

Test report No: 6252518.51

TEST REPORT

Radio Spectrum Matters (RF)

Identification of item tested	Dreame Floor Lamp F11P
Trademark	N/A
Model and /or type reference	C031
Features	Adapter: Input: AC 100-240 V, 50/60 Hz, 1.0 A Max Output: DC 12.0 V, 2.0 A
FCC ID	2AXGD-C031
ISED Number	26444-C031
Applicant's name / address	Dreame Trading (Tianjin) Co., Ltd. 2112-1-1, South, Finance and Trade Center, 6975 Yazhou Road, Dongjiang Bonded Port Area, Tianjin Pilot Free Trade Zone, 300463 Tianjin, China
Test method requested, standard	FCC CFR Title 47 Part 15 Subpart C Section 15.247 ANSI C63.10-2020+Cor.1-2023+C63.10a-2024+Errata to C63.10a-2024 RSS-Gen Issue 5 RSS-247 Issue 4
Verdict Summary	IN COMPLIANCE
Prepared by (name / position & signature)	Li Wang Test Engineer
Approved by (name / position & signature)	Lucas Xu Project Engineer
Date of issue	2026-01-26



Report template No	TRF_Part15C_247_RF03 V1.2
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COMPETENCES AND GUARANTEES

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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GENERAL CONDITIONS

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.
5. The information provided by the customer in this report may affect the validity of the results, the test lab is not responsible for it.
6. This report will not be used for social proof function in China market.

UNCERTAINTY

For all measurements where guidance for the calculation of the instrumentation uncertainty of a measurement is specified in the product standard, the measurement instrumentation uncertainty has been calculated and applied in accordance with these standards.

Uncertainties have been calculated according to the Dekra internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%. Refer to the Annex 1 for further information.

The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to calculate the uncertainty associated with the measurement result, unless the specification, standard or customer have special requirements.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%
Atmospheric pressure	86 kPa – 106 kPa

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

DEFINITION OF SYMBOLS USED IN THIS TEST REPORT

☒ Indicates that the listed condition, standard or equipment is applicable for this report/test/EUT.			
☐ Indicates that the listed condition, standard or equipment is not applicable for this report/test/EUT.			
Decimal separator used in this report	☒	Comma (,)	☐ Point (.)

ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT	: Equipment Under Test
QP	: Quasi-Peak
CAV	: CISPR Average
AV	: Average
CDN	: Coupling Decoupling Network
SAC	: Semi-Anechoic Chamber
OATS	: Open Area Test Site
BW	: Bandwidth
AM	: Amplitude Modulation
PM	: Pulse Modulation
HCP	: Horizontal Coupling Plane
VCP	: Vertical Coupling Plane
U_N	: Nominal voltage
Tx	: Transmitter
Rx	: Receiver
N/A	: Not Applicable

N/M : Not Measured

DOCUMENT HISTORY

Report nr.	Date	Description
6252518.51	2026-01-26	First release.

REMARKS AND COMMENTS

The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).

The test results relate only to the samples tested.

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1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Description of the item	Dreame Floor Lamp F11P
Model / Type number	C031
Trademark.....	N/A
FCC ID	2AXGD-C031
ISED Number	26444-C031
Test Sample Number	N/A
Manufacturer	Dreame Trading (Tianjin) Co., Ltd. 2112-1-1, South, Finance and Trade Center, 6975 Yazhou Road, Dongjiang Bonded Port Area, Tianjin Pilot Free Trade Zone, 300463 Tianjin, China

Mode of Operation	Bluetooth BLE
Operating frequency range(s).....	2402~2480 MHz
Type of Modulation	GFSK
PHYs	☒ LE 1M ☒ LE 2M ☐ LE Coded S=2/8
Data Rate	☒ 1 Mbps ☒ 2 Mbps ☐ 500/125 Kbps
Antenna type.....	PCB Antenna
Antenna gain.....	0.91 dBi
Number of channel	40
Operating Temperature Range.....	XX ~ XX°C

Note: Antenna information was provided from applicant.

Rated power supply	Voltage and Frequency	Reference poles				
		L1	L2	L3	N	PE
	☒ AC: 100 – 240 V, 50/60 Hz	☒	☐	☐	☒	☐
	☐ DC:					
	☐ Battery:					
Mounting position.....	☐ Table top equipment					
	☐ Wall/Ceiling mounted equipment					
	☒ Floor standing equipment					
	☐ Hand-held equipment					
	☐ Other:					

Intended use of the Equipment Under Test (EUT)
The product is Dreame Floor Lamp F11P which supports 2.4G WiFi & Bluetooth function.

1.2 **Test date**

Test Location	DEKRA Testing and Certification (Shanghai) Ltd. No.250,Jiangchangsan Road, Shanghai ,200436 P.R.China
Date of receipt of test item	2025-12-17
Date (s) of performance of tests	2025-12-17 to 2025-12-31

2 DESCRIPTION OF TEST SETUP

2.1 Operating mode(s) used for tests

During the tests the following operating mode(s) has(have) been used.

Operating mode	Operating mode description	Used for methos	
		Conducted	Radiated
1	Transmitting	☒	☒
2	---	☐	☐
Supplemental information: ---			

2.2 Support / Auxiliary equipment / unit / software for the EUT

The EUT has been tested with the following auxiliary equipment / unit / software:

Auxiliary equipment / unit / software	Type / Version	Serial number	Manufacturer	Supplied by
EspRFTTestTool	V4.7	N/A	ESPRESSIF	Applicant
Laptop	Latitude 3430	7XB4DS3	DELL	DEKRA
Supplemental information: ---				

2.3 Test Configuration / Block diagram used for tests

Refer to Annex 3.

3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

3.1 Standards

Standard	Year	Description
FCC CFR Title 47 Part 15 Subpart C Section 15.247	2022	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.
ANSI C63.10	2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
ANSI C63.10 Corrigendum 1	2020	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
Amendment 1	2023	
Errata to Amendment 1	2024	
RSS-Gen Issue 5	2018	General Requirements for Compliance of Radio Apparatus
Amendment 1	2019	
Amendment 2	2021	
RSS-247 Issue 4	2025	Digital Transmission Systems, Frequency Hopping Systems and Licence-Exempt Local Area Network Devices in 902-928 MHz, 2400-2483.5 MHz, 5150-5350 MHz, and 5470-5895 MHz bands

3.2 Deviation(s) from the Standard(s) / Test Specification(s)

The following deviation(s) was / were made from the published requirements of the listed standards: N/A.

3.3 Overview of results

FCC measurement			
Requirement – Test case	Basic standard(s)	Verdict	Remark
AC Power Line Conducted Emission	FCC 15.207	PASS	---
Emissions in restricted frequency bands	FCC 15.247(d), 15.209, 15.205	PASS	---
Duty cycle	ANSI C63.10:2013	PASS	---
Emissions in non-restricted frequency bands	FCC 15.247(d)	PASS	---
Radiated Emission Band Edge	FCC 15.247(d), 15.209, 15.205	PASS	---
Fundamental emission output power	FCC 15.247(b)(3)	PASS	---
DTS Bandwidth	FCC 15.247(a)(2)	PASS	---
Power Spectral Density	FCC 15.247(e)	PASS	---
Antenna Requirement	FCC 15.203	PASS	---
<u>Supplementary information:</u> ---			

RSS measurement			
Requirement – Test case	Basic standard(s)	Verdict	Remark
AC Power Line Conducted Emission	RSS-Gen Issue 5 Section 8.8	PASS	---
Emissions in restricted frequency bands	RSS-Gen Issue 5 Section 8.9 & 8.10	PASS	---
Duty cycle	ANSI C63.10:2013	PASS	---
Emissions in non-restricted frequency bands	RSS-247 Issue 4 Section 6.6	PASS	---
Radiated Emission Band Edge	RSS-Gen Issue 5 Section 8.9 & 8.10	PASS	---
Fundamental emission output power	RSS-247 Issue 4 Section 6.3.2	PASS	---
DTS Bandwidth & Occupied Bandwidth	RSS-Gen Issue 5 Section 6.7 RSS-247 Issue 4 Section 6.3.1(a)	PASS	---
Power Spectral Density	RSS-247 Issue 4 Section 6.3.1(b)	PASS	---
Antenna Requirement	RSS-Gen Issue 5 Section 6.8	PASS	---
Supplementary information: ---			

3.4 Test Facility

FCC Designation Number	:	CN1358
ISED CAB identifier Number	:	CN0155

3.5 Measurement procedure

The EUT was controlled by USB Cable provided by applicant which connected to laptop. After connected, run the software “EspRFTTestTool” supplied by manufacturer to control the EUT work in required test mode as below table.

Mode	Modulation	Data Rate	Channel Number	Frequency (MHz)	Power Setting
BLE	GFSK	1Mbps	00	2402	10
			19	2440	10
			39	2480	10
BLE	GFSK	2Mbps	00	2402	10
			19	2440	10
			39	2480	10

4 TEST RESULTS

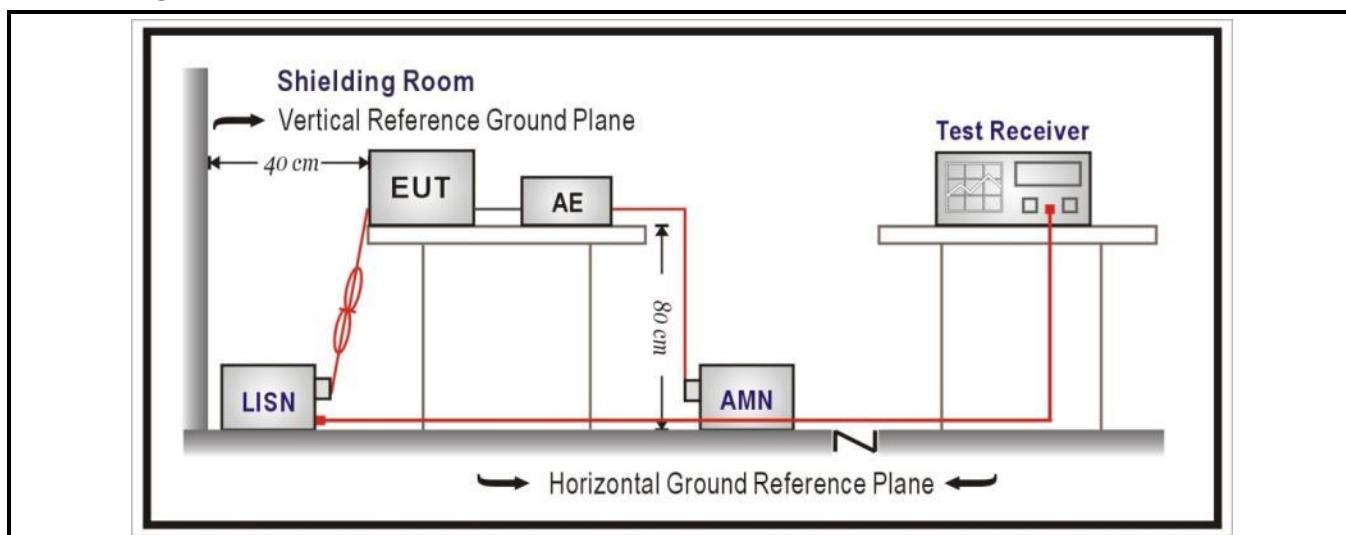
4.1 AC Power Line Conducted Emission	VERDICT: PASS
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Limit

FCC Part 15 Subpart C Paragraph 15.207 & RSS-Gen Issue 5 Section 8.8				
Frequency range [MHz]	Limit: QP [dB(μV) ¹⁾	Limit: AV [dB(μV) ¹⁾	IF BW	Detector(s)
0,15 - 0,50	66 - 56 ²⁾	56 - 46 ²⁾	9 KHz	QP, AV
0,50 - 5,0	56	46	9 KHz	QP, AV
5,0 - 30	60	50	9 KHz	QP, AV

¹⁾ At the transition frequency, the lower limit applies.
²⁾ The limit decreases linearly with the logarithm of the frequency.

Test Configuration



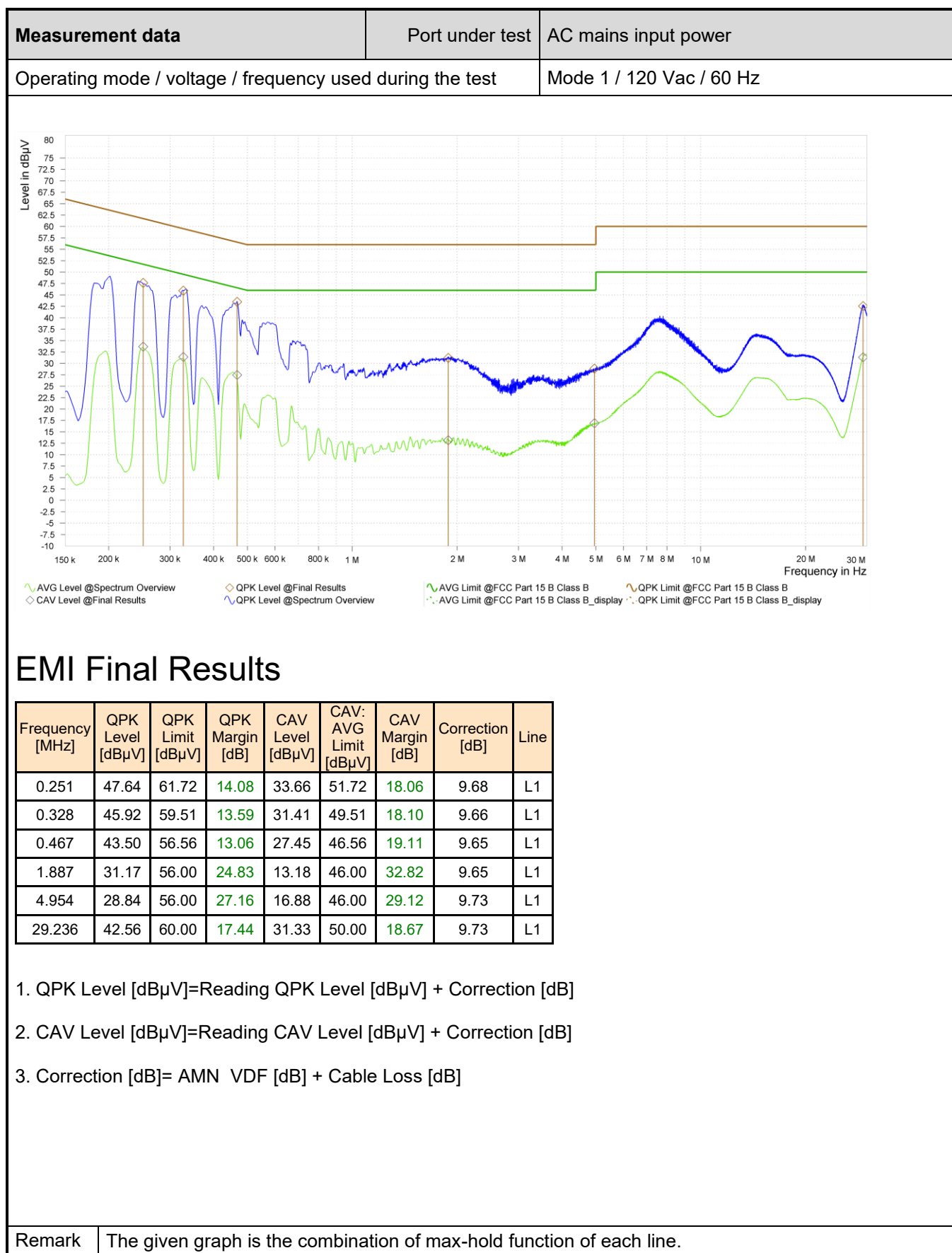
Performed measurements

Port under test		Terminal							
☒	AC mains input power	☒	N	☒	L1	☐	L2	☐	L3
☐	DC input power	☐	Positive (+)			☐	Negative (-)		
Voltage – Mains [V]		120 Vac							
Frequency – Mains [Hz]		60 Hz							
Test method applied	☒	Artificial mains network							
	☐	Voltage probe							
Test setup	☐	Table top	☐	Artificial hand applied					
	☒	Floor standing	☐	Other:					
	Refer to the Annex 2 for test setup photo(s).								

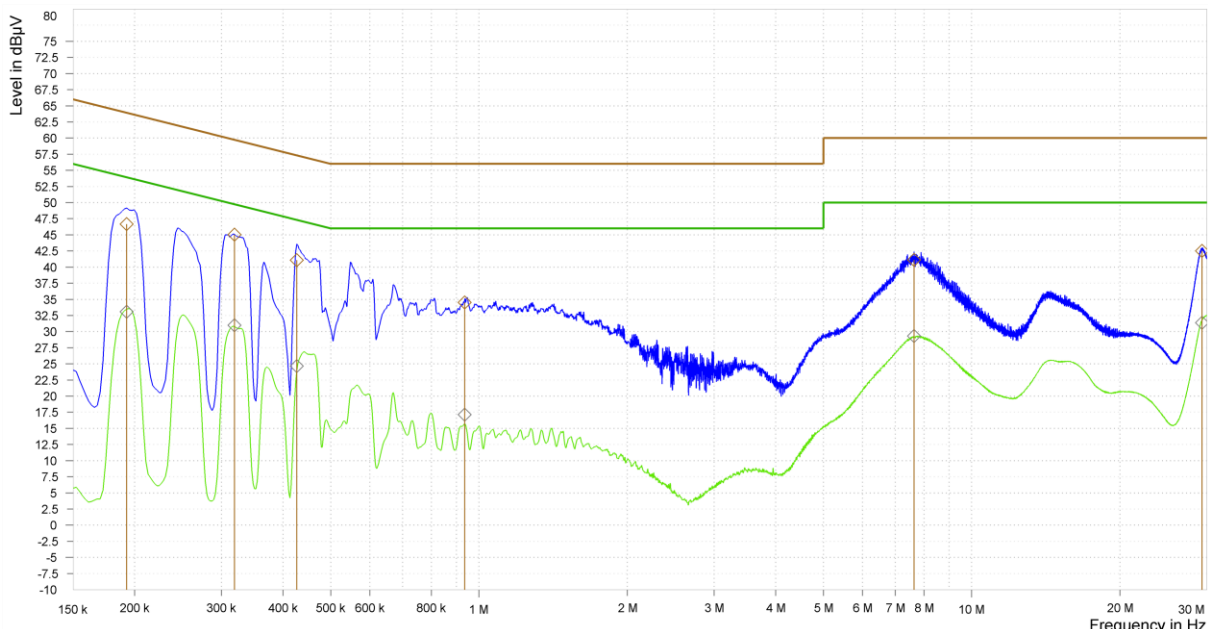


Operating mode(s) used	Mode 1
Remark	--

See next page.



