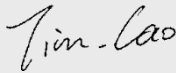


Test report No:
2630259R.703B

FCC TEST REPORT

Product Name	Insta360 Luna Pro
Trademark	Insta360
Model and /or type reference	CINSACHA
FCC ID	2AWWH-CINSACHA
Applicant's name / address	Arashi Vision Inc. 11th Floor, Building 2, Jinlitong Financial Center, Bao'an District, 518000 Shenzhen, Guangdong, China
Test method requested, standard	47 CFR FCC Part 15 (Section 15.247) ANSI C63.10: 2020
Verdict Summary	IN COMPLIANCE
Tested By (name / position & signature)	Tim Cao / Project Manager 
Approved by (name / position & signature)	Frank He / Technical Manager 
Date of issue	2026-04-15
Report Version	V1.0
Report template No.	Template_FCC Part 15C-RF-V1.0

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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.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA.

GENERAL CONDITIONS

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Test Facility	A2LA (Certificate No. 3235.01) CNAS (Certificate No. L5313) FCC - Designation Number: CN1199 Test Firm Registration Number: 566524 ISED - CAB identifier: CN0040 IC#: 4075B
Date (receive sample)	Mar. 23, 2026
Date (start test)	Apr. 05, 2026
Date (finish test)	Apr. 14, 2026

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 measurement result is considered in conformance with the requirement if it is within the prescribed limit, it is not necessary to account the uncertainty associated with the measurement result.

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
2630259R.703B	V1.0	Initial issue of report.	2026-04-15

TEST SUMMARY

Requirement – Test Item	Standard(s)	Verdict	Remark
DTS Bandwidth	FCC 15.247(a)(2)	PASS	Test data please refer to Appendix
Maximum conducted output power	15.247 (b)(3)	PASS	Test data please refer to Appendix
Maximum power spectral density	FCC 15.247(e)	PASS	Test data please refer to Appendix
Band edge measurements	FCC 15.247(d) FCC 15.205 FCC 15.209	PASS	Test data please refer to Appendix
Conducted Spurious Emission	FCC 15.247(d), FCC 15.209	PASS	Test data please refer to Appendix
Duty cycle	ANSI C63.10	PASS	Test data please refer to Appendix
Emissions in Restricted Bands	FCC 15.205 FCC 15.209	PASS	Test data please refer to Appendix
AC Power Line Conducted Emission	FCC 15.207	PASS	Test data please refer to Appendix
Antenna Requirement	FCC 15.203	PASS	---
Remark: Based on the original DEKRA report 2610076R.703B, the product has changed the DDR model and removed the secondary camera preISP and I2C resistors. The product has been changed from dual cameras to a single camera, with no changes to the RF module and RF circuit. According to technical evaluation, only spot check verification was performed on the product under worse case conditions. For relevant test data, please refer to DEKRA report 2610076R.703B.			

USED EQUIPMENT

Conducted Test – TR8

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Wireless Connectivity Tester	R&S	CMW 270	102593	2025.05.10	2026.05.09
High and low temperature and fast	ASTUOD	ASTD-FBT-225K	N/A	2026.01.11	2027.01.10
Temperature/Humidity Meter	RTS	RTS-8S	RF08	2025.06.17	2026.06.16
MAX Signal Analyzer	Keysight	N9020B	MY59050482	2025.05.10	2026.05.09
RF Control Unit	Tonscend	JS0806-2	22G8060594	2025.12.07	2026.12.06
Vector Signal Generator	R&S	SMM 100A	101853	2025.09.20	2026.09.19
EXG-B MW Analog Signal Generator	Keysight	N5173B	MY61252566	2025.05.10	2026.05.09
Test Software	Tonscend	TS1120	JS1120-3	N/A	N/A

Radiated Emission(9KHz-1GHz) / AC2

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Anechoic chamber	Quietek	9m*6m*6m	AC2	2024.07.07	2027.07.06
EMI Test Receiver	R&S	ESCI	100573	2025.12.07	2026.12.06
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2025.03.24	2026.03.23
Temperature/Humidity Meter	RTS	RTS-1909	THM-021	2025.04.30	2026.04.29
Dekra test software	Dekra	N/A	N/A	N/A	N/A

AC Power Line Conducted Emission / TR1

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Shielding room	Quietek	4.9m*4m*3m	TR1	2023.03.04	2026.03.03
EMI Test Receiver	R&S	ESR7	102086	2025.12.07	2026.12.06
Two-Line V-Network	R&S	ENV216	101189	2025.05.10	2026.05.09
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2025.03.16	2026.03.15
Temperature/Humidity Meter	RTS	RTS-1909	THM-012	2025.04.30	2026.04.29
Dekra test software	Dekra	N/A	N/A	N/A	N/A

Radiated Emission Band Edge / AC5

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Anechoic chamber	Quietek	9m*6m*6m	AC5	2024.07.07	2027.07.06
DRG Horn Antenna	ETS-Lindgren	3117	167055	2025.08.14	2026.08.13
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2025.06.22	2026.06.21
MXA Signal Analyzer	Keysight	N9020B	MY60112218	2025.09.20	2026.09.19
Pre-Amplifier	XH	LNA1845	LNA23040284	2025.05.17	2026.05.16
Pre-Amplifier	CY	EMC184045SE	980263	2025.05.10	2026.05.09
Filter Switch Box	MVE	MSW-F196	C070001S	2026.01.24	2027.01.23
Temperature/Humidity Meter	RTS	RTS-1909	THM-001	2025.08.22	2026.08.21
Temperature/Humidity Meter	RTS	RTS-1909	THM-024	2025.04.30	2026.04.29
Test Software	Tonscend	JS1120	JS36-RE	N/A	N/A

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 Test Location	Uncertainty
AC Power Line Conducted Emission	9kHz~150kHz: 2.8 dB 150kHz~30MHz: 2.4 dB
Peak Power Output	± 1.3 dB
Radiated Emission(30MHz~1GHz)	Horizontal: 30MHz~200MHz: 3.5 dB 300MHz~1GHz: 3.6 dB Vertical: 30MHz~200MHz: 3.6 dB 300MHz~1GHz: 3.5 dB
Radiated Emission(1GHz~26.5GHz)	Horizontal: 1GHz~18GHz: 5.0 dB Vertical: 1GHz~18GHz: 4.8 dB Horizontal: 18GHz~26.5GHz: 5.3 dB Vertical: 18GHz~26.5GHz: 4.9 dB
RF antenna conducted test	± 1.3 dB
Carrier Frequency Separation	± 1.0 kHz
Number of Hopping Frequencies	± 1.0 kHz
Time of Occupancy (Dwell Time)	± 0.10 us
Radiated Emission Band Edge	± 3.9 dB
DTS Bandwidth	± 1.0 kHz
Occupied Bandwidth	± 1.0 kHz
Power Density	± 1.3 dB

1 GENERAL INFORMATION

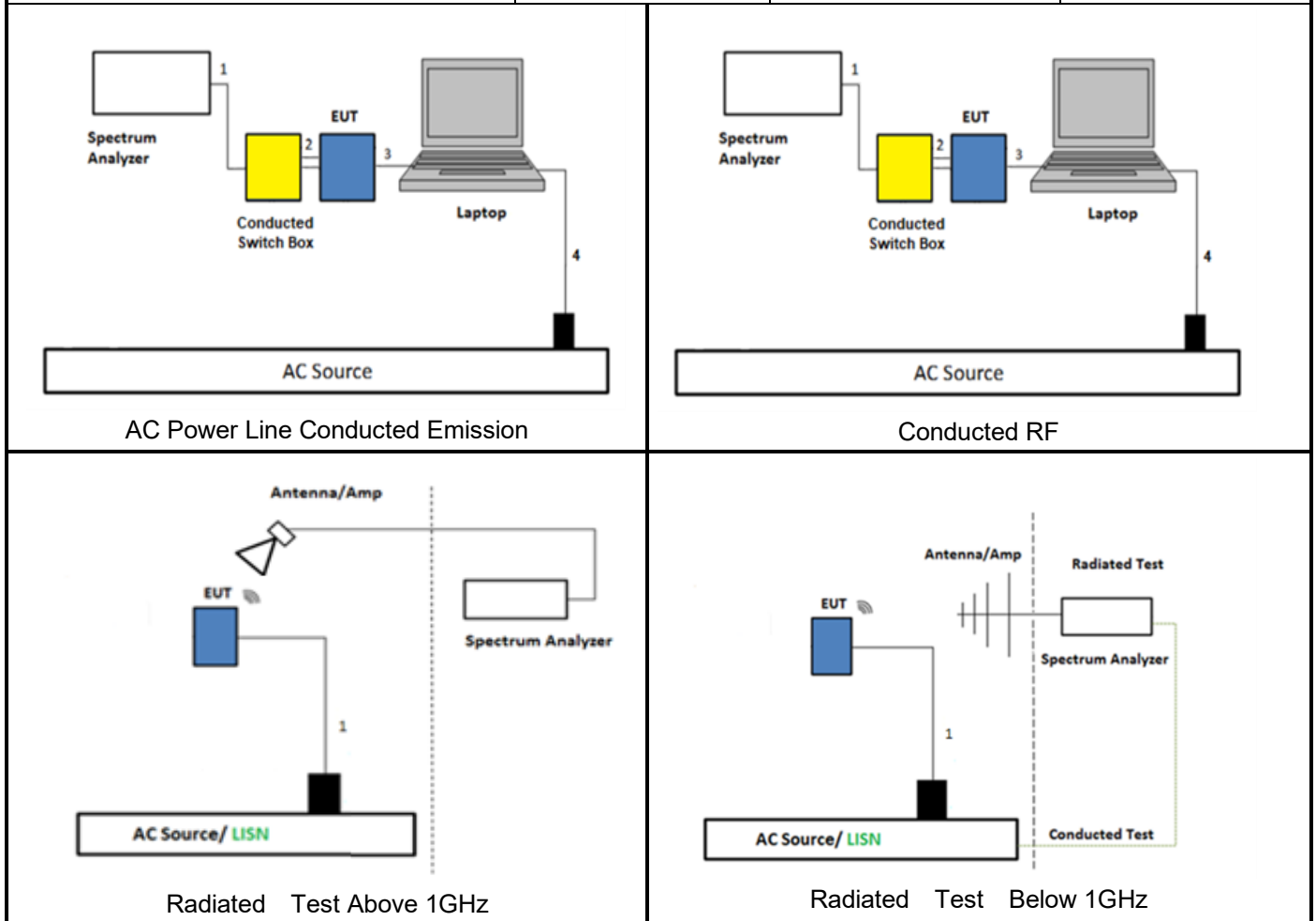
Product Name	Insta360 Luna Pro	
Model No.	CINSACHA	
Trademark.....	Insta360	
FCC ID.....	2AWWH-CINSACHA	
Hardware Version.....	V10	
Software Version.....	V1.2.51	
Manufacturer	Arashi Vision Inc.	
Manufacturer Address	11th Floor, Building 2, Jinlitong Financial Center, Bao'an District, 518000 Shenzhen, Guangdong, China	
Power Supply	3.85 Vdc, EUT is equipped with an adapter to power it via AC/DC.	
SN	RF Conducted	N/A
	RSE	N/A
Wireless specifiction.....	Bluetooth	
Operating frequency range(s).....	2402~2480MHz	
Type of modulation.....	GFSK	
Number of channels	40	
Data Rate.....	LE1M 1Mbit/s, LE2M 2Mbit/s	
Antenna type.....	FPC	
Antenna Gain	0.64 dBi	
Remark:		
1. As above information is provided and confirmed by the applicant. DEKRA is not liable to the accuracy, suitability, reliability or/and integrity of the information.		
2. The EUT is equipped with two batteries from different brands; only the manufacturers are different, everything else is identical, and the report only reflects data from the worst-performing battery.		

Power setting in test

Mode	Power setting
LE 1M / LE 2M	Default

2 DESCRIPTION OF TEST SETUP

Auxiliary equipment	Type / Version	Manufacturer	Supplied by
(1) Notebook	Think pad x220	Lenovo	Adapter
(2) Ethernet cable	N/A	N/A	N/A
(3) Ethernet cable	N/A	N/A	N/A
Software	Type / Version	Manufacturer	Supplied by
ADB	N/A	N/A	N/A



Accessories Information	Cable		
	Length used during test [m]	Attached during test	Shielded
(2) Ethernet cable	1	☒	☒
(3) Ethernet cable	8	☒	☒

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	2020	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.
ANSI C63.10	2020	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
KDB 558074	2019	Test procedures for measuring Digital Transmission System.

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.

(Please define the deviations from the standard(s) if applicable)

4 TEST RESULTS

4.1 AC Power Line Conducted Emission

VERDICT: PASS

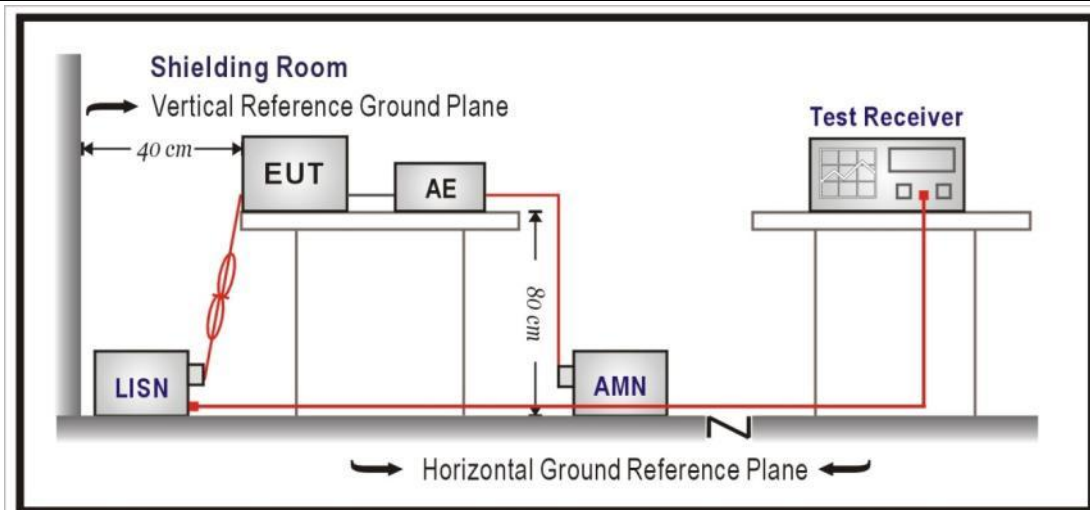
4.1.1 Limit

Standard			FCC Part 15 Subpart C Paragraph 15.207
Frequency range [MHz]	Limit: QP [dB(μV) ¹⁾]	Limit: AV [dB(μV) ¹⁾]	
0,15 - 0,50	66 - 56 ²⁾	56 - 46 ²⁾	
0,50 - 5,0	56	46	
5,0 - 30	60	50	

¹⁾ At the transition frequency, the lower limit applies.

²⁾ The limit decreases linearly with the logarithm of the frequency.

4.1.2 Test Setup



4.1.3 Test Procedure

	References Rule	Chapter	Item
☒	ANSI C63.10	6.2	Standard test method for ac power-line conducted emissions from unlicensed wireless devices

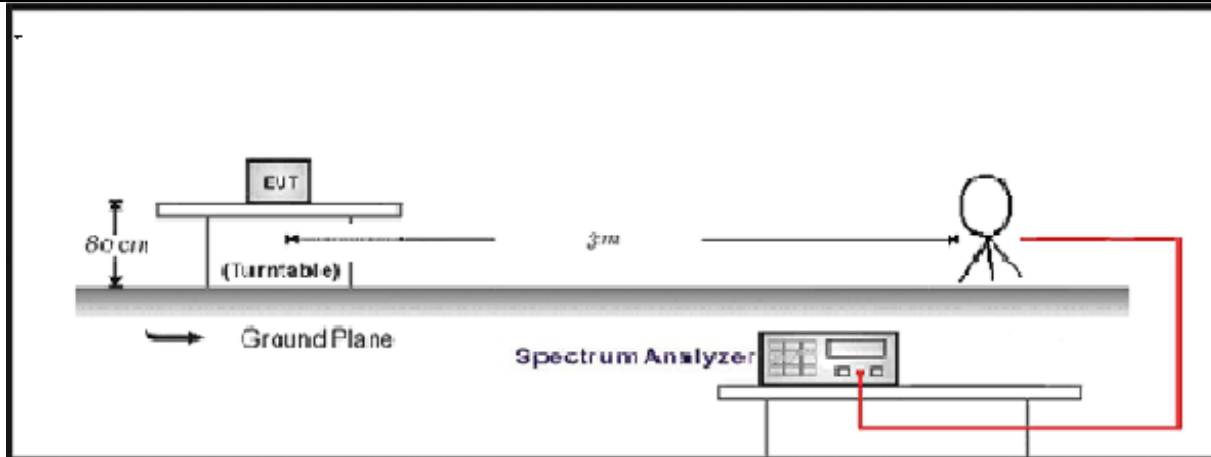
4.2 Emissions in restricted frequency bands**VERDICT: PASS****4.2.1 Limit**

Standard		FCC Part 15 Subpart C Paragraph 15.205; 15.209	
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 Band Emissions Limit			
Frequency (MHz)	Field strength (µV/m)	Field strength (dBµV/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			

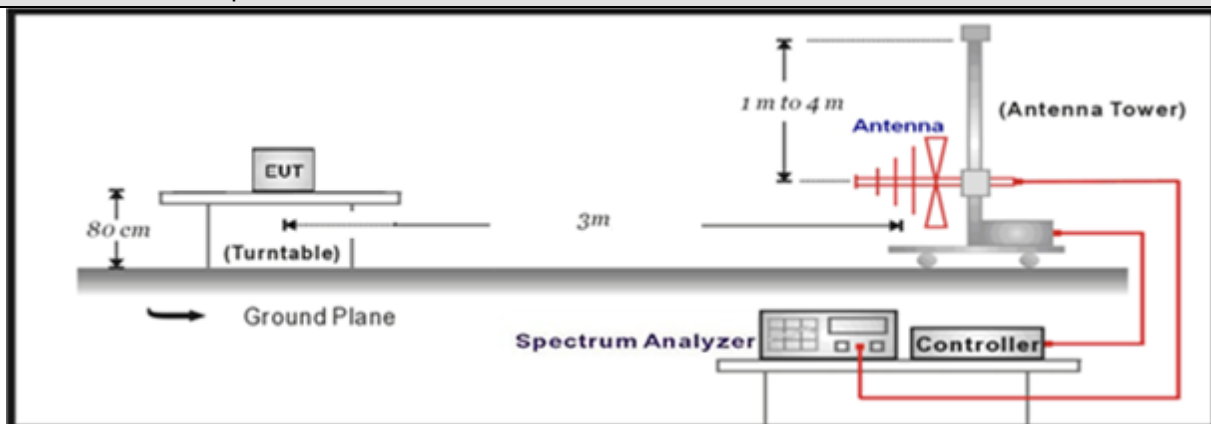
factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.2.2 Test Setup

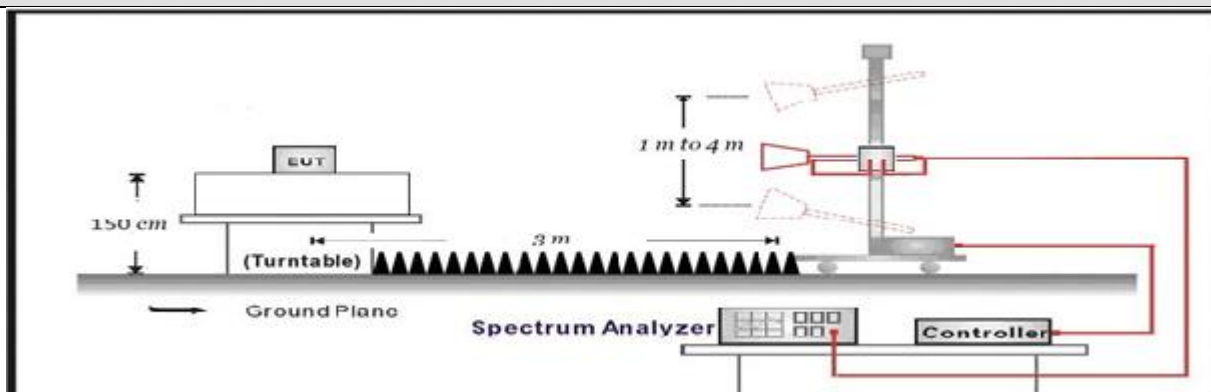
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



4.2.3 Test Procedure

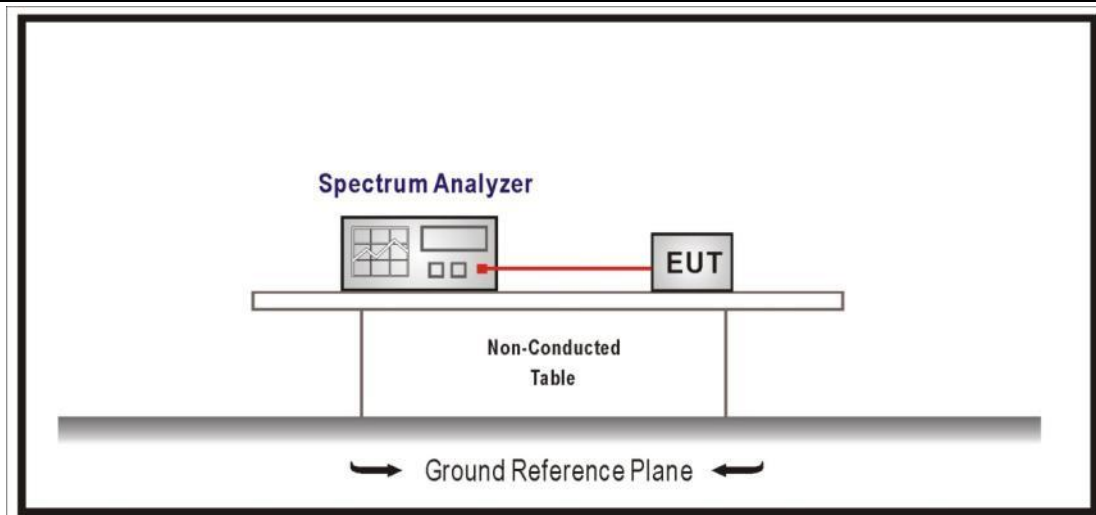
	References Rule		Chapter	Description
☒	ANSI C63.10		11.12	Emissions in restricted frequency bands
	☒	ANSI C63.10	11.12.1	Radiated emission measurements
	☒	ANSI C63.10	6.3	Radiated spurious emission test
	☒	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
	☒	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
	☒	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

4.3 Emissions in non-restricted frequency band**VERDICT: PASS****4.3.1 Limit**

Standard	FCC Part 15 Subpart C Paragraph 15.247(d)
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 level in 100 kHz (i.e., 30 dBc).

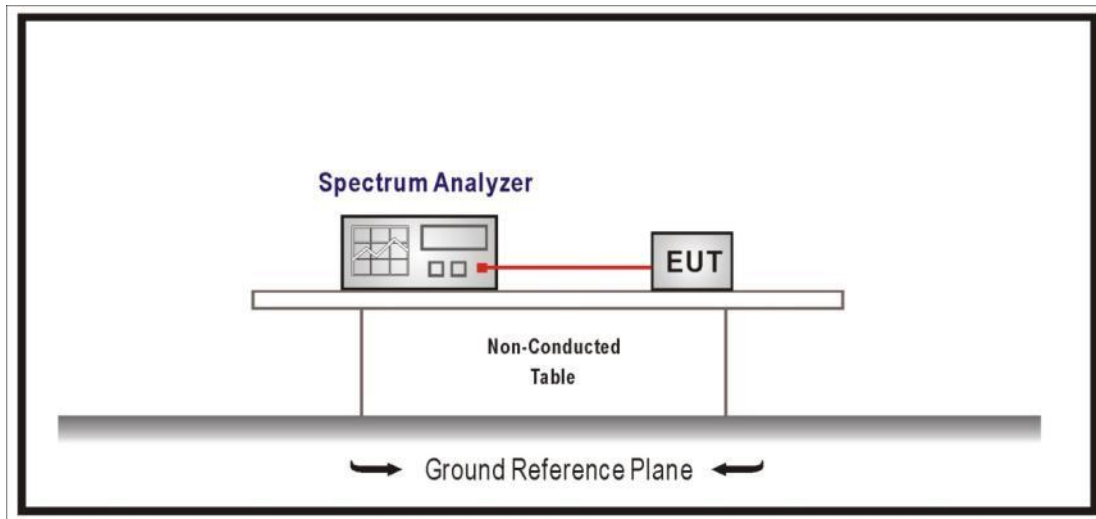
Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).

4.3.2 Test Setup**4.3.3 Test Procedure**

References Rule	Chapter	Description
☒ ANSI C63.10	11.11	Emissions in non-restricted frequency bands
☒ ANSI C63.10	11.11.1	General
☒ ANSI C63.10	11.11.2	Reference level measurement
☒ ANSI C63.10	11.11.3	Emission level measurement

4.4 Duty cycle**VERDICT: PASS****4.4.1 Limit**

N/A

4.4.2 Test Setup**4.4.3 Test Procedure**

References Rule		Chapter	Description
☒	ANSI C63.10	11.6	Duty cycle (D), transmission duration (T), and maximum power control level

4.5 Radiated Emission Band Edge**VERDICT: PASS****4.5.1 Limit****Standard**

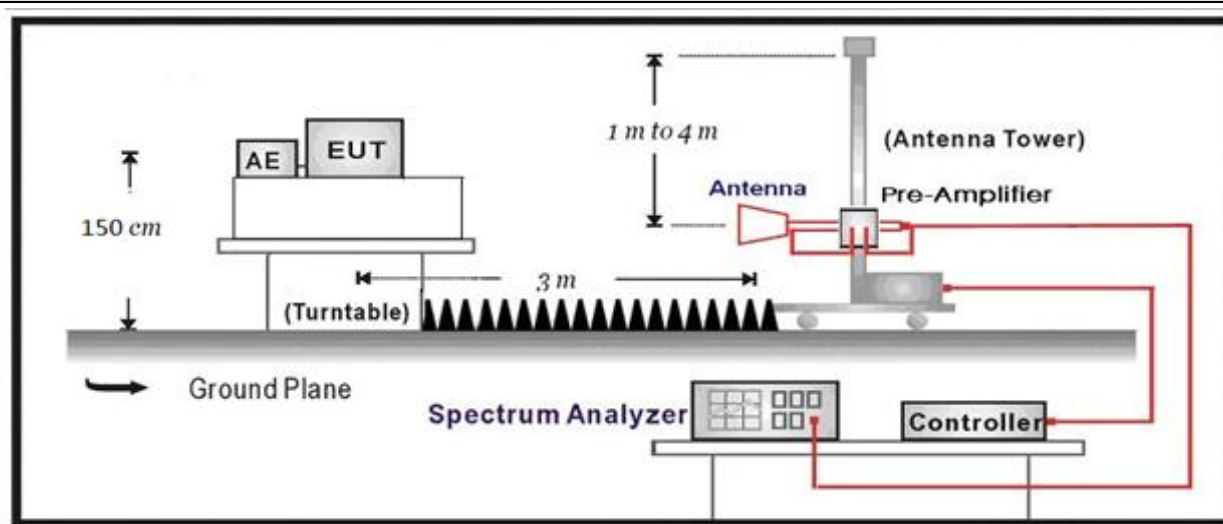
FCC Part 15 Subpart C Paragraph 15.247(d) , 15.205, 15.209

Frequency bands (MHz)	Detector	Limit (dB μ V/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.

4.5.2 Test Setup

Above 1GHz Test Setup:

**4.5.3 Test Procedure**

	References Rule	Chapter	Description
☒	ANSI C63.10	6.10	Band-edge testing
	☒ ANSI C63.10	6.10.5	Restricted-band band-edge measurements
	☐ ANSI C63.10	6.10.6	Marker-delta method
☒	ANSI C63.10	11.12	Emissions in restricted frequency bands
	☒ ANSI C63.10	11.12.1	Radiated emission measurements
	☒ ANSI C63.10	6.3	Radiated spurious emission test
☐	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
☐	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
☒	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

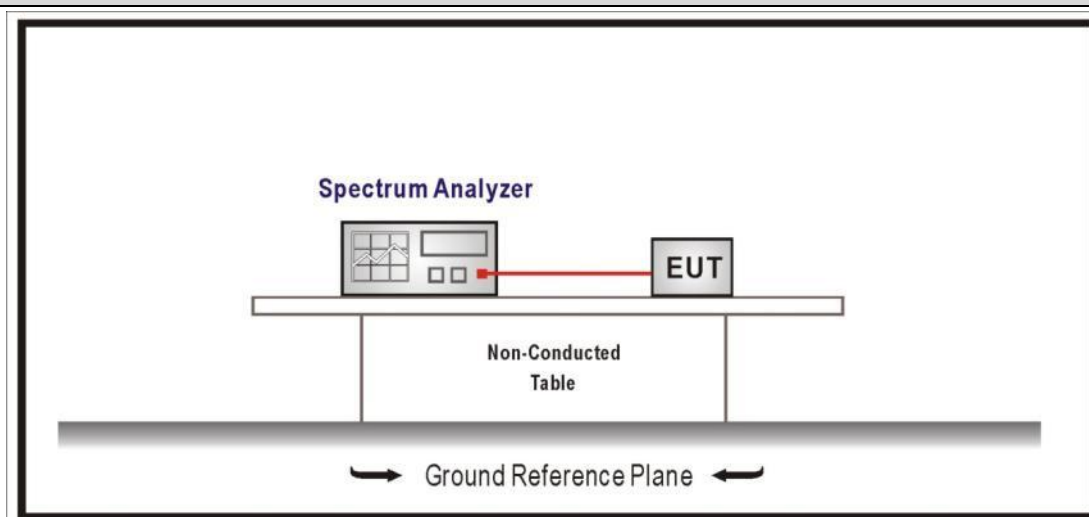
4.6 DTS Bandwidth**VERDICT: PASS****4.6.1 Limit**

Standard	FCC Part 15 Subpart C Paragraph 15.247 (a)(2)
-----------------	---

Systems using digital modulation techniques operate in the 2400-2483.5 MHz. The minimum 6 dB bandwidth shall be at least 500 kHz

Standard	ANSI C63.10 Paragraph 6.7
-----------------	---------------------------

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 be within the required frequency range.

4.6.2 Test Setup**4.6.3 Test Procedure**

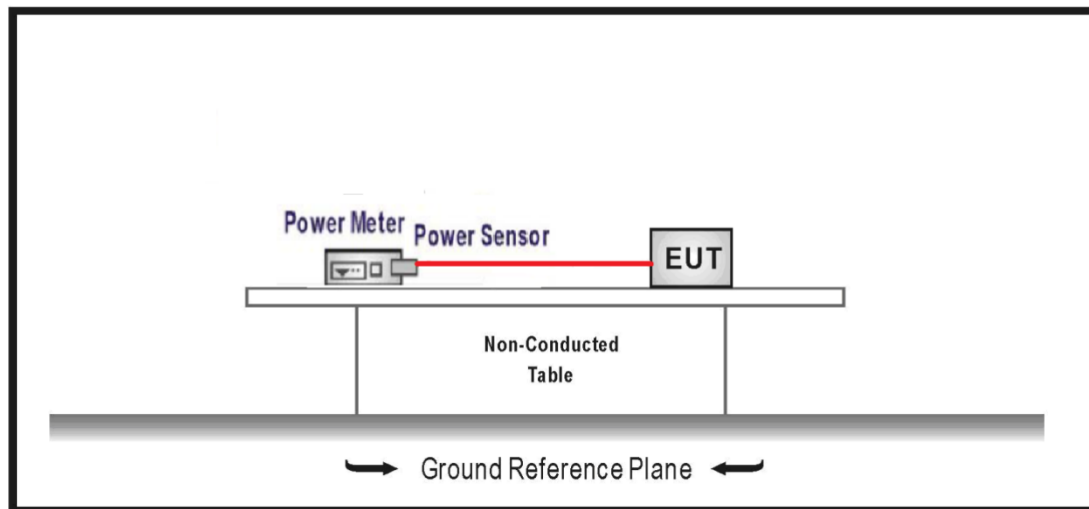
	Reference Rule	Chapter	Description
☒	ANSI C63.10	11.8	DTS bandwidth
	☒ ANSI C63.10	11.8.1	Option 1
	☐ ANSI C63.10	11.8.2	Option 2
☒	ANSI C63.10	6.9	Occupied bandwidth
	☐ ANSI C63.10	6.9.2	relative measurement procedure
	☒ ANSI C63.10	6.9.3	power bandwidth (99%) measurement procedure

4.7 Fundamental emission output power**VERDICT: PASS****4.7.1 Limit**

Standard		FCC Part 15 Subpart C Paragraph 15.247 (b)(3)
☒	GTX < 6dBi	Pout ≤ 30dBm
☐	GTX > 6dBi	
☐	Non-Fix point-point	Pout ≤ 30 - (GTX - 6)
☐	Fix point-point	Pout ≤ 30 - [(GTX - 6)]/3
☐	Point-to-multipoint	Pout ≤ 30 - (GTX - 6)
☐	Overlap Beams	Pout ≤ 30 - [(GTX - 6)]/3
☐	Avgregate power transmitted simultaneously on all beams	Pout ≤ 30 - [(GTX - 6)]/3
☐	single directional beam	Pout ≤ 30 - [(GTX - 6)]/3 + 8dB

Note 1 : GTX directional gain of transmitting antennas.

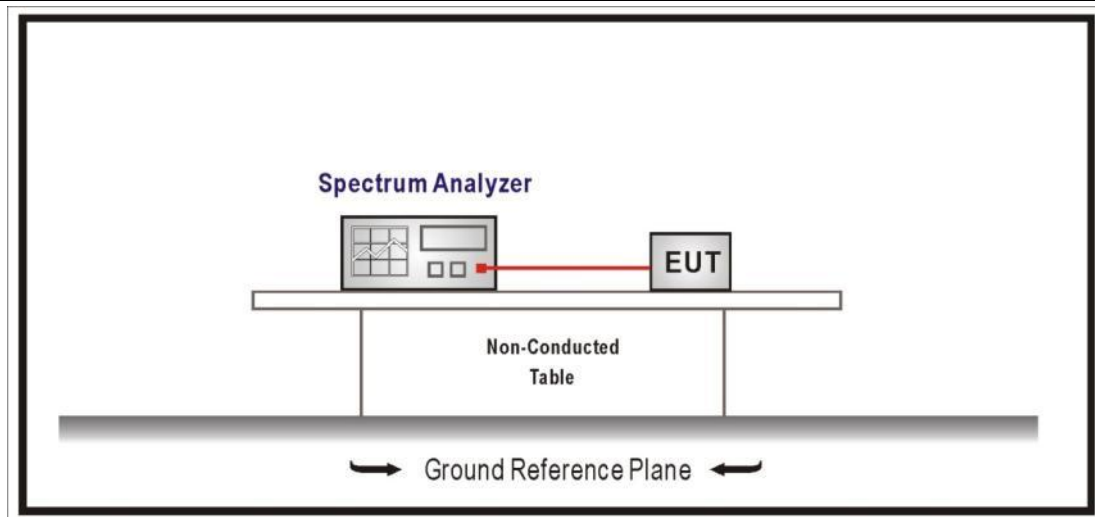
Note 2 : Pout is maximum conducted output power .

