



FCC RADIO TEST REPORT

FCC ID : XMR202008EG91NAXD
Equipment : Blues Wireless for Arduino Opta
Brand Name : Blues
Model Name : Blues Wireless for Arduino Opta – Cellular Edition (LTE Cat 1 North America)
Applicant : Blues Wireless Inc.
50 Harbor Street, Manchester by the Sea, MA 01944, United States
Manufacturer : Blues Wireless Inc.
50 Harbor Street, Manchester by the Sea, MA 01944, United States
Standard : FCC 47 CFR Part 2, 22(H), 24(E), 27, Part 90(S)

The product was received on Sep. 18, 2024 and testing was performed from Nov. 15, 2024 to Dec. 05, 2024. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

The test results in this partial report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Pass	-
	§22.913 (a)(5) §90.635	Effective Radiated Power (Band 5) (Band 26)	Pass	
	§27.50 (b)(10) §27.50 (c)(10)	Effective Radiated Power (Band 12)		
	§24.232 (c)	Equivalent Isotropic Radiated Power (Band 2) (Band 25)		
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power (Band 4)		
-	§24.232 (d) §27.50 (d)(5)	Peak-to-Average Ratio	Pass	See Note
-	§2.1049	Occupied Bandwidth	Pass	See Note
-	§2.1051 §22.917 (a) §24.238 (a) §27.53 (c)(2)(4) §27.53 (g) §27.53 (h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 12) (Band 25) (Band 26)	Pass	See Note
	§2.1051 §90.691	Emission masks (Band 26)		



Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
-	§2.1051 §22.917 (a) §24.238 (a) §27.53 (c)(2) §27.53 (g) §27.53 (h) §90.691	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 25) (Band 26)	Pass	See Note
-	§2.1055 §22.355 §24.235 §27.54 §90.213	Frequency Stability Temperature & Voltage	Pass	See Note
4.2	§2.1053 §22.917 (a) §24.238 (a) §27.53 (c)(2) §27.53 (f) §27.53 (g) §27.53 (h) §90.691	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 25) (Band 26)	Pass	11.71 dB under the limit at 1629.00 MHz

Note:

- For host device, Effective Radiated Power and Equivalent Isotropic Radiated Power are verified and complies with the limit in this test report.
- For host device, the Conducted Output Power is no difference after compared to module (Model: EG91-NAXD)

Conformity Assessment Condition:

The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Leon Huang

Report Producer: Ming Chen



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
General Specs	WCDMA/LTE/5G NR, and GNSS.

Support band and evaluated information	
Supported band	B2, B4, B5, B12, B25, B26
Evaluated and Tested band	B2, B4, B12, B26
Band covered information	Wider operating frequency band range covers narrower one when the power is worse as follows: <ul style="list-style-type: none"> ■ B2 cover B25 (Part 24) ■ B26 cover B5 (Part 22)
Main Antenna	B2, B4, B5, B12, B25, B26

Antenna information				
Band	MIMO1/Main	MIMO2/Aux	Main Ant. #	Sub Ant. #
B5	1.5	1.5	MIMO1	MIMO2
B12	1.4	1.4	MIMO1	MIMO2
B26	1.5	1.5	MIMO1	MIMO2
B2	3.6	3.6	MIMO1	MIMO2
B4	2.7	2.7	MIMO1	MIMO2
B25	3.6	3.6	MIMO1	MIMO2

Remark: The above EUT's information was declared by manufacturer. Please refer to Disclaimer in report summary.



1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333
Test Site No.	Sporton Site No.
	TH03-HY
Test Engineer	Diego Huang
Temperature (°C)	22.3~23.4
Relative Humidity (%)	50.1~55.8

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010
Test Site No.	Sporton Site No.
	03CH21-HY (TAF Code: 3786)
Test Engineer	Jesse Fan
Temperature (°C)	19~25
Relative Humidity (%)	51~60
Remark	The Radiated Spurious Emission test item subcontracted to Sporton International Inc. Wensan Laboratory.

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW1190 and TW3786

1.4 Applicable Standards

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

- ♦ ANSI C63.26-2015
- ♦ FCC 47 CFR Part 2, 22(H), 24(E), 27, Part 90(S)
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.



2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

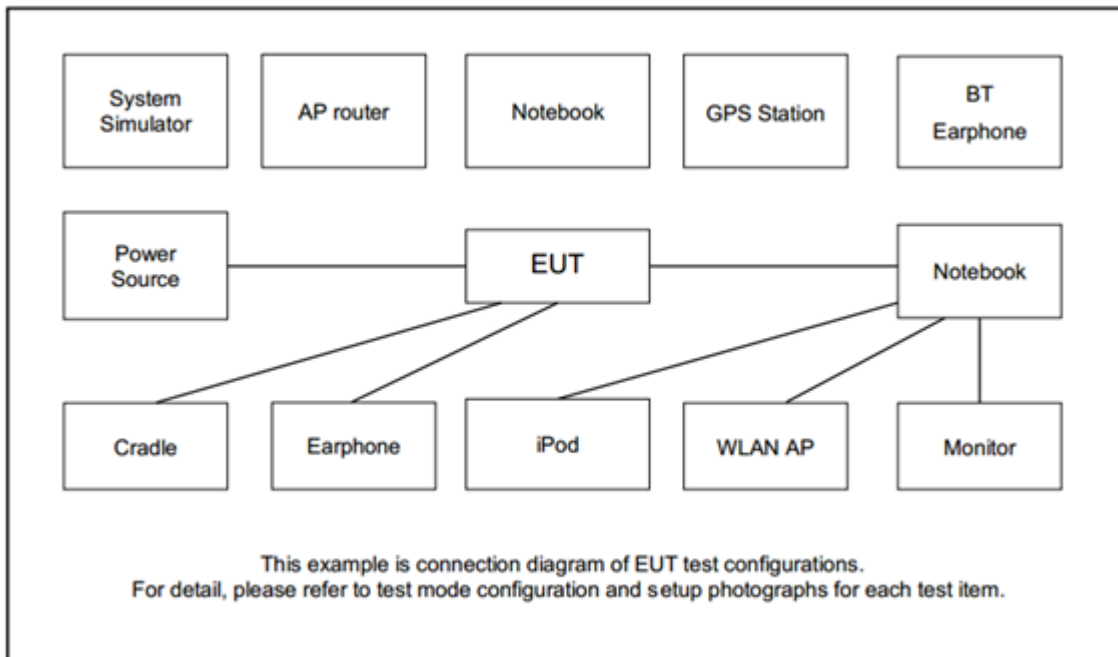
Modulation Type	Modulation
A	QPSK
B	16QAM
C	64QAM
D	256QAM

Test Item	Modulation Type	Bandwidth	RB Size	Channel
Conducted Power	A, B	All	1, Half, Full	L, M, H
EIRP	A, B	All	1, Half, Full	L, M, H
RSE	A	20 MHz or less	1RB	M

Remark:

1. Evaluated all the transmitter signal and reporting worst-case configuration among all modulation types.
2. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst-case emissions are reported.
3. During the RSE preliminary test, the standalone mode and charging modes were verified. It is determined that the charging modes is the worst case for the official test.

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
2.	Power Supply	GW Instek	SPS-606	N/A	N/A	N/A



2.4 Frequency List of Low/Middle/High Channels

LTE Band 2 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	18700	18900	19100
	Frequency	1860	1880	1900
15	Channel	18675	18900	19125
	Frequency	1857.5	1880	1902.5
10	Channel	18650	18900	19150
	Frequency	1855	1880	1905
5	Channel	18625	18900	19175
	Frequency	1852.5	1880	1907.5
3	Channel	18615	18900	19185
	Frequency	1851.5	1880	1908.5
1.4	Channel	18607	18900	19193
	Frequency	1850.7	1880	1909.3

LTE Band 4 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20050	20175	20300
	Frequency	1720	1732.5	1745
15	Channel	20025	20175	20325
	Frequency	1717.5	1732.5	1747.5
10	Channel	20000	20175	20350
	Frequency	1715	1732.5	1750
5	Channel	19975	20175	20375
	Frequency	1712.5	1732.5	1752.5
3	Channel	19965	20175	20385
	Frequency	1711.5	1732.5	1753.5
1.4	Channel	19957	20175	20393
	Frequency	1710.7	1732.5	1754.3



LTE Band 5 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	20450	20525	20600
	Frequency	829	836.5	844
5	Channel	20425	20525	20625
	Frequency	826.5	836.5	846.5
3	Channel	20415	20525	20635
	Frequency	825.5	836.5	847.5
1.4	Channel	20407	20525	20643
	Frequency	824.7	836.5	848.3

LTE Band 12 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	23060	23095	23130
	Frequency	704	707.5	711
5	Channel	23035	23095	23155
	Frequency	701.5	707.5	713.5
3	Channel	23025	23095	23165
	Frequency	700.5	707.5	714.5
1.4	Channel	23017	23095	23173
	Frequency	699.7	707.5	715.3

LTE Band 25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	26140	26340	26590
	Frequency	1860	1880	1905
15	Channel	26115	26340	26615
	Frequency	1857.5	1880	1907.5
10	Channel	26090	26340	26640
	Frequency	1855	1880	1910
5	Channel	26065	26340	26665
	Frequency	1852.5	1880	1912.5
3	Channel	26055	26340	26675
	Frequency	1851.5	1880	1913.5
1.4	Channel	26047	26340	26683
	Frequency	1850.7	1880	1914.3



LTE Band 26 Channel and Frequency List (Part22H)				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
15	Channel	26865	26915	26965
	Frequency	831.5	836.5	841.5
10	Channel	26840	26915	26990
	Frequency	829.0	836.5	844.0
5	Channel	26815	26915	27015
	Frequency	826.5	836.5	846.5
3	Channel	26805	26915	27025
	Frequency	825.5	836.5	847.5
1.4	Channel	26797	26915	27033
	Frequency	824.7	836.5	848.3

LTE Band 26 Channel and Frequency List (Part90 S)				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	-	26740	-
	Frequency	-	819	-
5	Channel	26715	26740	26765
	Frequency	816.5	819	821.5
3	Channel	26705	26740	26775
	Frequency	815.5	819	822.5
1.4	Channel	26697	26740	26783
	Frequency	814.7	819	823.3

LTE Band 26 Channel and Frequency List (Part90 S)				
BW [MHz]	Channel/Frequency(MHz)	cross-rule channels		
15	Channel	26765	26790	-
	Frequency	821.5	824	-
10	Channel	-	26790	-
	Frequency	-	824	-
5	Channel	-	26790	-
	Frequency	-	824	-
3	Channel	-	26790	-
	Frequency	-	824	-
1.4	Channel	-	26790	-
	Frequency	-	824	-

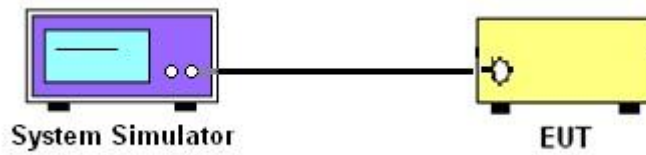
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.1.1 Test Setup

3.1.2 Conducted Output Power



3.1.3 Test Result of Conducted Test

Please refer to Appendix A.



