FCC - TEST REPORT

Report Number	:	**68.950.23.0516.01** Date of Issue: **July 22, 2023**
Model	:	**DP20 PRO, DP20, D3, D5, D5T, D6, D7, D8, D9, D9A, D9B, D9C, D9+, D9 PRO, D520, D520T, D530, D530T, D550, D550T, D560, D560T, D5U, DP10, DP20, DP30, D110, D11S, M1, M2, M110, M120G, M120-B, M130, M130-B, I6, I5, I3**
Product Type	:	Laser Distance Meter
Applicant	:	Shenzhen Mileseey Technology Co., Ltd.
Address	:	No.3601 Block A, Tanglang Town Plaza West, Fuguang Community, Taoyuan Street, Nanshan District, Shenzhen, China
Manufacturer	:	Shenzhen Mileseey Technology Co., Ltd.
Address	:	No.3601 Block A, Tanglang Town Plaza West, Fuguang Community, Taoyuan Street, Nanshan District, Shenzhen, China
Factory	:	Huizhou Mileseey Technology Co., Ltd.
Address	:	Floor 2 & 3 of Intelliget Tower, Innovation Park of Tonghu Ecological Smart Zone, Zhongkai Six Road #137, Chenjiang Avenue, Zhongkai High-tech Area, 516029 Huizhou, Guangdong, PEOPLE'S REPUBLIC OF CHINA
Test Result	:	■ **Positive** ☐ Negative
Total pages including Appendices	:	**31**

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1 Table of Contents

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2 Details about the Test Laboratory

Details about the Test Laboratory
Test Site 1

Company name:	TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12 & 13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District Shenzhen 518052 P.R. China
Telephone:	86 755 8828 6998
Fax:	86 755 8828 5299
FCC Registration No.:	514049
FCC Designation Number:	CN5009

3 Description of the Equipment Under Test

Product:	Laser Distance Meter
Model no.:	DP20 PRO, DP20, D3, D5, D5T, D6, D7, D8, D9, D9A, D9B, D9C, D9+, D9 PRO, D520, D520T, D530, D530T, D550, D550T, D560, D560T, D5U, DP10, DP20, DP30, D110, D11S, M1, M2, M110, M120G, M120-B, M130, M130-B, I6, I5, I3
Model difference:	All models are identical in technical construction including circuit diagram, PCB layout, components and component layout, the differences lies only in the color and marketing purpose of different models. So all the tests were applied on DP20 PRO, other models deemed to fulfill the requirement without further testing.
Brand name:	Mileseey
FCC ID:	2AEOGDP20PRO
Options and accessories:	N/A
Rating:	5VDC, 600mA supplied by USB-C port or 3.7VDC, 1000mAh supplied by rechargeable Lithium-ion battery
RF Transmission Frequency:	2402MHz-2480MHz
No. of Operated Channel:	40
Modulation:	GFSK
Antenna Type:	PCB antenna
Antenna 1	Gain: 0.2dBi
Description of the EUT:	The EUT is a Laser Distance Meter which supports BLE technology. Only Bluetooth Low Energy included in this report.

NOTE: The above EUT's information is declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

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4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart C 10-1-2021 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators

All the test methods were according to KDB 558074 D01 15.247 Meas Guidance v05r02 Measurement Guidance and ANSI C63.10 (2020).

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5 Summary of Test Results

Technical Requirements			
FCC Part 15 Subpart C			
Test Condition		Test Site	Test Result
§15.207	Conducted emission AC power port	N/A	N/A*
§15.247(b)(3)	Conducted peak output power	Site 1	Pass
§15.247(e)	Power spectral density	Site 1	Pass
§15.247(a)(2)	6dB bandwidth	Site 1	Pass
§15.247(a)(1)	20dB bandwidth	N/A	N/A
§15.247(a)(1)	Carrier frequency separation	N/A	N/A
§15.247(a)(1)(iii)	Number of hopping frequencies	N/A	N/A
§15.247(a)(1)(iii)	Dwell Time	N/A	N/A
§15.247(d)	Spurious RF conducted emissions	Site 1	Pass
§15.247(d)	Band edge	Site 1	Pass
§15.247(d) & §15.205 & §15.209	Spurious radiated emissions for transmitter	Site 1	Pass
§15.203	Antenna requirement	See note 2	Pass

Note 1: N/A=Not Applicable.
Note 2: The EUT uses a PCB antenna, which gain is 0.2dBi. In accordance to §15.203, it is considered sufficiently to comply with the provisions of this section.
Note 3: * The EUT can't transmit when working in charging mode.

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6 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: 2AEOGDP20PRO, complies with Section 15.209, 15.247 of the FCC Part 15, Subpart C rules.

SUMMARY:

All tests according to the regulations cited on page 5 were

■ - Performed

☐ - **Not** Performed

The Equipment under Test

■ - **Fulfills** the general approval requirements.

☐ - **Does not** fulfill the general approval requirements.

Sample Received Date:	June 25, 2023
Testing Start Date:	June 25, 2023
Testing End Date:	July 21, 2023

- TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch -

Reviewed by:	Prepared by:	Tested by:
John Zhi	Sanvin Zheng	Carry Cai
Project Manager	Project Engineer	Test Engineer

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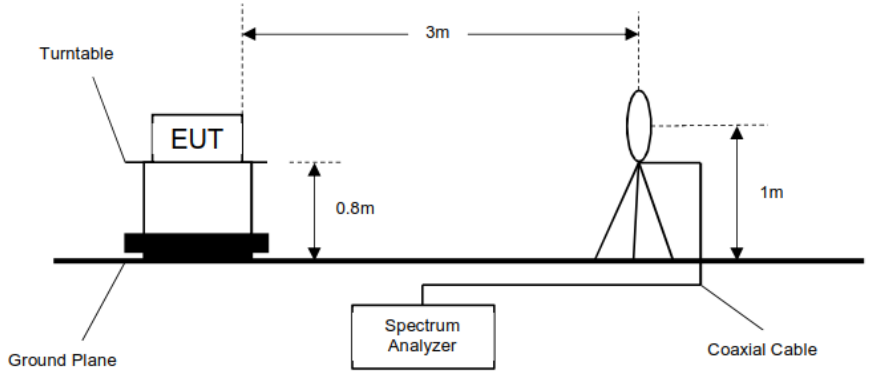
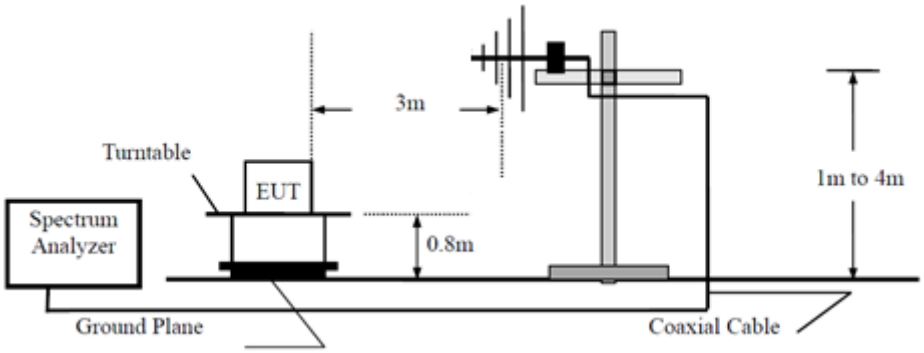
7 Test Setups

