

 MOTOROLA SOLUTIONS	   																																
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.D																																
<table> <tr> <td>Date/s Tested</td> <td>: 16-May-2025 - 13-June-2025</td> </tr> <tr> <td>Report Issue Date</td> <td>: 02-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 Blv d MD 41-128, USA Plantation FL 333222-9947</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 12) 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	: 16-May-2025 - 13-June-2025	Report Issue Date	: 02-July-2025	Manufacturer/Location	: Motorola Solutions INC. (Plantation)	Manufacturer Address	: Motorola Solutions INC. (Plantation), 8000 West Sunrise Blv d MD 41-128, USA Plantation FL 333222-9947	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 12) 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:



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Table of Contents

1.0.	Summary of Test Results.....	4
1.1.	Measurement Uncertainty	4
1.2.	Equipment List.....	5
1.3.	General Information	6
1.4.	Channel Number and Frequency Info	8
1.5.	Test Mode Applicability and Tested Channel Detail	8
1.6.	Conducted RF Output Power	10
1.6.1.	Test Setup.....	10
1.6.2.	Test Limits.....	10
1.6.3.	Conducted RF Output Power – LTE Band 12 (699-716MHz)	10
1.6.4.	Effective Radiated Power – LTE Band 12 (699-716MHz).....	12
1.7.	Peak-to-Average Power Ratio	14
1.7.1.	Test Setup.....	14
1.7.2.	Test Limit.....	14
1.7.3.	Peak-to-Average Power Ratio – LTE Band 12 (699-716MHz).....	14
1.8.	Occupied Bandwidth	17
1.8.1.	Test Setup.....	17
1.8.2.	Test Limit.....	17
1.8.3.	Occupied Bandwidth – LTE Band 12 (699-716MHz)	18
1.9.	Frequency Stability.....	22
1.9.1.	Test Setup.....	22
1.9.2.	Test Limit.....	22
1.9.3.	Frequency Stability – LTE Band 12 (699-716MHz).....	23
1.10.	Band Edge Conducted Spurious Emission	27
1.10.1.	Test Setup	27
1.10.2.	Test Limit.....	27
1.10.3.	Band Edge Conducted Spurious Emission – LTE Band 12 (699-716MHz)	28
1.11.	Conducted Spurious Emission	34
1.11.1.	Test Setup	34
1.11.2.	Test Limit.....	34
1.11.3.	Conducted Spurious Emissions – LTE Band 12 (699-716MHz)	35
1.12.	Radiated Spurious Emission.....	43
1.12.1.	Test Setup	43
1.12.2.	Test Limit.....	43
1.12.3.	Radiated Spurious Emission – LTE Band 12 (699-716MHz).....	44
1.13.	Effective Radiated Power (ERP)	53
1.13.1.	Test Setup	53
1.13.2.	Test Limit.....	53
1.13.3.	Effective Radiated Power (ERP) - LTE Band 12 (699-716MHz)	53

REVISION HISTORY

Revision History	Description	Date	Originator
Rev. A	Initial Report	02-July-2025	Nur Amanina
Rev. B	Update Report Issue Date from 02-July-2024 to 02-July-2025	01-August-2025	Nur Amanina
Rev. C	1.Update Antenna type from Stamped Metal to PIFA 2.Update antenna gain from 0.7dBi to 0dBi 3.Update ERP data	06-August-2025	Nur Amanina
Rev. D	1.Amend highest data from 23.505 to 23.54 under Conducted Power 5MHz data section. 2.Update Emission designator from G7W to D7W at 1.3 section.	08-August-2025	Nur Amanina

1.0. Summary of Test Results

FCC Clause	ISED Clause	Test Item	Results	Remarks	Serial Number Tested
2.1046	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
2.1046	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(g)	RSS-Gen 6.13 RSS-130 4.7	Band Edge Conducted Spurious Emission	Pass	Meet the requirement of limit	437ZBG0235
2.1051 27.53(g)	RSS-Gen 6.13 RSS-130 4.7	Conducted Spurious Emissions	Pass	Meet the requirement of limit	437ZBG0235
2.1053 27.53(g)	RSS-130 4.7	Radiated Spurious Emission	Pass	-52.3072 dBm (Margin: 39.3072 dB, Noise Floor)	437ZBG0594
2.1049 27.50(c)(9)(10)	RSS-130 4.6	Effective Radiated Power (ERP)	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	8-Aug-24	8-Aug-25
CHAMBER	SH-641	92003150	12-Sep-24	12-Sep-25
POWER SUPPLY	6652A	MY40001437	03-Mar-25	03-Mar-26
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
LOOP ANTENNA	6502	00208416	08-Oct-24	08-Oct-25
TEST SOFTWARE	EMC.FCC.IC.RE.v1.7.1			
VERSION	1.7.1			

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 12			
Modulation Type	QPSK, 16QAM			
Operating Frequency	LTE Band 12	Channel Bandwidth 1.4MHz	699.7MHz~715.3MHz	
		Channel Bandwidth 3MHz	700.5MHz~714.5MHz	
		Channel Bandwidth 5MHz	701.5MHz~713.5MHz	
		Channel Bandwidth 10MHz	704.0MHz~711.0MHz	
Max. Conducted RF Output Power	LTE Band 12 QPSK	Channel Bandwidth 1.4MHz	23.555dBm (0.227W)	
		Channel Bandwidth 3MHz	23.541dBm (0.226W)	
		Channel Bandwidth 5MHz	23.540dBm (0.224W)	
		Channel Bandwidth 10MHz	23.487dBm (0.223W)	
	LTE Band 12 16QAM	Channel Bandwidth 1.4MHz	22.645dBm (0.184W)	
		Channel Bandwidth 3MHz	22.669dBm (0.185W)	
		Channel Bandwidth 5MHz	22.920dBm (0.196W)	
		Channel Bandwidth 10MHz	22.655dBm (0.184W)	
Emission Designator	LTE Band 12		QPSK	16QAM
		Channel Bandwidth 1.4MHz	1M09G7D	1M09D7W
		Channel Bandwidth 3MHz	2M68G7D	2M69D7W
		Channel Bandwidth 5MHz	4M47G7D	4M47D7W
		Channel Bandwidth 10MHz	8M95G7D	8M93D7W
Antenna Type	LTE Band 12	PIFA, Antenna LTE Low Band 699 – 716MHz (0dBi)		
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 12	1.4 MHz	23017 ~ 23173	23017	23095	23173	699.7	707.5	715.3
	3 MHz	23025 ~ 23165	23025	23095	23165	700.5	707.5	714.5
	5 MHz	23035 ~ 23155	23035	23095	23155	701.5	707.5	713.5
	10 MHz	23060 ~ 23130	23060	23095	23130	704.0	707.5	711.0

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 12

Test Item	Available Channel	Tested Channel	Channel Bandwidth	Uplink Modulation	Mode
Conducted RF Output Power	23017 ~ 23173	23017, 23095, 23173	1.4 MHz	QPSK, 16QAM	As per table 1.6.3
	23025 ~ 23165	23025, 23095, 23165	3 MHz		
	23035 ~ 23155	23035, 23095, 23155	5 MHz		
	23060 ~ 23130	23060, 23095, 23130	10 MHz		
Peak to Average Power Ratio	23017 ~ 23173	23017, 23095, 23173	1.4 MHz	QPSK, 16QAM	6 RB / 0 RB Offset
	23025 ~ 23165	23025, 23095, 23165	3 MHz		15 RB / 0 RB Offset
	23035 ~ 23155	23035, 23095, 23155	5 MHz		25 RB / 0 RB Offset
	23060 ~ 23130	23060, 23095, 23130	10 MHz		50 RB / 0 RB Offset
Occupied Bandwidth	23017 ~ 23173	23017, 23095, 23173	1.4 MHz	QPSK, 16QAM	6 RB / 0 RB Offset
	23025 ~ 23165	23025, 23095, 23165	3 MHz		15 RB / 0 RB Offset
	23035 ~ 23155	23035, 23095, 23155	5 MHz		25 RB / 0 RB Offset
	23060 ~ 23130	23060, 23095, 23130	10 MHz		50 RB / 0 RB Offset
Frequency Stability	23017 ~ 23173	23017, 23173	1.4 MHz	QPSK	6 RB / 0 RB Offset
	23025 ~ 23165	23025, 23165	3 MHz		15 RB / 0 RB Offset
	23035 ~ 23155	23035, 23155	5 MHz		25 RB / 0 RB Offset
	23060 ~ 23130	23060, 23130	10 MHz		50 RB / 0 RB Offset
Band Edge Conducted Spurious Emission	23017 ~ 23173	23017, 23173	1.4 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
					1 RB / 5 RB Offset
					6 RB / 0 RB Offset
	23025 ~ 23165	23025, 23165	3 MHz		1 RB / 0 RB Offset
					1 RB / 14 RB Offset
					15 RB / 0 RB Offset
	23035 ~ 23155	23035, 23155	5 MHz		1 RB / 0 RB Offset
					1 RB / 24 RB Offset
					25 RB / 0 RB Offset
	23060 ~ 23130	23060, 23130	10 MHz		1 RB / 0 RB Offset
					1 RB / 49 RB Offset
					50 RB / 0 RB Offset

Conducted Spurious Emission	23017 ~ 23173	23017, 23095, 23173	1.4 MHz	QPSK	3 RB / 0 RB Offset
	23025 ~ 23165	23025, 23095, 23165	3 MHz		1 RB / 7 RB Offset
	23035 ~ 23155	23035, 23095, 23155	5 MHz		1 RB / 13 RB Offset
	23060 ~ 23130	23060, 23095, 23130	10 MHz		1 RB / 25 RB Offset
Radiated Spurious Emission	23017 ~ 23173	23017	1.4 MHz	QPSK	3 RB / 0 RB Offset
	23035 ~ 23155	23035	5 MHz		1 RB / 25 RB Offset
	23060 ~ 23130	23060	10 MHz		1 RB / 25 RB Offset
Effective Radiated Power (ERP)	23017 ~ 23173	23017, 23095, 23173	1.4 MHz	QPSK, 16QAM	As per table 1.6.4
	23025 ~ 23165	23025, 23095, 23165	3 MHz		
	23035 ~ 23155	23035, 23095, 23155	5 MHz		
	23060 ~ 23130	23060, 23095, 23130	10 MHz		

NOTE:

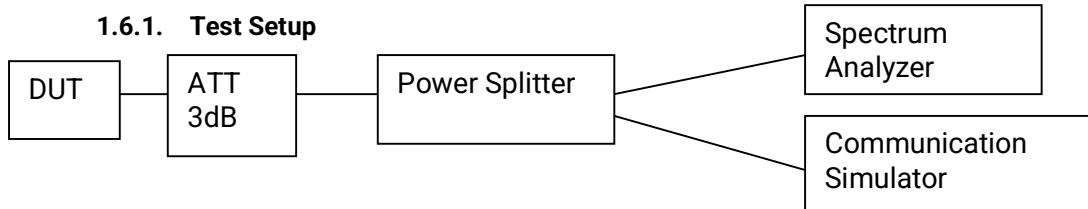
1. The Conducted RF Output Power for QPSK and 16QAM, measured value of QPSK mode is higher than 16QAM mode. Therefore, only Conducted Spurious Emission and Radiated Emission had been tested under QPSK modes.
2. Band Edge was performed with 1 and full Resource Block at the lowest and highest operating frequency band.
3. The Effective 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 & Rezza & 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) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are 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 12 (699-716MHz)

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
			23017	23095	23173	23017	23095	23173
			699.7 MHz	707.5 MHz	715.3 MHz	699.7 MHz	707.5 MHz	715.3 MHz
Band 12 / 1.4 MHz	1	0	23.504	23.395	23.259	22.6	22.531	22.406
	1	3	23.527	23.455	23.264	22.613	22.579	22.428
	1	5	23.493	23.414	23.234	22.629	22.563	22.391
	3	0	23.555	23.428	23.339	22.638	22.521	22.358
	3	2	23.543	23.444	23.342	22.645	22.59	22.358
	3	3	23.54	23.433	23.328	22.642	22.574	22.329
	6	0	22.502	22.39	22.335	21.51	21.403	21.334

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
			23025	23095	23165	23025	23095	23165
			700.5 MHz	707.5 MHz	714.5 MHz	700.5 MHz	707.5 MHz	714.5 MHz
Band 12 / 3MHz	1	0	23.532	23.385	23.312	22.624	22.586	22.445
	1	7	23.541	23.462	23.362	22.669	22.653	22.498
	1	14	23.444	23.408	23.266	22.589	22.569	22.376
	8	0	22.559	22.45	22.329	21.525	21.569	21.409
	8	4	22.562	22.543	22.407	21.639	21.664	21.482
	8	7	22.52	22.527	22.381	21.627	21.491	21.453
	15	0	22.582	22.456	22.333	21.594	21.482	21.361

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
			23035	23095	23155	23035	23095	23155
			701.5 MHz	707.5 MHz	713.5 MHz	701.5 MHz	707.5 MHz	713.5 MHz
Band 12 / 5MHz	1	0	23.471	23.43	23.352	22.65	22.76	22.591
	1	13	23.505	23.48	23.369	22.708	22.92	22.588
	1	25	23.451	23.54	23.287	22.66	22.83	22.537
	12	0	22.479	22.47	22.37	21.508	21.4	21.396
	12	6	22.565	22.52	22.362	21.624	21.48	21.407
	12	13	22.531	22.51	22.388	21.553	21.59	21.411
	25	0	22.549	22.57	22.35	21.565	21.41	21.369

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
			23060	23095	23130	23060	23095	23130
			704.0 MHz	707.5 MHz	711.0 MHz	704.0 MHz	707.5MHz	711.0 MHz
Band 12 / 10MHz	1	0	23.431	23.356	23.363	22.552	22.594	22.53
	1	25	23.487	23.459	23.416	22.64	22.655	22.598
	1	49	23.466	23.375	23.311	22.614	22.569	22.43
	25	0	22.523	22.48	22.436	21.521	21.488	21.429
	25	13	22.586	22.484	22.444	21.611	21.493	21.458
	25	25	22.564	22.505	22.436	21.551	21.536	21.463
	50	0	22.576	22.485	22.426	21.584	21.499	21.455

1.6.4. Effective Radiated Power – LTE Band 12 (699-716MHz)

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
			23017	23095	23173	23017	23095	23173
			699.7 MHz	707.5 MHz	715.3 MHz	699.7 MHz	707.5 MHz	715.3 MHz
Band 12 / 1.4 MHz	1	0	21.354	21.245	21.109	20.45	20.381	20.256
	1	3	21.377	21.305	21.114	20.463	20.429	20.278
	1	5	21.343	21.264	21.084	20.479	20.413	20.241
	3	0	21.405	21.278	21.189	20.488	20.371	20.208
	3	2	21.393	21.294	21.192	20.495	20.44	20.208
	3	3	21.39	21.283	21.178	20.492	20.424	20.179
	6	0	20.352	20.24	20.185	19.36	19.253	19.184

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
			23025	23095	23165	23025	23095	23165
			700.5 MHz	707.5 MHz	714.5 MHz	700.5 MHz	707.5 MHz	714.5 MHz
Band 12 / 3MHz	1	0	21.382	21.235	21.162	20.474	20.436	20.295
	1	7	21.391	21.312	21.212	20.519	20.503	20.348
	1	14	21.294	21.258	21.116	20.439	20.419	20.226
	8	0	20.409	20.3	20.179	19.375	19.419	19.259
	8	4	20.412	20.393	20.257	19.489	19.514	19.332
	8	7	20.37	20.377	20.231	19.477	19.341	19.303
	15	0	20.432	20.306	20.183	19.444	19.332	19.211

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
			23035	23095	23155	23035	23095	23155
			701.5 MHz	707.5 MHz	713.5 MHz	701.5 MHz	707.5 MHz	713.5 MHz
Band 12 / 5MHz	1	0	21.321	21.28	21.202	20.5	20.61	20.441
	1	13	21.355	21.33	21.219	20.558	20.77	20.438
	1	25	21.301	21.39	21.137	20.51	20.68	20.387
	12	0	20.329	20.32	20.22	19.358	19.25	19.246
	12	6	20.415	20.37	20.212	19.474	19.33	19.257
	12	13	20.381	20.36	20.238	19.403	19.44	19.261
	25	0	20.399	20.42	20.2	19.415	19.26	19.219

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
			23060	23095	23130	23060	23095	23130
			704.0 MHz	707.5 MHz	711.0 MHz	704.0 MHz	707.5MHz	711.0 MHz
Band 12 / 10MHz	1	0	21.281	21.206	21.213	20.402	20.444	20.38
	1	25	21.337	21.309	21.266	20.49	20.505	20.448
	1	49	21.316	21.225	21.161	20.464	20.419	20.28
	25	0	20.373	20.33	20.286	19.371	19.338	19.279
	25	13	20.436	20.334	20.294	19.461	19.343	19.308
	25	25	20.414	20.355	20.286	19.401	19.386	19.313
	50	0	20.426	20.335	20.276	19.434	19.349	19.305

