

Hykso

TEST REPORT

Model:
FC300

REPORT NUMBER
260700307THC-001

ISSUE DATE
Aug. 24, 2026

PAGES
44

DOCUMENT CONTROL NUMBER
GFT-OP-10h (28-Nov-2018)
© 2020 Intertek

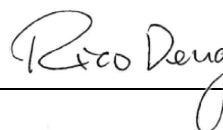


Radio Spectrum TEST REPORT

Applicant:	Hykso 936 W. 17th street, Costa Mesa CA 92627, United States
Product:	FightCamp Charging Dock
Model No.:	FC300
Brand Name:	FightCamp
FCC ID:	2AK2R-CHRG
Test Method/ Standard:	47 CFR FCC Part 15.247 & ANSI C63.10-2020 KDB 558074 D01 v05r02
Test By:	Intertek Testing Services Taiwan Ltd., Hsinchu Laboratory No. 17, Ln. 246, Niupu S. Rd., Xiangshan Dist, Hsinchu City 300075, Taiwan




Rich Nien
Engineer



Rico Deng
Reviewer

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

TEST REPORT

Revision History

Report No.	Issue Date	Revision Summary
260700307THC-001	Aug. 24, 2026	Original report

Table of Contents

1. General Information	6
1.1 Identification of the EUT	6
1.2 Antenna description	6
1.3 Operation mode	7
1.4 Peripherals equipment	7
2. Minimum 6 dB Bandwidth	8
2.1 Instrument Setting.....	8
2.2 Test Procedure	8
2.3 Test Diagram	8
2.4 Limit	8
2.5 Test Results	9
3. Maximum Peak Conducted Output Power	12
3.1 Instrument Setting.....	12
3.2 Test Procedure.....	12
3.3 Test Diagram	12
3.4 Limit	12
3.5 Test Results	13
4. Power Spectral Density.....	14
4.1 Instrument Setting.....	14
4.2 Test Procedure	14
4.3 Test Diagram	14
4.4 Limit	14
4.5 Test Results	15
5. Emissions in Non-Restricted Frequency Bands	18
5.1 Instruments Setting	18
5.2 Test Procedure	18
5.3 Test Diagram	18
5.4 Limit	18
5.5 Test Results	19
6. Emissions in Restricted Frequency Bands (Radiated emission measurements)	26
6.1 Instrument Setting.....	26
6.2 Test setup & procedure	26
6.3 Limit	28
6.4 Test Result.....	29
6.4.1 Measurement results: frequencies 9kHz to 30MHz.....	29
6.4.2 Measurement results: frequencies below 1 GHz	31
6.4.3 Measurement results: frequency above 1GHz.....	32

7. Emission on Band Edge.....	34
7.1 Instrument Setting.....	34
7.2 Test Procedure	34
7.3 Test Results	34
8. AC Power Line Conducted Emission	39
8.1 Measuring instrument setting.....	39
8.2 Test Procedure	39
8.3 Test Diagram	39
8.4 Limit	40
8.5 Test Results	41
Appendix A: Test equipment list.....	43
Appendix B: Measurement Uncertainty.....	44

Summary of Test Data

Test Requirement	Applicable Rule (Section 15.247)	Result
Minimum 6 dB Bandwidth	15.247(a)(2)	Pass
Maximum Peak Conducted Output Power	15.247(b)(3)	Pass
Power Spectral Density	15.247(e)	Pass
Emissions In Non-Restricted Frequency Bands	15.247(d)	Pass
Emissions In Restricted Frequency Bands (Radiated emission measurements)	15.247(d), 15.205, 15.209	Pass
Emission On The Band Edge	15.247(d), 15.205	Pass
AC Power Line Conducted Emission	15.207	Pass
Antenna Requirement	15.203	Pass

Note: Please note that the test results with statement of conformity, the decision rules which are based on: Safety Testing: the specification, standard or IEC Guide 115.

Other Testing: the specification, standard and not taking into account the measurement uncertainty.

1. General Information

1.1 Identification of the EUT

Product:	FightCamp Charging Dock
Model No.:	FC300
Operating Frequency:	2402 MHz ~ 2480 MHz
Channel Number:	40 channels
Frequency of Each Channel:	2402+2 k, k=0 ~ 39
Rating:	5 V= 0.5 A
Power Cord:	N/A
Sample receiving date:	2026/07/31
Sample condition:	Workable
Test Date(s):	2026/08/04 ~ 2026/08/07

1.2 Antenna description

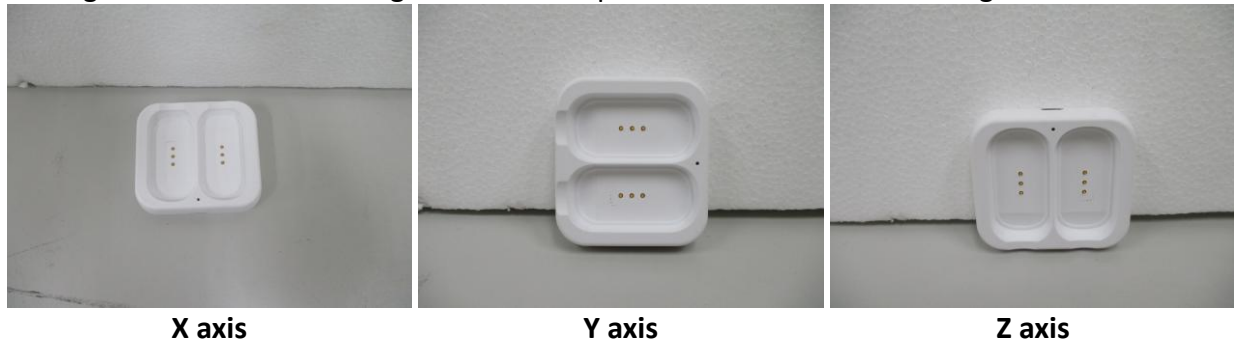
DVT ANTENNA

Antenna Gain:	3 dBi
Antenna Type:	IFA
Connector Type:	Fixed
Remark:	Antenna information provided by the client.

1.3 Operation mode

Connected to Notebook PC via USB Cable, executing “Direct Test Mode v3” to select different frequency and modulation.

The signal is maximized through rotation and placement in the Three orthogonal axes.



After verifying three axes, we found the maximum electromagnetic field was occurred at X axis. The final test data was executed under this configuration.

Mode	Channel	Frequency (MHz)	Signal on time (ms)	Signal on & off time (ms)	Duty cycle (%)	Duty Cycle factor (dB)
BLE 1M	19	2440	2.14	2.50	85.60	0.68
BLE 2M	19	2440	1.08	1.88	57.60	2.40

1.4 Peripherals equipment

Peripheral Name	Brand	Model No.	Serial No.
Notebook PC	HP	HP ProBook 440 G3	5CD8021S9H
Fixture	WaveShare	PL2303 USB UART Board V2	N/A

Peripheral Name	Length	Shielded(Y/N)	Brand	Model No.
USB 2.0	1 m	N	Multicomp	SPC20060
USB Cable	1.5 m	Y	UGREEN	20276
USB cable	0.2 m	Y	UGREEN	60122

2. Minimum 6 dB Bandwidth

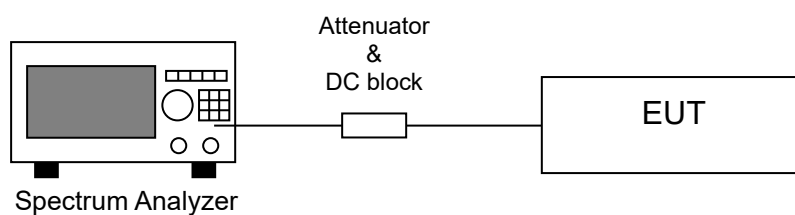
2.1 Instrument Setting

Spectrum Parameter	Setting
Detector	Peak
RBW	100kHz
VBW	$\geq 3 \times \text{RBW}$
Sweep	Auto couple
Trace	Allow the trace to stabilize.
Span	Between two times and five times the occupied bandwidth
Attenuation	Auto

2.2 Test Procedure

Step 1	The transmitter output was connected to the spectrum analyzer.
Step 2	Test was performed accordance with ANSI C63.10.
Step 3	Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

2.3 Test Diagram



2.4 Limit

The minimum 6 dB bandwidth shall be at least 500 kHz.

2.5 Test Results

Temperature (°C) :	25
Relative Humidity (%) :	71
Test date :	2026/08/05

Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.71	>0.5	Pass
	19	2440	0.66	>0.5	Pass
	39	2480	0.67	>0.5	Pass
BLE 2M	0	2402	1.12	>0.5	Pass
	19	2440	1.13	>0.5	Pass
	39	2480	1.13	>0.5	Pass