7.1 Radiated test setups

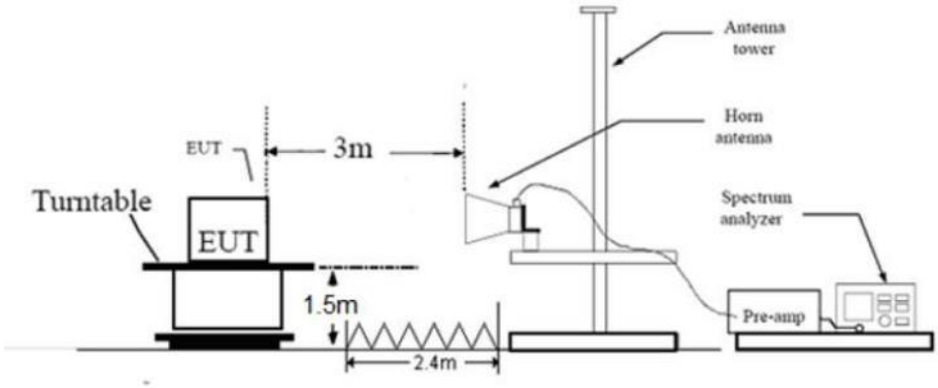
9kHz - 30MHz



30MHz - 1GHz



Above 1GHz



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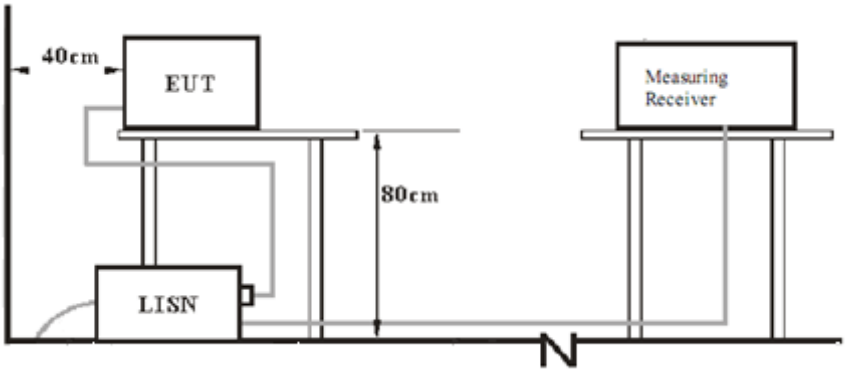
7.2 AC Power Line Conducted Emission test setups



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8 Systems Test Configuration

Auxiliary Equipment Used during Test:

Description	Manufacturer	Model NO.	S/N
Laptop	HP	HP ProBook 455	5CD302CY52

Test software information:

Test Software Version	BK32xx RF Test_V1.8.2	
Modulation	Setting TX Power	Packet Type
GFSK	2	PRBS9

The system was configured to non-hopping mode, testing channel 0, 19, 39.

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9 Technical Requirement

9.1 Conducted Peak Output Power

Test Method

1. The EUT was placed on 0.8m height table, the RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. Use the following test receiver settings:
   Span = approximately 5 times the 20dB bandwidth, centered on a hopping channel
   RBW > the 20dB bandwidth of the emission being measured, VBW≥RBW,
   Sweep = auto, Detector function = peak, Trace = max hold
4. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power and record the results in the test report.
5. Repeat above procedures until all frequencies measured were complete.

Limits

According to §15.247 (b) (3), conducted peak output power limit as below:

Frequency Range MHz	Limit W	Limit dBm
2400-2483.5	≤1	≤30

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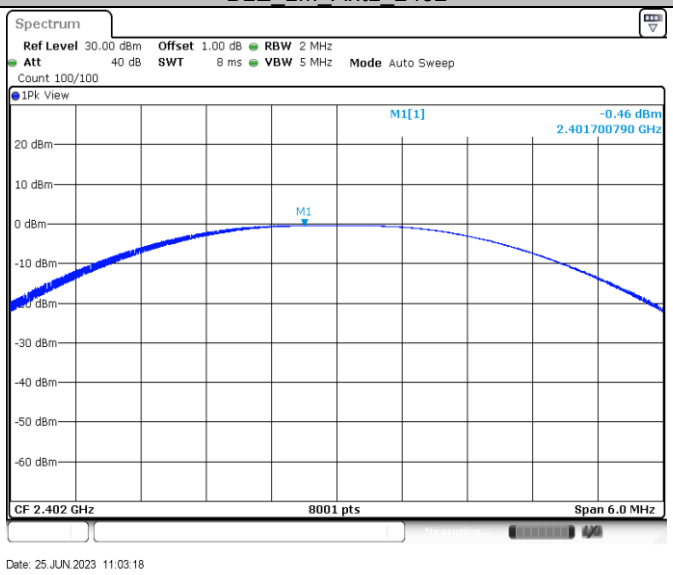
Conducted Peak Output Power

Frequency MHz	Mode	Conducted Peak Output Power dBm	Result
Bottom channel 2402MHz	LE 1M	-0.46	Pass
Middle channel 2440MHz	LE 1M	-0.47	Pass
Top channel 2480MHz	LE 1M	-0.94	Pass

