



FCC Radio Test Report

FCC ID: RI7ATD551

This report concerns: Original Grant

Project No. : 2404C168
Equipment : LTE Cat-M1 Tracker
Brand Name : 1. Telit Cinterion
2. DeWALT
Test Model : ATD551
Series Model : N/A
Applicant : Telit Communications S.p.A.
Address : Via Stazione di Prosecco 5/b, 34010 Sgonico, Trieste, Italy
Manufacturer : Telit Communications S.p.A.
Address : Via Stazione di Prosecco 5/b, 34010 Sgonico, Trieste, Italy
Factory : Fushan Technology (Vietnam)Limited Liability Company
Address : No. 8, Road 6, VSIP Bac Ninh, Phu Chan, Tu Son, Bac Ninh, Vietnam
Date of Receipt : May 07, 2024
Date of Test : May 08, 2024 ~ Sep. 09, 2024
Issued Date : Oct. 31, 2024
Report Version : R02
Test Sample : Engineering Sample No.: DG20240507140, DG20240507139
Standard(s) : 47 CFR FCC Part 27 Subpart L, 47 CFR FCC Part 27 Subpart N,
47 CFR FCC Part 27 Subpart H, 47 CFR FCC Part 27 Subpart F,
47 CFR FCC Part 2

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

Prepared by : Edward Li
Edward Li
Approved by : Trey Chen
Trey Chen

Room 108-116, 309-310, Building 2, No.1, Yile Road, Songshan Lake Zone,
Dongguan City, Guangdong, People's Republic of China.

Tel: +86-769-8318-3000 Web: www.newbtl.com Service mail: btl_qa@newbtl.com

Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** assumes no responsibility for the data provided by the customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by **BTL**.

The report must not be used by the client to claim product certification, approval, or endorsement by A2LA or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the ISO/IEC 17025: 2017 requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

Table of Contents	Page
REPORT ISSUED HISTORY	4
1 . APPLICABLE STANDARDS	5
2 . SUMMARY OF TEST RESULTS	5
2.1 TEST FACILITY	7
2.2 MEASUREMENT UNCERTAINTY	7
2.3 TEST ENVIRONMENT CONDITIONS	8
3 . GENERAL INFORMATION	9
3.1 GENERAL DESCRIPTION OF EUT	9
3.2 DESCRIPTION OF TEST MODES	13
3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	15
3.4 DESCRIPTION OF SUPPORT UNITS	15
4 . TEST RESULT	16
4.1 OUTPUT POWER MEASUREMENT	16
4.1.1 LIMIT	16
4.1.2 TEST PROCEDURE	16
4.1.3 TEST SETUP LAYOUT	17
4.1.4 TEST DEVIATION	17
4.1.5 TEST RESULTS	17
4.2 RADIATED SPURIOUS EMISSIONS MEASUREMENT	18
4.2.1 LIMIT	18
4.2.2 TEST PROCEDURES	18
4.2.3 TEST SETUP LAYOUT	18
4.2.4 TEST RESULTS (9KHZ TO 30MHZ)	19
4.2.5 TEST RESULTS (30MHZ TO 1000MHZ)	19
4.2.6 TEST RESULTS (ABOVE 1000MHZ)	19
5. LIST OF MEASUREMENT EQUIPMENTS	20
6. EUT TEST PHOTO	22
APPENDIX A - OUTPUT POWER	25
APPENDIX B - RADIATED SPURIOUS EMISSIONS (9KHZ TO 30MHZ)	36
APPENDIX C - RADIATED SPURIOUS EMISSIONS (30MHZ TO 1GHZ)	38
APPENDIX D - RADIATED SPURIOUS EMISSIONS (ABOVE 1GHZ)	52

REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-3-2404C168	R00	Original Report.	Sep. 26, 2024	Invalid
BTL-FCCP-3-2404C168	R01	Added the RF Module FCC ID in section 2.	Oct. 18, 2024	Invalid
BTL-FCCP-3-2404C168	R02	Updated the Laboratory address.	Oct. 31, 2024	Valid

1. APPLICABLE STANDARDS

The following reference test guidance is not within the scope of accreditation of A2LA:
 ANSI C63.26-2015
 FCC KDB 971168 D01 Power Meas License Digital Systems v03r01

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part 27 Subpart L, N, H, F & Part 2			
Standard(s) Section	Test Item	Judgment	Remark
2.1046	Output Power	PASS	Note(1)
27.50(d)(4) 27.50(c)(10) 27.50(b)(10)	Equivalent Isotropic Radiated Power & Equivalent Radiated Power	PASS	Note(1)
2.1049	Occupied Bandwidth	PASS	Note(1)
2.1051 27.53(h) 27.53(g) 27.53(c)(2)(f)	Conducted Spurious Emissions	PASS	Note(1)
2.1053 27.53(h) 27.53(g) 27.53(c)(2)(f)	Radiated Spurious Emissions	PASS	-----
2.1051 27.53(h) 27.53(g) 27.53(c)(2)(f)	Band Edge Measurements	PASS	Note(1)
27.50(d)(5)	Peak To Average Ratio	PASS	Note(1)
2.1055 27.54	Frequency Stability	PASS	Note(1)

Note:

1. The RF module of this LTE Cat-M1 Tracker has been tested and certified. Please refer to the module report as listed in the below table for the test results of the RF module.

RF Module	Module Function	Report Number	Standard	
Model: ME310G1-WW FCC ID: RI7ME310G1WW	GSM	60356613 003	47 CFR FCC Part 22	RSS-132 Issue 3
			47 CFR FCC Part 24	RSS-133 Issue 6
			47 CFR FCC Part 2	RSS-Gen Issue 5
	LTE	60356613 002	47 CFR FCC Part 22	RSS-132 Issue 3
			47 CFR FCC Part 24	RSS-133 Issue 6
			47 CFR FCC Part 27	RSS-130 Issue 2
47 CFR FCC Part 90			RSS-139 Issue 3	
47 CFR FCC Part 2			RSS-Gen Issue 5	
		60356613 001	47 CFR FCC Part 22	RSS-132 Issue 3
			47 CFR FCC Part 24	RSS-133 Issue 6
			47 CFR FCC Part 27	RSS-130 Issue 2
			47 CFR FCC Part 90	RSS-139 Issue 3
			47 CFR FCC Part 2	RSS-Gen Issue 5

- 1) The band 4 and band 66 antenna gain of LTE Cat-M1 Tracker was greater than that of module, so output power and EIRP were tested and recorded. The band 12, band 13, band 71 and band 85 antenna gain of LTE Cat-M1 Tracker was smaller than that of antenna gain of module, so output power and ERP refer to module test report. Thus, only the radiated spurious emissions were evaluated and recorded in this report. For the test results of all other test items please refer to above module test report.

2. Table for Filed Antenna:

Brand	P/N	Antenna Type	Connector	Gain (dBi)	Note
	1004795/1004796	PCB	N/A	3.1	LTE Band 4
				1.6	LTE Band 12
				1.6	LTE Band 13
				3.1	LTE Band 66
				1.6	LTE Band 71
				1.6	LTE Band 85

- 1) The antenna gain is provided by the manufacturer.

2.1 TEST FACILITY

The test facilities used to collect the test data of output power and EIRP in this report is at the location of Room 108-116, 309-310, Building 2, No.1, Yile Road, Songshan Lake Zone, Dongguan City, Guangdong, People's Republic of China.

The test facilities used to collect the test data of radiated spurious emissions in this report is at the location of 1-2/F, 4/F, Building A, 1-2/F, Building B, 3/F, Building C, No.3, Jinshagang 1st Road, Dalang Town, Dongguan City, Guangdong People's Republic of China.

BTL's Registration Number for FCC: 747969

BTL's Designation Number for FCC: CN1377

2.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor ($k=2$))

The BTL measurement uncertainty as below table:

A. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	U ,(dB)
DG-CB01	CISPR	9kHz ~ 30MHz	2.36

Test Site	Method	Measurement Frequency Range	Ant. H / V	U ,(dB)
DG-CB03 (3m)	CISPR	30MHz ~ 200MHz	V	4.40
		30MHz ~ 200MHz	H	3.62
		200MHz ~ 1,000MHz	V	4.58
		200MHz ~ 1,000MHz	H	3.98

Test Site	Method	Measurement Frequency Range	U ,(dB)
DG-CB03 (3m)	CISPR	1GHz ~ 6GHz	4.08
		6GHz ~ 18GHz	4.62

B. Other Measurement:

Parameter	Uncertainty
Maximum Output Power	± 0.87 dB
Temperature	± 0.48 °C
Humidity	± 1.37 %

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

2.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By	Test Date
Output Power & EIRP	24.3°C	45%	DC 3.7V	Mark Wu	May 08, 2024- Jun. 13, 2024
Radiated Spurious Emissions (9 kHz to 30 MHz)	21°C	50%	AC 120V/60Hz	Hayden Chen	Jun. 29, 2024
Radiated Spurious Emissions (30 MHz to 1000 MHz)	24°C	56%	AC 120V/60Hz	Jensen Zhou	Jun. 22, 2024
Radiated Spurious Emissions (Above 1000 MHz)	24°C	56%	AC 120V/60Hz	Jensen Zhou	Jun. 22, 2024

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	LTE Cat-M1 Tracker			
Brand Name	1. Telit Cinterion 2. DeWALT			
Test Model	ATD551			
PMN	LTE Cat-M1 Tracker(C1) will use Brand:DeWALT LTE Cat-M1 Tracker(S0) will use Brand:Telit Cinterion LTE Cat-M1 Tracker(S1) will use Brand:Telit Cinterion LTE Cat-M1 Tracker(C2)			
Model Difference(s)	Logo, some mechanical parts color, label, accesorries are different.			
Hardware Version	V0.6			
Software Version	V03.05			
Power Source	1# DC Voltage supplied from AC adapter. Model: ADS-10LA-06 05010EPCU 2# Supplied from battery.			
Power Rating	1# I/P: 100-240V ~ 50/60Hz MAX 0.3A O/P: 5V  2.0A 2# DC 3.7V / 3000mAh			
IMEI No.	350903782706437, 350903782706486			
Modulation Type	LTE(eMTC)		UL: QPSK,16QAM	
	LTE(NB-IoT)		UL: BPSK, QPSK	
Max. EIRP	LTE (eMTC)	Channel Bandwidth (MHz)	QPSK (dBm)	16QAM (dBm)
	Band 4	1.4	22.57	21.74
		3	22.58	22.32
		5	24.78	24.79
		10	24.89	24.91
		15	24.77	24.79
		20	24.77	24.73
	Band 66	1.4	22.96	22.23
		3	23.04	21.98
		5	24.84	24.61
		10	24.72	24.83
		15	24.90	24.80
		20	24.87	24.86
	LTE (NB-IoT)	Sub-carrier Spacing (kHz)	BPSK (dBm)	QPSK (dBm)
Band 4	3.75	25.44	25.41	
	15	25.93	26.01	
Band 66	3.75	25.46	25.65	
	15	25.96	26.07	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. Channel List:

LTE Band 4(eMTC)					
Test Frequency ID	Bandwidth (MHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	1.4	19957	1710.7	1957	2110.7
	3	19965	1711.5	1965	2111.5
	5	19975	1712.5	1975	2112.5
	10	20000	1715	2000	2115
	15	20025	1717.5	2025	2117.5
	20	20050	1720	2050	2120
Mid Range	1.4/3/5/10/15/20	20175	1732.5	2175	2132.5
High Range	1.4	20393	1754.3	2393	2154.3
	3	20385	1753.5	2385	2153.5
	5	20375	1752.5	2375	2152.5
	10	20350	1750	2350	2150
	15	20325	1747.5	2325	2147.5
	20	20300	1740	2300	2145

LTE Band 4(NB-IoT)					
Test Frequency ID	Bandwidth (kHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	200	19951	1710.1	1951	2110.1
Mid Range	200	20175	1732.5	2175	2132.5
High Range	200	20399	1754.9	2399	2154.9

LTE Band 12(eMTC)					
Test Frequency ID	Bandwidth (MHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	1.4	23017	699.7	5017	729.7
	3	23025	700.5	5025	730.5
	5	23035	701.5	5035	731.5
	10	23060	704.0	5060	734
Mid Range	1.4/3/5/10	23095	707.5	5095	737.5
High Range	1.4	23173	715.3	5173	745.3
	3	23165	714.5	5165	744.5
	5	23155	713.5	5155	743.5
	10	23130	711.0	5130	741

LTE Band 12(NB-IoT)					
Test Frequency ID	Bandwidth (kHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	200	23011	699.1	5011	729.1
Mid Range	200	23095	707.5	5095	737.5
High Range	200	23179	715.9	5179	745.9

LTE Band 13(eMTC)					
Test Frequency ID	Bandwidth (MHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	5	23205	779.5	5205	748.5
Mid Range	5/10	23230	782.0	5230	751
High Range	5	23255	784.5	5255	753.5

LTE Band 13(NB-IoT)					
Test Frequency ID	Bandwidth (kHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	200	23181	777.1	5181	746.1
Mid Range	200	23230	782.0	5230	751.0
High Range	200	23279	786.9	5279	755.9

LTE Band 66(eMTC)					
Test Frequency ID	Bandwidth (MHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	1.4	131979	1710.7	66443	2110.7
	3	131987	1711.5	66451	2111.5
	5	131997	1712.5	66461	2112.5
	10	132022	1715	66486	2115
	15	132047	1717.5	66511	2117.5
	20	132072	1720	66536	2120
Mid Range	1.4/3/5/10/15/20	132322	1745	66786	2145
High Range	1.4	132665	1779.3	67129	2179.3
	3	132657	1778.5	67121	2178.5
	5	132647	1777.5	67111	2177.5
	10	132622	1775	67086	2175
	15	132597	1772.5	67061	2172.5
	20	132572	1770	67036	2170

LTE Band 66(NB-LoT)					
Test Frequency ID	Bandwidth (kHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	200	131973	1710.1	66437	2110.10
Mid Range	200	132322	1745.0	66786	2145.0
High Range	200	132671	1779.9	67135	2179.9

LTE Band 71(NB-LoT)					
Test Frequency ID	Bandwidth (kHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	200	133123	663.1	68587	617.1
Mid Range	200	133297	680.5	68761	634.5
High Range	200	133471	697.9	68935	651.9

LTE Band 85(eMTC)					
Test Frequency ID	Bandwidth (MHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	5	134027	700.5	70391	730.5
	10	134052	703	70416	733
Mid Range	5	134092	707	70456	737
	10	134092	707	70456	737
High Range	5	134157	713.5	70521	743.5
	10	134132	711	70496	741

LTE Band 85(NB-LoT)					
Test Frequency ID	Bandwidth (kHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	200	134003	698.1	70367	728.1
Mid Range	200	134092	707.0	70456	737.0
High Range	200	134181	715.9	70545	745.9

3.2 DESCRIPTION OF TEST MODES

Following mode(s) is (were) found to be the worst case(s) and selected for the final test.

