RADIO PERFORMANCE TEST REPORT

Test Report No.	**: OT-24O-RWD-037**
Reception No.	**: 2408002763**
Applicant	**: MCNEX CO.,LTD**
Address	**: MCNEX Tower, 13-39, Songdogwahak-ro 16 beon-gi, Yeonsu-gu, Incheon, South Korea**
Manufacturer	**: MCNEX CO.,LTD**
Address	**: MCNEX Tower, 13-39, Songdogwahak-ro 16 beon-gi, Yeonsu-gu, Incheon, South Korea**
Type of Equipment	**: 2CH Dashcam**
FCC ID	**: 2ABC6-M8**
Model Name	**: M8**
Multiple Model Name	**: MD-8000, MD-8100, MD-8200, FTX-DC4000, MD-8400**
Serial number	**: N/A**
Total page of Report	**: 54 pages (including this page)**
Date of Incoming	**: August 29, 2024**
Date of issue	**: October 24, 2024**

SUMMARY

The equipment complies with the regulation; ***FCC PART 15 SUBPART C Section 15.247***

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

This report is not correlated with the "KS Q ISO/IEC 17025 and KOLAS accreditation" of Korean Laboratory Accreditation Scheme.

Tested by	Reviewed by	Approved by
Yun-Bok, Wi / Prj. Engineer	Tae-Ho, Kim / Chief Engineer	Jae-Ho, Lee / Chief Engineer
ONETECH Corp.	ONETECH Corp.	ONETECH Corp.

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

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ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

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※ Please refer to the Annex section for All test plots

Revision History

Rev. No.	Issue Report No.	Issued Date	Revisions	Section Affected
0	OT-24O-RWD-037	October 24, 2024	Initial Release	All

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1. VERIFICATION OF COMPLIANCE

Applicant : MCNEX CO.,LTD

Address : MCNEX Tower, 13-39, Songdogwahak-ro 16 beon-gi, Yeonsu-gu, Incheon, South Korea

Contact Person : SEUNG JUN RO / Senior Research Engineer

Telephone No. : +82-10-9274-1055

FCC ID : 2ABC6-M8

Model Name : M8

Brand Name : Momento, FTX / Firstech, LLC

Serial Number : N/A

Date : October 24, 2024

EQUIPMENT CLASS	DTS – DIGITAL TRNSMISSION SYSTEM
E.U.T. DESCRIPTION	2CH Dashcam
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2013
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC PART 15 SUBPART C Section 15.247 KDB 558074 D01 15.247 Meas Guidance v05r02
Modifications on the Equipment to Achieve Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

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2. TEST SUMMARY

2.1 Test items and results

SECTION	TEST ITEMS	RESULTS
15.247 (a) (2)	Minimum 6 dB Bandwidth	Met the Limit / PASS
15.247 (b) (3)	Maximum Conducted Output Power	Met the Limit / PASS
15.247 (d)	100 kHz Bandwidth Outside the Frequency Band	Met the Limit / PASS
15.247 (d)	Radiated Emission which fall in the Restricted Band	Met the Limit / PASS
15.247 (e)	Peak Power Spectral Density	Met the Limit / PASS
15.209	Radiated Emission Limits	Met the Limit / PASS
15.207	Conducted Limits	Met the Limit / PASS
15.203	Antenna Requirement	Met requirement / PASS

2.2 Additions, deviations, exclusions from standards

No additions, deviations or exclusions have been made from standard.

2.3 Related Submittal(s) / Grant(s)

Original submittal only

2.4 Purpose of the test

To determine whether the equipment under test fulfills the requirements of the regulation stated in FCC PART 15 SUBPART C Section 15.247.

2.5 Test Methodology

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10: 2013. Radiated testing was performed at a distance of 3 m from EUT to the antenna.

2.6 Test Facility

The Onetech Corp. has been designated to perform equipment testing in compliance with ISO/IEC 17025.

The Electromagnetic compatibility measurement facilities are located at 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea.

-. Site Filing:

VCCI (Voluntary Control Council for Interference) – Registration No. R-20122/ C-14617/ G-10666/ T-11842

ISED (Innovation, Science and Economic Development Canada) – Registration No. Site# 3736A-3

KOLAS (Korea Laboratory Accreditation Scheme) - Accreditation NO. KT085

FCC (Federal Communications Commission) - Accreditation No. KR0013

RRA (Radio Research Agency) – Designation No. KR0013

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3. GENERAL INFORMATION

3.1 Product Description

The MCNEX CO.,LTD, Model M8 (referred to as the EUT in this report) is a 2CH Dashcam. The product specification described herein was obtained from product data sheet or user's manual.

DEVICE TYPE	2CH Dashcam	
Temperature Range	-20 °C ~ 60 °C	
OPERATING FREQUENCY	WLAN 2.4 GHz	2 412 MHz ~ 2 462 MHz (802.11b/g/n(HT20))
		2 422 MHz ~ 2 452 MHz (802.11n(HT40))
	5 150 MHz ~ 5 250 MHz Band	5 180 MHz ~ 5 240 MHz (802.11a/n(HT20))
		5 190 MHz ~ 5 230 MHz (802.11n(HT40))
	5 725 MHz ~ 5 850 MHz Band	5 745 MHz ~ 5 825 MHz (802.11a/n(HT20))
		5 755 MHz ~ 5 795 MHz (802.11n(HT40))
MODULATION TYPE	WLAN 2.4 GHz	802.11b: DSSS Modulation(DBPSK/DQPSK/CCK) 802.11g/n(HT20)/n(HT40): OFDM Modulation(BPSK/QPSK/16QAM/64QAM)
	WLAN 5 GHz	802.11a/n(HT20)/n(HT40): OFDM Modulation(BPSK/QPSK/16QAM/64QAM)
RF OUTPUT POWER	WLAN 2.4 GHz	21.05dBm(802.11b) 14.43 dBm(802.11g) 13.38 dBm(802.11n_HT20) 11.13 dBm(802.11n_HT40)

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RF OUTPUT POWER	5 150 MHz ~ 5 250 MHz Band (UNII I)	9.02 dBm(802.11a) 8.46 dBm(802.11n_HT20) 6.79 dBm(802.11n_HT40)
	5 725 MHz ~ 5 850 MHz Band (UNII 3)	10.44 dBm(802.11a) 10.59 dBm(802.11n_HT20) 10.63 dBm(802.11n_HT40)
ANTENNA TYPE	Chip Antenna	
ANTENNA GAIN	WLAN 2.4 GHz	2.23 dBi
	5 150 MHz ~ 5 250 MHz Band	2.79 dBi
	5 725 MHz ~ 5 850 MHz Band	2.79 dBi
List of each Osc. or crystal Freq.(Freq. >= 1 MHz)		24MHz, 26MHz, 27MHz
ELECTRICAL RATING		DC 12 V / DC 24 V

3.2 Alternative type(s)/model(s); also covered by this test report.

-. The following lists consist of the added model and their differences.

Model Name	Differences	Tested
M8	V536 processor, DDR3*2, front camera+rear camera(Basic Model)	☑
MD-8000	V526 processor, DDR3*1, front camera only	☐
MD-8100	V526 processor, DDR3*1, front camera+rear camera	☐
MD-8200	V536 processor, DDR3*2, front camera+rear camera	☐
FTX-DC4000	V536 processor, DDR3*2, front camera only	☐
MD-8400	V536 processor, DDR3*2, front camera+rear camera	☐

Note: 1. Applicant consigns only basic model to test. Therefore this test report just guarantees the units, which have been tested.

2. The Applicant/manufacturer is responsible for the compliance of all variants.

4. EUT MODIFICATIONS

-. None

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5. SYSTEM TEST CONFIGURATION

5.1 Justification

This device was configured for testing in a typical way as a normal customer is supposed to be used. During the test, the following components were installed inside of the EUT.

DEVICE TYPE	MANUFACTURER	MODEL/PART NUMBER	FCC ID
Main Board	MCNEX CO.,LTD	N/A	N/A
Camera	MCNEX CO.,LTD	N/A	N/A
Radar Module	N/A	N/A	2AD56HLK-LD2410-P

5.2 Peripheral equipment

Defined as equipment needed for correct operation of the EUT, but not considered as tested:

Model	Manufacturer	Description	Connected to
M8	MCNEX CO.,LTD	2CH Dashcam (EUT)	-
GP-4303D	LG Precision Co.,Ltd	DC Power Supply (DC 30 V 3 A)	EUT
PROBOOK 450 G7	HP	NoteBook PC	EUT

5.3 Mode of operation during the test

For the testing, software used to control the EUT for staying in continuous transmitting is programmed.

The EUT was moved throughout the XY, XZ, and YZ planes and the worst case is “XY” axis, but the worst data was recorded in this report.

-. Channel List (WLAN 2.4 GHz_20 MHz BandWidth)

Channel	Frequency[MHz]	Channel	Frequency[MHz]	Channel	Frequency[MHz]
1	2 412.00	6	2 437.00	11	2 462.00
2	2 417.00	7	2 442.00		
3	2 422.00	8	2 447.00		
4	2 427.00	9	2 452.00		
5	2 432.00	10	2 457.00		

-. Channel List (WLAN 2.4 GHz_40 MHz BandWidth)

Channel	Frequency[MHz]	Channel	Frequency[MHz]	Channel	Frequency[MHz]
3	2 422.00	6	2 437.00	9	2 452.00
4	2 427.00	7	2 442.00		
5	2 432.00	8	2 447.00		

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-. Duty Cycle

Band	TEST Mode	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle (%)	Duty Cycle Factor (dB)
WLAN 2.4 GHz	802.11 b	1	12.460	12.860	96.89	0.14
		2	6.320	6.760	93.49	0.29
		5.5	2.410	2.800	86.07	0.65
		11	1.305	1.676	77.86	1.09
	802.11 g	6	2.068	2.292	90.23	0.45
		9	1.378	1.567	87.94	0.56
		12	1.046	1.243	84.15	0.75
		18	0.701	0.934	75.05	1.25
		24	0.531	0.745	71.33	1.47
		36	0.363	0.557	65.25	1.85
		48	0.276	0.464	59.57	2.25
		54	0.249	0.453	55.00	2.60
	802.11 n(HT20)	MCS0	1.929	2.133	90.44	0.44
		MCS1	0.977	1.193	81.90	0.87
		MCS2	0.665	0.869	76.53	1.16
		MCS3	0.505	0.684	73.84	1.32
		MCS4	0.353	0.576	61.31	2.13
		MCS5	0.272	0.467	58.33	2.34
		MCS6	0.250	0.480	52.01	2.84
		MCS7	0.227	0.422	53.89	2.68
	802.11 n(HT40)	MCS0	0.947	1.078	87.89	0.56
		MCS1	0.492	0.688	71.50	1.46
		MCS2	0.339	0.553	61.29	2.13
		MCS3	0.264	0.458	57.56	2.40
		MCS4	0.189	0.410	46.02	3.37
		MCS5	0.151	0.373	40.59	3.92
		MCS6	0.140	0.354	39.66	4.02
		MCS7	0.128	0.360	35.66	4.48

Note – Duty Cycle : (Tx On Time / (Tx On Time + Tx Off Time)) * 100

Correction Factor : 10 * Log(1 / (Duty Cycle / 100))

5.4 Configuration of Test System

Line Conducted Test: It is not need to test this requirement, because the EUT shall be operated by DC Power.

