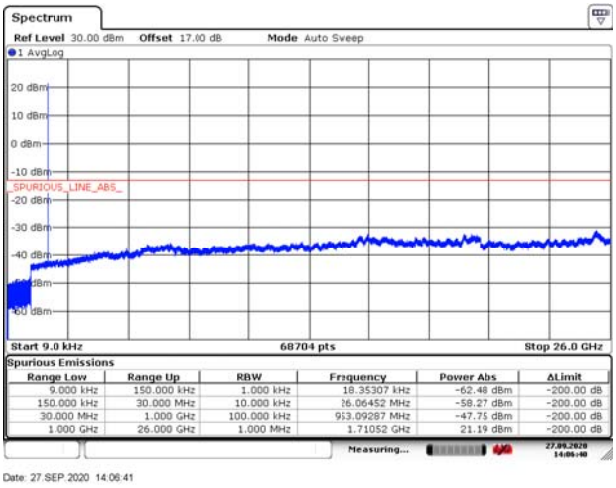
EN-DC_5A _n66 10MHz CH-High 9kHz~26GHz



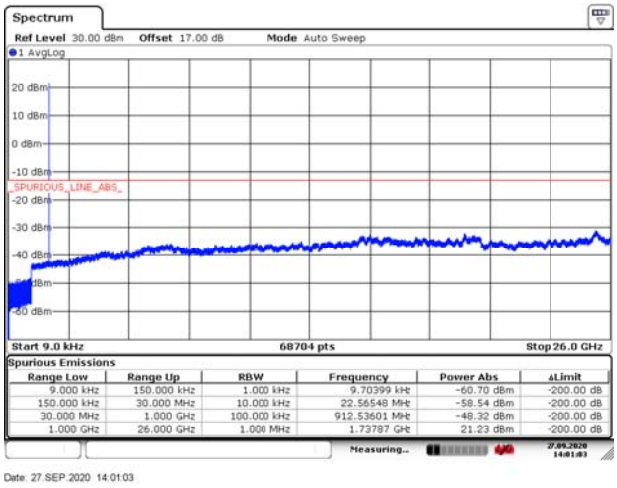
EN-DC_5A _n66 15MHz CH- Low 9kHz~26GHz



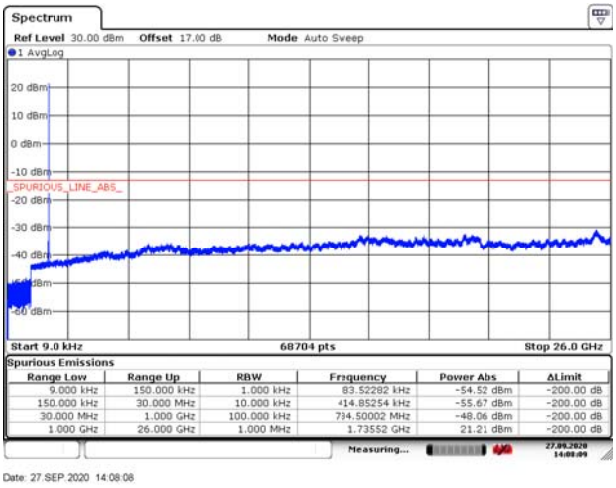
EN-DC_5A _n66 20MHz CH-Low 9kHz~26GHz



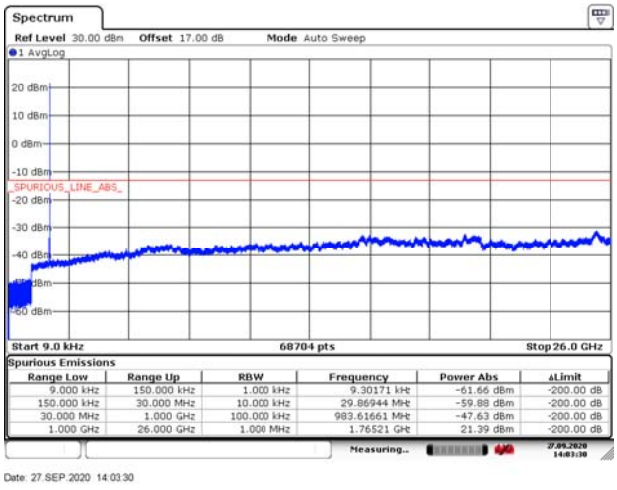
EN-DC_5A_n66 15MHz CH- Middle 9kHz~26GHz