3.2 Conducted Output Power and ERP/EIRP

3.2.1 Description of the Conducted Output Power Measurement and ERP/EIRP Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5, Band 26 (Part 22H)

The output power of mobile transmitters must not exceed 100 Watts for LTE Band 26 (Part 90S)

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 12,

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2, Band 25

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.2.2 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.

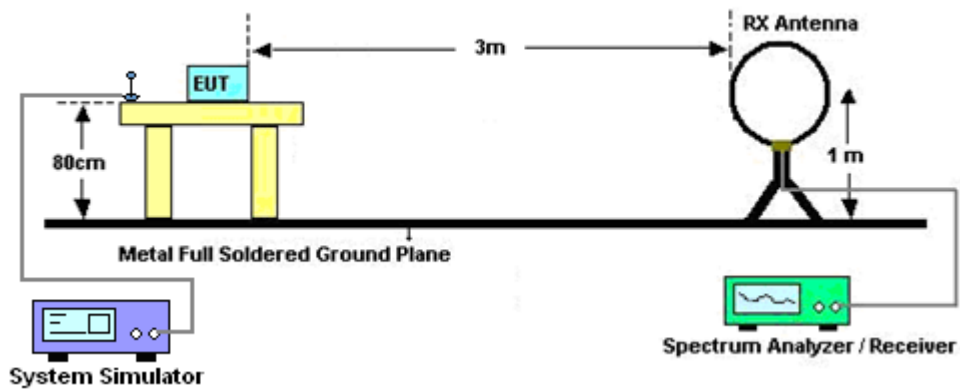
4 Radiated Test Items

4.1 Measuring Instruments

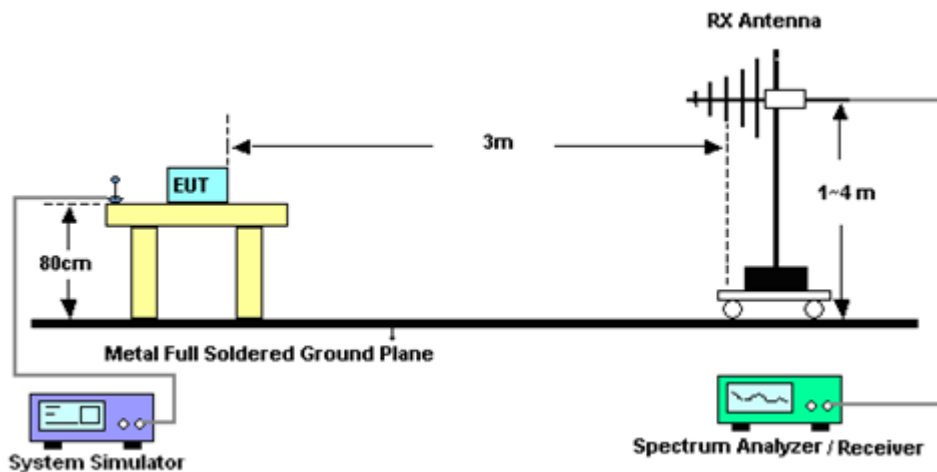
See list of measuring instruments of this test report.

4.1.1 Test Setup

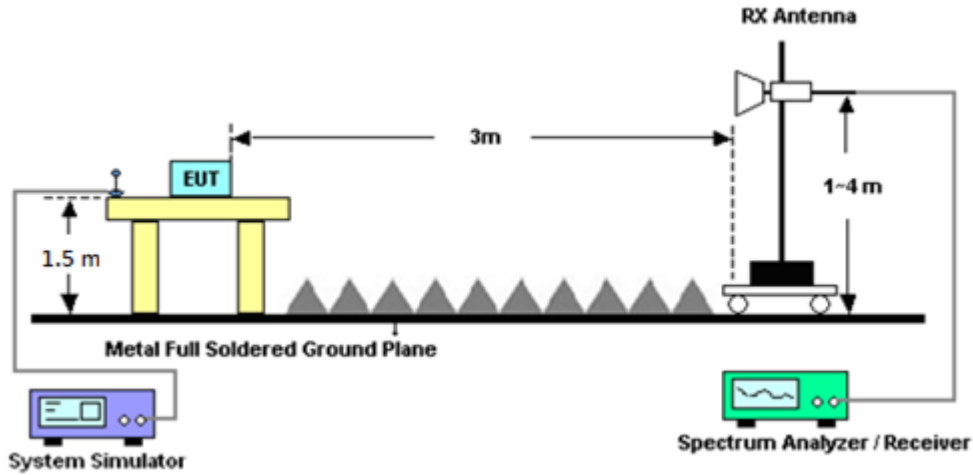
For radiated test below 30MHz



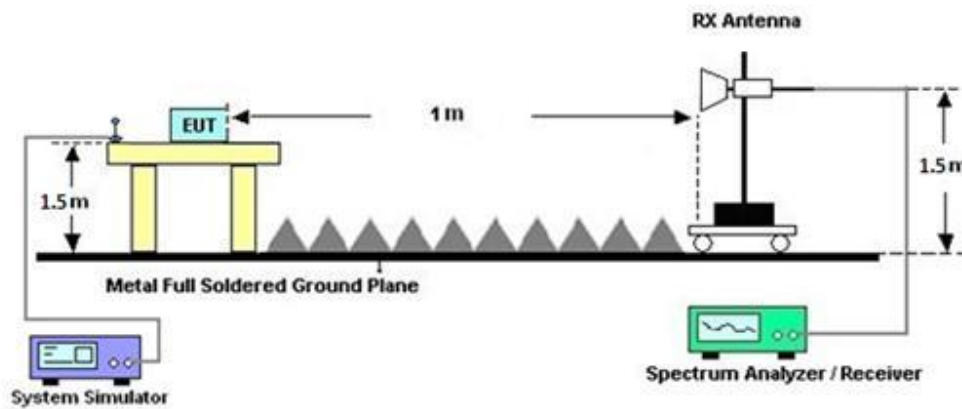
For radiated test from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



4.1.2 Test Result of Radiated Test

Please refer to Appendix B.

Note:

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.



4.2 Radiated Spurious Emission Measurement

4.2.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI C63.26-2015.

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.2.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI C63.26-2015 section 5.5.4 Radiated measurement using the field strength method.

1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. To convert spectrum reading E(dBuV/m) to EIRP(dBm)
$$\text{EIRP(dBm)} = \text{Level (dBuV/m)} + 20\log(d) - 104.77,$$
where d is the distance at which field strength limit is specified in the rules
7. Field Strength Level (dBm) = Spectrum Reading (dBm) + Antenna Factor + Cable Loss + Read Level - Preamp Factor.
8. ERP (dBm) = EIRP (dBm) - 2.15
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.



5 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LOOP Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Aug. 29, 2024	Nov. 15, 2024	Aug. 28, 2025	Radiation (03CH21-HY)
Bilog Antenna	TESEQ & WOKEN	CBL 6111D & 00802N1D-06	41912 & 05	30MHz~1GHz	Feb. 04, 2024	Nov. 15, 2024	Feb. 03, 2025	Radiation (03CH21-HY)
Double Ridged Guide Horn Antenna	RFSPIN	DRH18-E	LE2C03A18E N	1GHz~18GHz	Jul. 11, 2024	Nov. 15, 2024	Jul. 10, 2025	Radiation (03CH21-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1230	18GHz~40GHz	Oct. 25, 2024	Nov. 15, 2024	Oct. 24, 2025	Radiation (03CH21-HY)
Amplifier	EMEC	EM01G18GA	060876	1GHz~18GHz	Sep. 27, 2024	Nov. 15, 2024	Sep. 26, 2025	Radiation (03CH21-HY)
Preamplifier	EMEC	EM18G40G	060871	18GHz~40GHz	Aug. 23, 2024	Nov. 15, 2024	Aug. 22, 2025	Radiation (03CH21-HY)
Spectrum Analyzer	Keysight	N9010B	MY62170358	10Hz~44GHz	Sep. 06, 2024	Nov. 15, 2024	Sep. 05, 2025	Radiation (03CH21-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9kHz~30MHz	Mar. 06, 2024	Nov. 15, 2024	Mar. 05, 2025	Radiation (03CH21-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804397/2,804612/2,803954/2	30MHz~40GHz	Aug. 12, 2024	Nov. 15, 2024	Aug. 11, 2025	Radiation (03CH21-HY)
Hygrometer	TECPEL	DTM-303A	TP211568	N/A	Oct. 21, 2024	Nov. 15, 2024	Oct. 20, 2025	Radiation (03CH21-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Nov. 15, 2024	N/A	Radiation (03CH21-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Nov. 15, 2024	N/A	Radiation (03CH21-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Nov. 15, 2024	N/A	Radiation (03CH21-HY)
Software	Audix	E3 6.2009-8-24	RK-001053	N/A	N/A	Nov. 15, 2024	N/A	Radiation (03CH21-HY)
Radio Communication Analyzer	Anritsu	MT8821C	6262025353	LTE FDD/TDD LTE-2CC DLCA/ULCA	Oct. 01, 2024	Dec. 05, 2024	Sep. 01, 2025	Conducted (TH03-HY)
Coupler+10dB+ RFcable	Warison + WoKen + E-Instument	20dB 25W SMA Directional Coupler+ 10dB 18GHz_5W+SFL4 05_1.5M	#A+#1+#1+#7	1-18GHz	Jan. 02, 2024	Dec. 05, 2024	Jan. 01, 2025	Conducted (TH03-HY)
Power divider	Anritsu	K241C	2143398	9KHz~40GHz	Jun. 13, 2024	Dec. 05, 2024	Jun. 12, 2025	Conducted (TH03-HY)
Software	Sporton	LTE Conducted Test Tools	N/A	Conducted Test Item	N/A	Dec. 05, 2024	N/A	Conducted (TH03-HY)
Hygrometer	TECPEL	DTM-303B	TP210073	-10 ~ 50°C / 20 ~ 95%RH	Jun. 05, 2024	Dec. 05, 2024	Jun. 04, 2025	Conducted (TH03-HY)