Measurement data		Port under test	AC mains input power
Operating mode / voltage / frequency used during the test			Mode 1 / 120 Vac / 60 Hz



~ AVG Level @Spectrum Overview ◇ QPK Level @Final Results ~ AVG Limit @FCC Part 15 B Class B ~ QPK Limit @FCC Part 15 B Class B
◇ CAV Level @Final Results ~ QPK Level @Spectrum Overview ~ AVG Limit @FCC Part 15 B Class B_display ~ QPK Limit @FCC Part 15 B Class B_display

EMI Final Results

Frequency [MHz]	QPK Level [dBµV]	QPK Limit [dBµV]	QPK Margin [dB]	CAV Level [dBµV]	CAV: AVG Limit [dBµV]	CAV Margin [dB]	Correction [dB]	Line
0.193	46.66	63.92	17.25	33.08	53.92	20.84	9.74	N
0.319	45.03	59.74	14.71	30.98	49.74	18.76	9.72	N
0.427	41.06	57.32	16.25	24.67	47.32	22.65	9.71	N
0.935	34.53	56.00	21.47	17.14	46.00	28.86	9.70	N
7.636	41.11	60.00	18.89	29.30	50.00	20.70	9.86	N
29.333	42.50	60.00	17.50	31.38	50.00	18.62	9.85	N

1. QPK Level [dBµV]=Reading QPK Level [dBµV] + Correction [dB]

2. CAV Level [dBµV]=Reading CAV Level [dBµV] + Correction [dB]

3. Correction [dB]= AMN VDF [dB] + Cable Loss [dB]

Remark	The given graph is the combination of max-hold function of each line.
--------	---

4.2	Emissions in restricted frequency bands	VERDICT: PASS
-----	---	---------------

Limit

Standard		FCC Part 15 Subpart C Paragraph 15.247(d), 15.205, 15.209 & RSS-Gen Issue 5 Section 8.9 & 8.10	
Restricted Bands of operation for FCC			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.81425 - 8.81475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	Above 38.6
13.36 - 13.41	--	--	--
Restricted Bands of operation for ISED			
0.090 - 0.110	13.36 - 13.41	960 - 1427	9.0 - 9.2
0.495 - 0.505	16.42 - 16.423	1435 - 1626.5	9.3 - 9.5
2.1735 - 2.1905	16.69475 - 16.69525	1645.5 - 1646.5	10.6 - 12.7
3.020 - 3.026	16.80425 - 16.80475	1660 - 1710	13.25 - 13.4
4.125 - 4.128	25.5 - 25.67	1718.8 - 1722.2	14.47 - 14.5
4.17725 - 4.17775	37.5 - 38.25	2200 - 2300	15.35 - 16.2
4.20725 - 4.20775	73 - 74.6	2310 - 2390	17.7 - 21.4
5.677 - 5.683	74.8 - 75.2	2483.5 - 2500	22.01 - 23.12
6.215 - 6.218	108 - 138	2655 - 2900	23.6 - 24.0
6.26775 - 6.26825	149.9 - 150.05	3260 - 3267	31.2 - 31.8
6.31175 - 6.31225	156.52475 - 156.52525	3332 - 3339	36.43 - 36.5
8.291 - 8.294	156.7 - 156.9	3345.8 - 3358	Above 38.6
8.362 - 8.366	162.0125 - 167.17	3500 - 4400	--
8.37625 - 8.38675	167.72 - 173.2	4500 - 5150	--
8.41425 - 8.41475	240 - 285	5350 - 5460	--
12.29 - 12.293	322 - 335.4	7250 - 7750	--
12.51975 - 12.52025	399.9 - 410	8025 - 8500	--
12.57675 - 12.57725	608 - 614	--	--

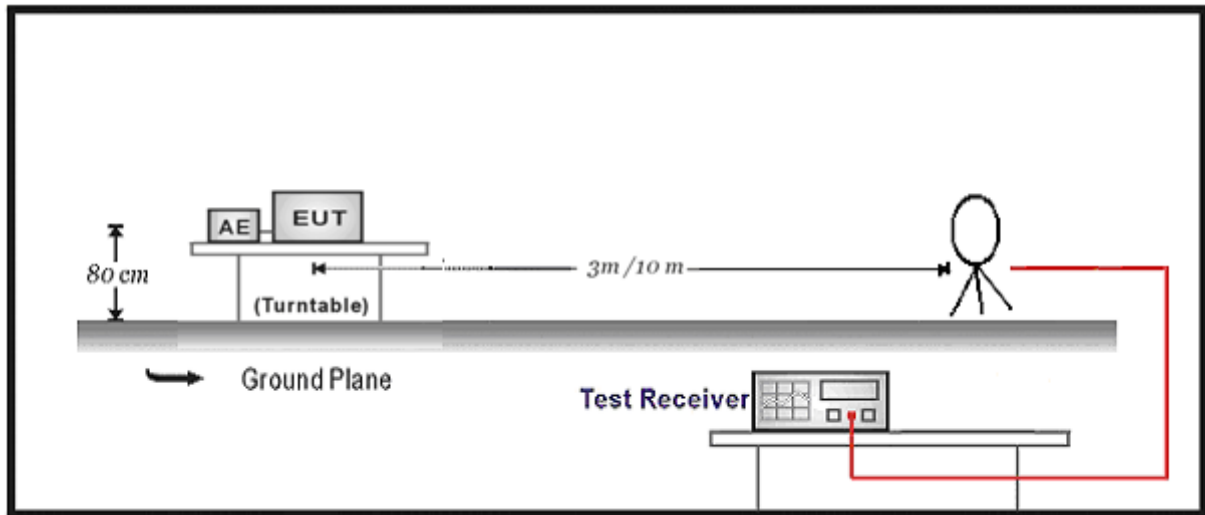
Restricted Band Emissions Limit			
Frequency (MHz)	Field strength (μ V/m)	Field strength (dB μ V/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 - 13.8	300 _(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 _(Note 1)
1.705 - 30	30	29.5	30 _(Note 1)
30 - 88	100	40	3 _(Note 2)
88 - 216	150	43.5	3 _(Note 2)
216 - 960	200	46	3 _(Note 2)
Above 960	500	54	3 _(Note 2)

Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

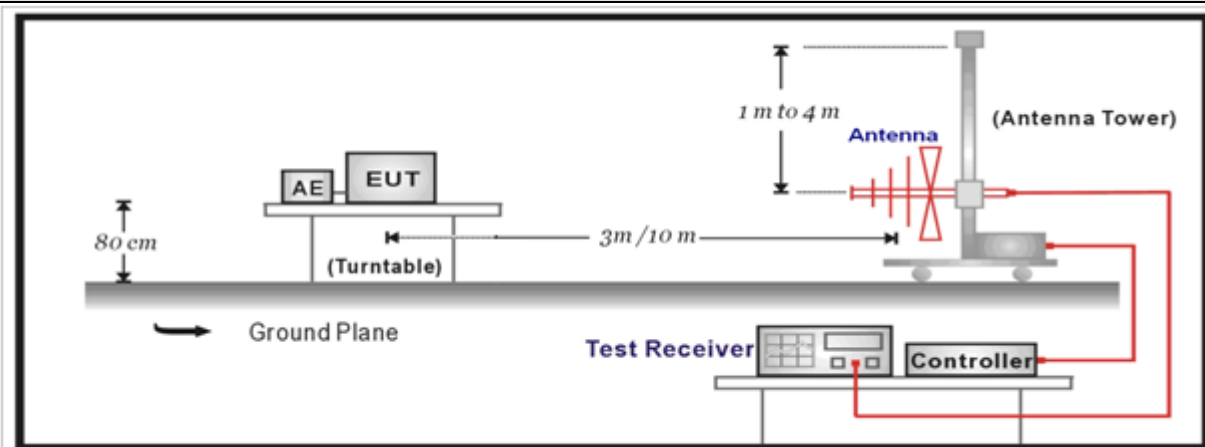
Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

Test Configuration

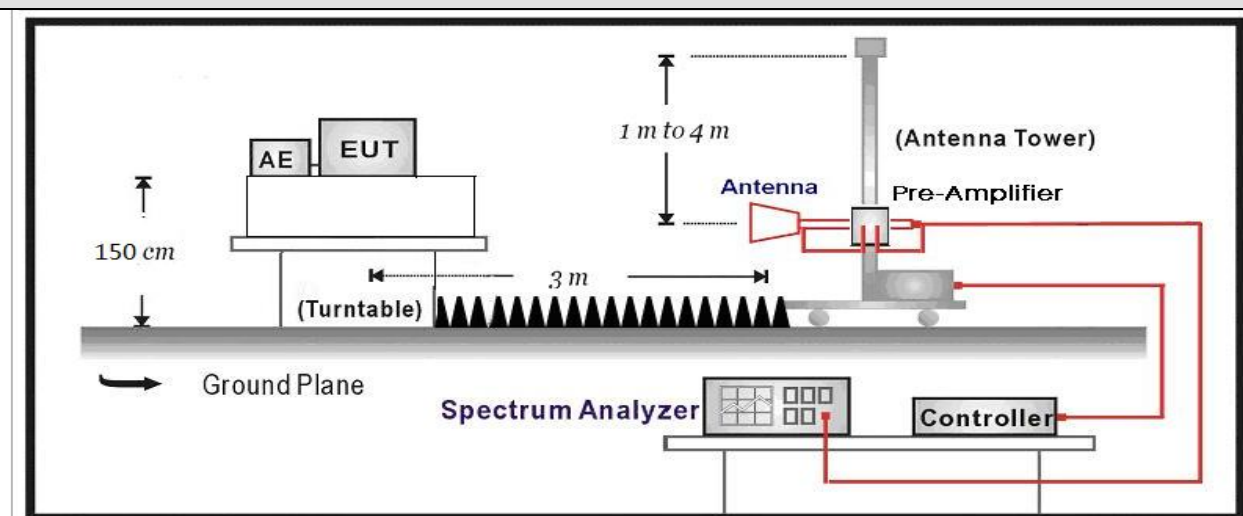
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



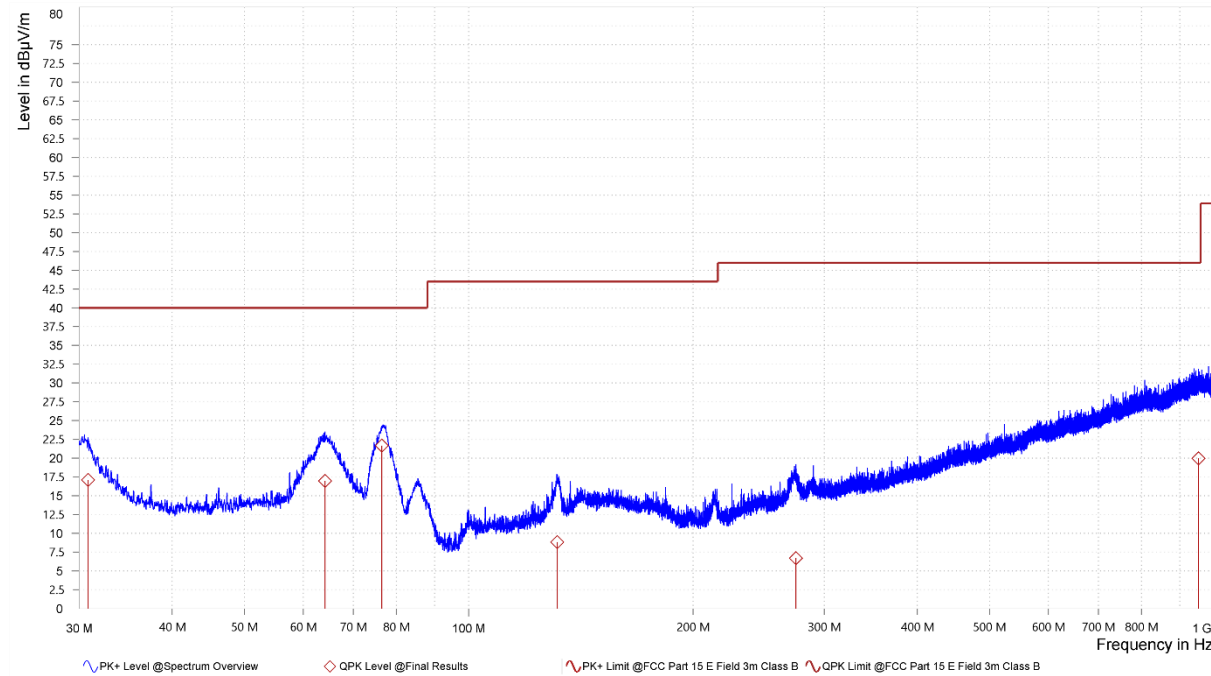
Performed measurements

Port under test	Enclosure port	
Test method applied	☐	Conducted measurement
	☒	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1	
Remark	1. The test frequency range, 9kHz~30MHz, 18GHz~26GHz, both of the worst case are at least 20dB below the limits, therefore no data appear in the report. 2. The EUT is working in the Normal link mode below 1 GHz. As the radiated emission was performed, so conducted emission was not tested.	

Results

Emissions in restricted frequency bands

30MHz – 1GHz, Normal Mode, H

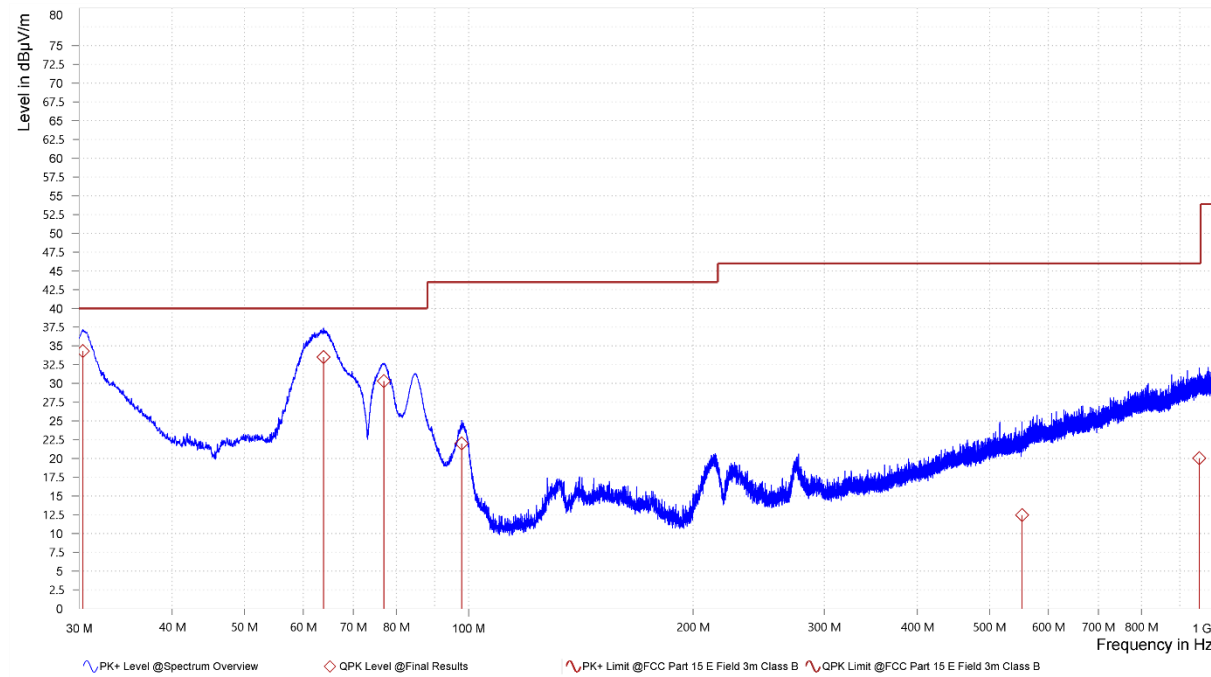


EMI Final Results

Frequency [MHz]	QPK Level [dBμV/m]	QPK Limit [dBμV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
30.840	17.12	40.00	22.88	13.13	H	116.8	1
64.140	16.98	40.00	23.02	13.74	H	196.7	2
76.470	21.69	40.00	18.31	11.31	H	136.6	2
131.520	8.85	43.50	34.65	14.00	H	56.3	1
274.920	6.70	46.00	39.30	15.55	H	146.2	2
953.640	19.96	46.00	26.04	29.33	H	0	1

1. QPK Level [dBμV/m]=Reading QPK Level [dBμV/m] + Correction [dB/m]
2. Correction [dB/m]=Antenna Factor [dB/m] + Cable Loss [dB]

30MHz – 1GHz, Normal Mode, V



EMI Final Results

Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
30.360	34.30	40.00	5.70	13.01	V	106.1	1
63.840	33.50	40.00	6.50	13.80	V	263.7	1.5
76.950	30.31	40.00	9.69	11.17	V	40.8	1
97.830	22.01	43.50	21.49	10.01	V	213.2	1
552.900	12.48	46.00	33.52	22.38	V	359.6	1.5
956.160	20.06	46.00	25.94	29.40	V	313.8	1

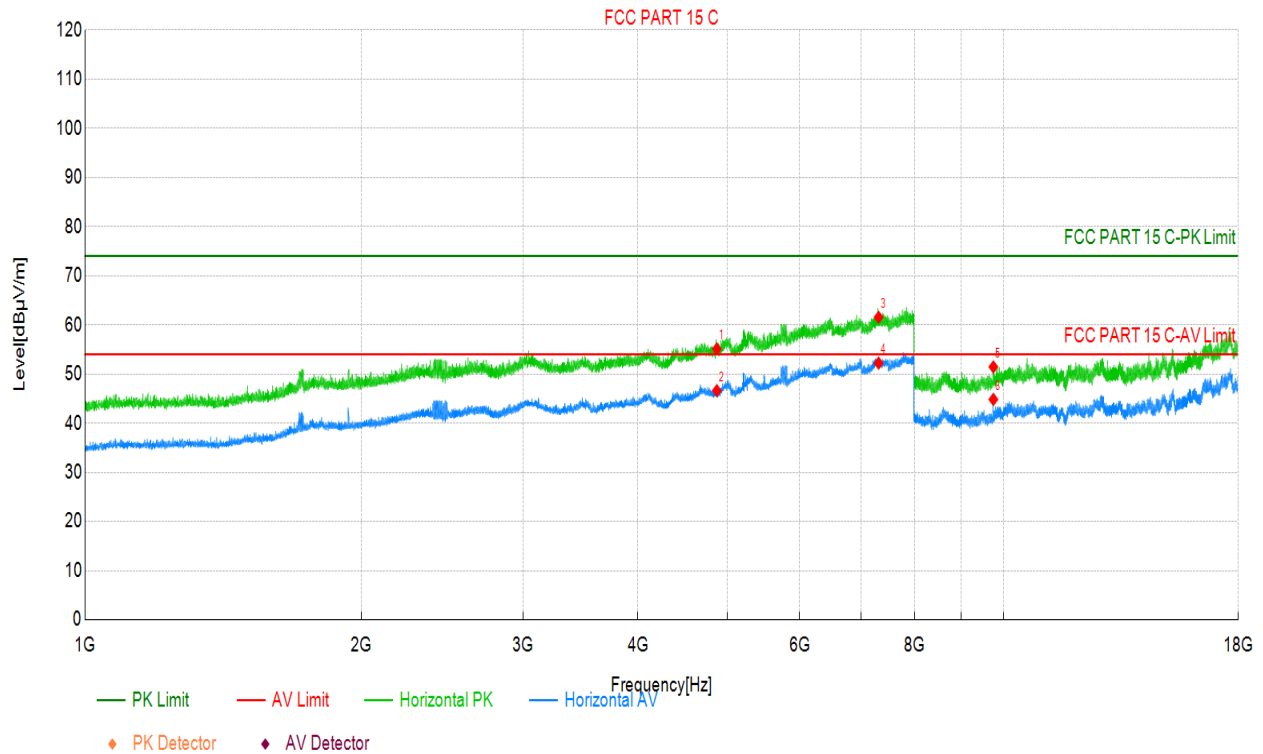
1. QPK Level [dBµV/m]=Reading QPK Level [dBµV/m] + Correction [dB/m]

2. Correction [dB/m]=Antenna Factor [dB/m] + Cable Loss [dB]

1GHz – 10th Harmonic

All the modes(BLE 1M, BLE 2M) have been tested and the worst(BLE 1M) result recorded was report as below:

2402MHz, 1Mbps, H

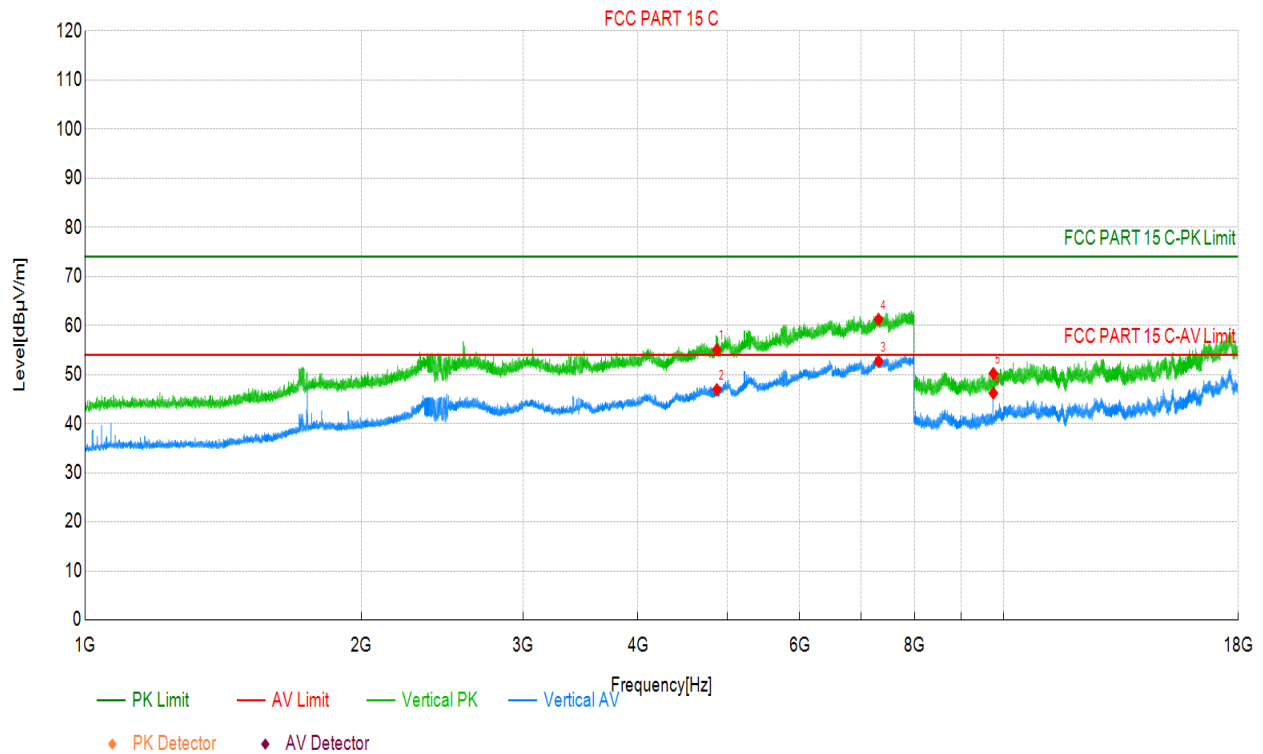


Suspected Data List									
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4804.00	38.3	55.12	16.800	74.00	18.88	PK	Hori	PASS
2	4804.00	29.8	46.62	16.800	54.00	7.38	AV	Hori	PASS
3	7260.00	37.9	61.56	23.680	74.00	12.44	PK	Hori	PASS
4	7206.00	28.5	52.22	23.680	54.00	1.78	AV	Hori	PASS
5	9608.00	38.9	51.46	12.610	74.00	22.54	PK	Hori	PASS
6	9608.00	32.2	44.84	12.610	54.00	9.16	AV	Hori	PASS

Note:(1)Level=Reading+Factor

(2)Margin=Limit-Level

2402MHz, 1Mbps, V

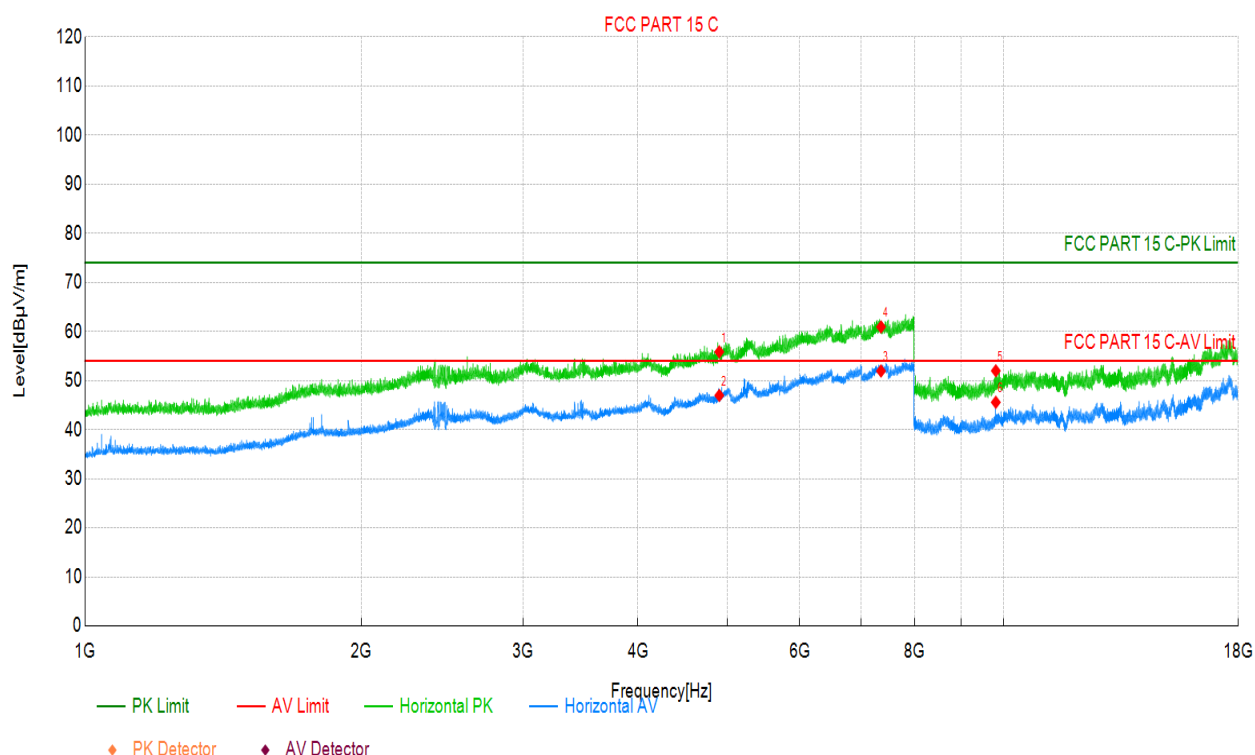


Suspected Data List									
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4804.00	38.2	55.02	16.800	74.00	18.98	PK	Verti	PASS
2	4804.00	30.1	46.93	16.800	54.00	7.07	AV	Verti	PASS
3	7206.00	37.6	61.23	23.680	74.00	12.77	PK	Verti	PASS
4	7206.00	29.0	52.69	23.680	54.00	1.31	AV	Verti	PASS
5	9608.00	37.6	50.20	12.610	74.00	23.80	PK	Verti	PASS
6	9608.00	33.6	46.21	12.610	54.00	7.79	AV	Verti	PASS

Note:(1)Level=Reading+Factor

(2)Margin=Limit-Level

2440MHz, 1Mbps, H

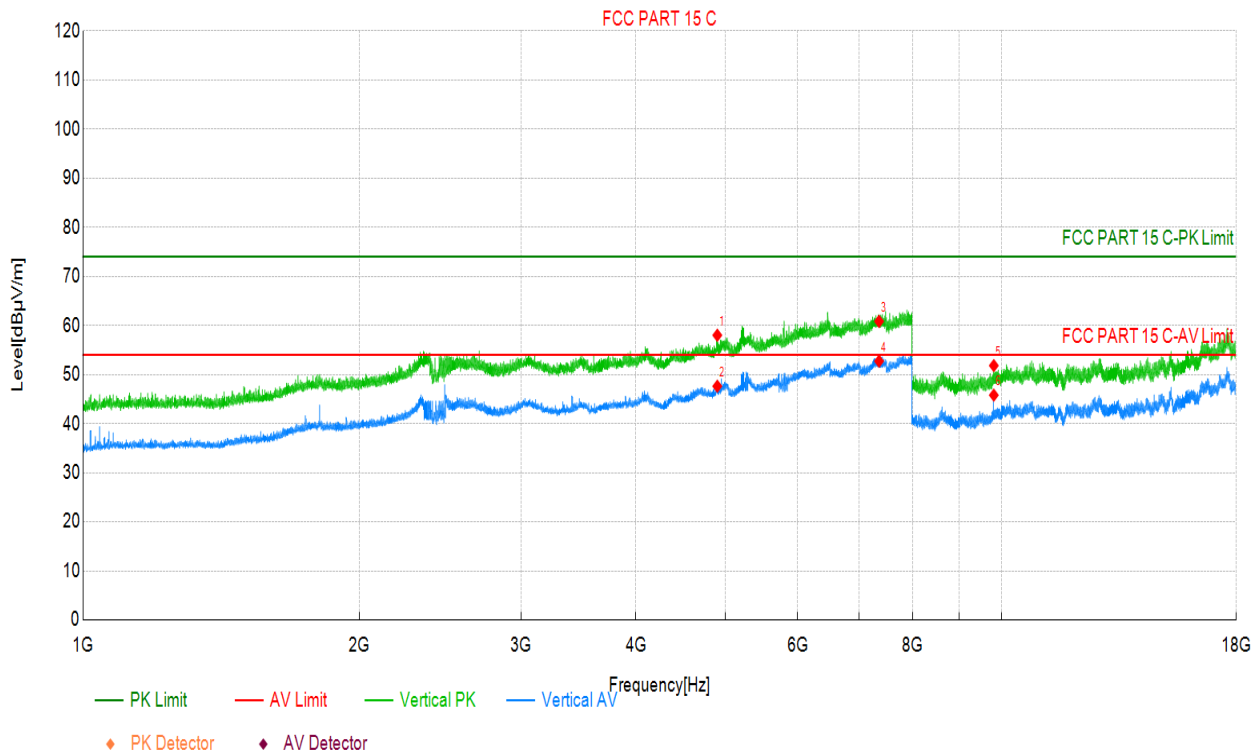


Suspected Data List									
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4880.00	39.0	55.85	16.890	74.00	18.15	PK	Hori	PASS
2	4880.00	30.1	46.97	16.890	54.00	7.03	AV	Hori	PASS
3	7320.00	37.4	60.93	23.550	74.00	13.07	PK	Hori	PASS
4	7320.00	28.4	51.95	23.550	54.00	2.05	AV	Hori	PASS
5	9760.00	38.8	51.99	13.160	74.00	22.01	PK	Hori	PASS
6	9760.00	32.4	45.57	13.160	54.00	8.43	AV	Hori	PASS

Note:(1)Level=Reading+Factor

(2)Margin=Limit-Level

2440MHz, 1Mbps, V

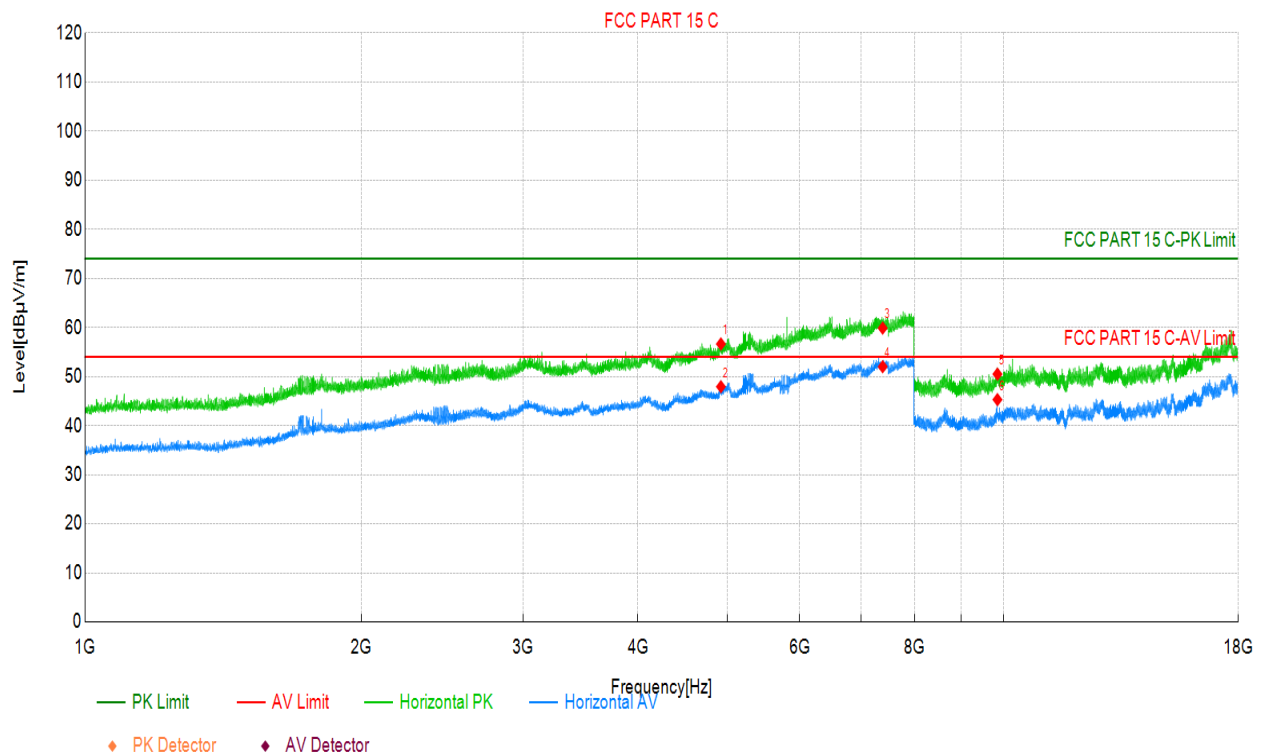


Suspected Data List									
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4880.00	41.1	58.01	16.890	74.00	15.99	PK	Verti	PASS
2	4880.00	30.7	47.63	16.890	54.00	6.37	AV	Verti	PASS
3	7320.00	37.3	60.84	23.550	74.00	13.16	PK	Verti	PASS
4	7320.00	29.2	52.73	23.550	54.00	1.27	AV	Verti	PASS
5	9760.00	38.7	51.83	13.160	74.00	22.17	PK	Verti	PASS
6	9760.00	32.6	45.80	13.160	54.00	8.20	AV	Verti	PASS

Note:(1)Level=Reading+Factor

(2)Margin=Limit-Level

2480MHz, 1Mbps, H

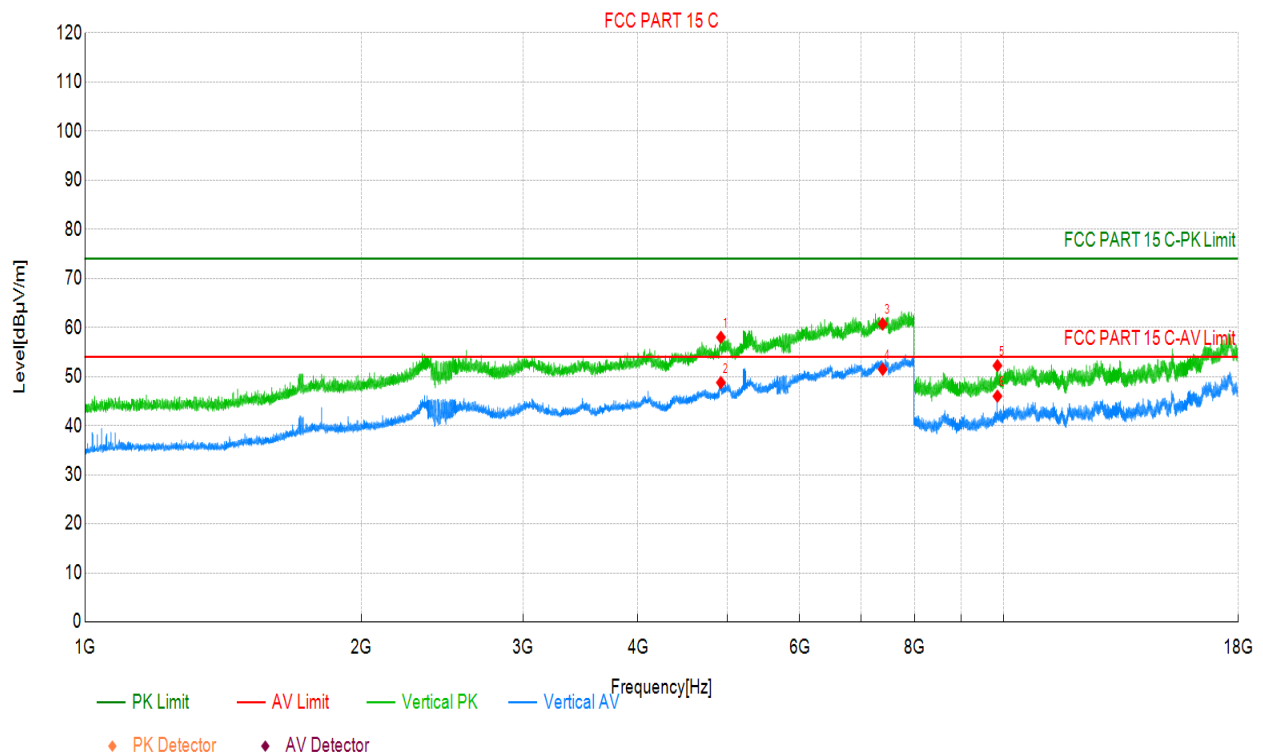


Suspected Data List									
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4880.00	39.4	56.63	17.250	74.00	17.37	PK	Hori	PASS
2	4880.00	30.7	47.93	17.250	54.00	6.07	AV	Hori	PASS
3	7320.00	36.4	59.87	23.470	74.00	14.13	PK	Hori	PASS
4	7320.00	28.5	52.01	23.470	54.00	1.99	AV	Hori	PASS
5	9760.00	37.2	50.50	13.270	74.00	23.50	PK	Hori	PASS
6	9760.00	32.0	45.30	13.270	54.00	8.70	AV	Hori	PASS

Note:(1)Level=Reading+Factor

(2)Margin=Limit-Level

2480MHz, 1Mbps, V



Suspected Data List									
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4880.00	40.7	57.99	17.250	74.00	16.01	PK	Verti	PASS
2	4880.00	31.5	48.78	17.250	54.00	5.22	AV	Verti	PASS
3	7320.00	37.3	60.73	23.470	74.00	13.27	PK	Verti	PASS
4	7320.00	28.0	51.48	23.470	54.00	2.52	AV	Verti	PASS
5	9760.00	39.0	52.22	13.270	74.00	21.78	PK	Verti	PASS
6	9760.00	32.7	46.01	13.270	54.00	7.99	AV	Verti	PASS

Note:(1)Level=Reading+Factor

(2)Margin=Limit-Level

4.3	Emissions in non-restricted frequency band	VERDICT: PASS
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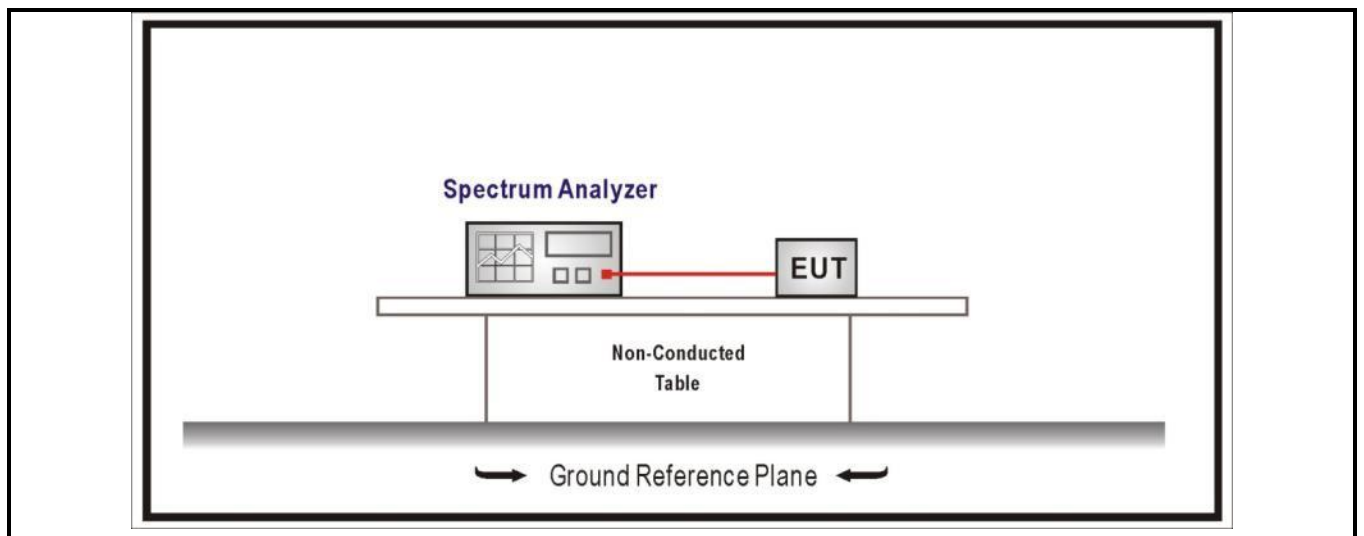
Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247(d) & RSS-247 Issue 4 Section 6.6	
RF Output power (Detection methods)	Limit(dB)	
RF Output power(Average detector)	30dBc(Note1)	
RF Output power(PK detector)	20dBc(Note2)	

Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD by Level in 100 kHz (i.e., 30 dBc).