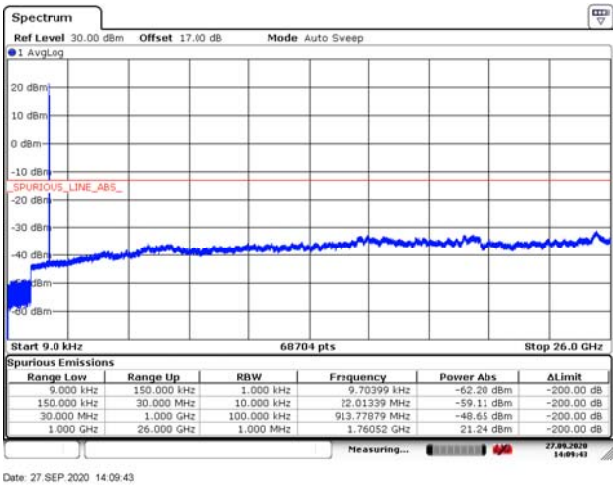
EN-DC_5A_n66 20MHz CH- Middle 9kHz~26GHz



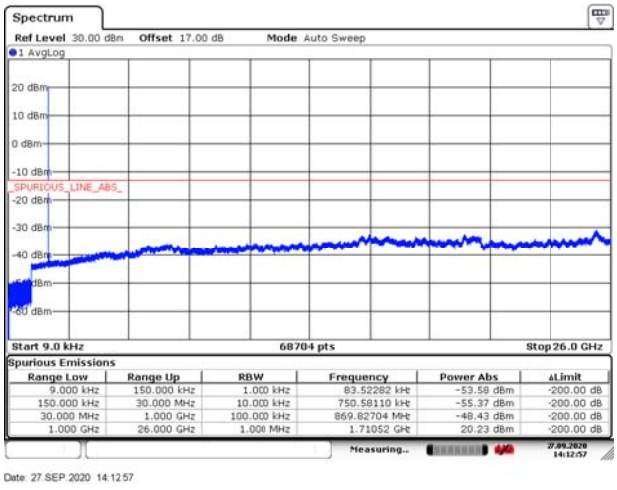
EN-DC_5A _n66 15MHz CH-High 9kHz~26GHz



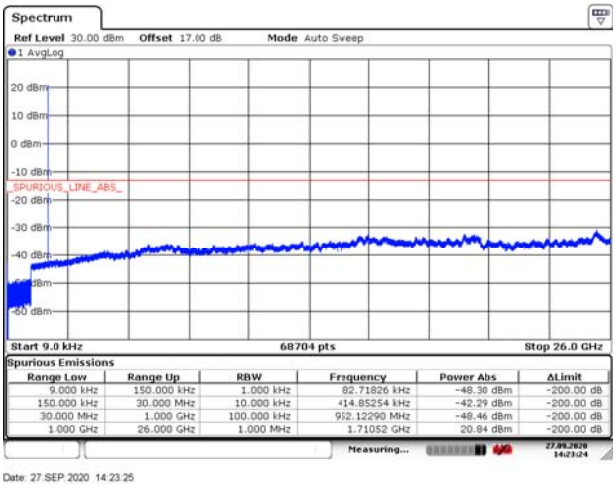
EN-DC_5A _n66 20MHz CH- High 9kHz~26GHz



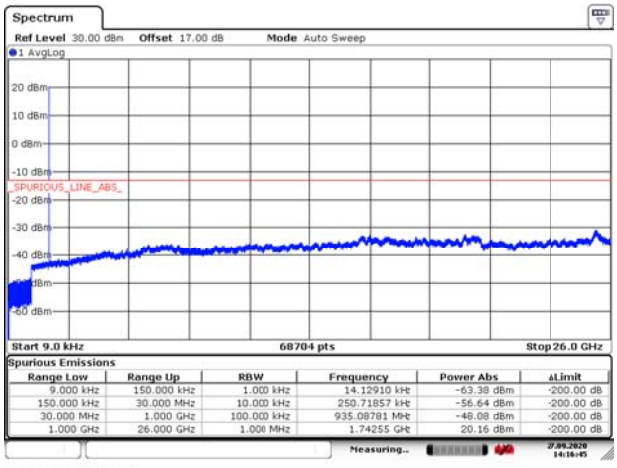
