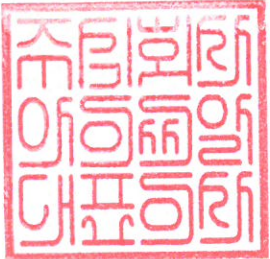




시험 성적서

TEST REPORT

페이지(page) : (1) / (총(Total) 29)

성적서 번호 Report No.		ICRT-TR-E230484-0A	
신청자 Client	기관명 Name	CanTops Co., Ltd.	
	주 소 Address	A 1002-1008, Digital Empire BLDG, 16, Deogyong-daero 1556beon-gil, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16690, South Korea	
시험대상품목 Sample description		nRF Reader	
모델명 Type designation		CTS-STBR-AE-1-02	
정 격 Ratings		AC (100 – 240) V, 50/60 Hz	
시험장소 Place of test		☒ 고정시험(Inside test) ☐ 현장시험(Field test) 주소지(Address): 112, Hwanggeum 3-ro 7beon-gil, Hagun-ri, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea	
시험기간 Date of test		03. Mar. 2023 ~ 06. Mar. 2023	
시험방법/항목 Test Method/Item		FCC Part 15 Subpart C §15.209	
시험결과 Test Results		Refer to 3. Test Summary	
확 인 Affirmation	작성자 Tested by	기술책임자 Technical Manager	
	성 명 Name Seong-Hun, Jeong (서명) (Signature)	성 명 Name Tae-Yang, Yoon (서명) (Signature)	
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2023. 03. 07 주식회사 아이씨알 대표이사 The head of INTERNATIONAL CERTIFICATION REGISTRAR 			

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The authenticity of the test report can be checked on the G4B or ICR website.

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Revision History

Issued Report No.	Issued Date	Revisions	Effect Section
ICRT-TR-E230484-0A	2023.03.07	Initial Issue	All



1. Applicant & Manufacturer & Test Laboratory Information

1.1 Applicant information

Applicant	CanTops Co., Ltd.
Address	A 1002-1008, Digital Empire BLDG, 16, Deogyong-daero 1556beon-gil, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16690, South Korea
Contact Person	Sang-Gyu, Han
Telephone No.	82-10-4607-6910
Fax No.	82-31-303-5233
E-mail	sgghan@cantops.biz

1.2 Manufacturer Information

Manufacturer	CanTops Co., Ltd.
Address	A 1002-1008, Digital Empire BLDG, 16, Deogyong-daero 1556beon-gil, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16690, South Korea

1.3 Test Laboratory Information

Conducted tests were performed at	
Laboratory	ICR Co., Ltd.
Address	112, 113, Hwanggeum 3-ro 7beon-gil, Hagun-ri, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea
Telephone No.	+82-2-6351-9002
Fax No.	+82-2-6351-9007
RRA No.	KR0165
KOLAS No.	KT652



2. Equipment under Test(EUT) Information

2.1 General Information

Product Name	nRF Reader
Brand Name	CanTops
Model Name	CTS-STBR-AE-1-02
Additional Model Name	CTS-STBR-AE-1-04
FCC ID	RMN-CTS-RFID-AE
Power Supply	AC (100 – 240) V, 50/60 Hz
Antenna Port	4

2.2 Additional Information

Equipment Class	DCD - Part 15 Low Power Transmitter Below 1705 kHz	
Operating Frequency	134.2 kHz	
Channel Number	1	
Modulation Type	ASK	
Maximum output power	94.14 dBμV/m	
Antenna Type	CTS-STBA-EC-1-0400	Coil Antenna (Rectangular Type)
	CTS-RFID-AO01-0400	Coil Antenna (Stick Type)
	CTS-RFID-AB01-0400	Coil Antenna (Stick Type)
	CTS-RFID-AC01-0400	Coil Antenna (Stick Type)

2.3 Operation Description

- The product has 4 antenna ports, and they do not operate simultaneously. Consumers connect and use one of the four types of antennas provided by the manufacturer.

The test was conducted by connecting 4 types of antennas to each of the 4 ports.

2.4 Additional model information

- Additional model CTS-STBR-AE-1-04 is the form in which the N2IO board has been removed from original model, There is no change in RF specification..

2.5 Mode of operation during the test

- The EUT is continuous transmission mode during the test. To get a maximum radiated emission levels from the EUT, the EUT was moved throughout the XY, YZ, XZ planes.

2.6 Modifications of EUT

- None



3. Test Summary

3.1 Test standards and results

FCC Part 15 Subpart C			
Clause	Test items	Applied	Results
§15.215 (c)	20 dB Bandwidth	☒	PASS
§15.209	Field Strength of the Fundamental Signal	☒	PASS
§15.209	Radiated Emissions	☒	PASS
§15.207	AC Power-Line Conducted Emissions	☒	PASS

3.2 Purpose of the test

To determine whether the equipment under test fulfills the requirements of the standards stated in FCC Part 15 Subpart C Section 15.209.

3.3 Test Methodology

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10: 2013, FCC CFR 47 PART 15.

3.4 Configuration of Test System

3.4.1 Radiated emission test

Preliminary radiated emissions test were conducted using the procedure in ANSI C63.10: 2013 to determine the worse operating conditions.

The turntable was rotated through 360 degrees and the EUT was tested by positioned three orthogonal planes to obtain the highest reading on the field strength meter. Once maximum reading was determined, the search antenna was raised and lowered in both vertical and horizontal polarization.

3.4.2 AC power line conducted emission test

The EUT was connected to LISN. All supporting equipment were connected to another LISN. Preliminary Power line Conducted Emission test was performed by using the procedure in ANSI C63.10: 2013 to determine the worse operating conditions



3.5 Antenna requirement

According to §15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section.

The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

3.5.1 Result: Pass

The transmitter can use 4 types of antennas, Each antenna complies with clause 15.203.



4. Used equipment on test

	Description	Model Name	Manufacturer	Serial Number	Next Cal
☒	Signal Generator	SMB100A	Rohde & Schwarz	180607	2024-03-03
☒	Signal & Spectrum analyzer	FSW85	Rohde & Schwarz	101306	2024-03-02
☒	TRILOG BROADBAND ANTENNA	VULB 9162	SCHWARZBECK	143	2024-12-24
☒	Loop Antenna	HFH2-Z2	Rohde & Schwarz	100506	2023-07-05
☒	RF Pre Amplifier	SCU08	Rohde & Schwarz	100747	2023-04-13
☒	EMI Test Receiver	ESR26	Rohde & Schwarz	101462	2023-04-13
☒	LISN	ENV216	Rohde & Schwarz	102193	2023-05-20

※ All test equipment used is calibration on a regular basis.



5. 20 dB Bandwidth

5.1 Operating environment

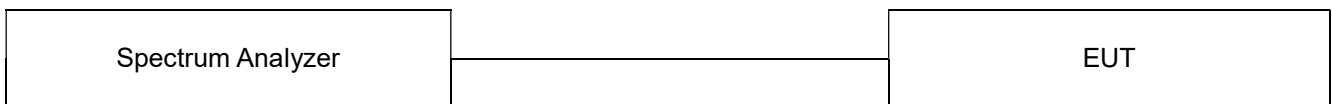
Temperature : 23 °C
Relative humidity : 47 %

5.2 Measurement method

Standard : §15.215

5.3 Test setup

The antenna output of the EUT was connected to the spectrum analyzer. The resolution bandwidth(RBW) is set to 1% to 5% of the OBW. The Video bandwidth is set to 3 times the RBW. The 20 dB bandwidth is defined as the total spectrum over which the power is higher than the peak power minus 20 dB.