Note 2: If the maximum peak conducted output power procedure was used, then 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 by Level in 100 kHz (i.e., 20 dBc).

Test Configuration



Performed measurements

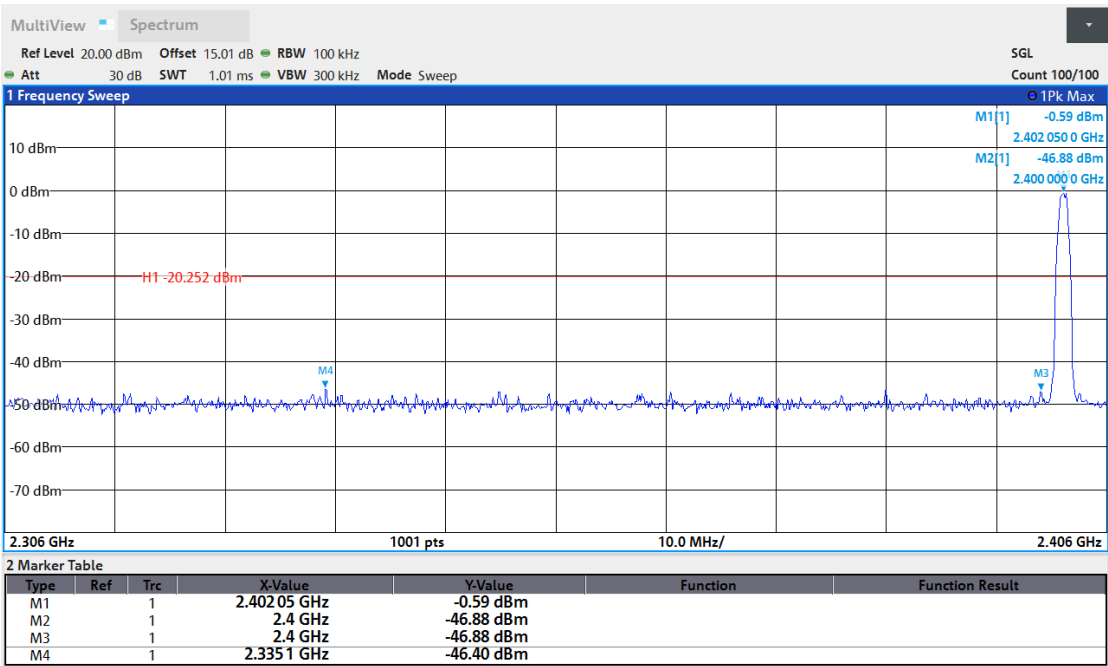
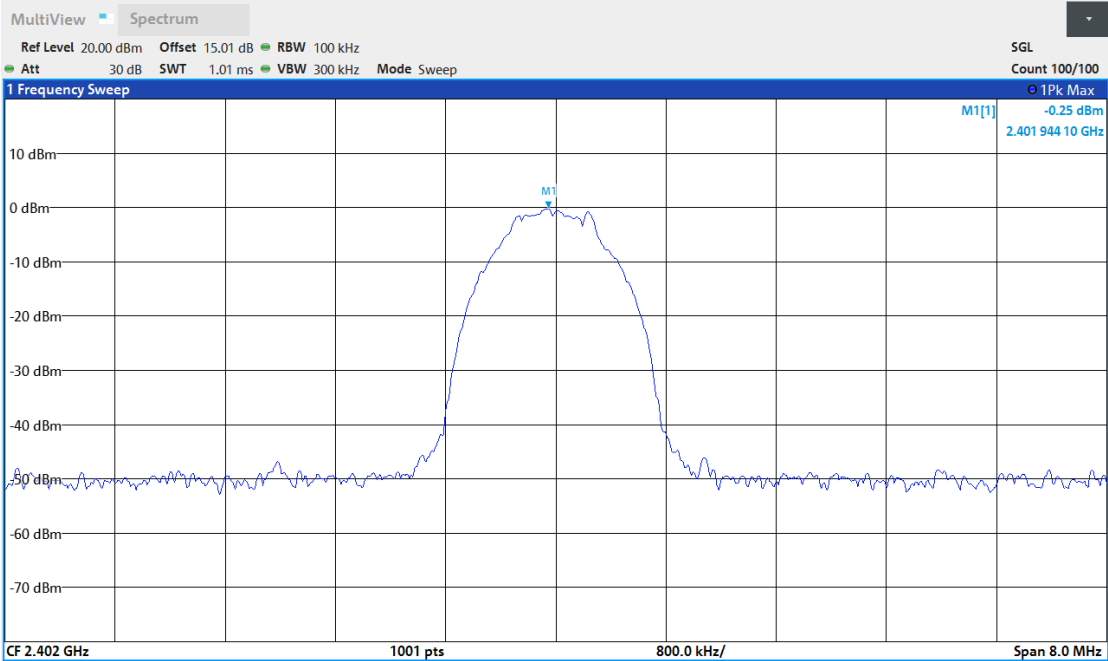
Port under test	Antenna port	
Test method applied	☒	Conducted measurement
	☐	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1	
Remark	---	

See next page

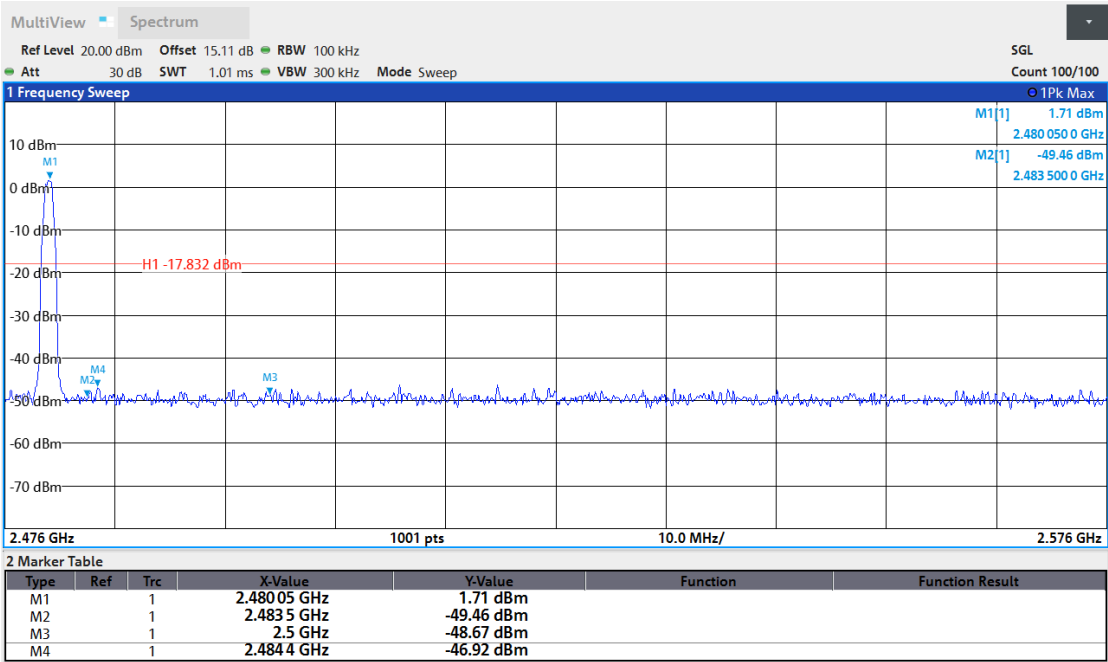
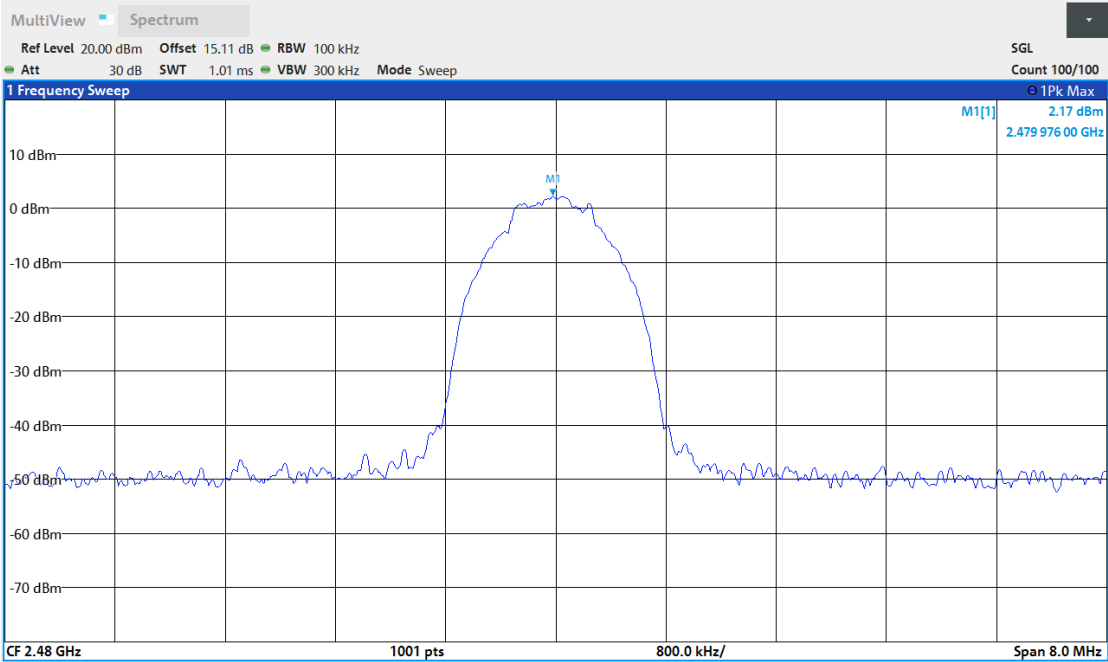
Results

Emissions in non-restricted frequency band

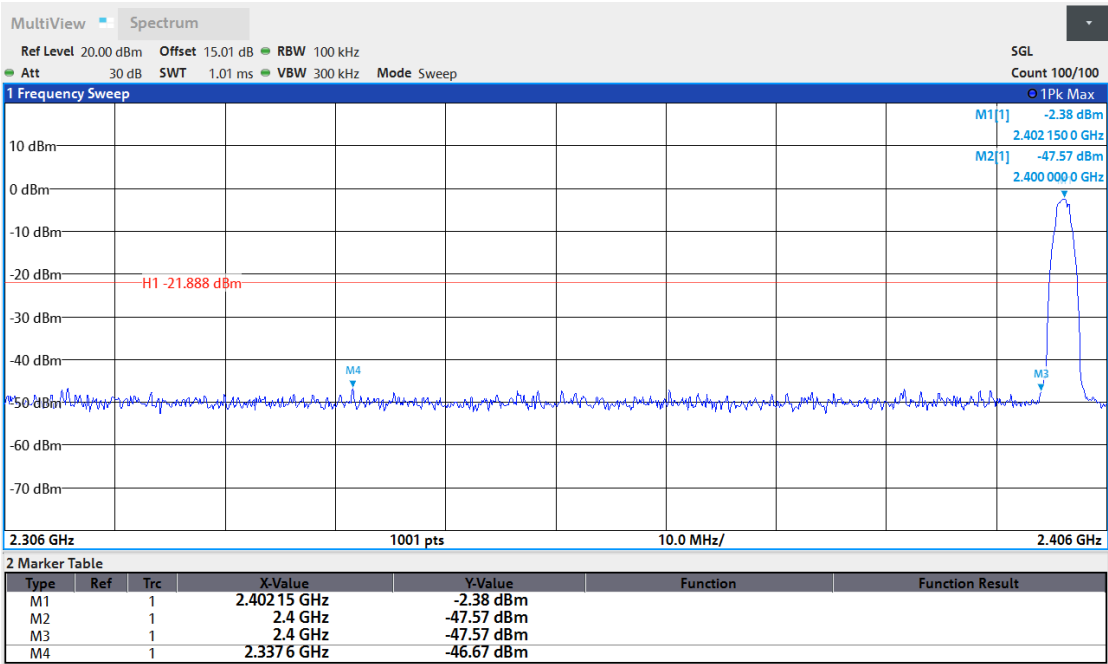
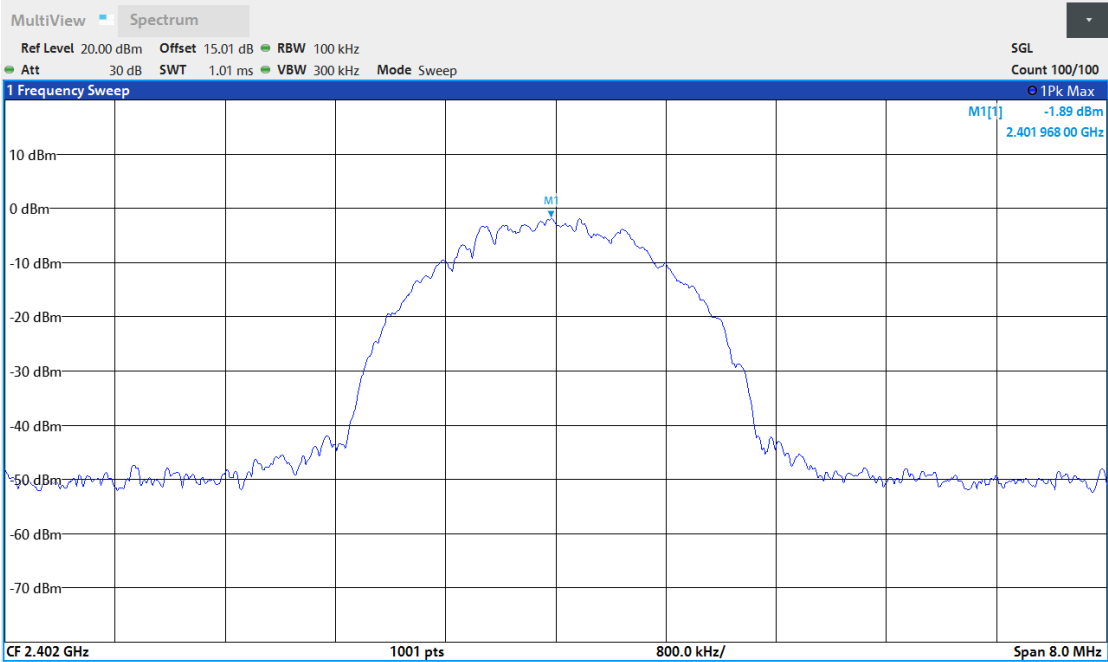
2402MHz, 1Mbps



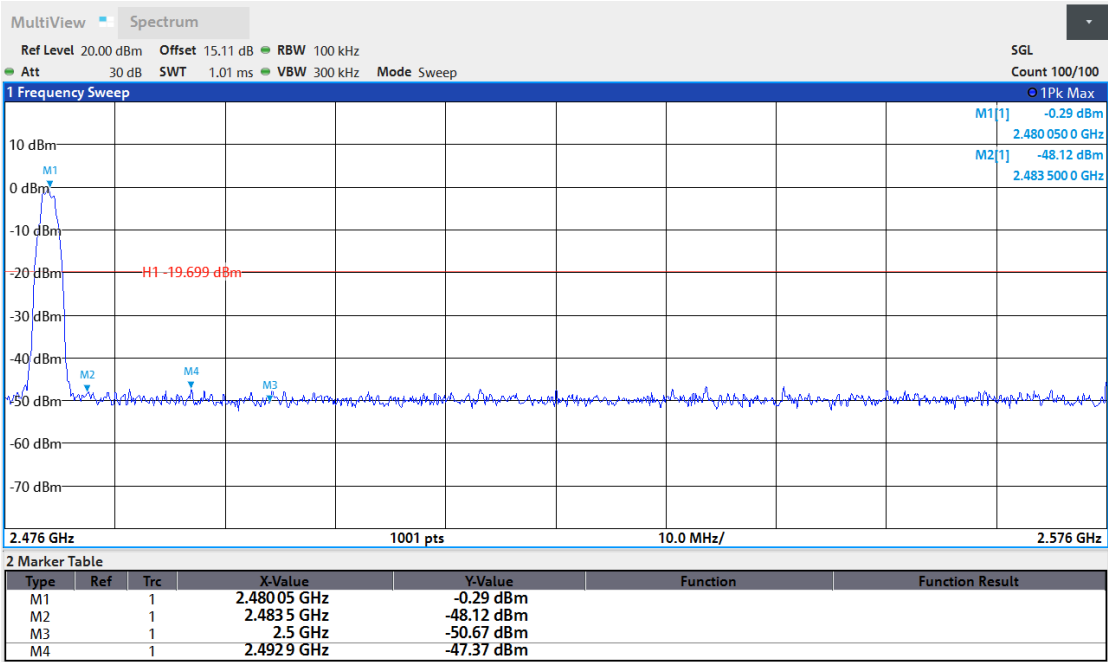
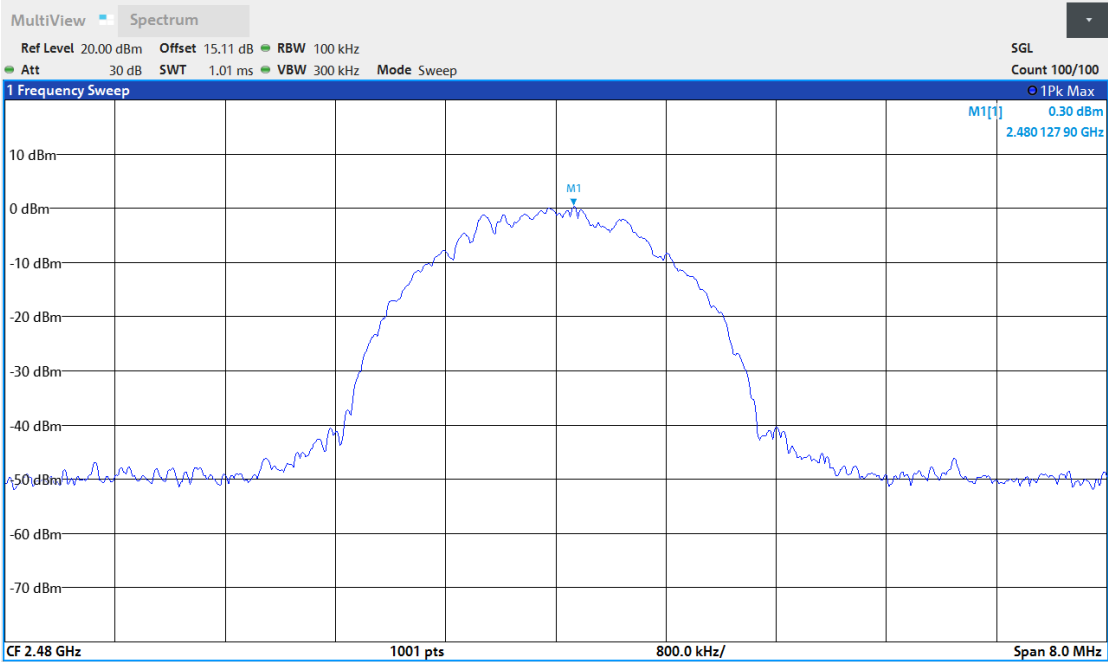
2480MHz, 1Mbps



