

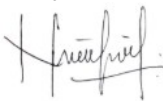
 MOTOROLA SOLUTIONS	    CERTIFICATE 2518.08 SAMM 825																																
MOTOROLA PENANG ADV. COMM. LABORATORY Motorola Solutions Malaysia Sdn Bhd, Plot 2A, Medan Bayan Lepas, Mukim 12 S.W.D, 11900 Bayan Lepas, Penang, Malaysia.	FCC / ISED TEST REPORT Report Revision : Rev.E																																
<table><tr><td>Date/s Tested</td><td>: 06-May-2025 - 13-June-2025</td></tr><tr><td>Report Issue Date</td><td>: 03-July-2025</td></tr><tr><td>Manufacturer/Location</td><td>: Motorola Solutions INC. (Plantation)</td></tr><tr><td>Manufacturer Address</td><td>: Motorola Solutions INC. (Plantation), 8000 West Sunrise Blvd MD 41-128, USA Plantation FL 33322-9947</td></tr><tr><td>Requestor</td><td>: Stankovska Daniela</td></tr><tr><td>Product Type</td><td>: Hand-held</td></tr><tr><td>Product Marketing Name (PMN)</td><td>: APX NEXT</td></tr><tr><td>Hardware Version Identification Number (HVIN)</td><td>: H55TGT9PW8BN</td></tr><tr><td>Frequency Band</td><td>: Refer to section 1.4</td></tr><tr><td>Max RF Output Power</td><td>: 251.19mW</td></tr><tr><td>Applicant Name</td><td>: Motorola Solutions Inc</td></tr><tr><td>Applicant Address</td><td>: Plot 2A, Medan Bayan Lepas, Mukim 12, S.W.D. 11900 Bayan Lepas, Penang, Malaysia</td></tr><tr><td>FCC Registrations</td><td>: 461337</td></tr><tr><td>ISED Registrations</td><td>: MY0001</td></tr><tr><td>Firmware Version Identification Number(FVIN)</td><td>: D37.00.17 (BP), D37.00.02 (AP)</td></tr></table> The equipment was tested accordance to the requirement listed below: <table><tr><td>(LTE Band 13) FCC 47 CFR Part 2 / 27 ISED RSS-GEN (Issue 5), Amendment 1 (Mar 2019), Amendment 2 (Feb 2021) RSS-130 (Issue 2)</td><td>PASS</td></tr></table>		Date/s Tested	: 06-May-2025 - 13-June-2025	Report Issue Date	: 03-July-2025	Manufacturer/Location	: Motorola Solutions INC. (Plantation)	Manufacturer Address	: Motorola Solutions INC. (Plantation), 8000 West Sunrise Blvd MD 41-128, USA Plantation FL 33322-9947	Requestor	: Stankovska Daniela	Product Type	: Hand-held	Product Marketing Name (PMN)	: APX NEXT	Hardware Version Identification Number (HVIN)	: H55TGT9PW8BN	Frequency Band	: Refer to section 1.4	Max RF Output Power	: 251.19mW	Applicant Name	: Motorola Solutions Inc	Applicant Address	: Plot 2A, Medan Bayan Lepas, Mukim 12, S.W.D. 11900 Bayan Lepas, Penang, Malaysia	FCC Registrations	: 461337	ISED Registrations	: MY0001	Firmware Version Identification Number(FVIN)	: D37.00.17 (BP), D37.00.02 (AP)	(LTE Band 13) FCC 47 CFR Part 2 / 27 ISED RSS-GEN (Issue 5), Amendment 1 (Mar 2019), Amendment 2 (Feb 2021) RSS-130 (Issue 2)	PASS
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Prepared By:  Nur Amanina binti Ahmad Nizam Technician	Approve Signatory:  Zulhairudin bin Zulkifli Responsible Engineer																																

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REVISION HISTORY

Revision History	Description	Date	Originator
Rev. A	Initial Report	03-July-2025	Nur Amanina
Rev. B	1.Update Report Issue Date from 03-July-2024 to 03-July-2025 2.Add Stamped Metal at Antenna Type section 3.Amend tester name from Awatif Rahman to Nur Amanina at Test Condition section.	01-August-2025	Nur Amanina
Rev. C	1.Update Antenna type from Stamped Metal to PIFA 2.Update antenna gain from 0.7dBi to -1.6dBi 3.Update ERP data	06-August-2025	Nur Amanina
Rev. D	Changes from dBm to dB under Summary of result remark section.	08-August-2025	Nur Amanina
Rev. E	Changes of FVIN at the front page from D03.75.21 (BP), D00.00.16 (AP) to D37.00.17 (BP), D37.00.02 (AP)	11-August-2025	Nur Amanina

1.0. Summary of Test Results

FCC Clause	ISED Clause	Test Item	Results	Remarks	Serial Number Tested
2.1046 27.50(b)(12)	RSS-Gen 6.12 RSS-130 4.6	Conducted RF Output Power	Pass	Meet the requirement of limit	437ZBG0235
-	RSS-130 4.6	Peak-to-Average Power Ratio	Pass	Meet the requirement of limit	437ZBG0235
2.1049	RSS-Gen 6.7	Occupied Bandwidth (26dBc, 99%)	Pass	Meet the requirement of limit	437ZBG0235
2.1055 27.54	RSS-130 4.5	Frequency Stability	Pass	Meet the requirement of limit	437ZBG0235
2.1051 27.53(c)	RSS-Gen 6.13 RSS-130 4.7	Band Edge/Emission Mask Conducted Spurious Emission	Pass	Meet the requirement of limit	437ZBG0235
2.1051 27.53(c)(2)	RSS-Gen 6.13 RSS-130 4.7	Conducted Spurious Emissions	Pass	Meet the requirement of limit	437ZBG0235
2.1053 27.53(c)(2)	RSS-130 4.7	Radiated Spurious Emission	Pass	-52.2830 dBm (Margin: 39.283 dB, Noise Floor)	437ZBG0594
2.1049 27.50(b)(10)	RSS-130 4.6	Effective Radiated Power (ERP)	Pass	Meet the requirement of limit	437ZBG0235
27.53(f)	RSS – 130 4.7.2 (b)	GNSS (EIRP for 1599 – 1610MHz)	Pass	Meet the requirement of limit	437ZBG0235

1.1. Measurement Uncertainty

Measurement	Frequency	Expanded Uncertainty (k=1.96) (±dB)
Radiated Emissions up to 1 GHz	30MHz ~ 200MHz	4.03
	200MHz ~ 1000MHz	4.03
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	4.03
	18GHz ~ 25GHz	4.03

1.2. Equipment List

DESCRIPTION	MODEL	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
BROADBAND ATE 1 (RF CONDUCTED TESTS)				
WIDEBAND RADIO COMMUNICATION TESTER	CMW500	154550	16-Aug-24	16-Aug-25
WIDEBAND RADIO COMMUNICATION TESTER	CMW500	163061	19-Aug-24	19-Aug-25
SIGNAL ANALYZER	FSV40	101431	08-Aug-24	08-Aug-25
CHAMBER	SH-641	92003150	12-Sep-24	12-Sep-25
POWER SUPPLY	6652A	MY40001437	03-Mar-25	03-Mar-26
TEST SOFTWARE	R&S CMWrun			
VERSION	V.1.9.8			
RADIATED SPURIOUS EMISSION (EMC CHAMBER 1)				
DRG HORN FREQ.	SAS-571	566	09-Jan-25	09-Jan-26
DRG HORN FREQ.	SAS-571	719	09-Oct-24	09-Oct-25
DC Power Supply	6032A	MY41001736	05-Aug-24	05-Aug-25
SIGNAL GENERATOR	SMB 100A	180683	20-Dec-24	20-Dec-27
EMI TEST RECEIVER	ESW44	101750	07-Aug-24	07-Aug-25
5m SEMI-ANECHOIC CHAMBER	S800-HX	J2308	Not Required	Not Required
BILOG ANTENNA	CBL6112B	2964	08-Oct-24	08-Oct-25
BILOG ANTENNA	CBL6112D	55546	05-Jun-24	05-Jun-25
DATA LOGGER THERMOHYGROMETER	SDL500	A.016800	26-Jun-24	26-Jun-25
SYSTEM CONTROLLER	SC104V	050806-1	Not Required	Not Required
TURNTABLE FLUSH MOUNT 2M	FM2011	FM2011-001	Not Required	Not Required
ANTENNA POSITIONING TOWER	TLT2	090308-5	Not Required	Not Required
BROAD-BAND HORN ANTENNA	BBHA9170	BBHA9170143	30-Sep-24	30-Sep-25
PREAMPLIFIER 18-40GHz	JS44-18004000-33-8P	2034566	Not Required	Not Required
PREAMPLIFIER 1-18GHz	EMC0518A45SE	980890	04-Aug-24	04-Aug-25
PREAMPLIFIER	PAM-0118P	269	27-Aug-24	27-Aug-25
TEST SOFTWARE	EMC.FCC.IC.RE.v1.7.1			
VERSION	1.7.1			

DESCRIPTION	MODEL	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
RADIATED SPURIOUS EMISSION (EMC CHAMBER 1)				
EMI TEST RECEIVER	ESW26	103229	09-Sep-24	09-Sep-25
3M SEMI-ANECHOIC CHAMBER	NA	888032	Not Required	Not Required
BORE SIGHT ANTENNA MAST	MBS-500	1010817	Not Required	Not Required
TURNTABLE FLUSH MOUNT 2M	T-200-S	T-200-S-001	Not Required	Not Required
POSITIONING CONTROLLER	MF-7802BS	MF-780208636	Not Required	Not Required
POWER SUPPLY	6032A	2615A01178	30-Jul-24	30-Jul-25
SIGNAL ANALYZER	FSV40	101432	09-Aug-24	08-Aug-25
DATA LOGGER	SDL500	A.016766	20-Jul-24	20-Jul-25
BILOG ANTENNA	CBL6112B	2950	09-Apr-25	09-Apr-26
BILOG ANTENNA	CBL 6112B	2964	08-Oct-24	08-Oct-25
DRG HORN FREQ.	SAS-571	720	29-Apr-25	29-Apr-26
DRG HORN FREQ.	SAS-571	719	09-Oct-24	09-Oct-25
PREAMPLIFIER	PAM-0118	427	15-Nov-24	15-Nov-25
SIGNAL GENERATOR	SMB100A	181117	06-Dec-21	06-Aug-25
LOOP ANTENNA	6502	00208416	08-Oct-24	08-Oct-25
BROAD-BAND HORN ANTENNA	BBHA9170	BBHA9170143	30-Sep-24	30-Sep-25
TEST SOFTWARE	EMC_FCC_IC_Bluetooth_RE_Test			
VERSION	EMC_FCC_RE_v1.6.5			

1.3. General Information

General Description of EUT

Product	APX NEXT			
Brand	Motorola Solutions			
Test Model	H55TGT9PW8BN			
Power Supply Rating	7.5 Vdc			
Mode of Operation	LTE Band 13			
Modulation Type	QPSK, 16QAM			
Operating Frequency	LTE Band 13	Channel Bandwidth 5MHz	779.5MHz~784.5MHz	
		Channel Bandwidth 10MHz	782MHz	
Max. Conducted RF Output Power	LTE Band 13 QPSK	Channel Bandwidth 5MHz	23.746dBm (0.237W)	
		Channel Bandwidth 10MHz	23.754dBm (0.237W)	
	LTE Band 13 16QAM	Channel Bandwidth 5MHz	22.912dBm (0.196W)	
		Channel Bandwidth 10MHz	22.828dBm (0.192W)	
Emission Designator	LTE Band 13		QPSK	16QAM
		Channel Bandwidth 5MHz	4M47G7D	4M47D7W
		Channel Bandwidth 10MHz	8M89G7D	8M91D7W
Antenna Type	LTE Band 13	PIFA, Antenna LTE Low Band 777 – 787MHz (-1.6dBi)		
SW Version	D37.00.17 (BP), D37.00.02 (AP)			
HW Version	P2			

Note:

1. The EUT contains following accessory devices and data cable.

Item	Brand	Model or P/N	Specification
Li-Ion Battery	MOTOROLA	PMNN4895A	BATTERY PACK, BATT IMPRES 2 LIION IP68 5800T

Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	Product	Brand	Model No.	Serial No.	FCC ID
1	Wideband Radio Communication Tester	R&S	CMW500	154550	NA
2	Wideband Radio Communication Tester	R&S	CMW500	163061	NA

NO.	Signal Cable Description of The above Support Units
1	NA

Note:

1. All power cords of the above support units are non-shielded.
2. Item 1 acted as a communication partner to transfer data.

EUT Operating Conditions

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency.

General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

KDB 971168 D01 Power Meas License Digital Systems v03r01
KDB 971168 D02 Misc OOB License Digital Systems v02r01
ANSI C63.26

NOTE: All test items have been performed and recorded as per the above standards.