EN-DC_13A_n66 5MHz CH-Low 9kHz~26GHz



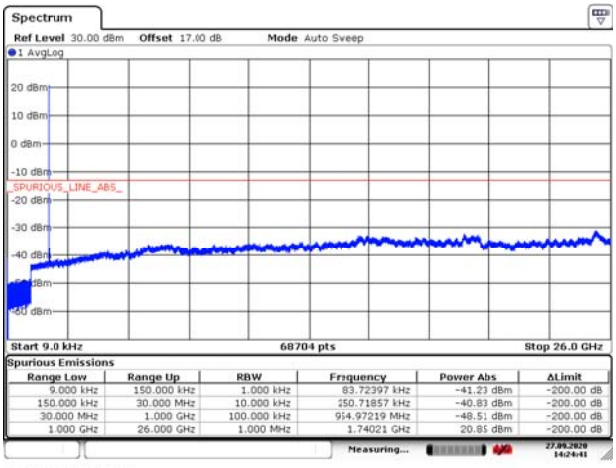
EN-DC_13A _n66 10MHz CH- Low 9kHz~26GHz



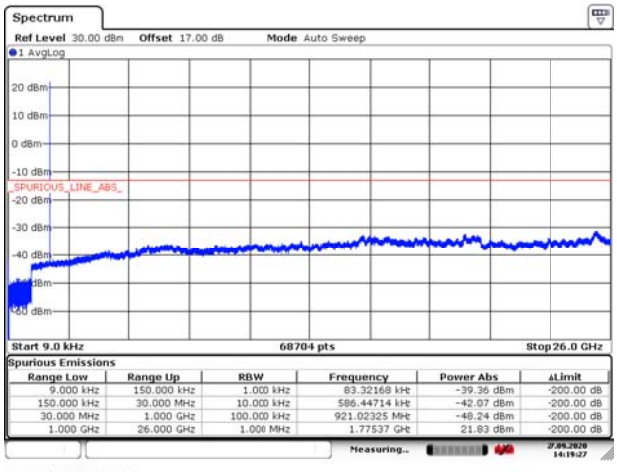
EN-DC_13A _n66 5MHz CH- Middle 9kHz~26GHz



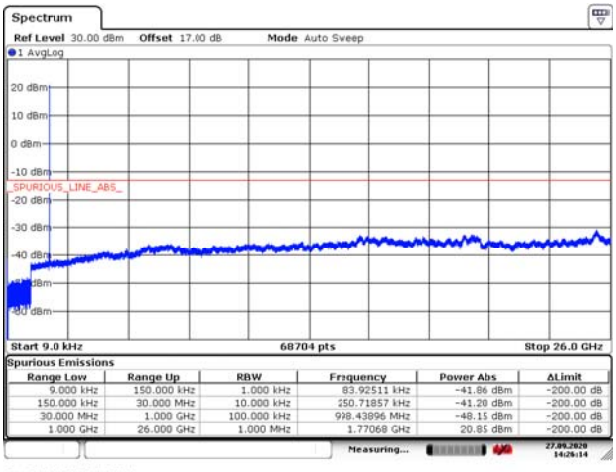
EN-DC_13A _n66 10MHz CH- Middle 9kHz~26GHz



