Prüfbericht-Nr.: *Test report no.:*	**IN23RLHX 001**	**Auftrags-Nr.:** *Order no.:*	146741356 0020	Seite 1 von 56 *Page 1 of 56*
Kunden-Referenz-Nr.: *Client reference no.:*	2026143	**Auftragsdatum:** *Order date:*	2022-11-21	
Auftraggeber: *Client:*	TessolveDTS Inc 226 Airport Parkway Suite 100, Sanjose, CALIFORNIA, U.S.A, 95110			
Prüfgegenstand: *Test item:*	Moter Automotive application Gateway			
Bezeichnung.: *Identification .:*	MT-V2001			
Auftrags-Inhalt: *Order content:*	Testing and issue of Test Report with Grant Certificate			
Prüfgrundlage: *Test specification:*	FCC Part 22H, FCC Part15 SubpartC 15.207			
Wareneingangsdatum: *Date of sample receipt:*	2022-12-05			
Prüfmuster-Nr & Serien-Nr.: *Test sample no & serial no.:*	A003384947-001 Engineering Sample			
Prüfzeitraum: *Testing period:*	2022-12-06 - 2022-12-15			
Ort der Prüfung: *Place of testing:*	Wireless laboratory, Bangalore			
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (India) Pvt.Ltd., 27/B, 2nd Cross, Electronic City Phase1 Bangalore -560 100, India FCC Test site registration number: 496599 ISED Test site registration number: 3466E-1			
Prüfergebnis*: *Test result*:*	Pass			

geprüft von: *tested by:*		**genehmigt von:** *authorized by:*	
Datum: *Date:* 2023-01-23	M.V. Naveen Kumar	**Ausstellatum:** *Issue date:* 2023-04-26	M.K.N
Stellung / *Position:*	**M.V.Naveen Kumar** Engineer	**Stellung** / *Position:*	**Madhu K.N** Senior Engineer
Sonstiges / *Other:*	FCC ID: 2A6PTMT2V1001		

Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery:*	**Prüfmuster vollständig und unbeschädigt** ***Test item complete and undamaged***

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
** Legend:*	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(ass) = passed a.m. test specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.
This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be replicated in extracts. This test report does not entitle to carry any test mark.

1	Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. *The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system.* *Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.*
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4	Die Entscheidungsregel für Konformitätserklärungen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. *The decision rule for statements of conformity in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report.*

TEST SUMMARY

Test Item	FCC Clause	Results
Conducted Output Average Power and Peak to Average Power ratio	§2.1046 §22.913(a)(5)(d)	Pass
Equivalent Isotropic Radiated Power (EIRP) / Effective Radiated Power (ERP)	§22.913 (a) (5)	Pass
Field strength of spurious radiation	§2.1053 §22.917	Pass
Frequency Stability	§2.1055 §22.355	N/T
Emission Bandwidth and Occupied Bandwidth	§2.1049	N/T
Band Edge	§ 2.1051 §22.917	N/T
Spurious emissions at antenna terminals	§2.1051 §22.917	N/T
Conducted Emissions on A.C Power Lines	§15.207	Pass

Note:

N/T: Not Tested since **Motor Automotive application Gateway** product uses certified RF modules with **FCC ID: XMR2021EM05G**, Hence the above mentioned test cases are excluded and which can be found in the module test report of respective FCC ID

Product	Applicant	FCC ID	Report No	Issued By	Grant Date
EM05-G	Quectel Wireless Solutions Company Limited	XMR2021EM05G	SHR/2021/3000701	SGS-CSTC Standards Technical Service Co., Ltd. Shenzhen Branch	2021/06/23

Product Category: Electronics Testing
Test Discipline: EMC Test Facility

REVISION HISTORY OF THIS REPORT

Report Number	Version	Description	Issue date
IN23RLHX 001	01	Initial Issue of Test Report	2023-04-26

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1 GENERAL REMARKS

1.1 Attachments

All attachments are part of this test report and are issued in separate document

1: TEST SETUP PHOTOS

2: EUT EXTERNAL PHOTOS

3: EUT INTERNAL PHOTOS

4: FCC LABEL AND LABEL LOCATION

5: BLOCK DIAGRAM

6: SPECIFICATION OF EUT

7: SCHEMATIC DIAGRAM

8: BILL OF MATERIAL

9: USER MANUAL

10: MAXIMUM PERMISSIBLE EXPOSURE INFORMATION

2 TEST SITES

2.1 Testing Facilities

1. TÜV Rheinland (India) Pvt.Ltd.,
   27/B, 2nd Cross,
   ElectronicCityPhase1
   Bangalore – 560 100,
   India

2. TUV Rheinland (India) Private Limited
   108 , Beside ISBR Business School,
   Electronic city Phase I
   Bangalore - 560 100.
   India

2.2 List of Test and Measurement Instruments

Table 1: List of test and measurement instruments

Equipment	Manufacturer	Model Name	Serial Number	Firmware Versions	Calibration Due Date	Periodicity	Test Facility
Radio Communication tester	Rohde & Schwarz	CMW 500	158345	-	20.08.2023	Yearly	Radiated Spurious Emission
EMI Receiver	Rohde & Schwarz	ESW 44	101732	4.73 SP5	04.08.2023	Yearly	
Active loop antenna	Frankonia	LAX-10	LAX-10-800	-	31.01.2023	Yearly	
Baloon and Biconical Antenna	Schwarzbeck mess-elektronik	VHBB-9124 / BBA-9106	01028	-	03.02.2023	Yearly	
Log-Periodic Antenna	Schwarzbeck mess-elektronik	VUSLP-9111B	9111B-111	-	26.01.2023	Yearly	
Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-01944	-	11.10.2023	Yearly	
EMI Test Receiver	Rohde & Schwarz	ESW44	101773	1.72.SP1	12.02.2023	Yearly	
Semi Anechoic Chamber	Frankonia	-	-	-	-	-	
Fully Anechoic Chamber	Albatross	-	-	-	-	-	
EMI Receiver	Rohde & Schwarz	ESR7	101133	3.48 SP3	22.07.2023	Yearly	Conducted AC Power line Test
Line Impedance Stabilization Network	Rohde & Schwarz	ENV 216	101434	-	11.04.2023	Yearly	
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100811	-	12.07.2023	Yearly	

Table 2: Instrument application Software versions

SL. No.	Test Type	Application software	Version
1	Radiated spurious emission measurement in SAC	BATEMC	V2022.0.11.0
2	Radiated spurious emission measurement in FAC	EMC 32	10.60.20

3 GENERAL PRODUCT INFORMATION

3.1 Product Function and Intended Use

This SoM is based on a ICEBERG100_SOM high-performance vehicle network processor that combine controller area network (CAN), local interconnect network (LIN), and FlexRay networking with high-data-rate Ethernet networking.

3.2 Ratings and System Details of Equipment under Test

Table 3: Ratings and System Details as declared by Client*

Radio Protocol		LTE & WCDMA				
LTE E-UTRA operating bands		Band	Bandwidth (MHz)	UL Frequency (MHz)	DL Frequency (MHz)	Modulation
		5	1.4, 3, 5, 10	824.7 - 848.3	869.7- 893.3	QPSK, 16QAM
		26	1.4 ,3 ,5, 10	824.0 – 849	869.0 – 894	QPSK, 16QAM
WCDMA(UMTS)		5	5	824-849	869 - 894	QPSK
Transmitted Power for LTE (dBm)		Band	Power Class	Max. Conducted Average. Output Power		
		5	Power Class 3: 23dBm	24.46dBm@Band5		
		26	Power Class 3: 23dBm	24.20dBm@Band26		
Transmitted Power for WCDMA(UMTS) (dBm)		5	Power class 3: 23dBm	23.90dBm@Band5		
Antenna Type		Main Antenna – I-Bar Patch Antenna Diversity Antenna – I-Bar Patch Antenna				
Number of Antenna		Main – 1 & Diversity – 1				
Antenna Gain		Refer Table 4				
Supply Voltage to Product		12VDC Through AC-DC Adapter				
Environmental conditions	Storage	–40°C to +70°C				
	Operating	–40°C to +70°C				
EUT Dimension (L x W x H**)**		190 X 128 X 41.75 (mm)				

Antenna Type	**Frequency Range (MHz)**	**Antenna Gain (dBi)**
External/ Diversity Antenna	700MHz to 2700MHz	3.0

Table 4: Antenna Gain

***Disclaimer:**
The information/data is supplied by the client and the same is considered to arrive at the final value.
Any changes made apart from the specified specification, can directly impact on the tests results. Refer the products user manual for more details.

3.3 Measurement Uncertainty

Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of *k* = 2

Table 5: Measurement Uncertainty

Parameter	Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±1.5 dB
Power Spectral Density, conducted	±3 dB
Unwanted Emissions, conducted	±3 dB
All emissions, radiated	±6 dB
Temperature	±3 ℃
Supply Voltages	±3 %
Time	±5 %

4 TEST SET-UP AND OPERATION MODE

4.1 Principle of Configuration Selection

Transmission was enabled with highest possible duty cycle on low, mid and high channels

4.2 UUT Operation and Software

Hardware Name & version: moter-1.12.0-mtu-att.rootfs.sdcard.gz
Software Name & version : Moter_V2_SOM_CB

4.3 Special Accessories and Auxiliary Equipment

-None

4.4 Countermeasures to achieve EMC Compliance

- None

4.5 Report references

Note: Motor Automotive application Gateway has multiple protocols. All the supported wireless protocols and their respective test results are issued in separate test reports, following table lists the report numbers.

Radio Protocol	Report Number
RF test report for FCC Part 22 - (This report)	**IN23RLHX 001**
RF test report for FCC Part 24	IN23WWR8 001
RF test report for FCC Part 27	IN2393NU 001
RF test report for FCC Part 90	IN233SE0 001

5 Operational Description of the product

The S32G2 SOM based Gateway application unit is connected inside the Car. The Unit is powered on through the OBD connector by drawing the voltage of 12V, when the car is started. Once the unit is powered on, it receives the data from CAN and sends it to the Cloud through the 4G module.

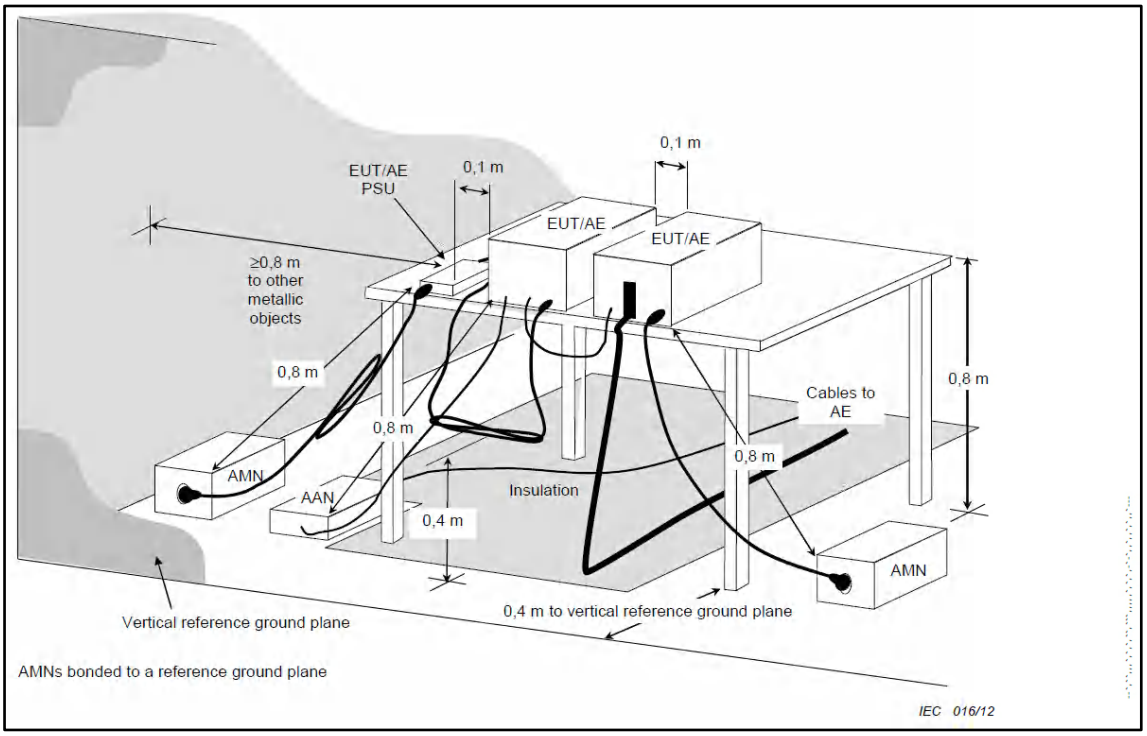
6 TEST METHODOLOGY

6.1 Conducted Spurious Emission Test on AC Power Line

Measured levels of ac power-line conducted emission across the 50Ω LISN port (to which the EUT is connected). All emission voltage and current measurements shall be made on each current-carrying conductor at the plug end of the EUT power cord by the use of mating plugs and receptacles on the LISN, if used. Equipment shall be tested with power cords that are normally supplied or recommended by the manufacturer and that have electrical and shielding characteristics that are the same as those cords normally supplied or recommended by the manufacturer.

The device is placed on the test table, raised 80cm above the reference ground plane. The vertical conducting plane is located 40cm to the rear of the device. AC Conducted emission measurement is made over frequency range from 150kHz to 30MHz, this measurement was performed with EUT powered with an AC adaptor with 110V AC 60Hz supply.

6.1.1 Test Setup Configuration



6.2 Radiated Emission Test

Frequency Range 9 kHz - 30 MHz

Test performed as per ANSI C63.4-2014 section 8.3

The loop Antenna was placed at 1m above the ground plane & EUT is 3 meters far from the measuring antenna. With 3m measurement distance, correction data were applied to the measured results. The test arrangement, measuring antenna guidelines and operational configurations in 8.2.1 and 8.2.2, shall be followed. The measurement antenna shall be positioned with its plane perpendicular to the ground at the Specified distance, when perpendicular to the ground plane, the lowest height of the magnetic antenna shall be 1 m above the ground and shall be positioned at the specified distance from the EUT. EUT & its associates are placed on non-conducting table of 0.8m height which is placed on the turn table, For each measurement antenna alignment, the EUT shall be rotated through 0° to 360° on a turntable. The report shall list worst case emission results, for each of the parallel & perpendicular orientations.