1.4. Channel Number and Frequency Info

Band	Bandwidth supported	Available Channel Number	Test Channel Number			Test Channel Frequency (MHz)		
			Low Channel	Mid Channel	High Channel	Low Channel	Mid Channel	High Channel
LTE Band 13	5 MHz	23205 ~ 23255	23205	23230	23255	779.5	782	784.5
	10 MHz	23230	-	23230	-	-	782	-

1.5. Test Mode Applicability and Tested Channel Detail

Pre-scan also have been conducted with the accessory devices listed in section table 1.3, only the worst case radiated emission results of the combination test configuration is reported in this report.
 The following channel(s) was (were) selected for the final test as listed below:

LTE Band 13

Test Item	Available Channel	Tested Channel	Channel Bandwidth	Uplink Modulation	Mode
Conducted RF Output Power	23025 ~ 23255	23205, 23230, 23255	5 MHz	QPSK, 16QAM	As per table 1.6.3
	23025 ~ 23255	23230	10 MHz		
Peak to Average Power Ratio	23025 ~ 23255	23205, 23230, 23255	5 MHz	QPSK, 16QAM	25 RB / 0 RB Offset
	23025 ~ 23255	23230	10 MHz		50 RB / 0 RB Offset
Occupied Bandwidth	23025 ~ 23255	23205, 23230, 23255	5 MHz	QPSK, 16QAM	25 RB / 0 RB Offset
	23025 ~ 23255	23230	10 MHz		50 RB / 0 RB Offset
Frequency Stability	23025 ~ 23255	23205, 23255	5 MHz	QPSK	25 RB / 0 RB Offset
	23025 ~ 23255	23230	10 MHz		50 RB / 0 RB Offset
Band Edge / Emission Mask Conducted Spurious Emission	23025 ~ 23255	23205, 23255	5 MHz	QPSK, 16QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
	23025 ~ 23255	23230	10 MHz		1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
Conducted Spurious Emission	23025 ~ 23255	23205, 23230, 23255	5 MHz	QPSK	1 RB / 0 RB Offset
	23025 ~ 23255	23230	10 MHz		1 RB / 0 RB Offset
Radiated Spurious Emission	23025 ~ 23255	23205	5 MHz	QPSK	1 RB / 0 RB Offset
	23025 ~ 23255	23230	10 MHz		1 RB / 0 RB Offset
	23025 ~ 23255	23255	5MHz		1 RB / 0 RB Offset
GNSS (EIRP for 1599 – 1610MHz)	23025 ~ 23255	23205	5 MHz	QPSK	1 RB / 24 RB Offset
		23255			1 RB / 13 RB Offset
Effective Radiated Power (ERP)	23025 ~ 23255	23205, 23230, 23255	5 MHz	QPSK, 16QAM	As per table 1.6.4
	23025 ~ 23255	23230	10 MHz		

NOTE:

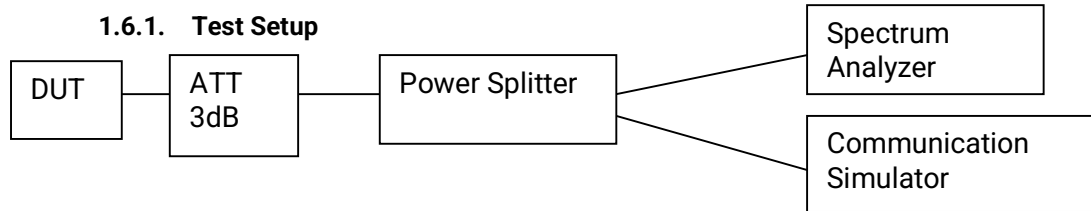
1. The Conducted RF Output Power for QPSK and 16QAM, measured value of QPSK mode is higher than 16QAM mode. Therefore, only Conducted Spurious Emission, Radiated Emission and GNSS (EIRP for 1599 – 1610MHz) had been tested under QPSK modes.
2. Band Edge was performed with 1 and full Resource Block at the lowest and highest operating frequency band.
3. The Equivalent Radiated Power (ERP) was calculated from Conducted RF Output Power results in QPSK and 16QAM modulation.
4. Peak to Average and Occupied Bandwidth were performed with full Resource Block which is the worst case.
5. Frequency stability was performed with full Resource Block in QPSK modulation.

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
Conducted RF Output Power	25°C, 50% RH	7.5 Vdc	Nur Amanina
Peak-to-Average Power Ratio	25°C, 50% RH	7.5 Vdc	Nur Amanina
Occupied Bandwidth	25°C, 50% RH	7.5 Vdc	Nur Amanina
Frequency Stability	-30°C ~ 60°C	7.5 Vdc	Nur Amanina
Band Edge Conducted Spurious Emission	25°C, 50% RH	7.5 Vdc	Nur Amanina
Conducted Spurious Emission	25°C, 50% RH	7.5 Vdc	Nur Amanina
Radiated Spurious Emission	23.4°C, 68.6% RH	7.5 Vdc	Nazrin & Fuad
Effective Radiated Power (ERP)	25°C, 50% RH	7.5 Vdc	Nur Amanina

1.6. Conducted RF Output Power

1.6.1. Test Setup



1. The DUT transmitter output port was connected to communication simulator with above setup.
2. Path loss for the measurement included.
3. Set DUT to transmit maximum power through communication simulator
4. All the measurement was done at low, mid, high channel for each band and different modulation.
5. Record the average power into the test report.

1.6.2. Test Limits

FCC: Portable stations (hand-held devices) transmitting in the 776-788 MHz band is limited to 3 watts ERP.

ISED: The e.r.p. shall not exceed 3 watts for mobile equipment, fixed subscriber equipment and portable equipment.

1.6.3. Conducted RF Output Power – LTE Band 13 (777-787MHz)

Conducted Output Power (dBm)								
LTE Band/BW	RB Size	RB Offset	QPSK Modulation			16QAM Modulation		
			Low CH	Mid CH	High CH	Low CH	Mid CH	High CH
			23205	23230	23255	23205	23230	23255
			779.5MHz	782 MHz	784.5 MHz	779.5 MHz	782 MHz	784.5 MHz
Band 13 / 5MHz	1	0	23.746	23.638	23.636	22.888	22.835	22.752
	1	13	23.71	23.634	23.635	22.912	22.815	22.761
	1	24	23.655	23.559	23.532	22.819	22.737	22.668
	12	0	22.725	22.686	22.565	21.752	21.741	21.587
	12	6	22.753	22.708	22.575	21.732	21.728	21.601
	12	13	22.687	22.642	22.584	21.719	21.692	21.636
	25	0	22.743	22.682	22.553	21.753	21.702	21.575

Conducted Output Power (dBm)								
LTE Band/BW	RB Size	RB Offset	QPSK Modulation			16QAM Modulation		
			Low CH	Mid CH	High CH	Low CH	Mid CH	High CH
			23205	23230	23255	23205	23230	23255
			779.5 MHz	782 MHz	784.5 MHz	779.5 MHz	782 MHz	784.5 MHz
Band 13 / 10MHz	1	0		23.754			22.828	
	1	25		23.665			22.784	
	1	49		23.499			22.646	
	25	0		22.777			21.781	
	25	13		22.718			21.749	
	25	25		22.65			21.673	
	50	0		22.716			21.75	

1.6.4. Effective Radiated Power – LTE Band 13 (777-787 MHz)

ERP (dBm)								
LTE Band/BW	RB Size	RB Offset	QPSK Modulation			16QAM Modulation		
			Low CH	Mid CH	High CH	Low CH	Mid CH	High CH
			23205	23230	23255	23205	23230	23255
			779.5MHz	782 MHz	784.5 MHz	779.5 MHz	782 MHz	784.5 MHz
Band 13 / 5MHz	1	0	19.996	19.888	19.886	19.138	19.085	19.002
	1	13	19.96	19.884	19.885	19.162	19.065	19.011
	1	24	19.905	19.809	19.782	19.069	18.987	18.918
	12	0	18.975	18.936	18.815	18.002	17.991	17.837
	12	6	19.003	18.958	18.825	17.982	17.978	17.851
	12	13	18.937	18.892	18.834	17.969	17.942	17.886
	25	0	18.993	18.932	18.803	18.003	17.952	17.825

ERP (dBm)								
LTE Band/BW	RB Size	RB Offset	QPSK Modulation			16QAM Modulation		
			Low CH	Mid CH	High CH	Low CH	Mid CH	High CH
				23230			23230	
				782 MHz			782 MHz	
Band 13 / 10MHz	1	0		20.004			19.078	
	1	25		19.915			19.034	
	1	49		19.749			18.896	
	25	0		19.027			18.031	
	25	13		18.968			17.999	
	25	25		18.9			17.923	
	50	0		18.966			18	

The maximum ERP/EIRP from the measured RF output power is given in Equation as follows:

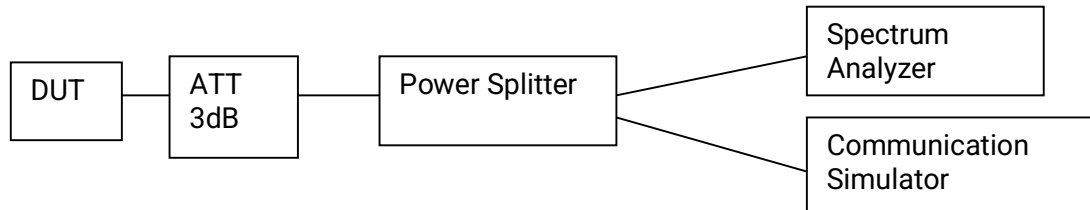
$$\begin{aligned} \text{EIRP} &= \text{PMeas} + \text{GT} \\ \text{ERP} &= \text{EIRP} - 2.15 \end{aligned}$$

Where, ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (Expressed in the same units as PMeas, e.g., dBm)

PMeas measured transmitter output power, in dBm
GT gain of the transmitting antenna, in dBi (EIRP)

1.7. Peak-to-Average Power Ratio

1.7.1. Test Setup



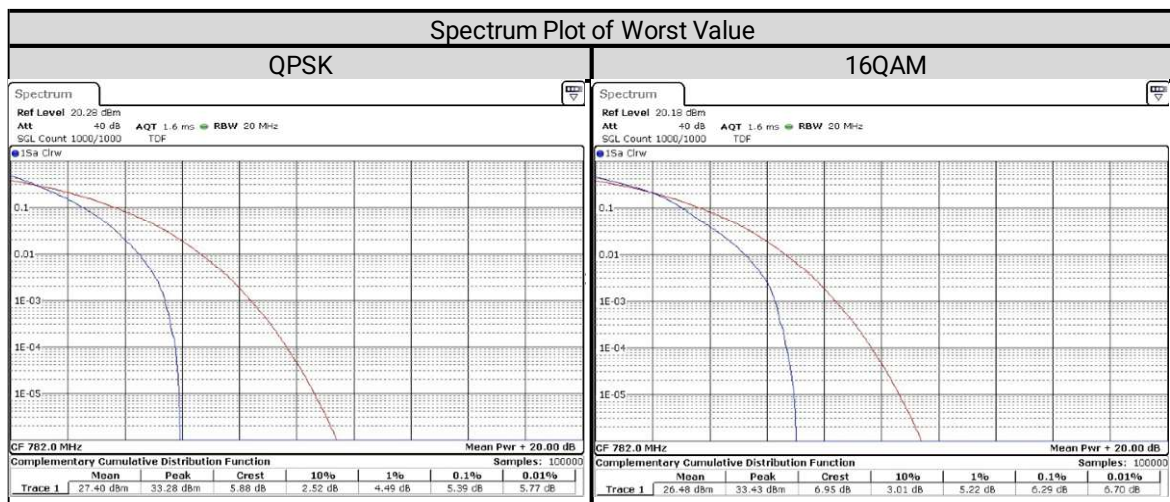
1. The DUT transmitter output port was connected to communication simulator with above setup.
2. Path loss for the measurement included.
3. Set DUT to transmit maximum power through communication simulator
4. Set the CCDF (Complementary Cumulative Distribution Function) option in the spectrum analyzer.
5. Spectrum Analyzer setting, RBW = 20MHz.
6. Recorded the maximum PAR level associated with a probability of 0.1% as Peak to Average Ratio.
7. All the measurement was done at low, mid, high channel for each band and different modulation.

1.7.2. Test Limit

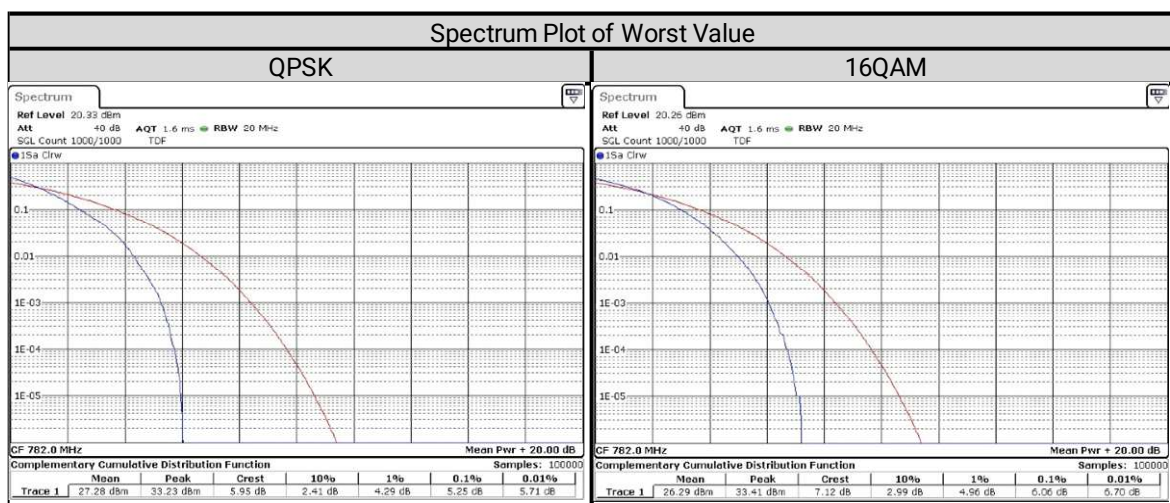
The peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the highest PAPR during periods of continuous transmission.