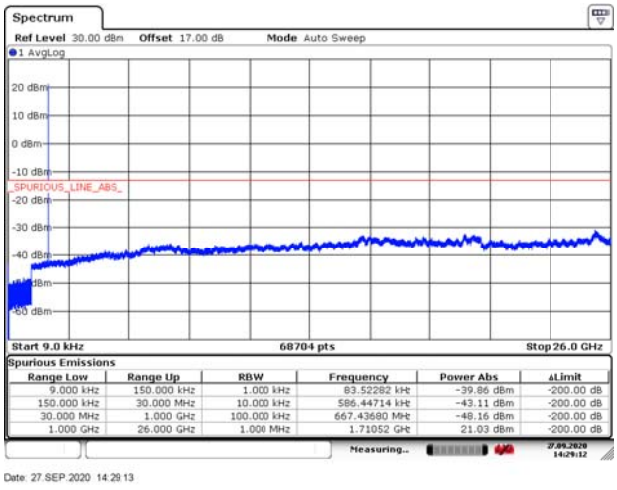
EN-DC_13A _n66 5MHz CH- High 9kHz~26GHz



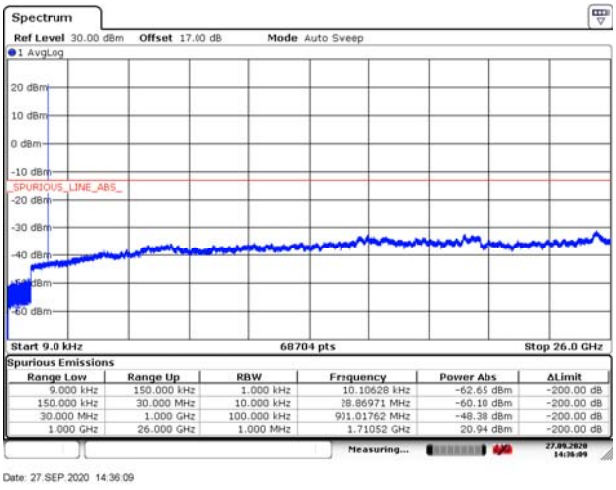
EN-DC_13A _n66 10MHz CH-High 9kHz~26GHz



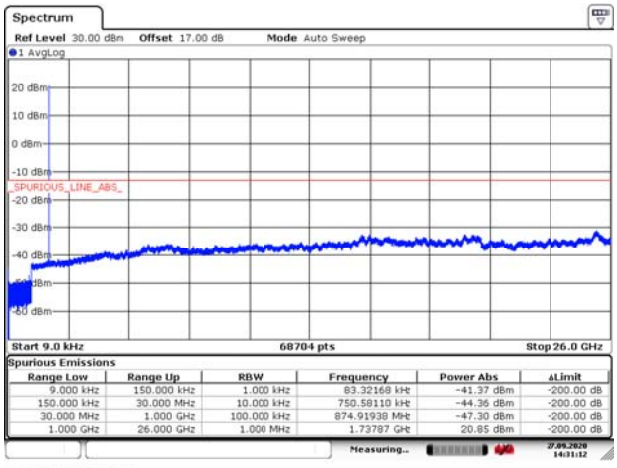
EN-DC_13A _n66 15MHz CH- Low 9kHz~26GHz



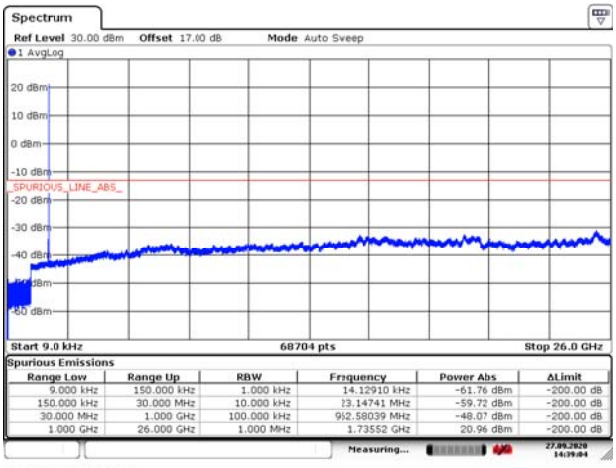
EN-DC_13A _n66 20MHz CH-Low 9kHz~26GHz



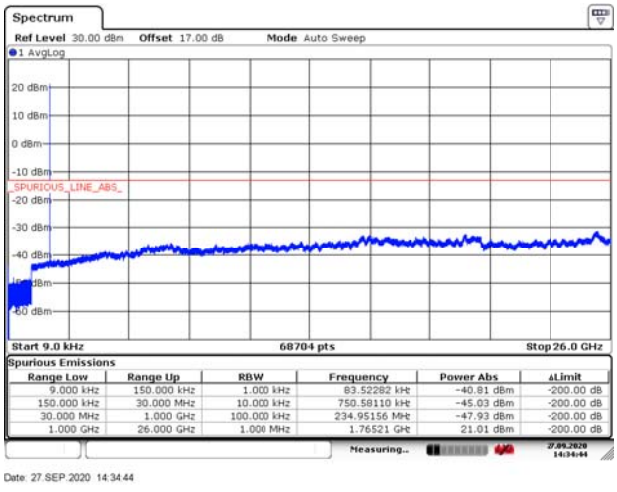
EN-DC_13A_n66 15MHz CH- Middle 9kHz~26GHz