LTE BAND 4 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Radiated Spurious Emissions	19957 to 20393	20175	1.4MHz	QPSK	1RB
	19975 to 20375	20175	5MHz	QPSK	1RB
	20050 to 20300	20175	20MHz	QPSK	1RB
Output Power & EIRP	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM	1RB/5RB
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM	1RB/5RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	1RB/6RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	1RB/6RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	1RB/6RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	1RB/6RB
Test Item	Available Channel	Tested Channel	Sub-carrier Spacing(kHz)	Modulation	Mode
Radiated Spurious Emissions	19951 to 20399	20175	3.75	QPSK	1RB
	19951 to 20399	20175	15	QPSK	1RB
Output Power & EIRP	19951 to 20399	20175	3.75	BPSK, QPSK	1RB
	19951 to 20399	20175	15	BPSK, QPSK	1RB/3RB

LTE BAND 12 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Radiated Emission	23017 to 23173	23095	1.4MHz	QPSK	1RB
	23035 to 23155	23095	5MHz	QPSK	1RB
	23060 to 23130	23095	10MHz	QPSK	1RB
Test Item	Available Channel	Tested Channel	Sub-carrier Spacing(kHz)	Modulation	Mode
Radiated Emission	23011 to 23179	23095	3.75	QPSK	1RB
	23011 to 23179	23095	15	QPSK	1RB

LTE BAND 13 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Radiated Emission	23205 to 23255	23230	5MHz	QPSK	1RB
	23230	23230	10MHz	QPSK	1RB
Test Item	Available Channel	Tested Channel	Sub-carrier Spacing(kHz)	Modulation	Mode
Radiated Emission	23181 to 23279	23230	3.75	QPSK	1RB
	23181 to 23279	23230	15	QPSK	1RB

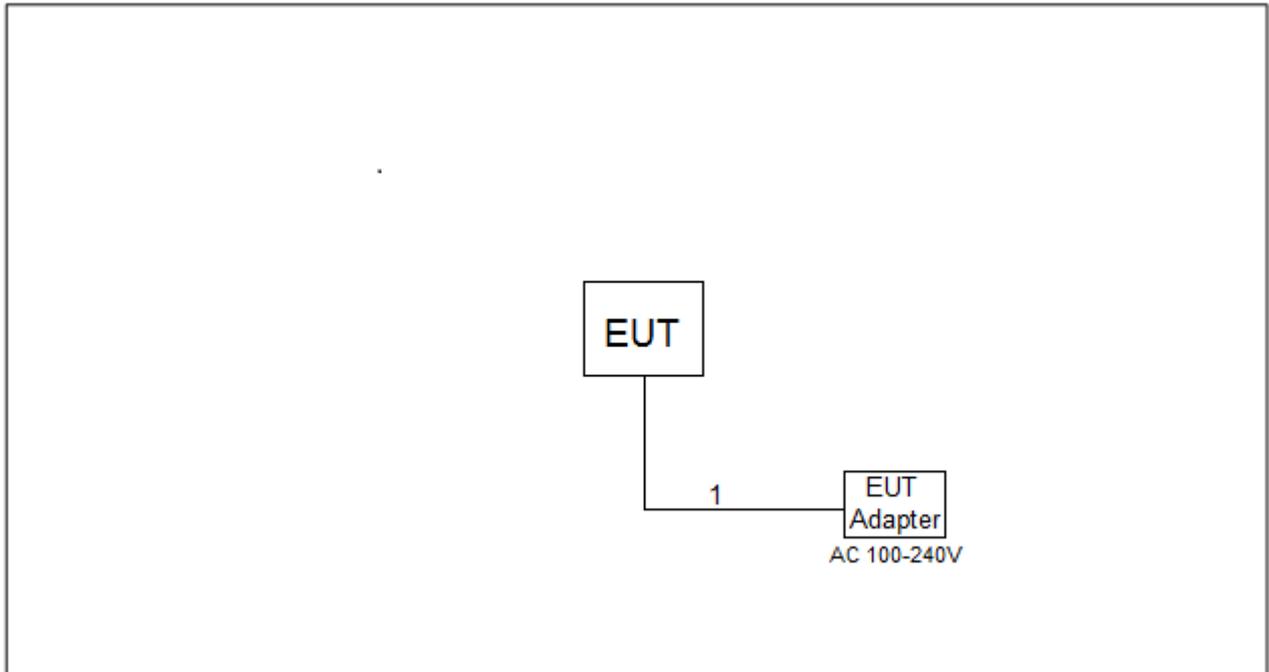
LTE BAND 66 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Radiated Spurious Emissions	131979 to 132665	132322	1.4MHz	QPSK	1RB
	131997 to 132647	132322	5MHz	QPSK	1RB
	132072 to 132572	132322	20MHz	QPSK	1RB
Output Power & EIRP	131979 to 132665	131979, 132322, 132665	1.4MHz	QPSK, 16QAM	1RB/5RB
	131987 to 132657	131987, 132322, 132657	3MHz	QPSK, 16QAM	1RB/5RB
	131997 to 132647	131997, 132322, 132647	5MHz	QPSK, 16QAM	1RB/6RB
	132022 to 132622	132022, 132322, 132622	10MHz	QPSK, 16QAM	1RB/6RB
	132047 to 132597	132047, 132322, 132597	15MHz	QPSK, 16QAM	1RB/6RB
	132072 to 132572	132072, 132322, 132572	20MHz	QPSK, 16QAM	1RB/6RB
Test Item	Available Channel	Tested Channel	Sub-carrier Spacing(kHz)	Modulation	Mode
Radiated Spurious Emissions	131973 to 132671	132322	3.75	QPSK	1RB
	131973 to 132671	132322	15	QPSK	1RB
Output Power & EIRP	131973 to 132671	132322	3.75	BPSK, QPSK	1RB
	131973 to 132671	132322	15	BPSK, QPSK	1RB/3RB

LTE BAND 71 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Radiated Spurious Emissions	133123 to 133471	133297	3.75	QPSK	1RB
	133123 to 133471	133297	15	QPSK	1RB

LTE BAND 85 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Radiated Spurious Emissions	134027 to 134157	134092	5MHz	QPSK	1RB
	134052 to 134132	134092	10MHz	QPSK	1RB
Test Item	Available Channel	Tested Channel	Sub-carrier Spacing(kHz)	Modulation	Mode
Radiated Spurious Emissions	134003 to 134181	134092	3.75	QPSK	1RB
	134003 to 134181	134092	15	QPSK	1RB

Note: For radiated spurious emissions, all modes had been pre-tested and in this report only recorded the worst case.

3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.4 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.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.
-	-	-	-	-

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	USB Cable	YES	NO	1m

4. TEST RESULT

4.1 OUTPUT POWER MEASUREMENT

4.1.1 LIMIT

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

Mobile stations of BRS/EBS are operating in the 2496–2690 MHz band limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

Control stations and mobile stations transmitting in the 746–757 MHz, 776–788 MHz, and 805–806 MHz bands and fixed stations transmitting in the 787–788 MHz and 805–806 MHz bands are limited to 30 watts ERP.

Portable stations (hand-held devices) transmitting in the 746–757 MHz, 776–788 MHz, and 805–806 MHz bands are limited to 3 watts ERP.

Control and mobile stations in the 698–746 MHz band are limited to 30 watts ERP.

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.

For mobile and portable stations transmitting in the 2305–2315 MHz band or the 2350–2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305–2315 MHz and 2350–2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305–2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

4.1.2 TEST PROCEDURE

The testing follows FCC KDB 971168 v03r01 Section 5 or ANSI C63.26-2015 Section 5.2.

EIRP:

$EIRP = \text{Output Power} + \text{Antenan gain}$

ERP:

$ERP = EIRP - 2.15$

Output Power:

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

4.1.3 TEST SETUP LAYOUT

Output Power Measurement

**4.1.4 TEST DEVIATION**

No deviation.

4.1.5 TEST RESULTS

Please refer to the APPENDIX A.

4.2 RADIATED SPURIOUS EMISSIONS MEASUREMENT

4.2.1 LIMIT

For band 4,12,13 ,66, 71, 85, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm.

E (dB μ V/m) = EIRP (dBm) - 20 log D + 104.8; where D is the measurement distance in meters. The emission limit equal to 82.26dB μ V/m or 70.26dB μ V/m or 55.26dB μ V/m.

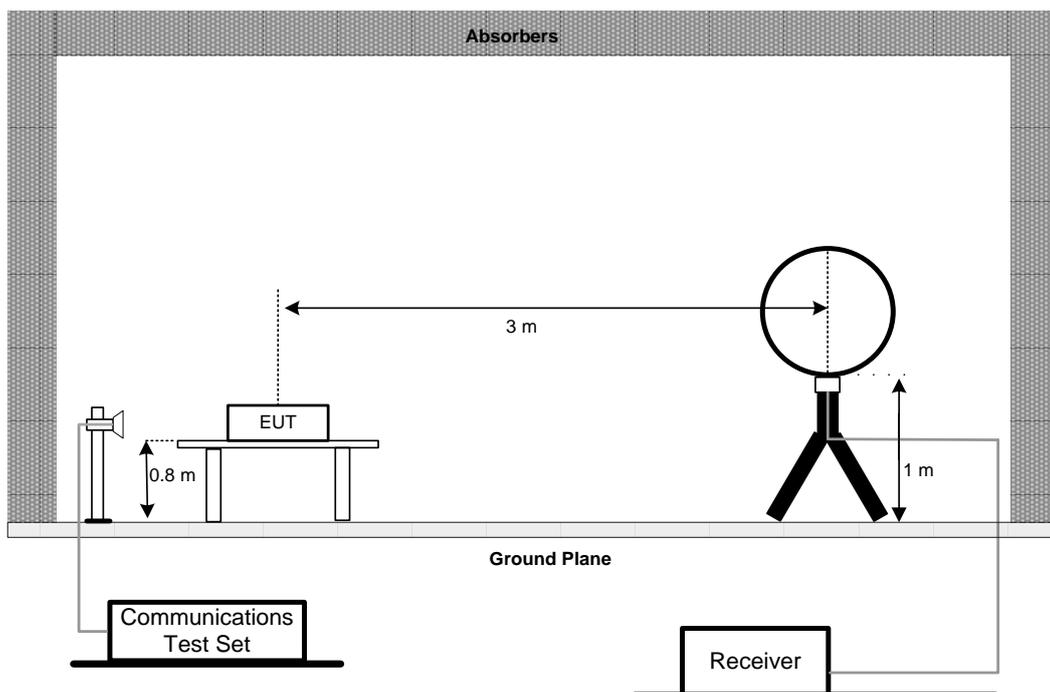
4.2.2 TEST PROCEDURES

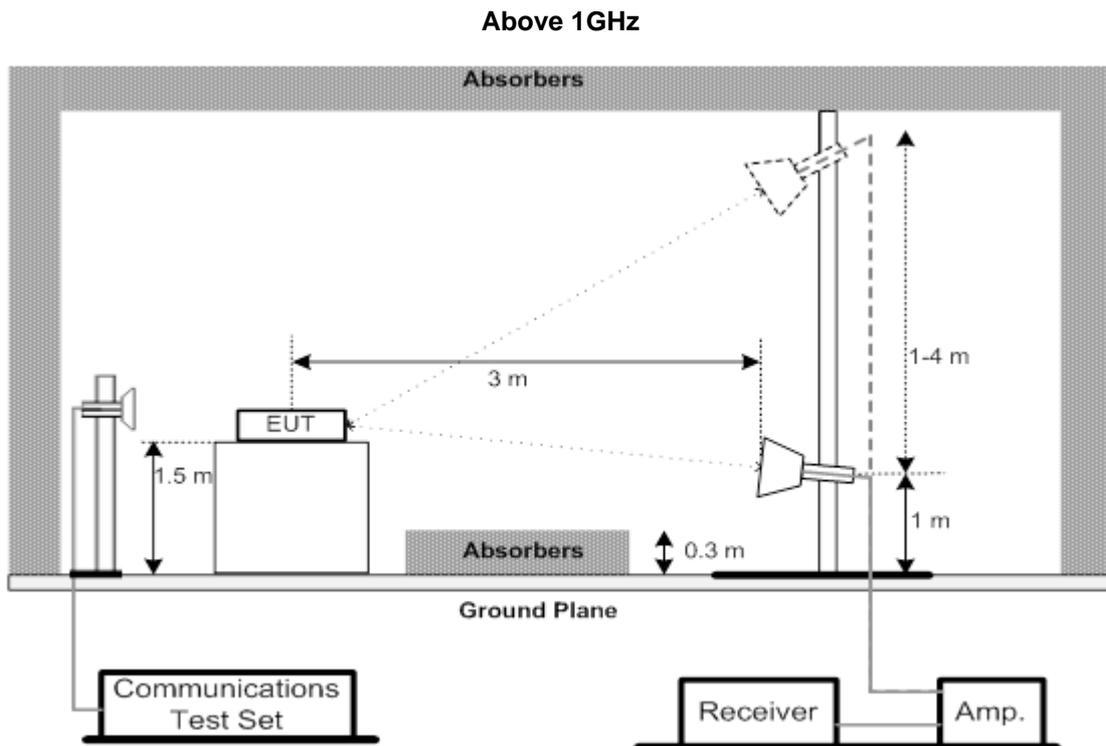
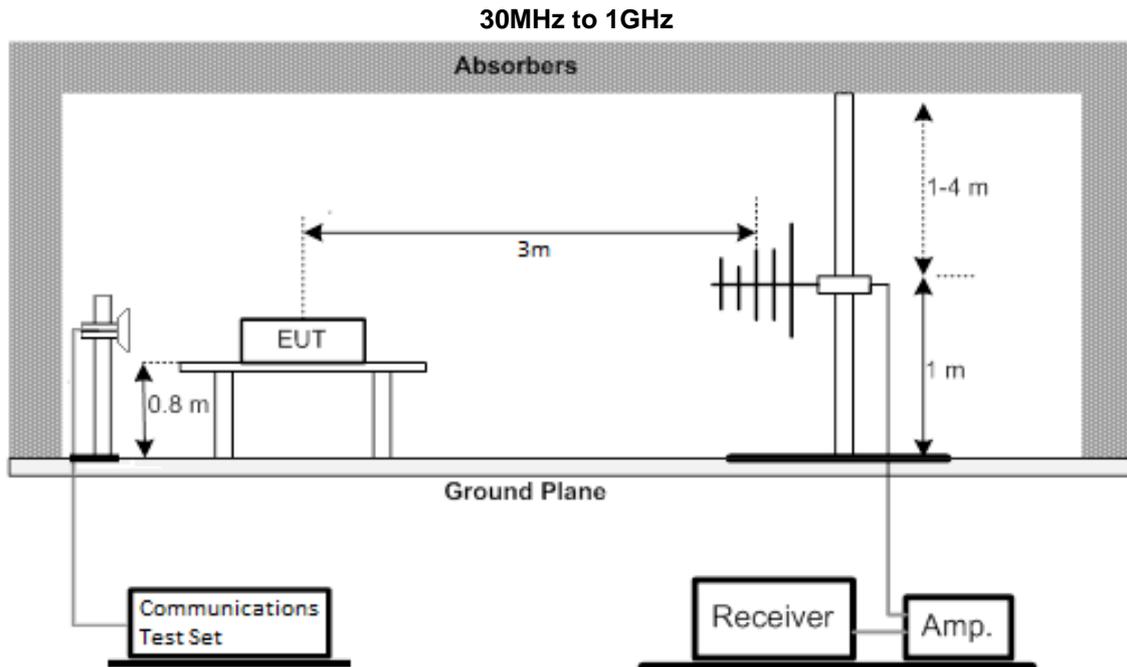
The testing follows FCC KDB 971168 v03r01 Section 6.2 or ANSI C63.26-2015 Section 5.5.

1. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
3. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
4. Start the test, rotate the table 360° to find the worst Angle, maintain the worst Angle, raise the antenna to 1-4m to find the worst height, maintain the worst height, then rotate the table to determine the final worst Angle, grab the spectrum diagram.
5. EUT shall be placed in accordance with X,Y,Z as required by Figure 5 in ANSI C63.26. Repeat Step 5 above to find the worst placement. Test all bands according to the worst placement.
6. Then EIRP is then converted to field strength as follows in Equation
7. E (dB μ V/m) = EIRP (dBm) - 20log(D) + 104.8; where D is the measurement distance (in the far field region) in m. The emission limit equal to 82.26dB μ V/m or 70.26dB μ V/m or 55.26dB μ V/m.

4.2.3 TEST SETUP LAYOUT

Below 30MHz





4.2.4 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the APPENDIX B.

4.2.5 TEST RESULTS (30MHZ TO 1000MHZ)

Please refer to the APPENDIX C.

4.2.6 TEST RESULTS (ABOVE 1000MHZ)

Please refer to the APPENDIX D.

5. LIST OF MEASUREMENT EQUIPMENTS

Conducted Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Wideband Radio Communication Tester	R&S	CWM 500	165578	May 11, 2024 Jan. 19, 2025
2	Radio Communication Analyzer	Anristu	MT8821C	6261915479	Jul. 07, 2024 Jun. 28, 2025
3	8960 SERIES 10 Wireless Communications Test Set	Agilent Technologies	E5515E	MY54491001	Jul. 07, 2024 Jun. 28, 2025

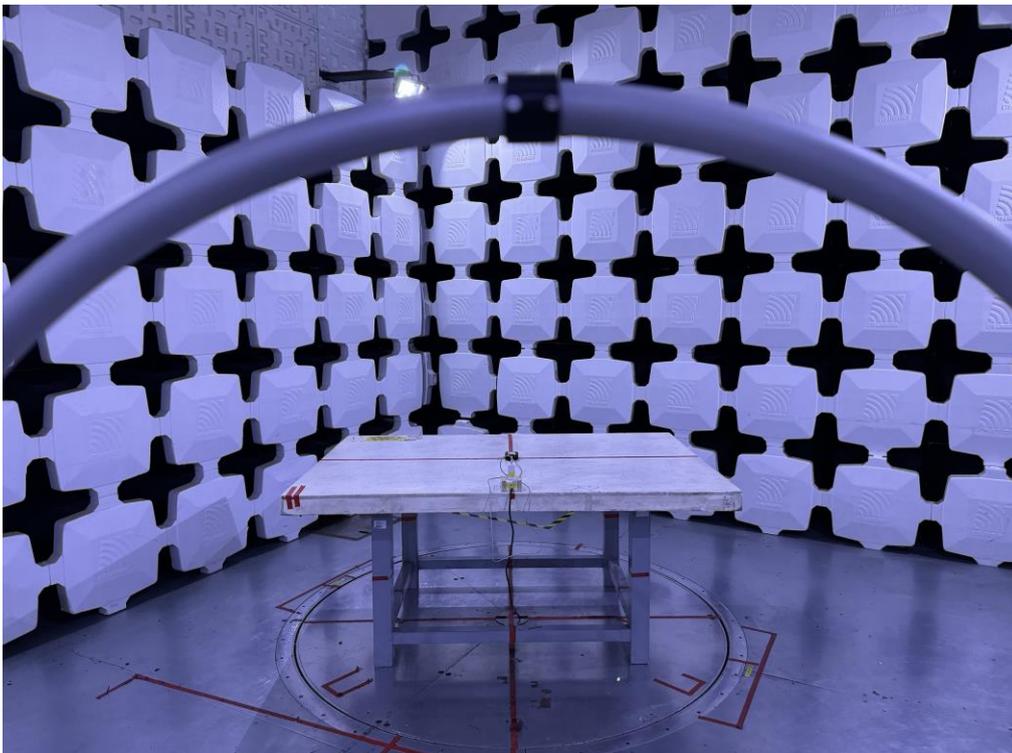
Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Active Loop Antenna	Schwarzbeck	FMZB 1513-60B	1513-60 B-034	Mar. 30, 2025
2	MXE EMI Receiver	Keysight	N9038A	MY56400091	Dec. 22, 2024
3	Cable	N/A	RW2350-3.8A-N MBM-1.5M	N/A	Jun. 09, 2025
4	Cable	N/A	RG 213/U	N/A	Jun. 09, 2025
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	966 Chamber room	ETS	9*6*6	N/A	Jul. 11, 2024 May 16, 2025
7	WPT coil	N/A	100KHz-300KHz	N/A	N/A