5.4 Test data

Operating mode : Transmit mode
Test Result : Pass

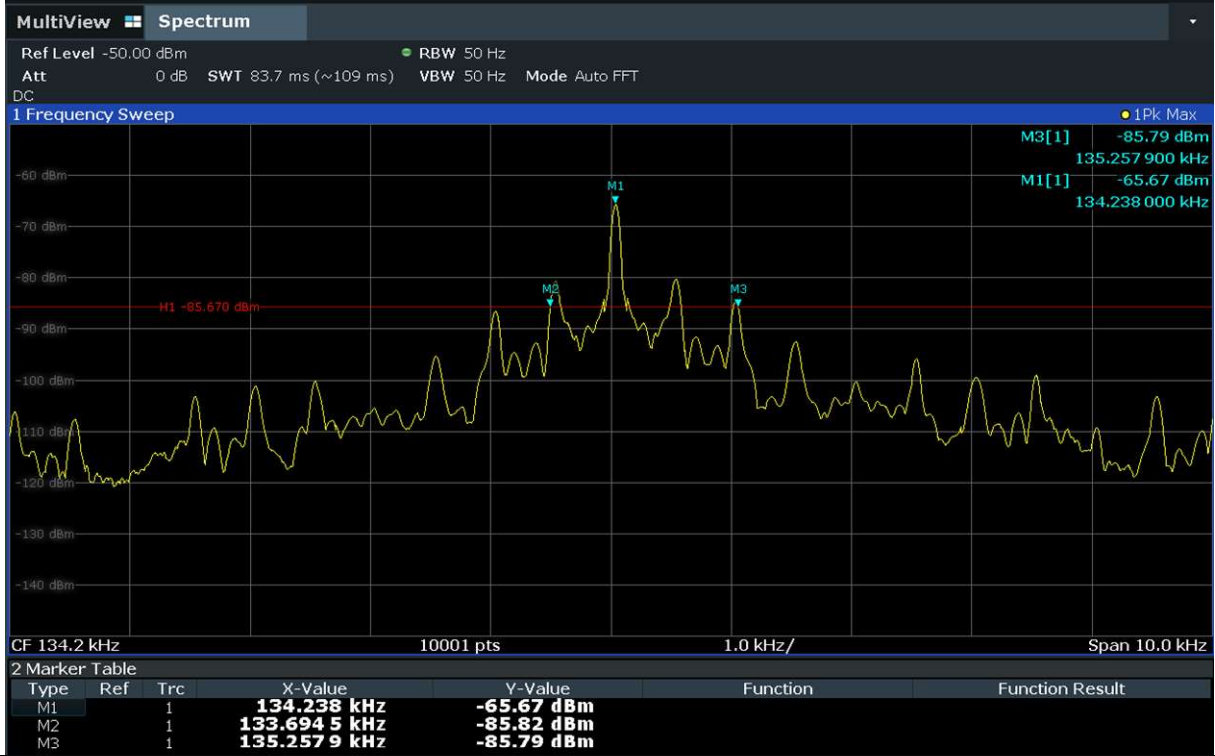
5.4.1 Measured Result

Modulation Type	Port	Frequency (kHz)	Measured Value (kHz)	Limit (kHz)
ASK	1	134.20 kHz	1.56	-
	2	134.20 kHz	1.57	
	3	134.20 kHz	1.55	
	4	134.20 kHz	1.56	

