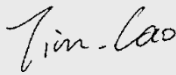


Test report No:
2570826R.703A

TEST REPORT

Product Name	WiFi BT Module
Trademark	Hisense
Model and /or type reference	MWH702B
FCC ID	2AJVQ-MWH702B
Applicant's name / address	Qingdao Intelligent & Precise Electronics Co., Ltd. No.218, Qianwangang Road, Economic and Technological Development Zone, Qingdao, Shandong Province, 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	2025-09-20
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)	Jul. 29, 2025
Date (start test)	Aug. 05, 2025
Date (finish test)	Sep. 12, 2025

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.

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
2570826R.703A	V1.0	Initial issue of report.	2025-09-20

TEST SUMMARY

Requirement – Test Item	Standard(s)	Verdict	Remark
DTS Bandwidth	FCC 15.247(a)(2)	PASS	Test data please refer to Appendix A
Maximum conducted output power	15.247 (b)(3)	PASS	Test data please refer to Appendix B
Maximum power spectral density	FCC 15.247(e)	PASS	Test data please refer to Appendix C
Band edge measurements	FCC 15.247(d) FCC 15.205 FCC 15.209	PASS	Test data please refer to Appendix D
Conducted Spurious Emission	FCC 15.247(d), FCC 15.209	PASS	Test data please refer to Appendix E
Duty cycle	ANSI C63.10	PASS	Test data please refer to Appendix F
Emissions in Restricted Bands	FCC 15.205 FCC 15.209	PASS	Test data please refer to Appendix G
AC Power Line Conducted Emission	FCC 15.207	N/A	Note ¹⁾
Antenna Requirement	FCC 15.203	PASS	---
Note: EUT is DC powered			

USED EQUIPMENT

Conducted Test/ TR8

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Wireless Connectivity Tester	R&S	CMW 270	102593	2025.05.10	2026.05.09
Power Meter	Anritsu	MA2411B	1339267	2025.07.30	2026.07.29
Coaxial Cable	N/A	N/A	2477	2025.06.10	2026.06.09
Coaxial Cable	N/A	N/A	2478	2025.06.10	2026.06.09
High and low temperature and fast temperature change test box	ASTUOD	ASTD-FBT-225K	N/A	2025.03.15	2026.03.14
Temperature/Humidity Meter	RTS	RTS-8S	RF07	2025.06.17	2026.06.16
Test system					
Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
MAX Signal Analyzer	Keysight	N9010A	MY48030494	2024.10.26	2025.10.25
RF Control Unit	Tonscend	JS0806-2	22G8060594	2025.01.26	2026.01.25
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY61252529	2025.03.23	2026.03.22
Frequency extender for EXG or MXG	Keysight	N5182BX07	MY59362500	2025.03.23	2026.03.22
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

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100176	2025.03.23	2026.03.22
Loop Antenna	R&S	HFH2-Z2E	101149	2025.04.16	2026.04.15
Bilog Antenna	Teseq GmbH	CBL6112D	27613	2025.03.24	2026.03.23
Temperature/Humidity Meter	RTS	RTS-1909	THM-021	2025.04.30	2026.04.29
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2025.03.16	2026.03.15
Dekra test software	Dekra	N/A	N/A	N/A	N/A

Radiated Emission Band Edge / AC5

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EXA Spectrum Analyzer	Keysight	N9020B	MY60112218	2024.11.02	2025.11.01
Pre-Amplifier	SKET	LNPA_0118G-45	SK2021090101	2025.04.26	2026.04.25
DRG Horn	ETS-Lindgren	3117	123988	2024.11.24	2025.11.23
Filter Switch Box	MVE	MSW-F196	C070001S	2025.03.15	2026.03.14
Temperature/Humidity Meter	RTS	RTS-1909	THM-024	2025.04.30	2026.04.29
Coaxial Cable	Lair Microwave	LA800-NMNWM-6.5M	502201001001	2025.03.15	2026.03.14
Coaxial Cable	Lair Microwave	LA800-SWMSWM-06.M	502201005001	2025.03.15	2026.03.14
Dekra test software	Dekra	N/A	N/A	N/A	N/A
Wideband Radio Communication Tester	R&S	CMW 500	170870	2025.05.10	2026.05.09

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
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

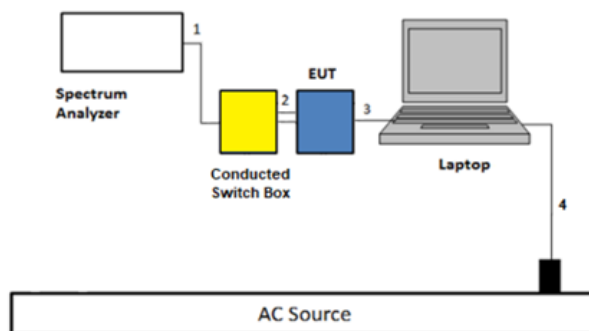
Product Name	WiFi BT Module
Model No.	MWH702B
Trademark.	Hisense
FCC ID.....	2AJVQ-MWH702B
Manufacturer	Qingdao Intelligent & Precise Electronics Co., Ltd.
Manufacturer Address	No.218, Qianwangang Road, Economic and Technological Development Zone, Qingdao, Shandong Province, China
Power Supply	4.5~5.5 Vdc
Wireless specification	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	Slot Antenna
Antenna Gain	Antenna 0: -1.83 dBi
	Antenna 1: -3.85 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. Except for the power tests of all antenna ports, other conducted data only shows the data of the worst antenna.	

Power setting in test

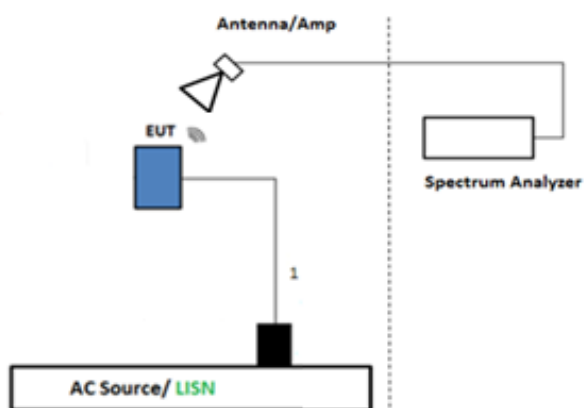
Mode	Power setting
LE 1M / LE 2M	Default

2 DESCRIPTION OF TEST SETUP

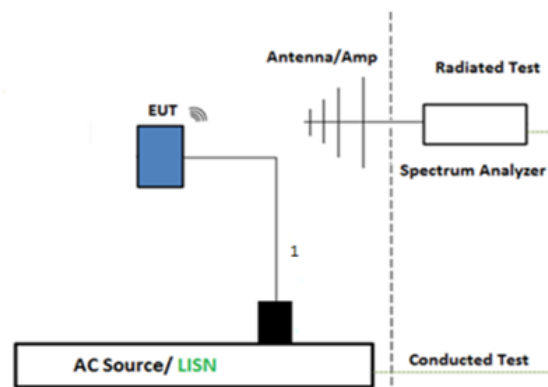
Auxiliary equipment	Type / Version	Manufacturer	Supplied by
(1) Notebook	Think pad x220	Lenovo	Adapter
(2) Ethernet cable	N/A	N/A	N/A
(3) Ethernet cable	N/A	N/A	N/A
Software	Type / Version	Manufacturer	Supplied by
MT7925_QA-Tool	0.0.2.99	MEDIATEK	N/A



Conducted RF



Radiated Test Above 1GHz



Radiated Test Below 1GHz

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

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: N/A

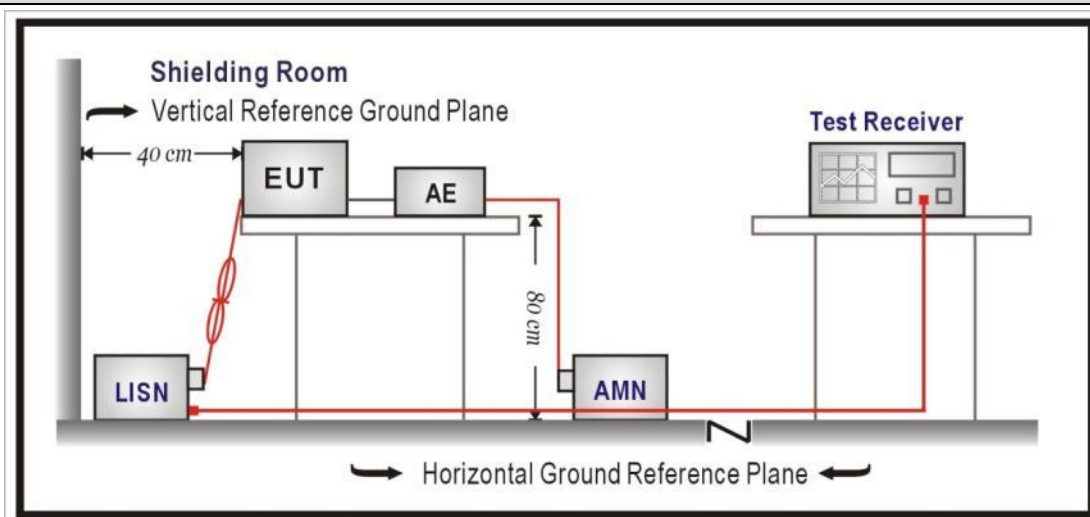
4.1.1 Limit

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)

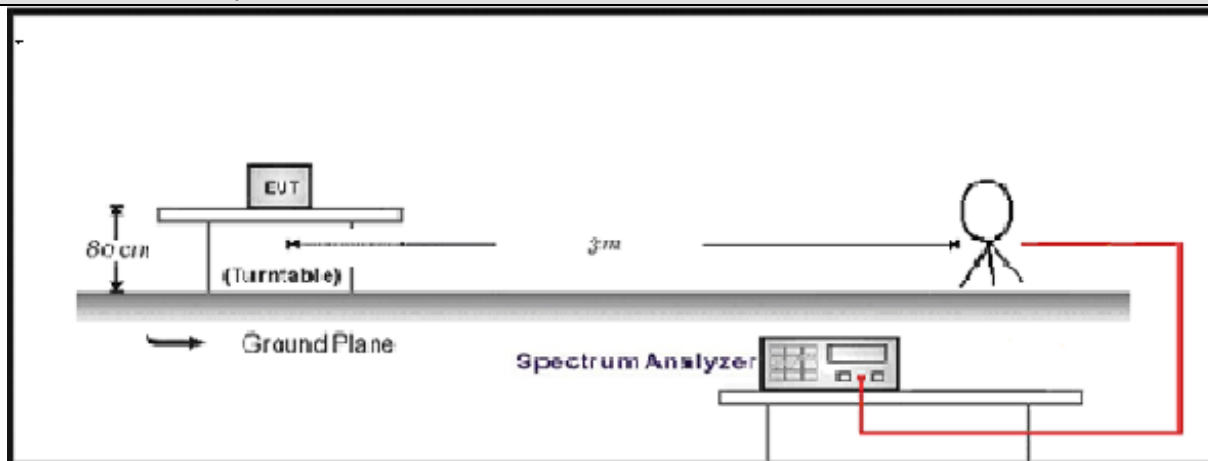
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed 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

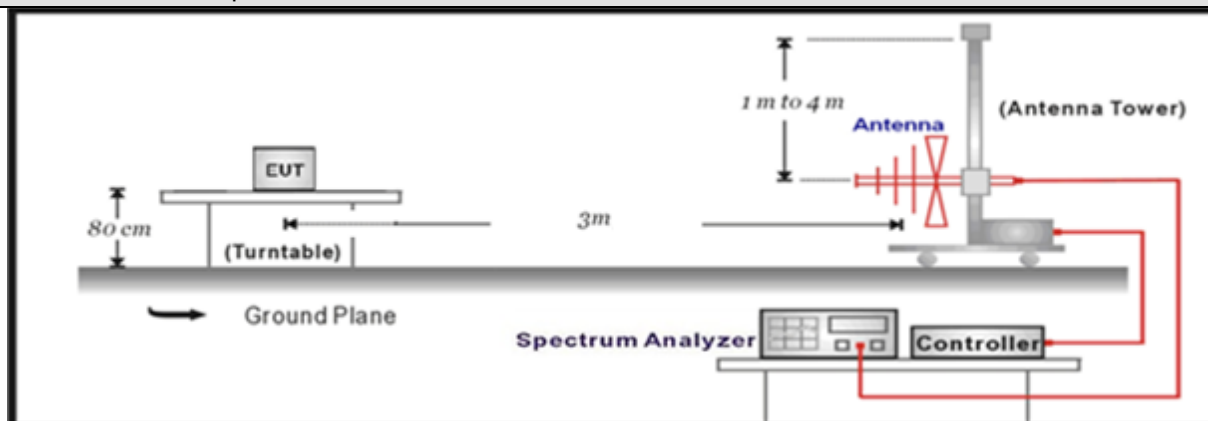
factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.2.2 Test Setup

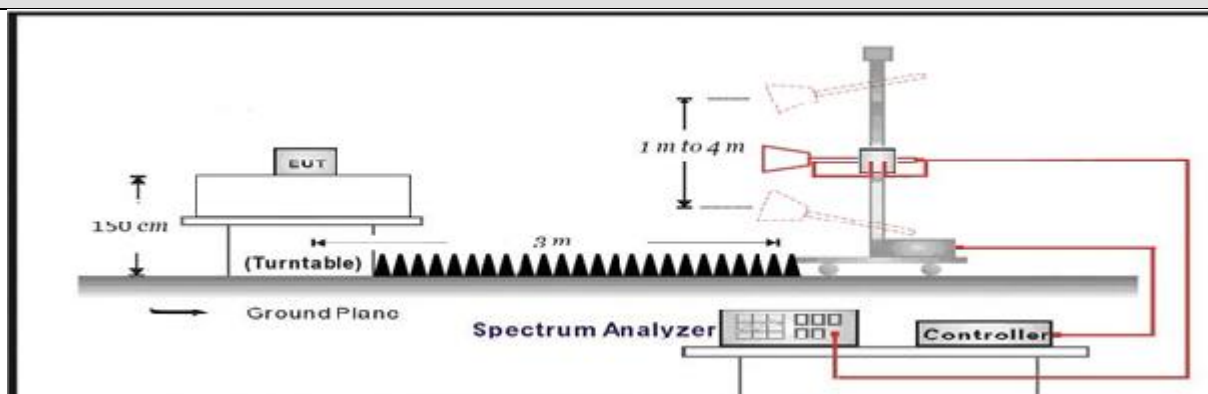
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



4.2.3 Test Procedure

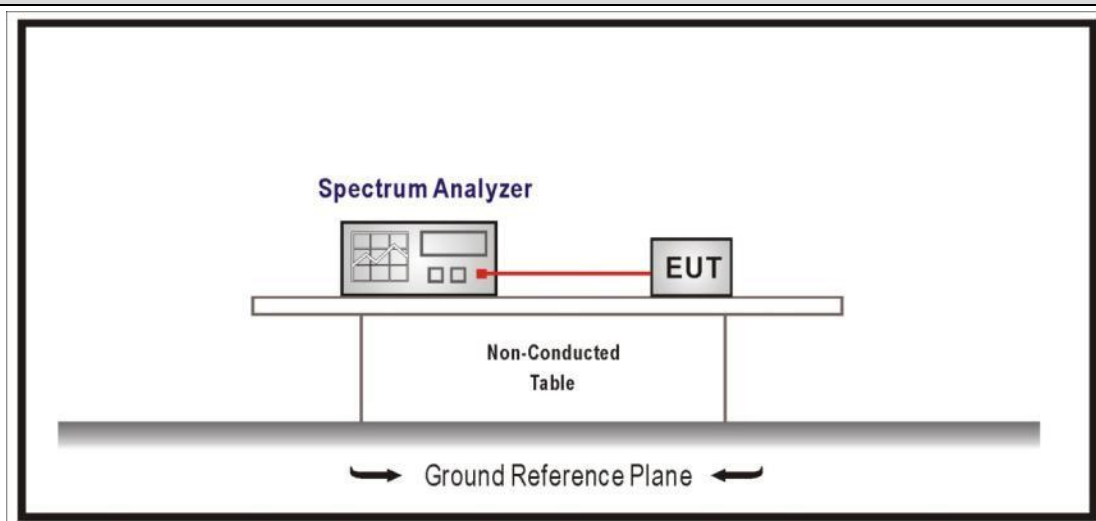
	References Rule		Chapter	Description
☒	ANSI C63.10		11.12	Emissions in restricted frequency bands
	☒	ANSI C63.10	11.12.1	Radiated emission measurements
	☒	ANSI C63.10	6.3	Radiated spurious emission test
	☒	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
	☒	ANSI C63.10	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).

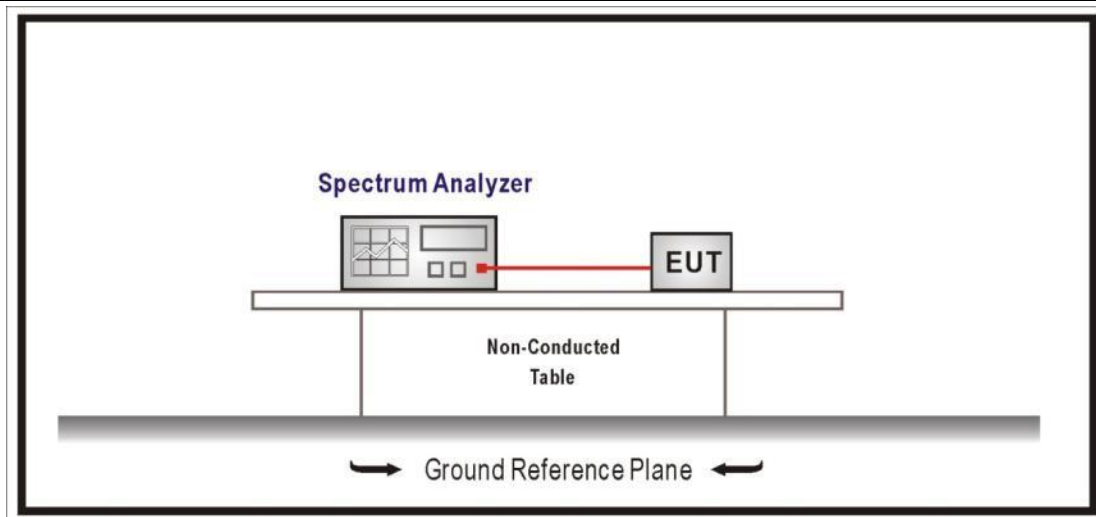
Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).