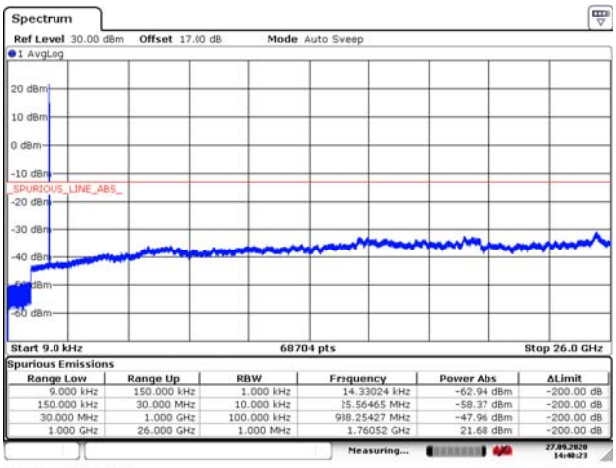
EN-DC_13A_n66 20MHz CH- Middle 9kHz~26GHz



EN-DC_13A _n66 15MHz CH-High 9kHz~26GHz



EN-DC_13A _n66 20MHz CH- High 9kHz~26GHz



5.7 Radiates Spurious Emission

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

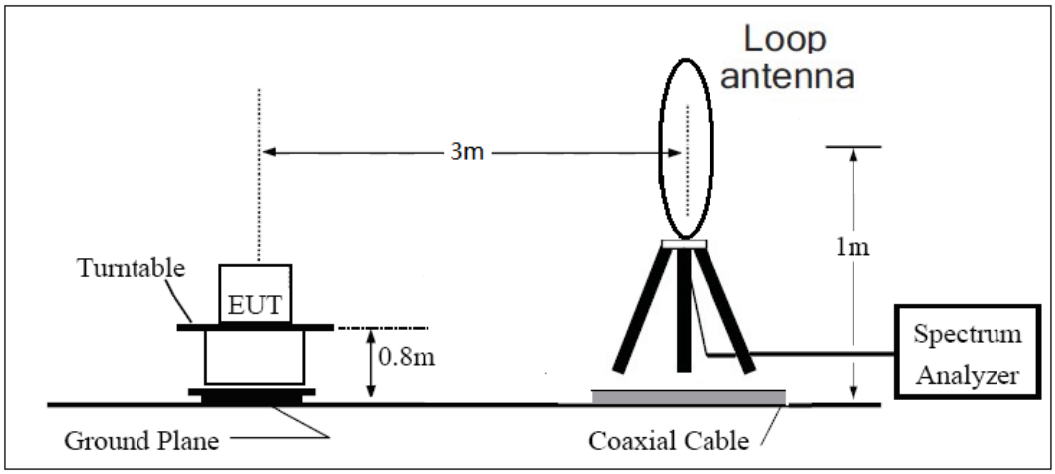
1. The testing follows FCC KDB 971168 D01 v03r01 Section 5.8 and ANSI C63.26 (2015).
2. Below 1GHz: The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H). Above 1GHz: (Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.) The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).
3. A loop antenna, A log-periodic antenna or 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.
4. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=200Hz,VBW=600Hz for 9kHz-150kHz , RBW=10kHz, VBW=30kHz 150kHz-30MHz ,RBW=100kHz,VBW=300kHz for 30MHz to 1GHz and RBW=1MHz, VBW=3MHz for above 1GHz And the maximum value of the receiver should be recorded as (Pr).
5. 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 is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) 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 (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
6. 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 (Pcl) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test.
7. The measurement results are obtained as described below:
Power(EIRP)=PMea- PAg - Pcl + Ga
The measurement results are amend as described below:
Power(EIRP)=PMea- Pcl + Ga
8. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP

= EIRP-2.15dBi.