6.2.1 Test Setup Configuration

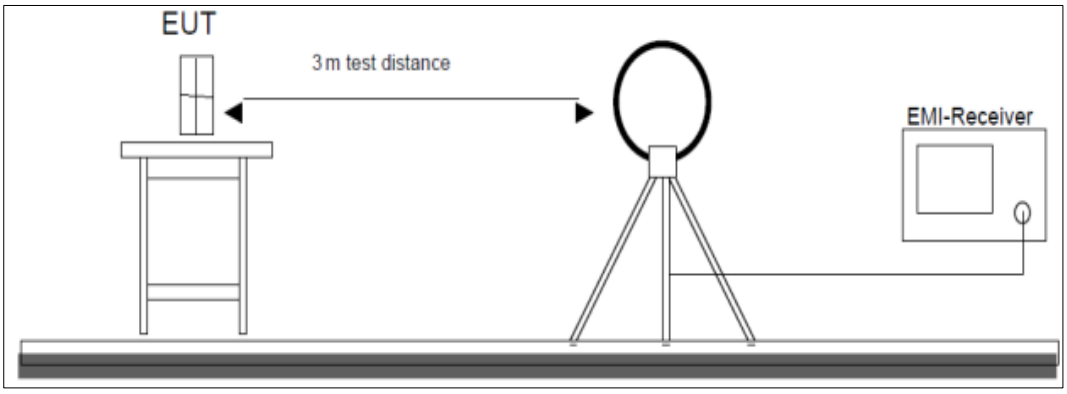


Figure 1: Frequency Range 9 kHz- 30 MHz

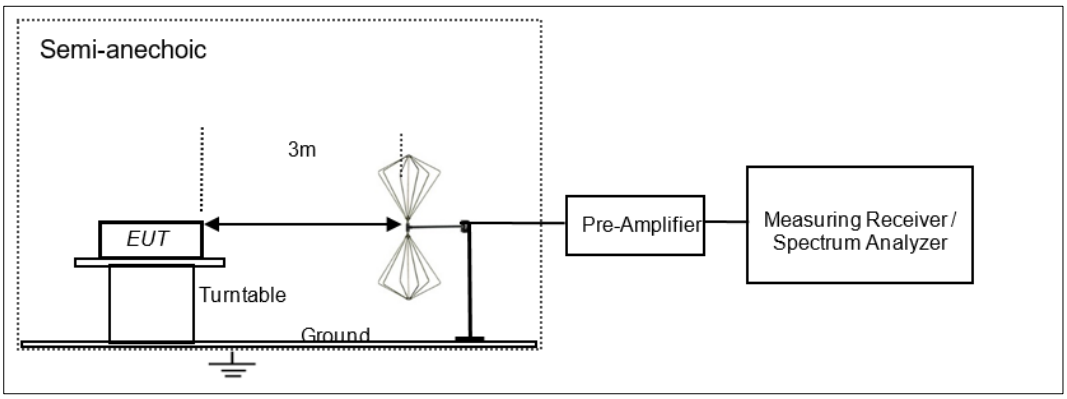


Figure 2: Frequency Range 30 MHz – 200 MHz

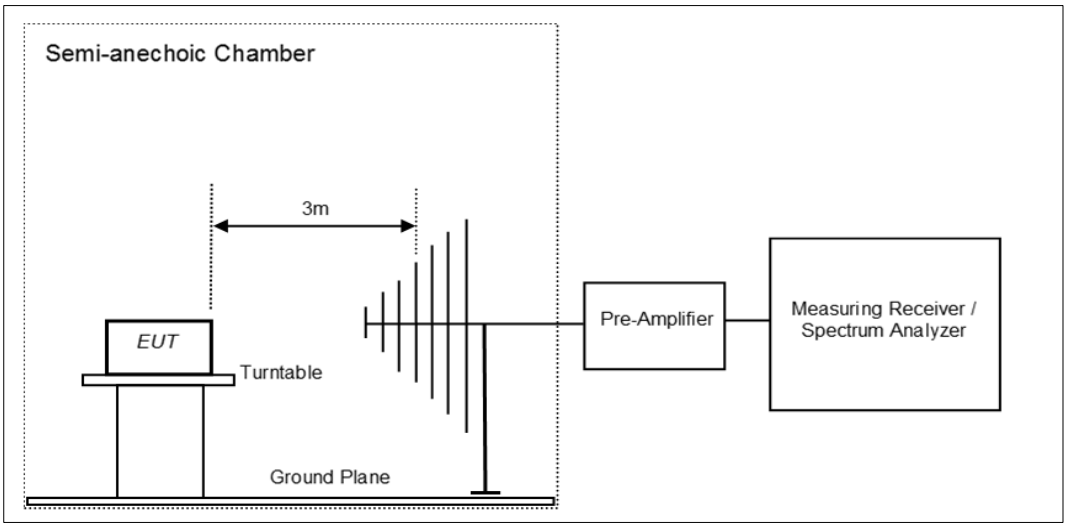


Figure 3: Frequency Range 200 MHz - 1GHz

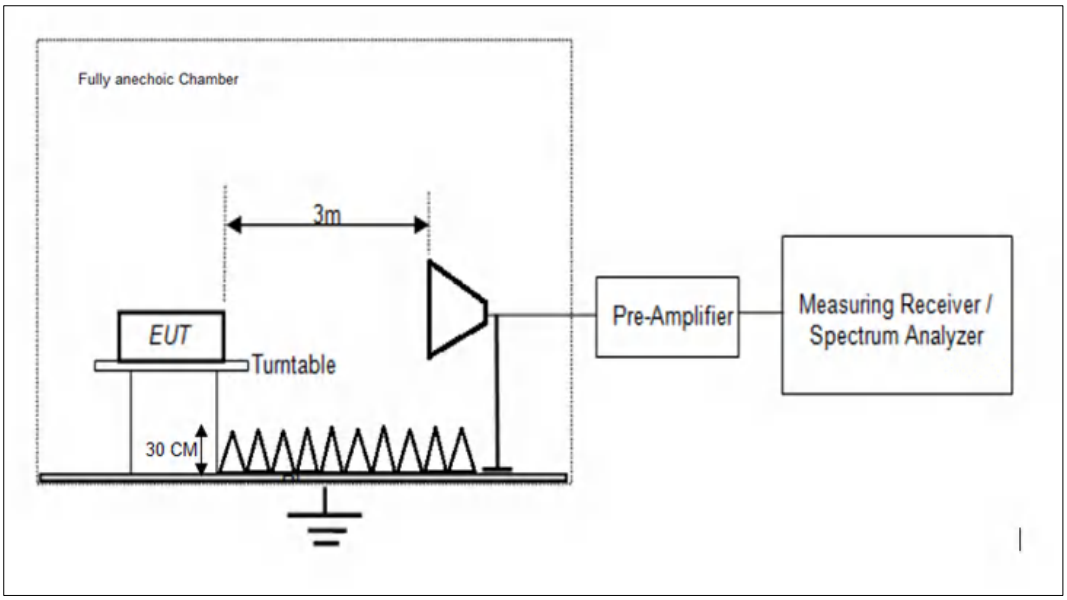


Figure 4: Frequency Range above 1 GHz

Frequency Range 30MHz to 10th harmonics of the highest fundamental frequency

Test performed as per ANSI C63.26-2015

Radiated spurious emission test are performed as below.

All the radiated emission measurements are performed in accordance with common requirement specified in 5.5.2 and Pre-test site path loss correction factors are used to adjust the EUT emission data in place of two step substitution method (as defined in Annex B of ANSI C63.26-2015).

The equipment under test is placed on non-conductive table at 3m away from the receive antenna in accordance with above mentioned standard. Turn table is rotated through 360 degree, and receiver antenna height is varied in order to determine the level of maximum emission. The maximum emission level and position of the maximized emission is recorded with use of spectrum analyzer.

Using pre-test site path loss to determine EUT emission power:

1) EUT emission powers are calculated using the following equation:

Emission Power = EUT_{Prec} [dBm EIRP/ ERP] + P_L [dB]

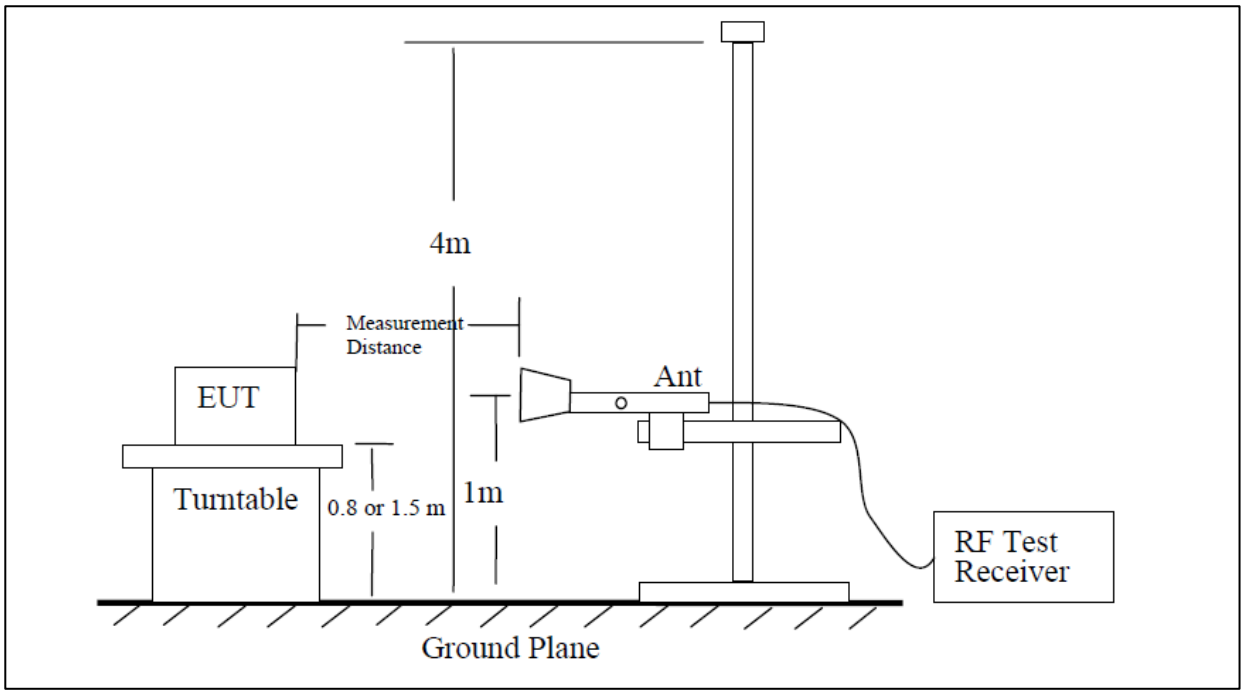
where

EUT_{Prec} = power of the emission measured at the test receiver during EUT measurements.

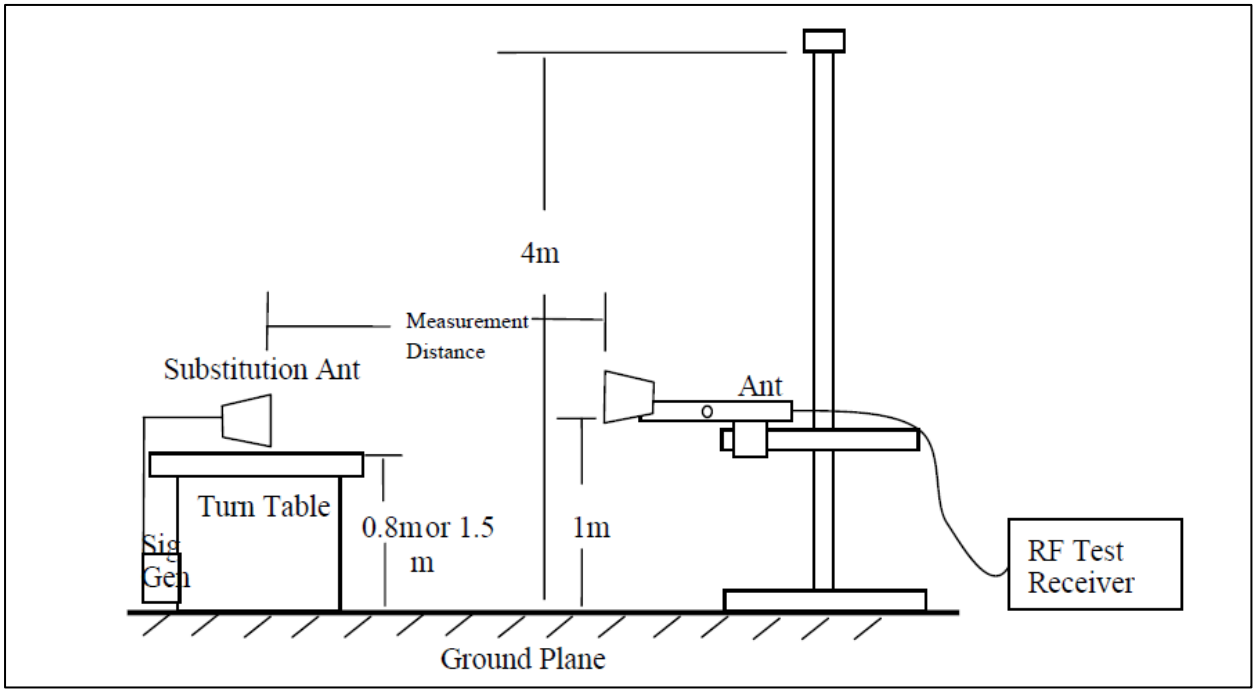
PL = path loss determined on the frequency of the EUT emission or calculated using linear interpolation between site characterization frequencies.

2) This is the level to be compared against the regulatory limit as it is the emission power referenced back to the EUT on the test site.

