



FCC RADIO TEST REPORT

FCC ID : 2AEUPBHARG091
Equipment : Battery Doorbell Pro
Brand Name : ring
Model Name : 5F79E9
Applicant : Ring LLC
12515 Cerise Ave, Hawthorne, CA
90250 USA
Standard : FCC Part 15 Subpart C §15.249

The product was received on Mar. 23, 2023 and testing was performed from Mar. 27, 2023 to May 30, 2023. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issue Date
FR330817	01	Initial issue of report	Jun. 05, 2023
FR330817	02	Revise Summary and Section 3.1 This report is an updated version, replacing the report issued on Jun. 05, 2023.	Jun. 09, 2023
FR330817	03	Revise Section 3.1 This report is an updated version, replacing the report issued on Jun. 09, 2023.	Jun. 09, 2023
FR330817	04	Remove manufacturer information This report is an updated version, replacing the report issued on Jun. 09, 2023.	Nov. 17, 2023



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	§15.215(c)	Emission Bandwidth	Pass	-
3.2	15.249(a) 15.249(d)	Field Strength of Fundamental and Radiated Spurious Emission	Pass	1.12 dB under the limit at 24250.000 MHz
3.3	15.207	AC Conducted Emission	Pass	21.14 dB under the limit at 0.441 MHz
-	15.249(b)	Frequency Stability	Not Required	Note
3.4	15.203	Antenna Requirements	Pass	-

Note: Only applicable to fixed point to point systems.

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Yun Huang

Report Producer: Lucy Wu



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
General Specs Bluetooth-LE, Wi-Fi 2.4GHz 802.11b/g/n/ax, Wi-Fi 5GHz 802.11a/n/ac/ax and 24GHz Radar.	
Antenna Type WLAN <Ant. Left>: IFA Antenna <Ant. Right>: IFA Antenna	
Bluetooth-LE <Ant. Left>: IFA Antenna <Ant. Right>: IFA Antenna 24GHz Radar: Patch Antenna	
Sample 1	Proposal 2 + old radar board
Sample 2	Proposal 2 + new radar board

Antenna information		
24.05 GHz ~ 24.25 GHz	Peak Gain (dBi)	2

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

1.2 Modification of EUT

No modifications are made to the EUT during all test items.

1.3 Testing Location

Test Site	Sporton International Inc. Wensan Laboratory		
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855		
Test Site No.	Sporton Site No.		
	CO07-HY	03CH11-HY	03CH18-HY
Test Engineer	Louis Chung	Fu Chen and Troye Hsieh	Eric Jeng
Temperature (°C)	22.2~23.8	20.1~21.2	20.1~21.2
Relative Humidity (%)	63~68	55.1~66.7	53~63.5

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

FCC designation No.: TW3786



1.4 Applicable Standards

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

- ♦ FCC Part 15 Subpart C §15.249
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ ANSI C63.10-2013

Remark:

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



2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and only the worst case emissions were reported in this report..
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Test Mode

Frequency Band	Frequency (MHz)	Modulation
24.05-24.25 GHz	24060	CW
24.05-24.25 GHz	24150	CW
24.05-24.25 GHz	24240	CW

<For Co-location Mode>

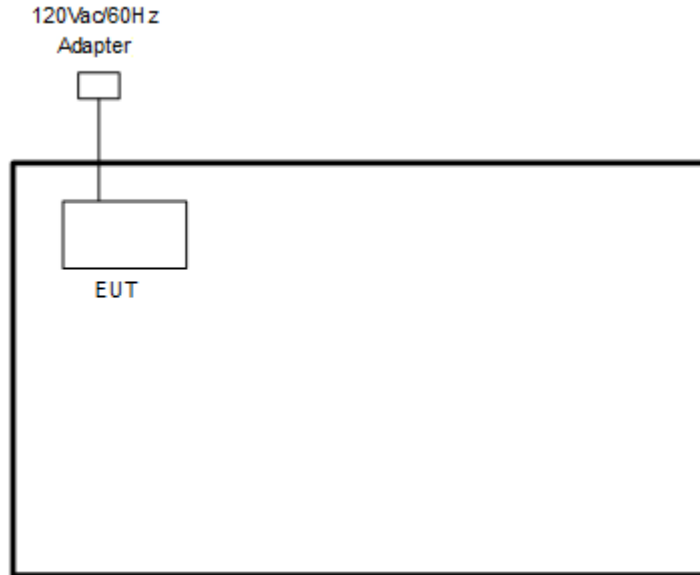
Test Configuration	Frequency (MHz)
24GHz + Bluetooth-LE 2Mbps CH39	24.24GHz + 2480MHz
24GHz + WLAN (2.4GHz) 802.11g CH10	24.24GHz + 2457MHz
24GHz + WLAN (5GHz) 802.11ac VHT20 CH100	24.24GHz + 5500MHz

Note: The Emission Bandwidth is tested by using FMCW, and the rest of test cases use CW mode in accordance with FCC Part 15.31(c).

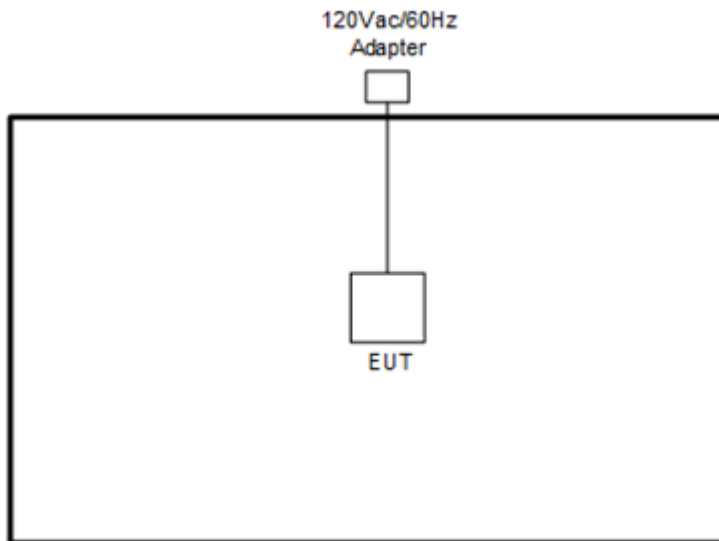
Test Cases	
AC Conducted Emission	Mode 1 : 24GHz Radar Tx + Adapter + Battery 2 for Sample 1 Mode 2 : 24GHz Radar Tx + Adapter + Battery 2 for Sample 2
Remark:	
1. The worst case of Conducted Emission is mode 1; only the test data of it was reported. 2. For Radiated Test Cases, the tests were performed with Sample 1 and verified for Sample 2. 3. For Radiated Test Cases, the tests were performed with Battery 5 and Battery 6.	

2.2 Connection Diagram of Test System

<AC Conducted Emission>



<24GHz Tx Mode>



2.3 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Adapter	DEE VAN ENTERPRISE CO., LTD	DSA-12PF16-24 240050	N/A	N/A	Unshielded, 6.0m



2.4 EUT Operation Test Setup

The RF test items, utility "SSCOM V5.13.1" was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.



3 Test Result

3.1 Emission Bandwidth

3.1.1 Description of Emission Bandwidth Measurement

99% Occupied Bandwidth are for reporting only.

Limit for 20 dB Bandwidth: Per Part15.215(C), the device shall operate in the 24-24.25 GHz band.

The emission bandwidth (EBW) is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least the specified amount below the maximum level of the modulated carrier.

3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

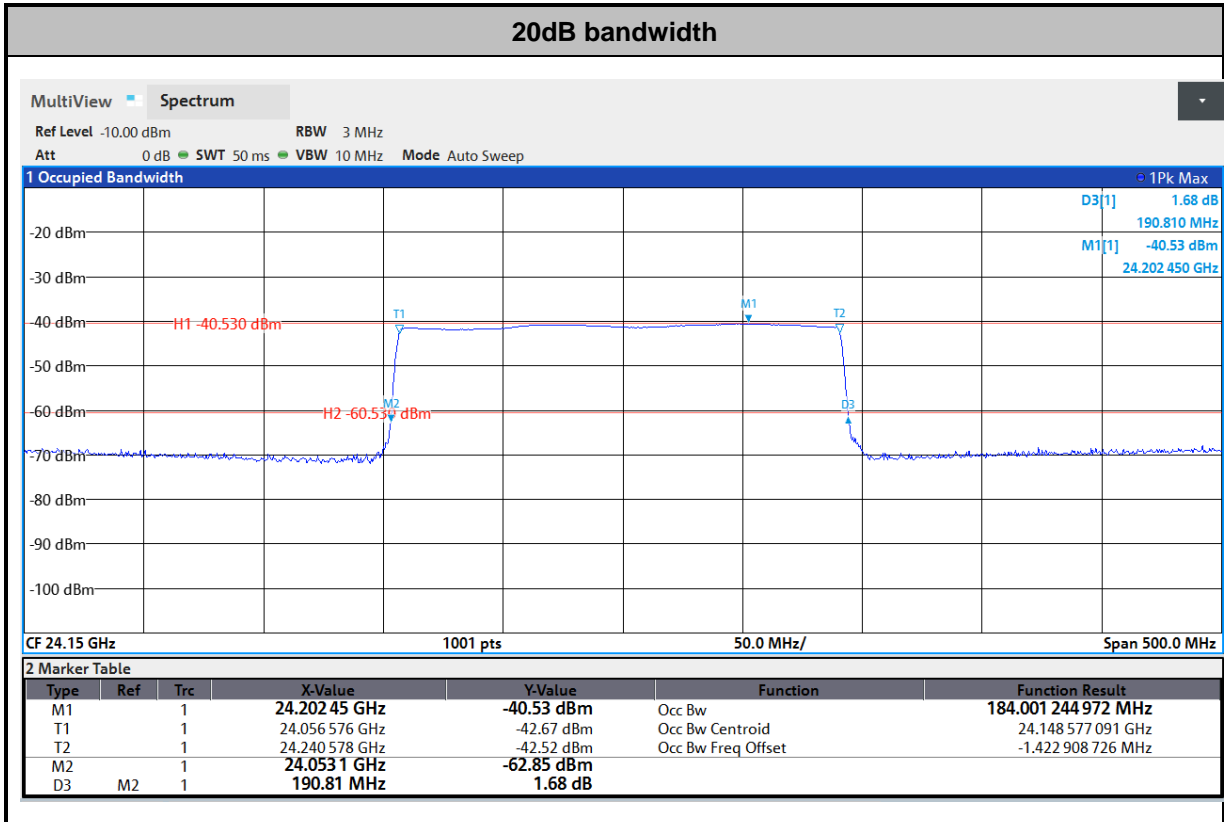
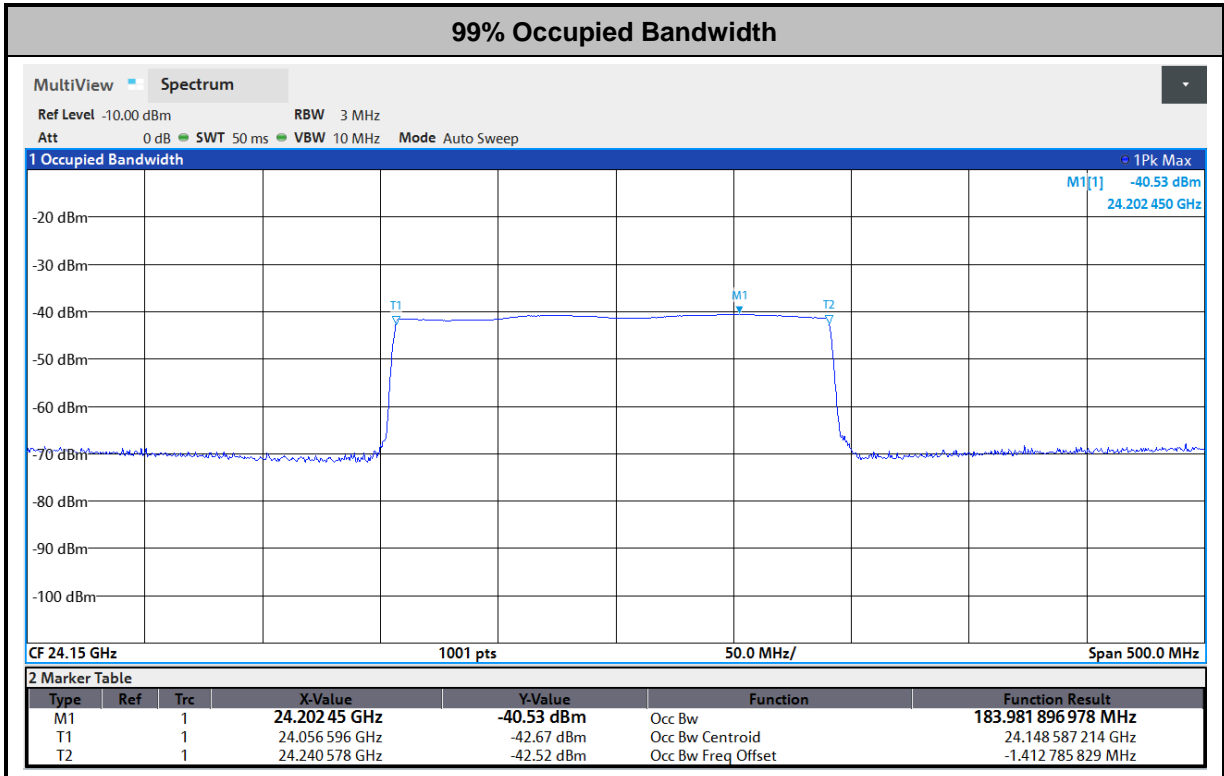
1. The testing follows the ANSI C63.10 Section 6.9.3.
2. Enable the EUT transmit continuously under FMCW mode.
3. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) $\geq 3 * RBW$.
4. Measure and record the results in the test report.

3.1.4 Test Result of Emission Bandwidth

99% Occupied Bandwidth (GHz)		Limit (GHz)	
0.183		Report Only	
20dB Bandwidth Measurement			
Bandwidth (GHz)	Low Frequency (GHz)	High Frequency (GHz)	Result
0.19081	24.0531	24.24391	Pass



3.1.5 Test Plots





3.2 Field Strength of Fundamental/Harmonics and Radiated Spurious Emission Measurement

3.2.1 Limit

The field strength measured at 3 meters shall not exceed the limits in the following table:

Rules and specifications	FCC CFR 47 Part 15 section 15.249	
Description	Field strength of fundamental	
24.0~24.25 (GHz)	Fundamental emissions (millivolts/meter) at 3m	Fundamental emissions (dBµV/m) at 3m
Average limits	250	107.95
Peak limits	-	127.95
Description	Field strength of harmonics	
24.0~24.25 (GHz)	Fundamental emissions (microvolts/meter) at 3m	Harmonic emissions (dBµV/m) at 3m
Average limits	2500	67.95
Peak limits	-	87.95
Note: Above 18GHz, the distance correction factor is used, 18GHz to 90GHz : $20\log(1m/3m) = -9.54dB$; 90GHz – 100GHz: $20\log(0.5m/3m) = -15.56dB$.		

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.2.2 Measuring Instruments

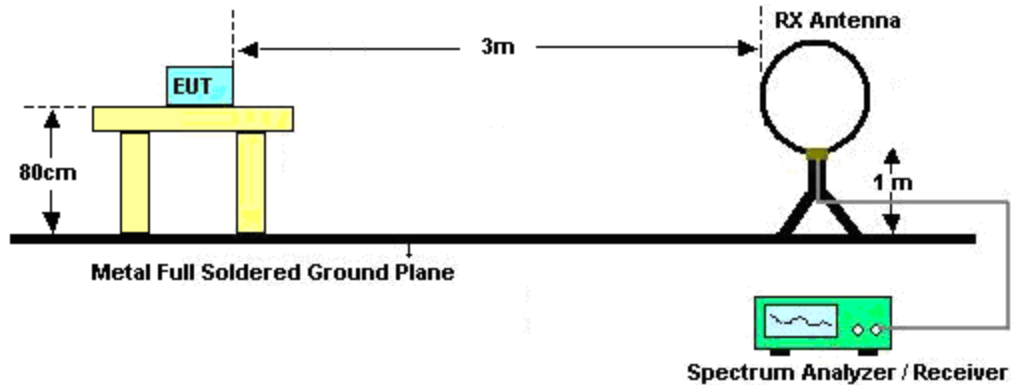
See list of measuring equipment of this test report.

3.2.3 Test Procedures

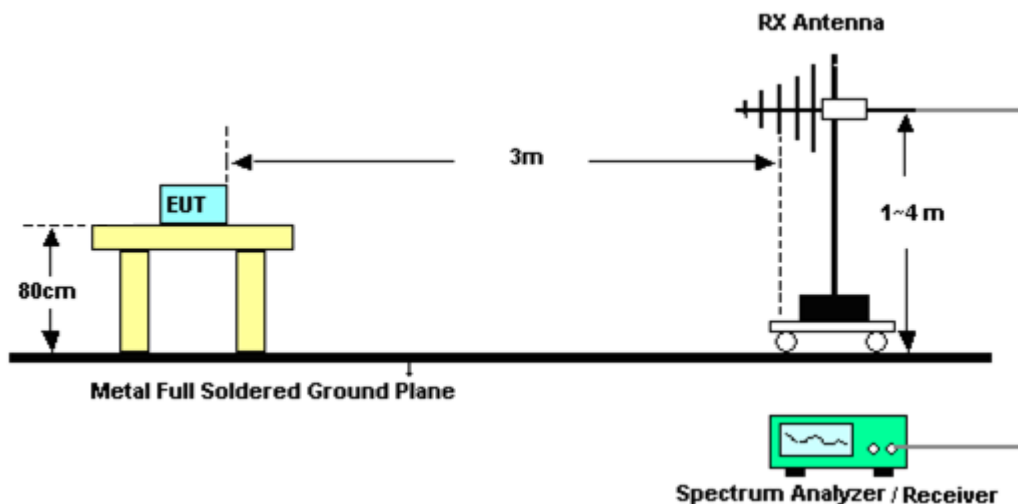
For emissions 9KHz to 40GHz, ANSI C63.10 Section 6.3 Radiated emissions testing follows, and for emissions 40GHz to 100GHz, ANSI C63.10 Section 9.8 and 9.9 radiated measurements follows. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and with 1.5 meter height for frequency above 1GHz, and was arranged test distance as shown in Section 3.4 Test Setup, respectively. For emissions, test results are attenuated more than 20 dB below the permissible value need not be reported in accordance with FCC Part 15.31(O).