4.7.2 Test Setup**4.7.3 Test Procedure**

	References Rule		Chapter	Description
☒	ANSI C63.10		11.9	Fundamental emission output power
☒	ANSI C63.10		11.9.1	Maximum peak conducted output power
	☐	ANSI C63.10	11.9.1.1	RBW ≥ DTS bandwidth
	☒	ANSI C63.10	11.9.1.2	PKPM1 Peak power meter method

4.8 Power Density**VERDICT: PASS****4.8.1 Limit:****Standard**

FCC Part 15 Subpart C Paragraph 15.247 (e)

Power Spectral Density $\leq 8\text{dBm}/3\text{kHz}$ **4.8.2 Test Setup****4.8.3 Test Procedure**

	References Rule	Chapter	Description
☒	ANSI C63.10	11.10	Maximum power spectral density level in the fundamental emission
☒	ANSI C63.10	11.10.2	Method PKPSD (peak PSD)

4.9 Antenna Requirement**VERDICT: PASS****4.9.1 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.

4.9.2 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 TEST SETUP PHOTO AND EUT PHOTO

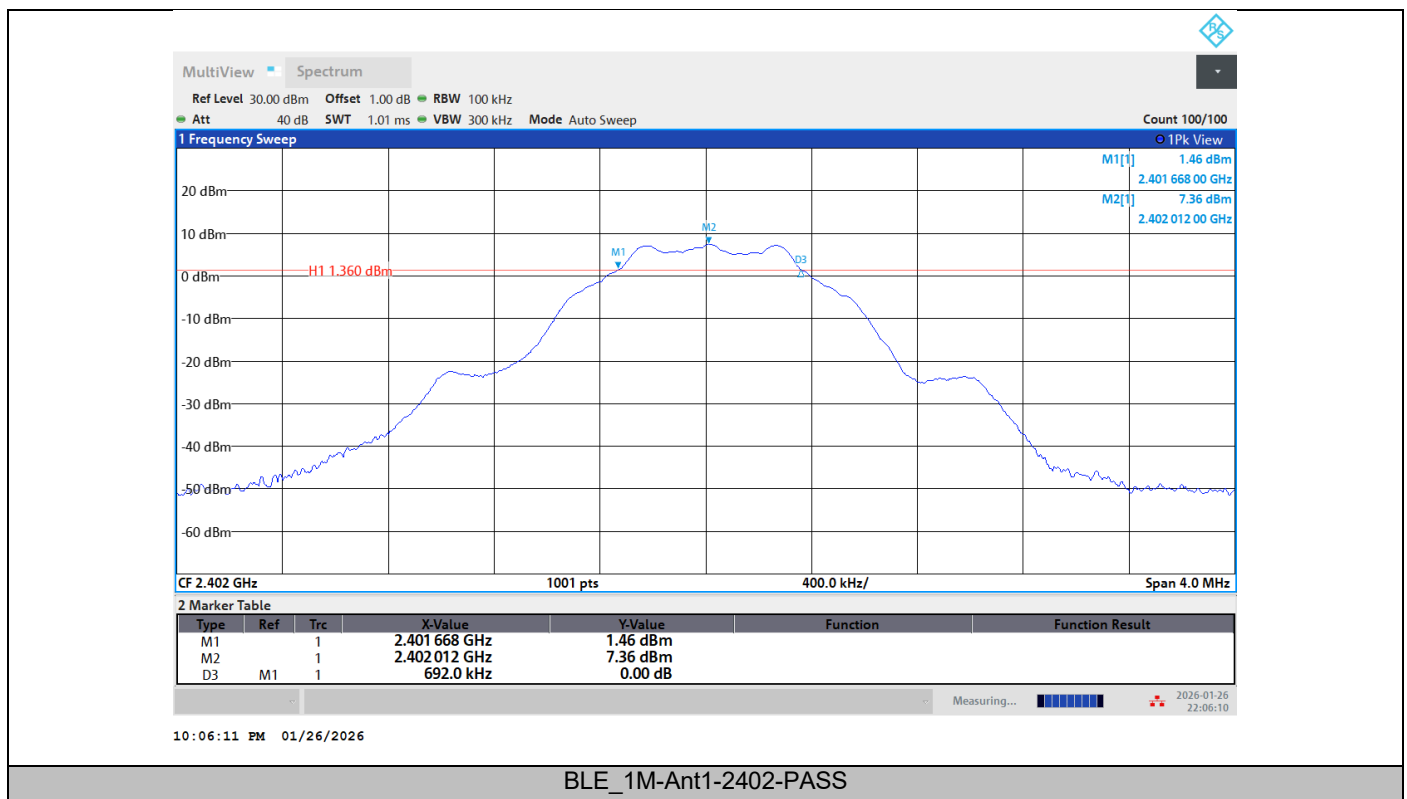
Remark: The test setup photo and EUT Photo please see appendix.

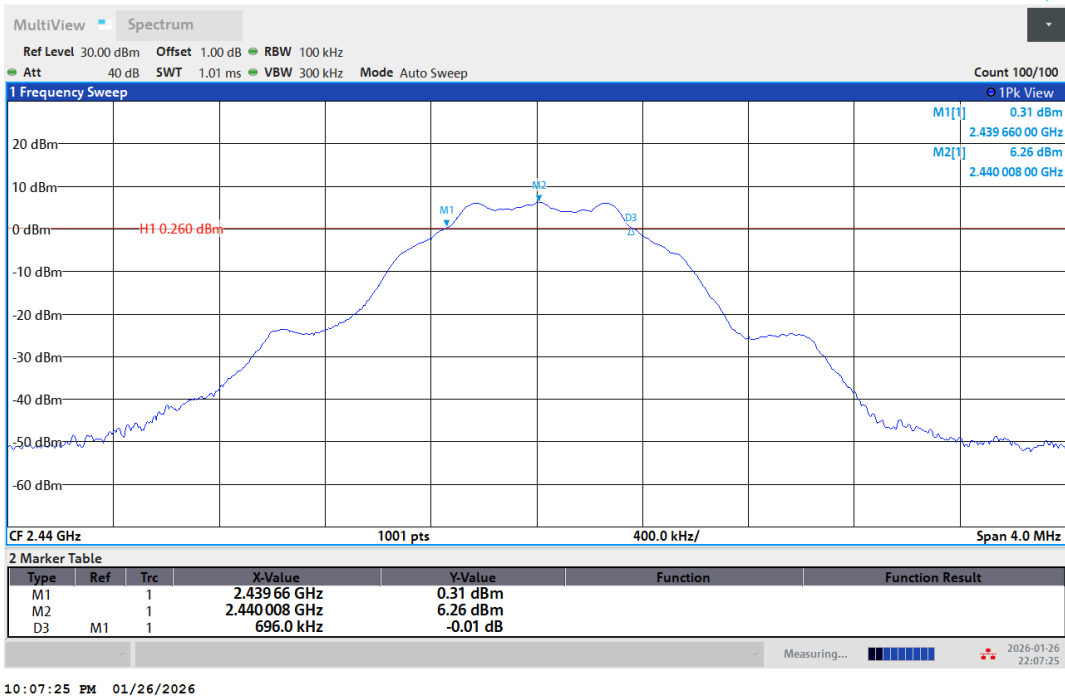
DTS Bandwidth

6dB bandwidth:

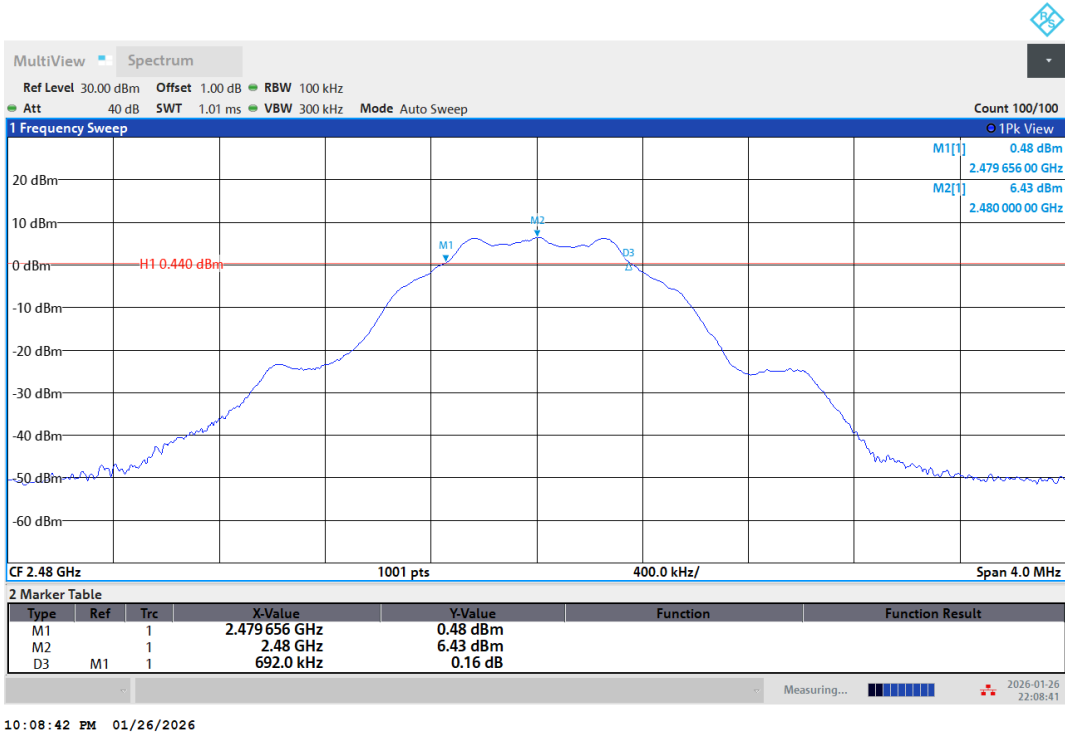
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.69	2401.67	2402.36	0.5	PASS
		2440	0.70	2439.66	2440.36	0.5	PASS
		2480	0.69	2479.66	2480.35	0.5	PASS
BLE_2M	Ant1	2402	1.36	2401.34	2402.70	0.5	PASS
		2440	1.37	2439.33	2440.70	0.5	PASS
		2480	1.36	2479.33	2480.69	0.5	PASS

Test Graphs

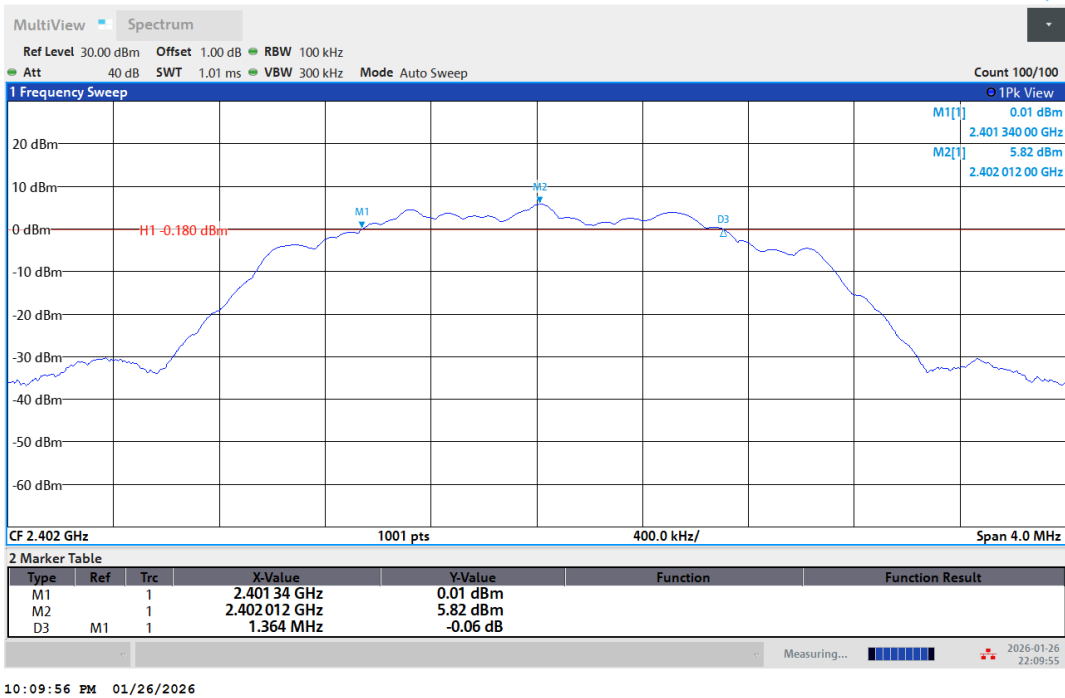




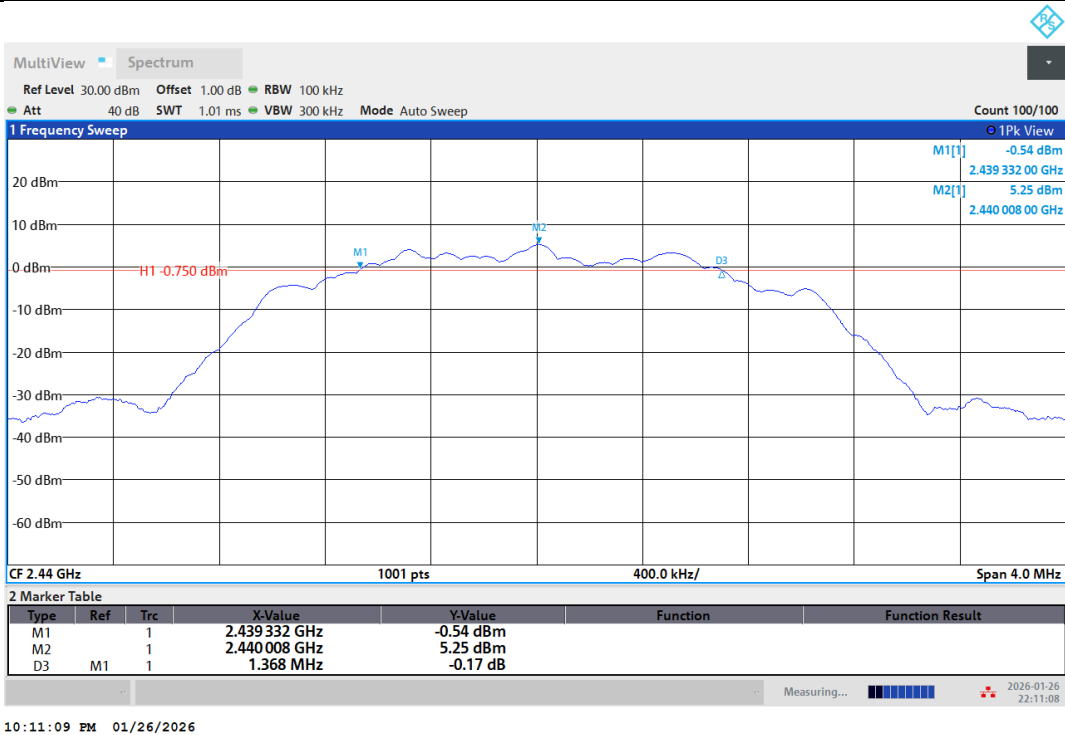
BLE_1M-Ant1-2440-PASS



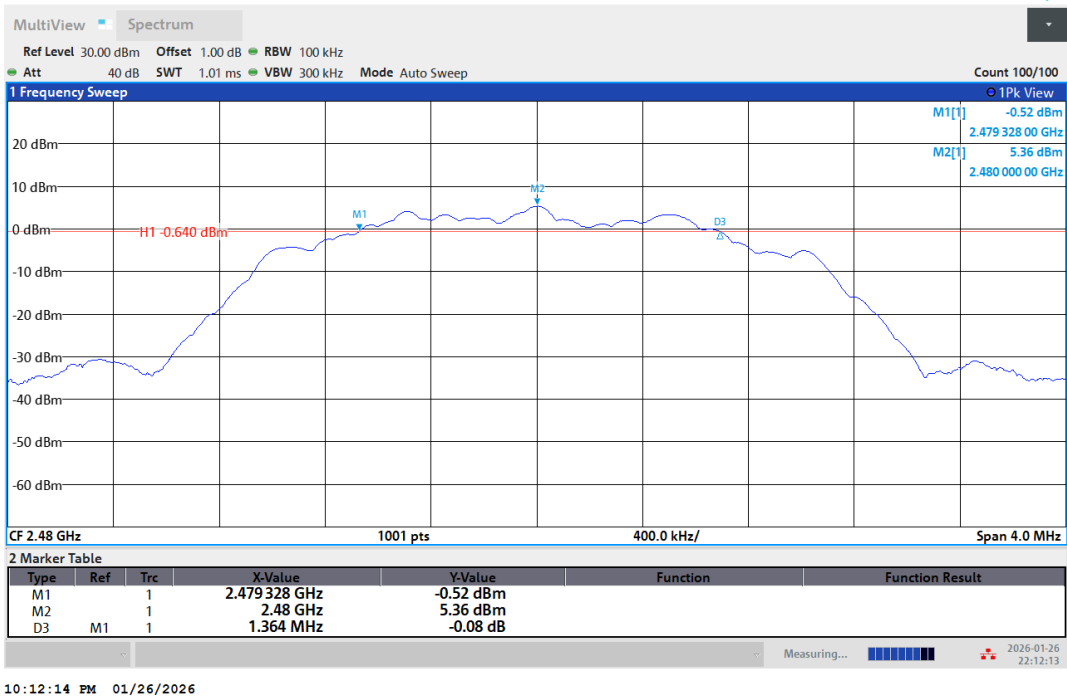
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



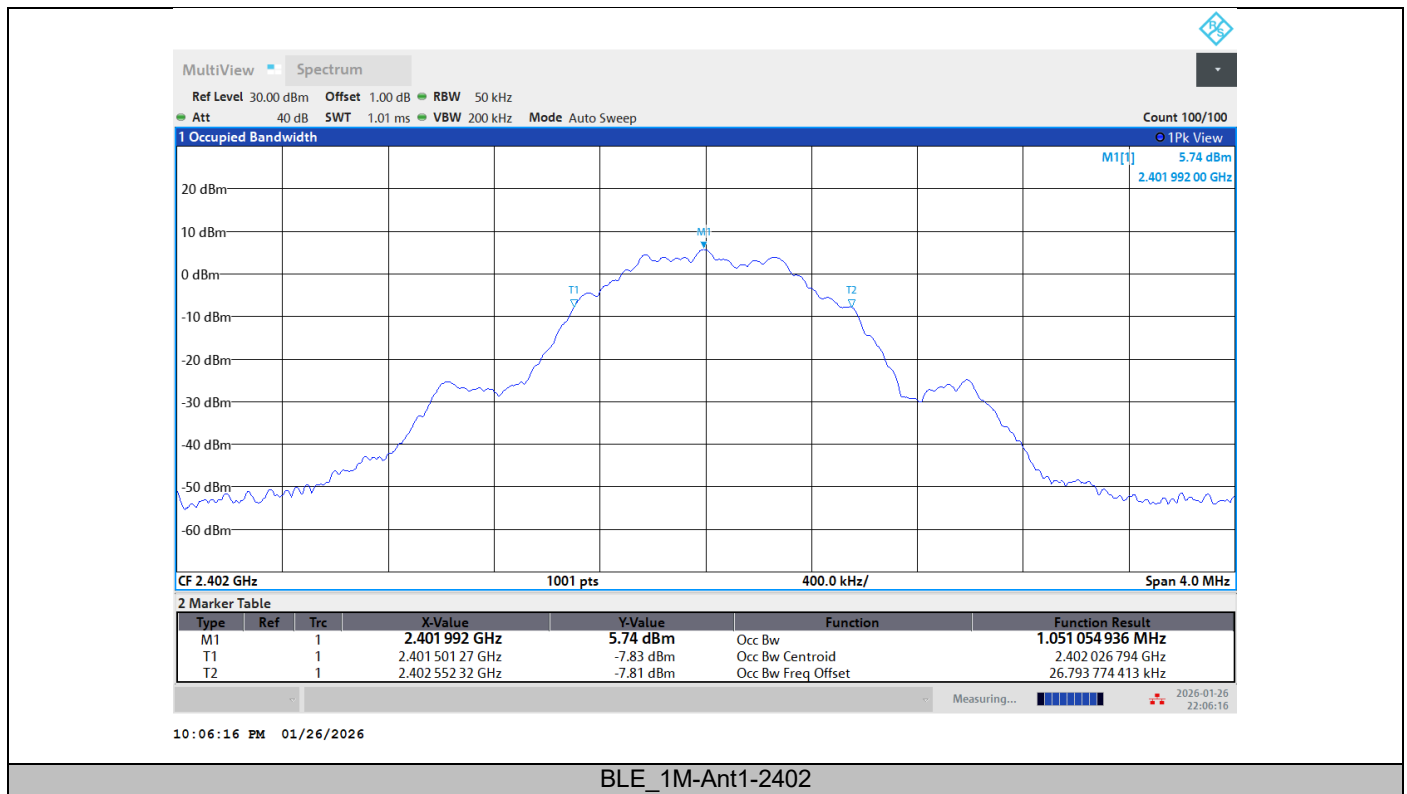
BLE_2M-Ant1-2440-PASS

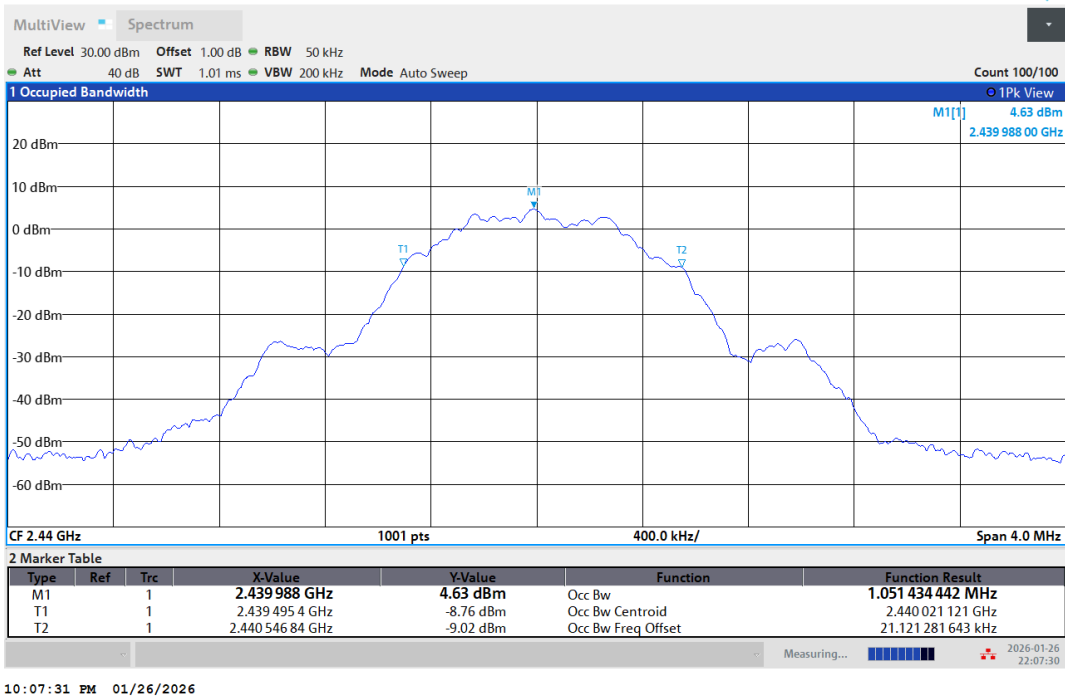


BLE_2M-Ant1-2480-PASS

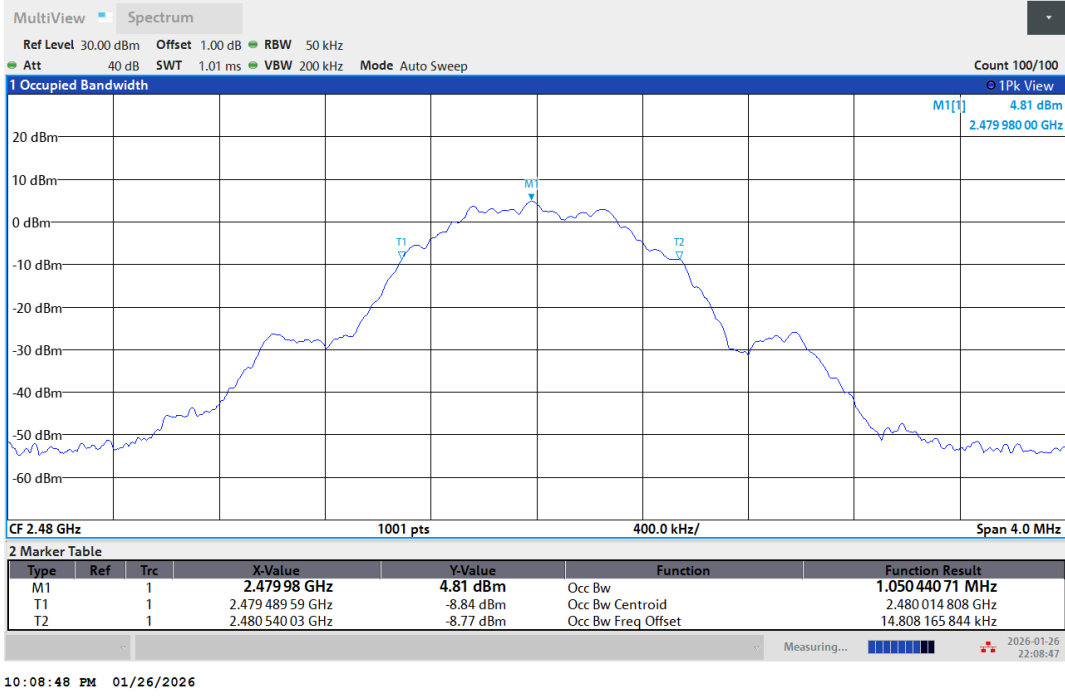
99% Occupied bandwidth:

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0511	2401.5013	2402.5523	---	---
		2440	1.0514	2439.4954	2440.5468	---	---
		2480	1.0504	2479.4896	2480.5400	---	---
BLE_2M	Ant1	2402	2.0706	2400.9987	2403.0693	---	---
		2440	2.0711	2438.9921	2441.0632	---	---
		2480	2.0708	2478.9858	2481.0566	---	---

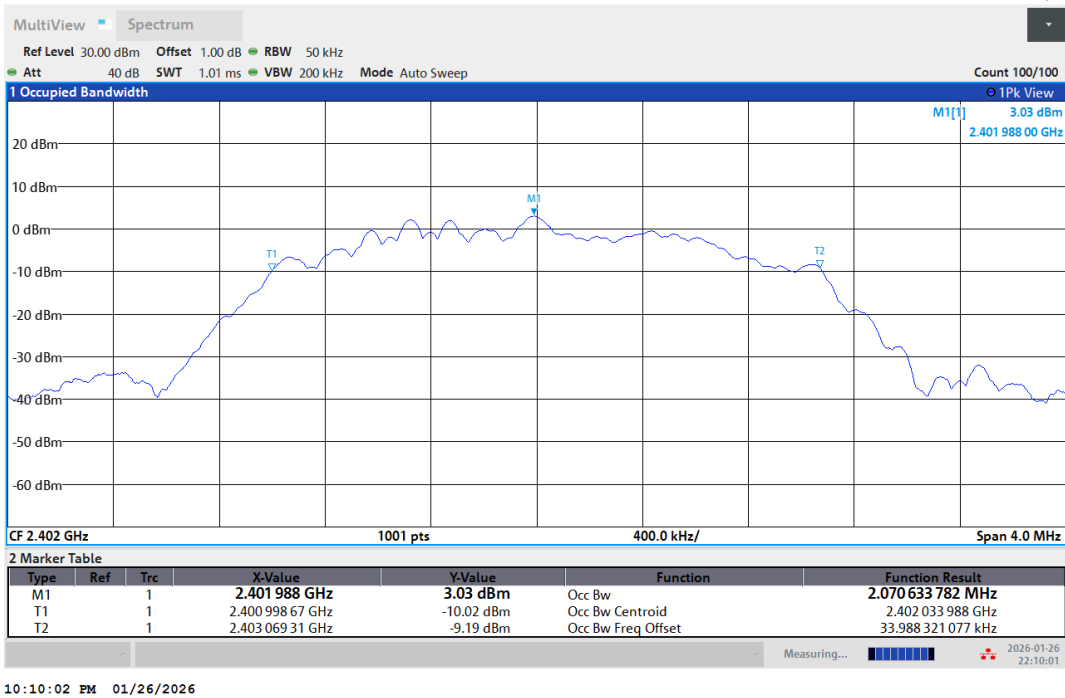
Test Graphs



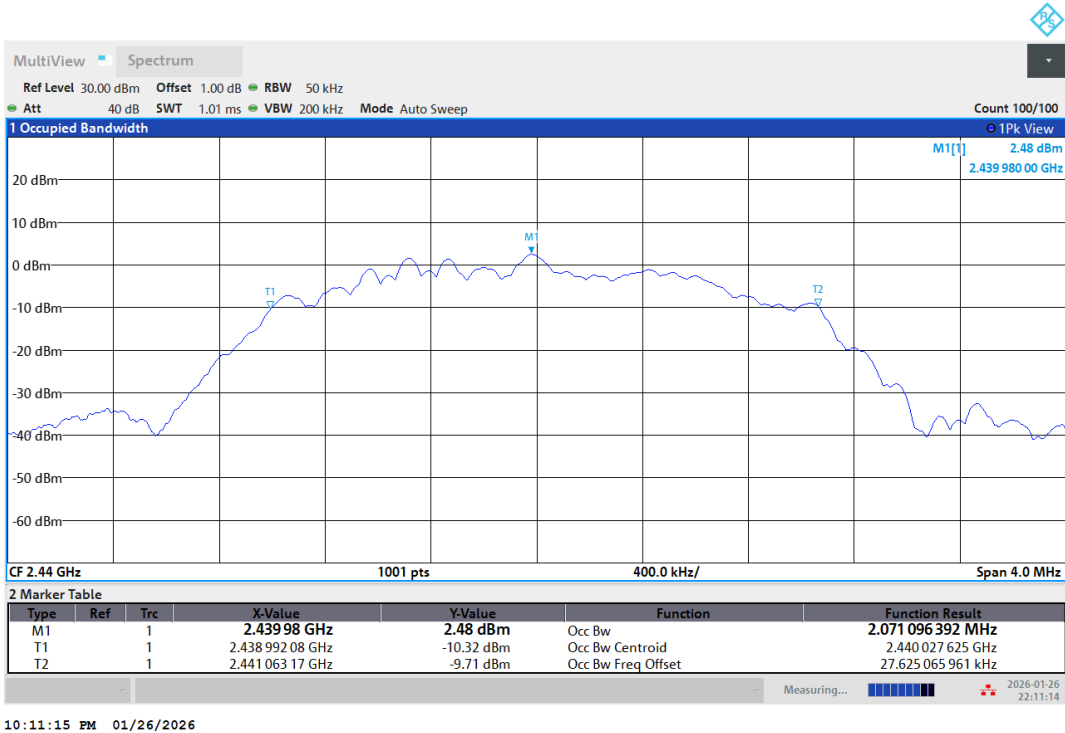
BLE_1M-Ant1-2440



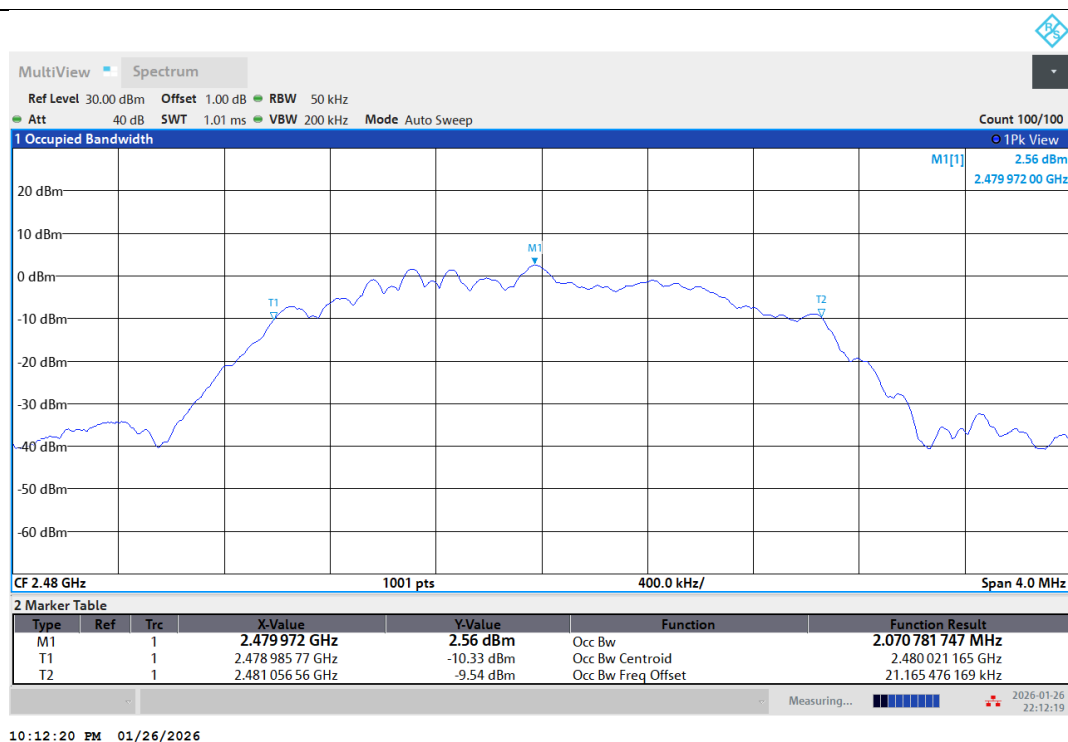
BLE_1M-Ant1-2480



BLE_2M-Ant1-2402



BLE_2M-Ant1-2440



BLE_2M-Ant1-2480

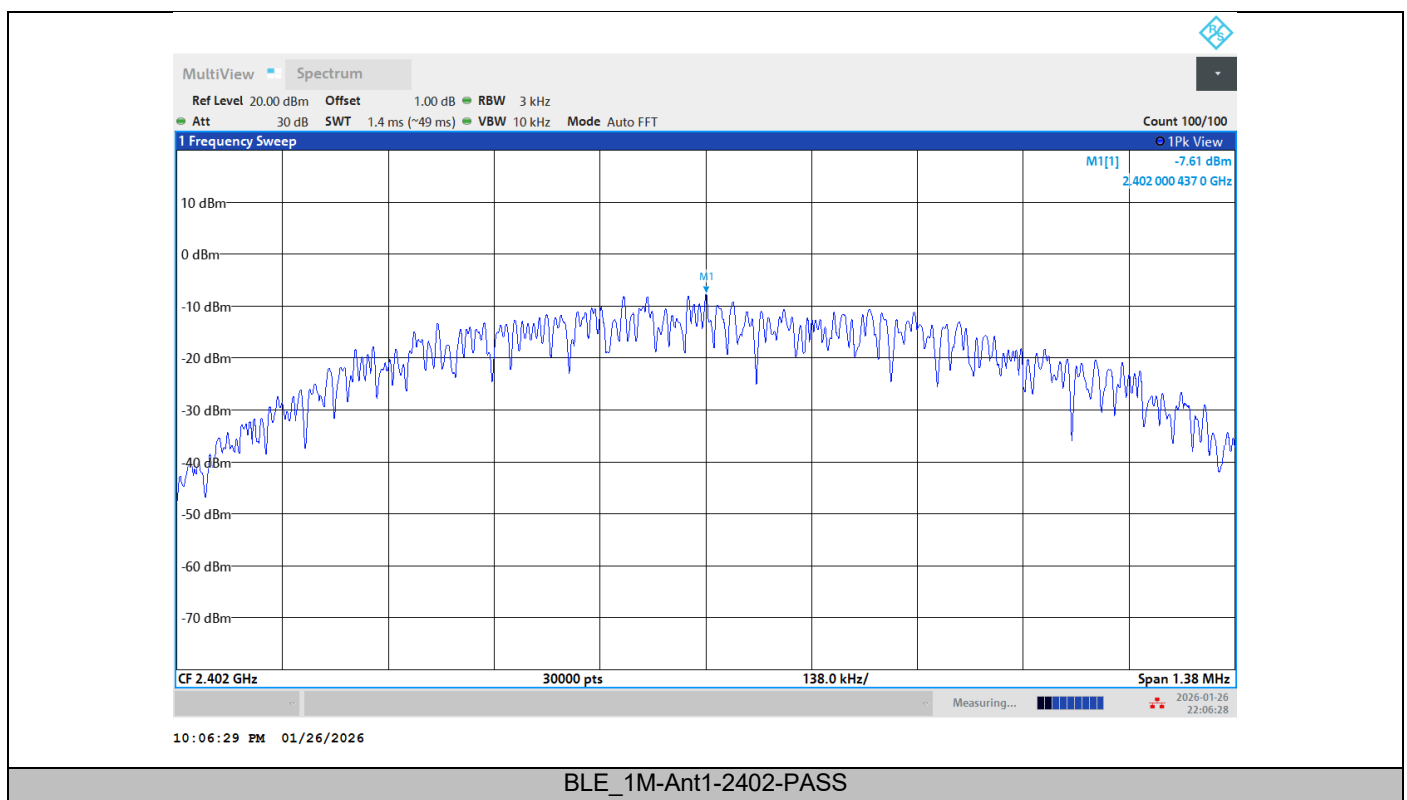
Maximum Conducted Output Power

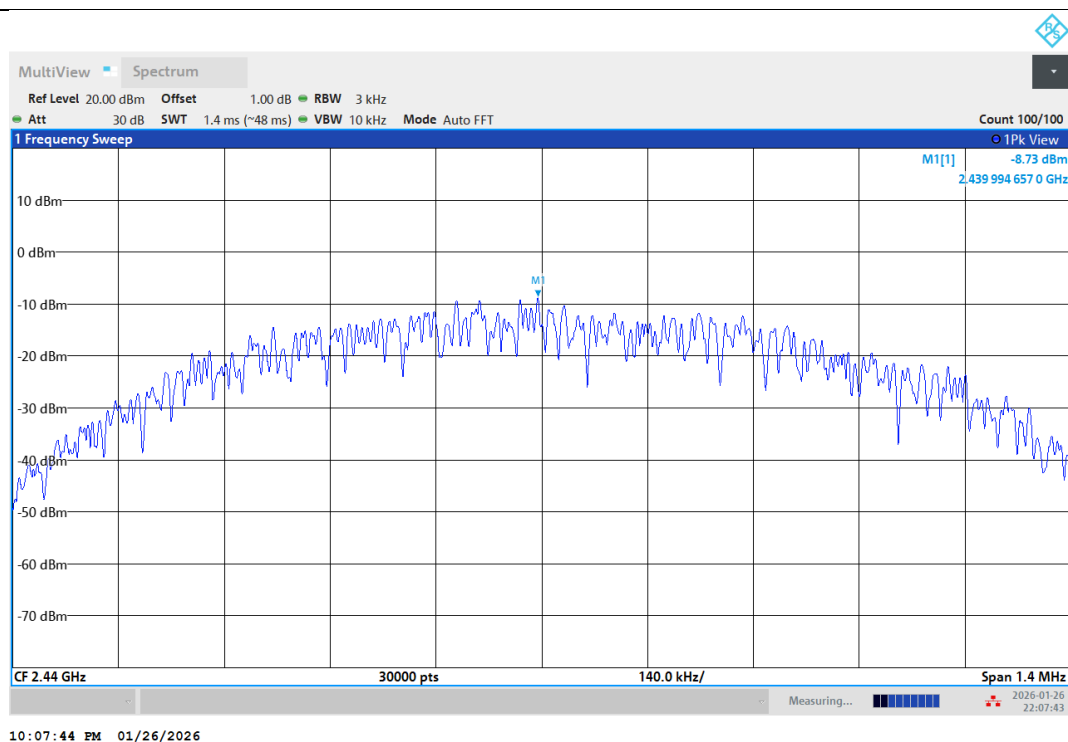
Bluetooth	Mode	Channel	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)
	BLE 1M	0	2402	5.72	30.00
		19	2442	5.98	30.00
		39	2480	5.67	30.00
	BLE 2M	0	2402	6.00	30.00
		19	2442	5.94	30.00
		39	2480	6.06	30.00