Test site-up for radiated measurements



Substitution method set-up for radiated emission



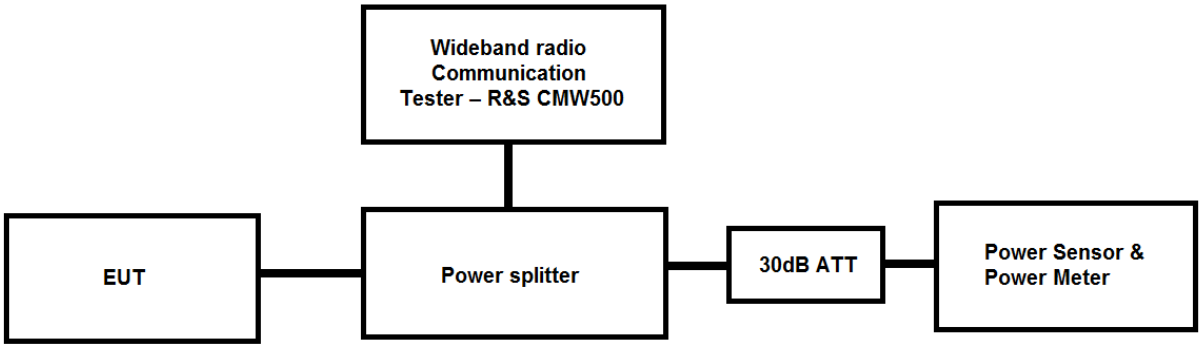
7 TEST RESULTS

7.1 Peak-Average Ratio

Result ***Pass***

Specification	FCC Part §2.1046 & §22.913(a)(5)(d)
Test Method / Procedure	ANSI C63.26-2015 As per subclause 5 in 971168 D01 Power Meas License Digital Systems v03r01
Detector Function	Peak/Average
Requirement	PAPR ≤ 13dBm

Test Setup:



Environmental Conditions:

Temperature: +22.5°C **Voltage:** 12VDC through AC-DC Adapter **Relative Humidity:** 62%

KDB Guidelines applied:
Measurements were made as per section 5.2.4 in KDB 971168 D01 Power Meas License Digital Systems v03r01

Test results:

Note:

1 All the losses are included during measurement and final values are mentioned in the test report.

2. Total Average Output power (dBm) = Measured Average power (dBm) + Attenuator factor (30dB) + Power Splitter (6 dB) + Cable loss (1dB)

3. PAPR (dB) = Measured Peak Power(dBm) – Measured Average Power(dBm)

PAPR Test Results

Cellular Band	Channel Bandwidth (MHz)	Modulation Technique	Channel Number	RB Pos/RB allocation	PAPR (dB)	Limit (dBm)
Band5	1.4MHz	QPSK	20407	1RB#0	4.76	≤13
			20407	1RB#2	4.57	≤13
			20407	1RB#5	4.74	≤13
			20407	3RB#0	4.67	≤13
			20407	3RB#1	4.74	≤13
			20407	3RB#3	4.51	≤13
			20407	6RB#0	5.48	≤13
			20525	1RB#0	4.51	≤13
			20525	1RB#5	4.70	≤13
			20525	1RB#2	4.59	≤13
			20525	3RB#0	4.89	≤13
			20525	3RB#1	4.86	≤13
			20525	3RB#3	4.91	≤13
			20525	6RB#0	5.33	≤13
			20643	1RB#5	5.09	≤13
			20643	1RB#0	4.66	≤13
			20643	1RB#2	4.37	≤13
			20643	3RB#0	4.86	≤13
			20643	3RB#1	4.84	≤13
			20643	3RB#3	5.13	≤13
			20643	6RB#0	5.29	≤13
Band5	1.4MHz	16QAM	20407	1RB#0	5.66	≤13
			20407	1RB#2	5.53	≤13
			20407	1RB#5	5.36	≤13
			20407	3RB#1	5.60	≤13
			20407	3RB#0	4.60	≤13
			20407	3RB#3	4.78	≤13
			20407	6RB#0	4.81	≤13
			20525	1RB#0	5.14	≤13
			20525	1RB#2	5.18	≤13
			20525	1RB#5	5.15	≤13
			20525	3RB#3	5.02	≤13
			20525	3RB#0	4.31	≤13
			20525	3RB#1	5.56	≤13
			20525	6RB#0	5.37	≤13
			20643	1RB#2	5.47	≤13
			20643	1RB#0	5.43	≤13
			20643	1RB#5	5.16	≤13
			20643	3RB#0	4.91	≤13
			20643	3RB#1	5.62	≤13
			20643	3RB#3	4.98	≤13
			20643	6RB#0	5.45	≤13

Cellular Band	Channel Bandwidth (MHz)	Modulation Technique	Channel Number	RB Pos/RB allocation	PAPR (dB)	Limit (dBm)
Band5	3MHz	QPSK	20415	1RB#8	4.51	≤13
			20415	1RB#14	4.71	≤13
			20415	1RB#0	4.71	≤13
			20415	8RB#0	4.83	≤13
			20415	8RB#4	4.86	≤13
			20415	8RB#7	5.03	≤13
			20415	15RB#0	5.47	≤13
			20525	1RB#0	4.61	≤13
			20525	1RB#14	4.76	≤13
			20525	1RB#8	4.59	≤13
			20525	8RB#7	5.09	≤13
			20525	8RB#0	5.19	≤13
			20525	8RB#4	5.00	≤13
			20525	15RB#0	5.55	≤13
			20635	1RB#8	4.56	≤13
			20635	1RB#0	4.71	≤13
			20635	1RB#14	4.78	≤13
			20635	8RB#0	5.14	≤13
			20635	8RB#7	5.18	≤13
			20635	8RB#4	5.02	≤13
			20635	15RB#0	5.41	≤13
Band5	3MHz	16QAM	20415	1RB#14	5.13	≤13
			20415	1RB#0	5.23	≤13
			20415	1RB#8	5.01	≤13
			20415	8RB#7	5.80	≤13
			20415	8RB#4	5.61	≤13
			20415	8RB#0	5.87	≤13
			20415	15RB#0	6.07	≤13
			20525	1RB#14	5.65	≤13
			20525	1RB#0	5.62	≤13
			20525	1RB#8	5.50	≤13
			20525	8RB#7	5.77	≤13
			20525	8RB#0	5.72	≤13
			20525	8RB#4	5.79	≤13
			20525	15RB#0	6.18	≤13
			20635	1RB#8	5.64	≤13
			20635	1RB#0	5.74	≤13
			20635	1RB#14	5.79	≤13
			20635	8RB#0	6.04	≤13
			20635	8RB#4	5.89	≤13
			20635	8RB#7	5.71	≤13
			20635	15RB#0	6.43	≤13

Cellular Band	Channel Bandwidth (MHz)	Modulation Technique	Channel Number	RB Pos/RB allocation	PAPR (dB)	Limit (dBm)
Band5	5MHz	QPSK	20425	1RB#0	4.69	≤13
			20425	1RB#12	4.53	≤13
			20425	1RB#24	4.66	≤13
			20425	12RB#0	5.04	≤13
			20425	12RB#6	4.84	≤13
			20425	12RB#13	5.00	≤13
			20425	25RB#0	5.55	≤13
			20525	1RB#0	5.32	≤13
			20525	1RB#24	4.64	≤13
			20525	1RB#12	4.95	≤13
			20525	12RB#0	5.41	≤13
			20525	12RB#6	4.94	≤13
			20525	12RB#13	4.96	≤13
			20525	25RB#0	5.44	≤13
			20625	1RB#24	4.66	≤13
			20625	1RB#0	4.70	≤13
			20625	1RB#12	4.54	≤13
			20625	12RB#0	5.10	≤13
			20625	12RB#6	4.89	≤13
			20625	12RB#13	4.99	≤13
			20625	25RB#0	5.09	≤13
Band5	5MHz	16QAM	20425	1RB#0	4.68	≤13
			20425	1RB#12	5.34	≤13
			20425	1RB#24	5.20	≤13
			20425	12RB#6	5.69	≤13
			20425	12RB#0	4.99	≤13
			20425	12RB#13	4.89	≤13
			20425	25RB#0	6.87	≤13
			20525	1RB#0	5.47	≤13
			20525	1RB#12	5.43	≤13
			20525	1RB#24	5.41	≤13
			20525	12RB#13	5.71	≤13
			20525	12RB#0	4.85	≤13
			20525	12RB#6	5.70	≤13
			20525	25RB#0	5.49	≤13
			20625	1RB#12	4.91	≤13
			20625	1RB#0	5.22	≤13
			20625	1RB#24	5.29	≤13
			20625	12RB#0	5.07	≤13
			20625	12RB#6	5.67	≤13
			20625	12RB#13	5.22	≤13
			20625	25RB#0	6.16	≤13

Cellular Band	Channel Bandwidth (MHz)	Modulation Technique	Channel Number	RB Pos/RB allocation	PAPR (dB)	Limit (dBm)
Band5	10MHz	QPSK	20450	1RB#49	4.57	≤13
			20450	1RB#24	4.60	≤13
			20450	1RB#0	4.51	≤13
			20450	25RB#0	4.30	≤13
			20450	25RB#12	4.85	≤13
			20450	25RB#25	4.10	≤13
			20450	50RB#0	4.22	≤13
			20525	1RB#0	4.55	≤13
			20525	1RB#49	4.37	≤13
			20525	1RB#24	4.63	≤13
			20525	25RB#25	4.95	≤13
			20525	25RB#0	4.73	≤13
			20525	25RB#12	5.09	≤13
			20525	50RB#0	4.69	≤13
			20600	1RB#24	4.53	≤13
			20600	1RB#0	4.60	≤13
			20600	1RB#49	4.58	≤13
			20600	25RB#0	5.22	≤13
			20600	25RB#25	4.94	≤13
			20600	25RB#12	5.05	≤13
			20600	50RB#0	5.02	≤13
Band5	10MHz	16QAM	20450	1RB#49	5.52	≤13
			20450	1RB#0	5.64	≤13
			20450	1RB#24	5.65	≤13
			20450	25RB#25	4.67	≤13
			20450	25RB#12	5.90	≤13
			20450	25RB#0	4.87	≤13
			20450	50RB#0	5.31	≤13
			20525	1RB#49	4.85	≤13
			20525	1RB#0	5.40	≤13
			20525	1RB#24	5.53	≤13
			20525	25RB#25	6.40	≤13
			20525	25RB#0	6.22	≤13
			20525	25RB#12	5.78	≤13
			20525	50RB#0	7.06	≤13
			20600	1RB#24	5.15	≤13
			20600	1RB#0	6.13	≤13
			20600	1RB#49	4.78	≤13
			20600	25RB#0	5.30	≤13
			20600	25RB#12	4.10	≤13
			20600	25RB#25	6.51	≤13
			20600	50RB#0	5.93	≤13

Cellular Band	Channel Bandwidth (MHz)	Modulation Technique	Channel Number	RB Pos/RB allocation	PAPR (dB)	Limit (dBm)
Band26	1.4MHz	QPSK	26697	1RB#0	4.76	≤13
			26697	1RB#2	4.45	≤13
			26697	1RB#5	4.47	≤13
			26697	3RB#0	5.04	≤13
			26697	3RB#1	4.87	≤13
			26697	3RB#3	4.97	≤13
			26697	6RB#0	5.81	≤13
			26915	1RB#0	4.75	≤13
			26915	1RB#5	4.73	≤13
			26915	1RB#2	4.57	≤13
			26915	3RB#0	4.75	≤13
			26915	3RB#1	4.72	≤13
			26915	3RB#3	4.78	≤13
			26915	6RB#0	5.48	≤13
			27033	1RB#5	4.68	≤13
			27033	1RB#0	4.65	≤13
			27033	1RB#2	4.50	≤13
			27033	3RB#0	4.88	≤13
			27033	3RB#1	4.85	≤13
			27033	3RB#3	4.93	≤13
			27033	6RB#0	5.46	≤13
Band26	1.4MHz	16QAM	26697	1RB#0	5.64	≤13
			26697	1RB#2	5.40	≤13
			26697	1RB#5	5.62	≤13
			26697	3RB#1	5.74	≤13
			26697	3RB#0	5.82	≤13
			26697	3RB#3	5.81	≤13
			26697	6RB#0	6.07	≤13
			26915	1RB#0	5.26	≤13
			26915	1RB#2	5.19	≤13
			26915	1RB#5	5.30	≤13
			26915	3RB#3	5.67	≤13
			26915	3RB#0	5.66	≤13
			26915	3RB#1	5.56	≤13
			26915	6RB#0	6.40	≤13
			27033	1RB#2	5.48	≤13
			27033	1RB#0	5.70	≤13
			27033	1RB#5	5.60	≤13
			27033	3RB#0	5.58	≤13
			27033	3RB#1	5.56	≤13
			27033	3RB#3	5.66	≤13
			27033	6RB#0	6.00	≤13

Cellular Band	Channel Bandwidth (MHz)	Modulation Technique	Channel Number	RB Pos/RB allocation	PAPR (dB)	Limit (dBm)
Band26	3MHz	QPSK	26705	1RB#8	4.65	≤13
			26705	1RB#14	4.83	≤13
			26705	1RB#0	4.78	≤13
			26705	8RB#0	5.09	≤13
			26705	8RB#4	5.14	≤13
			26705	8RB#7	5.29	≤13
			26705	15RB#0	5.85	≤13
			26915	1RB#0	4.73	≤13
			26915	1RB#14	4.73	≤13
			26915	1RB#8	4.54	≤13
			26915	8RB#7	4.98	≤13
			26915	8RB#0	5.01	≤13
			26915	8RB#4	4.9	≤13
			26915	15RB#0	5.42	≤13
			27025	1RB#8	4.55	≤13
			27025	1RB#0	4.68	≤13
			27025	1RB#14	4.68	≤13
			27025	8RB#0	4.98	≤13
			27025	8RB#7	5.05	≤13
			27025	8RB#4	4.96	≤13
			27025	15RB#0	5.39	≤13
Band26	3MHz	16QAM	26705	1RB#14	5.83	≤13
			26705	1RB#0	5.8	≤13
			26705	1RB#8	5.7	≤13
			26705	8RB#7	5.93	≤13
			26705	8RB#4	5.82	≤13
			26705	8RB#0	5.88	≤13
			26705	15RB#0	6.47	≤13
			26915	1RB#14	5.39	≤13
			26915	1RB#0	5.27	≤13
			26915	1RB#8	5.19	≤13
			26915	8RB#7	5.93	≤13
			26915	8RB#0	5.89	≤13
			26915	8RB#4	5.74	≤13
			26915	15RB#0	6.12	≤13
			27025	1RB#8	5.55	≤13
			27025	1RB#0	5.61	≤13
			27025	1RB#14	5.69	≤13
			27025	8RB#0	5.77	≤13
			27025	8RB#4	5.75	≤13
			27025	8RB#7	5.82	≤13
			27025	15RB#0	6.16	≤13

Cellular Band	Channel Bandwidth (MHz)	Modulation Technique	Channel Number	RB Pos/RB allocation	PAPR (dB)	Limit (dBm)
Band26	5MHz	QPSK	26715	1RB#0	4.62	≤13
			26715	1RB#12	4.59	≤13
			26715	1RB#24	4.66	≤13
			26715	12RB#0	5.08	≤13
			26715	12RB#6	6.76	≤13
			26715	12RB#13	5.02	≤13
			26715	25RB#0	5.51	≤13
			26915	1RB#0	4.73	≤13
			26915	1RB#24	4.56	≤13
			26915	1RB#12	4.49	≤13
			26915	12RB#0	4.99	≤13
			26915	12RB#6	4.88	≤13
			26915	12RB#13	4.96	≤13
			26915	25RB#0	5.23	≤13
			27015	1RB#24	4.52	≤13
			27015	1RB#0	4.85	≤13
			27015	1RB#12	4.51	≤13
			27015	12RB#0	4.95	≤13
			27015	12RB#6	4.91	≤13
			27015	12RB#13	4.92	≤13
			27015	25RB#0	5.51	≤13
Band26	5MHz	16QAM	26715	1RB#0	5.80	≤13
			26715	1RB#12	5.45	≤13
			26715	1RB#24	5.55	≤13
			26715	12RB#6	5.79	≤13
			26715	12RB#0	5.88	≤13
			26715	12RB#13	5.94	≤13
			26715	25RB#0	6.61	≤13
			26915	1RB#0	5.45	≤13
			26915	1RB#12	5.39	≤13
			26915	1RB#24	5.49	≤13
			26915	12RB#13	5.82	≤13
			26915	12RB#0	5.90	≤13
			26915	12RB#6	5.79	≤13
			26915	25RB#0	6.40	≤13
			27015	1RB#12	4.82	≤13
			27015	1RB#0	4.98	≤13
			27015	1RB#24	5.04	≤13
			27015	12RB#0	5.67	≤13
			27015	12RB#6	5.53	≤13
			27015	12RB#13	5.79	≤13
			27015	25RB#0	6.37	≤13