3.2.4 Test Setup

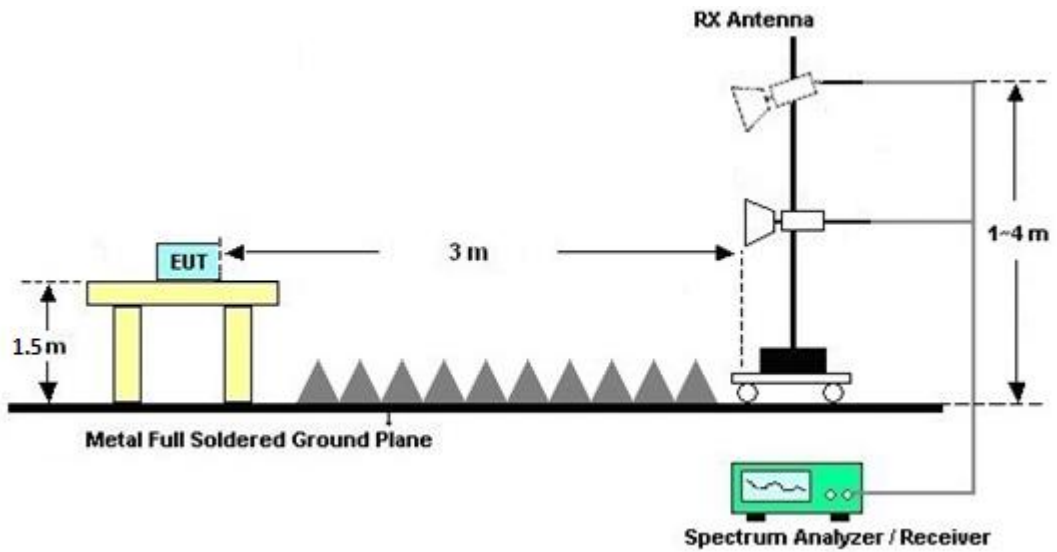
<For radiated emissions below 30MHz>



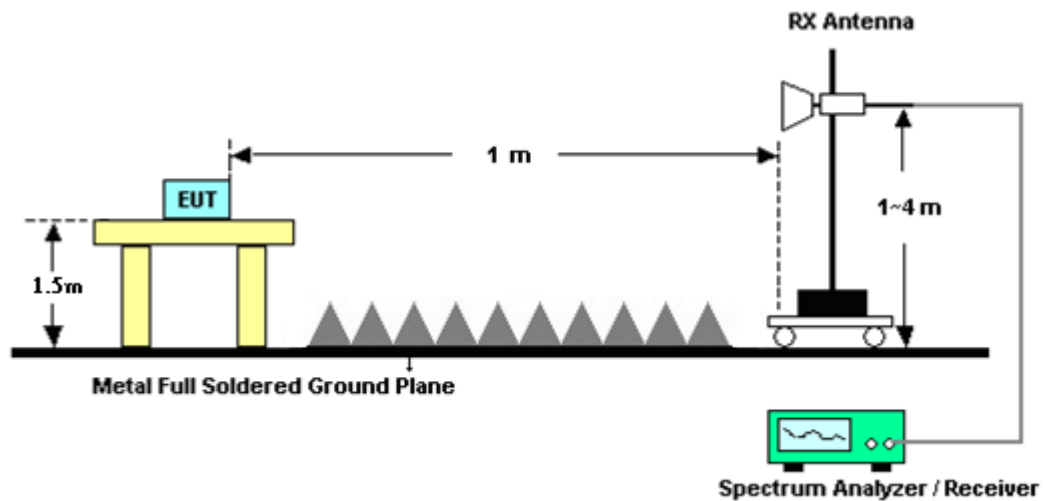
<For radiated emissions from 30MHz ~ 1GHz>



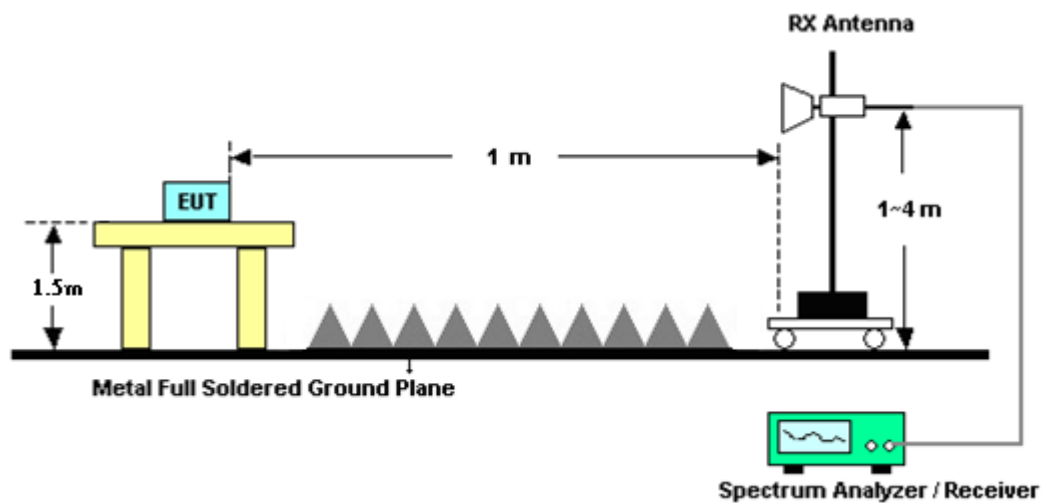
<For radiated emissions from 1 ~ 18GHz>



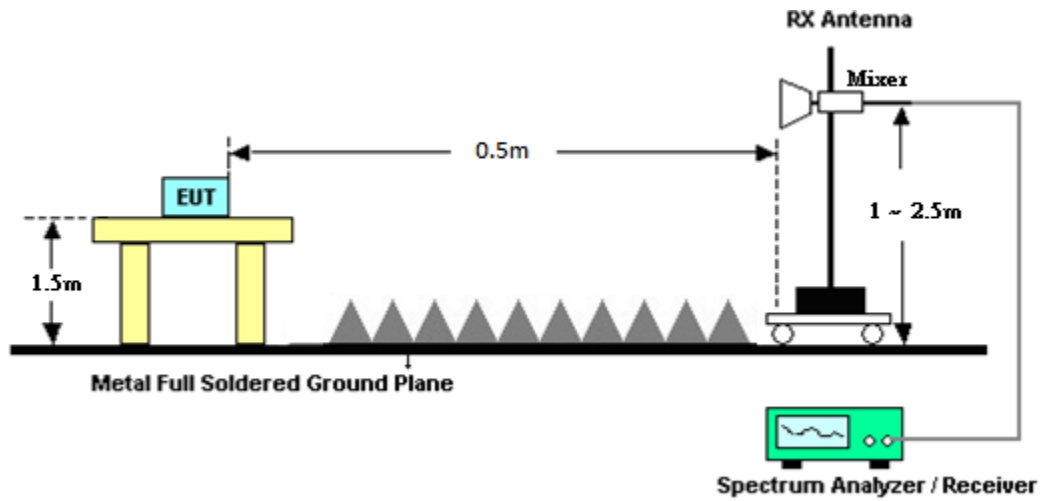
<For radiated emissions from 18 ~ 40GHz>



<For radiated emissions above 40 ~ 90GHz>



<For radiated emissions above 90 ~ 100GHz>



3.2.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

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

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

3.2.6 Test Result of Field Strength of Fundamental and Radiated Spurious Emission

Please refer to Appendix B and C.



3.3 AC Conducted Emission Measurement

3.3.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

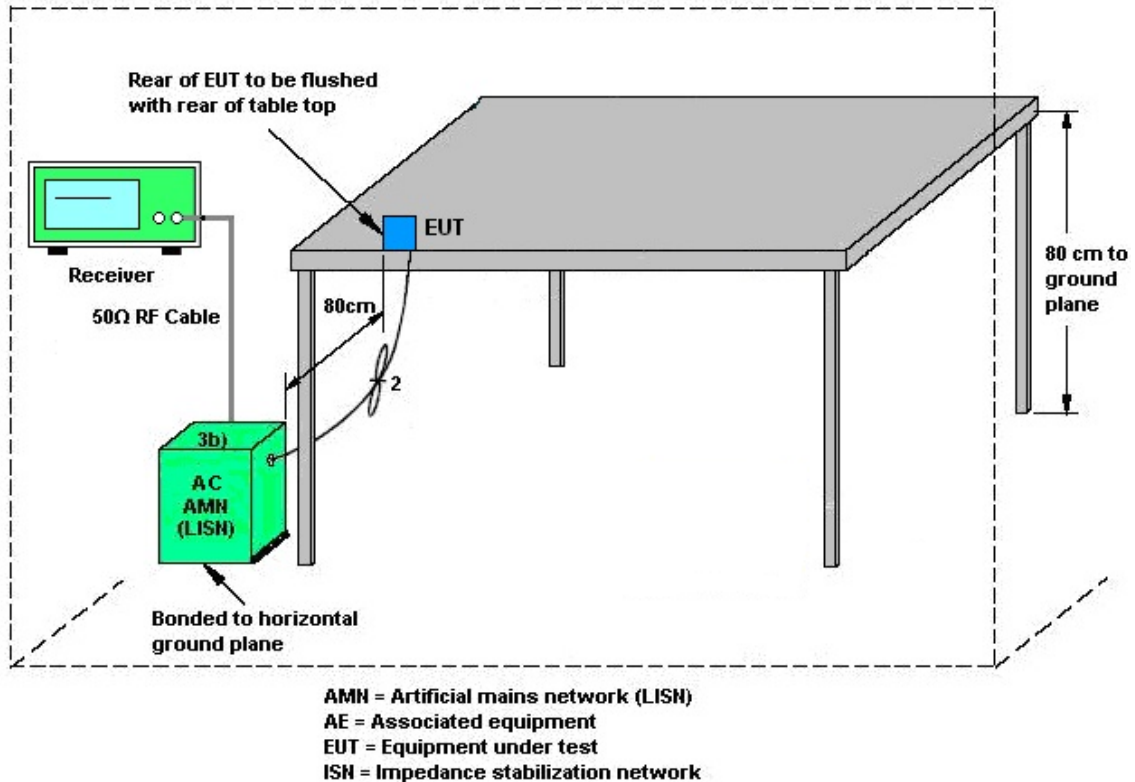
3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

1. Connect EUT to the power mains through a line impedance stabilization network (LISN).
2. All the support units are connecting to the other LISN.
3. The LISN provides 50 ohm coupling impedance for the measuring instrument.
4. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
5. Both sides of AC line were checked for maximum conducted interference.
6. The frequency range from 150 kHz to 30 MHz was searched.
7. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF bandwidth = 9kHz) with Maximum Hold Mode.

3.3.4 Test Setup



3.3.5 Test Result of AC Conducted Emission

Please refer to Appendix A.



3.4 Antenna Requirements

3.4.1 Limit

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. 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 the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited.

3.4.2 Antenna Connector Construction

Embedded in Antenna.



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LOOP Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 20, 2022	Apr. 17, 2023~ May 30, 2023	Sep. 19, 2023	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D & N-6-06	35414 & AT-N0602	30MHz~1GHz	Oct. 08, 2022	Apr. 17, 2023~ May 30, 2023	Oct. 07, 2023	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-01620	1GHz~18GHz	Aug. 24, 2022	Apr. 17, 2023~ May 30, 2023	Aug. 23, 2023	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA9170	BBHA917058 4	18GHz~40GHz	Dec. 14, 2022	Apr. 17, 2023~ May 30, 2023	Dec. 13, 2023	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Dec. 09, 2022	Apr. 17, 2023~ May 30, 2023	Dec. 08, 2023	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 09, 2022	Apr. 17, 2023~ May 30, 2023	Nov. 08, 2023	Radiation (03CH11-HY)
Preamplifier	Jet-Power	JPA0118-55-30 3	17100018000 55007	1GHz~18GHz	Jun. 15, 2022	Apr. 17, 2023~ May 30, 2023	Jun. 14, 2023	Radiation (03CH11-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 28, 2022	Apr. 17, 2023~ May 30, 2023	Jun. 27, 2023	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 07, 2022	Apr. 17, 2023~ May 30, 2023	Oct. 06, 2023	Radiation (03CH11-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY54130085	20MHz~8.4GHz	Oct. 18, 2022	Apr. 17, 2023~ May 30, 2023	Oct. 17, 2023	Radiation (03CH11-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Apr. 17, 2023~ May 30, 2023	N/A	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Apr. 17, 2023~ May 30, 2023	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Apr. 17, 2023~ May 30, 2023	N/A	Radiation (03CH11-HY)
Software	Audix	E3 6.2009-8-24	RK-001053	N/A	N/A	Apr. 17, 2023~ May 30, 2023	N/A	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30MHz~40GHz	Mar. 07, 2023	Apr. 17, 2023~ May 30, 2023	Mar. 06, 2024	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801595/2	30MHz~40GHz	Mar. 07, 2023	Apr. 17, 2023~ May 30, 2023	Mar. 06, 2024	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9K~30M	Mar. 07, 2023	Apr. 17, 2023~ May 30, 2023	Mar. 06, 2024	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	30M~40G	Mar. 07, 2023	Apr. 17, 2023~ May 30, 2023	Mar. 06, 2024	Radiation (03CH11-HY)
Filter	Wainwright	WLK4-1000-15 30-8000-40SS	SN11	1.53G Low Pass	Sep. 12, 2022	Apr. 17, 2023~ May 30, 2023	Sep. 11, 2023	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-2700 -3000-18000-6 0SS	SN3	3GHz High Pass Filter	Sep. 12, 2022	Apr. 17, 2023~ May 30, 2023	Sep. 11, 2023	Radiation (03CH11-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170980	18GHz-40GHz	Jan. 30, 2023	Mar. 27, 2023~ May 30, 2023	Jan. 29, 2024	Radiation (03CH18-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 07, 2022	Mar. 27, 2023~ May 30, 2023	Dec. 06, 2023	Radiation (03CH18-HY)
RF Cable	HUBER + SUHNERW	SUCOFLEX 102	801589/2	N/A	Nov. 29, 2022	Mar. 27, 2023~ May 30, 2023	Nov. 28, 2023	Radiation (03CH18-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801607/2	N/A	Nov. 29, 2022	Mar. 27, 2023~ May 30, 2023	Nov. 28, 2023	Radiation (03CH18-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV3044	101009	9kHz to 44GHz	Nov. 22, 2022	Mar. 27, 2023~ May 30, 2023	Nov. 21, 2023	Radiation (03CH18-HY)
Harmonic Mixer	Rohde & Schwarz	RPG FS-Z60	100986	40GHz to 60GHz	Apr. 09, 2021	Mar. 27, 2023~ May 30, 2023	Apr. 08, 2024	Radiation (03CH18-HY)
Harmonic Mixer	Rohde & Schwarz	FSZ-90	101811	60GHz to 90GHz	Nov. 16, 2021	Mar. 27, 2023~ May 30, 2023	Nov. 15, 2024	Radiation (03CH18-HY)
Harmonic Mixer	Rohde & Schwarz	RPG FS-Z140	101128	90GHz to 140GHz	Oct. 26, 2020	Mar. 27, 2023~ May 30, 2023	Oct. 25, 2023	Radiation (03CH18-HY)
Antenna	Quinstar	QWH-UPRR00	QWH-UPRR00-01	40-60 GHz	Jul. 06, 2021	Mar. 27, 2023~ May 30, 2023	Jul. 05, 2024	Radiation (03CH18-HY)
Antenna	Quinstar	QWH-EPRR00	1372000000	60-90 GHz	Jul. 06, 2021	Mar. 27, 2023~ May 30, 2023	Jul. 05, 2024	Radiation (03CH18-HY)
Antenna	Quinstar	QWH-FPRR00	1011500008	90-140 GHz	Jul. 06, 2021	Mar. 27, 2023~ May 30, 2023	Jul. 05, 2024	Radiation (03CH18-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801589/2	N/A	Nov. 29, 2022	Mar. 27, 2023~ May 30, 2023	Nov. 28, 2023	Radiation (03CH18-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801607/2	N/A	Nov. 29, 2022	Mar. 27, 2023~ May 30, 2023	Nov. 28, 2023	Radiation (03CH18-HY)
AC Power Source	ACPOWER	AFC-11003G	F317040033	N/A	N/A	May 24, 2023~ May 30, 2023	N/A	Conduction (CO07-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	May 24, 2023~ May 30, 2023	N/A	Conduction (CO07-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-FN	9561-FN00373	9kHz-200MHz	Nov. 01, 2022	May 24, 2023~ May 30, 2023	Oct. 31, 2023	Conduction (CO07-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Mar. 15, 2023	May 24, 2023~ May 30, 2023	Mar. 14, 2024	Conduction (CO07-HY)
Two-Line V-Network	TESEQ	NNB 51	45051	N/A	Mar. 05, 2023	May 24, 2023~ May 30, 2023	Mar. 04, 2024	Conduction (CO07-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Oct. 06, 2022	May 24, 2023~ May 30, 2023	Oct. 05, 2023	Conduction (CO07-HY)



5 Measurement Uncertainty

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.46 dB
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<For 03CH11-HY>

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.3 dB
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Uncertainty of Radiated Emission Measurement (1GHz ~ 6GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.4 dB
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Uncertainty of Radiated Emission Measurement (6GHz ~ 18GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.8 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.3 dB
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<For 03CH18-HY>