1.7.3. Peak-to-Average Power Ratio – LTE Band 13 (777-787MHz)

LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	Peak To Average (dB)	
			QPSK Modulation	16QAM Modulation
Band 13/5MHz/25/0	Low CH 23205	779.5 MHz	5.304	6.087
	Mid CH 23230	782 MHz	5.391	6.29
	High CH 23255	784.5 MHz	5.188	6.029

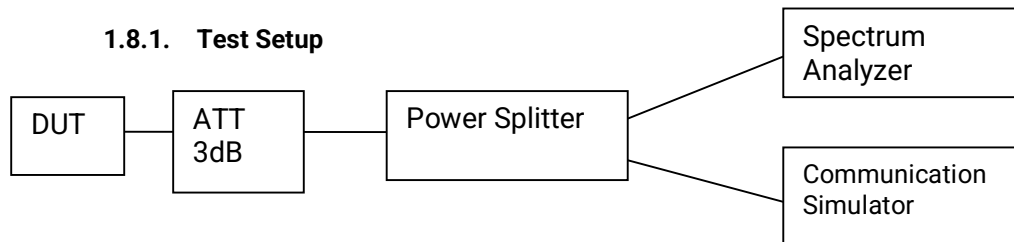


LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	Peak To Average (dB)	
			QPSK Modulation	16QAM Modulation
Band 13/10MHz/50/0	Low CH			
	Mid CH 23230	782 MHz	5.246	6.058
	High CH			



1.8. Occupied Bandwidth

1.8.1. Test Setup



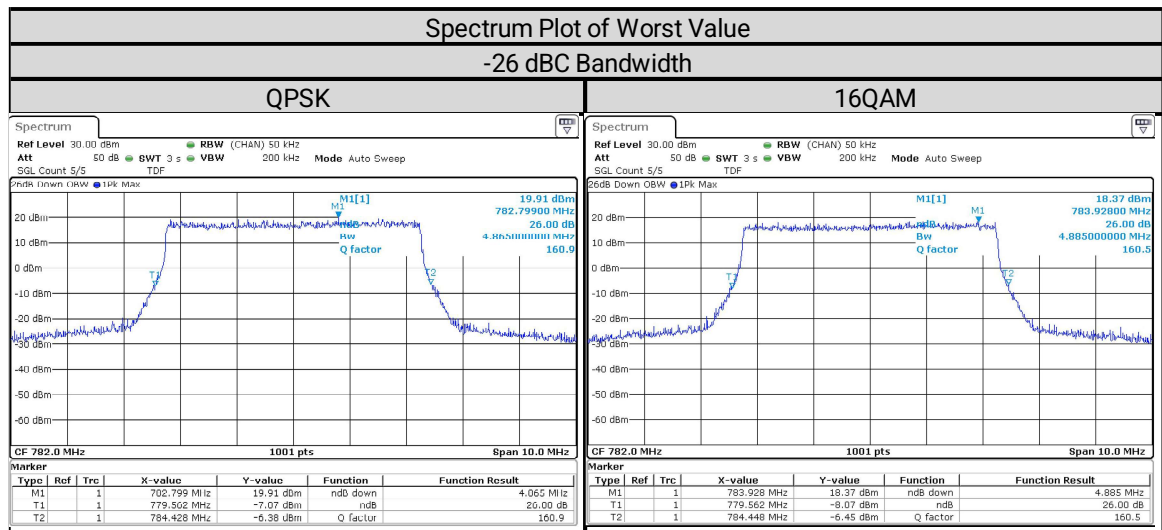
- 1) The DUT transmitter output port was connected to communication simulator with above setup.
- 2) Path loss for the measurement included.
- 3) For LTE measurement, set DUT to transmit maximum power & full RB size through communication simulator.
- 4) For LTE measurement, set DUT to transmit maximum power through communication simulator.
- 5) Spectrum Analyzer setting, RBW is 1% of OBW and VBW is 3 times of RBW.
- 6) Measure & record -26dBc and 99% occupied bandwidth (BW).
- 7) All the measurement was done at low, mid, high channel for each band and different modulation.

1.8.2. Test Limit

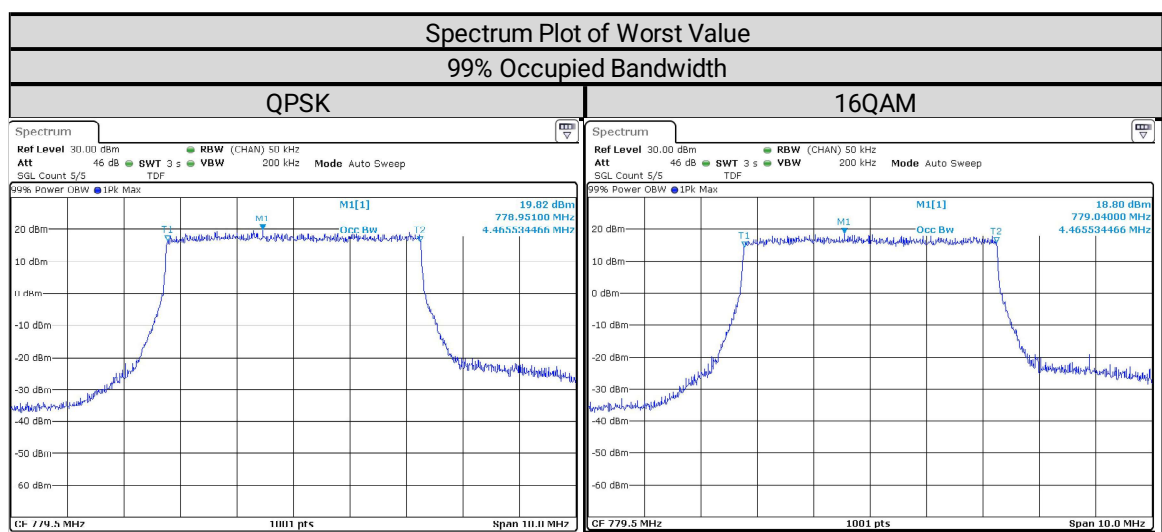
For measurement 99% of occupied bandwidth that is required by FCC 2.1049 and RSS Gen 6.7.

1.8.3. Occupied Bandwidth – LTE Band 13 (777-787MHz)

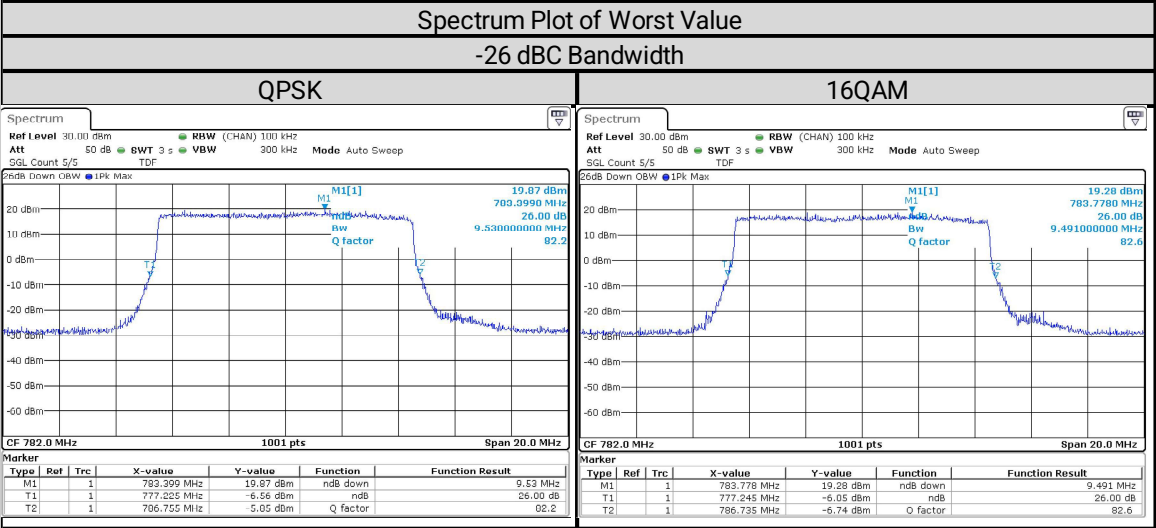
LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	-26 dBc Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 13/5MHz/25/0	Low CH 23205	779.5 MHz	4.845	4.855
	Mid CH 23230	782 MHz	4.865	4.885
	High CH 23255	784.5 MHz	4.815	4.825



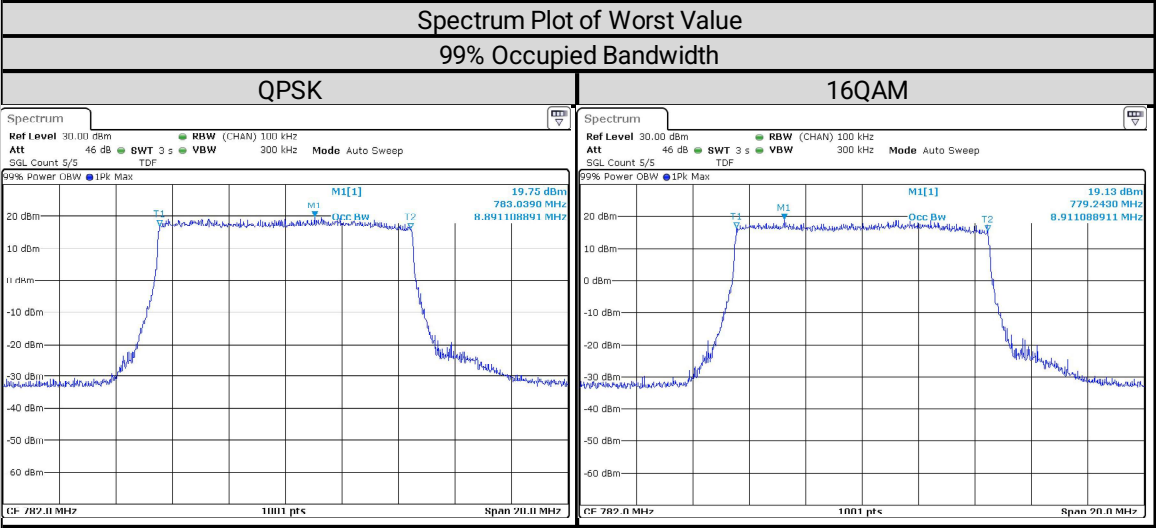
LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	99% Occupied Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 13/5MHz/25/0	Low CH 23205	779.5 MHz	4.466	4.466
	Mid CH 23230	782 MHz	4.466	4.466
	High CH 23255	784.5 MHz	4.466	4.456



LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	-26 dBc Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 13/10MHz/50/0	Low CH			
	Mid CH 23230	782 MHz	9.53	9.491
	High CH			

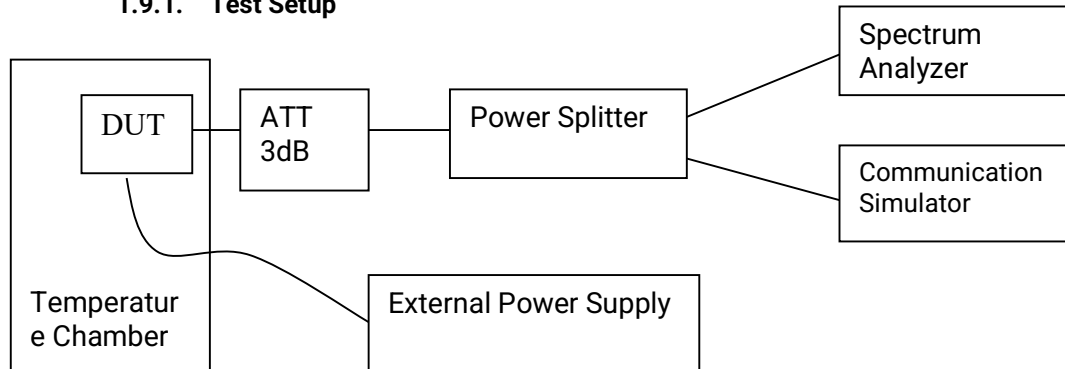


LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	99% Occupied Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 13/10MHz/50/0	Low CH			
	Mid CH 23230	782 MHz	8.891	8.911
	High CH			



1.9. Frequency Stability

1.9.1. Test Setup



- 1) The DUT is placed in the temperature chamber and DUT is power up by external power supply to control the DC input voltage.
- 2) The temperature chamber could control the temperature and humidity and external power supply could control the test voltage range from minimum to maximum operating voltage.
- 3) Measured frequency error from the communication simulator by vary below step :
 - i. Vary temperature of the temperature chamber from -30 ~ 60 deg C (10 deg C / Step) and set external supply voltage constant at nominal voltage.
 - ii. Vary external supply voltage from minimum to maximum operation voltage support by DUT and set temperature chamber constant at room temp.
- 4) All the measurement was done at mid channel for each band.

1.9.2. Test Limit

As per manufacturer declared product operating at -30 to 60 deg C with spec of +/- 0.1ppm.

