

Test Report No:
2380159R-RFNAOTHV02-A

VARIANT TEST REPORT

FCC Rules&Regulations

Product Name	freeRAN LTE Base Station
Brand Name	
Model No.	BS1AL-EO9100-US
FCC ID	2AXTDBS1ALEO9100US
Applicant's Name / Address	Ubiik Inc. 19F., No. 17, Sec. 1, Chengde Rd., Datong Dist., Taipei City 103, Taiwan (R.O.C.)
Manufacturer's Name / Address	Ubiik Inc. 19F., No. 17, Sec. 1, Chengde Rd., Datong Dist., Taipei City 103, Taiwan (R.O.C.)
Test Method Requested, Standard	FCC CFR Title 47 Part 15 Subpart C Section 15.247 ANSI C63.10-2013
Verdict Summary	IN COMPLIANCE
Documented By	 Hailey Peng
Approved By	 Rueyyan Lin
Date of Receipt	Aug. 04, 2023
Date of Issue	Jan. 05, 2024
Report Version	V1.0

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Competences and Guarantees

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA.

General Conditions

1. The test results relate only to the samples tested.
2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
3. This report must not be used to claim product endorsement by TAF or any agency of the government.
4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Revision History

Version	Description	Issued Date
V1.0	Initial issue of report	Jan. 05, 2024

Permissive Change

Report No.	Version	Description	Issued Date
22C0676R-RFUSV01S-A	V3.0	Original application.	Mar. 29, 2023
2380159R-RFNAOTHV02-A	V1.0	<u>Class II Permissive Change (C2PC)</u> 1. Adding the Cat.1 1.4 MHz, 3 MHz and Cat-M1 1.4 MHz functions. 2. Adding two same type antennas (model: DS0915-0726WNM and model: DS0915-0727WNM) but higher gain than the original certificate. 3. Adding the LVDS module, and it is not radio frequency component. 4. Adding the MicroSD Card for marketing. 5. Changing the product name to “freeRAN LTE Base Station” from “freeRAN IoT Base Station”. 6. Adding the second source of WWAN module for EUT contains (brand name: UBIK, model: RC7611, FCC ID: 2AXTDRC76B).	Jan. 05, 2024

Summary of Test Result

Report Clause	Test Items	Result (PASS/FAIL)	Remark
3	AC Power Line Conducted Emission	PASS	-
4	Occupied Bandwidth & DTS Bandwidth	PASS	-
5	Maximum Conducted Output Power	PASS	-
6	Maximum Power Spectral Density	PASS	-
7	Antenna Port Conducted Emission	PASS	-
8	Transmitter Radiated Spurious Emission	PASS	-
Note: The EUT contains a WWAN module, and the WWAN module has two sources as below. (1) Main source of WWAN module, brand name: UBIK, model: RC7611-1, FCC ID: 2AXTDRC76B. (2) Second source of WWAN module, brand name: UBIK, model: RC7611, FCC ID: 2AXTDRC76B. From the above, main source of WWAN module (model: RC7611-1) was selected as representative model for the test and its data was recorded in this report.			

Comments and Explanations

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Comments and Remarks

The product specification and testing instructions for the EUT declared in the report are provided by the manufacturer who will take all responsibilities for the accuracy.

1. General Information

1.1. EUT Description

Function	Frequency Range (MHz)	Operating Frequency (MHz)	Channel Number	Modulation Type
Cat.1 1.4 MHz	902 ~ 928	925.7 ~ 927.3	17 Channels	OFDMA 16QAM
Cat-M1 1.4 MHz				
Cat.1 3 MHz		926.3	1 Channel	
Cat-M1 3 MHz				

Accessories Information

No.	Equipment Name	Brand Name	Model No.	Rating
1	PoE	PHIHONG	POE60U-BTA	INPUT: AC 100~240V, 1.5A, 50~60Hz OUTPUT 1: DC 56V, 0.535A, 30W PIN 3,6 + PIN 1,2 Return OUTPUT 2: DC 56V, 0.535A, 30W PIN 4,5 + PIN 7,8 Return
No.	Equipment Name	Brand Name	Model No.	Description
2	Power Cable	SHEE LINE	SL-2 to SL-3	Non-Shielded, 1.8m
3	MicroSD Card	ADATA	DU3A-016GT	--

Antenna Information for Cat.1 1.4 MHz, Cat.1 3 MHz, Cat-M1 1.4 MHz and Cat-M1 3 MHz functions:

Ant.	Brand Name	Model No.	Type	Antenna Gain (dBi)	Cable Loss (dB)	Actual Gain (dBi)
0	M.gear	C1991-690054-A(SRF2023215)	Dipole	2.65	--	2.65
1	M.gear	C1991-690053-A(SRF2023215)	Dipole	1.20	--	1.20
2	Invax	DS0915-0726WNM	Dipole	4.75	0.8	3.95
3	Invax	DS0915-0727WNM	Dipole	3.12	--	3.12

Note: The antenna 2 is matched with the coaxial cable to testing.

The EUT supports the 1TX/1RX function.

Since antenna 0~4 are of the same type, antenna 2 is the highest gain and be evaluated.

Antenna Information for WWAN function:

Ant.	Brand Name	Model No.	Type	Antenna Gain (dBi)		
				LTE Band 2	LTE Band 4	LTE Band 13
0	Grand-Tek	OA-LTEWB-035-C0-UB	OMNI	1.8	0.6	1.4

Antenna Information for GNSS function:

Ant.	Brand Name	Model No.	Type	Antenna Gain (dBi)
0	Jinchang	JCA225-N	RHCP	5

Working Frequency				
Frequency	Frequency	Frequency	Frequency	Frequency
925.7 MHz	926.1 MHz	926.5 MHz	926.9 MHz	927.3 MHz
925.8 MHz	926.2 MHz	926.6 MHz	927.0 MHz	-
925.9 MHz	926.3 MHz	926.7 MHz	927.1 MHz	-
926.0 MHz	926.4 MHz	926.8 MHz	927.2 MHz	-

Cat.1 1.4 MHz and Cat-M1 1.4 MHz supports 925.7 ~ 927.3 MHz (17 Channels).

Cat.1 3 MHz and Cat-M1 3 MHz supports 926.3 MHz (1 Channel) only.

1.2. EUT Information

EUT Power Type	From PoE			
EUT Function	☒	Point-to-multipoint	☐	Point-to-point

1.3. Testing Applied Standards

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

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of TAF:

- ♦ KDB 558074 D01 v05r02
- ♦ KDB 414788 D01 v01r01

1.4. Testing Location Information

Testing Location Information		
Test Laboratory : DEKRA Testing and Certification Co., Ltd.		
1 (TAF: 3024)	ADD: No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C. TEL: +886-3-582-8001 FAX: +886-3-582-8958	
2 (TAF: 3024)	ADD: No.372, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan, R.O.C. TEL: +886-3-582-8001 FAX: +886-3-582-8958	
Test site number for address 1 includes HC-SR02. Test site number for address 2 includes HC-CB02, HC-CB03, HC-CB04, HC-SR10 and HC-SR12.		

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
AC Conduction Emission	HC-SR02	Gary Liao	24 / 64	2023/09/27
RF Conducted Emission	HC-SR12	Max Chang Scott Chang	24~25 / 61~64	2023/09/26, 2023/10/06~2023/10/11
Radiated Emission	HC-CB02	Ling Chen Gary Liao	23~24.3 / 61~63	2023/09/25, 2023/09/28

1.5. Measurement Uncertainty

Uncertainties have been calculated according to the DEKRA internal document 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)).

Test Item	Uncertainty
AC Power Line Conducted Emission	± 2.34 dB
Occupied Bandwidth & DTS Bandwidth	± 282.55 Hz
Maximum Conducted Output Power	± 1.16 dB
Maximum Power Spectral Density	± 2.47 dB
Antenna Port Conducted Emission	± 2.47 dB
Transmitter Radiated Spurious Emission	± 3.52 dB below 1 GHz ± 3.56 dB above 1 GHz

1.6. List of Test Equipment

HC-SR02

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal. Date	Next Cal. Date
Artificial Mains Network	R&S	ENV4200	848411/010	9kHz-30MHz, 4line/100A	2022/12/19	2023/12/18
EMI Test Receiver	R&S	ESR3	102608	9 kHz - 3.6 GHz	2023/09/19	2024/09/18
Two-Line V-Network	R&S	ENV216	100096	9kHz-30MHz	2023/06/02	2024/06/01
Coaxial Cable(9 m)	Harbour	RG-400	HC-SR02	9 kHz-2500 MHz	2023/08/04	2024/08/03
EMI Testing System	AUDIX	e3 210616 dekra V9	HC-SR02	N/A	N/A	N/A

HC-SR12

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal. Date	Next Cal. Date
High Speed Peak Power Meter Dual Input	Anritsu	ML2496A	1602004	0.3-40 GHz	2022/11/02	2023/11/01
Pulse Power Sensor	Anritsu	MA2411B	1531043	0.3-40 GHz	2022/11/02	2023/11/01
Pulse Power Sensor	Anritsu	MA2411B	1531044	0.3-40 GHz	2022/11/02	2023/11/01
EXA Signal Analyzer	Keysight	N9010A	MY51440132	10 Hz-44 GHz	2022/12/13	2023/12/12

HC-CB02

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal. Date	Next Cal. Date
Signal and Spectrum Analyzer	R&S	FSVA40	101435	10 Hz-40 GHz	2023/05/29	2024/05/28
Trilog Broadband Antenna	Schwarzbeck	VULB 9168	1209	30 MHz-2 GHz	2023/06/13	2024/06/12
Double Ridged Horn Antenna	RF SPIN	DRH18-E	211211A18EN	1G-18GHz	2022/11/15	2023/11/14
Horn Antenna	Schwarzbeck	BBHA 9170	203	18G-40GHz	2023/02/13	2024/02/12
Pre-Amplifier	EMCI	EMC01820I	980365	30M-8 GHz,20 dB	2023/04/07	2024/04/06
Pre-Amplifier	EMEC	EM01G18GA	060741	1G-18 GHz,50 dB	2023/05/05	2024/05/04
Pre-Amplifier	DEKRA	AP-400C	201801231	18G-40 GHz,48 dB	2022/09/27	2023/09/26
Pre-Amplifier	DEKRA	AP-400C	201801231	18G-40 GHz,48 dB	2023/10/03	2024/10/02
EMI Test Receiver	R&S	ESR7	102260	10 Hz-7 GHz	2022/12/01	2023/11/30
Magnetic Loop Antenna	Teseq	HLA 6121	44287	0.01-30 MHz	2022/10/21	2023/10/20
Coaxial Cable(13m)	Suhner	SF104	HC-CB02	30M-18 GHz	2023/08/14	2024/08/13
Coaxial Cable(3m)	Suhner,Rosnol	SF102_UP0264	HC-CB02-1	18G-40 GHz 3 m	2023/08/14	2024/08/13
Radiated Software	AUDIX	e3 V9	HC-CB02_1	N/A	N/A	N/A

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

2. Test Configuration of EUT

2.1. Test Condition

EUT Operational Condition	
Testing Voltage	AC 120V/60Hz

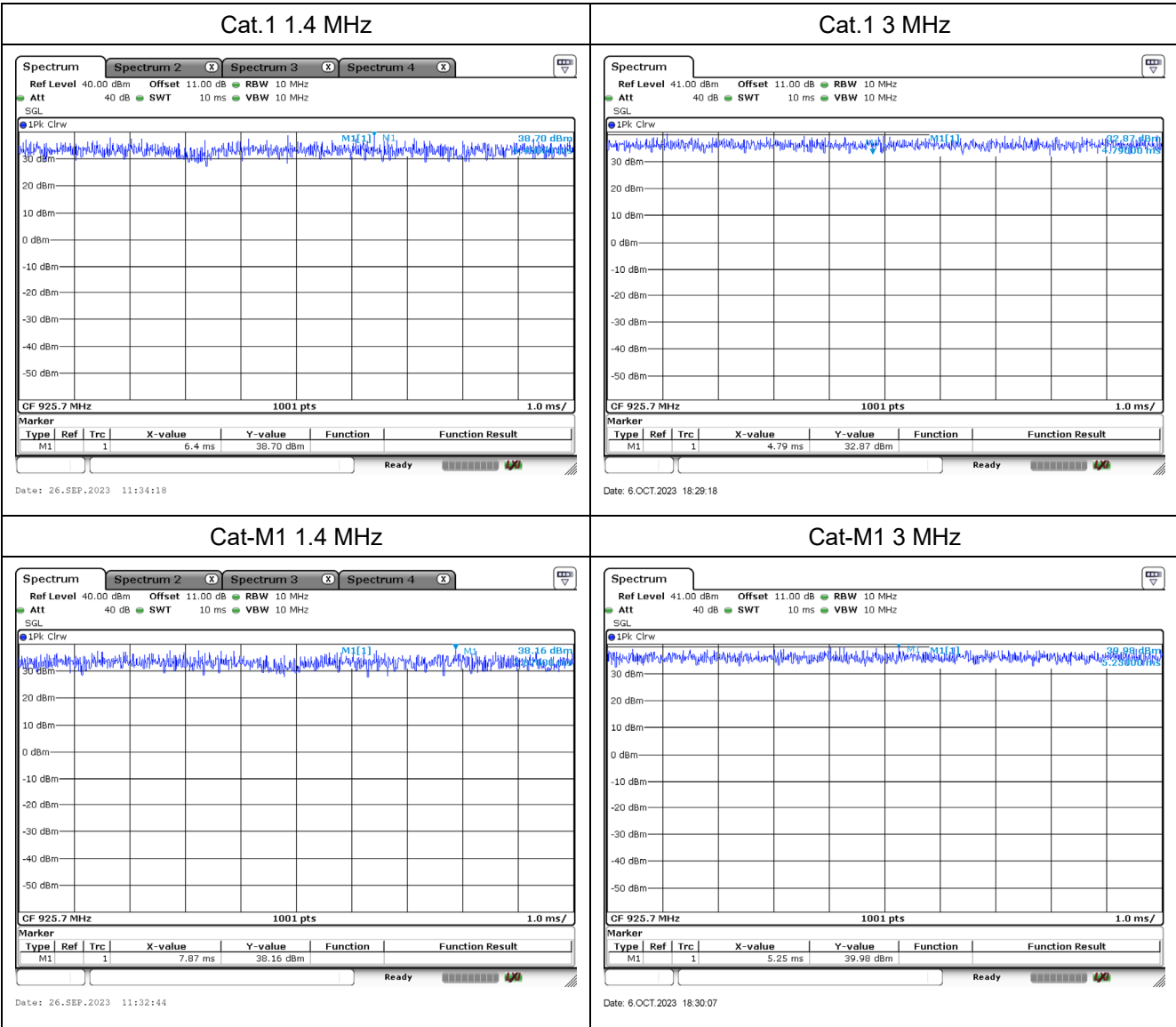
2.2. Test Frequency Mode

Test Software Version	TeraTerm v4.75
-----------------------	----------------

Test Condition	Frequency (MHz)	Power Setting
Cat.1 1.4 MHz	925.7	62
	927.3	62
Cat.1 3 MHz	926.3	61
Cat-M1 1.4 MHz	925.7	62
	927.3	61
Cat-M1 3 MHz	926.3	61

2.3. Duty Cycle

Test Condition	On Times (ms)	On+Off Times (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
Cat.1 1.4 MHz	--	--	100.00	0.00	0.010
Cat.1 3 MHz	--	--	100.00	0.00	0.010
Cat-M1 1.4 MHz	--	--	100.00	0.00	0.010
Cat-M1 3 MHz	--	--	100.00	0.00	0.010



2.4. The Worst Case Measurement Configuration

Tests Item	AC Power Line Conducted Emission
Test Condition	AC power line conducted measurement for line and neutral
Operating Mode	Transmit
The EUT supports four functions “Cat.1 1.4 MHz, Cat.1 3 MHz, Cat-M1 1.4 MHz and Cat-M1 3 MHz”. “Cat-M1 1.4 MHz” generated the worst test result for transmitter radiated spurious emission below 1GHz test, thus the measurement for AC power line conducted emission test will follow this same test configuration.	