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

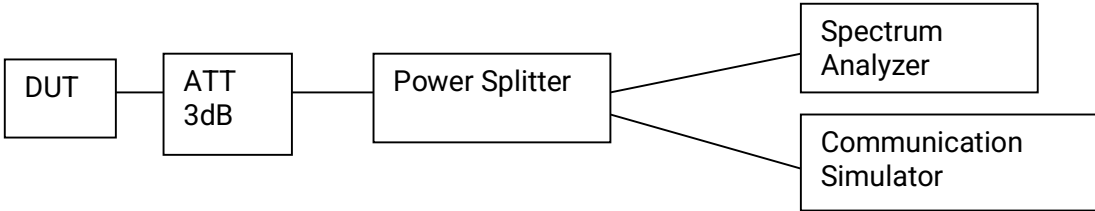
$$\begin{aligned} \text{EIRP} &= \text{PMeas} + \text{GT} \\ \text{ERP} &= \text{EIRP} - 2.15 \end{aligned}$$

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



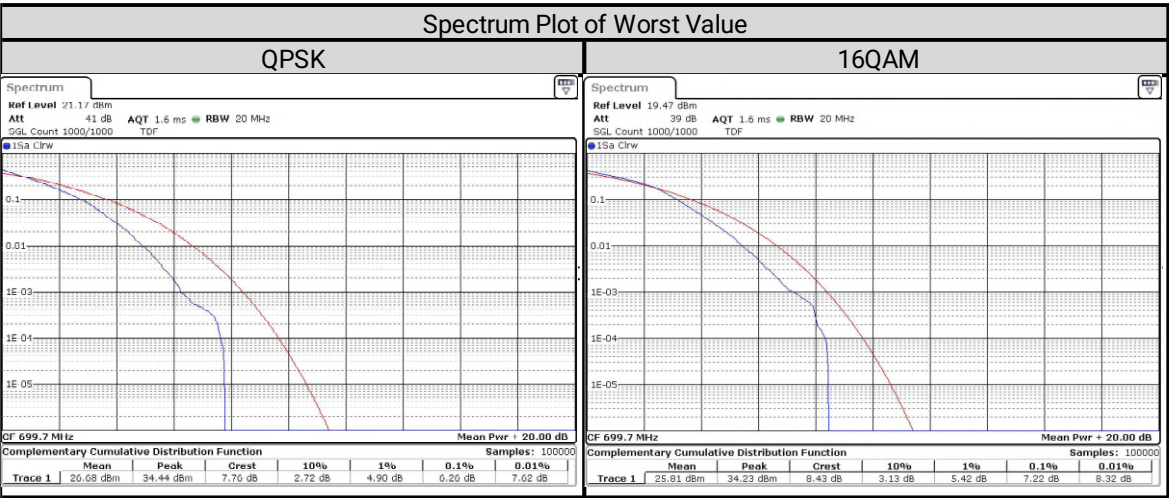
- 1. The DUT transmitter output port was connected to communication simulator with above setup.
- 2. Path loss for the measurement included.
- 3. Set DUT to transmit maximum power through communication simulator
- 4. Set the CCDF (Complementary Cumulative Distribution Function) option in the spectrum 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

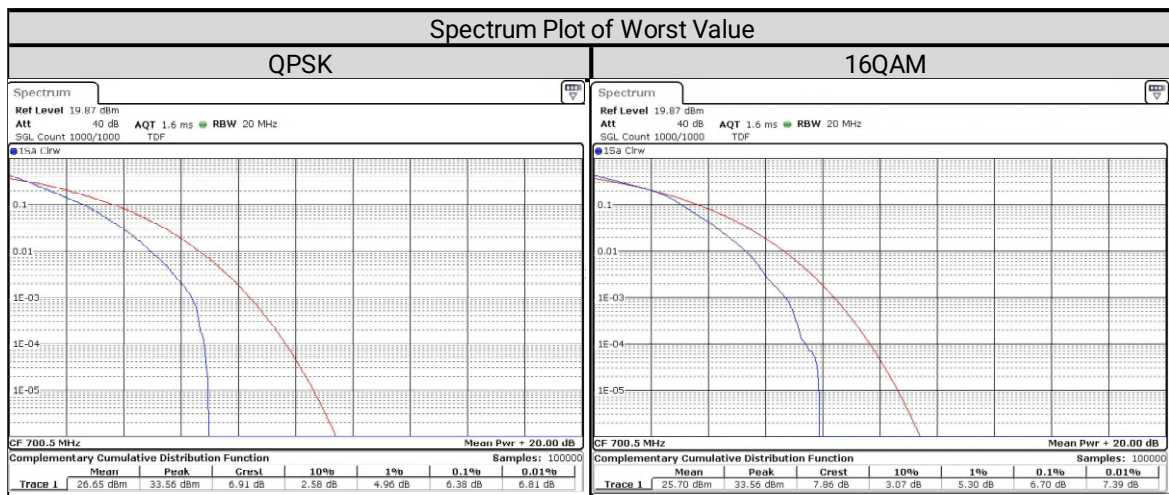
In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

1.7.3. Peak-to-Average Power Ratio – LTE Band 12 (699-716MHz)

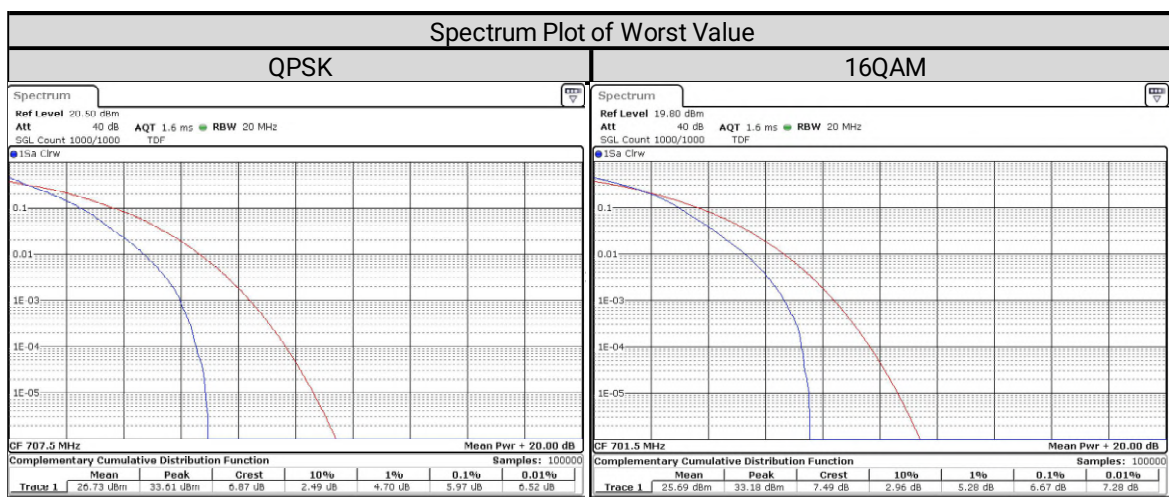
LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	Peak To Average (dB)	
			QPSK Modulation	16QAM Modulation
Band 12/1.4MHz/6/0	Low CH 23017	699.7 MHz	6.261	7.217
	Mid CH 23095	707.5 MHz	6.116	6.725
	High CH 23173	715.3 MHz	4.87	5.681



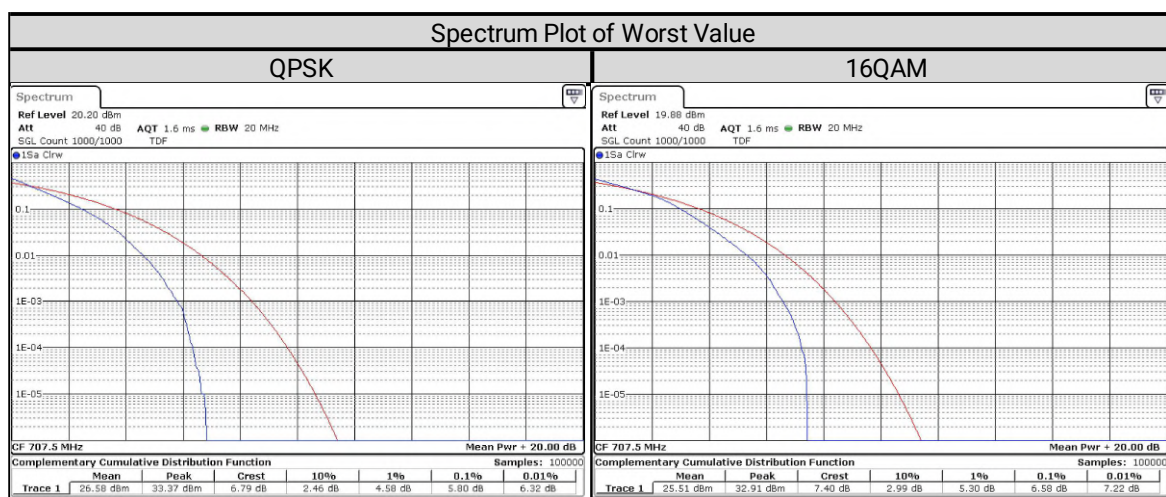
LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	Peak To Average (dB)	
			QPSK Modulation	16QAM Modulation
Band 12/3MHz/15/0	Low CH 23025	700.5 MHz	6.377	6.696
	Mid CH 23095	707.5 MHz	5.942	6.435
	High CH 23165	714.5 MHz	4.986	5.71



LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	Peak To Average (dB)	
			QPSK Modulation	16QAM Modulation
Band 12/5MHz/25/0	Low CH 23035	701.5 MHz	5.681	6.667
	Mid CH 23095	707.5 MHz	5.971	6.638
	High CH 23155	713.5 MHz	5.246	6

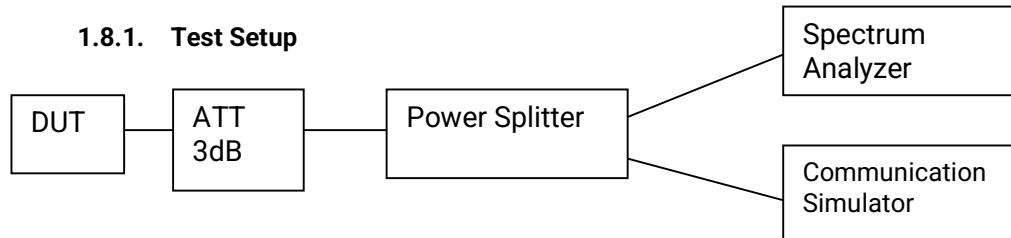


LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	Peak To Average (dB)	
			QPSK Modulation	16QAM Modulation
Band 12/10MHz/50/0	Low CH 23060	704 MHz	5.623	6.493
	Mid CH 23095	707.5 MHz	5.797	6.58
	High CH 23130	711 MHz	5.507	6.29



1.8. Occupied Bandwidth

1.8.1. Test Setup



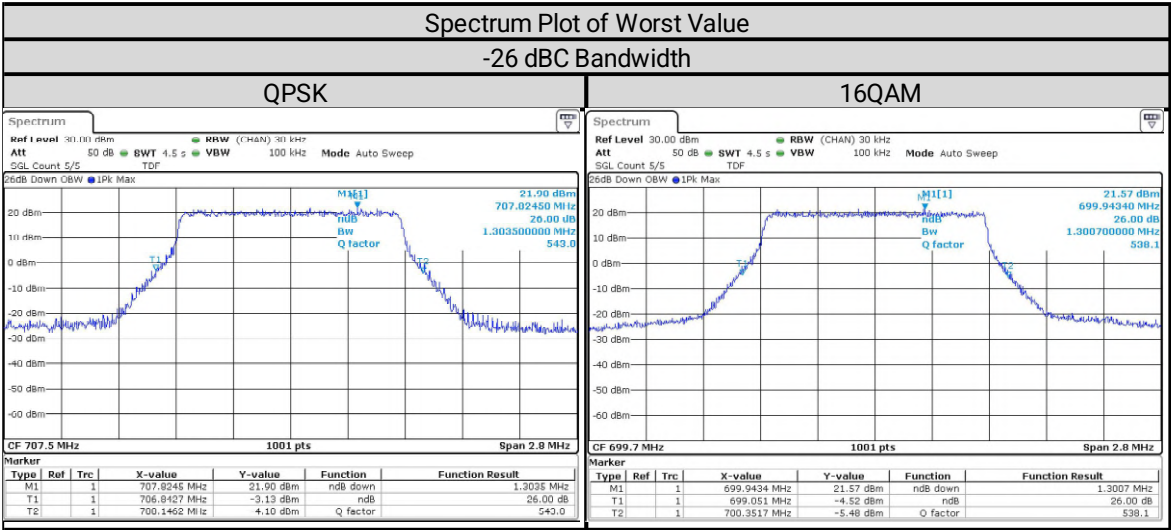
- 1) The DUT transmitter output port was connected to communication simulator with above setup.
- 2) Path loss for the measurement included.
- 3) For LTE measurement, set DUT to transmit maximum power & full RB size through communication simulator.
- 4) For LTE measurement, set DUT to transmit maximum 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

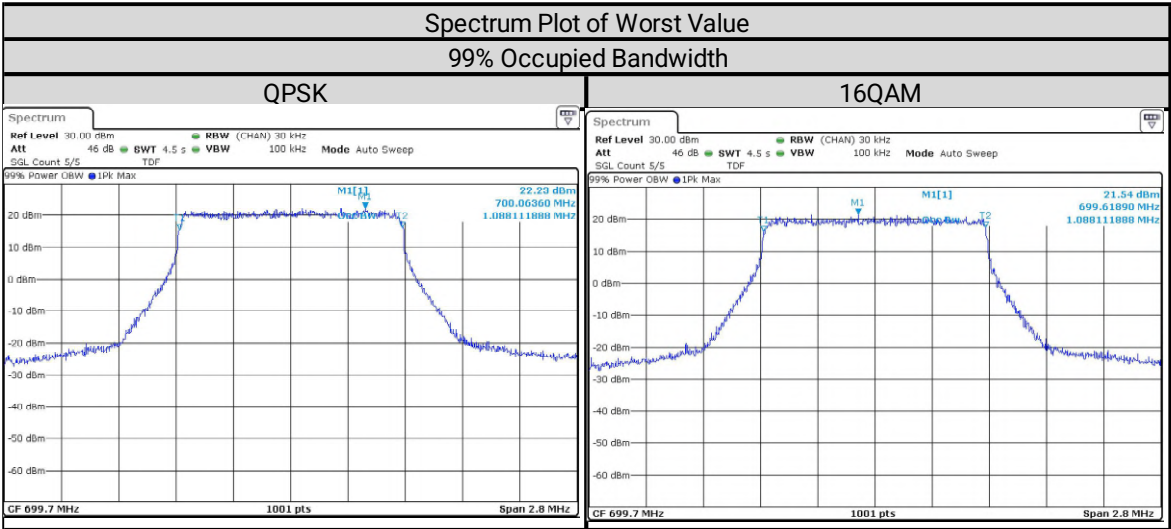
For measurement 99% of occupied bandwidth that is required by FCC 2.1046 and RSS Gen 6.7.