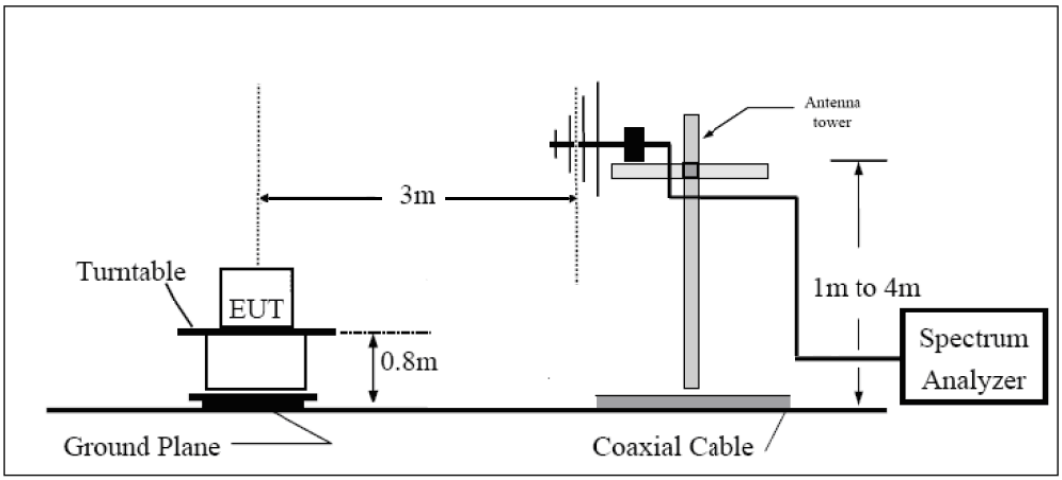
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test setup

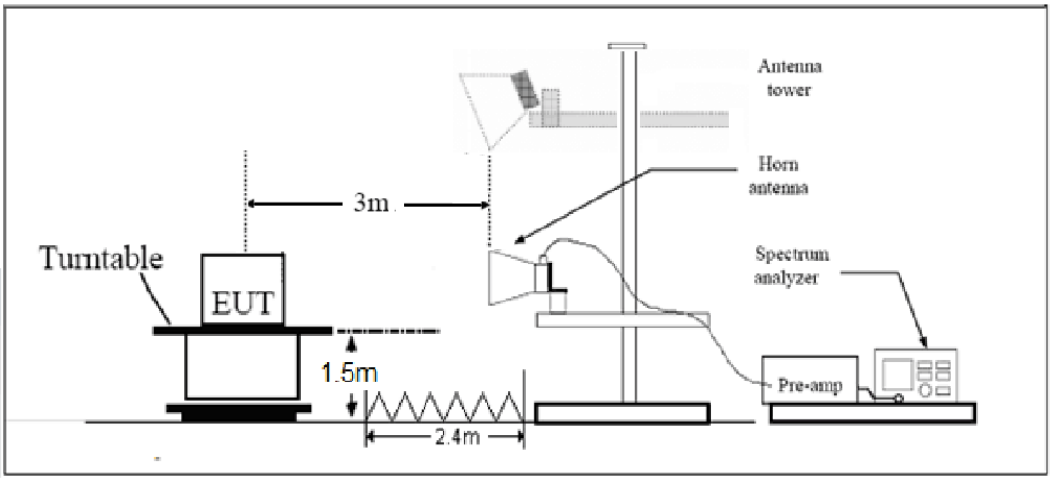
9KHz ~ 30MHz



30MHz ~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Limits

Rule Part 27.53(h) specifies that “for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10 (P) dB.”

Part 27.53(h) Limit	-13 dBm

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95％ confidence level for the normal distribution is with the coverage factor k = ±1.96, U= ±3.55 dB.

Test Result

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions below the noise floor will not be recorded in the report.