Tests Item	Occupied Bandwidth & DTS Bandwidth Maximum Conducted Output Power Maximum Power Spectral Density Antenna Port Conducted Emission
Test Condition	Conducted measurement at transmit chains

Tests Item	Transmitter Radiated Spurious Emission
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Transmit
Operating Mode > 1GHz	Transmit

Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Transmit
1	Cat.1 1.4 MHz + LTE
2	Cat.1 3 MHz + LTE
3	Cat-M1 1.4 MHz + LTE
4	Cat-M1 3 MHz + LTE
1. “Mode 3: Cat-M1 1.4 MHz + LTE” is the worst case and it was record in this test report. 2. Refer to Appendix G for Radiated Emission Co-location.	

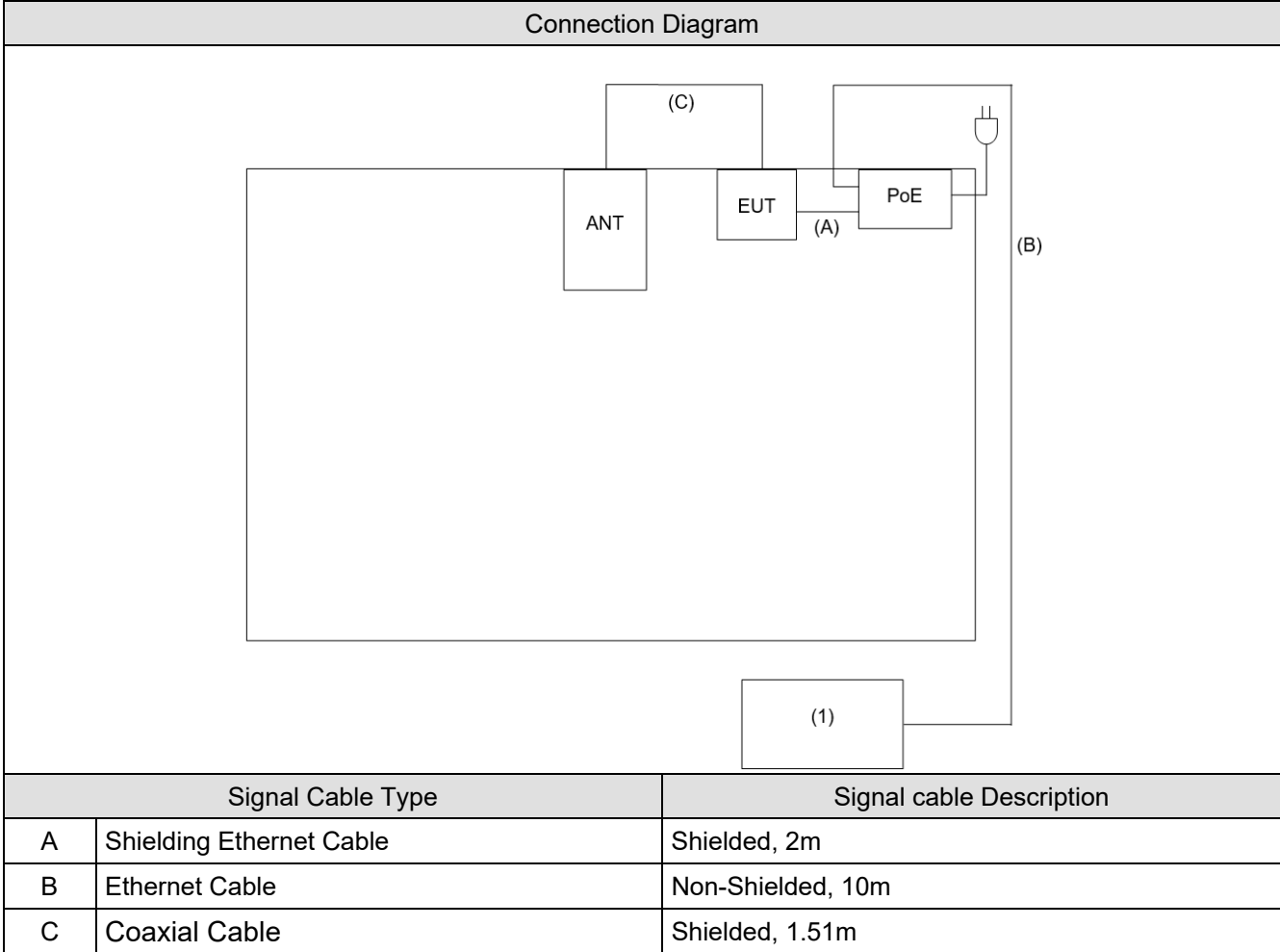
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	Transmit
1	Cat.1 1.4 MHz + LTE
2	Cat.1 3 MHz + LTE
3	Cat-M1 1.4 MHz + LTE
4	Cat-M1 3 MHz + LTE
1. “Mode 3: Cat-M1 1.4 MHz + LTE” is the worst case and it was record in this test report. 2. Refer to DEKRA Test Report No.: 2380159R-RFUSV17S-A for Co-location RF Exposure Evaluation.	

Note: Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.5. Tested System Details

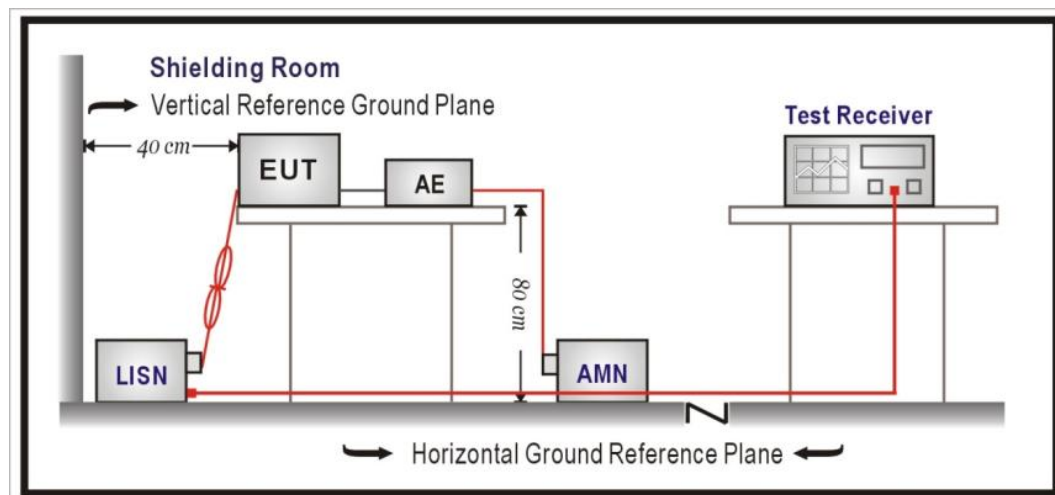
No.	Equipment	Brand Name	Model No.	Serial No.
1	Notebook	Lenovo	Lenovo Ideapad 510S	MP16Z7TB

2.6. Configuration of Tested System



3. AC Power Line Conducted Emission

3.1. Test Setup



3.2. Test Limit

Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

3.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs.)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

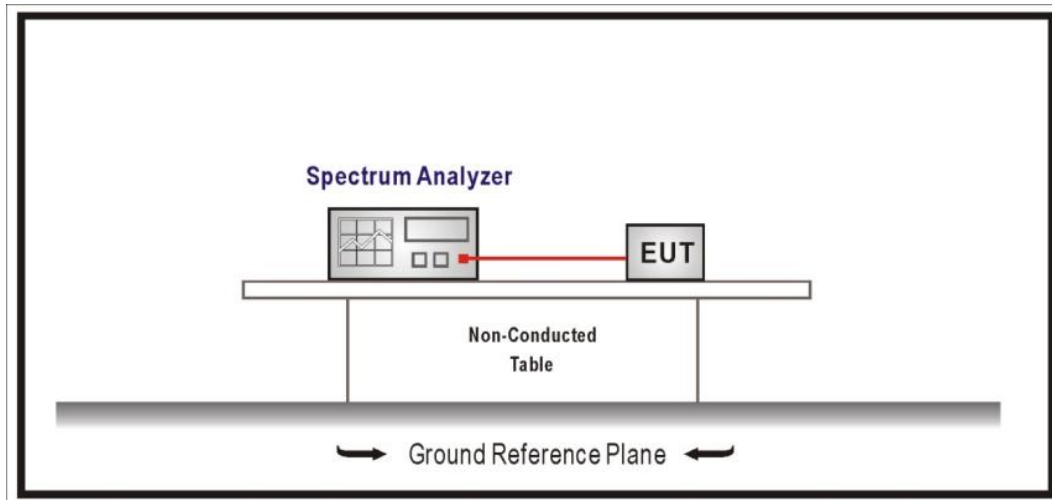
Conducted emissions were investigated over the frequency range from 0.15 MHz to 30 MHz using a receiver bandwidth of 9 kHz.

3.4. Test Result of AC Power Line Conducted Emission

Refer as Appendix A

4. Occupied Bandwidth & DTS Bandwidth

4.1. Test Setup



4.2. Test Limit

The 6 dB bandwidth: ≥ 0.50 MHz.

Occupied Bandwidth: N/A

4.3. Test Procedures

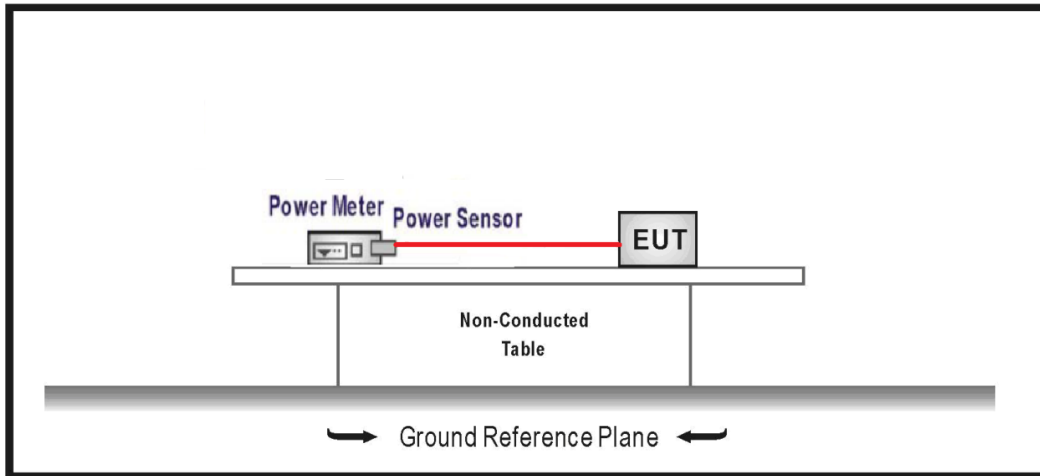
The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074.

4.4. Test Result of Occupied Bandwidth & DTS Bandwidth

Refer as Appendix B

5. Maximum Conducted Output Power

5.1. Test Setup



5.2. Test Limit

The maximum conducted output power shall be less 30 dBm (1 Watt).

5.3. Test Procedures

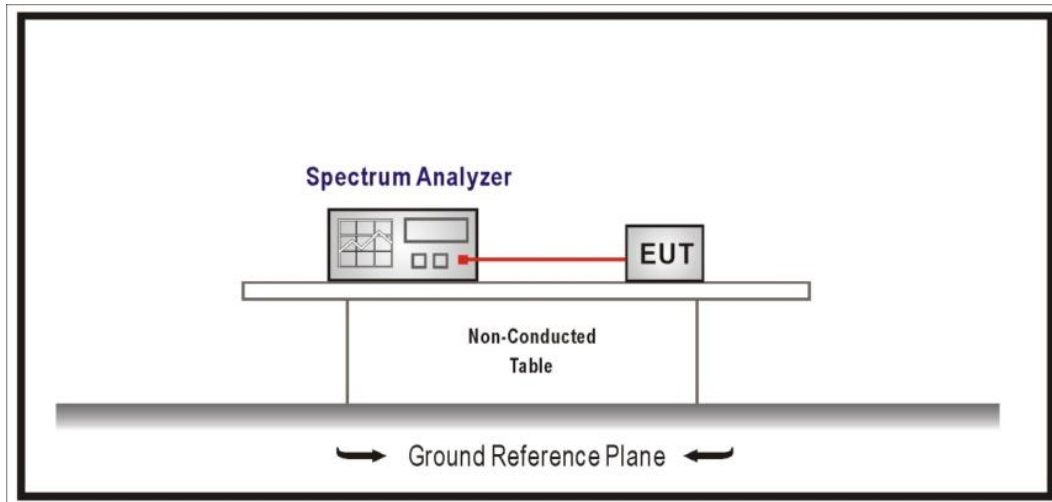
The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074.

5.4. Test Result of Maximum Conducted Output Power

Refer as Appendix C

6. Maximum Power Spectral Density

6.1. Test Setup



6.2. Test Limit

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8 dBm in any 3 kHz band during any time interval of continuous transmission.