1.8.3. Occupied Bandwidth – LTE Band 12 (699-716MHz)

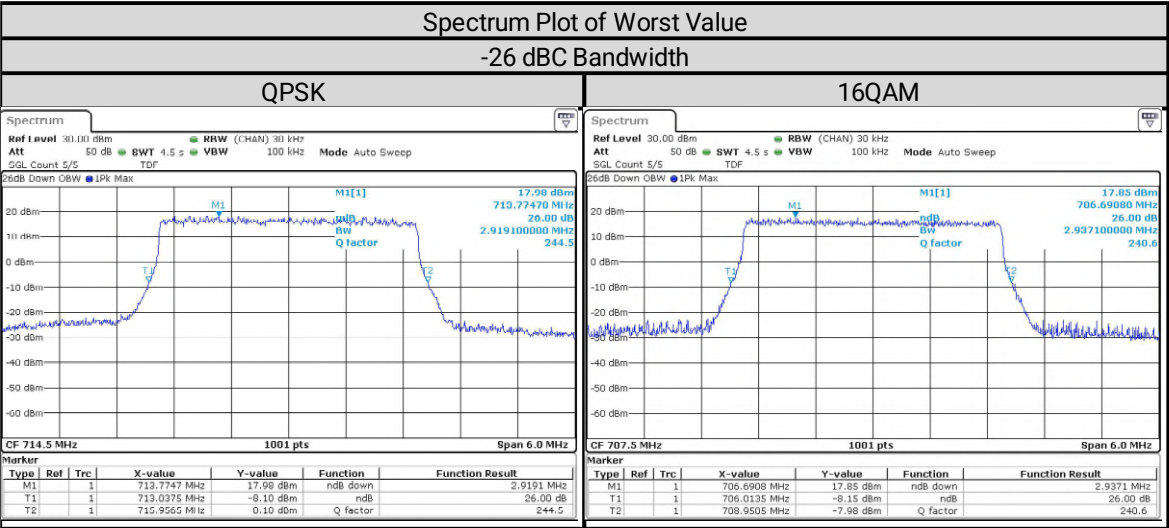
LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	-26 dBc Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 12/1.4MHz/6/0	Low CH 23017	699.7 MHz	1.284	1.301
	Mid CH 23095	707.5 MHz	1.304	1.281
	High CH 23173	715.3 MHz	1.27	1.273



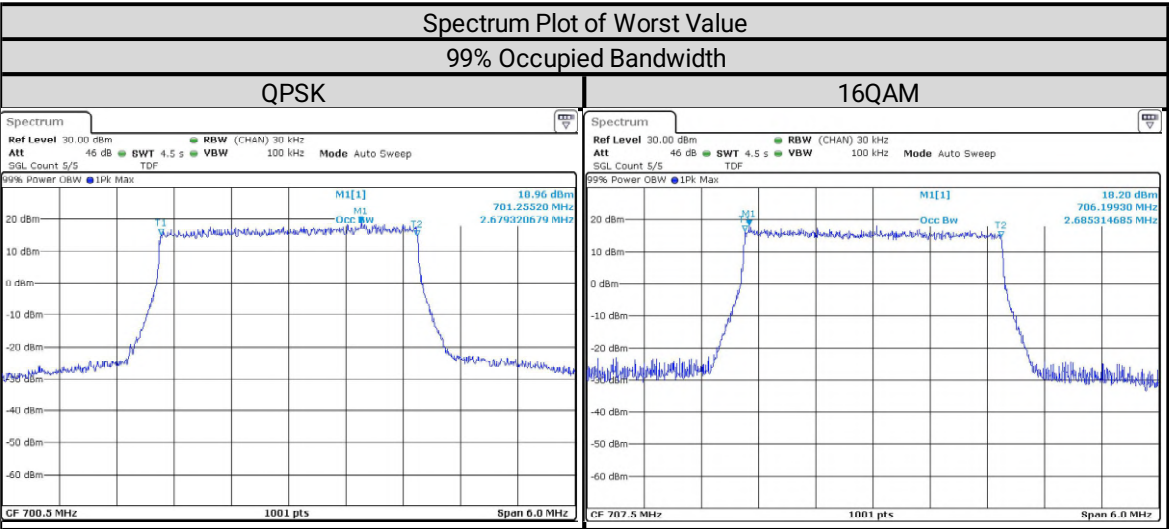
LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	99% Occupied Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 12/1.4MHz/6/0	Low CH 23017	699.7 MHz	1.088	1.088
	Mid CH 23095	707.5 MHz	1.085	1.088
	High CH 23173	715.3 MHz	1.085	1.085



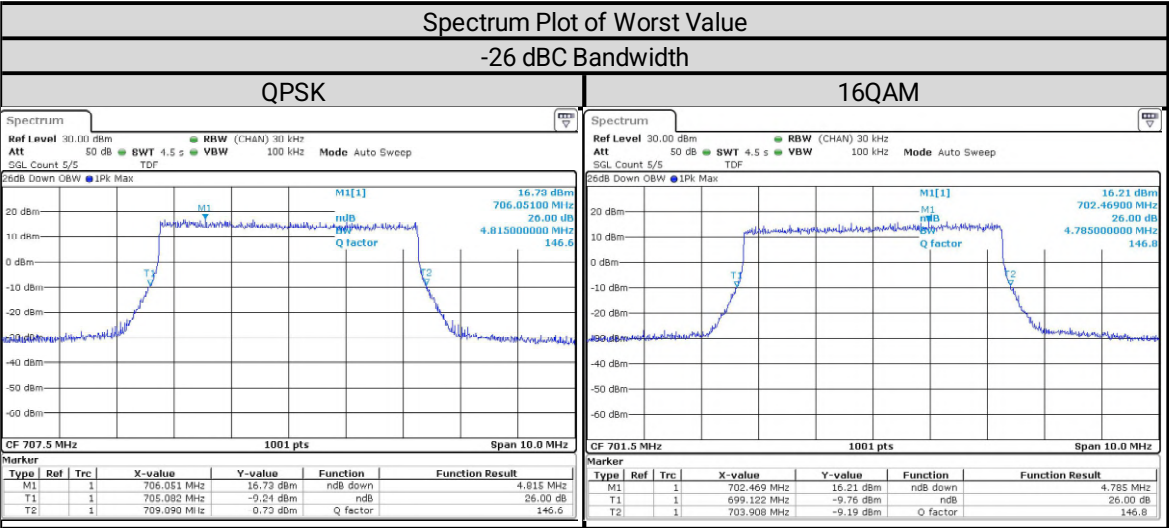
LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	-26 dBc Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 12/3MHz/15/0	Low CH 23025	700.5 MHz	2.901	2.919
	Mid CH 23095	707.5 MHz	2.907	2.937
	High CH 23165	714.5 MHz	2.919	2.913



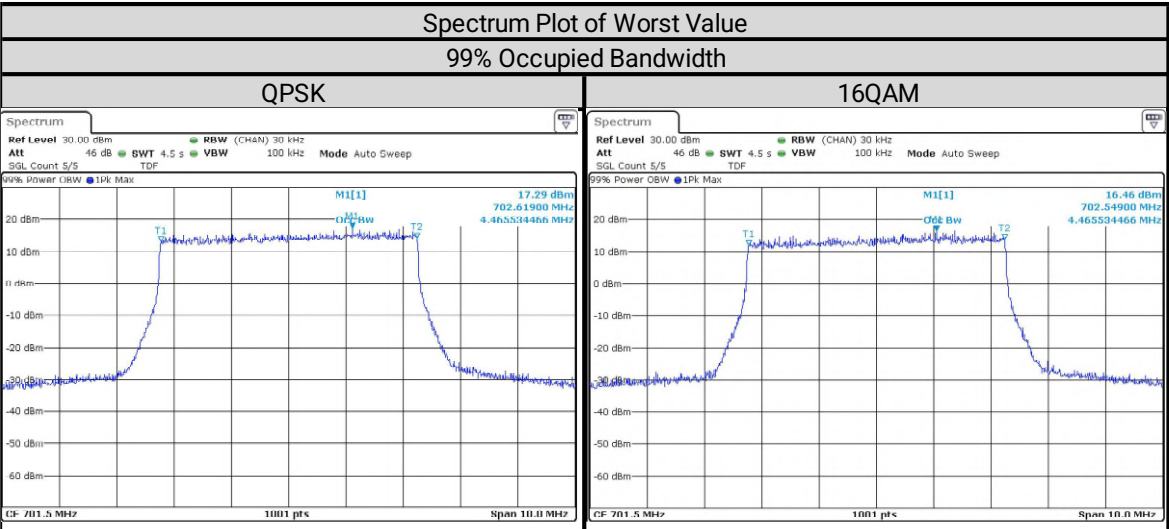
LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	99% Occupied Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 12/3MHz/15/0	Low CH 23025	700.5 MHz	2.679	2.679
	Mid CH 23095	707.5 MHz	2.679	2.685
	High CH 23165	714.5 MHz	2.679	2.673



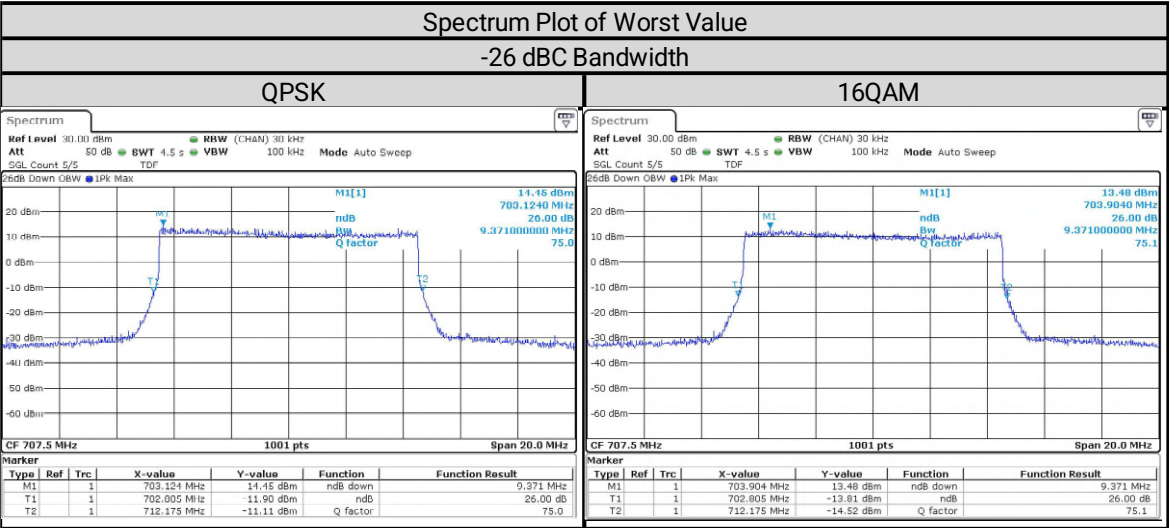
LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	-26 dBc Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 12/5MHz/25/0	Low CH 23035	701.5 MHz	4.755	4.785
	Mid CH 23095	707.5 MHz	4.815	4.785
	High CH 23155	713.5 MHz	4.775	4.775



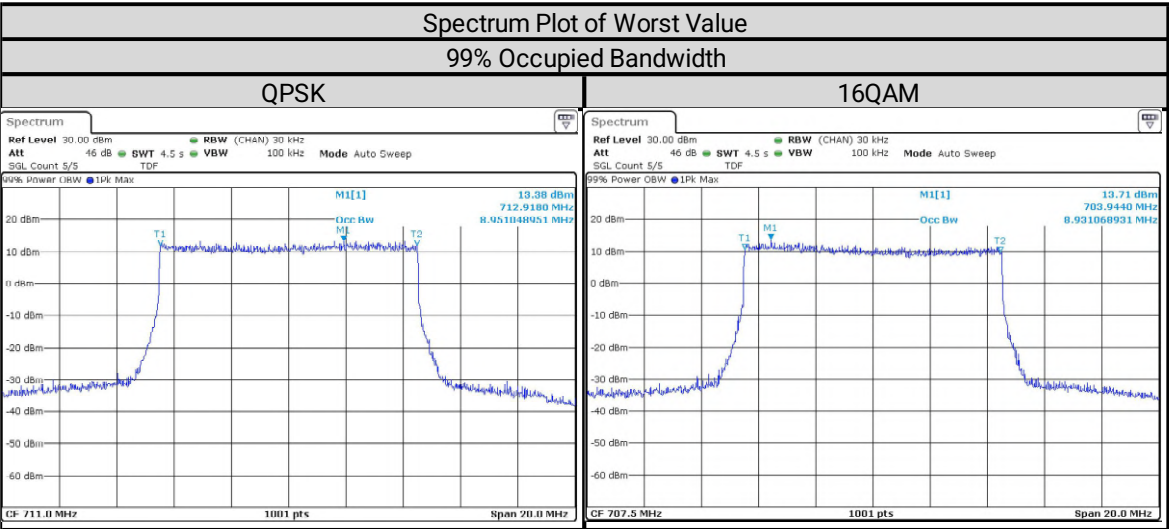
LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	99% Occupied Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 12/5MHz/25/0	Low CH 23035	701.5 MHz	4.466	4.466
	Mid CH 23095	707.5 MHz	4.466	4.466
	High CH 23155	713.5 MHz	4.456	4.456



LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	-26 dBc Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 12/10MHz/50/0	Low CH 23060	704 MHz	9.311	9.311
	Mid CH 23095	707.5 MHz	9.371	9.371
	High CH 23130	711 MHz	9.351	9.331

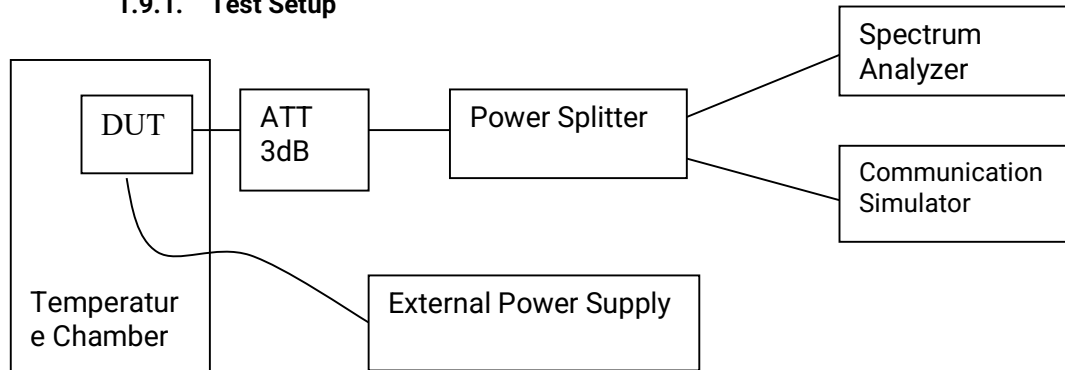


LTE Band/BW/RB Size/RB Offset	Channel Number	Tx Frequency	99% Occupied Bandwidth (MHz)	
			QPSK Modulation	16QAM Modulation
Band 12/10MHz/50/0	Low CH 23060	704 MHz	8.911	8.891
	Mid CH 23095	707.5 MHz	8.931	8.931
	High CH 23130	711 MHz	8.951	8.911



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 12 (699-716MHz)

Band	Temp (Deg C)	Frequency Error VS Temperature			
		Channel Bandwidth: 1.4 MHz			
		Low Channel		High Channel	
		699.7MHz		715.3MHz	
LTE Band 12		Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
	60	699.699995	-0.007687	715.299997	-0.00448
	50	699.699996	-0.005949	715.300003	0.00426
	40	699.699996	-0.005172	715.299995	-0.00634
	30	699.699996	-0.00597	715.300005	0.00748
	20	699.699995	-0.00644	715.299996	-0.0057
	10	699.700004	0.00505	715.300004	0.00596
	0	699.699996	-0.005091	715.300004	0.00558
	-10	699.700004	0.006215	715.300003	0.00456
	-20	699.699995	-0.007585	715.299995	-0.00664
	-30	699.700004	0.006379	715.299996	-0.00526

Band	Voltage (V)	Frequency Error VS Voltage			
		Channel Bandwidth: 1.4 MHz			
		Low Channel		High Channel	
		699.7MHz		715.3MHz	
LTE Band 12		Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
	9	699.700051	0.007176	715.3000336	-0.00586
	7.5	699.7006688	-0.007565	715.3000516	-0.00464
	6	699.700008	-0.007197	715.3000658	-0.0052

Band	Temp (Deg C)	Frequency Error VS Temperature			
		Channel Bandwidth: 3 MHz			
		Low Channel		High Channel	
		700.5MHz		714.5MHz	
LTE Band 12		Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
	60	700.500004	0.00535	714.500003	0.004345
	50	700.500004	0.006065	714.500003	0.004204
	40	700.500005	0.006943	714.500005	0.006387
	30	700.499997	-0.003737	714.500003	0.004285
	20	700.500004	0.00629	714.500003	0.004425
	10	700.500005	0.007433	714.500018	0.025887
	0	700.500004	0.005555	714.500005	0.006567
	-10	700.500004	0.006106	714.500003	0.004445
	-20	700.500005	0.006535	714.500005	0.006927
	-30	700.500004	0.005269	714.500005	0.007508

Band	Voltage (V)	Frequency Error VS Voltage			
		Channel Bandwidth: 3 MHz			
		Low Channel		High Channel	
		700.5MHz		714.5MHz	
LTE Band 12		Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
	9	700.500666	0.006698	714.5000666	0.027889
	7.5	700.5003655	0.006167	714.5000086	0.005906
	6	700.5003656	0.007005	714.5000645	0.005145

Band	Temp (Deg C)	Frequency Error VS Temperature			
		Channel Bandwidth: 5 MHz			
		Low Channel		High Channel	
		701.5MHz		713.5MHz	
LTE Band 12		Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
	60	701.500003	0.004303	713.500003	0.004611
	50	701.500003	0.003691	713.500003	0.004471
	40	701.500003	0.004751	713.500004	0.006055
	30	701.500003	0.004751	713.499997	-0.00409
	20	701.499997	-0.004833	713.500003	0.004611
	10	701.500004	0.005343	713.500004	0.006115
	0	701.500004	0.005282	713.500005	0.006396
	-10	701.500003	0.004976	713.500004	0.006195
	-20	701.500004	0.005302	713.500005	0.006676
	-30	701.500004	0.005832	713.500005	0.006536

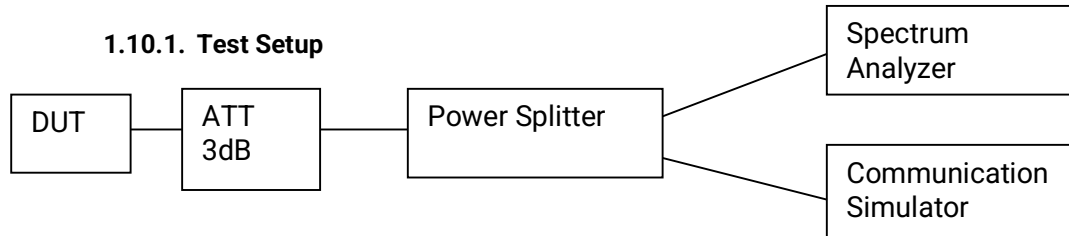
Band	Voltage (V)	Frequency Error VS Voltage			
		Channel Bandwidth: 5 MHz			
		Low Channel		High Channel	
		701.5MHz		713.5MHz	
LTE Band 12		Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
	9	701.5000636	-0.006872	713.5000636	0.007438
	7.5	701.5000546	-0.004282	713.5000686	0.004531
	6	701.5000366	-0.006362	713.5000415	0.005554