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

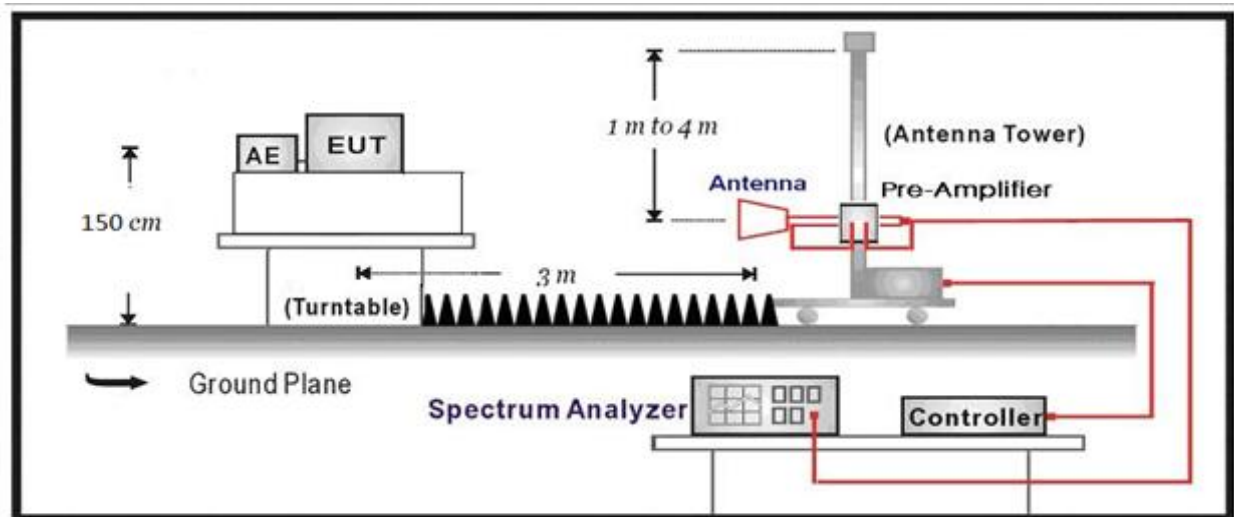
4.5 Radiated Emission Band Edge**VERDICT: PASS****4.5.1 Limit**

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

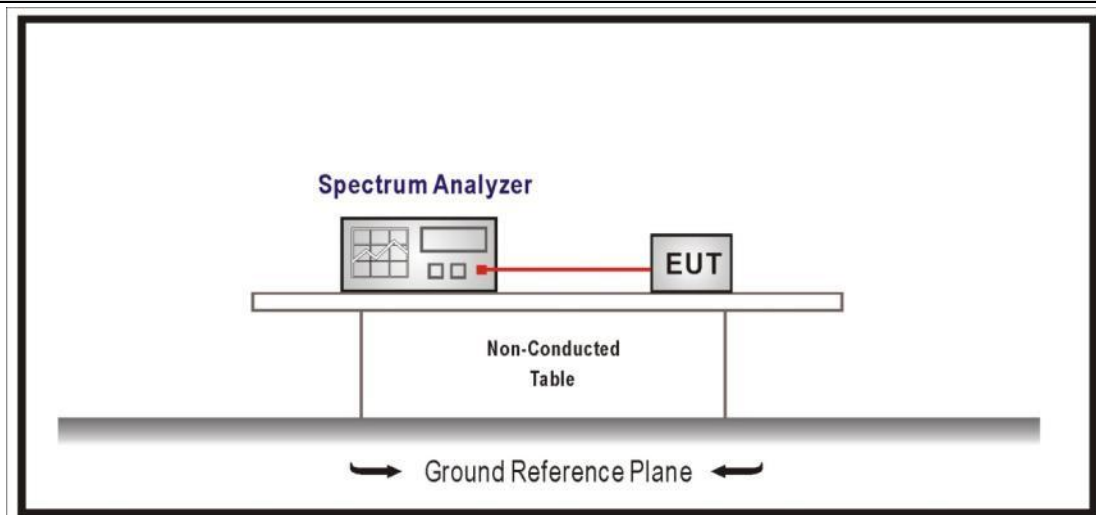
4.6 DTS Bandwidth**VERDICT: PASS****4.6.1 Limit**

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**

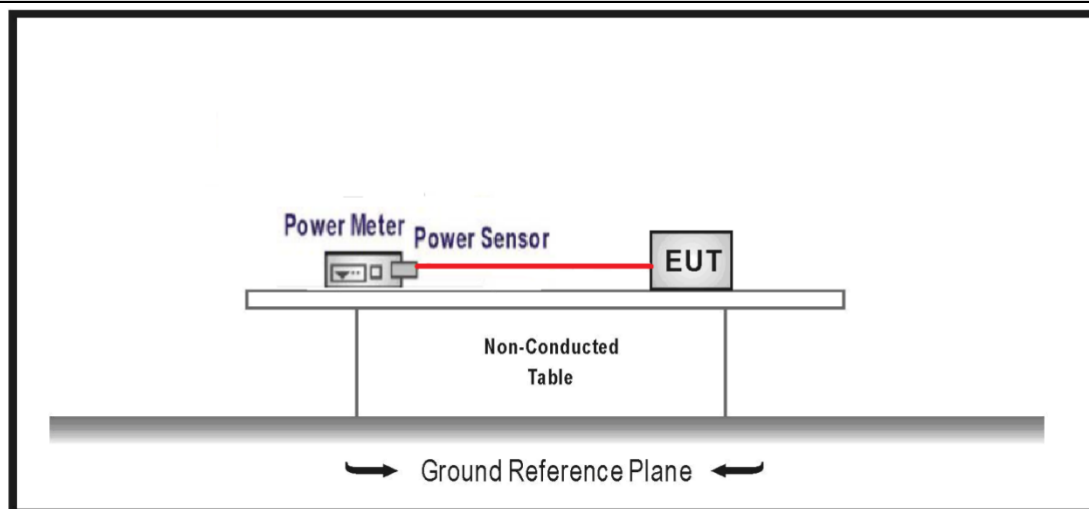
	Reference Rule	Chapter	Description
☒	ANSI C63.10	11.8	DTS bandwidth
	☒ ANSI C63.10	11.8.1	Option 1
	☐ ANSI C63.10	11.8.2	Option 2
☒	ANSI C63.10	6.9	Occupied bandwidth
	☐ ANSI C63.10	6.9.2	relative measurement procedure
	☒ ANSI C63.10	6.9.3	power bandwidth (99%) measurement procedure

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.

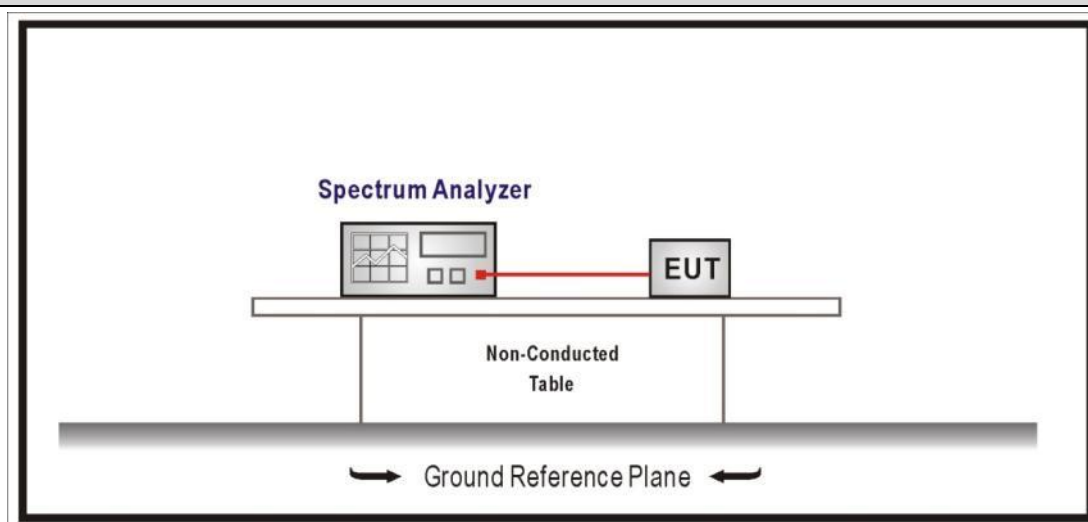
Note 2 : Pout is maximum conducted output power .

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.

Appendix A: Test results of DTS Bandwidth

6dB bandwidth:

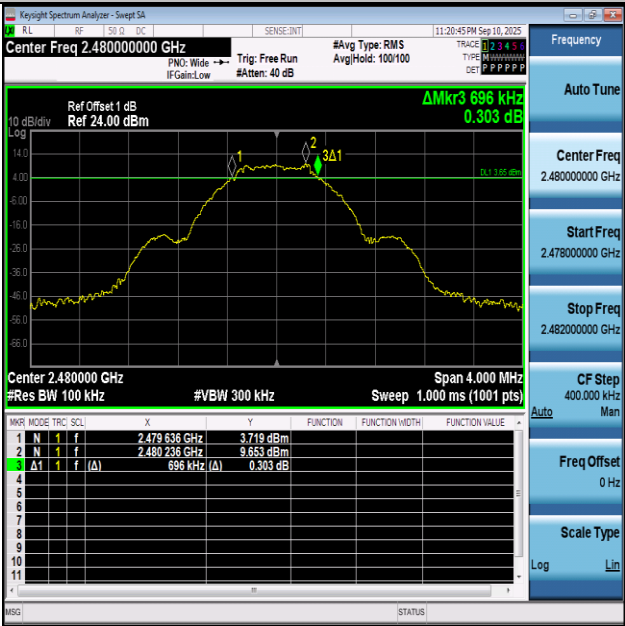
Test Result

TestMode	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	2402	0.700	2401.648	2402.348	0.5	PASS
BLE_1M	2440	0.652	2439.668	2440.320	0.5	PASS
BLE_1M	2480	0.696	2479.636	2480.332	0.5	PASS
BLE_2M	2402	1.220	2401.360	2402.580	0.5	PASS
BLE_2M	2440	1.196	2439.360	2440.556	0.5	PASS
BLE_2M	2480	1.228	2479.356	2480.584	0.5	PASS

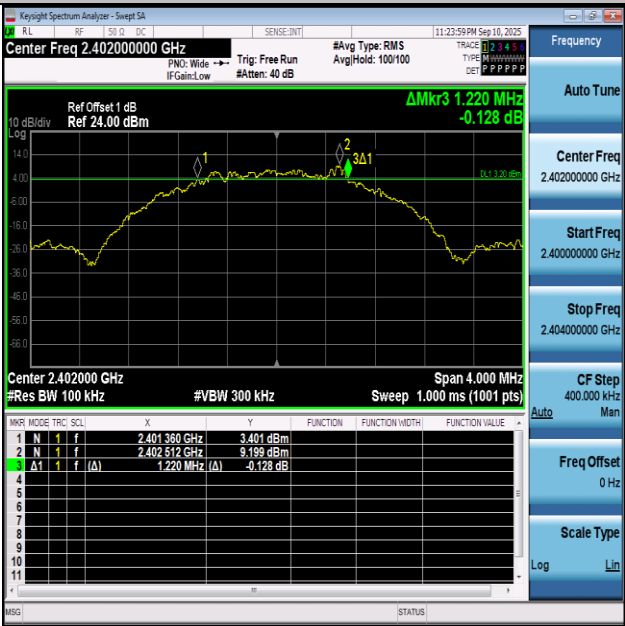
Test Graphs



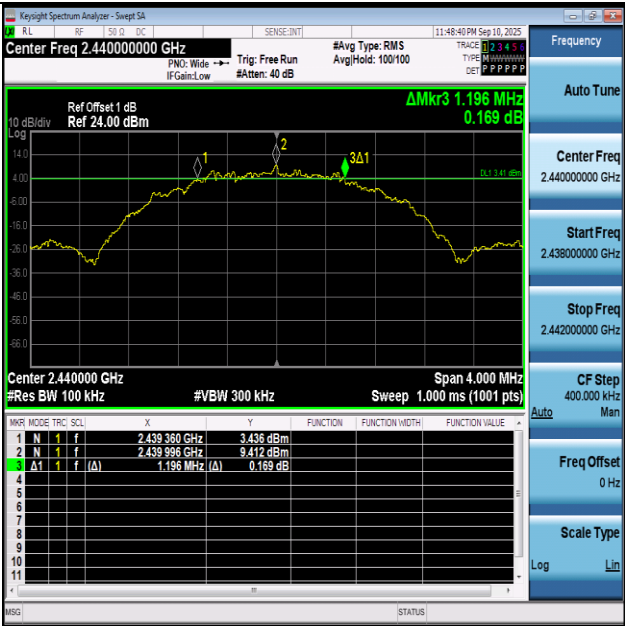
BLE_1M-Ant1-2440-PASS



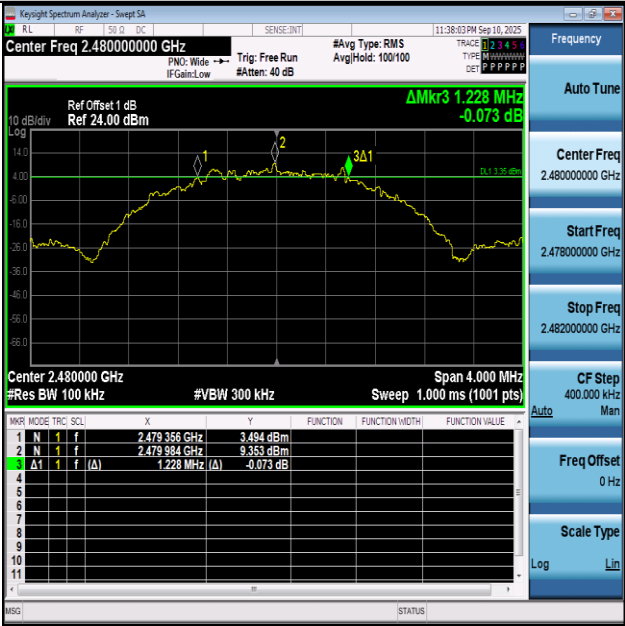
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



BLE_2M-Ant1-2480-PASS

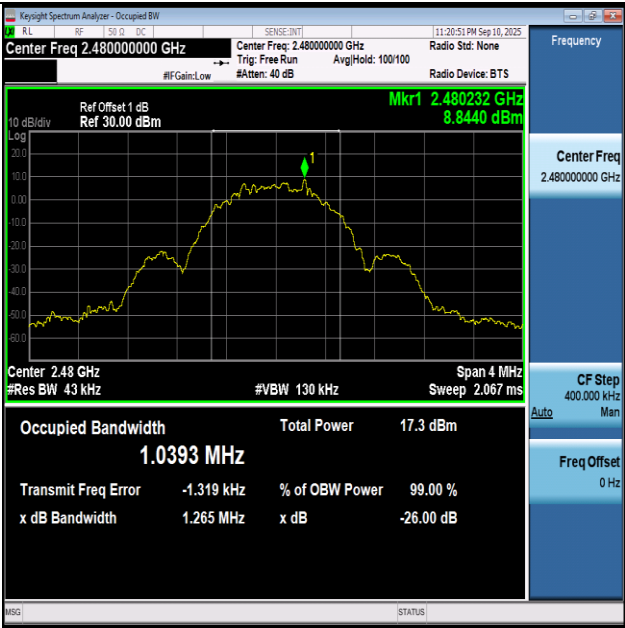
99% Occupied bandwidth:

Test Result

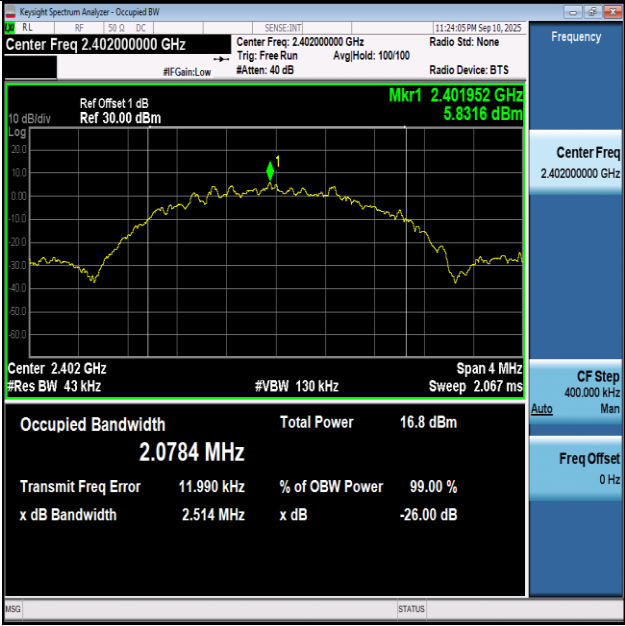
TestMode	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	2402	1.0474	2401.4759	2402.5233	---	---
BLE_1M	2440	1.0502	2439.4740	2440.5242	---	---
BLE_1M	2480	1.0393	2479.4790	2480.5183	---	---
BLE_2M	2402	2.0784	2400.9728	2403.0512	---	---
BLE_2M	2440	2.0808	2438.9691	2441.0499	---	---
BLE_2M	2480	2.0847	2478.9658	2481.0505	---	---