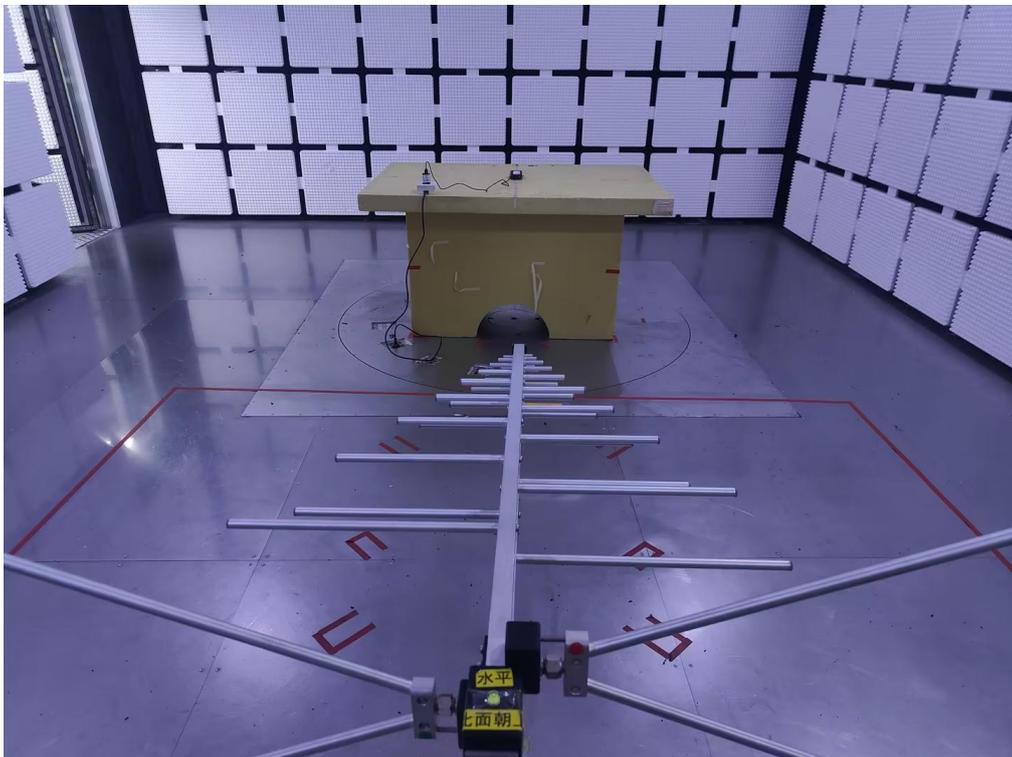
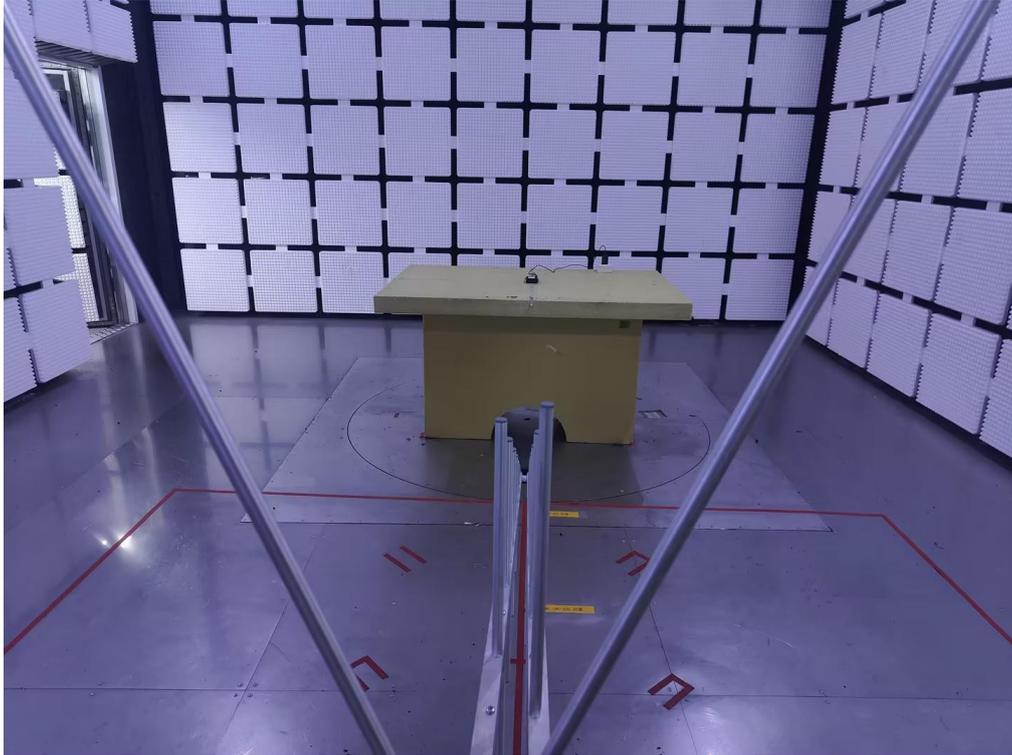
Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	1462	Dec. 13, 2024
2	Attenuator	EMC INSTRUMENT	EMCI-N-6-06	AT-06009	Dec. 13, 2024
3	Preamplifier	EMC INSTRUMENT	EMC001330	980863	Apr. 07, 2025
4	Cable	RegalWay	LMR400-NMNM -12.5m	N/A	Jul. 04, 2024 Jun. 06, 2025
5	Cable	RegalWay	LMR400-NMNM -3m	N/A	Jul. 04, 2024 Jun. 06, 2025
6	Cable	RegalWay	LMR400-NMNM -0.5m	N/A	Jul. 04, 2024 Jun. 06, 2025
7	Receiver	Agilent	N9038A	MY52130039	Dec. 22, 2024
8	Positioning Controller	MF	MF-7802	N/A	N/A
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
10	966 Chamber room	CM	9*6*6	N/A	May 16, 2025
11	Wireless Communication Test SET	Agilent	E5515C	MY48364183	Dec. 22, 2024
12	wideband radio communication tester	R&S	CMW500	152372	Dec. 22, 2024

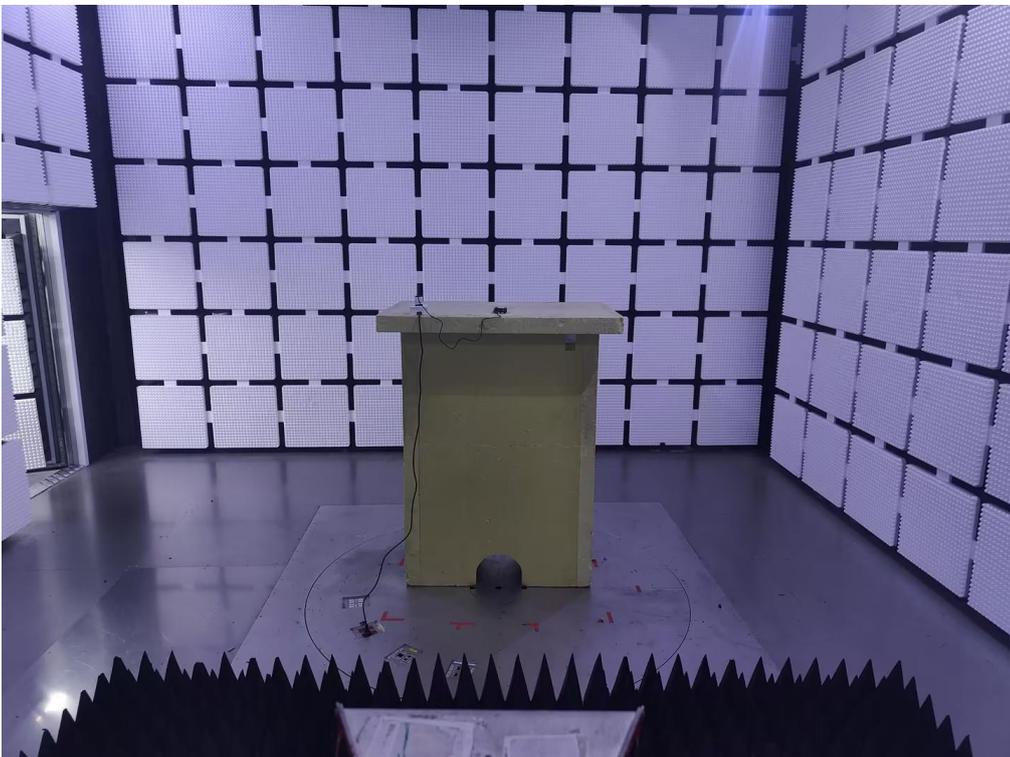
Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	MXA Signal Analyzer	KEYSIGHT	N9020B	MY63380204	Nov. 17, 2024
2	Receiver	Agilent	N9038A	MY52130039	Dec. 22, 2024
3	Preamplifier	EMC INSTRUMENT	EMC118A45SE	980888	Nov. 17, 2024
4	EXA Spectrum Analyzer	Keysight	N9010A	MY55150209	May 31, 2025
5	Double Ridged Guide Antenna	ETS	3115	75846	Mar. 20, 2025
6	Cable	RegalWay	RWLP50-4.0A-SMS M-12.5M	N/A	Feb. 19, 2025
7	Cable	RegalWay	RWLP50-4.0A-NM RASM-2.5M	N/A	Aug. 08, 2024 Jul. 03, 2025
8	Cable	RegalWay	RWLP50-4.0A-NM RASMRA-0.8M	N/A	Aug. 08, 2024 Jul. 03, 2025
9	966 Chamber room	CM	9*6*6	N/A	May 19, 2025
10	Filter	COM-MW	ZHPF-M1-13G-W1 02	N/A	May 31, 2025
11	Positioning Controller	MF	MF-7802	N/A	N/A
12	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
13	Wireless Communication Test SET	Agilent	E5515C	MY48364183	Dec. 22, 2024
14	wideband radio communication tester	R&S	CMW500	152372	Dec. 22, 2024

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

6. EUT TEST PHOTO**Radiated Emissions Test Photos****9 kHz to 30 MHz**

Radiated Emissions Test Photos**30 MHz to 1 GHz**

Radiated Emissions Test Photos**Above 1 GHz**

APPENDIX A - OUTPUT POWER

Output Power (dBm)
For eMTC:

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH19957	CH20175	CH20393
				1710.7MHz	1732.5MHz	1754.3MHz
4 / 1.4MHz	QPSK	1	0	19.47	19.07	19.11
		1	5	19.29	19.06	18.92
		5	1	17.15	16.96	17.00
	16QAM	1	0	18.64	18.48	18.09
		1	5	18.52	18.25	17.71
		5	1	17.11	17.13	17.19

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				19965	CH20175	CH20385
				1711.5MHz	1732.5MHz	1753.5MHz
4 / 3MHz	QPSK	1	0	19.48	19.40	19.11
		1	5	19.16	19.03	18.94
		5	1	17.39	17.02	17.05
	16QAM	1	0	19.22	18.95	18.10
		1	5	18.87	19.12	18.00
		5	1	17.95	17.09	16.99

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH19975	CH20175	CH20375
				1712.5MHz	1732.5MHz	1752.5MHz
4 / 5MHz	QPSK	1	0	21.46	21.39	21.56
		1	5	21.68	21.59	21.34
		6	0	21.66	21.52	21.37
	16QAM	1	0	21.52	21.48	21.55
		1	5	21.51	21.69	21.39
		6	0	21.50	21.49	21.58

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH20000	CH20175	CH20350
				1715MHz	1732.5MHz	1750MHz
4 / 10MHz	QPSK	1	0	21.79	21.63	21.40
		1	5	21.71	21.60	21.56
		6	0	21.51	21.55	21.58
	16QAM	1	0	21.54	21.62	21.52
		1	5	21.81	21.74	21.44
		6	0	21.67	21.45	21.56

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH20025	CH20175	CH20325
				1717.5MHz	1732.5MHz	1747.5MHz
4 / 15MHz	QPSK	1	0	21.55	21.57	21.56
		1	5	21.67	21.55	21.61
		6	0	21.54	21.52	21.49
	16QAM	1	0	21.58	21.55	21.41
		1	5	21.69	21.53	21.49
		6	0	21.64	21.63	21.62

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH20050	CH20175	CH20300
				1720MHz	1732.5MHz	1745MHz
4 / 20MHz	QPSK	1	0	21.56	21.49	21.58
		1	5	21.62	21.48	21.67
		6	0	21.63	21.56	21.56
	16QAM	1	0	21.51	21.59	21.52
		1	5	21.52	21.50	21.53
		6	0	21.61	21.49	21.63

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH131979	CH132322	CH132665
				1710.7MHz	1745MHz	1779.3MHz
66 / 1.4MHz	QPSK	1	0	19.33	19.41	19.86
		1	5	19.12	19.25	19.68
		5	1	17.12	17.17	17.83
	16QAM	1	0	18.22	18.38	19.13
		1	5	18.00	18.16	18.91
		5	1	17.23	16.77	17.96

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH131987	CH132322	CH132657
				1711.5MHz	1745MHz	1778.5MHz
66 / 3MHz	QPSK	1	0	19.30	19.23	19.72
		1	5	19.00	19.08	19.94
		5	1	16.98	17.17	18.89
	16QAM	1	0	18.23	18.22	18.88
		1	5	18.03	17.91	18.58
		5	1	17.10	17.10	17.77

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH131997	CH132322	CH132647
				1712.5MHz	1745MHz	1777.5MHz
66 / 5MHz	QPSK	1	0	21.43	21.51	21.44
		1	5	21.24	21.70	21.74
		6	0	21.18	21.68	21.45
	16QAM	1	0	21.24	21.45	21.46
		1	5	21.26	21.48	21.47
		6	0	21.21	21.44	21.51

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH132022	CH132322	CH132622
				1715MHz	1745MHz	1775MHz
66 / 10MHz	QPSK	1	0	21.29	21.52	21.48
		1	5	21.47	21.62	21.47
		6	0	21.45	21.55	21.47
	16QAM	1	0	21.45	21.66	21.71
		1	5	21.51	21.59	21.73
		6	0	21.49	21.58	21.51

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH132047	CH132322	CH132597
				1717.5MHz	1745MHz	1772.5MHz
66 / 15MHz	QPSK	1	0	21.23	21.66	21.58
		1	5	21.50	21.62	21.59
		6	0	21.25	21.80	21.61
	16QAM	1	0	21.44	21.61	21.57
		1	5	21.38	21.70	21.56
		6	0	21.42	21.62	21.62

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH132072	CH132322	CH132572
				1720MHz	1745MHz	1770MHz
66 / 20MHz	QPSK	1	0	21.34	21.49	21.77
		1	5	21.42	21.70	21.76
		6	0	21.39	21.61	21.59
	16QAM	1	0	21.27	21.58	21.64
		1	5	21.41	21.68	21.72
		6	0	21.44	21.76	21.61

For NB-IoT:

LTE Band / Sub-carrier Spacing(kHz)	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH19951	CH20175	CH20399
				1710.1MHz	1732.5MHz	1754.9MHz
4 / 3.75kHz	BPSK	1	0	5.68	22.34	5.05
		1	47	5.55	22.15	4.91
	QPSK	1	0	5.66	22.31	5.02
		1	47	5.56	22.19	4.95

LTE Band / Sub-carrier Spacing(kHz)	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH19951	CH20175	CH20399
				1710.1MHz	1732.5MHz	1754.9MHz
4 / 15kHz	BPSK	1	0	5.52	22.75	4.87
		1	11	5.42	22.83	4.83
	QPSK	1	0	5.58	22.82	4.91
		1	11	5.51	22.74	4.93
		3	3	5.69	22.91	5.06

LTE Band / Sub-carrier Spacing(kHz)	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH131973	CH132322	CH132671
				1710.1MHz	1745MHz	1779.9MHz
66 / 3.75kHz	BPSK	1	0	5.79	22.36	5.12
		1	47	5.71	22.31	4.96
	QPSK	1	0	5.85	22.27	5.05
		1	47	5.69	22.55	4.89

LTE Band / Sub-carrier Spacing(kHz)	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH131973	CH132322	CH132671
				1710.1MHz	1745MHz	1779.9MHz
66 / 15kHz	BPSK	1	0	5.83	22.86	4.92
		1	11	5.75	22.74	4.81
	QPSK	1	0	5.85	22.92	4.84
		1	11	5.71	22.80	4.77
		3	3	5.91	22.97	5.01