6.3. Test Procedures

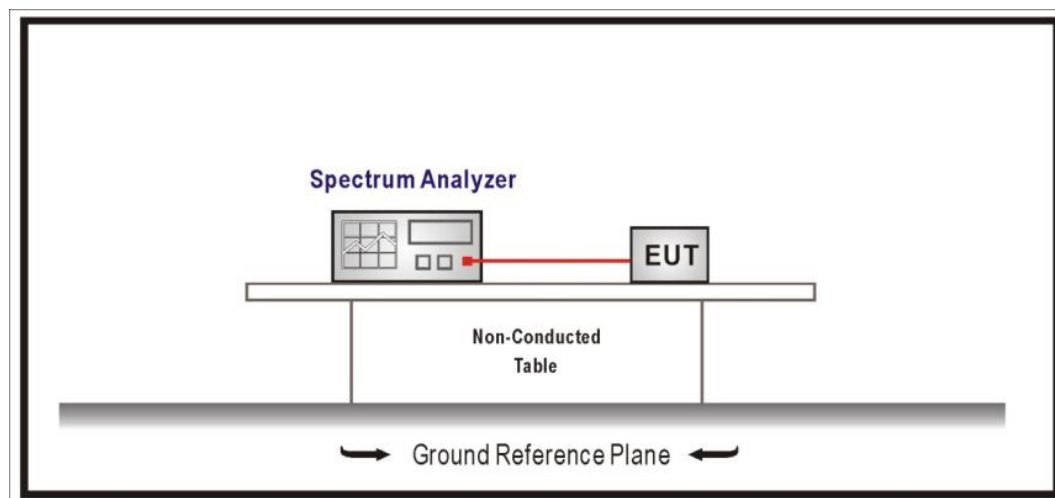
The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074.

6.4. Test Result of Maximum Power Spectral Density

Refer as Appendix D

7. Antenna Port Conducted Emission

7.1. Test Setup



7.2. Test Limit

RF output power procedure	Limit (dBc)
Peak output power procedure	20
Average output power procedure	30

Remarks:

1. In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limit.
2. If the transmitter complies with the conducted power limit based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

7.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB 558074.

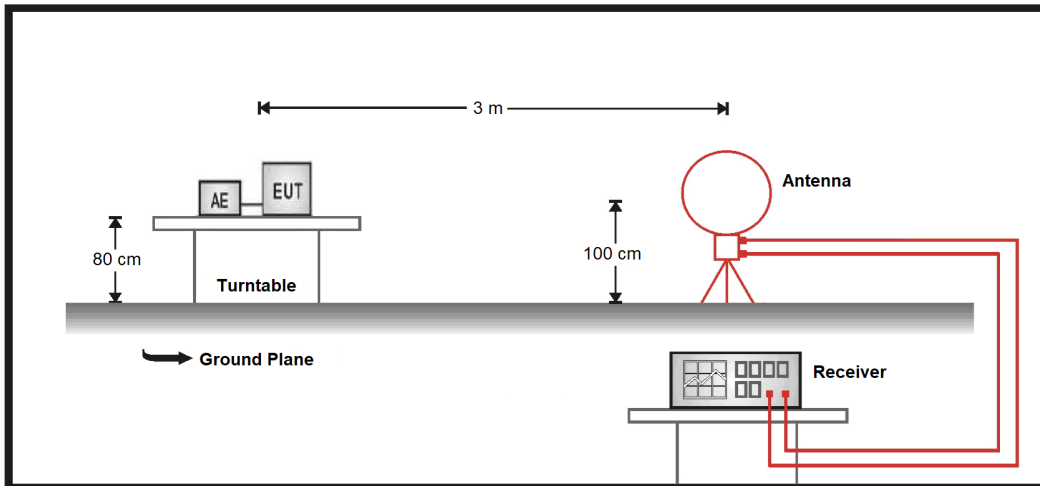
7.4. Test Result of Antenna Port Conducted Emission

Refer as Appendix E

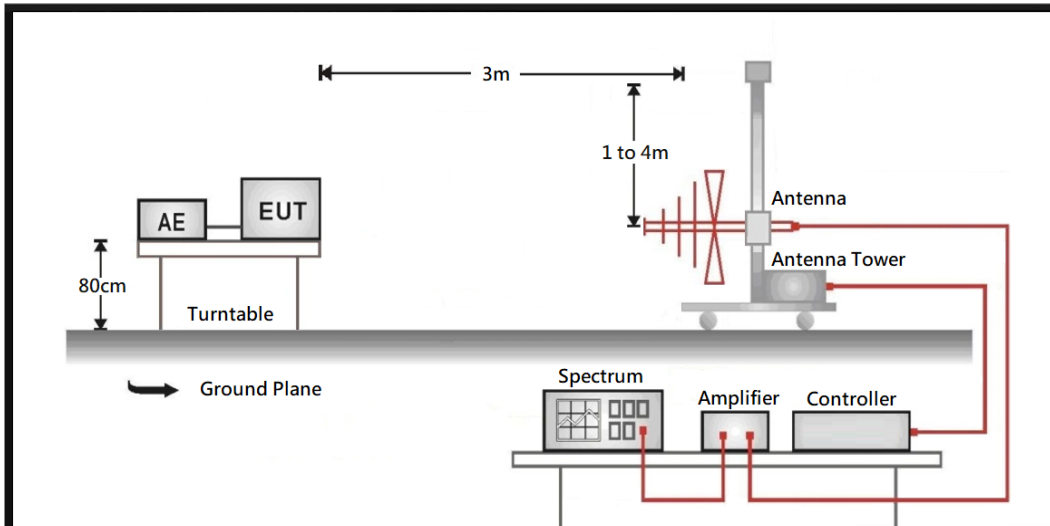
8. Transmitter Radiated Spurious Emission

8.1. Test Setup

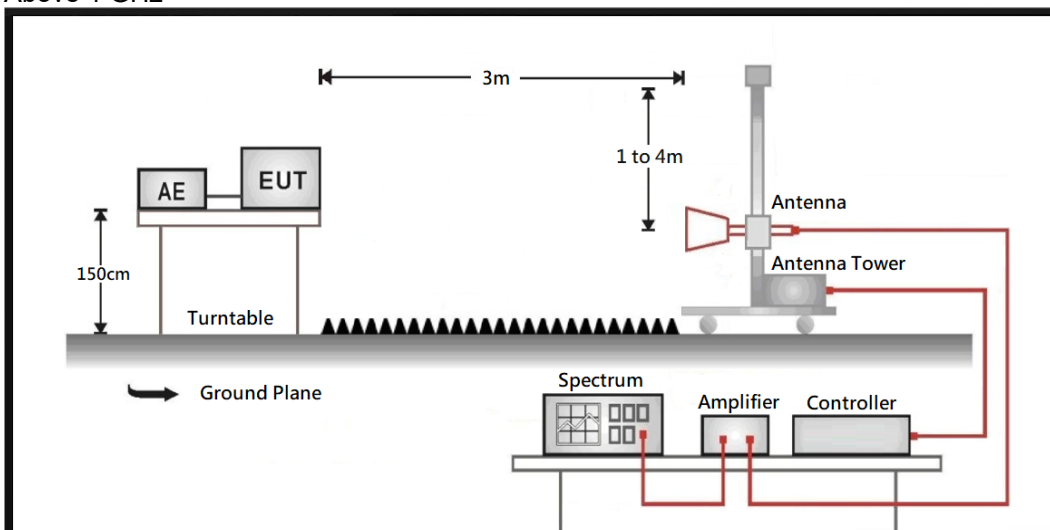
9 kHz ~ 30 MHz



30 MHz ~ 1 GHz



Above 1 GHz



8.2. Test Limit

Frequency (MHz)	Field strength (uV/m)	Field strength (dBuV/m)	Measurement distance (m)
0.009 – 0.490	2400/F(kHz)	20 log (2400/F(kHz))	300
0.490 – 1.705	24000/F(kHz)	20 log (24000/F(kHz))	30
1.705 - 30	30	29.5	30
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

Remarks:

1. Field strength (dBuV/m) = 20 log Field strength (uV/m)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

8.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB 558074.

The EUT and its simulators are placed on a turn table which is 0.8 or 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

On any frequency or frequencies from 9 kHz(include The the lowest oscillator frequency generated within the device up to the 10th harmonic) to 1000 MHz, the limit shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limit shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

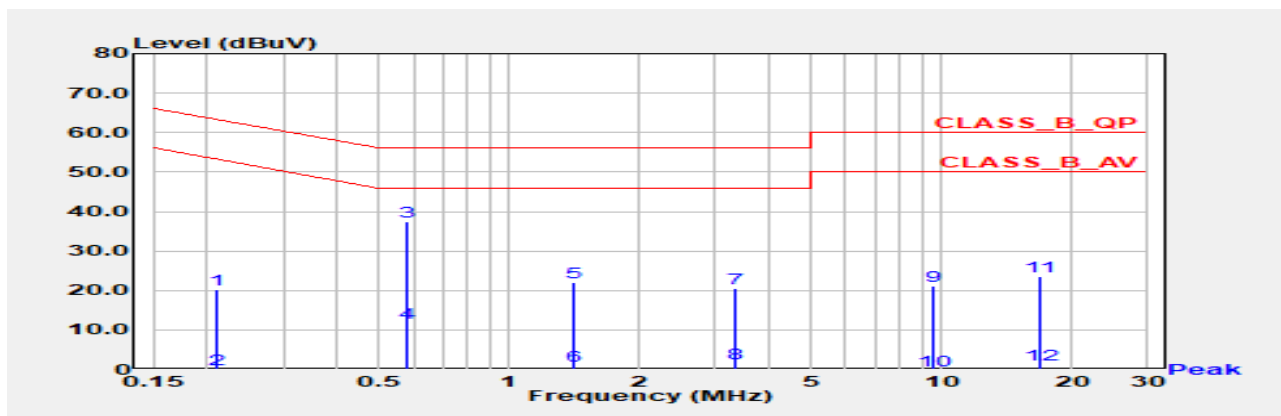
The bandwidth below 1 GHz setting on the field strength meter is 120 kHz and above 1 GHz is 1 MHz.

8.4. Test Result of Transmitter Radiated Spurious Emission

Refer as Appendix F

Appendix A. Test Result of AC Power Line Conducted Emission

Test Condition	Cat-M1 1.4 MHz / 927.3 MHz	Phase	Line
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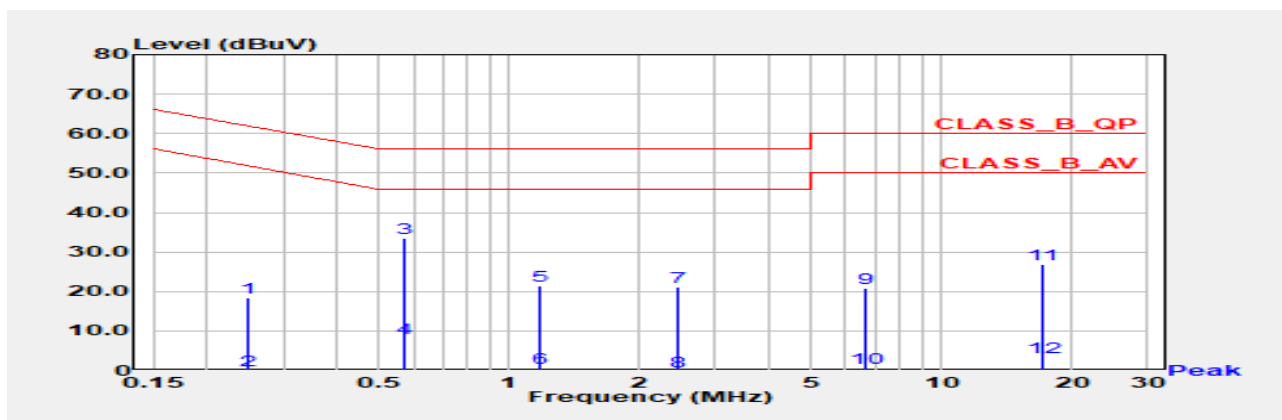


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.211	20.17	63.18	-43.01	10.53	9.65	QP
2	0.211	0.08	53.18	-53.11	-9.57	9.65	AV
*3	0.582	37.42	56.00	-18.58	27.74	9.68	QP
4	0.582	11.82	46.00	-34.18	2.14	9.68	AV
5	1.418	22.06	56.00	-33.94	12.32	9.74	QP
6	1.418	0.79	46.00	-45.21	-8.95	9.74	AV
7	3.310	20.49	56.00	-35.51	10.66	9.83	QP
8	3.310	1.43	46.00	-44.57	-8.40	9.83	AV
9	9.552	21.14	60.00	-38.86	11.06	10.07	QP
10	9.552	-0.19	50.00	-50.19	-10.26	10.07	AV
11	16.928	23.45	60.00	-36.55	13.21	10.23	QP
12	16.928	1.26	50.00	-48.74	-8.98	10.23	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Test Condition	Cat-M1 1.4 MHz / 927.3 MHz	Phase	Neutral
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No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.249	18.39	61.78	-43.38	8.75	9.64	QP
2	0.249	0.11	51.78	-51.66	-9.53	9.64	AV
*3	0.570	33.62	56.00	-22.38	23.95	9.67	QP
4	0.570	8.16	46.00	-37.84	-1.51	9.67	AV
5	1.172	21.56	56.00	-34.44	11.84	9.72	QP
6	1.172	0.49	46.00	-45.51	-9.23	9.72	AV
7	2.461	21.23	56.00	-34.77	11.44	9.79	QP
8	2.461	-0.23	46.00	-46.23	-10.02	9.79	AV
9	6.662	20.86	60.00	-39.14	10.88	9.97	QP
10	6.662	0.55	50.00	-49.45	-9.42	9.97	AV
11	17.109	26.95	60.00	-33.05	16.64	10.31	QP
12	17.109	3.28	50.00	-46.72	-7.03	10.31	AV

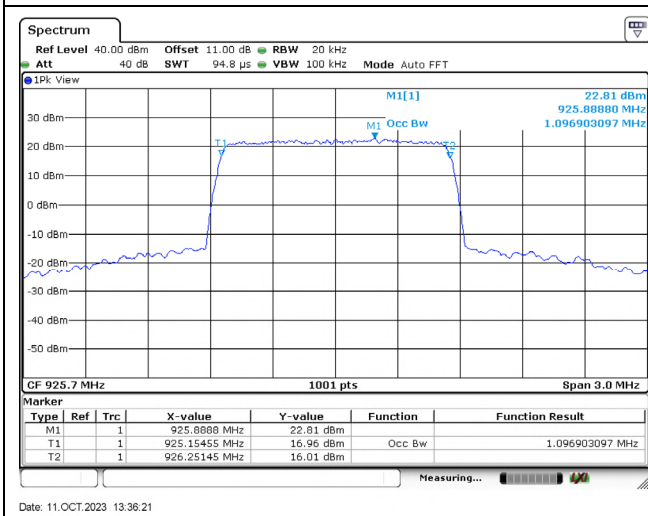
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

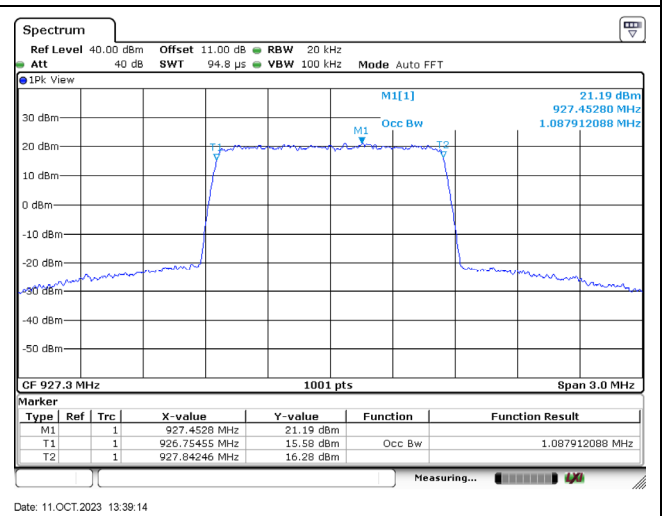
Appendix B.1 Test Result of Occupied Bandwidth