Radiated Emission Test: Preliminary radiated emissions test were conducted using the procedure in ANSI C63.10: 2013 to determine the worse operating conditions. Final radiated emission tests were conducted at 3 meter Semi Anechoic Chamber.

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.

5.5 Antenna Requirement

For intentional device, according to section 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.

Antenna Construction:

The PCB Antenna is located on the main board of EUT and the PCB antenna is connected to the outside of the EUT by a special connector type, so no consideration of replacement by the user.

6. PRELIMINARY TEST

6.1 AC Power line Conducted Emissions Tests

During Preliminary Test, the following operating mode was investigated.

Operation Mode	The Worse operating condition (Please check one only)
Transmitting Mode	X

6.2 General Radiated Emissions Tests

During Preliminary Test, the following operating mode was investigated.

Operation Mode	The Worse operating condition (Please check one only)
Transmitting Mode	X

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7. MIMIMUM 6 dB BANDWIDTH

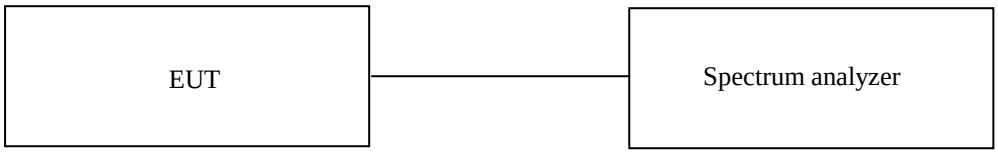
7.1 Operating environment

Temperature : 24 °C

Relative humidity : 51.3 % R.H.

7.2 Test set-up

The antenna output of the EUT was connected to the spectrum analyzer. The resolution bandwidth is set to 100 kHz, and peak detection was used. The 6 dB bandwidth is defined as the total spectrum over which the power is higher than the peak power minus 6 dB.



7.3 Test Date

September 02, 2024 ~ October 10, 2024

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7.4 Test data for DC 12 V

7.4.1 Test data for 802.11b WLAN Mode

-. Test Result : Pass

CHANNEL	FREQUENCY (MHz)	6 dB Bandwidth (MHz)	LIMIT (MHz)	Margin (MHz)
Low	2 412.00	10.09	0.50	9.59
Middle	2 437.00	10.04	0.50	9.54
High	2 462.00	9.14	0.50	8.64

Remark. Margin = Measured Value – Limit

7.4.2 Test data for 802.11g WLAN Mode

-. Test Result : Pass

CHANNEL	FREQUENCY (MHz)	6 dB Bandwidth (MHz)	LIMIT (MHz)	Margin (MHz)
Low	2 412.00	15.83	0.50	15.33
Middle	2 437.00	15.63	0.50	15.13
High	2 462.00	15.13	0.50	14.63

Remark. Margin = Measured Value – Limit

7.4.3 Test data for 802.11n_HT20 WLAN Mode

-. Test Result : Pass

CHANNEL	FREQUENCY (MHz)	6 dB Bandwidth (MHz)	LIMIT (MHz)	Margin (MHz)
Low	2 412.00	15.13	0.50	14.63
Middle	2 437.00	15.08	0.50	14.58
High	2 462.00	15.93	0.50	15.43

Remark. Margin = Measured Value – Limit

7.4.4 Test data for 802.11n_HT40 WLAN Mode

-. Test Result : Pass

CHANNEL	FREQUENCY (MHz)	6 dB Bandwidth (MHz)	LIMIT (MHz)	Margin (MHz)
Low	2 422.00	24.08	0.50	23.58
Middle	2 437.00	30.07	0.50	29.57
High	2 452.00	30.07	0.50	29.57

Remark. Margin = Measured Value - Limit

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7.5 Test data for DC 24 V

7.5.1 Test data for 802.11b WLAN Mode

-. Test Result : Pass

CHANNEL	FREQUENCY (MHz)	6 dB Bandwidth (MHz)	LIMIT (MHz)	Margin (MHz)
Low	2 412.00	9.09	0.50	8.59
Middle	2 437.00	9.14	0.50	8.64
High	2 462.00	10.04	0.50	9.54

Remark. Margin = Measured Value – Limit

7.5.2 Test data for 802.11g WLAN Mode

-. Test Result : Pass

CHANNEL	FREQUENCY (MHz)	6 dB Bandwidth (MHz)	LIMIT (MHz)	Margin (MHz)
Low	2 412.00	15.83	0.50	15.33
Middle	2 437.00	15.08	0.50	14.58
High	2 462.00	15.08	0.50	14.58

Remark. Margin = Measured Value – Limit

7.5.3 Test data for 802.11n_HT20 WLAN Mode

-. Test Result : Pass

CHANNEL	FREQUENCY (MHz)	6 dB Bandwidth (MHz)	LIMIT (MHz)	Margin (MHz)
Low	2 412.00	15.13	0.50	14.63
Middle	2 437.00	15.53	0.50	15.03
High	2 462.00	15.08	0.50	14.58

Remark. Margin = Measured Value – Limit

7.5.4 Test data for 802.11n_HT40 WLAN Mode

-. Test Result : Pass

CHANNEL	FREQUENCY (MHz)	6 dB Bandwidth (MHz)	LIMIT (MHz)	Margin (MHz)
Low	2 422.00	30.17	0.50	29.67
Middle	2 437.00	32.57	0.50	32.07
High	2 452.00	35.16	0.50	34.66

Remark. Margin = Measured Value – Limit

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8. MAXIMUM CONDUCTED OUTPUT POWER

8.1 Operating environment

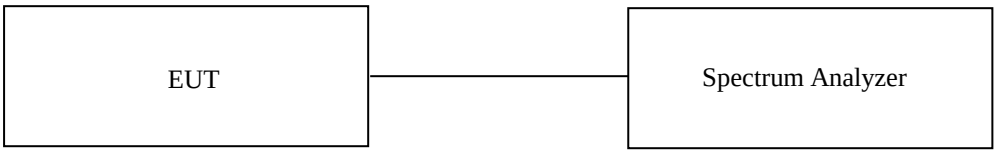
Temperature : 24 °C

Relative humidity : 51.3 % R.H.

8.2 Test set-up for conducted measurement

The antenna output of the EUT was connected to the spectrum analyzer.

The resolution bandwidth is set to 1 MHz, the video bandwidth is set to 3 times the resolution bandwidth.



8.3 Test Date

September 02, 2024 ~ October 10, 2024

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8.4 Test data for DC 12 V

8.4.1 Test data for 802.11b WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 96.89 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor(dB)	Total Value(dBm)	LIMIT (dBm)	MARGIN (dB)
Low	2 412.00	20.44	0.14	20.58	30.00	9.42
Middle	2 437.00	20.91	0.14	21.05	30.00	8.95
High	2 462.00	20.64	0.14	20.78	30.00	9.22

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

8.4.2 Test data for 802.11g WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 90.23 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor(dB)	Total Value(dBm)	LIMIT (dBm)	MARGIN (dB)
Low	2 412.00	13.74	0.45	14.19	30.00	15.81
Middle	2 437.00	13.79	0.45	14.24	30.00	15.76
High	2 462.00	13.78	0.45	14.23	30.00	15.77

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

8.4.3 Test data for 802.11n_HT20 WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 90.44 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor(dB)	Total Value(dBm)	LIMIT (dBm)	MARGIN (dB)
Low	2 412.00	12.84	0.44	13.28	30.00	16.72
Middle	2 437.00	12.77	0.44	13.21	30.00	16.79
High	2 462.00	12.68	0.44	13.12	30.00	16.88

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

8.4.4 Test data for 802.11n_HT40 WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 87.89 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor(dB)	Total Value(dBm)	LIMIT (dBm)	MARGIN (dB)
Low	2 422.00	10.51	0.56	11.07	30.00	18.93
Middle	2 437.00	10.42	0.56	10.98	30.00	19.02
High	2 452.00	10.36	0.56	10.92	30.00	19.08

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

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8.5 Test data for DC 24 V

8.5.1 Test data for 802.11b WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 96.89 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor(dB)	Total Value(dBm)	LIMIT (dBm)	MARGIN (dB)
Low	2 412.00	20.30	0.14	20.44	30.00	9.56
Middle	2 437.00	20.77	0.14	20.91	30.00	9.09
High	2 462.00	20.52	0.14	20.66	30.00	9.34

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

8.5.2 Test data for 802.11g WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 90.23 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor(dB)	Total Value(dBm)	LIMIT (dBm)	MARGIN (dB)
Low	2 412.00	13.98	0.45	14.43	30.00	15.57
Middle	2 437.00	13.91	0.45	14.36	30.00	15.64
High	2 462.00	13.85	0.45	14.30	30.00	15.70

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

8.5.3 Test data for 802.11n_HT20 WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 90.44 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor(dB)	Total Value(dBm)	LIMIT (dBm)	MARGIN (dB)
Low	2 412.00	12.94	0.44	13.38	30.00	16.62
Middle	2 437.00	12.72	0.44	13.16	30.00	16.84
High	2 462.00	12.71	0.44	13.15	30.00	16.85

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

8.5.4 Test data for 802.11n_HT40 WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 87.89 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor(dB)	Total Value(dBm)	LIMIT (dBm)	MARGIN (dB)
Low	2 422.00	10.57	0.56	11.13	30.00	18.87
Middle	2 437.00	10.50	0.56	11.06	30.00	18.94
High	2 452.00	10.39	0.56	10.95	30.00	19.05

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

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9. 100 kHz BANDWIDTH OUTSIDE THE FREQUENCY BAND

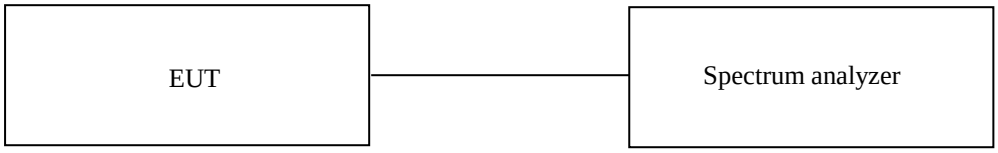
9.1 Operating environment

Temperature : 24 ℃

Relative humidity : 51.3 % R.H.