EIRP (dBm)
For eMTC:

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH19957	CH20175	CH20393
				1710.7MHz	1732.5MHz	1754.3MHz
4 / 1.4MHz	QPSK	1	0	22.57	22.17	22.21
		1	5	22.39	22.16	22.02
		5	1	20.25	20.06	20.10
	16QAM	1	0	21.74	21.58	21.19
		1	5	21.62	21.35	20.81
		5	1	20.21	20.23	20.29

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				19965	CH20175	CH20385
				1711.5MHz	1732.5MHz	1753.5MHz
4 / 3MHz	QPSK	1	0	22.58	22.50	22.21
		1	5	22.26	22.13	22.04
		5	1	20.49	20.12	20.15
	16QAM	1	0	22.32	22.05	21.20
		1	5	21.97	22.22	21.10
		5	1	21.05	20.19	20.09

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH19975	CH20175	CH20375
				1712.5MHz	1732.5MHz	1752.5MHz
4 / 5MHz	QPSK	1	0	24.56	24.49	24.66
		1	5	24.78	24.69	24.44
		6	0	24.76	24.62	24.47
	16QAM	1	0	24.62	24.58	24.65
		1	5	24.61	24.79	24.49
		6	0	24.60	24.59	24.68

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH20000	CH20175	CH20350
				1715MHz	1732.5MHz	1750MHz
4 / 10MHz	QPSK	1	0	24.89	24.73	24.50
		1	5	24.81	24.70	24.66
		6	0	24.61	24.65	24.68
	16QAM	1	0	24.64	24.72	24.62
		1	5	24.91	24.84	24.54
		6	0	24.77	24.55	24.66

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH20025	CH20175	CH20325
				1717.5MHz	1732.5MHz	1747.5MHz
4 / 15MHz	QPSK	1	0	24.65	24.67	24.66
		1	5	24.77	24.65	24.71
		6	0	24.64	24.62	24.59
	16QAM	1	0	24.68	24.65	24.51
		1	5	24.79	24.63	24.59
		6	0	24.74	24.73	24.72

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH20050	CH20175	CH20300
				1720MHz	1732.5MHz	1745MHz
4 / 20MHz	QPSK	1	0	24.66	24.59	24.68
		1	5	24.72	24.58	24.77
		6	0	24.73	24.66	24.66
	16QAM	1	0	24.61	24.69	24.62
		1	5	24.62	24.60	24.63
		6	0	24.71	24.59	24.73

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH131979	CH132322	CH132665
				1710.7MHz	1745MHz	1779.3MHz
66 / 1.4MHz	QPSK	1	0	22.43	22.51	22.96
		1	5	22.22	22.35	22.78
		5	1	20.22	20.27	20.93
	16QAM	1	0	21.32	21.48	22.23
		1	5	21.10	21.26	22.01
		5	1	20.33	19.87	21.06

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH131987	CH132322	CH132657
				1711.5MHz	1745MHz	1778.5MHz
66 / 3MHz	QPSK	1	0	22.40	22.33	22.82
		1	5	22.10	22.18	23.04
		5	1	20.08	20.27	21.99
	16QAM	1	0	21.33	21.32	21.98
		1	5	21.13	21.01	21.68
		5	1	20.20	20.20	20.87

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH131997	CH132322	CH132647
				1712.5MHz	1745MHz	1777.5MHz
66 / 5MHz	QPSK	1	0	24.53	24.61	24.54
		1	5	24.34	24.80	24.84
		6	0	24.28	24.78	24.55
	16QAM	1	0	24.34	24.55	24.56
		1	5	24.36	24.58	24.57
		6	0	24.31	24.54	24.61

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH132022	CH132322	CH132622
				1715MHz	1745MHz	1775MHz
66 / 10MHz	QPSK	1	0	24.39	24.62	24.58
		1	5	24.57	24.72	24.57
		6	0	24.55	24.65	24.57
	16QAM	1	0	24.55	24.76	24.81
		1	5	24.61	24.69	24.83
		6	0	24.59	24.68	24.61

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH132047	CH132322	CH132597
				1717.5MHz	1745MHz	1772.5MHz
66 / 15MHz	QPSK	1	0	24.33	24.76	24.68
		1	5	24.60	24.72	24.69
		6	0	24.35	24.90	24.71
	16QAM	1	0	24.54	24.71	24.67
		1	5	24.48	24.80	24.66
		6	0	24.52	24.72	24.72

LTE Band / BW	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH132072	CH132322	CH132572
				1720MHz	1745MHz	1770MHz
66 / 20MHz	QPSK	1	0	24.44	24.59	24.87
		1	5	24.52	24.80	24.86
		6	0	24.49	24.71	24.69
	16QAM	1	0	24.37	24.68	24.74
		1	5	24.51	24.78	24.82
		6	0	24.54	24.86	24.71

For NB-IoT:

LTE Band / Sub-carrier Spacing(kHz)	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH19951	CH20175	CH20399
				1710.1MHz	1732.5MHz	1754.9MHz
4 / 3.75kHz	BPSK	1	0	8.78	25.44	8.15
		1	47	8.65	25.25	8.01
	QPSK	1	0	8.76	25.41	8.12
		1	47	8.66	25.29	8.05

LTE Band / Sub-carrier Spacing(kHz)	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH19951	CH20175	CH20399
				1710.1MHz	1732.5MHz	1754.9MHz
4 / 15kHz	BPSK	1	0	8.62	25.85	7.97
		1	11	8.52	25.93	7.93
	QPSK	1	0	8.68	25.92	8.01
		1	11	8.61	25.84	8.03
		3	3	8.79	26.01	8.16

LTE Band / Sub-carrier Spacing(kHz)	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH131973	CH132322	CH132671
				1710.1MHz	1745MHz	1779.9MHz
66 / 3.75kHz	BPSK	1	0	8.89	25.46	8.22
		1	47	8.81	25.41	8.06
	QPSK	1	0	8.95	25.37	8.15
		1	47	8.79	25.65	7.99

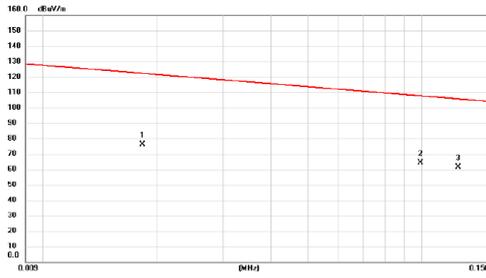
LTE Band / Sub-carrier Spacing(kHz)	Modulation	RB Size	RB Offset	Low CH	Mid CH	High CH
				CH131973	CH132322	CH132671
				1710.1MHz	1745MHz	1779.9MHz
66 / 15kHz	BPSK	1	0	8.93	25.96	8.02
		1	11	8.85	25.84	7.91
	QPSK	1	0	8.95	26.02	7.94
		1	11	8.81	25.90	7.87
		3	3	9.01	26.07	8.11

APPENDIX B - RADIATED SPURIOUS EMISSIONS (9KHZ TO 30MHZ)

Test Mode : TX Mode

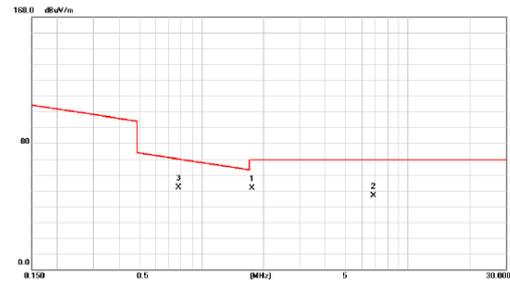
Test Mode : TX Mode

Ant 0°



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.018	55.39	20.75	76.14	122.36	-46.22	AVG	
2 *	0.099	42.91	21.33	64.24	107.68	-43.44	AVG	
3	0.125	40.15	21.29	61.44	105.70	-44.26	AVG	

Ant 0°

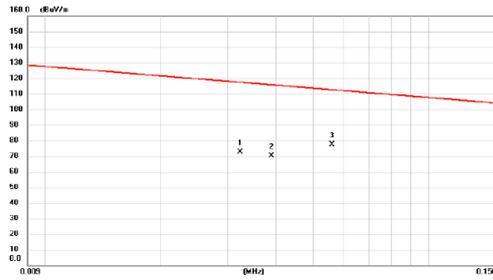


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	1.762	30.44	21.12	51.56	69.54	-17.98	QP	
2	6.806	25.60	21.19	46.79	69.54	-22.75	QP	
3 *	0.777	30.66	21.16	51.82	69.80	-17.98	QP	

Test Mode : TX Mode

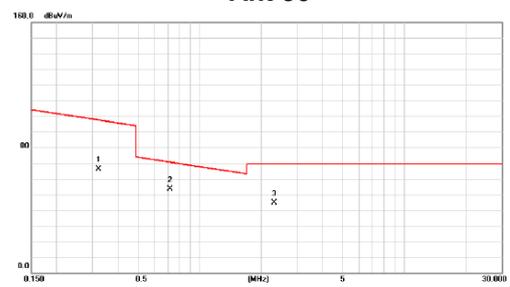
Test Mode : TX Mode

Ant 90°



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.032	51.36	21.11	72.47	117.42	-44.95	AVG	
2	0.039	49.16	21.14	70.30	115.78	-45.48	AVG	
3 *	0.056	56.26	21.22	77.48	112.63	-35.15	AVG	

Ant 90°



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.323	45.16	21.05	66.21	97.41	-31.20	QP	
2 *	0.717	32.22	21.14	53.36	70.49	-17.13	QP	
3	2.329	23.54	21.12	44.66	69.54	-24.88	QP	

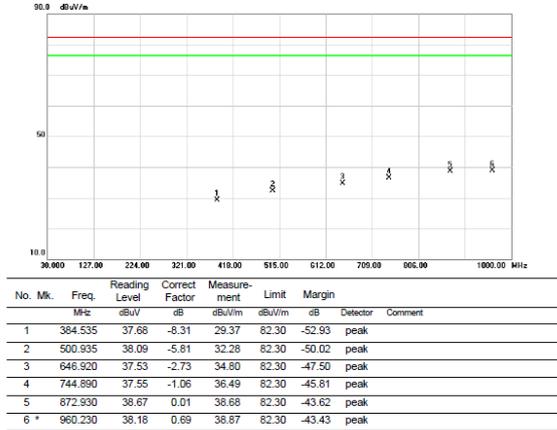
APPENDIX C - RADIATED SPURIOUS EMISSIONS (30MHZ TO 1GHZ)

For eMTC:

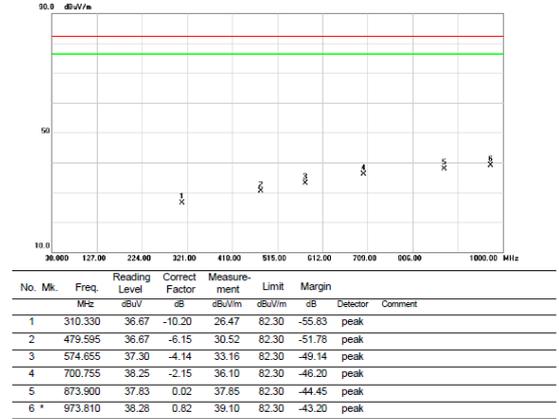
Test Mode : LTE Band 4_TX CH20175_1.4MHz

Test Mode : LTE Band 4_TX CH20175_1.4MHz

Vertical



Horizontal



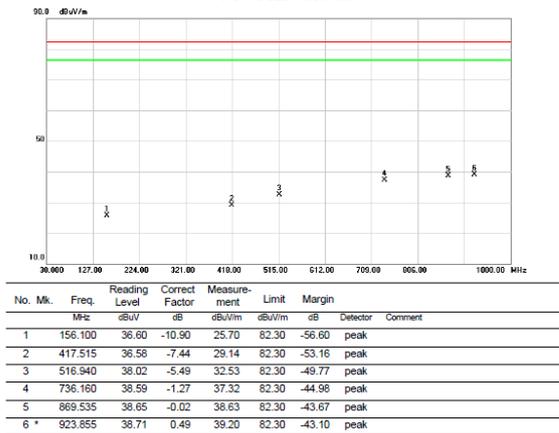
Test Mode : LTE Band 4_TX CH20175_5MHz

Test Mode : LTE Band 4_TX CH20175_5MHz

Vertical



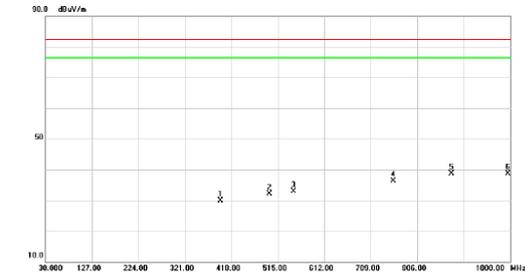
Horizontal



Test Mode : LTE Band 4_TX CH20175_20MHz

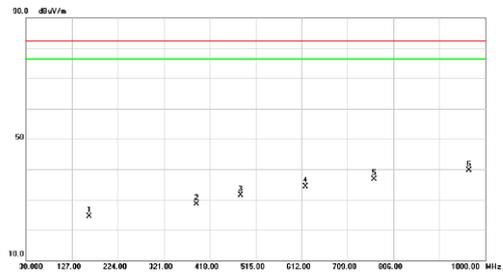
Test Mode : LTE Band 4_TX CH20175_20MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		395.690	37.88	-7.96	29.92	82.30	-52.38	peak	
2		497.540	37.91	-5.86	32.05	82.30	-50.25	peak	
3		547.495	37.79	-4.88	32.91	82.30	-49.39	peak	
4		755.560	37.32	-0.96	36.36	82.30	-45.94	peak	
5		877.295	38.58	0.07	38.65	82.30	-43.65	peak	
6 *		995.150	37.70	0.99	38.69	82.30	-43.61	peak	

Horizontal

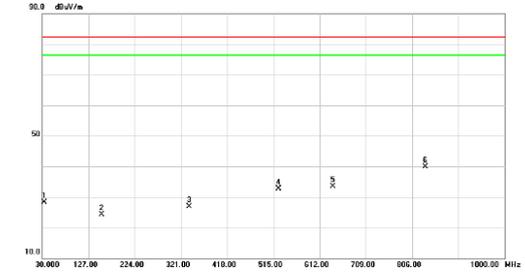


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		163.860	35.52	-10.92	24.60	82.30	-57.70	peak	
2		389.870	36.59	-8.08	28.51	82.30	-53.79	peak	
3		482.990	37.67	-6.09	31.58	82.30	-50.72	peak	
4		620.730	37.32	-3.12	34.20	82.30	-48.10	peak	
5		764.775	37.72	-1.01	36.71	82.30	-45.59	peak	
6 *		965.565	36.88	0.75	39.63	82.30	-42.67	peak	

Test Mode : LTE Band 12_TX CH23095_1.4MHz

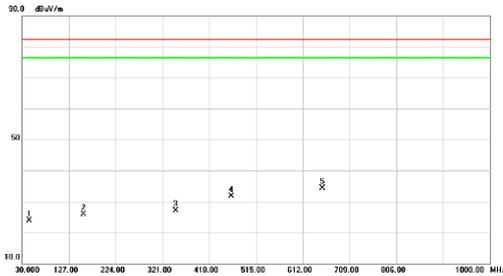
Test Mode : LTE Band 12_TX CH23095_1.4MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		34.365	40.72	-12.33	28.39	82.30	-53.91	peak	
2		154.645	35.26	-10.95	24.31	82.30	-57.99	peak	
3		337.975	36.32	-9.42	26.90	82.30	-55.40	peak	
4		526.155	36.00	-5.30	32.70	82.30	-49.60	peak	
5		639.160	36.28	-2.84	33.44	82.30	-48.86	peak	
6 *		833.645	40.54	-0.57	39.97	82.30	-42.33	peak	

Horizontal

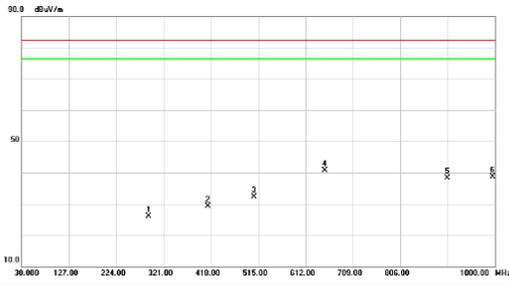


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		44.550	35.30	-11.39	23.91	82.30	-58.39	peak	
2		157.070	36.86	-10.67	25.99	82.30	-56.31	peak	
3		349.130	36.45	-9.31	27.14	82.30	-55.16	peak	
4		463.590	38.19	-6.39	31.80	82.30	-50.50	peak	
5 *		653.225	36.97	-2.64	34.33	82.30	-47.97	peak	