BLE_1M_Ant1_2402



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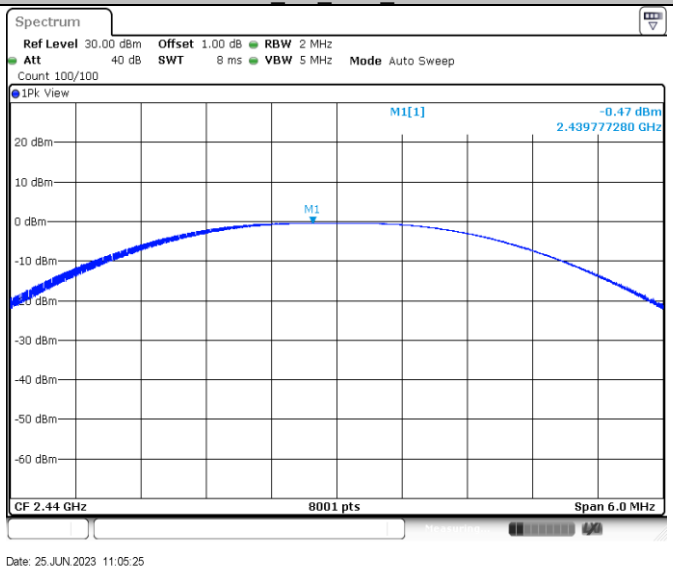

BLE_1M_Ant1_2480

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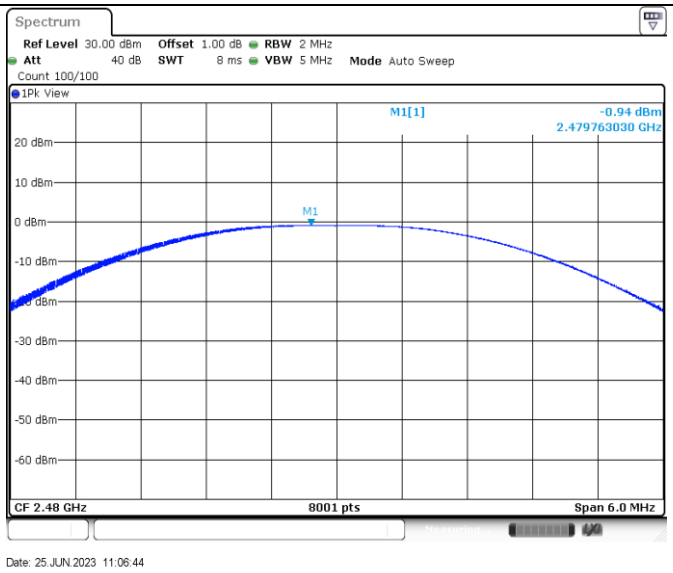

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9.2 Power Spectral Density

Test Method

1. The RF output of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting, the instrument center frequency is set to the nominal EUT channel center frequency enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings:
4. Set analyzer center frequency to DTS channel center frequency. RBW=3kHz, VBW≥3RBW, Span=1.5 times DTS bandwidth, Detector=Peak, Sweep=auto, Trace= max hold.
5. Allow trace to fully stabilize, use the peak marker function to determine the maximum amplitude level within the RBW.
6. Repeat above procedures until other frequencies measured were completed.

Limit

According to §15.247(e), power spectral density limit as below:

Limit [dBm]
≤8

Test result

Frequency MHz	Mode	Power spectral density dBm/3kHz	Result
Bottom channel 2402MHz	LE 1M	-17.28	Pass
Middle channel 2440MHz	LE 1M	-17.24	Pass
Top channel 2480MHz	LE 1M	-17.58	Pass

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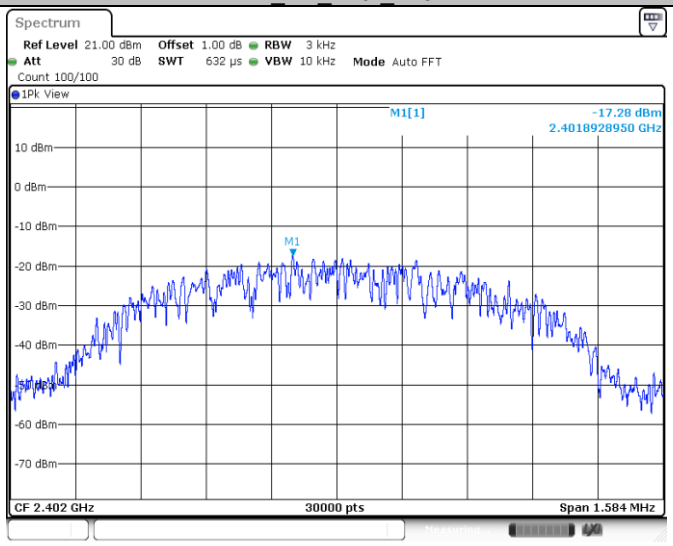
BLE_1M_Ant1_2402



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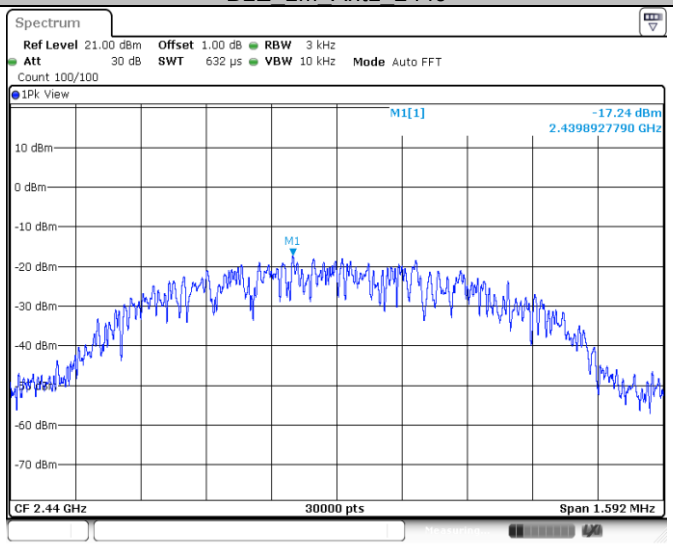
BLE_1M_Ant1_2440