Cellular Band	Channel Bandwidth (MHz)	Modulation Technique	Channel Number	RB Pos/RB allocation	PAPR (dB)	Limit (dBm)
Band26	10MHz	QPSK	26740	1RB#49	4.73	≤13
			26740	1RB#24	4.57	≤13
			26740	1RB#0	4.69	≤13
			26740	25RB#0	5.15	≤13
			26740	25RB#12	5.04	≤13
			26740	25RB#25	5.16	≤13
			26740	50RB#0	5.90	≤13
			26915	1RB#0	4.59	≤13
			26915	1RB#49	4.69	≤13
			26915	1RB#24	4.65	≤13
			26915	25RB#25	5.04	≤13
			26915	25RB#0	5.06	≤13
			26915	25RB#12	5.08	≤13
			26915	50RB#0	5.81	≤13
			26990	1RB#24	4.48	≤13
			26990	1RB#0	4.65	≤13
			26990	1RB#49	4.68	≤13
			26990	25RB#0	5.26	≤13
			26990	25RB#25	5.07	≤13
			26990	25RB#12	5.07	≤13
			26990	50RB#0	5.13	≤13
Band26	10MHz	16QAM	26740	1RB#49	5.70	≤13
			26740	1RB#0	5.67	≤13
			26740	1RB#24	5.47	≤13
			26740	25RB#25	6.03	≤13
			26740	25RB#12	6.08	≤13
			26740	25RB#0	5.99	≤13
			26740	50RB#0	6.41	≤13
			26915	1RB#49	5.81	≤13
			26915	1RB#0	5.64	≤13
			26915	1RB#24	5.65	≤13
			26915	25RB#25	6.08	≤13
			26915	25RB#0	6.15	≤13
			26915	25RB#12	5.97	≤13
			26915	50RB#0	6.69	≤13
			26990	1RB#24	5.02	≤13
			26990	1RB#0	5.41	≤13
			26990	1RB#49	5.35	≤13
			26990	25RB#0	5.91	≤13
			26990	25RB#12	5.96	≤13
			26990	25RB#25	5.92	≤13
			26990	50RB#0	6.72	≤13

Test Results of WCDMA:

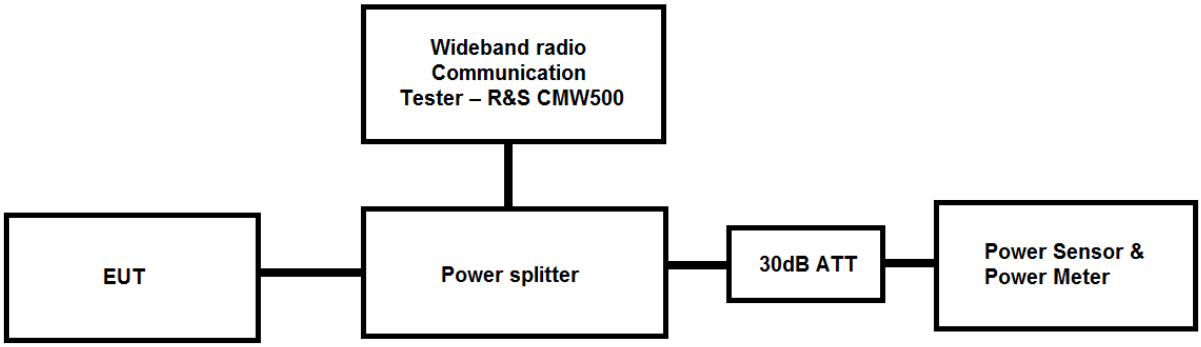
Band	Channel Number	Channel Frequency (MHz)	Measured PAPR (dBm)	Limit (dBm)	Margin (dB)
5	4132	826.4	3.37	13	-9.63
	4182	836.4	3.55	13	-9.45
	4233	846.4	3.47	13	-9.53

7.2 Effective (Isotropic) Radiated Power

Result ***Pass***

Specification	FCC Part §2.1046 & Part §22.913
Test Method / Procedure	ANSI C63.26-2015 As per subclause 5 in 971168 D01 Power Meas License Digital Systems v03r01
Detector Function	Average
Requirement	The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts

Test Setup:



Environmental Conditions:

Temperature: +22.5°C **Voltage:** 12VDC through AC-DC Adapter **Relative Humidity:** 62%

KDB Guidelines applied:
Measurements were made as per section 5.2.4 in KDB 971168 D01 Power Meas License Digital Systems v03r01

Test Results:

Note:

1. All the losses are included during measurement and final values are mentioned in the test report.
2. Total Average Output power (dBm) = Measured Average power (dBm) + Attenuator factor (30dB) + Power Splitter (3.3 dB) + Cable loss (1dB)
3. For getting the EIRP(Equivalent Isotropic Radiated Power), the following formula should be taken to calculate it,

ERP (dBm) = Conducted power (dBm) + Antenna gain (dBd)

EIRP (dBm) = Conducted power (dBm) + Antenna gain (dBi)

Cellular Band	Cell Bandwidth	Modulation technique	Channel Number	RBpos/RB allocation	Measured Average Power(dBm)	ERP (dBm)	limit (dBm)
Band5	1.4MHz	QPSK	20407	1RB#0	23.91	24.76	38.45
			20407	1RB#2	22.80	23.65	38.45
			20407	1RB#5	23.85	24.70	38.45
			20407	3RB#0	23.98	24.83	38.45
			20407	3RB#1	23.67	24.52	38.45
			20407	3RB#3	24.12	24.97	38.45
			20407	6RB#0	23.62	24.47	38.45
			20525	1RB#0	23.72	24.57	38.45
			20525	1RB#5	24.46	25.31	38.45
			20525	1RB#2	22.73	23.58	38.45
			20525	3RB#0	24.13	24.98	38.45
			20525	3RB#1	23.61	24.46	38.45
			20525	3RB#3	24.01	24.86	38.45
			20525	6RB#0	23.68	24.53	38.45
			20643	1RB#5	23.84	24.69	38.45
			20643	1RB#0	23.64	24.49	38.45
			20643	1RB#2	22.58	23.43	38.45
			20643	3RB#0	24.03	24.88	38.45
			20643	3RB#1	22.53	23.38	38.45
			20643	3RB#3	23.73	24.58	38.45
			20643	6RB#0	23.33	24.18	38.45
Band5	1.4MHz	16QAM	20407	1RB#0	22.92	23.77	38.45
			20407	1RB#2	22.80	23.65	38.45
			20407	1RB#5	22.56	23.41	38.45
			20407	3RB#1	22.95	23.80	38.45
			20407	3RB#0	23.86	24.71	38.45
			20407	3RB#3	23.24	24.09	38.45
			20407	6RB#0	22.45	23.30	38.45
			20525	1RB#0	23.08	23.93	38.45
			20525	1RB#2	23.11	23.96	38.45
			20525	1RB#5	23.04	23.89	38.45
			20525	3RB#3	23.09	23.94	38.45
			20525	3RB#0	23.29	24.14	38.45
			20525	3RB#1	23.82	24.67	38.45
			20525	6RB#0	22.45	23.30	38.45
			20643	1RB#2	22.95	23.80	38.45
			20643	1RB#0	22.63	23.48	38.45
			20643	1RB#5	22.36	23.21	38.45
			20643	3RB#0	22.92	23.77	38.45
			20643	3RB#1	23.77	24.62	38.45
			20643	3RB#3	22.31	23.16	38.45
			20643	6RB#0	22.16	23.01	38.45

Cellular Band	Cell Bandwidth	Modulation technique	Channel Number	RBpos/RB allocation	Measured Average Power(dBm)	ERP (dBm)	limit (dBm)
Band5	3MHz	QPSK	20415	1RB#8	22.94	23.79	38.45
			20415	1RB#14	22.89	23.74	38.45
			20415	1RB#0	22.65	23.50	38.45
			20415	8RB#0	23.62	24.47	38.45
			20415	8RB#4	23.78	24.63	38.45
			20415	8RB#7	23.79	24.64	38.45
			20415	15RB#0	23.65	24.50	38.45
			20525	1RB#0	22.61	23.46	38.45
			20525	1RB#14	22.69	23.54	38.45
			20525	1RB#8	22.70	23.55	38.45
			20525	8RB#7	23.55	24.40	38.45
			20525	8RB#0	23.52	24.37	38.45
			20525	8RB#4	23.60	24.45	38.45
			20525	15RB#0	23.57	24.42	38.45
			20635	1RB#8	22.61	23.46	38.45
			20635	1RB#0	22.57	23.42	38.45
			20635	1RB#14	22.36	23.21	38.45
			20635	8RB#0	23.52	24.37	38.45
			20635	8RB#7	23.66	24.51	38.45
			20635	8RB#4	23.41	24.26	38.45
			20635	15RB#0	23.43	24.28	38.45
Band5	3MHz	16QAM	20415	1RB#14	24.15	25.00	38.45
			20415	1RB#0	23.93	24.78	38.45
			20415	1RB#8	24.19	25.04	38.45
			20415	8RB#7	23.53	24.38	38.45
			20415	8RB#4	23.89	24.74	38.45
			20415	8RB#0	23.65	24.50	38.45
			20415	15RB#0	23.72	24.57	38.45
			20525	1RB#14	22.77	23.62	38.45
			20525	1RB#0	22.71	23.56	38.45
			20525	1RB#8	22.77	23.62	38.45
			20525	8RB#7	23.75	24.60	38.45
			20525	8RB#0	23.75	24.60	38.45
			20525	8RB#4	23.72	24.57	38.45
			20525	15RB#0	23.48	24.33	38.45
			20635	1RB#8	22.58	23.43	38.45
			20635	1RB#0	22.54	23.39	38.45
			20635	1RB#14	22.53	23.38	38.45
			20635	8RB#0	23.58	24.43	38.45
			20635	8RB#4	23.64	24.49	38.45
			20635	8RB#7	23.62	24.47	38.45
			20635	15RB#0	23.57	24.42	38.45

Cellular Band	Cell Bandwidth	Modulation technique	Channel Number	RBpos/RB allocation	Measured Average Power(dBm)	ERP (dBm)	limit (dBm)
Band5	5MHz	QPSK	20425	1RB#0	22.55	23.40	38.45
			20425	1RB#12	23.00	23.85	38.45
			20425	1RB#24	22.61	23.46	38.45
			20425	12RB#0	23.61	24.46	38.45
			20425	12RB#6	23.86	24.71	38.45
			20425	12RB#13	23.62	24.47	38.45
			20425	25RB#0	24.01	24.86	38.45
			20525	1RB#0	22.36	23.21	38.45
			20525	1RB#24	22.97	23.82	38.45
			20525	1RB#12	22.28	23.13	38.45
			20525	12RB#0	22.45	23.30	38.45
			20525	12RB#6	22.64	23.49	38.45
			20525	12RB#13	23.83	24.68	38.45
			20525	25RB#0	23.85	24.70	38.45
			20625	1RB#24	22.45	23.30	38.45
			20625	1RB#0	22.72	23.57	38.45
			20625	1RB#12	22.60	23.45	38.45
			20625	12RB#0	23.72	24.57	38.45
			20625	12RB#6	23.53	24.38	38.45
			20625	12RB#13	23.63	24.48	38.45
			20625	25RB#0	22.54	23.39	38.45
Band5	5MHz	16QAM	20425	1RB#0	22.68	23.53	38.45
			20425	1RB#12	23.06	23.91	38.45
			20425	1RB#24	21.86	22.71	38.45
			20425	12RB#6	23.03	23.88	38.45
			20425	12RB#0	22.82	23.67	38.45
			20425	12RB#13	22.66	23.51	38.45
			20425	25RB#0	21.84	22.69	38.45
			20525	1RB#0	21.86	22.71	38.45
			20525	1RB#12	22.88	23.73	38.45
			20525	1RB#24	22.86	23.71	38.45
			20525	12RB#13	21.65	22.50	38.45
			20525	12RB#0	22.31	23.16	38.45
			20525	12RB#6	23.72	24.57	38.45
			20525	25RB#0	22.13	22.98	38.45
			20625	1RB#12	23.13	23.98	38.45
			20625	1RB#0	22.15	23.00	38.45
			20625	1RB#24	22.18	23.03	38.45
			20625	12RB#0	21.99	22.84	38.45
			20625	12RB#6	22.80	23.65	38.45
			20625	12RB#13	22.32	23.17	38.45
			20625	25RB#0	22.02	22.87	38.45

Cellular Band	Cell Bandwidth	Modulation technique	Channel Number	RBpos/RB allocation	Measured Average Power(dBm)	ERP (dBm)	limit (dBm)
Band5	10MHz	QPSK	20450	1RB#49	22.57	23.42	38.45
			20450	1RB#24	22.93	23.78	38.45
			20450	1RB#0	22.46	23.31	38.45
			20450	25RB#0	23.12	23.97	38.45
			20450	25RB#12	23.78	24.63	38.45
			20450	25RB#25	22.96	23.81	38.45
			20450	50RB#0	22.97	23.82	38.45
			20525	1RB#0	23.21	24.06	38.45
			20525	1RB#49	23.79	24.64	38.45
			20525	1RB#24	22.70	23.55	38.45
			20525	25RB#25	23.07	23.92	38.45
			20525	25RB#0	23.13	23.98	38.45
			20525	25RB#12	22.71	23.56	38.45
			20525	50RB#0	22.89	23.74	38.45
			20600	1RB#24	23.00	23.85	38.45
			20600	1RB#0	23.08	23.93	38.45
			20600	1RB#49	23.13	23.98	38.45
			20600	25RB#0	22.87	23.72	38.45
			20600	25RB#25	22.97	23.82	38.45
			20600	25RB#12	23.75	24.60	38.45
			20600	50RB#0	23.00	23.85	38.45
Band5	10MHz	16QAM	20450	1RB#49	22.46	23.31	38.45
			20450	1RB#0	23.02	23.87	38.45
			20450	1RB#24	22.85	23.70	38.45
			20450	25RB#25	22.67	23.52	38.45
			20450	25RB#12	22.91	23.76	38.45
			20450	25RB#0	22.08	22.93	38.45
			20450	50RB#0	22.45	23.30	38.45
			20525	1RB#49	23.02	23.87	38.45
			20525	1RB#0	22.53	23.38	38.45
			20525	1RB#24	22.77	23.62	38.45
			20525	25RB#25	22.13	22.98	38.45
			20525	25RB#0	21.92	22.77	38.45
			20525	25RB#12	23.77	24.62	38.45
			20525	50RB#0	22.57	23.42	38.45
			20600	1RB#24	23.18	24.03	38.45
			20600	1RB#0	22.56	23.41	38.45
			20600	1RB#49	22.78	23.63	38.45
			20600	25RB#0	21.89	22.74	38.45
			20600	25RB#12	23.65	24.50	38.45
			20600	25RB#25	22.13	22.98	38.45
			20600	50RB#0	22.19	23.04	38.45