Test Graphs

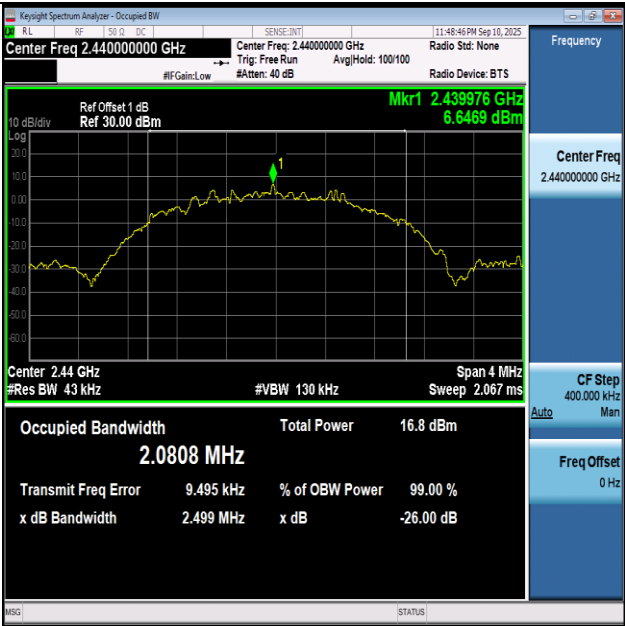




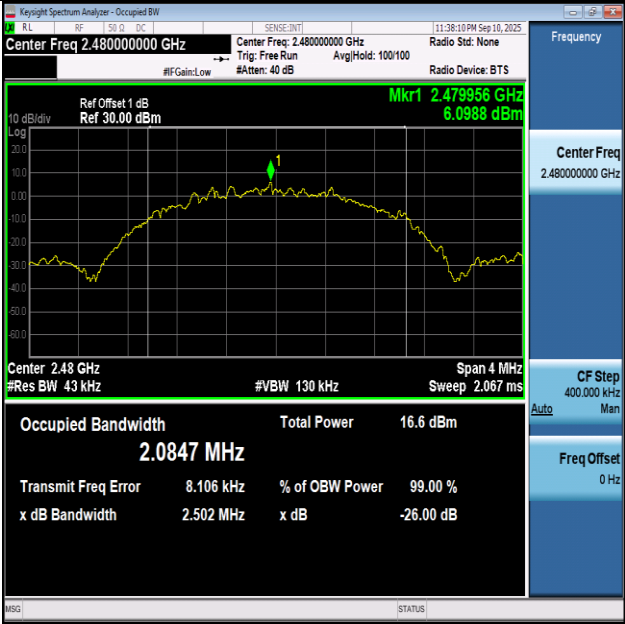
BLE_1M-Ant1-2480



BLE_2M-Ant1-2402



BLE_2M-Ant1-2440



BLE_2M-Ant1-2480

Appendix B: Test results of Maximum conducted output power

Mode	Channel	Frequency (MHz)	Measure result (dBm)		Limit (dBm)	Verdict
			Ant 0	Ant 1		
LE_1Mbps	00	2402	9.25	8.65	≤30	Pass
	19	2440	9.23	8.58	≤30	Pass
	39	2480	9.29	8.62	≤30	Pass
LE_2Mbps	00	2402	7.75	6.93	≤30	Pass
	19	2440	7.81	6.92	≤30	Pass
	39	2480	7.77	6.88	≤30	Pass

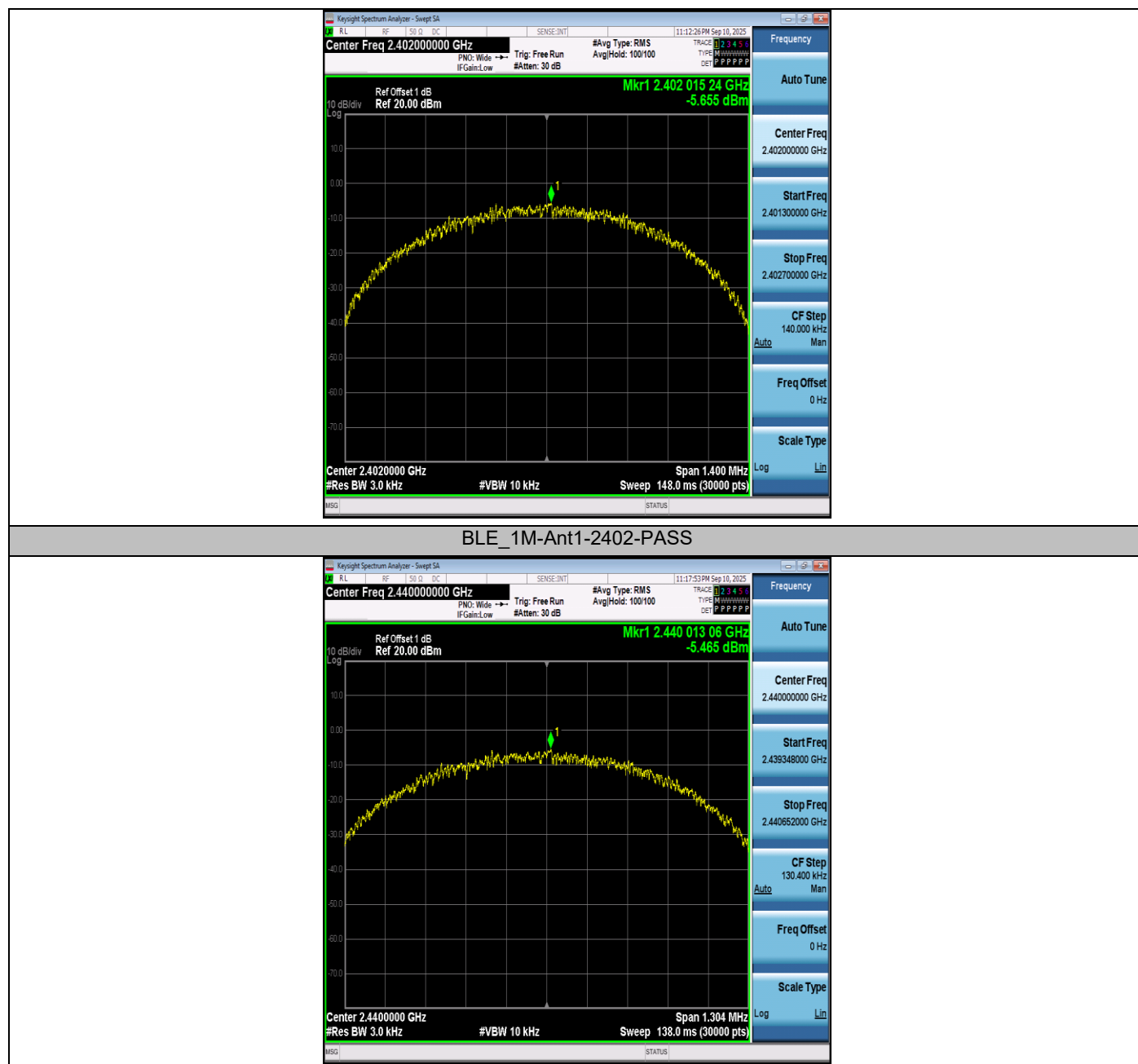
Note: Measure result = Conducted Power + Duty Cycle Factor

Appendix C: Test results of Maximum power spectral density

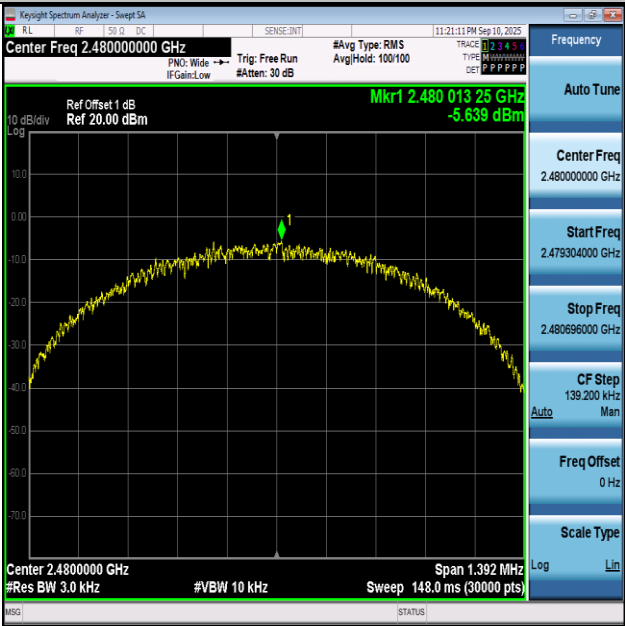
Test Result

TestMode	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	2402	-5.66	≤8.00	PASS
BLE_1M	2440	-5.47	≤8.00	PASS
BLE_1M	2480	-5.64	≤8.00	PASS
BLE_2M	2402	-7.98	≤8.00	PASS
BLE_2M	2440	-8.02	≤8.00	PASS
BLE_2M	2480	-8.09	≤8.00	PASS

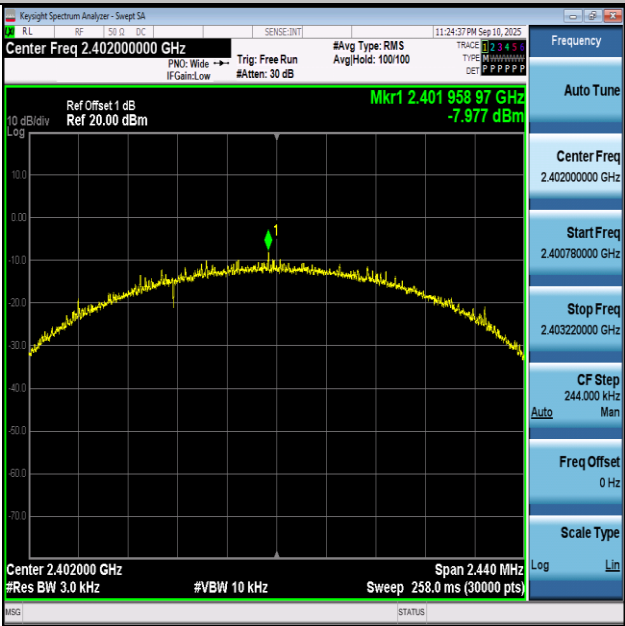
Test Graphs



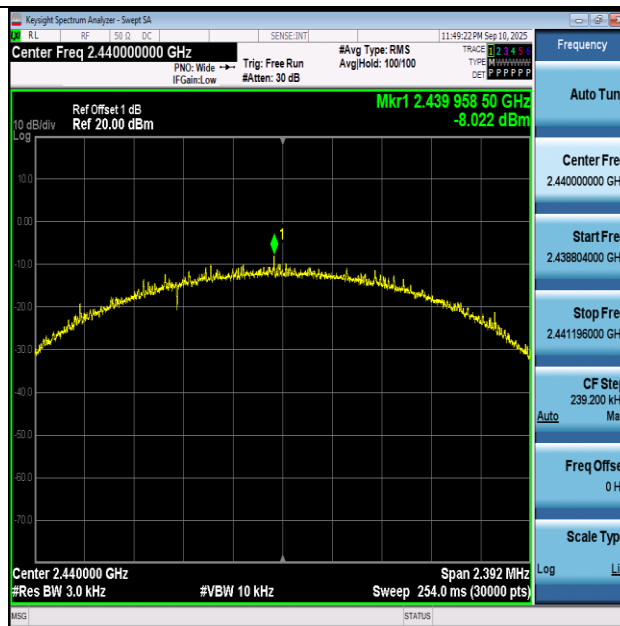
BLE_1M-Ant1-2440-PASS



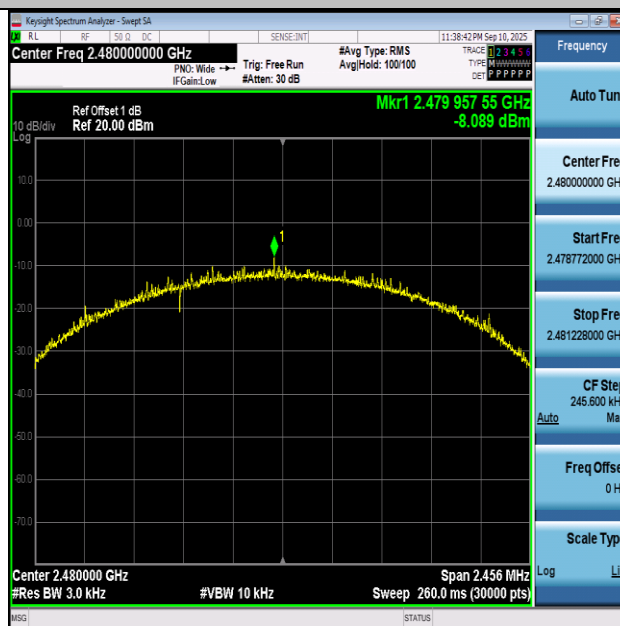
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



BLE_2M-Ant1-2480-PASS

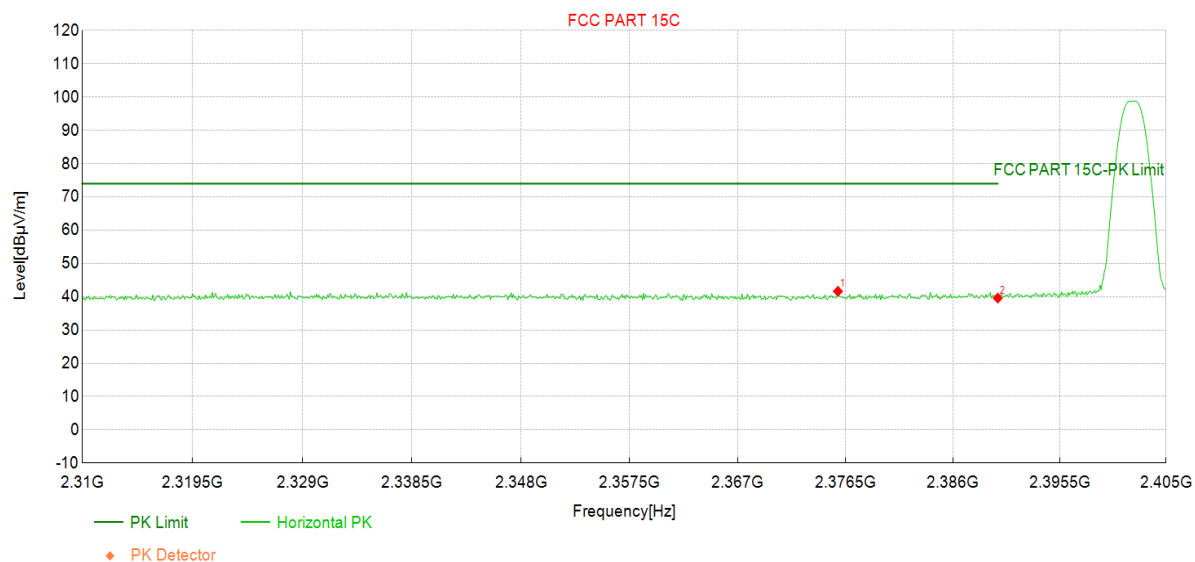
Note: We have evaluated each antenna and both BT Antenna 0 and BT Antenna 1, only worst data shown in report.

Appendix D: Test results of Band edge measurements

Antenna BT 0

Transmit at 2402MHz by LE_1Mbps

Test Graph

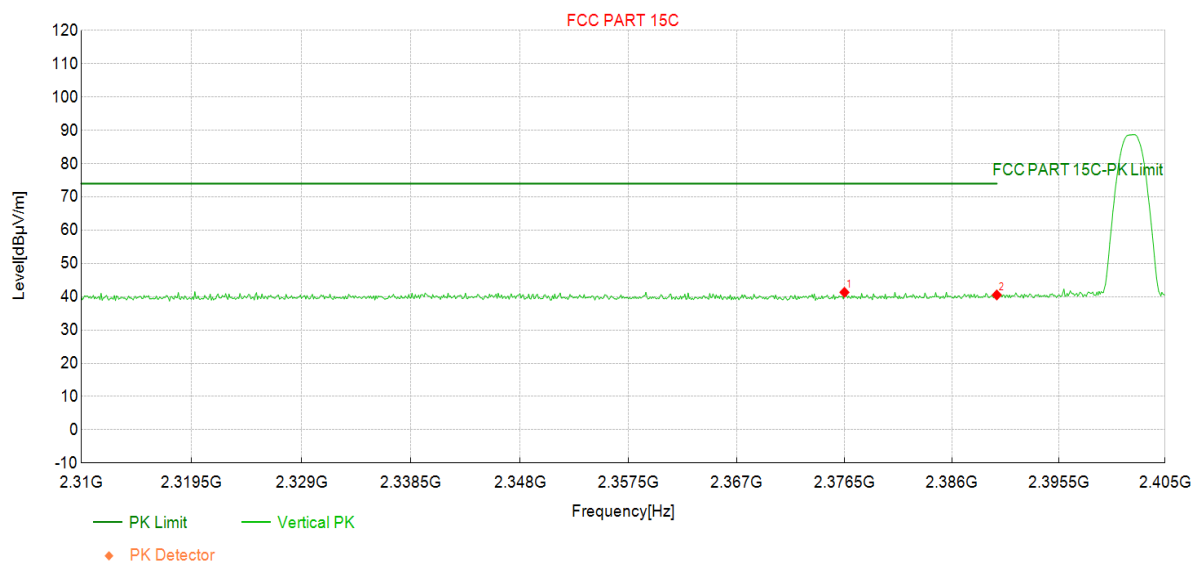


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2375.84	41.7	41.63	-0.080	74.00	32.37	PK	Horizo	PASS
2	2390.00	39.6	39.59	-0.050	74.00	34.41	PK	Horizo	PASS