Maximum Power Spectral Density

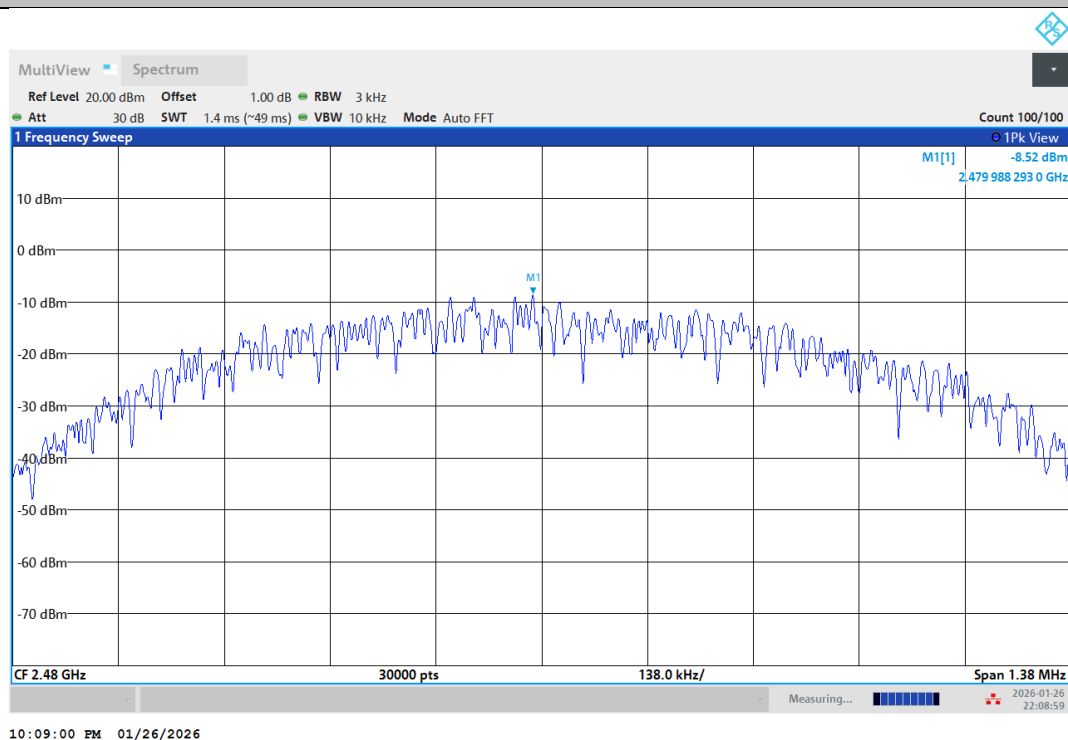
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-7.61	≤8.00	PASS
		2440	-8.73	≤8.00	PASS
		2480	-8.52	≤8.00	PASS
BLE_2M	Ant1	2402	-10.92	≤8.00	PASS
		2440	-11.49	≤8.00	PASS
		2480	-13.60	≤8.00	PASS

Test Graphs

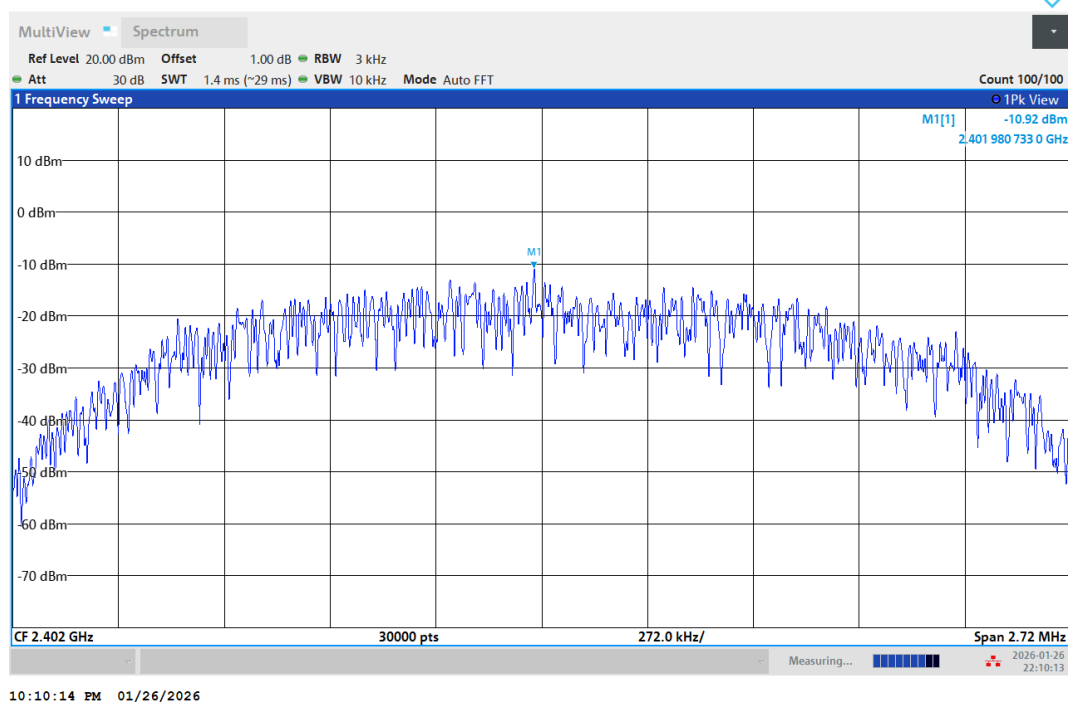




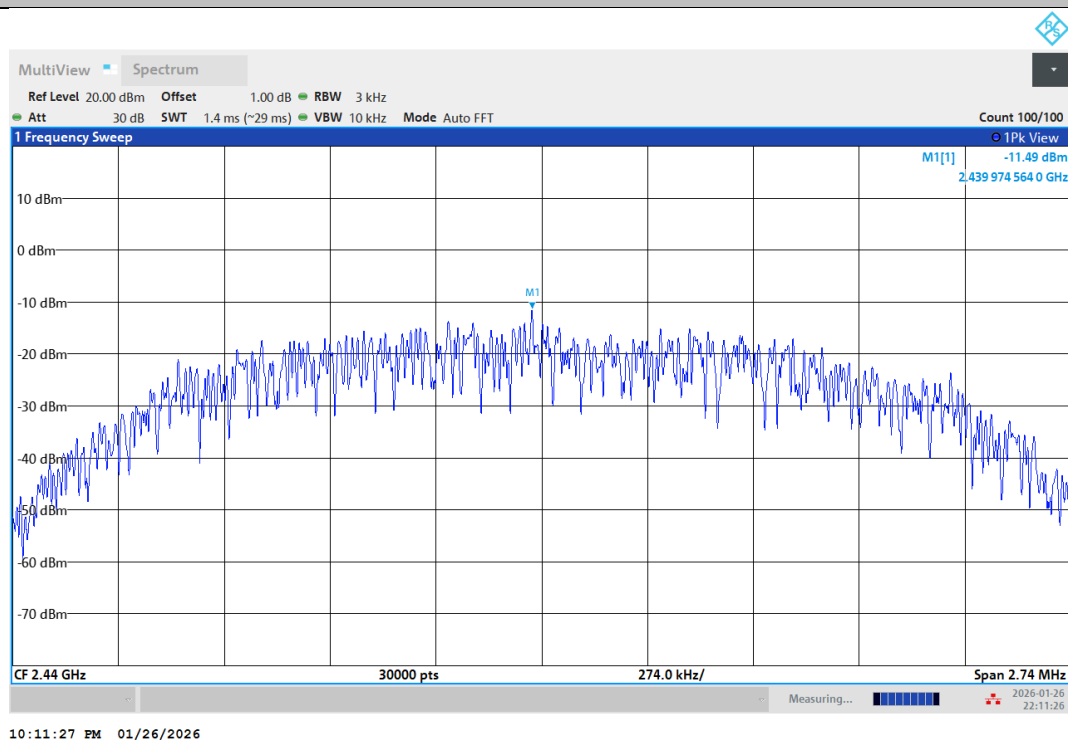
BLE_1M-Ant1-2440-PASS



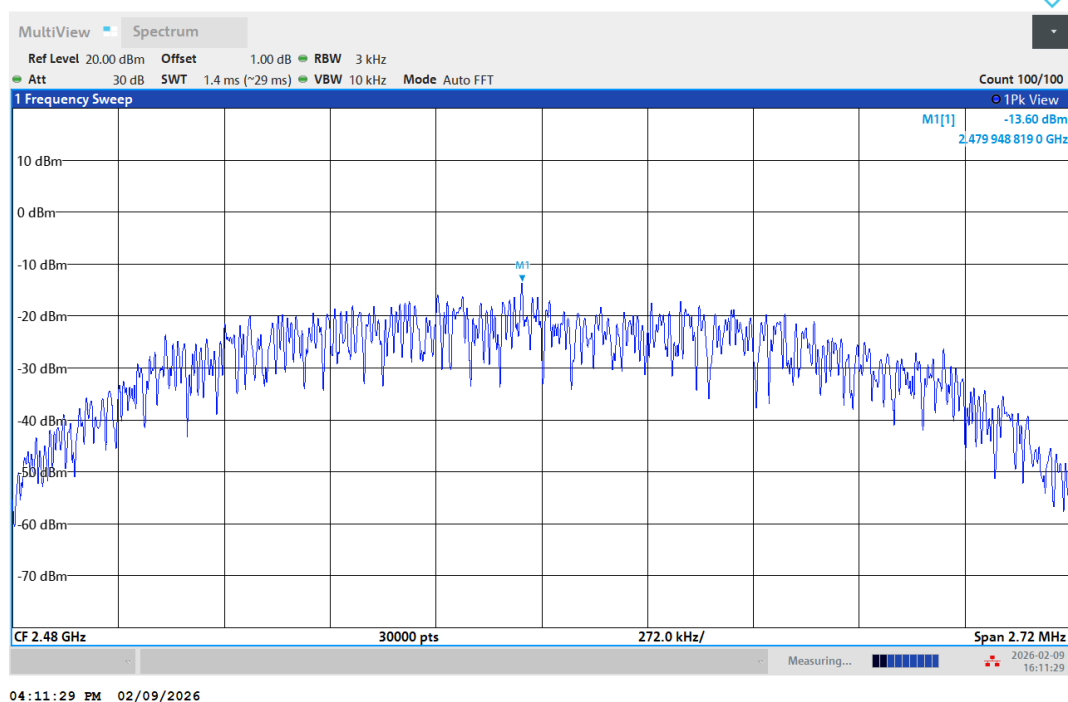
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS

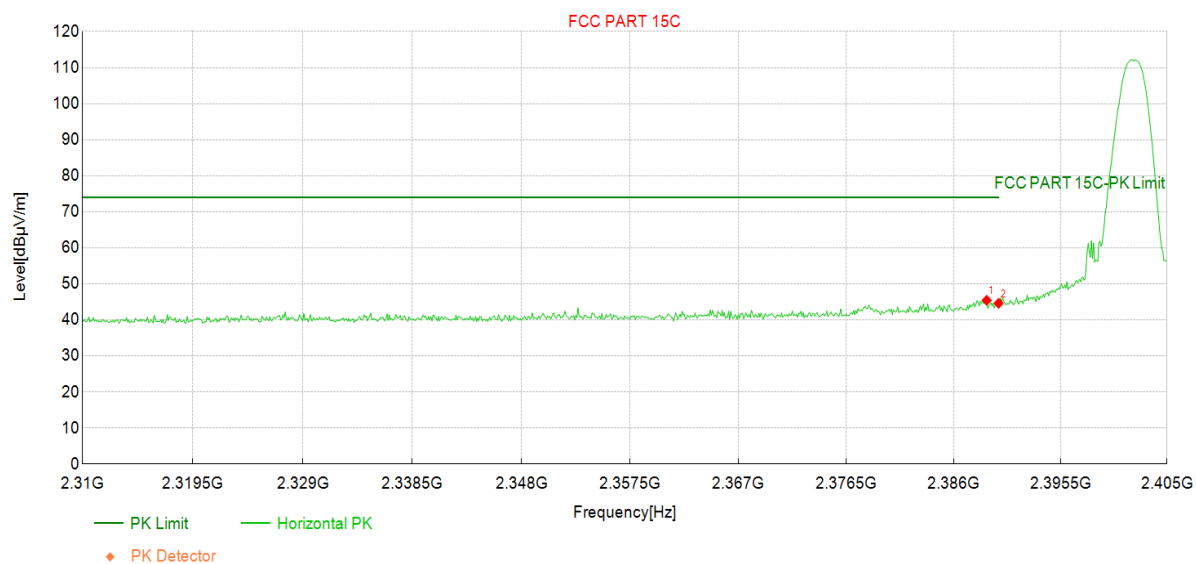


BLE_2M-Ant1-2480-PASS

Band edge measurements

Transmit at 2402MHz by LE_1Mbps

Test Graph

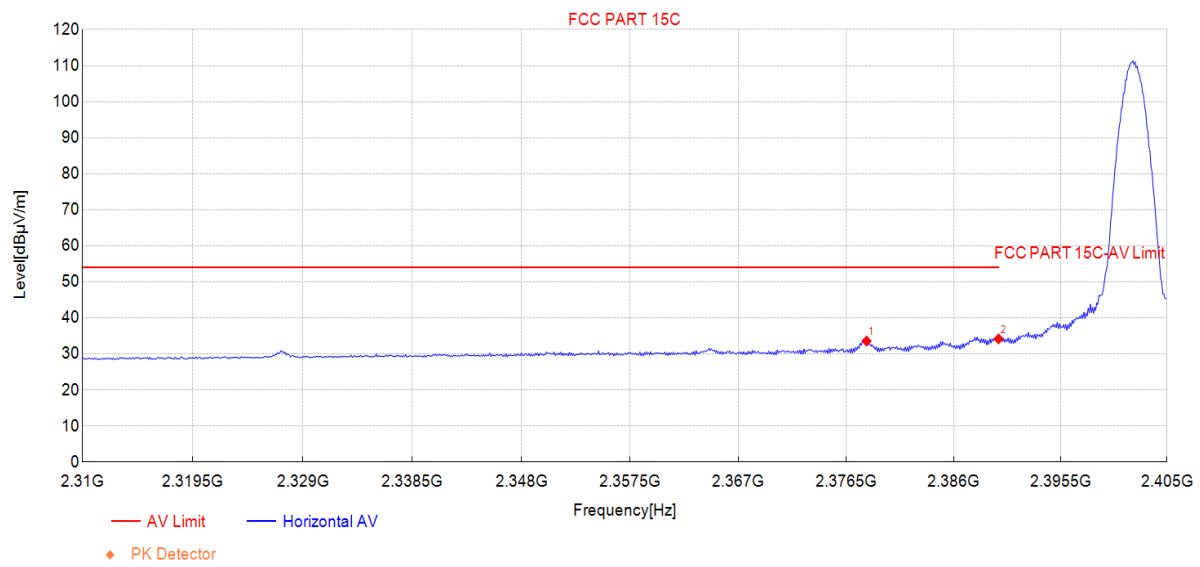


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2388.95	45.5	45.43	-0.100	74.00	28.57	PK	Horizo	PASS
2	2390.00	44.7	44.60	-0.090	74.00	29.40	PK	Horizo	PASS

Transmit at 2402MHz by LE_1Mbps

Test Graph

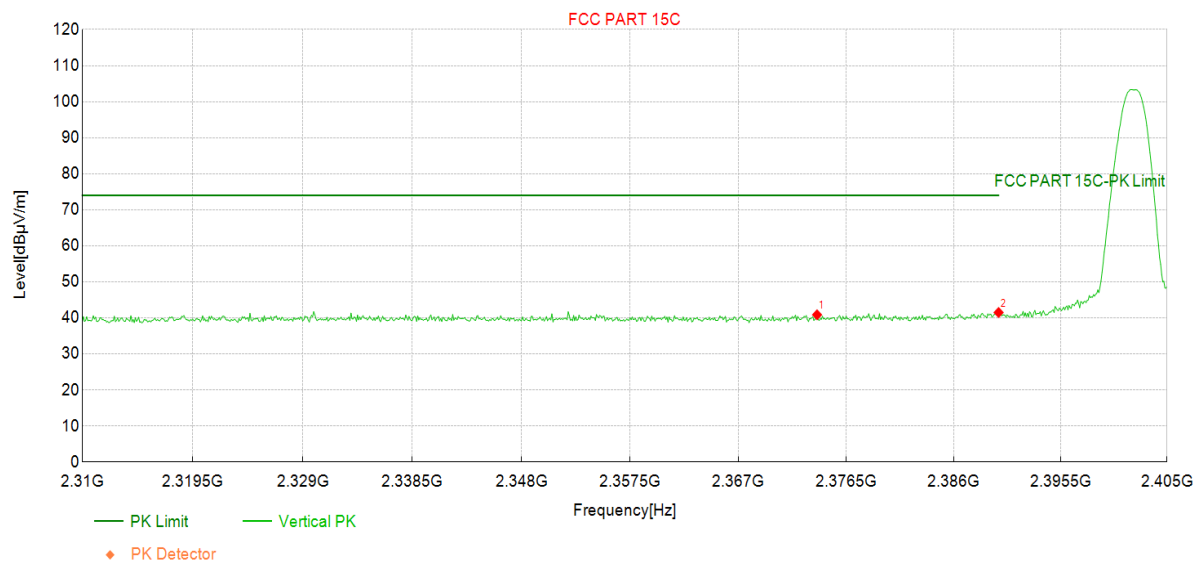


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2378.31	33.7	33.56	-0.110	54.00	20.44	AV	Horizo	PASS
2	2390.00	34.3	34.17	-0.090	54.00	19.83	AV	Horizo	PASS

Transmit at 2402MHz by LE_1Mbps

Test Graph

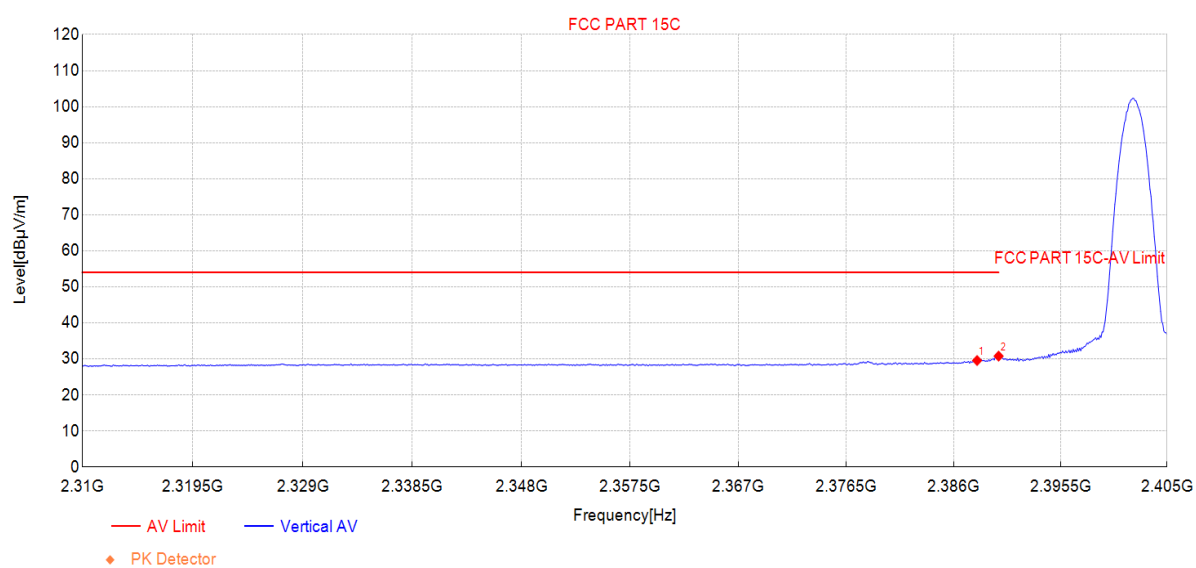


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2373.94	41.0	40.86	-0.110	74.00	33.14	PK	Vertic	PASS
2	2390.00	41.6	41.50	-0.090	74.00	32.50	PK	Vertic	PASS

Transmit at 2402MHz by LE_1Mbps

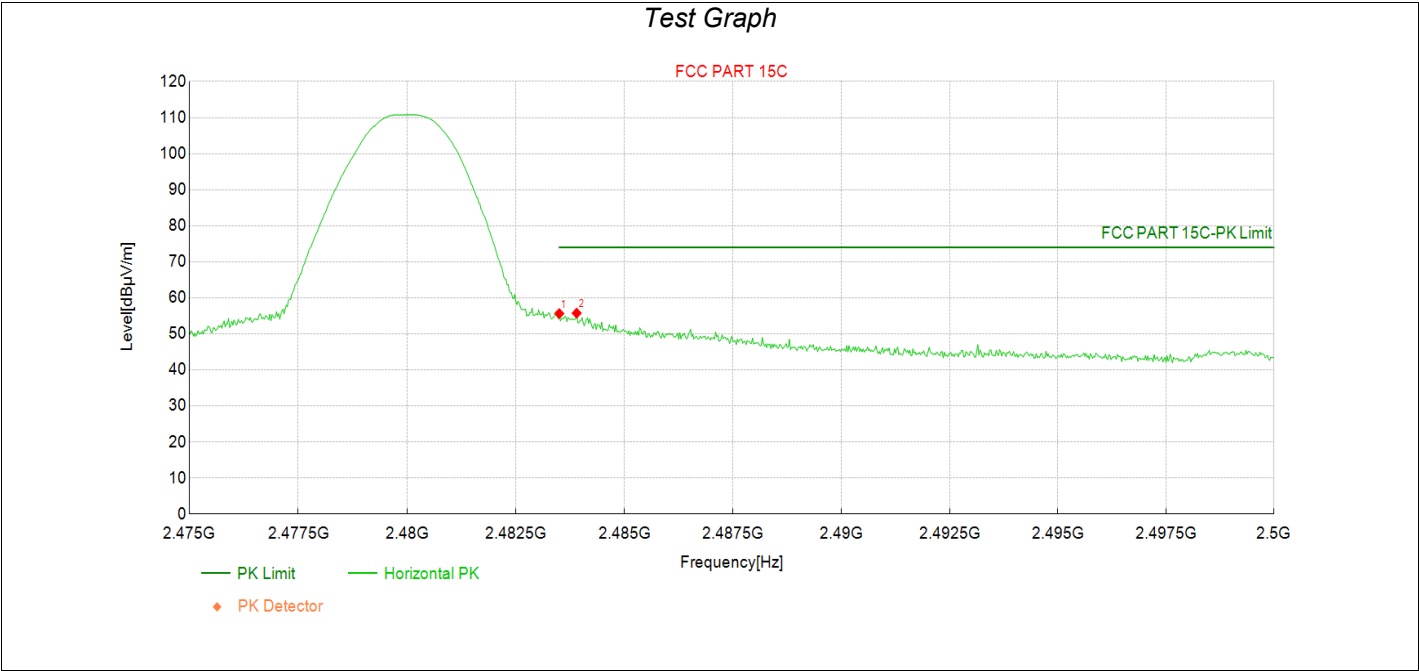
Test Graph



Data List

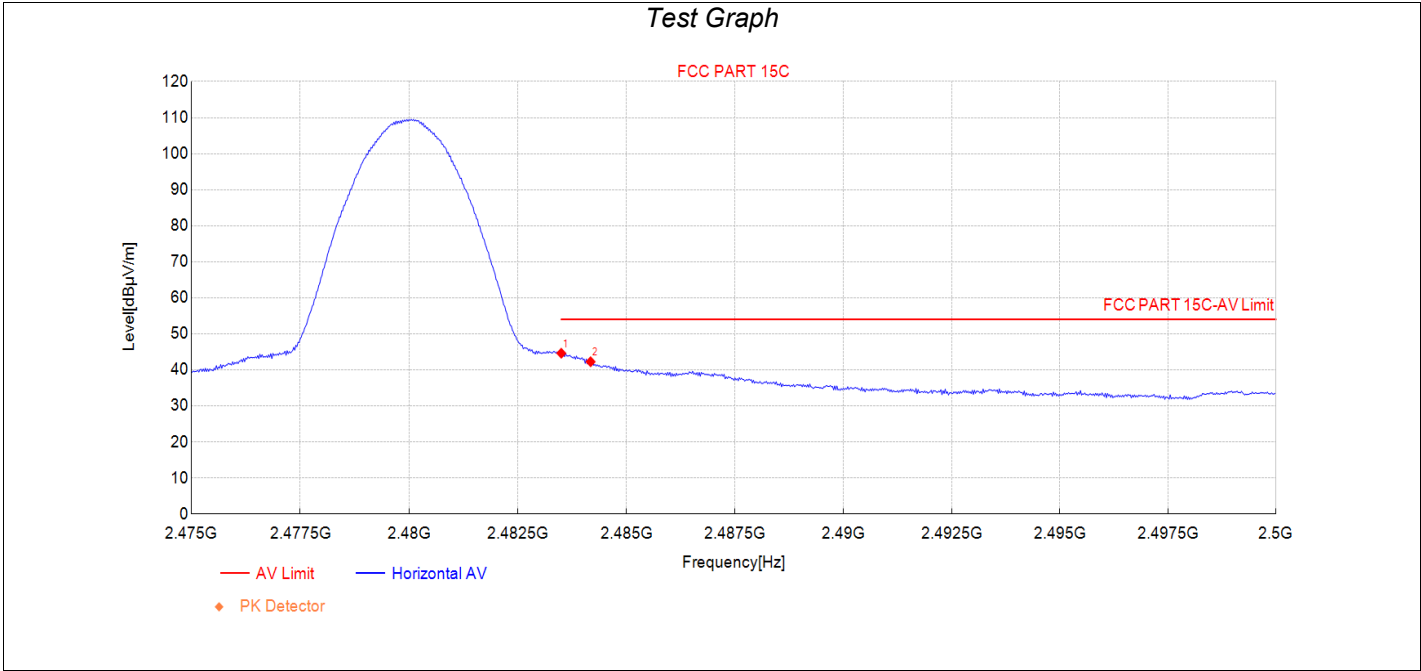
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2388.09	29.7	29.56	-0.100	54.00	24.44	AV	Vertic	PASS
2	2390.00	30.9	30.78	-0.090	54.00	23.22	AV	Vertic	PASS

Transmit at 2480MHz by LE_1Mbps



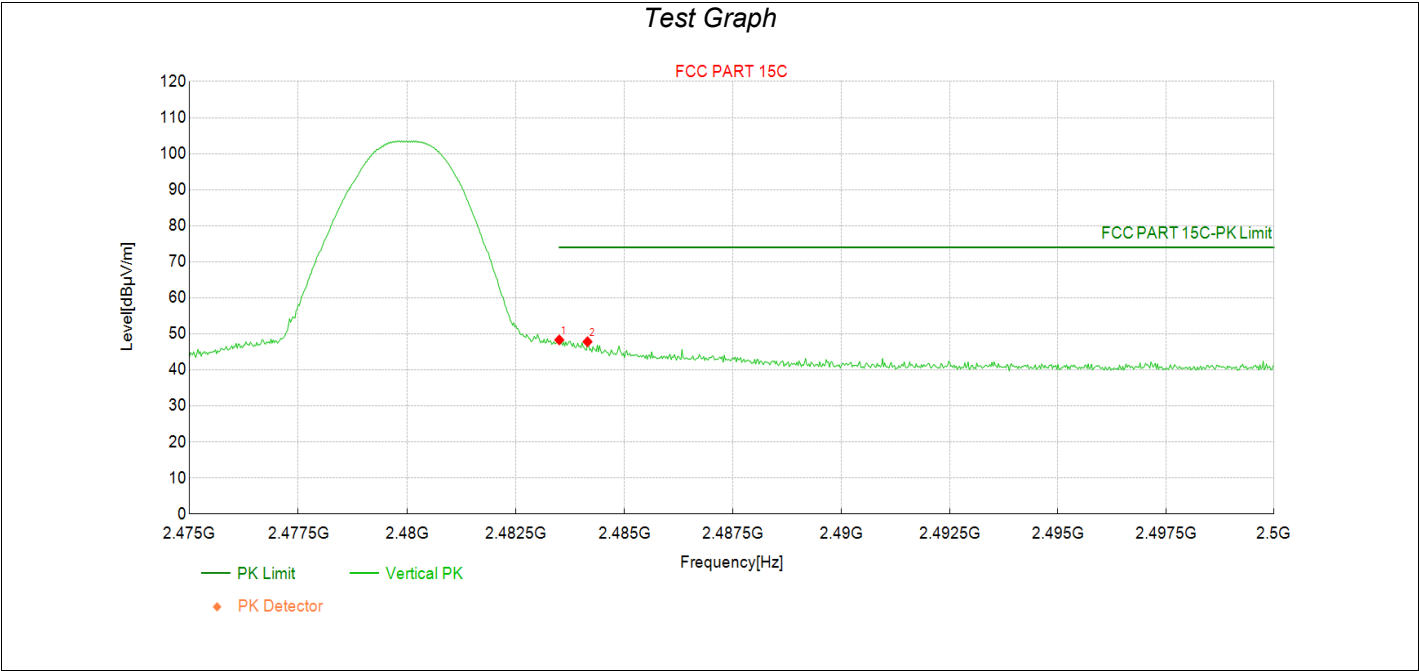
Data List									
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	55.5	55.62	0.100	74.00	18.38	PK	Horizo	PASS
2	2483.90	55.6	55.74	0.100	74.00	18.26	PK	Horizo	PASS

Transmit at 2480MHz by LE_1Mbps



Data List									
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	44.5	44.62	0.100	54.00	9.38	AV	Horizo	PASS
2	2484.18	42.2	42.26	0.100	54.00	11.74	AV	Horizo	PASS