9.2 Test set-up for conducted measurement

The antenna output of the EUT was connected to the spectrum analyzer. The resolution bandwidth is set to 100 kHz and video bandwidth is set to 300 kHz, and peak detection was used.



9.3 Test set-up for radiated measurement

The radiated emissions measurements were performed on the 3 m semi anechoic chamber. The EUT was placed on turntable approximately 1.5 m above the ground plane.

The frequency spectrum from 30 MHz to 26.5 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.

9.4 Test Date

September 02, 2024 ~ October 10, 2024

9.5 Test data for conducted emission

For Test data for conducted emission, Please refer to the Annex

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9.6 Test data for radiated emission

9.6.1 Test data for DC 12 V

9.6.1.1 Radiated Emission which fall in the Restricted Band

9.6.1.1.1 Test data for 802.11b WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode

1 MHz and RMS Detector for Average Mode

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Measurement distance : 3 m

-. Duty Cycle : 96.89 %

-. Result : PASSED

Frequency (MHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	ATT (dB)	Duty Factor (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel											
2385.97	58.45	Peak	H	27.56	4.65	41.74	6.11	-	55.03	74.00	18.97
2375.16	50.41	Average	H	27.60	4.65	41.74	6.12	0.14	47.18	54.00	6.82
2386.68	60.20	Peak	V	27.55	4.65	41.74	6.11	-	56.77	74.00	17.23
2375.27	51.01	Average	V	27.60	4.65	41.74	6.12	0.14	47.78	54.00	6.22
Test Data for High Channel											
2487.72	60.07	Peak	H	27.40	4.88	41.73	6.11	-	56.73	74.00	17.27
2483.51	46.45	Average	H	27.40	4.83	41.73	6.13	0.14	43.22	54.00	10.78
2487.80	61.98	Peak	V	27.40	4.88	41.73	6.11	-	58.64	74.00	15.36
2483.51	48.00	Average	V	27.40	4.83	41.73	6.13	0.14	44.77	54.00	9.23

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + ATT + Duty Factor

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9.6.1.1.2 Test data for 802.11g WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode

1 MHz and RMS Detector for Average Mode

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Measurement distance : 3 m

-. Duty Cycle : 90.23 %

-. Result : PASSED

Frequency (MHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	ATT (dB)	Duty Factor (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel											
2390.04	66.19	Peak	H	27.54	4.65	41.74	6.11	-	62.75	74.00	11.25
2390.04	47.76	Average	H	27.54	4.65	41.74	6.11	0.45	44.77	54.00	9.23
2389.94	64.70	Peak	V	27.54	4.65	41.74	6.11	-	61.26	74.00	12.74
2390.04	47.77	Average	V	27.54	4.65	41.74	6.11	0.45	44.78	54.00	9.22
Test Data for High Channel											
2483.81	68.72	Peak	H	27.40	4.83	41.73	6.13	-	65.35	74.00	8.65
2483.92	45.70	Average	H	27.40	4.83	41.73	6.13	0.45	42.78	54.00	11.22
2483.51	71.27	Peak	V	27.40	4.83	41.73	6.13	-	67.90	74.00	6.10
2483.58	53.97	Average	V	27.40	4.83	41.73	6.13	0.45	51.05	54.00	2.95

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + ATT + Duty Factor

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9.6.1.1.3 Test data for 802.11n_HT20 WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode

1 MHz and RMS Detector for Average Mode

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Measurement distance : 3 m

-. Duty Cycle : 90.44 %

-. Result : PASSED

Frequency (MHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	ATT (dB)	Duty Factor (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel											
2389.33	66.18	Peak	H	27.54	4.65	41.74	6.11	-	62.74	74.00	11.26
2389.94	48.06	Average	H	27.54	4.65	41.74	6.11	0.44	45.06	54.00	8.94
2389.84	61.37	Peak	V	27.54	4.65	41.74	6.11	-	57.93	74.00	16.07
2390.04	47.65	Average	V	27.54	4.65	41.74	6.11	0.44	44.65	54.00	9.35
Test Data for High Channel											
2483.51	70.16	Peak	H	27.40	4.83	41.73	6.13	-	66.79	74.00	7.21
2483.85	51.28	Average	H	27.40	4.83	41.73	6.13	0.44	48.35	54.00	5.65
2484.07	69.36	Peak	V	27.40	4.83	41.73	6.13	-	65.99	74.00	8.01
2483.81	52.01	Average	V	27.40	4.83	41.73	6.13	0.44	49.08	54.00	4.92

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + ATT + Duty Factor

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9.6.1.1.4 Test data for 802.11n_HT40 WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode

1 MHz and RMS Detector for Average Mode

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Measurement distance : 3 m

-. Duty Cycle : 87.89 %

-. Result : PASSED

Frequency (MHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	ATT (dB)	Duty Factor (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel											
2389.50	64.39	Peak	H	27.54	4.65	41.74	6.11	-	60.95	74.00	13.05
2390.06	53.34	Average	H	27.54	4.65	41.74	6.11	0.56	50.46	54.00	3.54
2389.38	62.15	Peak	V	27.54	4.65	41.74	6.11	-	58.71	74.00	15.29
2389.61	49.60	Average	V	27.54	4.65	41.74	6.11	0.56	46.72	54.00	7.28
Test Data for High Channel											
2484.58	62.24	Peak	H	27.40	4.83	41.73	6.13	-	58.87	74.00	15.13
2483.62	48.84	Average	H	27.40	4.83	41.73	6.13	0.56	46.03	54.00	7.97
2488.18	63.49	Peak	V	27.40	4.88	41.73	6.11	-	60.15	74.00	13.85
2483.62	48.57	Average	V	27.40	4.83	41.73	6.13	0.56	45.76	54.00	8.24

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + ATT + Duty Factor

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9.6.1.2 Spurious & Harmonic Radiated Emission

9.6.1.2.1 Test data for 802.11b WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

-. Duty Cycle : 96.89 %

-. Result : PASSED

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	Duty Factor (dB)	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Test Data for Low Channel										
4 824.000	49.07	Peak	H	31.20	6.59	41.28	-	45.58	74.00	28.42
4 824.000	39.78	Average	H	31.20	6.60	41.29	0.14	36.43	54.00	17.57
4 824.000	57.14	Peak	V	31.20	6.60	41.29	-	53.65	74.00	20.35
4 824.000	53.69	Average	V	31.20	6.60	41.29	0.14	50.34	54.00	3.66
Test Data for Middle Channel										
4 874.000	48.65	Peak	H	31.22	6.69	41.28	-	45.28	74.00	28.72
4 874.000	36.64	Average	H	31.22	6.69	41.28	0.14	33.41	54.00	20.59
4 874.000	53.69	Peak	V	31.25	6.69	41.27	-	50.36	74.00	23.64
4 874.000	49.70	Average	V	31.25	6.69	41.27	0.14	46.51	54.00	7.49
Test Data for High Channel										
4 924.000	49.91	Peak	H	31.40	6.70	41.26	-	46.75	74.00	27.25
4 924.000	41.28	Average	H	31.40	6.70	41.26	0.14	38.26	54.00	15.74
4 924.000	54.98	Peak	V	31.40	6.70	41.26	-	51.82	74.00	22.18
4 924.000	51.68	Average	V	31.40	6.70	41.26	0.14	48.66	54.00	5.34

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Total Level (dBμV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + Duty Factor

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9.6.1.2.2 Test data for 802.11g WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

-. Duty Cycle : 90.23 %

-. Result : PASSED

Frequency (MHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	Duty Factor (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel										
4 824.000	48.70	Peak	H	31.20	6.59	41.28	-	45.21	74.00	28.79
4 824.000	36.88	Average	H	31.20	6.59	41.28	0.45	33.84	54.00	20.16
4 824.000	50.25	Peak	V	31.20	6.60	41.29	-	46.76	74.00	27.24
4 824.000	38.44	Average	V	31.20	6.60	41.29	0.45	35.40	54.00	18.60
Test Data for Middle Channel										
4 874.000	48.71	Peak	H	31.22	6.69	41.28	-	45.34	74.00	28.66
4 874.000	36.55	Average	H	31.23	6.69	41.28	0.45	33.64	54.00	20.36
4 874.000	50.23	Peak	V	31.24	6.69	41.27	-	46.89	74.00	27.11
4 874.000	38.67	Average	V	31.25	6.69	41.27	0.45	35.79	54.00	18.21
Test Data for High Channel										
4 924.000	49.19	Peak	H	31.41	6.70	41.26	-	46.04	74.00	27.96
4 924.000	36.77	Average	H	31.39	6.70	41.26	0.45	34.05	54.00	19.95
4 924.000	51.83	Peak	V	31.39	6.70	41.26	-	48.66	74.00	25.34
4 924.000	39.71	Average	V	31.40	6.70	41.26	0.45	37.00	54.00	17.00

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + Duty Factor

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9.6.1.2.3 Test data for 802.11n_HT20 WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

-. Duty Cycle : 90.44 %

-. Result : PASSED

Frequency (MHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	Duty Factor (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel										
4 824.000	49.12	Peak	H	31.20	6.60	41.29	-	45.63	74.00	28.37
4 824.000	36.84	Average	H	31.20	6.60	41.29	0.44	33.79	54.00	20.21
4 824.000	49.55	Peak	V	31.20	6.59	41.28	-	46.06	74.00	27.94
4 824.000	37.49	Average	V	31.20	6.60	41.29	0.44	34.44	54.00	19.56
Test Data for Middle Channel										
4 874.000	48.31	Peak	H	31.26	6.70	41.27	-	45.00	74.00	29.00
4 874.000	36.83	Average	H	31.20	6.69	41.28	0.44	33.88	54.00	20.12
4 874.000	48.73	Peak	V	31.24	6.69	41.27	-	45.39	74.00	28.61
4 874.000	37.21	Average	V	31.25	6.69	41.27	0.44	34.32	54.00	19.68
Test Data for High Channel										
4 924.000	48.39	Peak	H	31.36	6.70	41.26	-	45.19	74.00	28.81
4 924.000	36.59	Average	H	31.39	6.70	41.26	0.44	33.86	54.00	20.14
4 924.000	50.02	Peak	V	31.42	6.70	41.26	-	46.88	74.00	27.12
4 924.000	38.41	Average	V	31.39	6.70	41.26	0.44	35.68	54.00	18.32

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + Duty Factor

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9.6.1.2.4 Test data for 802.11n_HT40 WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