Transmit at 2402MHz by LE_1Mbps

Test Graph

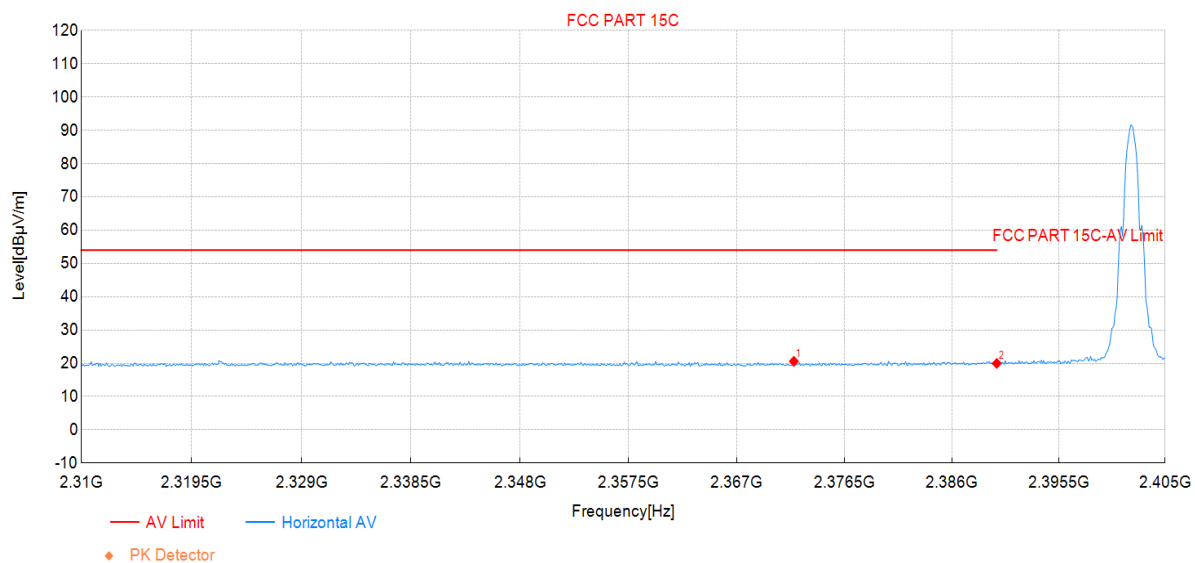


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2376.50	41.4	41.33	-0.080	74.00	32.67	PK	Vertic	PASS
2	2390.00	40.6	40.52	-0.050	74.00	33.48	PK	Vertic	PASS

Transmit at 2402MHz by LE_1Mbps

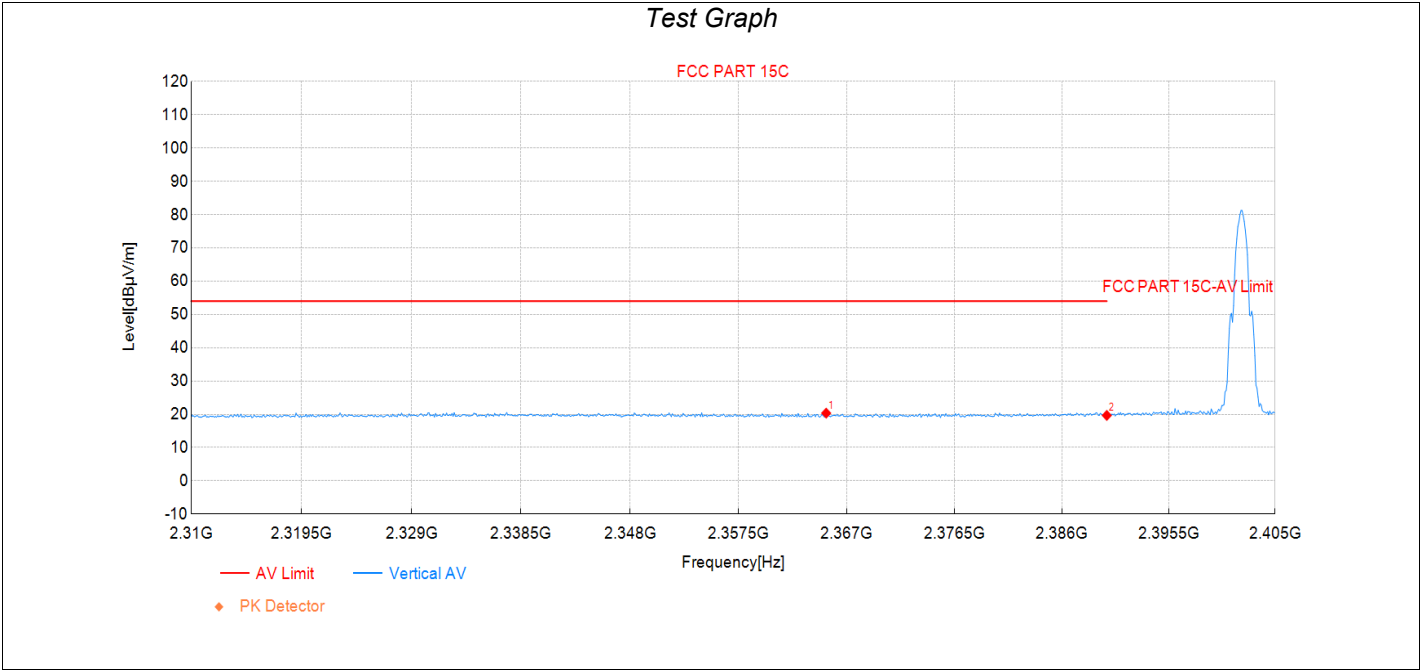
Test Graph



Data List

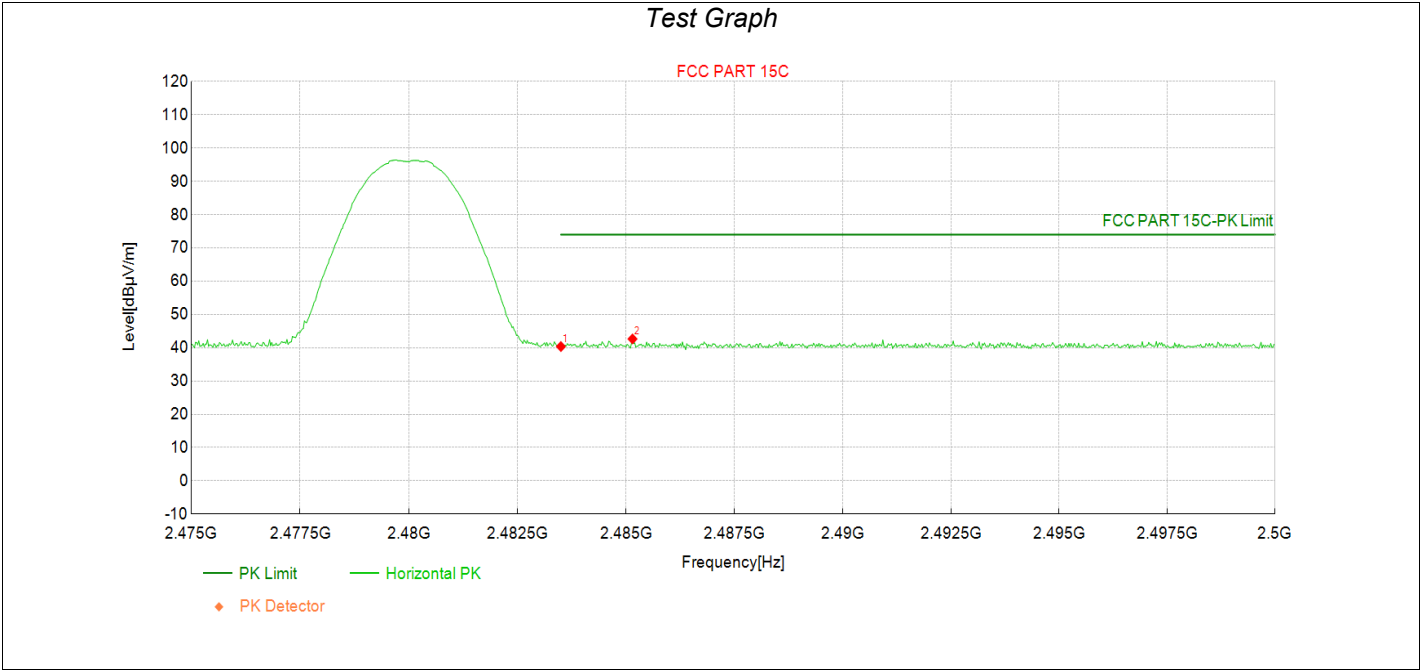
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2372.04	20.7	20.58	-0.100	54.00	33.42	AV	Horizo	PASS
2	2390.00	20.0	19.96	-0.050	54.00	34.04	AV	Horizo	PASS

Transmit at 2402MHz 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	2365.20	20.4	20.33	-0.110	54.00	33.67	AV	Vertic	PASS
2	2390.00	19.7	19.65	-0.050	54.00	34.35	AV	Vertic	PASS

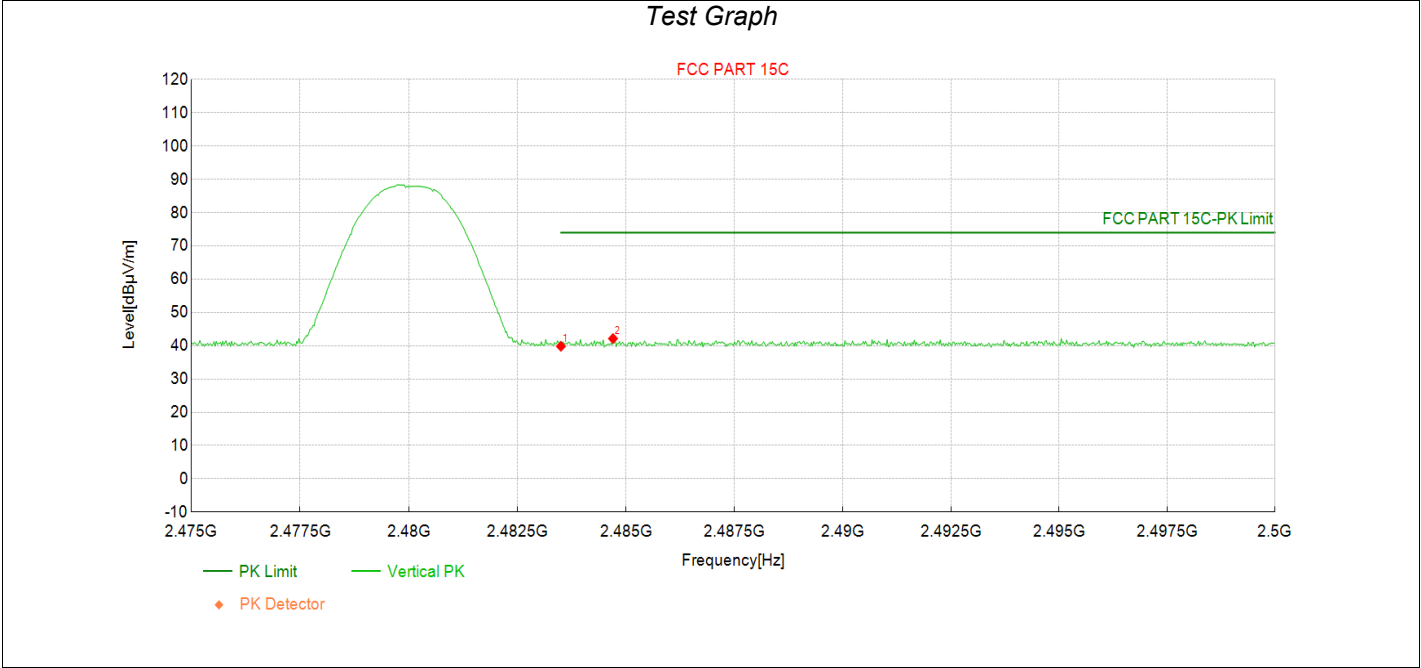
Transmit at 2480MHz by LE_1Mbps



Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	40.1	40.35	0.270	74.00	33.65	PK	Horizo	PASS
2	2485.15	42.4	42.64	0.280	74.00	31.36	PK	Horizo	PASS

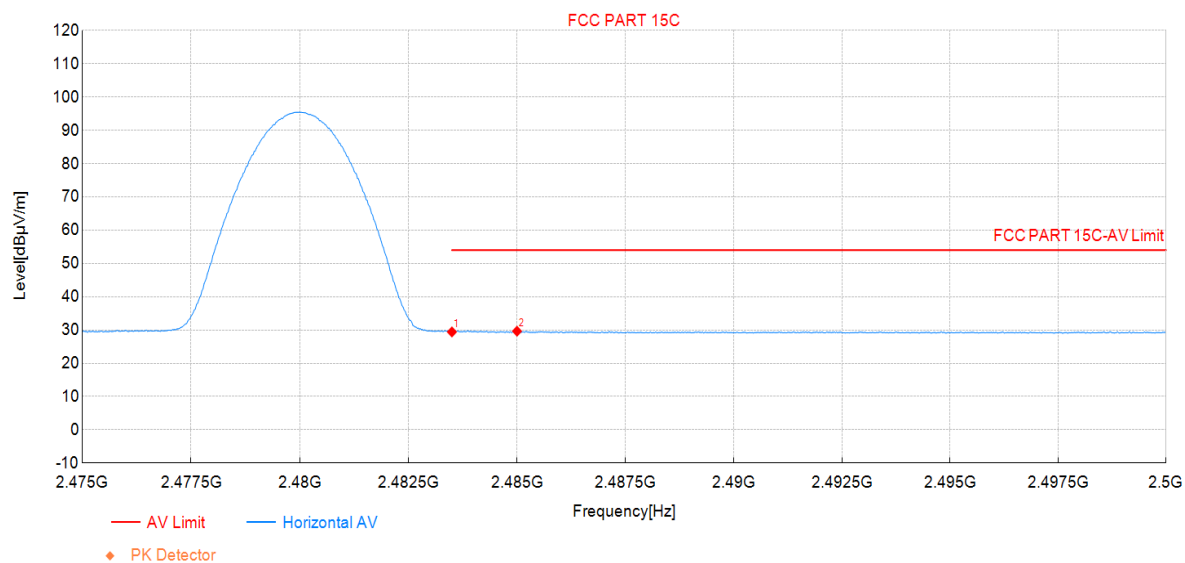
Transmit at 2480MHz by LE_1Mbps



Data List									
NO	Frequeuncy [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	39.6	39.84	0.270	74.00	34.16	PK	Vertic	PASS
2	2484.70	41.9	42.15	0.270	74.00	31.85	PK	Vertic	PASS

Transmit at 2480MHz by LE_1Mbps

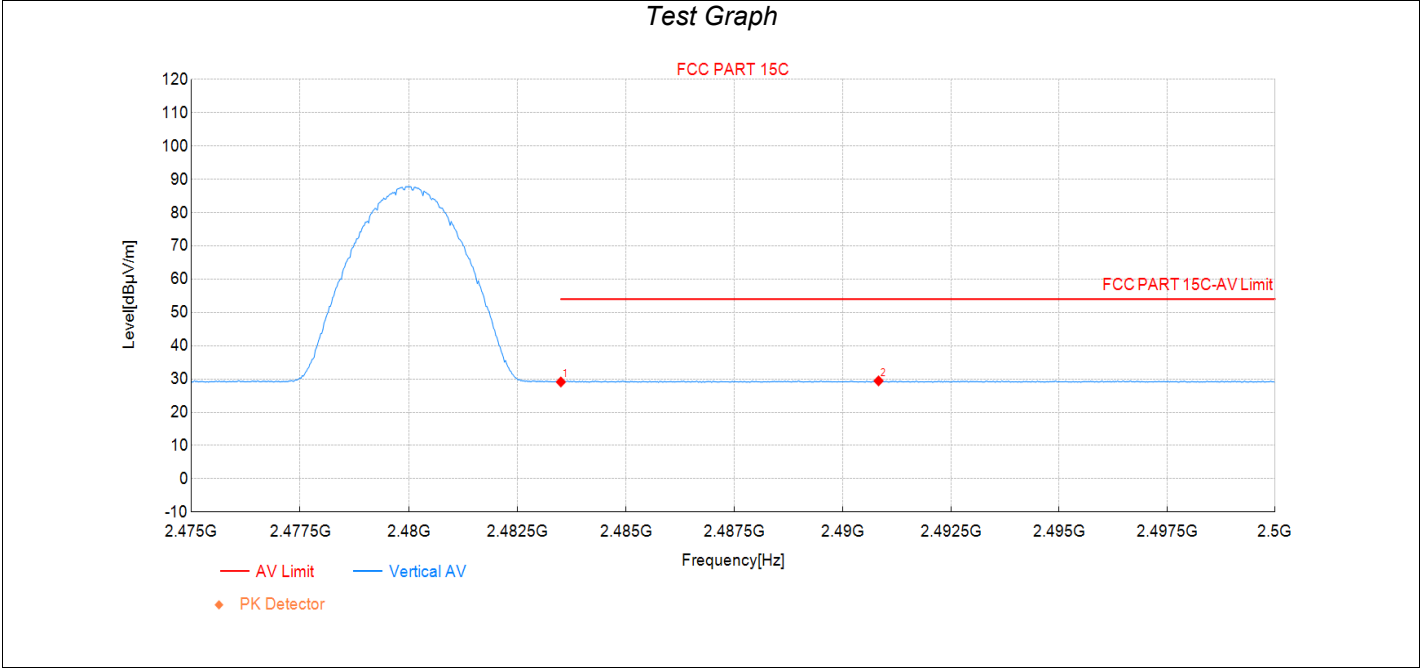
Test Graph



Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	29.2	29.42	0.270	54.00	24.58	AV	Horizo	PASS
2	2485.00	29.4	29.64	0.280	54.00	24.36	AV	Horizo	PASS