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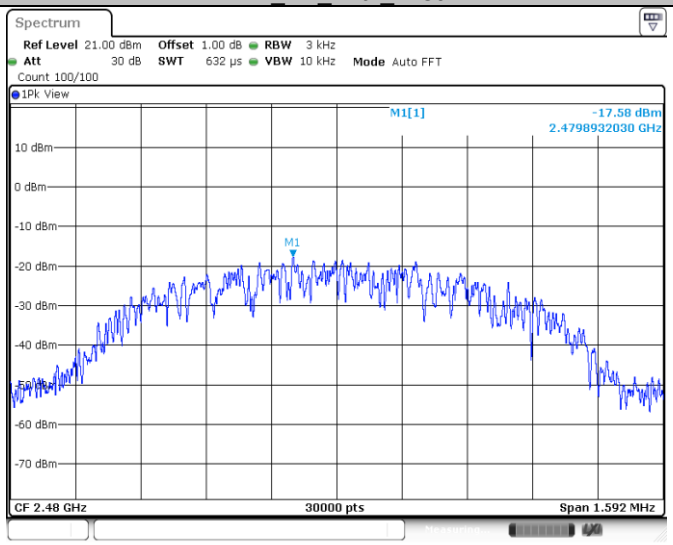

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9.3 6 dB Bandwidth

Test Method

1. The RF output of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting, the instrument center frequency is set to the nominal EUT channel center frequency enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings:
   RBW=100KHz, VBW≥3RBW, Sweep = auto, Detector function = peak, Trace = max hold
4. 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.
5. Allow the trace to stabilize, record the 6 dB Bandwidth value.

Limit

According to §15.247(a)(2), 6 dB bandwidth limit as below:

Limit [kHz]
≥500

Test result

Frequency MHz	Mode	6dB bandwidth MHz	Result
Bottom channel 2402MHz	LE 1M	0.792	Pass
Middle channel 2440MHz	LE 1M	0.796	Pass
Top channel 2480MHz	LE 1M	0.796	Pass

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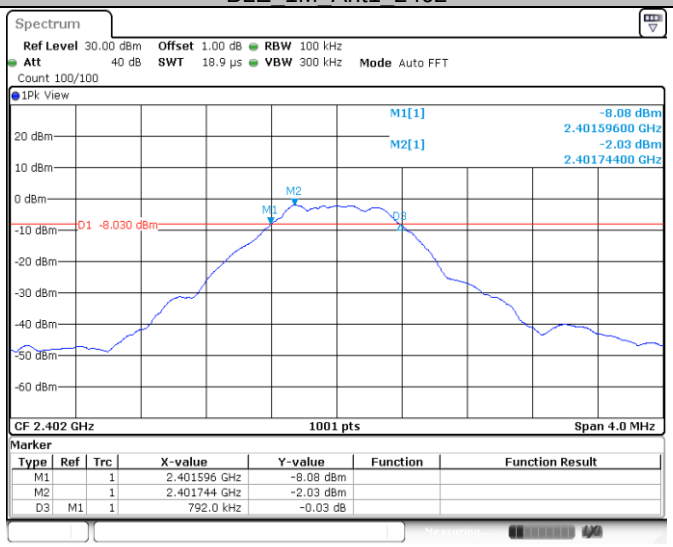
6 dB Bandwidth

BLE_1M_Ant1_2402



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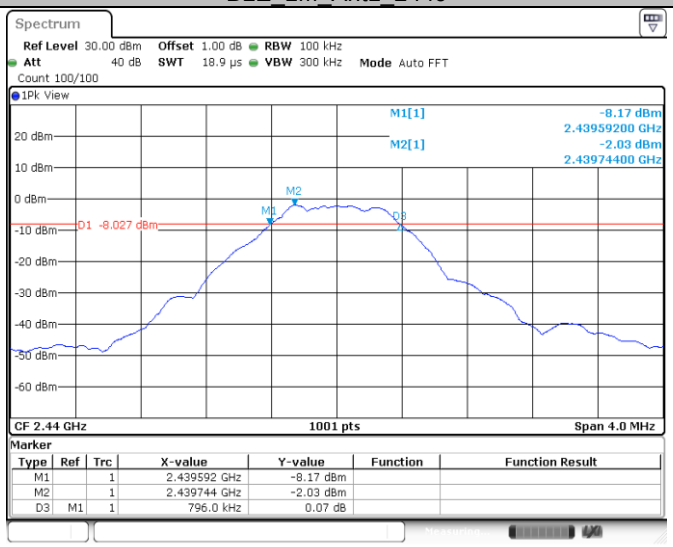

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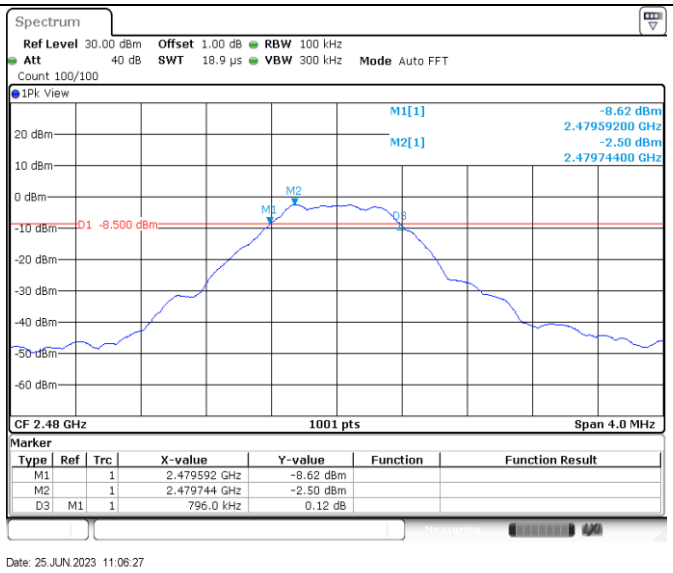
BLE_1M_Ant1_2480



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9.4 Spurious RF Conducted Emissions

Test Method

1. The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting, the instrument center frequency is set to the nominal EUT channel center frequency enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings:
   Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
   RBW = 100 kHz, VBW≥3RBW, Sweep = auto, Detector function = peak, Trace = max hold
4. Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded.
5. The level displayed must comply with the limit specified in this Section. Submit these plots.
6. Repeat above procedures until all frequencies measured were complete.

Limit

According to §15.247(d), spurious RF conducted emissions limit as below:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits.