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.9 dB
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Uncertainty of Radiated Emission Measurement (40 GHz ~ 140 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.64 dB
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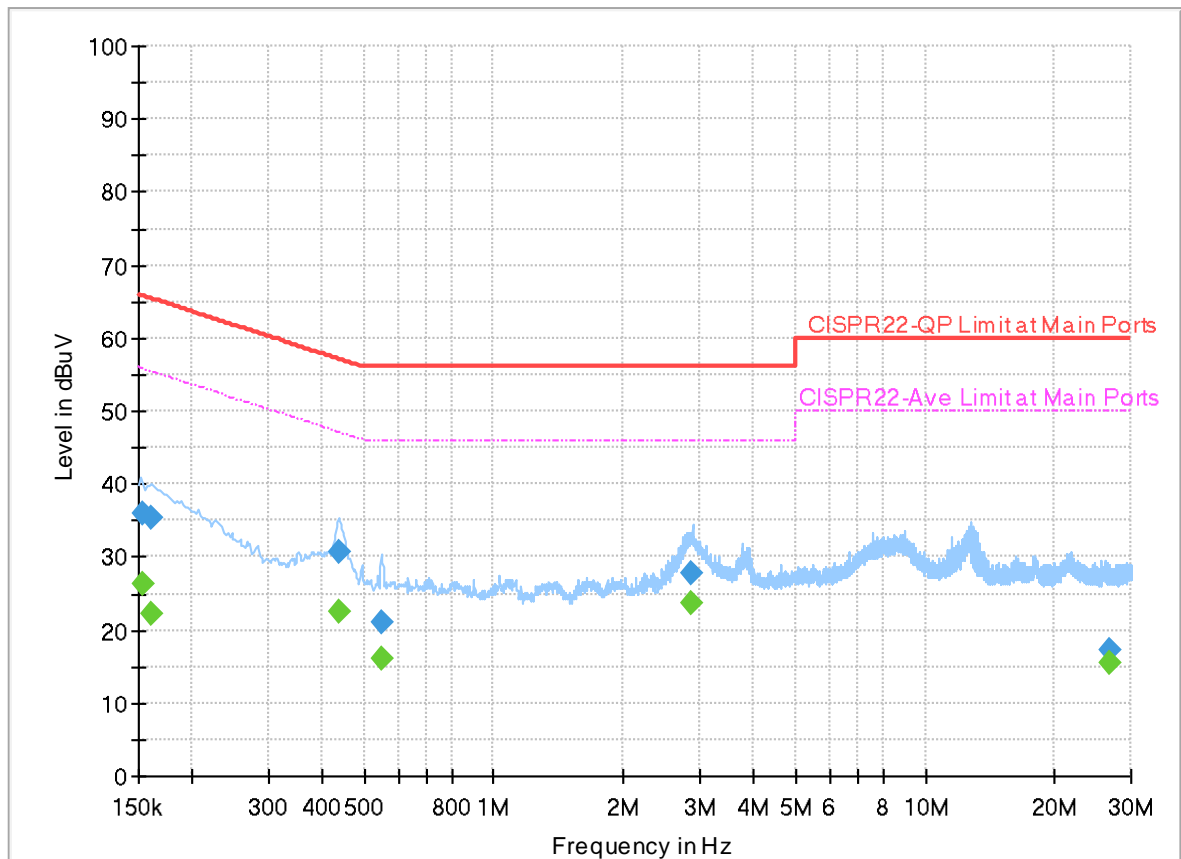


Appendix A. AC Conducted Emission Test Results

EUT Information

Report NO : 330817
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



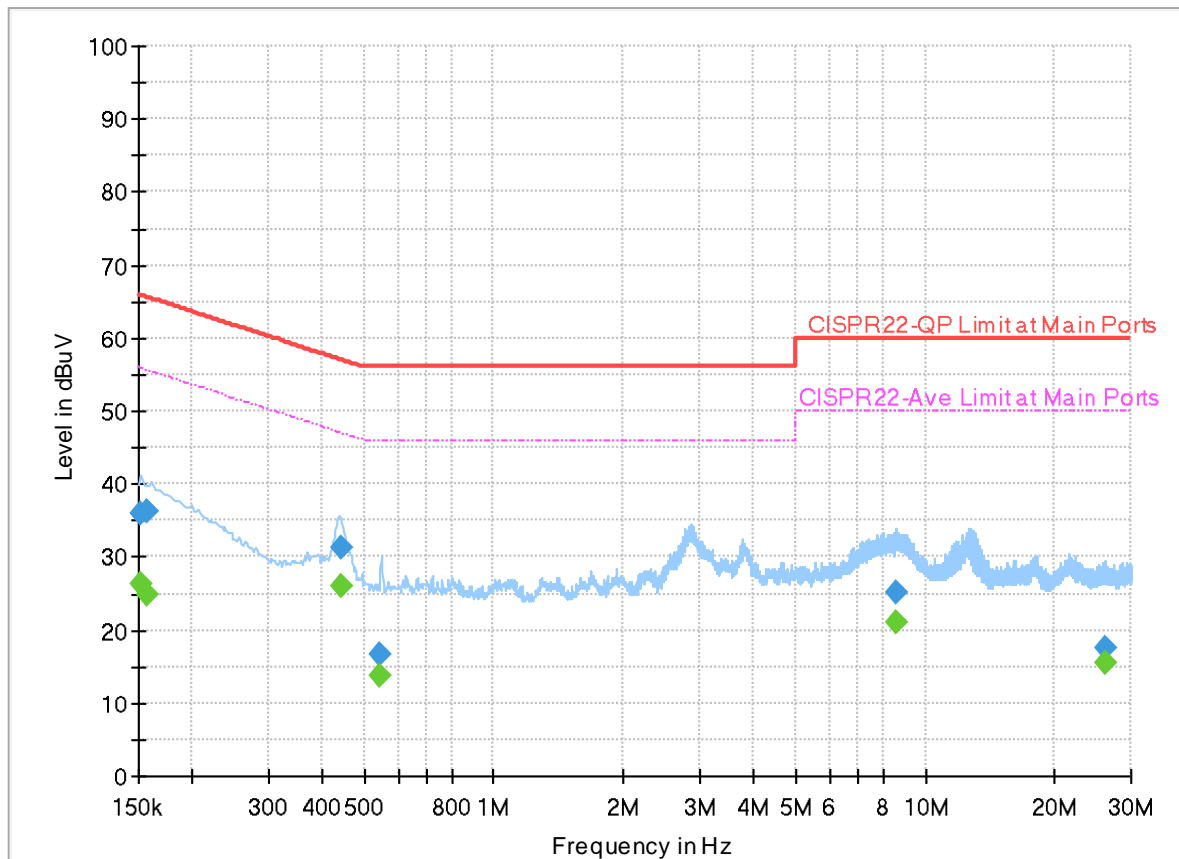
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152835	---	26.25	55.84	29.59	L1	OFF	19.9
0.152835	36.03	---	65.84	29.81	L1	OFF	19.9
0.161520	---	22.21	55.39	33.18	L1	OFF	19.9
0.161520	35.46	---	65.39	29.93	L1	OFF	19.9
0.440250	---	22.50	47.06	24.56	L1	OFF	20.0
0.440250	30.67	---	57.06	26.39	L1	OFF	20.0
0.550950	---	15.98	46.00	30.02	L1	OFF	20.0
0.550950	21.14	---	56.00	34.86	L1	OFF	20.0
2.856480	---	23.61	46.00	22.39	L1	OFF	20.0
2.856480	27.76	---	56.00	28.24	L1	OFF	20.0
26.776500	---	15.51	50.00	34.49	L1	OFF	20.2
26.776500	17.35	---	60.00	42.65	L1	OFF	20.2

EUT Information

Report NO : 330817
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150945	---	26.24	55.95	29.71	N	OFF	20.0
0.150945	36.10	---	65.95	29.85	N	OFF	20.0
0.156750	---	24.84	55.63	30.79	N	OFF	20.0
0.156750	36.23	---	65.63	29.40	N	OFF	20.0
0.440610	---	25.91	47.05	21.14	N	OFF	20.0
0.440610	31.40	---	57.05	25.65	N	OFF	20.0
0.543750	---	13.66	46.00	32.34	N	OFF	20.0
0.543750	16.76	---	56.00	39.24	N	OFF	20.0
8.566080	---	21.02	50.00	28.98	N	OFF	20.1
8.566080	25.06	---	60.00	34.94	N	OFF	20.1
26.022750	---	15.53	50.00	34.47	N	OFF	20.2
26.022750	17.42	---	60.00	42.58	N	OFF	20.2



Appendix B. Radiated Spurious Emission

Test Engineer :	Fu Chen, Troye Hsieh and Eric Jeng	Temperature :	20.1~21.2°C
		Relative Humidity :	53.0~66.7%

<Sample 1>

24GHz 24000~24250MHz

(Field strength of fundamental @ 3m)

24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.06GHz	23738	38.49	-9.54	-35.51	74	55.42	39.59	-46.98	-	-	P	H
	24058	97.83	-9.54	-30.12	127.95	114.60	39.55	-46.78	-	-	P	H
	24600	38.19	-9.54	-35.81	74	54.38	39.66	-46.31	-	-	P	H
	23802	25.39	-9.54	-28.61	54	42.30	39.58	-46.95	-	-	A	H
	24058	97.26	-9.54	-10.74	108	114.03	39.55	-46.78	-	-	A	H
	24606	25.50	-9.54	-28.50	54	41.68	39.67	-46.31	-	-	A	H
	23810	39.03	-9.54	-34.97	74	55.94	39.58	-46.95	-	-	P	V
	24058	96.84	-9.54	-31.11	127.95	113.61	39.55	-46.78	-	-	P	V
	24926	38.36	-9.54	-35.64	74	54.32	39.76	-46.18	-	-	P	V
	23800	25.38	-9.54	-28.62	54	42.29	39.58	-46.95	-	-	A	V
	24058	96.24	-9.54	-11.76	108	113.01	39.55	-46.78	-	-	A	V
24608	25.45	-9.54	-28.55	54	41.63	39.67	-46.31	-	-	A	V	
24.15GHz	23750	37.70	-9.54	-36.30	74	54.61	39.60	-46.97	-	-	P	H
	24148	97.14	-9.54	-30.81	127.95	113.75	39.62	-46.69	-	-	P	H
	24788	38.48	-9.54	-35.52	74	54.39	39.87	-46.24	-	-	P	H
	23720	25.05	-9.54	-28.95	54	42.00	39.58	-46.99	-	-	A	H
	24148	97.07	-9.54	-10.93	108	113.68	39.62	-46.69	-	-	A	H
	24602	25.21	-9.54	-28.79	54	41.40	39.66	-46.31	-	-	A	H
	23816	38.59	-9.54	-35.41	74	55.50	39.57	-46.94	-	-	P	V
	24148	96.16	-9.54	-31.79	127.95	112.77	39.62	-46.69	-	-	P	V
	24644	39.04	-9.54	-34.96	74	55.14	39.73	-46.29	-	-	P	V
	23714	25.08	-9.54	-28.92	54	42.04	39.57	-46.99	-	-	A	V
	24148	96.40	-9.54	-11.60	108	113.01	39.62	-46.69	-	-	A	V
	25408	24.73	-9.54	-29.27	54	40.75	39.51	-45.99	-	-	A	V



24.24GHz	23836	39.23	-9.54	-34.77	74	56.13	39.57	-46.93	-	-	P	H
	24238	97.66	-9.54	-30.29	127.95	114.12	39.69	-46.61	-	-	P	H
	24250	63.26	-9.54	-10.74	74	79.69	39.70	-46.59	-	-	P	H
	23726	25.26	-9.54	-28.74	54	42.21	39.58	-46.99	-	-	A	H
	24238	97.58	-9.54	-10.42	108	114.04	39.69	-46.61	-	-	A	H
	24250	52.69	-9.54	-1.31	54	69.12	39.70	-46.59	-	-	A	H
	23840	38.41	-9.54	-35.59	74	55.31	39.56	-46.92	-	-	P	V
	24238	96.68	-9.54	-31.27	127.95	113.14	39.69	-46.61	-	-	P	V
	24250	63.09	-9.54	-10.91	74	79.52	39.70	-46.59	-	-	P	V
	23718	25.20	-9.54	-28.80	54	42.16	39.57	-46.99	-	-	A	V
	24238	96.60	-9.54	-11.40	108	113.06	39.69	-46.61	-	-	A	V
	24250	52.54	-9.54	-1.46	54	68.97	39.70	-46.59	-	-	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]})$ (dB) Distance extrapolation factor = $20 \log (1\text{m}/3\text{m}) = -9.54$ (dB) The maximized peak level complies with the average limit, unnecessary to perform an average measurement 											



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + BLE 2M Ch39 2480MHz	23502	41.21	-9.54	-32.79	74	58.85	38.11	-46.21	-	-	P	H
	24238	98.29	-9.54	-29.66	127.95	114.87	39.01	-46.05	-	-	P	H
	24250	66.45	-9.54	-7.55	74	83.03	39.00	-46.04	-	-	P	H
	24000	27.59	-9.54	-26.41	54	43.97	39.30	-46.14	-	-	A	H
	24238	97.93	-9.54	-10.07	108	114.51	39.01	-46.05	-	-	A	H
	24250	52.86	-9.54	-1.14	54	69.44	39.00	-46.04	-	-	A	H
	23540	41.38	-9.54	-32.62	74	59.77	38.23	-47.08	-	-	P	V
	24238	90.65	-9.54	-37.30	127.95	107.79	39.01	-46.61	-	-	P	V
	24250	57.07	-9.54	-16.93	74	74.20	39.00	-46.59	-	-	P	V
	24000	28.19	-9.54	-25.81	54	45.27	39.30	-46.84	-	-	A	V
	24238	90.27	-9.54	-17.73	108	107.41	39.01	-46.61	-	-	A	V
24250	46.15	-9.54	-7.85	54	63.28	39.00	-46.59	-	-	A	V	
24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	23538	40.55	-9.54	-33.45	74	58.07	38.22	-46.20	-	-	P	H
	24238	98.28	-9.54	-29.67	127.95	114.86	39.01	-46.05	-	-	P	H
	24250	67.44	-9.54	-6.56	74	84.02	39.00	-46.04	-	-	P	H
	24000	27.6	-9.54	-26.40	54	43.98	39.30	-46.14	-	-	A	H
	24238	97.93	-9.54	-10.07	108	114.51	39.01	-46.05	-	-	A	H
	24250	52.82	-9.54	-1.18	54	69.40	39.00	-46.04	-	-	A	H
	23928	42.31	-9.54	-31.69	74	58.82	39.18	-46.15	-	-	P	V
	24238	91.28	-9.54	-36.67	127.95	107.86	39.01	-46.05	-	-	P	V
	24250	57.31	-9.54	-16.69	74	73.89	39.00	-46.04	-	-	P	V
	24000	28.87	-9.54	-25.13	54	45.25	39.30	-46.14	-	-	A	V
	24238	90.75	-9.54	-17.25	108	107.33	39.01	-46.05	-	-	A	V
24250	46.58	-9.54	-7.42	54	63.16	39.00	-46.04	-	-	A	V	



24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	23578	42.05	-9.54	-31.95	74	59.44	38.35	-46.20	-	-	P	H
	24238	98.31	-9.54	-29.64	127.95	114.89	39.01	-46.05	-	-	P	H
	24250	68.05	-9.54	-5.95	74	84.63	39.00	-46.04	-	-	P	H
	23554	27.62	-9.54	-26.38	54	45.09	38.27	-46.20	-	-	A	H
	24238	96.01	-9.54	-11.99	108	112.59	39.01	-46.05	-	-	A	H
	24250	52.87	-9.54	-1.13	54	69.45	39.00	-46.04	-	-	A	H
	23922	41.68	-9.54	-32.32	74	58.19	39.18	-46.15	-	-	P	V
	24238	91.30	-9.54	-36.65	127.95	107.88	39.01	-46.05	-	-	P	V
	24250	58.22	-9.54	-15.78	74	74.80	39.00	-46.04	-	-	P	V
	24000	28.94	-9.54	-25.06	54	45.32	39.30	-46.14	-	-	A	V
	24238	90.75	-9.54	-17.25	108	107.33	39.01	-46.05	-	-	A	V
	24250	46.63	-9.54	-7.37	54	63.21	39.00	-46.04	-	-	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) Distance extrapolation factor = 20 log (test distance [X m]/specific distance [3 m]) (dB) Distance extrapolation factor = 20log (1m/3m) = -9.54 (dB) The maximized peak level complies with the average limit, unnecessary to perform an average measurement 											



<Sample 2>

24GHz 24000~24250MHz

(Field strength of fundamental @ 3m)

24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.06GHz	23993.5	38.69	-9.54	-35.31	74	55.78	39.29	-46.84	-	-	P	H
	24059.3	97.59	-9.54	-30.36	127.95	114.68	39.23	-46.78	-	-	P	H
	24698.5	40.05	-9.54	-33.95	74	56.50	39.36	-46.27	-	-	P	H
	23998.2	26.25	-9.54	-27.75	54	43.33	39.30	-46.84	-	-	A	H
	24056.95	97.36	-9.54	-10.64	108	114.45	39.23	-46.78	-	-	A	H
	24712.6	26.98	-9.54	-27.02	54	43.42	39.37	-46.27	-	-	A	H
	23932.4	41.84	-9.54	-32.16	74	59.07	39.19	-46.88	-	-	P	V
	24059.3	93.04	-9.54	-34.91	127.95	110.13	39.23	-46.78	-	-	P	V
	24733.75	43.41	-9.54	-30.59	74	59.82	39.39	-46.26	-	-	P	V
	23532.9	28.92	-9.54	-25.08	54	47.35	38.21	-47.10	-	-	A	V
	24056.95	92.79	-9.54	-15.21	108	109.88	39.23	-46.78	-	-	A	V
	24783.1	29.88	-9.54	-24.12	54	46.21	39.45	-46.24	-	-	A	V
24.24GHz	23608.1	38.92	-9.54	-35.08	74	57.06	38.45	-47.05	-	-	P	H
	24237.9	97.66	-9.54	-30.29	127.95	114.78	39.01	-46.61	-	-	P	H
	24250	62.66	-9.54	-11.34	74	79.79	39.00	-46.59	-	-	P	H
	23521.15	25.91	-9.54	-28.09	54	44.38	38.17	-47.10	-	-	A	H
	24237.9	97.52	-9.54	-10.48	108	114.66	39.01	-46.61	-	-	A	H
	24250	52.88	-9.54	-1.12	54	70.01	39.00	-46.59	-	-	A	H
	23589.3	43.15	-9.54	-30.85	74	61.36	38.39	-47.06	-	-	P	V
	24237.9	90.64	-9.54	-37.31	127.95	107.78	39.01	-46.61	-	-	P	V
	24250	54.33	-9.54	-19.67	74	71.46	39.00	-46.59	-	-	P	V
	23598.7	29.48	-9.54	-24.52	54	47.66	38.42	-47.06	-	-	A	V
	24237.9	90.30	-9.54	-17.70	108	107.44	39.01	-46.61	-	-	A	V
	24250	44.00	-9.54	-10.00	54	61.13	39.00	-46.59	-	-	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) Distance extrapolation factor = 20 log (test distance [X m]/specific distance [3 m]) (dB) Distance extrapolation factor = 20log (1m/3m) = -9.54 (dB) The maximized peak level complies with the average limit, unnecessary to perform an average measurement 											