Test Condition	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)
Cat.1 1.4 MHz	925.7	1.096	-
	927.3	1.087	-
Cat.1 3 MHz	926.3	2.697	-
Cat-M1 1.4 MHz	925.7	1.090	-
	927.3	1.090	-
Cat-M1 3 MHz	926.3	2.687	-

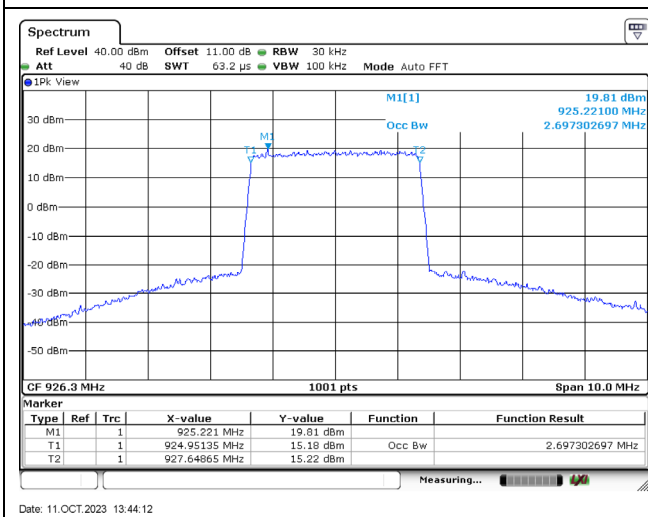
Cat.1 1.4 MHz / 925.7 MHz



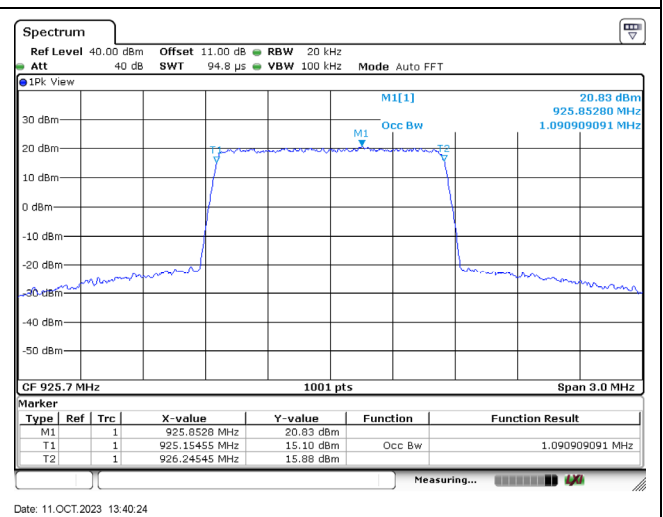
Cat.1 1.4 MHz / 927.3 MHz



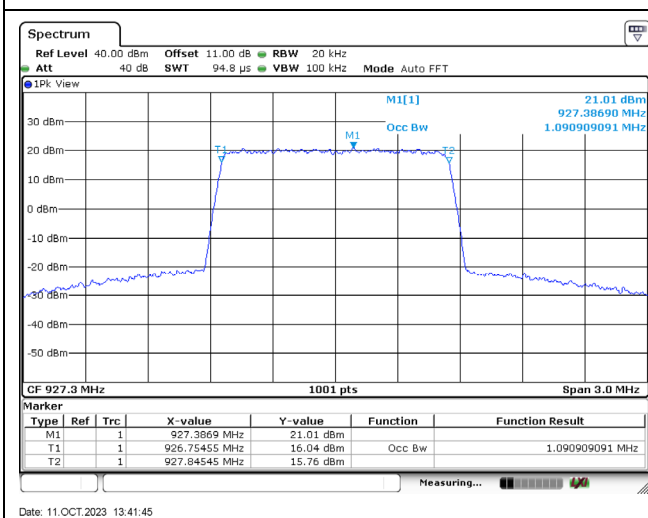
Cat.1 3 MHz / 926.3 MHz



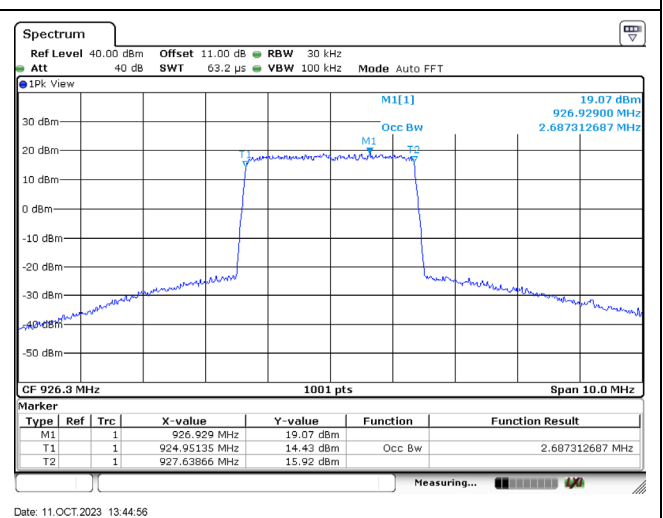
Cat-M1 1.4 MHz / 925.7 MHz



Cat-M1 1.4 MHz / 927.3 MHz



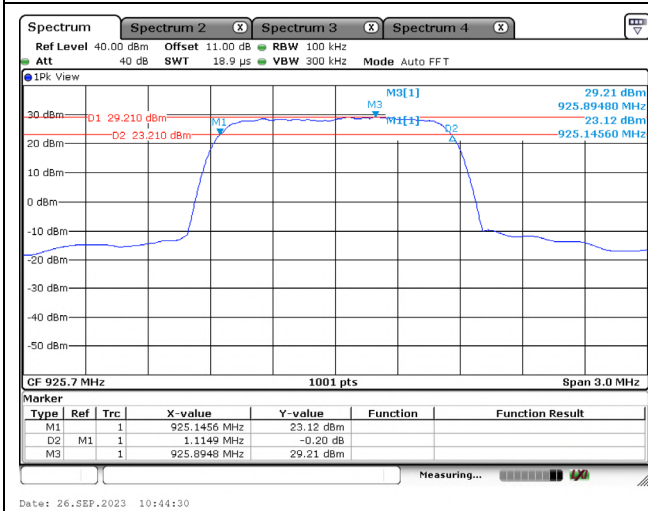
Cat-M1 3 MHz / 926.3 MHz



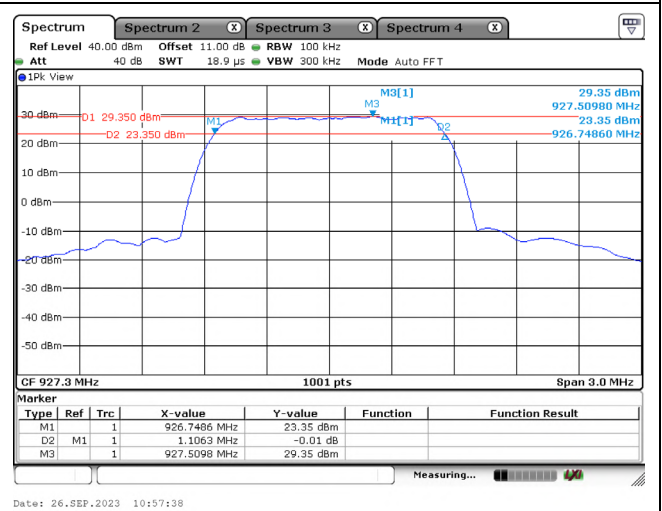
Appendix B.2 Test Result of DTS Bandwidth

Test Condition	Frequency (MHz)	DTS Bandwidth (MHz)	Limit (MHz)
Cat.1 1.4 MHz	925.7	1.114	0.50
	927.3	1.106	0.50
Cat.1 3 MHz	926.3	2.717	0.50
Cat-M1 1.4 MHz	925.7	1.121	0.50
	927.3	1.124	0.50
Cat-M1 3 MHz	926.3	2.703	0.50

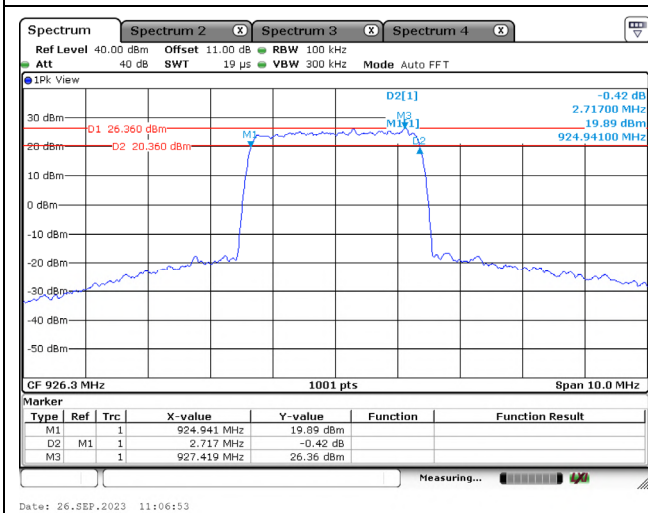
Cat.1 1.4 MHz / 925.7 MHz



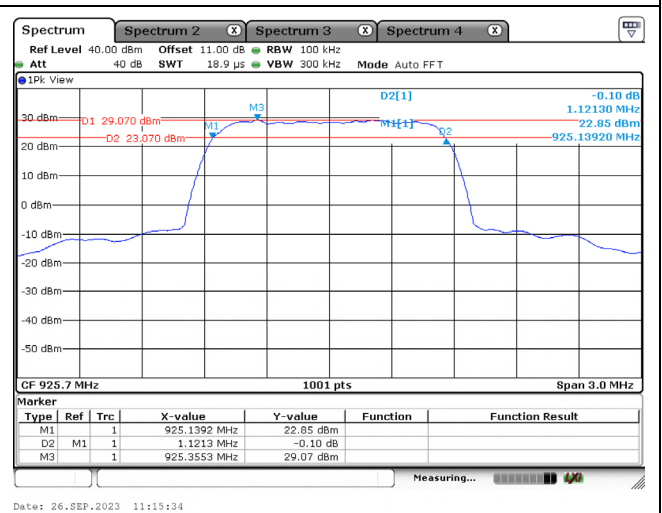
Cat.1 1.4 MHz / 927.3 MHz



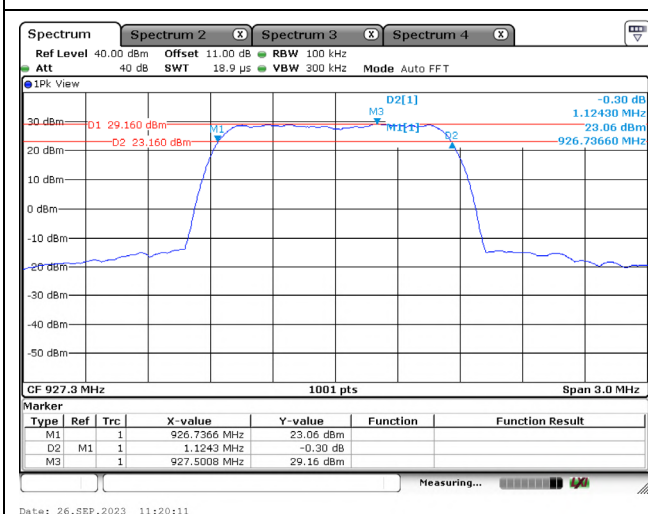
Cat.1 3 MHz / 926.3 MHz



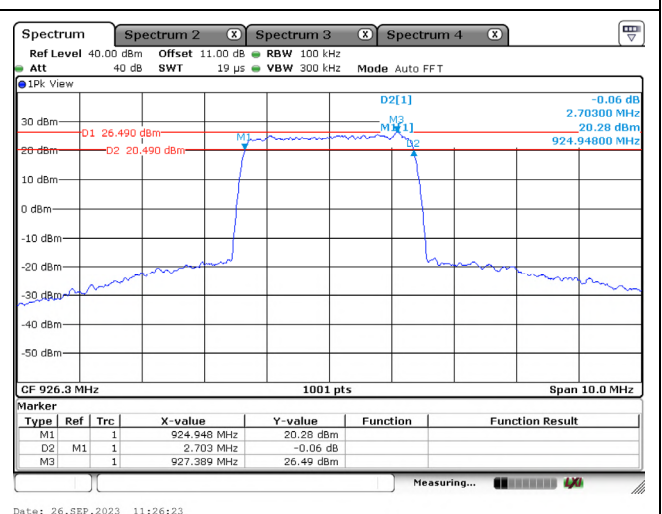
Cat-M1 1.4 MHz / 925.7 MHz



Cat-M1 1.4 MHz / 927.3 MHz



Cat-M1 3 MHz / 926.3 MHz



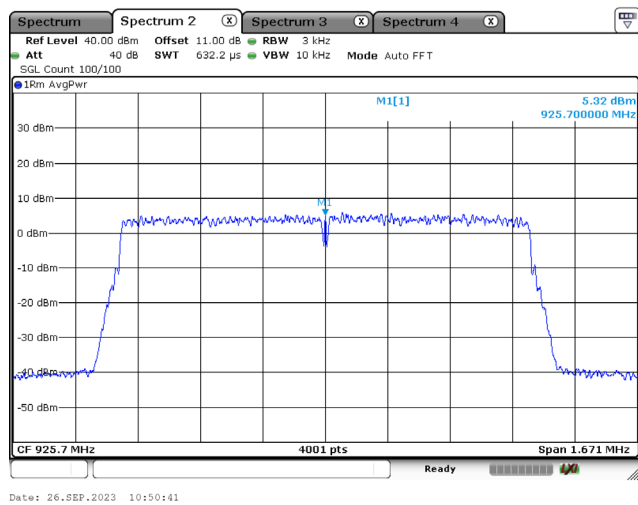
Appendix C. Test Result of Maximum Conducted Output Power

Test Condition	Frequency (MHz)	Maximum Conducted Average Output Power (dBm)	Limit (dBm)
Cat.1 1.4 MHz	925.7	29.19	30.00
	927.3	29.31	30.00
Cat.1 3 MHz	926.3	29.24	30.00
Cat-M1 1.4 MHz	925.7	29.32	30.00
	927.3	29.38	30.00
Cat-M1 3 MHz	926.3	29.29	30.00