Frequency Range MHz	Limit (dBc)
30-25000	-20

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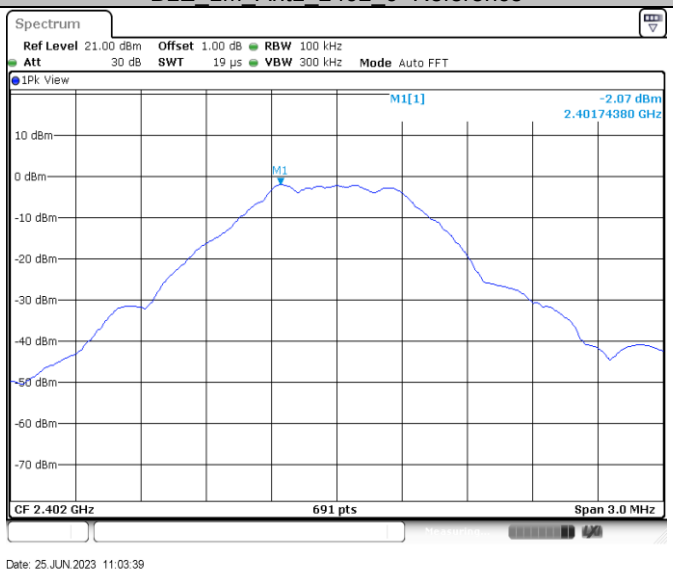
Spurious RF conducted emissions

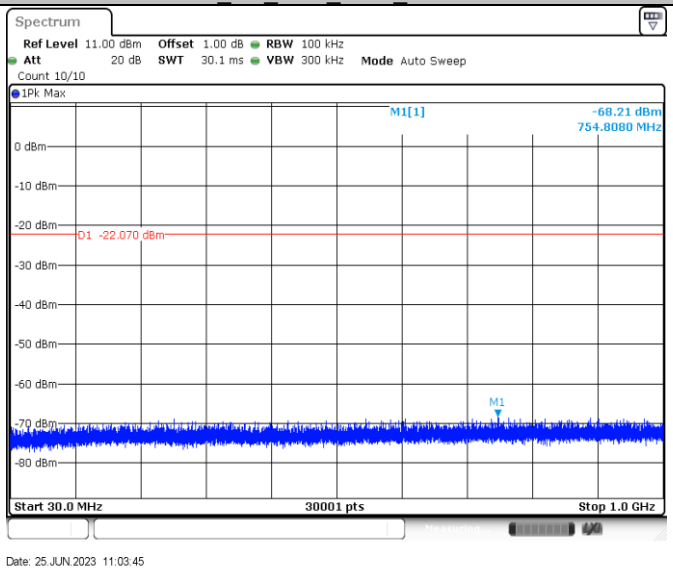
Test Mode	Antenna	Channel (MHz)	Frequency Range (MHz)	Reference Level	Result (dBm)	Limit (dBm)	Verdict
BLE_1M	Ant1	2402	Reference	-2.07	-2.07	---	PASS
			30~1000	30~1000	-68.21	<=-22.07	PASS
			1000~26500	1000~26500	-52.12	<=-22.07	PASS
		2440	Reference	-2.02	-2.02	---	PASS
			30~1000	30~1000	-68.2	<=-22.02	PASS
			1000~26500	1000~26500	-52.69	<=-22.02	PASS
		2480	Reference	-2.60	-2.60	---	PASS
			30~1000	30~1000	-68.22	<=-22.6	PASS
			1000~26500	1000~26500	-51.89	<=-22.6	PASS

Remark: The emissions exceed limit is fundamental signal.

BLE_1M_Ant1_2402_0~Reference



BLE_1M_Ant1_2402_30~1000



BLE_1M_Ant1_2402_1000~26500

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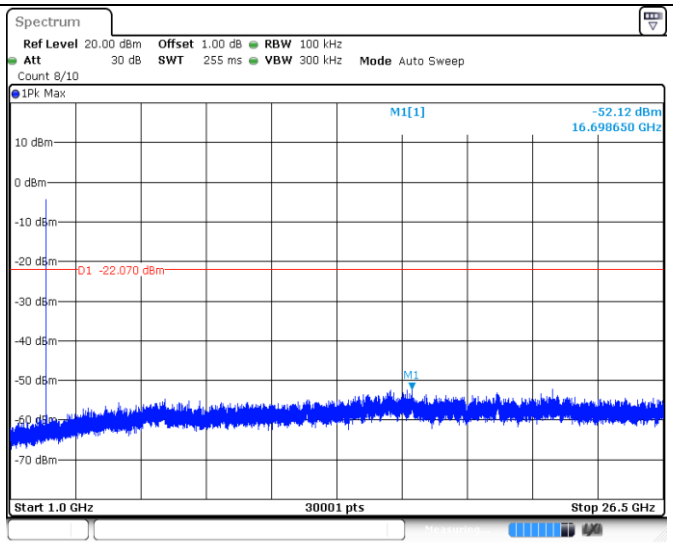

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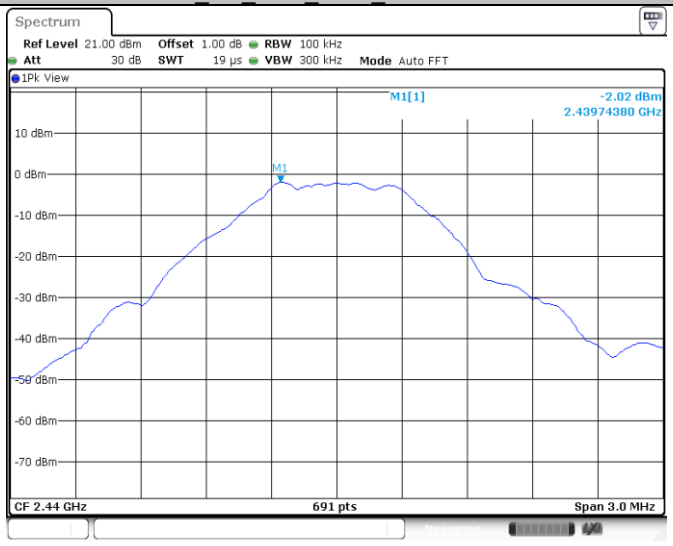
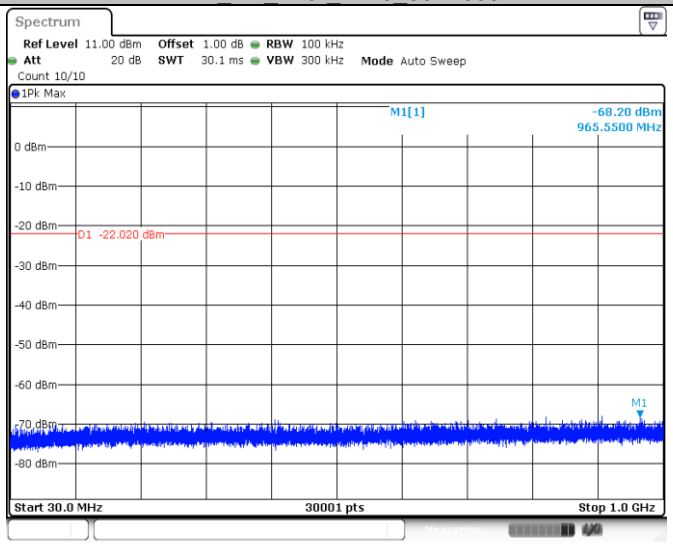