6dB Bandwidth @ LE 1M Mode CH0



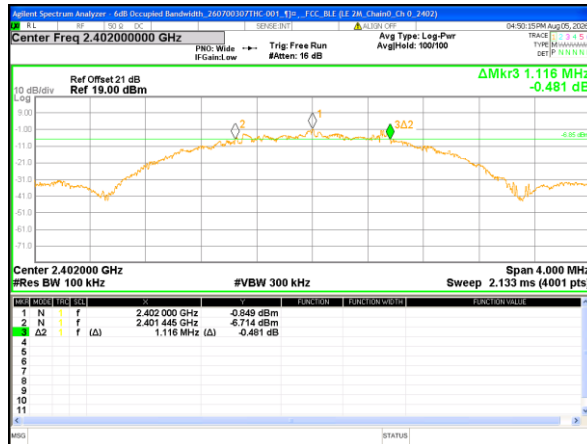
6dB Bandwidth @ LE 1M Mode CH19



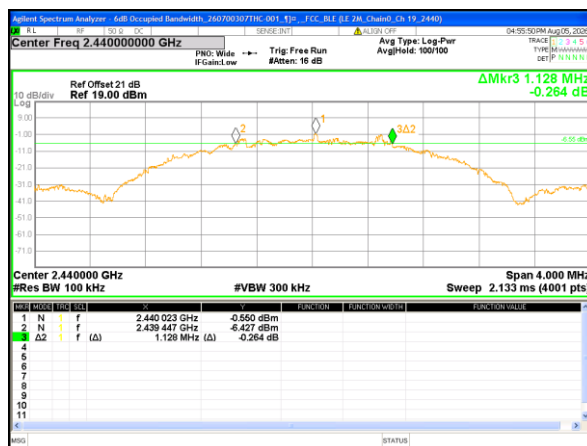
6dB Bandwidth @ LE 1M Mode CH39



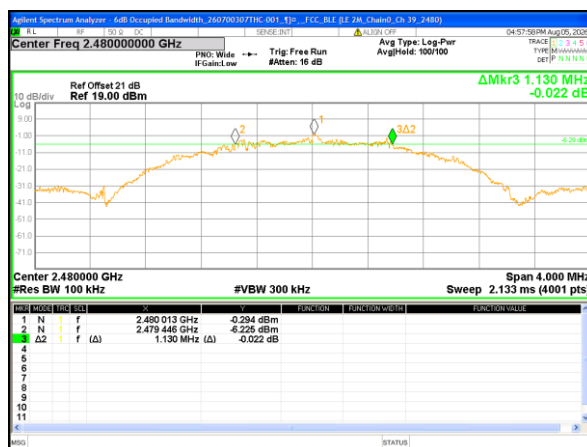
6dB Bandwidth @ LE 2M Mode CH0



6dB Bandwidth @ LE 2M Mode CH19



6dB Bandwidth @ LE 2M Mode CH39



3. Maximum Peak Conducted Output Power

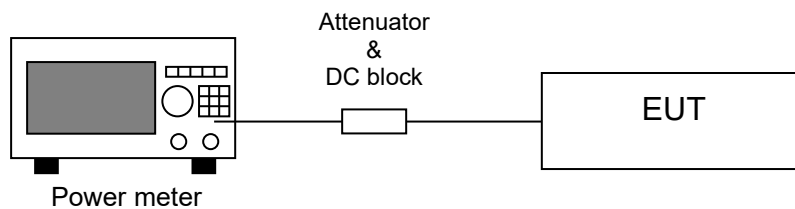
3.1 Instrument Setting

Power Meter Parameter	Setting
Bandwidth	65MHz bandwidth is greater than the EUT emission bandwidth
Detector	Peak & Average

3.2 Test Procedure

The preferred methodology is to use integrated average power measurements, as described in 11.9.2 and 11.13.3 of ANSI C63.10. The peak integrated band power methods of 11.9.1.2 and 11.13.3.2 of ANSI C63.10 are not applicable for FCC compliance testing purposes.

3.3 Test Diagram



3.4 Limit

For systems using digital modulation in the 2400-2483.5 MHz: 1 Watt (30dBm)

3.5 Test Results

Temperature (°C) :	25
Relative Humidity (%) :	71
Test date :	2026/08/05

Mode	Channel	Frequency (MHz)	Output Power [AV] (dBm)	Total Power [AV] (mW)	Maximum Power [PK] (dBm)	Maximum Power [PK] (mW)	Limit (dBm)	Margin (dB)
BLE 1M	0	2402	1.17	1.31	1.25	1.33	30	-28.75
	19	2440	1.41	1.38	1.48	1.41	30	-28.52
	39	2480	1.33	1.36	1.40	1.38	30	-28.60
BLE 2M	0	2402	1.19	1.32	1.26	1.34	30	-28.74
	19	2440	1.42	1.39	1.49	1.41	30	-28.51
	39	2480	1.33	1.36	1.38	1.37	30	-28.62

4. Power Spectral Density

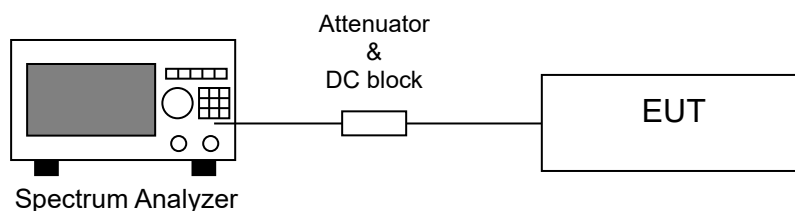
4.1 Instrument Setting

Spectrum Function	Setting
Detector	Peak
RBW	≥ 3 kHz
VBW	$\geq 3 \times$ RBW
Sweep	Auto couple
Trace	Max hold
Span	1.5 times x 6dB bandwidth
Attenuation	Auto

4.2 Test Procedure

Step 1	Test procedure refer to subclause 11.10 of ANSI C63.10.
Step 2	Using the maximum conducted output power in the fundamental emission demonstrates compliance. The EUT must be configured to transmit continuously at full power over the measurement duration.
Step 3	Use the peak marker function to determine the maximum amplitude level within the RBW.

4.3 Test Diagram



4.4 Limit

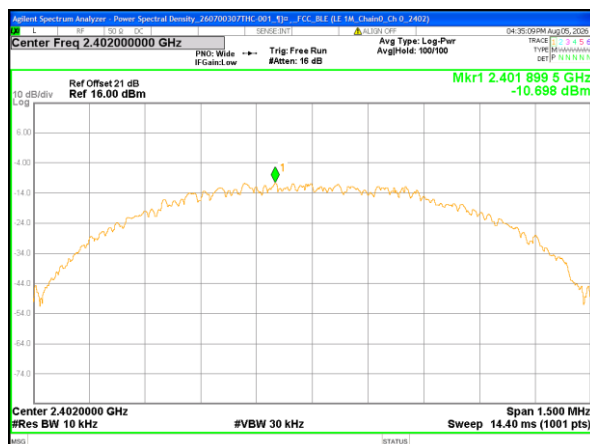
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission

4.5 Test Results

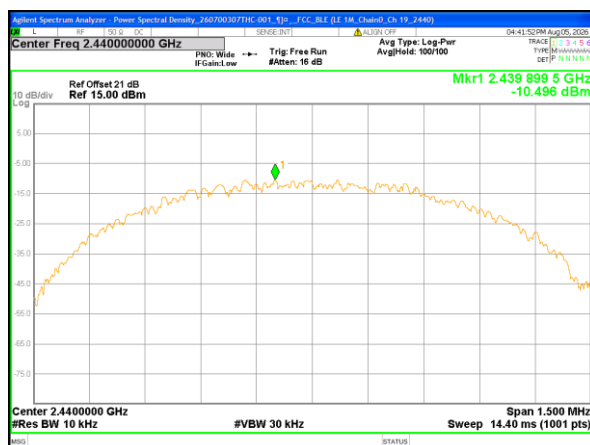
Temperature (°C) :	25
Relative Humidity (%) :	71
Test date :	2026/08/05

Mode	Channel	Frequency (MHz)	PSD (dBm)	Limit (dBm)	Margin (dB)
BLE 1M	0	2402	-10.70	8	-18.70
	19	2440	-10.50	8	-18.50
	39	2480	-10.40	8	-18.40
BLE 2M	0	2402	-12.12	8	-20.12
	19	2440	-11.85	8	-19.85
	39	2480	-11.99	8	-19.99

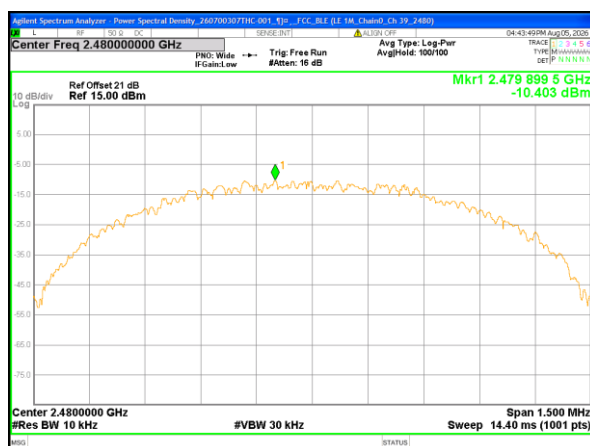
Power Spectral Density @ LE 1M Mode CH0



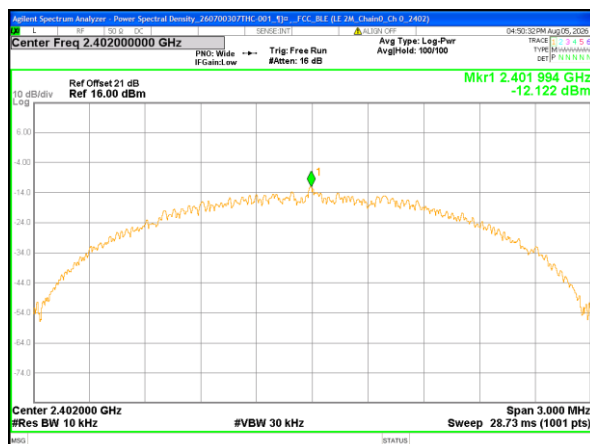
Power Spectral Density @ LE 1M Mode CH19



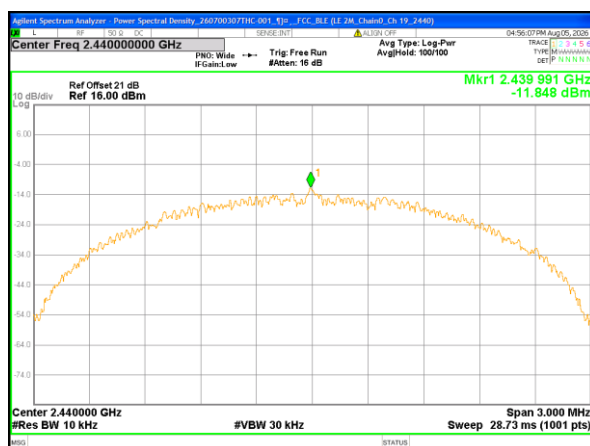
Power Spectral Density @ LE 1M Mode CH39



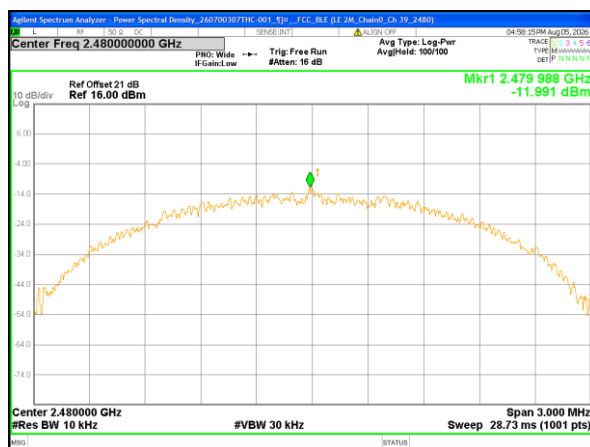
Power Spectral Density @ LE 2M Mode CH0



Power Spectral Density @ LE 2M Mode CH19



Power Spectral Density @ LE 2M Mode CH39



5. Emissions in Non-Restricted Frequency Bands

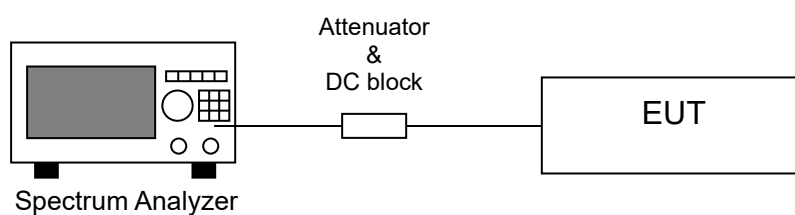
5.1 Instruments Setting

Spectrum Function	Setting (Reference Level)	Setting (Emission Level)
Detector	Peak	Peak
RBW	≥ 100 kHz	≥ 100 kHz
VBW	$\geq 3 \times$ RBW	$\geq 3 \times$ RBW
Sweep	Auto couple	Auto couple
Trace	Max hold	Max hold
Span	≥ 1.5 time 6dB bandwidth	
Attenuation	Auto	Auto

5.2 Test Procedure

- Step 1 The procedure was used in antenna-port conducted and connected to the spectrum analyzer.
- Step 2 Set instrument center frequency to center frequency.
- Step 3 Use the parameter configured in subclause 11.11 of ANSI C63.10 to measure.
- Step 4 Use the peak marker function to determine the maximum amplitude level.