Cellular Band	Cell Bandwidth	Modulation technique	Channel Number	RBpos/RB allocation	Measured Average Power(dBm)	ERP (dBm)	limit (dBm)
Band26	1.4MHz	QPSK	26697	1RB#0	22.36	23.21	38.45
			26697	1RB#2	23.18	24.03	38.45
			26697	1RB#5	23.17	24.02	38.45
			26697	3RB#0	23.18	24.03	38.45
			26697	3RB#1	23.13	23.98	38.45
			26697	3RB#3	23.15	24.00	38.45
			26697	6RB#0	24.07	24.92	38.45
			26915	1RB#0	22.40	23.25	38.45
			26915	1RB#5	22.34	23.19	38.45
			26915	1RB#2	22.43	23.28	38.45
			26915	3RB#0	24.07	24.92	38.45
			26915	3RB#1	24.09	24.94	38.45
			26915	3RB#3	24.02	24.87	38.45
			26915	6RB#0	24.04	24.89	38.45
			27033	1RB#5	22.23	23.08	38.45
			27033	1RB#0	22.41	23.26	38.45
			27033	1RB#2	22.38	23.23	38.45
			27033	3RB#0	23.38	24.23	38.45
			27033	3RB#1	23.39	24.24	38.45
			27033	3RB#3	23.27	24.12	38.45
			27033	6RB#0	23.33	24.18	38.45
Band26	1.4MHz	16QAM	26697	1RB#0	23.42	24.27	38.45
			26697	1RB#2	23.32	24.17	38.45
			26697	1RB#5	23.33	24.18	38.45
			26697	3RB#1	23.24	24.09	38.45
			26697	3RB#0	23.38	24.23	38.45
			26697	3RB#3	23.24	24.09	38.45
			26697	6RB#0	23.32	24.17	38.45
			26915	1RB#0	23.53	24.38	38.45
			26915	1RB#2	23.55	24.40	38.45
			26915	1RB#5	23.48	24.33	38.45
			26915	3RB#3	23.29	24.14	38.45
			26915	3RB#0	22.44	23.29	38.45
			26915	3RB#1	22.45	23.30	38.45
			26915	6RB#0	23.05	23.90	38.45
			27033	1RB#2	22.52	23.37	38.45
			27033	1RB#0	22.57	23.42	38.45
			27033	1RB#5	22.41	23.26	38.45
			27033	3RB#0	23.64	24.49	38.45
			27033	3RB#1	23.65	24.50	38.45
			27033	3RB#3	23.52	24.37	38.45
			27033	6RB#0	23.60	24.45	38.45

Cellular Band	Cell Bandwidth	Modulation technique	Channel Number	RBpos/RB allocation	Measured Average Power(dBm)	ERP (dBm)	limit (dBm)
Band26	3MHz	QPSK	26705	1RB#8	22.33	23.18	38.45
			26705	1RB#14	22.25	23.10	38.45
			26705	1RB#0	22.32	23.17	38.45
			26705	8RB#0	24.11	24.96	38.45
			26705	8RB#4	23.16	24.01	38.45
			26705	8RB#7	23.13	23.98	38.45
			26705	15RB#0	24.15	25.00	38.45
			26915	1RB#0	22.30	23.15	38.45
			26915	1RB#14	22.32	23.17	38.45
			26915	1RB#8	22.43	23.28	38.45
			26915	8RB#7	24.02	24.87	38.45
			26915	8RB#0	24.07	24.92	38.45
			26915	8RB#4	24.06	24.91	38.45
			26915	15RB#0	24.04	24.89	38.45
			27025	1RB#8	22.53	23.38	38.45
			27025	1RB#0	22.87	23.72	38.45
			27025	1RB#14	22.17	23.02	38.45
			27025	8RB#0	23.74	24.59	38.45
			27025	8RB#7	23.38	24.23	38.45
			27025	8RB#4	23.56	24.41	38.45
			27025	15RB#0	23.57	24.42	38.45
Band26	3MHz	16QAM	26705	1RB#14	22.10	22.95	38.45
			26705	1RB#0	22.17	23.02	38.45
			26705	1RB#8	22.18	23.03	38.45
			26705	8RB#7	23.26	24.11	38.45
			26705	8RB#4	23.28	24.13	38.45
			26705	8RB#0	23.32	24.17	38.45
			26705	15RB#0	23.28	24.13	38.45
			26915	1RB#14	23.40	24.25	38.45
			26915	1RB#0	23.45	24.30	38.45
			26915	1RB#8	23.56	24.41	38.45
			26915	8RB#7	23.21	24.06	38.45
			26915	8RB#0	23.26	24.11	38.45
			26915	8RB#4	23.26	24.11	38.45
			26915	15RB#0	23.20	24.05	38.45
			27025	1RB#8	22.68	23.53	38.45
			27025	1RB#0	23.04	23.89	38.45
			27025	1RB#14	22.32	23.17	38.45
			27025	8RB#0	23.85	24.70	38.45
			27025	8RB#4	23.68	24.53	38.45
			27025	8RB#7	23.50	24.35	38.45
			27025	15RB#0	23.60	24.45	38.45

Cellular Band	Cell Bandwidth	Modulation technique	Channel Number	RBpos/RB allocation	Measured Average Power(dBm)	ERP (dBm)	limit (dBm)
Band26	5MHz	QPSK	26715	1RB#0	22.33	23.18	38.45
			26715	1RB#12	22.46	23.31	38.45
			26715	1RB#24	22.32	23.17	38.45
			26715	12RB#0	24.12	24.97	38.45
			26715	12RB#6	22.29	23.14	38.45
			26715	12RB#13	24.09	24.94	38.45
			26715	25RB#0	24.05	24.90	38.45
			26915	1RB#0	23.09	23.94	38.45
			26915	1RB#24	23.16	24.01	38.45
			26915	1RB#12	23.23	24.08	38.45
			26915	12RB#0	23.99	24.84	38.45
			26915	12RB#6	24.08	24.93	38.45
			26915	12RB#13	24.00	24.85	38.45
			26915	25RB#0	24.05	24.90	38.45
			27015	1RB#24	23.10	23.95	38.45
			27015	1RB#0	22.34	23.19	38.45
			27015	1RB#12	23.91	24.76	38.45
			27015	12RB#0	24.17	25.02	38.45
			27015	12RB#6	23.95	24.80	38.45
			27015	12RB#13	23.50	24.35	38.45
			27015	25RB#0	23.85	24.70	38.45
Band26	5MHz	16QAM	26715	1RB#0	23.31	24.16	38.45
			26715	1RB#12	23.31	24.16	38.45
			26715	1RB#24	23.21	24.06	38.45
			26715	12RB#6	23.26	24.11	38.45
			26715	12RB#0	23.26	24.11	38.45
			26715	12RB#13	23.23	24.08	38.45
			26715	25RB#0	24.13	24.98	38.45
			26915	1RB#0	23.20	24.05	38.45
			26915	1RB#12	23.33	24.18	38.45
			26915	1RB#24	23.31	24.16	38.45
			26915	12RB#13	24.18	25.03	38.45
			26915	12RB#0	24.18	25.03	38.45
			26915	12RB#6	23.28	24.13	38.45
			26915	25RB#0	24.18	25.03	38.45
			27015	1RB#12	23.52	24.37	38.45
			27015	1RB#0	22.71	23.56	38.45
			27015	1RB#24	22.72	23.57	38.45
			27015	12RB#0	23.43	24.28	38.45
			27015	12RB#6	23.19	24.04	38.45
			27015	12RB#13	22.75	23.60	38.45
			27015	25RB#0	23.98	24.83	38.45

Cellular Band	Cell Bandwidth	Modulation technique	Channel Number	RBpos/RB allocation	Measured Average Power(dBm)	ERP (dBm)	limit (dBm)
Band26	10MHz	QPSK	26740	1RB#49	22.69	23.54	38.45
			26740	1RB#24	23.25	24.10	38.45
			26740	1RB#0	22.43	23.28	38.45
			26740	25RB#0	23.88	24.73	38.45
			26740	25RB#12	24.14	24.99	38.45
			26740	25RB#25	23.97	24.82	38.45
			26740	50RB#0	23.88	24.73	38.45
			26915	1RB#0	22.73	23.58	38.45
			26915	1RB#49	22.72	23.57	38.45
			26915	1RB#24	23.17	24.02	38.45
			26915	25RB#25	23.98	24.83	38.45
			26915	25RB#0	23.94	24.79	38.45
			26915	25RB#12	24.07	24.92	38.45
			26915	50RB#0	23.84	24.69	38.45
			26990	1RB#24	23.48	24.33	38.45
			26990	1RB#0	22.61	23.46	38.45
			26990	1RB#49	22.70	23.55	38.45
			26990	25RB#0	24.16	25.01	38.45
			26990	25RB#25	23.81	24.66	38.45
			26990	25RB#12	23.33	24.18	38.45
			26990	50RB#0	23.99	24.84	38.45
Band26	10MHz	16QAM	26740	1RB#49	22.60	23.45	38.45
			26740	1RB#0	22.53	23.38	38.45
			26740	1RB#24	23.32	24.17	38.45
			26740	25RB#25	24.18	25.03	38.45
			26740	25RB#12	23.26	24.11	38.45
			26740	25RB#0	23.07	23.92	38.45
			26740	50RB#0	24.04	24.89	38.45
			26915	1RB#49	22.75	23.60	38.45
			26915	1RB#0	22.56	23.41	38.45
			26915	1RB#24	23.10	23.95	38.45
			26915	25RB#25	24.08	24.93	38.45
			26915	25RB#0	24.06	24.91	38.45
			26915	25RB#12	23.20	24.05	38.45
			26915	50RB#0	24.03	24.88	38.45
			26990	1RB#24	23.90	24.75	38.45
			26990	1RB#0	23.94	24.79	38.45
			26990	1RB#49	23.97	24.82	38.45
			26990	25RB#0	24.20	25.05	38.45
			26990	25RB#12	23.47	24.32	38.45
			26990	25RB#25	23.00	23.85	38.45
			26990	50RB#0	24.00	24.85	38.45

Test Results of WCDMA:

Band	Channel Number	Channel Frequency (MHz)	Measured Average power (dBm)	Measured e.r.p (dBm)	Limit (dBm)
5	4132	826.4	23.69	24.54	38.50
	4182	836.4	23.86	24.71	38.50
	4233	846.4	23.9	24.75	38.50

7.3 FIELD STRENGTH OF SPURIOUS RADIATION

Result ***Pass***

Specification	FCC Part §2.1053, §22.917 (a)
Test Method / Procedure	ANSI C63.26-2015
Measurement Bandwidth (RBW)	100 kHz for frequency range < 1GHz 1 MHz for Frequency range >1GHz
Detector Function	Peak
Measuring Distance	3 m
Requirement	The power of any emission outside the authorized frequency range must be attenuated below the transmitting power (P) by a factor of at least 43+10log(P) dB
Test setup	Refer TEST METHODOLOGY

Environmental conditions:

Temperature (Norm) = + 24 °C Voltage = 12VDC through AC-DC Adapter Relative humidity = 62 %

KDB Guidelines applied:

All the radiated emission measurements are performed in accordance with common requirement specified in 7 971168 D01 Power Meas License Digital Systems v03r01 and Pre-test site path loss correction factors are used to adjust the EUT emission data in place of two step substitution method (as defined in Annex B of ANSI C63.26-2015)

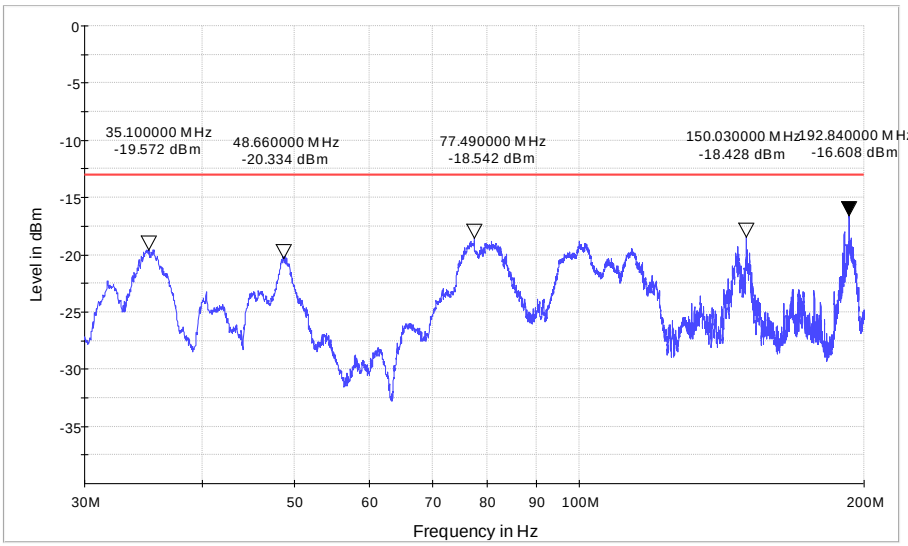
Test results:

Note: All the losses are included during measurement and final values are mentioned in the test report. Refer TEST METHODOLOGY for more details

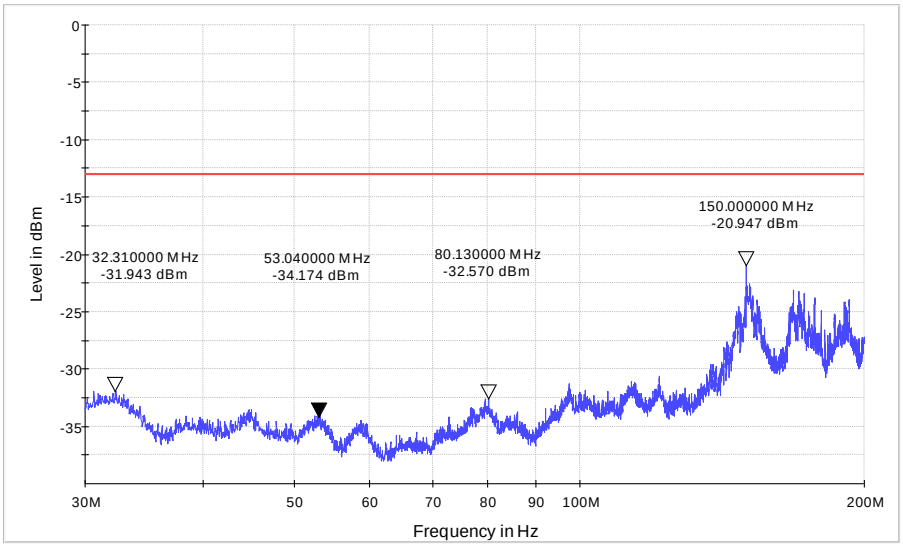
Test Results for frequency range 30MHz to 200MHz