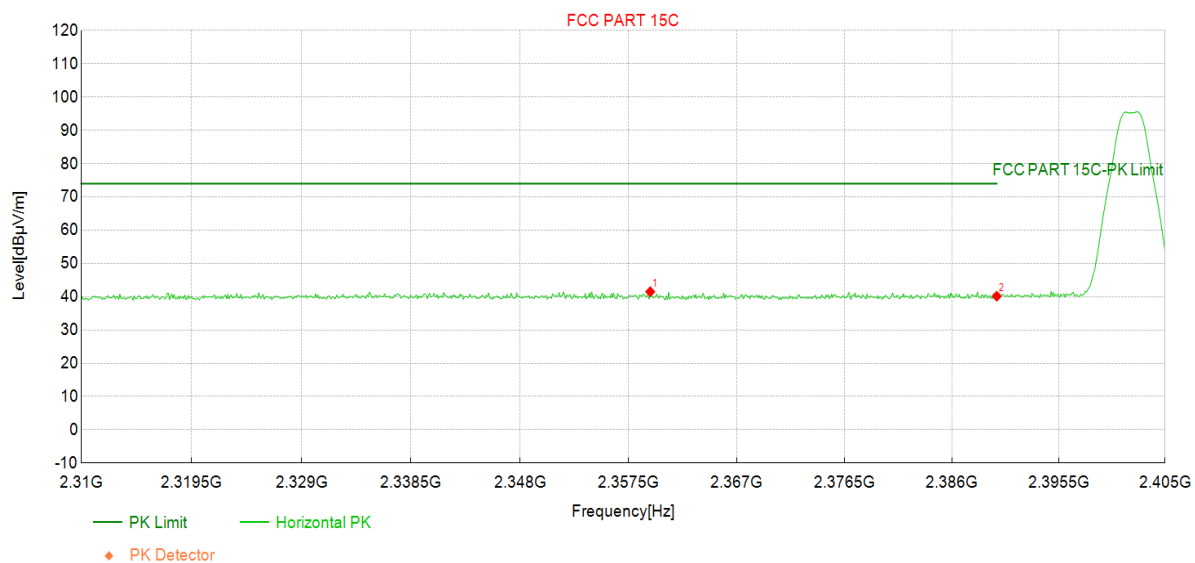
Transmit at 2480MHz by LE_1Mbps



Data List									
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	28.8	29.10	0.270	54.00	24.90	AV	Vertic	PASS
2	2490.83	29.1	29.43	0.300	54.00	24.57	AV	Vertic	PASS

Transmit at 2402MHz by LE_2Mbps

Test Graph

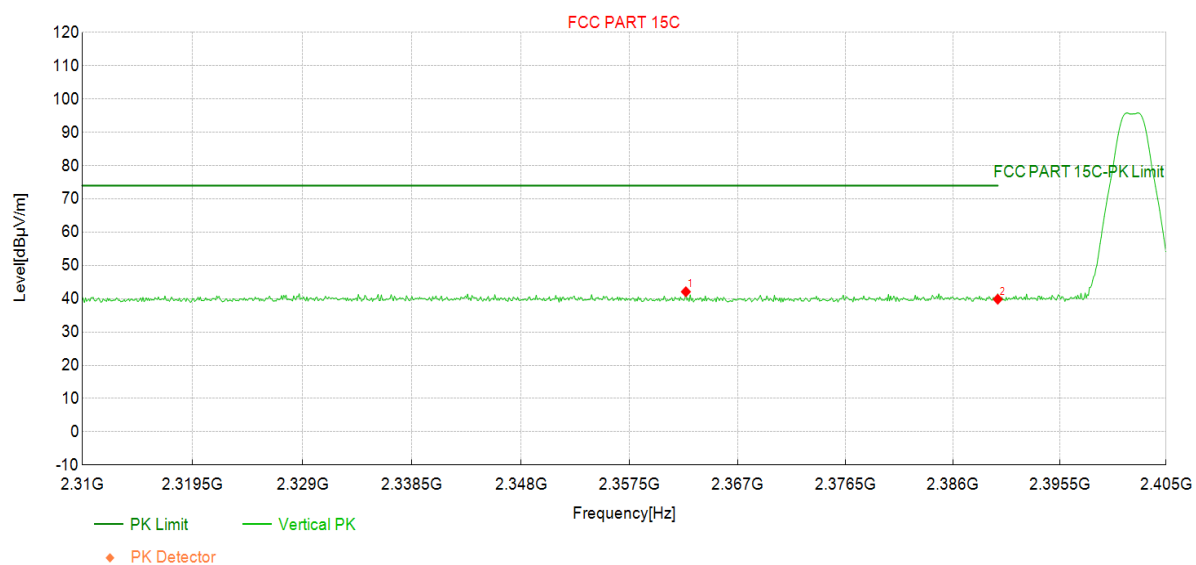


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2359.40	41.6	41.50	-0.130	74.00	32.50	PK	Horizo	PASS
2	2390.00	40.2	40.15	-0.050	74.00	33.85	PK	Horizo	PASS

Transmit at 2402MHz by LE_2Mbps

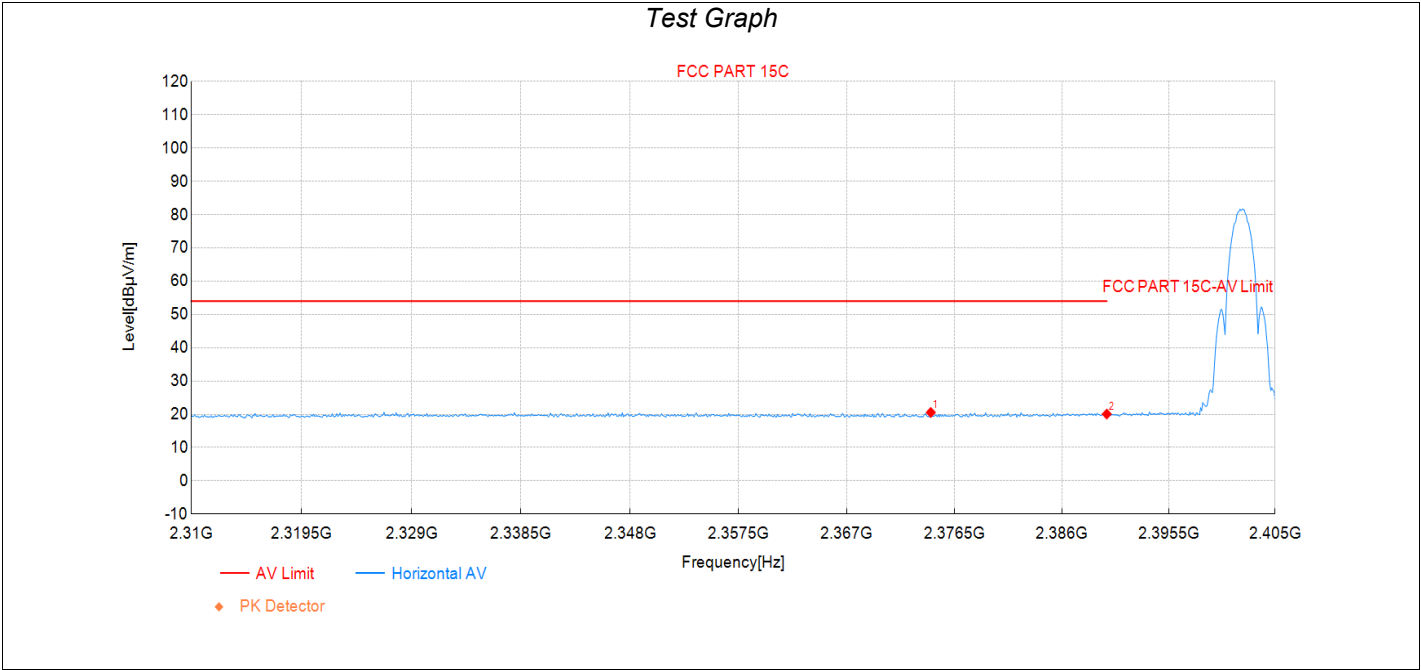
Test Graph



Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2362.44	42.2	42.09	-0.120	74.00	31.91	PK	Vertic	PASS
2	2390.00	39.9	39.85	-0.050	74.00	34.15	PK	Vertic	PASS

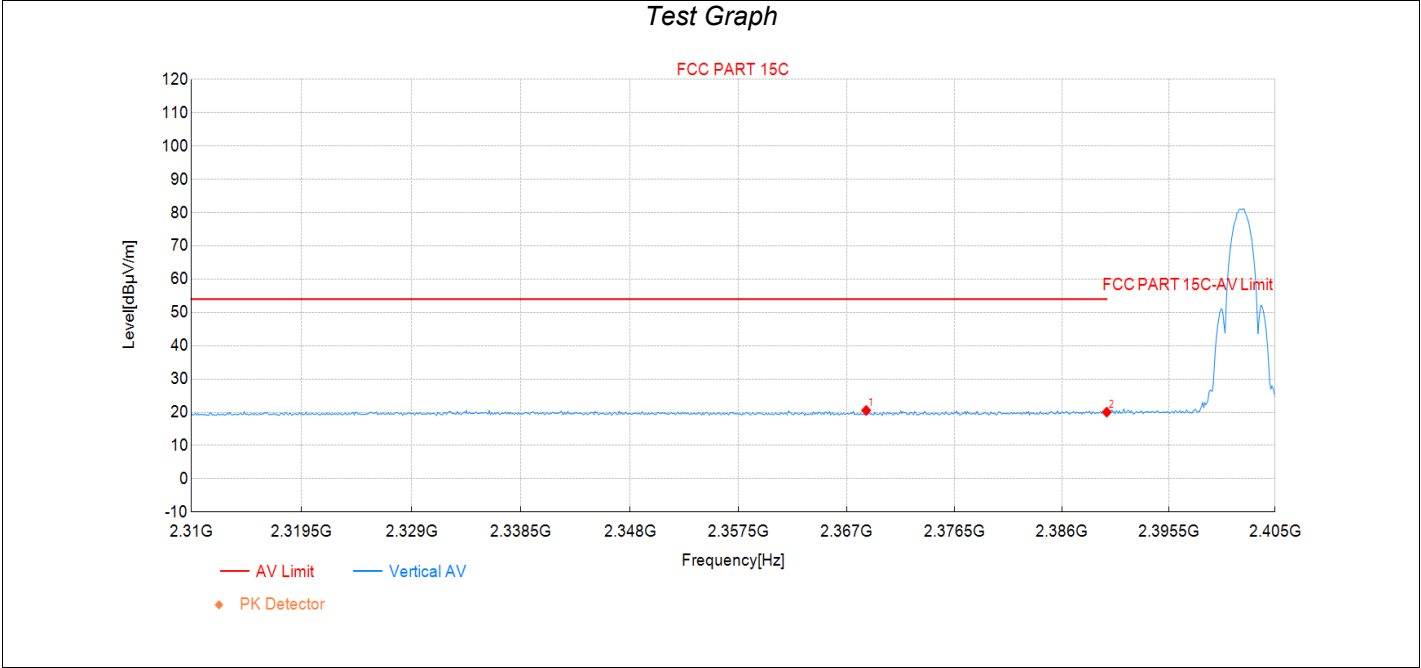
Transmit at 2402MHz by LE_2Mbps



Data List

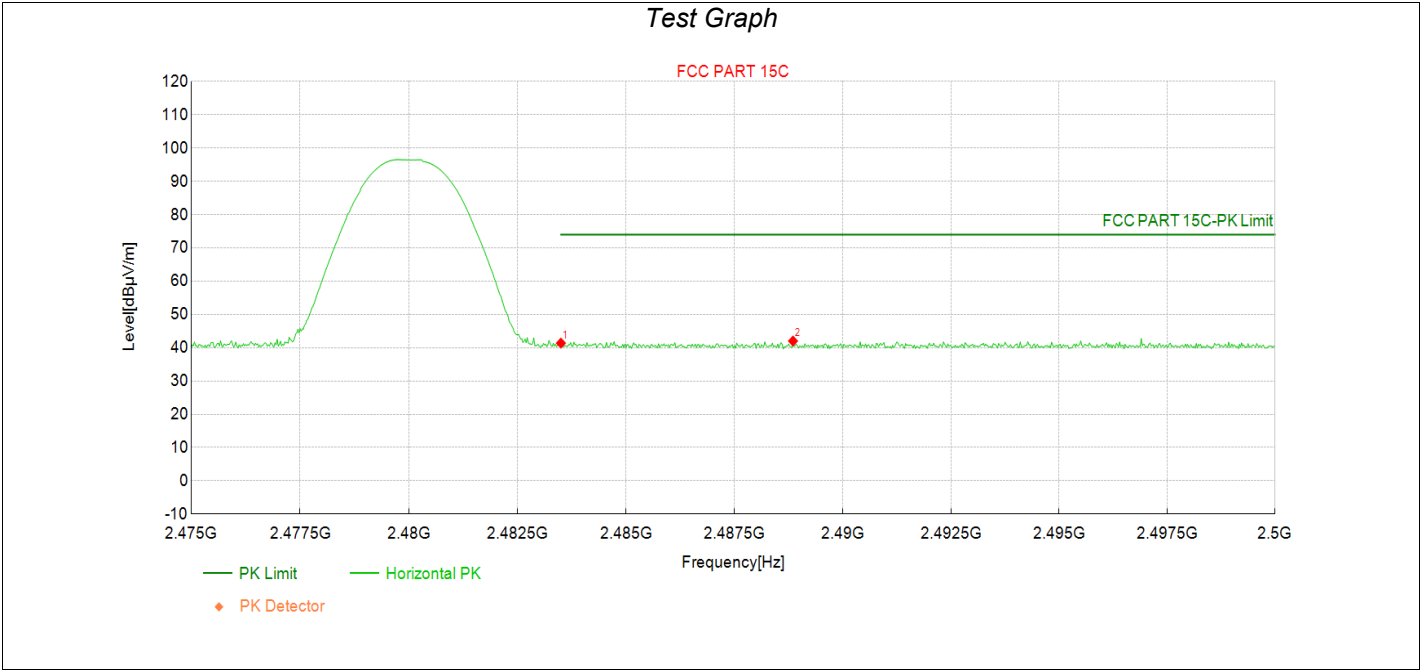
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2374.41	20.6	20.54	-0.090	54.00	33.46	AV	Horizo	PASS
2	2390.00	20.1	20.06	-0.050	54.00	33.94	AV	Horizo	PASS

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	2368.71	20.7	20.55	-0.100	54.00	33.45	AV	Vertic	PASS
2	2390.00	20.1	20.03	-0.050	54.00	33.97	AV	Vertic	PASS

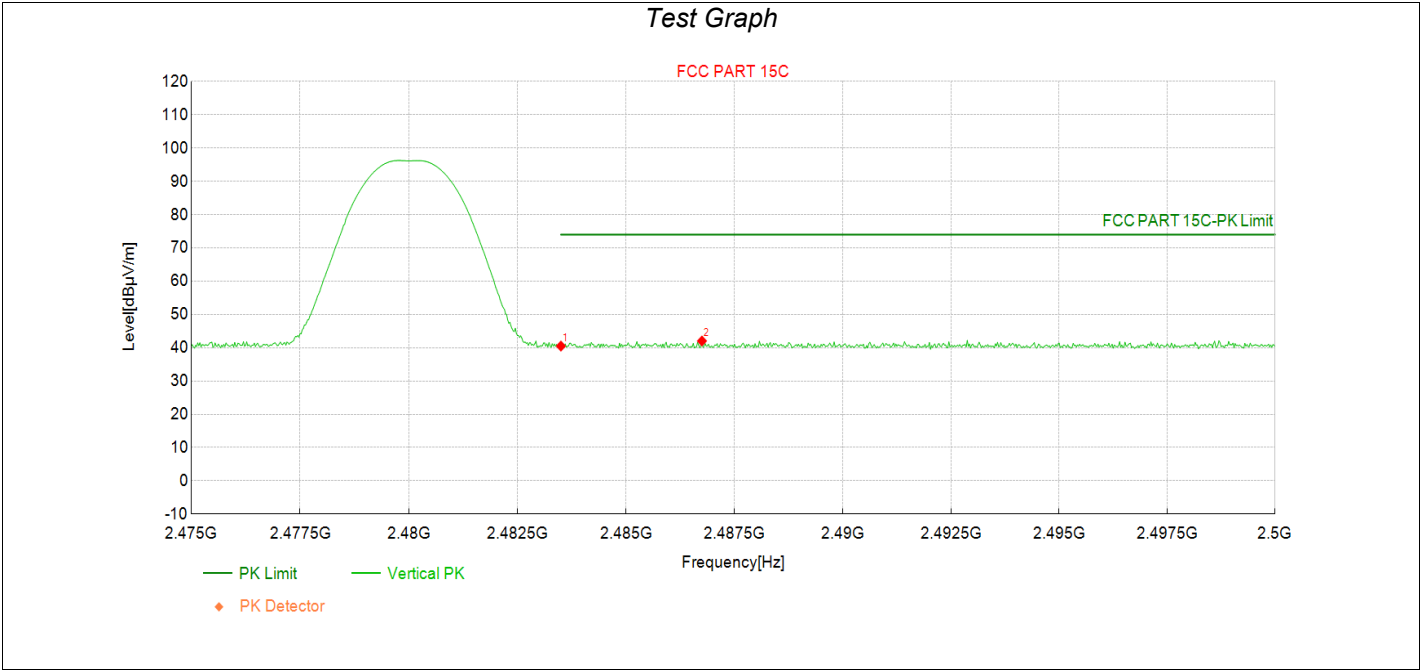
Transmit at 2480MHz by LE_2Mbps



Data List

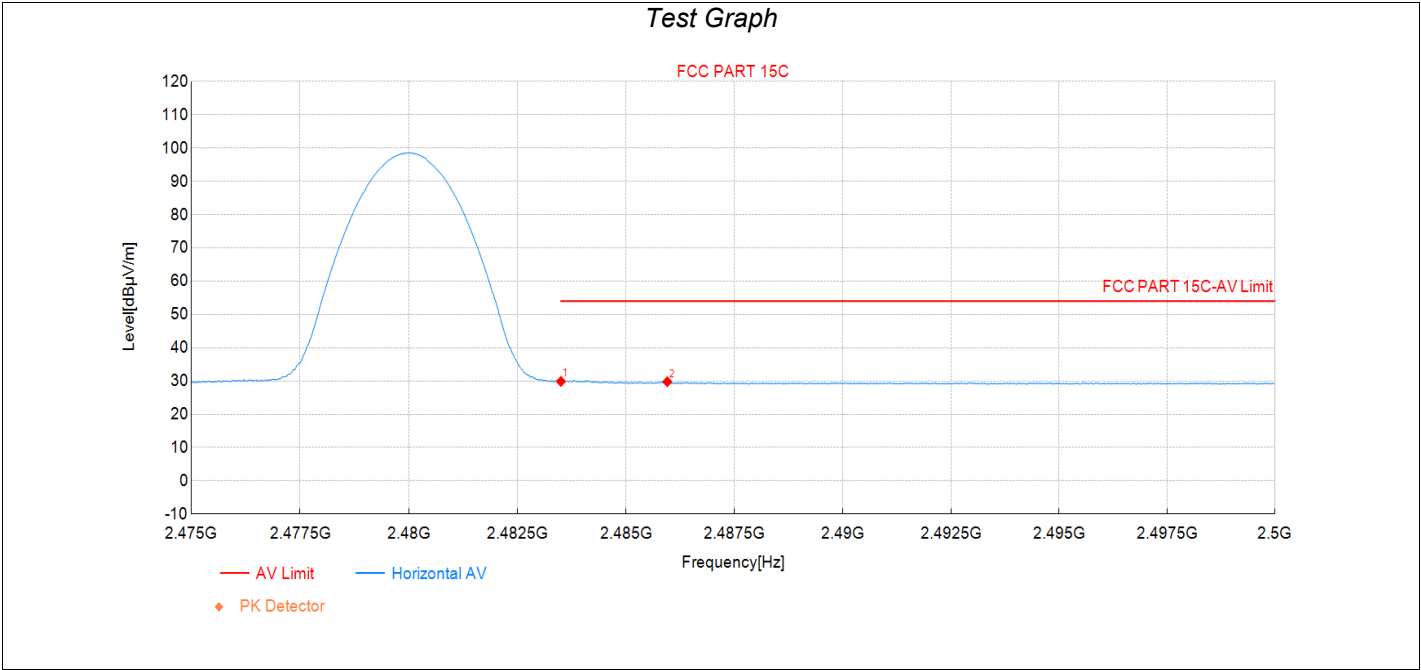
NO	Freque ncy [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdi ct
1	2483.50	41.1	41.38	0.270	74.00	32.62	PK	Horizo	PASS
2	2488.85	41.7	42.01	0.290	74.00	31.99	PK	Horizo	PASS