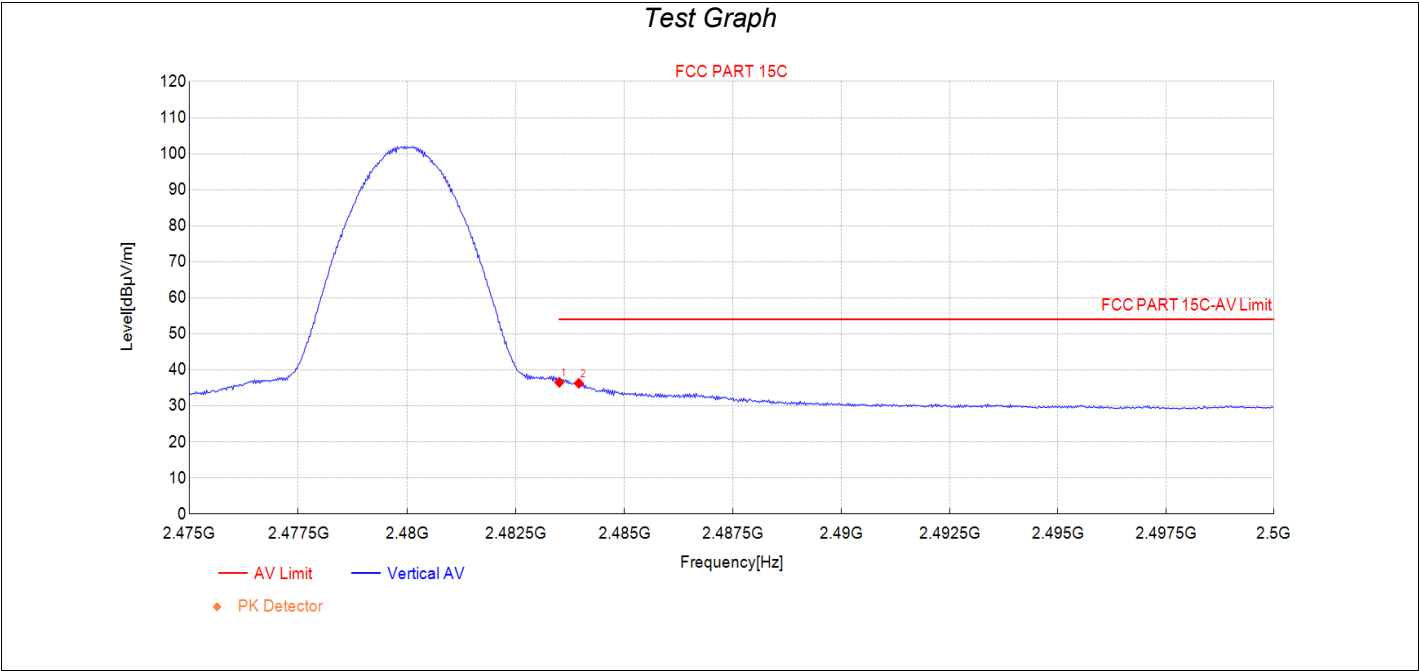
Transmit at 2480MHz by LE_1Mbps



Data List

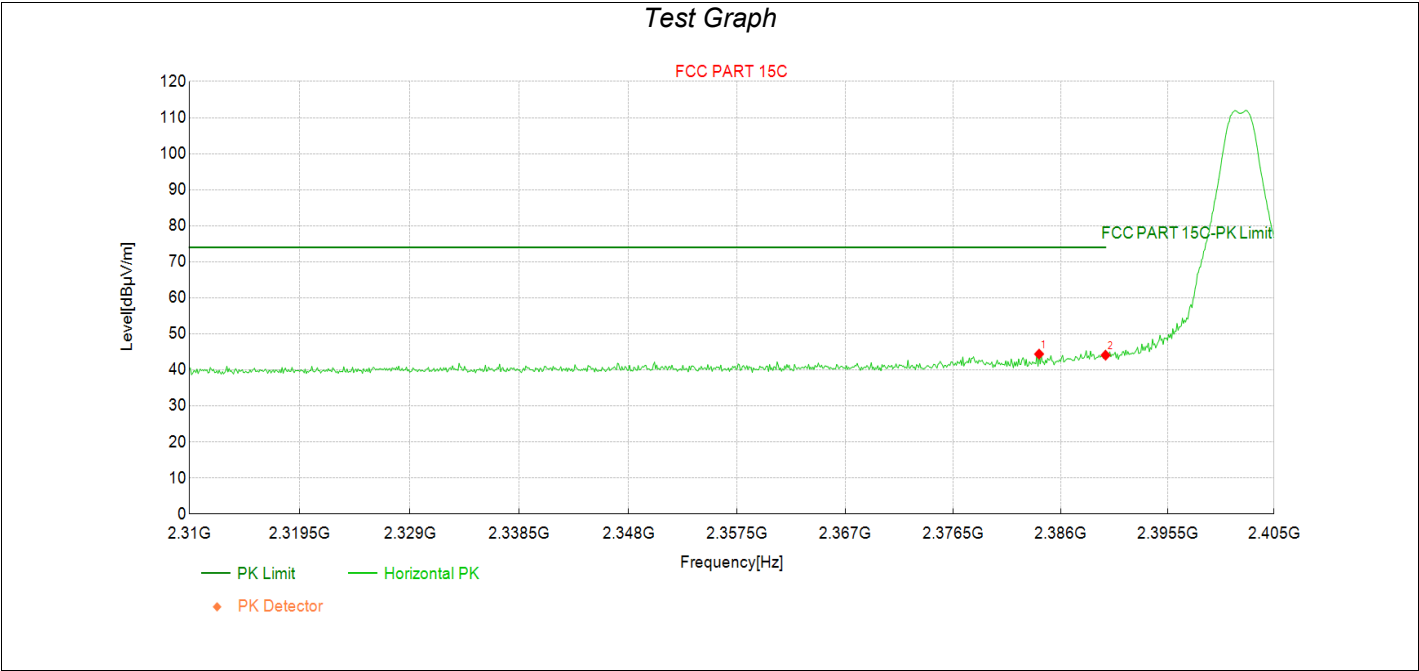
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	48.2	48.31	0.100	74.00	25.69	PK	Vertic	PASS
2	2484.15	47.7	47.81	0.100	74.00	26.19	PK	Vertic	PASS

Transmit at 2480MHz by LE_1Mbps



Data List									
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	36.4	36.54	0.100	54.00	17.46	AV	Vertic	PASS
2	2483.95	36.2	36.28	0.100	54.00	17.72	AV	Vertic	PASS

Transmit at 2402MHz by LE_2Mbps

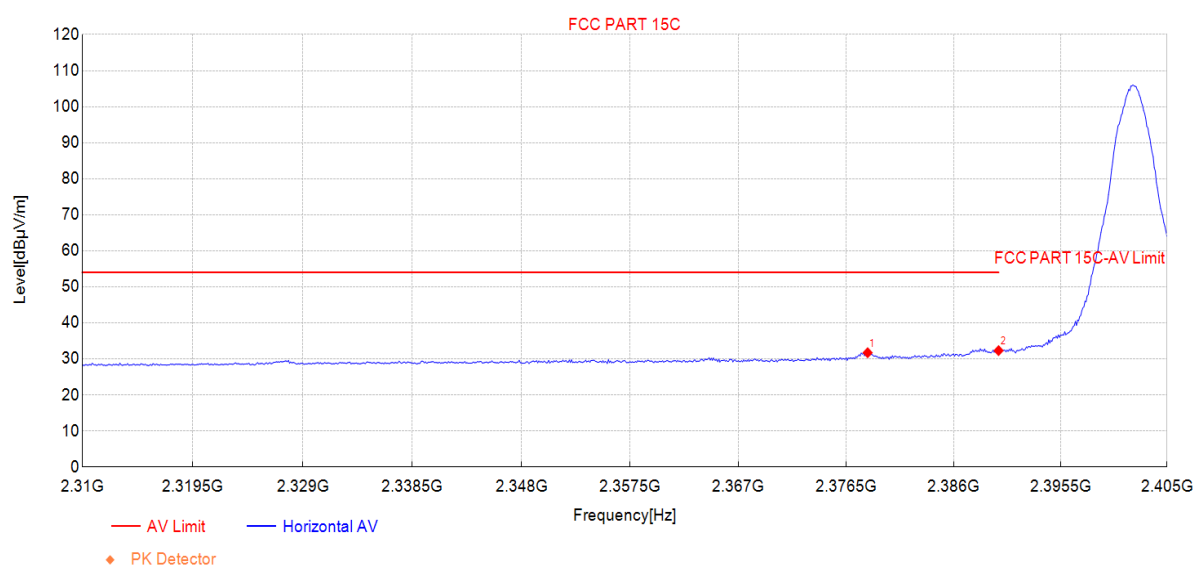


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2384.10	44.5	44.40	-0.100	74.00	29.60	PK	Horizo	PASS
2	2390.00	44.2	44.07	-0.090	74.00	29.93	PK	Horizo	PASS

Transmit at 2402MHz by LE_2Mbps

Test Graph

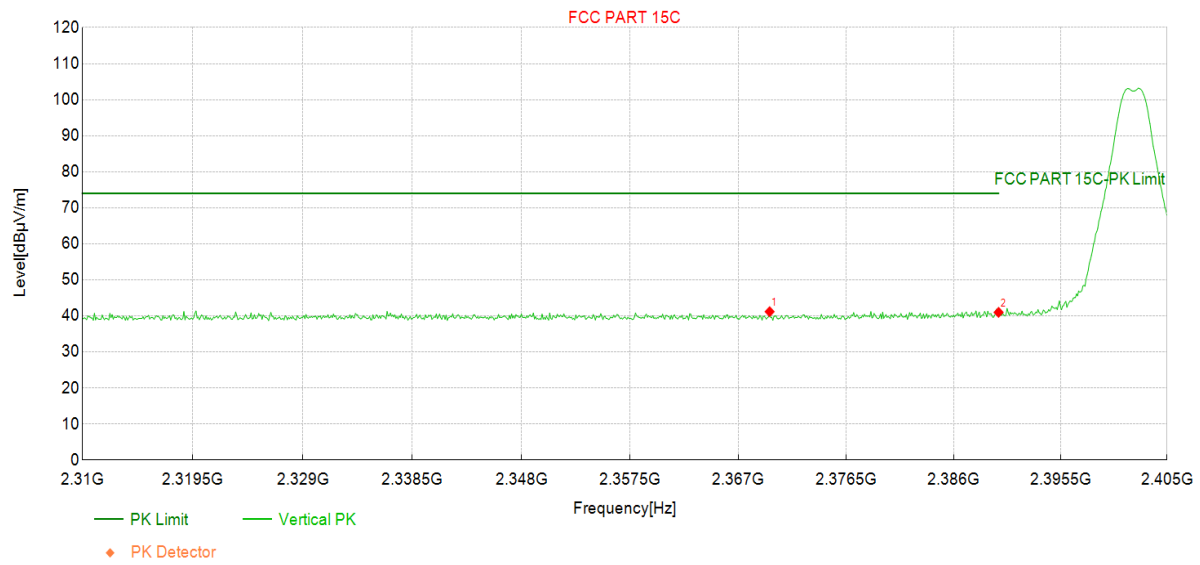


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2378.40	31.8	31.73	-0.110	54.00	22.27	AV	Horizo	PASS
2	2390.00	32.4	32.31	-0.090	54.00	21.69	AV	Horizo	PASS

Transmit at 2402MHz by LE_2Mbps

Test Graph

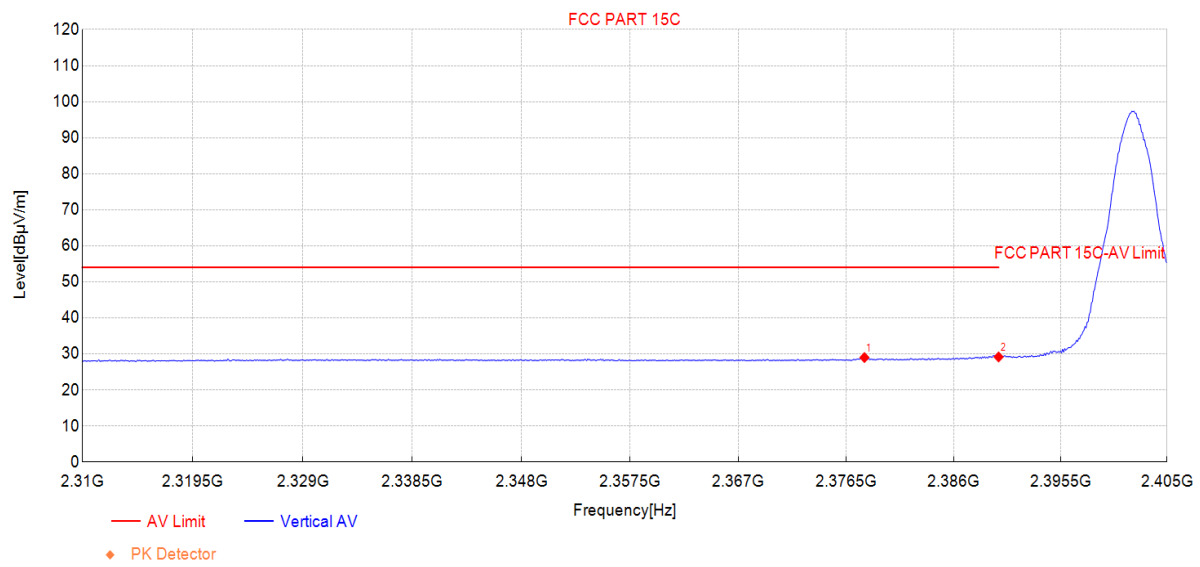


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2369.76	41.3	41.18	-0.110	74.00	32.82	PK	Vertic	PASS
2	2390.00	41.1	40.99	-0.090	74.00	33.01	PK	Vertic	PASS

Transmit at 2402MHz by LE_2Mbps

Test Graph

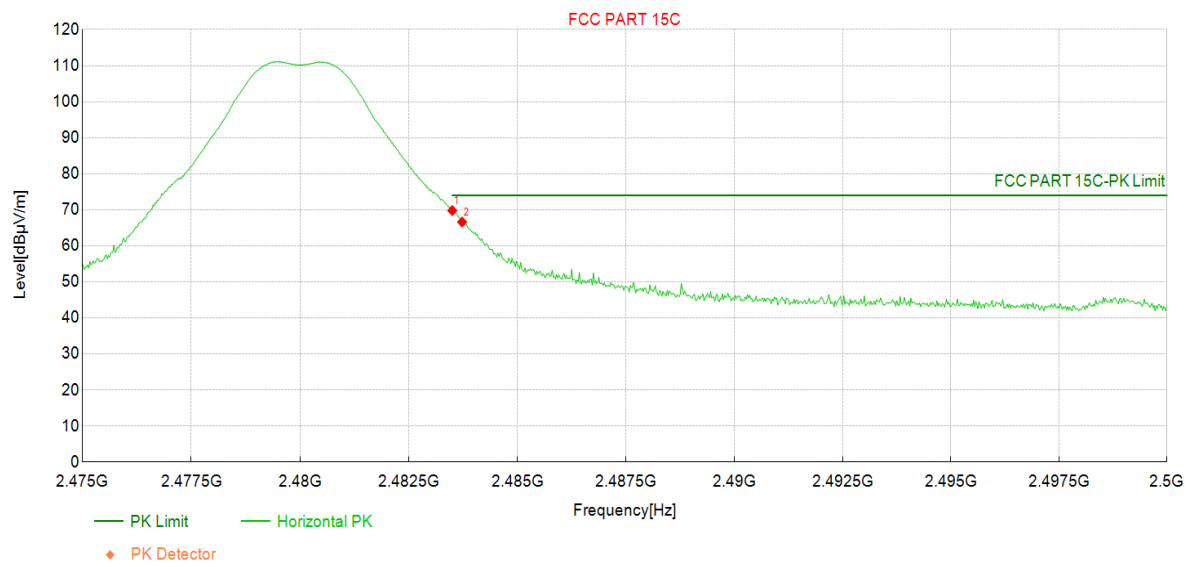


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2378.12	29.1	29.00	-0.110	54.00	25.00	AV	Vertic	PASS
2	2390.00	29.3	29.16	-0.090	54.00	24.84	AV	Vertic	PASS

Transmit at 2480MHz by LE_2Mbps

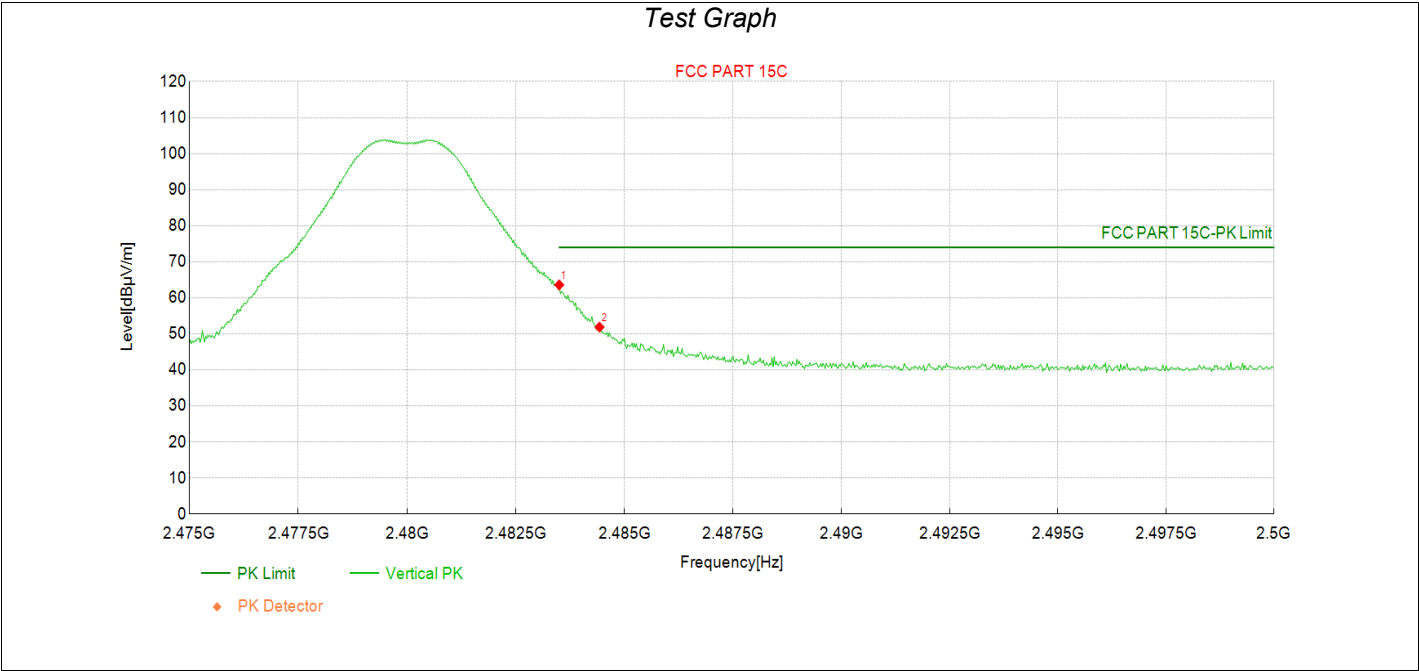
Test Graph



Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	69.7	69.79	0.100	74.00	4.21	PK	Horizo	PASS
2	2483.73	66.5	66.61	0.100	74.00	7.39	PK	Horizo	PASS

Transmit at 2480MHz by LE_2Mbps

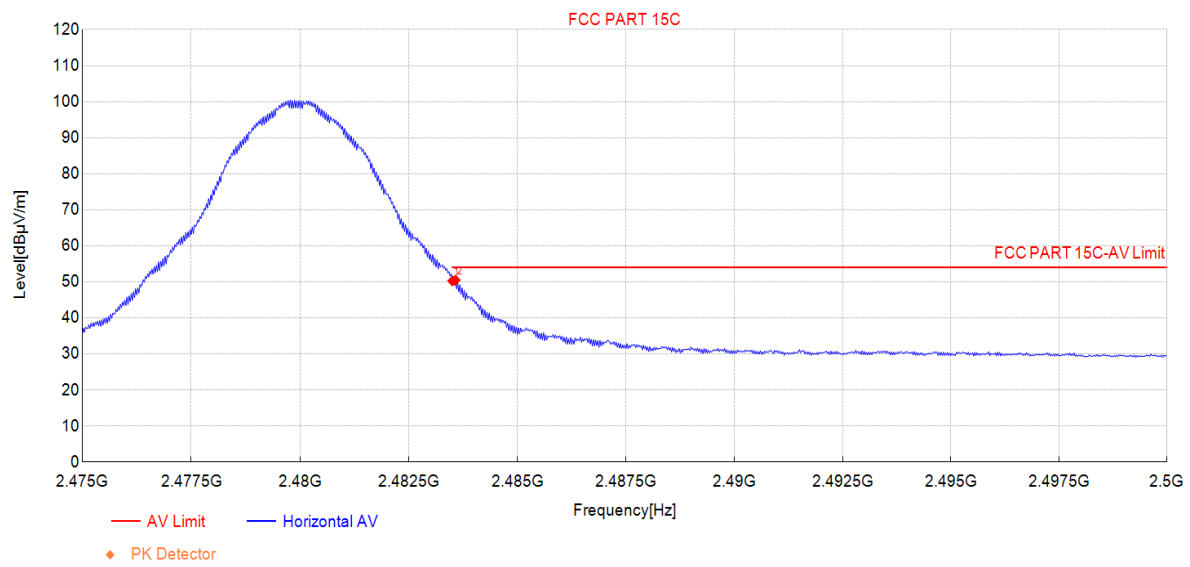


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	63.5	63.58	0.100	74.00	10.42	PK	Vertic	PASS
2	2484.43	51.8	51.87	0.100	74.00	22.13	PK	Vertic	PASS

Transmit at 2480MHz by LE_2Mbps

Test Graph

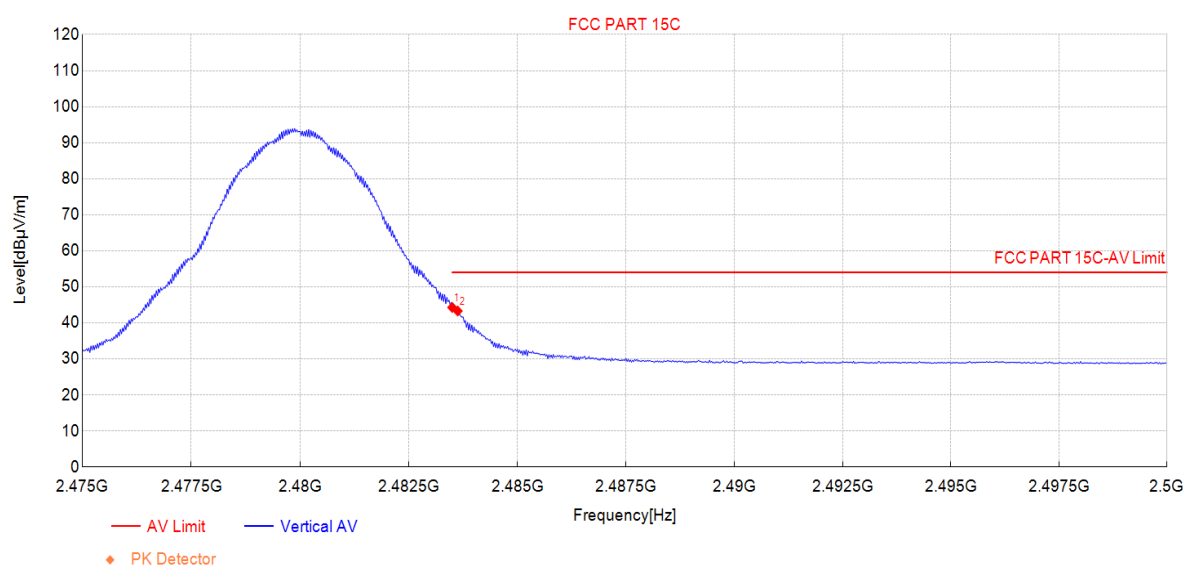


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	50.2	50.26	0.100	54.00	3.74	AV	Horizo	PASS
2	2483.58	50.4	50.49	0.100	54.00	3.51	AV	Horizo	PASS

Transmit at 2480MHz by LE_2Mbps

Test Graph



Data List

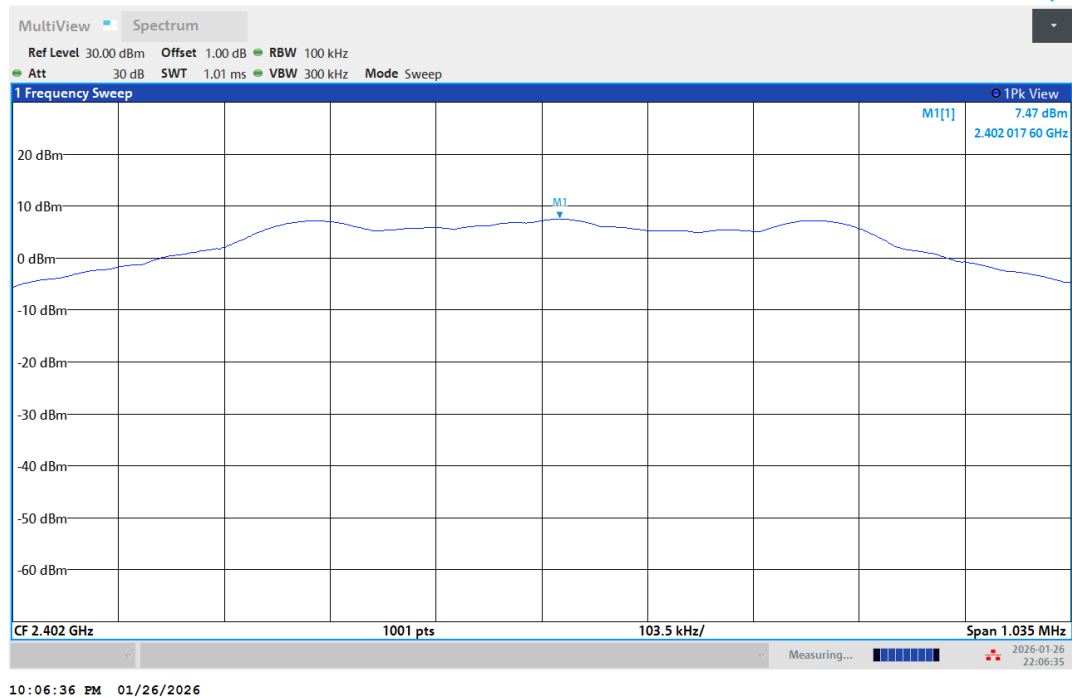
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	44.2	44.28	0.100	54.00	9.72	AV	Vertic	PASS
2	2483.63	43.2	43.31	0.100	54.00	10.69	AV	Vertic	PASS

Note: Level = Reading + Factor (Antenna factor + Amplifier factor + Cable loss)

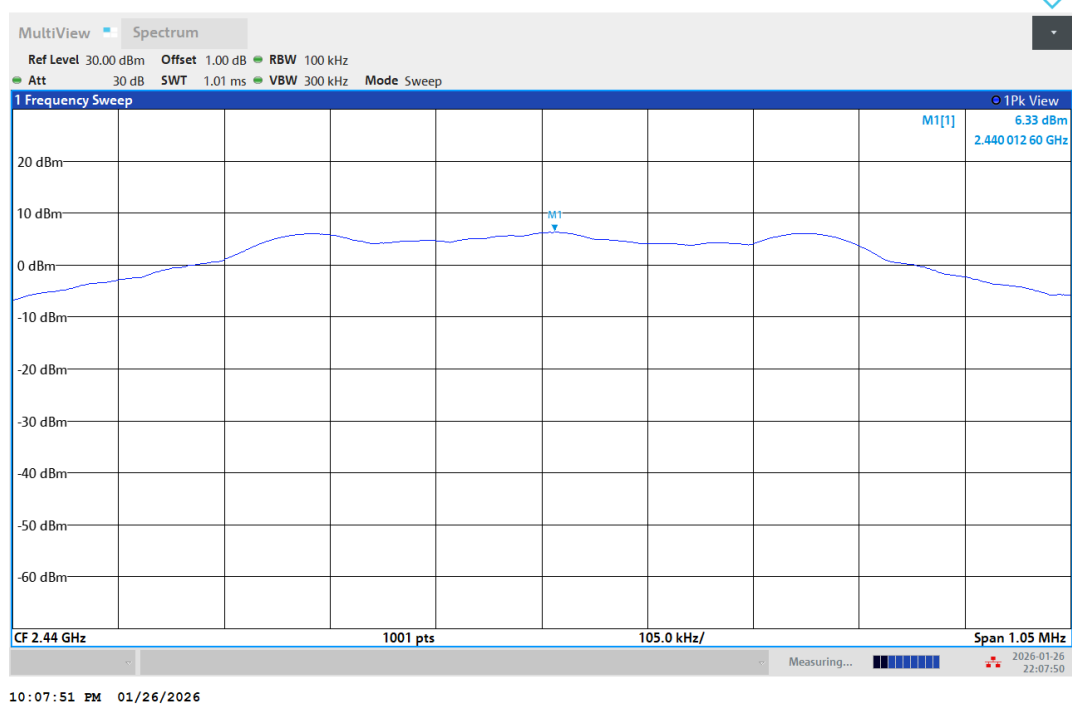
Conducted Spurious Emission

Reference level measurement

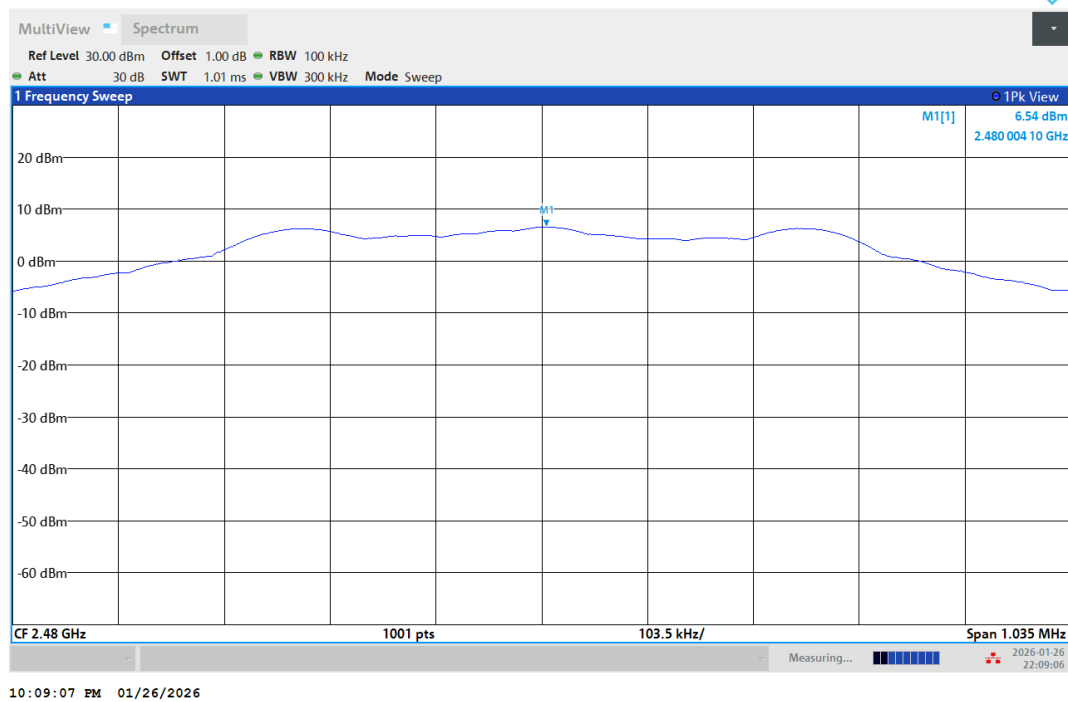
Test Graphs



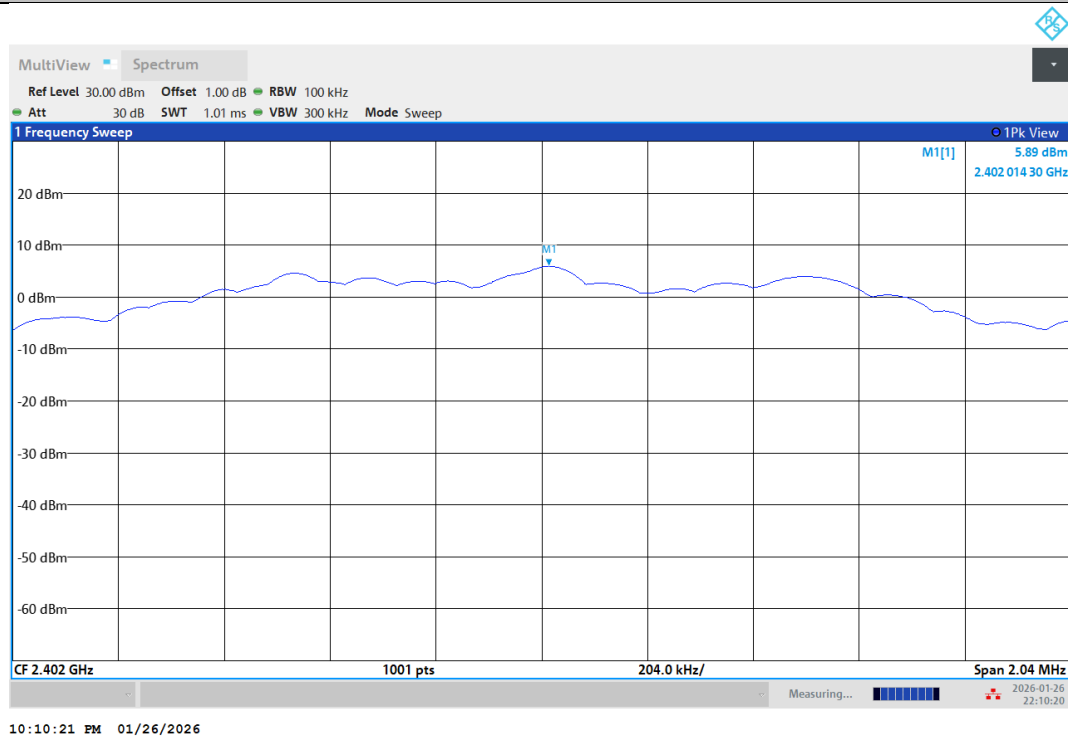
BLE_1M-Ant1-2402-PASS



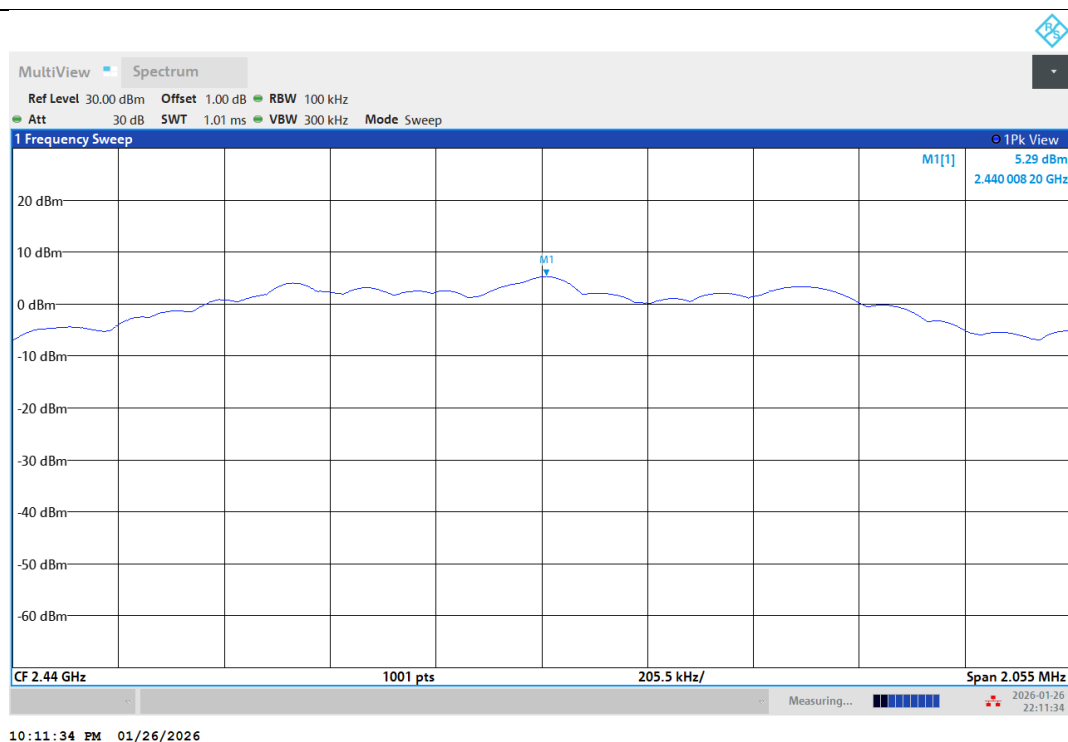
BLE_1M-Ant1-2440-PASS



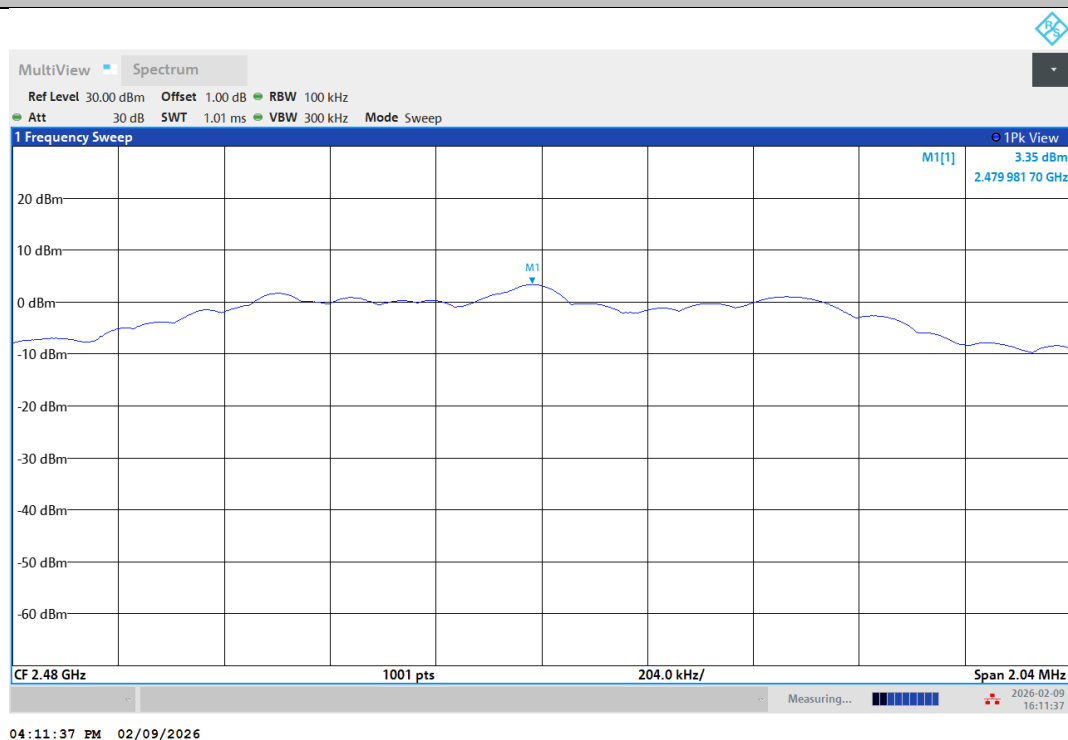
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS

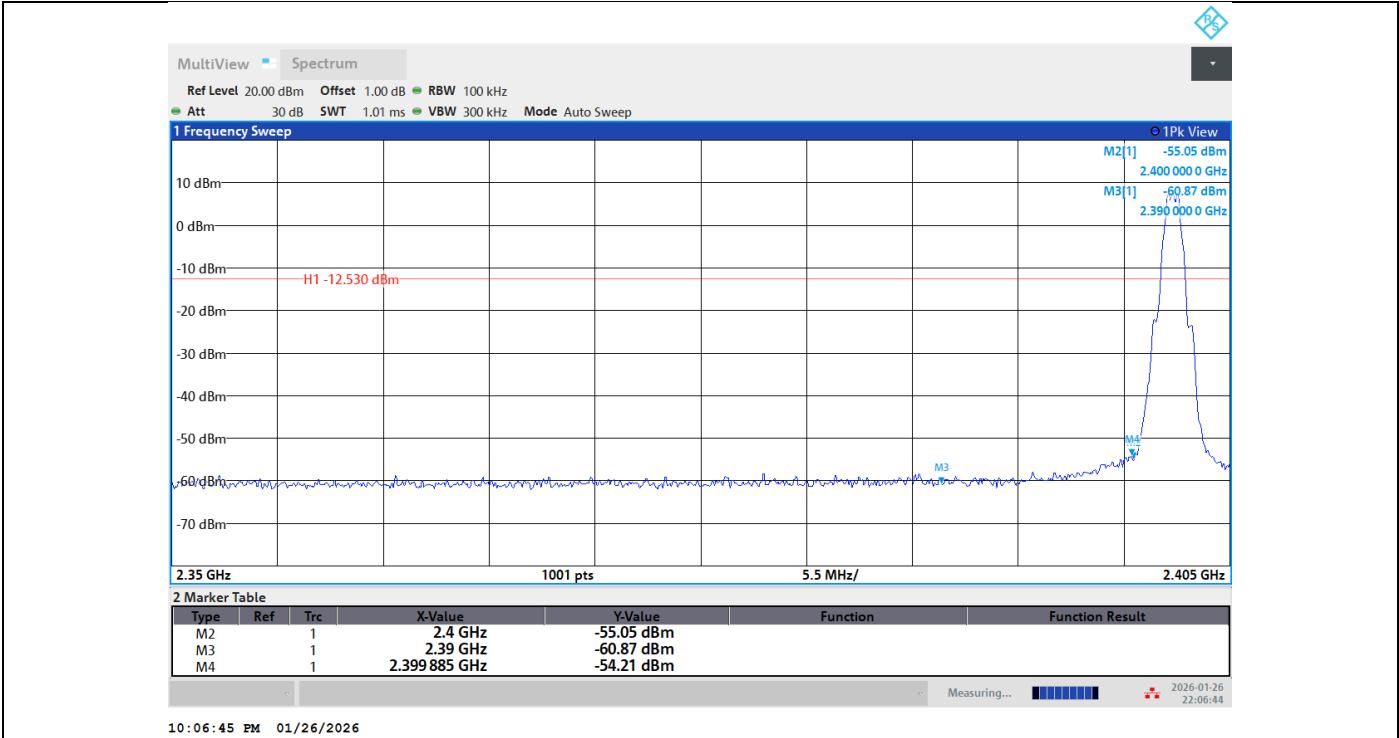


BLE_2M-Ant1-2440-PASS

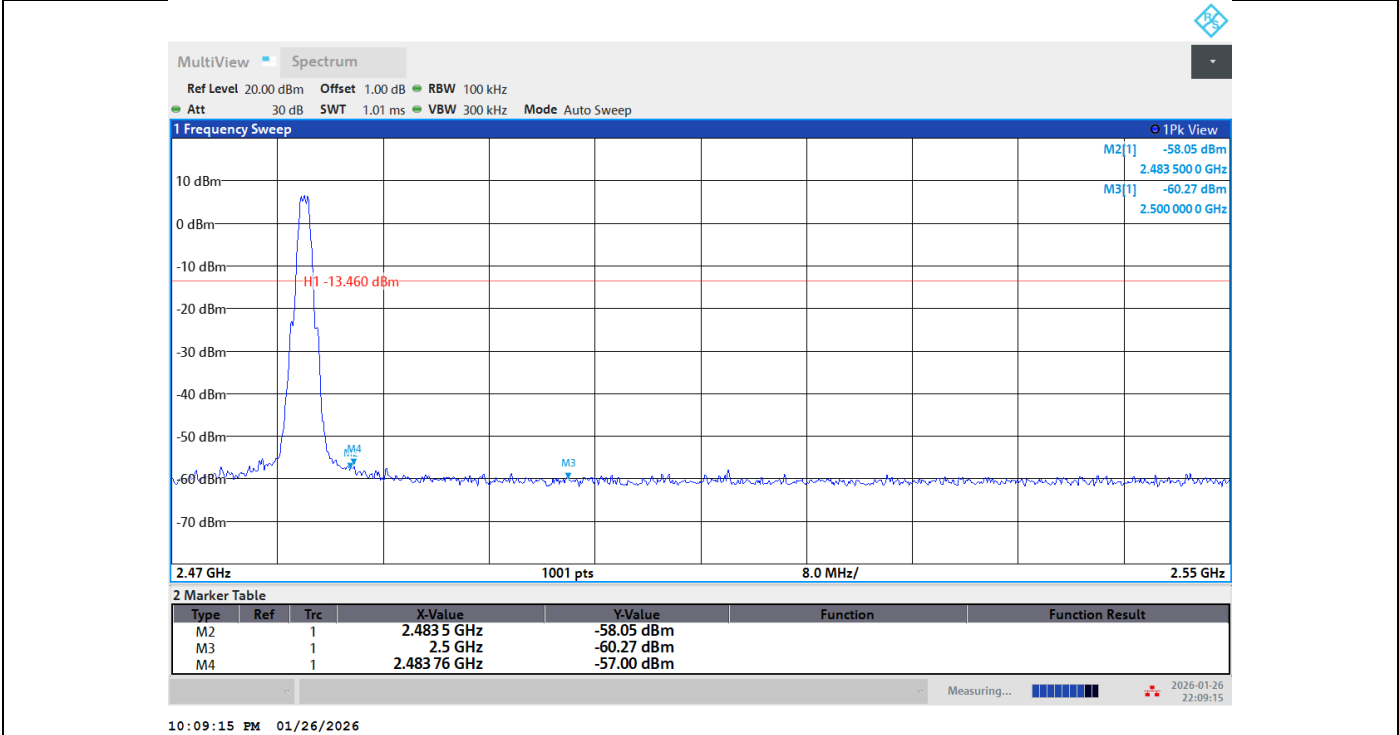


BLE_2M-Ant1-2480-PASS

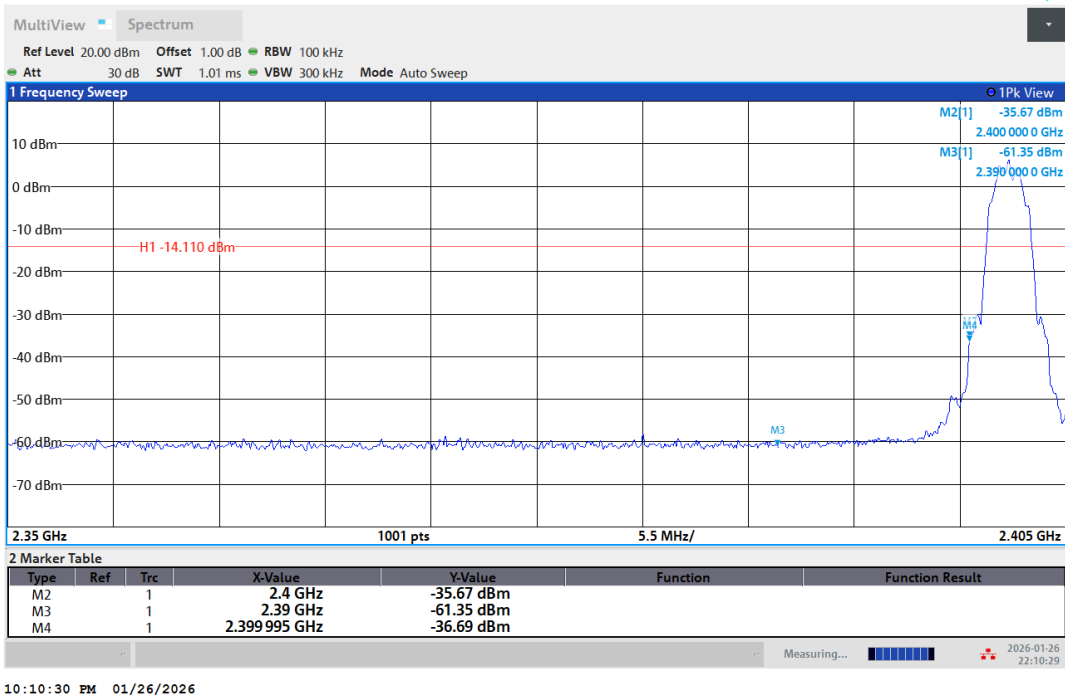
Band edge measurements
Test Graphs



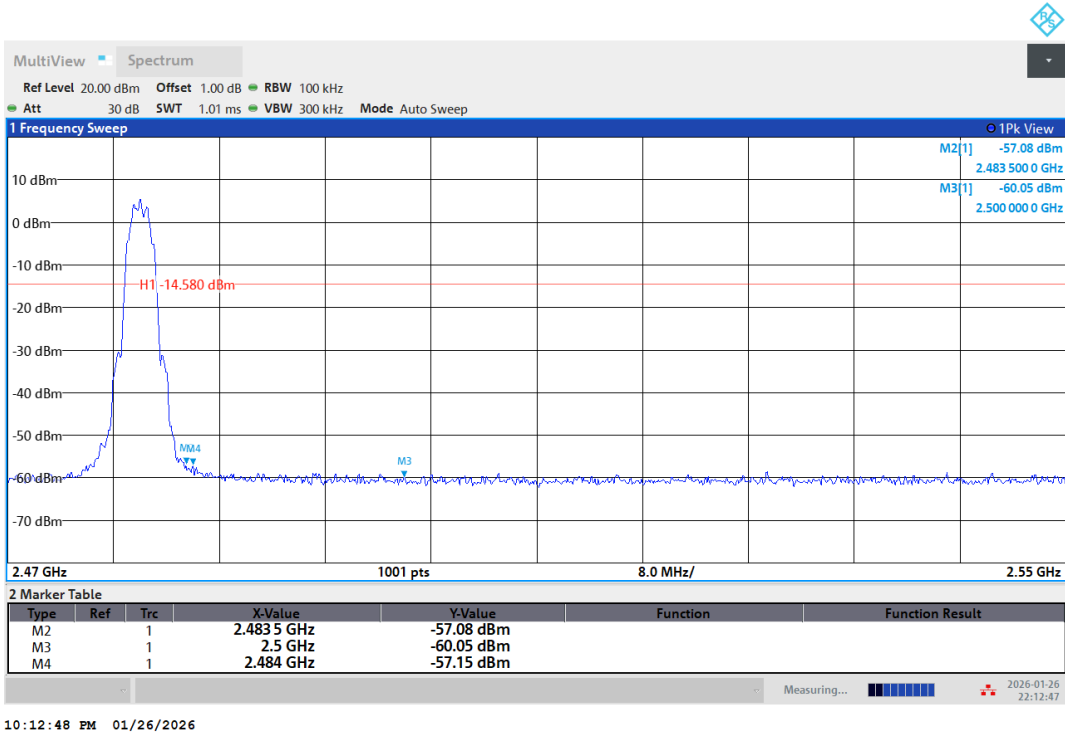
BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2480-PASS