-. Duty Cycle : 87.89 %

-. Result : PASSED

Frequency (MHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	Duty Factor (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel										
4 824.000	49.11	Peak	H	31.20	6.59	41.28	-	45.62	74.00	28.38
4 824.000	37.03	Average	H	31.20	6.60	41.29	0.56	34.10	54.00	19.90
4 824.000	48.78	Peak	V	31.20	6.59	41.28	-	45.29	74.00	28.71
4 824.000	36.99	Average	V	31.20	6.60	41.29	0.56	34.06	54.00	19.94
Test Data for Middle Channel										
4 874.000	48.65	Peak	H	31.20	6.60	41.29	-	45.16	74.00	28.84
4 874.000	37.04	Average	H	31.20	6.59	41.28	0.56	34.11	54.00	19.89
4 874.000	48.40	Peak	V	31.24	6.69	41.27	-	45.06	74.00	28.94
4 874.000	37.02	Average	V	31.20	6.59	41.28	0.56	34.09	54.00	19.91
Test Data for High Channel										
4 924.000	48.33	Peak	H	31.48	6.70	41.25	-	45.26	74.00	28.74
4 924.000	36.66	Average	H	31.33	6.70	41.26	0.56	33.99	54.00	20.01
4 924.000	48.98	Peak	V	31.28	6.70	41.27	-	45.69	74.00	28.31
4 924.000	36.86	Average	V	31.34	6.70	41.26	0.56	34.20	54.00	19.80

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + Duty Factor

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9.6.2 Test Data for DC 24 V

9.6.2.1 Radiated Emission which fall in the Restricted Band

9.6.2.1.1 Test data for 802.11b WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode

1 MHz and RMS Detector for Average Mode

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Measurement distance : 3 m

-. Duty Cycle : 96.89 %

-. Result : PASSED

Frequency (MHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	ATT (dB)	Duty Factor (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel											
2386.07	59.83	Peak	H	27.56	4.65	41.74	6.11	-	56.41	74.00	17.59
2386.17	51.87	Average	H	27.56	4.65	41.74	6.11	0.14	48.59	54.00	5.41
2385.46	58.29	Peak	V	27.56	4.65	41.74	6.11	-	54.87	74.00	19.13
2375.27	50.08	Average	V	27.60	4.65	41.74	6.12	0.14	46.85	54.00	7.15
Test Data for High Channel											
2487.53	59.95	Peak	H	27.40	4.88	41.73	6.11	-	56.61	74.00	17.39
2483.51	47.19	Average	H	27.40	4.83	41.73	6.13	0.14	43.96	54.00	10.04
2488.21	61.14	Peak	V	27.40	4.88	41.73	6.11	-	57.80	74.00	16.20
2483.51	50.33	Average	V	27.40	4.83	41.73	6.13	0.14	47.10	54.00	6.90

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + ATT + Duty Factor

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9.6.2.1.2 Test data for 802.11g WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode

1 MHz and RMS Detector for Average Mode

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Measurement distance : 3 m

-. Duty Cycle : 90.23 %

-. Result : PASSED

Frequency (MHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	ATT (dB)	Duty Factor (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel											
2389.23	63.48	Peak	H	27.54	4.65	41.74	6.11	-	60.04	74.00	13.96
2390.04	51.18	Average	H	27.54	4.65	41.74	6.11	0.45	48.19	54.00	5.81
2389.63	63.89	Peak	V	27.54	4.65	41.74	6.11	-	60.45	74.00	13.55
2389.84	47.73	Average	V	27.54	4.65	41.74	6.11	0.45	44.74	54.00	9.26
Test Data for High Channel											
2483.92	69.17	Peak	H	27.40	4.83	41.73	6.13	-	65.80	74.00	8.20
2483.58	50.89	Average	H	27.40	4.83	41.73	6.13	0.45	47.97	54.00	6.03
2483.73	69.92	Peak	V	27.40	4.83	41.73	6.13	-	66.55	74.00	7.45
2483.89	51.69	Average	V	27.40	4.83	41.73	6.13	0.45	48.77	54.00	5.23

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + ATT + Duty Factor

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9.6.2.1.3 Test data for 802.11n_HT20 WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode

1 MHz and RMS Detector for Average Mode

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Measurement distance : 3 m

-. Duty Cycle : 90.44 %

-. Result : PASSED

Frequency (MHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	ATT (dB)	Duty Factor (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel											
2390.04	66.34	Peak	H	27.54	4.65	41.74	6.11	-	62.90	74.00	11.10
2389.94	51.46	Average	H	27.54	4.65	41.74	6.11	0.44	48.46	54.00	5.54
2389.94	65.21	Peak	V	27.54	4.65	41.74	6.11	-	61.77	74.00	12.23
2389.94	49.23	Average	V	27.54	4.65	41.74	6.11	0.44	46.23	54.00	7.77
Test Data for High Channel											
2483.77	67.00	Peak	H	27.40	4.83	41.73	6.13	-	63.63	74.00	10.37
2483.62	49.80	Average	H	27.40	4.83	41.73	6.13	0.44	46.87	54.00	7.13
2483.51	68.40	Peak	V	27.40	4.83	41.73	6.13	-	65.03	74.00	8.97
2483.81	52.95	Average	V	27.40	4.83	41.73	6.13	0.44	50.02	54.00	3.98

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + ATT + Duty Factor

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9.6.2.1.4 Test data for 802.11n_HT40 WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode

1 MHz and RMS Detector for Average Mode

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Measurement distance : 3 m

-. Duty Cycle : 87.89 %

-. Result : PASSED

Frequency (MHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	ATT (dB)	Duty Factor (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel											
2389.72	64.86	Peak	H	27.54	4.65	41.74	6.11	-	61.42	74.00	12.58
2389.61	52.17	Average	H	27.54	4.65	41.74	6.11	0.56	49.29	54.00	4.71
2389.72	63.89	Peak	V	27.54	4.65	41.74	6.11	-	60.45	74.00	13.55
2390.06	49.64	Average	V	27.54	4.65	41.74	6.11	0.56	46.76	54.00	7.24
Test Data for High Channel											
2483.91	68.35	Peak	H	27.40	4.83	41.73	6.13	-	64.98	74.00	9.02
2483.48	50.63	Average	H	27.40	4.83	41.73	6.13	0.56	47.82	54.00	6.18
2484.06	67.14	Peak	V	27.40	4.83	41.73	6.13	-	63.77	74.00	10.23
2484.10	49.05	Average	V	27.40	4.83	41.73	6.13	0.56	46.24	54.00	7.76

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + ATT + Duty Factor

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9.6.2.2 Spurious & Harmonic Radiated Emission

9.6.2.2.1 Test data for 802.11b WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

-. Duty Cycle : 96.89 %

-. Result : PASSED

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	Duty Factor (dB)	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Test Data for Low Channel										
4 824.000	49.69	Peak	H	31.20	6.60	41.29	-	46.20	74.00	27.80
4 824.000	41.02	Average	H	31.20	6.60	41.29	0.14	37.67	54.00	16.33
4 824.000	51.69	Peak	V	31.20	6.60	41.29	-	48.20	74.00	25.80
4 824.000	46.00	Average	V	31.20	6.60	41.29	0.14	42.65	54.00	11.35
Test Data for Middle Channel										
4 874.000	49.55	Peak	H	31.25	6.69	41.27	-	46.22	74.00	27.78
4 874.000	40.25	Average	H	31.25	6.69	41.27	0.14	37.06	54.00	16.94
4 874.000	50.99	Peak	V	31.25	6.69	41.27	-	47.66	74.00	26.34
4 874.000	44.97	Average	V	31.25	6.69	41.27	0.14	41.78	54.00	12.22
Test Data for High Channel										
4 924.000	49.30	Peak	H	31.39	6.70	41.26	-	46.13	74.00	27.87
4 924.000	41.06	Average	H	31.40	6.70	41.26	0.14	38.04	54.00	15.96
4 924.000	55.31	Peak	V	31.40	6.70	41.26	-	52.15	74.00	21.85
4 924.000	52.14	Average	V	31.40	6.70	41.26	0.14	49.12	54.00	4.88

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Total Level (dBμV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + Duty Factor

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9.6.2.2.2 Test data for 802.11g WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

-. Duty Cycle : 90.23 %

-. Result : PASSED

Frequency (MHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	Duty Factor (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel										
4 824.000	48.51	Peak	H	31.20	6.60	41.29	-	45.02	74.00	28.98
4 824.000	37.01	Average	H	31.20	6.60	41.29	0.45	33.97	54.00	20.03
4 824.000	49.72	Peak	V	31.20	6.60	41.29	-	46.23	74.00	27.77
4 824.000	38.32	Average	V	31.20	6.59	41.29	0.45	35.27	54.00	18.73
Test Data for Middle Channel										
4 874.000	48.03	Peak	H	31.20	6.69	41.28	-	44.64	74.00	29.36
4 874.000	36.70	Average	H	31.21	6.69	41.28	0.45	33.77	54.00	20.23
4 874.000	50.87	Peak	V	31.24	6.69	41.27	-	47.53	74.00	26.47
4 874.000	38.80	Average	V	31.25	6.70	41.27	0.45	35.93	54.00	18.07
Test Data for High Channel										
4 924.000	48.27	Peak	H	31.32	6.70	41.26	-	45.03	74.00	28.97
4 924.000	36.83	Average	H	31.33	6.70	41.26	0.45	34.05	54.00	19.95
4 924.000	49.77	Peak	V	31.40	6.70	41.26	-	46.61	74.00	27.39
4 924.000	37.31	Average	V	31.40	6.70	41.26	0.45	34.60	54.00	19.40

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + Duty Factor

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9.6.2.2.3 Test data for 802.11n_HT20 WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

-. Duty Cycle : 90.44 %

-. Result : PASSED

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	Duty Factor (dB)	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Test Data for Low Channel										
4 824.000	48.82	Peak	H	31.20	6.59	41.28	-	45.33	74.00	28.67
4 824.000	37.01	Average	H	31.20	6.60	41.29	0.44	33.96	54.00	20.04
4 824.000	50.45	Peak	V	31.20	6.60	41.29	-	46.96	74.00	27.04
4 824.000	39.01	Average	V	31.20	6.60	41.29	0.44	35.96	54.00	18.04
Test Data for Middle Channel										
4 874.000	48.25	Peak	H	31.24	6.69	41.27	-	44.91	74.00	29.09
4 874.000	36.90	Average	H	31.20	6.69	41.28	0.44	33.95	54.00	20.05
4 874.000	48.49	Peak	V	31.27	6.70	41.27	-	45.19	74.00	28.81
4 874.000	36.85	Average	V	31.26	6.70	41.27	0.44	33.98	54.00	20.02
Test Data for High Channel										
4 924.000	48.33	Peak	H	31.40	6.70	41.26	-	45.17	74.00	28.83
4 924.000	36.73	Average	H	31.37	6.70	41.26	0.44	33.98	54.00	20.02
4 924.000	50.38	Peak	V	31.39	6.70	41.26	-	47.21	74.00	26.79
4 924.000	38.41	Average	V	31.40	6.70	41.26	0.44	35.69	54.00	18.31