Band	Temp (Deg C)	Frequency Error VS Temperature			
		Channel Bandwidth: 10 MHz			
		Low Channel		High Channel	
		704MHz		711MHz	
LTE Band 12		Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
	60	703.999997	-0.004125	711.000003	0.004084
	50	703.999997	-0.004836	711.000003	0.004084
	40	703.999997	-0.004369	711.000003	0.004909
	30	703.999997	-0.004369	710.999997	-0.004145
	20	704.000003	0.004308	710.999996	-0.00499
	10	704.000004	0.005893	711.000004	0.005412
	0	704.000004	0.005425	711.000004	0.005734
	-10	704.000004	0.0051	711.000004	0.005432
	-20	704.000003	0.004287	711.000004	0.004949
	-30	704.000004	0.006198	711.000004	0.005694

Band	Voltage (V)	Frequency Error VS Voltage			
		Channel Bandwidth: 10 MHz			
		Low Channel		High Channel	
		704MHz		711MHz	
LTE Band 12		Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
	9	704.0003366	0.007539	711.0000011	0.008732
	7.5	704.000014	-0.00445	711.0000006	-0.004245
	6	704.000033	-0.006949	711.0000056	-0.006619

1.10. Band Edge Conducted Spurious Emission

1.10.1. Test Setup

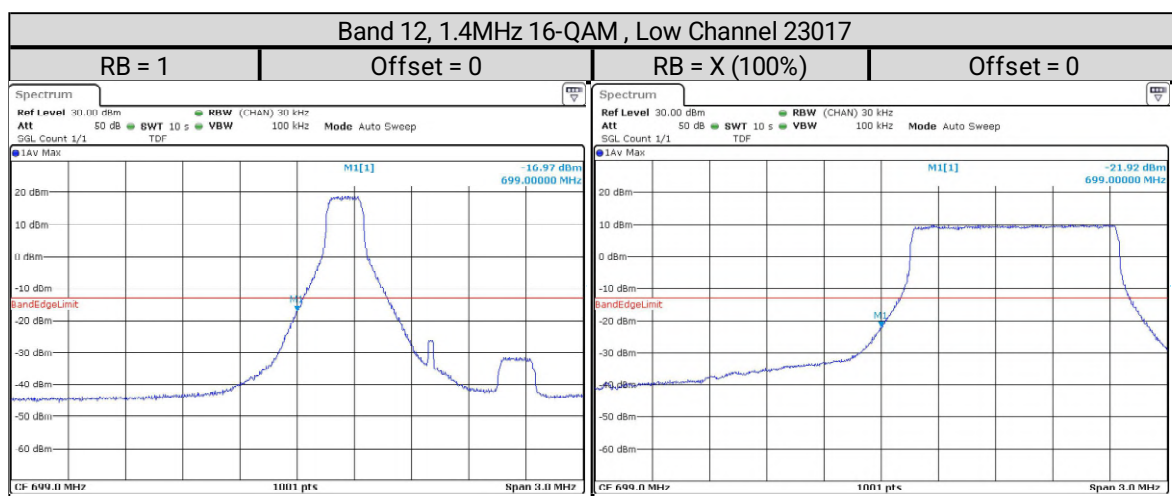
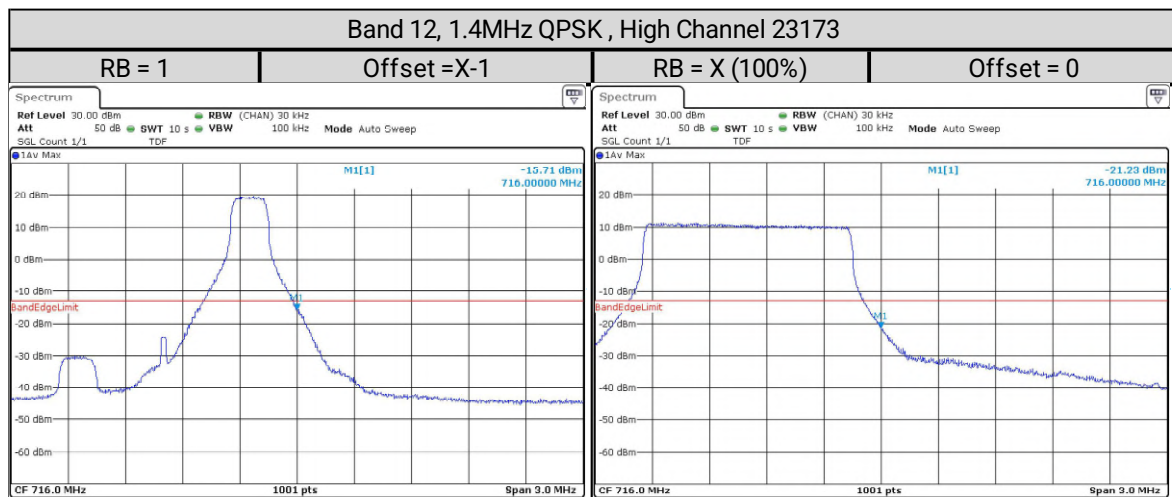
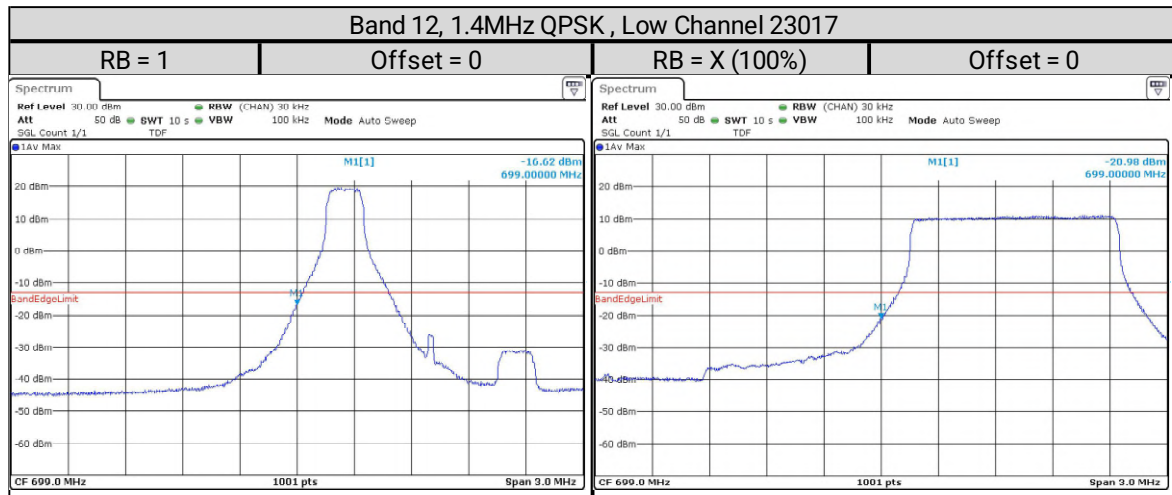


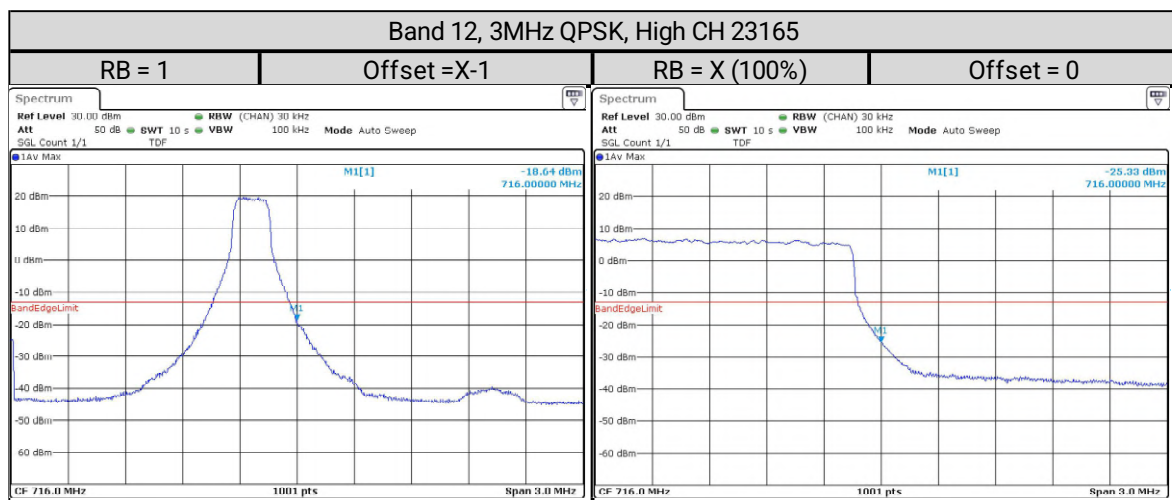
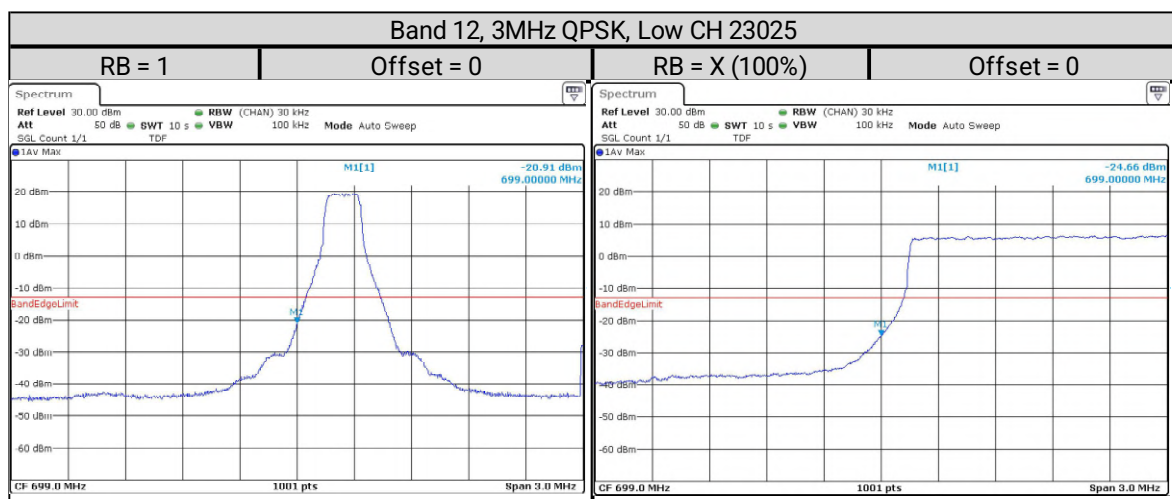
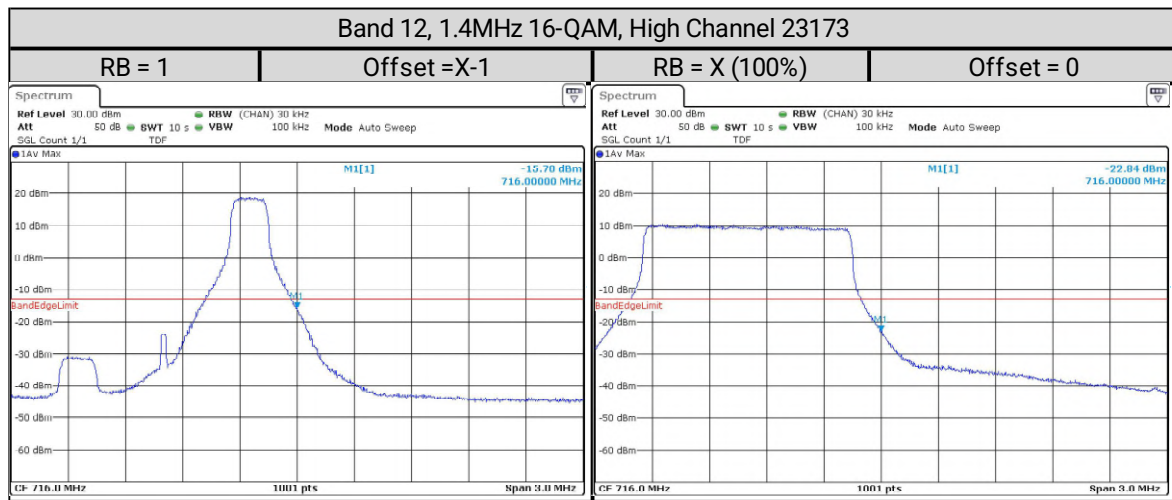
- 1) The DUT transmitter output port was connected to communication simulator with above setup.
- 2) Path loss for the measurement included.
- 3) Set DUT to transmit maximum power through communication simulator.
- 4) The band edges of lowest and highest channels with the highest RF powers were measured.
- 5) The center frequency of spectrum is the band edge frequency, span is 3MHz, RBW is 1~3% of EBW and VBW is at least 3 times of RBW
- 6) Record the maximum trace plot into the test report.

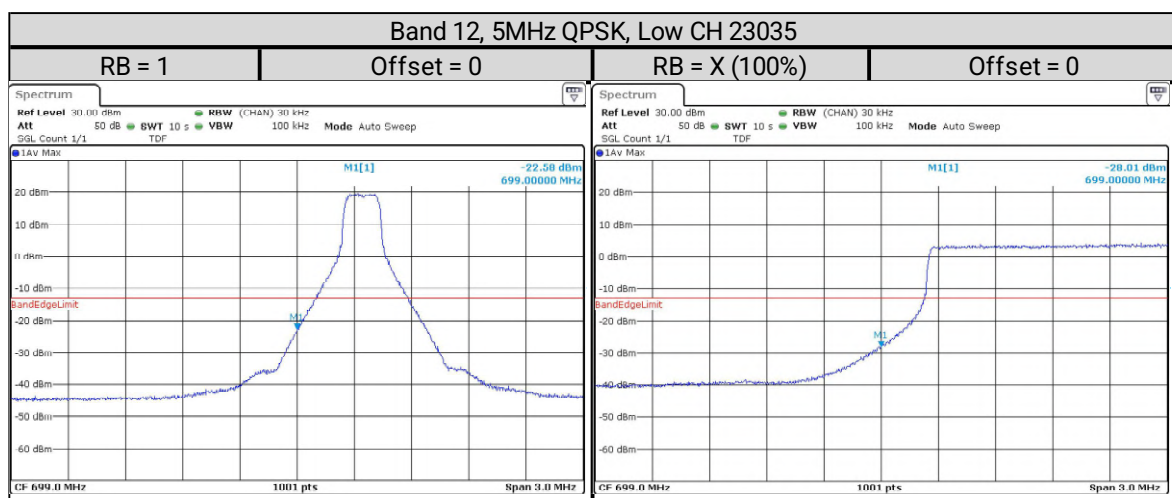
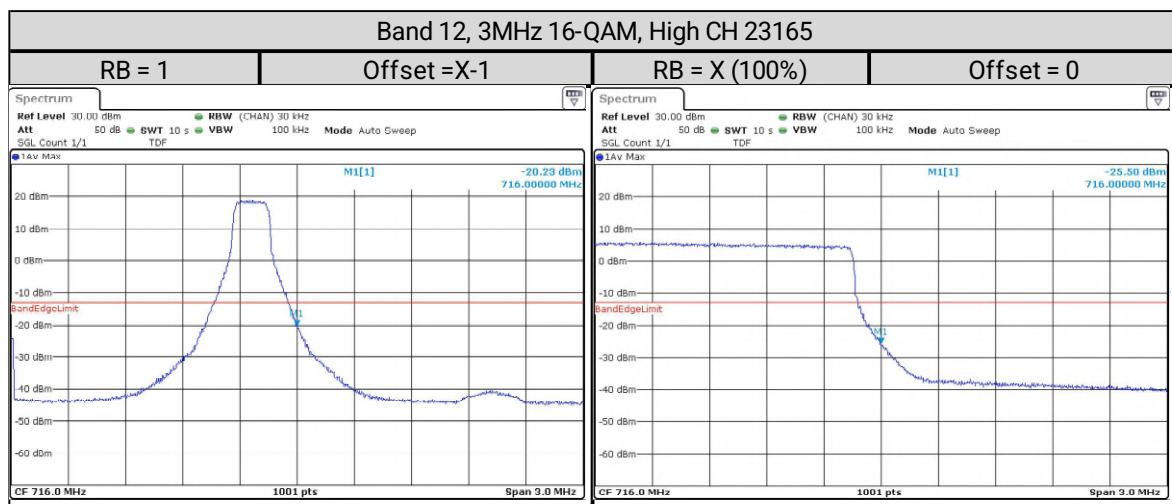
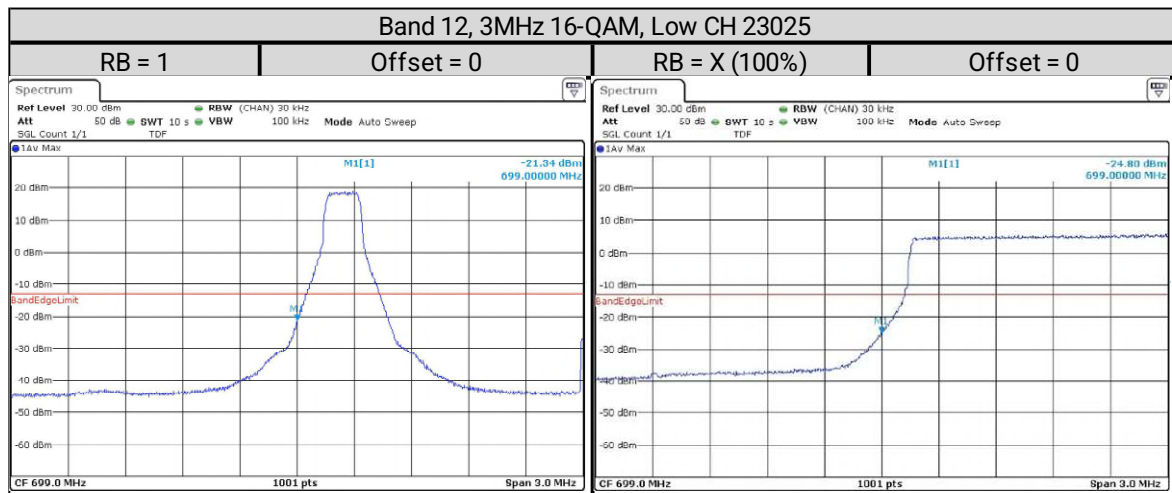
1.10.2. Test Limit