5.3 Test Diagram



5.4 Limit

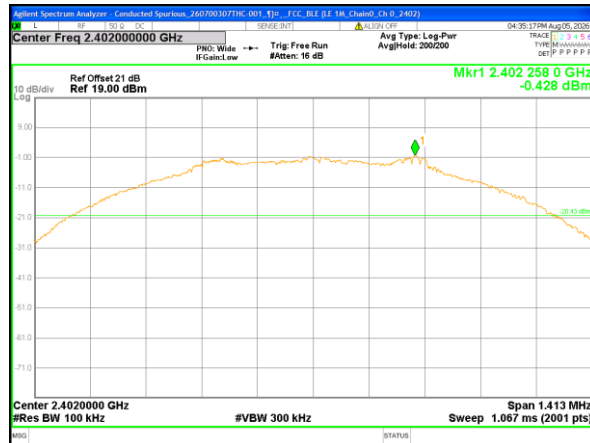
The peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz

5.5 Test Results

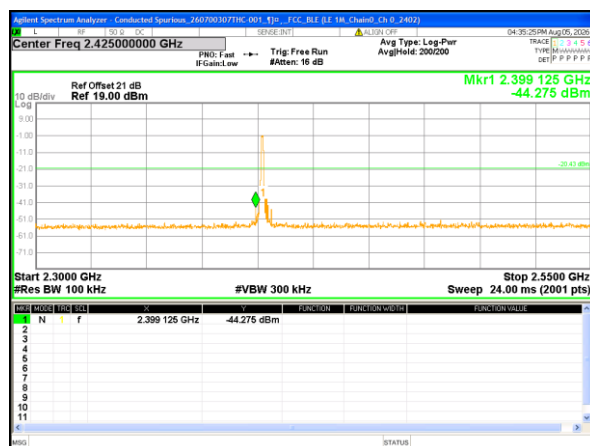
Temperature (°C) :	25
Relative Humidity (%) :	71
Test date :	2026/08/05

Mode	Channel	Frequency (MHz)	Delta (dBc)	Limit (dBc)
BLE 1M	0	2402	40.39	>20
	19	2440	40.63	>20
	39	2480	40.63	>20
BLE 2M	0	2402	32.64	>20
	19	2440	40.01	>20
	39	2480	40.49	>20