BLE_1M_Ant1_2440_30~1000



BLE_1M_Ant1_2440_1000~26500

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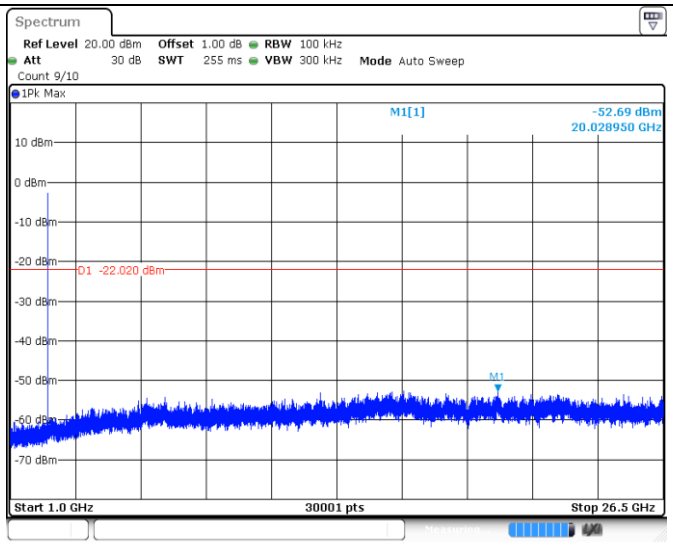

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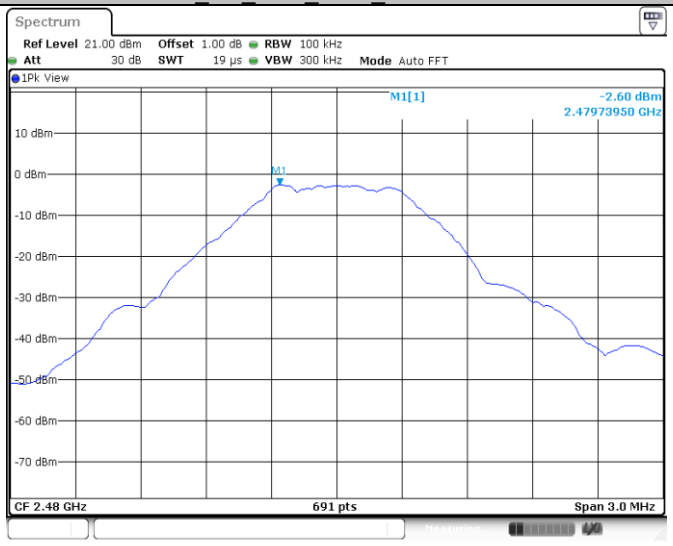
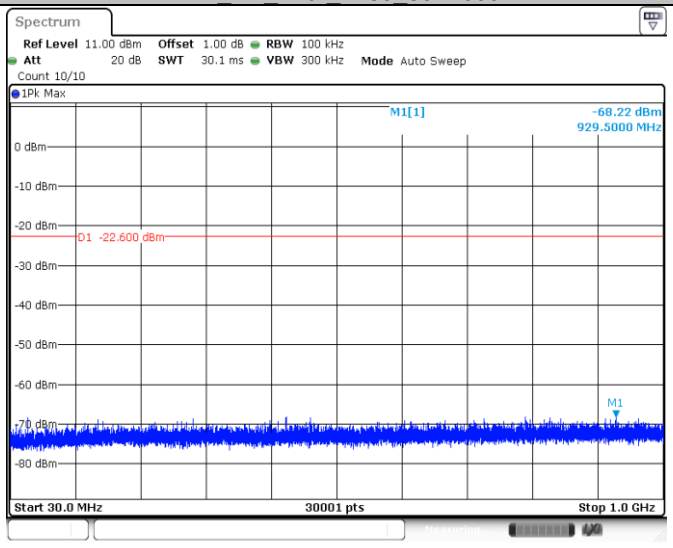


BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

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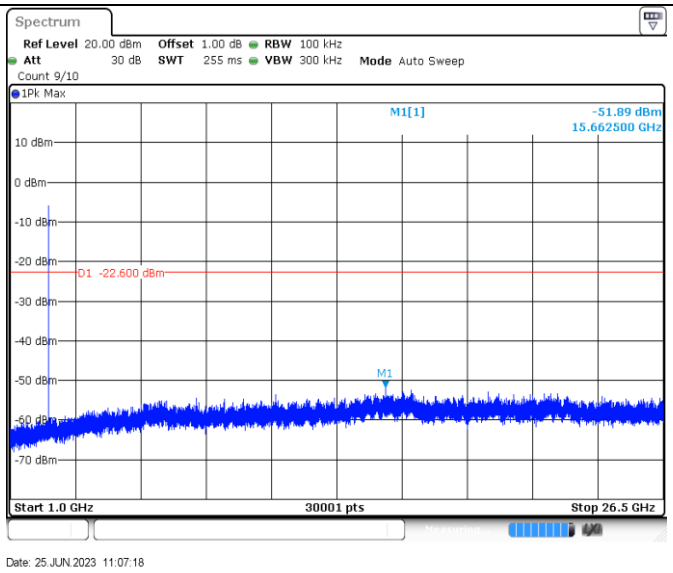

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9.5 Band Edge

Test Method

1. The RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously. Set the EUT to the lowest frequency channel.
3. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector, Trace: Max hold, Sweep time: Coupled, Span: Wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products that fall outside of the authorized band of operation. Allow the trace to stabilize.
4. Set the marker on the emission at the band edge, or on the highest modulation product outside of the band, if this level is greater than that at the band edge. Enable the marker-delta function, and then use the marker-to-peak function to move the marker to the peak of the in-band emission.
5. Set the EUT to the highest frequency channel and repeat step 2) to 4)
6. Enable the EUT hopping mode, repeat the test.

Limit:
According to §15.247(d), band edge limit as below:

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits.