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + BLE 2M Ch39 2480MHz	23993.5	45.89	-9.54	-28.11	74	62.28	39.29	-46.14	-	-	P	H
	24237.9	98.17	-9.54	-29.78	127.95	114.75	39.01	-46.05	-	-	P	H
	24250	67.11	-9.54	-6.89	74	83.69	39.00	-46.04	-	-	P	H
	23509.4	33.19	-9.54	-20.81	54	50.81	38.13	-46.21	-	-	A	H
	24237.9	97.86	-9.54	-10.14	108	114.44	39.01	-46.05	-	-	A	H
	24250	52.72	-9.54	-1.28	54	69.30	39.00	-46.04	-	-	A	H
	23993.5	46.96	-9.54	-27.04	74	63.35	39.29	-46.14	-	-	P	V
	24237.9	89.79	-9.54	-38.16	127.95	106.37	39.01	-46.05	-	-	P	V
	24250	59.68	-9.54	-14.32	74	76.26	39.00	-46.04	-	-	P	V
	23500	33.71	-9.54	-20.29	54	51.36	38.10	-46.21	-	-	A	V
	24237.9	89.27	-9.54	-18.73	108	105.85	39.01	-46.05	-	-	A	V
	24250	47.83	-9.54	-6.17	54	64.41	39.00	-46.04	-	-	A	V
24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	23551.7	46.07	-9.54	-27.93	74	63.54	38.27	-46.20	-	-	P	H
	24237.9	98.25	-9.54	-29.70	127.95	114.83	39.01	-46.05	-	-	P	H
	24250	63.98	-9.54	-10.02	74	80.56	39.00	-46.04	-	-	P	H
	23500	33.20	-9.54	-20.80	54	50.85	38.10	-46.21	-	-	A	H
	24237.9	97.91	-9.54	-10.09	108	114.49	39.01	-46.05	-	-	A	H
	24250	52.87	-9.54	-1.13	54	69.45	39.00	-46.04	-	-	A	H
	23981.75	41.69	-9.54	-32.31	74	58.10	39.27	-46.14	-	-	P	V
	24237.9	92.50	-9.54	-35.45	127.95	109.08	39.01	-46.05	-	-	P	V
	24250	57.70	-9.54	-16.30	74	74.28	39.00	-46.04	-	-	P	V
	23920.65	28.90	-9.54	-25.10	54	45.42	39.17	-46.15	-	-	A	V
	24237.9	91.58	-9.54	-16.42	108	108.16	39.01	-46.05	-	-	A	V
24250	47.01	-9.54	-6.99	54	63.59	39.00	-46.04	-	-	A	V	



24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	23516.45	46.81	-9.54	-27.19	74	64.41	38.15	-46.21	-	-	P	H
	24237.9	98.21	-9.54	-29.74	127.95	114.79	39.01	-46.05	-	-	P	H
	24250	66.65	-9.54	-7.35	74	83.23	39.00	-46.04	-	-	P	H
	23509.4	33.21	-9.54	-20.79	54	50.83	38.13	-46.21	-	-	A	H
	24237.9	97.89	-9.54	-10.11	108	114.47	39.01	-46.05	-	-	A	H
	24250	52.76	-9.54	-1.24	54	69.34	39.00	-46.04	-	-	A	H
	23570.5	47.48	-9.54	-26.52	74	64.89	38.33	-46.20	-	-	P	V
	24237.9	90.73	-9.54	-37.22	127.95	107.31	39.01	-46.05	-	-	P	V
	24250	60.27	-9.54	-13.73	74	76.85	39.00	-46.04	-	-	P	V
	23500	33.67	-9.54	-20.33	54	51.32	38.10	-46.21	-	-	A	V
	24237.9	91.11	-9.54	-16.89	108	107.69	39.01	-46.05	-	-	A	V
	24250	49.52	-9.54	-4.48	54	66.10	39.00	-46.04	-	-	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) Distance extrapolation factor = 20 log (test distance [X m]/specific distance [3 m]) (dB) Distance extrapolation factor = 20log (1m/3m) = -9.54 (dB) The maximized peak level complies with the average limit, unnecessary to perform an average measurement 											



<Sample 1>

**24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(1GHz to 18GHz)**

24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.06GHz	2318	46.04	-	-27.96	74	45.83	27.36	-27.15	-	-	P	H
	2776	47.47	-	-26.53	74	45.40	28.55	-26.48	-	-	P	H
	6465	45.75	-	-28.25	74	55.87	34.99	-45.11	-	-	P	H
	9720	47.97	-	-26.03	74	51.72	38.30	-42.05	-	-	P	H
	13740	37.78	-	-16.22	54	40.19	40.26	-42.67	100	36	A	H
	13740	50.65	-	-23.35	74	53.06	40.26	-42.67	100	36	P	H
	16530	41.41	-	-12.59	54	40.12	38.38	-37.09	121	52	A	H
	16530	49.13	-	-24.87	74	47.84	38.38	-37.09	121	52	P	H
	1716	42.83	-	-31.17	74	46.20	25.17	-28.54	-	-	P	V
	2226	45.97	-	-28.03	74	45.87	27.40	-27.30	-	-	P	V
	7875	47.07	-	-26.93	74	53.40	36.90	-43.23	-	-	P	V
	11280	35.99	-	-18.01	54	40.01	39.18	-43.20	100	59	A	V
	11280	49.15	-	-24.85	74	53.17	39.18	-43.20	100	59	P	V
	14220	39.42	-	-14.58	54	40.89	40.64	-42.11	102	72	A	V
	14220	51.01	-	-22.99	74	52.48	40.64	-42.11	102	72	P	V
	16410	41.37	-	-12.63	54	40.72	38.14	-37.49	100	100	A	V
16410	50.29	-	-23.71	74	49.64	38.14	-37.49	100	100	P	V	

Remark

- No other spurious found.
- Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB)
- The maximized peak level complies with the average limit, unnecessary to perform an average measurement
- The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.15GHz	2152	45.34	-	-28.66	74	45.29	27.50	-27.45	-	-	P	H
	2564	47.16	-	-26.84	74	45.73	28.16	-26.73	-	-	P	H
	8430	47.65	-	-26.35	74	53.08	37.22	-42.65	-	-	P	H
	11250	36.07	-	-17.93	54	40.11	39.15	-43.19	100	25	A	H
	11250	49.41	-	-24.59	74	53.45	39.15	-43.19	100	25	P	H
	14130	39.31	-	-14.69	54	41.02	40.63	-42.34	100	71	A	H
	14130	50.71	-	-23.29	74	52.42	40.63	-42.34	100	71	P	H
	16965	42.09	-	-11.91	54	39.81	37.87	-35.59	100	36	A	H
	16965	49.28	-	-24.72	74	47.00	37.87	-35.59	100	36	P	H
	2028	44.97	-	-29.03	74	45.78	26.92	-27.73	-	-	P	V
	2450	45.97	-	-28.03	74	45.10	27.80	-26.93	-	-	P	V
	8445	47.51	-	-26.49	74	52.85	37.28	-42.62	-	-	P	V
	10785	36.80	-	-17.20	54	40.53	39.30	-43.03	100	281	A	V
	10785	49.09	-	-24.91	74	52.82	39.30	-43.03	100	281	P	V
	14040	39.01	-	-14.99	54	41.05	40.54	-42.58	100	32	A	V
	14040	50.17	-	-23.83	74	52.21	40.54	-42.58	100	32	P	V
	16500	41.33	-	-12.67	54	40.03	38.50	-37.20	100	52	A	V
16500	49.80	-	-24.20	74	48.50	38.50	-37.20	100	52	P	V	
Remark	<ol style="list-style-type: none"> 1. No other spurious found. 2. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) 3. The maximized peak level complies with the average limit, unnecessary to perform an average measurement 4. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 											



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz	2052	44.77	-	-29.23	74	45.32	27.12	-27.67	-	-	P	H
	2458	46.03	-	-27.97	74	45.13	27.82	-26.92	-	-	P	H
	6645	45.37	-	-28.63	74	54.33	35.89	-44.85	-	-	P	H
	9105	47.32	-	-26.68	74	51.29	38.01	-41.98	-	-	P	H
	10725	36.50	-	-17.50	54	40.20	39.30	-43.00	100	33	A	H
	10725	48.67	-	-25.33	74	52.37	39.30	-43.00	100	33	P	H
	14115	38.32	-	-15.68	54	40.09	40.61	-42.38	100	28	A	H
	14115	50.36	-	-23.64	74	52.13	40.61	-42.38	100	28	P	H
	2070	44.37	-	-29.63	74	44.74	27.26	-27.63	-	-	P	V
	2422	45.83	-	-28.17	74	45.18	27.63	-26.98	-	-	P	V
	7755	45.93	-	-28.07	74	52.75	36.61	-43.43	-	-	P	V
	9195	47.91	-	-26.09	74	51.59	38.28	-41.96	-	-	P	V
	10995	35.74	-	-18.26	54	39.93	38.91	-43.10	100	22	A	V
	10995	49.24	-	-24.76	74	53.43	38.91	-43.10	100	22	P	V
	14025	36.90	-	-17.10	54	38.98	40.53	-42.61	102	32	A	V
14025	50.14	-	-23.86	74	52.22	40.53	-42.61	102	32	P	V	
Remark	<ol style="list-style-type: none"> No other spurious found. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) The maximized peak level complies with the average limit, unnecessary to perform an average measurement The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 											



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + BLE 2M Ch39 2480MHz	2210	44.99	-	-29.01	74	44.92	27.40	-27.33	-	-	P	H
	2756	47.48	-	-26.52	74	45.47	28.51	-26.50	-	-	P	H
	7035	44.91	-	-29.09	74	52.96	35.94	-43.99	-	-	P	H
	10395	47.87	-	-26.13	74	51.82	38.90	-42.85	-	-	P	H
	13395	48.99	-	-25.01	74	51.56	40.08	-42.65	100	233	P	H
	13395	37.72	-	-16.28	54	40.29	40.08	-42.65	100	233	A	H
	16710	48.35	-	-25.65	74	46.74	38.09	-36.48	100	77	P	H
	16710	36.78	-	-17.22	54	35.17	38.09	-36.48	100	77	A	H
	2248	44.77	-	-29.23	74	44.64	27.40	-27.27	-	-	P	V
	2958	47.96	-	-26.04	74	44.98	29.18	-26.20	-	-	P	V
	6495	44.15	-	-29.85	74	54.03	35.17	-45.05	-	-	P	V
	10485	47.64	-	-26.36	74	51.65	38.90	-42.91	-	-	P	V
	13050	50.16	-	-23.84	74	53.06	39.80	-42.70	100	45	P	V
	13050	37.67	-	-16.33	54	40.57	39.80	-42.70	100	45	A	V
	16485	48.80	-	-25.20	74	47.60	38.44	-37.24	100	133	P	V
16485	37.82	-	-16.18	54	36.62	38.44	-37.24	100	133	A	V	
Remark	<ol style="list-style-type: none"> No other spurious found. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) The maximized peak level complies with the average limit, unnecessary to perform an average measurement The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 											



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	2998	47.12	-	-26.88	74	43.66	29.58	-26.12	-	-	P	H
	5104	55.40	-	-18.60	74	45.38	33.11	-23.09	100	112	P	H
	5104	44.12	-	-9.88	54	34.10	33.11	-23.09	100	112	A	H
	6988	57.56	-	-16.44	74	43.01	35.80	-21.25	100	89	P	H
	6988	47.35	-	-6.65	54	32.80	35.80	-21.25	100	89	A	H
	8298	47.82	-	-26.18	74	53.28	37.10	-42.56	-	-	P	H
	11158	49.03	-	-24.97	74	53.10	39.02	-43.09	100	86	P	H
	11158	38.13	-	-15.87	54	42.20	39.02	-43.09	100	86	A	H
	14194	50.76	-	-23.24	74	52.32	40.69	-42.25	100	115	P	H
	14194	40.21	-	-13.79	54	41.77	40.69	-42.25	100	115	A	H
	17109	49.12	-	-24.88	74	46.20	38.03	-35.11	100	163	P	H
	17109	39.12	-	-14.88	54	36.20	38.03	-35.11	100	163	A	H
	3046	47.44	-	-26.56	74	43.71	29.78	-26.05	-	-	P	V
	5050	54.66	-	-19.34	74	44.48	33.30	-23.12	100	102	P	V
	5050	44.38	-	-9.62	54	34.20	33.30	-23.12	100	102	A	V
	6910	57.21	-	-16.79	74	42.84	35.80	-21.43	100	53	P	V
	6910	47.02	-	-6.98	54	32.65	35.80	-21.43	100	53	A	V
	8969	47.43	-	-26.57	74	51.38	37.90	-41.85	-	-	P	V
	11246	49.83	-	-24.17	74	53.80	39.15	-43.12	100	38	P	V
	11246	37.56	-	-16.44	54	41.53	39.15	-43.12	100	38	A	V
14183	50.21	-	-23.79	74	51.82	40.68	-42.29	100	85	P	V	
14183	40.39	-	-13.61	54	42.00	40.68	-42.29	100	85	A	V	
16955	48.84	-	-25.16	74	46.63	37.89	-35.68	100	113	P	V	
16955	39.22	-	-14.78	54	37.01	37.89	-35.68	100	113	A	V	

Remark

- No other spurious found.
- Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB)
- The maximized peak level complies with the average limit, unnecessary to perform an average measurement
- The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	2112	44.90	-	-29.10	74	44.94	27.50	-27.54	-	-	P	H
	2994	47.48	-	-26.52	74	44.07	29.54	-26.13	-	-	P	H
	6525	44.60	-	-29.40	74	54.27	35.35	-45.02	-	-	P	H
	11490	48.07	-	-25.93	74	52.14	39.21	-43.28	100	82	P	H
	11490	38.17	-	-15.83	54	42.24	39.21	-43.28	100	82	A	H
	14205	49.15	-	-24.85	74	50.61	40.69	-42.15	100	223	P	H
	14205	40.12	-	-13.88	54	41.58	40.69	-42.15	100	223	A	H
	16455	47.94	-	-26.06	74	46.96	38.32	-37.34	-	-	P	H
	2186	44.96	-	-29.04	74	44.91	27.43	-27.38	-	-	P	V
	2982	47.62	-	-26.38	74	44.35	29.42	-26.15	-	-	P	V
	4965	45.35	-	-28.65	74	58.32	33.09	-46.06	-	-	P	V
	10905	48.10	-	-25.90	74	52.08	39.09	-43.07	100	57	P	V
	10905	38.74	-	-15.26	54	42.72	39.09	-43.07	100	57	A	V
	14160	49.49	-	-24.51	74	51.09	40.66	-42.26	100	23	P	V
	14160	40.02	-	-13.98	54	41.62	40.66	-42.26	100	23	A	V
16545	47.93	-	-26.07	74	46.64	38.32	-37.03			P	V	
Remark	<ol style="list-style-type: none"> No other spurious found. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) The maximized peak level complies with the average limit, unnecessary to perform an average measurement The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 											



<Sample 2>

**24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(1GHz to 18GHz)**

24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz	1402	41.70	-	-32.30	74	45.92	25.70	-29.92	-	-	P	H
	2986	47.46	-	-26.54	74	44.14	29.46	-26.14	-	-	P	H
	6600	45.58	-	-28.42	74	54.69	35.80	-44.91	-	-	P	H
	10875	48.80	-	-25.20	74	52.71	39.15	-43.06	100	31	P	H
	10875	35.77	-	-18.23	54	39.68	39.15	-43.06	100	31	A	H
	14130	49.94	-	-24.06	74	51.65	40.63	-42.34	100	88	P	H
	14130	37.62	-	-16.38	54	39.33	40.63	-42.34	100	88	A	H
	16485	49.00	-	-25.00	74	47.80	38.44	-37.24	100	118	P	H
	16485	40.84	-	-13.16	54	39.64	38.44	-37.24	100	118	A	H
	1456	41.53	-	-32.47	74	45.30	25.76	-29.53	-	-	P	V
	2996	47.24	-	-26.76	74	43.81	29.56	-26.13	-	-	P	V
	8940	47.66	-	-26.34	74	51.80	37.92	-42.06	-	-	P	V
	11610	49.16	-	-24.84	74	53.68	38.88	-43.40	100	138	P	V
	11610	37.24	-	-16.76	54	41.76	38.88	-43.40	100	138	A	V
	14220	50.51	-	-23.49	74	51.98	40.64	-42.11	100	165	P	V
	14220	39.54	-	-14.46	54	41.01	40.64	-42.11	100	165	A	V
	16485	48.50	-	-25.50	74	47.30	38.44	-37.24	100	196	P	V
16485	40.79	-	-13.21	54	39.59	38.44	-37.24	100	196	A	V	
Remark	1. No other spurious found. 2. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) 3. The maximized peak level complies with the average limit, unnecessary to perform an average measurement 4. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only											



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + BLE 2M Ch39 2480MHz	2334	45.47	-	-28.53	74	45.26	27.33	-27.12	-	-	P	H
	2774	47.48	-	-26.52	74	45.41	28.55	-26.48	-	-	P	H
	6480	44.75	-	-29.25	74	54.75	35.08	-45.08	-	-	P	H
	11235	49.05	-	-24.95	74	53.11	39.13	-43.19	100	62	P	H
	11235	37.86	-	-16.14	54	41.92	39.13	-43.19	100	62	A	H
	13575	49.96	-	-24.04	74	52.26	40.35	-42.65	100	163	P	H
	13575	39.62	-	-14.38	54	41.92	40.35	-42.65	100	163	A	H
	16395	48.61	-	-25.39	74	48.05	38.10	-37.54	100	211	P	H
	16395	38.94	-	-15.06	54	38.38	38.10	-37.54	100	211	A	V
	2132	44.87	-	-29.13	74	44.87	27.50	-27.50	-	-	P	V
	2850	47.25	-	-26.75	74	45.02	28.60	-26.37	-	-	P	V
	4965	47.37	-	-26.63	74	60.34	33.09	-46.06	-	-	P	V
	8940	46.67	-	-27.33	74	50.81	37.92	-42.06	-	-	P	V
	13590	49.51	-	-24.49	74	51.78	40.38	-42.65	100	38	P	V
	13590	39.67	-	-14.33	54	41.94	40.38	-42.65	100	38	A	V
16410	48.29	-	-25.71	74	47.64	38.14	-37.49	100	75	P	P	
16410	38.85	-	-15.15	54	38.20	38.14	-37.49	100	75	A	A	
Remark	<ol style="list-style-type: none"> No other spurious found. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) The maximized peak level complies with the average limit, unnecessary to perform an average measurement The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 											