Antenna Polarization	Measured Frequency (MHz)	Measured Emission (dBm)	Limit (dBm)	Margin (dB)
Vertical	35.10	-19.57	-13.00	-6.57
	48.66	-20.33	-13.00	-7.33
	77.49	-18.54	-13.00	-5.54
	150.03	-18.42	-13.00	-5.42
	192.84	-16.60	-13.00	-3.60
Horizontal	32.31	-31.94	-13.00	-18.94
	53.04	-34.17	-13.00	-21.17
	80.13	-32.57	-13.00	-19.57
	150.00	-20.94	-13.00	-7.94

Plots for frequency range 30MHz to 200MHz:



Frequency Range: 30MHz-200MHz **Polarization: Vertical**

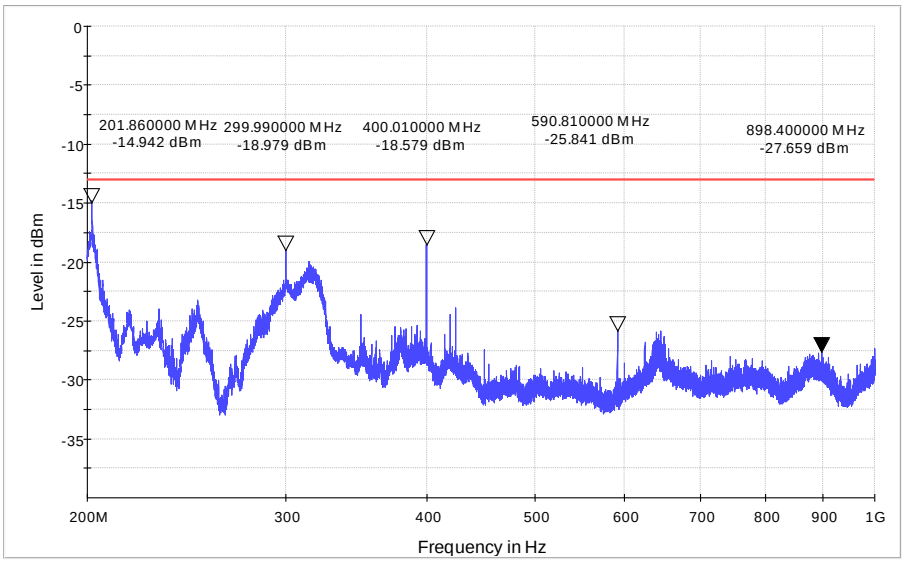


Frequency Range: 30MHz-200MHz **Polarization: Horizontal**

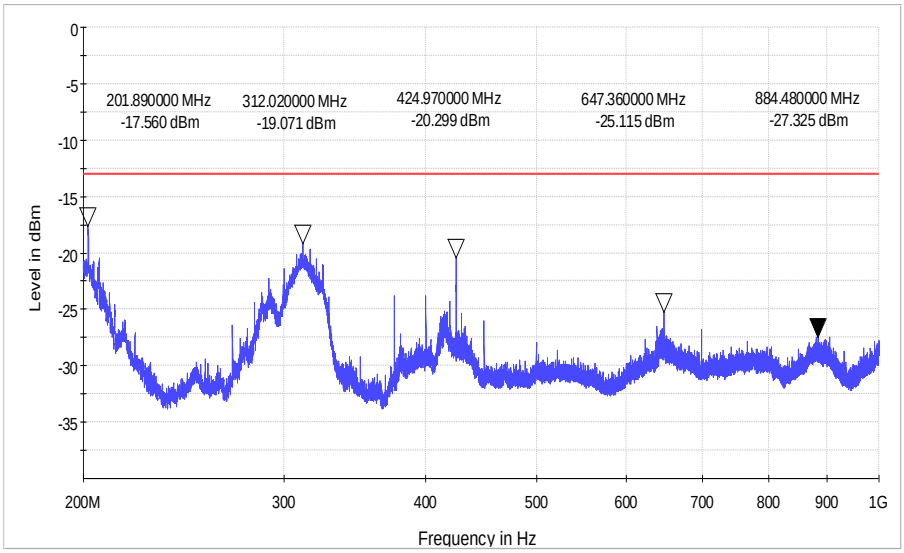
Frequency range 200MHz to 1GHz

Antenna Polarization	Measured Frequency (MHz)	Measured Emission (dBm)	Limit (dBm)	Margin (dB)
Vertical	201.86	-14.94	-13.00	-1.94
	299.99	-18.97	-13.00	-5.97
	400.01	-18.57	-13.00	-5.57
	590.81	-25.84	-13.00	-12.84
	898.40	-27.65	-13.00	-14.65
Horizontal	201.89	-17.56	-13.00	-4.56
	312.02	-19.07	-13.00	-6.07
	424.97	-20.29	-13.00	-7.29
	647.36	-25.11	-13.00	-12.11
	884.48	-27.32	-13.00	-14.32

Test Plots for Frequency range of 200MHz to 1GHz:



Frequency Range: 200MHz-1GHz **Polarization: Vertical**



Frequency Range: 200MHz-1GHz **Polarization: Horizontal**

Frequency range above 1GHz:

Band	Modulation	Cell BW	No. of RB/RB Pos	Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5	QPSK	1.4	3/3	824.70	1649.40	Vertical	-57.66	-13	-44.66
					2474.10		-45.85	-13	-32.85
					3298.80		-56.10	-13	-43.10
					1649.40	Horizontal	-61.48	-13	-48.48
					2474.10		-46.88	-13	-33.88
					3298.80		-55.44	-13	-42.44
			1/5	836.50	1673.00	Vertical	-57.58	-13	-44.58
					2509.50		-43.28	-13	-30.28
					3346.00		-56.57	-13	-43.57
					1673.00	Horizontal	-61.10	-13	-48.10
					2509.50		-45.61	-13	-32.61
					3346.00		-56.48	-13	-43.48
			3/0	848.20	1696.40	Vertical	-54.82	-13	-41.82
					2544.60		-44.97	-13	-31.97
					3392.80		-50.41	-13	-37.41
					1696.40	Horizontal	-58.03	-13	-45.03
					2544.60		-43.47	-13	-30.47
					3392.80		-54.97	-13	-41.97
		3	8/7	825.50	1651.00	Vertical	-60.95	-13	-47.95
					2476.50		-48.06	-13	-35.06
					3302.00		-56.22	-13	-43.22
					1651.00	Horizontal	-60.85	-13	-47.85
					2476.50		-51.63	-13	-38.63
					3302.00		-55.40	-13	-42.40
			8/4	836.50	1673.00	Vertical	-58.86	-13	-45.86
					2509.50		-47.82	-13	-34.82
					3346.00		-54.94	-13	-41.94
					1673.00	Horizontal	-60.89	-13	-47.89
					2509.50		-48.87	-13	-35.87
					3346.00		-55.86	-13	-42.86
			8/7	847.40	1694.80	Vertical	-56.19	-13	-43.19
					2542.20		-47.25	-13	-34.25
					3389.60		-55.07	-13	-42.07
					1694.80	Horizontal	-60.32	-13	-47.32
					2542.20		-48.96	-13	-35.96
					3389.60		-55.78	-13	-42.78

Band	Modulation	Cell BW	No. of RB/RB Pos	Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5	QPSK	5	25/0	826.50	1653.00	Vertical	-60.79	-13	-47.79
					2479.50		-53.64	-13	-40.64
					3306.00		-55.35	-13	-42.35
					1653.00	Horizontal	-60.94	-13	-47.94
					2479.50		-52.96	-13	-39.96
					3306.00		-55.77	-13	-42.77
			25/0	836.50	1673.00	Vertical	-59.44	-13	-46.44
					2509.50		-51.21	-13	-38.21
					3346.00		-54.97	-13	-41.97
					1673.00	Horizontal	-60.70	-13	-47.70
					2509.50		-51.36	-13	-38.36
					3346.00		-55.35	-13	-42.35
			12/0	846.40	1692.80	Vertical	-60.05	-13	-47.05
					2539.20		-51.03	-13	-38.03
					3385.60		-55.99	-13	-42.99
					1692.80	Horizontal	-60.38	-13	-47.38
					2539.20		-51.19	-13	-38.19
					3385.60		-55.62	-13	-42.62
		10	25/12	829.00	1658.00	Vertical	-60.25	-13	-47.25
					2487.00		-51.98	-13	-38.98
					3316.00		-54.84	-13	-41.84
					1658.00	Horizontal	-60.61	-13	-47.61
					2487.00		-52.15	-13	-39.15
					3316.00		-55.11	-13	-42.11
			1/49	836.50	1673.00	Vertical	-58.03	-13	-45.03
					2509.50		-46.79	-13	-33.79
					3346.00		-56.25	-13	-43.25
					1673.00	Horizontal	-61.53	-13	-48.53
					2509.50		-46.35	-13	-33.35
					3346.00		-56.87	-13	-43.87
			25/12	843.90	1687.80	Vertical	-60.62	-13	-47.62
					2531.70		-52.02	-13	-39.02
					3375.60		-55.43	-13	-42.43
					1687.80	Horizontal	-60.97	-13	-47.97
					2531.70		-52.08	-13	-39.08
					3375.60		-55.41	-13	-42.41

Band	Modulation	Cell BW	No. of RB/RB Pos	Channel Frequency (MHz)	Measured Frequency (MHz)	Antenna Polarization	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5	16QAM	1.4	3/0	824.70	1649.40	Vertical	-58.37	-13	-45.37
					2474.10		-47.86	-13	-34.86
					3298.80		-55.78	-13	-42.78
					1649.40	Horizontal	-60.54	-13	-47.54
					2474.10		-48.08	-13	-35.08
					3298.80		-56.28	-13	-43.28
			3/1	836.50	1673.00	Vertical	-55.98	-13	-42.98
					2509.50		-45.87	-13	-32.87
					3346.00		-52.48	-13	-39.48
					1673.00	Horizontal	-60.42	-13	-47.42
					2509.50		-45.20	-13	-32.20
					3346.00		-52.77	-13	-39.77
			3/1	848.20	1696.40	Vertical	-54.07	-13	-41.07
					2544.60		-46.91	-13	-33.91
					3392.80		-50.99	-13	-37.99
					1696.40	Horizontal	-58.16	-13	-45.16
					2544.60		-48.11	-13	-35.11
					3392.80		-51.56	-13	-38.56
		3	1/8	825.50	1651.00	Vertical	-60.34	-13	-47.34
					2476.50		-47.43	-13	-34.43
					3302.00		-56.19	-13	-43.19
					1651.00	Horizontal	-58.60	-13	-45.60
					2476.50		-47.54	-13	-34.54
					3302.00		-55.85	-13	-42.85
			8/0	836.50	1673.00	Vertical	-60.26	-13	-47.26
					2509.50		-48.83	-13	-35.83
					3346.00		-56.16	-13	-43.16
					1673.00	Horizontal	-60.60	-13	-47.60
					2509.50		-52.42	-13	-39.42
					3346.00		-56.29	-13	-43.29
			8/4	847.40	1694.80	Vertical	-57.04	-13	-44.04
					2542.20		-49.37	-13	-36.37
					3389.60		-53.57	-13	-40.57
					1694.80	Horizontal	-59.59	-13	-46.59
					2542.20		-48.46	-13	-35.46
					3389.60		-54.15	-13	-41.15

Band	Modulation	Cell BW	No. of RB/RB Pos	Channel Frequency (MHz)	Measured Frequency (MHz	Antenna Polarization	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5	16QAM	5	1/12	826.50	1653.00	Vertical	-58.73	-13	-45.73
					2479.50		-48.74	-13	-35.74
					3306.00		-55.37	-13	-42.37
					1653.00	Horizontal	-60.13	-13	-47.13
					2479.50		-47.69	-13	-34.69
					3306.00		-55.10	-13	-42.10
			12/6	836.50	1673.00	Vertical	-59.73	-13	-46.73
					2509.50		-50.37	-13	-37.37
					3346.00		-55.69	-13	-42.69
					1673.00	Horizontal	-60.04	-13	-47.04
					2509.50		-51.00	-13	-38.00
					3346.00		-55.11	-13	-42.11
			12/6	846.40	1692.80	Vertical	-58.82	-13	-45.82
					2539.20		-51.74	-13	-38.74
					3385.60		-55.42	-13	-42.42
					1692.80	Horizontal	-60.33	-13	-47.33
					2539.20		-51.02	-13	-38.02
					3385.60		-55.37	-13	-42.37
		10	1/0	829.00	1658.00	Vertical	-61.54	-13	-48.54
					2487.00		-48.33	-13	-35.33
					3316.00		-56.41	-13	-43.41
					1658.00	Horizontal	-59.83	-13	-46.83
					2487.00		-46.21	-13	-33.21
					3316.00		-55.35	-13	-42.35
			25/12	836.50	1673.00	Vertical	-60.53	-13	-47.53
					2509.50		-51.90	-13	-38.90
					3346.00		-55.72	-13	-42.72
					1673.00	Horizontal	-59.87	-13	-46.87
					2509.50		-52.30	-13	-39.30
					3346.00		-56.42	-13	-43.42
			25/12	843.90	1687.80	Vertical	-59.70	-13	-46.70
					2531.70		-52.17	-13	-39.17
					3375.60		-55.11	-13	-42.11
					1687.80	Horizontal	-60.74	-13	-47.74
					2531.70		-53.02	-13	-40.02
					3375.60		-56.19	-13	-43.19