EN-DC_2A_n66 QPSK 5MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3464.30	-60.16	2.6	10.75	Horizontal	-52.01	-13.00	39.01	0
3	5197.50	-59.19	2.4	11.05	Horizontal	-50.54	-13.00	37.54	45
4	6930.00	-57.14	4.5	11.15	Horizontal	-50.49	-13.00	37.49	315
5	8662.50	-55.29	5.1	11.35	Horizontal	-49.04	-13.00	36.04	90
6	10395.00	-51.16	5.3	11.95	Horizontal	-44.51	-13.00	31.51	0
7	12127.50	-53.59	5.5	13.55	Horizontal	-45.54	-13.00	32.54	45
8	13860.00	-51.12	6.3	13.75	Horizontal	-43.67	-13.00	30.67	90
9	15592.50	-52.02	6.7	13.85	Horizontal	-44.87	-13.00	31.87	45
10	17325.00	-49.03	6.8	14.25	Horizontal	-41.58	-13.00	28.58	315
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.									

EN-DC_2A_n66 QPSK 10MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3464.30	-63.59	2.6	10.75	Horizontal	-55.44	-13.00	42.44	90
3	5197.50	-60.42	2.4	11.05	Horizontal	-51.77	-13.00	38.77	45
4	6930.00	-58.39	4.5	11.15	Horizontal	-51.74	-13.00	38.74	180
5	8662.50	-55.23	5.1	11.35	Horizontal	-48.98	-13.00	35.98	45
6	10395.00	-53.22	5.3	11.95	Horizontal	-46.57	-13.00	33.57	270
7	12127.50	-53.57	5.5	13.55	Horizontal	-45.52	-13.00	32.52	225
8	13860.00	-51.06	6.3	13.75	Horizontal	-43.61	-13.00	30.61	90
9	15592.50	-53.13	6.7	13.85	Horizontal	-45.98	-13.00	32.98	45
10	17325.00	-48.67	6.8	14.25	Horizontal	-41.22	-13.00	28.22	0
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.									

EN-DC_2A_n66 QPSK 20MHz CH-Middle, RB 1

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	3464.30	-62.67	2.6	10.75	Horizontal	-54.52	-13.00	41.52	0
3	5197.50	-63.92	2.4	11.05	Horizontal	-55.27	-13.00	42.27	90
4	6930.00	-57.62	4.5	11.15	Horizontal	-50.97	-13.00	37.97	225
5	8662.50	-55.09	5.1	11.35	Horizontal	-48.84	-13.00	35.84	315
6	10395.00	-52.18	5.3	11.95	Horizontal	-45.53	-13.00	32.53	270
7	12127.50	-53.23	5.5	13.55	Horizontal	-45.18	-13.00	32.18	180
8	13860.00	-49.63	6.3	13.75	Horizontal	-42.18	-13.00	29.18	90
9	15592.50	-53.82	6.7	13.85	Horizontal	-46.67	-13.00	33.67	135
10	17325.00	-49.35	6.8	14.25	Horizontal	-41.90	-13.00	28.90	45
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.									

6 Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Base Station Simulator	ANRITSU	MT8000A	6261844783	2020-05-17	2021-05-16
Power Splitter	Hua Xiang	SHX-GF2-2-13	10120101	/	/
Spectrum Analyzer	Key sight	N9010A	MY50210259	2020-05-18	2021-05-17
Signal Analyzer	R&S	FSV30	100815	2019-12-15	2020-12-14
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2020-04-02	2023-04-01
Trilog Antenna	SCHWARZBECK	VUBL 9163	9163-201	2017-11-18	2020-11-17
Horn Antenna	R&S	HF907	102723	2018-08-11	2021-08-10
Horn Antenna	ETS-Lindgren	3160-09	00102643	2018-06-20	2021-06-19
Horn Antenna	STEATITE	QSH-SL-26-40-K-15	16779	2017-07-20	2021-07-19
Signal generator	R&S	SMB 100A	102594	2020-05-18	2021-05-17
Climatic Chamber	ESPEC	SU-242	93000506	2017-12-17	2020-12-16
Preampflier	R&S	SCU18	102327	2020-05-18	2021-05-17
MOB COMMS DC SUPPLY	Keysight	66319D	MY43004105	2020-05-18	2021-05-17
RF Cable	Agilent	SMA 15cm	0001	2020-06-12	2020-12-11
Software	R&S	EMC32	9.26.0	/	/

********END OF REPORT ********

ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.

ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.