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	2296	45.15	-	-28.85	74	44.94	27.40	-27.19	-	-	P	H
	2968	47.55	-	-26.45	74	44.44	29.28	-26.17	-	-	P	H
	6465	43.92	-	-30.08	74	54.04	34.99	-45.11	-	-	P	H
	10935	48.60	-	-25.40	74	52.65	39.03	-43.08	100	69	P	H
	10935	38.65	-	-15.35	54	42.70	39.03	-43.08	100	69	A	H
	14295	50.75	-	-23.25	74	52.24	40.42	-41.91	100	176	P	H
	14295	40.00	-	-14.00	54	41.49	40.42	-41.91	100	176	A	H
	16470	48.46	-	-25.54	74	47.37	38.38	-37.29	100	133	P	H
	16470	39.19	-	-14.81	54	38.10	38.38	-37.29	100	133	A	V
	2186	45.30	-	-28.70	74	45.25	27.43	-27.38	-	-	P	V
	2988	47.98	-	-26.02	74	44.64	29.48	-26.14	-	-	P	V
	6570	44.38	-	-29.62	74	53.71	35.62	-44.95	-	-	P	V
	10260	47.09	-	-26.91	74	50.98	38.84	-42.73	-	-	P	V
	14175	49.60	-	-24.40	74	51.16	40.67	-42.23	100	55	P	V
	14175	39.71	-	-14.29	54	41.27	40.67	-42.23	100	55	A	V
16485	47.79	-	-26.21	74	46.59	38.44	-37.24				P	V
Remark	<ol style="list-style-type: none"> No other spurious found. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) The maximized peak level complies with the average limit, unnecessary to perform an average measurement The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 											



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	3040	47.92	-	-26.08	74	44.22	29.76	-26.06	-	-	P	H
	6970	57.35	-	-16.65	74	42.84	35.80	-21.29	100	153	P	H
	6970	47.27	-	-6.73	54	32.76	35.80	-21.29	100	153	A	H
	7781	47.25	-	-26.75	74	53.64	36.66	-43.05	-	-	P	H
	11565	48.80	-	-25.20	74	53.06	39.01	-43.27	100	210	P	H
	11565	38.32	-	-15.68	54	42.58	39.01	-43.27	100	210	A	H
	14579	49.82	-	-24.18	74	50.93	40.32	-41.43	100	138	P	H
	14579	39.42	-	-14.58	54	40.53	40.32	-41.43	100	138	A	H
	16493	49.66	-	-24.34	74	48.45	38.47	-37.26	100	86	P	H
	16493	39.07	-	-14.93	54	37.86	38.47	-37.26	100	86	A	H
	3070	47.85	-	-26.15	74	44.02	29.84	-26.01	-	-	P	H
	6982	57.11	-	-16.89	74	42.58	35.80	-21.27	100	68	P	H
	6982	47.21	-	-6.79	54	32.68	35.80	-21.27	100	68	A	V
	7946	47.07	-	-26.93	74	52.97	36.90	-42.80	-	-	P	V
	11576	48.81	-	-25.19	74	53.12	38.97	-43.28	100	41	P	V
	11576	38.23	-	-15.77	54	42.54	38.97	-43.28	100	41	A	V
	13589	50.12	-	-23.88	74	52.43	40.38	-42.69	100	108	P	V
13589	39.49	-	-14.51	54	41.80	40.38	-42.69	100	108	A	V	
16900	48.83	-	-25.17	74	46.70	38.00	-35.87	100	93	P	V	
16900	38.90	-	-15.10	54	36.77	38.00	-35.87	100	93	A	V	

Remark

- No other spurious found.
- Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB)
- The maximized peak level complies with the average limit, unnecessary to perform an average measurement
- The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only



<Sample 1>

**24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(18GHz to 40GHz)**

24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.06GHz	36794.35	46.57	-9.54	-27.43	74	62.94	42.84	-49.67	-	-	P	H
	37003.09	47.09	-9.54	-26.91	74	63.07	42.99	-49.43	-	-	P	V
24.15GHz	37659.13	45.34	-9.54	-28.66	74	61.28	42.73	-49.13	-	-	P	H
	37256.56	45.62	-9.54	-28.38	74	62.12	42.41	-49.37	-	-	P	V
24.24GHz	37659.13	45.34	-9.54	-28.66	74	61.28	42.73	-49.13	-	-	P	H
	37256.56	45.62	-9.54	-28.38	74	62.12	42.41	-49.37	-	-	P	V

Remark

1. No other spurious found.
2. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB)
3. Distance extrapolation factor = 20 log (test distance [X m]/specific distance [3 m]) (dB)
Distance extrapolation factor = 20log (1m/3m) = -9.54 (dB)
4. The maximized peak level complies with the average limit, unnecessary to perform an average measurement
5. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + BLE 2M Ch39 2480MHz	39846	45.73	-9.54	-28.27	74	57.56	44.55	-46.84	-	-	P	H
	40000	47.78	-9.54	-26.22	74	59.06	44.8	-46.54	-	-	P	V
24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	39538	46.93	-9.54	-27.07	74	59.45	44.48	-47.46	-	-	P	H
	39930	46.03	-9.54	-27.97	74	57.56	44.69	-46.68	-	-	P	V
24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	39636	46.68	-9.54	-27.32	74	59.04	44.45	-47.27	-	-	P	H
	39986	47.08	-9.54	-26.92	74	58.41	44.78	-46.57	-	-	P	V
Remark	<ol style="list-style-type: none"> No other spurious found. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) Distance extrapolation factor = 20 log (test distance [X m]/specific distance [3 m]) (dB) Distance extrapolation factor = 20log (1m/3m) = -9.54 (dB) The maximized peak level complies with the average limit, unnecessary to perform an average measurement The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 											



<Sample 2>

**24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(18GHz to 40GHz)**

24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz	37534.24	45.23	-9.54	-28.77	74	61.41	42.63	-49.27	-	-	P	H
	37786.42	45.52	-9.54	-28.48	74	61.22	42.84	-49.00	-	-	P	V
24.24GHz + BLE 2M Ch39 2480MHz	38614	46.83	-9.54	-27.17	74	60.71	43.65	-47.99	-	-	P	H
	39930	46.29	-9.54	-27.71	74	57.82	44.69	-46.68	-	-	P	V
24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	39986	47.38	-9.54	-26.62	74	58.71	44.78	-46.57	-	-	P	H
	39930	47.38	-9.54	-26.62	74	58.91	44.69	-46.68	-	-	P	V
24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	39986	47.87	-9.54	-26.13	74	59.2	44.78	-46.57	-	-	P	H
	39944	47.36	-9.54	-26.64	74	58.84	44.71	-46.65	-	-	P	V

Remark

- No other spurious found.
- Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB)
- Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]})$ (dB)
Distance extrapolation factor = $20 \log (1\text{m}/3\text{m}) = -9.54$ (dB)
- The maximized peak level complies with the average limit, unnecessary to perform an average measurement
- The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only



<Sample 1>

**24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(Above 40GHz)**

24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	EIRP	Ant	Table	Peak	Pol.
			Factor		Line	Level	Pos	Pos	Avg.	
	(GHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBm)	(cm)	(deg)	(P/A)	(H/V)
24.06GHz	46.02	56.48	-9.54	-17.54	74.00	-38.78	-	-	P	H
	49.58	45.36	-9.54	-8.66	54.00	-49.90	-	-	A	H
	48.12	54.76	-9.54	-33.21	87.95	-40.50	-	-	P	H
	48.12	46.57	-9.54	-21.40	67.95	-48.69	-	-	A	H
	60.00	59.07	-9.54	-14.95	74.00	-36.19	-	-	P	H
	60.02	48.37	-9.54	-5.65	54.00	-46.89	-	-	A	H
	72.18	47.11	-9.54	-40.86	87.95	-48.15	-	-	P	H
	72.18	37.84	-9.54	-30.13	67.95	-57.42	-	-	A	H
	91.95	62.52	-15.56	-11.48	74.00	-32.72	-	-	P	H
	91.96	52.84	-15.56	-1.16	54.00	-42.40	-	-	A	H
	96.24	57.12	-15.56	-30.83	87.95	-38.12	-	-	P	H
	96.24	48.41	-15.56	-19.54	67.95	-46.83	-	-	A	H
	46.02	56.39	-9.54	-17.63	74.00	-38.87	-	-	P	V
	49.58	47.96	-9.54	-6.06	54.00	-47.30	-	-	A	V
	48.12	57.25	-9.54	-30.72	87.95	-38.01	-	-	P	V
	48.12	49.00	-9.54	-18.97	67.95	-46.26	-	-	A	V
	60.02	60.03	-9.54	-13.99	74.00	-35.23	-	-	P	V
	60.01	48.35	-9.54	-5.67	54.00	-46.91	-	-	A	V
	72.18	47.09	-9.54	-40.88	87.95	-48.17	-	-	P	V
	72.18	37.74	-9.54	-30.23	67.95	-57.52	-	-	A	V
91.33	63.22	-15.56	-10.78	74.00	-32.02	-	-	P	V	
92.14	52.62	-15.56	-1.38	54.00	-42.62	-	-	A	V	
96.24	56.99	-15.56	-30.96	87.95	-38.25	-	-	P	V	
96.24	48.77	-15.56	-19.18	67.95	-46.47	-	-	A	V	

Remark

- No other spurious found.
- $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$; where D is the measurement distance in meters.
- Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]}) \text{ (dB)}$
Distance extrapolation factor = $20 \log (1\text{m}/3\text{m}) = -9.54 \text{ (dB)}$
- The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	EIRP	Ant	Table	Peak	Pol.
			Factor		Line	Level	Pos	Pos	Avg.	
	(GHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBm)	(cm)	(deg)	(P/A)	(H/V)
24.15GHz	45.80	56.80	-9.54	-17.22	74.00	-38.46	-	-	P	H
	49.76	44.25	-9.54	-9.77	54.00	-51.01	-	-	A	H
	48.30	54.61	-9.54	-33.36	87.95	-40.65	-	-	P	H
	48.30	46.43	-9.54	-21.54	67.95	-48.83	-	-	A	H
	60.02	60.26	-9.54	-13.76	74.00	-35.00	-	-	P	H
	60.00	48.31	-9.54	-5.71	54.00	-46.95	-	-	A	H
	72.45	47.05	-9.54	-40.92	87.95	-48.21	-	-	P	H
	72.45	37.91	-9.54	-30.06	67.95	-57.35	-	-	A	H
	92.51	62.81	-15.56	-11.19	74.00	-32.43	-	-	P	H
	92.03	52.62	-15.56	-1.38	54.00	-42.62	-	-	A	H
	96.60	56.66	-15.56	-31.29	87.95	-38.58	-	-	P	H
	96.60	48.07	-15.56	-19.88	67.95	-47.17	-	-	A	H
	48.68	56.99	-9.54	-17.03	74.00	-38.27	-	-	P	V
	49.76	46.19	-9.54	-7.83	54.00	-49.07	-	-	A	V
	48.30	57.09	-9.54	-30.88	87.95	-38.17	-	-	P	V
	48.30	48.39	-9.54	-19.58	67.95	-46.87	-	-	A	V
	60.02	59.07	-9.54	-14.95	74.00	-36.19	-	-	P	V
	60.01	48.55	-9.54	-5.47	54.00	-46.71	-	-	A	V
	72.45	46.22	-9.54	-41.75	87.95	-49.04	-	-	P	V
	72.45	37.59	-9.54	-30.38	67.95	-57.67	-	-	A	V
91.94	62.66	-15.56	-11.34	74.00	-32.58	-	-	P	V	
92.08	52.60	-15.56	-1.40	54.00	-42.64	-	-	A	V	
96.60	56.32	-15.56	-31.63	87.95	-38.92	-	-	P	V	
96.60	48.23	-15.56	-19.72	67.95	-47.01	-	-	A	V	
Remark	<ol style="list-style-type: none"> No other spurious found. $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$; where D is the measurement distance in meters. Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]}) \text{ (dB)}$ Distance extrapolation factor = $20 \log (1\text{m}/3\text{m}) = -9.54 \text{ (dB)}$ The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 									



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	EIRP	Ant	Table	Peak	Pol.
			Factor		Line	Level	Pos	Pos	Avg.	
	(GHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBm)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz	48.48	57.76	-9.54	-30.21	87.95	-37.50	-	-	P	H
	48.48	46.64	-9.54	-21.33	67.95	-48.62	-	-	A	H
	49.01	56.22	-9.54	-17.80	74.00	-39.04	-	-	P	H
	49.94	44.89	-9.54	-9.13	54.00	-50.37	-	-	A	H
	60.08	58.97	-9.54	-15.05	74.00	-36.29	-	-	P	H
	60.00	48.44	-9.54	-5.58	54.00	-46.82	-	-	A	H
	72.72	46.63	-9.54	-41.34	87.95	-48.63	-	-	P	H
	72.72	37.50	-9.54	-30.47	67.95	-57.76	-	-	A	H
	92.03	63.17	-15.56	-10.83	74.00	-32.07	-	-	P	H
	91.92	52.69	-15.56	-1.31	54.00	-42.55	-	-	A	H
	96.96	55.92	-15.56	-32.03	87.95	-39.32	-	-	P	H
	96.96	47.68	-15.56	-20.27	67.95	-47.56	-	-	A	H
	48.22	57.27	-9.54	-16.75	74.00	-37.99	-	-	P	V
	49.94	47.14	-9.54	-6.88	54.00	-48.12	-	-	A	V
	48.48	56.70	-9.54	-31.27	87.95	-38.56	-	-	P	V
	48.48	49.18	-9.54	-18.79	67.95	-46.08	-	-	A	V
	60.01	58.79	-9.54	-15.23	74.00	-36.47	-	-	P	V
	60.01	48.45	-9.54	-5.57	54.00	-46.81	-	-	A	V
	72.72	46.39	-9.54	-41.58	87.95	-48.87	-	-	P	V
	72.72	37.61	-9.54	-30.36	67.95	-57.65	-	-	A	V
93.51	62.58	-15.56	-11.42	74.00	-32.66	-	-	P	V	
92.20	52.66	-15.56	-1.34	54.00	-42.58	-	-	A	V	
96.96	55.74	-15.56	-32.21	87.95	-39.50	-	-	P	V	
96.96	47.50	-15.56	-20.45	67.95	-47.74	-	-	A	V	
Remark	<ol style="list-style-type: none"> No other spurious found. $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$; where D is the measurement distance in meters. Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]}) \text{ (dB)}$ Distance extrapolation factor = $20 \log (1\text{m}/3\text{m}) = -9.54 \text{ (dB)}$ The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 									



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	EIRP	Ant	Table	Peak	Pol.
			Factor		Line	Level	Pos	Pos	Avg.	
	(GHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBm)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + BLE 2M Ch39 2480MHz	46.04	57.17	-9.54	-16.85	74.00	-38.09	-	-	P	H
	46.30	46.06	-9.54	-7.96	54.00	-49.20	-	-	A	H
	48.48	54.45	-9.54	-33.52	87.95	-40.81	-	-	P	H
	48.48	45.19	-9.54	-22.78	67.95	-50.07	-	-	A	H
	60.04	57.49	-9.54	-16.53	74.00	-37.77	-	-	P	H
	60.01	47.13	-9.54	-6.89	54.00	-48.13	-	-	A	H
	72.72	44.90	-9.54	-43.07	87.95	-50.36	-	-	P	H
	72.72	36.33	-9.54	-31.64	67.95	-58.93	-	-	A	H
	90.33	62.89	-15.56	-11.11	74.00	-32.35	-	-	P	H
	90.32	52.64	-15.56	-1.36	54.00	-42.60	-	-	A	H
	96.96	47.86	-15.56	-40.09	87.95	-47.38	-	-	P	H
	96.96	39.38	-15.56	-28.57	67.95	-55.86	-	-	A	H
	46.08	57.44	-9.54	-16.58	74.00	-37.82	-	-	P	V
	48.31	45.80	-9.54	-8.22	54.00	-49.46	-	-	A	V
	48.48	54.55	-9.54	-33.42	87.95	-40.71	-	-	P	V
	48.48	45.27	-9.54	-22.70	67.95	-49.99	-	-	A	V
	60.03	57.64	-9.54	-16.38	74.00	-37.62	-	-	P	V
	60.02	47.18	-9.54	-6.84	54.00	-48.08	-	-	A	V
	72.72	45.17	-9.54	-42.80	87.95	-50.09	-	-	P	V
	72.72	36.40	-9.54	-31.57	67.95	-58.86	-	-	A	V
90.82	62.99	-15.56	-11.01	74.00	-32.25	-	-	P	V	
90.32	52.75	-15.56	-1.25	54.00	-42.49	-	-	A	V	
96.96	62.99	-15.56	-24.96	87.95	-32.25	-	-	P	V	
96.96	39.38	-15.56	-28.57	67.95	-55.86	-	-	A	V	
Remark	<ol style="list-style-type: none"> No other spurious found. $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$; where D is the measurement distance in meters. Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]}) \text{ (dB)}$ Distance extrapolation factor = $20 \log (1\text{m}/3\text{m}) = -9.54 \text{ (dB)}$ The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 									