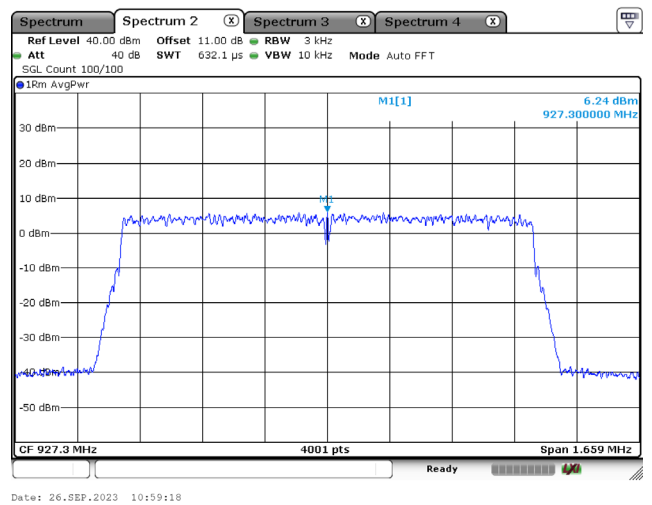
Appendix D. Test Result of Maximum Power Spectral Density

Test Condition	Frequency (MHz)	Power Spectral Density (dBm / 3kHz)	Limit (dBm / 3kHz)
Cat.1 1.4 MHz	925.7	5.32	8.00
	927.3	6.24	8.00
Cat.1 3 MHz	926.3	5.52	8.00
Cat-M1 1.4 MHz	925.7	5.68	8.00
	927.3	6.01	8.00
Cat-M1 3 MHz	926.3	5.63	8.00

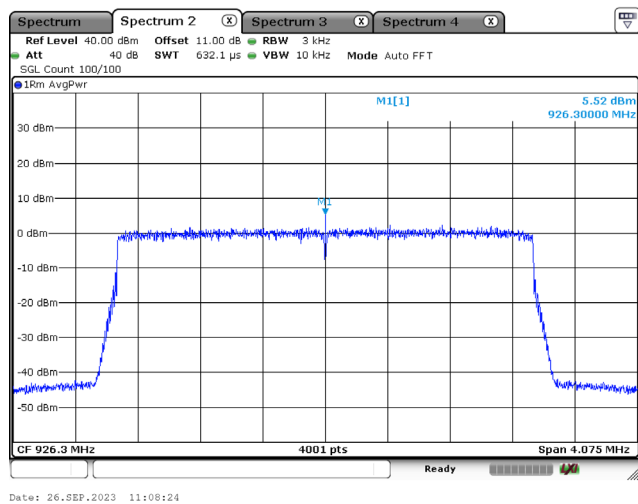
Cat.1 1.4 MHz / 925.7 MHz



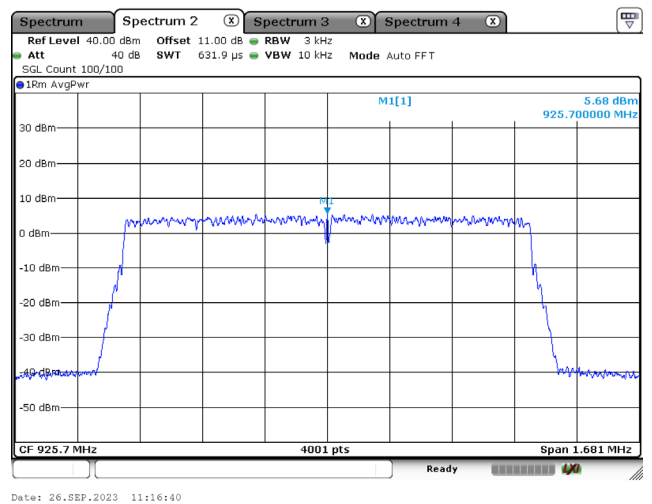
Cat.1 1.4 MHz / 927.3 MHz



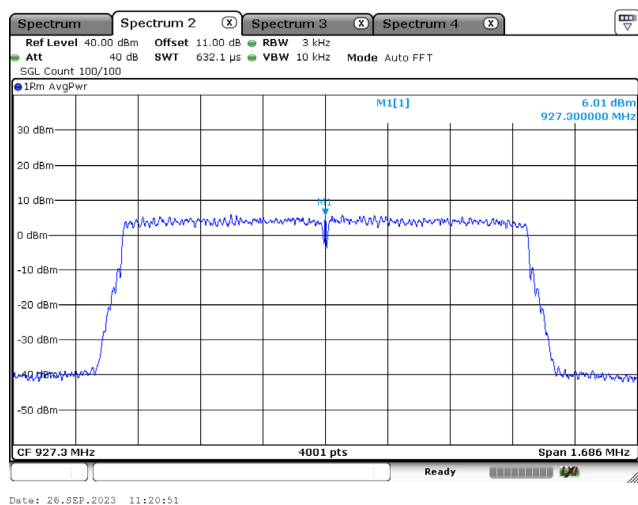
Cat.1 3 MHz / 926.3 MHz



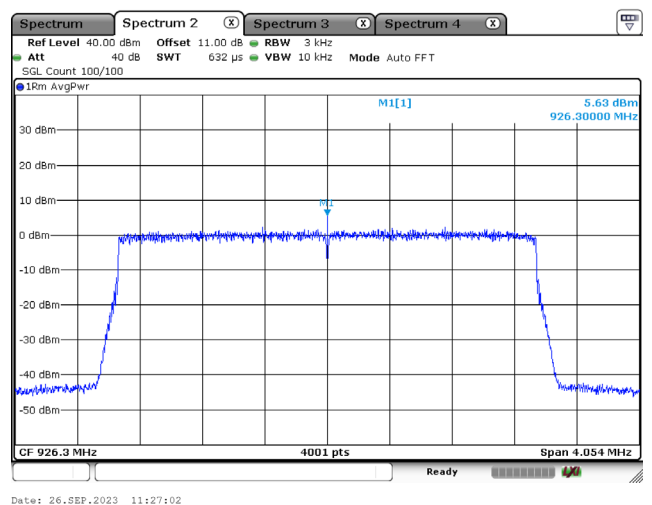
Cat-M1 1.4 MHz / 925.7 MHz



Cat-M1 1.4 MHz / 927.3 MHz

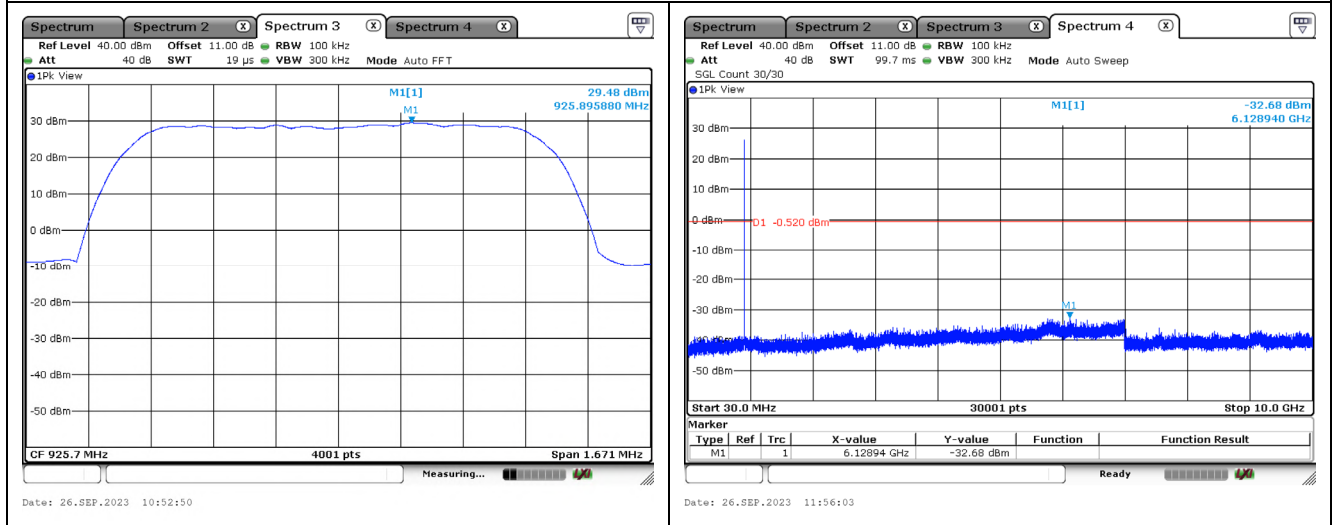


Cat-M1 3 MHz / 926.3 MHz

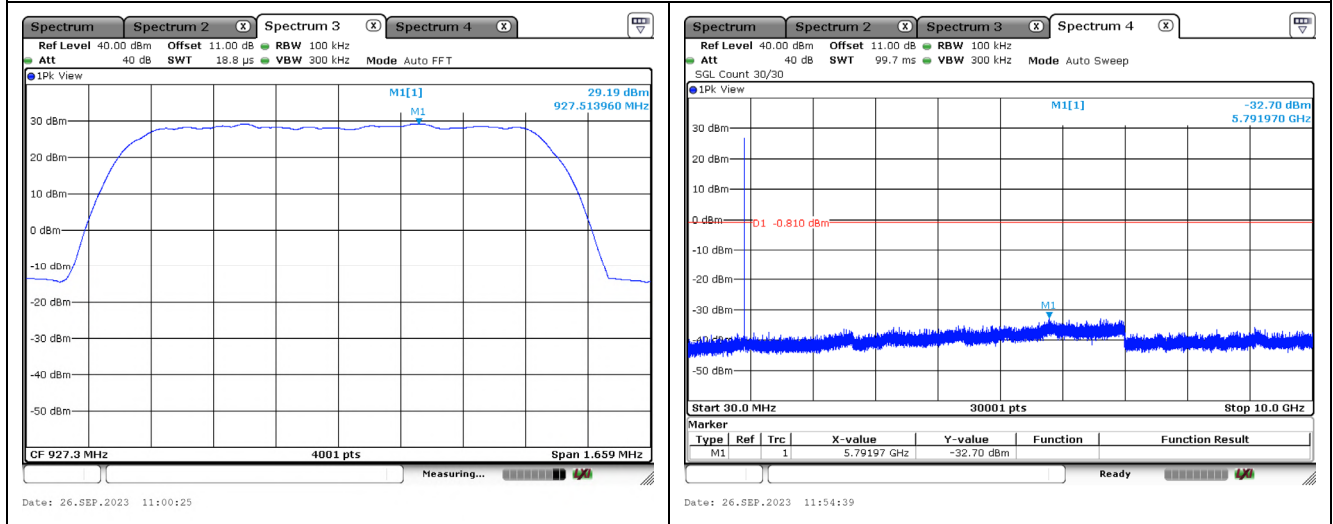


Appendix E. Test Result of Antenna Port Conducted Emission

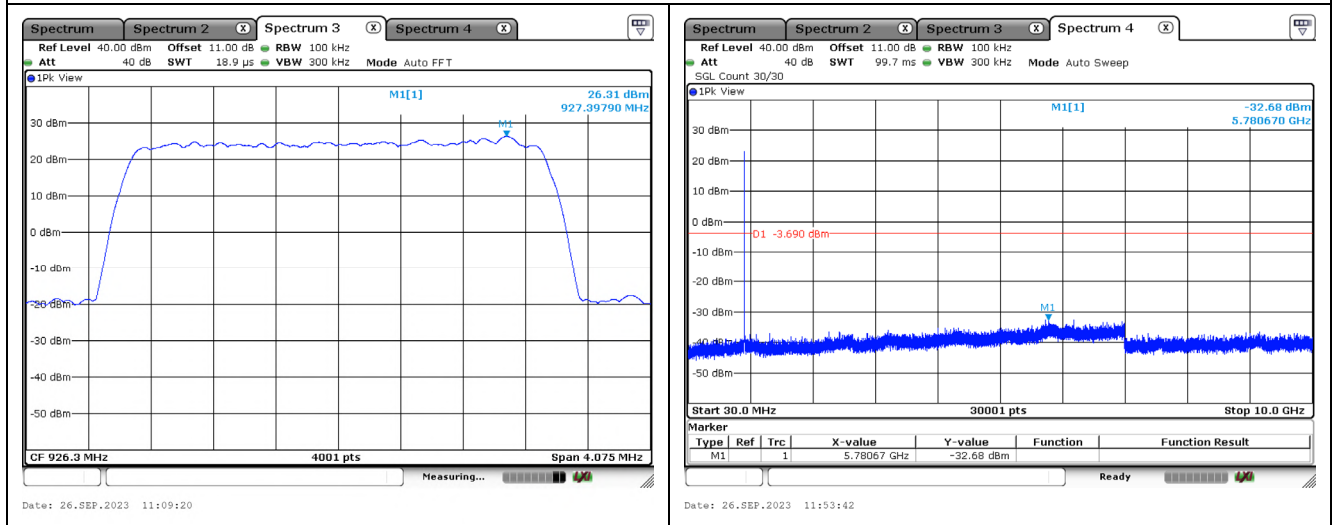
Cat.1 1.4 MHz / 925.7 MHz



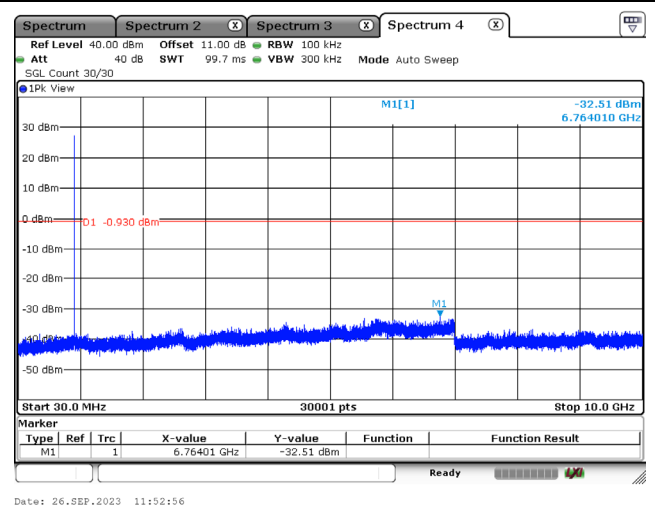
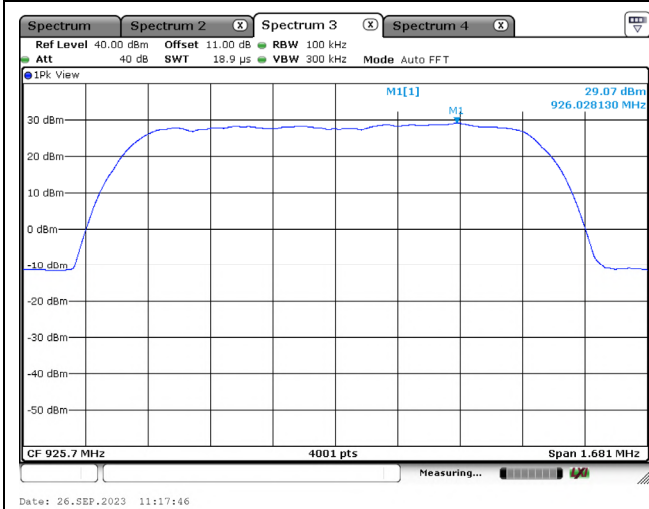
Cat.1 1.4 MHz / 927.3 MHz