6 Measurement Uncertainty

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.04 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.33 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.68 dB
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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power & ERP/EIRP)

LTE Band 2 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	21.59	21.55	21.94	25.74	0.3750
20	1	49		21.47	22.14	21.64		
20	1	99		21.47	21.90	22.10		
20	50	0		20.93	21.03	20.98		
20	50	24		20.82	20.98	20.96		
20	50	50		20.72	21.03	21.00		
20	100	0		20.93	21.08	20.96		
20	1	0	16-QAM	20.67	20.63	20.77	24.37	0.2735
20	1	49		20.70	20.71	20.65		
20	1	99		20.61	20.68	20.74		
Limit	EIRP < 2W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	21.69	21.85	21.94	25.68	0.3698
15	1	37		21.97	22.03	22.08		
15	1	74		21.41	22.07	22.01		
15	36	0		20.97	20.91	20.87		
15	36	20		20.96	21.02	21.01		
15	36	39		20.75	20.99	21.02		
15	75	0		20.89	21.01	20.93		
15	1	0	16-QAM	20.70	20.64	20.81	24.49	0.2812
15	1	37		20.77	20.68	20.76		
15	1	74		20.65	20.89	20.77		
Limit	EIRP < 2W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	21.74	21.59	21.69	25.83	0.3828
10	1	25		21.75	22.14	22.10		
10	1	49		21.51	22.23	21.92		
10	25	0		21.02	20.90	21.03		
10	25	12		20.97	21.05	21.07		
10	25	25		20.94	20.96	21.00		
10	50	0		20.97	20.98	21.00		
10	1	0	16-QAM	20.71	20.63	20.60	24.55	0.2851
10	1	25		20.90	20.90	20.95		
10	1	49		20.59	20.83	20.77		
Limit	EIRP < 2W			Result			Pass	



LTE Band 2 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	21.74	21.65	21.87	25.64	0.3664
5	1	12		21.88	21.88	22.04		
5	1	24		21.62	21.82	21.78		
5	12	0		20.90	20.88	20.97		
5	12	7		20.98	21.03	20.93		
5	12	13		21.05	20.93	20.86		
5	25	0		20.96	20.95	20.96		
5	1	0	16-QAM	20.64	20.58	20.67	24.55	0.2851
5	1	12		20.66	20.72	20.95		
5	1	24		20.73	20.66	20.64		
Limit	EIRP < 2W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
3	1	0	QPSK	21.83	22.07	21.86	25.67	0.3690
3	1	8		21.80	21.66	21.72		
3	1	14		21.70	21.84	21.72		
3	8	0		20.94	20.94	20.92		
3	8	4		20.91	21.04	21.00		
3	8	7		21.01	21.05	20.99		
3	15	0		20.83	20.99	20.96		
3	1	0	16-QAM	20.79	20.82	20.82	24.42	0.2767
3	1	8		20.60	20.71	20.69		
3	1	14		20.80	20.72	20.72		
Limit	EIRP < 2W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
1.4	1	0	QPSK	21.85	21.81	21.87	25.70	0.3715
1.4	1	3		21.90	21.93	21.73		
1.4	1	5		21.74	21.73	21.63		
1.4	3	0		21.96	21.92	22.02		
1.4	3	1		21.95	22.10	22.08		
1.4	3	3		21.97	22.10	21.96		
1.4	6	0		20.91	21.06	20.93		
1.4	1	0	16-QAM	20.74	20.77	20.71	24.83	0.3041
1.4	1	3		20.83	21.23	20.94		
1.4	1	5		20.74	20.97	20.54		
Limit	EIRP < 2W			Result			Pass	



LTE Band 25 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	21.74	21.48	21.55	25.99	0.3972
20	1	49		21.72	22.39	21.98		
20	1	99		21.42	21.89	21.73		
20	50	0		20.93	20.82	20.97		
20	50	24		20.85	20.87	20.95		
20	50	50		20.85	20.86	20.80		
20	100	0		20.76	20.94	20.85		
20	1	0	16-QAM	20.67	20.54	20.68	24.48	0.2805
20	1	49		20.71	20.77	20.66		
20	1	99		20.50	20.63	20.88		
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	21.66	21.47	21.58	25.58	0.3614
15	1	37		21.94	21.89	21.98		
15	1	74		21.79	21.94	21.81		
15	36	0		20.92	20.88	20.93		
15	36	20		20.87	20.87	20.97		
15	36	39		20.87	20.87	20.98		
15	75	0		20.71	20.78	20.68		
15	1	0	16-QAM	20.51	20.38	20.57	24.29	0.2685
15	1	37		20.55	20.65	20.49		
15	1	74		20.31	20.52	20.69		
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	21.52	21.47	21.61	25.76	0.3767
10	1	25		21.79	22.11	22.16		
10	1	49		21.52	22.04	21.78		
10	25	0		20.84	20.98	21.04		
10	25	12		20.82	21.09	21.10		
10	25	25		20.86	21.05	20.93		
10	50	0		20.96	21.07	21.02		
10	1	0	16-QAM	20.64	20.35	20.77	24.61	0.2891
10	1	25		20.79	20.98	21.01		
10	1	49		20.48	20.85	20.85		
10	25	0		19.86	19.87	19.92		
10	25	12		19.79	19.91	20.16		
10	25	25		19.82	19.96	19.85		
Limit	EIRP < 2W			Result			Pass	



LTE Band 25 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	21.80	21.57	21.99	25.59	0.3622
5	1	12		21.92	21.97	21.85		
5	1	24		21.72	21.83	21.84		
5	12	0		20.94	20.91	21.10		
5	12	7		20.85	21.04	20.96		
5	12	13		20.85	20.97	21.00		
5	25	0		20.86	20.99	20.98		
5	1	0	16-QAM	20.58	20.52	21.03	24.63	0.2904
5	1	12		20.60	20.66	20.43		
5	1	24		20.62	20.73	20.62		
5	12	0		19.82	19.78	20.01		
5	12	7		19.93	19.96	19.89		
5	12	13		19.64	19.98	19.79		
5	25	0		19.83	19.90	20.05		
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
3	1	0	QPSK	22.06	21.89	21.92	25.66	0.3681
3	1	8		22.06	21.99	21.64		
3	1	14		21.80	22.03	21.73		
3	8	0		21.00	20.88	21.19		
3	8	4		20.91	20.92	21.06		
3	8	7		20.84	20.98	21.05		
3	15	0		20.92	20.98	21.05		
3	1	0	16-QAM	20.77	20.62	21.16	24.76	0.2992
3	1	8		20.58	20.66	20.81		
3	1	14		20.69	20.75	20.69		
3	8	0		19.89	19.90	20.10		
3	8	4		19.84	19.87	19.89		
3	8	7		19.83	20.06	20.05		
3	15	0		19.75	19.98	20.03		
Limit	EIRP < 2W			Result			Pass	



LTE Band 25 Maximum Average Power [dBm] (GT - LC = 3.6 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
1.4	1	0	QPSK	21.80	21.79	21.79	25.74	0.3750
1.4	1	3		21.80	21.91	21.95		
1.4	1	5		21.64	21.91	21.89		
1.4	3	0		21.84	21.89	22.09		
1.4	3	1		21.92	22.14	21.98		
1.4	3	3		22.04	22.09	22.05		
1.4	6	0		20.91	21.06	21.09		
1.4	1	0	16-QAM	20.72	20.69	20.87	24.53	0.2838
1.4	1	3		20.86	20.93	20.83		
1.4	1	5		20.63	20.58	20.71		
Limit	EIRP < 2W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = 2.7 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	21.71	21.27	21.65	24.55	0.2851
20	1	49		21.60	21.85	21.63		
20	1	99		21.62	21.76	21.61		
20	50	0		20.66	20.73	20.88		
20	50	24		20.69	20.79	20.67		
20	50	50		20.70	20.81	20.46		
20	100	0		20.16	20.34	20.22		
20	1	0	16-QAM	20.66	20.42	20.72	23.42	0.2198
20	1	49		20.35	20.51	20.47		
20	1	99		20.44	20.50	20.39		
Limit	EIRP < 1W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = 2.7 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	21.59	21.53	21.64	24.68	0.2938
15	1	37		21.51	21.98	21.54		
15	1	74		21.57	21.82	21.53		
15	36	0		20.79	20.79	20.77		
15	36	20		20.61	20.76	20.58		
15	36	39		20.68	20.78	20.67		
15	75	0		20.27	20.30	20.25		
15	1	0	16-QAM	20.61	20.89	20.72	23.59	0.2286
15	1	37		20.30	20.65	20.39		
15	1	74		20.57	20.45	20.36		
Limit	EIRP < 1W			Result			Pass	



LTE Band 4 Maximum Average Power [dBm] (GT - LC = 2.7 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	21.87	21.58	21.73	24.64	0.2911
10	1	25		21.79	21.94	21.70		
10	1	49		21.25	21.88	21.44		
10	25	0		20.83	20.94	20.50		
10	25	12		20.78	20.91	20.60		
10	25	25		20.74	20.85	20.59		
10	50	0		20.76	20.95	20.46		
10	1	0	16-QAM	20.67	20.50	20.31	23.46	0.2218
10	1	25		20.76	20.71	20.46		
10	1	49		20.34	20.52	20.45		
10	25	0		19.86	19.82	19.69		
10	25	12		19.84	19.94	19.67		
10	25	25	19.81	19.73	19.60	2.70	0.0019	
10	50	0	256-QAM	0.00	0.00			0.00
Limit	EIRP < 1W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = 2.7 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	21.18	21.17	20.84	23.88	0.2443
5	1	12		20.99	21.01	20.99		
5	1	24		21.09	20.86	20.79		
5	12	0		20.09	20.12	19.85		
5	12	7		20.01	20.20	19.96		
5	12	13		19.99	20.33	20.03		
5	25	0		19.98	20.22	19.98		
5	1	0	16-QAM	19.78	20.19	19.68	22.89	0.1945
5	1	12		19.58	20.05	19.30		
5	1	24		19.63	19.81	19.86		
5	12	0		18.98	19.06	18.87		
5	12	7		19.00	19.30	18.93		
5	12	13		18.82	19.34	18.99		
5	25	0		19.06	19.51	19.05		
Limit	EIRP < 1W			Result			Pass	