2402MHz, 2Mbps



2480MHz, 2Mbps

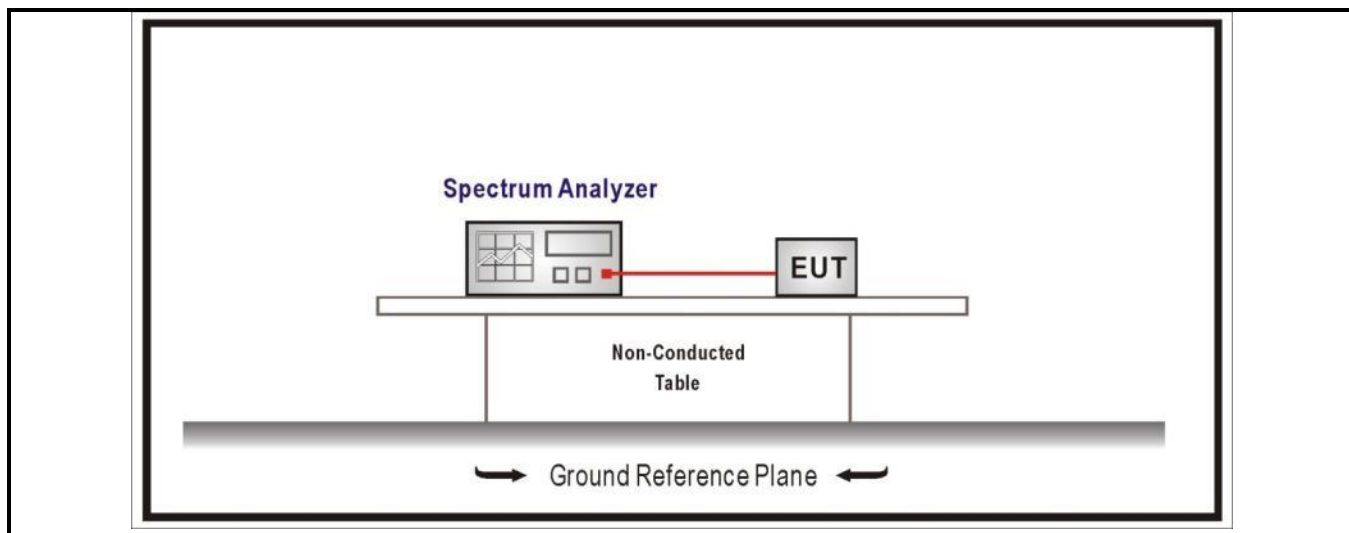


4.4	Duty Cycle	VERDICT: PASS
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Limit

N/A

Test Configuration



Performed measurements

Port under test	Antenna port	
Test method applied	☒	Conducted measurement
	☐	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1	
Remark	For reporting purpose only	

Results

Mode	CH.	Test Freq. (MHz)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
BLE 1Mbps	00	2402	100	0	0
	19	2440	100	0	0
	39	2480	100	0	0
BLE 2Mbps	00	2402	100	0	0
	19	2440	100	0	0
	39	2480	100	0	0

Note:

According to KDB 558074, when test for Radiated Emission Band Edge and Radiated Emission, for average detector set: VBW $\geq$ 1/T will be used.

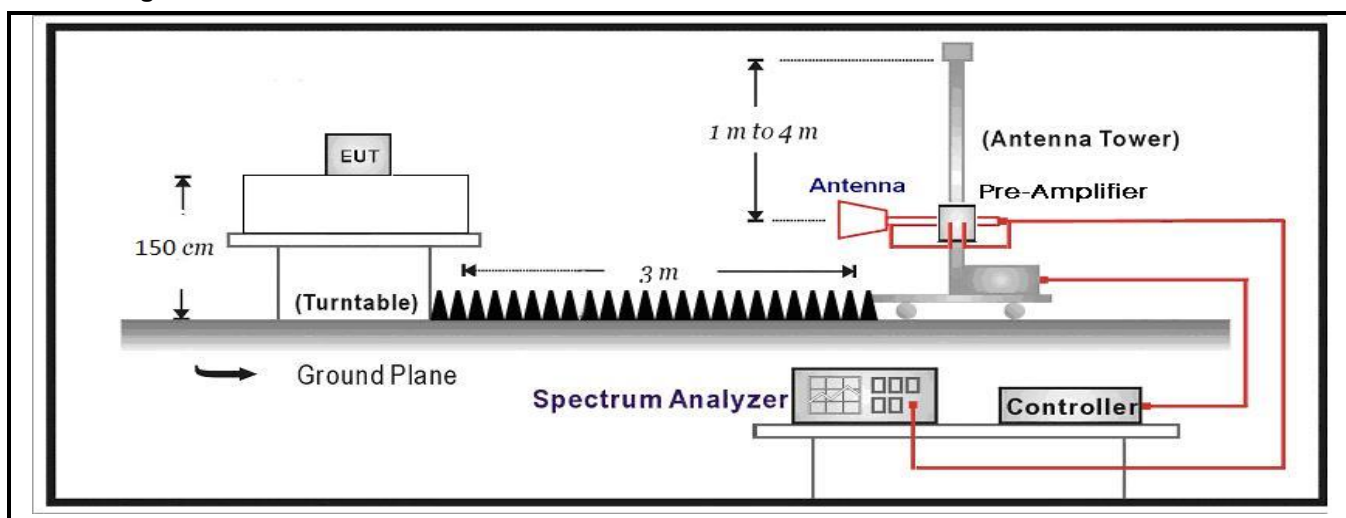
4.5	Radiated Emission Band Edge	VERDICT: PASS
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Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247(d), 15.205, 15.209 & RSS-Gen Issue 5 Section 8.9 & 8.10			
Frequency bands (MHz)	Detector	Limit (dBμV/m)	RBW (MHz)	Distance (m)
2310-2390	PK	74	1	3
2483.5-2500	AV	54	1	3

Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.

Test Configuration



Performed measurements

Port under test	Enclosure port	
Test method applied	☐	Conducted measurement
	☒	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1	
Remark	---	

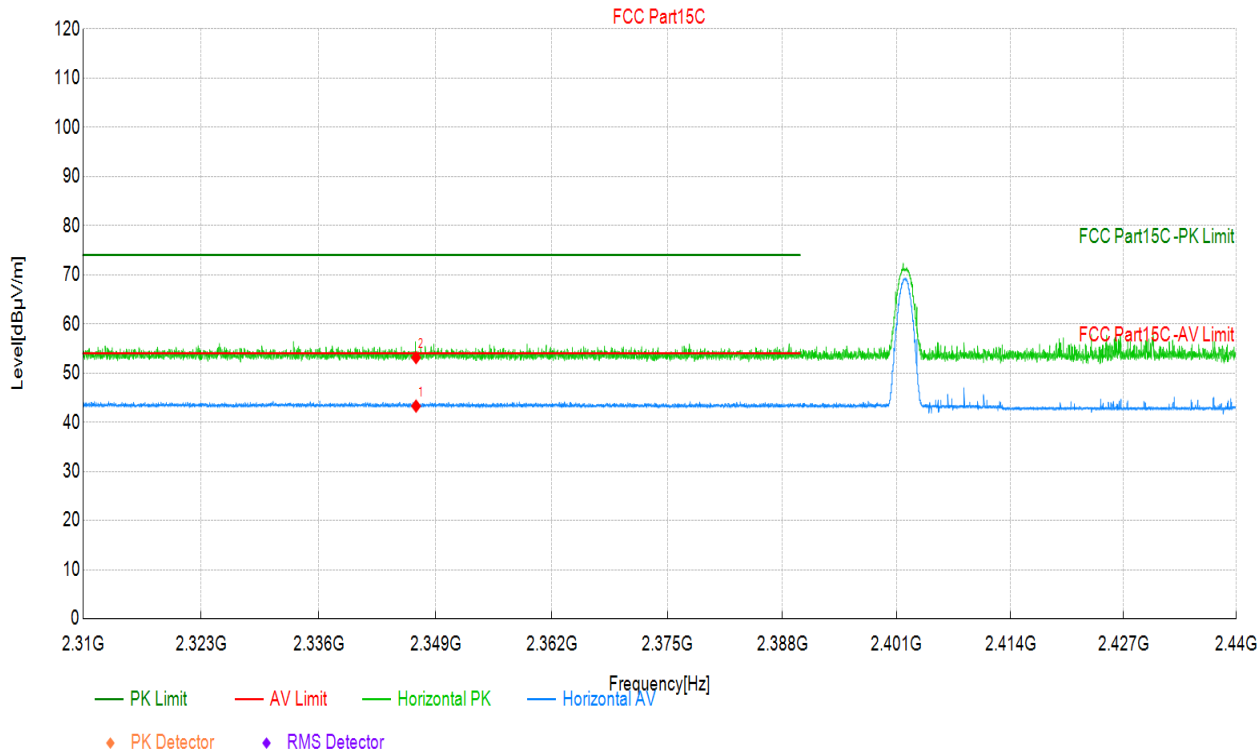
See next page

Results

Radiated Emission Band Edge

All the modes(BLE 1M, BLE 2M) have been tested and the worst(BLE 1M) result recorded was report as below:

2402MHz, 1Mbps, H

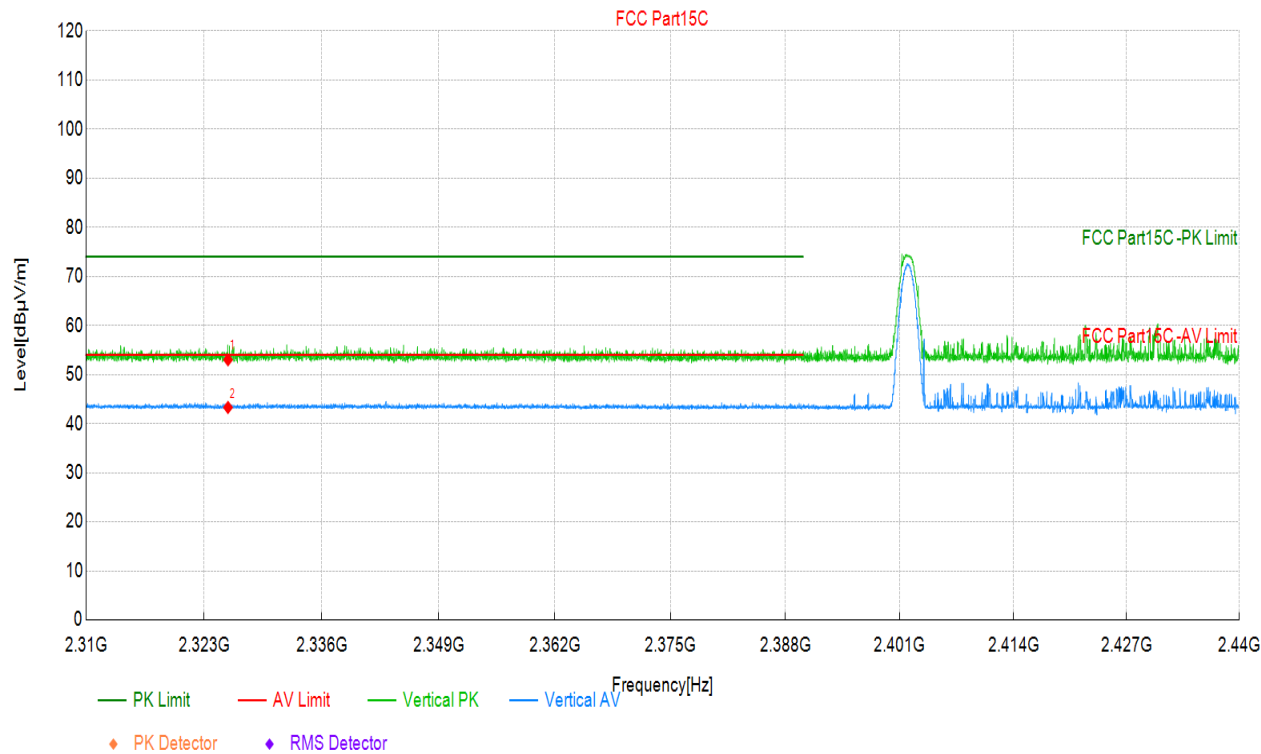


Suspected Data List									
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2346.82	31.4	43.28	11.910	54.00	10.72	PK	Hori	PASS
2	2346.82	41.2	53.14	11.910	74.00	20.86	AV	Hori	PASS

Note:(1)Level=Reading+Factor

(2)Margin=Limit-Level

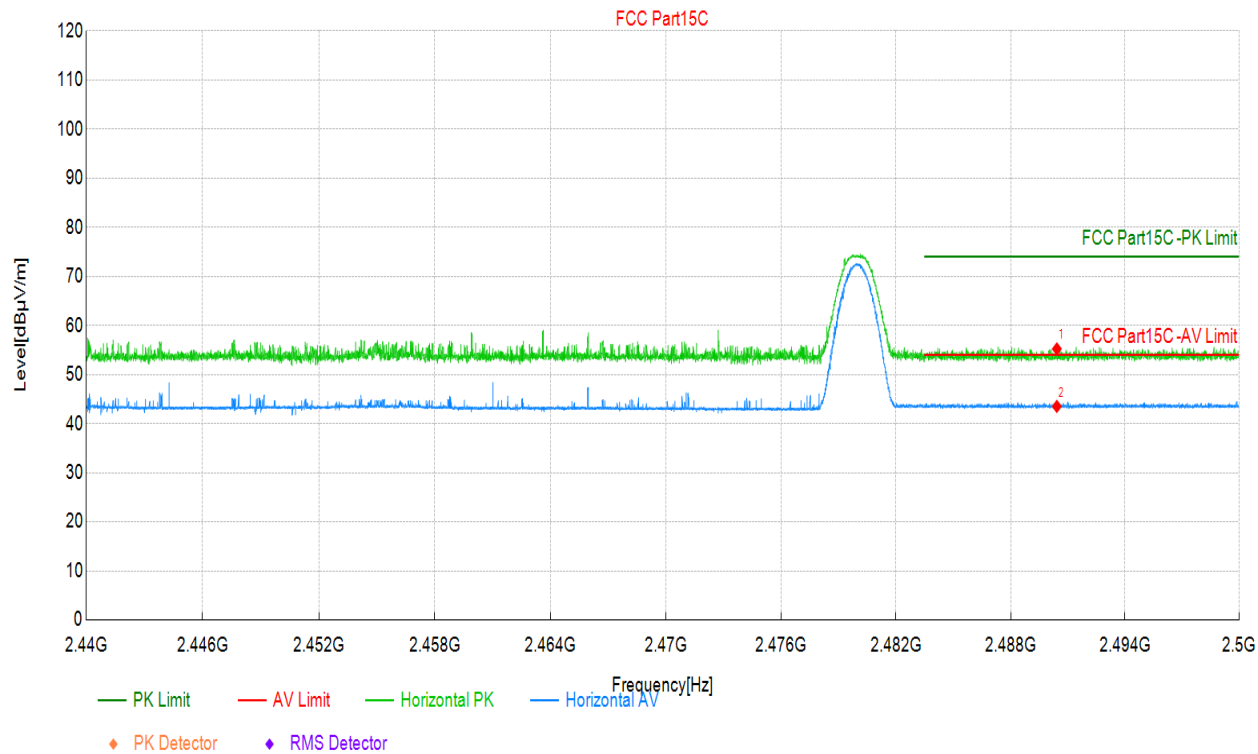
2402MHz, 1Mbps, V



Suspected Data List									
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2325.63	41.1	53.01	11.920	74.00	20.99	PK	Verti	PASS
2	2325.63	31.4	43.30	11.920	54.00	10.70	AV	Verti	PASS

Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

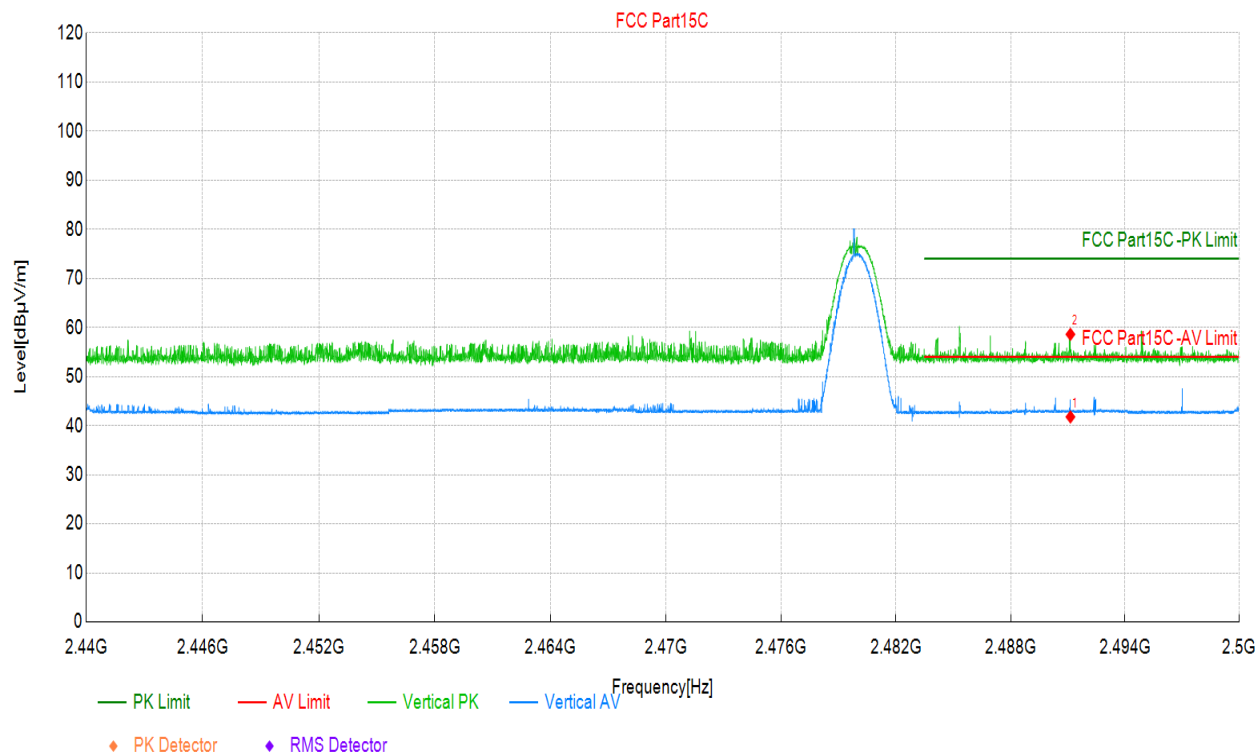
2480MHz, 1Mbps, H



Suspected Data List									
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2490.42	43.3	55.23	11.960	74.00	18.77	PK	Hori	PASS
2	2490.42	31.6	43.52	11.960	54.00	10.48	AV	Hori	PASS

Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

2480MHz, 1Mbps, V



Suspected Data List									
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2491.14	46.6	58.60	11.960	74.00	15.40	PK	Verti	PASS
2	2491.14	29.8	41.78	11.960	54.00	12.22	AV	Verti	PASS

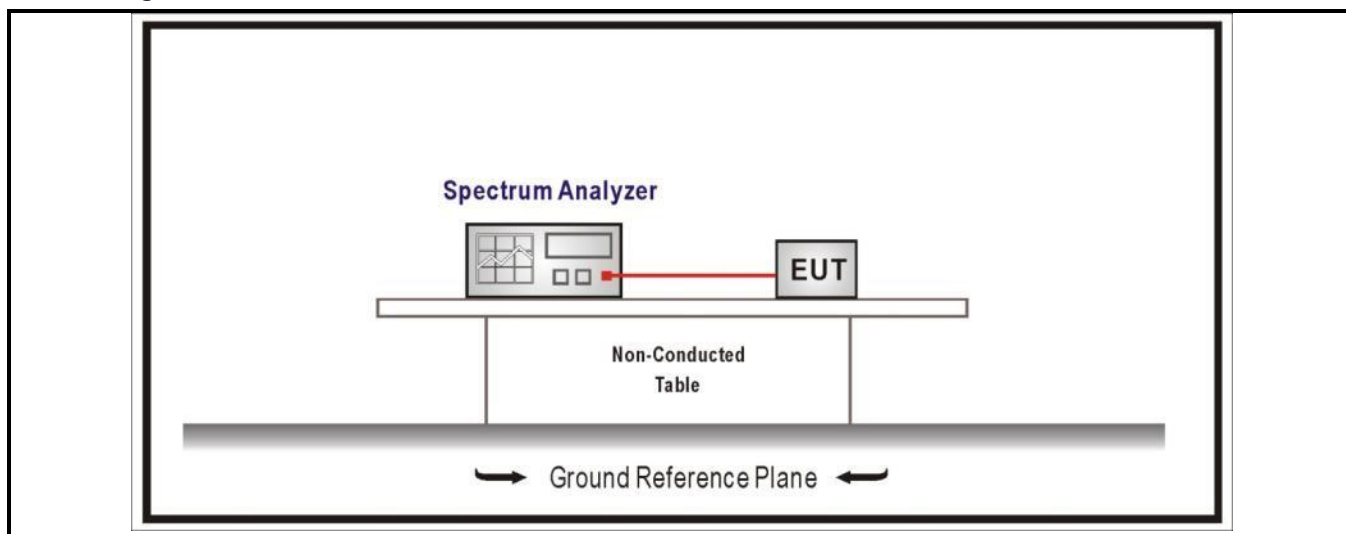
Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

4.6	DTS Bandwidth & Occupied Bandwidth	VERDICT: PASS
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Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247 (a)(2) & RSS-247 Issue 4 Section 6.3.1(a)
Systems using digital modulation techniques operate in the 2400-2483.5 MHz .The minimum 6 dB bandwidth shall be at least 500 kHz	
Standard	RSS-Gen Issue 5 Section 6.7 & RSS-247 Issue 4 Section 6.3.1(a)
The occupied bandwidth or the "99% emission bandwidth" is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs. The occupied bandwidth should within the required frequency range.	
The minimum 6 dB bandwidth shall be 500 kHz.	

Test Configuration



Performed measurements

Port under test	Antenna port	
Test method applied	☒	Conducted measurement
	☐	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1	
Remark	---	

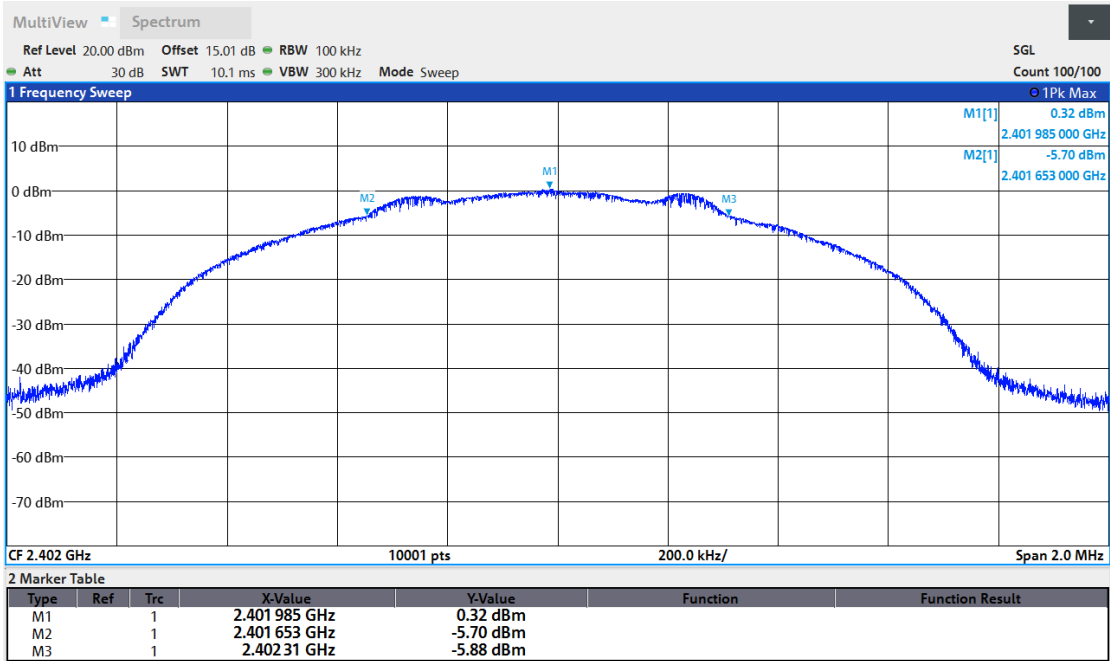
Results

Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (MHz)	Limit (MHz)	Result
BLE 1Mbps	00	2402	0.658	>0.5	Pass
	19	2440	0.657	>0.5	Pass
	39	2480	0.657	>0.5	Pass
BLE 2Mbps	00	2402	1.276	>0.5	Pass
	19	2440	1.270	>0.5	Pass
	39	2480	1.323	>0.5	Pass

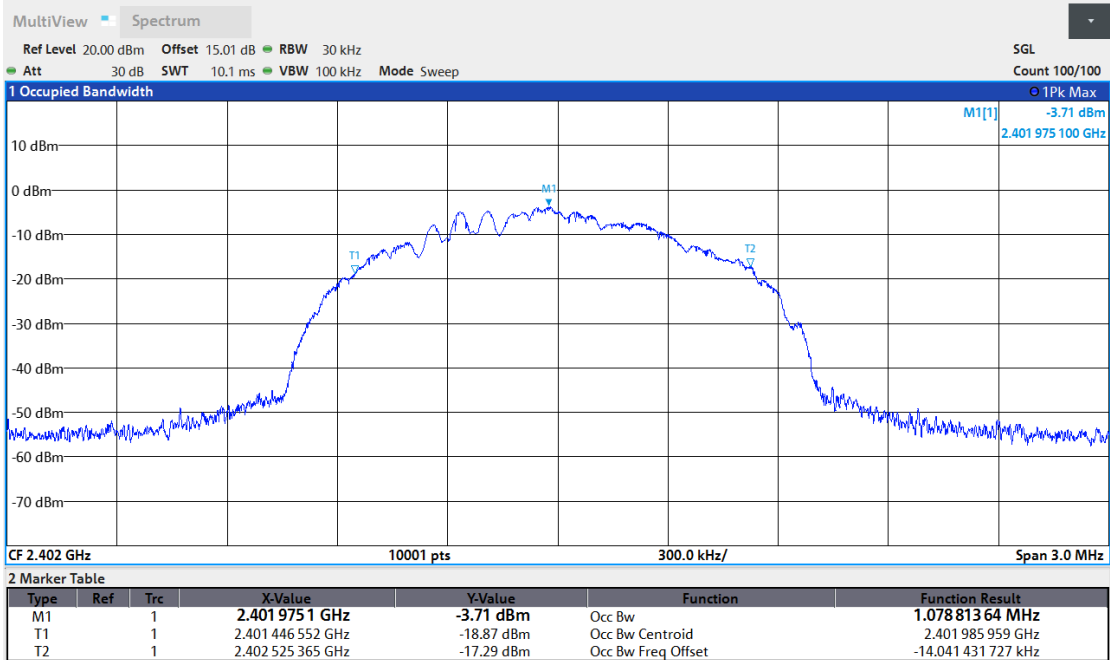
Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (MHz)	Limit (MHz)	Result
BLE 1Mbps	00	2402	1.079	Within frequency range	Pass
	19	2440	1.079	Within frequency range	Pass
	39	2480	1.079	Within frequency range	Pass
BLE 2Mbps	00	2402	2.120	Within frequency range	Pass
	19	2440	2.121	Within frequency range	Pass
	39	2480	2.120	Within frequency range	Pass