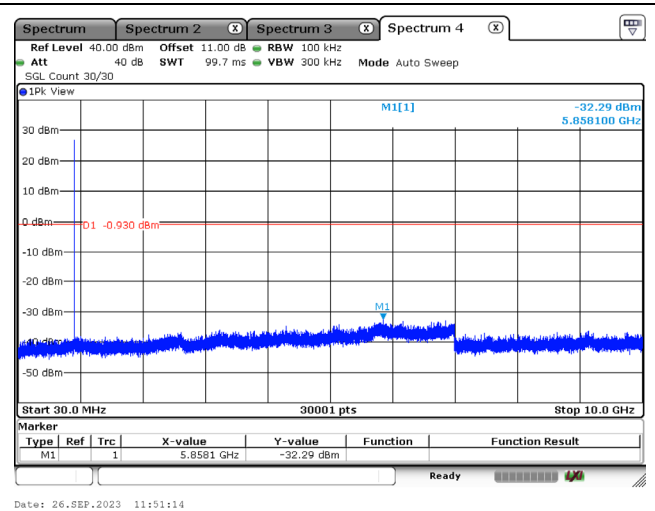
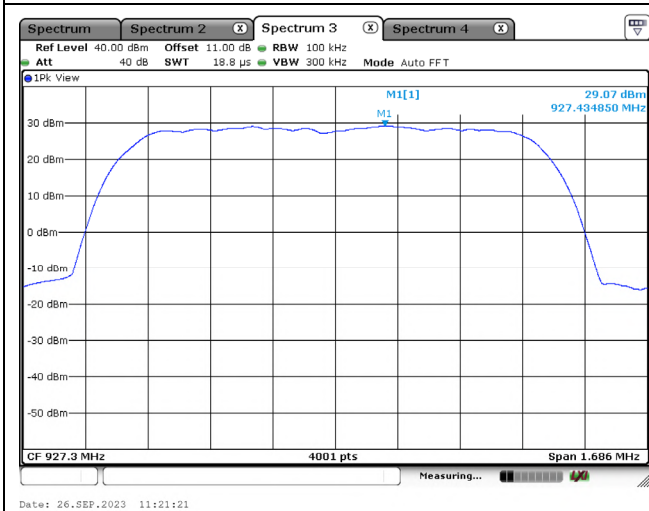
Cat.1 3 MHz / 926.3 MHz



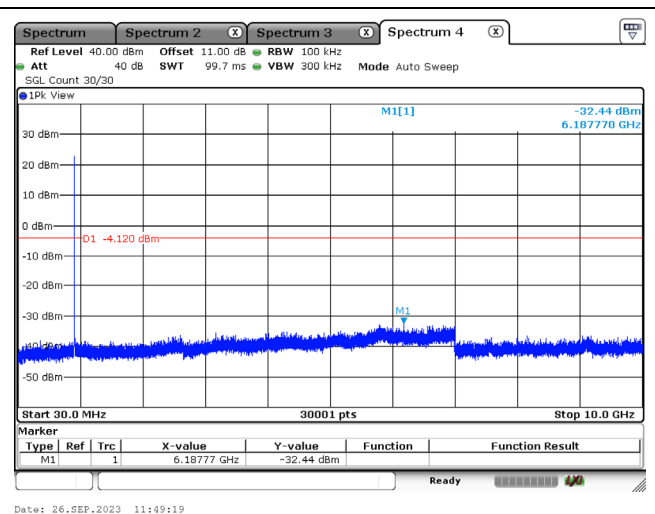
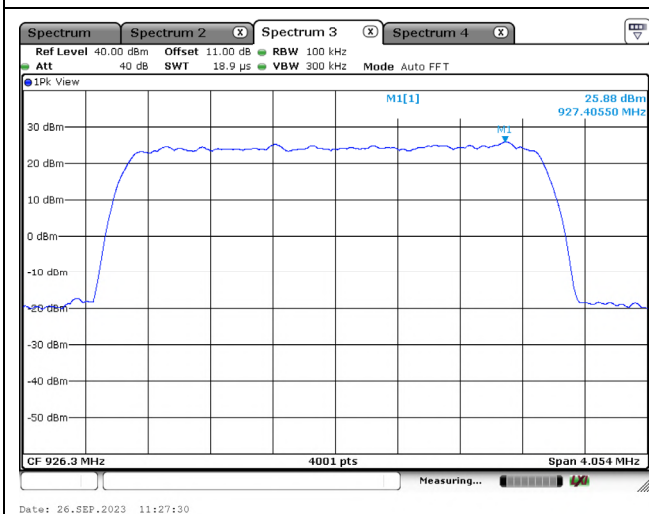
Cat-M1 1.4 MHz / 925.7 MHz



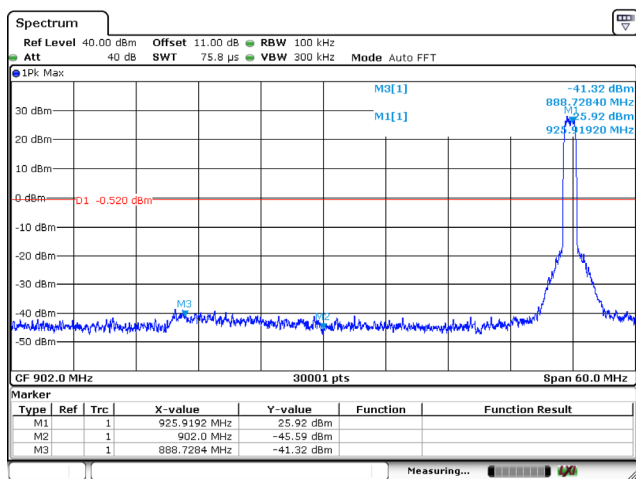
Cat-M1 1.4 MHz / 927.3 MHz



Cat-M1 3 MHz / 926.3 MHz

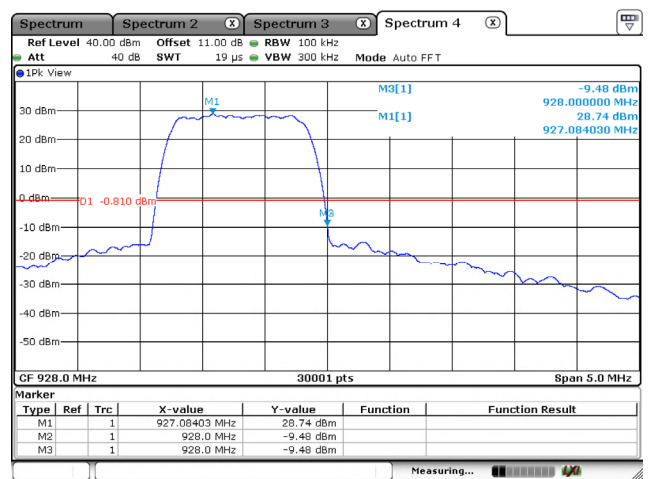


Cat.1 1.4 MHz / 925.7 MHz (Band Edge)



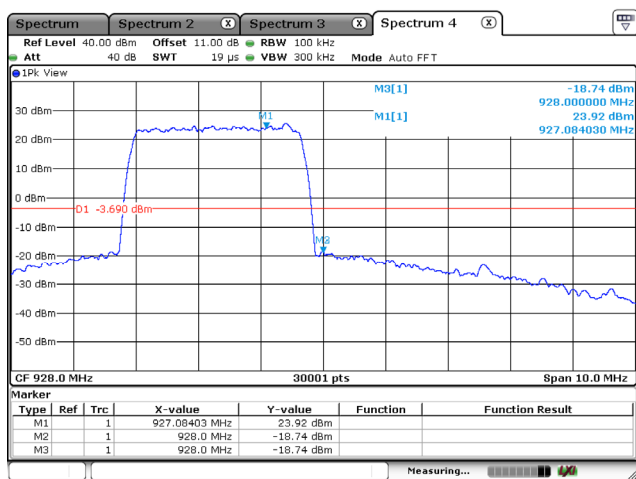
Date: 6.OCT.2023 15:11:35

Cat.1 1.4 MHz / 927.3 MHz (Band Edge)



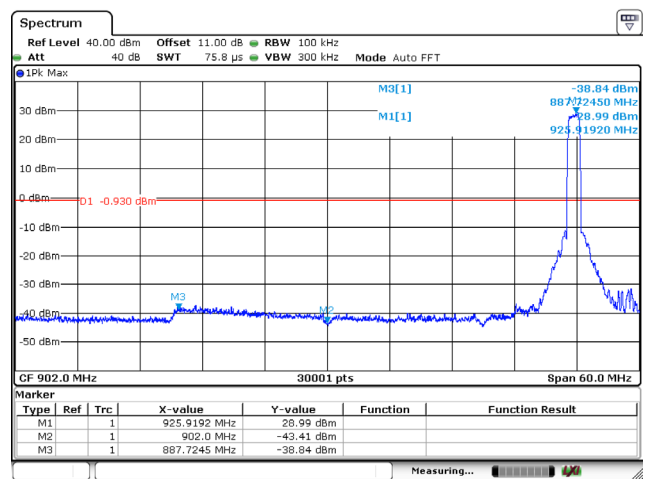
Date: 26.SEP.2023 11:02:54

Cat.1 3 MHz / 926.3 MHz (Band Edge)



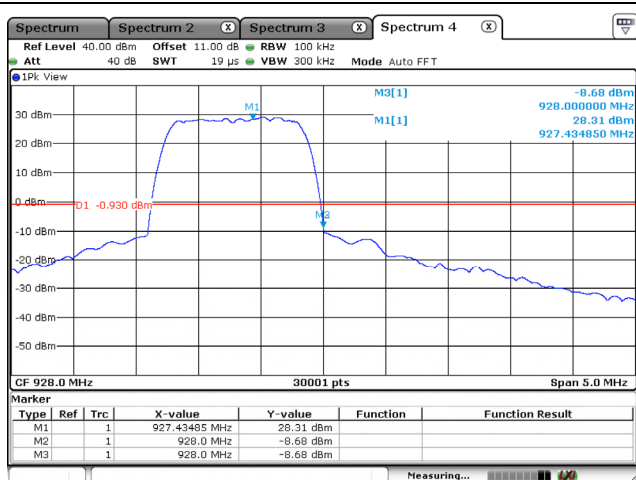
Date: 26.SEP.2023 11:12:14

Cat-M1 1.4 MHz / 925.7 MHz (Band Edge)



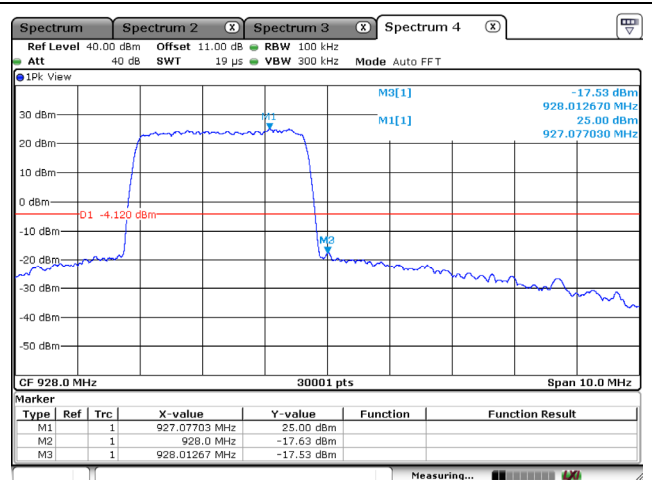
Date: 6.OCT.2023 15:17:18

Cat-M1 1.4 MHz / 927.3 MHz (Band Edge)



Date: 26.SEP.2023 11:23:37

Cat-M1 3 MHz / 926.3 MHz (Band Edge)



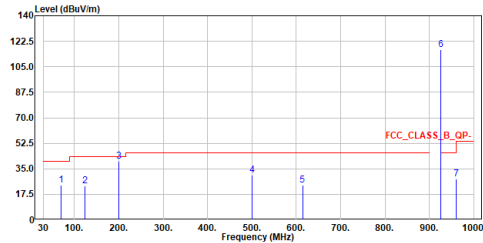
Date: 26.SEP.2023 11:29:13

Appendix F. Test Result of Transmitter Radiated Spurious Emission

30 MHz ~ 1 GHz and Band Edge

<For Cat.1 1.4 MHz>

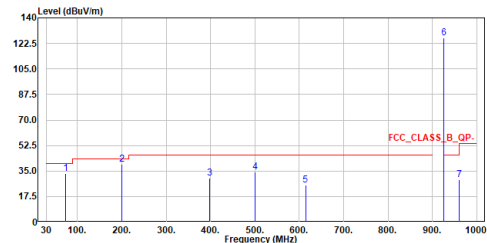
Site :HC-CB02
Condition :3m Horizontal
Mode :LF_Cat1_1.4M_TX_925.7MHz
Test By :Ling



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	69.576	23.94	40.00	-16.06	28.24	-4.30	QP
2	122.829	23.22	43.50	-20.28	27.99	-4.77	QP
3	200.041	40.14	43.50	-3.36	46.55	-6.41	QP
4	500.062	30.72	46.00	-15.28	28.16	2.56	QP
5	614.000	23.80	46.00	-22.20	18.70	5.10	QP
6	925.700	116.50	-----	-----	107.10	9.40	QP
7	960.000	27.90	46.00	-18.02	18.07	9.91	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

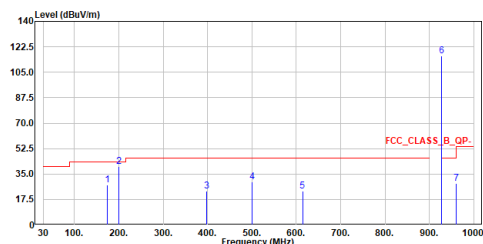
Site :HC-CB02
Condition :3m Vertical
Mode :LF_Cat1_1.4M_TX_925.7MHz
Test By :Ling



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	72.583	33.20	40.00	-6.80	38.32	-5.12	QP
2	200.138	39.40	43.50	-4.10	45.41	-6.01	QP
3	397.921	30.15	46.00	-15.85	29.50	0.65	QP
4	500.062	34.11	46.00	-11.89	31.25	2.86	QP
5	614.037	25.38	46.00	-20.62	19.80	5.58	QP
6	925.700	126.25	-----	-----	116.14	10.11	QP
7	960.000	28.83	46.00	-17.17	18.42	10.41	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