LTE Band 4 Maximum Average Power [dBm] (GT - LC = 2.7 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
3	1	0	QPSK	21.64	21.85	21.54	24.55	0.2851
3	1	8		21.43	21.77	21.51		
3	1	14		21.45	21.51	21.42		
3	8	0		20.72	20.80	20.54		
3	8	4		20.60	20.83	20.54		
3	8	7		20.56	20.91	20.53		
3	15	0		20.50	20.90	20.53		
3	1	0	16-QAM	20.69	20.71	20.19	23.82	0.2410
3	1	8		20.53	21.12	20.13		
3	1	14		20.47	20.51	20.48		
3	8	0		19.68	19.83	19.62		
3	8	4		19.71	19.88	19.67		
3	8	7		19.68	19.83	19.67		
3	15	0		19.69	19.82	19.36		
Limit	EIRP < 1W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = 2.7 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
1.4	1	0	QPSK	21.71	21.71	21.35	24.73	0.2972
1.4	1	3		21.61	21.86	21.44		
1.4	1	5		21.76	21.81	21.50		
1.4	3	0		21.95	21.99	21.53		
1.4	3	1		22.03	21.87	21.56		
1.4	3	3		21.91	21.84	21.69		
1.4	6	0		20.85	20.82	20.56		
1.4	1	0	16-QAM	20.54	20.54	20.46	23.50	0.2239
1.4	1	3		20.72	20.80	20.52		
1.4	1	5		20.70	20.58	20.39		
Limit	EIRP < 1W			Result			Pass	



LTE Band 5 Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	23.29	23.31	23.69	23.17	0.2075
10	1	25		23.41	23.53	23.79		
10	1	49		23.17	23.79	23.82		
10	25	0		22.59	22.53	22.76		
10	25	12		22.53	22.65	22.67		
10	25	25		22.56	22.77	22.66		
10	50	0		22.56	22.63	22.71		
10	1	0	16-QAM	22.29	22.36	22.53	22.06	0.1607
10	1	25		22.56	22.71	22.60		
10	1	49		22.27	22.51	22.39		
10	25	0		21.66	21.66	21.74		
10	25	12		21.65	21.70	21.73		
10	25	25		21.59	21.72	21.72		
Limit	ERP < 7W			Result			Pass	

LTE Band 5 Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.33	23.48	23.56	23.00	0.1995
5	1	12		23.65	23.49	23.48		
5	1	24		23.42	23.58	23.20		
5	12	0		22.62	22.68	22.59		
5	12	7		22.54	22.65	22.49		
5	12	13		22.53	22.74	22.68		
5	25	0		22.52	22.62	22.62		
5	1	0	16-QAM	22.10	22.23	22.35	21.89	0.1545
5	1	12		22.31	22.48	22.25		
5	1	24		22.28	22.54	22.26		
5	12	0		21.56	21.63	21.82		
5	12	7		21.67	21.65	21.75		
5	12	13		21.49	21.72	21.63		
5	25	0		21.68	21.85	21.79		
Limit	ERP < 7W			Result			Pass	



LTE Band 5 Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	23.56	23.67	23.57	23.15	0.2065
3	1	8		23.60	23.71	23.67		
3	1	14		23.60	23.80	23.27		
3	8	0		22.57	22.67	22.54		
3	8	4		22.63	22.64	22.67		
3	8	7		22.63	22.71	22.61		
3	15	0		22.57	22.70	22.57		
3	1	0	16-QAM	22.29	22.45	22.43	21.97	0.1574
3	1	8		22.32	22.31	22.30		
3	1	14		22.36	22.62	22.45		
3	8	0		21.65	21.69	21.55		
3	8	4		21.67	21.65	21.68		
3	8	7		21.76	21.64	21.71		
3	15	0		21.59	21.69	21.59		
Limit	ERP < 7W			Result			Pass	

LTE Band 5 Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	23.29	23.39	23.49	23.07	0.2028
1.4	1	3		23.47	23.51	23.72		
1.4	1	5		23.35	23.36	23.67		
1.4	3	0		23.60	23.55	23.63		
1.4	3	1		23.64	23.72	23.68		
1.4	3	3		23.68	23.69	23.68		
1.4	6	0		22.59	22.67	22.67		
1.4	1	0	16-QAM	22.46	22.53	22.47	22.09	0.1618
1.4	1	3		22.54	22.74	22.65		
1.4	1	5		22.35	22.59	22.51		
Limit	ERP < 7W			Result			Pass	

LTE Band 12 Maximum Average Power [dBm] (GT - LC = 1.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	22.95	23.10	23.61	22.86	0.1932
10	1	25		23.55	23.51	23.25		
10	1	49		23.14	22.88	22.89		
10	25	0		22.30	22.49	22.43		
10	25	12		22.39	22.32	22.28		
10	25	25		22.45	22.28	22.35		
10	50	0		22.39	22.29	22.40		
10	1	0	16-QAM	22.12	22.02	22.29	21.54	0.1426
10	1	25		22.14	22.20	22.06		
10	1	49		22.10	21.79	21.87		
Limit	ERP < 3W			Result			Pass	



LTE Band 12 Maximum Average Power [dBm] (GT - LC = 1.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.31	23.19	22.72	22.90	0.1950
5	1	12		23.65	23.34	23.25		
5	1	24		23.16	22.89	23.10		
5	12	0		22.36	22.41	22.29		
5	12	7		22.37	22.36	22.34		
5	12	13		22.35	22.16	22.37		
5	25	0		22.39	22.24	22.32		
5	1	0	16-QAM	22.03	22.05	22.51	21.76	0.1500
5	1	12		22.00	22.05	22.03		
5	1	24		21.98	21.89	22.05		
Limit	ERP < 3W			Result			Pass	

LTE Band 12 Maximum Average Power [dBm] (GT - LC = 1.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	23.26	23.55	23.28	22.80	0.1905
3	1	8		23.43	23.34	23.09		
3	1	14		23.23	22.94	23.17		
3	8	0		22.44	22.53	22.30		
3	8	4		22.45	22.36	22.44		
3	8	7		22.40	22.31	22.41		
3	15	0		22.41	22.35	22.36		
3	1	0	16-QAM	22.06	22.15	22.13	22.05	0.1603
3	1	8		22.80	21.89	21.92		
3	1	14		22.07	21.78	22.23		
Limit	ERP < 3W			Result			Pass	

LTE Band 12 Maximum Average Power [dBm] (GT - LC = 1.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	23.45	23.52	23.19	22.80	0.1905
1.4	1	3		23.35	23.38	23.32		
1.4	1	5		23.32	23.26	23.33		
1.4	3	0		23.28	23.50	23.34		
1.4	3	1		23.54	23.40	23.55		
1.4	3	3		23.51	23.42	23.28		
1.4	6	0		22.41	22.27	22.35		
1.4	1	0	16-QAM	22.30	22.35	22.04	21.66	0.1466
1.4	1	3		22.40	22.26	22.29		
1.4	1	5		22.29	22.41	22.17		
Limit	ERP < 3W			Result			Pass	



LTE Band 26 Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
15	1	0	QPSK	23.04	23.53	23.48	23.21	0.2094
15	1	37		23.63	23.79	23.86		
15	1	74		23.70	23.77	23.80		
15	36	0		22.33	22.74	22.66		
15	36	20		22.53	22.55	22.71		
15	36	39		22.60	22.56	22.80		
15	75	0		22.16	22.22	22.08		
15	1	0	16-QAM	22.03	22.35	22.37	21.98	0.1578
15	1	37		22.12	22.35	22.63		
15	1	74		22.22	22.53	22.50		
Limit	ERP < 7W			Result			Pass	

LTE Band 26 Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	22.97	23.57	23.57	23.26	0.2118
10	1	25		23.23	23.41	23.67		
10	1	49		23.38	23.48	23.91		
10	25	0		22.04	22.54	22.64		
10	25	12		22.36	22.53	22.69		
10	25	25		22.45	22.50	22.69		
10	50	0		22.34	22.61	22.63		
10	1	0	16-QAM	22.05	22.37	22.41	22.01	0.1589
10	1	25		22.14	22.40	22.66		
10	1	49		22.24	22.55	22.53		
Limit	ERP < 7W			Result			Pass	

LTE Band 26 Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.19	23.69	23.64	23.24	0.2109
5	1	12		23.16	23.89	23.87		
5	1	24		23.15	23.52	23.80		
5	12	0		22.21	22.70	22.66		
5	12	7		22.27	22.59	22.65		
5	12	13		22.34	22.61	22.69		
5	25	0		22.28	22.61	22.72		
5	1	0	16-QAM	22.57	22.38	22.43	22.15	0.1641
5	1	12		22.50	22.80	22.35		
5	1	24		22.70	22.30	22.45		
Limit	ERP < 7W			Result			Pass	



LTE Band 26 Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	23.16	23.71	24.00	23.35	0.2163
3	1	8		23.14	23.63	23.68		
3	1	14		23.45	23.41	23.71		
3	8	0		22.25	22.56	22.62		
3	8	4		22.23	22.61	22.72		
3	8	7		22.30	22.49	22.76		
3	15	0		22.17	22.59	22.82		
3	1	0	16-QAM	22.15	22.51	22.37	21.94	0.1563
3	1	8		22.08	22.34	22.47		
3	1	14		22.21	22.54	22.59		
Limit	ERP < 7W			Result			Pass	

LTE Band 26 Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	23.12	23.45	23.55	23.18	0.2080
1.4	1	3		23.29	23.48	23.79		
1.4	1	5		23.25	23.44	23.69		
1.4	3	0		23.28	23.64	23.69		
1.4	3	1		23.30	23.75	23.77		
1.4	3	3		23.18	23.67	23.83		
1.4	6	0		22.14	22.58	22.71		
1.4	1	0	16-QAM	22.09	22.66	22.57	22.10	0.1622
1.4	1	3		22.24	22.72	22.75		
1.4	1	5		22.04	22.48	22.57		
Limit	ERP < 7W			Result			Pass	



LTE Band 26 (Part90S) Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
15	1	0	QPSK	23.04	-	-	23.05	0.2018
15	1	37		23.63	-	-		
15	1	74		23.70	-	-		
15	36	0		22.33	-	-		
15	36	20		22.53	-	-		
15	36	39		22.60	-	-		
15	75	0		22.16	-	-		
15	1	0	16-QAM	22.03	-	-	21.57	0.1435
15	1	37		22.12	-	-		
15	1	74		22.22	-	-		
Limit	Power < 100W			Result			Pass	