DTS Bandwidth
2402MHz, 1Mbps

6dB Bandwidth

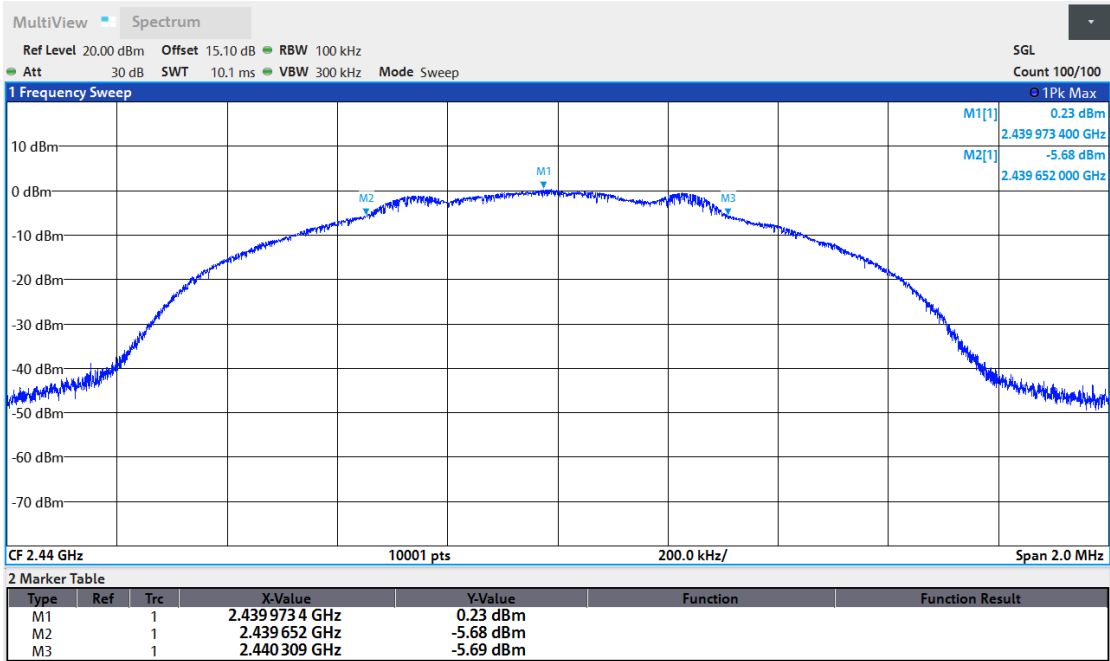


99% Occupied Bandwidth

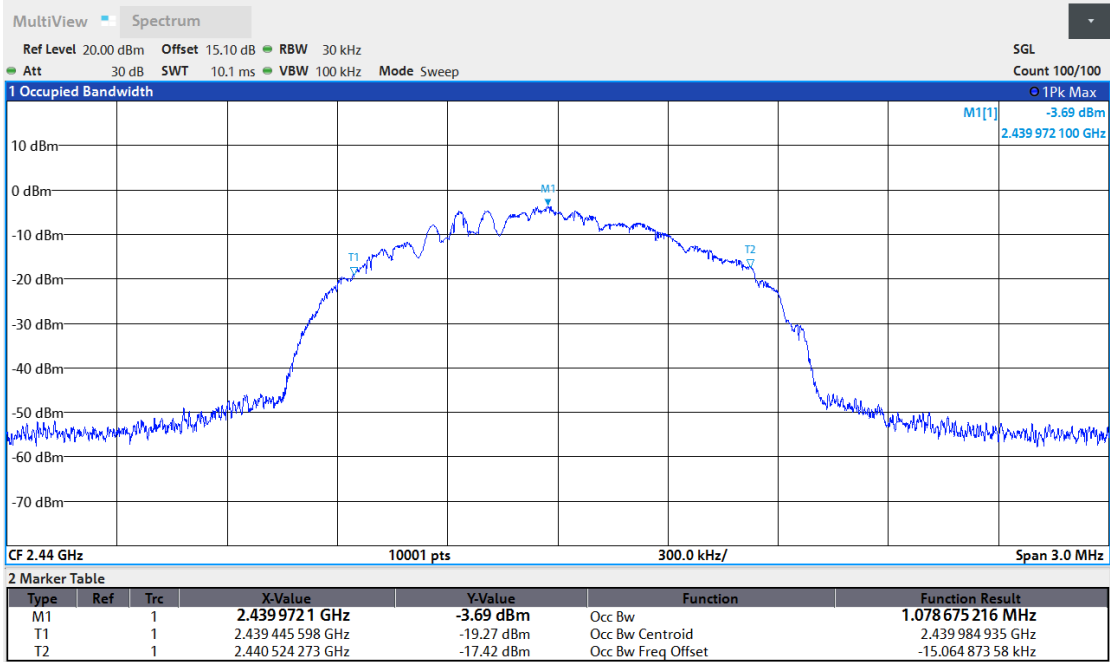


2440MHz, 1Mbps

6dB Bandwidth

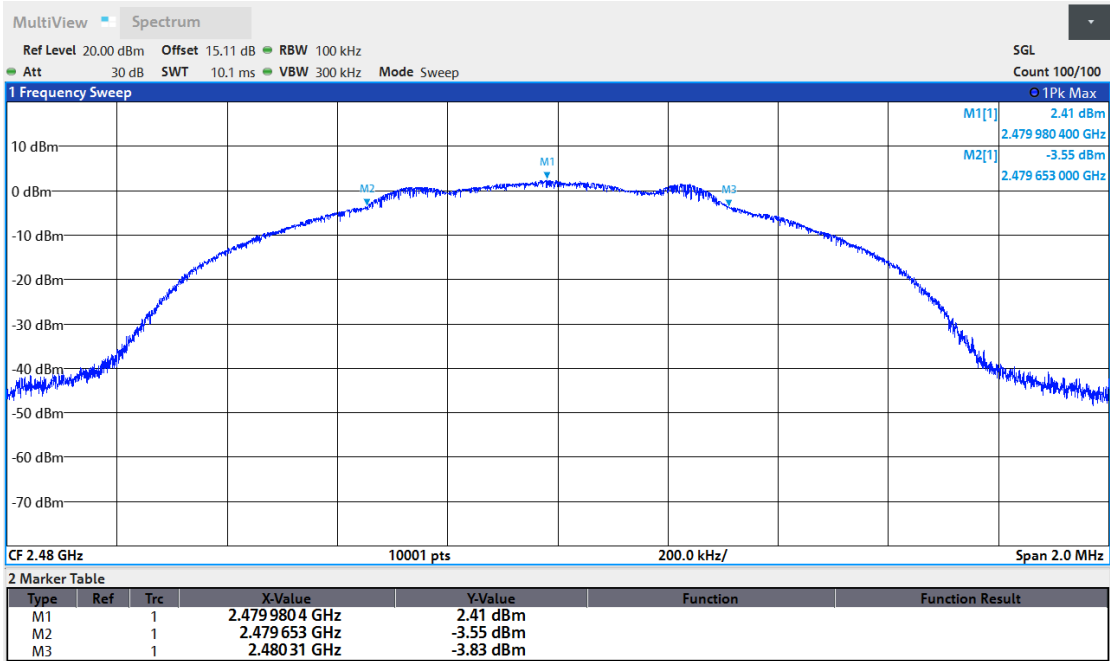


99% Occupied Bandwidth

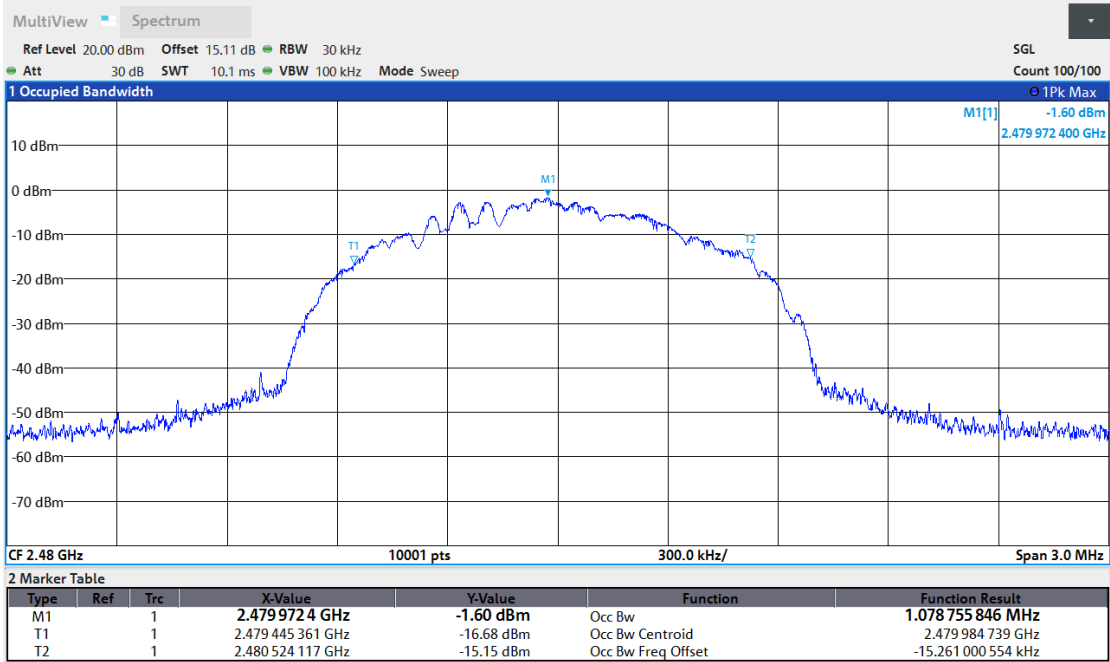


2480MHz, 1Mbps

6dB Bandwidth

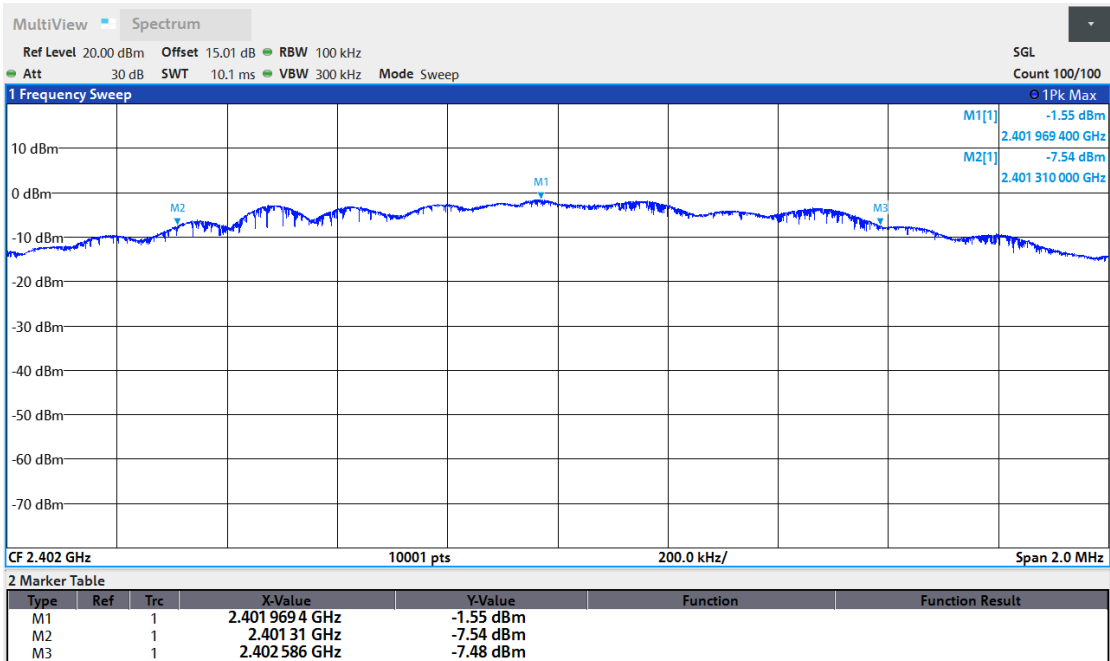


99% Occupied Bandwidth

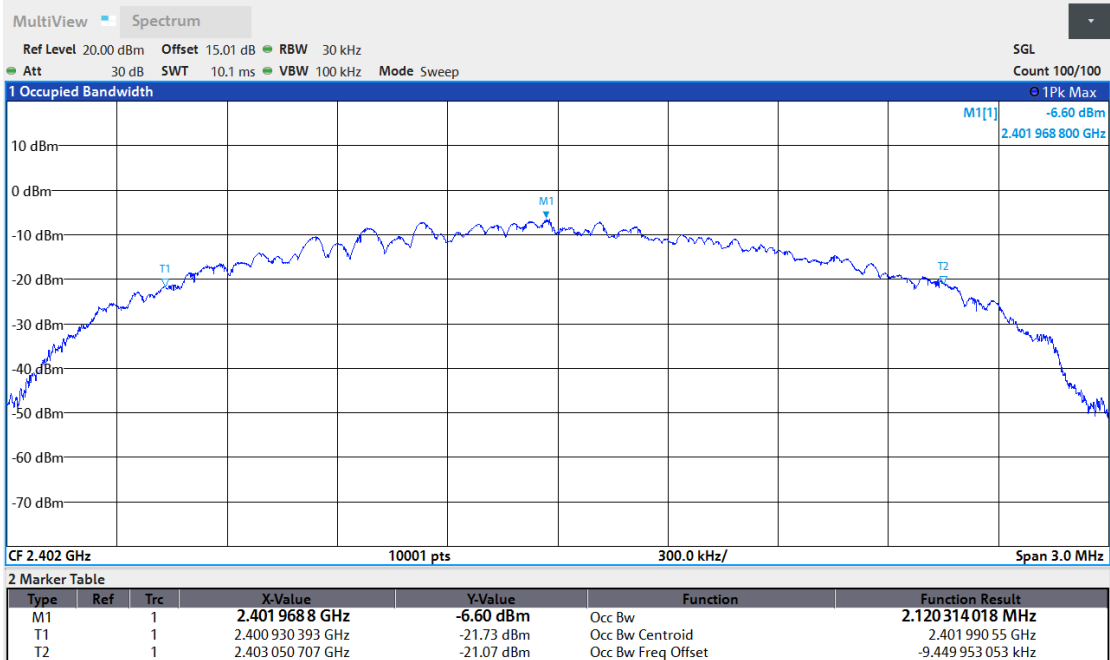


2402MHz, 2Mbps

6dB Bandwidth

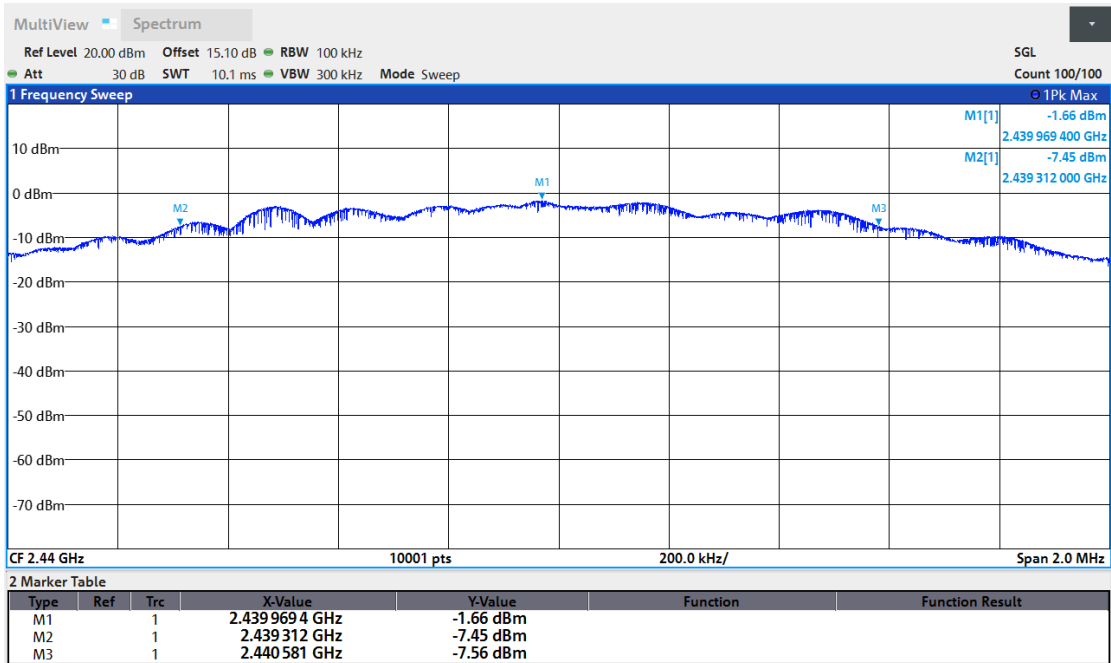


99% Occupied Bandwidth

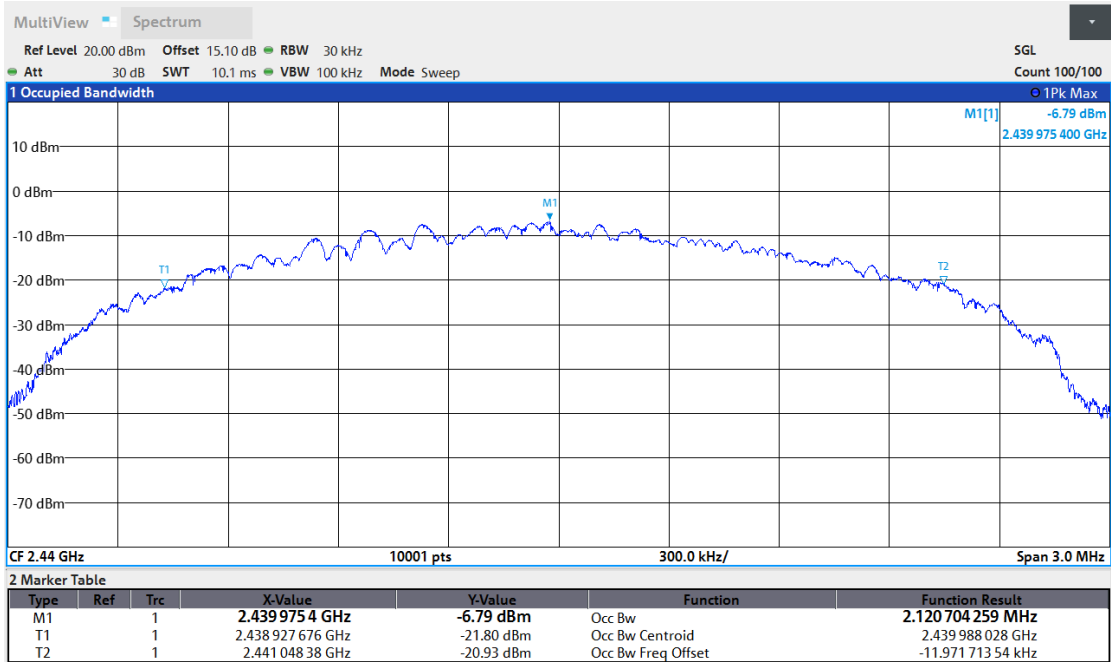


2440MHz, 2Mbps

6dB Bandwidth

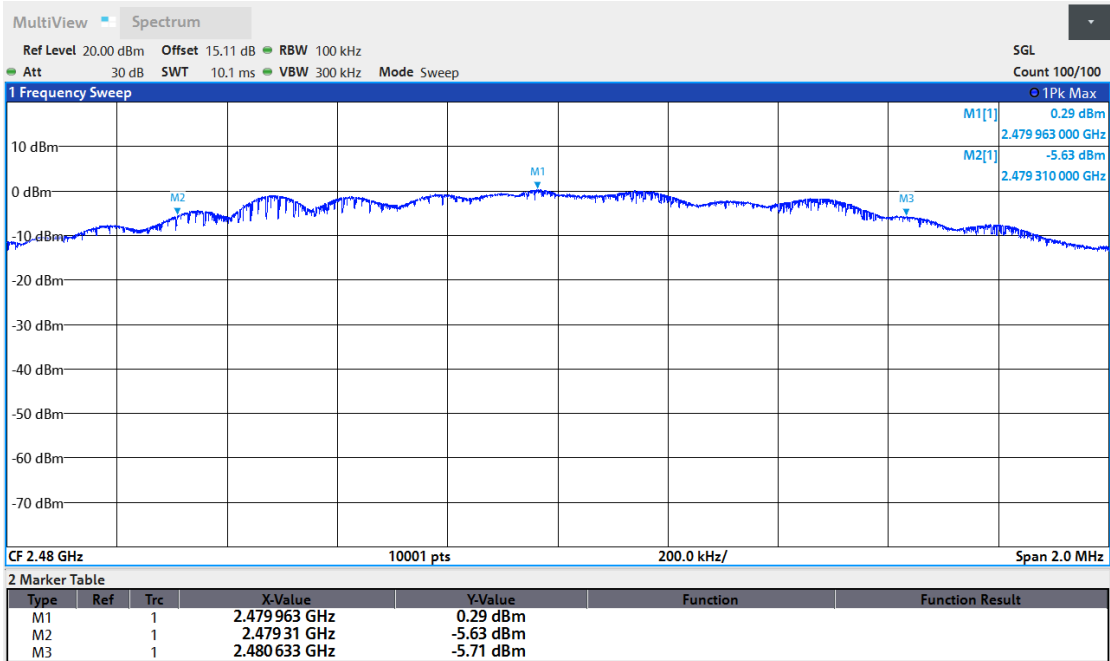


99% Occupied Bandwidth

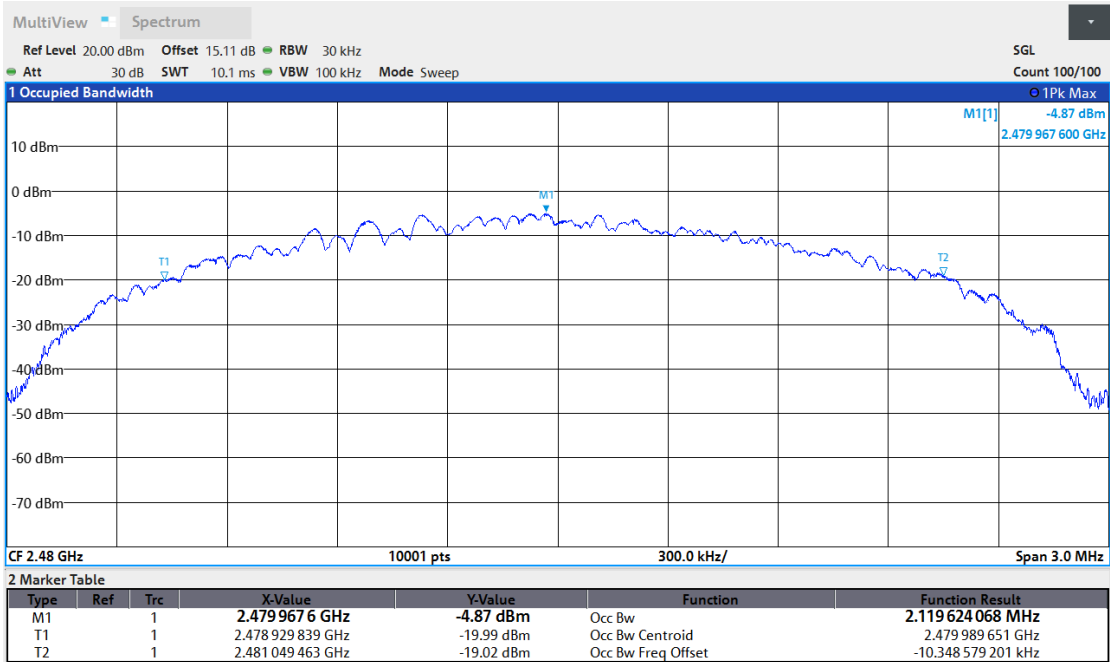


2480MHz, 2Mbps

6dB Bandwidth



99% Occupied Bandwidth



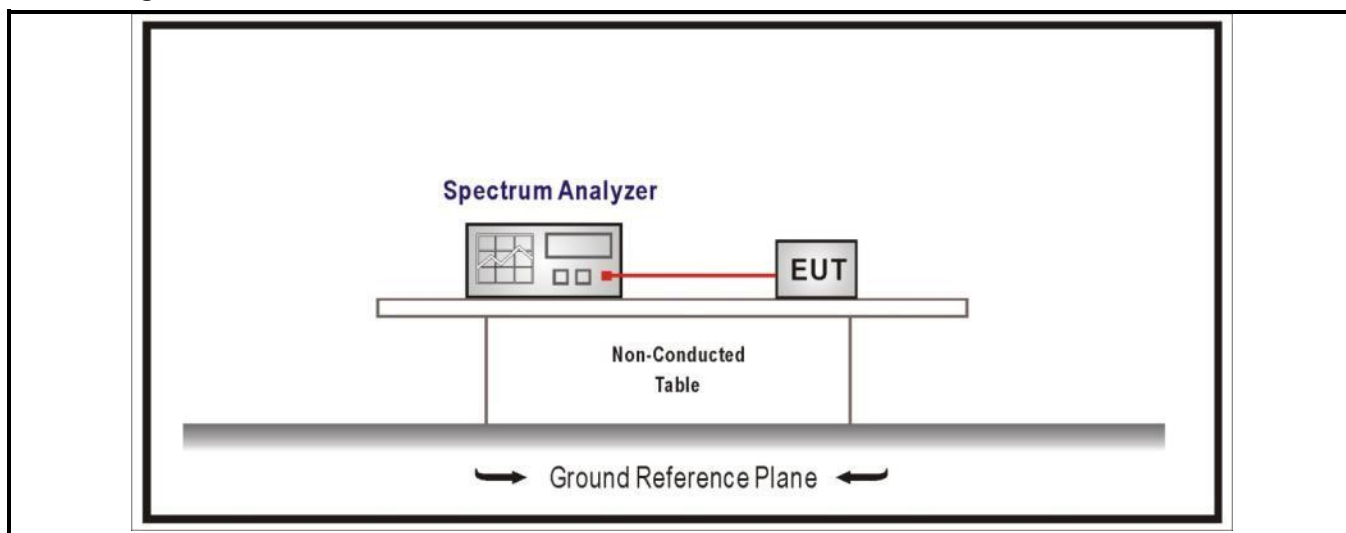
4.7	Fundamental emission output power	VERDICT: PASS
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Limit

Standard		FCC Part 15 Subpart C Paragraph 15.247 (b)(3) & RSS-247 Issue 4 Section 6.3.2
☒	GTX < 6dBi	Pout≤30dBm, EIRP≤36dBm
☐	GTX > 6dBi	
☐	Non-Fix point-point	Pout≤30-(GTX -6), EIRP≤36dBm
☐	Fix point-point	Pout≤30-[(GTX-6)]/3, EIRP≤36dBm
☐	Point-to-multipoint	Pout≤30-(GTX-6) , EIRP≤36dBm
☐	Overlap Beams	Pout≤30-[(GTX-6)]/3, EIRP≤36dBm
☐	Aggregate power transmitted simultaneously on all beams	Pout≤30-[(GTX-6)]/3, EIRP≤36dBm
☐	single LE directional beam	Pout≤30-[(GTX-6)]/3+8dB, EIRP≤36dBm

Note 1 : GTX directional gain of transmitting antennas.
Note 2 : Pout is maximum peak conducted output power .
Note 3 : EIRP is equivalent isotropically radiated power.

Test Configuration



Performed measurements

Port under test	Antenna port	
Test method applied	☒	Conducted measurement
	☐	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1	
Remark	---	

See next page.