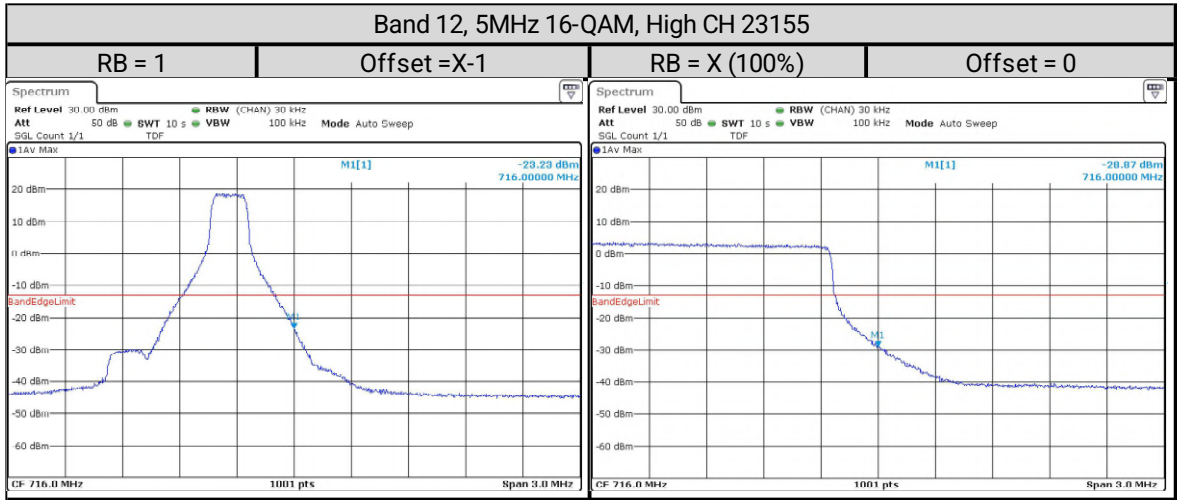
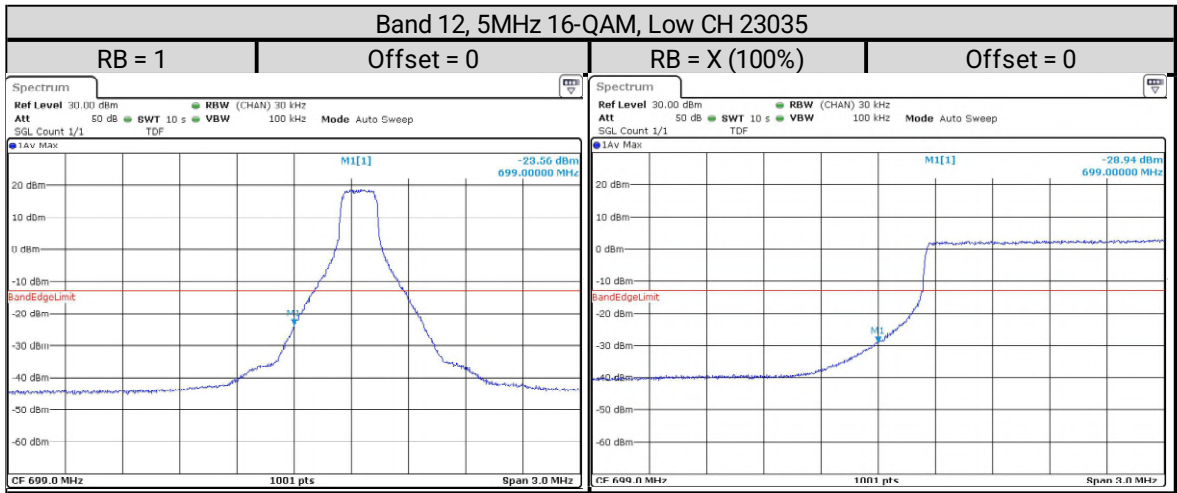
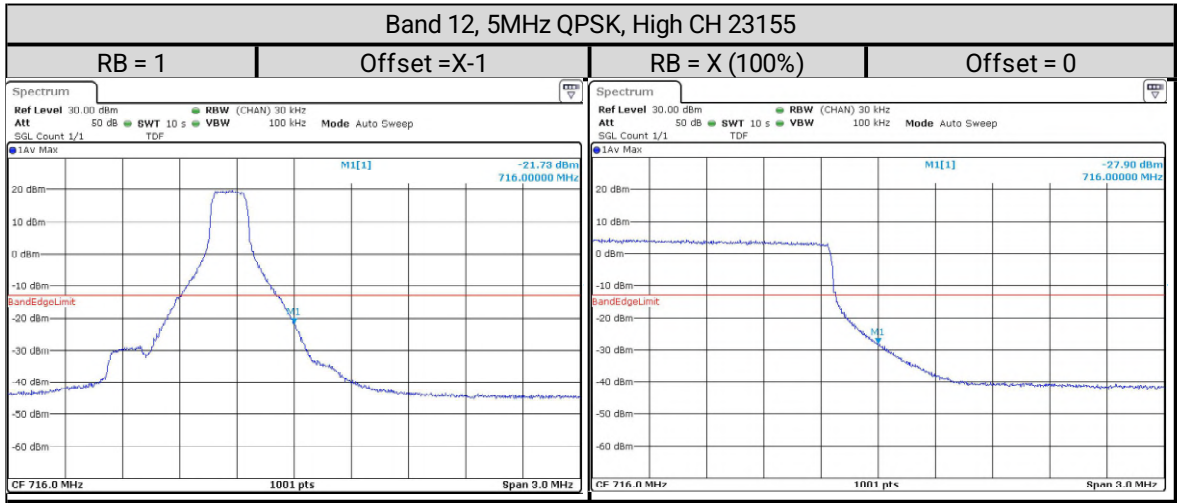
For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

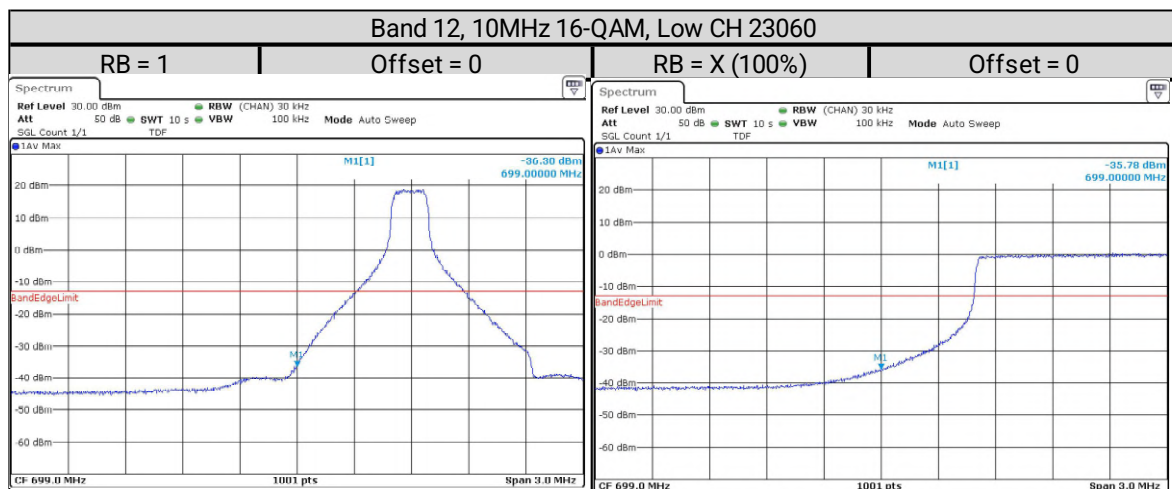
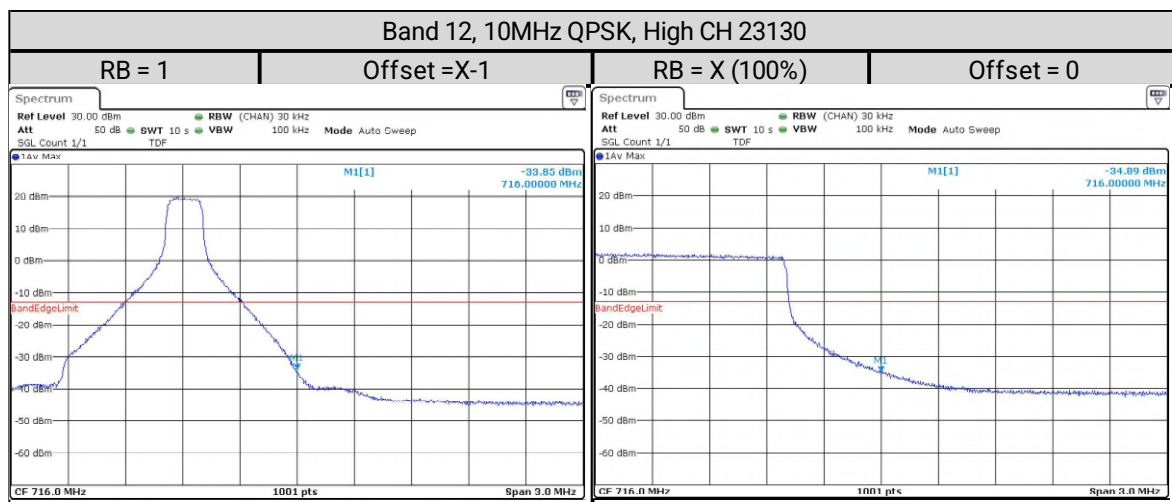
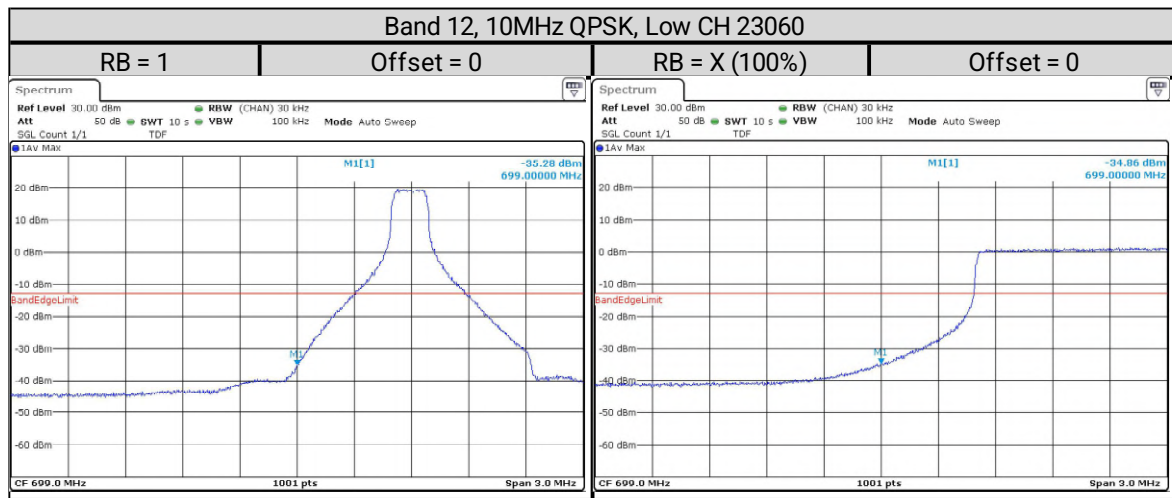
1.10.3. Band Edge Conducted Spurious Emission – LTE Band 12 (699-716MHz)