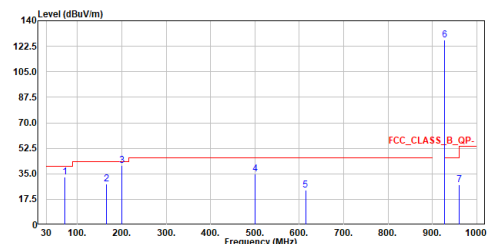
Site :HC-CB02
Condition :3m Horizontal
Mode :LF_Cat1_1.4M_TX_927.3MHz
Test By :Ling



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	173.366	27.23	43.50	-16.27	30.82	-3.59	QP
2	200.041	40.26	43.50	-3.24	46.67	-6.41	QP
3	397.727	23.30	46.00	-22.70	23.26	0.04	QP
4	500.062	29.75	46.00	-16.25	27.19	2.56	QP
5	614.000	23.27	46.00	-22.73	18.17	5.10	QP
6	927.300	116.07	-----	-----	106.65	9.42	QP
7	960.000	28.38	46.00	-17.62	18.47	9.91	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Site :HC-CB02
Condition :3m Vertical
Mode :LF_Cat1_1.4M_TX_927.3MHz
Test By :Ling

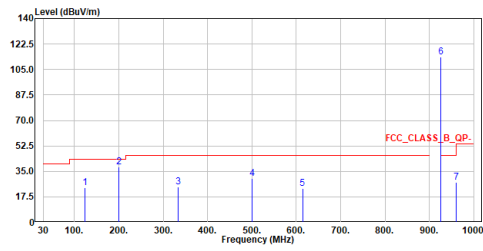


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	72.195	32.63	40.00	-7.37	37.61	-4.98	QP
2	164.442	28.08	43.50	-15.42	30.88	-2.80	QP
3	200.041	40.51	43.50	-2.99	46.52	-6.01	QP
4	500.062	34.84	46.00	-11.16	31.98	2.86	QP
5	614.000	23.93	46.00	-22.07	18.35	5.58	QP
6	927.300	126.66	-----	-----	116.49	10.17	QP
7	960.000	27.70	46.00	-18.30	17.29	10.41	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

<For Cat.1 3 MHz>

Site :HC-CB02
Condition :3m Horizontal
Mode :LF_Cat1_3M_TX_926.3MHz
Test By :Ling

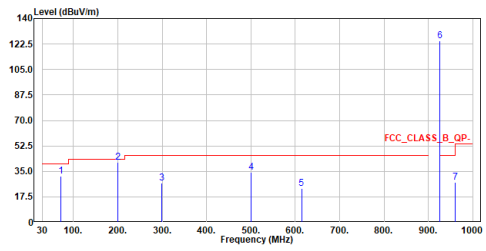


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	123.605	23.51	43.50	-19.99	28.19	-4.68	QP
2	200.138	38.25	43.50	-5.25	44.66	-6.41	QP
3	333.125	24.51	46.00	-21.49	26.00	-1.49	QP
4	500.062	30.31	46.00	-15.69	27.75	2.56	QP
5	614.000	23.42	46.00	-22.58	18.32	5.10	QP
6	926.300	113.66	-----	-----	104.26	9.40	QP
7	960.000	27.69	46.00	-18.31	17.78	9.91	QP

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Site :HC-CB02
Condition :3m Vertical
Mode :LF_Cat1_3M_TX_926.3MHz
Test By :Ling



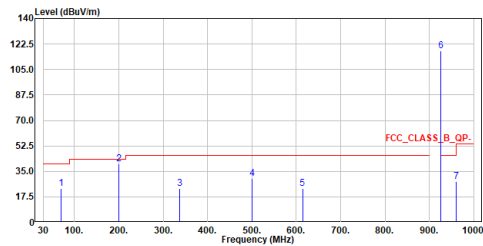
No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	71.516	31.44	40.00	-8.56	36.18	-4.74	QP
2	200.041	41.00	43.50	-2.50	47.01	-6.01	QP
3	298.399	26.81	46.00	-19.19	28.81	-2.00	QP
4	500.062	34.57	46.00	-11.43	31.71	2.86	QP
5	614.000	23.25	46.00	-22.75	17.67	5.58	QP
6	926.300	124.78	-----	-----	114.65	10.13	QP
7	960.000	27.52	46.00	-18.48	17.11	10.41	QP

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

<For Cat-M1 1.4 MHz>

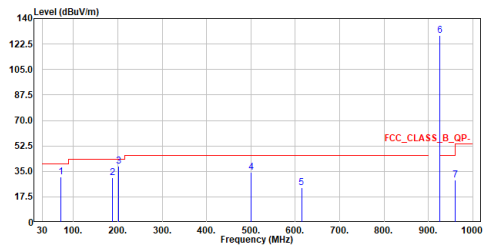
Site :HC-CB02
Condition :3m Horizontal
Mode :LF_1.4M_TX_925.7MHz
Test By :Ling



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	68.897	23.46	40.00	-16.54	27.50	-4.04	QP
2	200.041	39.97	43.50	-3.53	46.38	-6.41	QP
3	337.102	23.48	46.00	-22.52	24.92	-1.44	QP
4	500.062	30.15	46.00	-15.85	27.59	2.56	QP
5	614.000	23.38	46.00	-22.62	18.28	5.10	QP
6	925.700	117.63	-----	-----	108.23	9.40	QP
7	960.000	27.92	46.00	-18.08	18.01	9.91	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

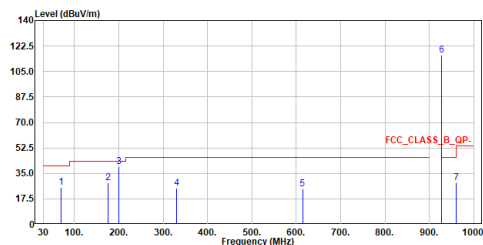
Site :HC-CB02
Condition :3m Vertical
Mode :LF_1.4M_TX_925.7MHz
Test By :Ling



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	71.516	31.13	40.00	-8.87	35.87	-4.74	QP
2	187.528	30.46	43.50	-13.04	35.44	-4.98	QP
3	200.914	38.61	43.50	-4.89	44.64	-6.03	QP
4	500.062	34.48	46.00	-11.52	31.62	2.86	QP
5	614.000	23.57	46.00	-22.43	17.99	5.58	QP
6	925.700	128.16	-----	-----	118.05	10.11	QP
7	960.000	29.02	46.00	-16.98	18.61	10.41	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

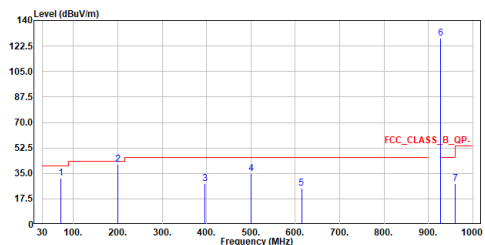
Site :HC-CB02
Condition :3m Horizontal
Mode :LF_1.4M_TX_927.3MHz
Test By :Ling



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	70.061	25.35	40.00	-14.65	29.84	-4.49	QP
2	175.597	28.56	43.50	-14.94	32.26	-3.70	QP
3	200.041	39.70	43.50	-3.80	46.11	-6.41	QP
4	329.536	24.82	46.00	-21.18	26.39	-1.57	QP
5	614.000	24.08	46.00	-21.92	18.98	5.10	QP
6	927.300	116.42	-----	-----	107.00	9.42	QP
7	960.000	28.45	46.00	-17.55	18.54	9.91	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Site :HC-CB02
Condition :3m Vertical
Mode :LF_1.4M_TX_927.3MHz
Test By :Ling

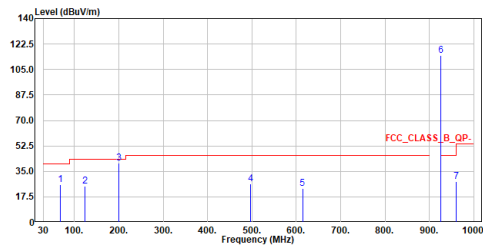


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	71.031	31.81	40.00	-8.19	36.40	-4.59	QP
2	200.041	41.25	43.50	-2.25	47.26	-6.01	QP
3	396.175	28.26	46.00	-17.74	27.65	0.61	QP
4	500.062	34.90	46.00	-11.10	32.04	2.86	QP
5	614.000	25.06	46.00	-20.94	19.48	5.58	QP
6	927.300	127.84	-----	-----	117.67	10.17	QP
7	960.000	27.77	46.00	-18.23	17.36	10.41	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

<For Cat-M1 3 MHz>

Site :HC-CB02
Condition :3m Horizontal
Mode :LF_3M_TX_926.3MHz
Test By :Ling

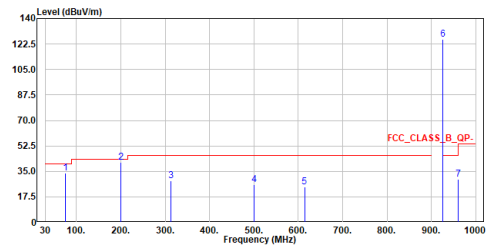


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	68.024	26.05	40.00	-13.95	29.82	-3.77	QP
2	123.896	24.74	43.50	-18.76	29.40	-4.66	QP
3	200.041	40.42	43.50	-3.08	46.83	-6.41	QP
4	496.085	26.44	46.00	-19.56	23.98	2.46	QP
5	614.000	23.33	46.00	-22.67	18.23	5.10	QP
6	926.300	114.50	-----	-----	105.10	9.40	QP
7	960.000	28.12	46.00	-17.88	18.21	9.91	QP

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Site :HC-CB02
Condition :3m Vertical
Mode :LF_3M_TX_926.3MHz
Test By :Ling



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	75.202	34.01	40.00	-5.99	39.76	-5.75	QP
2	200.041	40.96	43.50	-2.54	46.97	-6.01	QP
3	312.076	28.45	46.00	-17.55	30.00	-1.55	QP
4	499.965	26.08	46.00	-19.92	23.22	2.86	QP
5	614.000	24.42	46.00	-21.58	18.84	5.58	QP
6	926.300	125.91	-----	-----	115.78	10.13	QP
7	960.000	29.58	46.00	-16.42	19.17	10.41	QP

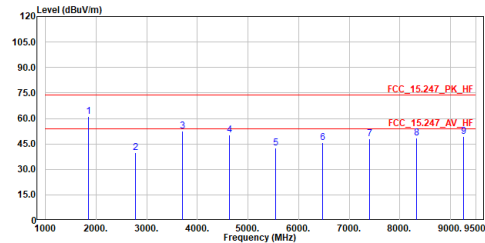
Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Above 1 GHz

<For Cat.1 1.4 MHz>

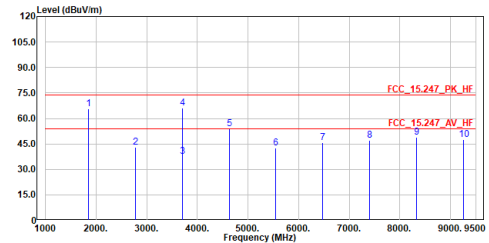
Site :HC-CB02
Condition :3m Horizontal
Mode :1.4M_TX_925.7MHz
Test By :Gary



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	Line	Limit	Level	dB	
1	1851.400	60.98	74.00	-13.02	86.52	-25.54	Peak
2	2777.100	39.66	74.00	-34.34	61.56	-21.90	Peak
3	3702.800	52.41	74.00	-21.59	71.44	-19.03	Peak
4	4628.500	50.40	74.00	-23.60	65.85	-15.45	Peak
5	5554.200	42.60	74.00	-31.40	56.30	-13.70	Peak
6	6479.900	45.57	74.00	-28.43	55.01	-9.44	Peak
7	7405.600	47.90	74.00	-26.10	55.68	-7.78	Peak
8	8331.300	48.62	74.00	-25.38	55.20	-6.58	Peak
9	9257.000	49.34	74.00	-24.66	54.31	-4.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

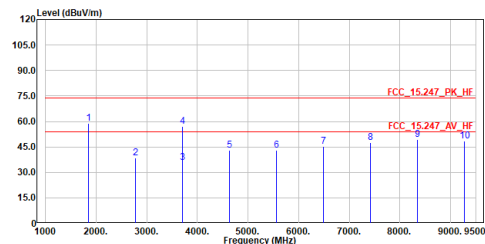
Site :HC-CB02
Condition :3m Vertical
Mode :1.4M_TX_925.7MHz
Test By :Gary



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	Line	Limit	Level	dB	
1	1851.400	65.61	74.00	-8.39	91.15	-25.54	Peak
2	2777.100	43.03	74.00	-30.97	64.93	-21.90	Peak
3	3702.800	37.70	54.00	-16.30	56.73	-19.03	Average
4	3702.800	66.27	74.00	-7.73	85.30	-19.03	Peak
5	4628.500	53.82	74.00	-20.18	69.27	-15.45	Peak
6	5554.200	42.78	74.00	-31.22	56.48	-13.70	Peak
7	6479.900	45.86	74.00	-28.14	55.30	-9.44	Peak
8	7405.600	47.24	74.00	-26.76	55.02	-7.78	Peak
9	8331.300	48.96	74.00	-25.04	55.54	-6.58	Peak
10	9257.000	47.52	74.00	-26.48	52.49	-4.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

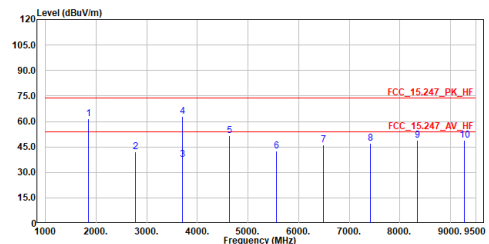
Site :HC-CB02
Condition :3m Horizontal
Mode :1.4M_TX_927.3MHz
Test By :Gary



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	Line	Limit	Level	dB	
1	1854.600	58.77	74.00	-15.23	84.29	-25.52	Peak
2	2781.900	38.65	74.00	-35.35	60.53	-21.88	Peak
3	3709.200	35.86	54.00	-18.14	54.86	-19.00	Average
4	3709.200	56.92	74.00	-17.08	75.92	-19.00	Peak
5	4636.500	43.05	74.00	-30.95	58.47	-15.42	Peak
6	5563.800	43.20	74.00	-30.80	56.87	-13.67	Peak
7	6491.100	45.49	74.00	-28.51	54.86	-9.37	Peak
8	7418.400	47.49	74.00	-26.51	55.25	-7.76	Peak
9	8345.700	49.19	74.00	-24.81	55.74	-6.55	Peak
10	9273.000	48.40	74.00	-25.60	53.36	-4.96	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB02
Condition :3m Vertical
Mode :1.4M_TX_927.3MHz
Test By :Gary