Results

Mode	Channel	Test Frequency (MHz)	Output Power (dBm)	Output Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)	Result
BLE 1Mbps	00	2402	2.24	≤30	3.15	≤36	Pass
	19	2440	2.25	≤30	3.16	≤36	Pass
	39	2480	4.28	≤30	5.19	≤36	Pass
BLE 2Mbps	00	2402	1.97	≤30	2.88	≤36	Pass
	19	2440	1.75	≤30	2.66	≤36	Pass
	39	2480	3.84	≤30	4.75	≤36	Pass

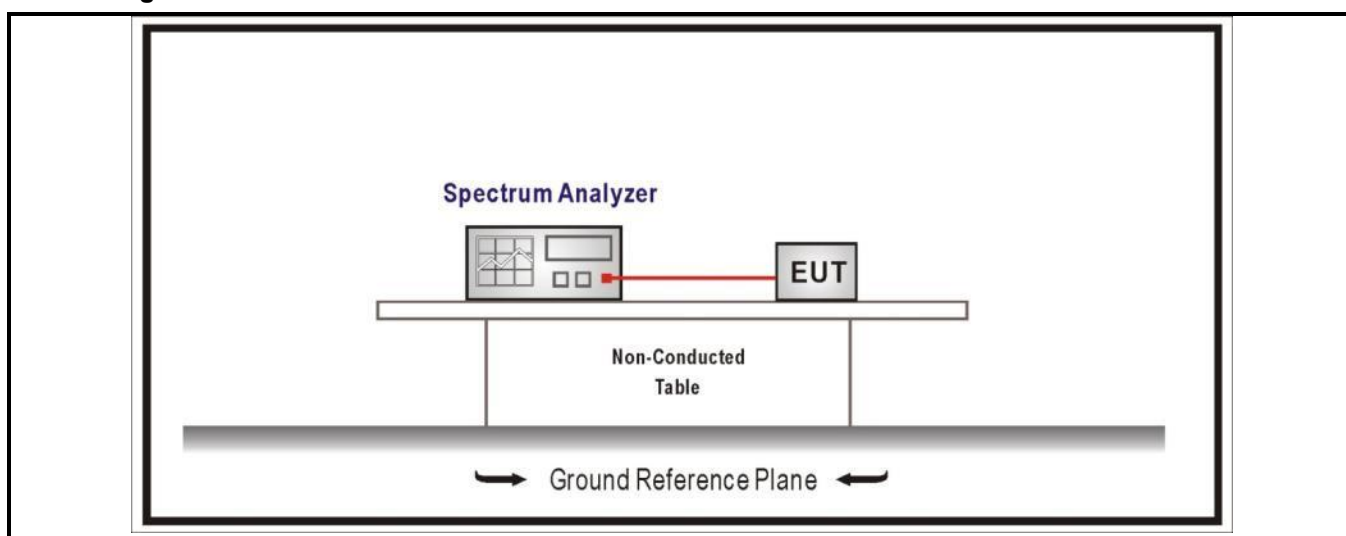
Note: EIRP = Output Power + Antenna Gain

4.8	Power Spectral Density	VERDICT: PASS
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Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247 (e) & RSS-247 Issue 4 Section 6.3.1(b)
Power Spectral Density ≤ 8 dBm/3kHz	

Test Configuration



Performed measurements

Port under test	Antenna port	
Test method applied	☒	Conducted measurement
	☐	Radiated measurement
Test setup	Refer to the Annex 3 for test setup photo(s).	
Operating mode(s) used	Mode 1	
Remark	---	

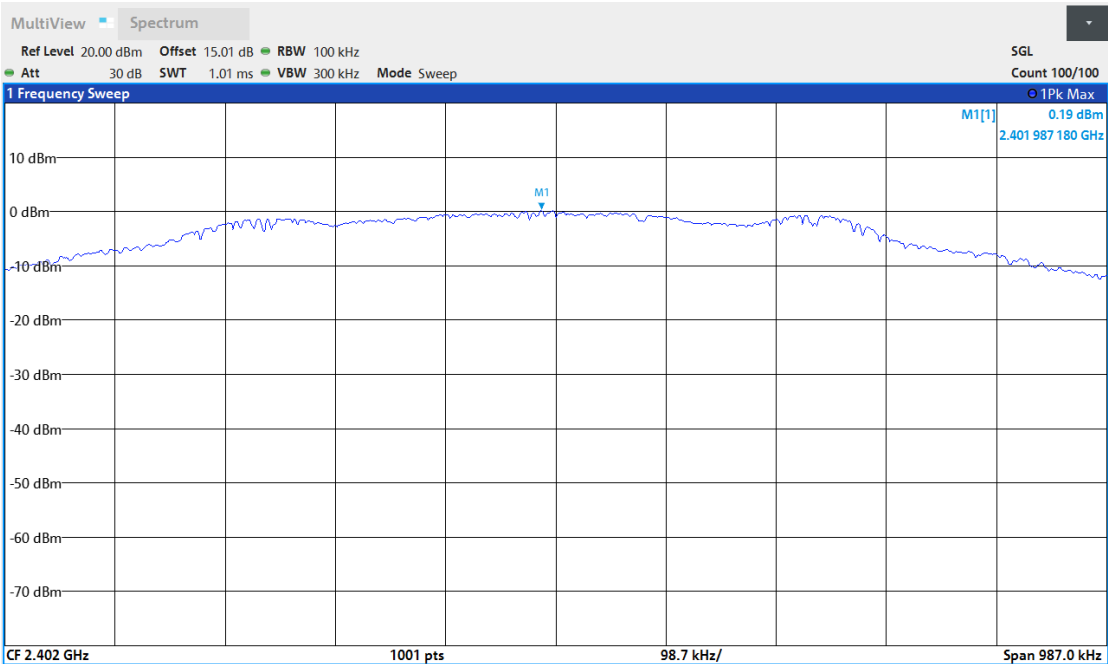
See next page.

Results

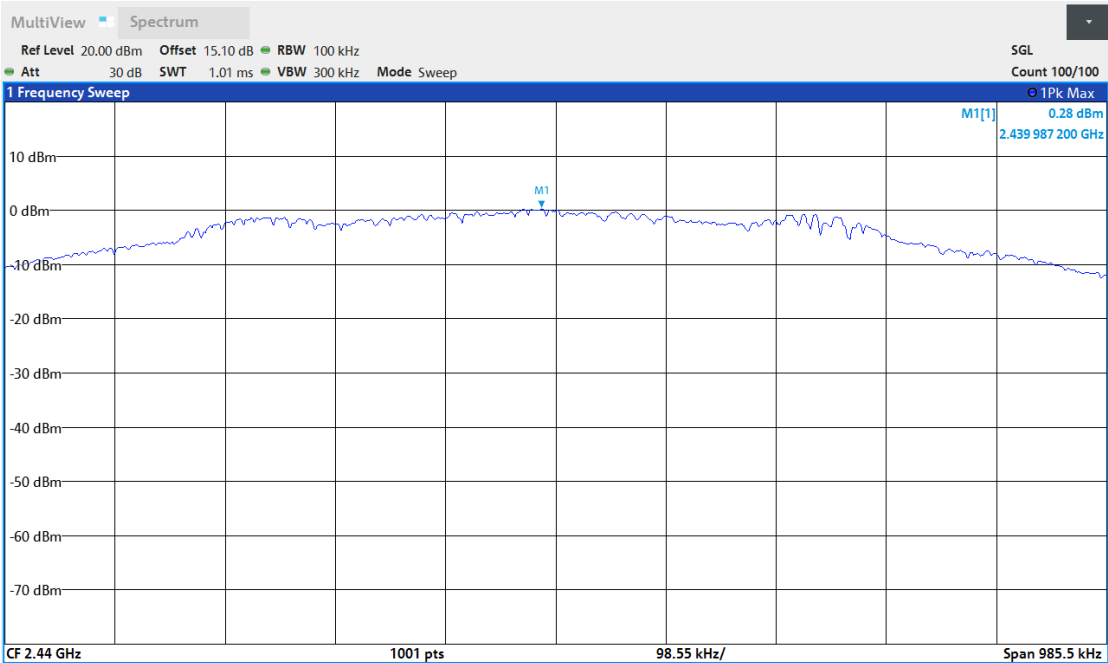
Mode	Channel	Test Frequency (MHz)	Power Spectral Density (dBm)	Limit (dBm/3kHz)	Result
BLE 1Mbps	00	2402	0.19	≤8	Pass
	19	2440	0.28	≤8	Pass
	39	2480	2.12	≤8	Pass
BLE 2Mbps	00	2402	-1.84	≤8	Pass
	19	2440	-1.92	≤8	Pass
	39	2480	0.36	≤8	Pass

Power Spectral Density

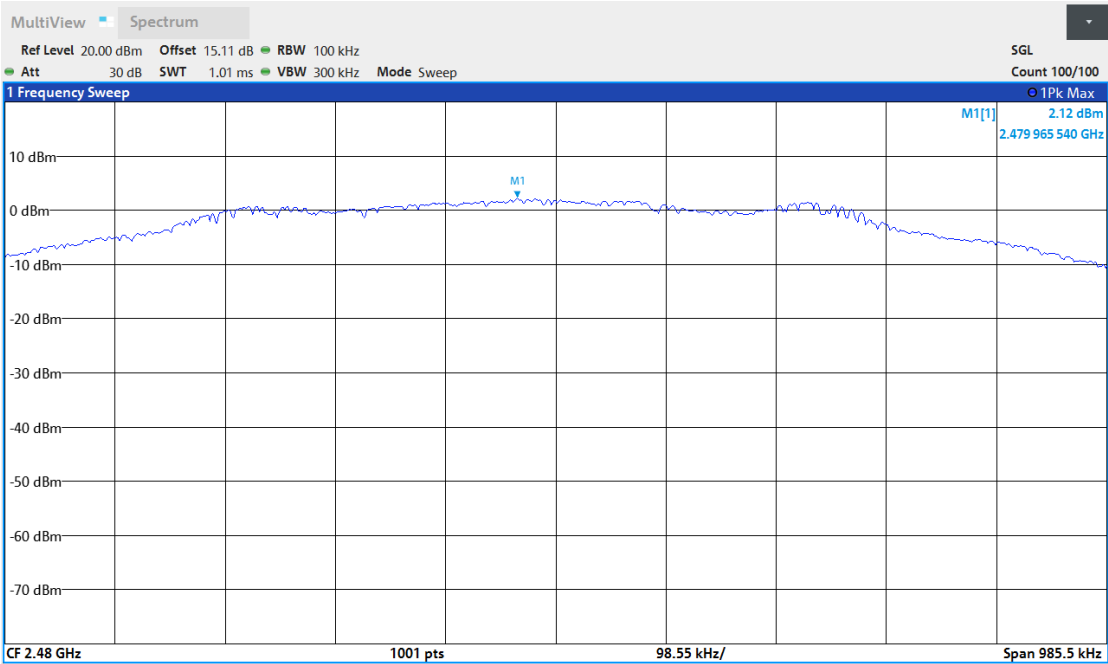
2402MHz, 1Mbps



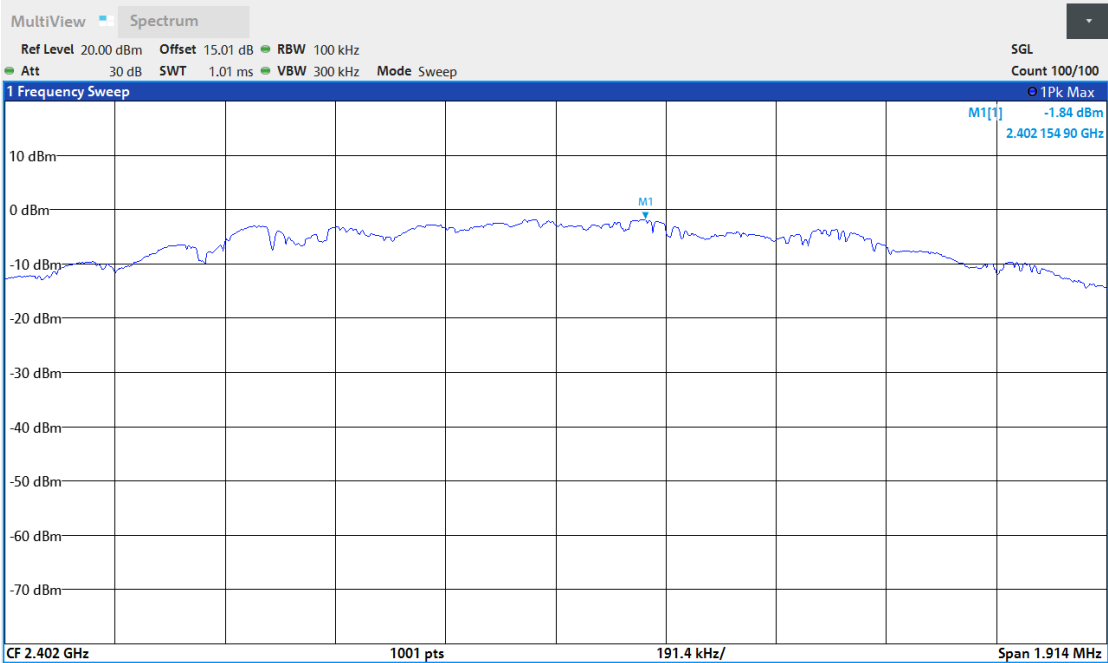
2440MHz, 1Mbps



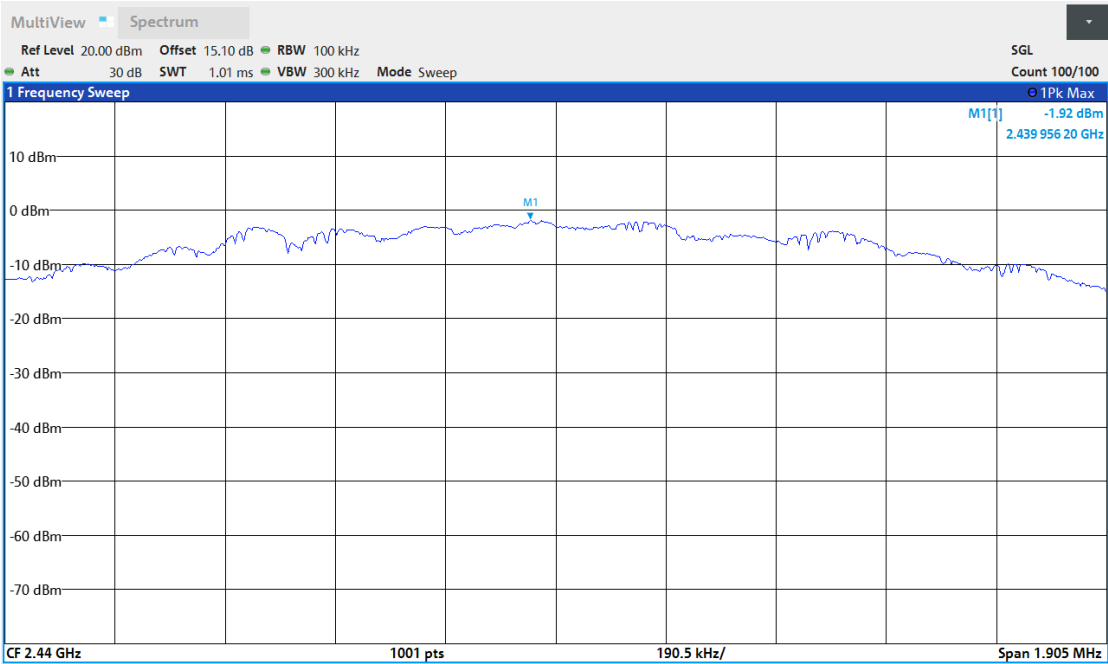
2480MHz, 1Mbps



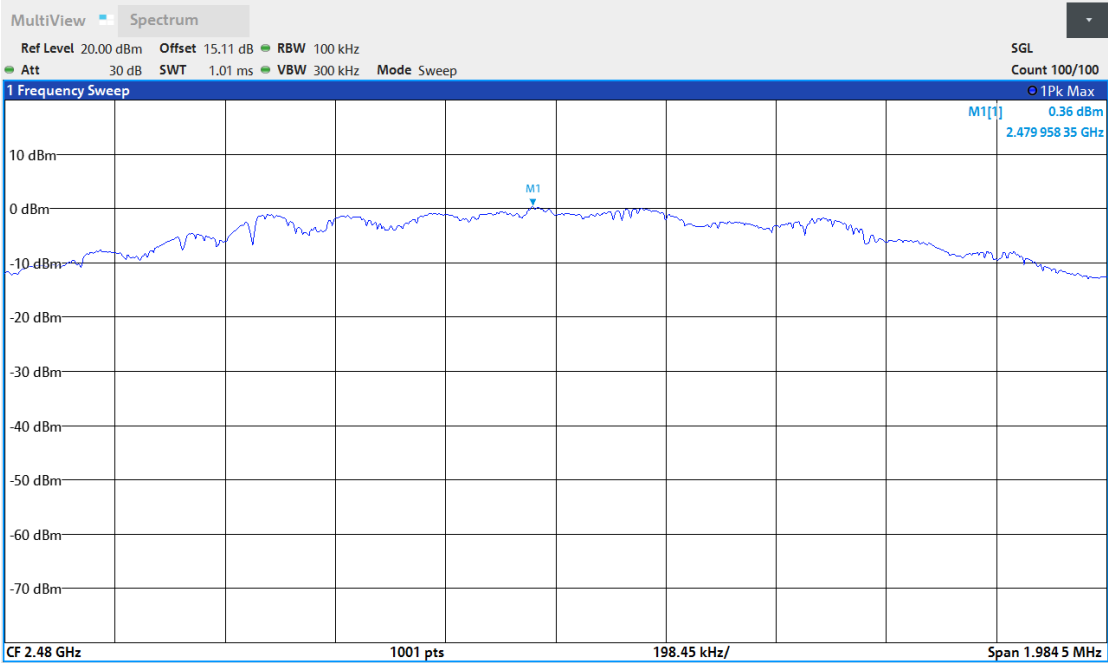
2402MHz, 2Mbps



2440MHz, 2Mbps



2480MHz, 2Mbps



4.9	Antenna Requirement	VERDICT: PASS
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Limit

Standard	FCC Part 15 Subpart C Paragraph 15.203
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.	
Standard	RSS-Gen Issue 5 Section 6.8
A transmitter can only be sold or operated with antennas with which it was certified. A transmitter may be certified with multiple antenna types. An antenna type comprises antennas having similar in-band and out-of-band radiation patterns.	

Antenna Connector Construction

☒	The use of a permanently attached antenna
☐	The antenna use of a unique coupling to the intentional radiator
☐	The use of a nonstandard antenna jack or electrical connector
Please refer to the attached document “Internal Photograph” to show the antenna connector.	

5 IDENTIFICATION OF THE EQUIPMENT UNDER TEST

Remark: The test setup photo and EUT Photo please see appendix.

ANNEX 1 – MEASUREMENT UNCERTAINTY

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%.

Test Item	Uncertainty	
AC Power Line Conducted Emission	2.7 dB	
Radio frequency & Bandwidth	2 ppm	
RF power, conducted	0.216 dB	
Dwell Time	2.016 ms	
Spurious emissions, radiated	(9KHz~30MHz)	2.26 dB
	(30MHz~1GHz)	Horizontal: 3.992 dB
		Vertical: 3.986 dB
	(1GHz~8GHz)	Horizontal: 4.382 dB
		Vertical: 4.140 dB
	(8GHz~12.75GHz)	Horizontal: 4.266 dB
		Vertical: 4.186 dB
	(12.75GHz~18GHz)	Horizontal: 4.694 dB
		Vertical: 4.034 dB
	(18GHz~40GHz)	Horizontal: 4.010 dB
		Vertical: 4.024 dB
Humidity	1.4 %	
Temperature	0.5 °C	

ANNEX 2 – USED EQUIPMENT

For AC Power Line Conducted Emission

Equipment Name	Manufacturer	Type/Model	Serial Number	Cal Due date
EMI test receiver	R&S	ESR3	102958	2026/10/26
Artificial Mains Network	R&S	ENV216	102772	2026/10/27
8-Wire ISN	TESEQ	ISN ST08	38053	2026/10/26
Current probe	ETS.LINDGREN	91550-1L	218473	2026/10/26
Software	R&S	ELEKTRA	4.32.0	N/A

For Spurious Emissions Test

Equipment Name	Manufacturer	Type/Model	Serial Number	Cal Due date
Wideband Radio Communication Tester	ROHDE & SCHWARZ	CMW500	171082	2026/01/20
Signal & Spectrum Analyzer	ROHDE & SCHWARZ	FSV3044	101286	2026/01/20
FILTERBANK	ROHDE & SCHWARZ	N/A	100778	N/A
Open Switch and Control Unit	ROHDE & SCHWARZ	OSP220	102454	N/A
System Controller Interface	ROHDE & SCHWARZ	SCI-200	520020123	N/A
Trilog Boroadband Antenna	Schwarzbeck	VULB9163	01514	2026/03/13
Wave Guide Antenna	Schwarzbeck	3117	00240298	2026/03/04
Antenna	Schwarzbeck	QMS-00208	27745	2026/03/04
Antenna	Schwarzbeck	QMS-00880	27646	2026/03/16
Pre-Amplifie	ROHDE & SCHWARZ	SCU08F1	101136	2026/01/20
Pre-Amplifie	ROHDE & SCHWARZ	SCU18F	100971	2026/02/23
Pre-Amplifie	ROHDE & SCHWARZ	SCU18F	100970	2026/02/23
Pre-Amplifie	ROHDE & SCHWARZ	SCU40F1	100631	2026/02/23
Software	ROHDE & SCHWARZ	ELEKTRA	4.52.1	N/A

For other test items

Equipment Name	Manufacturer	Type/Model	Serial Number	Cal Due date
Vector signal generator	ROHDE & SCHWARZ	SMM100A	101780	2026/01/20
Open switch and control platform	ROHDE & SCHWARZ	OSP150	100856	2026/01/20
Signal & Spectrum Analyzer	ROHDE & SCHWARZ	FSV3044	101287	2026/02/23
Wireless Connectivity Tester	ROHDE & SCHWARZ	CMW270	102651	2026/01/20
Signal Generator	ROHDE & SCHWARZ	SMB100A	183222	2026/01/20
Software	MWRFtest	MTS 8310	2.0.0.0	N/A

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