1.9.3. Frequency Stability – LTE Band 13 (777-787MHz)

Band	Temp (Deg C)	Frequency Error VS Temperature			
		Channel Bandwidth: 5 MHz			
		Low Channel		High Channel	
		779.5MHz		784.5MHz	
LTE Band 13		Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
	60	779.5000365	0.003634	784.5000896	0.005106
	50	779.5000146	-0.003964	784.5005588	0.003957
	40	779.5000415	-0.004331	784.5006875	0.004887
	30	779.5000002	-0.004276	784.5001119	0.005033
	20	779.5006875	0.004515	784.5002816	0.004777
	10	779.5005469	0.004643	784.5003652	0.006273
	0	779.5000367	0.005505	784.5006548	0.005981
	-10	779.5000846	0.00479	784.5006547	0.0062
	-20	779.5004111	0.005505	784.5004556	0.004376
	-30	779.5005888	0.004331	784.5006558	0.005069

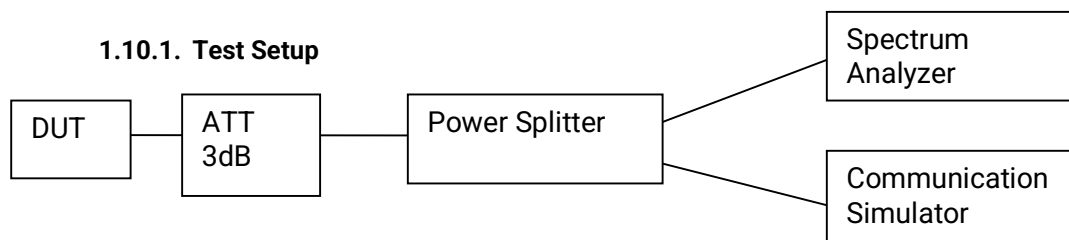
Band	Voltage (V)	Frequency Error VS Voltage			
		Channel Bandwidth: 5 MHz			
		Low Channel		High Channel	
		779.5MHz		784.5MHz	
LTE Band 13		Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
	9	779.5006988	-0.00534	784.5008855	0.007622
	7.5	779.5003216	0.004551	784.5003288	0.004632
	6	779.5006258	0.00468	784.5000007	0.004431

Band	Temp (Deg C)		
		Channel Bandwidth: 10 MHz	
		Mid Channel	
		782MHz	
LTE Band 13		Frequency (MHz)	Frequency Error (ppm)
	60	782.0003654	0.003915
	50	782.0016548	-0.004134
	40	782.0051556	0.004409
	30	782.0095144	0.003457
	20	782.0065879	0.004537
	10	782.0036544	0.005945
	0	782.0000798	0.005177
	-10	782.0084771	0.005159
	-20	782.0055774	0.005744
	-30	782.0003852	0.005104

Band	Voltage (V)		
		Frequency Error VS Voltage	
		Channel Bandwidth: 10 MHz	
		Mid Channel	
LTE Band 13		782MHz	
		Frequency (MHz)	Frequency Error (ppm)
	9	782.0036555	0.005616
	7.5	782.0081455	0.005012
	6	782.0003875	0.004756

1.10. Band Edge Conducted Spurious Emission

1.10.1. Test Setup



- 1) The DUT transmitter output port was connected to communication simulator with above setup.
- 2) Path loss for the measurement included.
- 3) Set DUT to transmit maximum power through communication simulator.
- 4) The band edges of lowest and highest channels with the highest RF powers were measured.
- 5) On frequency outside the 776-788 MHz band, the instrumentation employed a resolution bandwidth of 100 kHz. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz is employed.
- 6) Record the maximum trace plot into the test report.

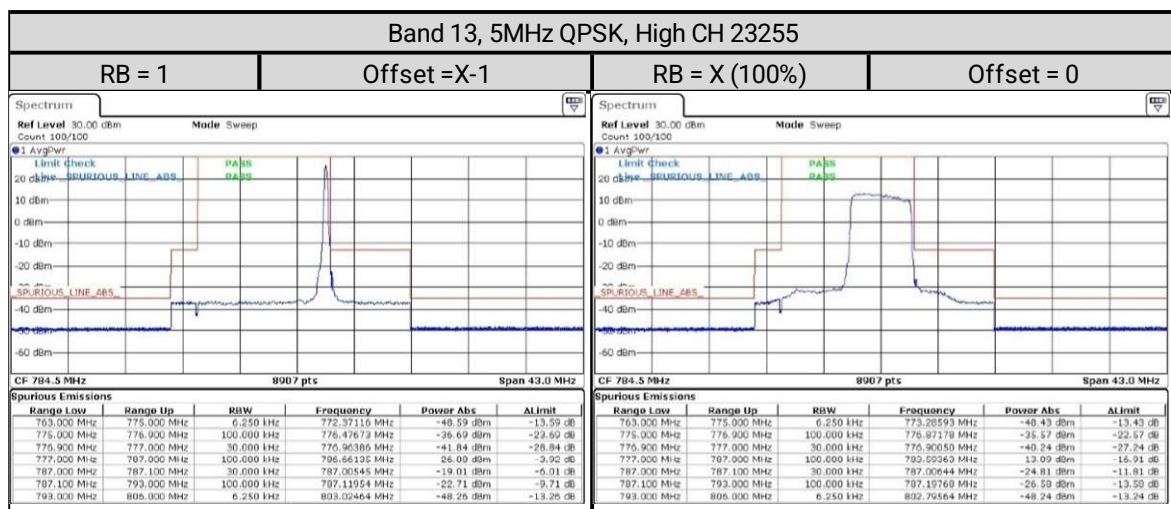
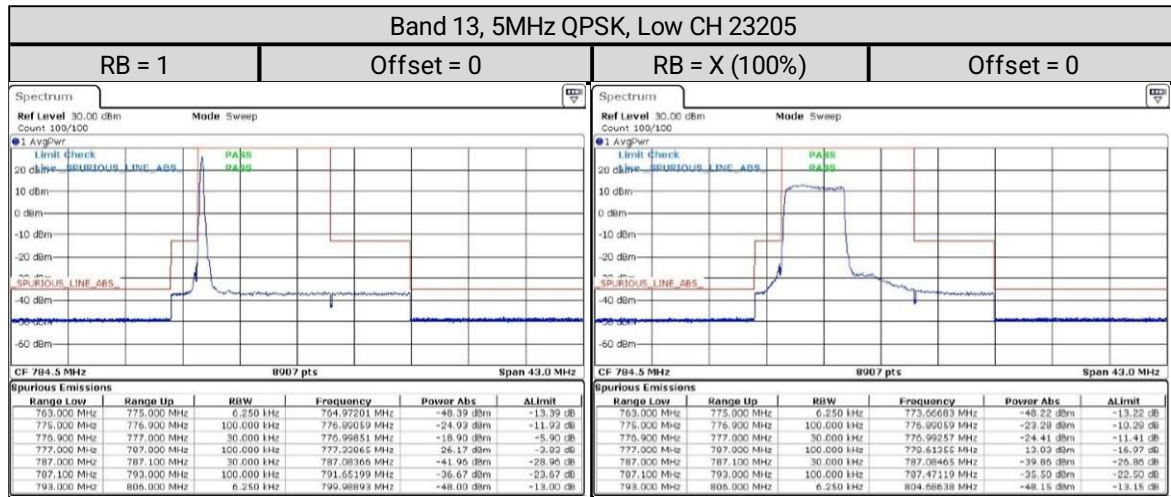
1.10.2. Test Limit

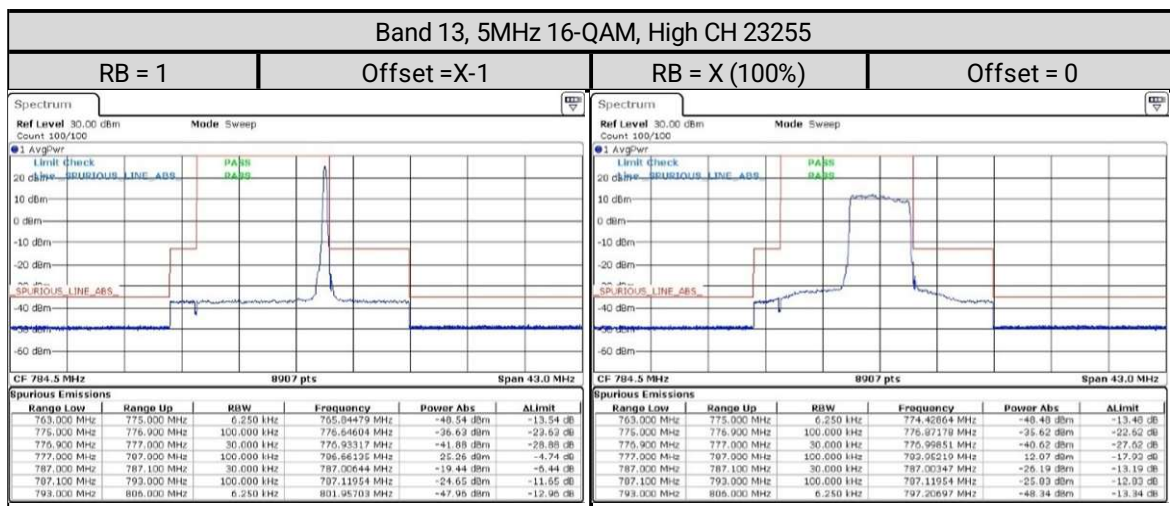
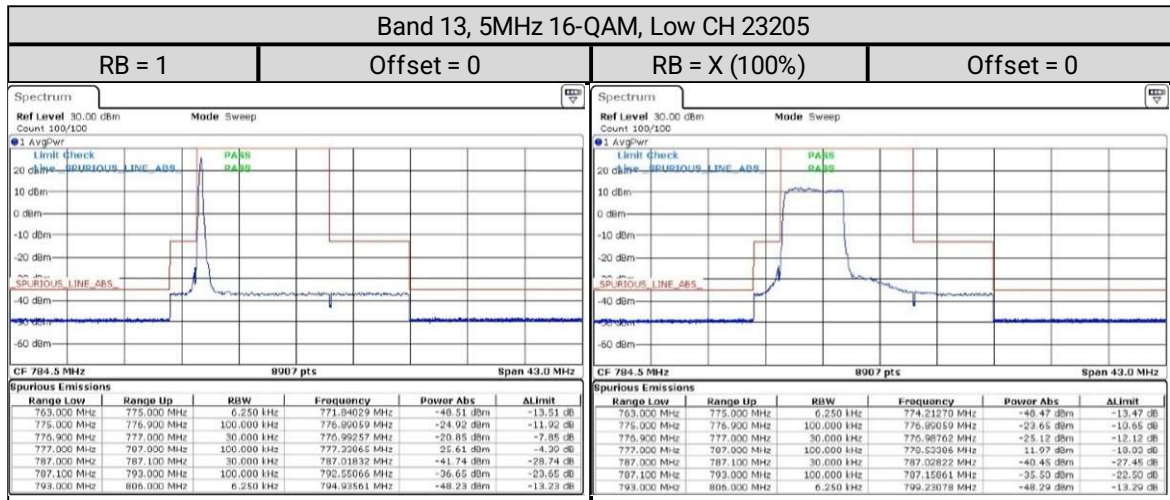
For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

- (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;
- (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;
- (3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $76 + 10 \log (P)$ dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;
- (5) Compliance with the provisions of paragraphs (1) and (2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

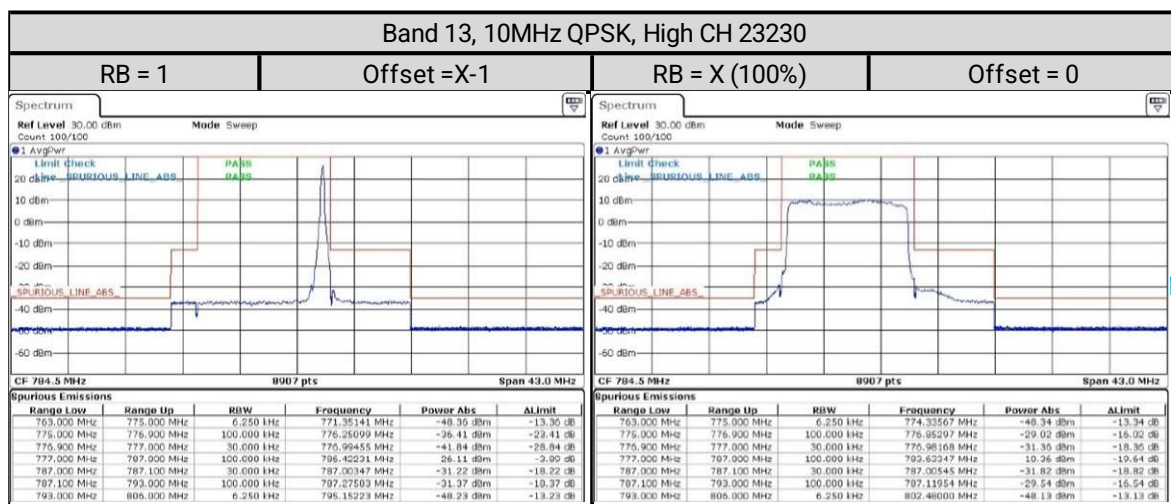
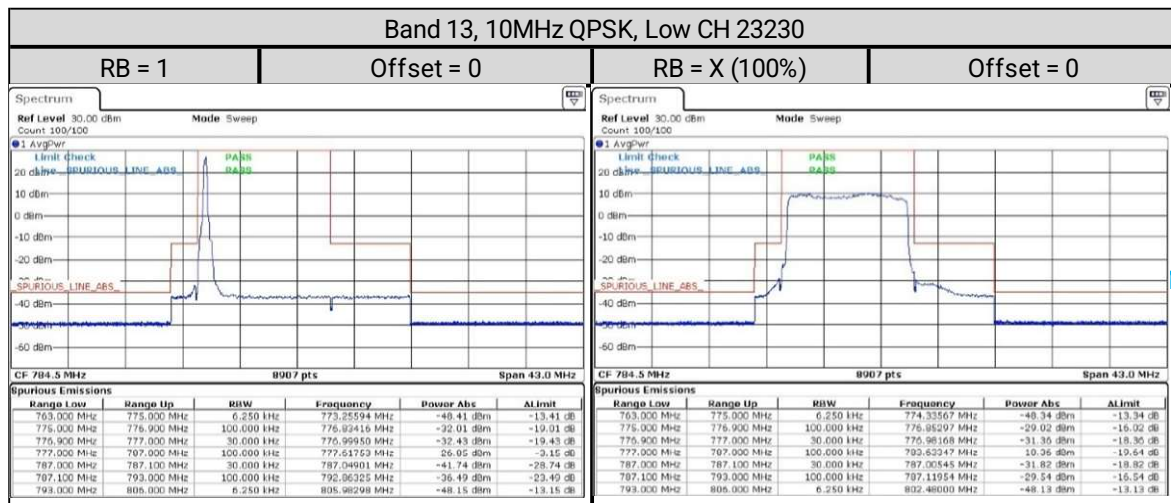
1.10.3. Band Edge / Emission Mask Conducted Spurious Emission – LTE Band 13 (777-787MHz)