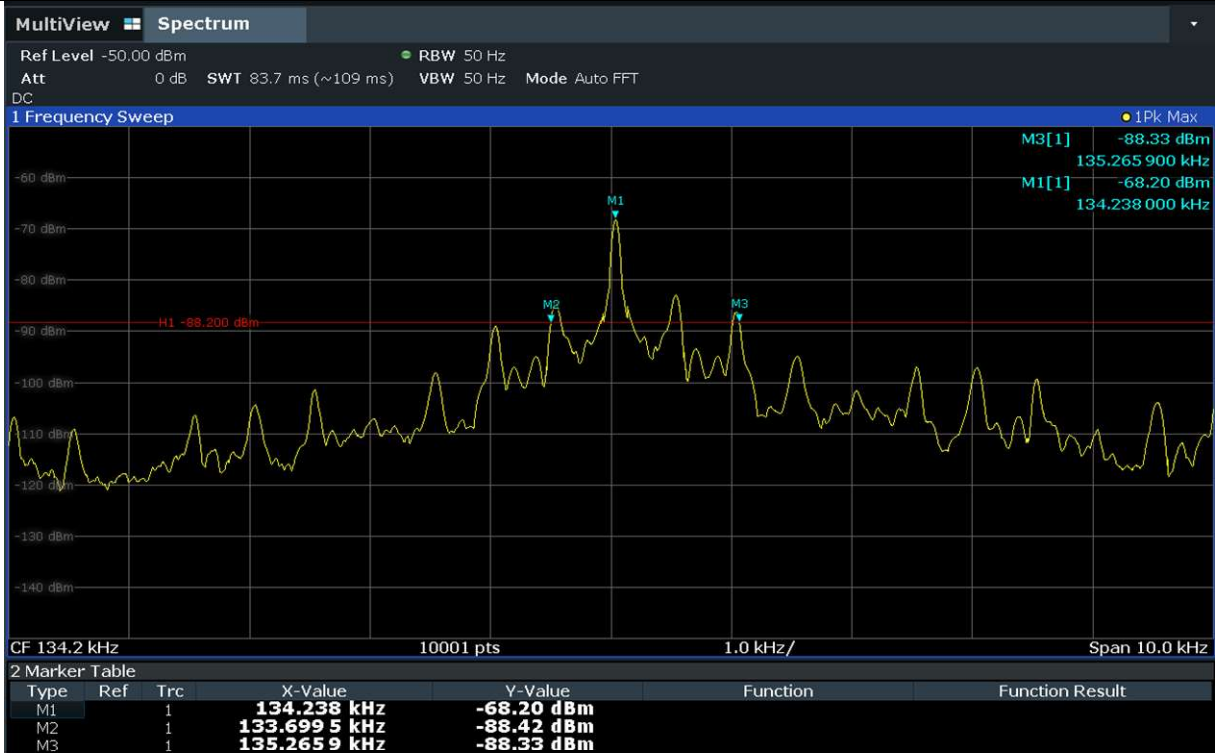


5.4.2 Measured Graph 20 dB Bandwidth

PORT1_CTS-RFID-AO

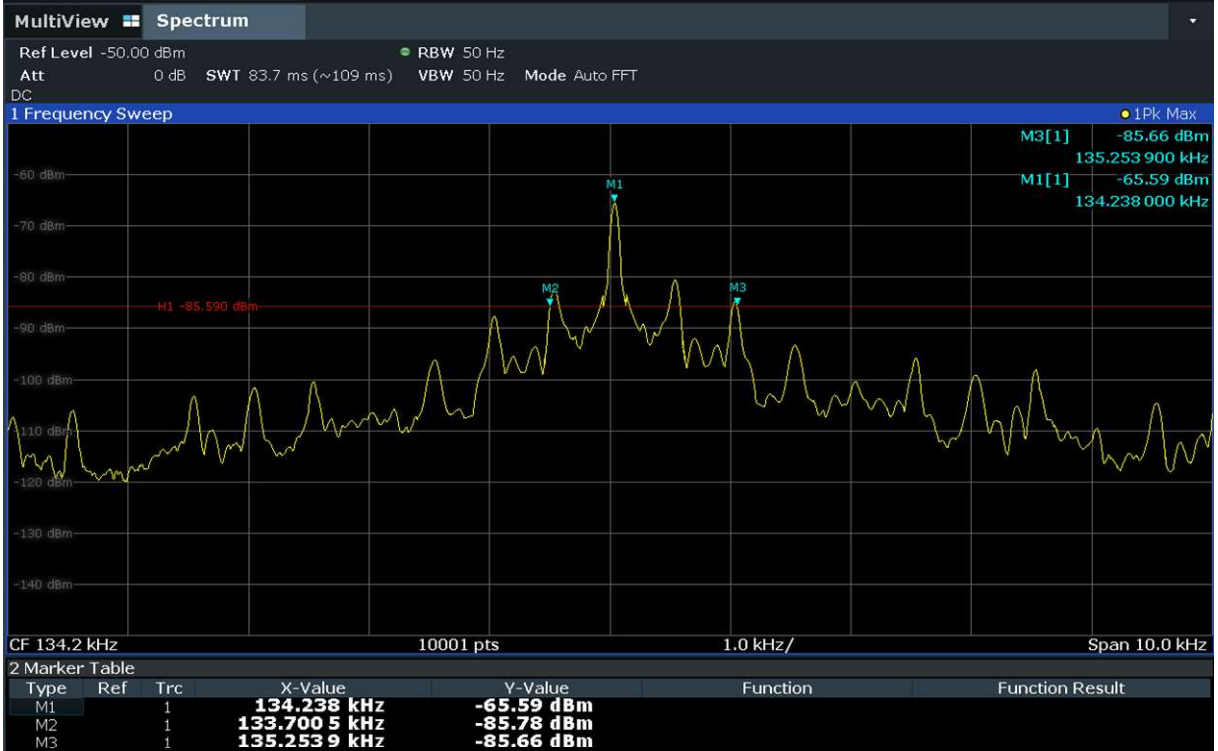


PORT2_CTS-RFID-AB

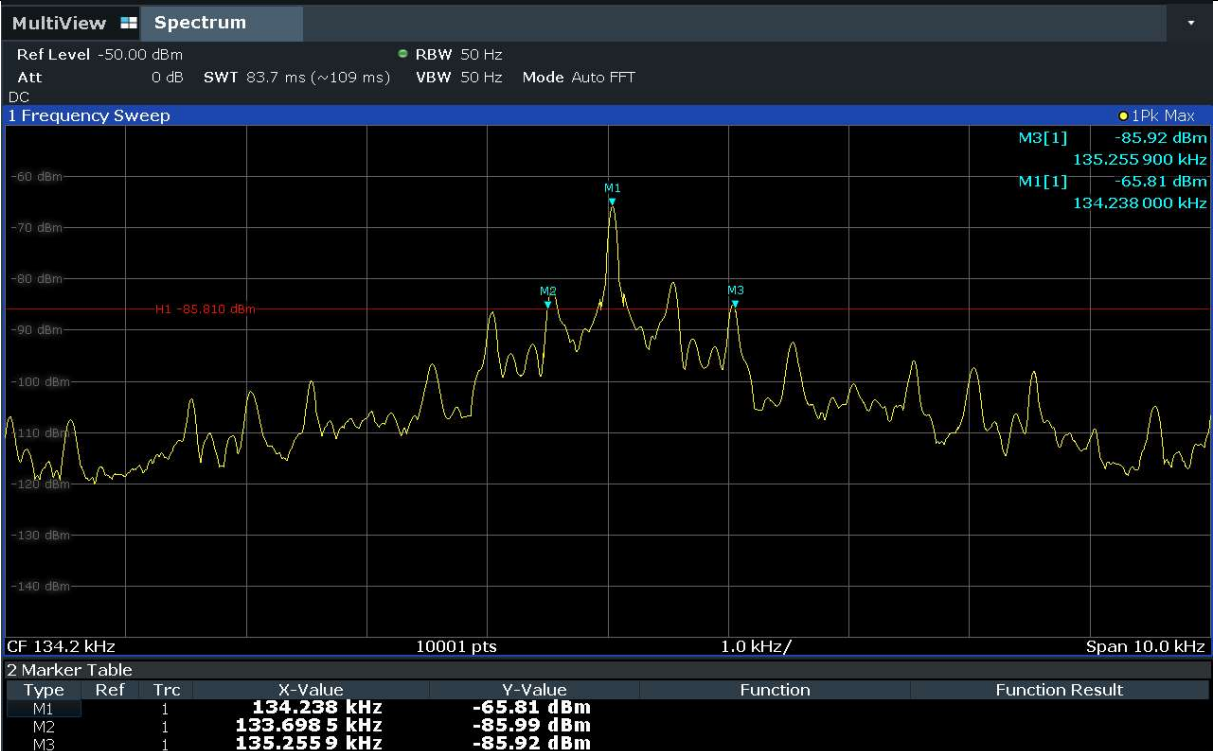




PORT3_CTS-RFID-AC



PORT4_CTS-STBA





6. Field Strength of the Fundamental Signal

6.1 Operating environment

Temperature : 23 °C

Relative humidity : 47 %

6.2 Measurement method

Standard : §15.209

6.3 Test setup

The radiated emissions measurements were performed on the 3 m, Semi-Anechoic Chamber. The EUT was placed on a non-conductive turntable above the ground plane.

The frequency spectrum from 9 kHz to 30 MHz was scanned and maximum emission levels at each frequency recorded. The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna, and the higher of the two was entered.

6.4 Test data for Fundamental Signal

Operating mode : Transmit mode

Test Result : Pass

6.4.1 Measurement Results

Port	Frequency (MHz)	Reading (dBμV)	Detector	Ant. Pol. (H/V)	Corr. Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
1	0.134 250	68.43	Average	H	19.60	88.03	105.05	17.02
2	0.134 250	74.20	Average	H	19.60	93.80	105.05	11.25
3	0.134 250	74.54	Average	H	19.60	94.14	105.05	10.91
4	0.134 250	54.16	Average	H	19.60	73.76	105.05	31.29

※ Ant. Pol. = Antenna Polarization

※ Corr. Factor. = Antenna Factor + Cable Loss - Amplifier Gain

※ Result = Reading + Corr. Factor

※ Margin = Limit – Result

※ Detector = Average for 9-90 kHz, 110-490 kHz, Quasi Peak for the others

※ Limit = at 0.009-0.490MHz and 3m distance, $20\log(2400/F(\text{kHz})) + 40\log(300\text{m}/3\text{m})$