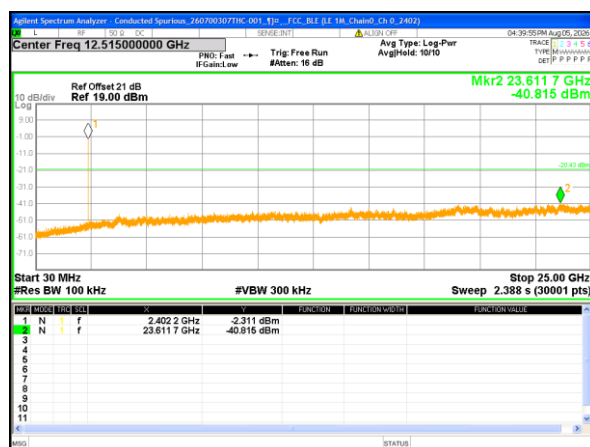
Conducted Spurious @ LE 1M Mode CH0



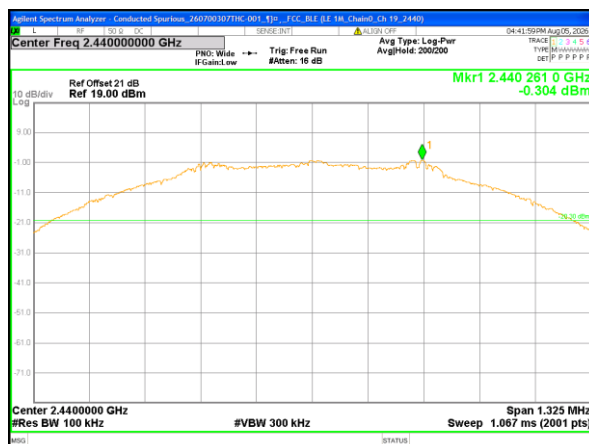
Conducted Spurious @ LE 1M Mode CH0



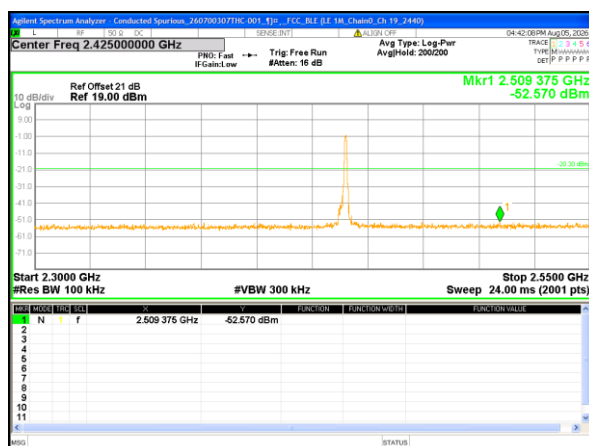
Conducted Spurious @ LE 1M Mode CH0



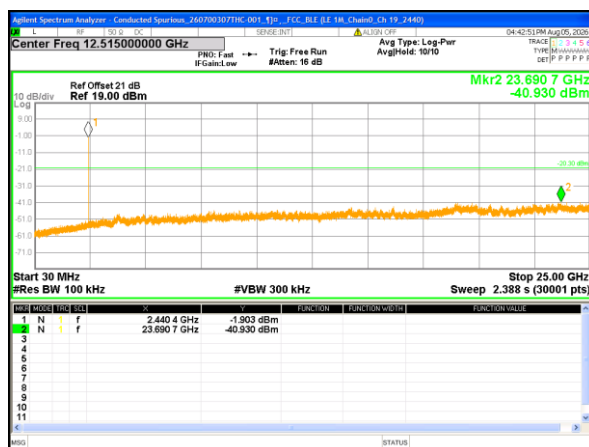
Conducted Spurious @ LE 1M Mode CH19



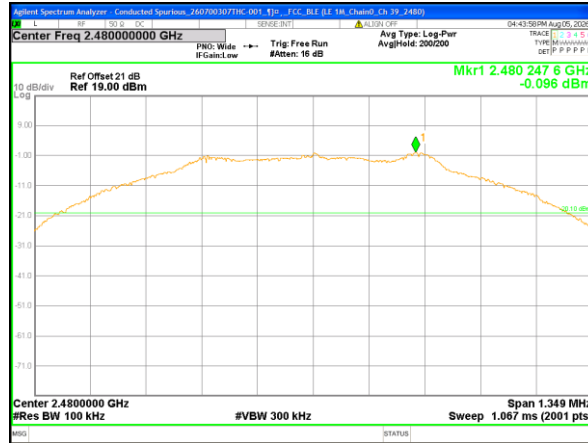
Conducted Spurious @ LE 1M Mode CH19



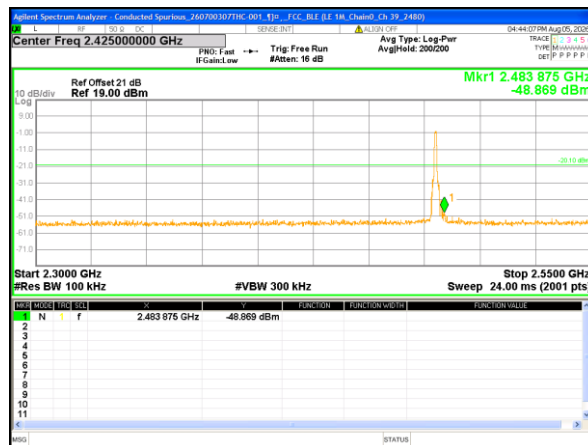
Conducted Spurious @ LE 1M Mode CH19



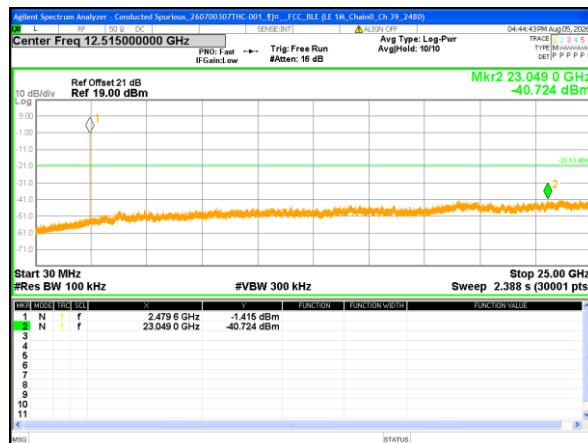
Conducted Spurious @ LE 1M Mode CH39



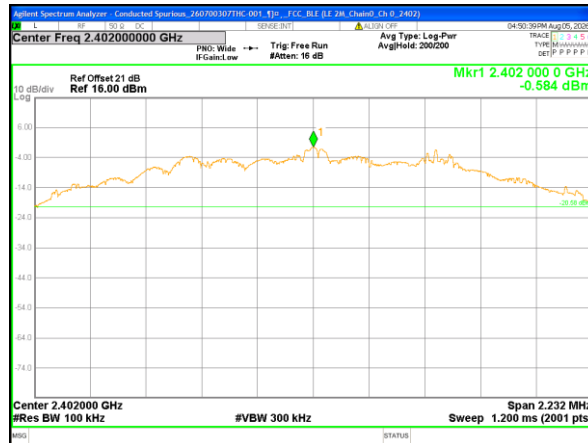
Conducted Spurious @ LE 1M Mode CH39



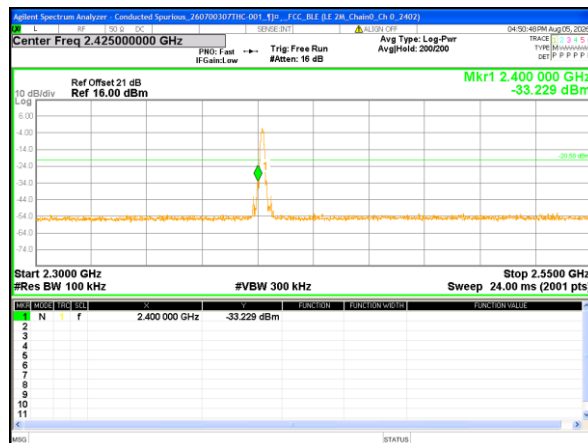
Conducted Spurious @ LE 1M Mode CH39



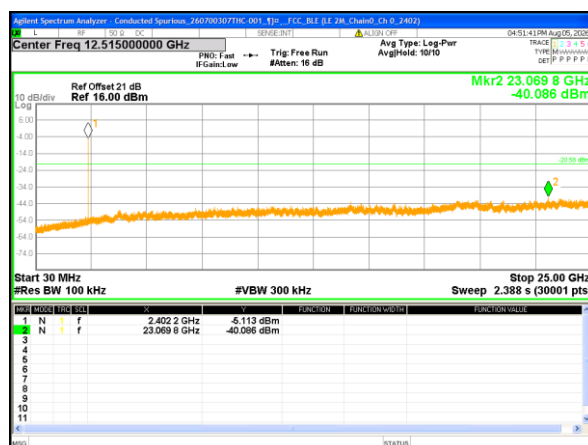
Conducted Spurious @ LE 2M Mode CH0



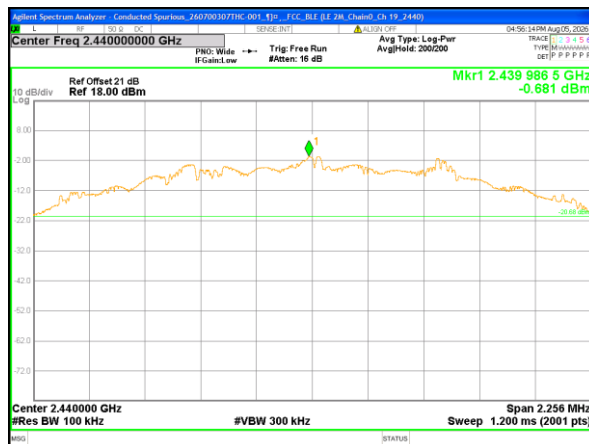
Conducted Spurious @ LE 2M Mode CH0



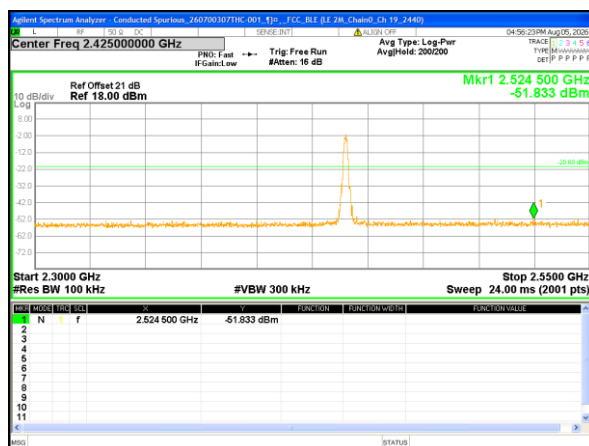
Conducted Spurious @ LE 2M Mode CH0



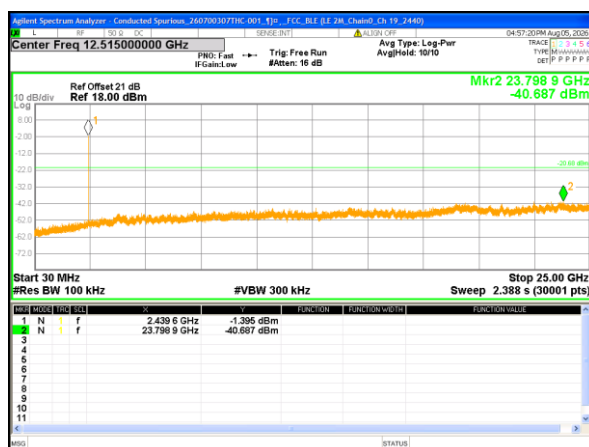
Conducted Spurious @ LE 2M Mode CH19



Conducted Spurious @ LE 2M Mode CH19



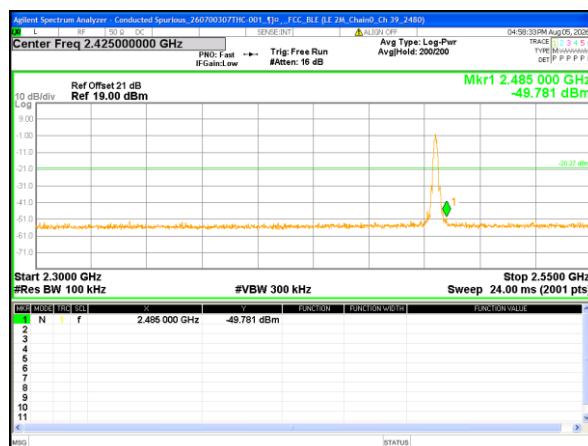
Conducted Spurious @ LE 2M Mode CH19



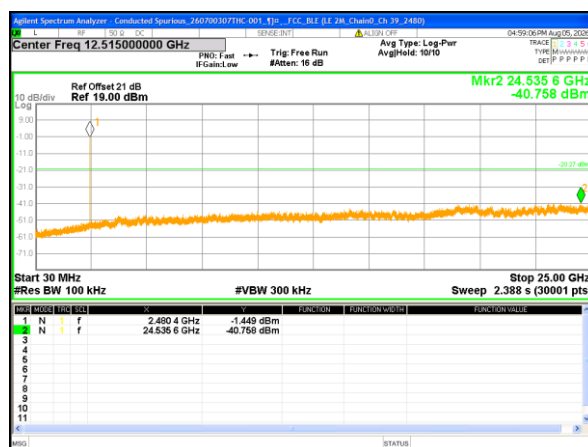
Conducted Spurious @ LE 2M Mode CH39



Conducted Spurious @ LE 2M Mode CH39



Conducted Spurious @ LE 2M Mode CH39



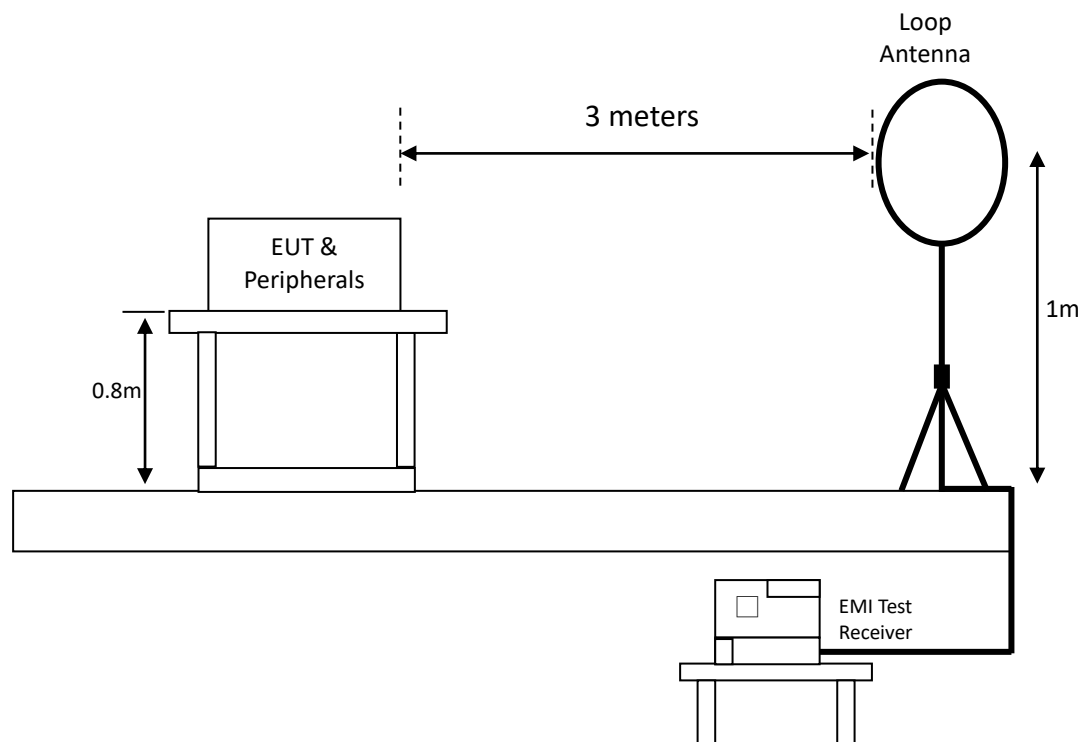
6. Emissions in Restricted Frequency Bands (Radiated emission measurements)