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	EIRP	Ant	Table	Peak	Pol.
			Factor		Line	Level	Pos	Pos	Avg.	
	(GHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBm)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	48.13	57.66	-9.54	-16.36	74.00	-37.60	-	-	P	H
	46.16	45.88	-9.54	-8.14	54.00	-49.38	-	-	A	H
	48.48	54.24	-9.54	-33.73	87.95	-41.02	-	-	P	H
	48.48	45.25	-9.54	-22.72	67.95	-50.01	-	-	A	H
	60.02	58.22	-9.54	-15.80	74.00	-37.04	-	-	P	H
	60.00	47.12	-9.54	-6.90	54.00	-48.14	-	-	A	H
	72.72	46.15	-9.54	-41.82	87.95	-49.11	-	-	P	H
	72.72	36.57	-9.54	-31.40	67.95	-58.69	-	-	A	H
	90.34	63.16	-15.56	-10.84	74.00	-32.08	-	-	P	H
	90.29	52.77	-15.56	-1.23	54.00	-42.47	-	-	A	H
	96.96	48.21	-15.56	-39.74	87.95	-47.03	-	-	P	H
	96.96	39.40	-15.56	-28.55	67.95	-55.84	-	-	A	H
	48.26	57.14	-9.54	-16.88	74.00	-38.12	-	-	P	V
	46.20	46.01	-9.54	-8.01	54.00	-49.25	-	-	A	V
	48.48	53.13	-9.54	-34.84	87.95	-42.13	-	-	P	V
	48.48	44.96	-9.54	-23.01	67.95	-50.30	-	-	A	V
	60.03	57.90	-9.54	-16.12	74.00	-37.36	-	-	P	V
	60.01	47.21	-9.54	-6.81	54.00	-48.05	-	-	A	V
	72.72	45.68	-9.54	-42.29	87.95	-49.58	-	-	P	V
	72.72	36.16	-9.54	-31.81	67.95	-59.10	-	-	A	V
91.40	63.29	-15.56	-10.71	74.00	-31.95	-	-	P	V	
90.29	52.68	-15.56	-1.32	54.00	-42.56	-	-	A	V	
96.96	48.14	-15.56	-39.81	87.95	-47.10	-	-	P	V	
96.96	39.52	-15.56	-28.43	67.95	-55.72	-	-	A	V	
Remark	<ol style="list-style-type: none"> No other spurious found. $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$; where D is the measurement distance in meters. Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]}) \text{ (dB)}$ Distance extrapolation factor = $20 \log (1\text{m}/3\text{m}) = -9.54 \text{ (dB)}$ The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 									



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	EIRP	Ant	Table	Peak	Pol.
			Factor		Line	Level	Pos	Pos	Avg.	
	(GHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBm)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	48.21	57.67	-9.54	-16.35	74.00	-37.59	-	-	P	H
	46.06	45.95	-9.54	-8.07	54.00	-49.31	-	-	A	H
	48.48	55.89	-9.54	-32.08	87.95	-39.37	-	-	P	H
	48.48	45.48	-9.54	-22.49	67.95	-49.78	-	-	A	H
	60.04	58.69	-9.54	-15.33	74.00	-36.57	-	-	P	H
	60.02	47.28	-9.54	-6.74	54.00	-47.98	-	-	A	H
	72.72	46.02	-9.54	-41.95	87.95	-49.24	-	-	P	H
	72.72	36.66	-9.54	-31.31	67.95	-58.60	-	-	A	H
	90.31	63.79	-15.56	-10.21	74.00	-31.45	-	-	P	H
	90.31	52.83	-15.56	-1.17	54.00	-42.41	-	-	A	H
	96.96	49.34	-15.56	-38.61	87.95	-45.90	-	-	P	H
	96.96	39.44	-15.56	-28.51	67.95	-55.80	-	-	A	H
	48.09	57.69	-9.54	-16.33	74.00	-37.57	-	-	P	V
	46.28	45.85	-9.54	-8.17	54.00	-49.41	-	-	A	V
	48.48	53.58	-9.54	-34.39	87.95	-41.68	-	-	P	V
	48.48	45.11	-9.54	-22.86	67.95	-50.15	-	-	A	V
	60.05	58.26	-9.54	-15.76	74.00	-37.00	-	-	P	V
	60.04	47.27	-9.54	-6.75	54.00	-47.99	-	-	A	V
	72.72	44.97	-9.54	-43.00	87.95	-50.29	-	-	P	V
	72.72	36.45	-9.54	-31.52	67.95	-58.81	-	-	A	V
90.35	62.67	-15.56	-11.33	74.00	-32.57	-	-	P	V	
90.33	52.72	-15.56	-1.28	54.00	-42.52	-	-	A	V	
96.96	47.83	-15.56	-40.12	87.95	-47.41	-	-	P	V	
96.96	39.29	-15.56	-28.66	67.95	-55.95	-	-	A	V	
Remark	<ol style="list-style-type: none"> No other spurious found. $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$; where D is the measurement distance in meters. Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]}) \text{ (dB)}$ Distance extrapolation factor = $20 \log (1\text{m}/3\text{m}) = -9.54 \text{ (dB)}$ The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 									



<Sample 2>

**24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(Above 40GHz)**

24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	EIRP	Ant	Table	Peak	Pol.
			Factor		Line	Level	Pos	Pos	Avg.	
	(GHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBm)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz	46.66	56.77	-9.54	-17.25	74.00	-38.49	-	-	P	H
	46.36	45.55	-9.54	-8.47	54.00	-49.71	-	-	A	H
	48.48	54.89	-9.54	-33.08	87.95	-40.37	-	-	P	H
	48.48	45.02	-9.54	-22.95	67.95	-50.24	-	-	A	H
	60.02	57.46	-9.54	-16.56	74.00	-37.80	-	-	P	H
	60.02	47.29	-9.54	-6.73	54.00	-47.97	-	-	A	H
	72.72	45.92	-9.54	-42.05	87.95	-49.34	-	-	P	H
	72.72	38.14	-9.54	-29.83	67.95	-57.12	-	-	A	H
	90.99	61.92	-15.56	-12.08	74.00	-33.32	-	-	P	H
	90.94	53.78	-15.56	-0.22	54.00	-41.46	-	-	A	H
	96.96	51.80	-15.56	-36.15	87.95	-43.44	-	-	P	H
	96.96	43.10	-15.56	-24.85	67.95	-52.14	-	-	A	H
	47.60	56.90	-9.54	-17.12	74.00	-38.36	-	-	P	V
	46.35	45.86	-9.54	-8.16	54.00	-49.40	-	-	A	V
	48.48	53.52	-9.54	-34.45	87.95	-41.74	-	-	P	V
	48.48	45.22	-9.54	-22.75	67.95	-50.04	-	-	A	V
	60.07	57.47	-9.54	-16.55	74.00	-37.79	-	-	P	V
	60.27	47.77	-9.54	-6.25	54.00	-47.49	-	-	A	V
	72.72	47.86	-9.54	-40.11	87.95	-47.40	-	-	P	V
	72.72	37.73	-9.54	-30.24	67.95	-57.53	-	-	A	V
90.41	34.36	-15.56	-39.64	74.00	-60.88	-	-	P	V	
90.97	53.33	-15.56	-1.33	54.00	-41.91	-	-	A	V	
96.96	50.78	-15.56	-37.17	87.95	-44.46	-	-	P	V	
96.96	43.23	-15.56	-24.72	67.95	-52.01	-	-	A	V	

Remark

- No other spurious found.
- $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$; where D is the measurement distance in meters.
- Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]}) \text{ (dB)}$
Distance extrapolation factor = $20 \log (1\text{m}/3\text{m}) = -9.54 \text{ (dB)}$
- The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	EIRP	Ant	Table	Peak	Pol.
			Factor		Line	Level	Pos	Pos	Avg.	
	(GHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBm)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + BLE 2M Ch39 2480MHz	45.98	57.49	-9.54	-16.53	74.00	-37.77	-	-	P	H
	46.12	45.85	-9.54	-8.17	54.00	-49.41	-	-	A	H
	48.48	54.32	-9.54	-33.65	87.95	-40.94	-	-	P	H
	48.48	45.15	-9.54	-22.82	67.95	-50.11	-	-	A	H
	60.07	57.29	-9.54	-16.73	74.00	-37.97	-	-	P	H
	60.01	47.21	-9.54	-6.81	54.00	-48.05	-	-	A	H
	72.72	46.48	-9.54	-41.49	87.95	-48.78	-	-	P	H
	72.72	36.51	-9.54	-31.46	67.95	-58.75	-	-	A	H
	90.34	63.28	-15.56	-10.72	74.00	-31.96	-	-	P	H
	90.31	52.74	-15.56	-1.26	54.00	-42.50	-	-	A	H
	96.96	46.99	-15.56	-40.96	87.95	-48.25	-	-	P	H
	96.96	39.18	-15.56	-28.77	67.95	-56.06	-	-	A	H
	47.84	56.76	-9.54	-17.26	74.00	-38.50	-	-	P	V
	45.93	45.78	-9.54	-8.24	54.00	-49.48	-	-	A	V
	48.48	54.65	-9.54	-33.32	87.95	-40.61	-	-	P	V
	48.48	45.25	-9.54	-22.72	67.95	-50.01	-	-	A	V
	60.08	57.63	-9.54	-16.39	74.00	-37.63	-	-	P	V
	60.00	47.25	-9.54	-6.77	54.00	-48.01	-	-	A	V
	72.72	46.91	-9.54	-41.06	87.95	-48.35	-	-	P	V
	72.72	36.20	-9.54	-31.77	67.95	-59.06	-	-	A	V
91.38	62.61	-15.56	-11.39	74.00	-32.63	-	-	P	V	
90.34	52.65	-15.56	-1.35	54.00	-42.59	-	-	A	V	
96.96	48.20	-15.56	-39.75	87.95	-47.04	-	-	P	V	
96.96	39.31	-15.56	-28.64	67.95	-55.93	-	-	A	V	
Remark	<ol style="list-style-type: none"> No other spurious found. $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$; where D is the measurement distance in meters. Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]}) \text{ (dB)}$ Distance extrapolation factor = $20 \log (1\text{m}/3\text{m}) = -9.54 \text{ (dB)}$ The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 									



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	EIRP	Ant	Table	Peak	Pol.
			Factor		Line	Level	Pos	Pos	Avg.	
	(GHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBm)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	48.79	57.01	-9.54	-17.01	74.00	-38.25	-	-	P	H
	46.18	45.92	-9.54	-8.10	54.00	-49.34	-	-	A	H
	48.48	53.15	-9.54	-34.82	87.95	-42.11	-	-	P	H
	48.48	45.07	-9.54	-22.90	67.95	-50.19	-	-	A	H
	60.07	57.75	-9.54	-16.27	74.00	-37.51	-	-	P	H
	60.02	47.29	-9.54	-6.73	54.00	-47.97	-	-	A	H
	72.72	46.47	-9.54	-41.50	87.95	-48.79	-	-	P	H
	72.72	36.39	-9.54	-31.58	67.95	-58.87	-	-	A	H
	91.40	62.94	-15.56	-11.06	74.00	-32.30	-	-	P	H
	90.37	52.61	-15.56	-1.39	54.00	-42.63	-	-	A	H
	96.96	47.57	-15.56	-40.38	87.95	-47.67	-	-	P	H
	96.96	39.24	-15.56	-28.71	67.95	-56.00	-	-	A	H
	46.06	56.56	-9.54	-17.46	74.00	-38.70	-	-	P	V
	46.16	45.93	-9.54	-8.09	54.00	-49.33	-	-	A	V
	48.48	54.94	-9.54	-33.03	87.95	-40.32	-	-	P	V
	48.48	44.89	-9.54	-23.08	67.95	-50.37	-	-	A	V
	60.06	57.65	-9.54	-16.37	74.00	-37.61	-	-	P	V
	60.02	47.18	-9.54	-6.84	54.00	-48.08	-	-	A	V
	72.72	46.58	-9.54	-41.39	87.95	-48.68	-	-	P	V
	72.72	36.12	-9.54	-31.85	67.95	-59.14	-	-	A	V
90.30	63.21	-15.56	-10.79	74.00	-32.03	-	-	P	V	
90.33	52.76	-15.56	-1.24	54.00	-42.48	-	-	A	V	
96.96	48.70	-15.56	-39.25	87.95	-46.54	-	-	P	V	
96.96	39.42	-15.56	-28.53	67.95	-55.82	-	-	A	V	
Remark	<ol style="list-style-type: none"> No other spurious found. $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$; where D is the measurement distance in meters. Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]}) \text{ (dB)}$ Distance extrapolation factor = $20 \log (1\text{m}/3\text{m}) = -9.54 \text{ (dB)}$ The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 									



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	EIRP	Ant	Table	Peak	Pol.
			Factor		Line	Level	Pos	Pos	Avg.	
	(GHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBm)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	48.02	57.04	-9.54	-16.98	74.00	-38.22	-	-	P	H
	45.97	45.93	-9.54	-8.09	54.00	-49.33	-	-	A	H
	48.48	53.34	-9.54	-34.63	87.95	-41.92	-	-	P	H
	48.48	45.01	-9.54	-22.96	67.95	-50.25	-	-	A	H
	60.00	58.92	-9.54	-15.10	74.00	-36.34	-	-	P	H
	60.01	47.16	-9.54	-6.86	54.00	-48.10	-	-	A	H
	72.72	47.30	-9.54	-40.67	87.95	-47.96	-	-	P	H
	72.72	36.54	-9.54	-31.43	67.95	-58.72	-	-	A	H
	90.31	64.05	-15.56	-9.95	74.00	-31.19	-	-	P	H
	90.31	52.53	-15.56	-1.47	54.00	-42.71	-	-	A	H
	96.96	48.40	-15.56	-39.55	87.95	-46.84	-	-	P	H
	96.96	39.91	-15.56	-28.04	67.95	-55.33	-	-	A	H
	48.61	57.74	-9.54	-16.28	74.00	-37.52	-	-	P	V
	48.11	45.90	-9.54	-8.12	54.00	-49.36	-	-	A	V
	48.48	53.30	-9.54	-34.67	87.95	-41.96	-	-	P	V
	48.48	45.20	-9.54	-22.77	67.95	-50.06	-	-	A	V
	60.05	58.04	-9.54	-15.98	74.00	-37.22	-	-	P	V
	60.02	47.12	-9.54	-6.90	54.00	-48.14	-	-	A	V
	72.72	46.07	-9.54	-41.90	87.95	-49.19	-	-	P	V
	72.72	36.31	-9.54	-31.66	67.95	-58.95	-	-	A	V
90.33	62.65	-15.56	-11.35	74.00	-32.59	-	-	P	V	
90.33	52.69	-15.56	-1.31	54.00	-42.55	-	-	A	V	
96.96	46.73	-15.56	-41.22	87.95	-48.51	-	-	P	V	
96.96	39.26	-15.56	-28.69	67.95	-55.98	-	-	A	V	
Remark	<ol style="list-style-type: none"> No other spurious found. $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$; where D is the measurement distance in meters. Distance extrapolation factor = $20 \log (\text{test distance [X m]}/\text{specific distance [3 m]}) \text{ (dB)}$ Distance extrapolation factor = $20 \log (1\text{m}/3\text{m}) = -9.54 \text{ (dB)}$ The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only 									



<Sample 1>

**24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(Below 1GHz)**

24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/Q)	(H/V)
24.24GHz	30.00	23.65	-	-16.35	40	31.04	23.92	-31.31	100	353	QP	H
	65.91	18.40	-	-21.60	40	37.72	11.65	-30.97	150	132	QP	H
	253.56	31.56	-	-14.44	46	42.61	18.50	-29.55	-	-	P	H
	949.60	33.47	-	-12.53	46	29.46	30.15	-26.14	-	-	P	H
	959.40	34.35	-	-11.65	46	29.70	30.66	-26.01	-	-	P	H
	988.10	35.29	-	-18.71	54	30.73	30.21	-25.65	-	-	P	H
	30.00	22.49	-	-17.51	40	29.88	23.92	-31.31	100	2	QP	V
	47.55	32.99	-	-7.01	40	48.89	15.20	-31.10	100	5	QP	V
	63.48	31.88	-	-8.12	40	51.34	11.52	-30.98	-	-	P	V
	951.00	33.49	-	-12.51	46	29.39	30.23	-26.13	-	-	P	V
	959.40	34.39	-	-11.61	46	29.74	30.66	-26.01	-	-	P	V
	964.30	34.50	-	-19.50	54	29.86	30.59	-25.95	-	-	P	V
Remark	1. No other spurious found. 2. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) 3. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.											



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + BLE 2M Ch39 2480MHz	30.00	30.83	-	-9.17	40	38.22	23.92	-31.34	100	333	QP	H
	136.65	27.18	-	-16.32	43.5	40.15	17.35	-30.39	-	-	P	H
	266.52	29.09	-	-16.91	46	39.37	19.23	-29.63	-	-	P	H
	867.00	32.42	-	-13.58	46	30.79	28.72	-27.27	-	-	P	H
	934.20	33.32	-	-12.68	46	30.31	29.37	-26.55	-	-	P	H
	958.70	34.24	-	-11.76	46	29.64	30.62	-26.24	-	-	P	H
	30.27	27.82	-	-12.18	40	35.32	23.80	-31.33	100	352	QP	V
	39.45	36.34	-	-3.66	40	47.94	19.53	-31.18	100	340	QP	V
	54.03	28.62	-	-11.38	40	47.23	12.43	-31.06	100	358	QP	V
	624.10	33.51	-	-12.49	46	35.92	25.83	-28.41	-	-	P	V
	958.00	34.36	-	-11.64	46	29.82	30.58	-26.26	-	-	P	V
	963.60	34.70	-	-19.30	54	30.06	30.60	-26.18	-	-	P	V
24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	30.27	28.22	-	-11.78	40	35.72	23.80	-31.30	100	320	QP	H
	39.45	25.06	-	-14.94	40	36.66	19.53	-31.13	-	-	P	H
	81.03	22.33	-	-17.67	40	39.72	13.29	-30.68	-	-	P	H
	937.70	33.19	-	-12.81	46	29.98	29.53	-26.32	-	-	P	H
	948.20	33.45	-	-12.55	46	29.54	30.08	-26.17	-	-	P	H
	973.40	34.05	-	-19.95	54	29.34	30.54	-25.83	-	-	P	H
	30.27	27.90	-	-12.10	40	35.40	23.80	-31.30	100	308	QP	V
	39.72	35.54	-	-4.46	40	47.26	19.40	-31.12	104	360	QP	V
	54.03	31.90	-	-8.10	40	50.51	12.43	-31.04	-	-	P	V
	624.10	33.67	-	-12.33	46	36.08	25.83	-28.24	-	-	P	V
	958.00	33.55	-	-12.45	46	29.01	30.58	-26.04	-	-	P	V
973.40	34.18	-	-19.82	54	29.47	30.54	-25.83	-	-	P	V	



24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	30.27	28.60	-	-11.40	40	36.10	23.80	-31.30	100	318	QP	H
	35.67	26.06	-	-13.94	40	35.91	21.40	-31.25	-	-	P	H
	135.57	27.07	-	-16.43	43.5	40.07	17.32	-30.32	-	-	P	H
	945.40	32.85	-	-13.15	46	29.10	29.95	-26.20	-	-	P	H
	951.00	33.56	-	-12.44	46	29.46	30.23	-26.13	-	-	P	H
	989.50	34.59	-	-19.41	54	30.08	30.14	-25.63	-	-	P	H
	30.00	26.13	-	-13.87	40	33.52	23.92	-31.31	100	360	QP	V
	35.40	34.57	-	-5.43	40	44.32	21.52	-31.27	100	346	QP	V
	39.18	35.86	-	-4.14	40	47.34	19.66	-31.14	100	350	QP	V
	624.10	33.22	-	-12.78	46	35.63	25.83	-28.24	-	-	P	V
936.30	32.99	-	-13.01	46	29.83	29.49	-26.33	-	-	P	V	
953.10	34.03	-	-11.97	46	29.80	30.33	-26.10	-	-	P	V	
Remark	<ol style="list-style-type: none"> No other spurious found. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only. 											