7. Radiated Emissions

7.1 Operating environment

Temperature : 23 °C
Relative humidity : 47 %

7.2 Measurement method

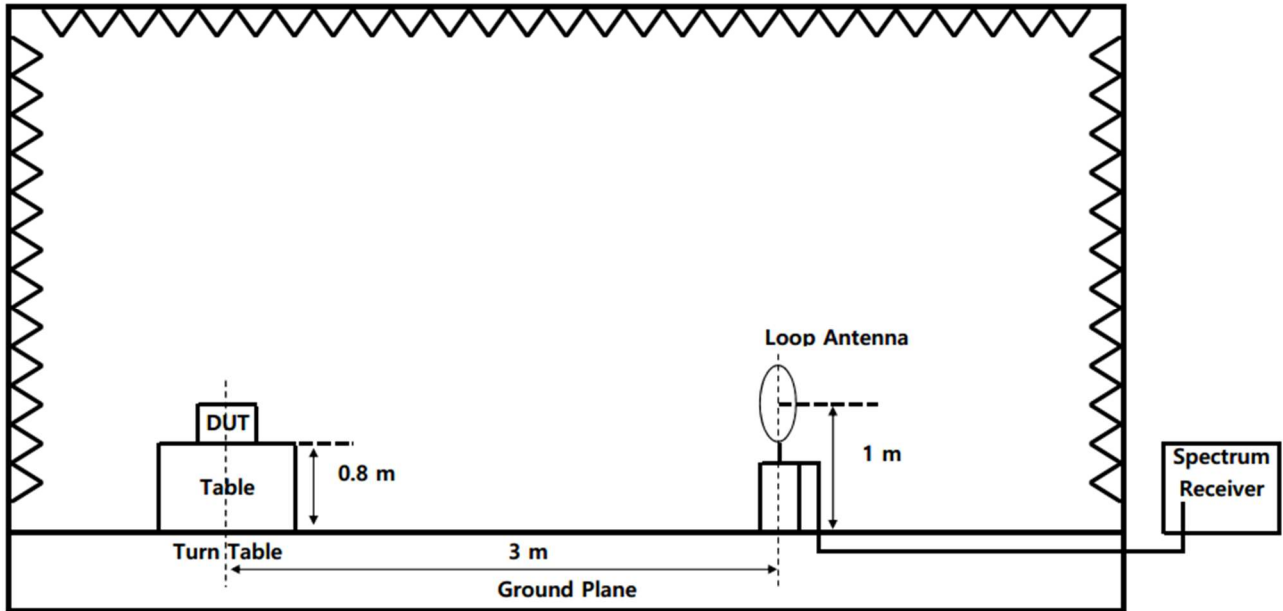
Standard : §15.209

7.3 Test setup

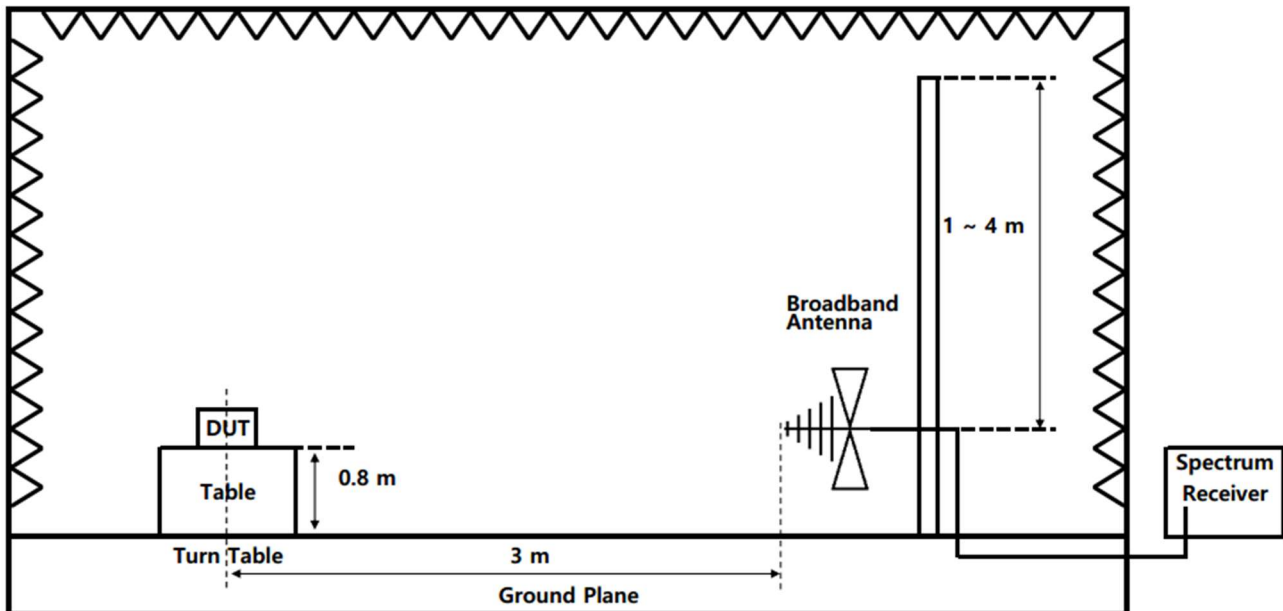
The radiated emissions measurements were performed on the 3 m, Semi-Anechoic Chamber. The EUT was placed on a non-conductive turntable above the ground plane.

The frequency spectrum from 9 kHz to 1 GHz was scanned and maximum emission levels at each frequency recorded. The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna, and the higher of the two was entered

7.3.1 Test setup layout Below 30 MHz



7.3.2 Test setup layout 30 MHz to 1 GHz





7.4 Regulation

According to §15.209(a), for an intentional device, the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Field strength ($\mu\text{V}/\text{m}$)	Field strength ($\text{dB}\mu\text{V}/\text{m}$)	Measurement distance (m)
0.009 ~ 0.490	$2\,400 / F$ (kHz)	-	300
0.490 ~ 1.705	$24\,000 / F$ (kHz)	-	30
1.705 ~ 30	30	29.54	30
30 ~ 88	100	40.00	3
88 ~ 216	150	43.52	3
216 ~ 960	200	46.02	3
Above 960	500	53.98	3

- The emission limits shown in the above table are based on measurement instrumentation employing a CISPR quasi-peak detector and 9-90 kHz, 110-490 kHz and above 1000 MHz are based on the average value of measured emissions.
- If field strength is measured at only a single point, then that point shall be at the radial from the EUT that produces the maximum emission at the frequency being measured, as described in 5.4. If that point is closer to the EUT than $\lambda/2\pi$ and the limit distance is greater than $\lambda/2\pi$, the measurement shall be extrapolated to the limit distance by conservatively presuming that the field strength decreases at a 40 dB/decade of distance rate to the $\lambda/2\pi$ distance, and at a 20 dB/decade of distance rate beyond $\lambda/2\pi$. This shall be accomplished using Equation

$$FS(\text{limit}) = FS(\text{max}) - 40\log\{d(\text{near field})/d(\text{measure})\} - 20\log\{d(\text{limit})/d(\text{near field})\}$$
$$d(\text{near field}) = 47.77 / f(\text{MHz})$$

If the single point measured is at a distance greater than $\lambda/2\pi$, then extrapolation to the limit distance shall be calculated using Equation

$$FS(\text{limit}) = FS(\text{max}) - 20\log\{d(\text{limit})/d(\text{measure})\}$$

If both the single point and the limit distance are equal to or closer to the EUT than $\lambda/2\pi$, then extrapolation to the limit distance shall be calculated using Equation

$$FS(\text{limit}) = FS(\text{max}) - 40\log\{d(\text{limit})/d(\text{measure})\}$$

Example, The radiation limit value at 3 m of a 0.150 MHz frequency signal is :

$$20\log(2400/150) + 40\log(300/3) = 104.08 \text{ dB}\mu\text{V}/\text{m}$$



7.5 Test data for Radiated Emissions

Operating mode : Transmit mode

Test Result : Pass

7.5.1 Measurement Results Below 30 MHz – Port 1_CTS-RFID-AO

Frequency (MHz)	Reading (dBμV)	Detector	Ant. Pol. (H/V)	Corr. Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
0.021	33.20	Average	V	19.80	53.00	121.28	68.28
1.472	28.02	QuasiPeak	V	19.70	47.72	64.24	16.52
4.025	30.45	QuasiPeak	V	19.90	50.35	69.54	19.19

※ Ant. Pol. : Antenna Polarization

※ Corr. Factor. : Antenna Factor + Cable Loss - Amplifier Gain

※ Result = Reading + Corr. Factor

※ Margin = Limit – Result

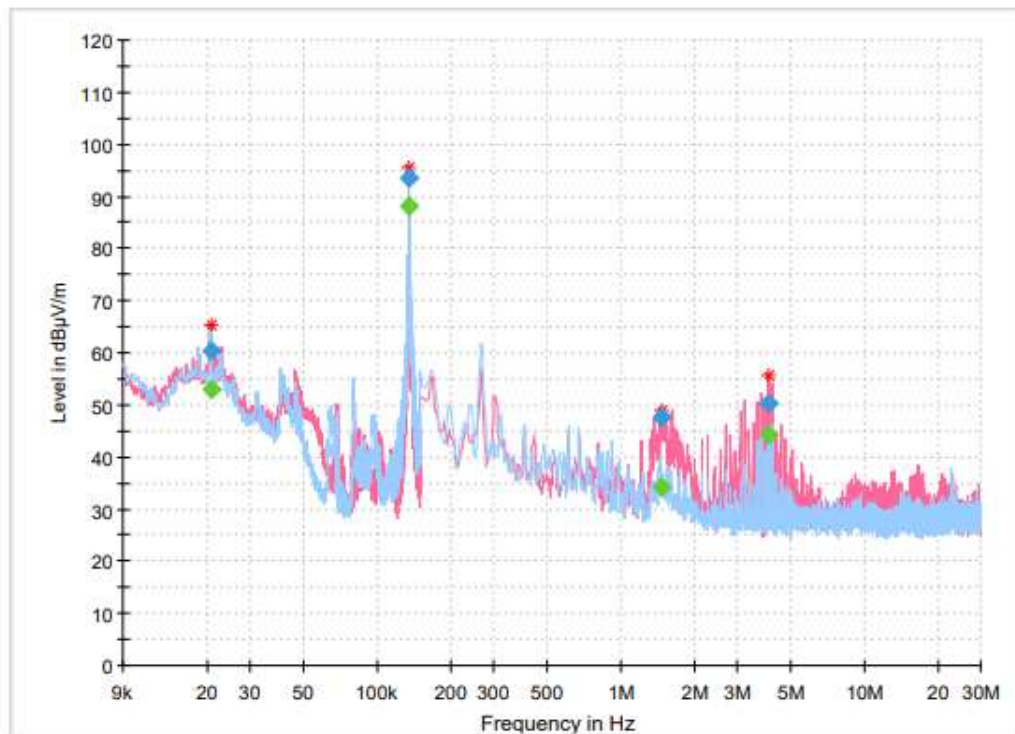
※ Detector = Average for 9-90 kHz, 110-490 kHz, Quasi Peak for the others