6.1 Instrument Setting

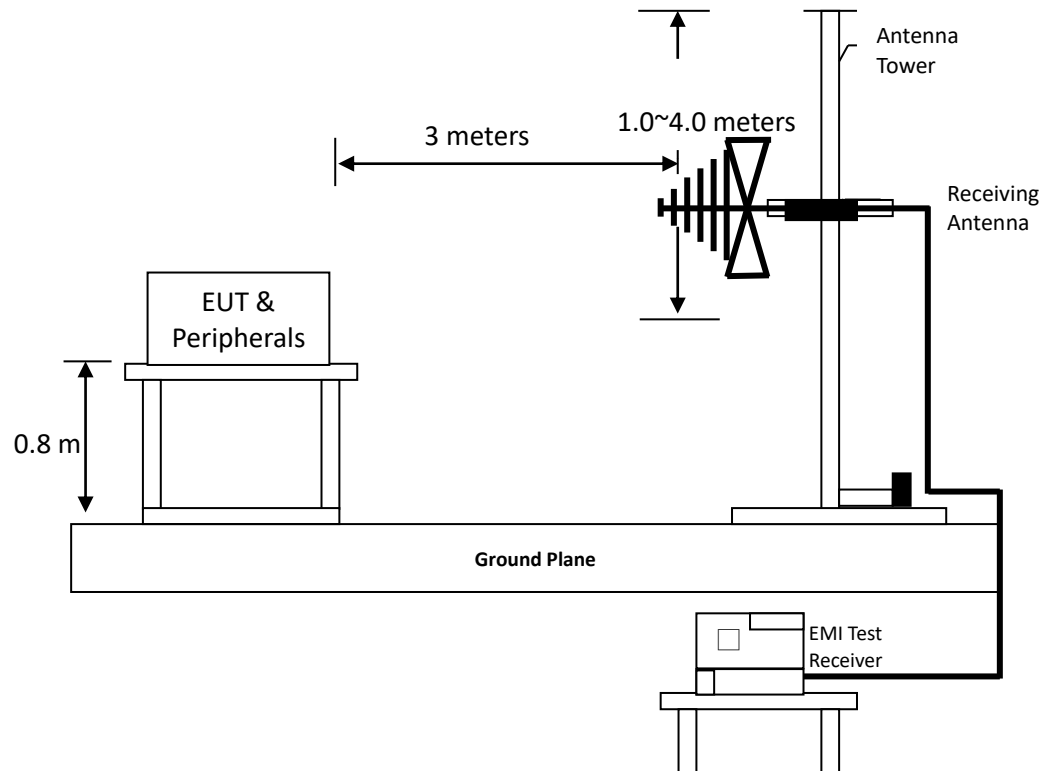
Receiver Function	Setting (Below 1GHz)	Setting (Above 1GHz)
Detector	QP	Peak and Average
RBW	9-150 kHz ; 200-300 Hz 0.15-30 MHz; 9-10 kHz 30-1000 MHz; 100-120 kHz	1MHz
VBW	$\geq 3 \times \text{RBW}$	3MHz & 1/T Minimum VBW
Sweep	Auto couple	Auto couple
Start Frequency	9 kHz	1GHz
Stop Frequency	1 GHz	Tenth harmonic
Attenuation	Auto	Auto

6.2 Test setup & procedure

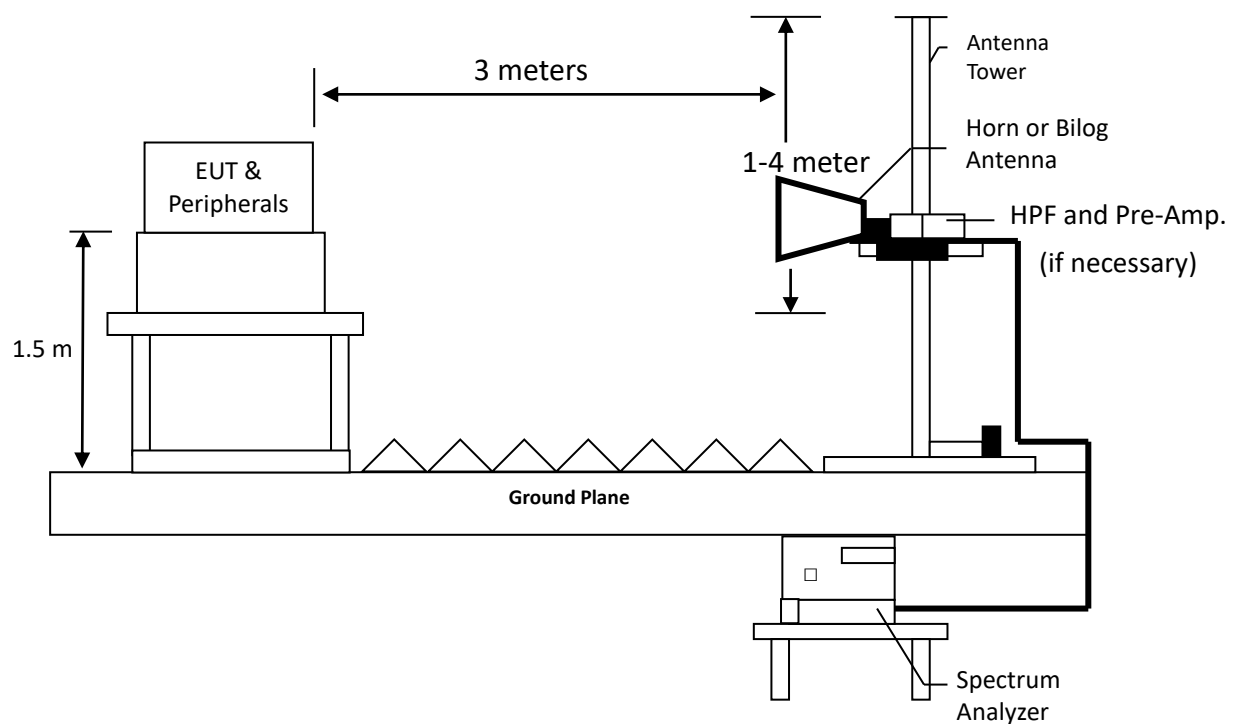
Radiated emission from 9kHz to 30MHz uses Loop Antenna:



Radiated emission below 1GHz using Bilog Antenna



Radiated emission above 1GHz using Horn Antenna



Radiated emissions were investigated cover the frequency range from 30MHz to 1000MHz using a receiver RBW of 120kHz record QP reading, and the frequency over 1GHz using a spectrum analyzer RBW of 1MHz and 10Hz VBW record Average reading. (15.209 paragraph), the Peak reading (1 MHz RBW/ 3 MHz VBW) recorded also on the report.

The EUT for testing is arranged on a turntable. If some peripherals apply to the EUT, the peripherals will be connected to EUT and the whole system. During the test, all cables were arranged to produce worst-case emissions. The signal is maximized through rotation. The height of antenna and polarization is changing constantly for exploring for maximum signal level. The height of antenna can be up to 4 meters and down to 1 meter.

The measurement for radiated emission will be done at the distance of three meters unless the signal level is too low to measure at that distance. In the case of the reading under noise floor, a pre-amplifier is used and/or the test is conducted at a closer distance. And then all readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance.

6.3 Limit

Frequency(MHz)	Field Strength(uV/m)	Measurement distance(m)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark:

1. In the above table, the tighter limit applies at the band edges.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system

6.4 Test Result

6.4.1 Measurement results: frequencies 9kHz to 30MHz

Temperature (°C) :	24
Relative Humidity (%) :	74
Test date :	2026/08/04

The test was performed on EUT under continuously transmitting mode. The worst case occurred at BLE 2M, Ch 19.

Antenna Polarity	Frequency (MHz)	Spectrum Analyzer Detector	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
Perpendicular	0.49	PK	18.24	16.57	34.81	93.82	-59.01
Perpendicular	0.97	PK	18.50	13.25	31.75	67.88	-36.13
Perpendicular	1.36	PK	18.46	12.63	31.09	64.94	-33.85
Perpendicular	2.02	PK	18.41	12.94	31.35	69.54	-38.19
Perpendicular	2.35	PK	18.45	11.90	30.35	69.54	-39.19
Perpendicular	2.86	PK	18.51	10.98	29.49	69.54	-40.05

Remark: Corr. Factor = Antenna Factor + Cable Loss

Antenna Polarity	Frequency (MHz)	Spectrum Analyzer Detector	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
Parallel	1.09	PK	18.49	13.65	32.14	66.86	-34.72
Parallel	1.54	PK	18.46	12.67	31.13	63.86	-32.73
Parallel	1.81	PK	18.43	13.15	31.58	69.54	-37.96
Parallel	2.65	PK	18.48	11.47	29.95	69.54	-39.59
Parallel	3.07	PK	18.56	11.08	29.64	69.54	-39.90
Parallel	3.91	PK	18.99	10.19	29.18	69.54	-40.36

Remark: Corr. Factor = Antenna Factor + Cable Loss

Antenna Polarity	Frequency (MHz)	Spectrum Analyzer Detector	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
Ground-parallel	0.67	PK	18.43	15.06	33.49	71.10	-37.61
Ground-parallel	1.03	PK	18.50	12.76	31.26	67.36	-36.10
Ground-parallel	1.24	PK	18.48	12.66	31.14	65.74	-34.60
Ground-parallel	2.98	PK	18.52	11.22	29.74	69.54	-39.80
Ground-parallel	4.24	PK	19.11	9.59	28.70	69.54	-40.84
Ground-parallel	20.31	PK	21.81	8.36	30.17	69.54	-39.37

Remark: Corr. Factor = Antenna Factor + Cable Loss

6.4.2 Measurement results: frequencies below 1 GHz

Temperature (°C) :	24
Relative Humidity (%) :	74
Test date :	2026/08/04

The test was performed on EUT under continuously transmitting mode. The worst case occurred at BLE 2M, Ch 19.