Test Mode : LTE Band 12_TX CH23095_5MHz

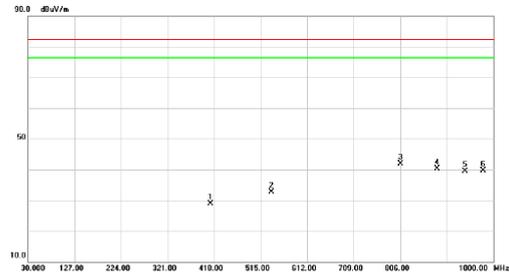
Test Mode : LTE Band 12_TX CH23095_5MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBµV	Correct Factor dB	Measurement dBµV/m	Limit dBµV/m	Margin dB	Detector	Comment
1	290.930	36.72	-10.61	26.11	82.30	-56.19	peak	
2	411.695	36.95	-7.59	29.36	82.30	-52.94	peak	
3	506.755	38.06	-5.69	32.37	82.30	-49.93	peak	
4 *	651.285	43.39	-2.67	40.72	82.30	-41.58	peak	
5	902.030	37.85	0.38	38.23	82.30	-44.07	peak	
6	965.635	37.72	0.99	38.71	82.30	-43.59	peak	

Horizontal

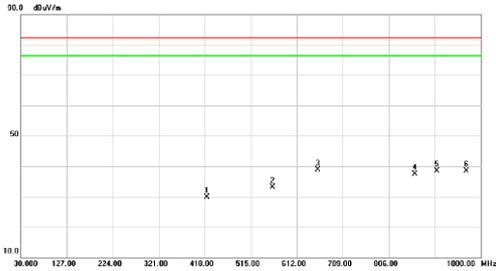


No. Mk.	Freq. MHz	Reading Level dBµV	Correct Factor dB	Measurement dBµV/m	Limit dBµV/m	Margin dB	Detector	Comment
1	410.240	36.50	-7.62	28.88	82.30	-53.42	peak	
2	537.310	37.81	-5.07	32.74	82.30	-49.56	peak	
3 *	806.485	42.93	-1.04	41.89	82.30	-40.41	peak	
4	883.115	40.12	0.15	40.27	82.30	-42.03	peak	
5	941.315	38.90	0.57	39.47	82.30	-42.83	peak	
6	979.145	38.81	0.86	39.67	82.30	-42.63	peak	

Test Mode : LTE Band 12_TX CH23095_10MHz

Test Mode : LTE Band 12_TX CH23095_10MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBµV	Correct Factor dB	Measurement dBµV/m	Limit dBµV/m	Margin dB	Detector	Comment
1	422.365	37.23	-7.31	29.92	82.30	-52.38	peak	
2	561.075	37.89	-4.51	33.38	82.30	-49.12	peak	
3 *	656.620	41.51	-2.62	38.89	82.30	-43.41	peak	
4	861.290	37.64	-0.14	37.50	82.30	-44.80	peak	
5	907.850	38.01	0.41	38.42	82.30	-43.88	peak	
6	968.960	37.77	0.77	38.54	82.30	-43.76	peak	

Horizontal

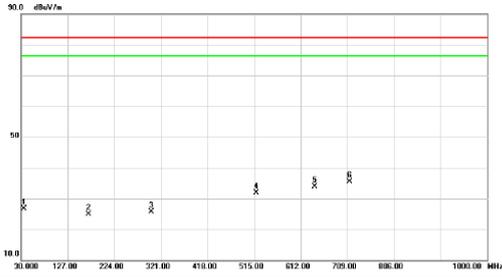


No. Mk.	Freq. MHz	Reading Level dBµV	Correct Factor dB	Measurement dBµV/m	Limit dBµV/m	Margin dB	Detector	Comment
1	43.580	36.08	-11.45	24.63	82.30	-57.67	peak	
2	169.680	36.04	-11.15	24.89	82.30	-57.41	peak	
3	364.165	36.32	-9.07	27.25	82.30	-55.05	peak	
4	433.035	41.86	-7.04	34.82	82.30	-47.48	peak	
5	606.665	36.15	-3.34	32.81	82.30	-49.49	peak	
6 *	921.430	40.61	0.48	41.09	82.30	-41.21	peak	

Test Mode : LTE Band 13_TX CH23230_5MHz

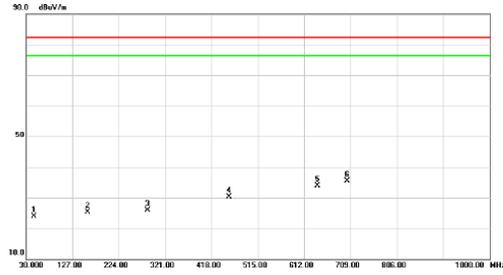
Test Mode : LTE Band 13_TX CH23230_5MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	36.305	38.94	-12.18	26.76	82.30	-55.54	peak	
2	169.080	38.03	-11.15	24.88	82.30	-57.42	peak	
3	301.115	36.18	-10.44	25.74	82.30	-56.56	peak	
4	519.365	37.39	-5.43	31.96	82.30	-50.34	peak	
5	640.615	36.73	-2.82	33.91	82.30	-48.39	peak	
6 *	712.880	37.35	-1.85	35.50	82.30	-46.80	peak	

Horizontal

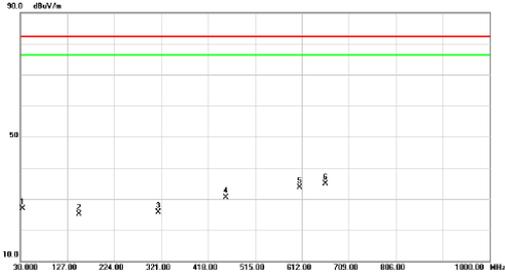


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	46.005	35.30	-11.33	23.97	82.30	-58.33	peak	
2	159.010	36.11	-10.80	25.31	82.30	-56.99	peak	
3	283.655	36.82	-10.80	25.82	82.30	-56.48	peak	
4	454.880	36.90	-6.52	30.38	82.30	-51.92	peak	
5	639.160	36.06	-2.84	33.82	82.30	-48.48	peak	
6 *	702.210	37.61	-2.12	35.49	82.30	-46.81	peak	

Test Mode : LTE Band 13_TX CH23230_10MHz

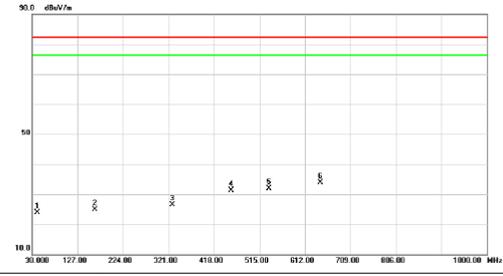
Test Mode : LTE Band 13_TX CH23230_10MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	34.850	39.29	-12.30	26.99	82.30	-55.31	peak	
2	150.280	36.26	-11.09	25.17	82.30	-57.13	peak	
3	315.180	35.77	-10.02	25.75	82.30	-56.55	peak	
4	454.880	37.07	-6.52	30.55	82.30	-51.75	peak	
5	607.150	37.02	-3.33	33.69	82.30	-48.61	peak	
6 *	660.500	37.51	-2.58	34.93	82.30	-47.37	peak	

Horizontal

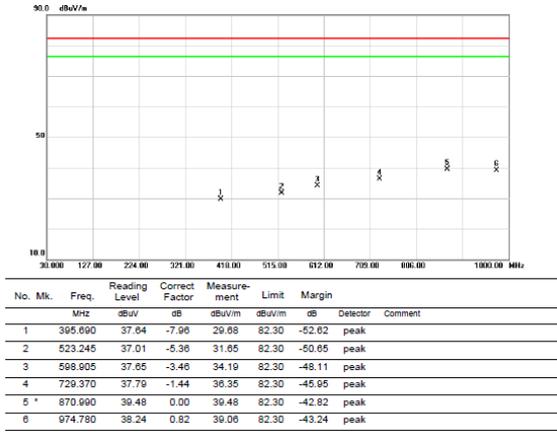


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	41.155	35.48	-11.65	23.83	82.30	-58.47	peak	
2	163.375	35.79	-10.61	24.88	82.30	-57.42	peak	
3	328.760	36.07	-9.57	26.50	82.30	-55.80	peak	
4	455.345	37.88	-6.52	31.36	82.30	-50.94	peak	
5	535.370	36.93	-5.12	31.81	82.30	-50.49	peak	
6 *	645.465	36.63	-2.75	33.88	82.30	-48.42	peak	

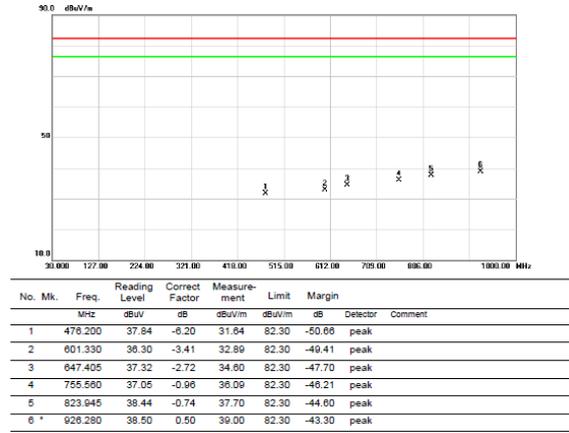
Test Mode : LTE Band 66_TX CH132322_1.4MHz

Test Mode : LTE Band 66_TX CH132322_1.4MHz

Vertical



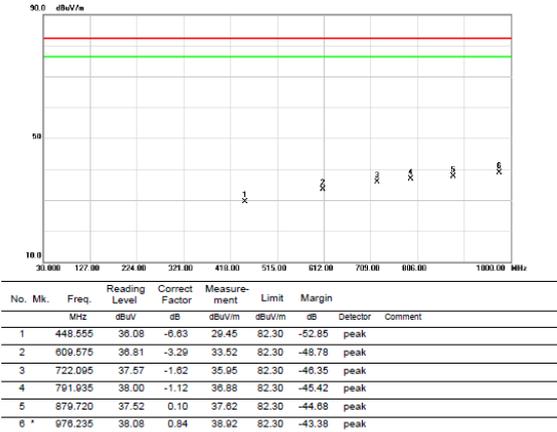
Horizontal



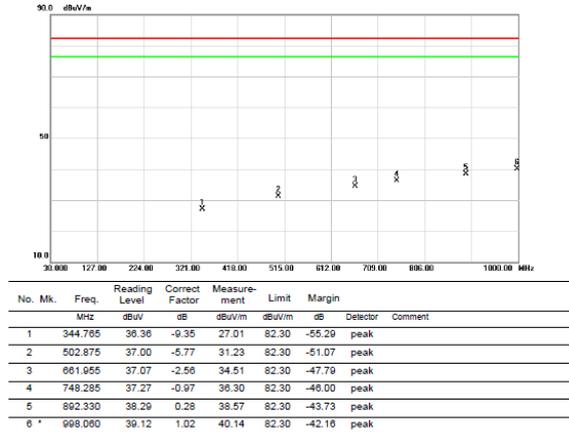
Test Mode : LTE Band 66_TX CH132322_5MHz

Test Mode : LTE Band 66_TX CH132322_5MHz

Vertical



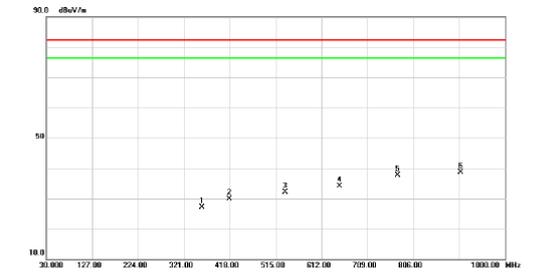
Horizontal



Test Mode : LTE Band 66_TX CH132322_20MHz

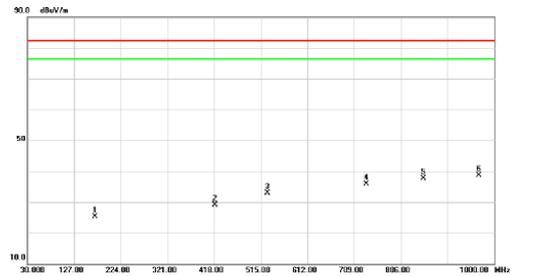
Test Mode : LTE Band 66_TX CH132322_20MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBμV	Correct Factor dB	Measurement dBμV/m	Limit dBμV/m	Margin dB	Detector	Comment
1	359.315	36.27	-9.24	27.03	82.30	-55.27	peak	
2	417.030	37.44	-7.45	29.99	82.30	-52.31	peak	
3	534.400	37.18	-5.14	32.04	82.30	-50.26	peak	
4	660.315	36.87	-2.68	34.19	82.30	-48.11	peak	
5	772.535	38.75	-1.03	37.72	82.30	-44.58	peak	
6 *	905.910	38.27	0.40	38.87	82.30	-43.63	peak	

Horizontal

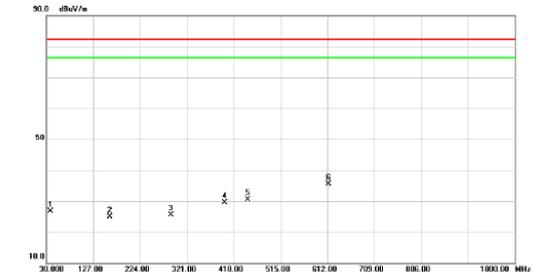


No. Mk.	Freq. MHz	Reading Level dBμV	Correct Factor dB	Measurement dBμV/m	Limit dBμV/m	Margin dB	Detector	Comment
1	170.165	36.52	-11.19	25.33	82.30	-56.97	peak	
2	419.940	36.51	-7.37	29.14	82.30	-53.16	peak	
3	529.085	38.14	-5.24	32.90	82.30	-49.40	peak	
4	733.735	37.31	-1.33	35.98	82.30	-46.32	peak	
5	853.530	37.87	-0.24	37.63	82.30	-44.67	peak	
6 *	968.475	37.96	0.76	38.72	82.30	-43.58	peak	

Test Mode : LTE Band 85_TX CH134092_5MHz

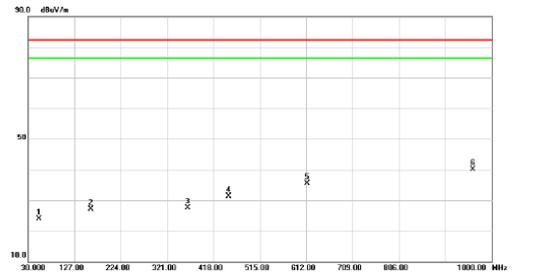
Test Mode : LTE Band 85_TX CH134092_5MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBμV	Correct Factor dB	Measurement dBμV/m	Limit dBμV/m	Margin dB	Detector	Comment
1	38.245	38.68	-11.95	26.71	82.30	-55.59	peak	
2	160.950	35.69	-10.81	24.88	82.30	-57.42	peak	
3	288.505	36.22	-10.65	25.57	82.30	-56.73	peak	
4	399.085	37.34	-7.90	29.44	82.30	-52.86	peak	
5	447.100	37.23	-6.88	30.55	82.30	-51.75	peak	
6 *	614.425	38.75	-3.21	35.54	82.30	-46.76	peak	

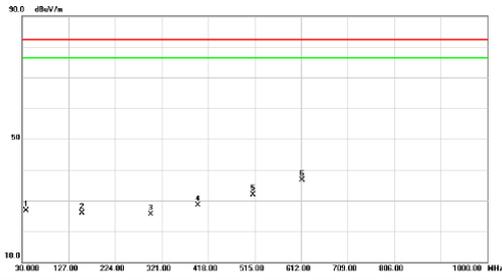
Horizontal



No. Mk.	Freq. MHz	Reading Level dBμV	Correct Factor dB	Measurement dBμV/m	Limit dBμV/m	Margin dB	Detector	Comment
1	52.795	35.34	-11.37	23.97	82.30	-58.33	peak	
2	160.950	37.83	-10.81	27.02	82.30	-55.28	peak	
3	364.650	36.54	-9.04	27.50	82.30	-54.80	peak	
4	449.040	37.98	-6.62	31.36	82.30	-50.94	peak	
5	614.425	38.66	-3.21	35.45	82.30	-46.85	peak	
6 *	960.230	39.47	0.69	40.16	82.30	-42.14	peak	

Test Mode : LTE Band 85_TX CH134092_10MHz

Test Mode : LTE Band 85_TX CH134092_10MHz

Vertical


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		38.730	38.85	-11.90	26.75	82.30	-55.55	peak	
2		154.160	38.93	-10.97	25.98	82.30	-56.34	peak	
3		298.690	35.98	-10.49	25.47	82.30	-56.83	peak	
4		397.145	36.41	-7.94	28.47	82.30	-53.83	peak	
5		511.805	37.57	-5.80	31.97	82.30	-50.33	peak	
6	*	614.425	39.89	-3.21	36.78	82.30	-45.52	peak	