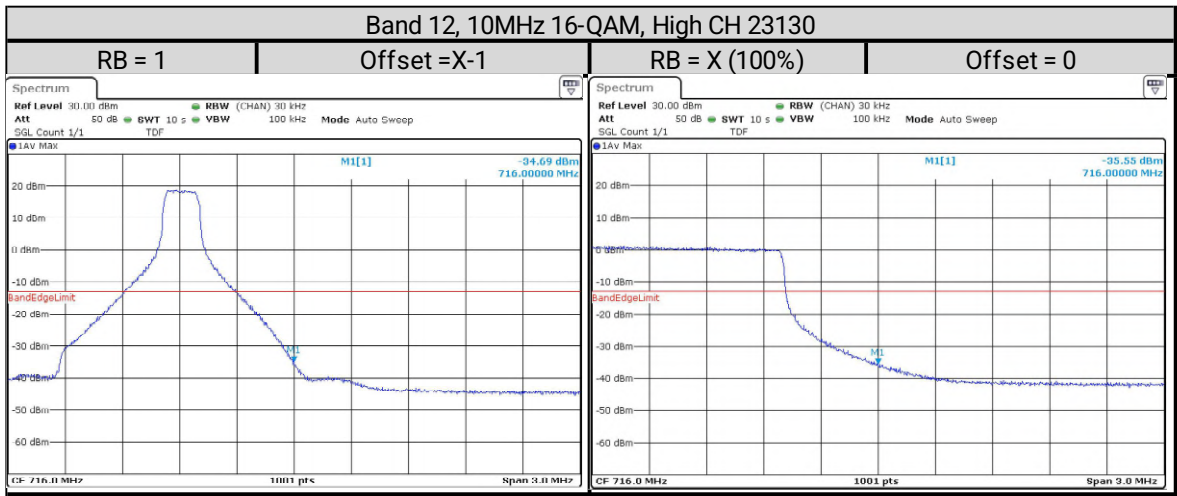






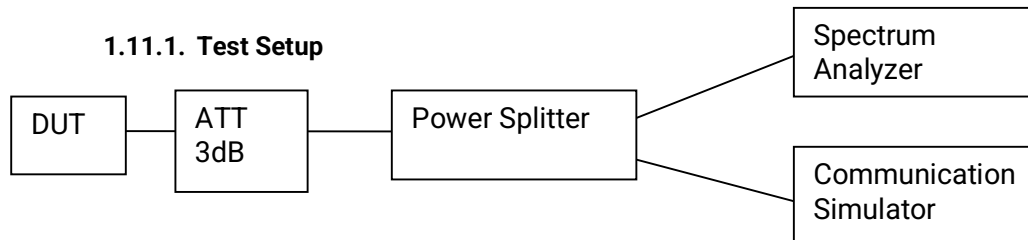






1.11. Conducted Spurious Emission

1.11.1. Test Setup



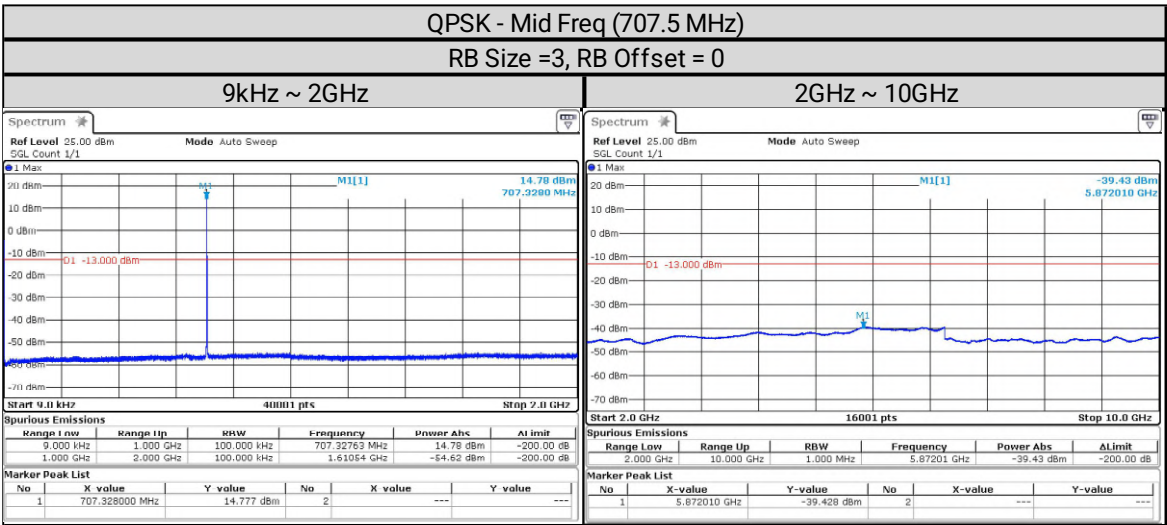
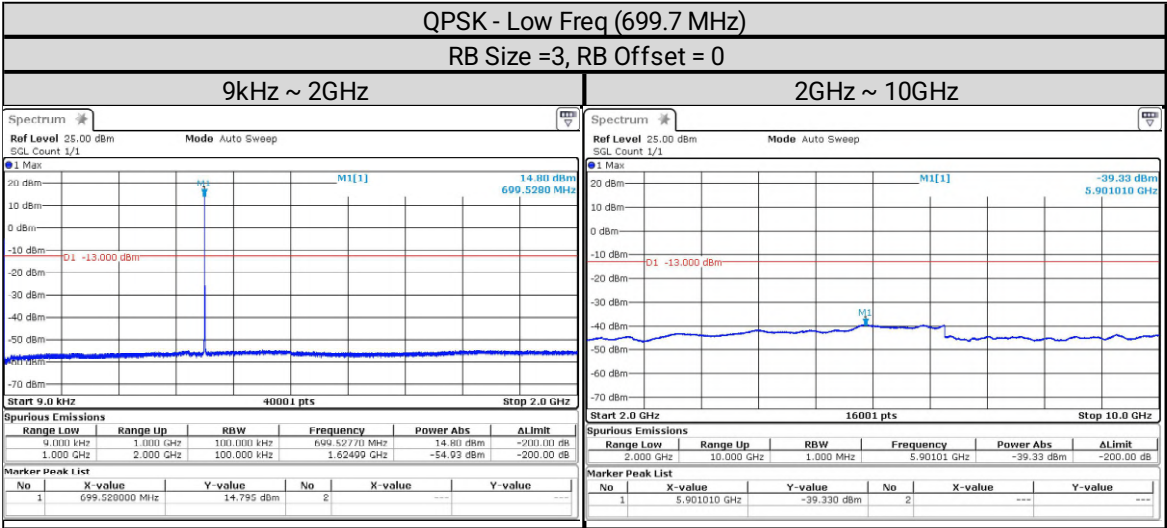
- 1) The DUT transmitter output port was connected to communication simulator with above setup.
- 2) Path loss for the measurement included.
- 3) Set DUT to transmit maximum power through communication simulator.
- 4) Spectrum Analyzer setting, RBW = 1 MHz, VBW = 3 MHz.
- 5) The spurious emission of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

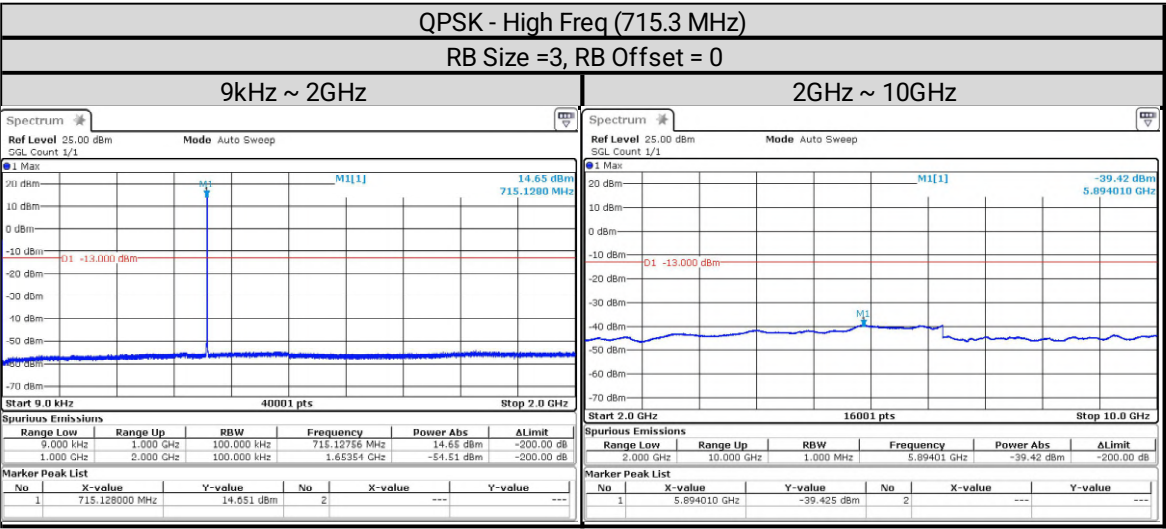
1.11.2. Test Limit

For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a 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, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

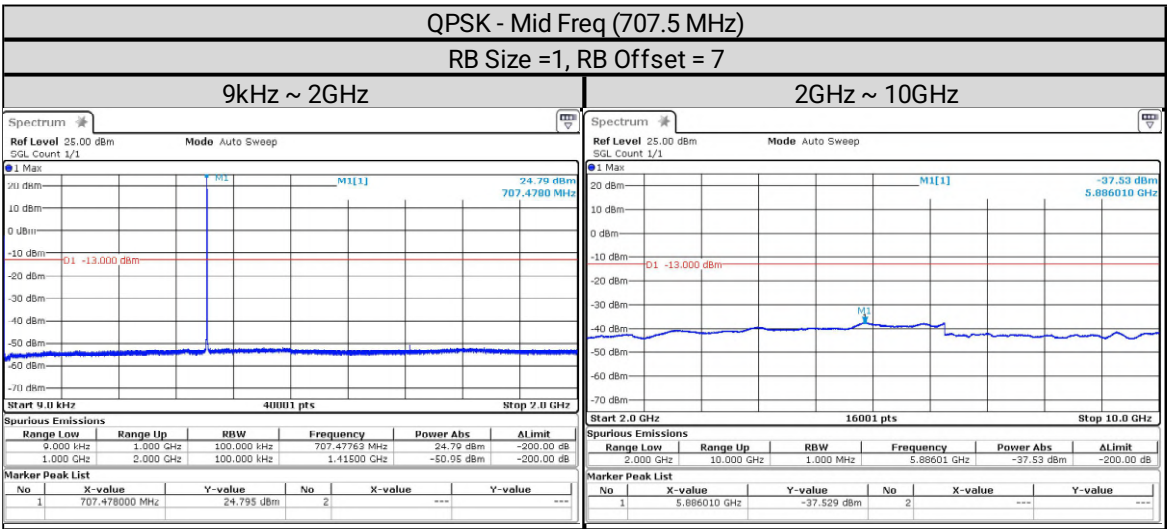
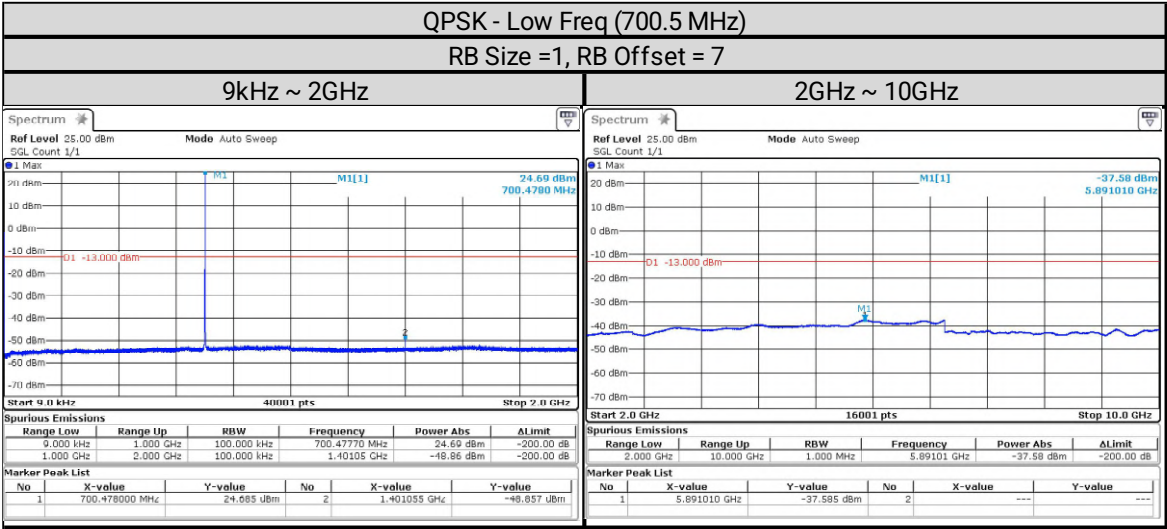
1.11.3. Conducted Spurious Emissions – LTE Band 12 (699-716MHz)