※ Limit = at 0.009-0.490MHz and 3m distance, $20\log(2400/F(\text{kHz})) + 40\log(300\text{m}/3\text{m})$

at 0.490-1.705MHz and 3m distance, $20\log(24000/F(\text{kHz})) + 40\log(30\text{m}/3\text{m})$

at 1.705-30.0MHz and 3m distance, $20\log(30) + 40\log(30\text{m}/3\text{m})$

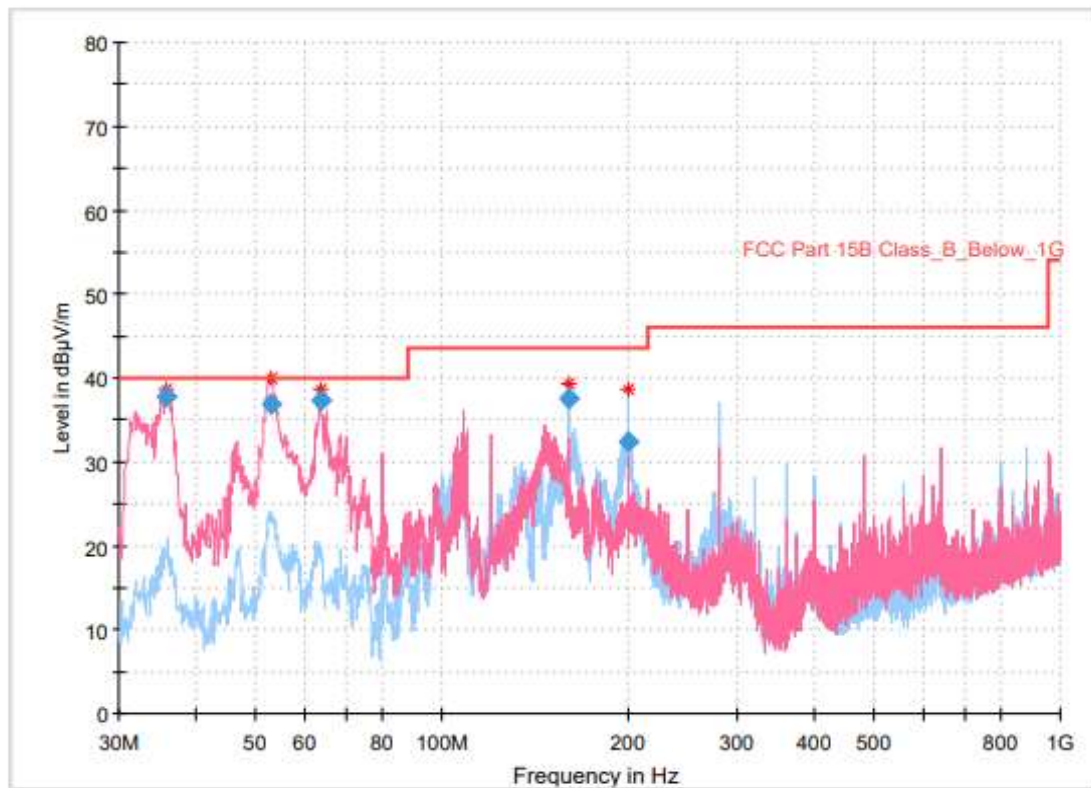
7.5.1.1 Measured Graph (Below 30 MHz)



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB)
0.020703	---	53.00	---	---	5000.0	0.200	V	314.0	19.8
0.020703	60.35	---	---	---	5000.0	0.200	V	314.0	19.8
0.134250	93.41	---	---	---	5000.0	0.200	H	297.0	19.6
0.134250	---	88.03	---	---	5000.0	0.200	H	297.0	19.6
1.472355	---	34.22	---	---	5000.0	9.000	V	70.0	19.7
1.472355	47.72	---	---	---	5000.0	9.000	V	70.0	19.7
4.024530	50.35	---	---	---	5000.0	9.000	V	201.0	19.9
4.024530	---	44.39	---	---	5000.0	9.000	V	201.0	19.9

7.5.1.2 Measured Graph (Below 1 GHz)



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
35.820000	37.88	40.00	2.12	1000.0	120.000	99.9	V	261.0	-25.4
53.086000	36.85	40.00	3.15	1000.0	120.000	99.9	V	261.0	-22.6
63.756000	37.30	40.00	2.70	1000.0	120.000	99.9	V	0.0	-24.7
159.980000	37.61	43.50	5.89	1000.0	120.000	99.9	H	0.0	-27.2
199.944000	32.36	43.50	11.14	1000.0	120.000	99.9	H	0.0	-24.2



7.5.2 Measurement Results Below 30 MHz – Port 2_CTS-RFID-AB

Frequency (MHz)	Reading (dBμV)	Detector	Ant. Pol. (H/V)	Corr. Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
0.266	38.46	Average	H	19.50	57.96	99.09	41.13
0.535	26.21	QuasiPeak	H	19.50	45.71	73.04	27.33
3.890	29.78	QuasiPeak	V	19.90	49.68	69.54	19.86

※ Ant. Pol. : Antenna Polarization

※ Corr. Factor. : Antenna Factor + Cable Loss - Amplifier Gain

※ Result = Reading + Corr. Factor

※ Margin = Limit – Result

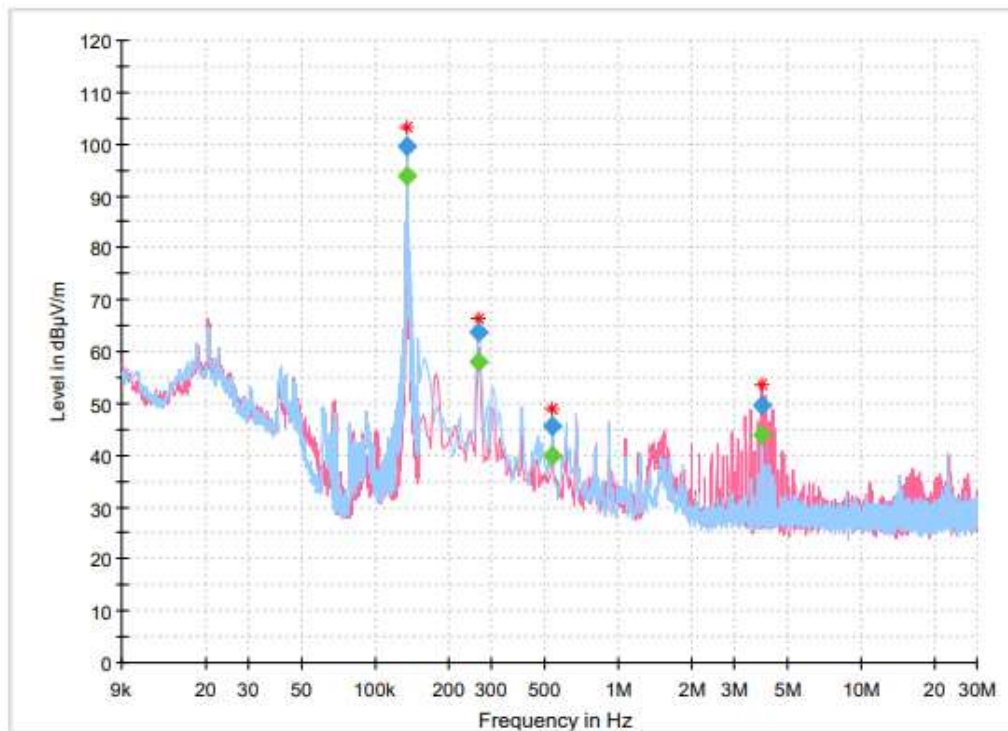
※ Detector = Average for 9-90 kHz, 110-490 kHz, Quasi Peak for the others