<Sample 2>

**24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(Below 1GHz)**

24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBμV/m)	(dB)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz	34.32	23.46	-	-16.54	40	32.70	22.04	-31.28	-	-	P	H
	142.05	28.53	-	-14.97	43.5	41.75	17.06	-30.28	-	-	P	H
	268.41	29.34	-	-16.66	46	39.91	18.93	-29.50	-	-	P	H
	568.80	27.56	-	-18.44	46	30.37	25.56	-28.37	-	-	P	H
	717.90	35.44	-	-10.56	46	36.81	26.57	-27.94	-	-	P	H
	952.40	34.50	-	-11.50	46	30.31	30.30	-26.11	-	-	P	H
	37.56	31.94	-	-8.06	40	42.72	20.41	-31.19	100	21	QP	V
	141.78	28.19	-	-15.31	43.5	41.41	17.06	-30.28	-	-	P	V
	268.14	32.36	-	-13.64	46	42.90	18.96	-29.50	-	-	P	V
	624.10	29.70	-	-16.30	46	32.11	25.83	-28.24	-	-	P	V
	717.90	34.82	-	-11.18	46	36.19	26.57	-27.94	-	-	P	V
948.90	33.85	-	-12.15	46	29.89	30.11	-26.15	-	-	P	V	
Remark	1. No other spurious found. 2. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) 3. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.											



24GHz	Frequency	Level	Distance extrapolation	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
			Factor		Line	Level	Factor	Loss	Pos	Pos	Avg.	
	(MHz)	(dBµV/m)	(dB)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24.24GHz + BLE 2M Ch39 2480MHz	30.00	37.83	-	-2.17	40	45.22	23.92	-31.31	100	332	QP	H
	35.67	26.26	-	-13.74	40	36.11	21.40	-31.25	-	-	P	H
	135.84	26.87	-	-16.63	43.5	39.86	17.33	-30.32	-	-	P	H
	878.90	32.34	-	-13.66	46	30.81	28.54	-27.01	-	-	P	H
	929.30	32.43	-	-13.57	46	29.71	29.16	-26.44	-	-	P	H
	949.60	34.83	-	-11.17	46	30.82	30.15	-26.14	-	-	P	H
	30.00	28.93	-	-11.07	40	36.32	23.92	-31.31	100	308	QP	V
	35.67	30.69	-	-9.31	40	40.54	21.40	-31.25	100	346	QP	V
	39.18	36.85	-	-3.15	40	48.33	19.66	-31.14	100	360	QP	V
	934.90	33.18	-	-12.82	46	30.12	29.41	-26.35	-	-	P	V
	956.60	33.91	-	-12.09	46	29.46	30.50	-26.05	-	-	P	V
	993.00	35.01	-	-18.99	54	30.58	30.01	-25.58	-	-	P	V
24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	30.00	36.14	-	-3.86	40	43.53	23.92	-31.31	100	358	QP	H
	39.45	25.18	-	-14.82	40	36.78	19.53	-31.13	-	-	P	H
	54.03	22.20	-	-17.80	40	40.81	12.43	-31.04	-	-	P	H
	932.10	32.92	-	-13.08	46	30.08	29.24	-26.40	-	-	P	H
	943.30	33.25	-	-12.75	46	29.65	29.83	-26.23	-	-	P	H
	949.60	33.84	-	-12.16	46	29.83	30.15	-26.14	-	-	P	H
	30.27	28.38	-	-11.62	40	35.88	23.80	-31.30	104	355	QP	V
	35.94	35.56	-	-4.44	40	45.53	21.28	-31.25	100	344	QP	V
	39.45	33.63	-	-6.37	40	45.23	19.53	-31.13	100	357	QP	V
	624.10	33.40	-	-12.60	46	35.81	25.83	-28.24	-	-	P	V
	959.40	33.59	-	-12.41	46	28.94	30.66	-26.01	-	-	P	V
962.20	34.72	-	-19.28	54	30.07	30.63	-25.98	-	-	P	V	



24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	30.54	30.92	-	-9.08	40	38.55	23.68	-31.31	100	311	QP	H
	35.40	26.42	-	-13.58	40	36.17	21.52	-31.27	-	-	P	H
	39.72	25.20	-	-14.80	40	36.92	19.40	-31.12	-	-	P	H
	927.90	32.79	-	-13.21	46	30.11	29.13	-26.45	-	-	P	H
	958.70	34.47	-	-11.53	46	29.87	30.62	-26.02	-	-	P	H
	970.60	34.87	-	-19.13	54	30.18	30.56	-25.87	-	-	P	H
	30.00	35.83	-	-4.17	40	43.22	23.92	-31.31	100	352	QP	V
	39.45	36.96	-	-3.04	40	48.56	19.53	-31.13	100	344	QP	V
	53.49	30.02	-	-9.98	40	48.48	12.58	-31.04	100	355	QP	V
	624.10	32.70	-	-13.30	46	35.11	25.83	-28.24	-	-	P	V
951.70	33.59	-	-12.41	46	29.44	30.26	-26.11	-	-	P	V	
958.70	34.27	-	-11.73	46	29.67	30.62	-26.02	-	-	P	V	
Remark	<ol style="list-style-type: none"> No other spurious found. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB) The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only. 											



Note symbol

!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical



A calculation example for radiated spurious emission is shown as below:

Frequency	Level	Margin	Limit	Read	Antenna	Path	Ant	Table	Peak	Pol.
(MHz)	(dBμV/m)	(dB)	Line	Level	Factor	Loss	Pos	Pos	Avg.	
			(dBμV/m)	(dBμV)	(dB/m)	(dB)	(cm)	(deg)	(P/A)	(H/V)
24058	91.19	-36.76	127.95	109.1	38.7	-47.07	144	322	P	H
24058	90.71	-17.29	108	108.62	38.7	-47.07	144	322	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB) - Preamp Factor (dB)
2. Level(dBμV/m) = Read Level(dBμV) + Antenna Factor(dB/m) + Path Loss(dB)
3. Margin(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 24058MHz:

1. Level(dBμV/m)
 - = Read Level(dBμV) + Antenna Factor(dB/m) + Path Loss(dB) - Distance factor
 - = 109.1(dBμV) + 38.7(dB/m) - 47.07 (dB) - 9.54
 - = 91.19(dBμV/m)
2. Margin(dB)
 - = Level(dBμV/m) – Limit Line(dBμV/m)
 - = 91.19(dBμV/m) – 127.95(dBμV/m)
 - = -36.76(dB)

For Average Limit @ 24058MHz:

1. Level(dBμV/m)
 - = Read Level(dBμV) + Antenna Factor(dB/m) + Path Loss(dB) - Distance factor
 - = 108.62(dBμV) + 38.7(dB/m) - 53.75 (dB) - 9.54
 - = 90.71 (dBμV/m)
2. Margin(dB)
 - = Level(dBμV/m) – Limit Line(dBμV/m)
 - = 90.71(dBμV/m) – 108(dBμV/m)
 - = -17.29(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.



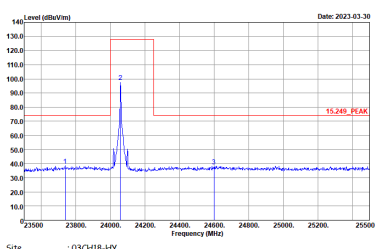
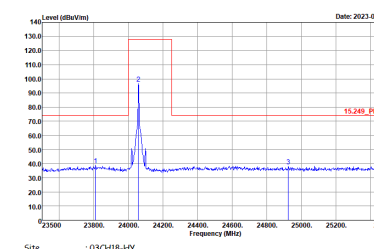
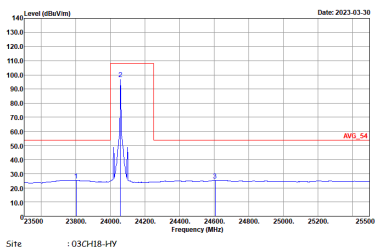
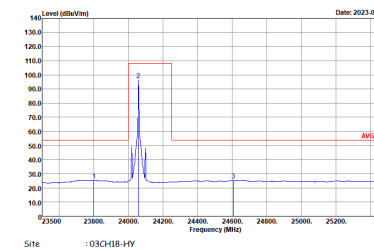
Appendix C. Radiated Spurious Emission Plots

Test Engineer :	Fu Chen, Troye Hsieh and Eric Jeng	Temperature :	20.1~21.2°C
		Relative Humidity :	53.6~66.7%



<Sample 1>

24GHz 24000~24250MHz
(Field strength of fundamental @ 3m)

24GHz	Field strength of fundamental	
	24.06GHz	
	Horizontal	Vertical
Peak	 <p>Level (dBW/m) vs Frequency (MHz) plot for Horizontal orientation. Peak at 24.06 GHz, level 115.249 dBW/m. Site: 03CH18-HY, Condition: 15.249_PEAK 1m SHF_70584_221214 HORIZONTAL.</p>	 <p>Level (dBW/m) vs Frequency (MHz) plot for Vertical orientation. Peak at 24.06 GHz, level 115.249 dBW/m. Site: 03CH18-HY, Condition: 15.249_PEAK 1m SHF_70584_221214 VERTICAL.</p>
Avg.	 <p>Level (dBW/m) vs Frequency (MHz) plot for Horizontal orientation. Average level at 24.06 GHz, level 115.54 dBW/m. Site: 03CH18-HY, Condition: AVG_54 1m SHF_70584_221214 HORIZONTAL.</p>	 <p>Level (dBW/m) vs Frequency (MHz) plot for Vertical orientation. Average level at 24.06 GHz, level 115.54 dBW/m. Site: 03CH18-HY, Condition: AVG_54 1m SHF_70584_221214 VERTICAL.</p>

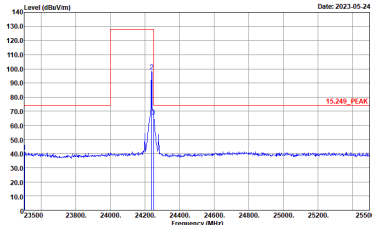
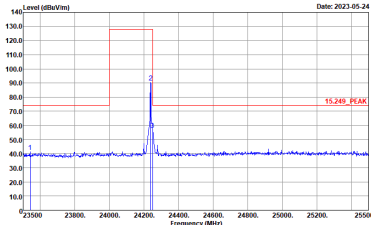
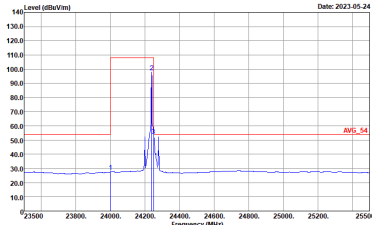
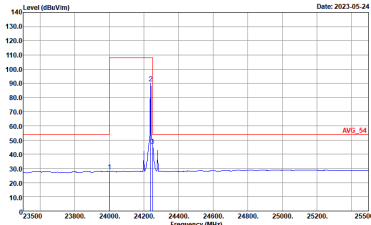


24GHz	Field strength of fundamental	
	24.15GHz	
	Horizontal	Vertical
Peak	<p>Site : 03CH-HY Condition : 15.249_Peak 1m SHF_70584_221214 HORIZONTAL</p>	<p>Site : 03CH-HY Condition : 15.249_Peak 1m SHF_70584_221214 VERTICAL</p>
Avg.	<p>Site : 03CH-HY Condition : AVG_54 1m SHF_70584_221214 HORIZONTAL</p>	<p>Site : 03CH-HY Condition : AVG_54 1m SHF_70584_221214 VERTICAL</p>

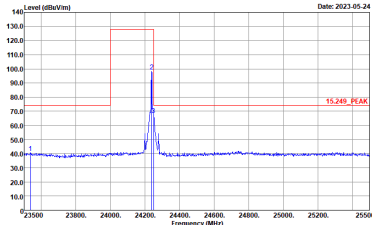
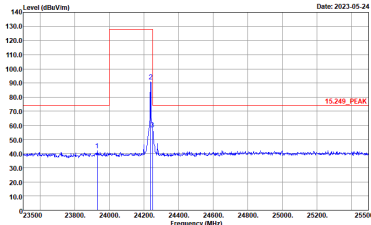
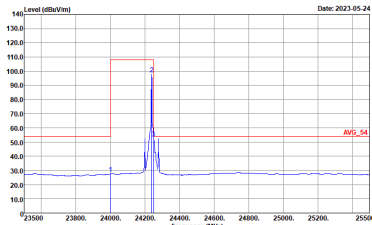
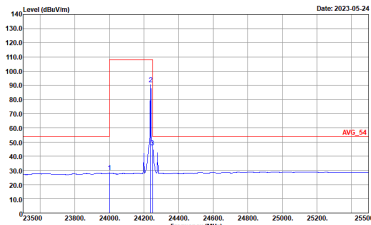


24GHz	Field strength of fundamental	
	24.24GHz	
	Horizontal	Vertical
Peak	<p>Level (dBW/m) vs Frequency (MHz) plot for Horizontal orientation. Peak at 24.24 GHz, level ~120 dBW/m. Site: 03CH18-HY, Condition: 15.249_PEAK 1m SHF_70584_221214 HORIZONTAL.</p>	<p>Level (dBW/m) vs Frequency (MHz) plot for Vertical orientation. Peak at 24.24 GHz, level ~120 dBW/m. Site: 03CH18-HY, Condition: 15.249_PEAK 1m SHF_70584_221214 VERTICAL.</p>
Avg.	<p>Level (dBW/m) vs Frequency (MHz) plot for Horizontal orientation. Peak at 24.24 GHz, level ~110 dBW/m. Site: 03CH18-HY, Condition: AV6_54 1m SHF_70584_221214 HORIZONTAL.</p>	<p>Level (dBW/m) vs Frequency (MHz) plot for Vertical orientation. Peak at 24.24 GHz, level ~110 dBW/m. Site: 03CH18-HY, Condition: AV6_54 1m SHF_70584_221214 VERTICAL.</p>

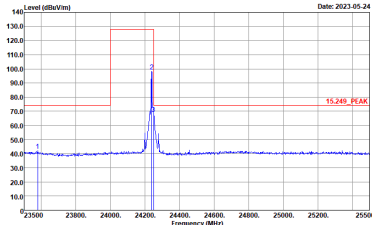
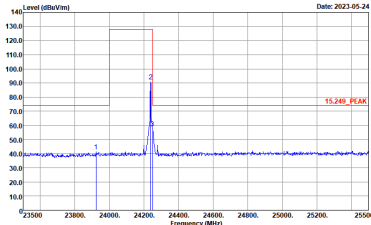
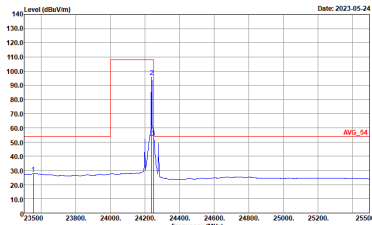
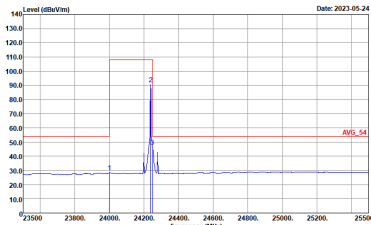


24GHz	Field strength of fundamental	
24.24GHz + Bluetooth-LE 2M Ch39 2480MHz		
Horizontal		Vertical
Peak	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>15.249_Peak</p> <p>Site : 03CH18-HY Condition : 15.249_Peak 1m SHF_9170_1223 HORIZONTAL</p>	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>15.249_Peak</p> <p>Site : 03CH18-HY Condition : 15.249_Peak 1m SHF_9170_1223 VERTICAL</p>
Avg.	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>AVG_54</p> <p>Site : 03CH18-HY Condition : AVG_54 1m SHF_9170_1223 HORIZONTAL</p>	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>AVG_54</p> <p>Site : 03CH18-HY Condition : AVG_54 1m SHF_9170_1223 VERTICAL</p>



24GHz	Field strength of fundamental	
24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz		
Horizontal		Vertical
Peak	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>15.249_Peak</p> <p>Site : 03CH18-HY Condition : 15.249_Peak 1m SHF_9170_1223 HORIZONTAL</p>	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>15.249_Peak</p> <p>Site : 03CH18-HY Condition : 15.249_Peak 1m SHF_9170_1223 VERTICAL</p>
Avg.	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>AVG_54</p> <p>Site : 03CH18-HY Condition : AVG_54 1m SHF_9170_1223 HORIZONTAL</p>	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>AVG_54</p> <p>Site : 03CH18-HY Condition : AVG_54 1m SHF_9170_1223 VERTICAL</p>

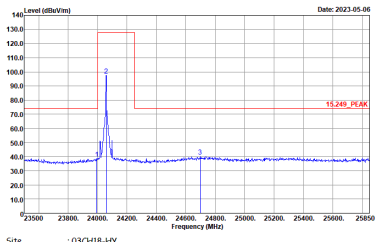
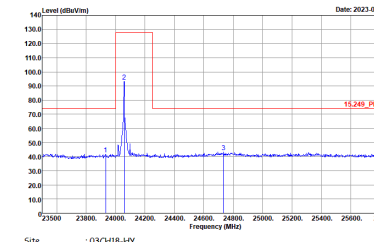
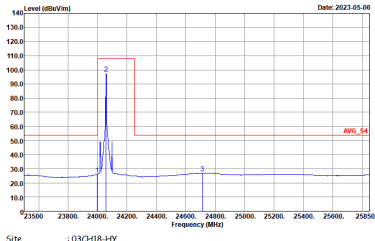
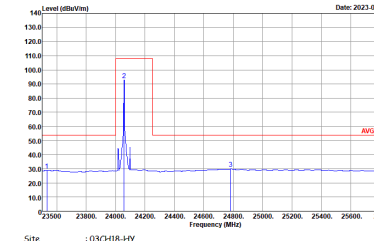