Transmit at 2480MHz by LE_2Mbps



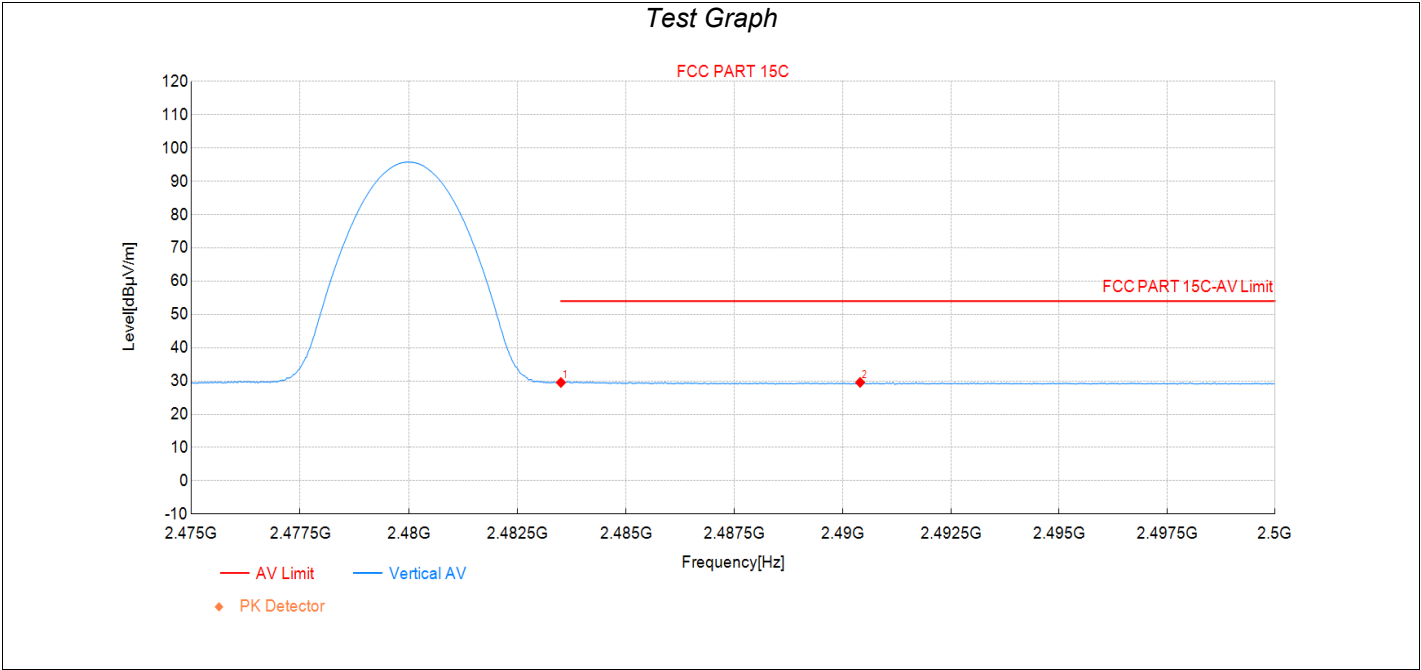
Data List									
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	40.2	40.49	0.270	74.00	33.51	PK	Vertic	PASS
2	2486.75	41.7	42.02	0.290	74.00	31.98	PK	Vertic	PASS

Transmit at 2480MHz by LE_2Mbps

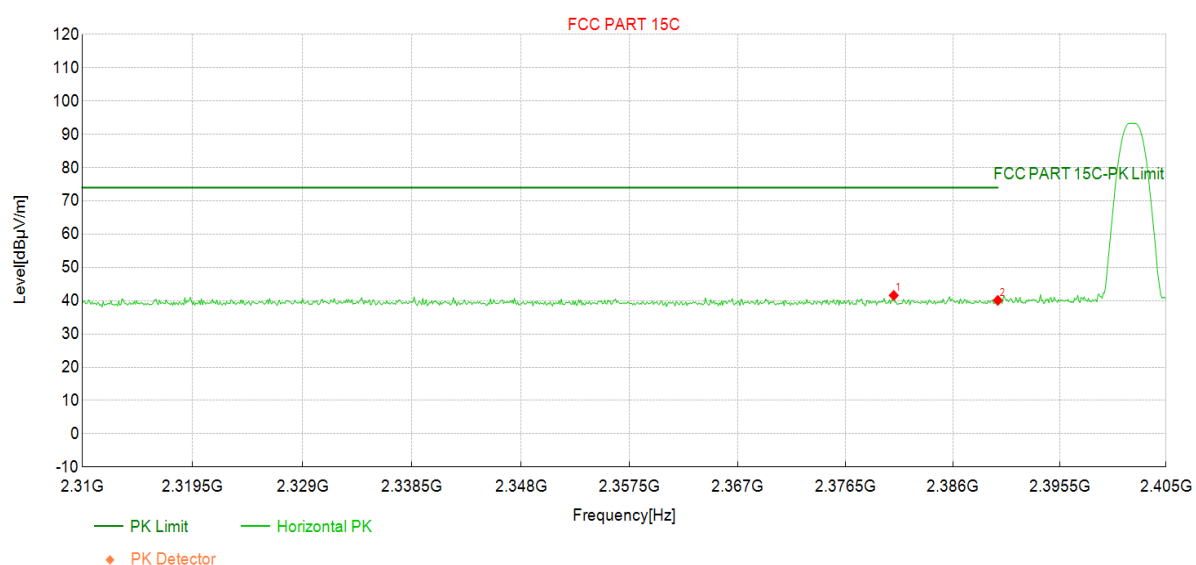


Data List									
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	29.6	29.87	0.270	54.00	24.13	AV	Horizo	PASS
2	2485.95	29.5	29.78	0.290	54.00	24.22	AV	Horizo	PASS

Transmit at 2480MHz by LE_2Mbps



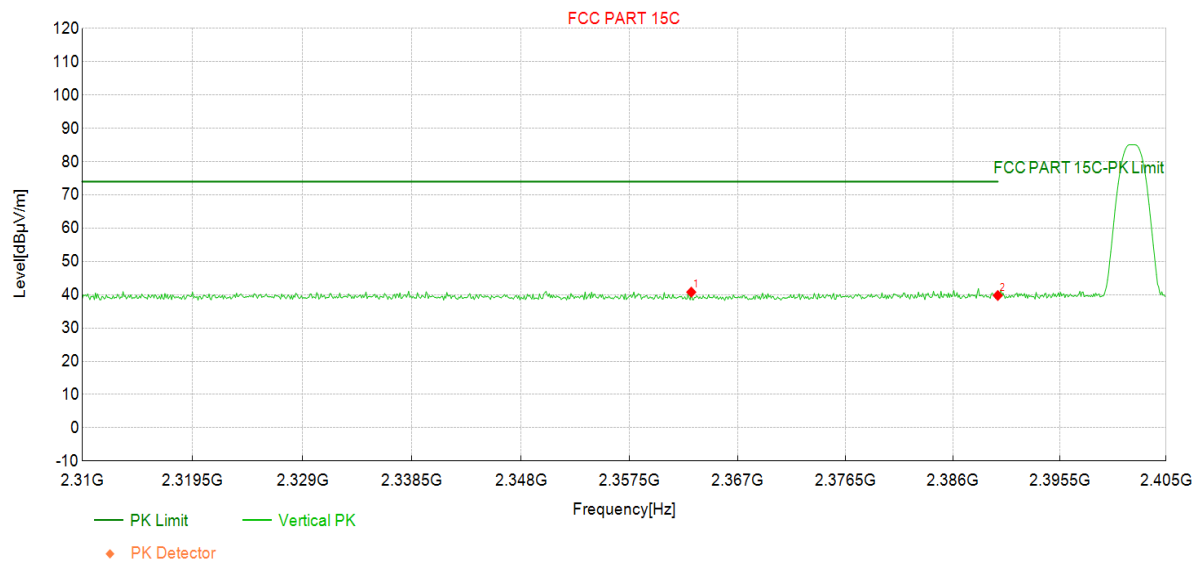
Data List									
NO	Freque ncy [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdi ct
1	2483.50	29.3	29.54	0.270	54.00	24.46	AV	Vertic	PASS
2	2490.40	29.3	29.57	0.300	54.00	24.43	AV	Vertic	PASS

Antenna BT 1**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	2380.78	41.7	41.59	-0.080	74.00	32.41	PK	Horizo	PASS
2	2390.00	40.1	40.09	-0.050	74.00	33.91	PK	Horizo	PASS

Transmit at 2402MHz by LE_1Mbps

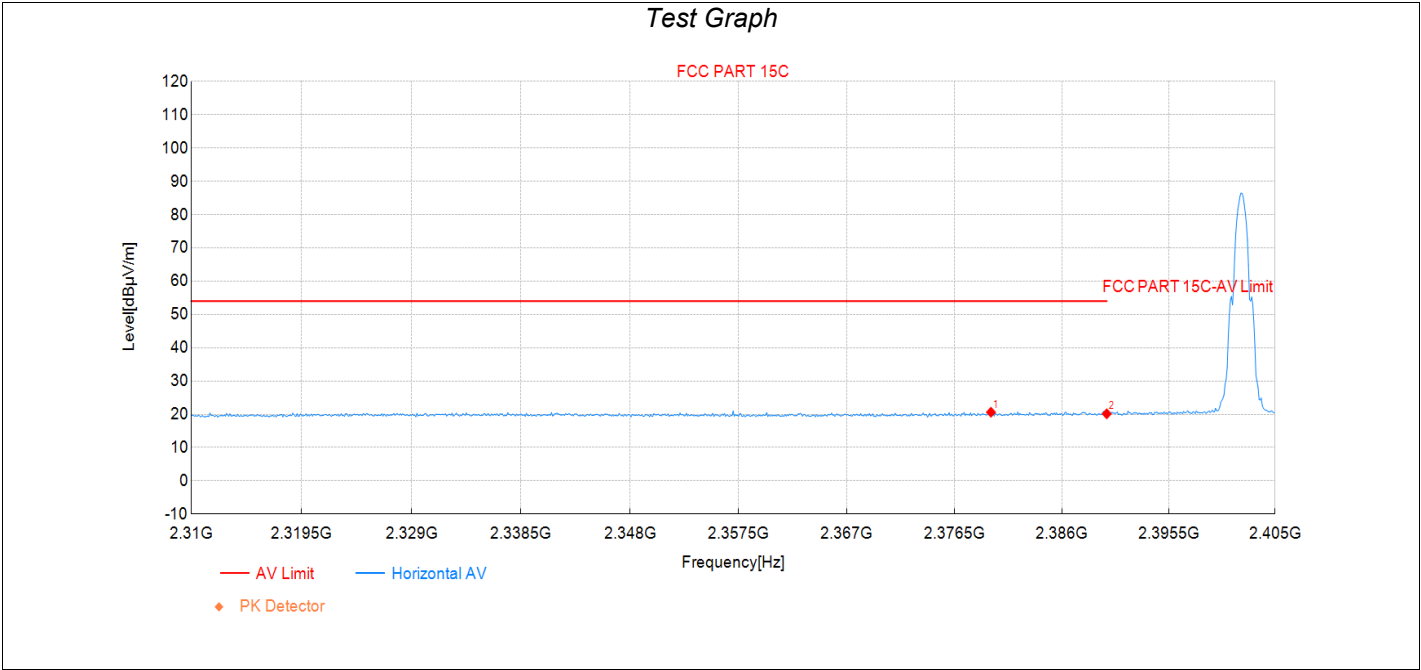
Test Graph



Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2362.92	40.9	40.78	-0.120	74.00	33.22	PK	Vertic	PASS
2	2390.00	39.8	39.77	-0.050	74.00	34.23	PK	Vertic	PASS

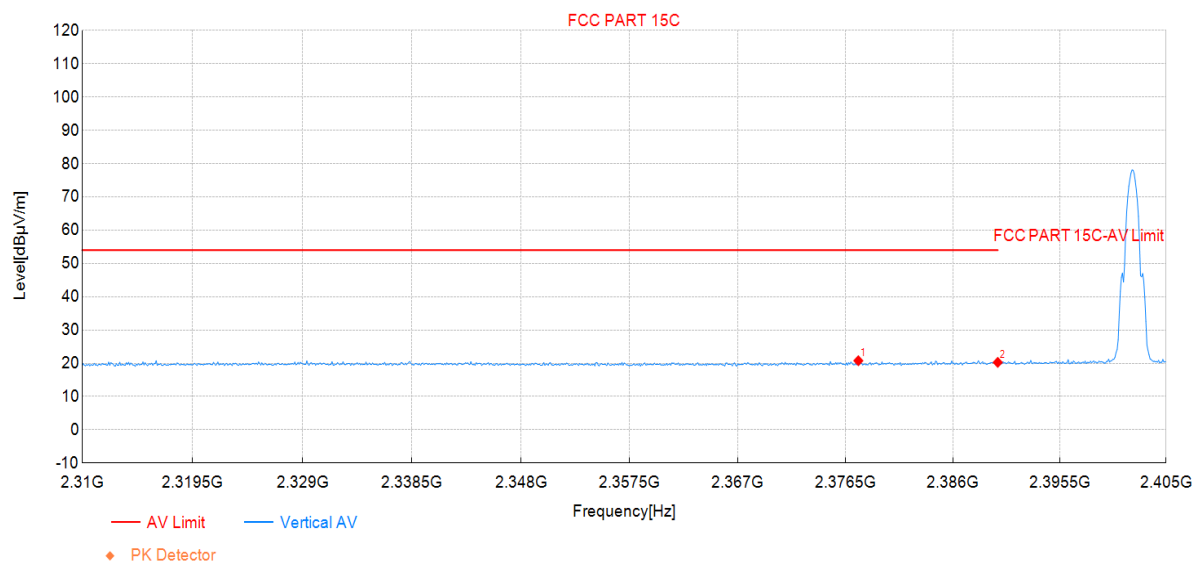
Transmit at 2402MHz by LE_1Mbps



Data List									
NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	2379.73	20.7	20.61	-0.080	54.00	33.39	AV	Horizo	PASS
2	2390.00	20.2	20.13	-0.050	54.00	33.87	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	2377.64	20.9	20.77	-0.080	54.00	33.23	AV	Vertic	PASS
2	2390.00	20.3	20.26	-0.050	54.00	33.74	AV	Vertic	PASS

Note: Level = Reading + Factor

Note: We have evaluated each antenna and both BT Antenna 0 and BT Antenna 1, only worst data shown in report.