※ Limit = at 0.009-0.490MHz and 3m distance, $20\log(2400/F(\text{kHz})) + 40\log(300\text{m}/3\text{m})$

at 0.490-1.705MHz and 3m distance, $20\log(24000/F(\text{kHz})) + 40\log(30\text{m}/3\text{m})$

at 1.705-30.0MHz and 3m distance, $20\log(30) + 40\log(30\text{m}/3\text{m})$

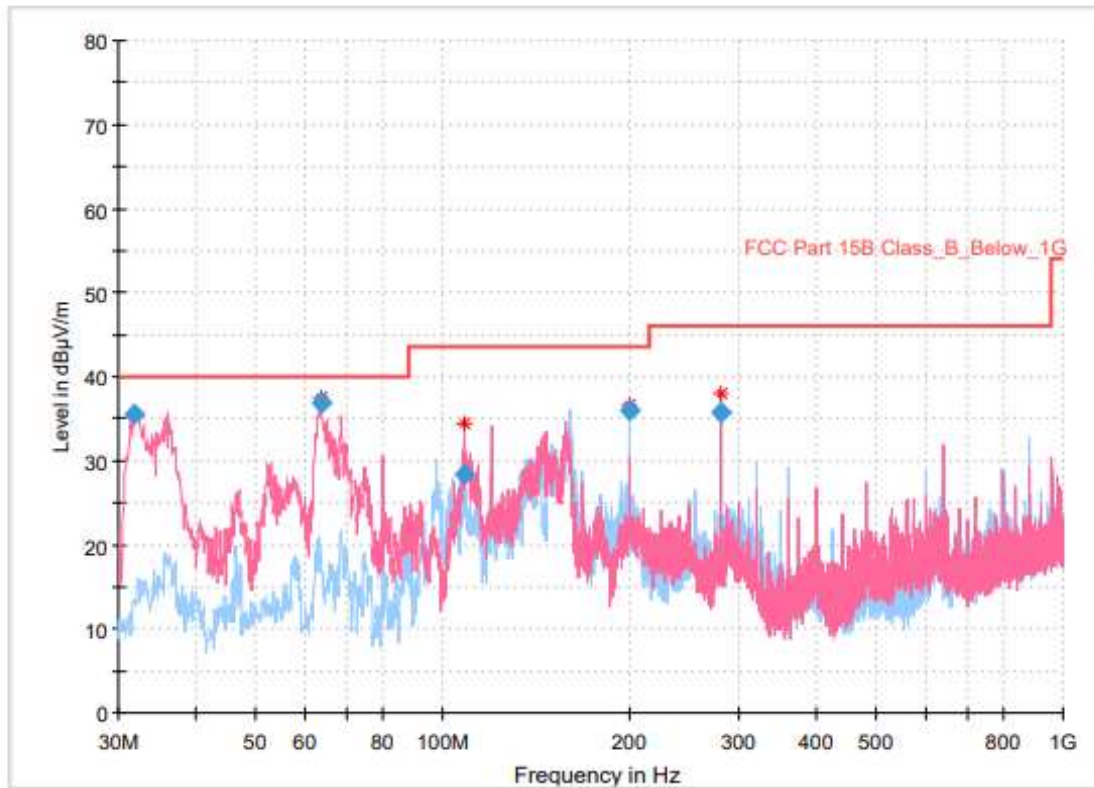
7.5.2.1 Measured Graph (Below 30 MHz)



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB)
0.134250	99.50	---	---	---	5000.0	0.200	H	312.0	19.6
0.134250	---	93.80	---	---	5000.0	0.200	H	312.0	19.6
0.266415	63.53	---	---	---	5000.0	9.000	H	282.0	19.5
0.266415	---	57.96	---	---	5000.0	9.000	H	282.0	19.5
0.535065	45.71	---	---	---	5000.0	9.000	H	91.0	19.5
0.535065	---	40.01	---	---	5000.0	9.000	H	91.0	19.5
3.890205	49.68	---	---	---	5000.0	9.000	V	30.0	19.9
3.890205	---	43.92	---	---	5000.0	9.000	V	30.0	19.9

7.5.2.2 Measured Graph (Below 1 GHz)



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
31.746000	35.52	40.00	4.48	1000.0	120.000	99.9	V	288.0	-26.6
63.659000	36.97	40.00	3.03	1000.0	120.000	99.9	V	318.0	-24.6
108.667000	28.38	43.50	15.12	1000.0	120.000	99.9	V	0.0	-24.6
200.041000	36.06	43.50	7.44	1000.0	120.000	99.9	H	331.0	-24.3
280.066000	35.71	46.00	10.29	1000.0	120.000	99.9	H	249.0	-21.5



7.5.3 Measurement Results Below 30 MHz – Port 3_CTS-RFID-AC

Frequency (MHz)	Reading (dBμV)	Detector	Ant. Pol. (H/V)	Corr. Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
0.266	38.21	Average	H	19.50	57.71	99.09	41.38
1.562	23.20	QuasiPeak	H	19.70	42.90	63.73	20.83
4.159	27.87	QuasiPeak	V	19.90	47.77	69.54	21.77

※ Ant. Pol. : Antenna Polarization

※ Corr. Factor. : Antenna Factor + Cable Loss - Amplifier Gain

※ Result = Reading + Corr. Factor

※ Margin = Limit – Result

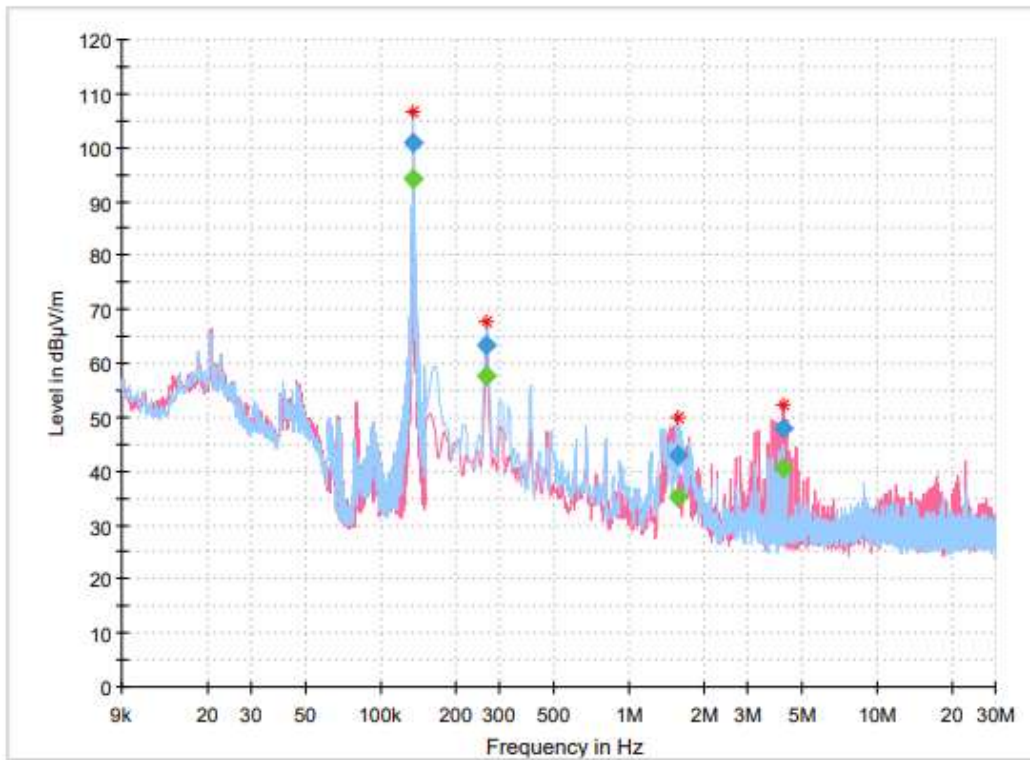
※ Detector = Average for 9-90 kHz, 110-490 kHz, Quasi Peak for the others