Antenna Polarity	Frequency (MHz)	Spectrum Analyzer Detector	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
Horizontal	54.25	PK	20.69	2.10	22.79	40.00	-17.21
Horizontal	153.19	PK	20.85	2.48	23.33	43.50	-20.17
Horizontal	337.49	PK	22.89	2.77	25.66	46.00	-20.34
Horizontal	411.21	PK	24.72	3.27	27.99	46.00	-18.01
Horizontal	445.16	PK	26.02	3.05	29.07	46.00	-16.93
Horizontal	631.40	PK	30.03	4.37	34.40	46.00	-11.60

Remark: Corr. Factor = Antenna Factor + Cable Loss

Antenna Polarity	Frequency (MHz)	Spectrum Analyzer Detector	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
Vertical	51.34	PK	20.71	8.57	29.28	40.00	-10.72
Vertical	93.05	PK	15.24	11.27	26.51	43.50	-16.99
Vertical	155.13	PK	20.95	2.01	22.96	43.50	-20.54
Vertical	271.53	PK	21.15	4.21	25.36	46.00	-20.64
Vertical	333.61	PK	22.85	3.06	25.91	46.00	-20.09
Vertical	497.54	PK	26.91	3.32	30.23	46.00	-15.77

Remark: Corr. Factor = Antenna Factor + Cable Loss

TEST REPORT

6.4.3 Measurement results: frequency above 1GHz

Temperature (°C) :	24
Relative Humidity (%) :	74
Test date :	2026/08/04

Mode	Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
BLE 1M Ch 0	4804	PK	H	-1.75	55.08	53.33	74	-20.67
	7206	PK	H	7.17	44.10	51.27	74	-22.73
	4804	PK	V	-1.75	50.44	48.69	74	-25.31
	5985	PK	V	3.13	49.56	52.69	74	-21.31
	7206	PK	V	7.17	44.53	51.70	74	-22.30
BLE 1M Ch 19	4880	PK	H	-1.42	54.95	53.53	74	-20.47
	7320	PK	H	6.91	43.84	50.75	74	-23.25
	4880	PK	V	-1.42	51.64	50.22	74	-23.78
	5985	PK	V	3.13	46.22	49.35	74	-24.65
	7320	PK	V	6.91	46.46	53.37	74	-20.63
	12200	PK	V	15.73	37.57	53.30	74	-20.70
BLE 1M Ch 39	4960	PK	H	-1.12	54.43	53.31	74	-20.69
	7440	PK	H	7.05	44.77	51.82	74	-22.18
	3990	PK	V	-5.57	54.65	49.08	74	-24.92
	4960	PK	V	-1.12	51.03	49.91	74	-24.09
	5970	PK	V	3.17	47.28	50.45	74	-23.55
	7440	PK	V	7.05	47.45	54.50	74	-19.50
	7440	AV	V	7.05	40.63	47.68	54	-6.32
	12400	PK	V	15.34	38.09	53.43	74	-20.57

Remark: 1. Correction Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Pre_Amplifier Gain
2. The emissions were very low against the limit above 18 GHz.

TEST REPORT

Mode	Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
BLE 2M Ch 0	4804	PK	H	-1.75	54.35	52.60	74	-21.40
	7206	PK	H	7.17	44.62	51.79	74	-22.21
	4804	PK	V	-1.75	50.59	48.84	74	-25.16
	5985	PK	V	3.13	48.04	51.17	74	-22.83
	7206	PK	V	7.17	43.54	50.71	74	-23.29
BLE 2M Ch 19	4880	PK	H	-1.42	53.60	52.18	74	-21.82
	7320	PK	H	6.91	42.73	49.64	74	-24.36
	4880	PK	V	-1.42	51.16	49.74	74	-24.26
	6000	PK	V	3.07	47.67	50.74	74	-23.26
	7320	PK	V	6.91	44.98	51.89	74	-22.11
	12200	PK	V	15.73	37.25	52.98	74	-21.02
BLE 2M Ch 39	4960	PK	H	-1.12	53.65	52.53	74	-21.47
	7440	PK	H	7.05	44.69	51.74	74	-22.26
	4960	PK	V	-1.12	51.60	50.48	74	-23.52
	5985	PK	V	3.13	49.26	52.39	74	-21.61
	7440	PK	V	7.05	46.06	53.11	74	-20.89
	12400	PK	V	15.34	38.02	53.36	74	-20.64

Remark: 1. Correction Factor = Antenna Factor + Cable Loss + High Pass Filter Loss - Pre_Amplifier Gain

2. The emissions were very low against the limit above 18 GHz.

7. Emission on Band Edge

7.1 Instrument Setting

Spectrum Function	Setting
Detector	Peak and Average
RBW	1MHz
VBW	3MHz & 1/T Minimum VBW
Sweep	Auto couple
Restrict bands	2310 MHz ~ 2390 MHz 2483.5 MHz ~ 2500 MHz
Attenuation	Auto

7.2 Test Procedure

The test procedure is the same as Emissions in Restricted Frequency Bands (Radiated emission measurements).

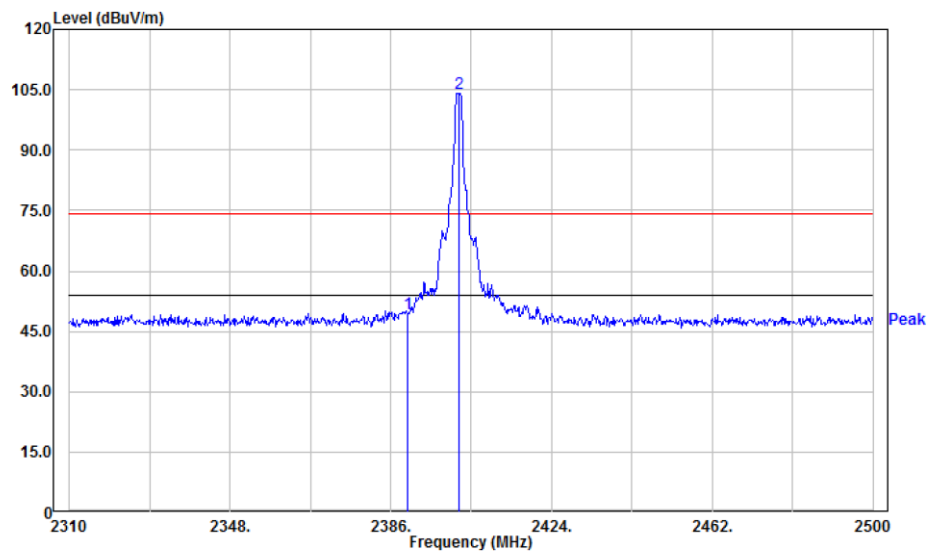
7.3 Test Results

Temperature (°C) :	24
Relative Humidity (%) :	74
Test date :	2026/08/04

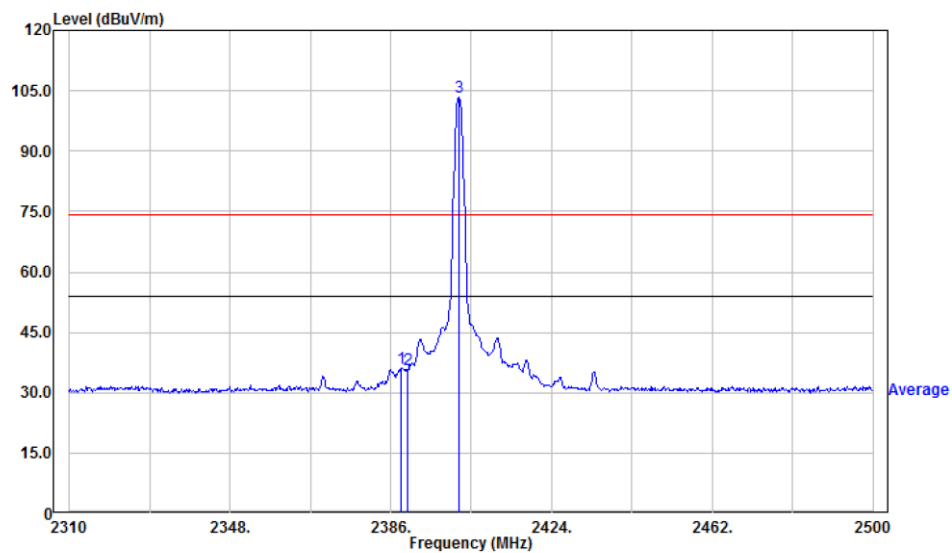
Mode	Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)	Restricted band (MHz)
BLE 1M	2390.00	PK	H	35.82	13.75	49.57	74	-24.43	2310~2390
	2388.47	AV	H	35.82	0.39	36.21	54	-17.79	
	2483.50	PK	H	35.80	30.95	66.75	74	-7.25	2483.5~2500
	2484.04	AV	H	35.80	10.76	46.56	54	-7.44	
BLE 2M	2389.61	PK	H	35.82	14.47	50.29	74	-23.71	2310~2390
	2388.66	AV	H	35.82	2.33	38.15	54	-15.85	
	2483.50	PK	H	35.80	29.58	65.38	74	-8.62	2483.5~2500
	2483.50	AV	H	35.80	12.84	48.64	54	-5.36	

Remark: Correction Factor = Antenna Factor + Cable Loss

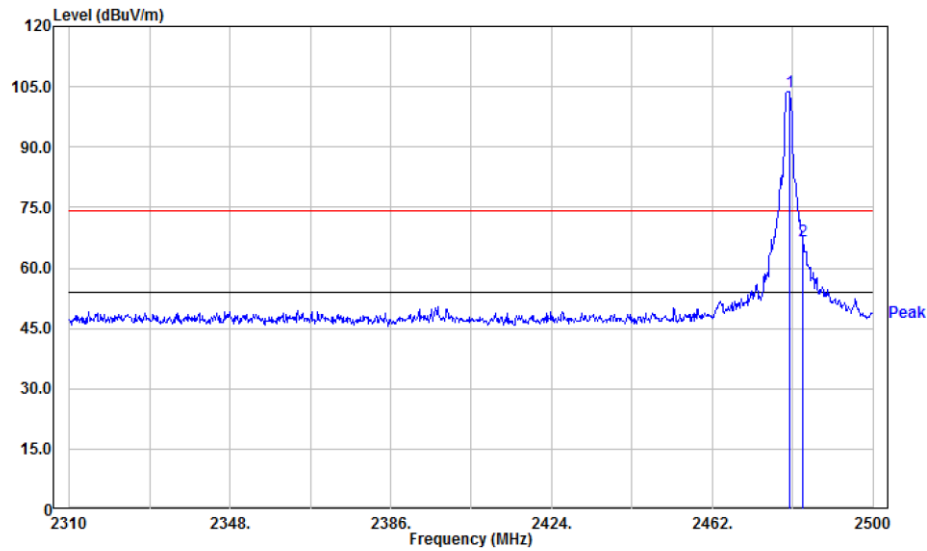
Chain0 : Restricted Band Bandedge @ BLE ch0 1M PK