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBμV/m) - Total Level (dBμV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + Duty Factor

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9.6.2.2.4 Test data for 802.11n_HT40 WLAN Mode

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

-. Duty Cycle : 87.89 %

-. Result : PASSED

Frequency (MHz)	Reading (dBµV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain (dB)	Duty Factor (dB)	Total (dBµV/m)	Limits (dBµV/m)	Margin (dB)
Test Data for Low Channel										
4 824.000	49.37	Peak	H	31.20	6.59	41.28	-	45.88	74.00	28.12
4 824.000	37.13	Average	H	31.20	6.60	41.29	0.56	34.20	54.00	19.80
4 824.000	49.41	Peak	V	31.20	6.59	41.29	-	45.91	74.00	28.09
4 824.000	37.08	Average	V	31.21	6.69	41.28	0.56	34.26	54.00	19.74
Test Data for Middle Channel										
4 874.000	49.38	Peak	H	31.20	6.59	41.28	-	45.89	74.00	28.11
4 874.000	36.95	Average	H	31.20	6.59	41.29	0.56	34.01	54.00	19.99
4 874.000	48.91	Peak	V	31.20	6.59	41.28	-	45.42	74.00	28.58
4 874.000	36.97	Average	V	31.20	6.60	41.29	0.56	34.04	54.00	19.96
Test Data for High Channel										
4 924.000	48.57	Peak	H	31.21	6.69	41.28	-	45.19	74.00	28.81
4 924.000	36.70	Average	H	31.33	6.70	41.26	0.56	34.03	54.00	19.97
4 924.000	48.28	Peak	V	31.43	6.70	41.26	-	45.15	74.00	28.85
4 924.000	36.82	Average	V	31.34	6.70	41.26	0.56	34.16	54.00	19.84

Remark: “H”: Horizontal, “V”: Vertical

Margin (dB) = Limits (dBµV/m) - Total Level (dBµV/m)

Total Level = Reading + Antenna Factor + Cable Loss - Amp Gain + Duty Factor

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10. PEAK POWER SPECTRAL DENSITY

10.1 Operating environment

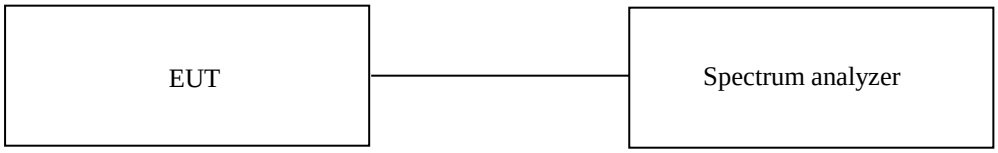
Temperature : 24 °C

Relative humidity : 51.3 % R.H.

10.2 Test set-up for conducted measurement

The antenna output of the EUT was connected to the spectrum analyzer.

The resolution bandwidth is set to 3 kHz ≤ RBW ≤ 100 kHz , the video bandwidth is set to 3 times the resolution bandwidth.



10.3 Test Date

September 02, 2024 ~ October 10, 2024

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10.4 Test data for DC 12 V

10.4.1 Test data for 802.11b WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 96.89 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor (dB)	RESULT (dBm)	LIMIT (dBm)	MARGIN (dB)
LOW	2 412.00	-12.26	0.14	-12.12	8.00	20.12
MIDDLE	2 437.00	-11.71	0.14	-11.57	8.00	19.57
HIGH	2 462.00	-12.06	0.14	-11.92	8.00	19.92

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

10.4.2 Test data for 802.11g WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 90.23 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor (dB)	RESULT (dBm)	LIMIT (dBm)	MARGIN (dB)
LOW	2 412.00	-19.65	0.45	-19.20	8.00	27.20
MIDDLE	2 437.00	-19.92	0.45	-19.47	8.00	27.47
HIGH	2 462.00	-19.16	0.45	-18.71	8.00	26.71

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

10.4.3 Test data for 802.11n_HT20 WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 90.44 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor (dB)	RESULT (dBm)	LIMIT (dBm)	MARGIN (dB)
LOW	2 412.00	-21.10	0.44	-20.66	8.00	28.66
MIDDLE	2 437.00	-20.89	0.44	-20.45	8.00	28.45
HIGH	2 462.00	-20.64	0.44	-20.20	8.00	28.20

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

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10.4.4 Test data for 802.11n_HT40 WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 87.89 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor (dB)	RESULT (dBm)	LIMIT (dBm)	MARGIN (dB)
LOW	2 422.00	-25.90	0.56	-25.34	8.00	33.34
MIDDLE	2 437.00	-25.99	0.56	-25.43	8.00	33.43
HIGH	2 452.00	-26.16	0.56	-25.60	8.00	33.60

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

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10.5 Test data for DC 24 V

10.5.1 Test data for 802.11b WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 96.89 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor (dB)	RESULT (dBm)	LIMIT (dBm)	MARGIN (dB)
LOW	2 412.00	-12.47	0.14	-12.33	8.00	20.33
MIDDLE	2 437.00	-12.03	0.14	-11.89	8.00	19.89
HIGH	2 462.00	-12.52	0.14	-12.38	8.00	20.38

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

10.5.2 Test data for 802.11g WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 90.23 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor (dB)	RESULT (dBm)	LIMIT (dBm)	MARGIN (dB)
LOW	2 412.00	-20.05	0.45	-19.60	8.00	27.60
MIDDLE	2 437.00	-19.65	0.45	-19.20	8.00	27.20
HIGH	2 462.00	-19.68	0.45	-19.23	8.00	27.23

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

10.5.3 Test data for 802.11n_HT20 WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 90.44 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor (dB)	RESULT (dBm)	LIMIT (dBm)	MARGIN (dB)
LOW	2 412.00	-20.86	0.44	-20.42	8.00	28.42
MIDDLE	2 437.00	-21.03	0.44	-20.59	8.00	28.59
HIGH	2 462.00	-21.12	0.44	-20.68	8.00	28.68

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

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10.5.4 Test data for 802.11n_HT40 WLAN Mode

-. Test Result : Pass

-. Duty Cycle : 87.89 %

CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	Duty Factor (dB)	RESULT (dBm)	LIMIT (dBm)	MARGIN (dB)
LOW	2 422.00	-26.23	0.56	-25.67	8.00	33.67
MIDDLE	2 437.00	-26.53	0.56	-25.97	8.00	33.97
HIGH	2 452.00	-26.23	0.56	-25.67	8.00	33.67

Remark. Margin = Limit – Result (=Measured Value + Duty Factor)

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11. RADIATED EMISSION TEST

11.1 Operating environment

Temperature : 24 °C

Relative humidity : 51.3 % R.H.

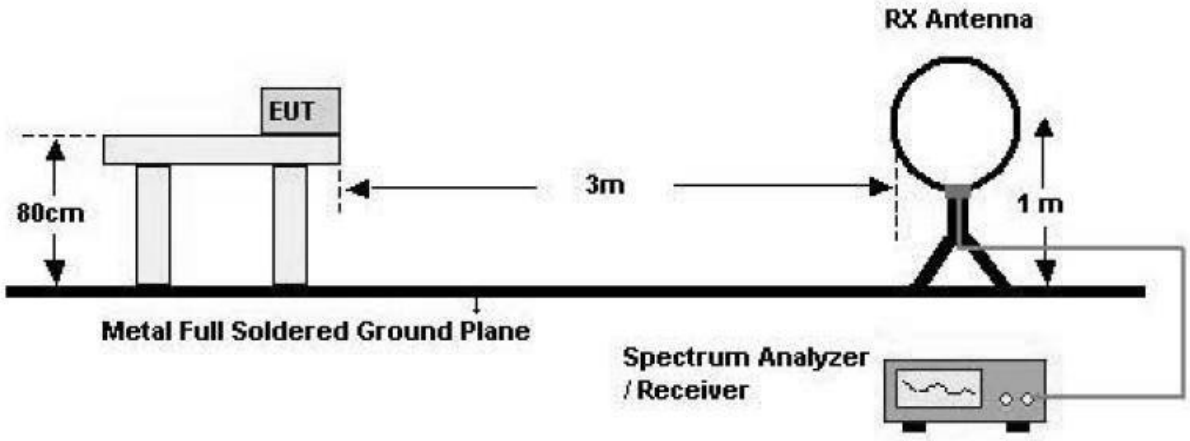
11.2 Test set-up

The radiated emissions measurements were on the 3 m semi anechoic chamber. The EUT and other support equipment were placed on a non-conductive turntable above the ground plane. The interconnecting cables from outside test site were inserted into ferrite clamps at the point where the cables reach the turntable.

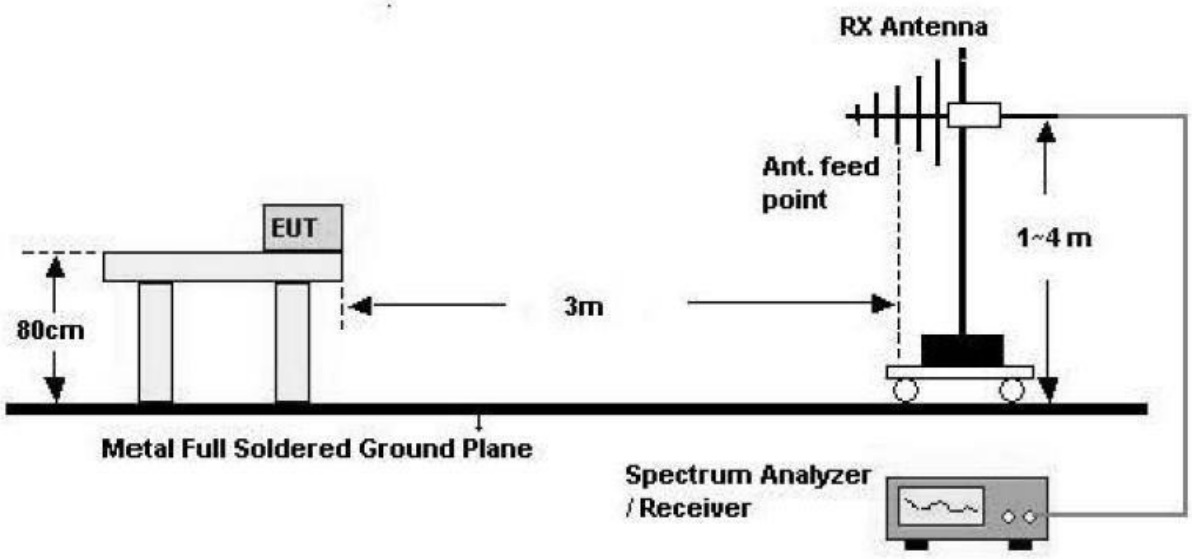
The frequency spectrum from 30 MHz to 26.5 GHz was scanned and emission levels maximized at each frequency recorded. The system was rotated 360°, and the antenna was varied in height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for both horizontal and vertical polarization of the receiving antenna.