24GHz	Field strength of fundamental	
24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz		
Horizontal		Vertical
Peak	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>15.249_Peak</p> <p>Site : 03CH18-HY Condition : 15.249_Peak 1m SHF_9170_1223 HORIZONTAL</p>	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>15.249_Peak</p> <p>Site : 03CH18-HY Condition : 15.249_Peak 1m SHF_9170_1223 VERTICAL</p>
Avg.	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>AVG_54</p> <p>Site : 03CH18-HY Condition : AVG_54 1m SHF_9170_1223 HORIZONTAL</p>	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>AVG_54</p> <p>Site : 03CH18-HY Condition : AVG_54 1m SHF_9170_1223 VERTICAL</p>



<Sample 2>

24GHz 24000~24250MHz
(Field strength of fundamental @ 3m)

24GHz	Field strength of fundamental	
	24.06GHz	
	Horizontal	Vertical
Peak	 <p>Level (dBV/m) vs Frequency (MHz) plot for Horizontal orientation. Peak at 24.06 GHz with level 15.249 dBV/m. Site: 03CH18-HY, Condition: 15.249_PEAK 1m SHF_9170_1223 HORIZONTAL.</p>	 <p>Level (dBV/m) vs Frequency (MHz) plot for Vertical orientation. Peak at 24.06 GHz with level 15.249 dBV/m. Site: 03CH18-HY, Condition: 15.249_PEAK 1m SHF_9170_1223 VERTICAL.</p>
Avg.	 <p>Level (dBV/m) vs Frequency (MHz) plot for Horizontal orientation. Average level at 24.06 GHz is 54 dBV/m. Site: 03CH18-HY, Condition: AVG_54 1m SHF_9170_1223 HORIZONTAL.</p>	 <p>Level (dBV/m) vs Frequency (MHz) plot for Vertical orientation. Average level at 24.06 GHz is 54 dBV/m. Site: 03CH18-HY, Condition: AVG_54 1m SHF_9170_1223 VERTICAL.</p>

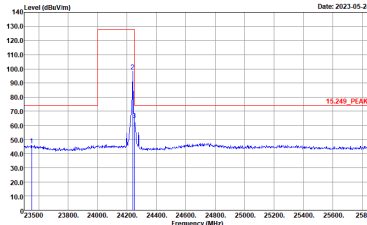
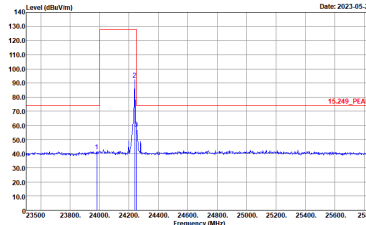
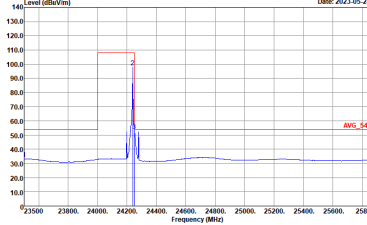
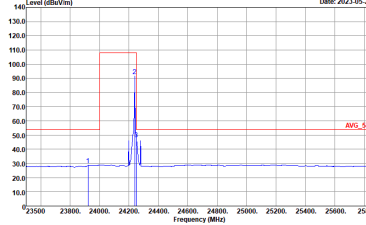


24GHz	Field strength of fundamental	
	24.24GHz	
	Horizontal	Vertical
Peak	<p>Site : 03CH8-HY Condition : 15.249_PEAK 1m SHF_9170_1223 HORIZONTAL</p>	<p>Site : 03CH8-HY Condition : 15.249_PEAK 1m SHF_9170_1223 VERTICAL</p>
Avg.	<p>Site : 03CH8-HY Condition : AVG_54 1m SHF_9170_1223 HORIZONTAL</p>	<p>Site : 03CH8-HY Condition : AVG_54 1m SHF_9170_1223 VERTICAL</p>



24GHz	Field strength of fundamental	
	24.24GHz + Bluetooth-LE 2M Ch39 2480MHz	
	Horizontal	Vertical
Peak	<p>Site : 03CH8-HY Condition : 15.249_Peak 1m SHF_9170_1223 HORIZONTAL</p>	<p>Site : 03CH8-HY Condition : 15.249_Peak 1m SHF_9170_1223 VERTICAL</p>
Avg.	<p>Site : 03CH8-HY Condition : AVG_54 1m SHF_9170_1223 HORIZONTAL</p>	<p>Site : 03CH8-HY Condition : AVG_54 1m SHF_9170_1223 VERTICAL</p>



24GHz	Field strength of fundamental	
	24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	
	Horizontal	Vertical
Peak	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>15.249_Peak</p> <p>Site : 03CH18-HY Condition : 15.249_Peak 1m SHF_9170_1223 HORIZONTAL</p>	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>15.249_Peak</p> <p>Site : 03CH18-HY Condition : 15.249_Peak 1m SHF_9170_1223 VERTICAL</p>
Avg.	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>AVG_54</p> <p>Site : 03CH18-HY Condition : AVG_54 1m SHF_9170_1223 HORIZONTAL</p>	 <p>Date: 2023-05-24</p> <p>Level (dBW/m) vs Frequency (MHz)</p> <p>AVG_54</p> <p>Site : 03CH18-HY Condition : AVG_54 1m SHF_9170_1223 VERTICAL</p>



24GHz	Field strength of fundamental	
	24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	
	Horizontal	Vertical
Peak	<p>Level (dBW/m) vs Frequency (MHz) plot for Horizontal orientation. Peak at 24.24 GHz, level 115.249 dBW/m. Site: 03CH18-HY, Condition: 15.249_PEAK 1m SHF_9170_1223 HORIZONTAL.</p>	<p>Level (dBW/m) vs Frequency (MHz) plot for Vertical orientation. Peak at 24.24 GHz, level 115.249 dBW/m. Site: 03CH18-HY, Condition: 15.249_PEAK 1m SHF_9170_1223 VERTICAL.</p>
Avg.	<p>Level (dBW/m) vs Frequency (MHz) plot for Horizontal orientation. Average level at 24.24 GHz, level 54 dBW/m. Site: 03CH18-HY, Condition: AVG_54 1m SHF_9170_1223 HORIZONTAL.</p>	<p>Level (dBW/m) vs Frequency (MHz) plot for Vertical orientation. Average level at 24.24 GHz, level 54 dBW/m. Site: 03CH18-HY, Condition: AVG_54 1m SHF_9170_1223 VERTICAL.</p>



<Sample 1>

24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(1GHz to 18GHz)

24GHz	Radiated Spurious Emission	
	24.06GHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 VERTICAL</p>



24GHz	Radiated Spurious Emission	
	24.15GHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 HORIZONTAL 1.</p>	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 VERTICAL 1.</p>



24GHz	Radiated Spurious Emission	
	24.24GHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 HORIZONTAL 1.</p>	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 VERTICAL 1.</p>



24GHz	Radiated Spurious Emission	
	24.24GHz + Bluetooth-LE 2M Ch39 2480MHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 VERTICAL</p>



24GHz	Radiated Spurious Emission	
	24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 VERTICAL</p>

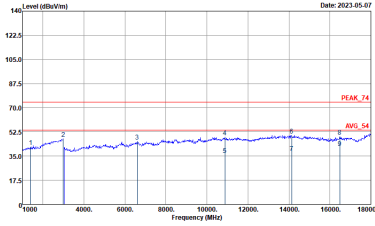
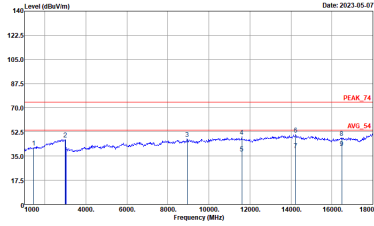


24GHz	Radiated Spurious Emission	
	24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 VERTICAL</p>



<Sample 2>

24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(1GHz to 18GHz)

24GHz	Radiated Spurious Emission	
	24.24GHz	
	Horizontal	Vertical
Peak / Avg	 <p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 HORIZONTAL 1.</p>	 <p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 VERTICAL 1.</p>

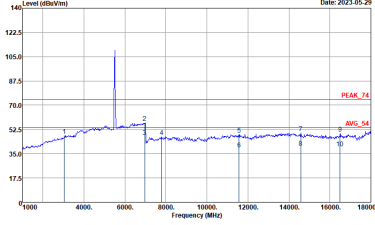
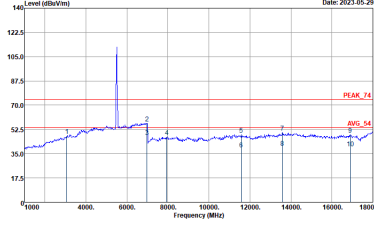


24GHz	Radiated Spurious Emission	
	24.24GHz + Bluetooth-LE 2M Ch39 2480MHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 VERTICAL</p>



24GHz	Radiated Spurious Emission	
	24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 HORIZONTAL 1.</p>	<p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 VERTICAL 1.</p>



24GHz	Radiated Spurious Emission	
24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz		
Horizontal		Vertical
Peak / Avg	 <p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 HORIZONTAL</p>	 <p>Site : 03CH11-HY Condition : PEAK_74 3m 91200_01620_220824 VERTICAL</p>



<Sample 1>

24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(18GHz to 40GHz)

24GHz	Radiated Spurious Emission	
	24.06GHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00991_220514 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00991_220514 VERTICAL</p>



24GHz	Radiated Spurious Emission	
	24.15GHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00991_220514 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00991_220514 VERTICAL</p>



24GHz	Radiated Spurious Emission	
	24.24GHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00991_220514 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00991_220514 VERTICAL</p>



24GHz	Radiated Spurious Emission	
	24.24GHz + Bluetooth-LE 2M Ch39 2480MHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00994_221104 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00994_221104 VERTICAL</p>



24GHz	Radiated Spurious Emission	
	24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00994_221104 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00994_221104 VERTICAL</p>

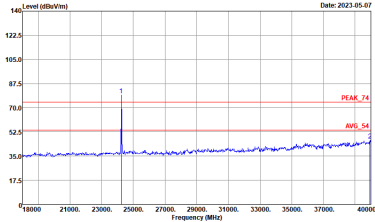
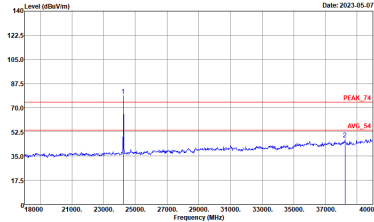


24GHz	Radiated Spurious Emission	
	24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00994_221104 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00994_221104 VERTICAL</p>



<Sample 2>

24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(18GHz to 40GHz)

24GHz	Radiated Spurious Emission	
	24.24GHz	
	Horizontal	Vertical
Peak / Avg	 <p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00993_221124 HORIZONTAL</p>	 <p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00993_221124 VERTICAL</p>

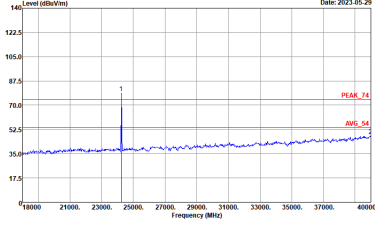
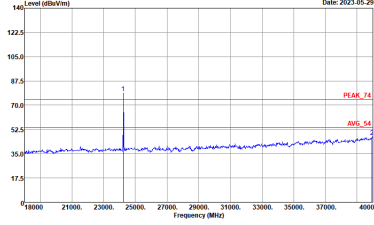


24GHz	Radiated Spurious Emission	
	24.24GHz + Bluetooth-LE 2M Ch39 2480MHz	
	Horizontal	Vertical
Peak / Avg	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00994_221104 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00994_221104 VERTICAL</p>



24GHz	Radiated Spurious Emission	
	24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz	
	Horizontal	Vertical
Peak / Avg	<p>Horizontal spectrum plot showing a peak at 2457 MHz. The y-axis is Level (dBW/m) from 17.5 to 140. The x-axis is Frequency (MHz) from 18000 to 40000. A peak is labeled 'PEAK_74' at approximately 75 dBW/m. An average level is labeled 'AVG_54' at approximately 55 dBW/m. Site: 03CH11-HY, Condition: PEAK_74 1m SHF_00994_221104 HORIZONTAL.</p>	<p>Vertical spectrum plot showing a peak at 2457 MHz. The y-axis is Level (dBW/m) from 17.5 to 140. The x-axis is Frequency (MHz) from 18000 to 40000. A peak is labeled 'PEAK_74' at approximately 75 dBW/m. An average level is labeled 'AVG_54' at approximately 55 dBW/m. Site: 03CH11-HY, Condition: PEAK_74 1m SHF_00994_221104 VERTICAL.</p>



24GHz	Radiated Spurious Emission	
	24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	
	Horizontal	Vertical
Peak / Avg	 <p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00994_221104 HORIZONTAL</p>	 <p>Site : 03CH11-HY Condition : PEAK_74 1m SHF_00994_221104 VERTICAL</p>

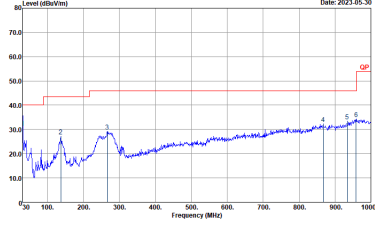
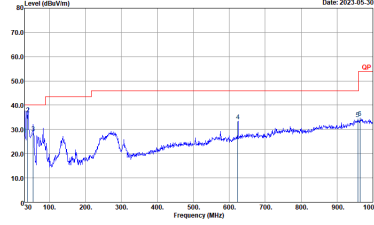


<Sample 1>

24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(Below 1GHz)

24GHz	Radiated Spurious Emission	
	24.24GHz	
	Horizontal	Vertical
QP / Peak	<p>Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 VERTICAL</p>

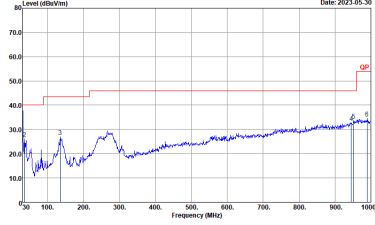
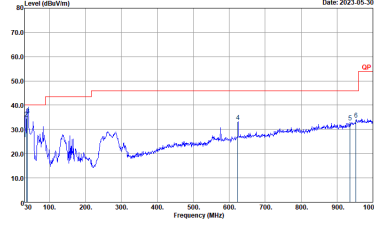


24GHz	Radiated Spurious Emission	
	24.24GHz + Bluetooth-LE 2M Ch39 2480MHz	
	Horizontal	Vertical
QP / Peak	 <p data-bbox="438 683 686 716">Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 HORIZONTAL</p>	 <p data-bbox="901 683 1149 716">Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 VERTICAL</p>



24GHz	Radiated Spurious Emission	
24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz		
Horizontal		Vertical
QP / Peak	<p>Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 VERTICAL</p>

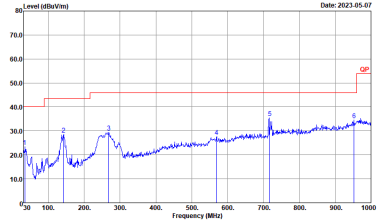
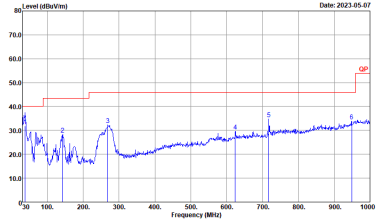


24GHz	Radiated Spurious Emission	
24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz		
Horizontal		Vertical
QP / Peak	 <p data-bbox="438 683 813 728">Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 HORIZONTAL</p>	 <p data-bbox="901 683 1276 728">Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 VERTICAL</p>

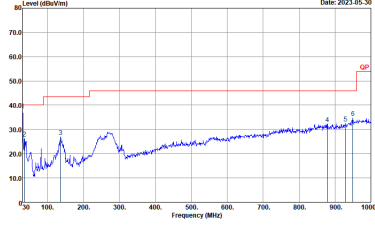
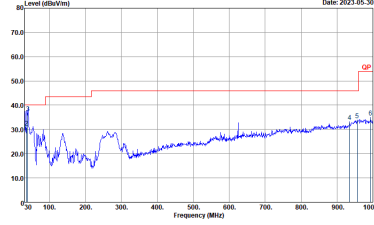


<Sample 2>

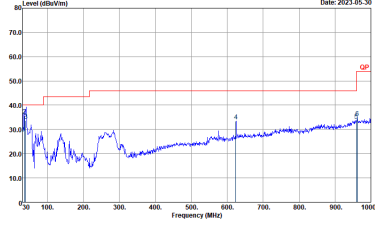
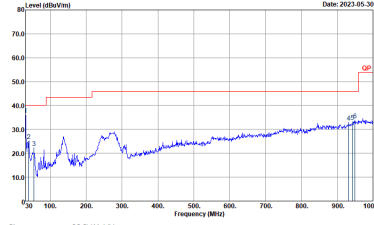
24GHz 24000~24250MHz
(Radiated Spurious Emission @ 3m)
(Below 1GHz)

24GHz	Radiated Spurious Emission	
	24.24GHz	
	Horizontal	Vertical
QP / Peak	 <p>Site : 03CH11-HY Condition : QP 3m 2_BTL06_35414_221008 HORIZONTAL</p>	 <p>Site : 03CH11-HY Condition : QP 3m 2_BTL06_35414_221008 VERTICAL</p>



24GHz	Radiated Spurious Emission	
	24.24GHz + Bluetooth-LE 2M Ch39 2480MHz	
	Horizontal	Vertical
QP / Peak	 <p>Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 HORIZONTAL Date: 2023-05-30</p>	 <p>Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 VERTICAL Date: 2023-05-30</p>



24GHz	Radiated Spurious Emission	
24.24GHz + WLAN (2.4GHz) 802.11g Ch10 2457MHz		
Horizontal		Vertical
QP / Peak	 <p data-bbox="438 683 670 716">Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 VERTICAL</p>	 <p data-bbox="901 683 1133 716">Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 HORIZONTAL</p>



24GHz	Radiated Spurious Emission	
	24.24GHz + WLAN (5GHz) 802.11ac VHT20 Ch100 5500MHz	
	Horizontal	Vertical
QP / Peak	<p>Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 HORIZONTAL</p>	<p>Site : 03CH11-HY Condition : QP 3m 2_BILOG_35414_221008 VERTICAL</p>

—THE END—