Horizontal

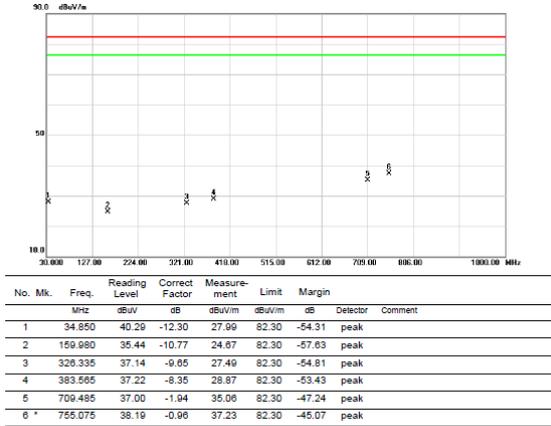

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		54.250	35.98	-11.44	24.54	82.30	-57.76	peak	
2		154.645	36.92	-10.95	25.97	82.30	-56.33	peak	
3		288.020	35.69	-10.67	25.02	82.30	-57.28	peak	
4		431.580	37.59	-7.07	30.52	82.30	-51.78	peak	
5		523.730	37.85	-5.35	32.50	82.30	-49.80	peak	
6	*	591.630	36.69	-3.66	33.03	82.30	-49.27	peak	

For NB-IoT:

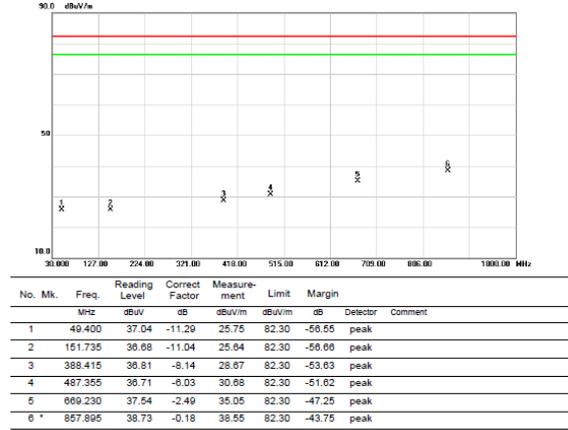
Test Mode : LTE Band 4_TX CH20175_3.75kHz

Test Mode : LTE Band 4_TX CH20175_3.75kHz

Vertical



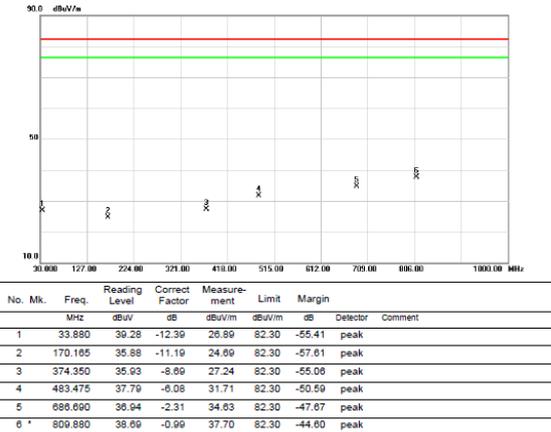
Horizontal



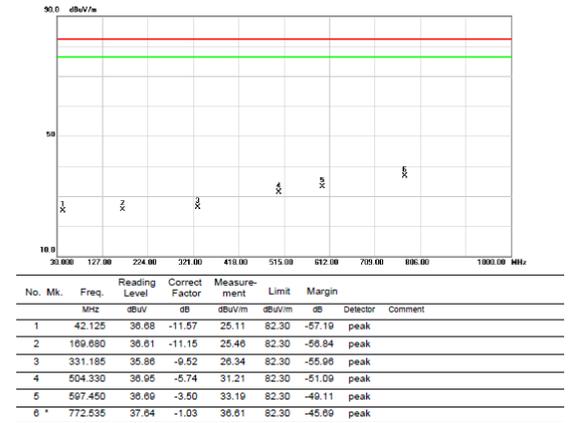
Test Mode : LTE Band 4_TX CH20175_15kHz

Test Mode : LTE Band 4_TX CH20175_15kHz

Vertical



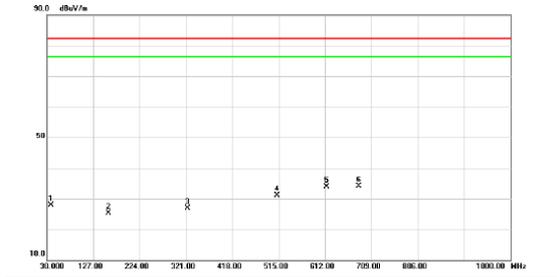
Horizontal



Test Mode : LTE Band 12_TX CH23095_3.75kHz

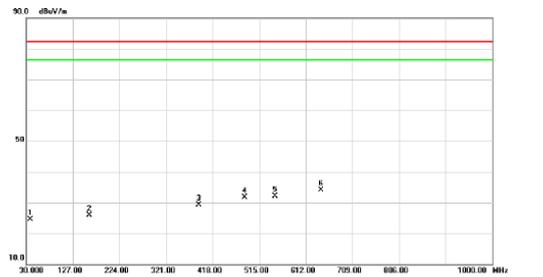
Test Mode : LTE Band 12_TX CH23095_3.75kHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	38.245	39.93	-11.95	27.98	82.30	-54.32	peak	
2	159.525	36.12	-10.82	25.30	82.30	-57.00	peak	
3	324.395	36.52	-9.71	26.81	82.30	-55.49	peak	
4	511.120	36.72	-5.61	31.11	82.30	-51.19	peak	
5	614.910	37.21	-3.21	34.00	82.30	-48.30	peak	
6 *	681.840	36.49	-2.35	34.14	82.30	-48.16	peak	

Horizontal

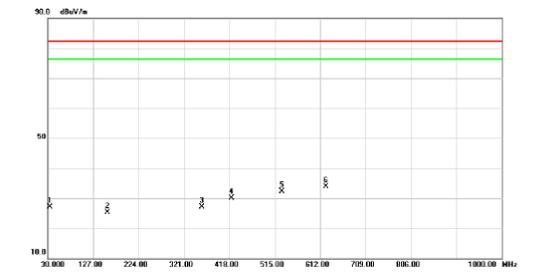


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	37.700	36.56	-12.02	24.54	82.30	-57.76	peak	
2	160.950	36.72	-10.81	25.91	82.30	-56.39	peak	
3	388.900	37.38	-8.12	29.26	82.30	-53.04	peak	
4	484.445	37.80	-5.07	31.73	82.30	-50.57	peak	
5	548.465	37.00	-4.85	32.15	82.30	-50.15	peak	
6 *	643.525	36.82	-2.78	34.04	82.30	-48.26	peak	

Test Mode : LTE Band 12_TX CH23095_15kHz

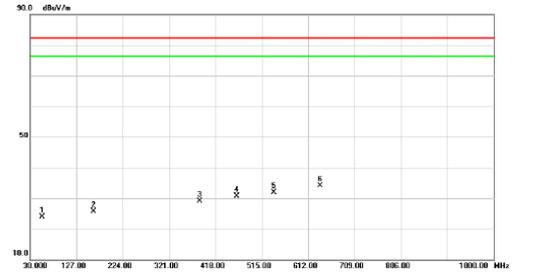
Test Mode : LTE Band 12_TX CH23095_15kHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	33.880	39.45	-12.39	27.06	82.30	-55.24	peak	
2	157.070	36.11	-10.87	25.24	82.30	-57.06	peak	
3	359.315	36.34	-9.24	27.10	82.30	-55.20	peak	
4	422.385	37.45	-7.31	30.14	82.30	-52.16	peak	
5	530.035	37.48	-5.22	32.26	82.30	-50.04	peak	
6 *	624.125	36.60	-3.07	33.53	82.30	-48.77	peak	

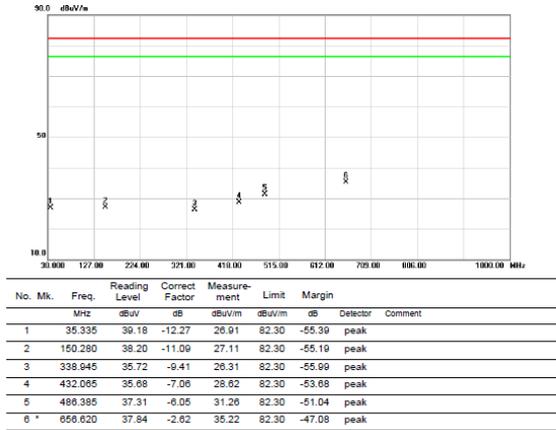
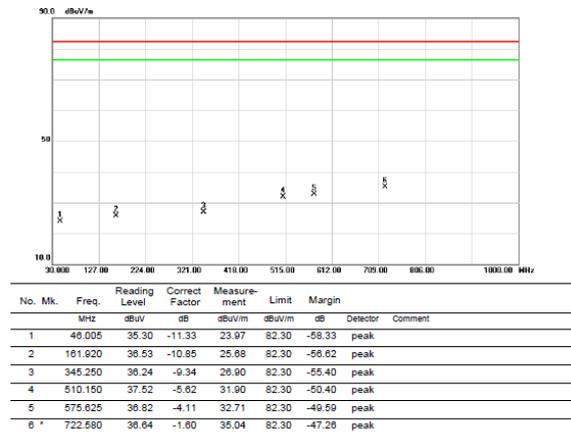
Horizontal



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	55.705	35.36	-11.53	23.83	82.30	-58.47	peak	
2	162.890	36.63	-10.89	25.74	82.30	-56.56	peak	
3	385.020	37.34	-8.29	29.05	82.30	-53.25	peak	
4	463.105	37.16	-6.39	30.77	82.30	-51.53	peak	
5	540.220	36.88	-5.02	31.86	82.30	-50.44	peak	
6 *	637.220	37.00	-2.87	34.13	82.30	-48.17	peak	

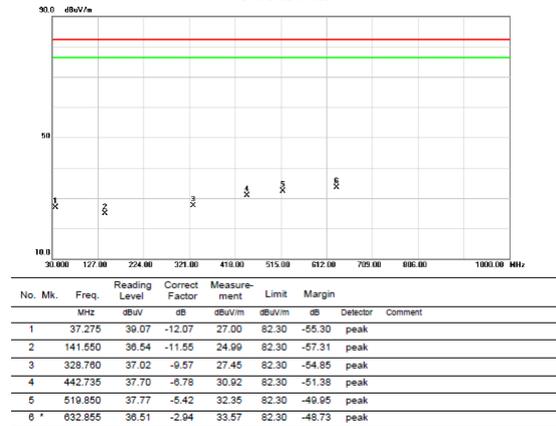
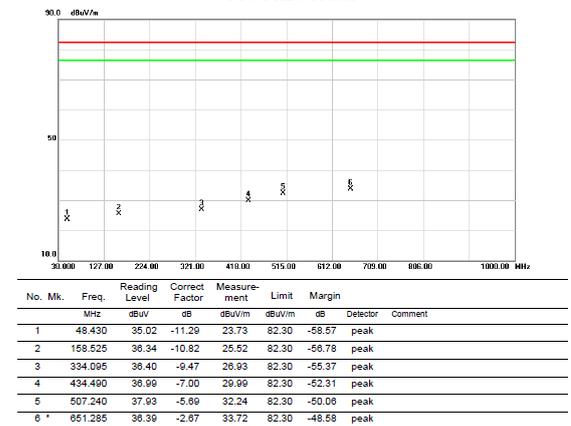
Test Mode : LTE Band 13_TX CH23230_3.75kHz

Test Mode : LTE Band 13_TX CH23230_3.75kHz

Vertical

Horizontal


Test Mode : LTE Band 13_TX CH23230_15kHz

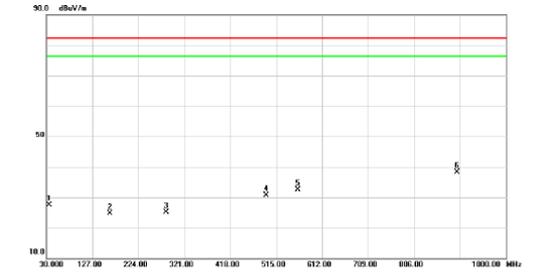
Test Mode : LTE Band 13_TX CH23230_15kHz

Vertical

Horizontal


Test Mode : LTE Band 66_TX CH132322_3.75kHz

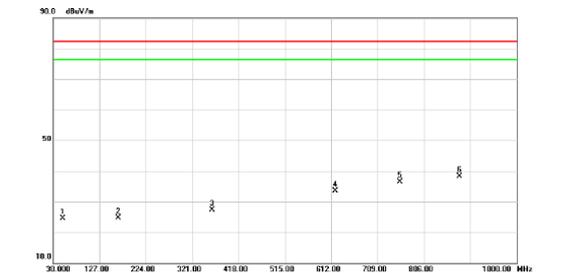
Test Mode : LTE Band 66_TX CH132322_3.75kHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	35.335	39.95	-12.27	27.58	82.30	-54.72	peak	
2	163.890	35.09	-10.92	24.77	82.30	-57.53	peak	
3	282.685	35.04	-10.83	25.11	82.30	-57.19	peak	
4	494.145	36.53	-5.92	30.61	82.30	-51.09	peak	
5	560.590	37.08	-4.52	32.56	82.30	-49.74	peak	
6 *	895.695	37.07	0.33	38.30	82.30	-44.00	peak	

Horizontal

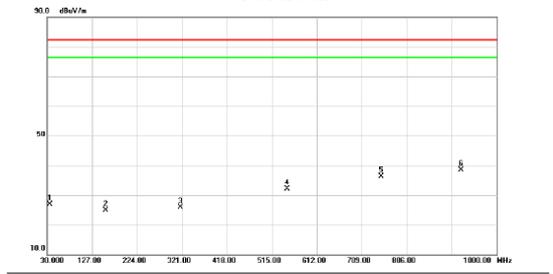


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	49.400	35.88	-11.29	24.59	82.30	-57.71	peak	
2	166.770	35.66	-11.04	24.62	82.30	-57.68	peak	
3	282.710	36.38	-9.13	27.23	82.30	-55.07	peak	
4	620.245	36.95	-3.13	33.52	82.30	-48.78	peak	
5	755.590	37.56	-0.96	36.60	82.30	-45.70	peak	
6 *	879.720	38.26	0.10	38.36	82.30	-43.94	peak	

Test Mode : LTE Band 66_TX CH132322_15kHz

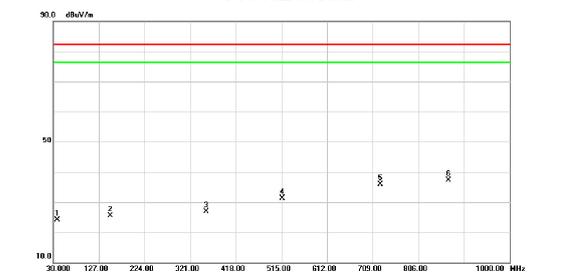
Test Mode : LTE Band 66_TX CH132322_15kHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	36.305	39.15	-12.18	26.97	82.30	-55.33	peak	
2	159.585	35.81	-10.88	24.93	82.30	-57.37	peak	
3	318.090	35.82	-9.92	25.90	82.30	-56.40	peak	
4	548.485	37.04	-4.85	32.19	82.30	-50.11	peak	
5	751.195	37.17	-0.95	36.22	82.30	-46.08	peak	
6 *	922.885	37.99	0.48	38.47	82.30	-43.83	peak	

Horizontal

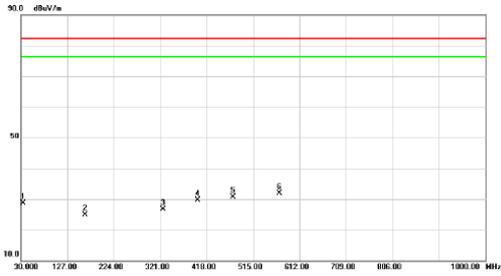


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	37.760	39.22	-12.02	24.20	82.30	-58.10	peak	
2	150.795	36.62	-11.08	25.54	82.30	-56.76	peak	
3	354.950	36.13	-9.28	26.85	82.30	-55.45	peak	
4	516.940	36.71	-5.40	31.22	82.30	-51.08	peak	
5	725.005	37.50	-1.55	35.95	82.30	-46.35	peak	
6 *	970.020	37.32	-0.02	37.30	82.30	-45.00	peak	

Test Mode : LTE Band 71_TX CH133297_3.75kHz

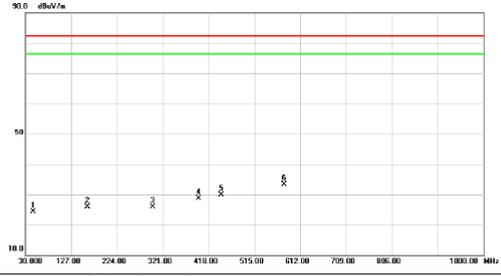
Test Mode : LTE Band 71_TX CH133297_3.75kHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	33.880	41.05	-12.39	28.66	82.30	-53.64	peak	
2	163.880	35.82	-10.92	24.90	82.30	-57.40	peak	
3	327.305	35.24	-9.61	25.63	82.30	-56.67	peak	
4	368.800	37.51	-7.90	29.61	82.30	-52.69	peak	
5	473.290	35.99	-6.24	30.75	82.30	-51.55	peak	
6 *	569.805	36.16	-4.27	31.89	82.30	-50.41	peak	