Appendix E: Test results of Conducted Spurious Emission

Reference level measurement

Test Graphs





BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS

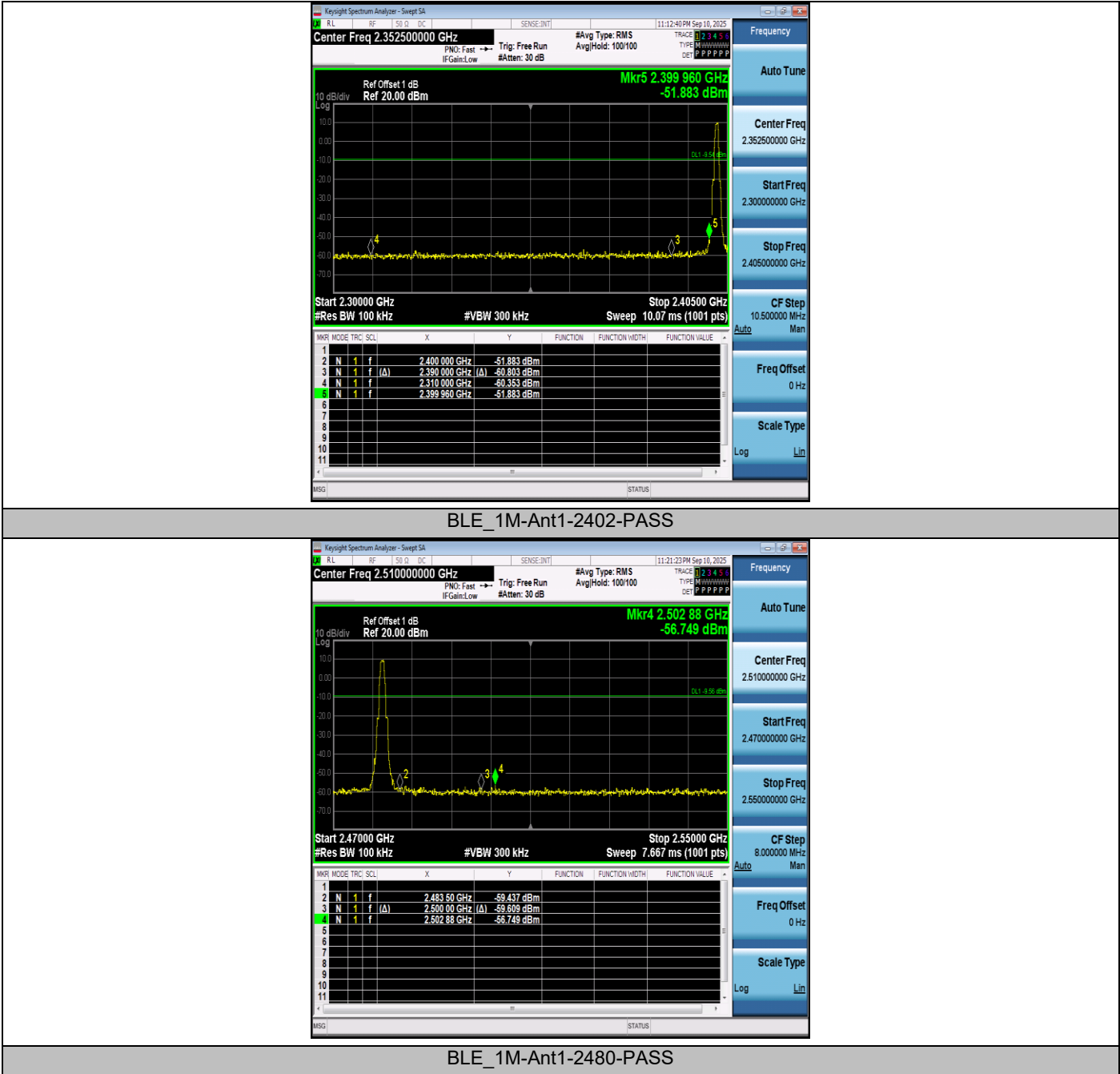


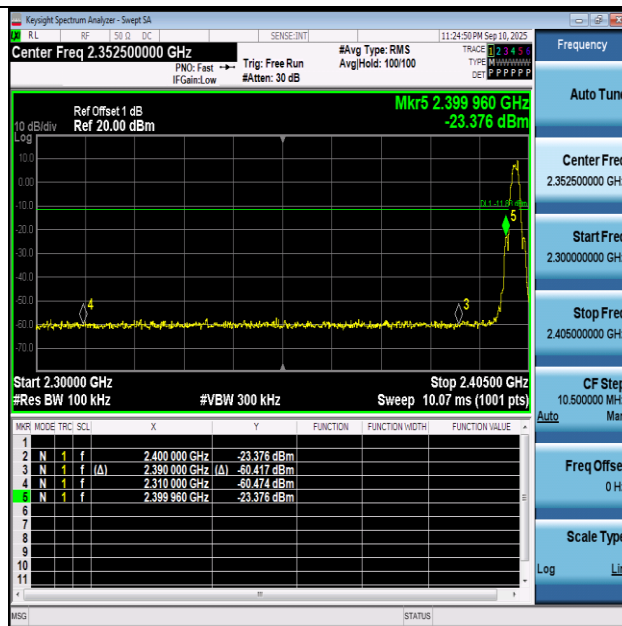
BLE_2M-Ant1-2440-PASS



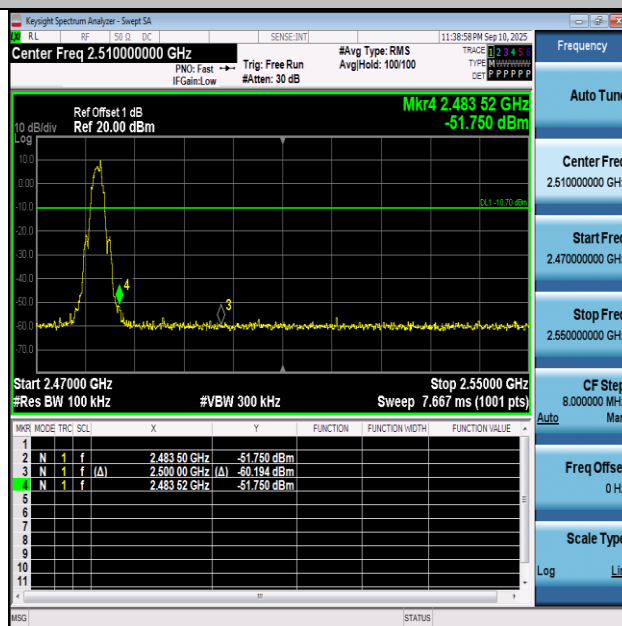
BLE_2M-Ant1-2480-PASS

Band edge measurements
Test Graphs





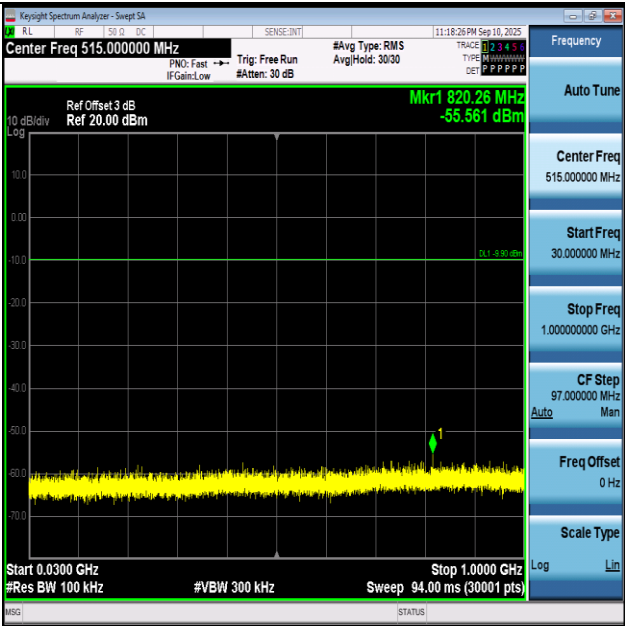
BLE_2M-Ant1-2402-PASS



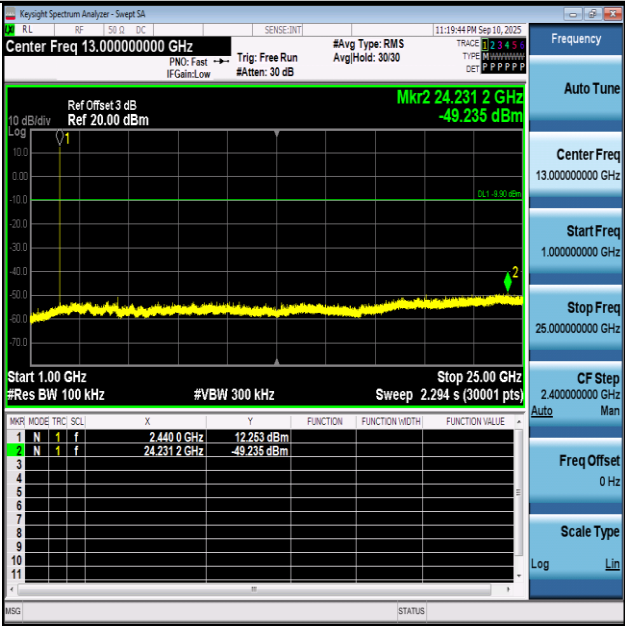
BLE_2M-Ant1-2480-PASS

Conducted Spurious Emission
Test Graphs

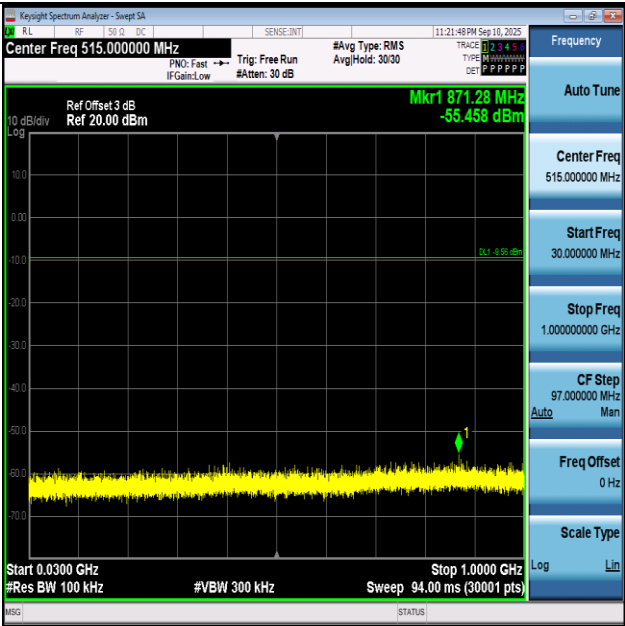




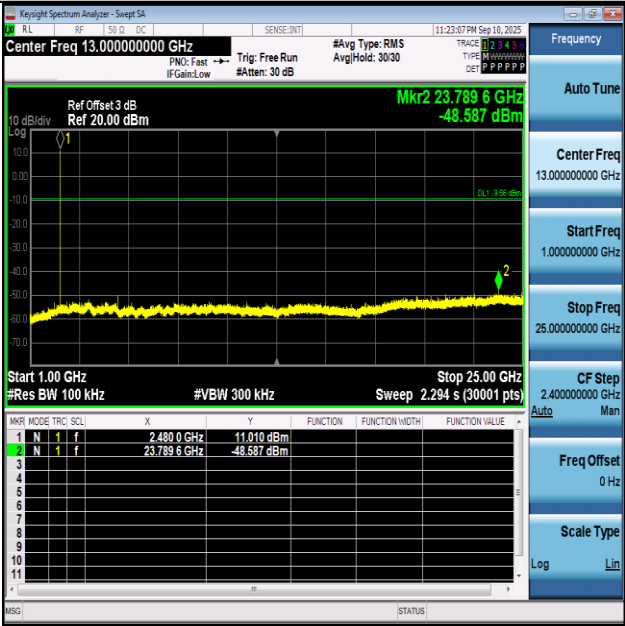
BLE_1M-Ant1-2440-30~1000-PASS



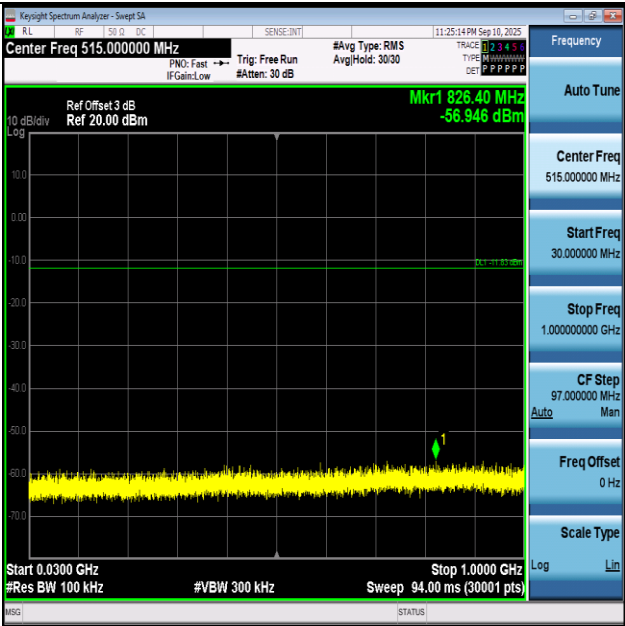
BLE_1M-Ant1-2440-1000~25000-PASS



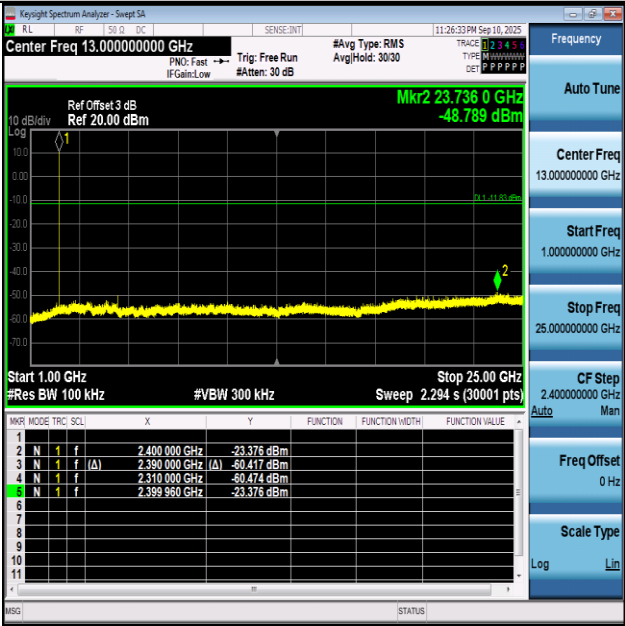
BLE_1M-Ant1-2480-30~1000-PASS



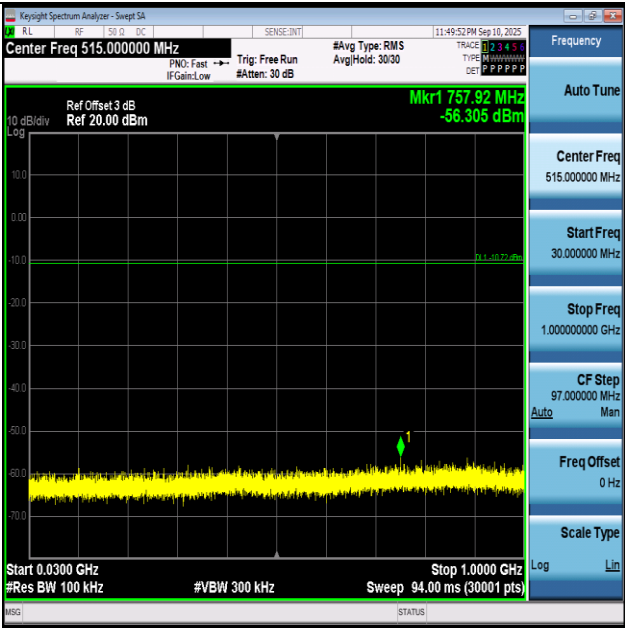
BLE_1M-Ant1-2480-1000~25000-PASS



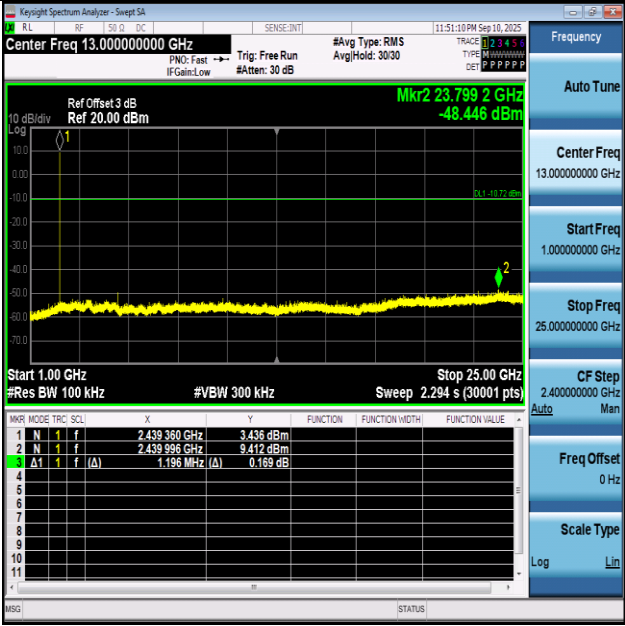
BLE_2M-Ant1-2402-30~1000-PASS



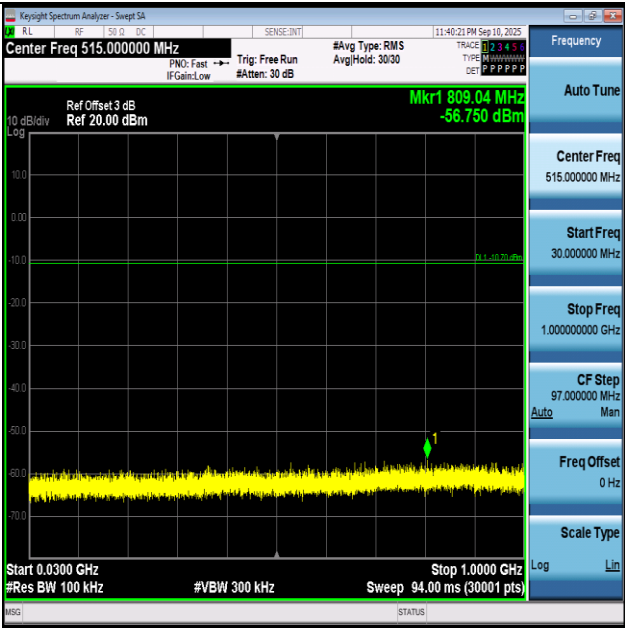
BLE_2M-Ant1-2402-1000~25000-PASS



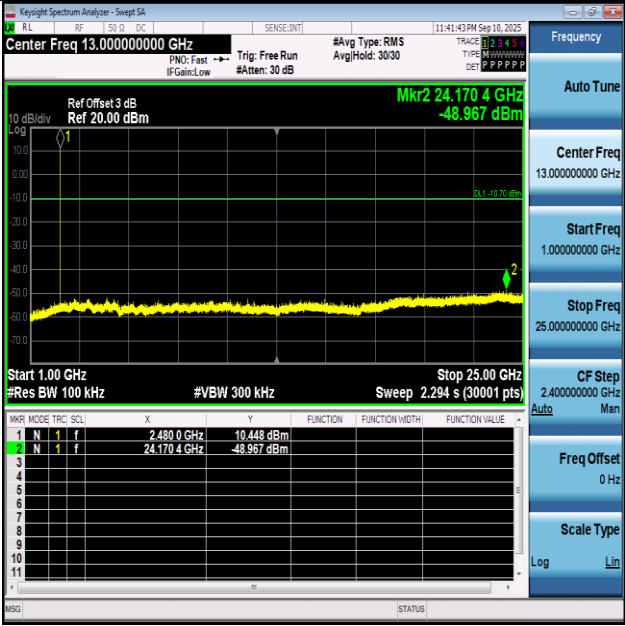
BLE_2M-Ant1-2440-30~1000-PASS



BLE_2M-Ant1-2440-1000~25000-PASS



BLE_2M-Ant1-2480-30~1000-PASS



BLE_2M-Ant1-2480-1000~25000-PASS

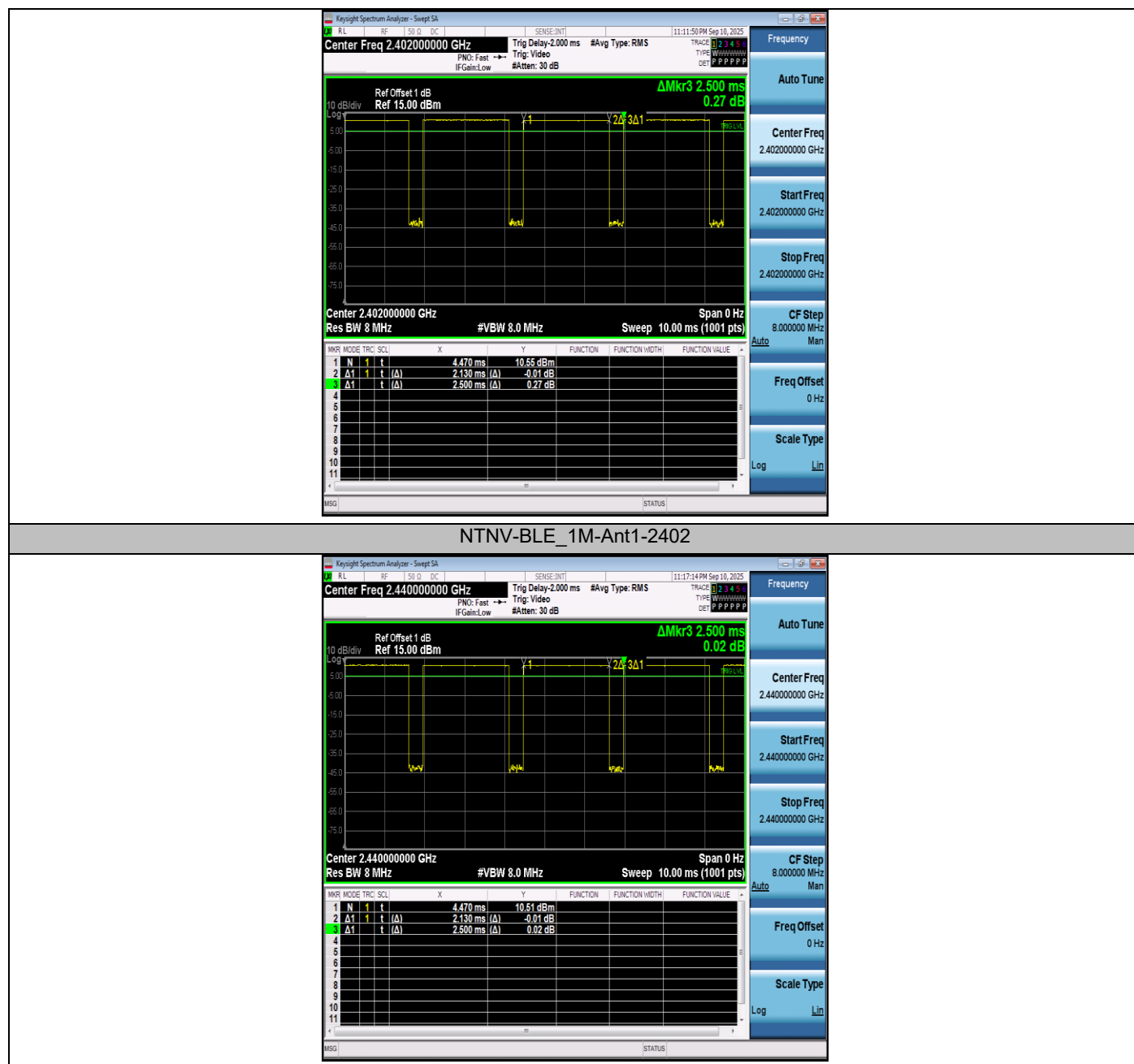
Note: We have evaluated each antenna and both BT Antenna 0 and BT Antenna 1, only worst data shown in report.

Appendix F: Test results of Duty cycle

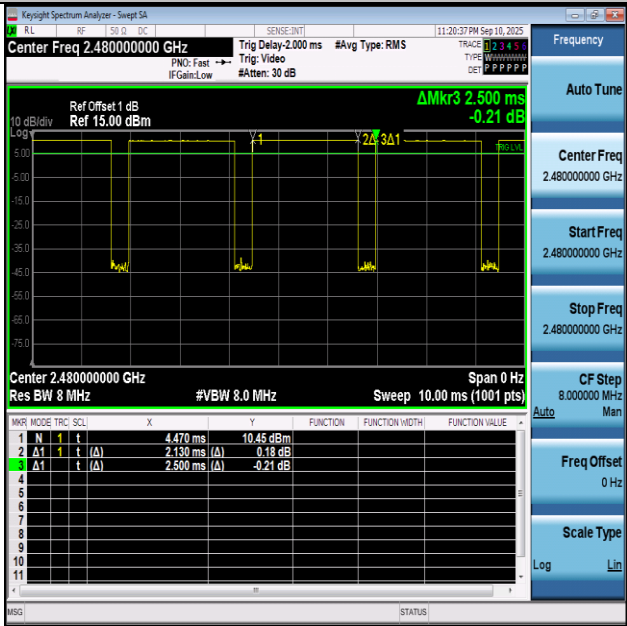
Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	2.13	2.50	85.20	0.70