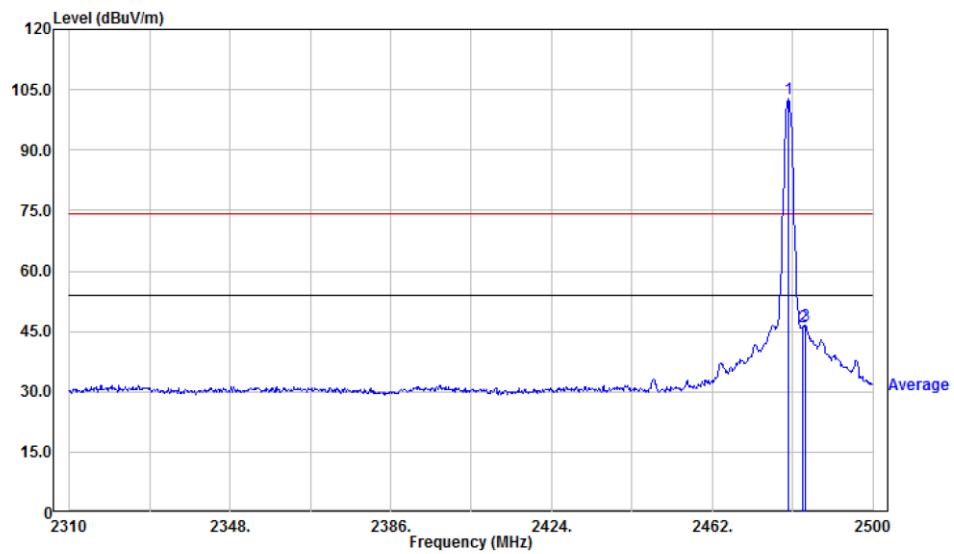
Chain0 : Restricted Band Bandedge @ BLE ch0 1M AV



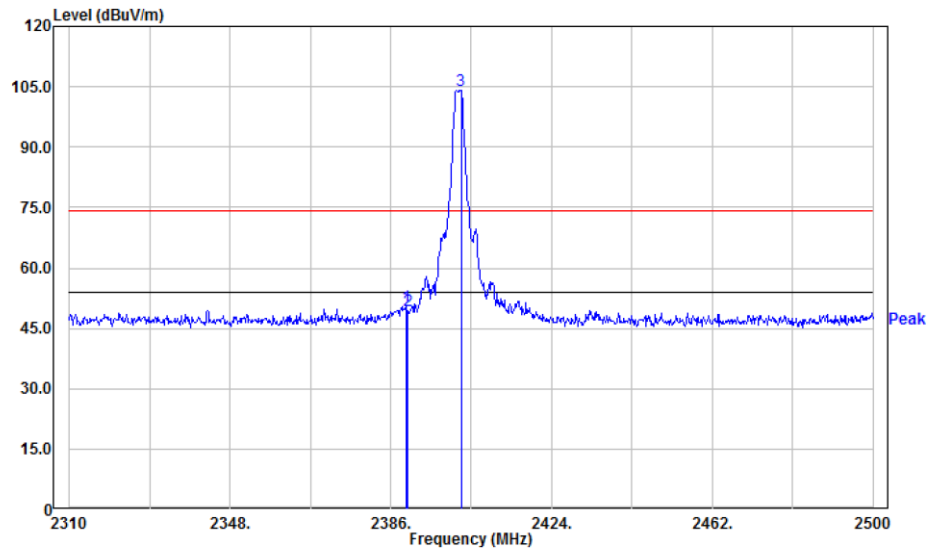
Chain0 : Restricted Band Bandedge @ BLE ch39 1M PK



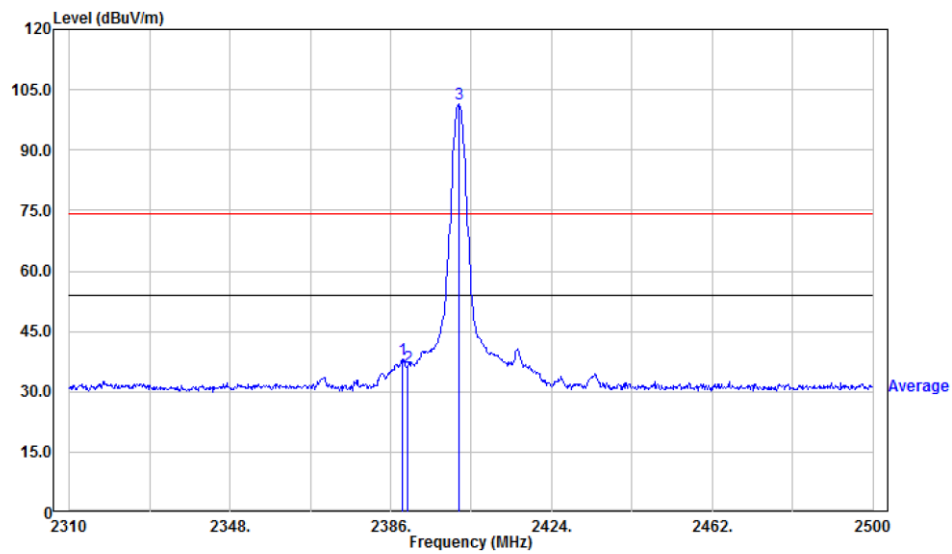
Chain0 : Restricted Band Bandedge @ BLE ch39 1M AV



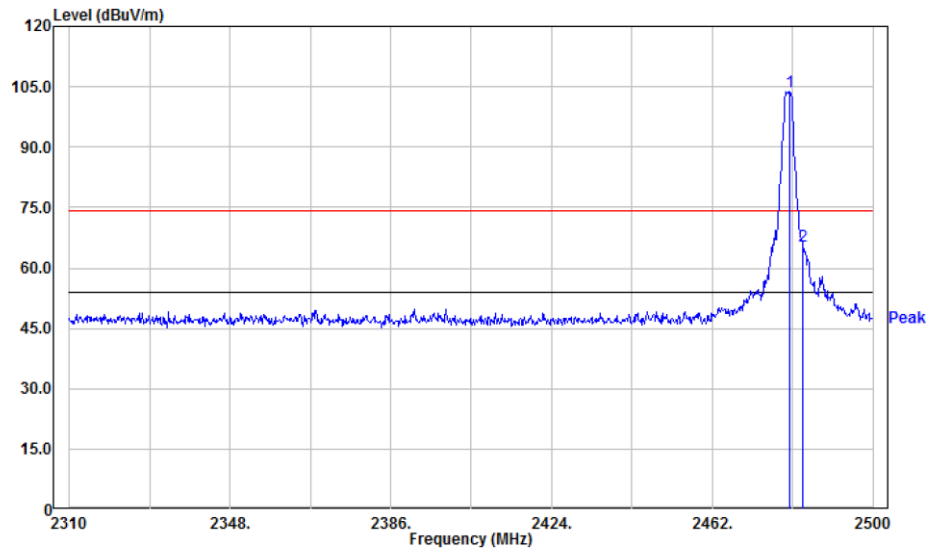
Chain0 : Restricted Band Bandedge @ BLE ch0 2M PK



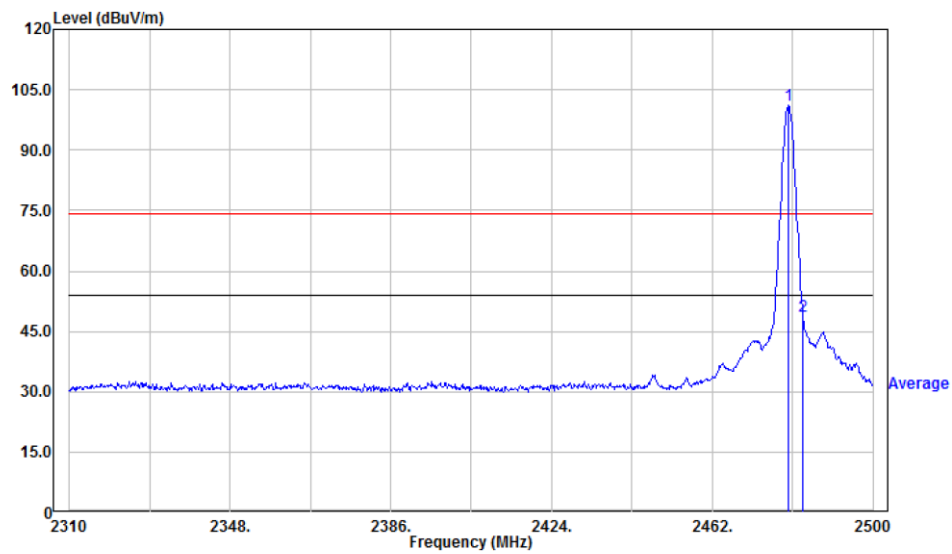
Chain0 : Restricted Band Bandedge @ BLE ch0 2M AV



Chain0 : Restricted Band Bandedge @ BLE ch39 2M PK



Chain0 : Restricted Band Bandedge @ BLE ch39 2M AV



8. AC Power Line Conducted Emission

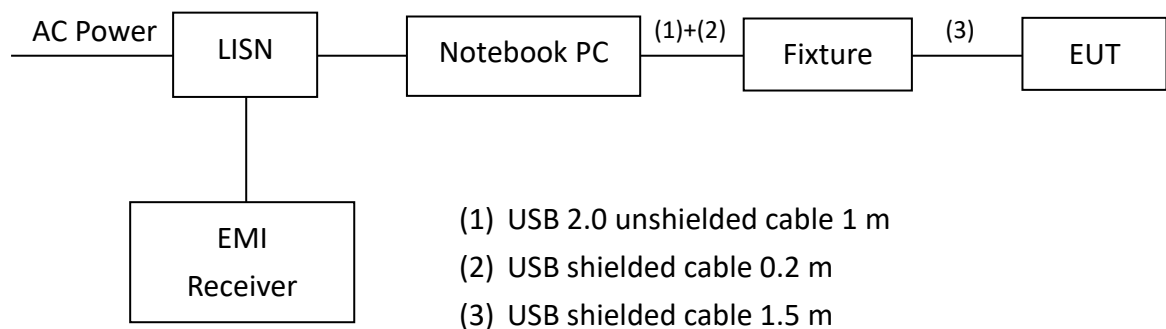
8.1 Measuring instrument setting

Receiver Function	Setting
Detector	QP
Start frequency	0.15MHz
Stop frequency	30MHz
IF bandwidth	9 kHz
Attenuation	10dB

8.2 Test Procedure

Step 1	Configure the EUT according to ANSI C63.10-2020. The EUT or host of EHT has to be placed 0.4 meter far from the conducting wall of the shielding room and at least 80 centimeters from any other grounded conducting surface.
Step 2	Connect EUT or host of EUT to the power mains through a line impedance stabilization network.
Step 3	All the companion devices are connected to the other LISN. The LISN should provide 50Uh/50ohms coupling impedance.
Step 4	The frequency range from 150 kHz to 30MHz was searched.
Step 5	Set the test-receiver system to peak detector and specified bandwidth with maximum hold mode.
Step 6	The measurement has to be done between each power line and ground at the power terminal.