※ Limit = at 0.009-0.490MHz and 3m distance, $20\log(2400/F(\text{kHz})) + 40\log(300\text{m}/3\text{m})$

at 0.490-1.705MHz and 3m distance, $20\log(24000/F(\text{kHz})) + 40\log(30\text{m}/3\text{m})$

at 1.705-30.0MHz and 3m distance, $20\log(30) + 40\log(30\text{m}/3\text{m})$

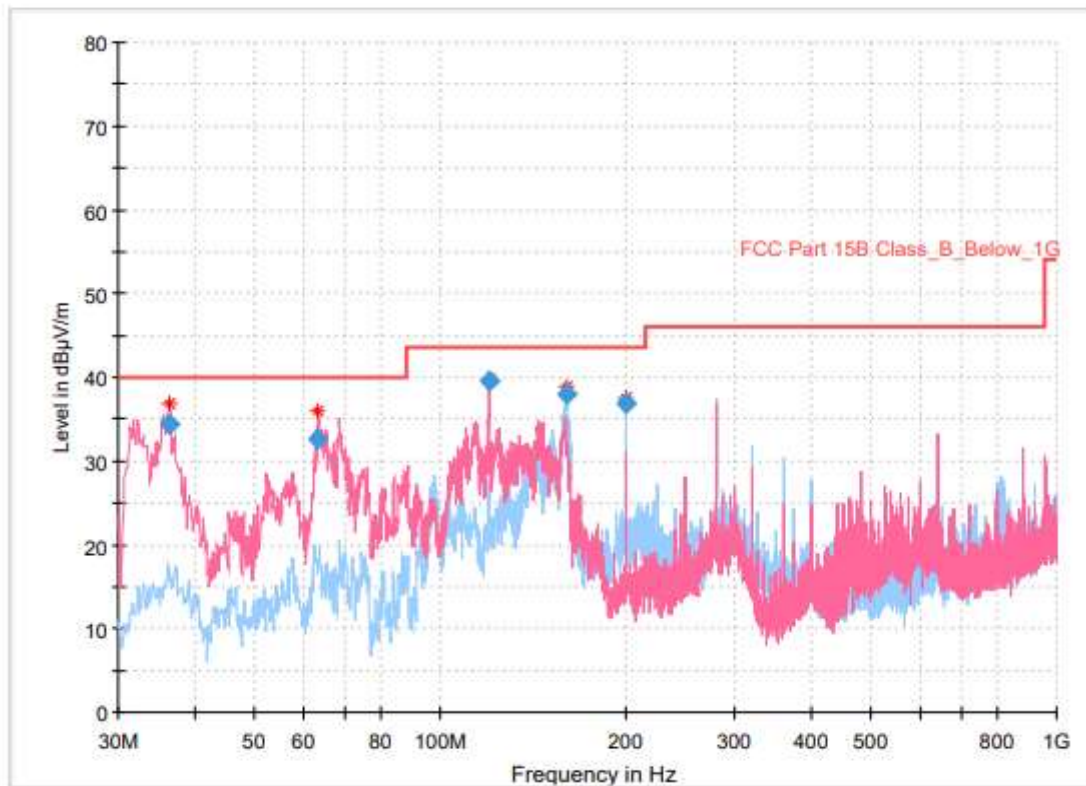
7.5.3.1 Measured Graph (Below 30 MHz)



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB)
0.134250	101.00	---	---	---	5000.0	0.200	H	302.0	19.6
0.134250	---	94.14	---	---	5000.0	0.200	H	302.0	19.6
0.266415	63.29	---	---	---	5000.0	9.000	H	335.0	19.5
0.266415	---	57.71	---	---	5000.0	9.000	H	335.0	19.5
1.561905	42.90	---	---	---	5000.0	9.000	H	0.0	19.7
1.561905	---	35.21	---	---	5000.0	9.000	H	0.0	19.7
4.158855	47.77	---	---	---	5000.0	9.000	V	0.0	19.9
4.158855	---	40.54	---	---	5000.0	9.000	V	0.0	19.9

7.5.3.2 Measured Graph (Below 1 GHz)



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
36.402000	34.46	40.00	5.54	1000.0	120.000	99.9	V	4.0	-25.2
63.465000	32.66	40.00	7.34	1000.0	120.000	99.9	V	0.0	-24.6
120.016000	39.45	43.50	4.05	1000.0	120.000	99.9	V	189.0	-26.1
159.980000	37.91	43.50	5.59	1000.0	120.000	99.9	H	113.0	-27.2
200.041000	36.86	43.50	6.64	1000.0	120.000	99.9	H	0.0	-24.3



7.5.4 Measurement Results Below 30 MHz – Port 4_CTS-STBA

Frequency (MHz)	Reading (dBμV)	Detector	Ant. Pol. (H/V)	Corr. Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
0.020	36.90	Average	H	19.80	56.70	121.41	64.71
1.481	26.05	QuasiPeak	V	19.70	45.75	64.19	18.44
4.025	30.20	QuasiPeak	V	19.90	50.10	69.54	19.44

※ Ant. Pol. : Antenna Polarization

※ Corr. Factor. : Antenna Factor + Cable Loss - Amplifier Gain

※ Result = Reading + Corr. Factor

※ Margin = Limit – Result

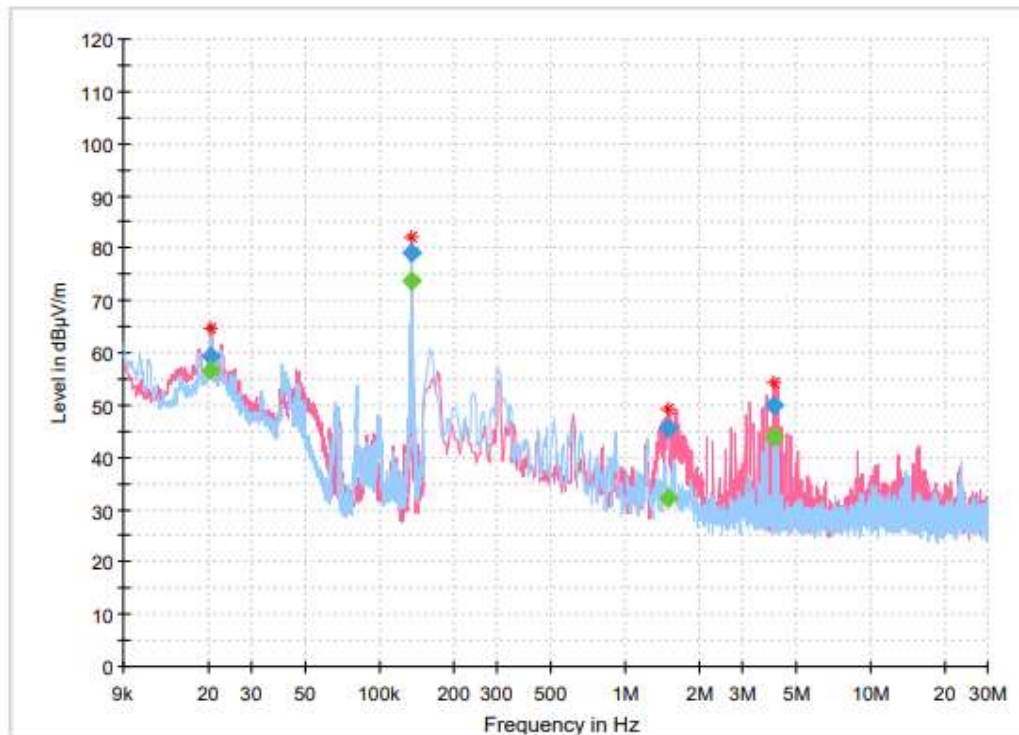
※ Detector = Average for 9-90 kHz, 110-490 kHz, Quasi Peak for the others