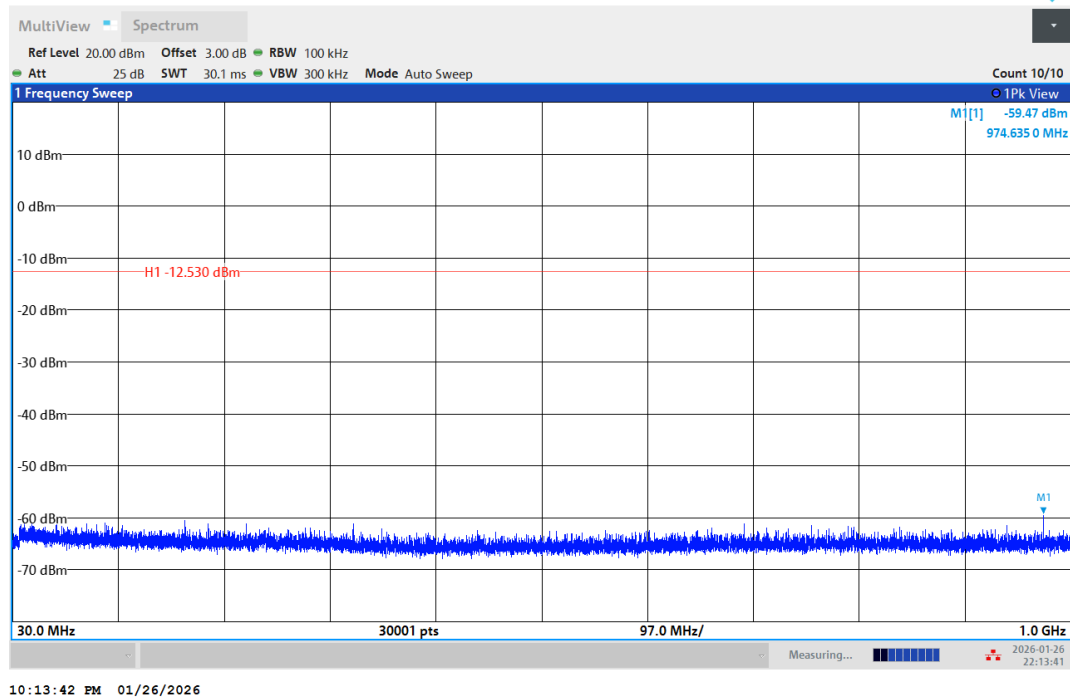


BLE_2M-Ant1-2402-PASS

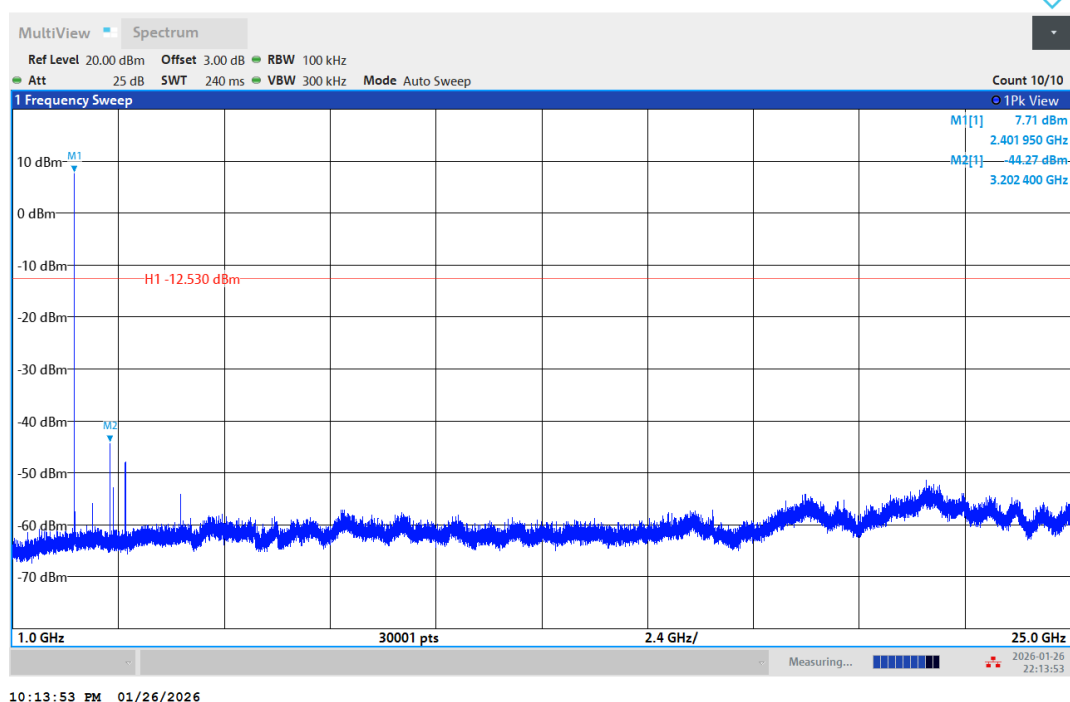


BLE_2M-Ant1-2480-PASS

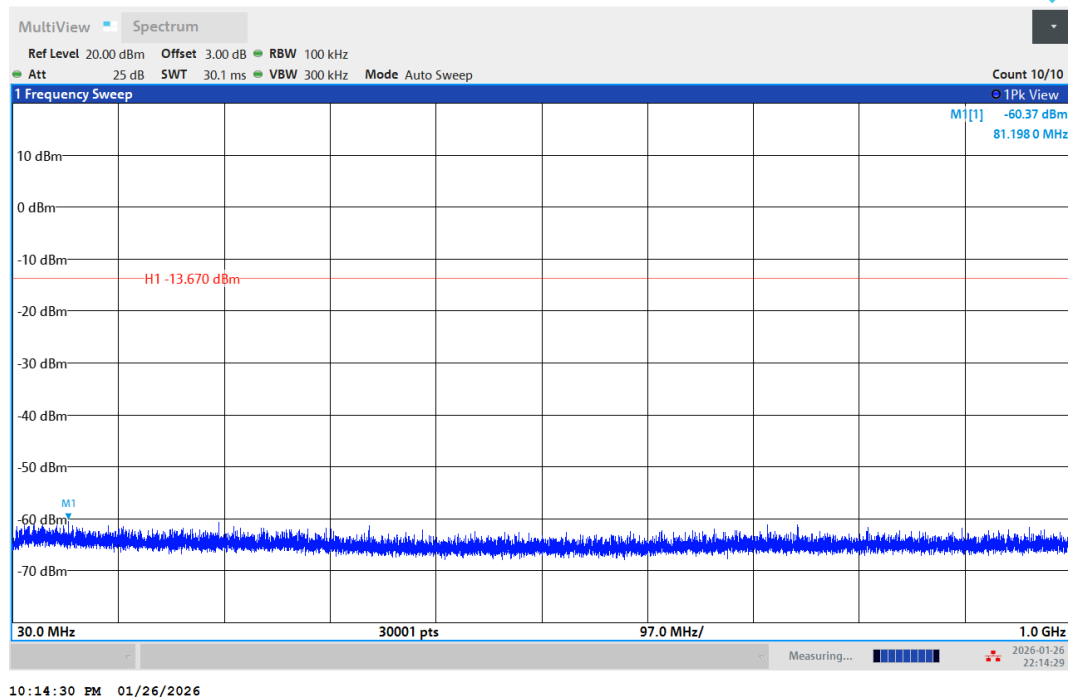
Conducted Spurious Emission Test Graphs



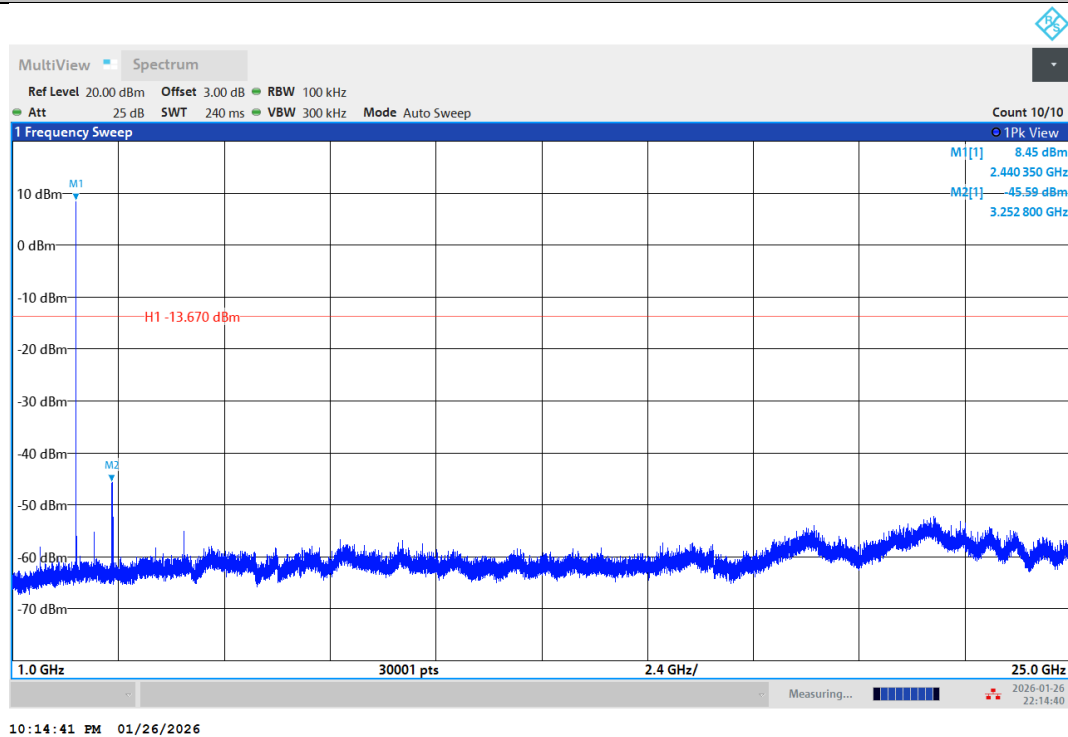
BLE_1M-Ant1-2402-30~1000-PASS



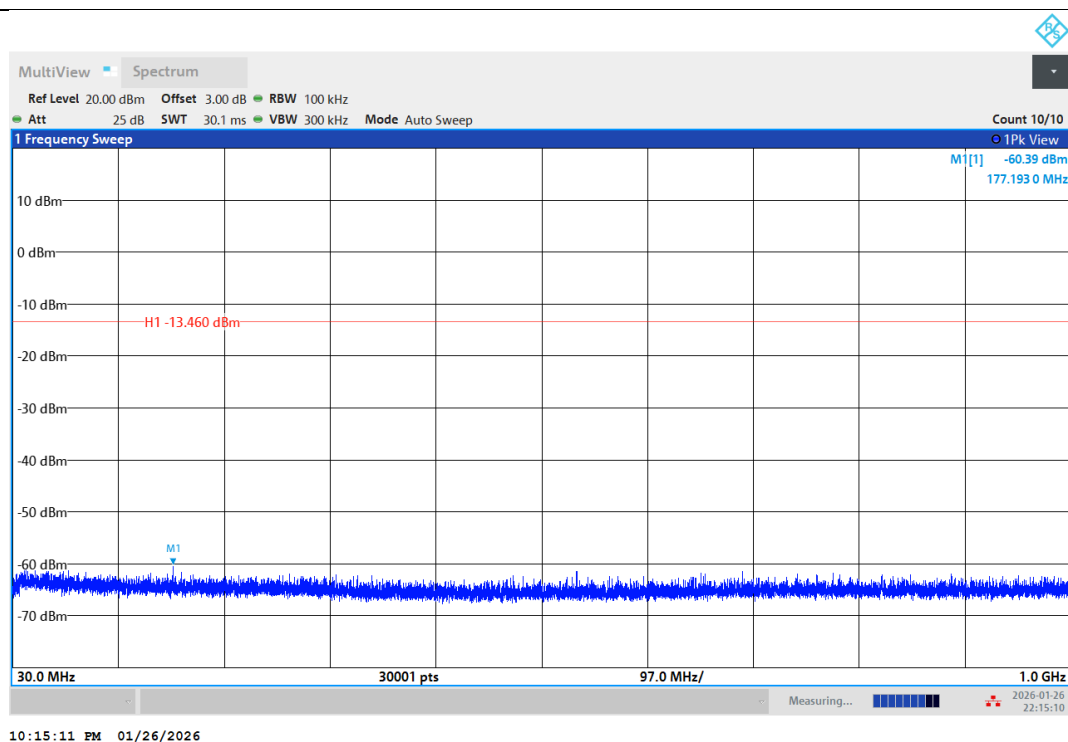
BLE_1M-Ant1-2402-1000~25000-PASS



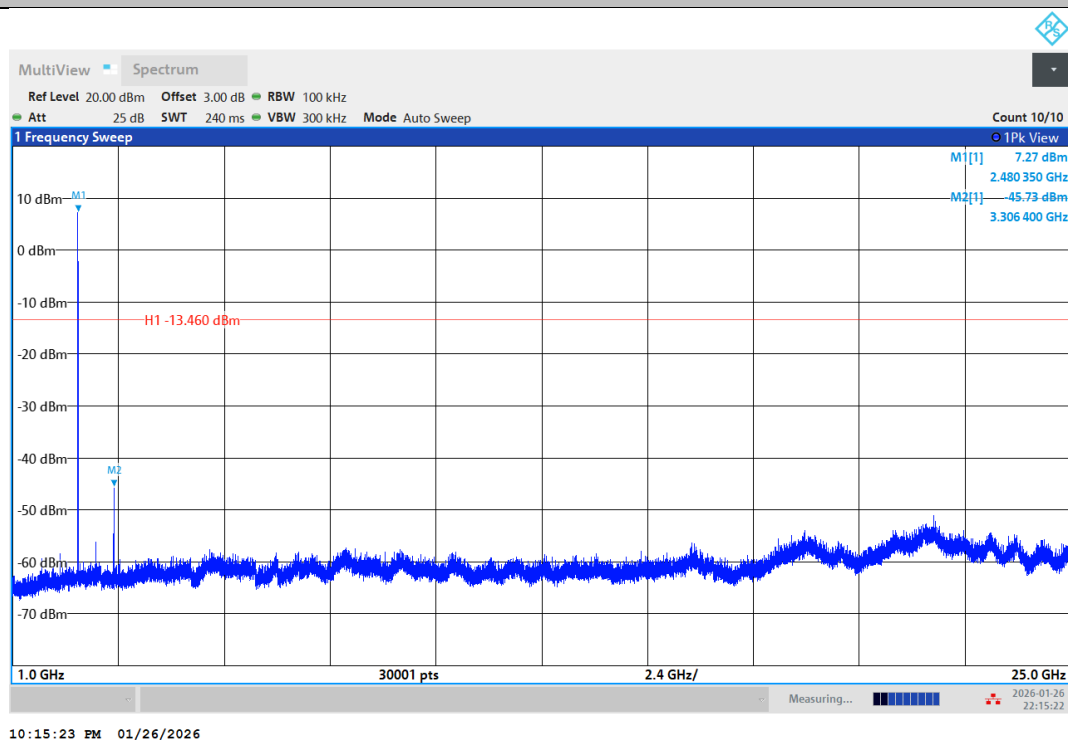
BLE_1M-Ant1-2440-30~1000-PASS



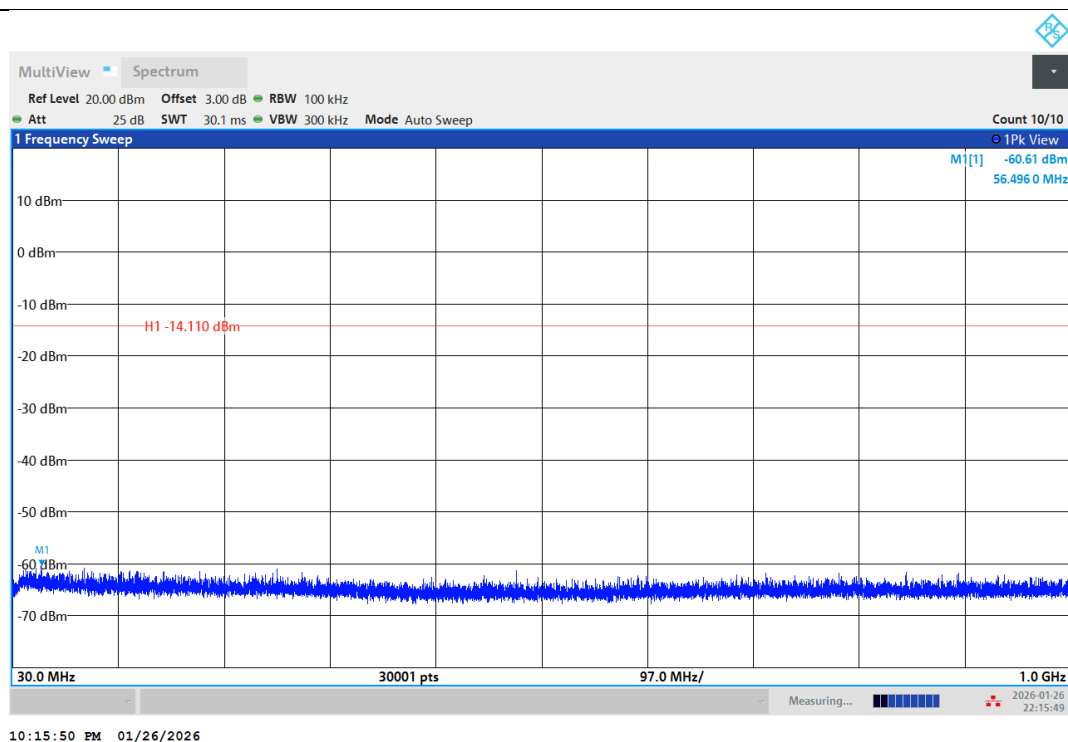
BLE_1M-Ant1-2440-1000~25000-PASS



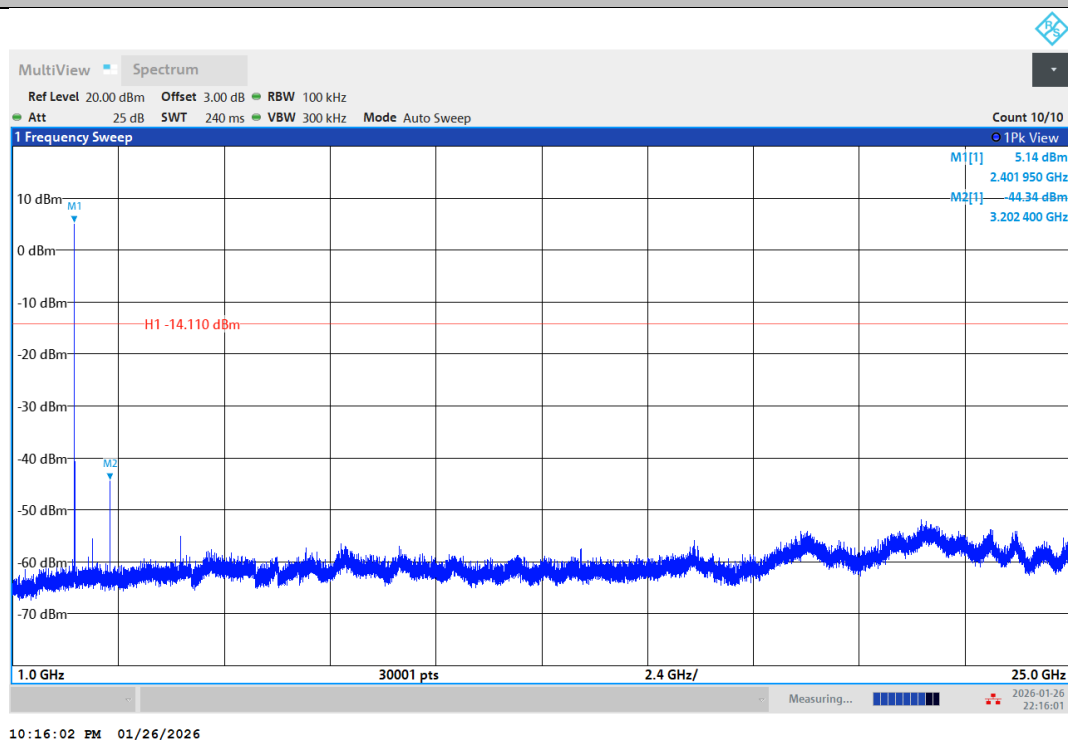
BLE_1M-Ant1-2480-30~1000-PASS



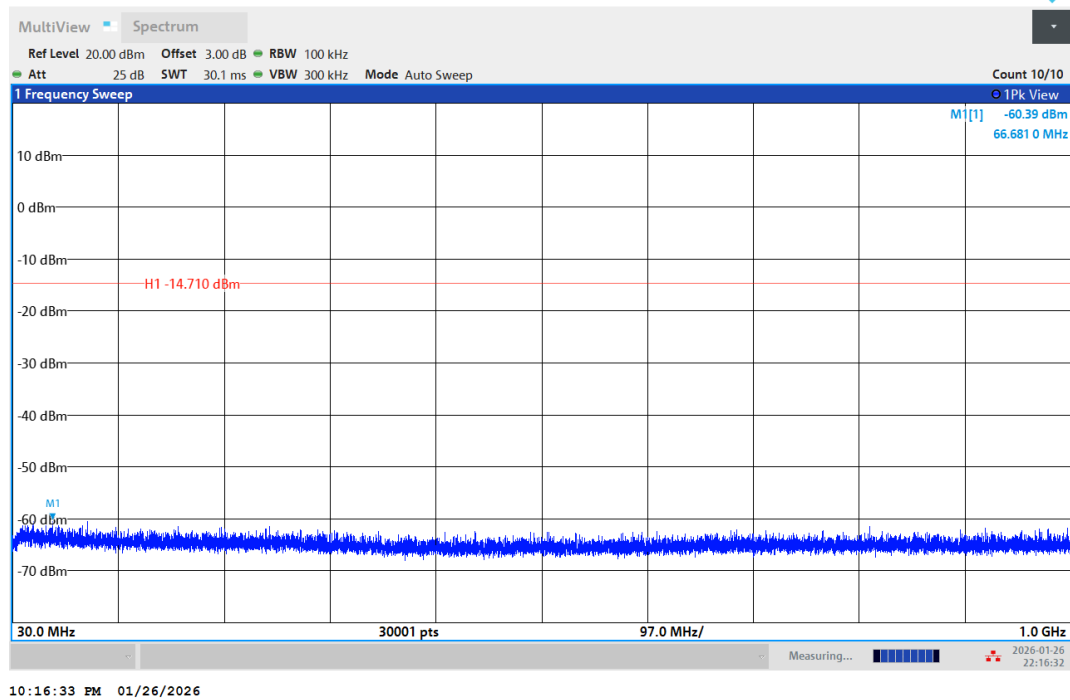
BLE_1M-Ant1-2480-1000~25000-PASS



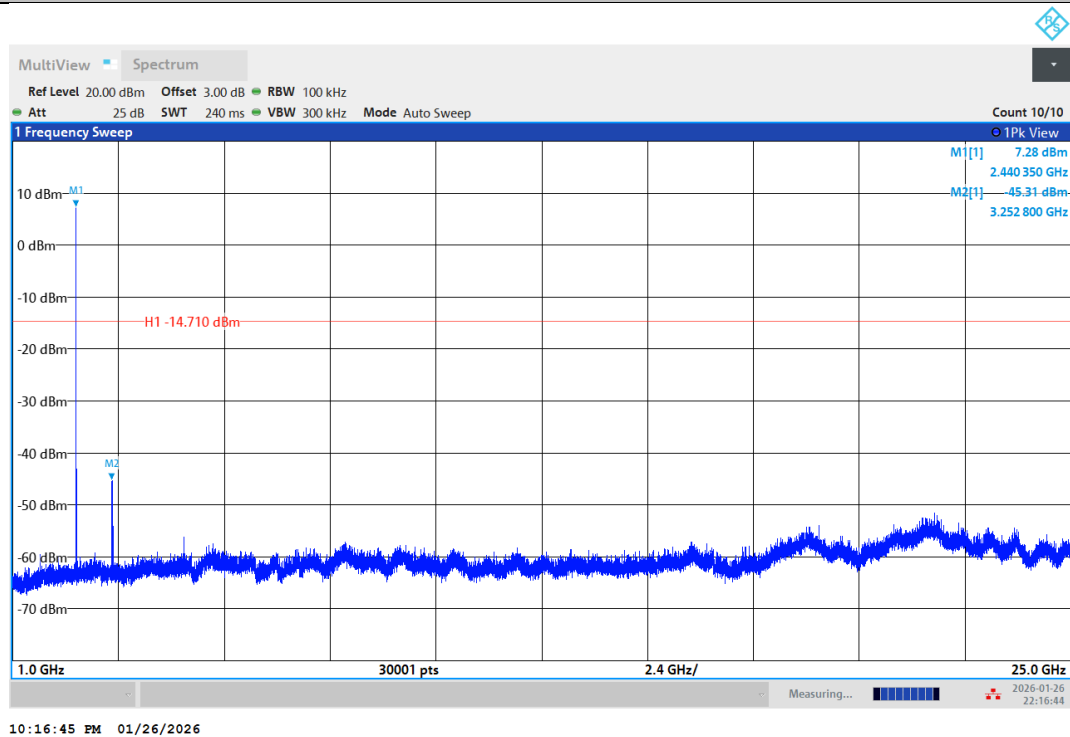
BLE_2M-Ant1-2402-30~1000-PASS



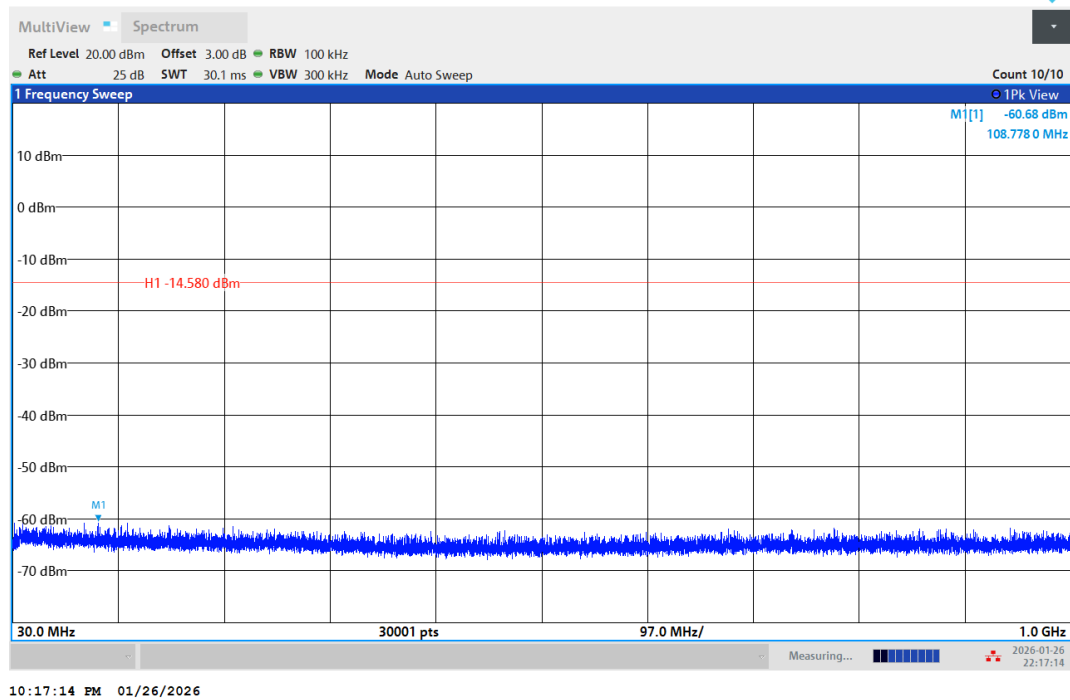
BLE_2M-Ant1-2402-1000~25000-PASS



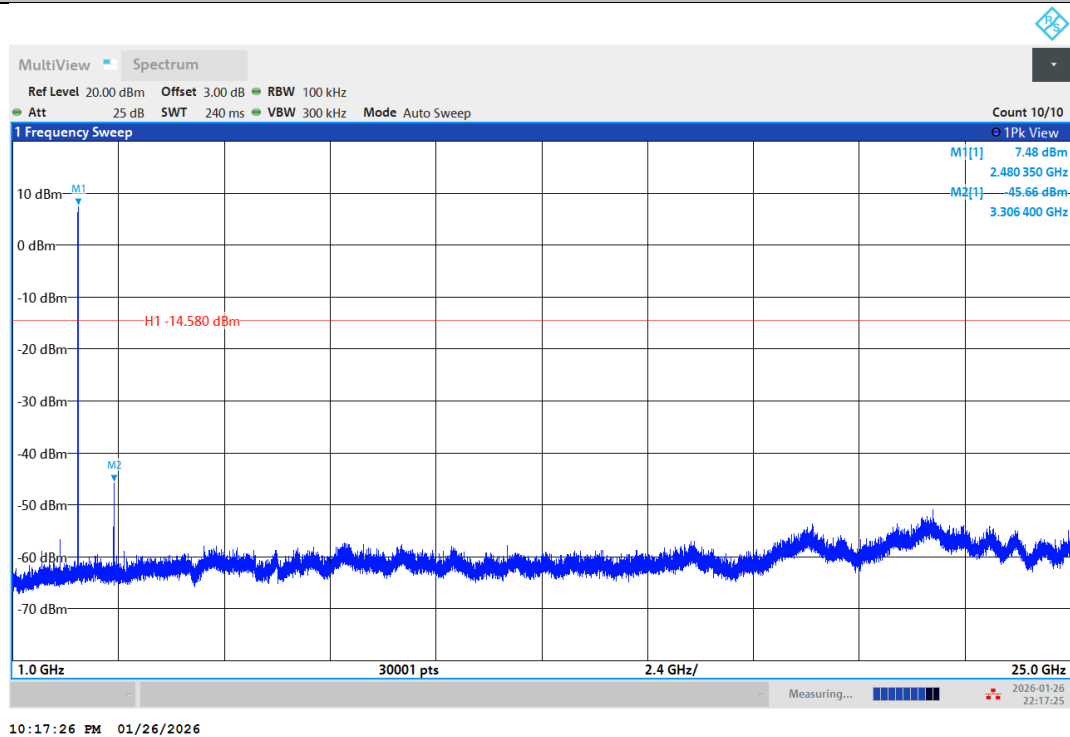
BLE_2M-Ant1-2440-30~1000-PASS



BLE_2M-Ant1-2440-1000~25000-PASS



BLE_2M-Ant1-2480-30~1000-PASS



BLE_2M-Ant1-2480-1000~25000-PASS

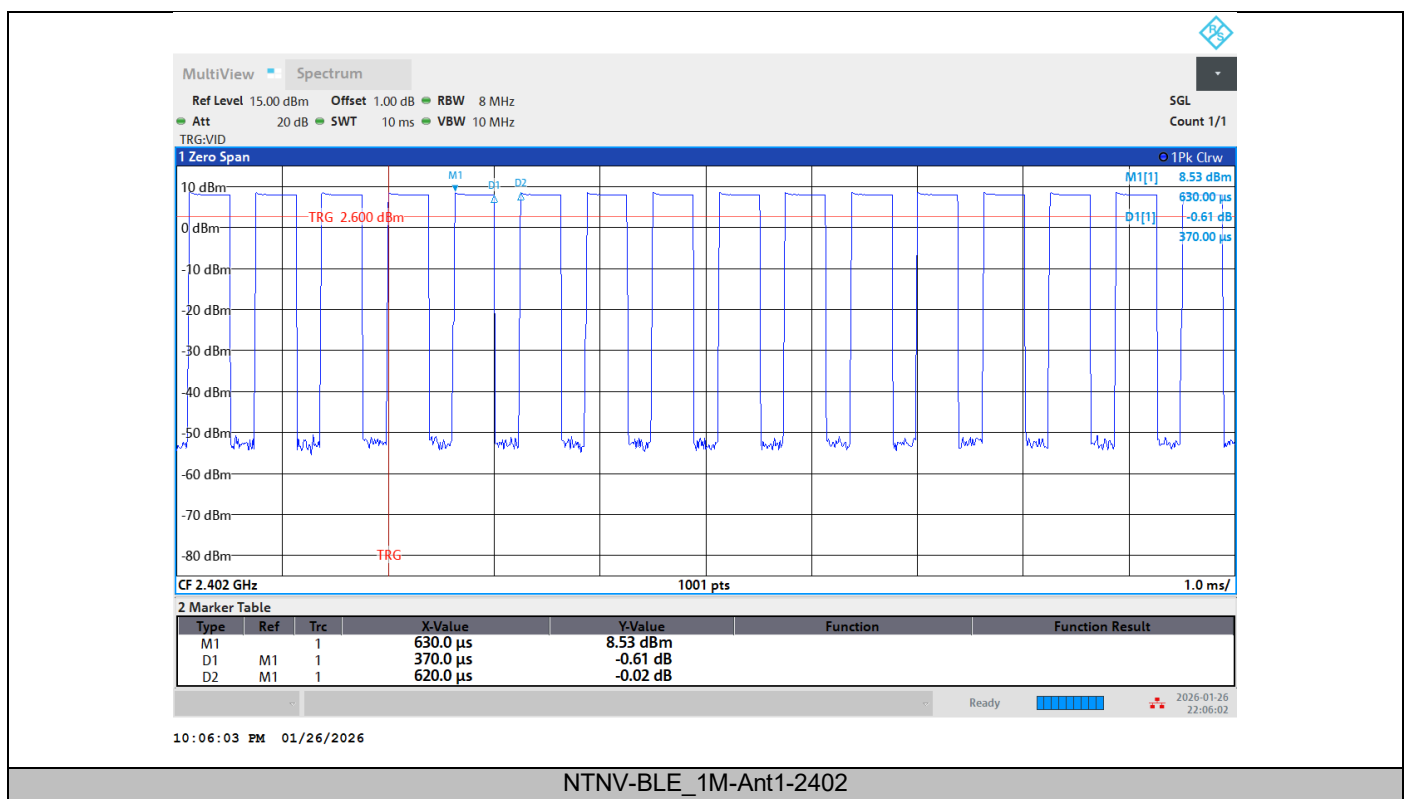
Notes:

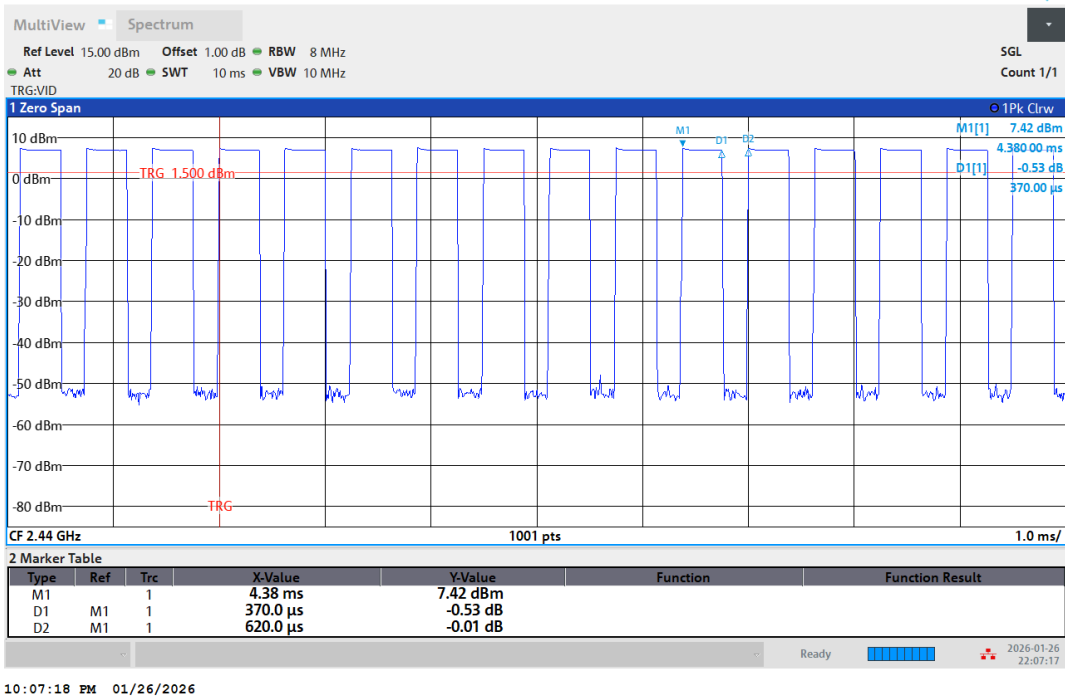
1. Offset = Cable loss

Duty cycle

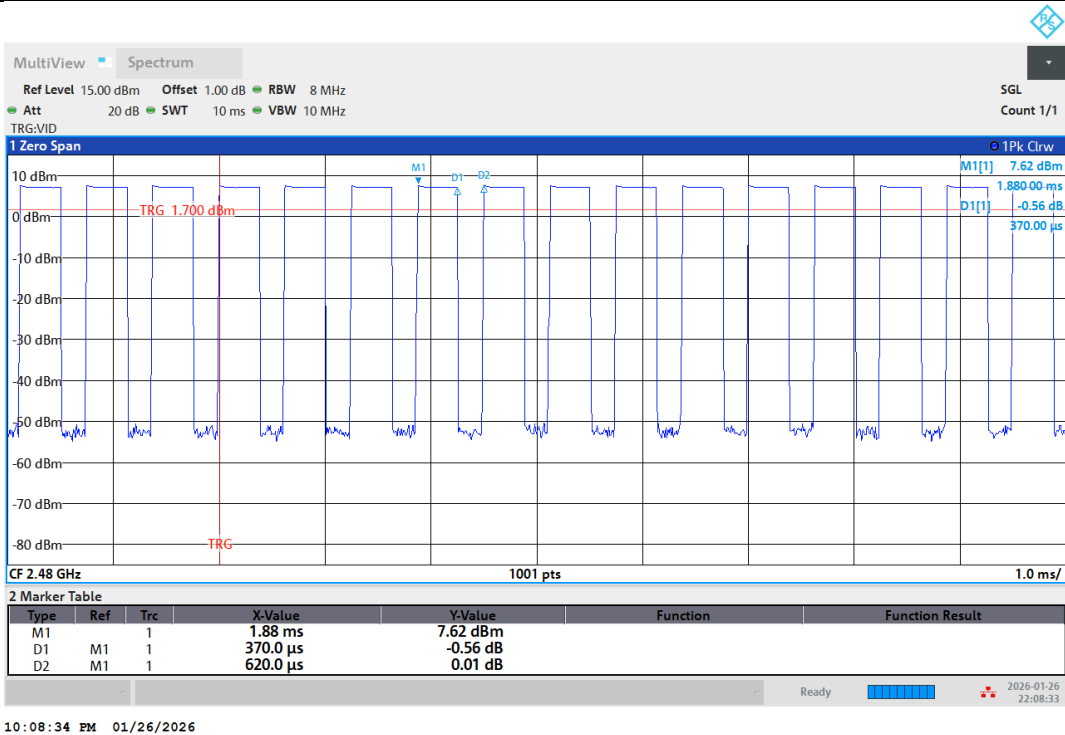
TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.37	0.62	59.68	2.24
		2440	0.37	0.62	59.68	2.24
		2480	0.37	0.62	59.68	2.24
BLE_2M	Ant1	2402	0.19	0.63	30.16	5.21
		2440	0.19	0.63	30.16	5.21
		2480	0.19	0.63	30.16	5.21

Test Graphs

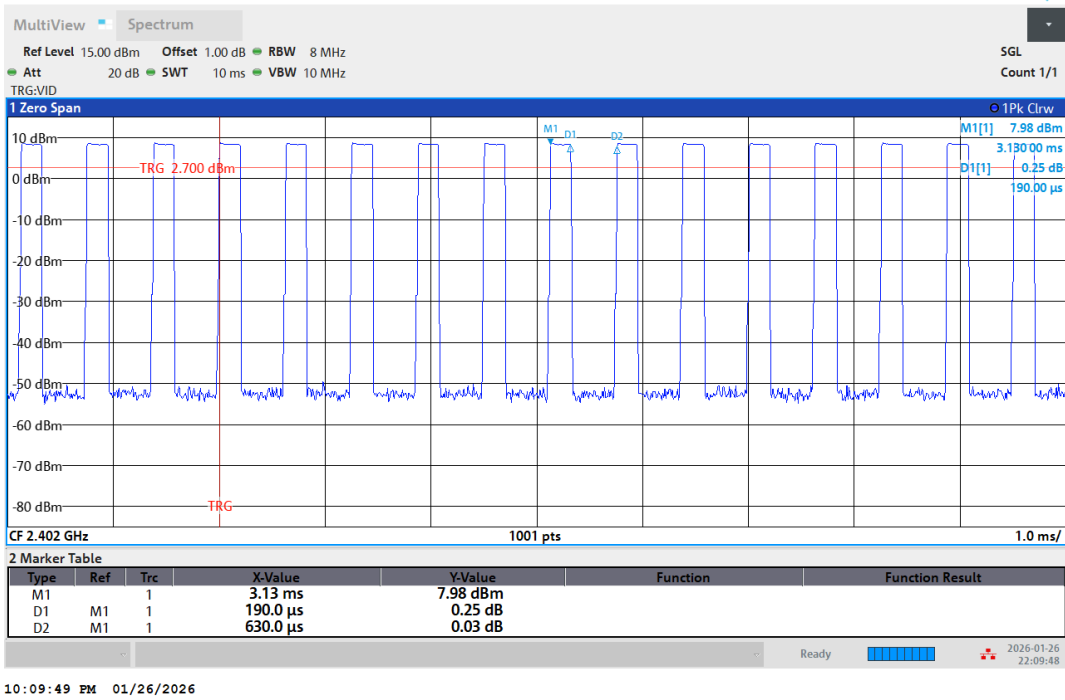




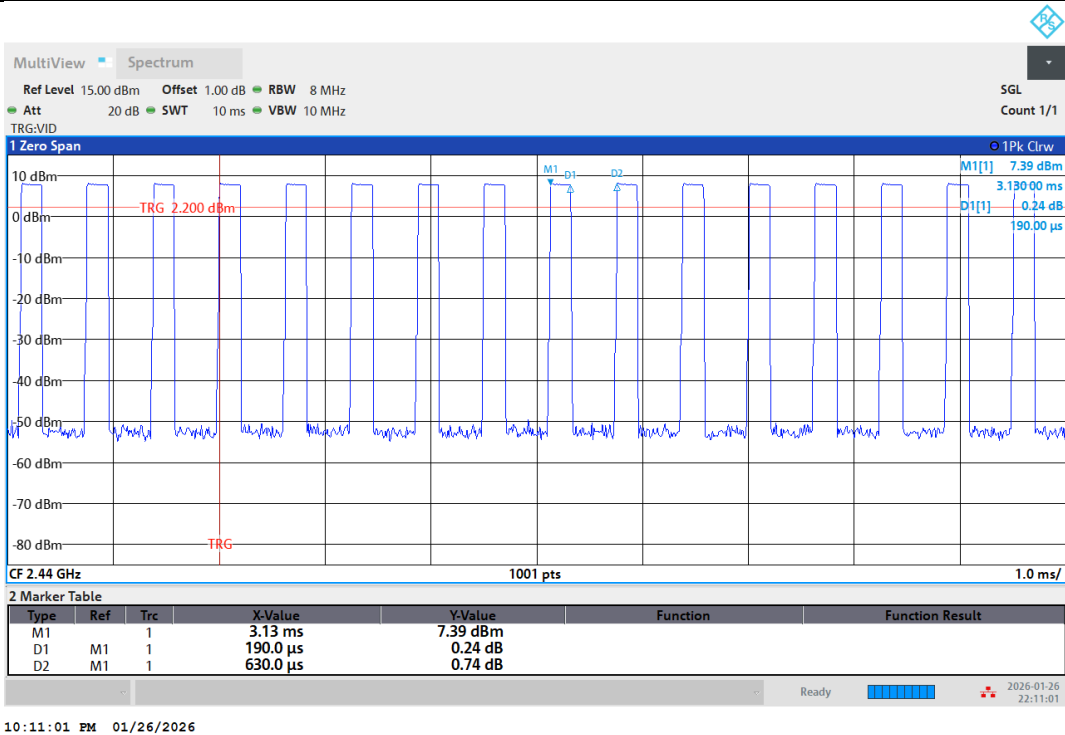
NTNV-BLE_1M-Ant1-2440



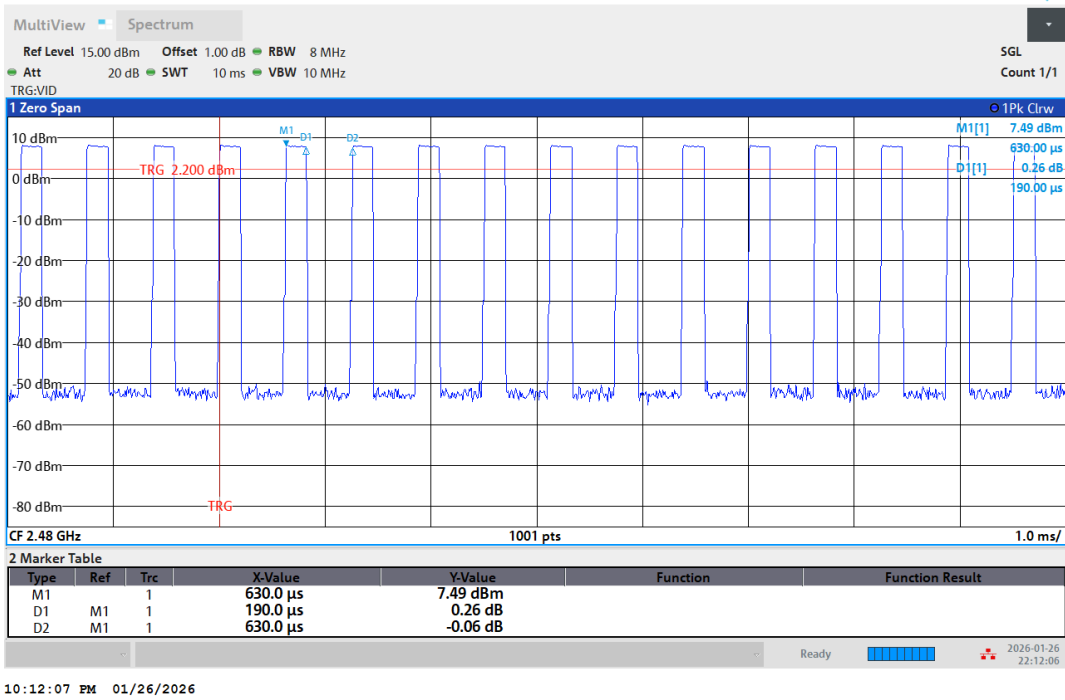
NTNV-BLE_1M-Ant1-2480



NTNV-BLE_2M-Ant1-2402



NTNV-BLE_2M-Ant1-2440

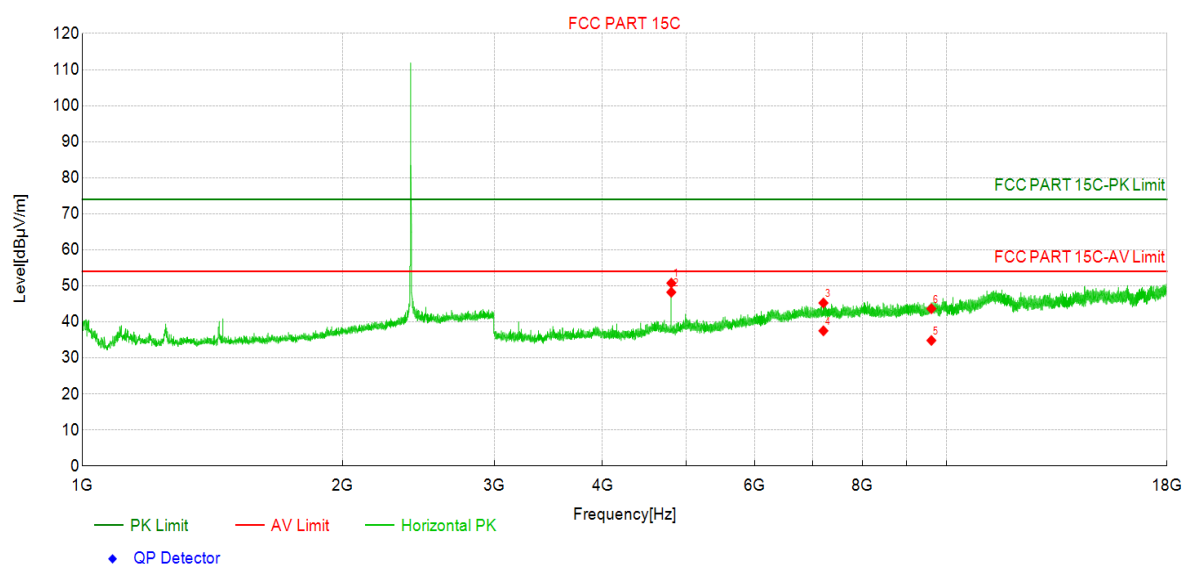


NTNV-BLE_2M-Ant1-2480

Emissions in Restricted Bands

Transmit at 2402MHz by LE_1Mbps

Test Graph

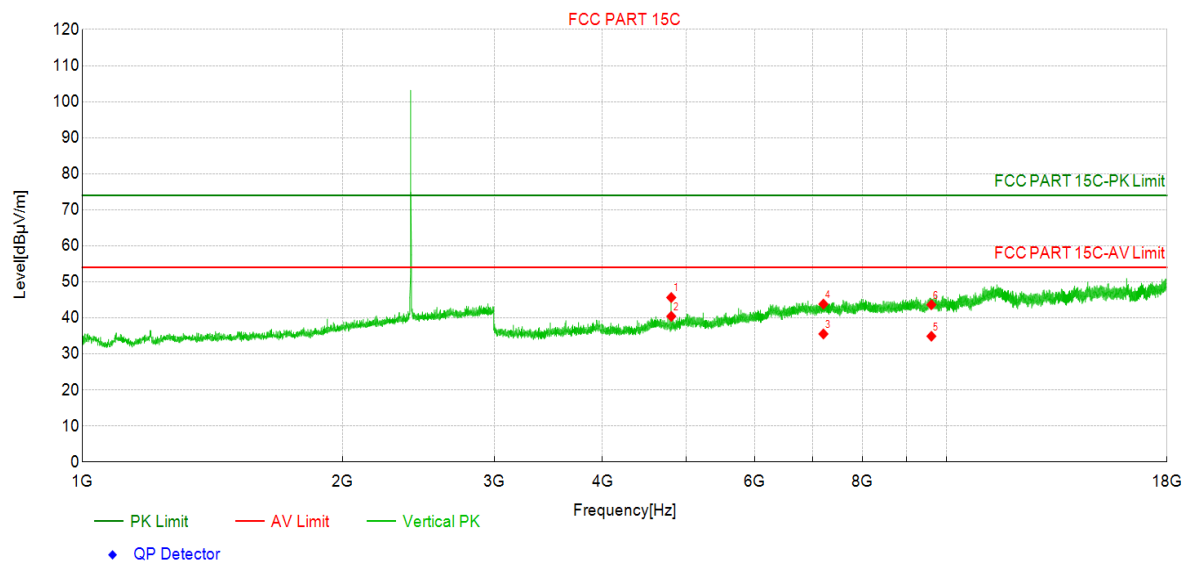


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4804.50	59.7	50.77	-8.960	74.00	23.23	PK	Horizo	PASS
2	4804.50	57.2	48.22	-8.960	54.00	5.78	AV	Horizo	PASS
3	7206.00	47.4	45.26	-2.130	74.00	28.74	PK	Horizo	PASS
4	7206.00	39.7	37.52	-2.130	54.00	16.48	AV	Horizo	PASS
5	9608.00	34.1	34.84	0.760	54.00	19.16	AV	Horizo	PASS
6	9608.00	42.9	43.66	0.760	74.00	30.34	PK	Horizo	PASS

Transmit at 2402MHz by LE_1Mbps

Test Graph

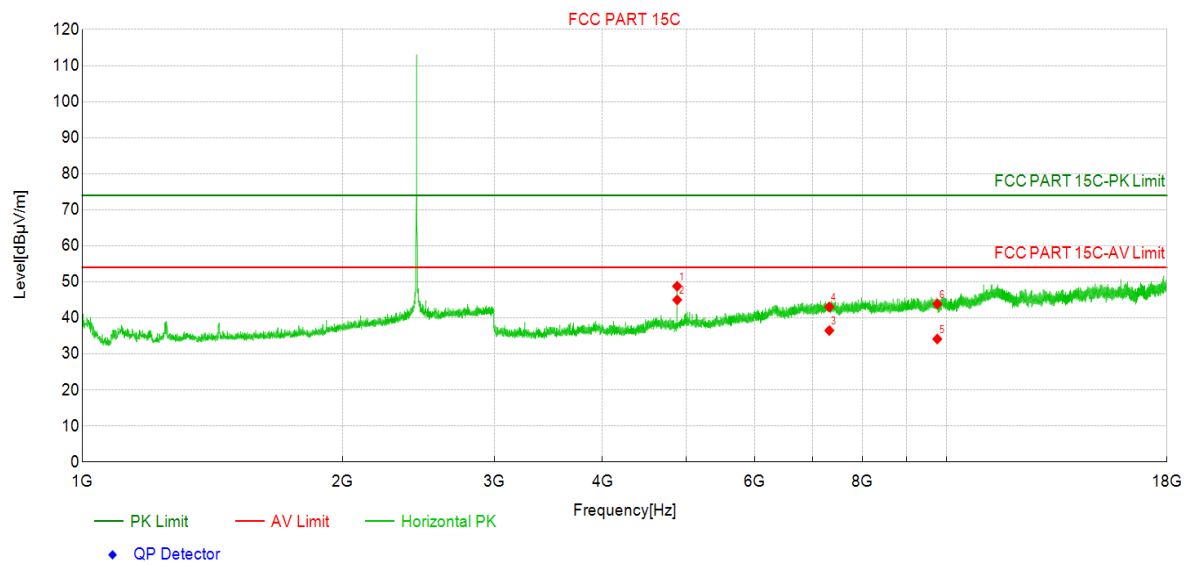


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4803.75	54.6	45.65	-8.960	74.00	28.35	PK	Vertic	PASS
2	4804.50	49.4	40.43	-8.960	54.00	13.57	AV	Vertic	PASS
3	7206.00	37.7	35.55	-2.130	54.00	18.45	AV	Vertic	PASS
4	7206.00	46.0	43.83	-2.130	74.00	30.17	PK	Vertic	PASS
5	9608.00	34.2	34.91	0.760	54.00	19.09	AV	Vertic	PASS
6	9608.00	42.9	43.65	0.760	74.00	30.35	PK	Vertic	PASS

Transmit at 2440MHz by LE_1Mbps

Test Graph

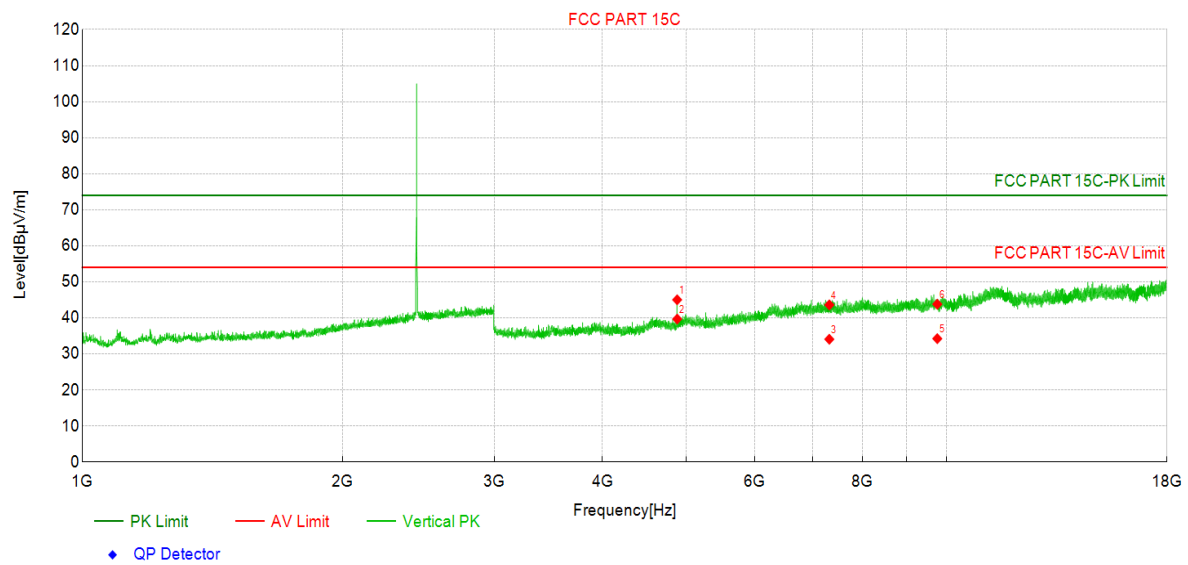


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4880.25	57.4	48.78	-8.590	74.00	25.22	PK	Horizo	PASS
2	4880.25	53.6	45.00	-8.590	54.00	9.00	AV	Horizo	PASS
3	7320.00	38.4	36.49	-1.890	54.00	17.51	AV	Horizo	PASS
4	7320.00	44.9	43.04	-1.890	74.00	30.96	PK	Horizo	PASS
5	9760.00	33.3	34.14	0.830	54.00	19.86	AV	Horizo	PASS
6	9760.00	43.0	43.87	0.830	74.00	30.13	PK	Horizo	PASS

Transmit at 2440MHz by LE_1Mbps

Test Graph

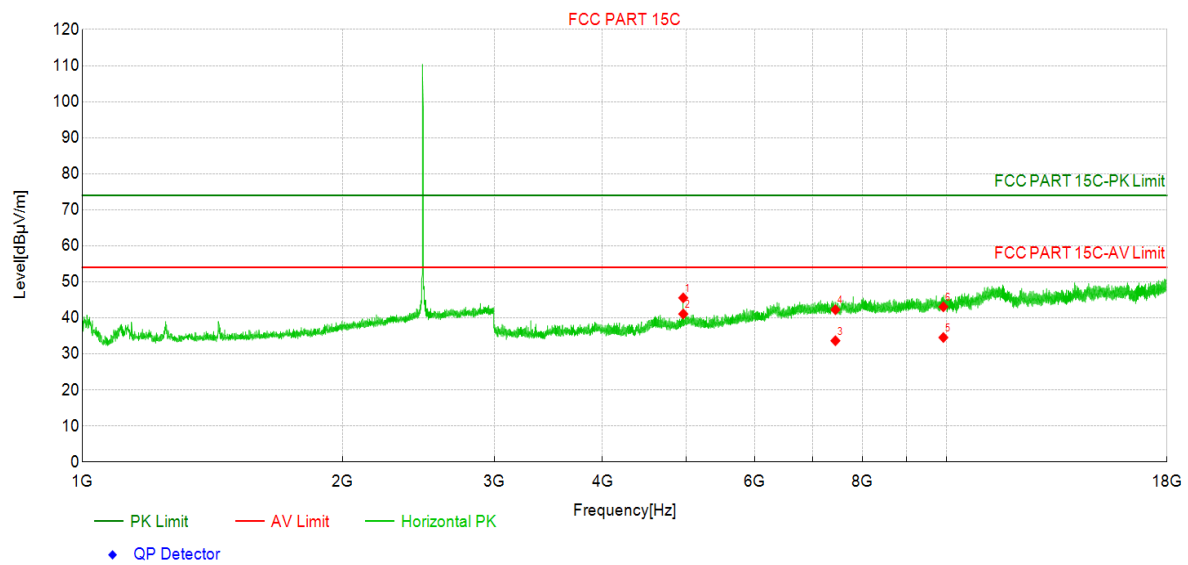


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4880.25	53.6	45.03	-8.590	74.00	28.97	PK	Vertic	PASS
2	4881.00	48.3	39.69	-8.580	54.00	14.31	AV	Vertic	PASS
3	7320.00	36.0	34.07	-1.890	54.00	19.93	AV	Vertic	PASS
4	7320.00	45.5	43.61	-1.890	74.00	30.39	PK	Vertic	PASS
5	9760.00	33.4	34.24	0.830	54.00	19.76	AV	Vertic	PASS
6	9760.00	43.0	43.80	0.830	74.00	30.20	PK	Vertic	PASS