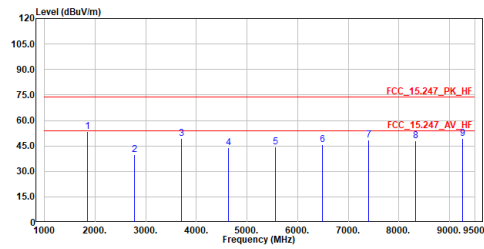


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	Line	Limit	Level	dB	
1	1854.600	61.62	74.00	-12.38	87.14	-25.52	Peak
2	2781.900	42.19	74.00	-31.81	64.07	-21.88	Peak
3	3709.200	37.57	54.00	-16.43	56.57	-19.00	Average
4	3709.200	62.83	74.00	-11.17	81.83	-19.00	Peak
5	4636.500	51.55	74.00	-22.45	66.97	-15.42	Peak
6	5563.800	42.76	74.00	-31.24	56.43	-13.67	Peak
7	6491.100	46.21	74.00	-27.79	55.58	-9.37	Peak
8	7418.400	46.93	74.00	-27.07	54.69	-7.76	Peak
9	8345.700	48.92	74.00	-25.08	55.47	-6.55	Peak
10	9273.000	48.75	74.00	-25.25	53.71	-4.96	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

<For Cat.1 3 MHz>

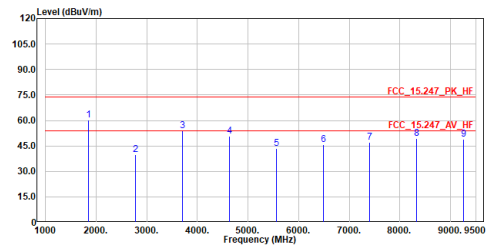
Site :HC-C802
Condition :3m Horizontal
Mode :3M_TX_926.3MHz
Test By :Gary



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	1852.600	53.22	74.00	-20.78	78.75	-25.53	Peak
2	2778.900	39.67	74.00	-34.33	61.56	-21.89	Peak
3	3705.200	49.18	74.00	-24.82	68.20	-19.02	Peak
4	4631.500	43.73	74.00	-30.27	59.17	-15.44	Peak
5	5557.800	44.22	74.00	-29.78	57.91	-13.69	Peak
6	6484.100	45.82	74.00	-28.18	55.22	-9.40	Peak
7	7410.400	48.36	74.00	-25.64	56.12	-7.76	Peak
8	8336.700	48.22	74.00	-25.78	54.80	-6.58	Peak
9	9263.000	49.43	74.00	-24.57	54.40	-4.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-C802
Condition :3m Vertical
Mode :3M_TX_926.3MHz
Test By :Gary

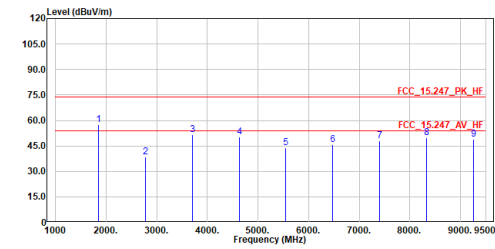


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	1852.600	60.27	74.00	-13.73	85.80	-25.53	Peak
2	2778.900	39.88	74.00	-34.12	61.77	-21.89	Peak
3	3705.200	53.88	74.00	-20.12	72.90	-19.02	Peak
4	4631.500	50.92	74.00	-23.08	66.36	-15.44	Peak
5	5557.800	43.70	74.00	-30.30	57.39	-13.69	Peak
6	6484.100	45.55	74.00	-28.45	54.95	-9.40	Peak
7	7410.400	47.26	74.00	-26.74	55.02	-7.76	Peak
8	8336.700	49.34	74.00	-24.66	55.92	-6.58	Peak
9	9263.000	48.87	74.00	-25.13	53.84	-4.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

<For Cat-M1 1.4 MHz>

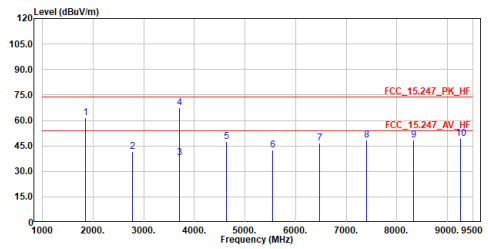
Site :HC-CB02
Condition :3m Horizontal
Mode :1.4M_TX_925.7MHz
Test By :Gary



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	1851.400	57.45	74.00	-16.55	82.99	-25.54	Peak
2	2777.100	38.56	74.00	-35.44	60.46	-21.90	Peak
3	3702.800	51.57	74.00	-22.43	70.60	-19.03	Peak
4	4628.500	50.37	74.00	-23.63	65.82	-15.45	Peak
5	5554.200	43.76	74.00	-30.24	57.46	-13.70	Peak
6	6479.900	45.92	74.00	-28.08	55.36	-9.44	Peak
7	7405.600	48.08	74.00	-25.92	55.86	-7.78	Peak
8	8331.300	49.63	74.00	-24.37	56.21	-6.58	Peak
9	9257.000	48.73	74.00	-25.27	53.70	-4.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

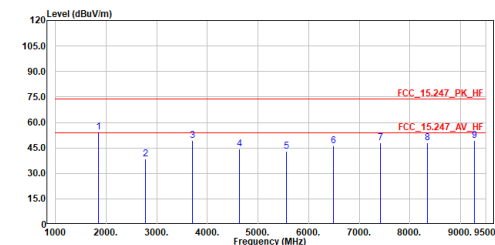
Site :HC-CB02
Condition :3m Vertical
Mode :1.4M_TX_925.7MHz
Test By :Gary



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	1851.400	61.55	74.00	-12.45	87.09	-25.54	Peak
2	2777.100	41.57	74.00	-32.43	63.47	-21.90	Peak
3	3702.800	37.97	74.00	-36.03	57.00	-19.03	Average
4	3702.800	67.38	74.00	-6.62	86.41	-19.03	Peak
5	4628.500	47.58	74.00	-26.42	63.03	-15.45	Peak
6	5554.200	42.60	74.00	-31.40	56.30	-13.70	Peak
7	6479.900	46.52	74.00	-27.48	55.96	-9.44	Peak
8	7405.600	48.64	74.00	-25.36	56.42	-7.78	Peak
9	8331.300	48.59	74.00	-25.41	55.17	-6.58	Peak
10	9257.000	49.30	74.00	-24.70	54.27	-4.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

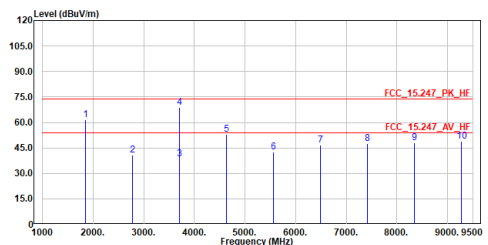
Site :HC-CB02
Condition :3m Horizontal
Mode :1.4M_TX_927.3MHz
Test By :Gary



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	1854.600	54.14	74.00	-19.86	79.66	-25.52	Peak
2	2781.900	38.38	74.00	-35.62	60.26	-21.88	Peak
3	3709.200	49.36	74.00	-24.64	68.36	-19.00	Peak
4	4636.500	44.26	74.00	-29.74	59.68	-15.42	Peak
5	5563.800	42.93	74.00	-31.07	56.60	-13.67	Peak
6	6491.100	46.10	74.00	-27.90	55.47	-9.37	Peak
7	7418.400	47.83	74.00	-26.17	55.59	-7.76	Peak
8	8345.700	48.14	74.00	-25.86	54.69	-6.55	Peak
9	9273.000	49.14	74.00	-24.86	54.10	-4.96	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB02
Condition :3m Vertical
Mode :1.4M_TX_927.3MHz
Test By :Gary

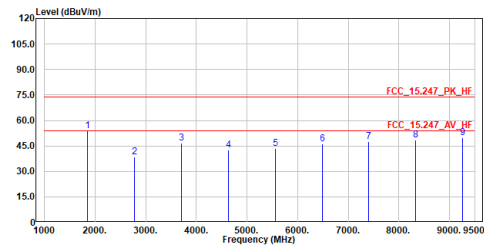


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	1854.600	61.39	74.00	-12.61	86.91	-25.52	Peak
2	2781.900	40.96	74.00	-33.04	62.84	-21.88	Peak
3	3709.200	38.41	74.00	-35.59	57.41	-19.00	Average
4	3709.200	69.04	74.00	-4.96	88.04	-19.00	Peak
5	4636.500	53.03	74.00	-20.97	68.45	-15.42	Peak
6	5563.800	42.70	74.00	-31.30	56.37	-13.67	Peak
7	6491.100	46.54	74.00	-27.46	55.91	-9.37	Peak
8	7418.400	47.55	74.00	-26.45	55.31	-7.76	Peak
9	8345.700	48.00	74.00	-26.00	54.55	-6.55	Peak
10	9273.000	48.86	74.00	-25.14	53.82	-4.96	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

<For Cat-M1 3 MHz>

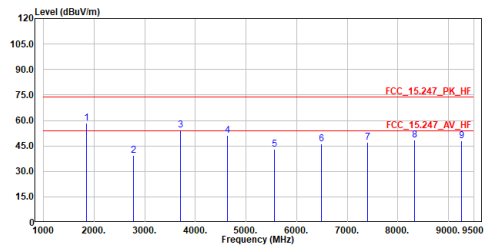
Site :HC-C802
Condition :3m Horizontal
Mode :3M_TX_926.3MHz
Test By :Gary



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	1852.600	53.70	74.00	-20.30	79.23	-25.53	Peak
2	2778.900	38.63	74.00	-35.37	60.52	-21.89	Peak
3	3705.200	46.79	74.00	-27.21	65.81	-19.02	Peak
4	4631.500	42.53	74.00	-31.47	57.97	-15.44	Peak
5	5557.800	43.25	74.00	-30.75	56.94	-13.69	Peak
6	6484.100	46.13	74.00	-27.87	55.53	-9.40	Peak
7	7410.400	47.67	74.00	-26.33	55.43	-7.76	Peak
8	8336.700	48.64	74.00	-25.36	55.22	-6.58	Peak
9	9263.000	49.76	74.00	-24.24	54.73	-4.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-C802
Condition :3m Vertical
Mode :3M_TX_926.3MHz
Test By :Gary



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	
1	1852.600	58.46	74.00	-15.54	83.99	-25.53	Peak
2	2778.900	39.37	74.00	-34.63	61.26	-21.89	Peak
3	3705.200	54.49	74.00	-19.51	73.51	-19.02	Peak
4	4631.500	51.38	74.00	-22.62	66.82	-15.44	Peak
5	5557.800	42.87	74.00	-31.13	56.56	-13.69	Peak
6	6484.100	46.11	74.00	-27.89	55.51	-9.40	Peak
7	7410.400	47.08	74.00	-26.92	54.84	-7.76	Peak
8	8336.700	48.63	74.00	-25.37	55.21	-6.58	Peak
9	9263.000	48.14	74.00	-25.86	53.11	-4.97	Peak

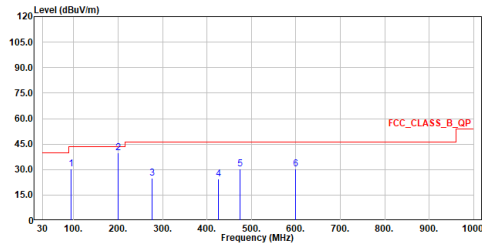
Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Appendix G. Test Result of Radiated Emissions Co-location

For Cat-M1 + WWAN LTE:

30 MHz ~ 1 GHz

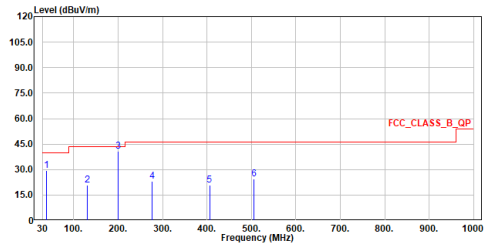
Site :HC-CB02
Condition :3m Horizontal
Mode :LF_Co-location_1.4M_927.3MHz+82
Test By :Ling



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	94.020	30.22	43.50	-13.28	38.71	-8.49	QP
2	200.090	39.97	43.50	-3.53	46.38	-6.41	QP
3	276.429	24.87	46.00	-21.13	27.83	-2.96	QP
4	424.984	24.41	46.00	-21.59	23.62	0.79	QP
5	475.036	30.46	46.00	-15.54	28.29	2.17	QP
6	600.021	30.39	46.00	-15.61	25.34	5.05	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Site :HC-CB02
Condition :3m Vertical
Mode :LF_Co-location_1.4M_927.3MHz+82
Test By :Ling

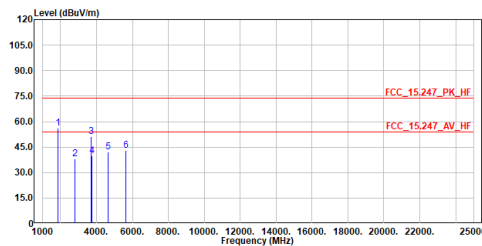


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	37.615	29.54	40.00	-10.46	32.24	-2.70	QP
2	130.541	20.64	43.50	-22.86	24.72	-4.08	QP
3	200.090	40.85	43.50	-2.65	47.26	-6.41	QP
4	276.477	23.28	46.00	-22.72	26.24	-2.96	QP
5	405.633	20.92	46.00	-25.08	20.70	0.22	QP
6	505.300	24.54	46.00	-21.46	21.86	2.68	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.
5. The other emission levels were very low against the limit.

Above 1 GHz

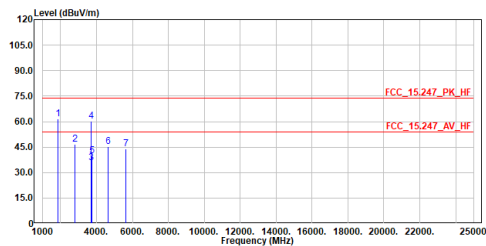
Site :HC-CB02
Condition :3m Horizontal
Mode :Co-location_1.4M_927.3MHz+82
Test By :Ling



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	1854.600	56.18	74.00	-17.82	81.70	-25.52	Peak
2	2781.900	37.89	74.00	-36.11	59.77	-21.88	Peak
3	3709.200	51.29	74.00	-22.71	70.29	-19.00	Peak
4	3760.000	39.96	74.00	-34.04	58.72	-18.76	Peak
5	4636.500	41.99	74.00	-32.01	57.41	-15.42	Peak
6	5640.000	42.95	74.00	-31.05	56.38	-13.43	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

Site :HC-CB02
Condition :3m Vertical
Mode :Co-location_1.4M_927.3MHz+82
Test By :Ling



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBuV/m	dBuV/m	Limit	Level	dB	
1	1854.600	61.48	74.00	-12.52	87.00	-25.52	Peak
2	2781.900	46.43	74.00	-27.57	68.31	-21.88	Peak
3	3709.200	35.97	54.00	-18.03	54.97	-19.00	Average
4	3760.000	60.43	74.00	-13.57	79.43	-19.00	Peak
5	3760.000	39.63	74.00	-34.37	58.39	-18.76	Peak
6	4636.500	45.25	74.00	-28.75	60.67	-15.42	Peak
7	5640.000	43.94	74.00	-30.06	57.37	-13.43	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The peak result complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.