LTE Band 26 (Part90S) Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	-	23.57	-	22.92	0.1959
10	1	25		-	23.41	-		
10	1	49		-	23.48	-		
10	25	0		-	22.54	-		
10	25	12		-	22.53	-		
10	25	25		-	22.50	-		
10	50	0		-	22.61	-		
10	1	0	16-QAM	-	22.37	-	21.90	0.1549
10	1	25		-	22.40	-		
10	1	49		-	22.55	-		
Limit	Power < 100W			Result			Pass	

LTE Band 26 (Part90S) Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.19	23.69	23.64	23.24	0.2109
5	1	12		23.16	23.89	23.87		
5	1	24		23.15	23.52	23.80		
5	12	0		22.21	22.70	22.66		
5	12	7		22.27	22.59	22.65		
5	12	13		22.34	22.61	22.69		
5	25	0		22.28	22.61	22.72		
5	1	0	16-QAM	22.57	22.38	22.43	22.15	0.1641
5	1	12		22.50	22.80	22.35		
5	1	24		22.70	22.30	22.45		
Limit	Power < 100W			Result			Pass	



LTE Band 26 (Part90S) Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	23.16	23.71	24.00	23.35	0.2163
3	1	8		23.14	23.63	23.68		
3	1	14		23.45	23.41	23.71		
3	8	0		22.25	22.56	22.62		
3	8	4		22.23	22.61	22.72		
3	8	7		22.30	22.49	22.76		
3	15	0		22.17	22.59	22.82		
3	1	0	16-QAM	22.15	22.51	22.37	21.94	0.1563
3	1	8		22.08	22.34	22.47		
3	1	14		22.21	22.54	22.59		
Limit	Power < 100W			Result			Pass	

LTE Band 26 (Part90S) Maximum Average Power [dBm] (GT - LC = 1.5 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	23.12	23.45	23.55	23.18	0.2080
1.4	1	3		23.29	23.48	23.79		
1.4	1	5		23.25	23.44	23.69		
1.4	3	0		23.28	23.64	23.69		
1.4	3	1		23.30	23.75	23.77		
1.4	3	3		23.18	23.67	23.83		
1.4	6	0		22.14	22.58	22.71		
1.4	1	0	16-QAM	22.09	22.66	22.57	22.10	0.1622
1.4	1	3		22.24	22.72	22.75		
1.4	1	5		22.04	22.48	22.57		
Limit	Power < 100W			Result			Pass	



Appendix B. Test Results of Radiated Test

B.1. Summary of each worse mode

Mode	Part	Band	Ch	Freq (MHz)	Level (dBm)	Det	Ant Factor (dB)	Amp/Cbl (dB)	Filter (dB)	EIRPCF (dB)	Reading (dBuV)	Limit (dBm)	Margin (dB)	Pol	Ant
4	Part 22H	LTE B26	M	1660	-35.36	RMS	24.60	-25.13	0.65	-95.23	59.75	-13.00	-22.36	V	Ant. 1+ Ant. 2
1	Part 24E	LTE B2	M	5613	-43.32	RMS	32.98	-21.75	0.68	-95.23	40.00	-13.00	-30.32	V	Ant. 1+ Ant. 2
2	Part 27L	LTE B4	M	5171	-48.22	RMS	32.66	-21.50	0.39	-95.23	35.46	-13.00	-35.22	V	Ant. 1+ Ant. 2
3	Part 27H	LTE B12	M	1406	-40.44	RMS	24.60	-25.55	0.73	-95.23	55.01	-13.00	-27.44	V	Ant. 1+ Ant. 2
5	Part 90S	LTE B26	M	1629	-24.71	RMS	24.60	-25.17	0.64	-95.23	70.45	-13.00	-11.71	V	Ant. 1+ Ant. 2

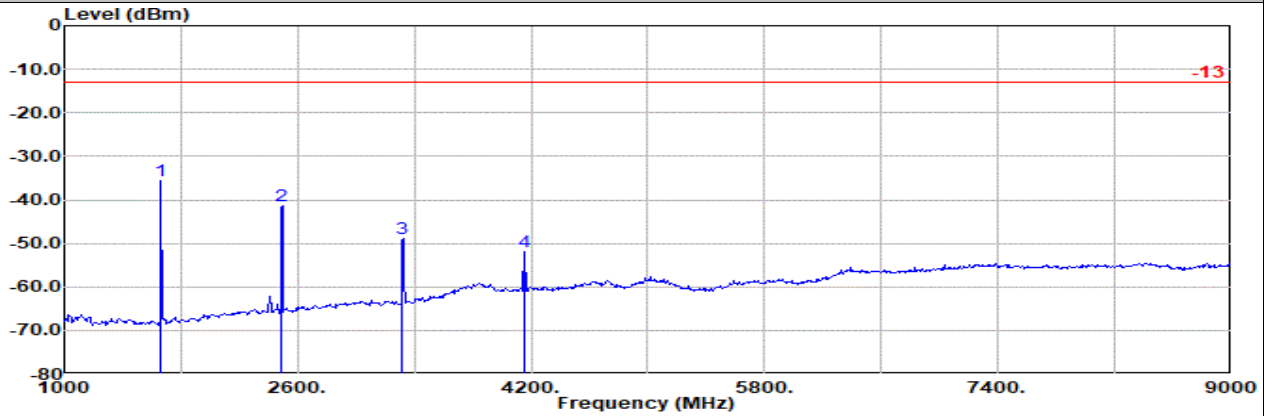


Ant. 1+ Ant. 2

Part 22H Mode 4

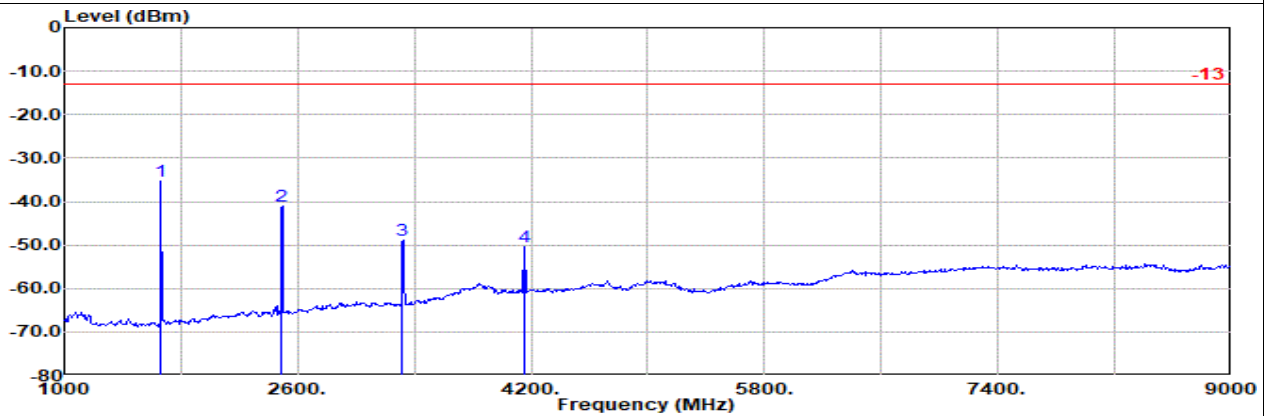
LTE B26 15M Ch26915 1RB0 QPSK

M



Site : 03CH21-HY
 Condition: -13 3m DRH18-E_LE2C03A18EN_240711 Horizontal
 : LTE B26 15M Ch26915 1RB0 QPSK

1	2	3	4	Ant Factor	Amp	\Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
MHz	dBm	Detector	dB/m	dB	dB	dB	dB	dB	dBuV	dBm	dB	
1660.00	-35.66	RMS	24.60	-25.13	0.65	-95.23	59.45	-13.00	-22.66	Horizontal		
2490.00	-41.33	RMS	26.70	-24.05	0.35	-95.23	50.90	-13.00	-28.33	Horizontal		
3319.00	-49.02	RMS	28.08	-22.71	0.35	-95.23	40.49	-13.00	-36.02	Horizontal		
4149.00	-51.82	RMS	30.30	-21.86	0.35	-95.23	34.62	-13.00	-38.82	Horizontal		



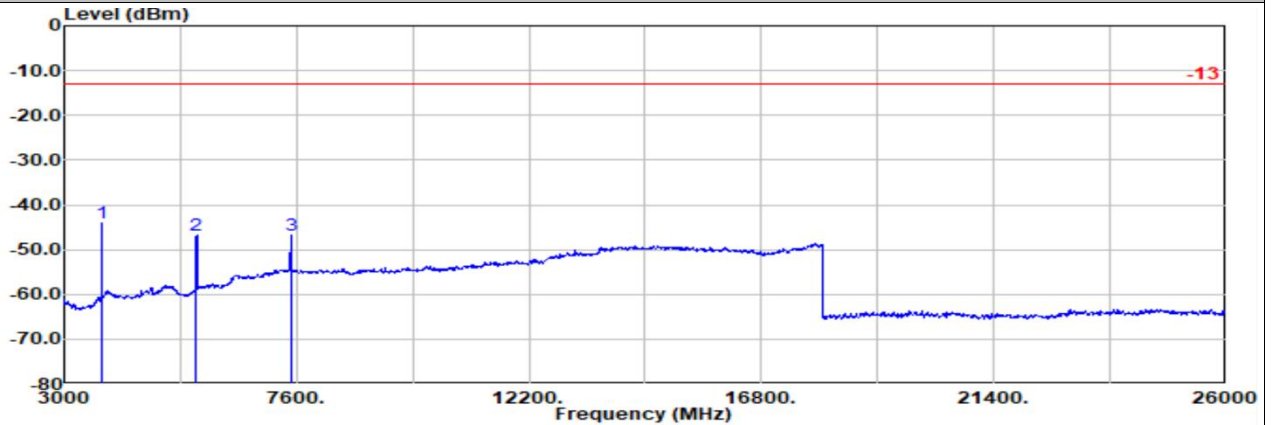
Site : 03CH21-HY
 Condition: -13 3m DRH18-E_LE2C03A18EN_240711 Vertical
 : LTE B26 15M Ch26915 1RB0 QPSK