Transmit at 2480MHz by LE_1Mbps

Test Graph

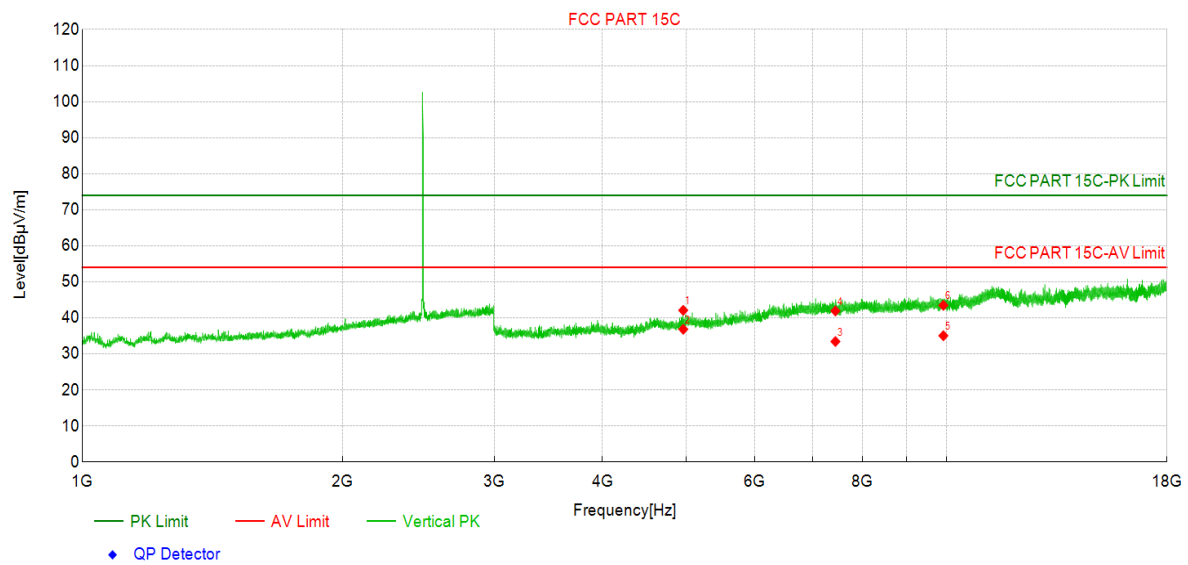


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4959.75	53.8	45.56	-8.250	74.00	28.44	PK	Horizo	PASS
2	4960.50	49.3	41.09	-8.250	54.00	12.91	AV	Horizo	PASS
3	7440.00	35.3	33.65	-1.690	54.00	20.35	AV	Horizo	PASS
4	7440.00	44.0	42.27	-1.690	74.00	31.73	PK	Horizo	PASS
5	9920.00	32.9	34.56	1.690	54.00	19.44	AV	Horizo	PASS
6	9920.00	41.4	43.08	1.690	74.00	30.92	PK	Horizo	PASS

Transmit at 2480MHz by LE_1Mbps

Test Graph

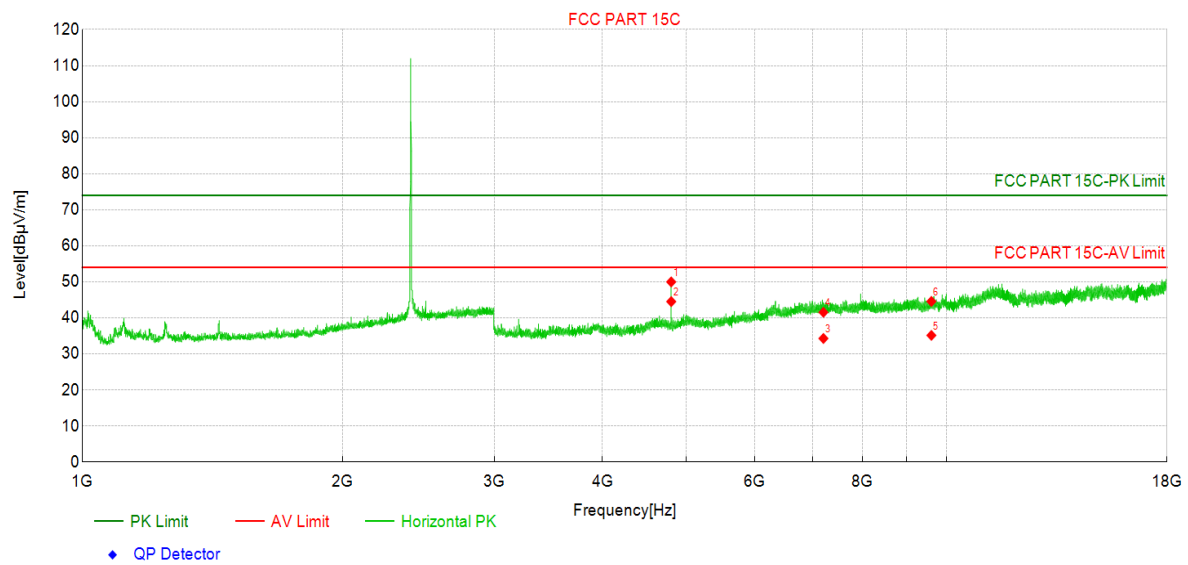


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4959.75	50.4	42.10	-8.250	74.00	31.90	PK	Vertic	PASS
2	4960.50	45.1	36.86	-8.250	54.00	17.14	AV	Vertic	PASS
3	7440.00	35.1	33.44	-1.690	54.00	20.56	AV	Vertic	PASS
4	7440.00	43.6	41.92	-1.690	74.00	32.08	PK	Vertic	PASS
5	9920.00	33.4	35.06	1.690	54.00	18.94	AV	Vertic	PASS
6	9920.00	41.8	43.49	1.690	74.00	30.51	PK	Vertic	PASS

Transmit at 2402MHz by LE_2Mbps

Test Graph

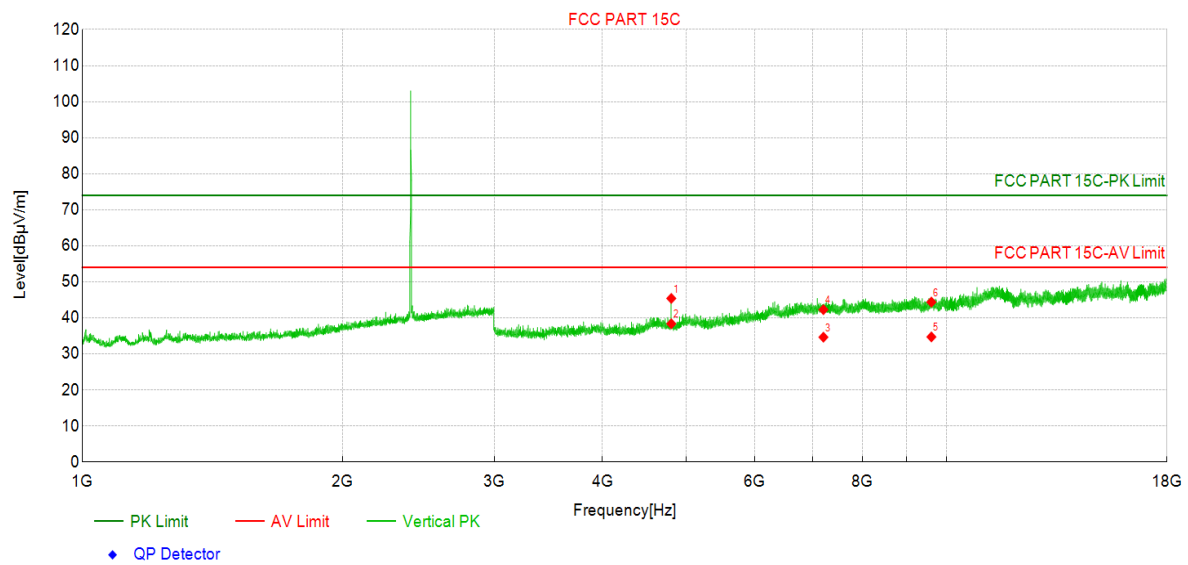


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4803.00	59.0	49.99	-8.970	74.00	24.01	PK	Horizo	PASS
2	4803.75	53.5	44.53	-8.960	54.00	9.47	AV	Horizo	PASS
3	7206.00	36.4	34.30	-2.130	54.00	19.70	AV	Horizo	PASS
4	7206.00	43.7	41.55	-2.130	74.00	32.45	PK	Horizo	PASS
5	9608.00	34.4	35.15	0.760	54.00	18.85	AV	Horizo	PASS
6	9608.00	43.8	44.57	0.760	74.00	29.43	PK	Horizo	PASS

Transmit at 2402MHz by LE_2Mbps

Test Graph

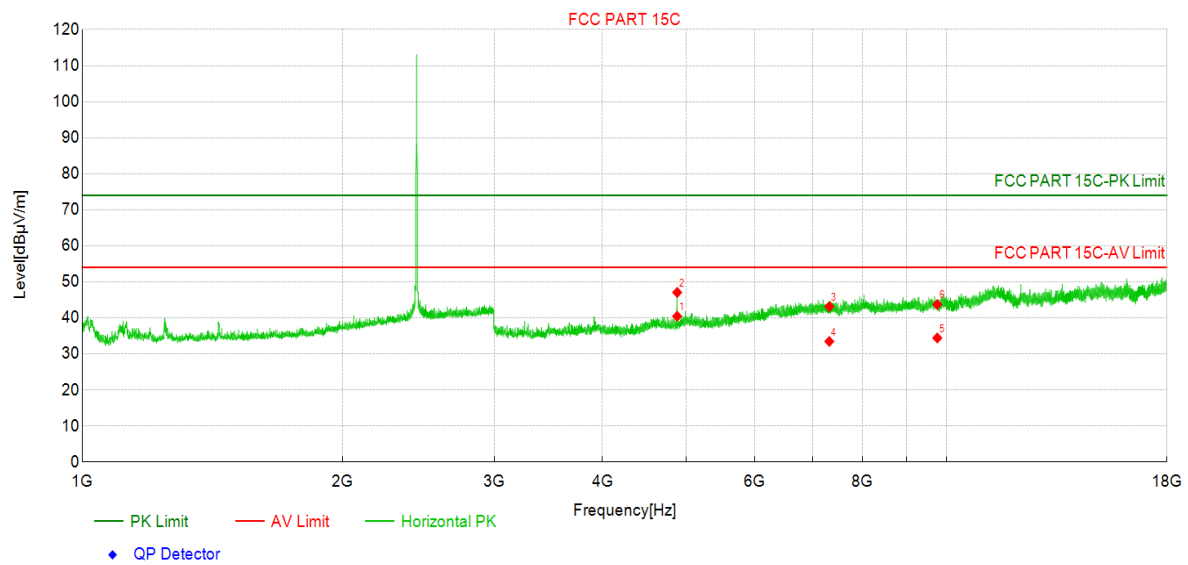


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4804.50	54.4	45.40	-8.960	74.00	28.60	PK	Vertic	PASS
2	4804.50	47.3	38.38	-8.960	54.00	15.62	AV	Vertic	PASS
3	7206.00	36.8	34.64	-2.130	54.00	19.36	AV	Vertic	PASS
4	7206.00	44.4	42.29	-2.130	74.00	31.71	PK	Vertic	PASS
5	9608.00	34.0	34.72	0.760	54.00	19.28	AV	Vertic	PASS
6	9608.00	43.6	44.38	0.760	74.00	29.62	PK	Vertic	PASS

Transmit at 2440MHz by LE_2Mbps

Test Graph

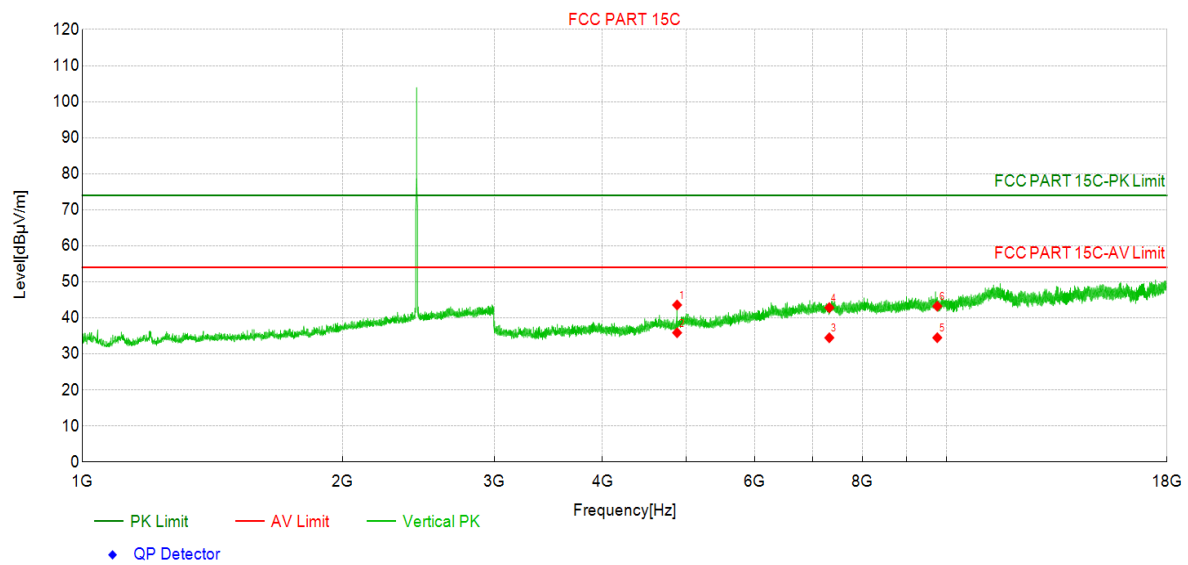


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4880.25	49.0	40.44	-8.590	54.00	13.56	AV	Horizo	PASS
2	4881.00	55.7	47.07	-8.580	74.00	26.93	PK	Horizo	PASS
3	7320.00	45.0	43.15	-1.890	74.00	30.85	PK	Horizo	PASS
4	7320.00	35.4	33.47	-1.890	54.00	20.53	AV	Horizo	PASS
5	9760.00	33.6	34.43	0.830	54.00	19.57	AV	Horizo	PASS
6	9760.00	42.9	43.72	0.830	74.00	30.28	PK	Horizo	PASS

Transmit at 2440MHz by LE_2Mbps

Test Graph

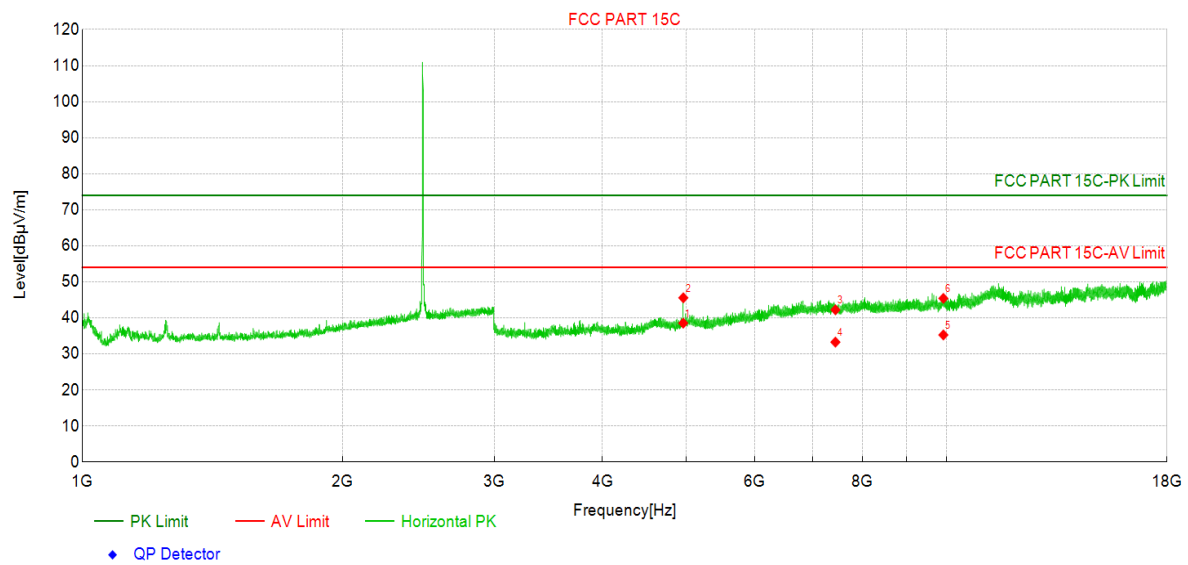


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4879.50	52.2	43.58	-8.600	74.00	30.42	PK	Vertic	PASS
2	4879.50	44.5	35.88	-8.600	54.00	18.12	AV	Vertic	PASS
3	7320.00	36.4	34.49	-1.890	54.00	19.51	AV	Vertic	PASS
4	7320.00	44.7	42.85	-1.890	74.00	31.15	PK	Vertic	PASS
5	9760.00	33.7	34.50	0.830	54.00	19.50	AV	Vertic	PASS
6	9760.00	42.4	43.24	0.830	74.00	30.76	PK	Vertic	PASS

Transmit at 2480MHz by LE_2Mbps

Test Graph

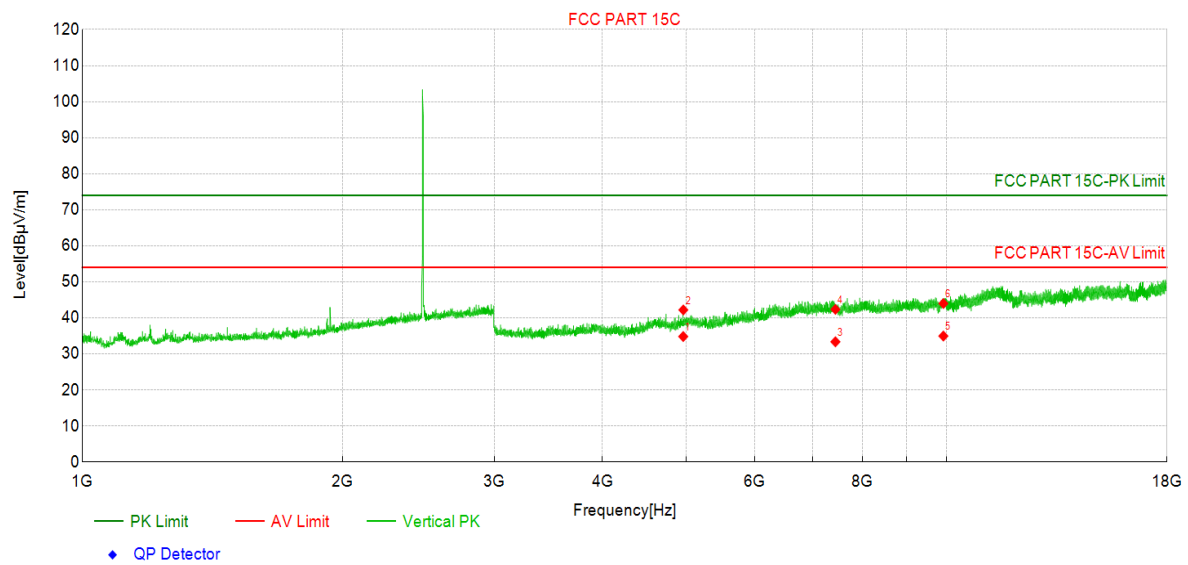


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4959.75	46.8	38.54	-8.250	54.00	15.46	AV	Horizo	PASS
2	4961.25	53.8	45.57	-8.250	74.00	28.43	PK	Horizo	PASS
3	7440.00	43.9	42.24	-1.690	74.00	31.76	PK	Horizo	PASS
4	7440.00	35.0	33.28	-1.690	54.00	20.72	AV	Horizo	PASS
5	9920.00	33.6	35.27	1.690	54.00	18.73	AV	Horizo	PASS
6	9920.00	43.7	45.42	1.690	74.00	28.58	PK	Horizo	PASS

Transmit at 2480MHz by LE_2Mbps

Test Graph

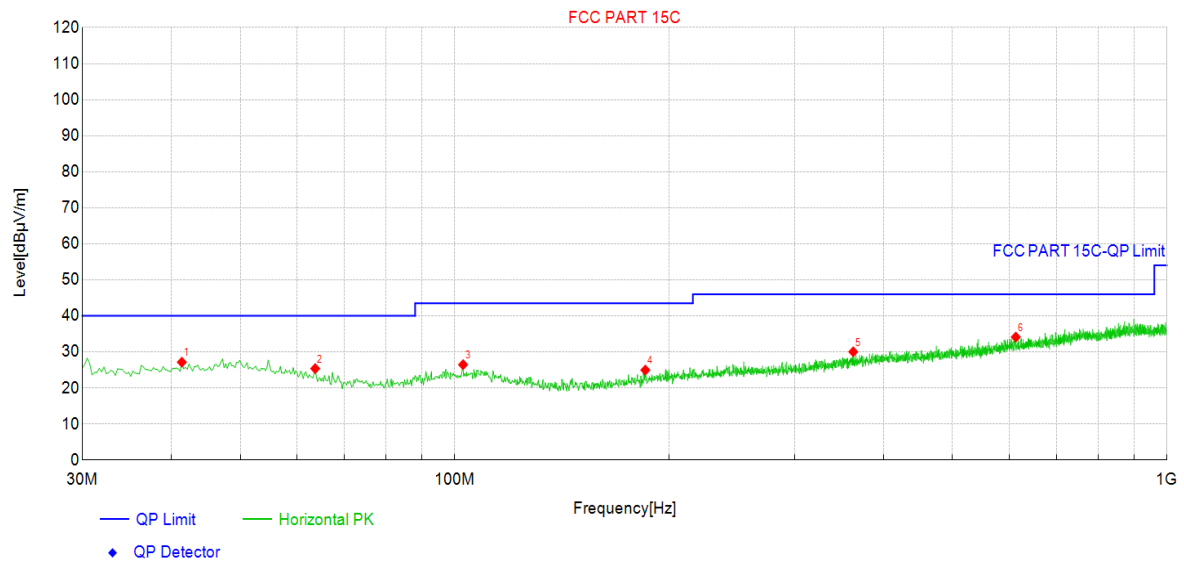


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4959.75	43.1	34.83	-8.250	54.00	19.17	AV	Vertic	PASS
2	4961.25	50.5	42.21	-8.250	74.00	31.79	PK	Vertic	PASS
3	7440.00	35.1	33.37	-1.690	54.00	20.63	AV	Vertic	PASS
4	7440.00	44.1	42.36	-1.690	74.00	31.64	PK	Vertic	PASS
5	9920.00	33.3	34.96	1.690	54.00	19.04	AV	Vertic	PASS
6	9920.00	42.3	43.99	1.690	74.00	30.01	PK	Vertic	PASS

Transmit at 2480MHz by LE_1Mbps

Test Graph

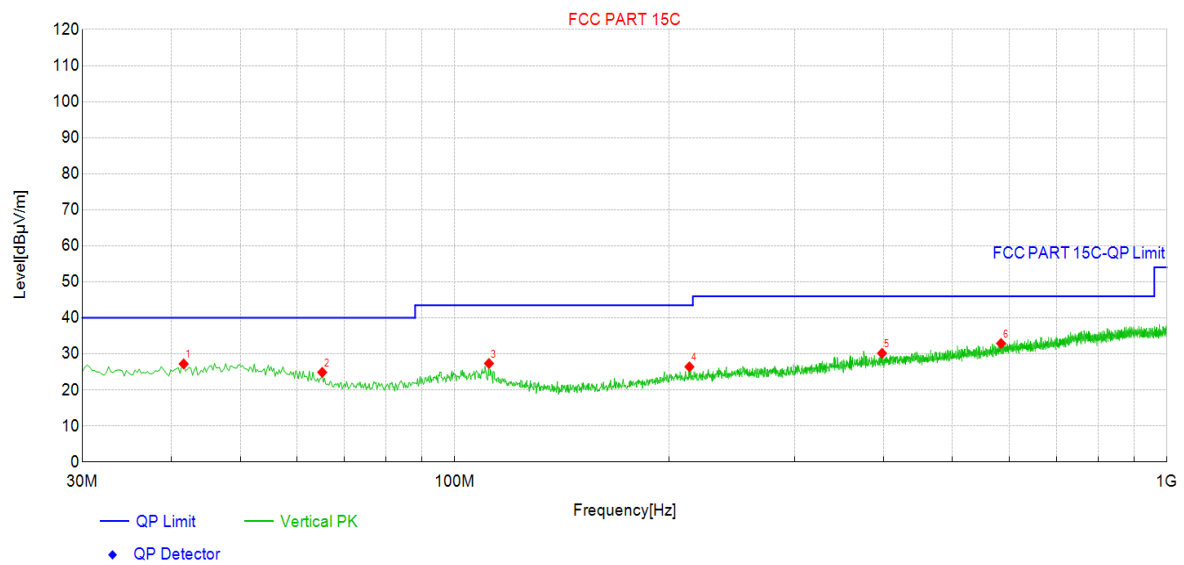


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	41.40	13.1	27.15	14.070	40.00	12.85	PK	Horizo	PASS
2	63.71	13.6	25.37	11.780	40.00	14.63	PK	Horizo	PASS
3	102.75	14.0	26.47	12.460	43.50	17.03	PK	Horizo	PASS
4	185.20	14.2	24.97	10.780	43.50	18.53	PK	Horizo	PASS
5	362.71	14.5	30.03	15.570	46.00	15.97	PK	Horizo	PASS
6	613.46	14.3	34.12	19.810	46.00	11.88	PK	Horizo	PASS

Transmit at 2480MHz by LE_1Mbps

Test Graph

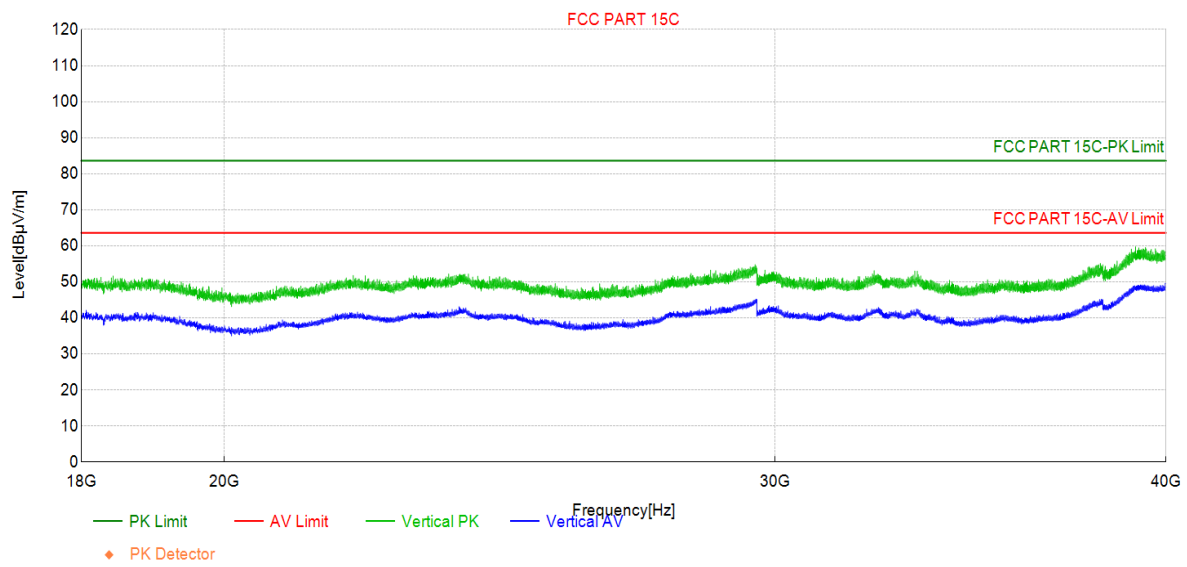


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	41.64	13.1	27.24	14.100	40.00	12.76	PK	Vertic	PASS
2	65.16	13.5	24.89	11.390	40.00	15.11	PK	Vertic	PASS
3	111.72	15.4	27.36	11.990	43.50	16.14	PK	Vertic	PASS
4	213.57	14.3	26.42	12.150	43.50	17.08	PK	Vertic	PASS
5	398.12	14.1	30.18	16.090	46.00	15.82	PK	Vertic	PASS
6	584.84	13.6	32.91	19.340	46.00	13.09	PK	Vertic	PASS

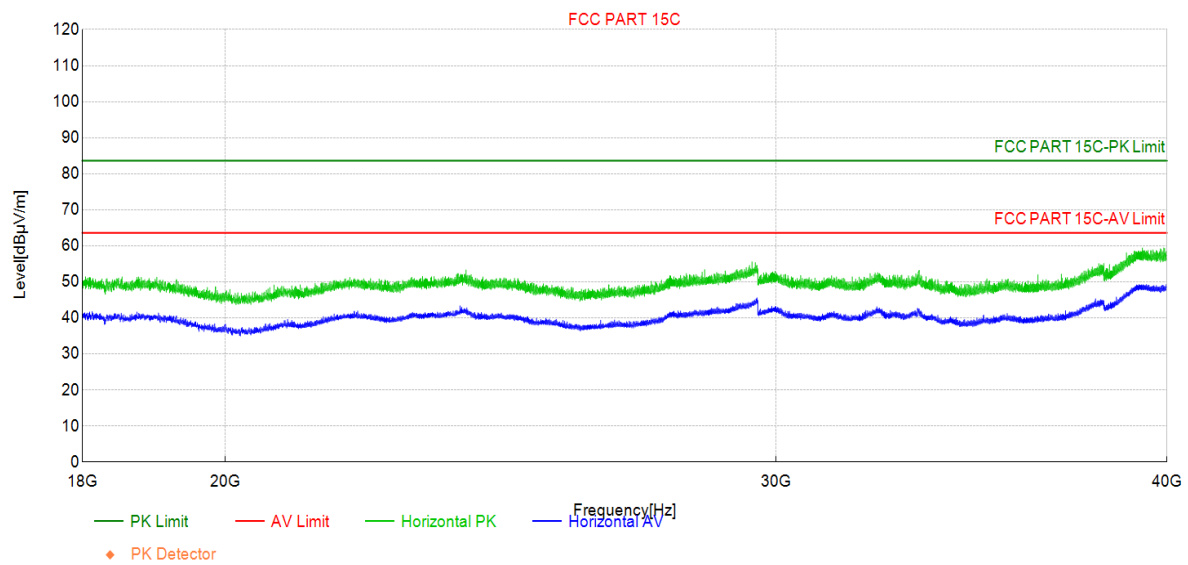
Transmit at 2402MHz by LE_1Mbps

Test Graph



Transmit at 2402MHz by LE_1Mbps

Test Graph



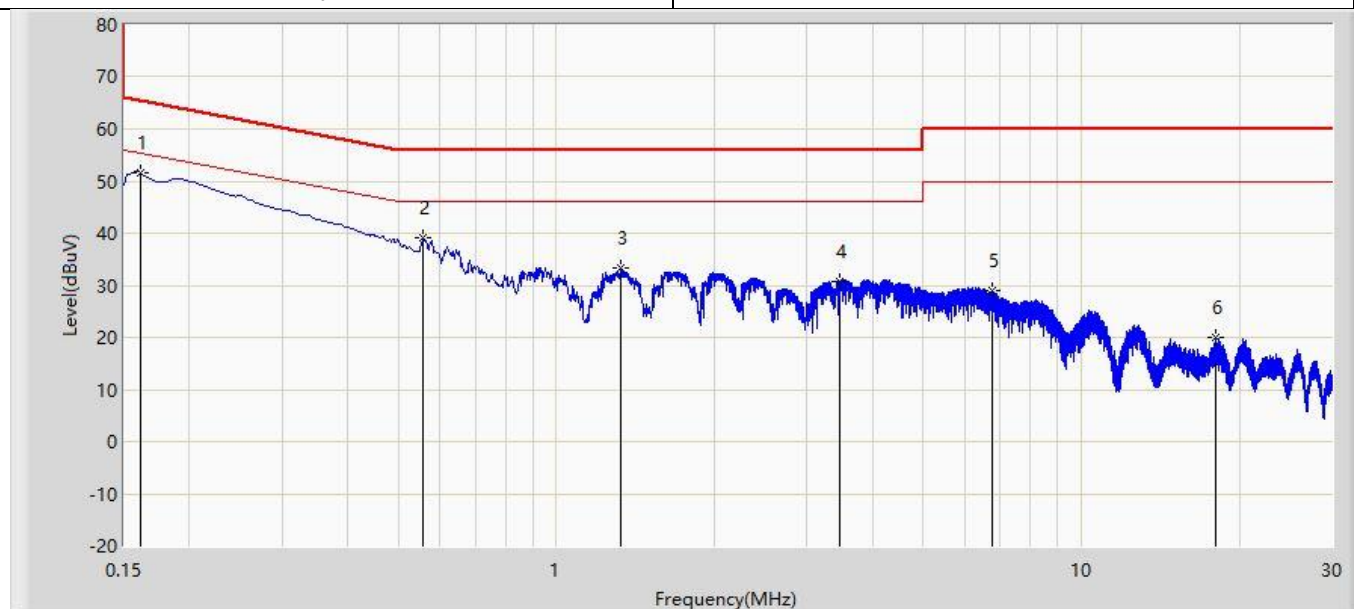
Note: Level = Reading + Factor (Antenna factor + Amplifier factor + Cable loss)

Note: In the report, for the sections below 1G and 18~40G, verification tests were only performed on the worst channel in the worst mode of the 1~18G range.

Note: All test data above 18GHz are noise base, so no data shown in this report.