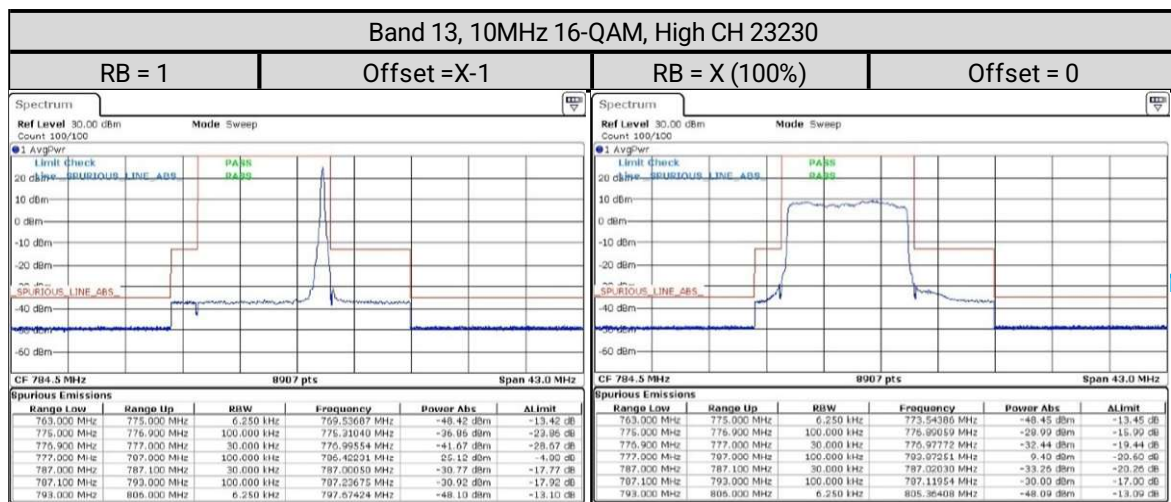
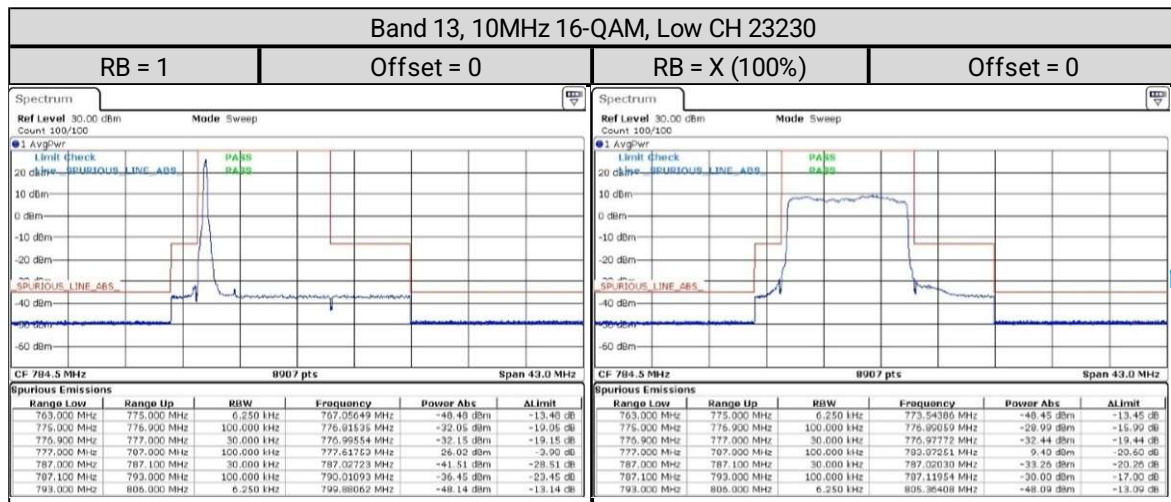
5MHz





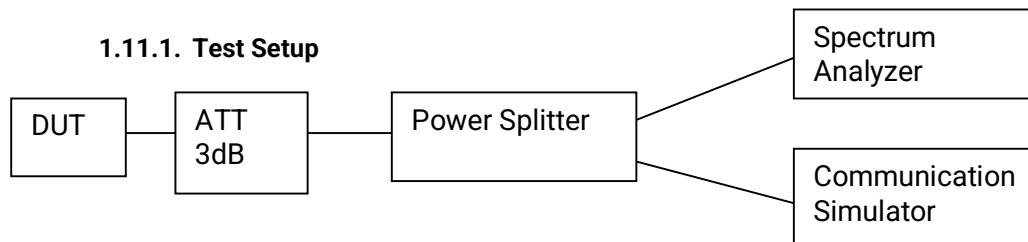
10MHz





1.11. Conducted Spurious Emission

1.11.1. Test Setup



- 1) The DUT transmitter output port was connected to communication simulator with above setup.
- 2) Path loss for the measurement included.
- 3) Set DUT to transmit maximum power through communication simulator.
- 4) Spectrum Analyzer setting, RBW = 1 MHz, VBW = 3 MHz.
- 5) The spurious emission of lowest, middle and highest channels with the highest RF powers were measured.
- 6) Record the maximum trace plot into the test report.

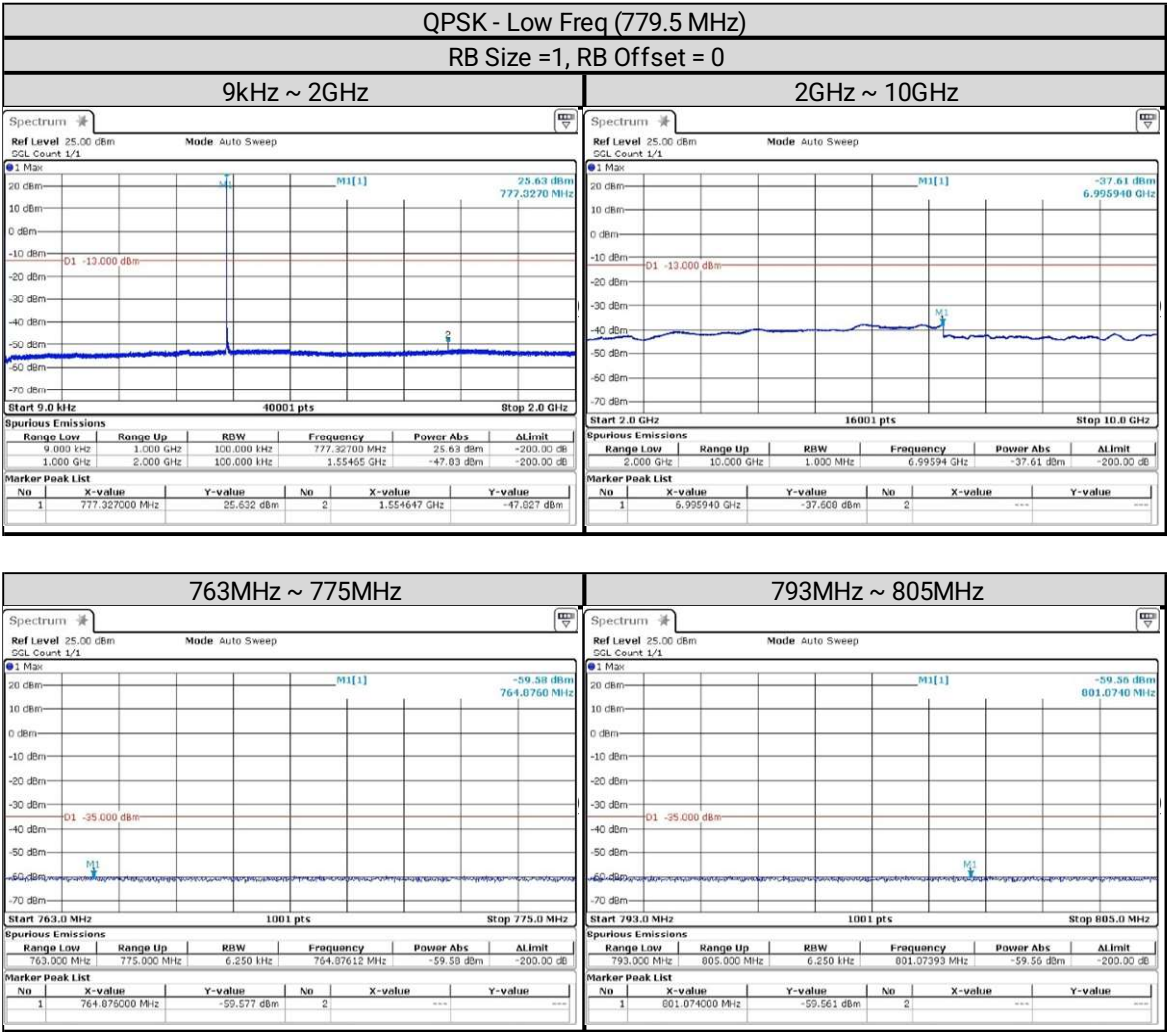
1.11.2. Test Limit

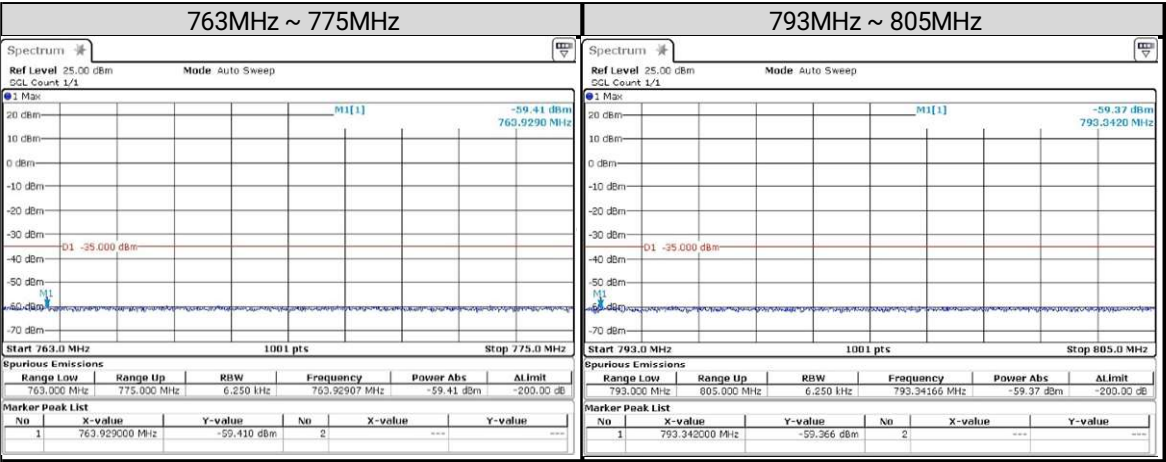
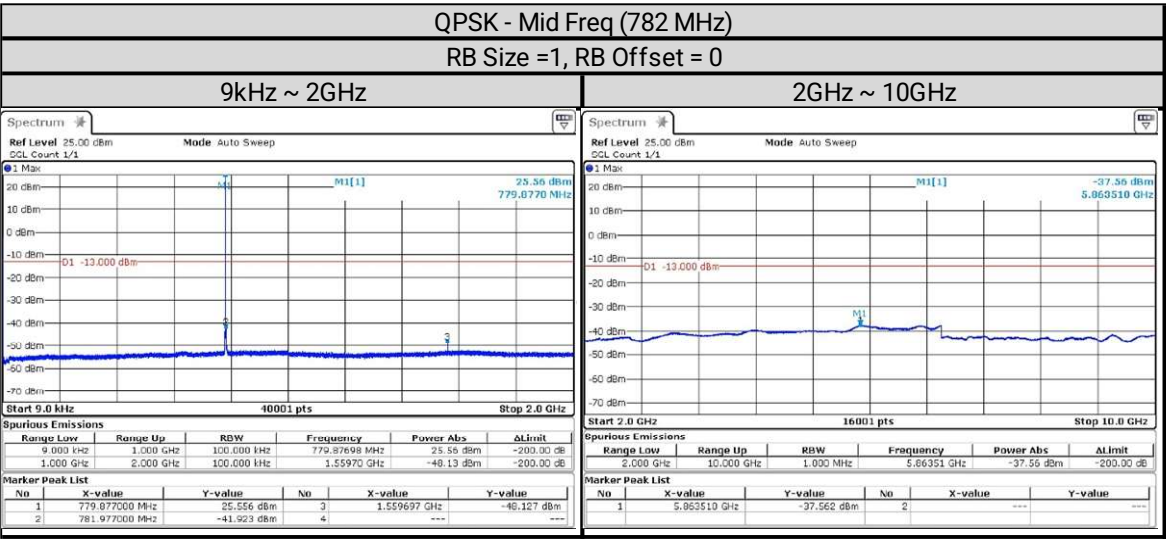
For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