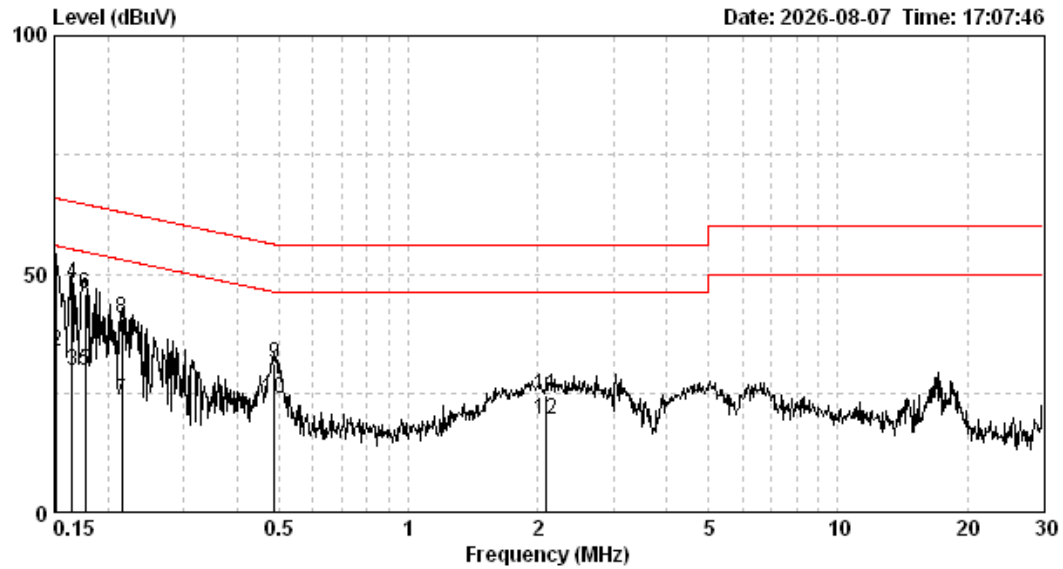
8.3 Test Diagram



8.4 Limit

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi Peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5.00	56	46
5.00 to 30.0	60	50

8.5 Test Results

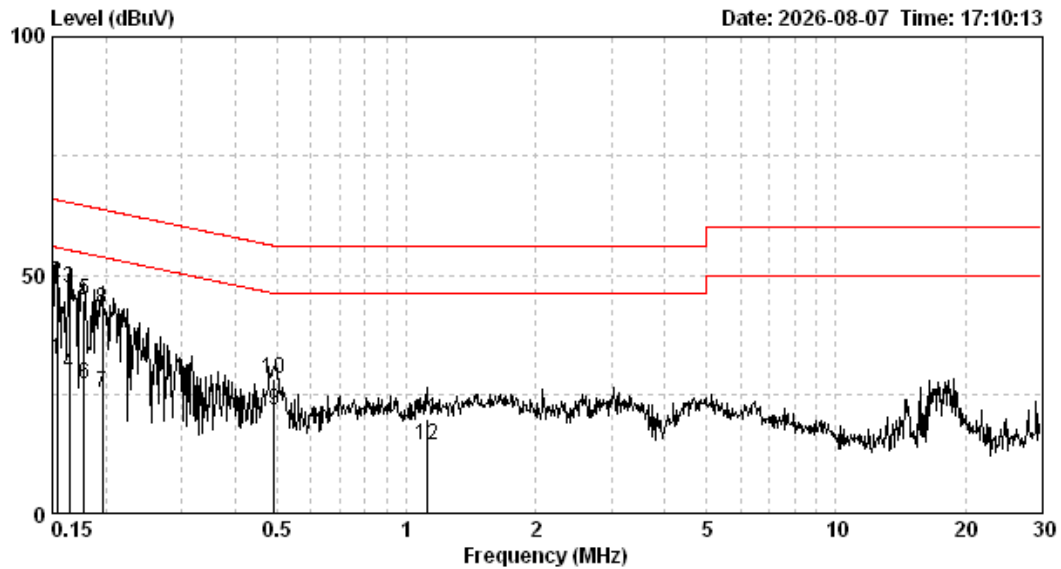


Test voltage : AC 120V / 60Hz
 Temp. / R.H. : 25 °C / 71 %
 Atmospheric pressure : 1010 hPa

Phase	Frequency (MHz)	Corr. Factor (dB)	Reading QP (dBuV)	Level QP (dBuV)	Limit QP (dBuV)	Reading AV (dBuV)	Level AV (dBuV)	Limit AV (dBuV)	Margin (dB)	
									QP	AV
LINE	0.152	9.77	39.87	49.64	65.91	23.83	33.60	55.91	-16.28	-22.32
LINE	0.165	9.78	38.24	48.02	65.21	19.94	29.72	55.21	-17.19	-25.49
LINE	0.177	9.78	35.99	45.77	64.64	20.02	29.80	54.64	-18.86	-24.83
LINE	0.215	9.80	30.89	40.68	63.01	13.68	23.48	53.01	-22.32	-29.53
LINE	0.489	9.87	21.09	30.96	56.19	14.03	23.90	46.19	-25.23	-22.28
LINE	2.099	10.06	14.43	24.49	56.00	9.44	19.50	46.00	-31.51	-26.50

Remark:

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Level (dBuV) = Corr. Factor (dB) + Reading (dBuV)
3. Margin (dB) = Level (dBuV) – Limit (dBuV)



Test voltage : AC 120V / 60Hz
Temp. / R.H. : 25 °C / 71 %
Atmospheric pressure : 1010 hPa

Phase	Frequency (MHz)	Corr. Factor (dB)	Reading QP (dBuV)	Level QP (dBuV)	Limit QP (dBuV)	Reading AV (dBuV)	Level AV (dBuV)	Limit AV (dBuV)	Margin (dB)	
									QP	AV
NEUTRAL	0.154	9.76	38.61	48.37	65.78	22.41	32.17	55.78	-17.41	-23.61
NEUTRAL	0.164	9.76	37.41	47.17	65.25	19.40	29.16	55.25	-18.08	-26.09
NEUTRAL	0.178	9.76	34.93	44.69	64.59	17.42	27.18	54.59	-19.91	-27.42
NEUTRAL	0.197	9.76	33.15	42.91	63.76	15.53	25.29	53.76	-20.85	-28.47
NEUTRAL	0.491	9.83	18.47	28.30	56.14	11.79	21.62	46.14	-27.84	-24.52
NEUTRAL	1.117	9.91	9.86	19.77	56.00	4.25	14.16	46.00	-36.23	-31.84

Remark:

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Level (dBuV) = Corr. Factor (dB) + Reading (dBuV)
3. Margin (dB) = Level (dBuV) – Limit (dBuV)

Appendix A: Test equipment list

Test Equipment/ Test site	Brand	Model No.	Serial No.	Calibration Date	Next Calibration Date
Pre-Amplifier	SGH	SGH118	20220105-1	2025/12/15	2026/12/14
Broadband Antenna	SCHWARZBECK	VULB 9168	9168-172	2025/12/15	2026/12/14
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170159	2026/07/21	2027/07/20
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-456	2025/12/02	2026/12/01
Power Meter	Anritsu	ML2495A	0844001	2025/11/28	2026/11/27
Power Sensor	Anritsu	MA2491A	031543	2025/11/28	2026/11/27
Cable	SUHNER	SUCOFLEX 104	295105/4	2026/02/26	2027/02/25
Cable	SUHNER	SUCOFLEX 104P	CB0005	2026/02/26	2027/02/25
Cable	SUHNER	SUCOFLEX 104P	9403 / 4P	2025/11/21	2026/11/20
Signal Analyzer	Agilent	N9030A	MY51380492	2026/01/20	2027/01/19
Band Pass Filter	Reactel	7HS-3G/18G-S11	N/A	2026/05/20	2027/05/19
Active Loop Antenna	SCHWARZBECK	FMZB1519	1519-067	2025/11/17	2026/11/16
Attenuator	Mini-Circuits	BW-S20W5+	N/A	2026/05/20	2027/05/19
Pre-amplifier	SGH	SGH184	20201124-1	2025/11/25	2026/11/24
Spectrum analyzer	KEYSIGHT	N9020B	MY63450146	2026/01/30	2027/01/29
EMI Test Receiver	KEYSIGHT	N9038B	MY63060107	2026/01/14	2027/01/13
966-2_3m Semi-Anechoic Chamber	CHANCE MOST	CEM-966_2	N/A	2026/07/28	2027/07/27
Test software	Audix	e3	V9	NCR	NCR
EMI Test Receiver	R&S	ESCI	100059	2025/09/03	2026/09/02
LISN	R&S	ENV216	101160	2026/06/16	2027/06/15
Cable	SUHNER	EMCCFD300-BM- NM-6000	170502	2026/06/22	2027/06/21
Test software	Audix	e3	V4.20040112L	NCR	NCR
Test site	Intertek	Con-2	N/A	NCR	NCR

Note: No Calibration Required (NCR).

Appendix B: Measurement Uncertainty

This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level using a coverage factor of $k=2.0$.

Item	Uncertainty
Radiated disturbances from 9kHz~30MHz in a semi-anechoic chamber at a distance of 3m	2.73 dB
Vertically polarized radiated disturbances from 30MHz~1GHz in a semi-anechoic chamber at a distance of 3m	3.91 dB
Horizontally polarized radiated disturbances from 30MHz~1GHz in a semi-anechoic chamber at a distance of 3m	3.49 dB
Vertically polarized Radiated disturbances from 1GHz~18GHz in a semi-anechoic chamber at a distance of 3m	3.71 dB
Horizontally polarized Radiated disturbances from 1GHz~18GHz in a semi-anechoic chamber at a distance of 3m	3.71 dB
Vertically polarized Radiated disturbances from 18GHz~40GHz in a semi-anechoic chamber at a distance of 3m	3.26 dB
Horizontally polarized Radiated disturbances from 18GHz~40GHz in a semi-anechoic chamber at a distance of 3m	3.26 dB
Conducted Measurement	0.69 dB
AC Power Line Conducted Emission	1.31 dB