1	2	3	4	Ant Factor	Amp	\Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
MHz	dBm	Detector	dB/m	dB	dB	dB	dB	dB	dBuV	dBm	dB	
1660.00	-35.36	RMS	24.60	-25.13	0.65	-95.23	59.75	-13.00	-22.36	Vertical		
2490.00	-40.95	RMS	26.70	-24.05	0.35	-95.23	51.28	-13.00	-27.95	Vertical		
3319.00	-49.03	RMS	28.08	-22.71	0.35	-95.23	40.48	-13.00	-36.03	Vertical		
4149.00	-50.54	RMS	30.30	-21.86	0.35	-95.23	35.90	-13.00	-37.54	Vertical		



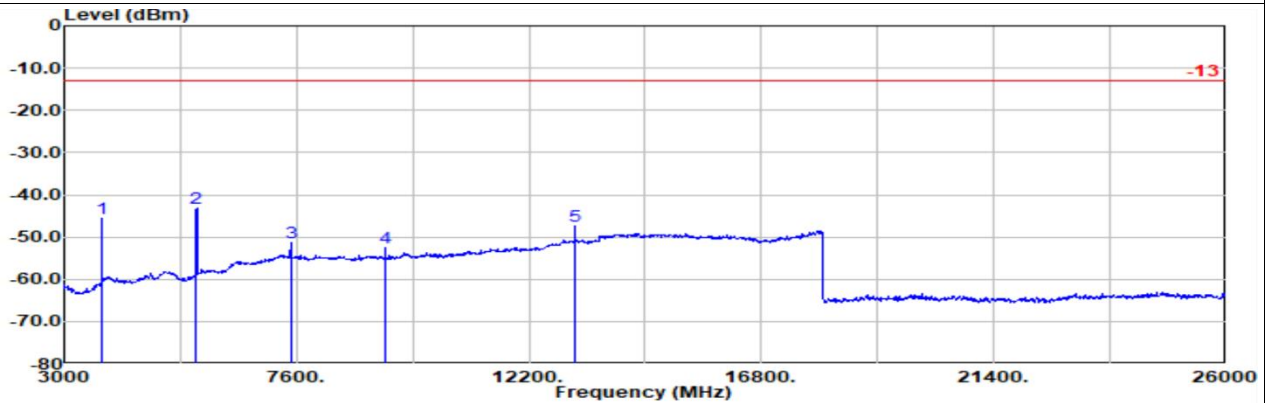
Ant. 1+ Ant. 2

Part 24E Mode 1
LTE B2 20M Ch18900 1RB0 QPSK
M



Site : 03CH21-HY
Condition: -13 3m DRH18-E_LE2C03A18EN_240711 Horizontal
: LTE Band 2 20M Ch18900 1RB0 QPSK

Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin Pol	
			Factor	1				g	
MHz	dBm		dB/m	dB	dB	dBuV	dBm	dB	
1 3742.00	-44.00	RMS	29.94	-22.20	0.27	-95.23	0.00	-13.00	-31.00 Horizontal
2 5613.00	-46.92	RMS	32.98	-21.75	0.68	-95.23	36.40	-13.00	-33.92 Horizontal
3 7484.00	-46.74	RMS	36.73	-20.69	0.71	-95.23	31.74	-13.00	-33.74 Horizontal



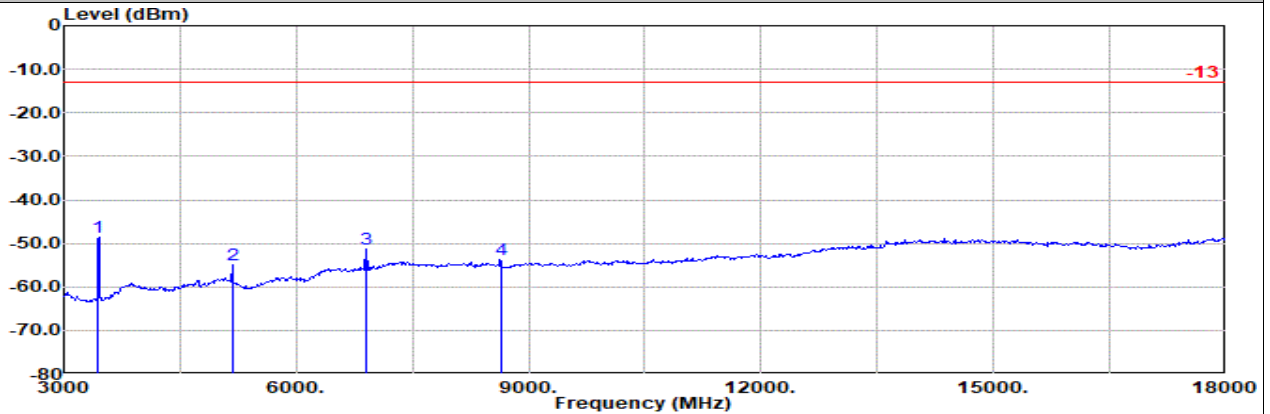
Site : 03CH21-HY
Condition: -13 3m DRH18-E_LE2C03A18EN_240711 Vertical
: LTE Band 2 20M Ch18900 1RB0 QPSK

Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin Pol	
			Factor	1				g	
MHz	dBm		dB/m	dB	dB	dBuV	dBm	dB	
1 3742.00	-45.72	RMS	29.94	-22.20	0.27	-95.23	41.50	-13.00	-32.72 Vertical
2 5613.00	-43.32	RMS	32.98	-21.75	0.68	-95.23	40.00	-13.00	-30.32 Vertical
3 7484.00	-51.31	RMS	36.73	-20.69	0.71	-95.23	27.17	-13.00	-38.31 Vertical
4 9355.00	-52.46	RMS	36.82	-21.08	0.10	-95.23	26.93	-13.00	-39.46 Vertical
5 13098.00	-47.48	RMS	40.00	-20.53	0.45	-95.23	27.83	-13.00	-34.48 Vertical



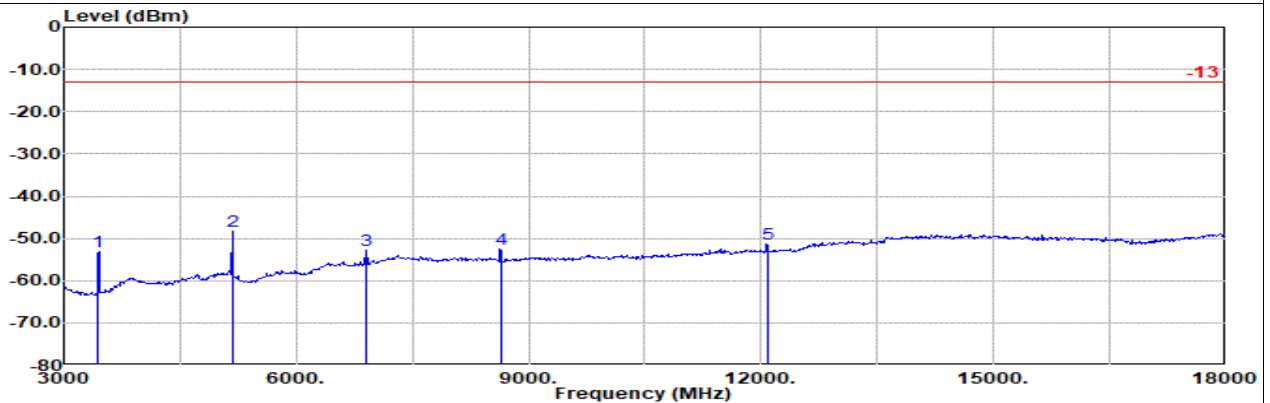
Ant. 1+ Ant. 2

Part 27L Mode 2
LTE B4 20M Ch20175 1RB0 QPSK
M



Site : 03CH21-HY
Condition: -13 3m DRH18-E_LE2C03A18EN_240711 Horizontal
: LTE 20M Ch20175 1RB0 QPSK

Freq	Level	Detector	Ant Factor	Amp	\Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
MHz	dBm			dB/m	dB	dB	dB	dBuV	dBm	dB	
1 3447.00	-48.68	RMS	28.49	-22.58	0.58	-95.23	40.06	-13.00	-35.68	Horizontal	
2 5171.00	-55.04	RMS	32.66	-21.50	0.39	-95.23	28.64	-13.00	-42.04	Horizontal	
3 6894.00	-51.38	RMS	36.30	-20.94	0.34	-95.23	28.15	-13.00	-38.38	Horizontal	
4 8640.00	-53.80	RMS	36.70	-21.07	0.49	-95.23	25.31	-13.00	-40.80	Horizontal	



Site : 03CH21-HY
Condition: -13 3m DRH18-E_LE2C03A18EN_240711 Vertical
: LTE 20M Ch20175 1RB0 QPSK

Freq	Level	Detector	Ant Factor	Amp	\Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
MHz	dBm			dB/m	dB	dB	dB	dBuV	dBm	dB	
1 3447.00	-53.11	RMS	28.49	-22.58	0.58	-95.23	35.63	-13.00	-40.11	Vertical	
2 5171.00	-48.22	RMS	32.66	-21.50	0.39	-95.23	35.46	-13.00	-35.22	Vertical	
3 6894.00	-52.95	RMS	36.30	-20.94	0.34	-95.23	26.58	-13.00	-39.95	Vertical	
4 8640.00	-52.51	RMS	36.70	-21.07	0.49	-95.23	26.60	-13.00	-39.51	Vertical	
5 12097.00	-51.30	RMS	38.70	-21.43	0.48	-95.23	26.18	-13.00	-38.30	Vertical	