AC Power Line Conducted Emission

Probe: ENV216_101189(0.009-30MHz)	Polarity: Line
Note: Transmit at 2402MHz by LE_1Mbps	Power: AC 120V/60Hz



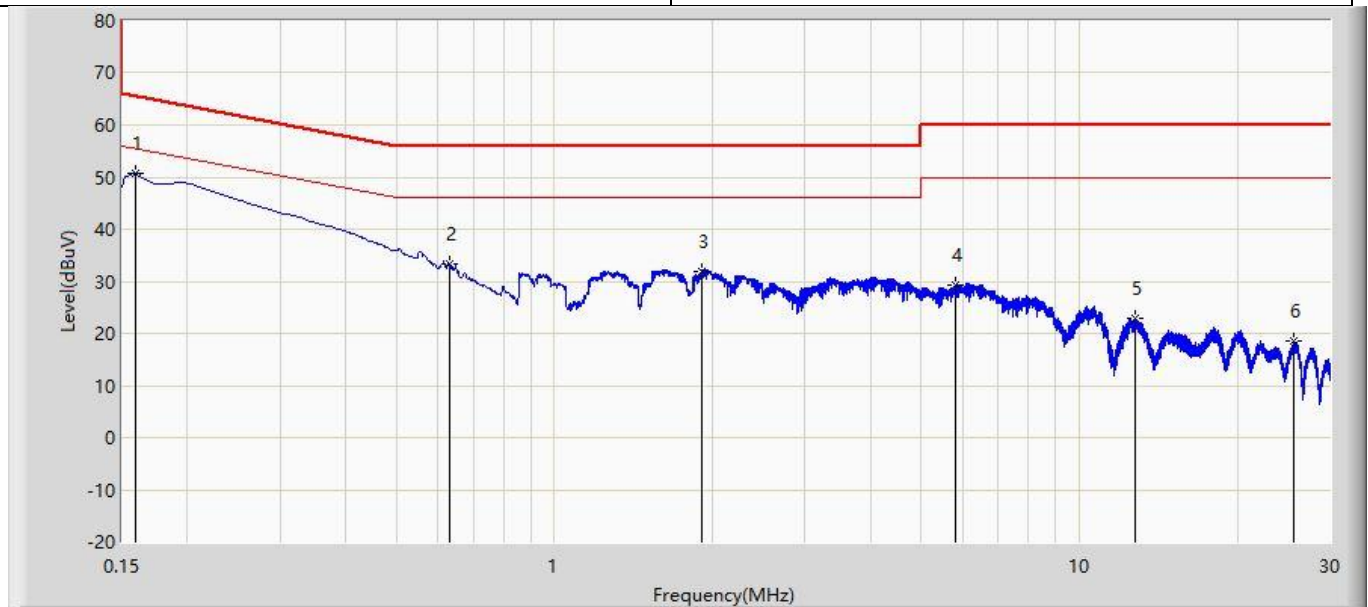
No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.161	51.649	41.982	-13.763	65.412	9.667	QP
2		0.557	39.182	29.491	-16.818	56.000	9.691	QP
3		1.327	33.229	23.507	-22.771	56.000	9.722	QP
4		3.469	30.862	21.062	-25.138	56.000	9.800	QP
5		6.752	28.926	19.067	-31.074	60.000	9.859	QP
6		17.975	20.110	9.746	-39.890	60.000	10.364	QP

Probe: ENV216_101189(0.009-30MHz)

Polarity: Neutral

Note: Transmit at 2402MHz by LE_1Mbps

Power: AC 120V/60Hz



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.159	50.854	41.163	-14.662	65.516	9.691	QP
2		0.632	33.350	23.719	-22.650	56.000	9.631	QP
3		1.903	32.021	22.328	-23.979	56.000	9.693	QP
4		5.811	29.377	19.534	-30.623	60.000	9.843	QP
5		12.741	22.795	12.785	-37.205	60.000	10.010	QP
6		25.636	18.441	7.577	-41.559	60.000	10.864	QP

Note: Level = Reading + Factor (Antenna factor + Amplifier factor + Cable loss)

Variant spot check data

DTS Bandwidth

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.672	2401.656	2402.328	0.5	PASS

Test Graphs

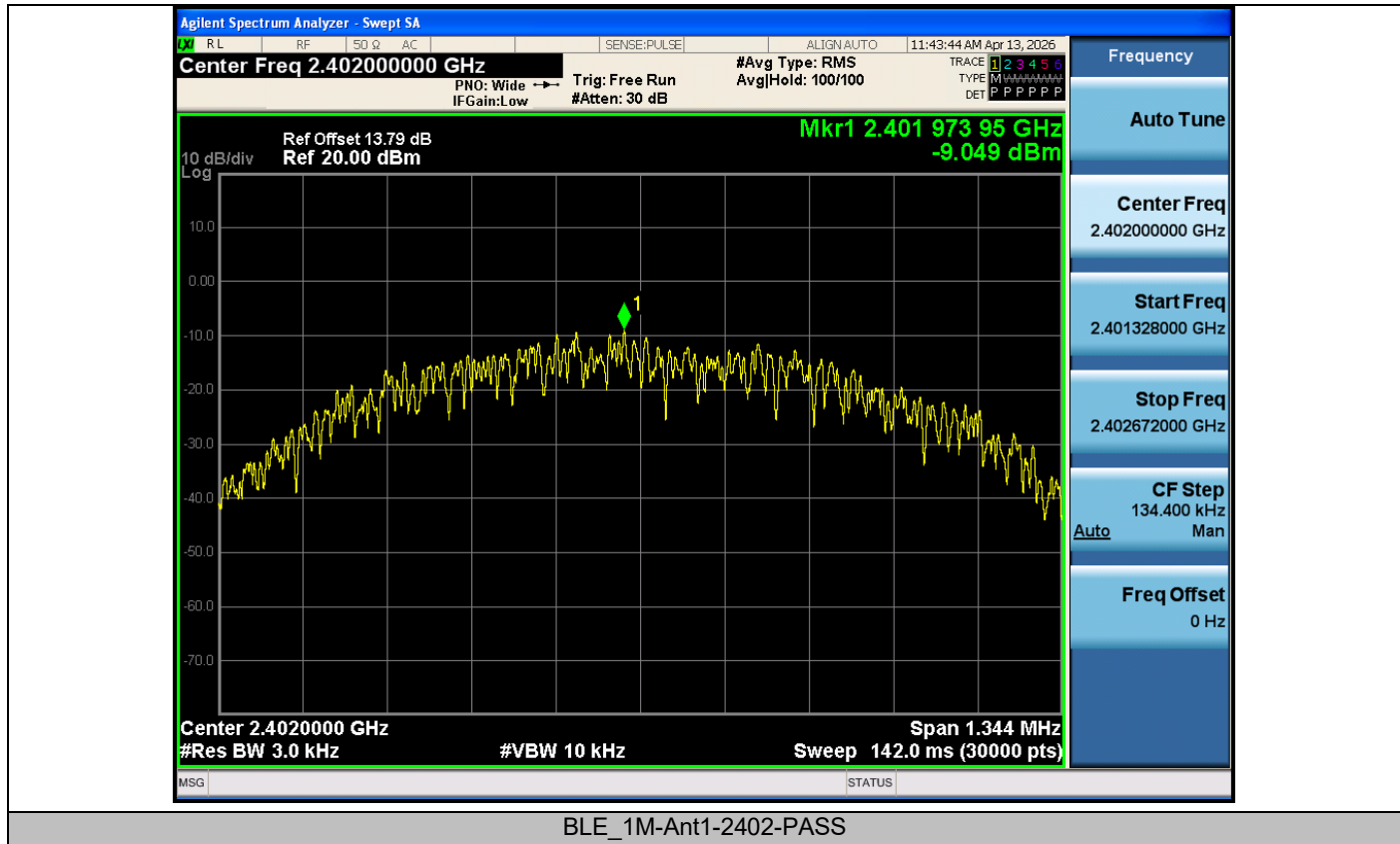


Maximum conducted output power

Bluetooth	Mode	Channel	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)
	BLE 2M	0	2402	5.81	30.00
		19	2442	5.78	30.00
		39	2480	5.95	30.00

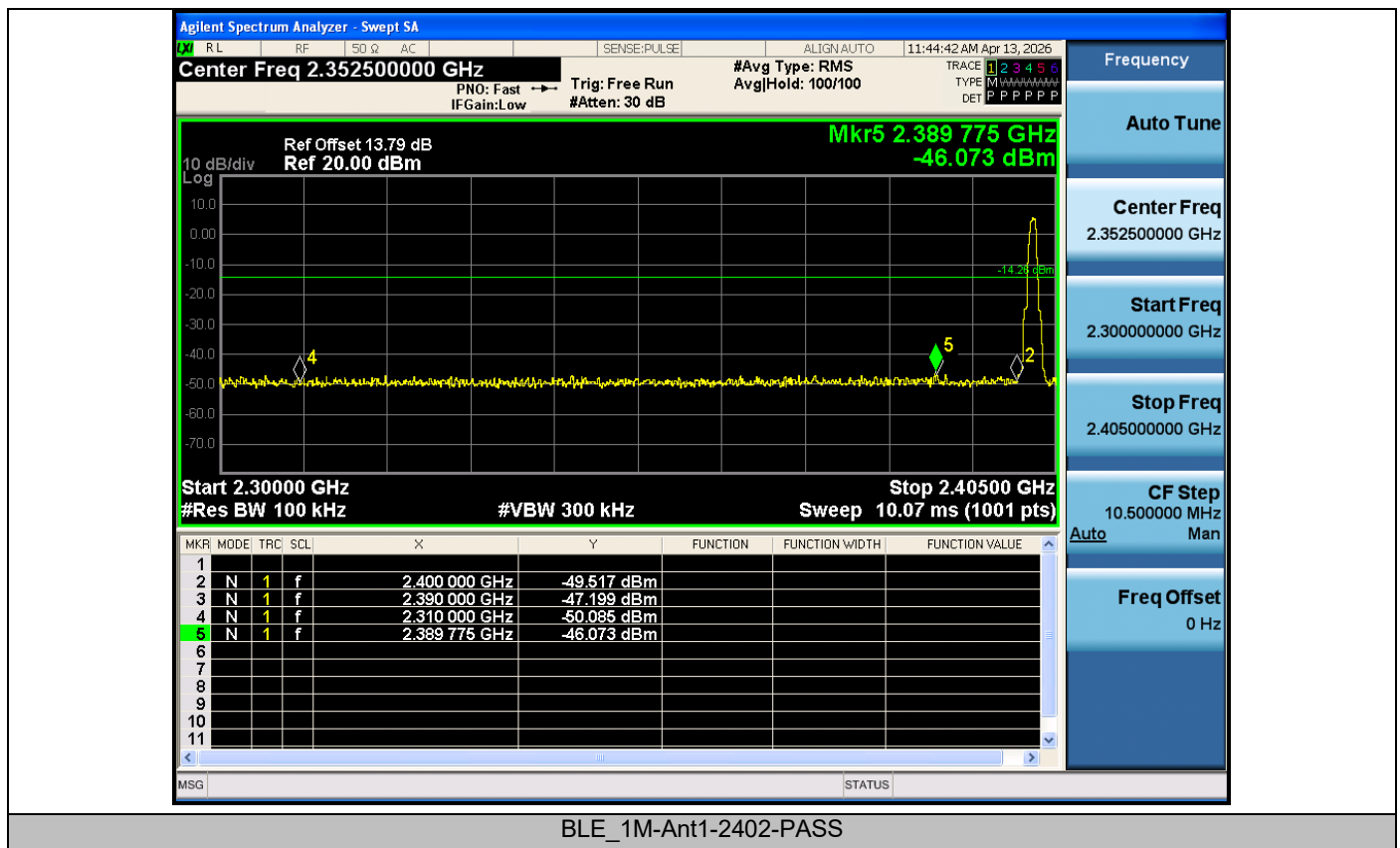
Maximum power spectral density
Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-9.05	≤8.00	PASS

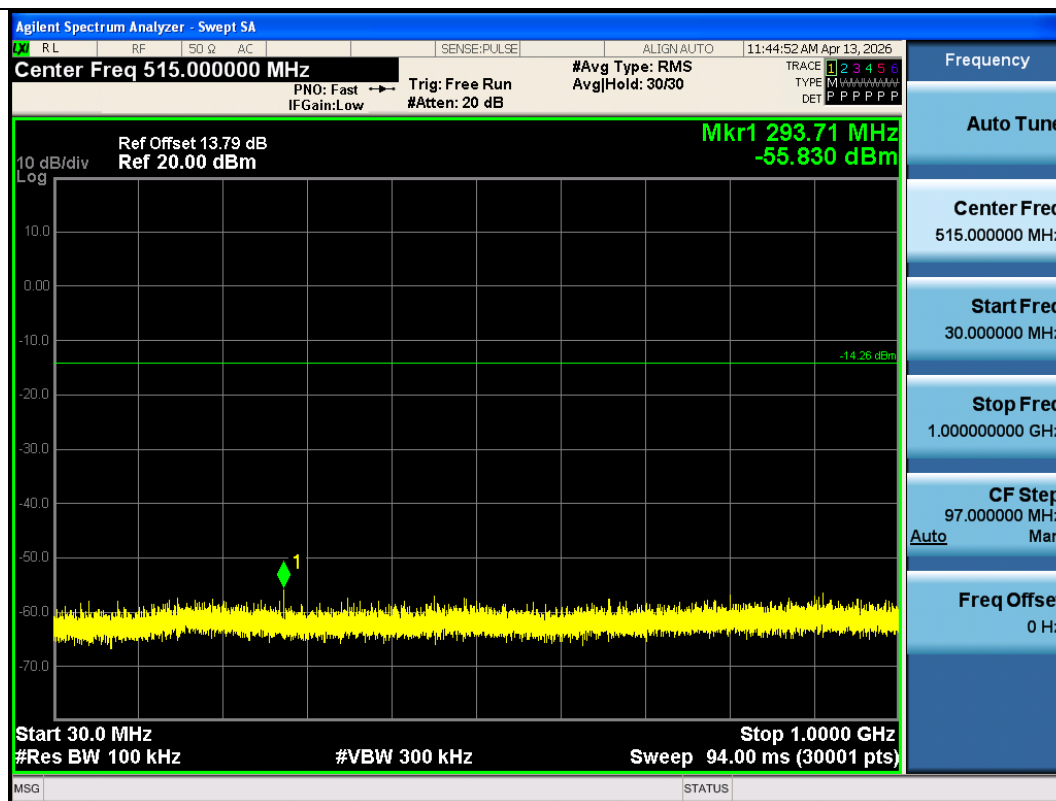
Test Graphs

Conducted Spurious Emission
Reference level measurement
Test Graphs

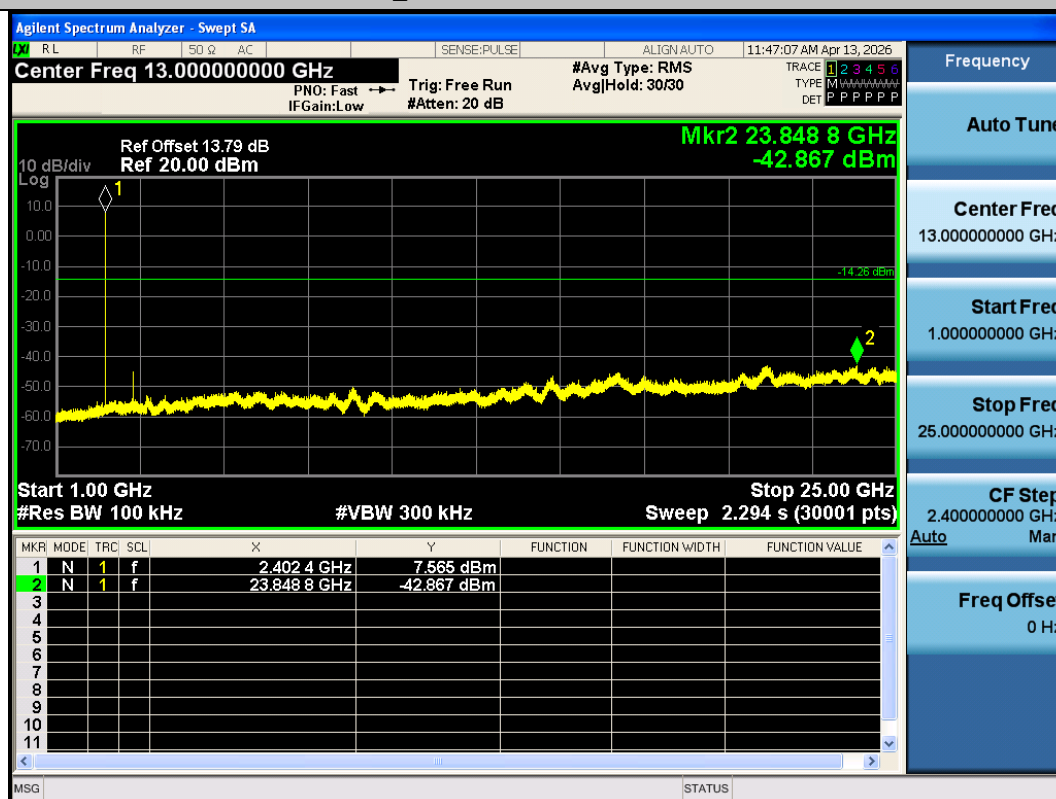


Band edge measurements
Test Graphs

Spurious Emission Test Graphs



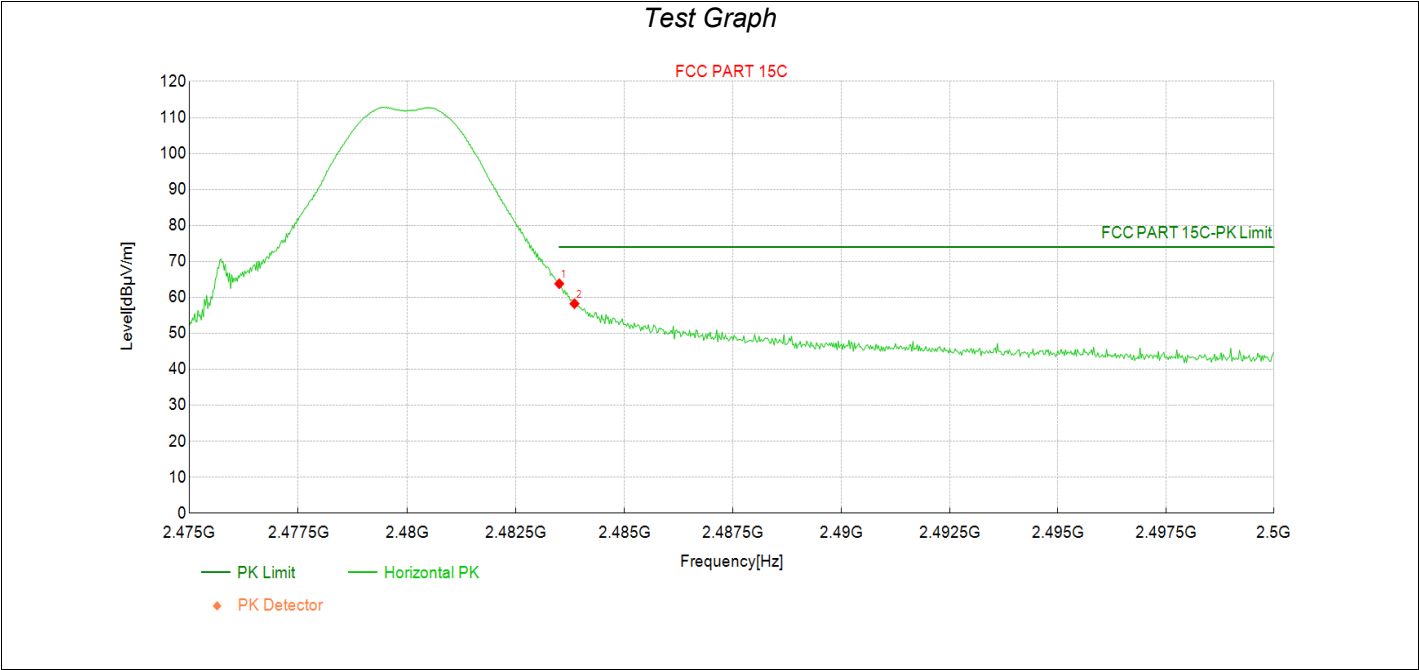
BLE_1M-Ant1-2402-30~1000-PASS



BLE_1M-Ant1-2402-1000~25000-PASS

Band edge measurements

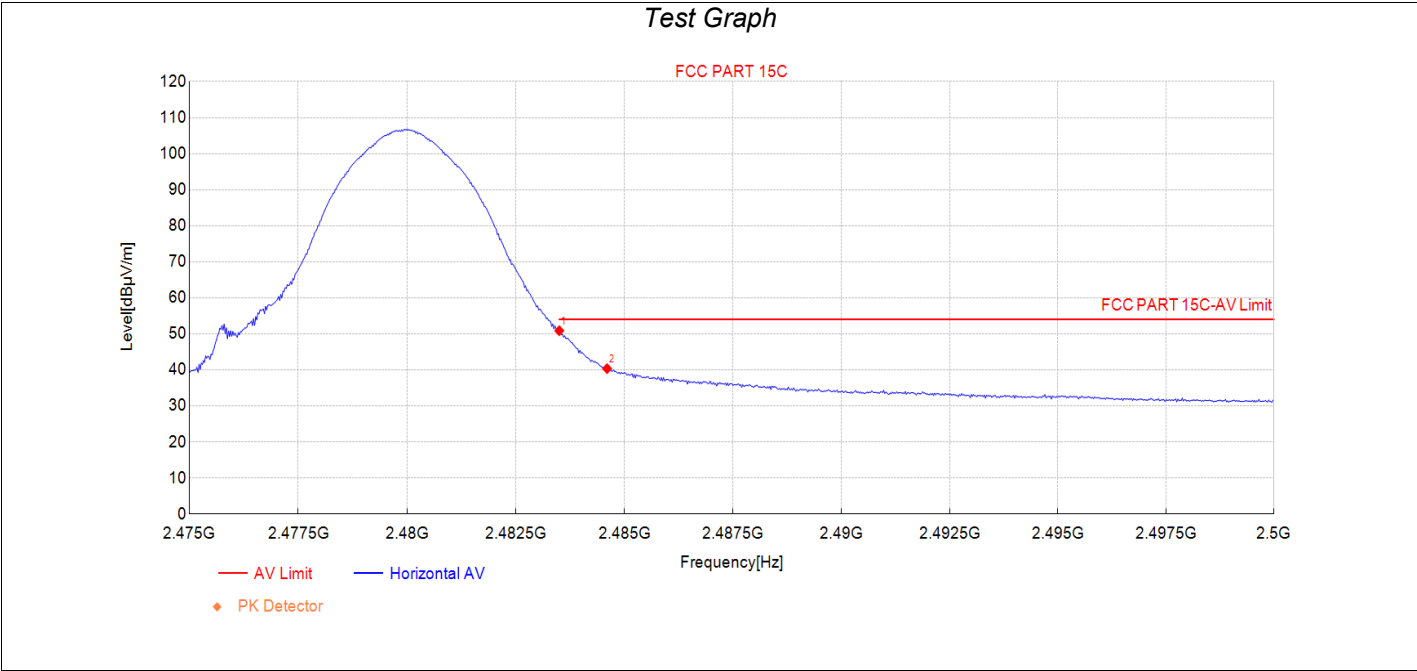
Transmit at 2480MHz by LE_2Mbps



Data List

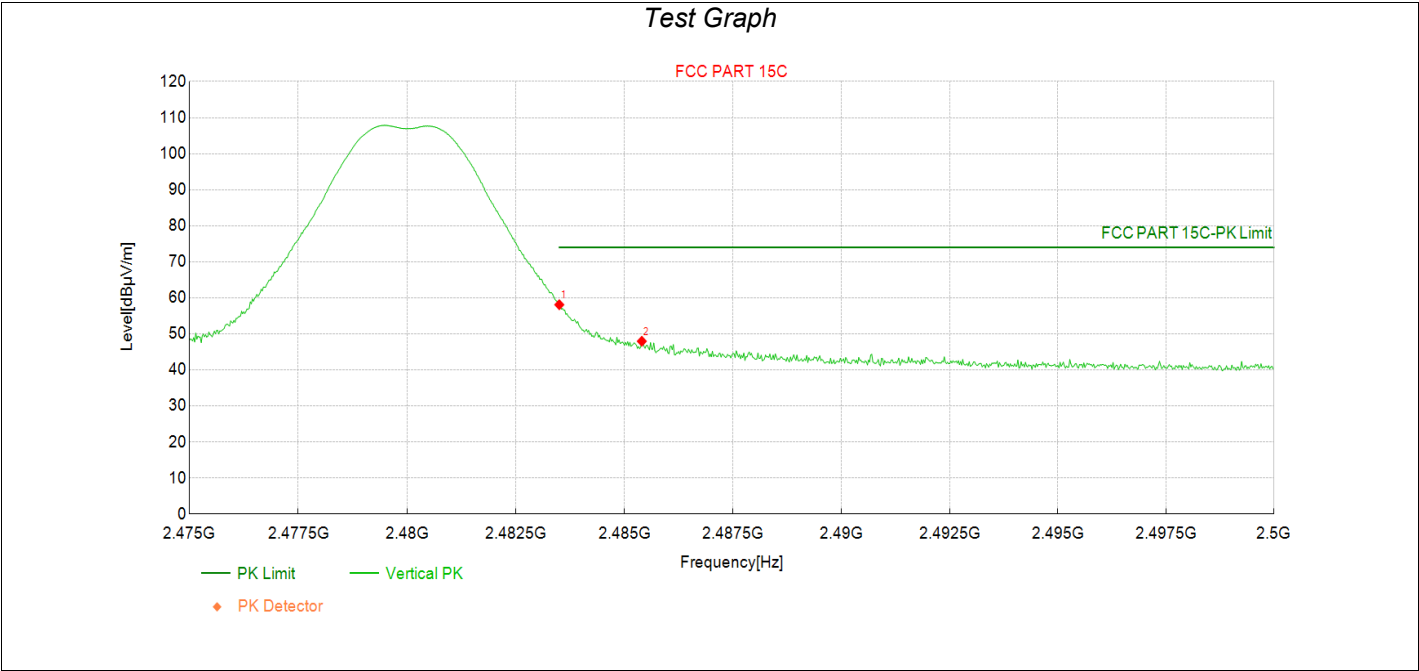
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	63.7	63.79	0.100	74.00	10.21	PK	Horizo	PASS
2	2483.85	58.2	58.25	0.100	74.00	15.75	PK	Horizo	PASS

Transmit at 2480MHz by LE_2Mbps



Data List									
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	50.8	50.88	0.100	54.00	3.12	AV	Horizo	PASS
2	2484.60	40.3	40.36	0.100	54.00	13.64	AV	Horizo	PASS

Transmit at 2480MHz by LE_2Mbps

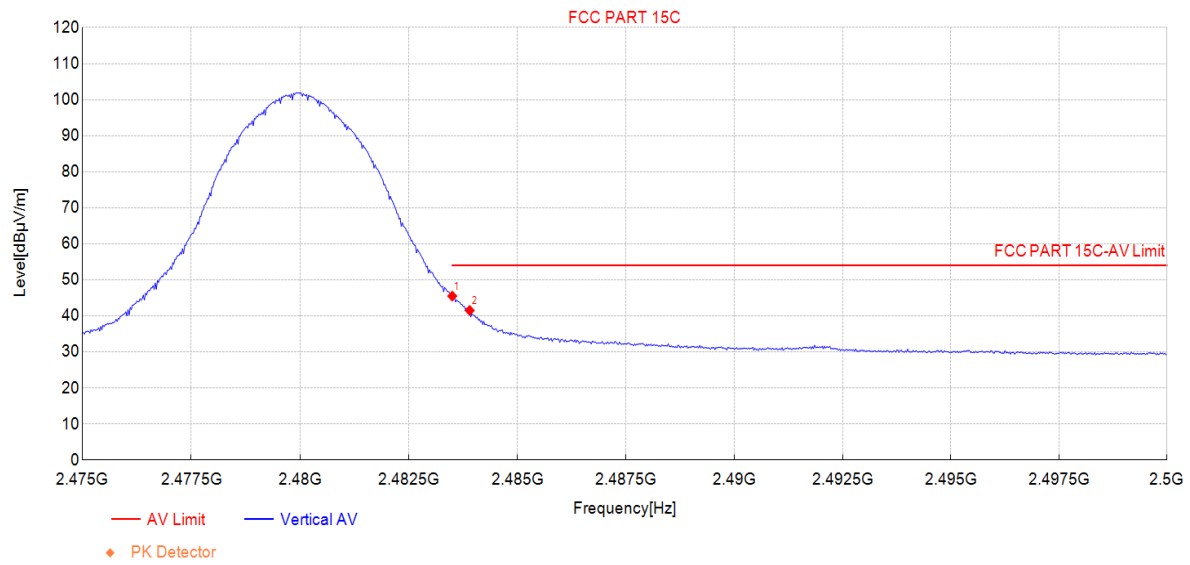


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	58.0	58.08	0.100	74.00	15.92	PK	Vertic	PASS
2	2485.40	47.8	47.95	0.110	74.00	26.05	PK	Vertic	PASS

Transmit at 2480MHz by LE_2Mbps

Test Graph



Data List

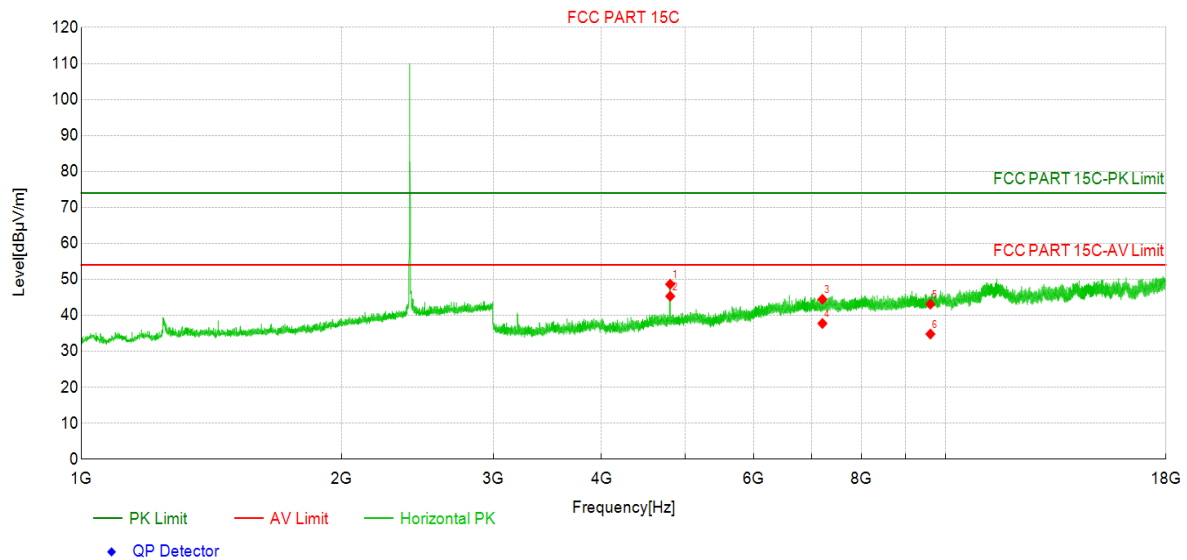
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	45.4	45.50	0.100	54.00	8.50	AV	Vertic	PASS
2	2483.90	41.4	41.51	0.100	54.00	12.49	AV	Vertic	PASS

Note: Level = Reading + Factor (Antenna factor + Amplifier factor + Cable loss)

Emissions in Restricted Bands

Transmit at 2402MHz by LE_1Mbps

Test Graph

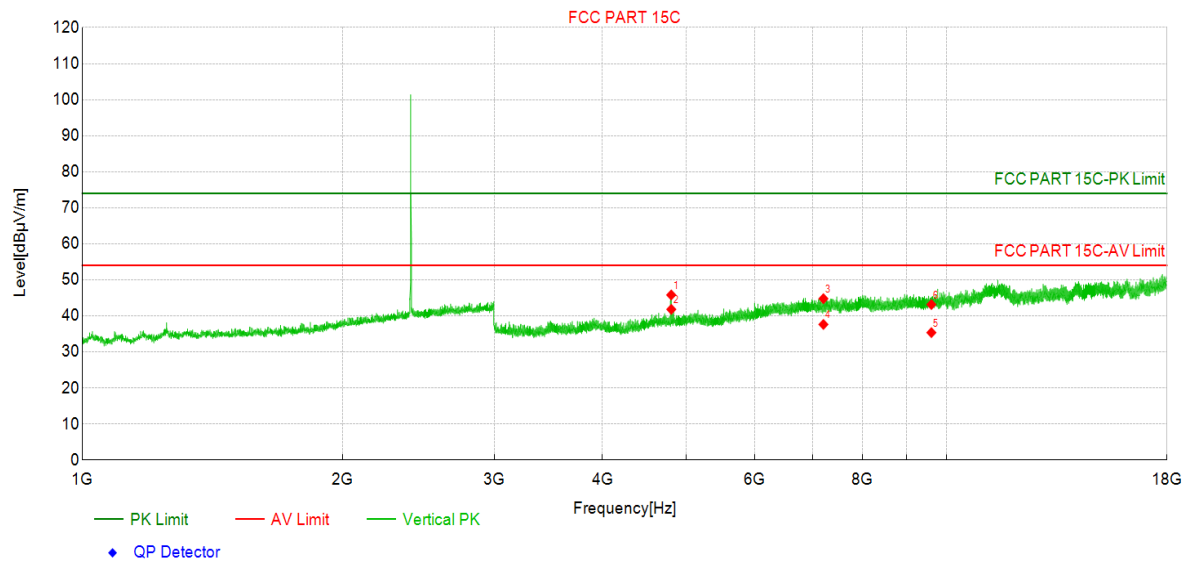


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4803.50	57.6	48.65	-8.970	74.00	22.35	PK	Horizo	PASS
2	4804.00	54.3	45.30	-8.960	54.00	8.70	AV	Horizo	PASS
3	7206.00	46.6	44.45	-2.130	74.00	29.55	PK	Horizo	PASS
4	7206.00	39.9	37.73	-2.130	54.00	16.27	AV	Horizo	PASS
5	9608.00	42.4	43.11	0.760	74.00	30.89	PK	Horizo	PASS
6	9608.00	34.0	34.80	0.760	54.00	19.20	AV	Horizo	PASS

Transmit at 2402MHz by LE_1Mbps

Test Graph



Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4803.50	54.8	45.81	-8.970	74.00	28.19	PK	Vertic	PASS
2	4804.50	50.8	41.82	-8.960	54.00	12.18	AV	Vertic	PASS
3	7206.00	46.9	44.79	-2.130	74.00	29.21	PK	Vertic	PASS
4	7206.00	39.8	37.63	-2.130	54.00	16.37	AV	Vertic	PASS
5	9608.00	34.6	35.36	0.760	54.00	18.64	AV	Vertic	PASS
6	9608.00	42.4	43.16	0.760	74.00	30.84	PK	Vertic	PASS

Note: Level = Reading + Factor (Antenna factor + Amplifier factor + Cable loss)

Cross Reference Table

Reference Device				Variant Device				
FCC ID: 2AWWH-CINSABTA				FCC ID: 2AWWH-CINSACHA				
Rule Part	Test item	Data Referencing	Comments	VdB	RdB	Limit	ddB	ddB Limit
15.247 (b)(3)	Conducted Output Power	Y	Pointer to full test exhibit	5.95	6.06dBm	30dBm	-0.11	≤3dB
15.247 (a)(2) (BLE1M,2402)	DTS (6 dB) Bandwidth & 99% Occupied Bandwidth	Y		0.672	0.69MHz	>500kHz	-0.02	≤3dB
15.247 (e) (BLE1M,2402)	Power Spectral Density	Y		-9.05	-7.61 dBm/3kHz	8dBm/3kHz	-1.44	≤3dB
15.247(d) (BLE1M,2402)	Conducted Spurious Emission	Y		5.74	7.47 dBm/100kHz	30dBc ¹⁾	-1.73	≤3dB
15.247(d); 15.205&15.209 (BLE2M,2480)	Emissions Band edge	Y		50.88 (dBμV/m)	50.49 (dBμV/m)	54 (dBμV/m)	0.39	≤3dB
15.247(d); 15.205&15.209 (BLE1M,2402)	Emissions in Restricted Bands	Y		45.30 (dBμV/m)	48.22 (dBμV/m)	54 (dBμV/m)	-2.92	≤3dB
FCC 15.207	AC Power Line Conducted Emission	N	Refresh test	N/A	N/A	N/A	N/A	N/A

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 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 level in 100 kHz (i.e., 20 dBc).

Note 3: Based on the original DEKRA report 2610076R.703B, the product has changed the DDR model and removed the secondary camera preISP and I2C resistors. The product has been changed from dual cameras to a single camera, with no changes to the RF module and RF circuit. According to technical evaluation, only spot check verification was performed on the product under worse case conditions. For relevant test data, please refer to DEKRA report 2610076R.703B.

The End