Frequency Range MHz	Limit (dBc)
30-25000	-20

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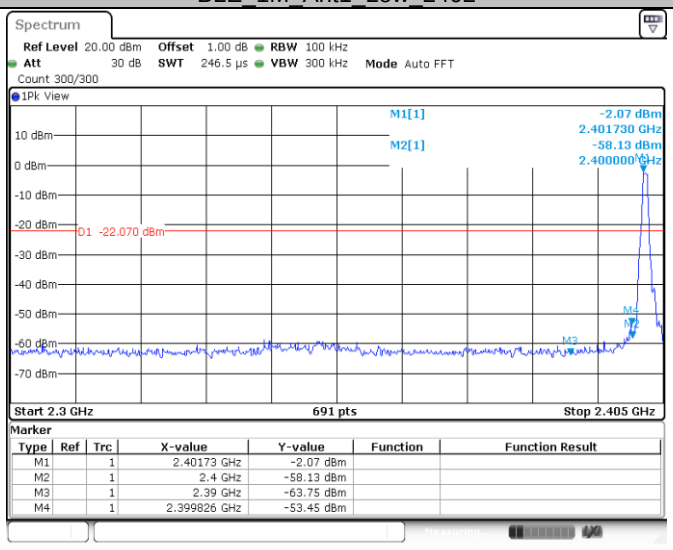
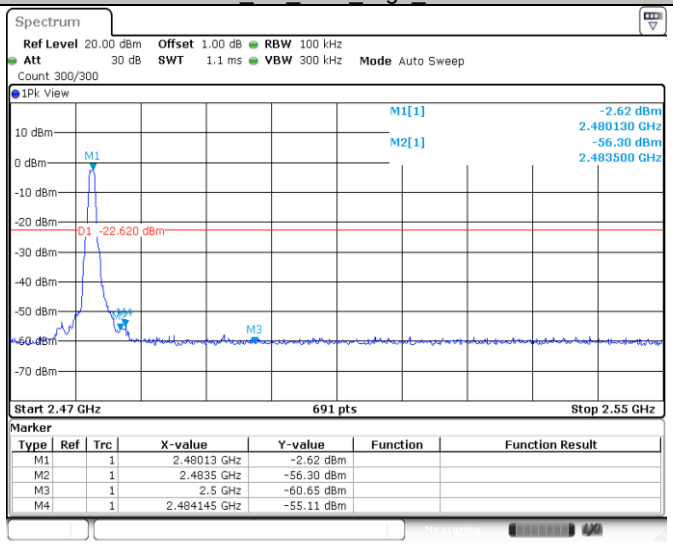
Band edge testing

Test Mode	Antenna	Channel	Channel (MHz)	Reference Level (dBm)	Result (dBm)	Limit (dBm)	Verdict
BLE_1M	Ant1	Low	2402	-2.07	-53.45	<=-22.07	PASS
		High	2480	-2.62	-55.11	<=-22.62	PASS

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480



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9.6 Spurious Radiated Emissions for Transmitter

Test Method

1. The EUT was place on a turn table which is 1.5m above ground plane for above 1GHz and 0.8m above ground for below 1GHz at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference – receiving antenna, which was mounted on the top of a variable – height antenna tower.
3. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. Use the following spectrum analyzer settings According to C63.10:

For Below 1GHz

Use the following test receiver settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious RBW = 100 KHz to 120KHz, VBW≥RBW for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.

For Peak unwanted emissions Above 1GHz:

Span = wide enough to capture the peak level of the in-band emission and all spurious RBW = 1MHz, VBW≥RBW for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.

Procedures for average unwanted emissions measurements above 1000 MHz

a) RBW = 1MHz.

b) VBW \ [3 × RBW].

c) Detector = RMS (power averaging), if [span / (# of points in sweep)] \ RBW / 2. Satisfying this condition can require increasing the number of points in the sweep or reducing the span. If the condition is not satisfied, then the detector mode shall be set to peak.

d) Averaging type = power (i.e., rms) (As an alternative, the detector and averaging type may be set for linear voltage averaging. Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.)

e) Sweep time = auto.

f) Perform a trace average of at least 100 traces if the transmission is continuous. If the transmission is not continuous, then the number of traces shall be increased by a factor of 1 / D, where D is the duty cycle. For example, with 50% duty cycle, at least 200 traces shall be averaged. (If a specific emission is demonstrated to be continuous—i.e., 100% duty cycle—then rather than turning ON and OFF with the transmit cycle, at least 100 traces shall be averaged.)

g) If tests are performed with the EUT transmitting at a duty cycle less than 98%, then a correction factor shall be added to the measurement results prior to comparing with the emission limit, to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:

1) If power averaging (rms) mode was used in the preceding step e), then the correction factor is [10 log (1 / D)], where D is the duty cycle. For example, if the transmit duty

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cycle was 50%, then 3 dB shall be added to the measured emission levels.
2) If linear voltage averaging mode was used in the preceding step e), then the correction factor is [20 log (1 / D)], where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB shall be added to the measured emission levels.
3) If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning ON and OFF with the transmit cycle, then no duty cycle correction is required for that emission (AV) at frequency above 1GHz.

Limit

The radio emission outside the operating frequency band shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. Radiated emissions which fall in the restricted bands, as defined in section15.205, must comply with the radiated emission limits specified in section 15.209.

Frequency MHz	Field Strength μV/m	Field Strength dBμV/m	Detector	Measurement distance meters
0.009-0.490	2400/F(kHz)	48.5-13.8	AV	300
0.490-1.705	24000/F(kHz)	33.8-23.0	QP	30
1.705-30	30	29.5	QP	30
30-88	100	40	QP	3
88-216	150	43.5	QP	3
216-960	200	46	QP	3
960-1000	500	54	QP	3
Above 1000	500	54	AV	3
Above 1000	5000	74	PK	3

Note 1: Limit 3m(dBμV/m)=Limit 300m(dBμV/m)+40Log(300m/3m) (Below 30MHz)
Note 2: Limit 3m(dBμV/m)=Limit 30m(dBμV/m)+40Log(30m/3m) (Below 30MHz)

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Spurious radiated emissions for transmitter