- Test Configuration

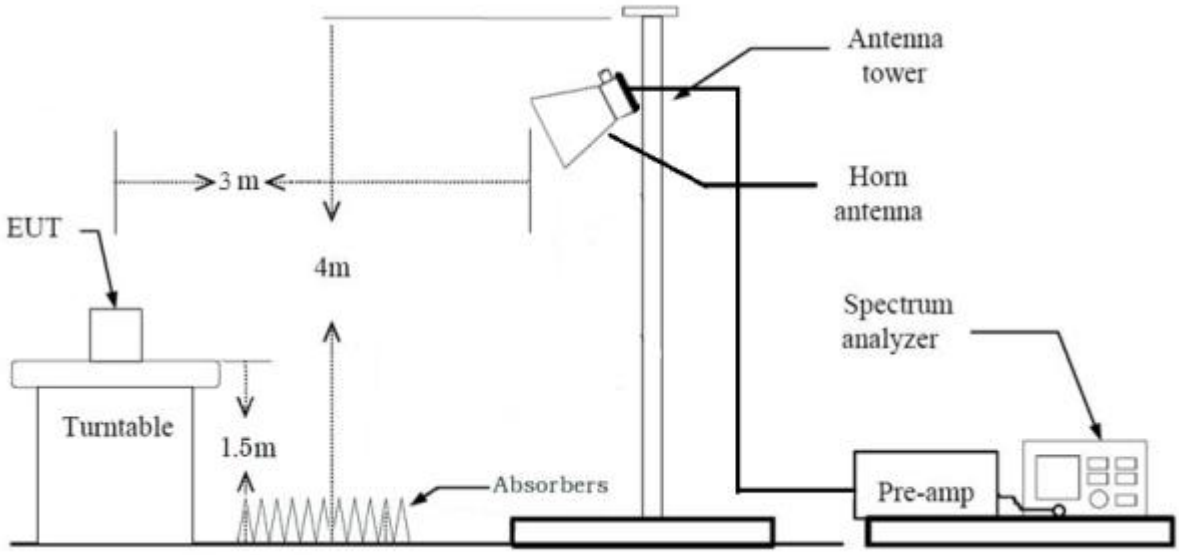
1. Below 30 MHz



2. 30 MHz - 1 GHz



3. Above 1 GHz



11.3 Test Date

September 02, 2024 ~ October 10, 2024

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11.4 Test data for DC 12 V

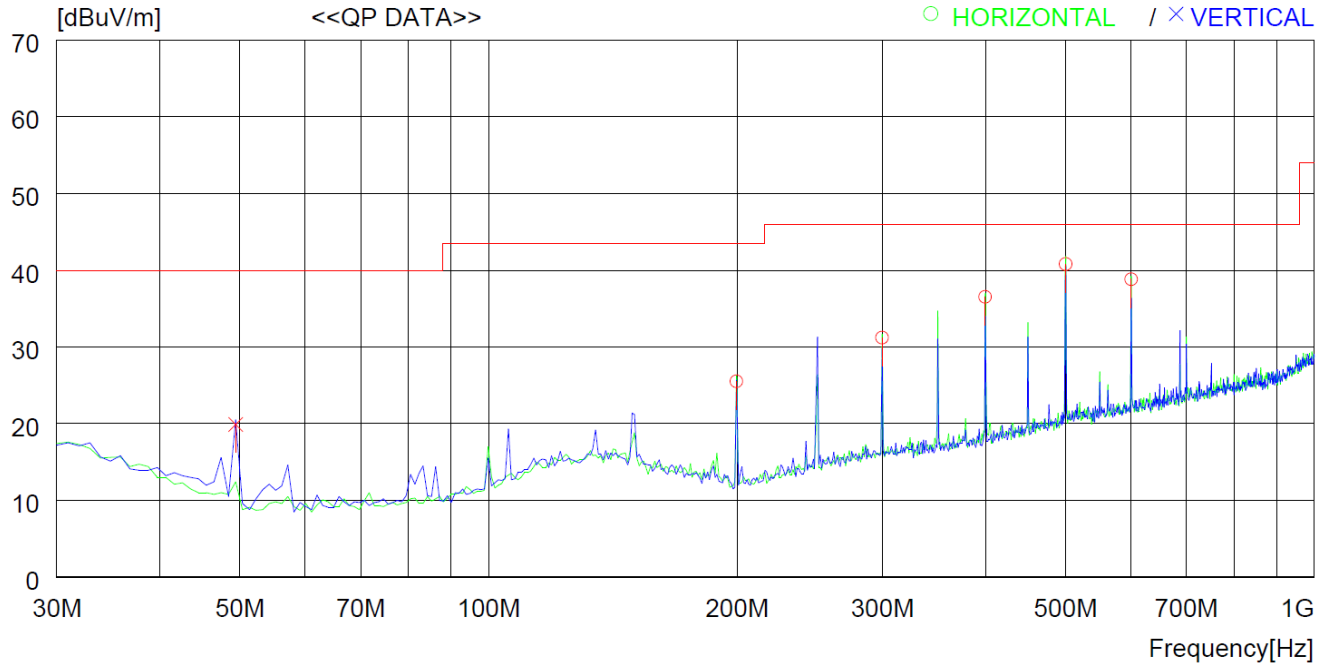
11.4.1 Test data for 30 MHz ~ 1 000 MHz

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

Result : PASSED

EUT : 2CH Dashcam

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)



No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	199.750	40.2	15.6	1.8	32.1	25.5	43.5	18.0	200	359
2	299.660	41.7	19.4	2.2	32.1	31.2	46.0	14.8	100	0
3	399.570	45.2	20.8	2.6	32.1	36.5	46.0	9.5	100	0
4	500.451	46.9	23.2	2.9	32.2	40.8	46.0	5.2	100	352
5	600.358	43.7	24.2	3.2	32.3	38.8	46.0	7.2	200	359
----- Vertical ------										
6	49.400	37.9	13.2	0.9	32.1	19.9	40.0	20.1	100	359

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11.4.2 Test data for Below 30 MHz

-. Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)

-. Frequency range : 9 kHz ~ 30 MHz

-. Measurement distance : 3 m

-. Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBµV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBµV/m)	Limits (dBµV/m)	Margin (dB)
Emission from the EUT more than 20 dB below the limit in each frequency range.									

11.4.3 Test data for above 1 GHz

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode

1 MHz and RMS Detector for Average Mode

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

-. Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBµV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBµV/m)	Limits (dBµV/m)	Margin (dB)
Emission from the EUT more than 20 dB below the limit in each frequency range.									

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11.5 Test data for DC 24 V

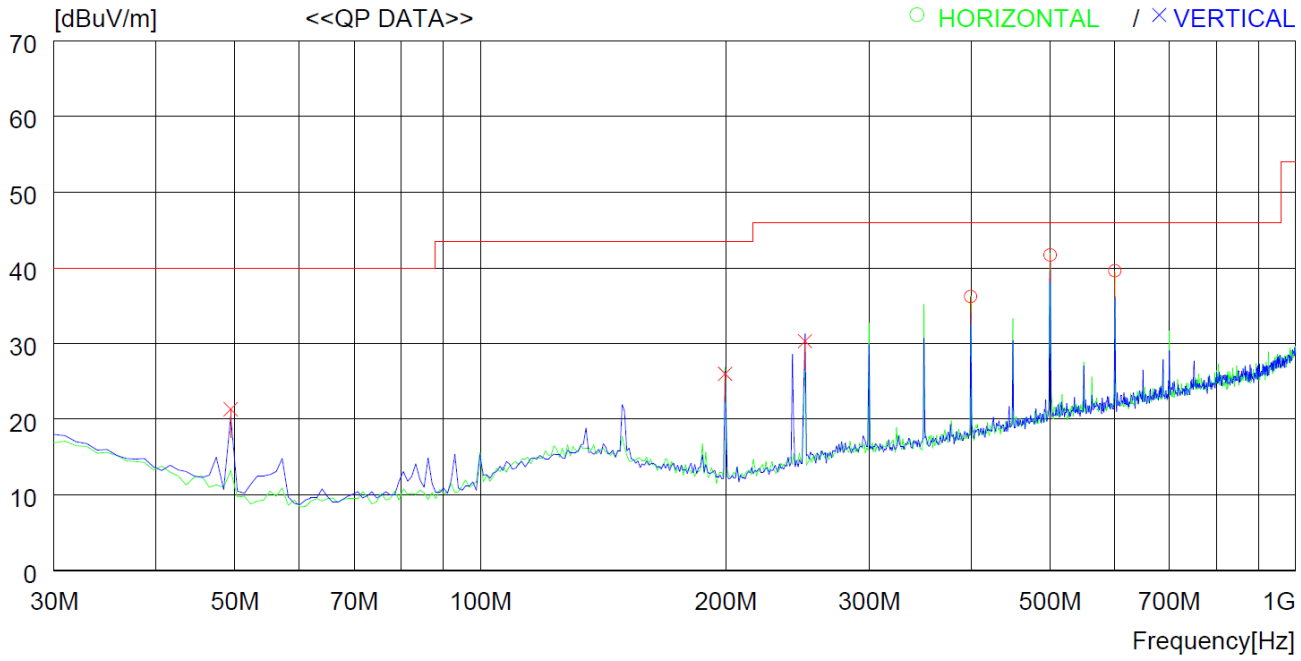
11.5.1 Test data for 30 MHz ~ 1 000 MHz

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

Result : PASSED

EUT : 2CH Dashcam

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)



No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal ------										
1	399.570	44.9	20.8	2.6	32.1	36.2	46.0	9.8	100	0
2	500.451	47.8	23.2	2.9	32.2	41.7	46.0	4.3	100	355
3	600.358	44.5	24.2	3.2	32.3	39.6	46.0	6.4	200	359
----- Vertical ------										
4	49.400	39.3	13.2	0.9	32.1	21.3	40.0	18.7	100	25
5	199.750	40.7	15.6	1.8	32.1	26.0	43.5	17.5	100	359
6	250.190	42.5	17.8	2.1	32.1	30.3	46.0	15.7	100	359

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11.5.2 Test data for Below 30 MHz

-. Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)

-. Frequency range : 9 kHz ~ 30 MHz

-. Measurement distance : 3 m

-. Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBµV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBµV/m)	Limits (dBµV/m)	Margin (dB)
Emission from the EUT more than 20 dB below the limit in each frequency range.									