Horizontal

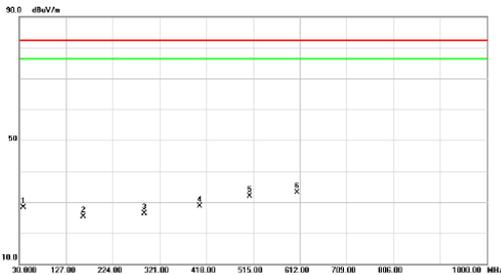


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	46.005	35.68	-11.33	24.35	82.30	-57.95	peak	
2	161.435	36.79	-10.83	25.96	82.30	-56.34	peak	
3	299.175	36.35	-10.48	25.87	82.30	-56.43	peak	
4	398.660	36.59	-7.95	28.64	82.30	-53.66	peak	
5	444.190	36.73	-6.75	29.98	82.30	-52.32	peak	
6 *	578.050	37.43	-4.05	33.38	82.30	-48.92	peak	

Test Mode : LTE Band 71_TX CH133297_15kHz

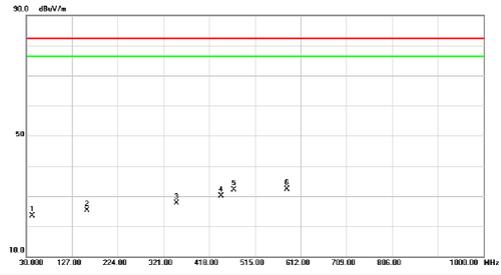
Test Mode : LTE Band 71_TX CH133297_15kHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	38.730	40.20	-11.90	28.30	82.30	-54.00	peak	
2	162.405	36.23	-10.87	25.36	82.30	-56.94	peak	
3	288.990	36.87	-10.64	26.23	82.30	-56.07	peak	
4	403.935	36.49	-7.78	28.71	82.30	-53.59	peak	
5	507.240	37.59	-5.69	31.90	82.30	-50.40	peak	
6 *	605.695	36.48	-3.35	33.13	82.30	-49.17	peak	

Horizontal

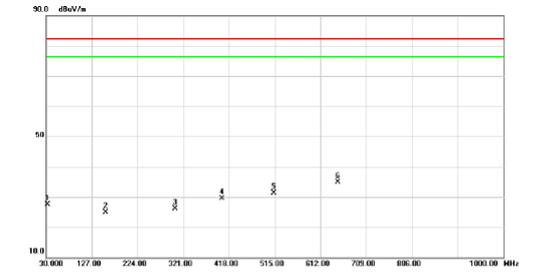


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	42.125	35.08	-11.57	23.49	82.30	-58.81	peak	
2	159.010	36.02	-10.80	25.22	82.30	-57.08	peak	
3	349.130	37.05	-9.31	27.74	82.30	-54.56	peak	
4	443.220	36.87	-6.77	30.10	82.30	-52.20	peak	
5	470.895	38.38	-6.29	32.09	82.30	-50.21	peak	
6 *	583.385	36.24	-3.90	32.34	82.30	-49.96	peak	

Test Mode : LTE Band 85_TX CH134092_3.75kHz

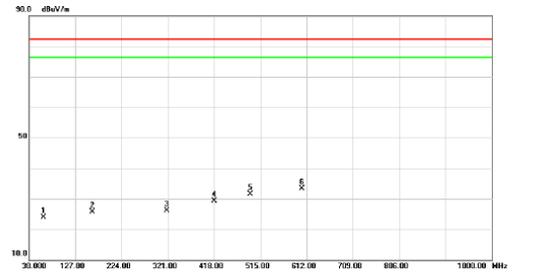
Test Mode : LTE Band 85_TX CH134092_3.75kHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		32.910	40.01	-12.57	27.44	82.30	-54.86	peak	
2		155.015	35.81	-10.91	24.90	82.30	-57.40	peak	
3		303.055	36.51	-10.39	26.12	82.30	-56.18	peak	
4		402.480	37.36	-7.82	29.54	82.30	-52.76	peak	
5		513.545	36.62	-5.55	31.27	82.30	-51.03	peak	
6	*	648.860	37.52	-2.70	34.82	82.30	-47.48	peak	

Horizontal

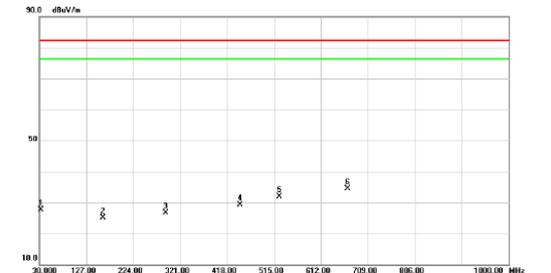


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		60.070	35.94	-11.96	23.98	82.30	-58.32	peak	
2		161.920	36.49	-10.85	25.64	82.30	-56.66	peak	
3		318.575	35.93	-9.91	26.02	82.30	-56.28	peak	
4		418.000	36.64	-7.43	29.21	82.30	-53.09	peak	
5		493.175	37.43	-5.93	31.50	82.30	-50.80	peak	
6	*	601.815	36.64	-3.41	33.23	82.30	-49.07	peak	

Test Mode : LTE Band 85_TX CH134092_15kHz

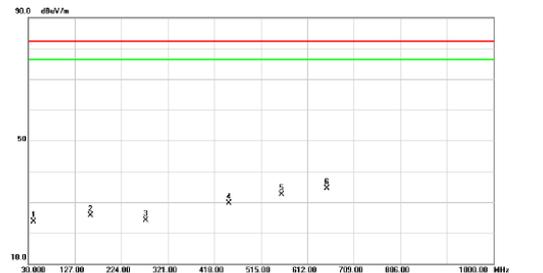
Test Mode : LTE Band 85_TX CH134092_15kHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		33.395	40.17	-12.48	27.69	82.30	-54.61	peak	
2		161.435	35.95	-10.83	25.12	82.30	-57.18	peak	
3		289.960	37.25	-10.61	26.64	82.30	-55.66	peak	
4		444.675	36.11	-6.74	29.37	82.30	-52.93	peak	
5		526.155	37.11	-5.30	31.81	82.30	-50.49	peak	
6	*	666.805	37.11	-2.51	34.60	82.30	-47.70	peak	

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		41.155	35.35	-11.65	23.70	82.30	-58.60	peak	
2		159.980	36.45	-10.77	25.68	82.30	-56.62	peak	
3		274.925	35.29	-11.17	24.12	82.30	-58.18	peak	
4		448.070	36.31	-6.65	29.66	82.30	-52.64	peak	
5		558.165	37.09	-4.59	32.50	82.30	-49.80	peak	
6	*	652.255	37.18	-2.66	34.52	82.30	-47.78	peak	

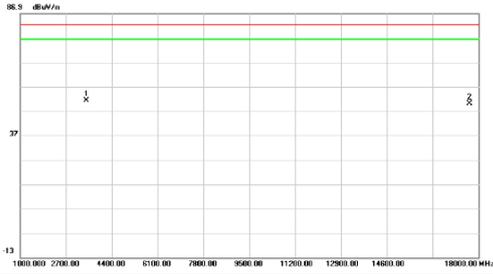
APPENDIX D - RADIATED SPURIOUS EMISSIONS (ABOVE 1GHZ)

For eMTC:

Test Mode : LTE Band 4_TX CH20175_1.4MHz

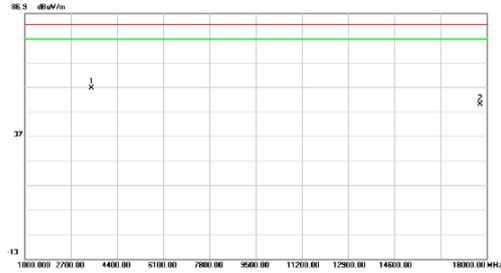
Test Mode : LTE Band 4_TX CH20175_1.4MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	3485.000	52.55	-1.33	51.22	82.30	-31.08	peak	
2	17677.000	40.80	9.11	49.91	82.30	-32.39	peak	

Horizontal



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	3465.000	57.74	-1.33	56.41	82.30	-25.89	peak	
2	17762.000	40.73	9.08	49.81	82.30	-32.49	peak	

Test Mode : LTE Band 4_TX CH20175_5MHz

Test Mode : LTE Band 4_TX CH20175_5MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	3465.000	49.46	-1.33	48.13	82.30	-34.17	peak	
2 *	17702.500	40.99	9.10	50.09	82.30	-32.21	peak	

Horizontal

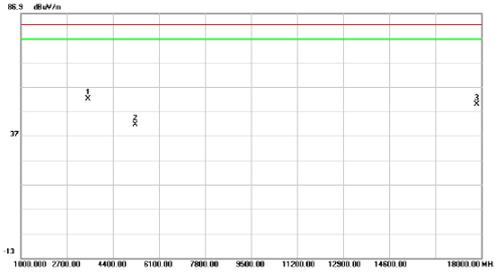


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	3473.500	63.07	-1.32	61.75	82.30	-20.55	peak	
2	17362.500	40.83	9.07	49.90	82.30	-32.40	peak	

Test Mode : LTE Band 4_TX CH20175_20MHz

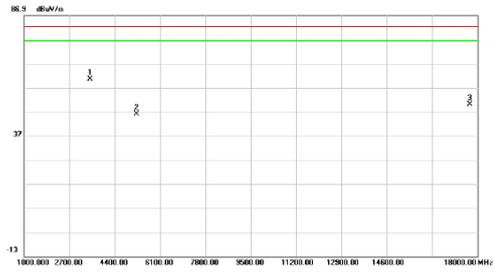
Test Mode : LTE Band 4_TX CH20175_20MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBμV	Correct Factor dB	Measurement dBμV/m	Limit dBμV/m	Margin dB	Detector	Comment
1 *	3482.000	53.38	-1.30	52.08	82.30	-30.22	peak	
2	5224.500	39.78	1.71	41.49	82.30	-40.81	peak	
3	17821.500	40.84	9.05	49.89	82.30	-32.41	peak	

Horizontal

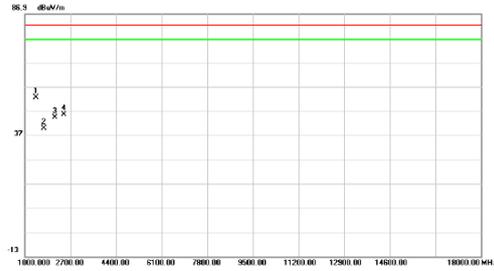


No. Mk.	Freq. MHz	Reading Level dBμV	Correct Factor dB	Measurement dBμV/m	Limit dBμV/m	Margin dB	Detector	Comment
1 *	3482.000	61.93	-1.30	60.63	82.30	-21.67	peak	
2	5224.500	44.42	1.71	46.13	82.30	-36.17	peak	
3	17711.000	40.92	9.10	50.02	82.30	-32.28	peak	

Test Mode : LTE Band 12_TX CH23095_1.4MHz

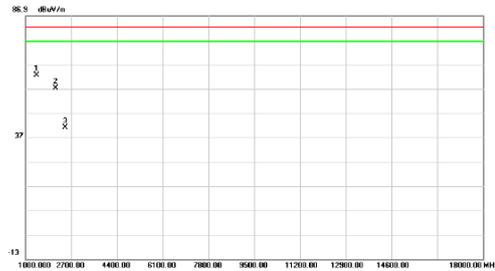
Test Mode : LTE Band 12_TX CH23095_1.4MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBμV	Correct Factor dB	Measurement dBμV/m	Limit dBμV/m	Margin dB	Detector	Comment
1 *	1416.500	58.30	-5.79	52.51	82.30	-29.79	peak	
2	1714.000	44.50	-4.84	39.66	82.30	-42.64	peak	
3	2122.000	48.72	-4.42	44.30	82.30	-38.00	peak	
4	2470.500	49.92	-4.51	45.41	82.30	-36.89	peak	

Horizontal

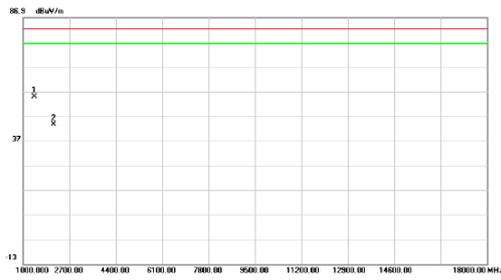


No. Mk.	Freq. MHz	Reading Level dBμV	Correct Factor dB	Measurement dBμV/m	Limit dBμV/m	Margin dB	Detector	Comment
1 *	1416.500	68.34	-5.79	62.55	82.30	-19.75	peak	
2	2122.000	61.66	-4.42	57.24	82.30	-25.06	peak	
3	2479.000	45.55	-4.51	41.04	82.30	-41.26	peak	

Test Mode : LTE Band 12_TX CH23095_5MHz

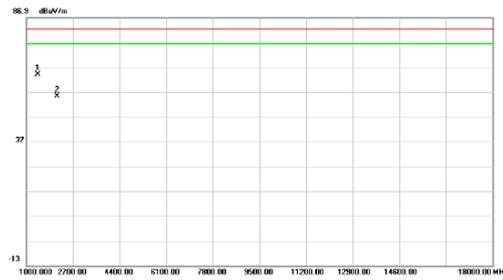
Test Mode : LTE Band 12_TX CH23095_5MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	1416.500	60.69	-5.79	54.90	82.30	-27.40	peak	
2	2130.500	47.96	-4.42	43.54	82.30	-38.76	peak	

Horizontal

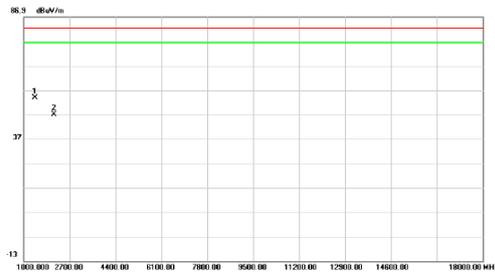


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	1416.500	69.82	-5.79	64.03	82.30	-18.27	peak	
2	2130.500	59.63	-4.42	55.21	82.30	-27.09	peak	

Test Mode : LTE Band 12_TX CH23095_10MHz

Test Mode : LTE Band 12_TX CH23095_10MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	1425.000	59.57	-5.72	53.85	82.30	-28.45	peak	
2	2113.500	51.40	-4.40	47.00	82.30	-35.30	peak	

Horizontal

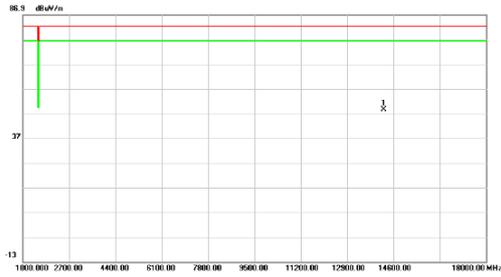


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	1425.000	72.25	-5.72	66.53	82.30	-15.77	peak	
2	2139.000	60.63	-4.41	56.22	82.30	-26.08	peak	

Test Mode : LTE Band 13_TX CH23230_5MHz

Test Mode : LTE Band 13_TX CH23230_5MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	14243.000	39.25	9.40	48.65	82.30	-33.65	peak	

Horizontal

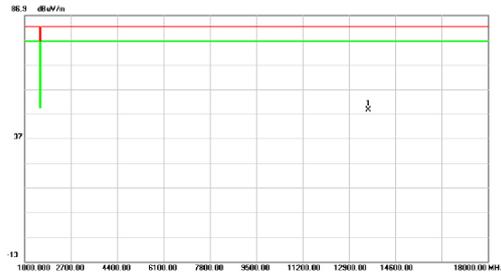


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	14115.500	38.87	9.52	48.39	82.30	-33.91	peak	

Test Mode : LTE Band 13_TX CH23230_10MHz

Test Mode : LTE Band 13_TX CH23230_10MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	13605.500	39.12	9.37	48.49	82.30	-33.81	peak	

Horizontal

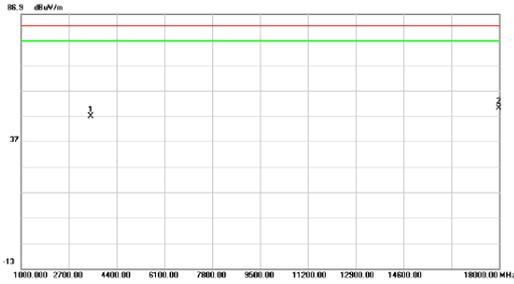


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	14234.500	39.13	9.41	48.54	82.30	-33.76	peak	

Test Mode : LTE Band 66_TX CH132322_1.4MHz

Test Mode : LTE Band 66_TX CH132322_1.4MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	3490.500	48.12	-1.29	46.83	82.30	-35.47	peak	
2 *	17991.500	41.05	8.96	50.01	82.30	-32.29	peak	

Horizontal

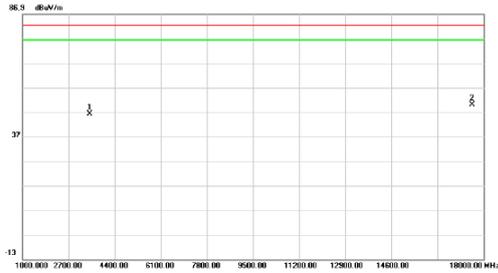


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	3490.500	55.95	-1.29	54.66	82.30	-27.64	peak	
2	17779.000	41.89	9.06	50.95	82.30	-31.35	peak	