※ Limit = at 0.009-0.490MHz and 3m distance, $20\log(2400/F(\text{kHz})) + 40\log(300\text{m}/3\text{m})$

at 0.490-1.705MHz and 3m distance, $20\log(24000/F(\text{kHz})) + 40\log(30\text{m}/3\text{m})$

at 1.705-30.0MHz and 3m distance, $20\log(30) + 40\log(30\text{m}/3\text{m})$

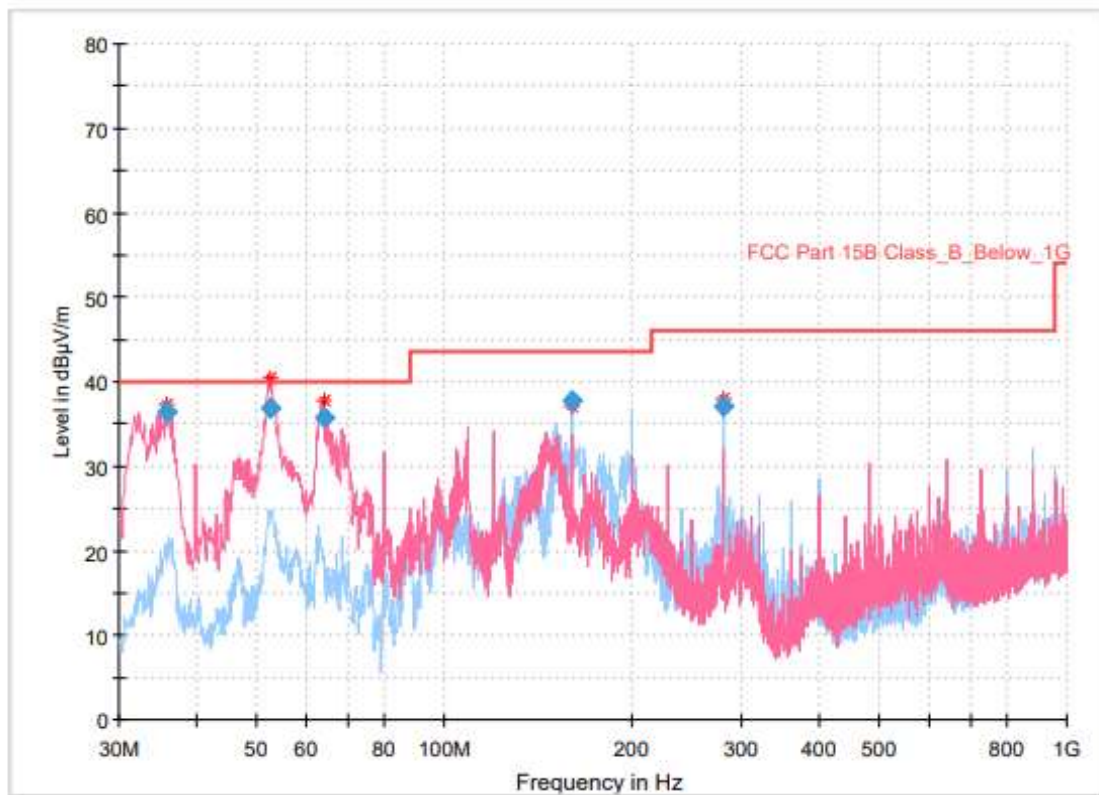
7.5.4.1 Measured Graph (Below 30 MHz)



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB)
0.020393	---	56.70	---	---	5000.0	0.200	H	0.0	19.8
0.020393	59.32	---	---	---	5000.0	0.200	H	0.0	19.8
0.134250	---	73.76	---	---	5000.0	0.200	H	292.0	19.6
0.134250	79.12	---	---	---	5000.0	0.200	H	292.0	19.6
1.481310	---	32.02	---	---	5000.0	9.000	V	301.0	19.7
1.481310	45.75	---	---	---	5000.0	9.000	V	301.0	19.7
4.024530	---	43.89	---	---	5000.0	9.000	V	356.0	19.9
4.024530	50.10	---	---	---	5000.0	9.000	V	356.0	19.9

7.5.4.2 Measured Graph (Below 1 GHz)



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
35.723000	36.41	40.00	3.59	1000.0	120.000	99.9	V	210.0	-25.5
52.698000	36.97	40.00	3.03	1000.0	120.000	99.9	V	335.0	-22.6
63.950000	35.64	40.00	4.36	1000.0	120.000	99.9	V	196.0	-24.7
159.980000	37.69	43.50	5.81	1000.0	120.000	99.9	H	330.0	-27.2
280.066000	37.02	46.00	8.98	1000.0	120.000	99.9	H	152.0	-21.5



8. Power Line Conducted Emission

8.1 Operating environment

Temperature : 23 °C

Relative humidity : 47 %

8.2 Measurement method

Standard : §15.207

8.3 Limit

Standard : §15.207

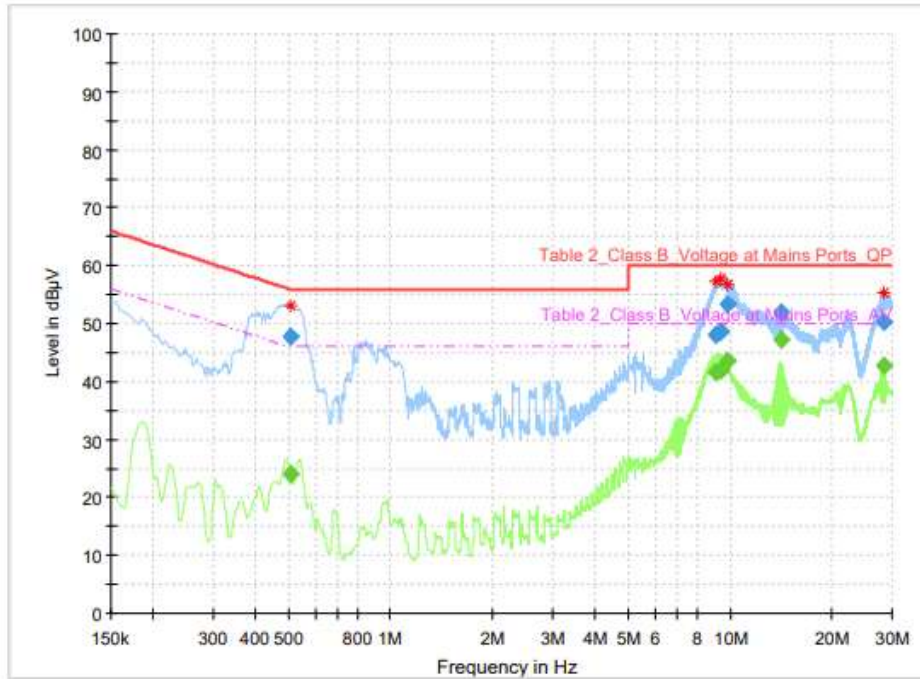
8.4 Test data

Operating mode : Transmit mode

Test Result : Pass

8.4.1 Measured Results & Graph

Live line / Natural line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.508	47.75	---	56.00	8.25	5000.0	9.000	N	10.00
0.508	---	24.13	46.00	21.87	5000.0	9.000	N	10.00
9.096	47.97	---	60.00	12.03	5000.0	9.000	L1	10.06
9.096	---	41.52	50.00	8.48	5000.0	9.000	L1	10.06
9.341	48.52	---	60.00	11.48	5000.0	9.000	L1	10.07
9.341	---	41.82	50.00	8.18	5000.0	9.000	L1	10.07
9.872	53.31	---	60.00	6.69	5000.0	9.000	L1	10.09
9.872	---	43.70	50.00	6.30	5000.0	9.000	L1	10.09
14.179	51.97	---	60.00	8.03	5000.0	9.000	L1	10.23
14.179	---	47.09	50.00	2.91	5000.0	9.000	L1	10.23
28.489	50.31	---	60.00	9.69	5000.0	9.000	L1	10.64
28.489	---	42.66	50.00	7.34	5000.0	9.000	L1	10.64

- END OF REPORT -