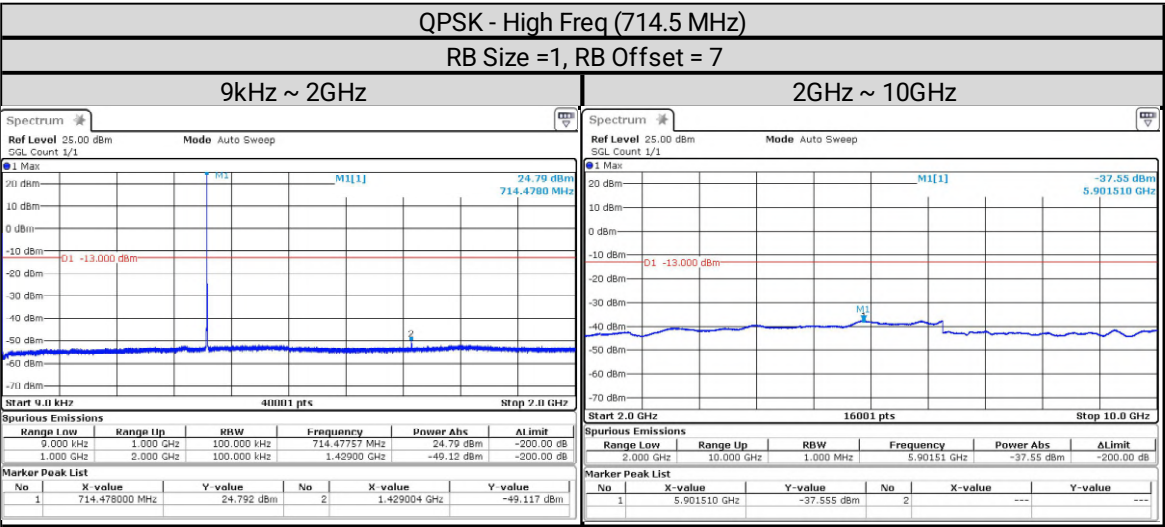
1.4MHz



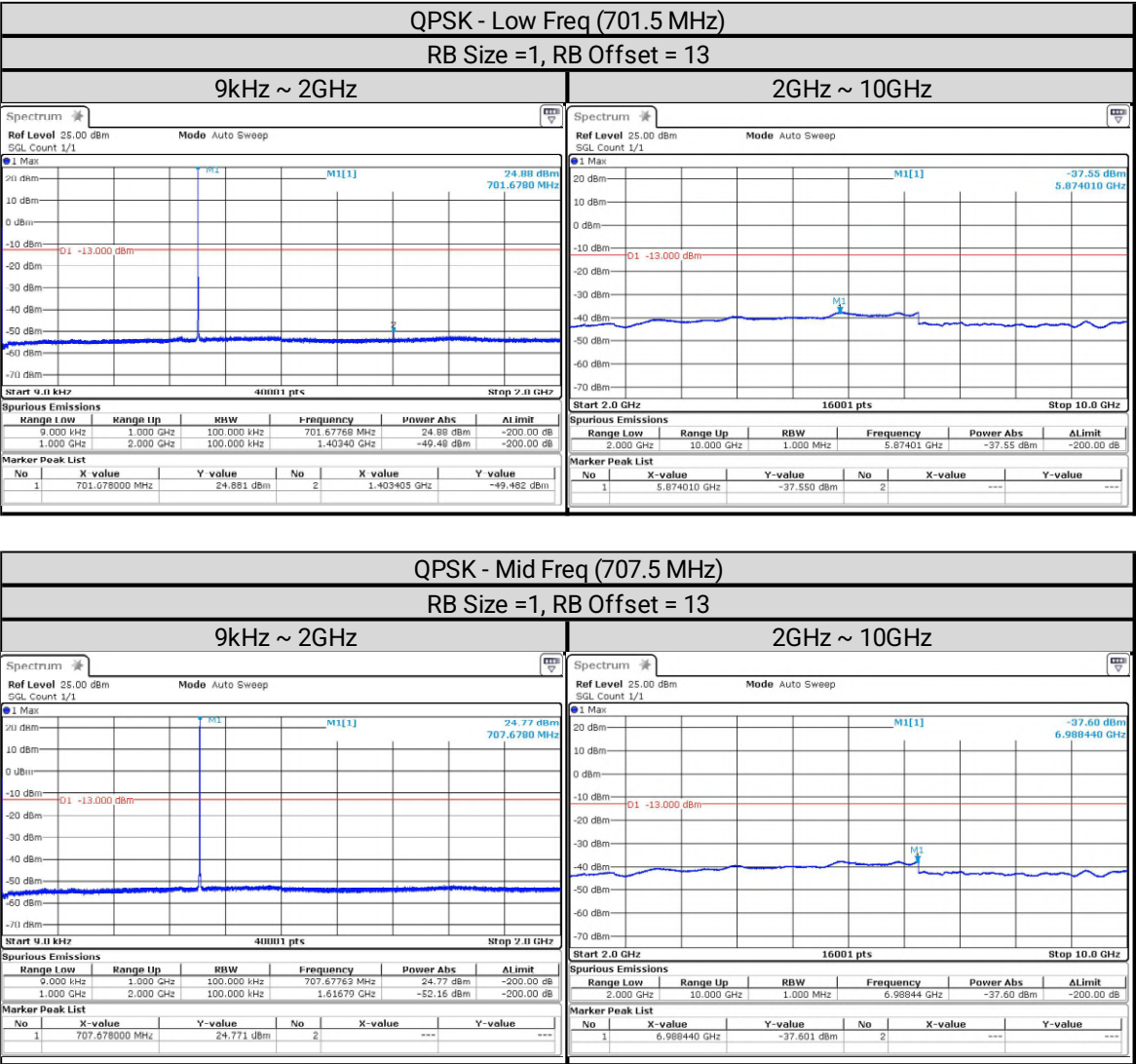


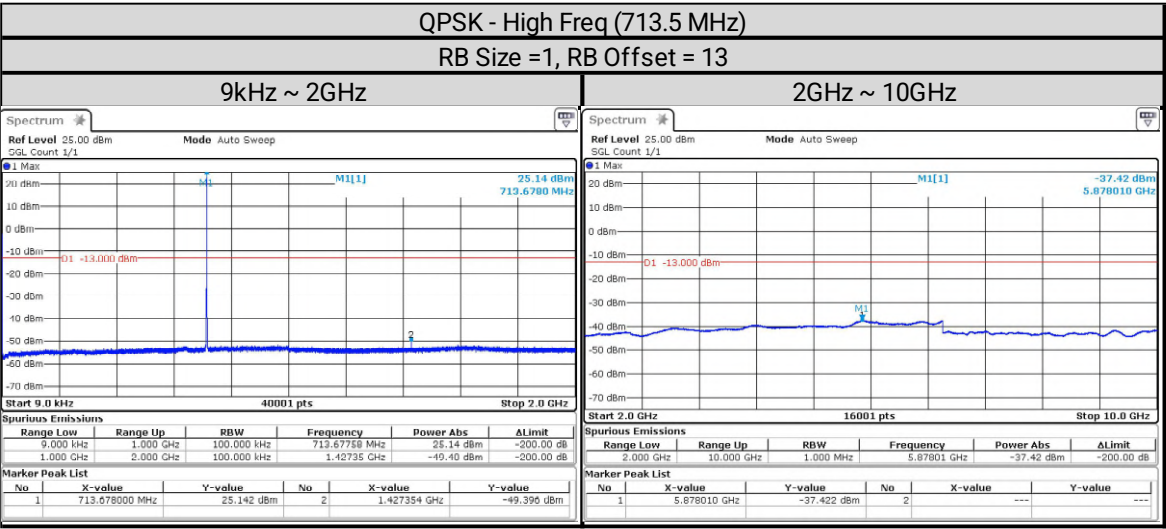
3MHz



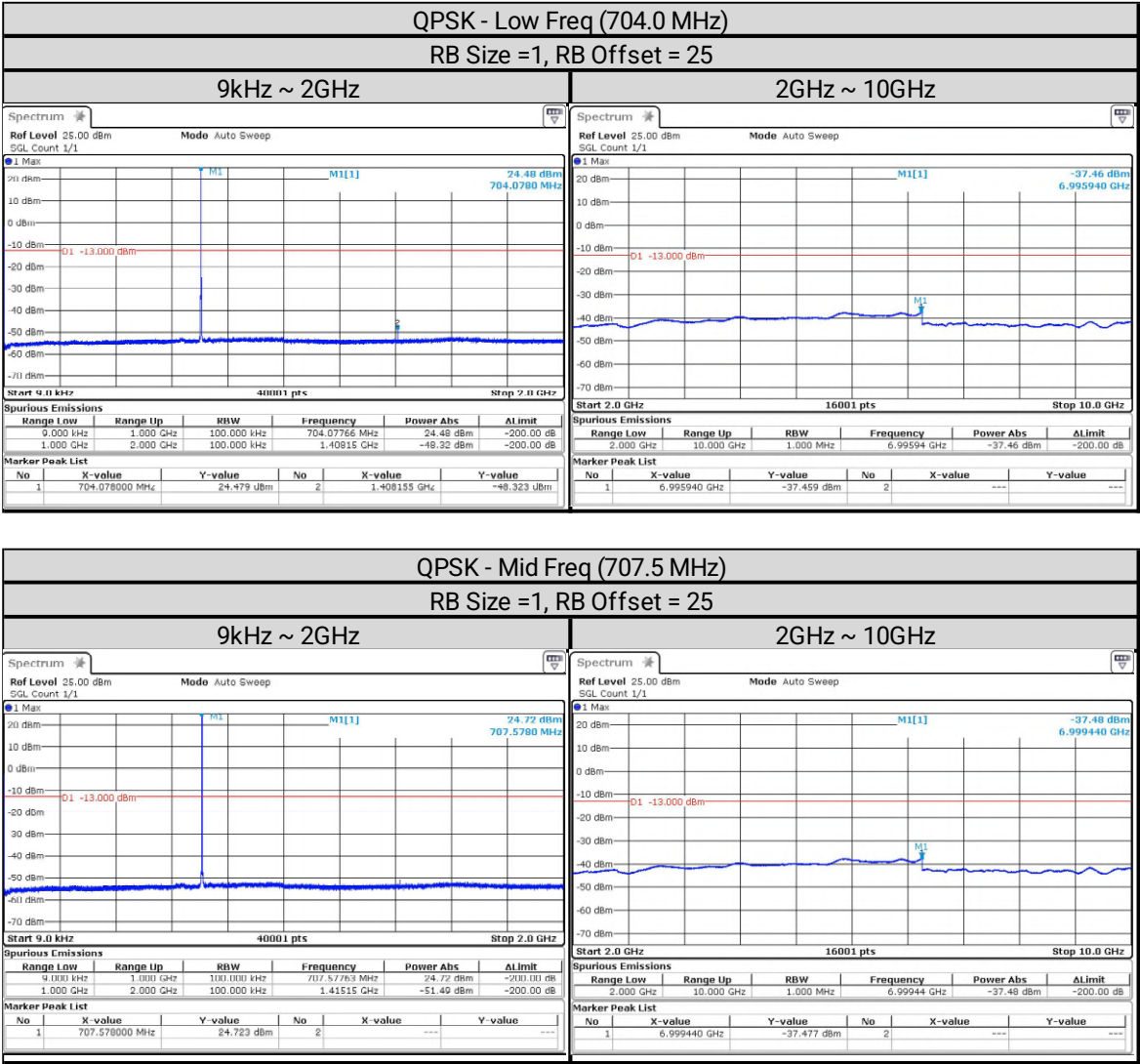


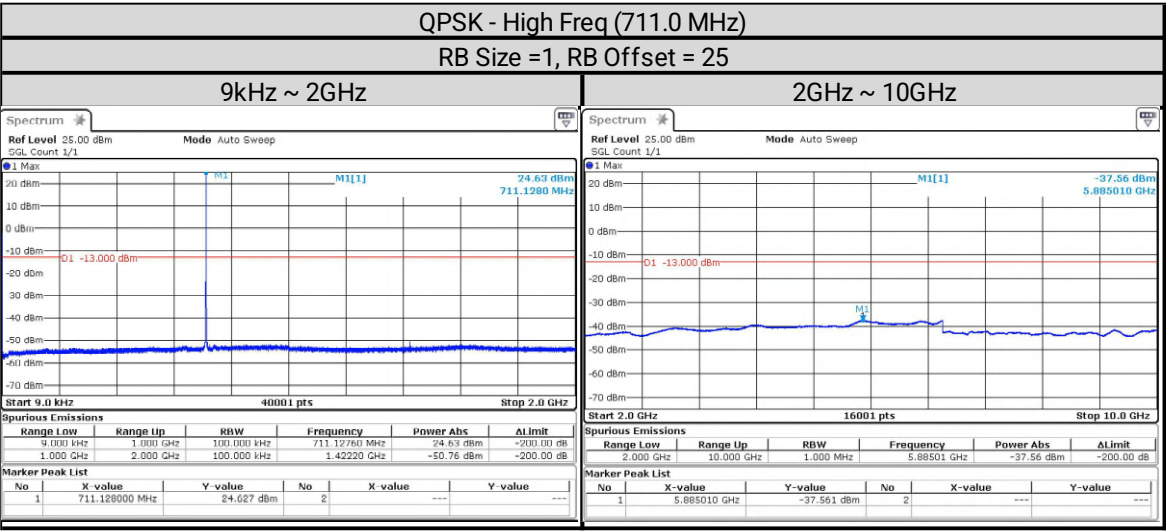
5MHz





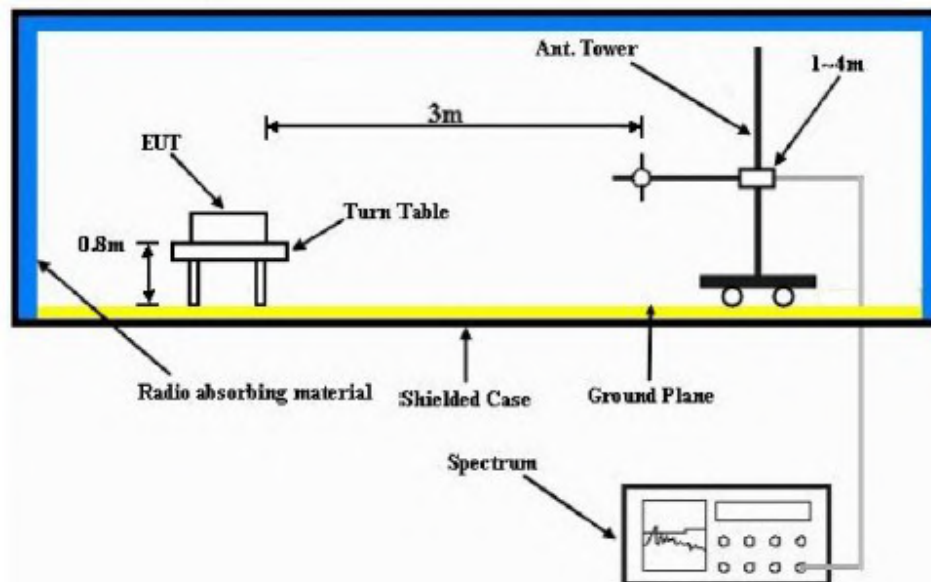
10MHz





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.

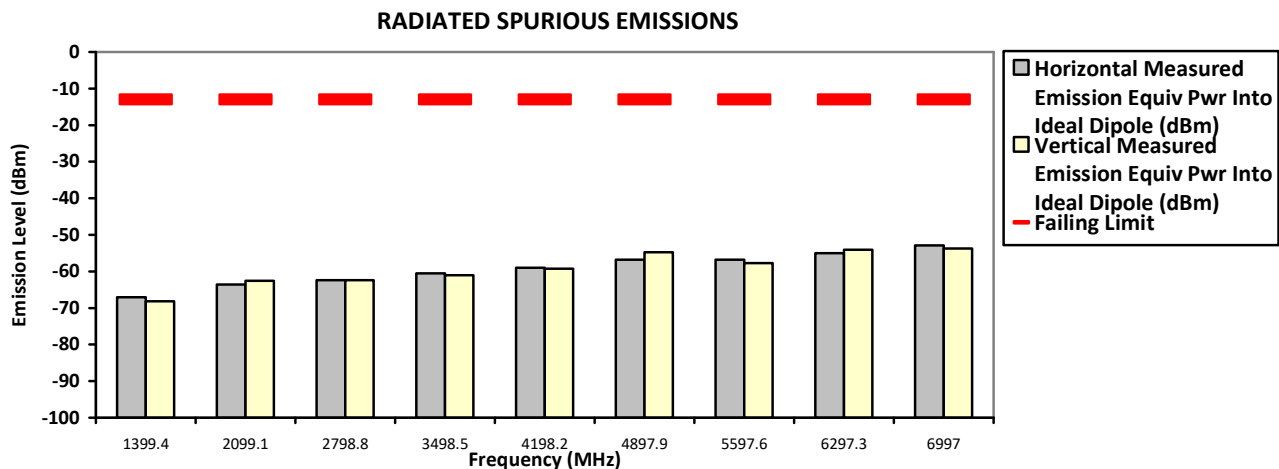
1.12.2. Test Limit

For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a 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, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

1.12.3. Radiated Spurious Emission – LTE Band 12 (699-716MHz)

Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00080
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 12 (X-Plane)	Test Frequency: 699.700000 MHz (Low)
Channel Bandwidth: 1.4MHz	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)
1399.4000	-13.0000	-67.0775 **	-68.1651 **
2099.1000	-13.0000	-63.5660 **	-62.5597 **
2798.8000	-13.0000	-62.3744 **	-62.4229 **
3498.5000	-13.0000	-60.5186 **	-61.0533 **
4198.2000	-13.0000	-59.0167 **	-59.2489 **
4897.9000	-13.0000	-56.8260 **	-54.7537 **
5597.6000	-13.0000	-56.8300 **	-57.7490 **
6297.3000	-13.0000	-54.9816 **	-54.0554 **
6997.0000	-13.0000	-52.8495 **	-53.7619 **



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 & Rezza

Fri, 16 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

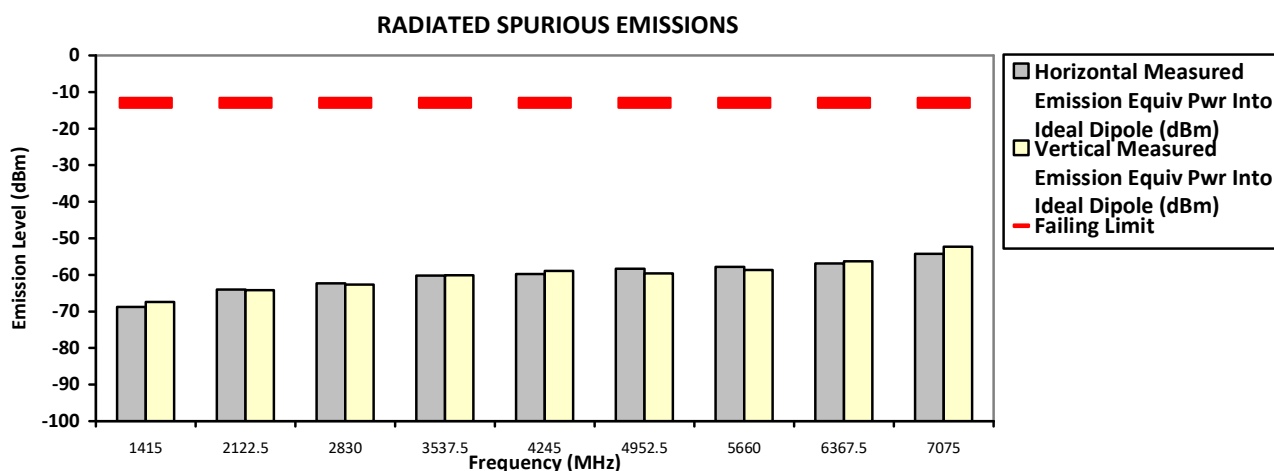
System MU: 4.03 dB

Remarks:

Passed Results	Marginal Results	Failed Results
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Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00080
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 12 (X-Plane)	Test Frequency: 707.500000 MHz (Mid)
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)
1415.0000	-13.0000	-68.7702 **	-67.4379 **
2122.5000	-13.0000	-64.0396 **	-64.1785 **
2830.0000	-13.0000	-62.3010 **	-62.6503 **
3537.5000	-13.0000	-60.1500 **	-60.1396 **
4245.0000	-13.0000	-59.7712 **	-58.8869 **
4952.5000	-13.0000	-58.3422 **	-59.5857 **
5660.0000	-13.0000	-57.7762 **	-58.6412 **
6367.5000	-13.0000	-56.8483 **	-56.2953 **
7075.0000	-13.0000	-54.2028 **	-52.3072 **



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: Rezza & Fuad

Fri, 16 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:

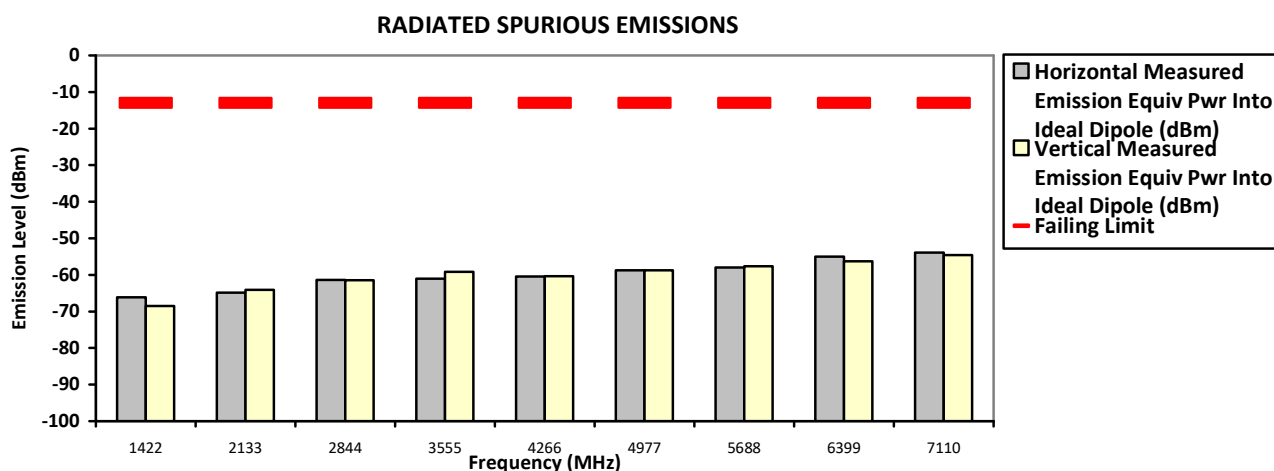
Passed Results

Marginal Results

Failed Results

Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00080
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 12 (X-Plane)	Test Frequency: 711.000000 MHz (High)
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)
1422.0000	-13.0000	-66.1221 **	-68.5132 **
2133.0000	-13.0000	-64.8798 **	-64.1240 **
2844.0000	-13.0000	-61.3837 **	-61.4243 **
3555.0000	-13.0000	-61.0187 **	-59.1521 **
4266.0000	-13.0000	-60.4428 **	-60.3756 **
4977.0000	-13.0000	-58.7365 **	-58.7504 **
5688.0000	-13.0000	-57.9534 **	-57.6814 **
6399.0000	-13.0000	-55.0384 **	-56.2827 **
7110.0000	-13.0000	-53.9439 **	-54.5461 **



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: Rezza & Fuad

Fri, 16 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:

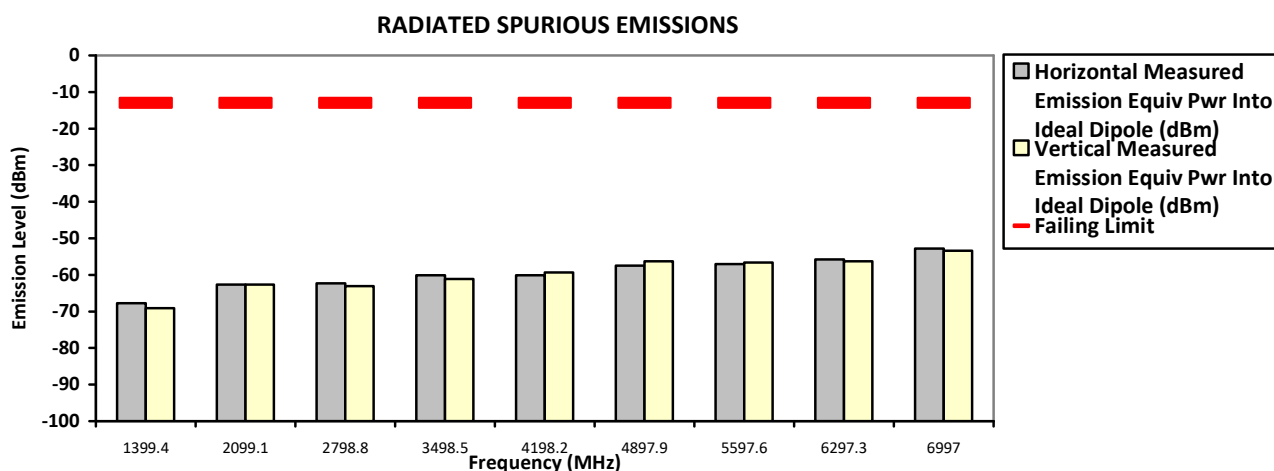
Passed Results

Marginal Results

Failed Results

Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00080
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 12 (Y-Plane)	Test Frequency: 699.700000 MHz (Low)
Channel Bandwidth: 1.4MHz	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)
1399.4000	-13.0000	-67.7326 **	-69.0733 **
2099.1000	-13.0000	-62.6157 **	-62.6886 **
2798.8000	-13.0000	-62.2739 **	-63.0703 **
3498.5000	-13.0000	-60.1093 **	-61.1246 **
4198.2000	-13.0000	-60.1115 **	-59.3067 **
4897.9000	-13.0000	-57.4510 **	-56.2805 **
5597.6000	-13.0000	-57.0821 **	-56.6447 **
6297.3000	-13.0000	-55.8063 **	-56.2524 **
6997.0000	-13.0000	-52.7679 **	-53.3978 **