Test Mode : LTE Band 66_TX CH132322_5MHz

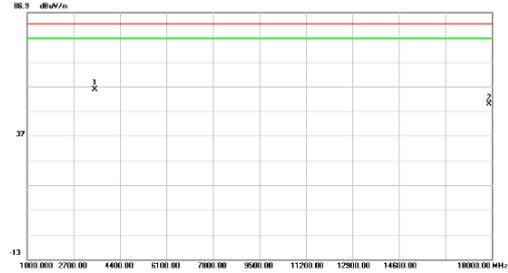
Test Mode : LTE Band 66_TX CH132322_5MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	3490.500	47.54	-1.29	46.25	82.30	-36.05	peak	
2 *	17583.500	40.95	9.16	50.11	82.30	-32.19	peak	

Horizontal

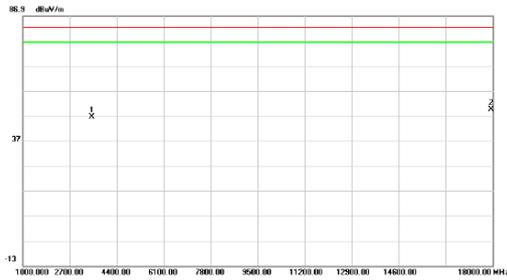


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	3490.500	57.15	-1.29	55.86	82.30	-26.44	peak	
2	17906.500	40.90	9.00	49.90	82.30	-32.40	peak	

Test Mode : LTE Band 66_TX CH132322_20MHz

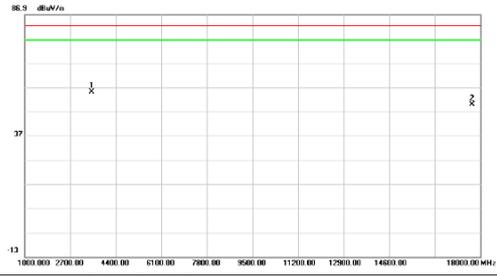
Test Mode : LTE Band 66_TX CH132322_20MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	3507.500	47.71	-1.26	46.45	82.30	-35.85	peak	
2 *	17940.500	40.61	8.98	49.59	82.30	-32.71	peak	

Horizontal

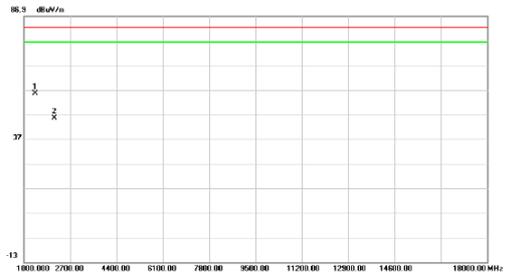


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	3507.500	56.33	-1.26	55.07	82.30	-27.23	peak	
2	17940.500	40.67	9.10	49.77	82.30	-32.53	peak	

Test Mode : LTE Band 85_TX CH134092_5MHz

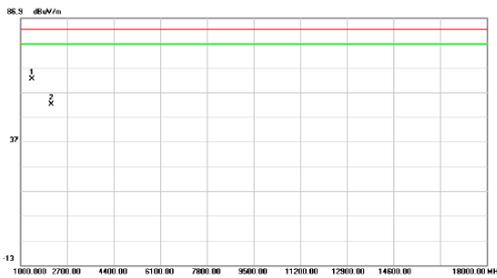
Test Mode : LTE Band 85_TX CH134092_5MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	1416.500	61.24	-5.79	55.45	82.30	-26.85	peak	
2	2130.500	49.89	-4.42	45.47	82.30	-36.83	peak	

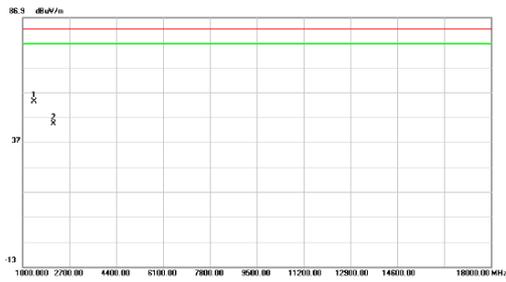
Horizontal



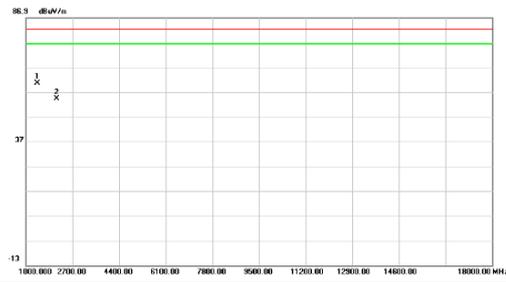
No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	1416.500	68.04	-5.79	62.25	82.30	-20.05	peak	
2	2130.500	56.49	-4.42	52.07	82.30	-30.23	peak	

Test Mode : LTE Band 85_TX CH134092_10MHz

Test Mode : LTE Band 85_TX CH134092_20MHz

Vertical


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	1425.000	59.10	-5.72	53.38	82.30	-28.92	peak	
2	2130.500	48.70	-4.42	44.28	82.30	-38.02	peak	

Horizontal


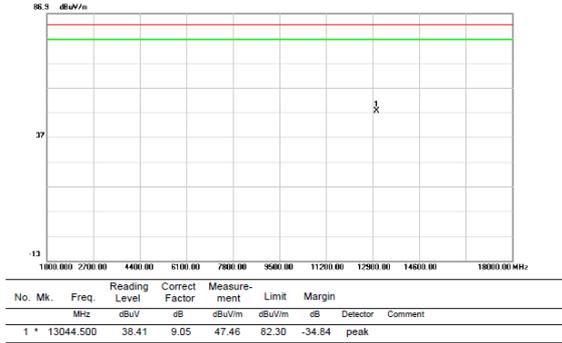
No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	1425.000	66.16	-5.72	60.44	82.30	-21.86	peak	
2	2130.500	58.81	-4.42	54.39	82.30	-27.91	peak	

For NB-IoT:

Test Mode : LTE Band 4_TX CH20175_3.75kHz

Test Mode : LTE Band 4_TX CH20175_3.75kHz

Vertical



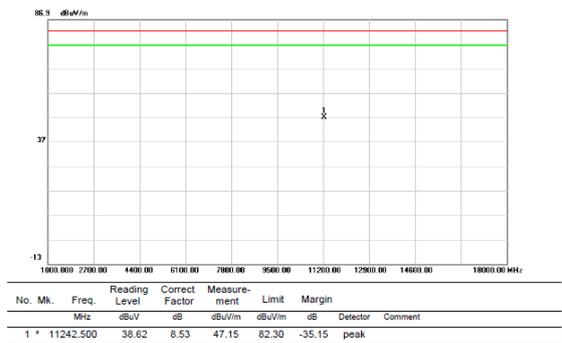
Horizontal



Test Mode : LTE Band 4_TX CH20175_15kHz

Test Mode : LTE Band 4_TX CH20175_15kHz

Vertical



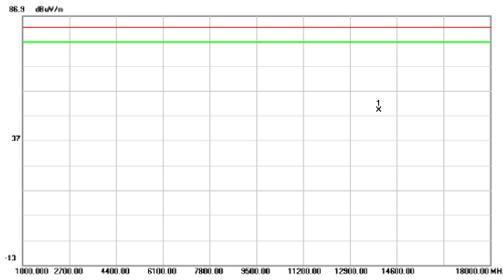
Horizontal



Test Mode : LTE Band 12_TX CH23095_3.75kHz

Test Mode : LTE Band 12_TX CH23095_3.75kHz

Vertical



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBμV	dB	dBμV/m	dBμV/m	dB	Detector	Comment
1 *	13945.500	39.39	9.59	48.98	82.30	-33.32	peak	

Horizontal

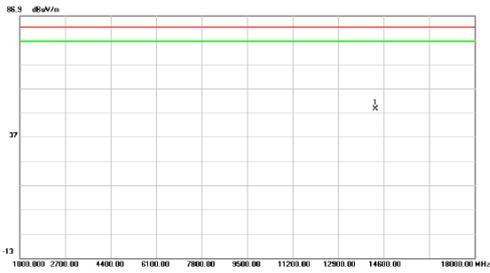


No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBμV	dB	dBμV/m	dBμV/m	dB	Detector	Comment
1 *	14362.000	39.75	9.28	49.03	82.30	-33.27	peak	

Test Mode : LTE Band 12_TX CH23095_15kHz

Test Mode : LTE Band 12_TX CH23095_15kHz

Vertical



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBμV	dB	dBμV/m	dBμV/m	dB	Detector	Comment
1 *	14285.500	39.13	9.36	48.49	82.30	-33.81	peak	

Horizontal

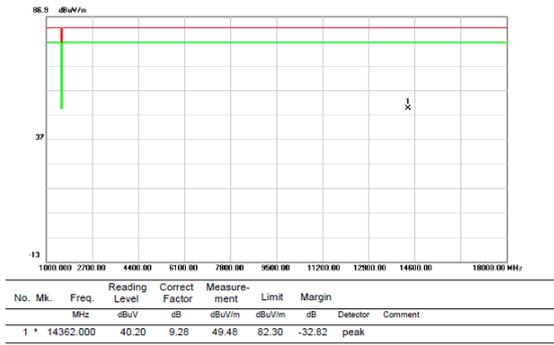


No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBμV	dB	dBμV/m	dBμV/m	dB	Detector	Comment
1 *	13860.500	39.61	9.53	49.14	82.30	-33.16	peak	

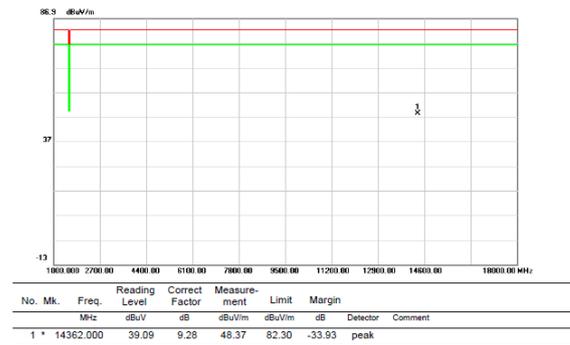
Test Mode : LTE Band 13_TX CH23230_3.75kHz

Test Mode : LTE Band 13_TX CH23230_3.75kHz

Vertical



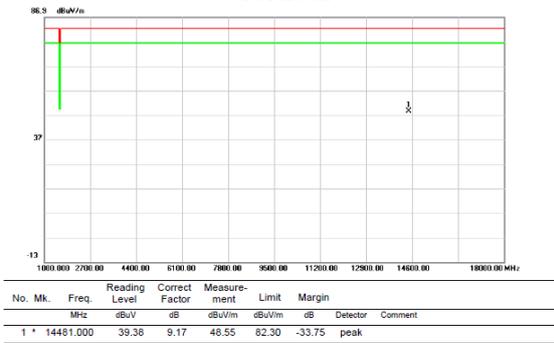
Horizontal



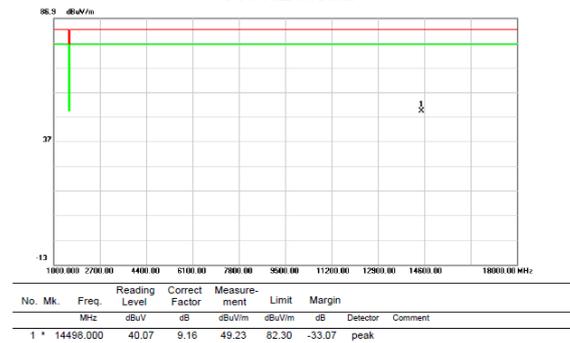
Test Mode : LTE Band 13_TX CH23230_15kHz

Test Mode : LTE Band 13_TX CH23230_15kHz

Vertical



Horizontal



Test Mode : LTE Band 66_TX CH132322_3.75kHz

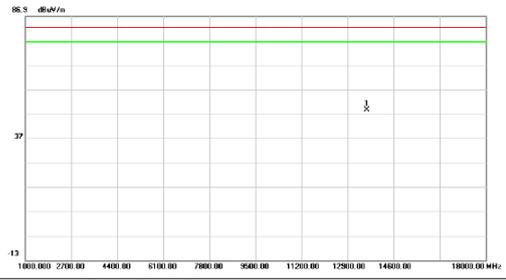
Test Mode : LTE Band 66_TX CH132322_3.75kHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	11242.500	37.86	8.53	46.39	82.30	-35.91	peak	

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	13614.000	39.21	9.38	48.59	82.30	-33.71	peak	

Test Mode : LTE Band 66_TX CH132322_15kHz

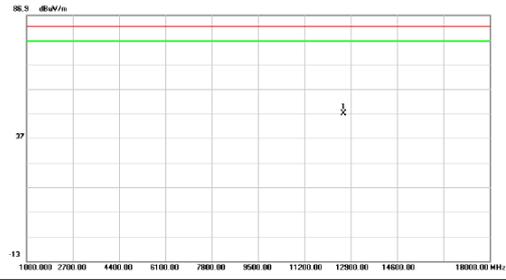
Test Mode : LTE Band 66_TX CH132322_15kHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	7587.500	37.67	6.10	43.77	82.30	-38.53	peak	

Horizontal

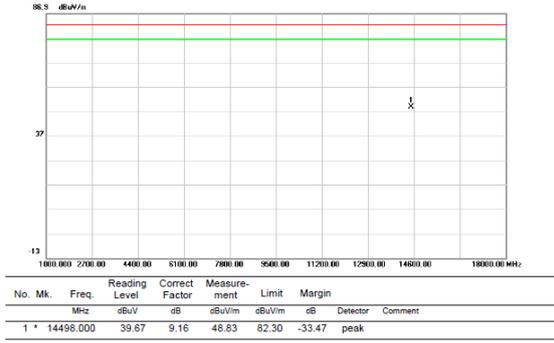


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	12636.500	38.60	8.45	47.05	82.30	-35.25	peak	

Test Mode : LTE Band 71_TX CH133297_3.75kHz

Test Mode : LTE Band 71_TX CH133297_3.75kHz

Vertical



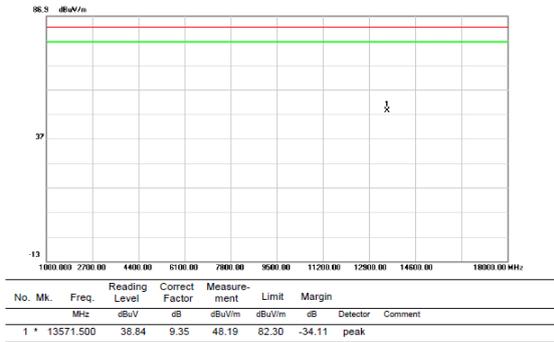
Horizontal



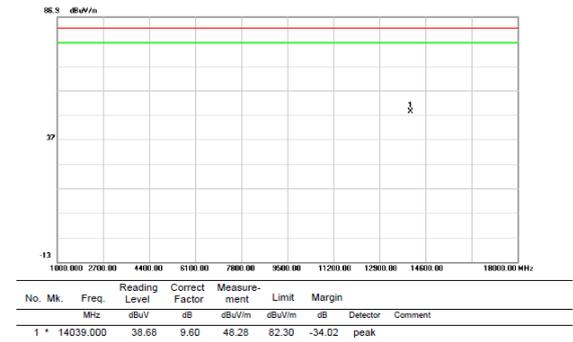
Test Mode : LTE Band 71_TX CH133297_15kHz

Test Mode : LTE Band 71_TX CH133297_15kHz

Vertical



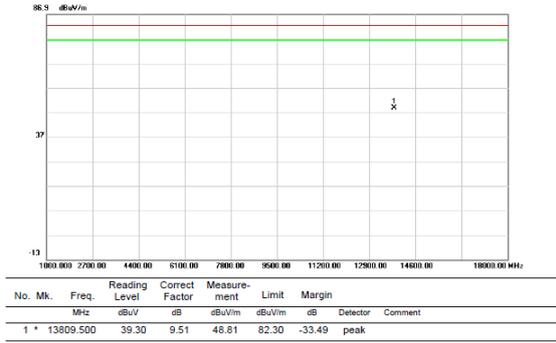
Horizontal



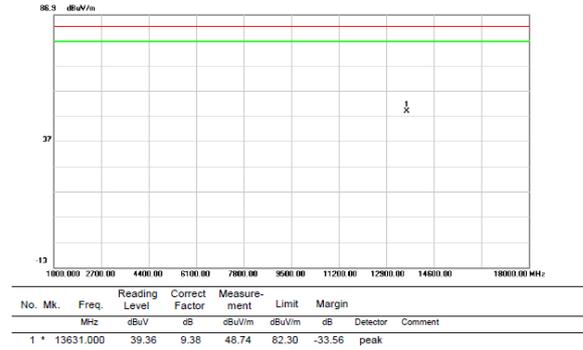
Test Mode : LTE Band 85_TX CH134092_
3.75kHz

Test Mode : LTE Band 85_TX CH134092_
3.75kHz

Vertical



Horizontal



Test Mode : LTE Band 85_TX CH134092_15kHz

Test Mode : LTE Band 85_TX CH134092_15kHz

Vertical



Horizontal