11.5.3 Test data for above 1 GHz

-. Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode

1 MHz and RMS Detector for Average Mode

-. Video bandwidth : 3 MHz for Peak and Average Mode

-. Frequency range : 1 GHz ~ 26.5 GHz

-. Measurement distance : 3 m

-. Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBµV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBµV/m)	Limits (dBµV/m)	Margin (dB)
Emission from the EUT more than 20 dB below the limit in each frequency range.									

12. CONDUCTED EMISSION TEST

12.1 Operating environment

Temperature : 24 °C

Relative humidity : 51.3 % R.H.

12.2 Test set-up

The EUT was placed on a wooden table, 0.8 m height above the floor. Power was fed to the EUT through a 50 Ω / 50 μH + 5 Ω Artificial Mains Network (AMN). The ground plane was electrically bonded to the reference ground system and all power lines were filtered from ambient.

12.3 Test Date

September 02, 2024 ~ October 10, 2024

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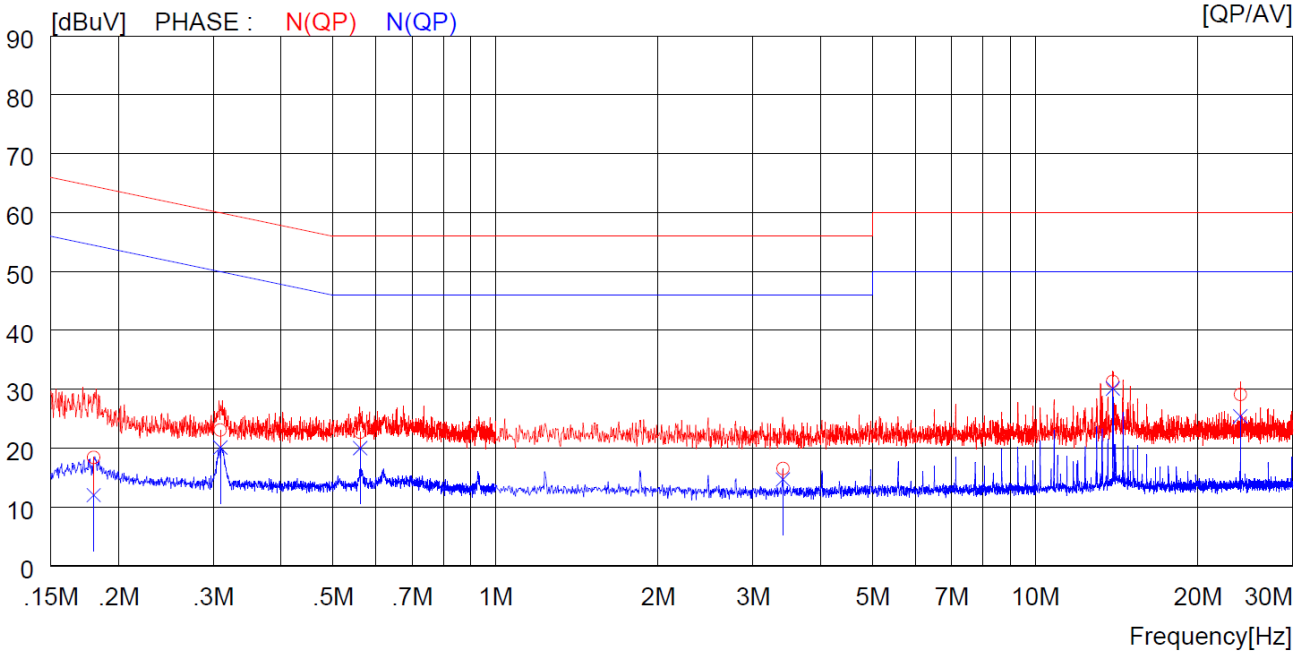
12.4 Test data for DC 12 V

-. Resolution bandwidth : 9 kHz

-. Frequency range : 0.15 MHz ~ 30 MHz

-. Tested Line : HOT LINE



NO	FREQ [MHz]	READING QP [dBuV]	READING AV [dBuV]	C.FACTOR [dB]	RESULT QP [dBuV]	RESULT AV [dBuV]	LIMIT QP [dBuV]	LIMIT AV [dBuV]	MARGIN QP [dBuV]	MARGIN AV [dBuV]	PHASE
1	0.18000	8.3	----	10.1	18.4	----	64.5	----	46.1	----	N(QP)
2	0.30900	13.1	----	10.0	23.1	----	60.0	----	36.9	----	N(QP)
3	0.56100	12.6	----	10.1	22.7	----	56.0	----	33.3	----	N(QP)
4	3.40800	6.3	----	10.2	16.5	----	56.0	----	39.5	----	N(QP)
5	13.92000	20.9	----	10.4	31.3	----	60.0	----	28.7	----	N(QP)
6	23.99000	18.3	----	10.8	29.1	----	60.0	----	30.9	----	N(QP)
7	0.18000	----	1.9	10.1	----	12.0	----	54.5	----	42.5	N(CAV)
8	0.30900	----	10.1	10.0	----	20.1	----	50.0	----	29.9	N(CAV)
9	0.56100	----	9.9	10.1	----	20.0	----	46.0	----	26.0	N(CAV)
10	3.40800	----	4.5	10.2	----	14.7	----	46.0	----	31.3	N(CAV)
11	13.92000	----	19.7	10.4	----	30.1	----	50.0	----	19.9	N(CAV)
12	23.99000	----	14.6	10.8	----	25.4	----	50.0	----	24.6	N(CAV)

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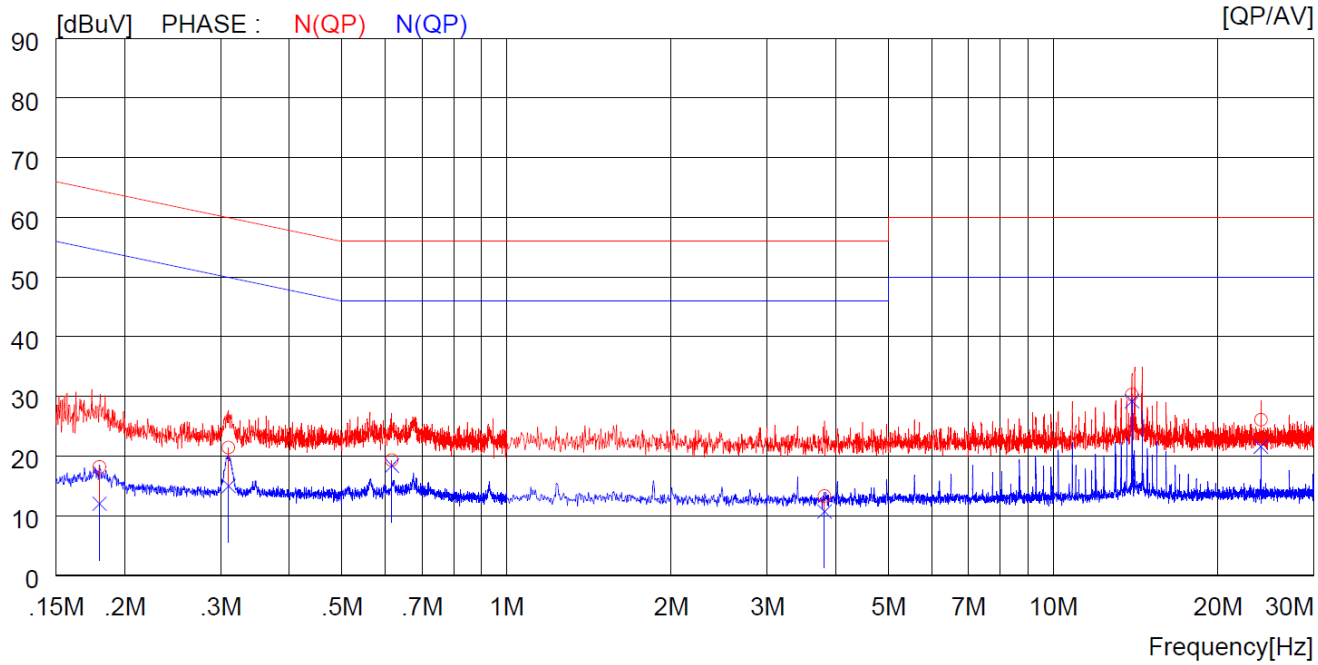
-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING QP [dBuV]	READING AV [dBuV]	C.FACTOR [dB]	RESULT QP [dBuV]	RESULT AV [dBuV]	LIMIT QP [dBuV]	LIMIT AV [dBuV]	MARGIN QP [dBuV]	MARGIN AV [dBuV]	PHASE
1	0.18000	8.1	----	10.1	18.2	----	64.5	----	46.3	----	N(QP)
2	0.31000	11.4	----	10.0	21.4	----	60.0	----	38.6	----	N(QP)
3	0.61700	9.2	----	10.1	19.3	----	56.0	----	36.7	----	N(QP)
4	3.81600	3.1	----	10.2	13.3	----	56.0	----	42.7	----	N(QP)
5	13.93000	19.9	----	10.4	30.3	----	60.0	----	29.7	----	N(QP)
6	24.00000	15.3	----	10.8	26.1	----	60.0	----	33.9	----	N(QP)
7	0.18000	----	1.9	10.1	----	12.0	----	54.5	----	42.5	N(CAV)
8	0.31000	----	5.0	10.0	----	15.0	----	50.0	----	35.0	N(CAV)
9	0.61700	----	8.3	10.1	----	18.4	----	46.0	----	27.6	N(CAV)
10	3.81600	----	0.5	10.2	----	10.7	----	46.0	----	35.3	N(CAV)
11	13.93000	----	18.8	10.4	----	29.2	----	50.0	----	20.8	N(CAV)
12	24.00000	----	10.8	10.8	----	21.6	----	50.0	----	28.4	N(CAV)

Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

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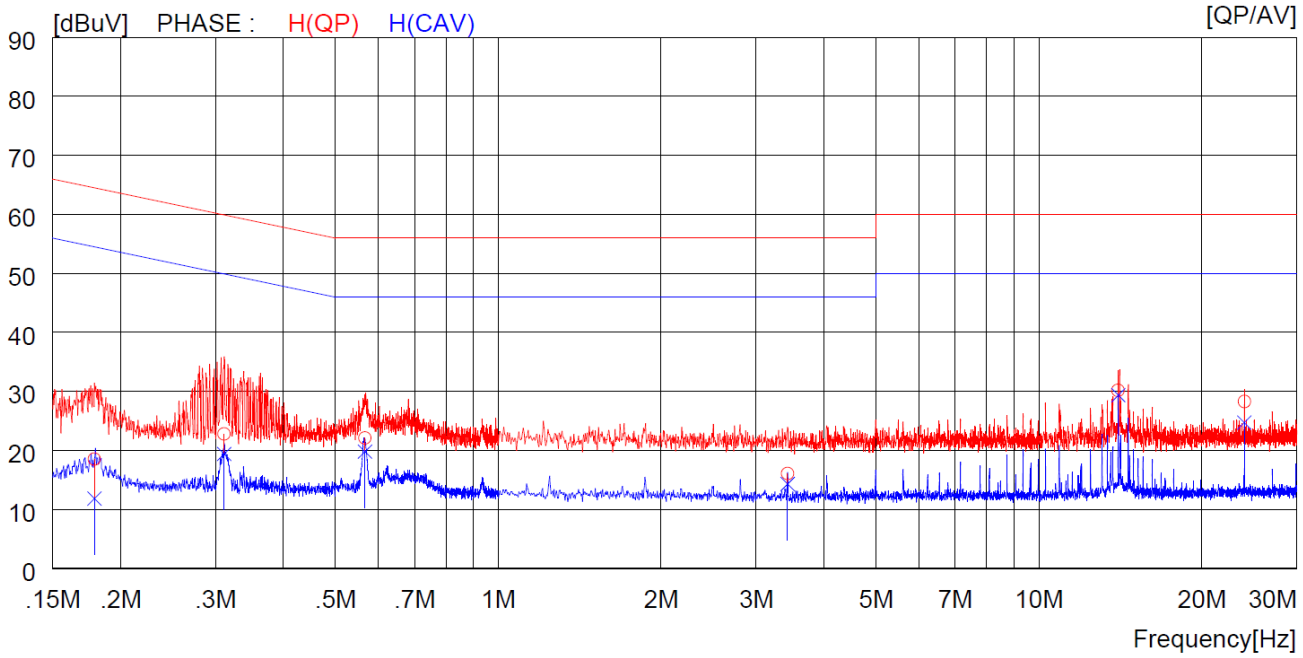
12.5 Test data for DC 24 V

-. Resolution bandwidth : 9 kHz

-. Frequency range : 0.15 MHz ~ 30 MHz

-. Tested Line : HOT LINE



NO	FREQ	READING QP [dBuV]	READING AV [dBuV]	C.FACTOR [dB]	RESULT QP [dBuV]	RESULT AV [dBuV]	LIMIT QP [dBuV]	LIMIT AV [dBuV]	MARGIN QP [dBuV]	MARGIN AV [dBuV]	PHASE
1	0.17900	8.4	----	10.1	18.5	----	64.5	----	46.0	----	H(QP)
2	0.31100	12.8	----	10.0	22.8	----	59.9	----	37.1	----	H(QP)
3	0.56700	12.0	----	10.1	22.1	----	56.0	----	33.9	----	H(QP)
4	3.42800	5.9	----	10.2	16.1	----	56.0	----	39.9	----	H(QP)
5	14.02000	19.8	----	10.4	30.2	----	60.0	----	29.8	----	H(QP)
6	24.00000	17.5	----	10.8	28.3	----	60.0	----	31.7	----	H(QP)
7	0.17900	----	1.8	10.1	----	11.9	----	54.5	----	42.6	H(CAV)
8	0.31100	----	9.4	10.0	----	19.4	----	49.9	----	30.5	H(CAV)
9	0.56700	----	9.7	10.1	----	19.8	----	46.0	----	26.2	H(CAV)
10	3.42800	----	4.1	10.2	----	14.3	----	46.0	----	31.7	H(CAV)
11	14.02000	----	19.0	10.4	----	29.4	----	50.0	----	20.6	H(CAV)
12	24.00000	----	13.9	10.8	----	24.7	----	50.0	----	25.3	H(CAV)

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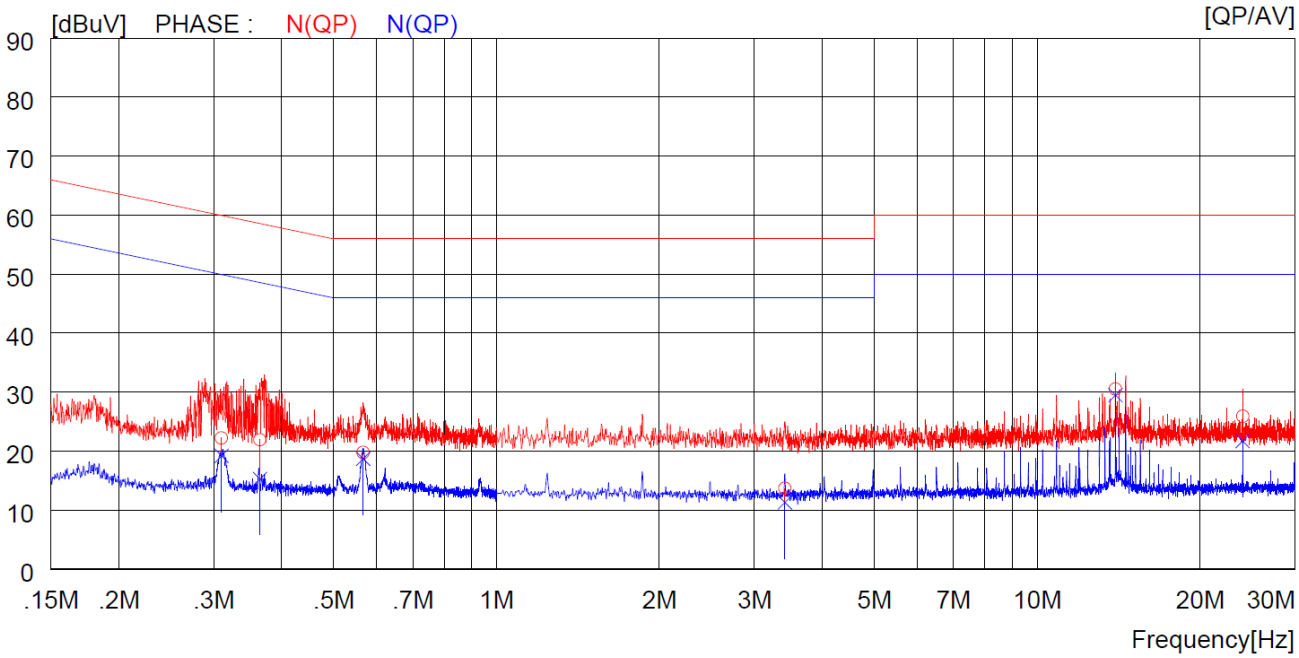
-. Tested Line : NEUTRAL LINE



NO	FREQ	READING QP	READING AV	C.FACTOR	RESULT QP	RESULT AV	LIMIT QP	LIMIT AV	MARGIN QP	MARGIN AV	PHASE
	[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	
1	0.31000	12.2	----	10.0	22.2	----	60.0	----	37.8	----	N(QP)
2	0.36500	11.8	----	10.1	21.9	----	58.6	----	36.7	----	N(QP)
3	0.56700	9.7	----	10.1	19.8	----	56.0	----	36.2	----	N(QP)
4	3.41600	3.5	----	10.2	13.7	----	56.0	----	42.3	----	N(QP)
5	13.96000	20.1	----	10.4	30.5	----	60.0	----	29.5	----	N(QP)
6	24.00000	15.1	----	10.8	25.9	----	60.0	----	34.1	----	N(QP)
7	0.31000	----	9.2	10.0	----	19.2	----	50.0	----	30.8	N(CAV)
8	0.36500	----	5.2	10.1	----	15.3	----	48.6	----	33.3	N(CAV)
9	0.56700	----	8.6	10.1	----	18.7	----	46.0	----	27.3	N(CAV)
10	3.41600	----	1.1	10.2	----	11.3	----	46.0	----	34.7	N(CAV)
11	13.96000	----	19.1	10.4	----	29.5	----	50.0	----	20.5	N(CAV)
12	24.00000	----	10.9	10.8	----	21.7	----	50.0	----	28.3	N(CAV)

Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

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13. LIST OF TEST EQUIPMENT

Model Number	Manufacturer	Description	Serial Number	Last Cal.(Interval)
FSV40-N	Rohde & Schwarz	Signal Analyzer	101651	Jan. 15, 2024 (1Y)
ESU	Rohde & Schwarz	EMI Test Receiver	100261	Mar. 05, 2024 (1Y)
GP-4303D	LG Precision Co.,Ltd	DC POWER SUPPLY	5071069	Jan. 04, 2024 (1Y)
E3632A	Agilent	DC POWER SUPPLY	MY50370016	Jan. 15, 2024 (1Y)
OPM-303D	ODA	DC POWER SUPPLY	oda-01-0923-07199	Jan. 16, 2024 (1Y)
HPF 3GHz	Rohde & Schwarz	High Pass Filter (1-3 GHz)	N/A	Jan. 15, 2024 (1Y)
WT-A3882-R10	Microwave	Cavity Band Rejection Filter	WT22040502-1	Jan. 16, 2024 (1Y)
F-40-10.0-RF	RLC Electronis	High Pass Filter	0427	Mar. 04, 2024 (1Y)
WT-A5851-R12	Microwave	Cavity Band Rejection Filter	WT22040502-2	Jan. 16, 2024 (1Y)
WT-A1856-R12	Microwave	Cavity Band Rejection Filter	WT22040502-4	Jan. 16, 2024 (1Y)
310N	Sonoma Instrument	Pre-Amplifier	392756	Oct. 16, 2024 (1Y)
SCU18	Rohde & Schwarz	Pre-Amplifer	102266	Jul. 04, 2024 (1Y)
SCU40A	Rohde & Schwarz	Signal Conditioning unit	100436	Jan. 23, 2024 (1Y)
QFA1802-26-6-S	Qualwave	6dB Attenuator	225340	Jan. 17, 2024 (1Y)
DT2000-2t	Innco System	Turn Table	N/A	N/A
CO3000	Innco System	Controller	1026/40960617/P	N/A
MA-4640-XPET	Innco System	Antenna Master	MA4640/652/43100318/P	N/A
HLP-2008	TDK	Hybrid Antenna	131316	Mar. 09, 2024 (2Y)
BBHA9120D	Schwarzbeck	Horn Antenna	9120D-1349	Jul. 02, 2024 (1Y)
BBHA9170	Schwarzbeck	Horn Antenna	BBHA9170178	Jan. 04, 2024 (1Y)
FMZB 1513	Schwarzbeck	Loop Antenna	1513-235	Mar. 20, 2024 (2Y)
ESCI	Rohde & Schwarz	Test Receiver	101012	Mar. 11, 2024 (1Y)
ESH3-Z2	Rohde & Schwarz	Pulse Limiter	100655	Mar. 12, 2024 (1Y)
NSLK8128	Schwarzbeck	LISN	8128216	Mar. 12, 2024 (1Y)
PSL-2KP	ESPEC	Environmental Test Chamber	14009407	Jan. 15, 2024 (1Y)

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