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 & Rezza

Fri, 16 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:

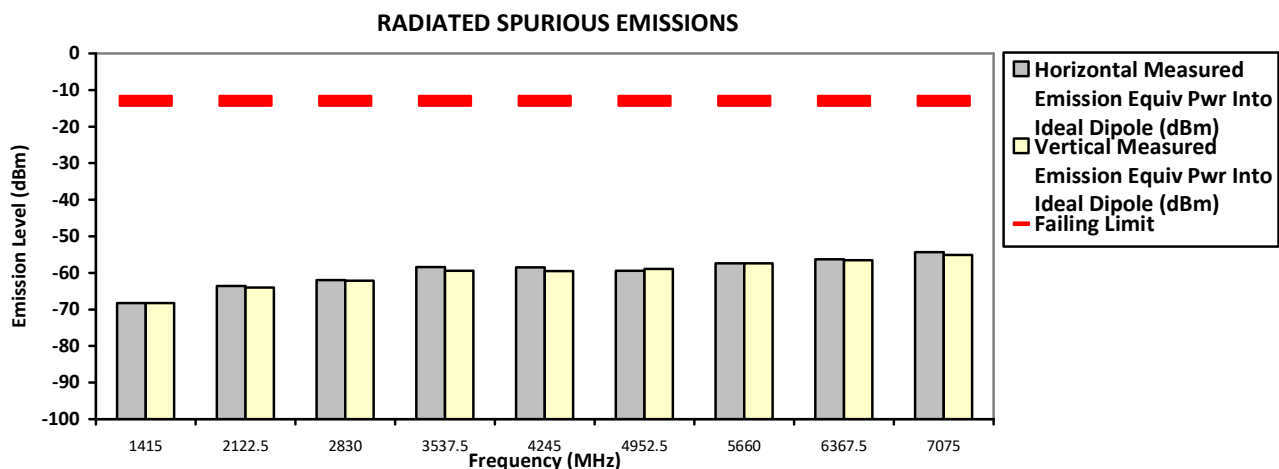
Passed Results

Marginal Results

Failed Results

Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00080
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 12 (Y-Plane)	Test Frequency: 707.500000 MHz (Mid)
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)
1415.0000	-13.0000	-68.2515 **	-68.2379 **
2122.5000	-13.0000	-63.5846 **	-64.0006 **
2830.0000	-13.0000	-61.9595 **	-62.1062 **
3537.5000	-13.0000	-58.4173 **	-59.4575 **
4245.0000	-13.0000	-58.4788 **	-59.5064 **
4952.5000	-13.0000	-59.3836 **	-58.9189 **
5660.0000	-13.0000	-57.4045 **	-57.4175 **
6367.5000	-13.0000	-56.2485 **	-56.5348 **
7075.0000	-13.0000	-54.3199 **	-55.0947 **



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: Rezza & Fuad

Fri, 16 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:

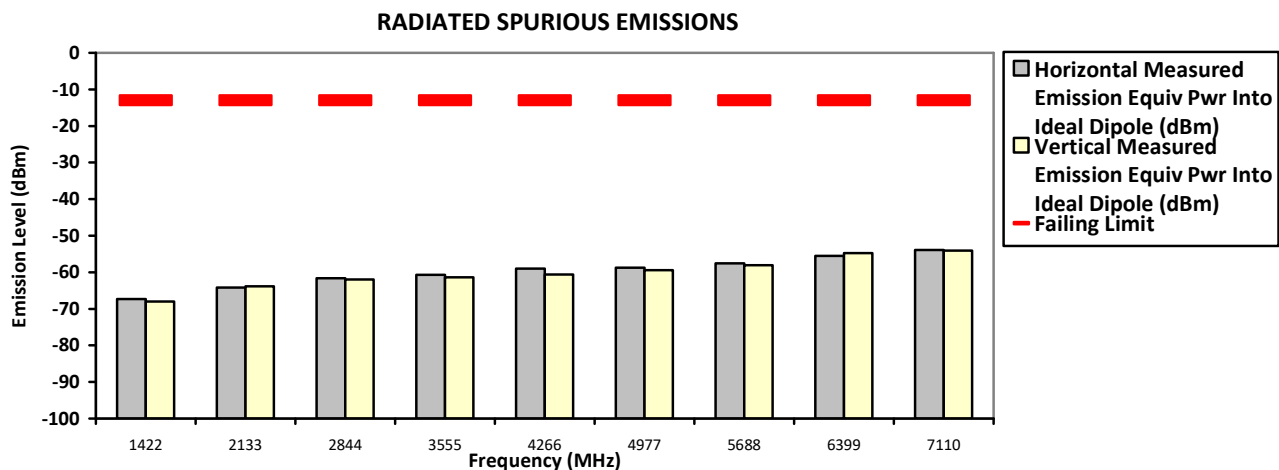
Passed Results

Marginal Results

Failed Results

Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00080
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 12 (Y-Plane)	Test Frequency: 711.000000 MHz (High)
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)
1422.0000	-13.0000	-67.2946 **	-67.9704 **
2133.0000	-13.0000	-64.2024 **	-63.8203 **
2844.0000	-13.0000	-61.5987 **	-62.0104 **
3555.0000	-13.0000	-60.7231 **	-61.3565 **
4266.0000	-13.0000	-59.0127 **	-60.5905 **
4977.0000	-13.0000	-58.7290 **	-59.4053 **
5688.0000	-13.0000	-57.5611 **	-58.0690 **
6399.0000	-13.0000	-55.4988 **	-54.7232 **
7110.0000	-13.0000	-53.8767 **	-54.1010 **



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: Rezza & Fuad

Fri, 16 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

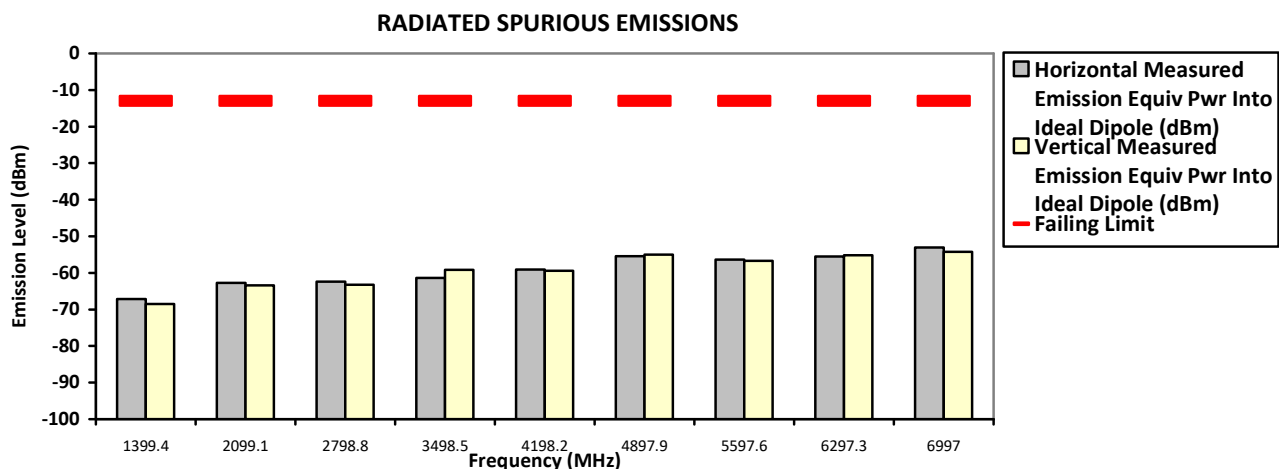
System MU: 4.03 dB

Remarks:

Passed Results	Marginal Results	Failed Results
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Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00080
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 12 (Z-Plane)	Test Frequency: 699.700000 MHz (Low)
Channel Bandwidth: 1.4MHz	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)
1399.4000	-13.0000	-67.1072 **	-68.5472 **
2099.1000	-13.0000	-62.7221 **	-63.3886 **
2798.8000	-13.0000	-62.3561 **	-63.2356 **
3498.5000	-13.0000	-61.3895 **	-59.1761 **
4198.2000	-13.0000	-59.0641 **	-59.4597 **
4897.9000	-13.0000	-55.4225 **	-54.9726 **
5597.6000	-13.0000	-56.3263 **	-56.7122 **
6297.3000	-13.0000	-55.5554 **	-55.1714 **
6997.0000	-13.0000	-53.0589 **	-54.2302 **



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: Rezza & Fuad

Fri, 16 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:

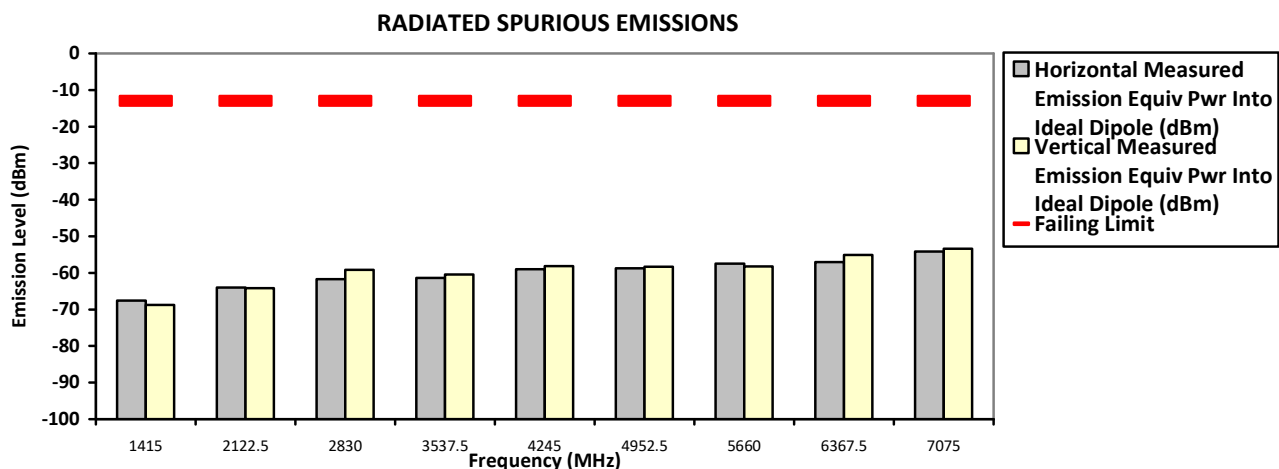
Passed Results

Marginal Results

Failed Results

Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00080
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 12 (Z-Plane)	Test Frequency: 707.500000 MHz (Mid)
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)
1415.0000	-13.0000	-67.5749 **	-68.7871 **
2122.5000	-13.0000	-64.0053 **	-64.1769 **
2830.0000	-13.0000	-61.7196 **	-59.1687 **
3537.5000	-13.0000	-61.3638 **	-60.4529 **
4245.0000	-13.0000	-59.0072 **	-58.1131 **
4952.5000	-13.0000	-58.7726 **	-58.3590 **
5660.0000	-13.0000	-57.5020 **	-58.2184 **
6367.5000	-13.0000	-57.0461 **	-55.0890 **
7075.0000	-13.0000	-54.1370 **	-53.4279 **



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: Rezza & Fuad

Fri, 16 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:

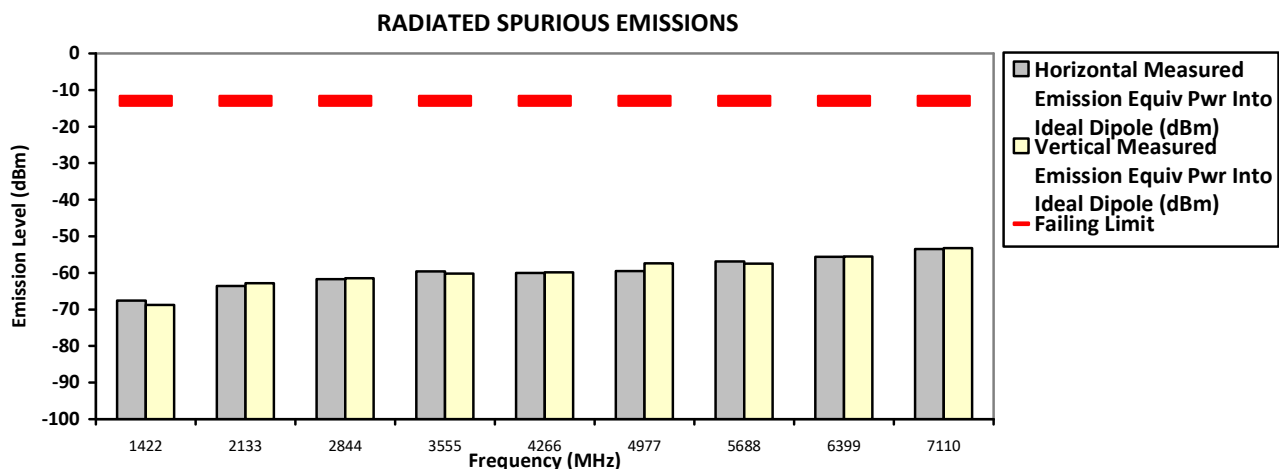
Passed Results

Marginal Results

Failed Results

Test: SAC Transmitter Radiated Emission	EMC SR ID: 0875N00-EMC-00080
Model Number: H55TGT9PW8BN	S/N: 437ZBG0594
Battery: PMNN4895A	
Accessory: AN000297A01	
Test Mode: TX LTE Band 12 (Z-Plane)	Test Frequency: 711.000000 MHz (High)
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)
1422.0000	-13.0000	-67.6013 **	-68.7972 **
2133.0000	-13.0000	-63.5845 **	-62.8188 **
2844.0000	-13.0000	-61.6952 **	-61.4845 **
3555.0000	-13.0000	-59.6214 **	-60.1891 **
4266.0000	-13.0000	-59.9994 **	-59.8781 **
4977.0000	-13.0000	-59.4850 **	-57.3949 **
5688.0000	-13.0000	-56.9093 **	-57.4992 **
6399.0000	-13.0000	-55.6066 **	-55.5460 **
7110.0000	-13.0000	-53.4438 **	-53.2200 **



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: Rezza & Fuad

Fri, 16 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

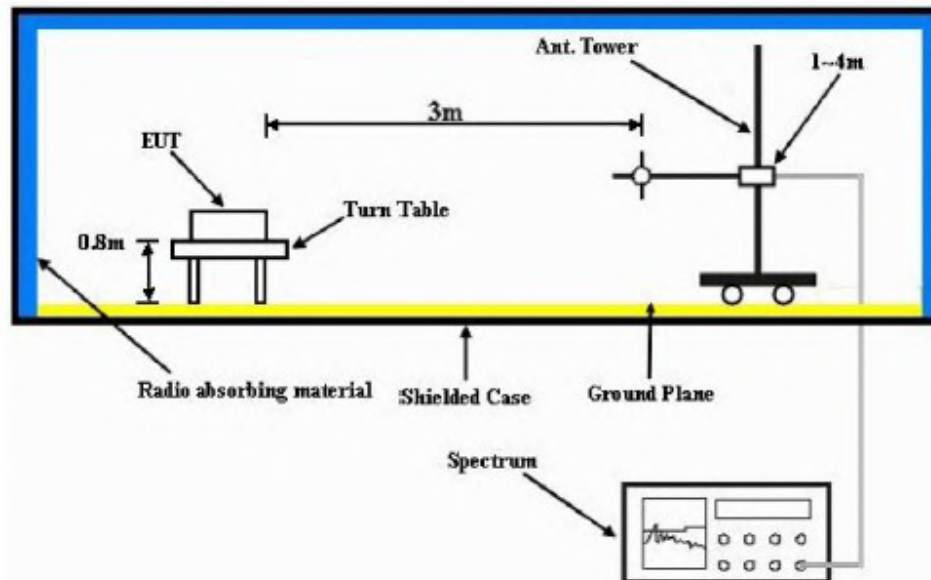
System MU: 4.03 dB

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

The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw). Power is given in terms of effective radiated power (ERP).

1.13.3. Effective Radiated Power (ERP) - LTE Band 12 (699-716MHz)

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

--End of Test Report--