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

Test data_30MHz to 1000MHz

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Correct factor	Result
	MHz	dBµV/m		dBµV/m		dBµV/m	(dB/m)	
30-1000MHz	51.158125	24.15	H	40.00	QP	15.85	20.97	Pass
	102.689375	23.17	H	43.50	QP	20.33	18.71	Pass
	195.809375	23.84	H	43.50	QP	19.66	19.05	Pass
	389.021250	28.64	H	46.00	QP	17.36	23.84	Pass
	585.385625	35.29	H	46.00	QP	10.71	27.51	Pass
	947.316875	38.92	H	46.00	QP	7.08	32.34	Pass
	Other Frequencies	--	H	--	QP	--	--	Pass
	31.758125	25.87	V	40.00	QP	14.13	16.62	Pass
	43.034375	27.39	V	40.00	QP	12.61	20.24	Pass
	101.961875	23.65	V	43.50	QP	19.85	18.70	Pass
	197.991875	25.60	V	43.50	QP	17.90	19.10	Pass
	590.660000	33.48	V	46.00	QP	12.52	27.73	Pass
	946.650000	39.46	V	46.00	QP	6.54	32.32	Pass
	Other Frequencies	--	V	--	QP	--	--	Pass

BLE_1M of low channel 2402MHz

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Correct factor	Result
	MHz	dBµV/m		dBµV/m		dBµV/m	(dB/m)	
1000-25000MHz	3758.000000*	46.01	H	74.00	PK	27.99	2.24	Pass
	7511.000000*	41.70	H	74.00	PK	32.30	9.38	Pass
	10630.000000*	43.19	H	74.00	PK	30.81	13.37	Pass
	Other Frequencies	--	H	--	PK	--	--	Pass
	3874.500000*	48.29	V	74.00	PK	25.71	2.84	Pass
	6427.500000	40.20	V	74.00	PK	33.80	7.39	Pass
	8905.000000	43.46	V	74.00	PK	30.54	12.44	Pass
	Other Frequencies	--	V	--	PK	--	--	Pass

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BLE_1M of Middle channel 2440MHz

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Correct factor	Result
	MHz	dBµV/m		dBµV/m		dBµV/m	(dB/m)	
1000-25000MHz	6371.000000	39.62	H	74.00	PK	34.38	7.46	Pass
	9527.000000	44.04	H	74.00	PK	29.96	12.78	Pass
	13121.500000	45.24	H	74.00	PK	28.76	15.01	Pass
	Other Frequencies	--	H	--	PK	--	--	Pass
	4336.000000*	48.53	V	74.00	PK	25.47	4.27	Pass
	7645.500000	41.44	V	74.00	PK	32.56	9.56	Pass
	10359.500000	43.16	V	74.00	PK	30.84	12.94	Pass
	Other Frequencies	--	V	--	PK	--	--	Pass

BLE_1M of high channel 2480MHz

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Correct factor	Result
	MHz	dBµV/m		dBµV/m		dBµV/m	(dB/m)	
1000-25000MHz	6576.500000	40.93	H	74.00	PK	33.07	8.06	Pass
	8087.500000*	41.96	H	74.00	PK	32.04	10.34	Pass
	11380.000000*	45.15	H	74.00	PK	28.85	14.44	Pass
	Other Frequencies	--	H	--	PK	--	--	Pass
	1593.500000*	45.68	V	74.00	PK	28.32	-9.47	Pass
	2556.000000	48.45	V	74.00	PK	25.55	-3.96	Pass
	3198.500000	48.41	V	74.00	PK	25.59	-0.36	Pass
	Other Frequencies	--	V	--	PK	--	--	Pass

Remark:

(1) "*" means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.
(2) Data of measurement within frequency ranges 9kHz-30MHz are the noise floor or attenuated more than 20dB below the permissible limits or the field strength is too small to be measured, so test data does not present in this report.
(3) Level= Reading Level + Correction Factor
(4) Above 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain
Below 1GHz: Corrector factor = Antenna Factor + Cable Loss
(The Reading Level is recorded by software which is not shown in the sheet)

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10 Test Equipment List

List of Test Instruments

Radiated Emission 1# Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 7	68-4-74-19-001	102176	2024-5-20
Loop Antenna	Rohde & Schwarz	HFH2-Z2	68-4-80-14-006	100398	2023-8-17
3m Semi-anechoic chamber	TDK	SAC-3 #1	68-4-90-14-001	----	2024-5-28
Test software	Rohde & Schwarz	EMC32	68-4-90-14-001-A10	Version10.35.02	N/A

Radiated Emission 2# Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	68-4-74-14-002	101269	2024-5-20
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9162	68-4-80-19-003	284	2024-3-5
Wave Guide Antenna	ETS	3117	68-4-80-19-001	00218954	2024-4-26
Pre-amplifier	Rohde & Schwarz	SCU 18F	68-4-29-19-001	100745	2024-5-19
Sideband Horn Antenna	Q-PAR	QWH-SL-18-40-K-SG	68-4-80-14-008	12827	2023-7-27
Pre-amplifier	Rohde & Schwarz	SCU 40A	68-4-29-14-002	100432	2023-7-27
Attenuator	Mini-circuits	UNAT-6+	68-4-81-21-002	15542	2024-5-19
3m Semi-anechoic chamber	TDK	SAC-3 #2	68-4-90-19-006	----	2024-5-28
Test software	Rohde & Schwarz	EMC32	68-4-90-19-006-A01	Version10.35.02	N/A

Conducted RF Test System

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL. DUE DATE
Signal Analyzer	Rohde & Schwarz	FSV40	68-4-74-14-004	101030	2024-5-19
RF Switch Module	Rohde & Schwarz	OSP120/OSP-B157W	68-4-93-14-003	101226/100929	2024-5-20
Test software	Tonscend	System for BT/WIFI	68-4-74-14-006-A13	Version 2.6.77.0518	N/A
Shielding Room	TDK	TS8997	68-4-90-19-003	----	2025-10-15

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11 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

System Measurement Uncertainty	
Test Items	Extended Uncertainty
Uncertainty for Radiated Emission in 3m chamber (68-4-90-14-001) 9kHz-30MHz	4.70dB
Uncertainty for Radiated Emission in 3m chamber (68-4-90-14-001) 30MHz-1000MHz	Horizontal: 4.63dB; Vertical: 4.78dB;
Uncertainty for Radiated Emission in new 3m chamber (68-4-90-19-006) 1000MHz-18000MHz	Horizontal: 5.38dB; Vertical: 5.38dB;
Uncertainty for Radiated Emission in new 3m chamber (68-4-90-19-006) 18GHz-40GHz	Horizontal: 5.29dB; Vertical: 5.29dB;
Uncertainty for Conducted RF test with TS 8997	RF Power Conducted: 1.31dB Frequency test involved: 0.6×10^{-8} or 1%

Measurement Uncertainty Decision Rule:

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115: 2021, clause 4.4.3 and 4.5.1.

THE END

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