Band	Modulation	Cell BW	No. of RB/RB Pos	Channel Frequency (MHz)	Measured Frequency (MHz	Antenna Polarization	Emission Level (dBm)	Limit (dBm)	Margin (dB)
26	QPSK	1.4	6/0	814.70	1629.40	Vertical	-59.70	-13	-46.70
					2444.10		-49.55	-13	-36.55
					3258.80		-55.42	-13	-42.42
					1629.40	Horizontal	-59.90	-13	-46.90
					2444.10		-48.43	-13	-35.43
					3258.80		-54.66	-13	-41.66
			3/1	836.50	1673.00	Vertical	-57.01	-13	-44.01
					2509.50		-43.78	-13	-30.78
					3346.00		-54.38	-13	-41.38
					1673.00	Horizontal	-60.52	-13	-47.52
					2509.50		-44.10	-13	-31.10
					3346.00		-54.75	-13	-41.75
			3/1	848.30	1696.60	Vertical	-54.59	-13	-41.59
					2544.90		-43.75	-13	-30.75
					3393.20		-51.00	-13	-38.00
					1696.60	Horizontal	-58.50	-13	-45.50
					2544.90		-43.90	-13	-30.90
					3393.20		-52.21	-13	-39.21
		3	15/0	815.50	1631.00	Vertical	-60.04	-13	-47.04
					2446.50		-51.18	-13	-38.18
					3262.00		-55.24	-13	-42.24
					1631.00	Horizontal	-60.57	-13	-47.57
					2446.50		-51.24	-13	-38.24
					3262.00		-54.59	-13	-41.59
			8/1	836.50	1673.00	Vertical	-59.70	-13	-46.70
					2509.50		-48.63	-13	-35.63
					3346.00		-55.57	-13	-42.57
					1673.00	Horizontal	-60.07	-13	-47.07
					2509.50		-48.32	-13	-35.32
					3346.00		-55.99	-13	-42.99
			15/0	847.50	1695.00	Vertical	-58.40	-13	-45.40
					2542.50		-49.00	-13	-36.00
					3390.00		-54.16	-13	-41.16
					1695.00	Horizontal	-60.53	-13	-47.53
					2542.50		-50.07	-13	-37.07
					3390.00		-54.64	-13	-41.64

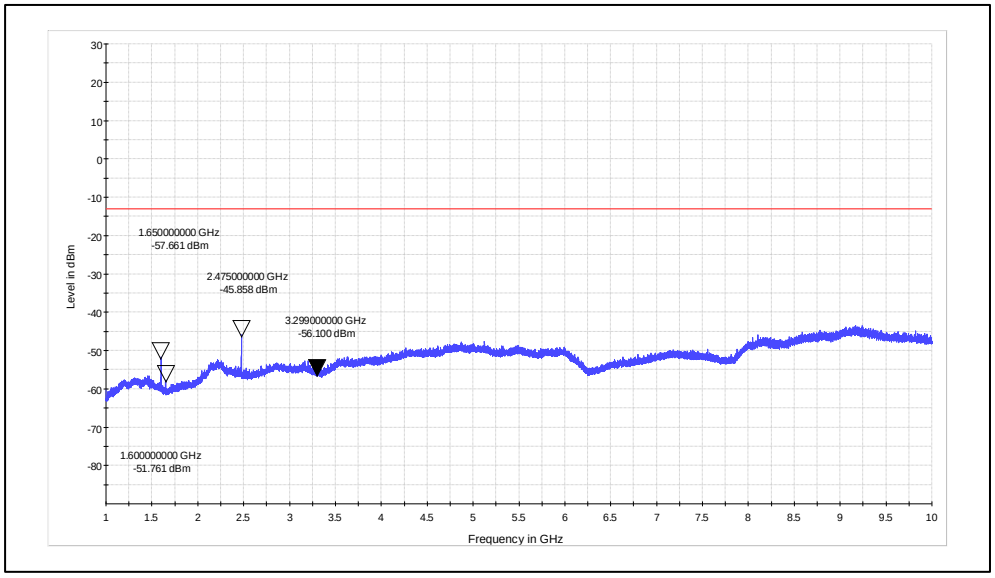
Band	Modulation	Cell BW	No. of RB/RB Pos	Channel Frequency (MHz)	Measured Frequency (MHz	Antenna Polarization	Emission Level (dBm)	Limit (dBm)	Margin (dB)
26	QPSK	5	12/13	816.50	1633.00	Vertical	-60.07	-13	-47.07
					2449.50		-51.09	-13	-38.09
					3266.00		-55.44	-13	-42.44
					1633.00	Horizontal	-60.67	-13	-47.67
					2449.50		-50.92	-13	-37.92
					3266.00		-55.33	-13	-42.33
			12/6	836.50	1673.00	Vertical	-59.57	-13	-46.57
					2509.50		-48.73	-13	-35.73
					3346.00		-54.98	-13	-41.98
					1673.00	Horizontal	-60.71	-13	-47.71
					2509.50		-50.90	-13	-37.90
					3346.00		-55.22	-13	-42.22
			12/0	846.50	1693.00	Vertical	-57.98	-13	-44.98
					2539.50		-50.31	-13	-37.31
					3386.00		-56.21	-13	-43.21
					1693.00	Horizontal	-59.91	-13	-46.91
					2539.50		-50.11	-13	-37.11
					3386.00		-56.08	-13	-43.08
		10	50/0	819.00	1638.00	Vertical	-59.22	-13	-46.22
					2457.00		-52.61	-13	-39.61
					3276.00		-55.90	-13	-42.90
					1638.00	Horizontal	-61.44	-13	-48.44
					2457.00		-52.43	-13	-39.43
					3276.00		-55.23	-13	-42.23
			25/12	836.50	1673.00	Vertical	-60.14	-13	-47.14
					2509.50		-51.71	-13	-38.71
					3346.00		-55.73	-13	-42.73
					1673.00	Horizontal	-60.77	-13	-47.77
					2509.50		-52.77	-13	-39.77
					3346.00		-56.24	-13	-43.24
			25/0	844.00	1688.00	Vertical	-60.64	-13	-47.64
					2532.00		-52.17	-13	-39.17
					3376.00		-56.15	-13	-43.15
					1688.00	Horizontal	-60.36	-13	-47.36
					2532.00		-51.40	-13	-38.40
					3376.00		-56.27	-13	-43.27

Band	Modulation	Cell BW	No. of RB/RB Pos	Channel Frequency (MHz)	Measured Frequency (MHz	Antenna Polarization	Emission Level (dBm)	Limit (dBm)	Margin (dB)
26	16QAM	1.4	1/0	814.70	1629.40	Vertical	-60.35	-13	-47.35
					2444.10		-49.01	-13	-36.01
					3258.80		-55.44	-13	-42.44
					1629.40	Horizontal	-60.64	-13	-47.64
					2444.10		-46.29	-13	-33.29
					3258.80		-55.80	-13	-42.80
			1/2	836.50	1673.00	Vertical	-56.23	-13	-43.23
					2509.50		-45.14	-13	-32.14
					3346.00		-53.12	-13	-40.12
					1673.00	Horizontal	-59.63	-13	-46.63
					2509.50		-45.01	-13	-32.01
					3346.00		-54.11	-13	-41.11
			3/1	848.30	1696.60	Vertical	-54.53	-13	-41.53
					2544.90		-44.13	-13	-31.13
					3393.20		-50.12	-13	-37.12
					1696.60	Horizontal	-58.67	-13	-45.67
					2544.90		-46.21	-13	-33.21
					3393.20		-50.64	-13	-37.64
		3	8/0	815.50	1631.00	Vertical	-60.30	-13	-47.30
					2446.50		-50.64	-13	-37.64
					3262.00		-56.07	-13	-43.07
					1631.00	Horizontal	-60.59	-13	-47.59
					2446.50		-48.92	-13	-35.92
					3262.00		-55.61	-13	-42.61
			1/8	836.50	1673.00	Vertical	-56.83	-13	-43.83
					2509.50		-44.75	-13	-31.75
					3346.00		-55.82	-13	-42.82
					1673.00	Horizontal	-60.95	-13	-47.95
					2509.50		-47.22	-13	-34.22
					3346.00		-51.77	-13	-38.77
			8/0	847.50	1695.00	Vertical	-59.68	-13	-46.68
					2542.50		-51.76	-13	-38.76
					3390.00		-54.59	-13	-41.59
					1695.00	Horizontal	-60.31	-13	-47.31
					2542.50		-49.49	-13	-36.49
					3390.00		-56.15	-13	-43.15

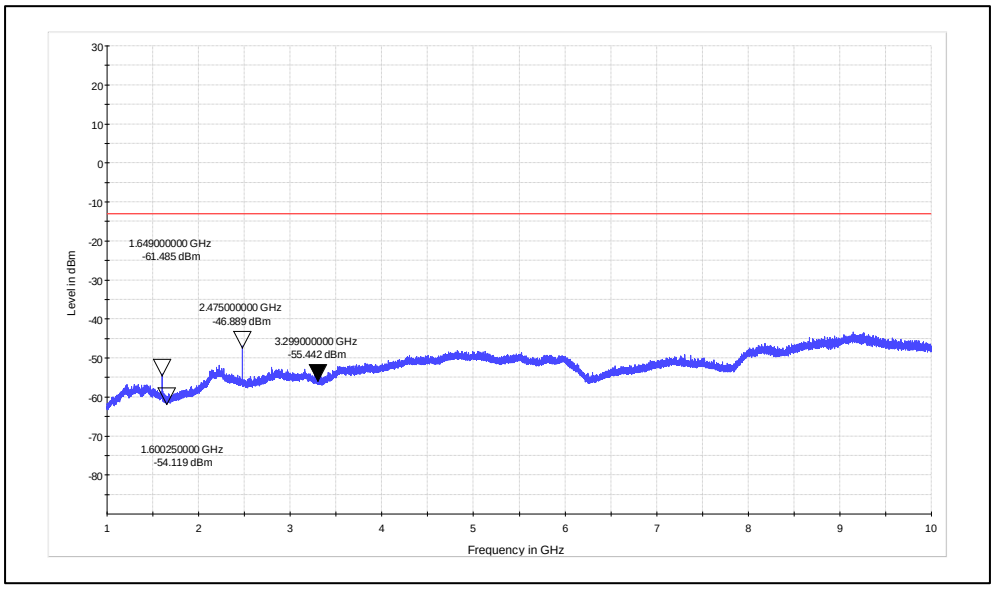
Band	Modulation	Cell BW	No. of RB/RB Pos	Channel Frequency (MHz)	Measured Frequency (MHz	Antenna Polarization	Emission Level (dBm)	Limit (dBm)	Margin (dB)
26	16QAM	5	25/0	816.50	1633.00	Vertical	-60.44	-13	-47.44
					2449.50		-51.76	-13	-38.76
					3266.00		-54.89	-13	-41.89
					1633.00	Horizontal	-60.73	-13	-47.73
					2449.50		-53.20	-13	-40.20
					3266.00		-55.81	-13	-42.81
			25/0	836.50	1673.00	Vertical	-60.00	-13	-47.00
					2509.50		-51.16	-13	-38.16
					3346.00		-56.41	-13	-43.41
					1673.00	Horizontal	-60.12	-13	-47.12
					2509.50		-52.15	-13	-39.15
					3346.00		-56.37	-13	-43.37
			25/0	846.50	1693.00	Vertical	-60.14	-13	-47.14
					2539.50		-52.34	-13	-39.34
					3386.00		-55.78	-13	-42.78
					1693.00	Horizontal	-60.72	-13	-47.72
					2539.50		-50.93	-13	-37.93
					3386.00		-55.85	-13	-42.85
		10	25/25	819.00	1638.00	Vertical	-61.16	-13	-48.16
					2457.00		-51.39	-13	-38.39
					3276.00		-55.72	-13	-42.72
					1638.00	Horizontal	-60.67	-13	-47.67
					2457.00		-52.79	-13	-39.79
					3276.00		-54.85	-13	-41.85
			25/25	836.50	1673.00	Vertical	-60.73	-13	-47.73
					2509.50		-51.27	-13	-38.27
					3346.00		-55.97	-13	-42.97
					1673.00	Horizontal	-60.85	-13	-47.85
					2509.50		-51.12	-13	-38.12
					3346.00		-56.49	-13	-43.49
			25/25	844.00	1688.00	Vertical	-60.65	-13	-47.65
					2532.00		-51.00	-13	-38.00
					3376.00		-54.96	-13	-41.96
					1688.00	Horizontal	-60.48	-13	-47.48
					2532.00		-52.49	-13	-39.49
					3376.00		-55.81	-13	-42.81

Test Plots:

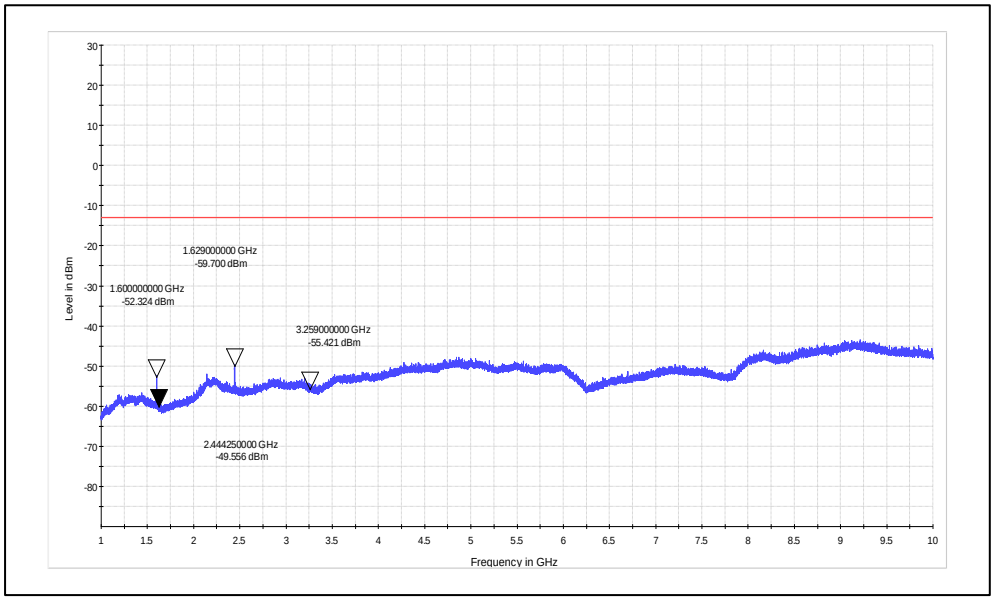
Band 5_Channel 824.7MHz-QPSK-CB-1.4MHz-Vertical Polarization