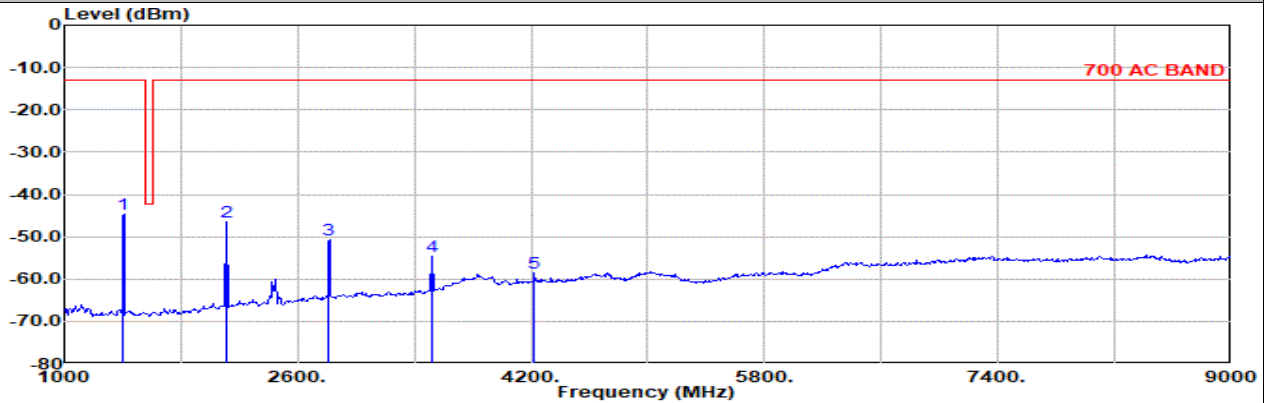


Ant. 1+ Ant. 2

Part 27H Mode 3

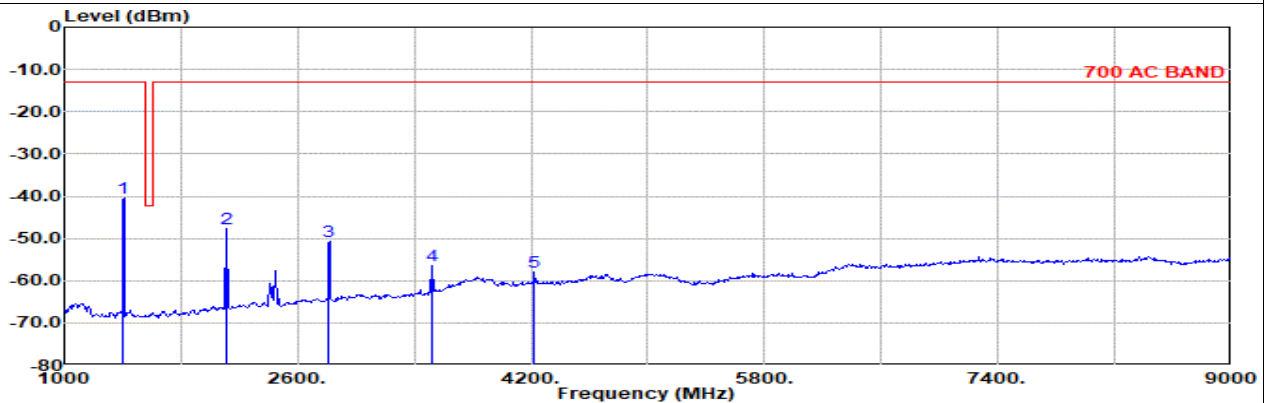
LTE B12 10M Ch23095 1RB0 QPSK

M



Site : 03CH21-HY
 Condition: 700 AC BAND 3m DRH18-E_LE2C03A18EN_240711 Horizontal
 : LTE Band 12 10M Ch23095 1RB0 QPSK

	Freq MHz	Level dBm	Detector	Ant Amp\Cb		Filter	EIRPCF	Readin g	Limit dBm	Margin dB	Pol
				Factor	1						
1	1406.00	-44.71	RMS	24.60	-25.55	0.73	-95.23	50.74	-13.00	-31.71	Horizontal
2	2109.00	-46.45	RMS	26.29	-24.56	0.47	-95.23	46.58	-13.00	-33.45	Horizontal
3	2812.00	-50.71	RMS	27.80	-23.44	0.39	-95.23	39.77	-13.00	-37.71	Horizontal
4	3515.00	-54.55	RMS	28.92	-22.52	0.33	-95.23	33.95	-13.00	-41.55	Horizontal
5	4219.00	-58.63	RMS	30.30	-21.85	0.35	-95.23	27.80	-13.00	-45.63	Horizontal



Site : 03CH21-HY
 Condition: 700 AC BAND 3m DRH18-E_LE2C03A18EN_240711 Vertical
 : LTE Band 12 10M Ch23095 1RB0 QPSK

	Freq MHz	Level dBm	Detector	Ant Amp\Cb		Filter	EIRPCF	Readin g	Limit dBm	Margin dB	Pol
				Factor	1						
1	1406.00	-40.44	RMS	24.60	-25.55	0.73	-95.23	55.01	-13.00	-27.44	Vertical
2	2109.00	-47.55	RMS	26.29	-24.56	0.47	-95.23	45.48	-13.00	-34.55	Vertical
3	2812.00	-50.85	RMS	27.80	-23.44	0.39	-95.23	39.63	-13.00	-37.85	Vertical
4	3515.00	-56.41	RMS	28.92	-22.52	0.33	-95.23	32.09	-13.00	-43.41	Vertical
5	4219.00	-58.00	RMS	30.30	-21.85	0.35	-95.23	28.43	-13.00	-45.00	Vertical

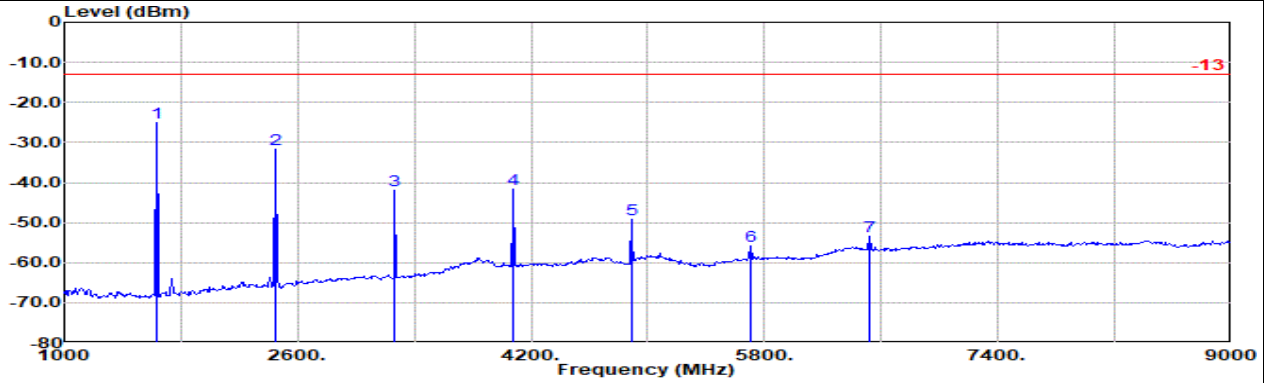


Ant. 1+ Ant. 2

Part 90S Mode 5

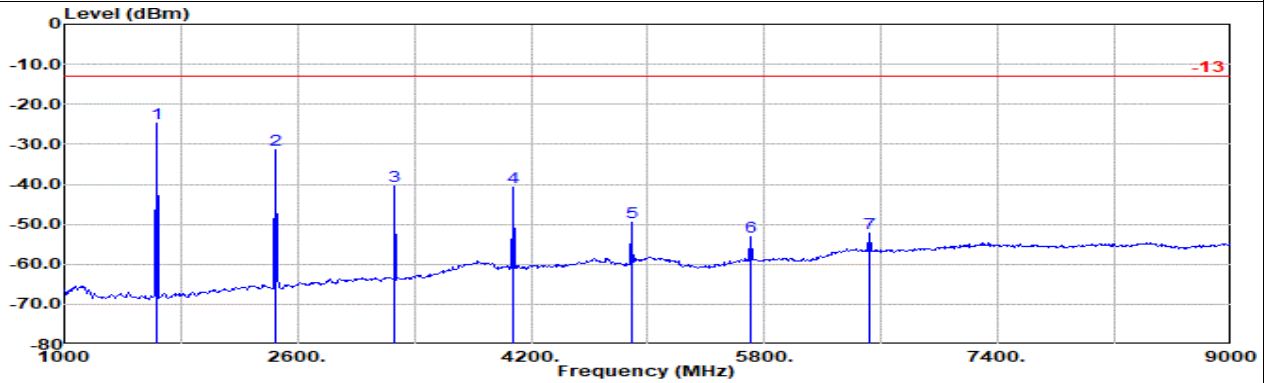
LTE B26 10M Ch26740 1RB0 QPSK

M



Site : 03CH21-HY
 Condition: -13 3m DRH18-E_LE2C03A18EN_240711 Horizontal
 : LTE Band 26 10M Ch26740 1RB0 QPSK

	Freq MHz	Level dBm	Detector	Ant Amp\Cb		Filter	EIRPCF		Readin g	Limit dBm	Margin dB	Pol
				Factor	dB		dB	dB				
1	1629.00	-25.02	RMS	24.60	-25.17	0.64	-95.23	70.14	-13.00	-12.02	Horizontal	
2	2444.00	-31.64	RMS	26.70	-24.11	0.36	-95.23	60.64	-13.00	-18.64	Horizontal	
3	3258.00	-41.94	RMS	28.00	-22.78	0.35	-95.23	47.72	-13.00	-28.94	Horizontal	
4	4073.00	-41.73	RMS	30.45	-21.88	0.31	-95.23	44.62	-13.00	-28.73	Horizontal	
5	4888.00	-49.27	RMS	32.38	-21.44	0.36	-95.23	34.66	-13.00	-36.27	Horizontal	
6	5702.00	-55.76	RMS	33.51	-21.69	0.22	-95.23	27.43	-13.00	-42.76	Horizontal	
7	6517.00	-53.52	RMS	35.87	-20.95	0.25	-95.23	26.54	-13.00	-40.52	Horizontal	



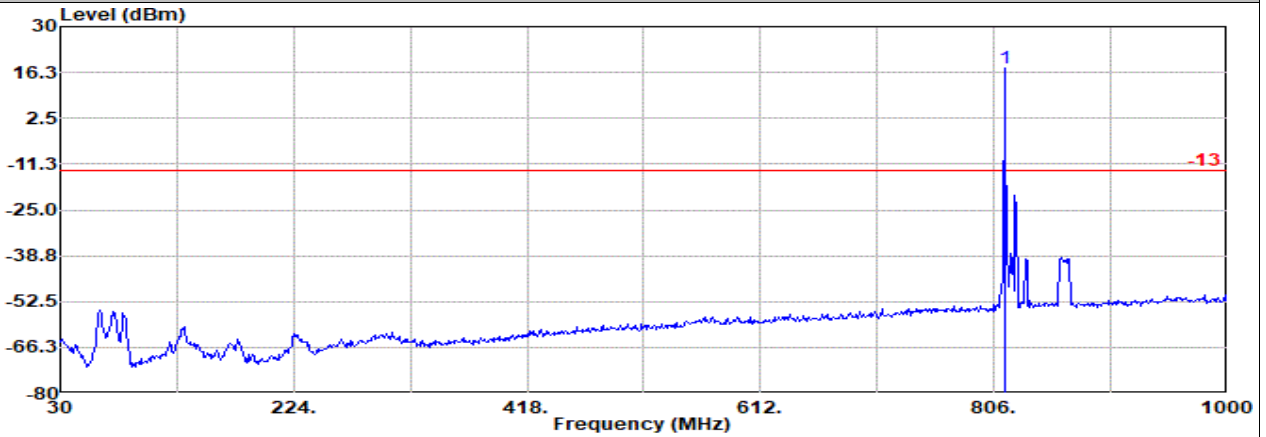
Site : 03CH21-HY
 Condition: -13 3m DRH18-E_LE2C03A18EN_240711 Vertical
 : LTE Band 26 10M Ch26740 1RB0 QPSK