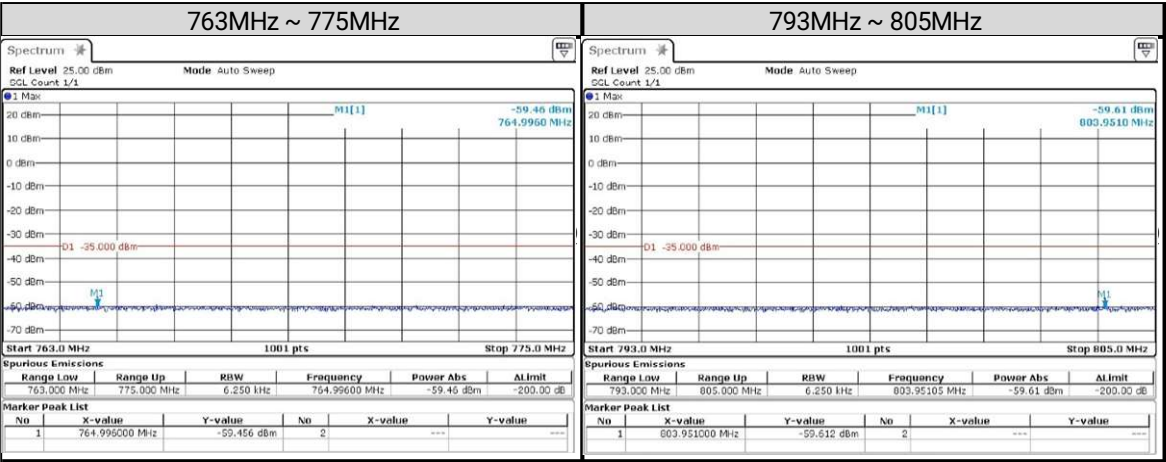
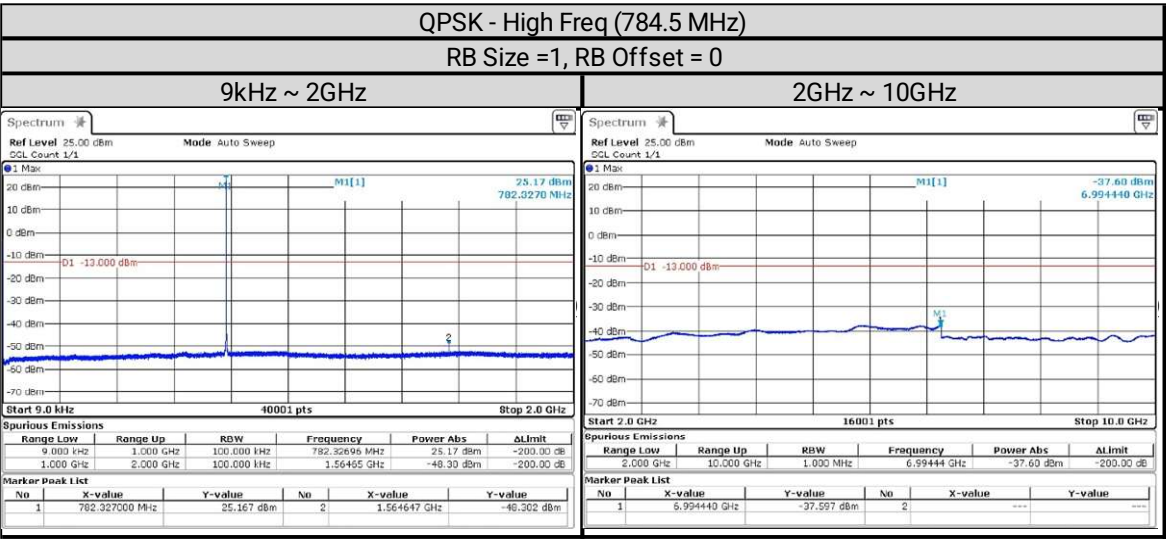
- (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;
- (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;
- (3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $76 + 10 \log (P)$ dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;
- (5) Compliance with the provisions of paragraphs (1) and (2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

1.11.3. Conducted Spurious Emissions – LTE Band 13 (777-787MHz)

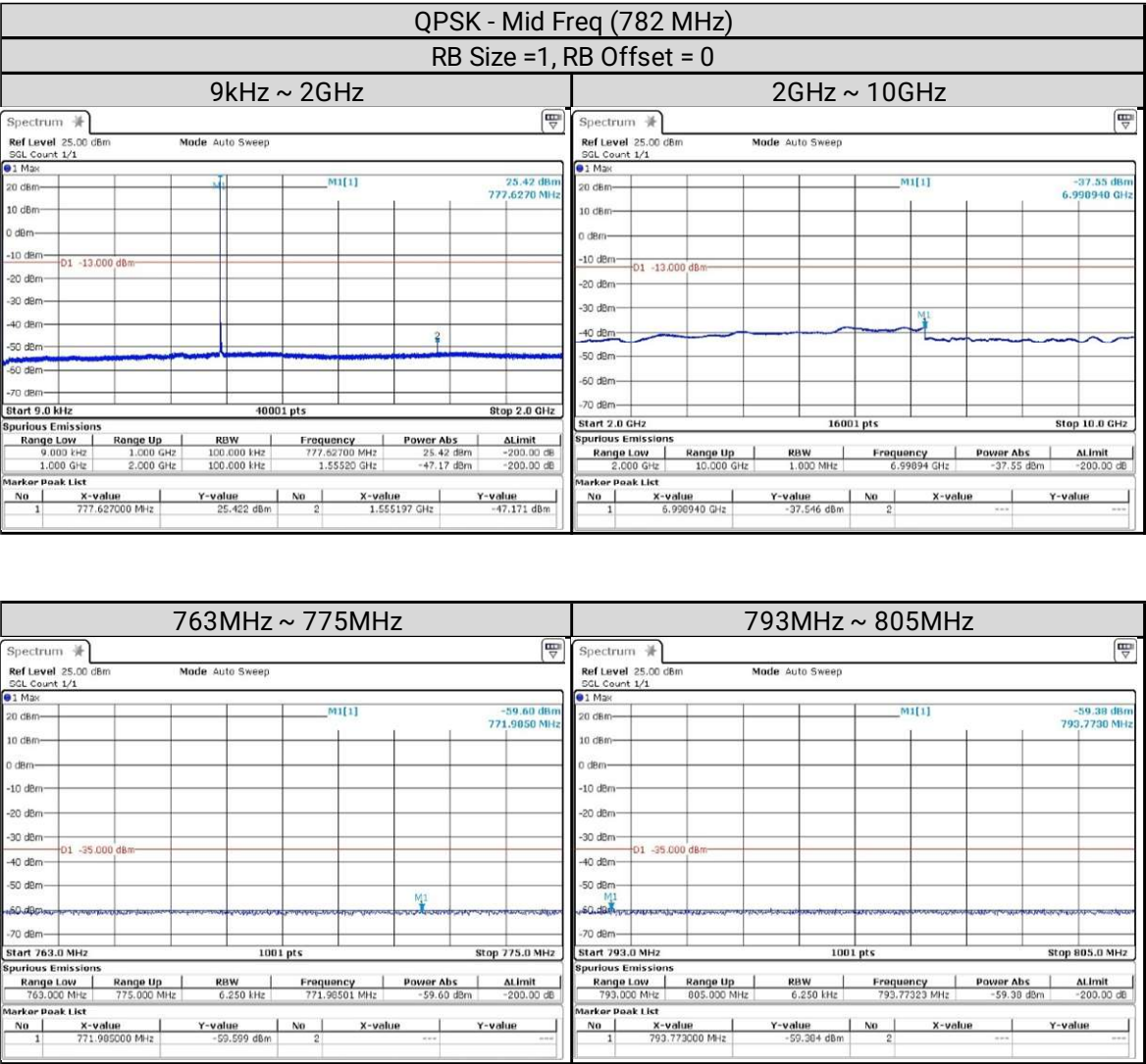
5MHz





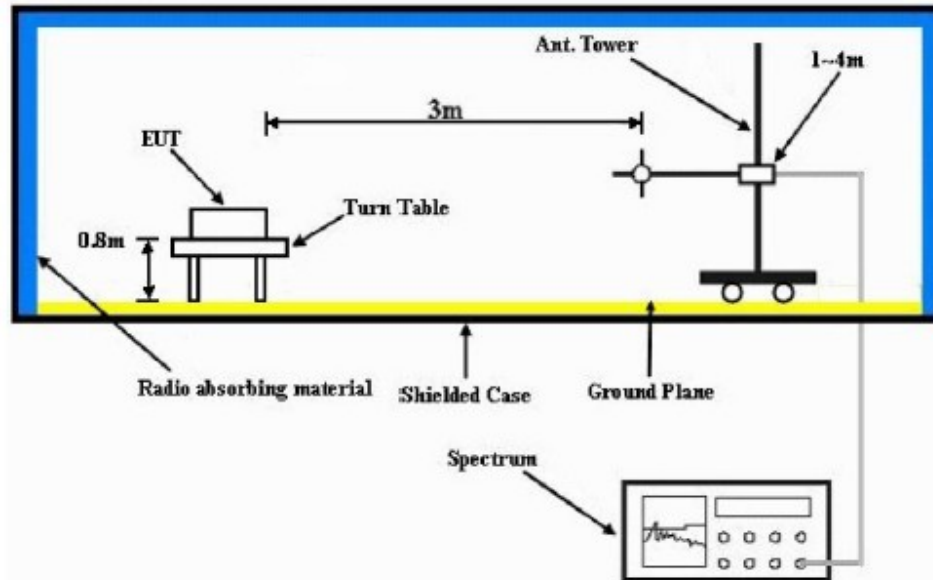


10MHz



1.12. Radiated Spurious Emission

1.12.1. Test Setup



- 1) The spectrum setting for scanning Radiated Emission below 1 GHz is RBW = 100 kHz, VBW = 300 kHz and above 1 GHz is RBW = 1MHz, VBW = 3MHz. Detector mode is positive peak.
- 2) In the semi-anechoic chamber, setup as illustrated above the EUT placed on the Turn Table at 0.8m height for below 1Ghz measurement and at 1.5m height for above 1GHz measurement, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- 3) The substitution antenna is substituted for EUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum radiation power. Record the power level of maximum radiation power from spectrum. So, the measured substitution value = Ref level of S.G + TX cables loss – Substituted Antenna Gain.
- 4) Final Radiated Spurious Emission = "Read Value" + Measured substitution value.

1.12.2. Test Limit

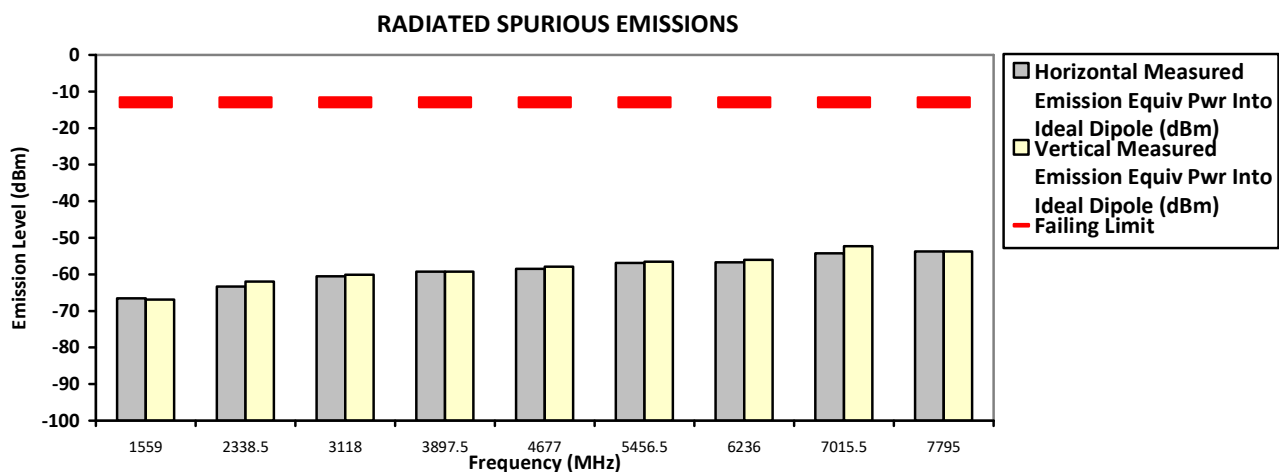
For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

- (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;
- (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;
- (3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $76 + 10 \log (P)$ dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;
- (5) Compliance with the provisions of paragraphs (1) and (2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

1.12.3. Radiated Spurious Emission – LTE Band 13 (777-787MHz)

Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00081
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 13 (X-Plane)	Test Frequency: 779.500000 MHz (Low)
Channel Bandwidth: 5MHz	Power: 0.25119 Watt(s)/Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1559.0000	-13.0000	-66.5613 **	-66.8936 **
2338.5000	-13.0000	-63.3384 **	-61.9370 **
3118.0000	-13.0000	-60.5212 **	-60.0869 **
3897.5000	-13.0000	-59.2536 **	-59.2622 **
4677.0000	-13.0000	-58.5186 **	-57.9226 **
5456.5000	-13.0000	-56.8432 **	-56.5231 **
6236.0000	-13.0000	-56.6762 **	-55.9848 **
7015.5000	-13.0000	-54.2226 **	-52.2830 **
7795.0000	-13.0000	-53.7586 **	-53.7220 **



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad

Sun, 11 May, 2025

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH):68.6

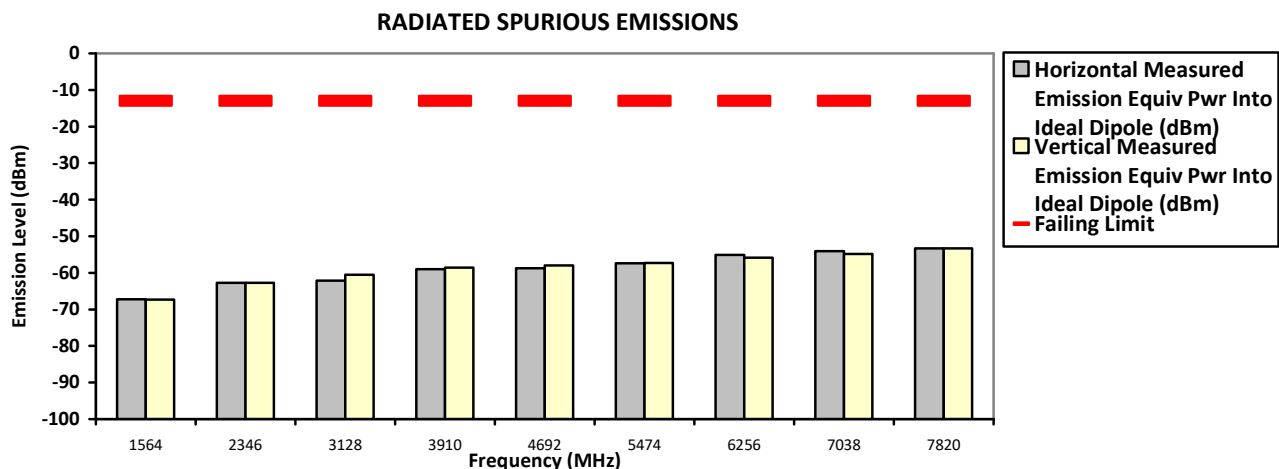
System MU: 4.03 dB

Remarks:

Passed Results	Marginal Results	Failed Results
----------------	------------------	----------------

Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00081
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 13 (X-Plane)	Test Frequency: 782.000000 MHz (Mid)
Channel Bandwidth: 10MHz	Power: 0.25119 Watt(s)/Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1564.0000	-13.0000	-67.2448 **	-67.2993 **
2346.0000	-13.0000	-62.7324 **	-62.7573 **
3128.0000	-13.0000	-62.1538 **	-60.5271 **
3910.0000	-13.0000	-58.9969 **	-58.5653 **
4692.0000	-13.0000	-58.7015 **	-57.9852 **
5474.0000	-13.0000	-57.4076 **	-57.3033 **
6256.0000	-13.0000	-55.0746 **	-55.8837 **
7038.0000	-13.0000	-54.0962 **	-54.8231 **
7820.0000	-13.0000	-53.3309 **	-53.2979 **



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad

Sun, 11 May, 2025

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH):68.6

System MU: 4.03 dB

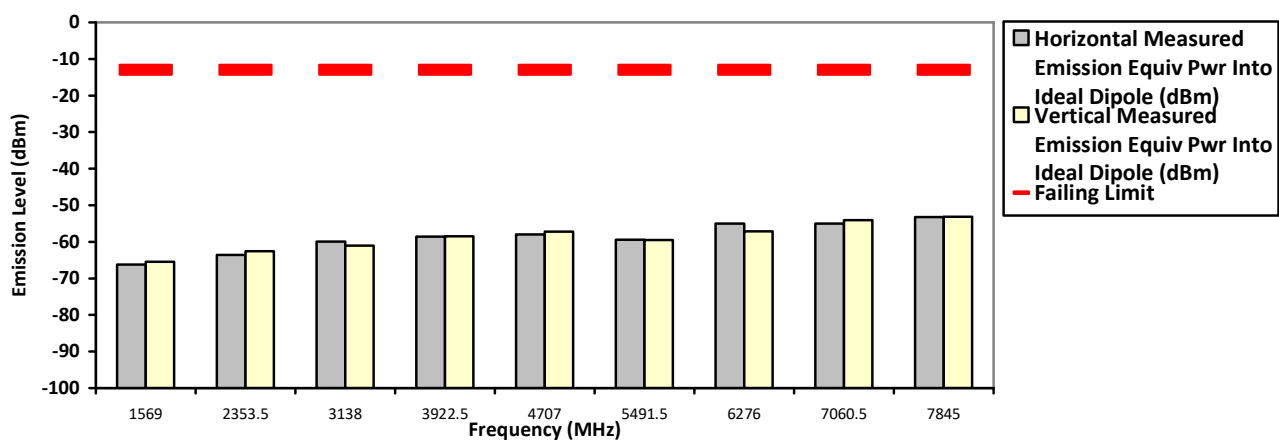
Remarks:

Passed Results	Marginal Results	Failed Results
----------------	------------------	----------------

Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00081
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 13 (X-Plane)	Test Frequency: 784.500000 MHz (High)
Channel Bandwidth: 5MHz	Power: 0.25119 Watt(s)/Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1569.0000	-13.0000	-66.1794 **	-65.4666 **
2353.5000	-13.0000	-63.5894 **	-62.5894 **
3138.0000	-13.0000	-59.9364 **	-61.0089 **
3922.5000	-13.0000	-58.5383 **	-58.4524 **
4707.0000	-13.0000	-58.0070 **	-57.2486 **
5491.5000	-13.0000	-59.3925 **	-59.5379 **
6276.0000	-13.0000	-55.0138 **	-57.1124 **
7060.5000	-13.0000	-55.0049 **	-54.0758 **
7845.0000	-13.0000	-53.2242 **	-53.1071 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad

Sun, 11 May, 2025

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH):68.6

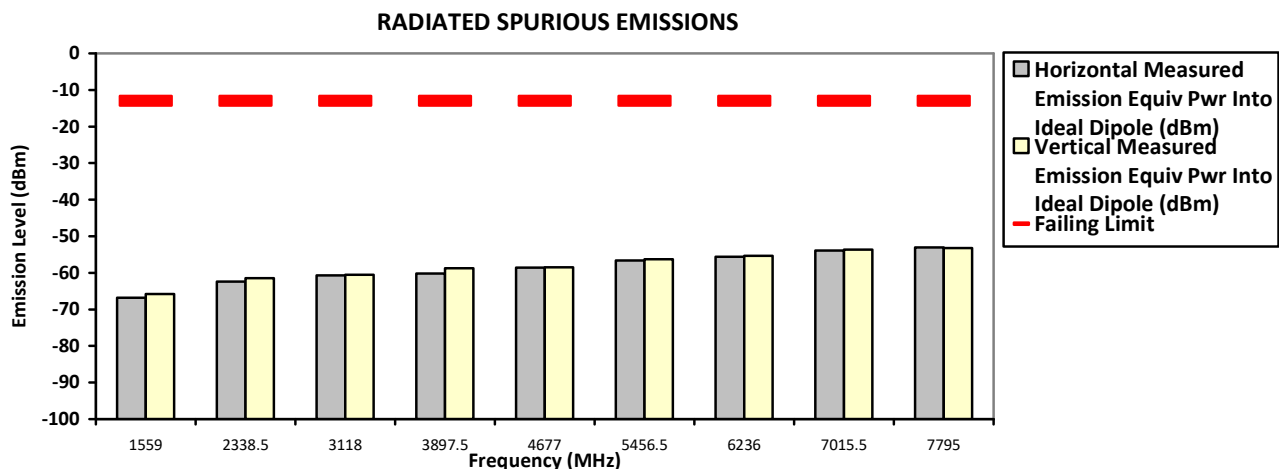
System MU: 4.03 dB

Remarks:

Passed Results	Marginal Results	Failed Results
----------------	------------------	----------------

Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00081
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 13 (Y-Plane)	Test Frequency: 779.500000 MHz (Low)
Channel Bandwidth: 5MHz	Power: 0.25119 Watt(s)/Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1559.0000	-13.0000	-66.8470 **	-65.8307 **
2338.5000	-13.0000	-62.3890 **	-61.4959 **
3118.0000	-13.0000	-60.7226 **	-60.5530 **
3897.5000	-13.0000	-60.1866 **	-58.7627 **
4677.0000	-13.0000	-58.6006 **	-58.4978 **
5456.5000	-13.0000	-56.6488 **	-56.2779 **
6236.0000	-13.0000	-55.6355 **	-55.3133 **
7015.5000	-13.0000	-53.9304 **	-53.6509 **
7795.0000	-13.0000	-53.0742 **	-53.2328 **



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad

Sun, 11 May, 2025

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH):68.6

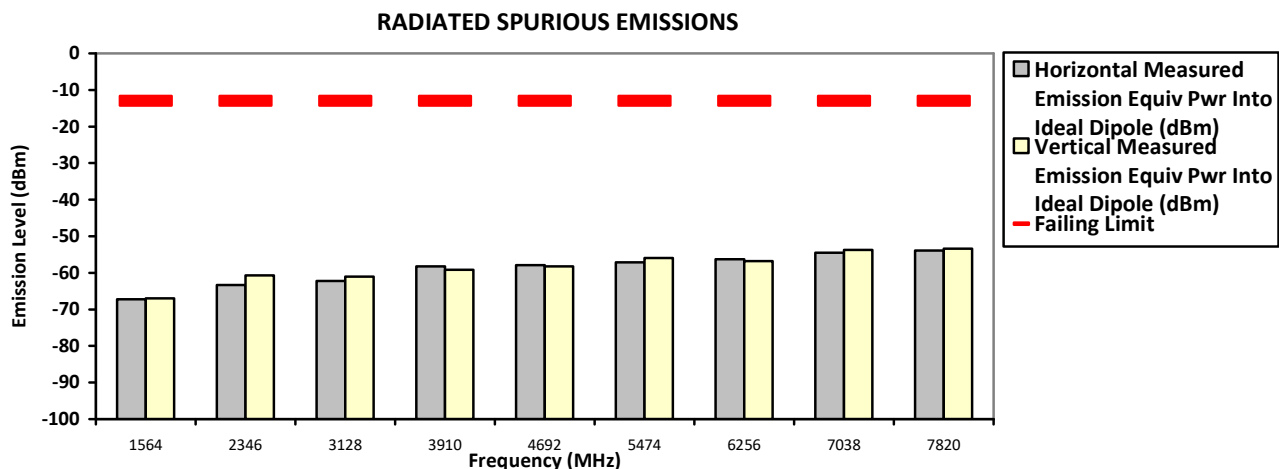
System MU: 4.03 dB

Remarks:

Passed Results	Marginal Results	Failed Results
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Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00081
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 13 (Y-Plane)	Test Frequency: 782.000000 MHz (Mid)
Channel Bandwidth: 10MHz	Power: 0.25119 Watt(s)/Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1564.0000	-13.0000	-67.2307 **	-66.9363 **
2346.0000	-13.0000	-63.3298 **	-60.6806 **
3128.0000	-13.0000	-62.2103 **	-61.0755 **
3910.0000	-13.0000	-58.2513 **	-59.1554 **
4692.0000	-13.0000	-57.8711 **	-58.2672 **
5474.0000	-13.0000	-57.1147 **	-55.9766 **
6256.0000	-13.0000	-56.2796 **	-56.7883 **
7038.0000	-13.0000	-54.4584 **	-53.7591 **
7820.0000	-13.0000	-53.9062 **	-53.4258 **



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad

Sun, 11 May, 2025

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH):68.6

System MU: 4.03 dB

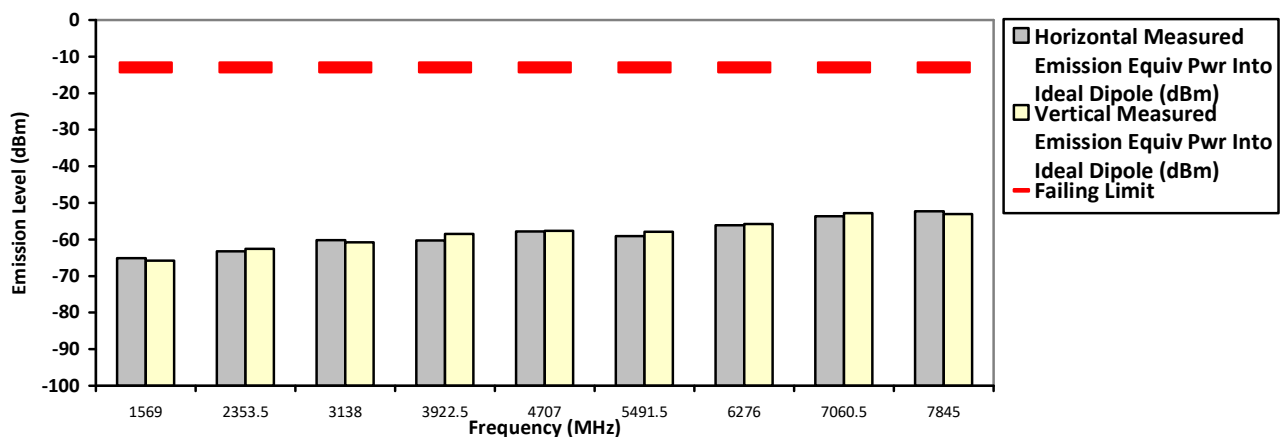
Remarks:

Passed Results	Marginal Results	Failed Results
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Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00081
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 13 (Y-Plane)	Test Frequency: 784.500000 MHz (High)
Channel Bandwidth: 5MHz	Power: 0.25119 Watt(s)/Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1569.0000	-13.0000	-65.0814 **	-65.8246 **
2353.5000	-13.0000	-63.2493 **	-62.5884 **
3138.0000	-13.0000	-60.1518 **	-60.7544 **
3922.5000	-13.0000	-60.2821 **	-58.4680 **
4707.0000	-13.0000	-57.7688 **	-57.6707 **
5491.5000	-13.0000	-59.0729 **	-57.8982 **
6276.0000	-13.0000	-56.0978 **	-55.7321 **
7060.5000	-13.0000	-53.6861 **	-52.8017 **
7845.0000	-13.0000	-52.3133 **	-53.0773 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad

Sun, 11 May, 2025

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH):68.6

System MU: 4.03 dB

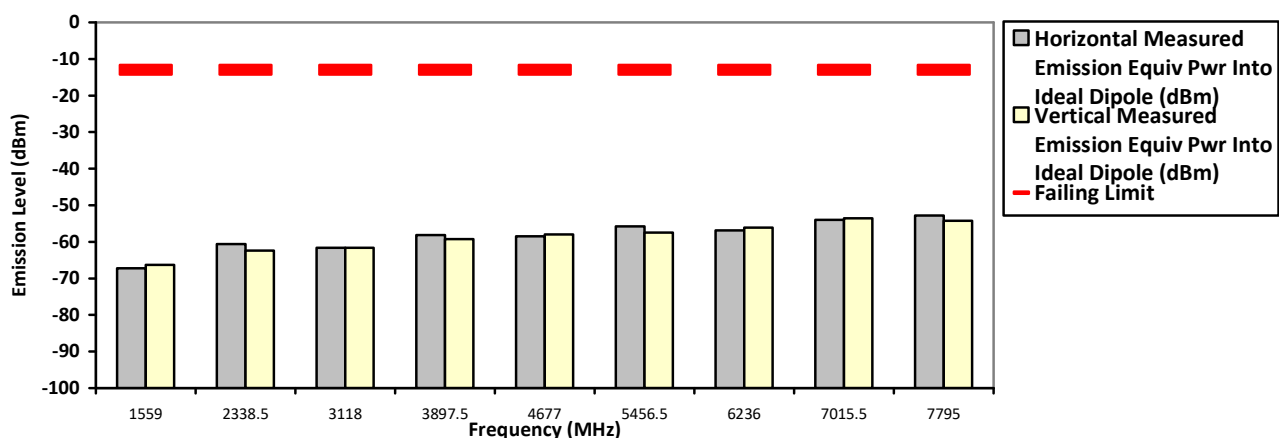
Remarks:

Passed Results	Marginal Results	Failed Results
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Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00081
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 13 (Z-Plane)	Test Frequency: 779.500000 MHz (Low)
Channel Bandwidth: 5MHz	Power: 0.25119 Watt(s)/Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1559.0000	-13.0000	-67.2397 **	-66.3045 **
2338.5000	-13.0000	-60.5811 **	-62.3620 **
3118.0000	-13.0000	-61.6299 **	-61.6586 **
3897.5000	-13.0000	-58.1332 **	-59.2840 **
4677.0000	-13.0000	-58.4867 **	-57.9916 **
5456.5000	-13.0000	-55.7502 **	-57.4632 **
6236.0000	-13.0000	-56.9028 **	-56.0834 **
7015.5000	-13.0000	-53.9801 **	-53.5627 **
7795.0000	-13.0000	-52.8392 **	-54.2499 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad

Sun, 11 May, 2025

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH):68.6

System MU: 4.03 dB

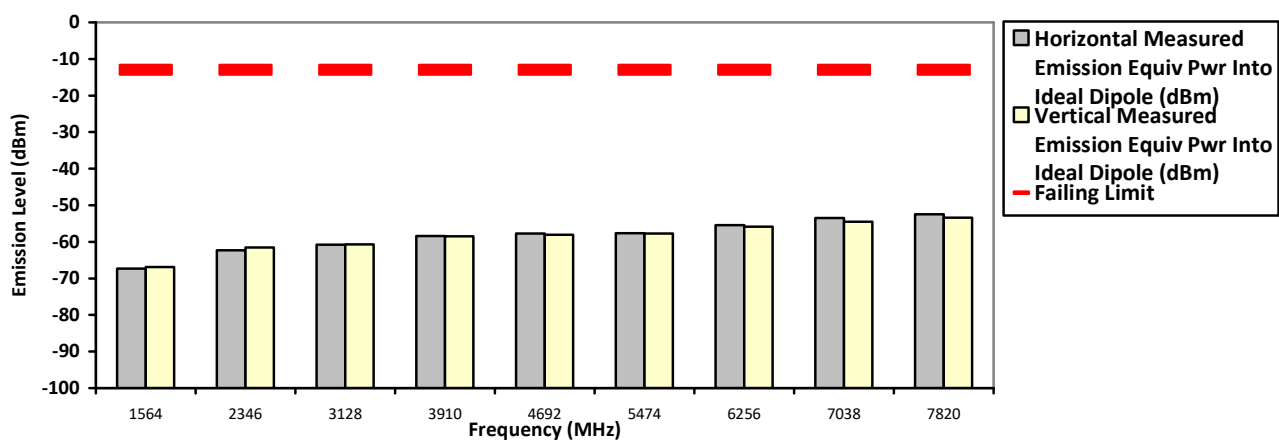
Remarks:

Passed Results	Marginal Results	Failed Results
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Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00081
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 13 (Z-Plane)	Test Frequency: 782.000000 MHz (Mid)
Channel Bandwidth: 10MHz	Power: 0.25119 Watt(s)/Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1564.0000	-13.0000	-67.3293 **	-66.9188 **
2346.0000	-13.0000	-62.2961 **	-61.5113 **
3128.0000	-13.0000	-60.7593 **	-60.7154 **
3910.0000	-13.0000	-58.4454 **	-58.4717 **
4692.0000	-13.0000	-57.6924 **	-58.0971 **
5474.0000	-13.0000	-57.6206 **	-57.7242 **
6256.0000	-13.0000	-55.4294 **	-55.8906 **
7038.0000	-13.0000	-53.4412 **	-54.4989 **
7820.0000	-13.0000	-52.4619 **	-53.4301 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad

Sun, 11 May, 2025

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH):68.6

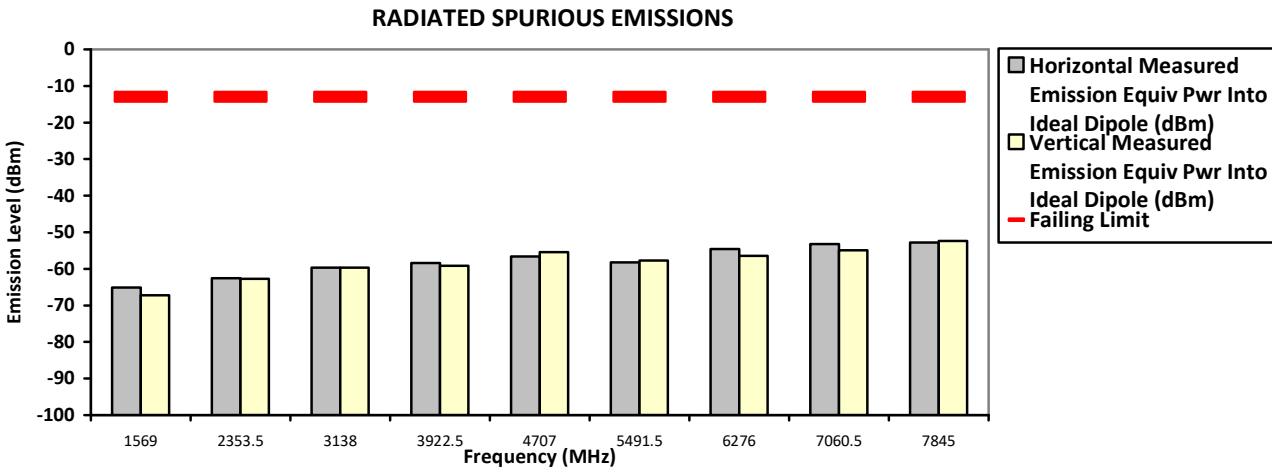
System MU: 4.03 dB

Remarks:

Passed Results	Marginal Results	Failed Results
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Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00081
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 13 (Z-Plane)	Test Frequency: 784.500000 MHz (High)
Channel Bandwidth: 5MHz	Power: 0.25119 Watt(s)/Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1569.0000	-13.0000	-65.0988 **	-67.2617 **
2353.5000	-13.0000	-62.6032 **	-62.7734 **
3138.0000	-13.0000	-59.6956 **	-59.6530 **
3922.5000	-13.0000	-58.3786 **	-59.1654 **
4707.0000	-13.0000	-56.6147 **	-55.4532 **
5491.5000	-13.0000	-58.2743 **	-57.7042 **
6276.0000	-13.0000	-54.5521 **	-56.4496 **
7060.5000	-13.0000	-53.2149 **	-54.9090 **
7845.0000	-13.0000	-52.7930 **	-52.3782 **



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad Sun, 11 May, 2025

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
*Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported

Temp(Deg): 23.4 Hum(%RH):68.6

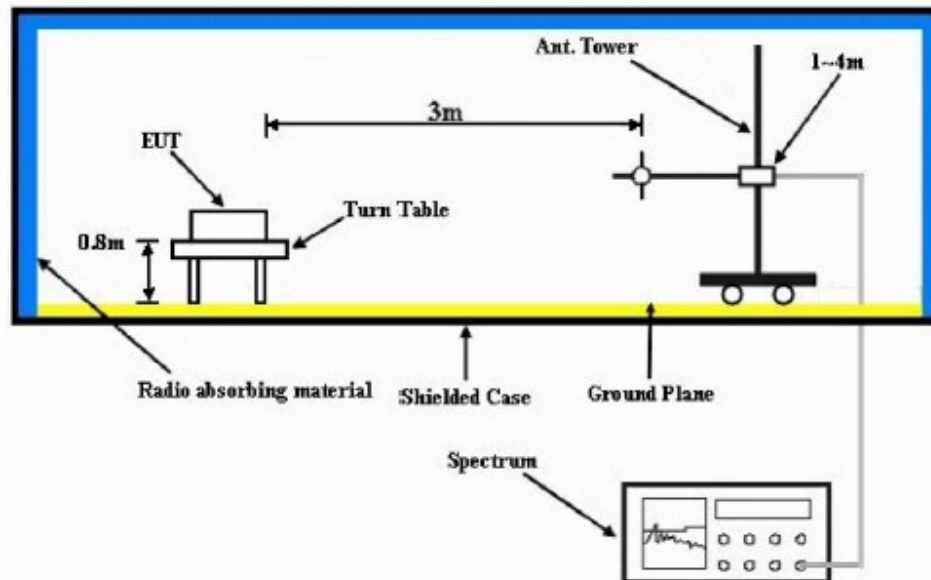
System MU: 4.03 dB

Remarks:

Passed Results	Marginal Results	Failed Results
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1.13. Effective Radiated Power (ERP)

1.13.1. Test Setup



- 1) The spectrum setting for scanning Radiated Emission below 1 GHz is RBW = 100 kHz, VBW = 300 kHz and above 1 GHz is RBW = 1MHz, VBW = 3MHz. Detector mode is RMS.
- 2) In the semi-anechoic chamber, setup as illustrated above the EUT placed on the Turn Table at 0.8m height for below 1Ghz measurement and at 1.5m height for above 1GHz measurement, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- 3) The substitution antenna is substituted for EUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum radiation power. Record the power level of maximum radiation power from spectrum. So, the measured substitution value = Ref level of S.G + TX cables loss – Substituted Antenna Gain.
- 4) EIRP = "Read Value" + Measured substitution value.

1.13.2. Test Limit

FCC: Portable stations (hand-held devices) transmitting in the 776-788 MHz band is limited to 3 watts ERP.

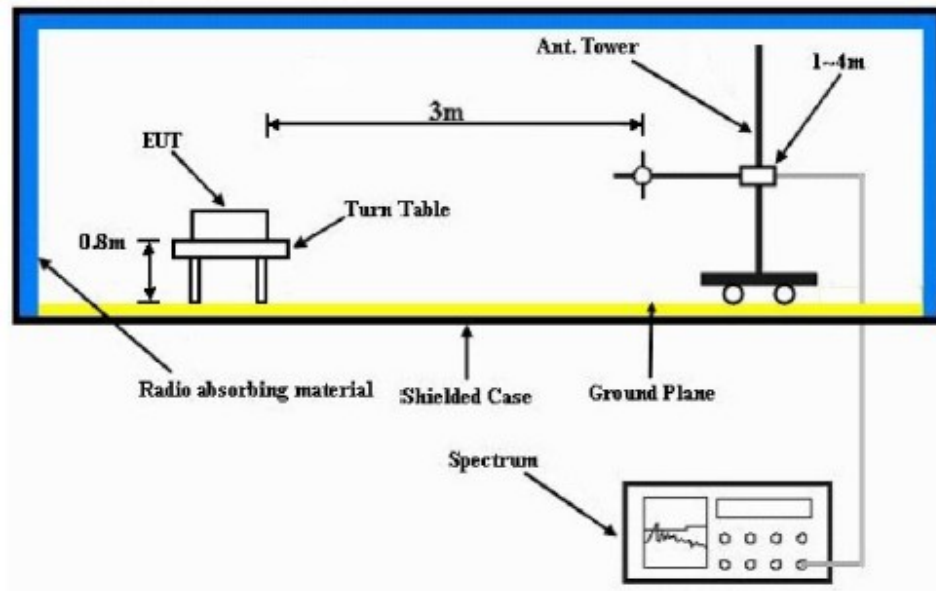
ISED: The e.i.r.p. shall not exceed 50 watts for mobile equipment or for outdoor fixed subscriber equipment, nor shall it exceed 5 watts for portable equipment or for indoor fixed subscriber equipment.

1.13.3. Effective Radiated Power (ERP) - LTE Band 13 (777-787MHz)

[Refer to 1.6.4 / Not Performed.](#)

1.14. GNSS (EIRP for 1559 – 1610MHz)

1.14.1. Test Setup



- 1) The Resolution Bandwidth for Equivalent Isotropically Radiated Power (EIRP) below 1 GHz is 100 kHz with Video Bandwidth = 300 kHz and Resolution Bandwidth for EIRP above 1 GHz is 1 MHz with Video Bandwidth = 3 MHz. Detector Mode is RMS.
- 2) In the semi-anechoic chamber, setup as illustrated above the DUT placed on the 0.8m height of Turn Table, rotated the table 45 degree each interval to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power for each degree interval. The "Read Value" is the spectrum reading of maximum power value.
- 3) The substitution antenna is substituted for DUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum radiation power. Record the power level of maximum radiation power from spectrum. So, the Measured substitution value = Ref level of S.G + TX cables loss – Substituted Antenna Gain.
- 4) $EIRP = \text{"Read Value"} + \text{Measured substitution value} + 2.15$

1.14.2. Test Limit

FCC: For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

ISED: The e.i.r.p. in the band 1559-1610 MHz shall not exceed -70 dBW/MHz for wideband signal and -80 dBW for discrete emission with bandwidth less than 700 Hz.

1.14.3. GNSS (EIRP for 1599 – 1610MHz) - LTE Band 13 (777-787MHz)

EiRP in RNSS band (1.581GHz)

S/N: 437ZBG0594

Channel BW: 5 MHz

Accessory: AN000297A01

Battery: PMNN4895A

Tx Power: 251.19 mWatts

Modulation: QPSK

Frequency Channel: 779.5000 MHz (LTE Band 13)

Antenna Polarization	2Fc (MHz)	EIRP (dBm)	Limit (dBm)
Horizontal	1559.0000	-78.87	-40
Vertical	1559.0000	-78.84	-40

EiRP in RNSS band (1.581GHz)

S/N: 437ZBG0594

Channel BW: 5 MHz

Accessory: AN000297A01

Battery: PMNN4895A

Tx Power: 251.19 mWatts

Modulation: QPSK

Frequency Channel: 784.5000 MHz (LTE Band 13)

Antenna Polarization	2Fc (MHz)	EIRP (dBm)	Limit (dBm)
Horizontal	1569.0000	-78.82	-40
Vertical	1569.0000	-78.79	-40

--End of Test Report--