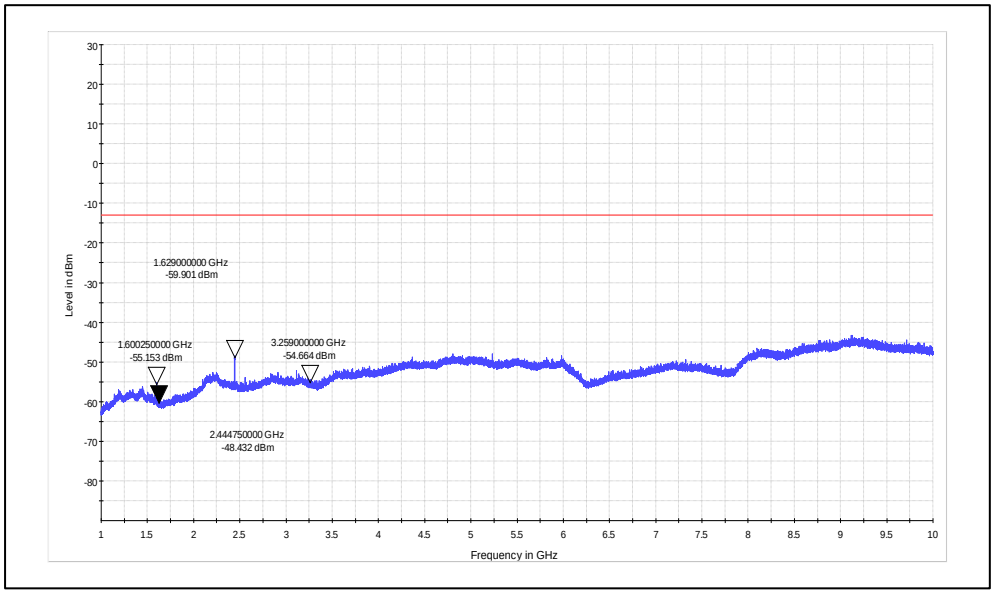
Band5_Channel 824.7MHz-QPSK-CB-1.4MHz-Horizontal polarization



Band 26_Channel 814.7MHz-QPSK-CB-1.4MHz-Vertical Polarization



Band 26_Channel 814.7MHz-QPSK-CB-1.4MHz-Horizontal Polarization

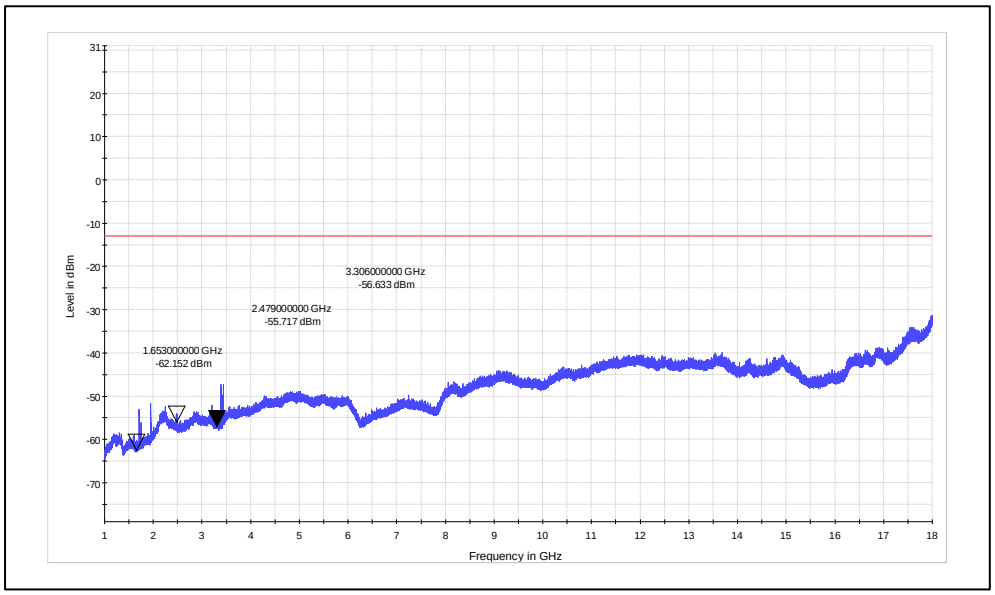


Test Results of WCDMA:

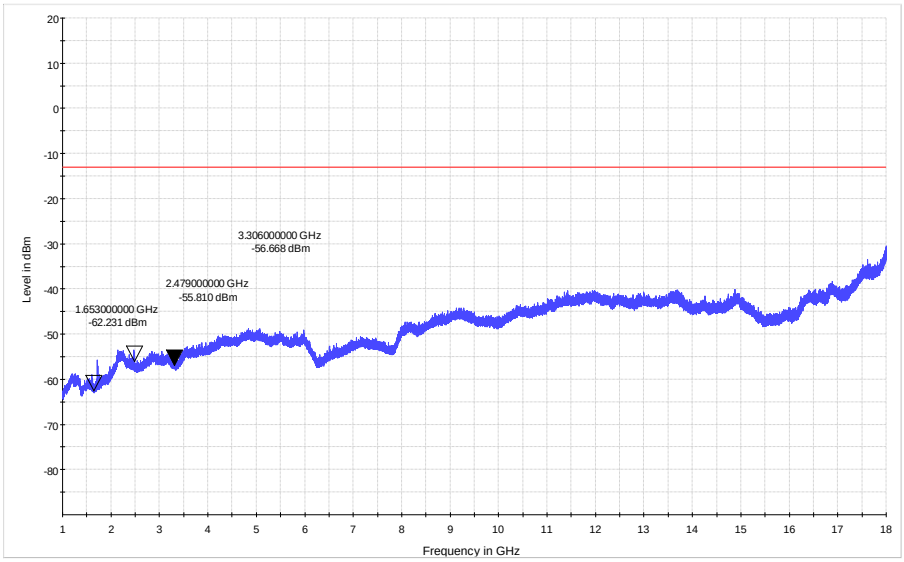
Band	Channel Number	Channel Frequency (MHz)	Antenna Polarization	Measured Frequency (MHz)	Measured emission (dBm)	Limit (dBm)	Margin (dB)
5	4132	826.4	Vertical	1652.8	-62.15	-13	-49.15
				2479.2	-55.71	-13	-42.71
				3305.6	-56.63	-13	-43.63
			Horizontal	1652.8	-62.23	-13	-49.23
				2479.2	-55.81	-13	-42.81
				3305.6	-56.66	-13	-43.66
	4182	836.4	Vertical	1672.8	-61.89	-13	-48.89
				2509.2	-51.15	-13	-38.15
				3345.6	-57.08	-13	-44.08
			Horizontal	1672.8	-61.73	-13	-48.73
				2509.2	-56.22	-13	-43.22
				3345.6	-57.13	-13	-44.13
	4233	846.6	Vertical	1693.2	-60.87	-13	-47.87
				2539.8	-51.83	-13	-38.83
				3386.4	-56.73	-13	-43.73
			Horizontal	1693.2	-61.59	-13	-48.59
				2539.8	-55.66	-13	-42.66
				3386.4	-56.65	-13	-43.65

Test Plots:

Channel frequency: 826.4MHz_Vertical Polarization



Channel frequency: 826.4MHz_Horizontal Polarization



7.4 Conducted spurious emission Test on AC Power lines

Result ***Pass***

Test Specification	:	FCC Part 15 Section 15.207
Test Method	:	ANSI C 63.10-2013
Testing Location	:	Screened room
Measurement Bandwidth	:	9kHz
Frequency Range	:	150kHz – 30MHz
Supply Voltage	:	110VAC,60Hz
Test Method	:	Refer TEST METHODOLOGY

Limits of section 15.207

Frequency of emission (MHz)	Conducted limit (dBµV)	
	Quasi-peak (dBµV)	Average (dBµV)
0.15-0.5	66-56*	56-46*
0.5-5	56	46
5-30	60	50

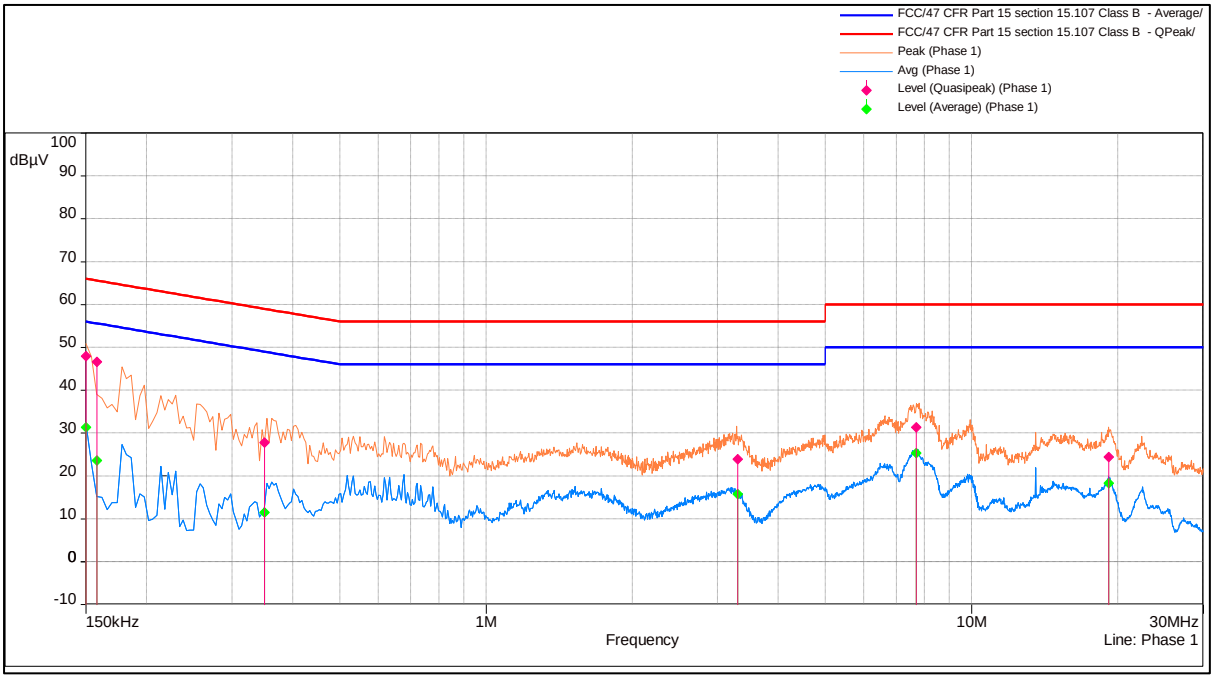
* Decreases with the logarithm of the frequency

Test Conditions:

Normal Temperature = +24°C Voltage (V norm) = 110VAC 60Hz through Adapter Relative Humidity = 64%

Test Results:

Power: 110V 60Hz_LINE



Line Graph

Quasi Peak:

Frequency (MHz)	Correction (dB)	Level (dBµV)	Limit (dBµV)	Margin (dB)	Comments
0.1518	19.89	47.93	66	-18.07	Pass
0.1564	19.89	46.59	65.57	-18.98	Pass
7.6907	20.06	31.33	60	-28.67	Pass
0.34805	19.86	27.83	58.96	-31.13	Pass
3.2941	20.03	23.92	56	-32.08	Pass
19.1598	20.28	24.45	60	-35.55	Pass

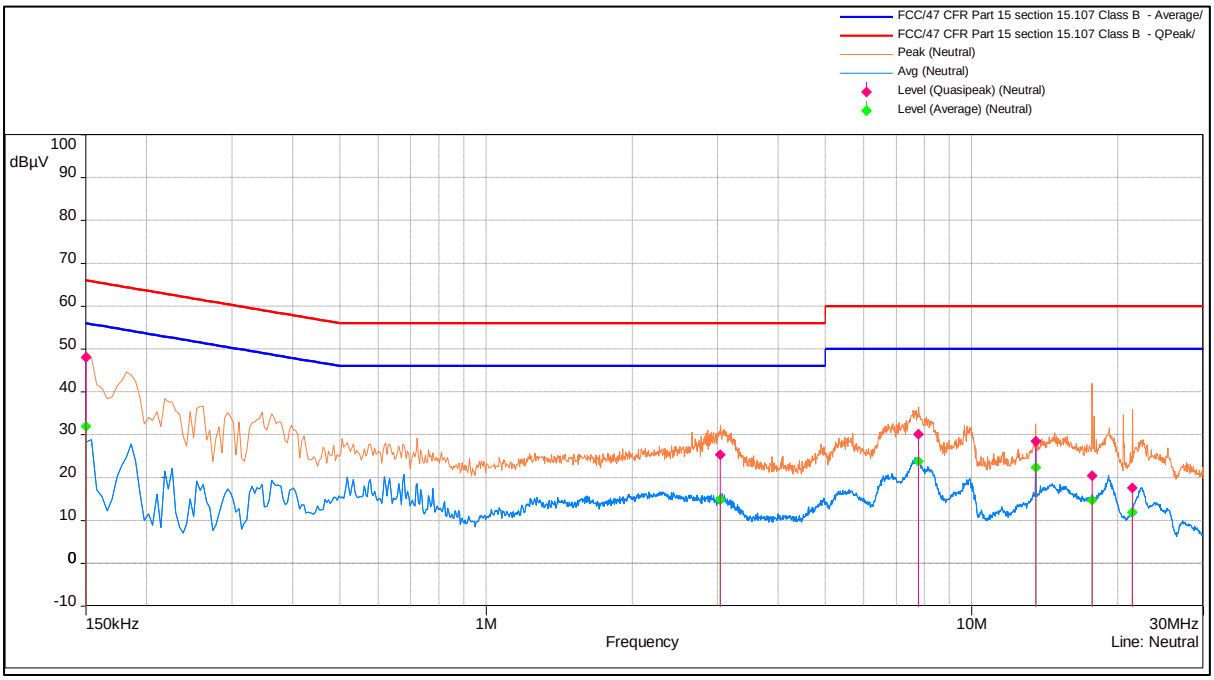
Line Table

Average:

Frequency (MHz)	Correction (dB)	Level (dBµV)	Limit (dBµV)	Margin (dB)	Comments
0.1518	19.89	31.4	56	-24.6	Pass
7.6907	20.06	25.31	50	-24.69	Pass
3.2941	20.03	15.78	46	-30.22	Pass
19.1598	20.28	18.37	50	-31.63	Pass
0.1564	19.89	23.61	55.57	-31.95	Pass
0.34805	19.86	11.47	48.96	-37.5	Pass

Line Table

Power: 110V 60Hz_NEUTRAL



Neutral Graph

Quasi Peak:

Frequency (MHz)	Correction (dB)	Level (dBµV)	Limit (dBµV)	Margin (dB)	Comments
0.1518	19.87	48.03	66	-17.97	Pass
7.76495	19.88	30.16	60	-29.84	Pass
3.03305	19.85	25.34	56	-30.66	Pass
13.56065	19.99	28.54	60	-31.46	Pass
17.70565	20.08	20.45	60	-39.55	Pass
21.42275	20.09	17.6	60	-42.4	Pass

Neutral Table

Average:

Frequency (MHz)	Correction (dB)	Level (dBµV)	Limit (dBµV)	Margin (dB)	Comments
0.1518	19.87	31.97	56	-24.03	Pass
7.76495	19.88	23.83	50	-26.17	Pass
13.56065	19.99	22.36	50	-27.64	Pass
3.03305	19.85	14.9	46	-31.1	Pass
17.70565	20.08	14.72	50	-35.28	Pass
21.42275	20.09	11.86	50	-38.14	Pass

Neutral Table

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