	Freq MHz	Level dBm	Detector	Ant Amp\Cb		Filter	EIRPCF		Readin g	Limit dBm	Margin dB	Pol
				Factor	dB		dB	dB				
1	1629.00	-24.71	RMS	24.60	-25.17	0.64	-95.23	70.45	-13.00	-11.71	Vertical	
2	2444.00	-31.28	RMS	26.70	-24.11	0.36	-95.23	61.00	-13.00	-18.28	Vertical	
3	3258.00	-40.58	RMS	28.00	-22.78	0.35	-95.23	49.08	-13.00	-27.58	Vertical	
4	4073.00	-40.72	RMS	30.45	-21.88	0.31	-95.23	45.63	-13.00	-27.72	Vertical	
5	4888.00	-49.51	RMS	32.38	-21.44	0.36	-95.23	34.42	-13.00	-36.51	Vertical	
6	5702.00	-53.09	RMS	33.51	-21.69	0.22	-95.23	30.10	-13.00	-40.09	Vertical	
7	6517.00	-52.37	RMS	35.87	-20.95	0.25	-95.23	27.69	-13.00	-39.37	Vertical	



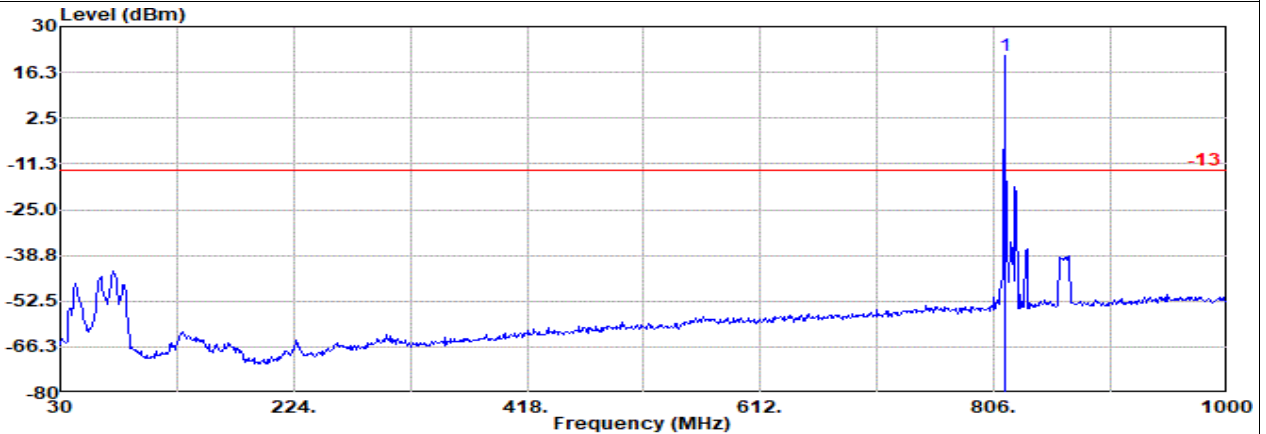
Ant. 1+ Ant. 2

Part 90S Mode 5
 LTE B26 10M Ch26740 1RB0 QPSK
 M



Site : 03CH21-HY
 Condition: -13 3m CBL 6111D & 00800N1D01N-06_41912&05 Horizontal
 : LTE Band 26 10M Ch26740 1RB0 QPSK
 : #1 is fundamental signal which can be ignored.

Freq	Level	Detector	Ant Factor	Amp	Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
MHz	dBm			dB/m	dB	dB	dB	dBuV	dBm	dB	
1	814.73	17.50 RMS	27.42	5.02	0.00	-95.23	80.29	-13.00	30.50	Horizontal	



Site : 03CH21-HY
 Condition: -13 3m CBL 6111D & 00800N1D01N-06_41912&05 Vertical
 : LTE Band 26 10M Ch26740 1RB0 QPSK
 : #1 is fundamental signal which can be ignored.

Freq	Level	Detector	Ant Factor	Amp	Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
MHz	dBm			dB/m	dB	dB	dB	dBuV	dBm	dB	
1	814.73	21.16 RMS	27.42	5.02	0.00	-95.23	83.95	-13.00	34.16	Vertical	

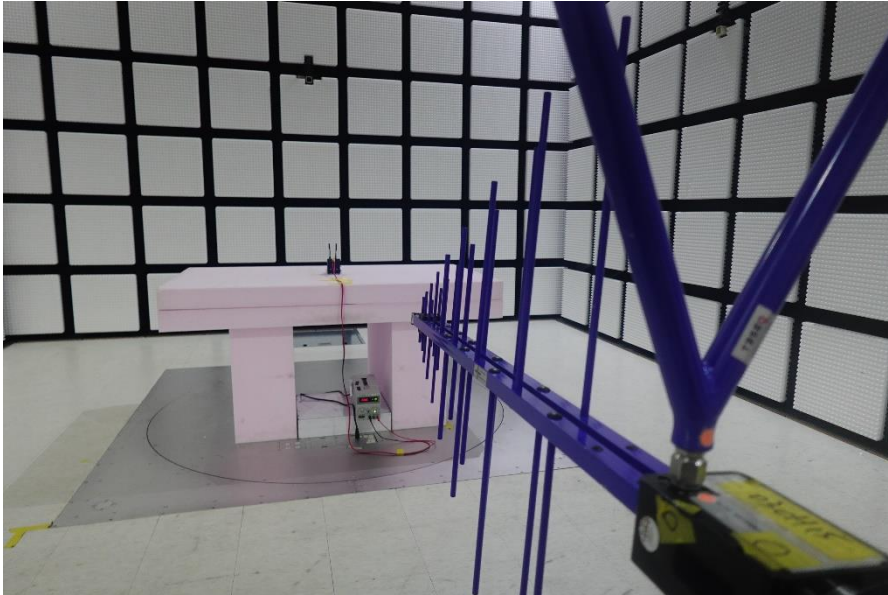
Remark: #1 is fundamental signal which can be ignored.

Appendix C. Setup Photographs

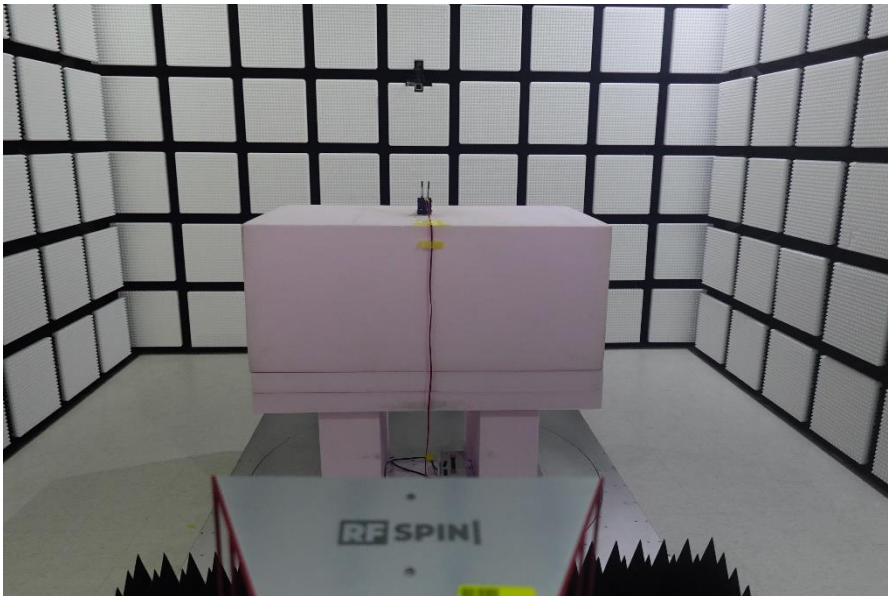
<Radiated Emission>

Y Plane

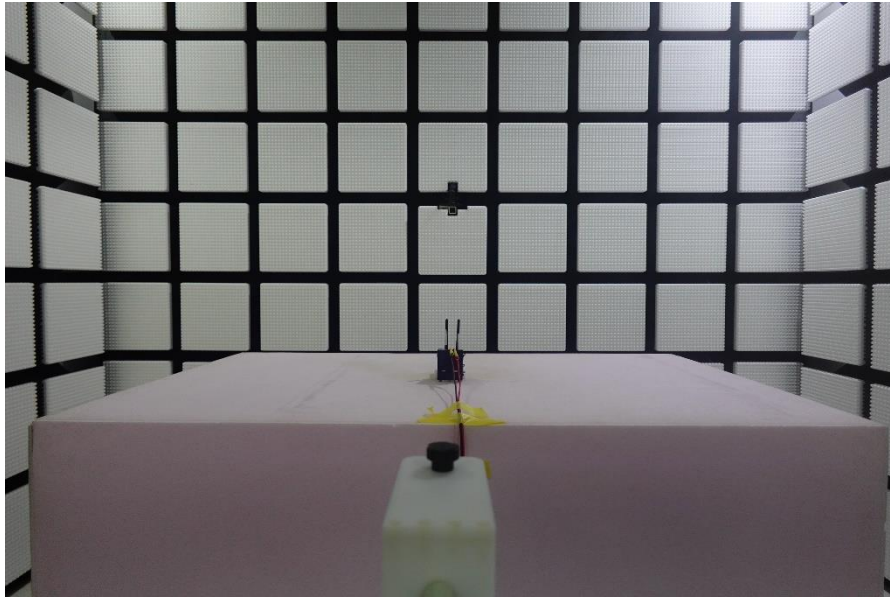
LF



HF



SHF



————THE END————