BLE_1M	Ant1	2440	2.13	2.50	85.20	0.70
BLE_1M	Ant1	2480	2.13	2.50	85.20	0.70
BLE_2M	Ant1	2402	1.07	1.88	56.91	2.45
BLE_2M	Ant1	2440	1.07	1.87	57.22	2.42
BLE_2M	Ant1	2480	1.07	1.88	56.91	2.45

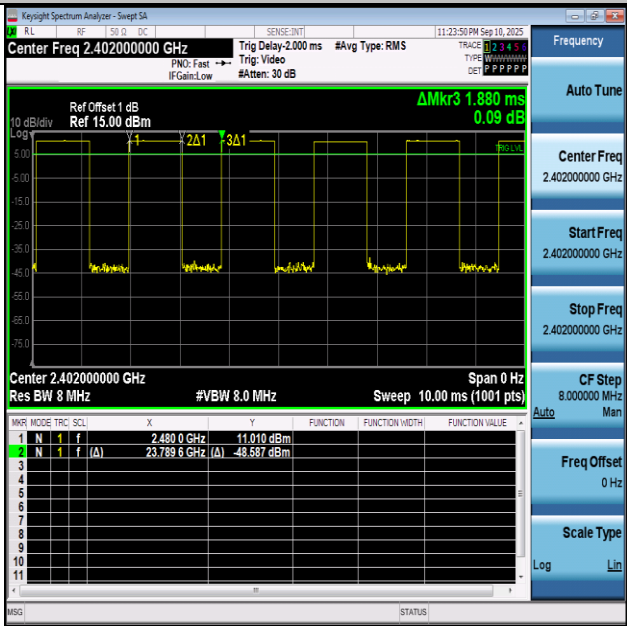
Test Graphs



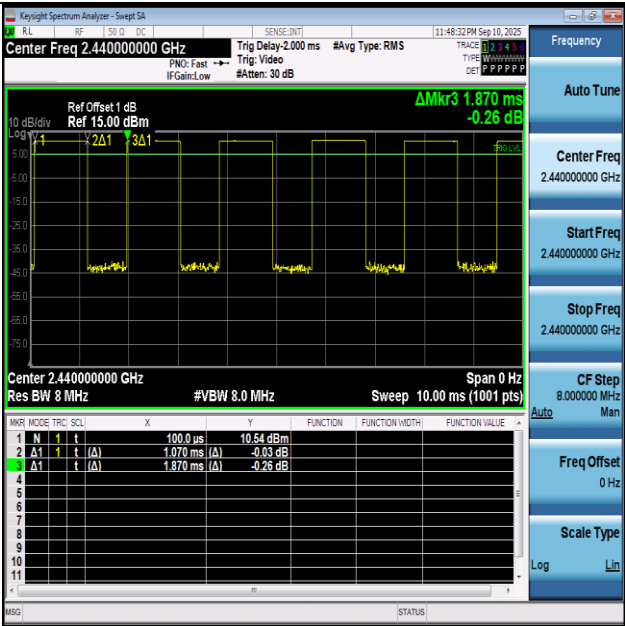
NTNV-BLE_1M-Ant1-2440



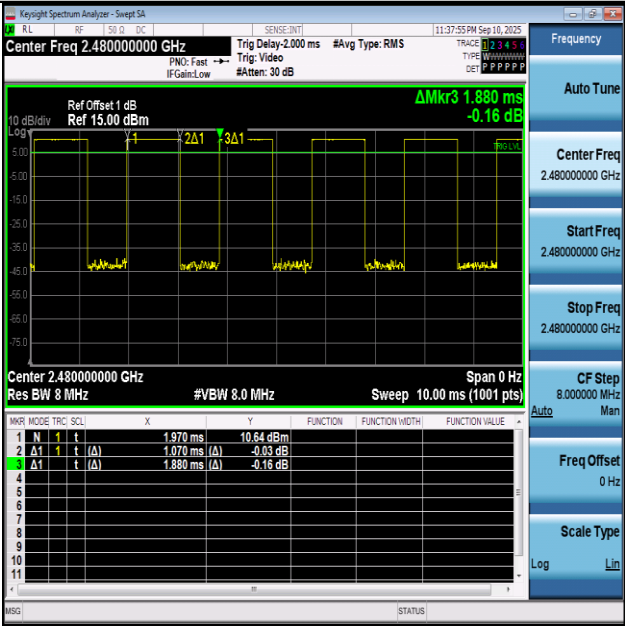
NTNV-BLE_1M-Ant1-2480



NTNV-BLE_2M-Ant1-2402



NTNV-BLE_2M-Ant1-2440



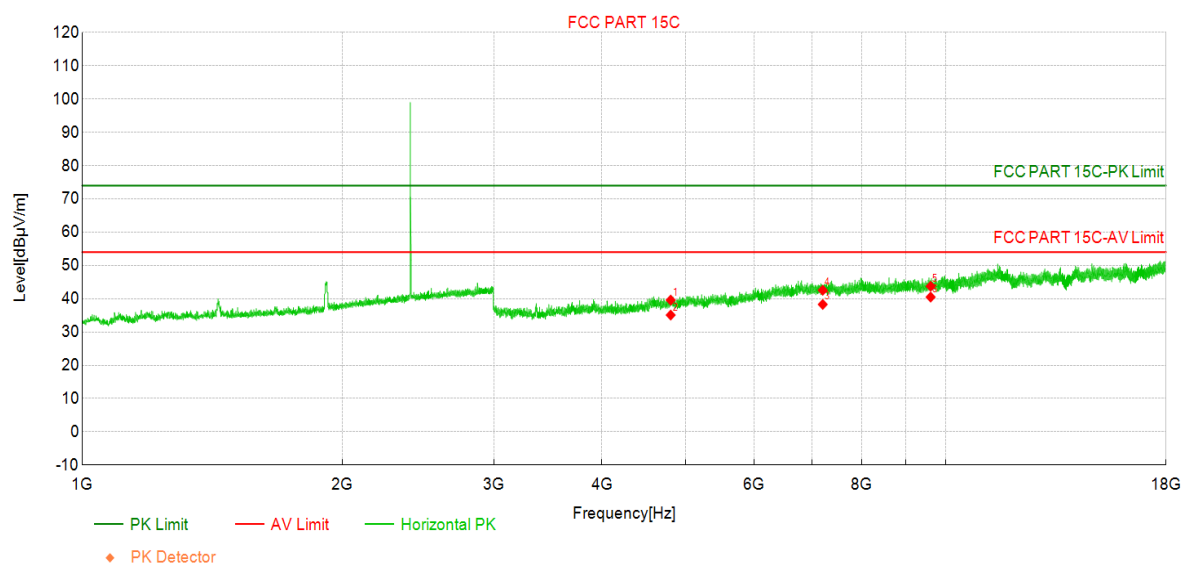
NTNV-BLE_2M-Ant1-2480

Appendix G: Test results of Emissions in Restricted Bands

Antenna BT 0

Transmit at 2402MHz by LE_1Mbps

Test Graph

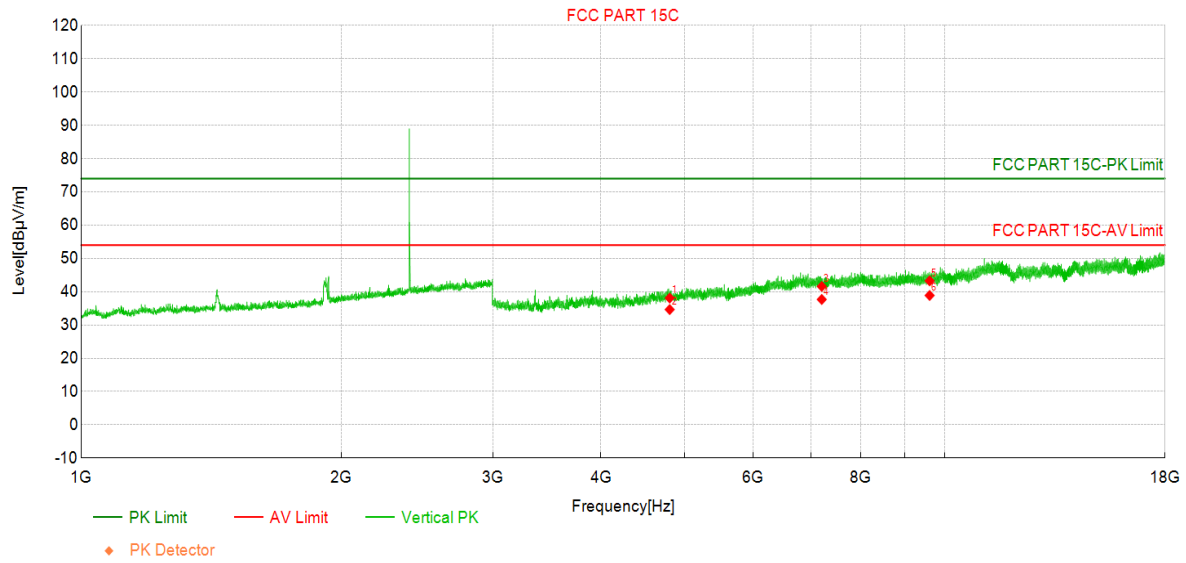


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4804.00	48.1	39.59	-8.480	74.00	34.41	PK	Horizo	PASS
2	4804.00	43.6	35.08	-8.480	54.00	18.92	AV	Horizo	PASS
3	7206.00	39.9	38.29	-1.620	54.00	15.71	AV	Horizo	PASS
4	7206.00	44.2	42.56	-1.620	74.00	31.44	PK	Horizo	PASS
5	9608.00	42.4	43.75	1.380	74.00	30.25	PK	Horizo	PASS
6	9608.00	39.1	40.50	1.380	54.00	13.50	AV	Horizo	PASS

Transmit at 2402MHz by LE_1Mbps

Test Graph

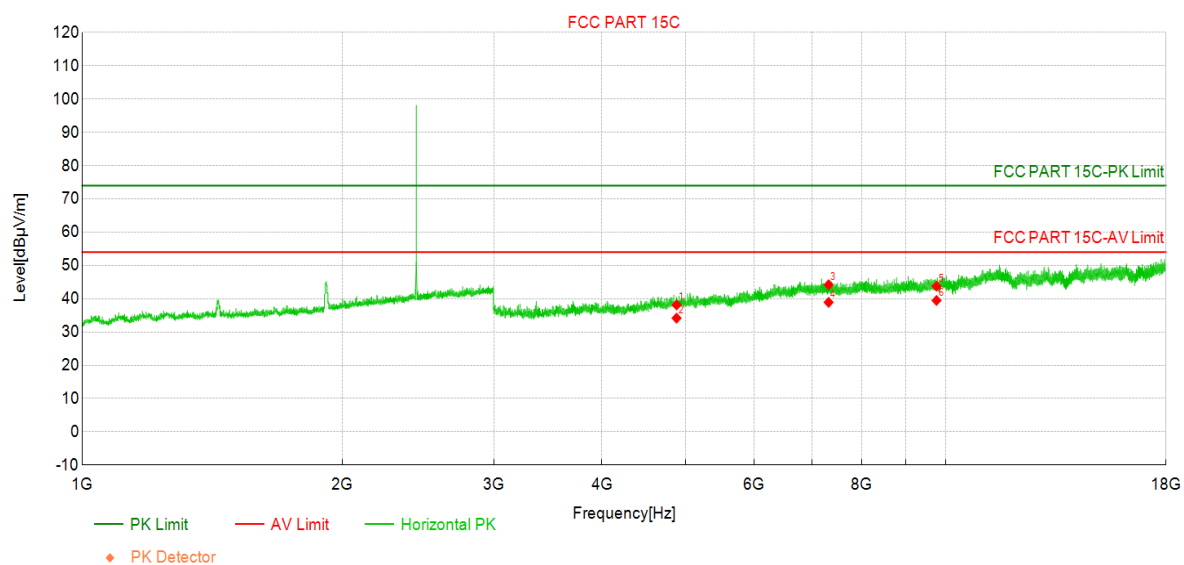


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4804.00	46.6	38.09	-8.480	74.00	35.91	PK	Vertic	PASS
2	4804.00	43.1	34.64	-8.480	54.00	19.36	AV	Vertic	PASS
3	7206.00	43.2	41.59	-1.620	74.00	32.41	PK	Vertic	PASS
4	7206.00	39.3	37.67	-1.620	54.00	16.33	AV	Vertic	PASS
5	9608.00	41.9	43.27	1.380	74.00	30.73	PK	Vertic	PASS
6	9608.00	37.5	38.88	1.380	54.00	15.12	AV	Vertic	PASS

Transmit at 2440MHz by LE_1Mbps

Test Graph

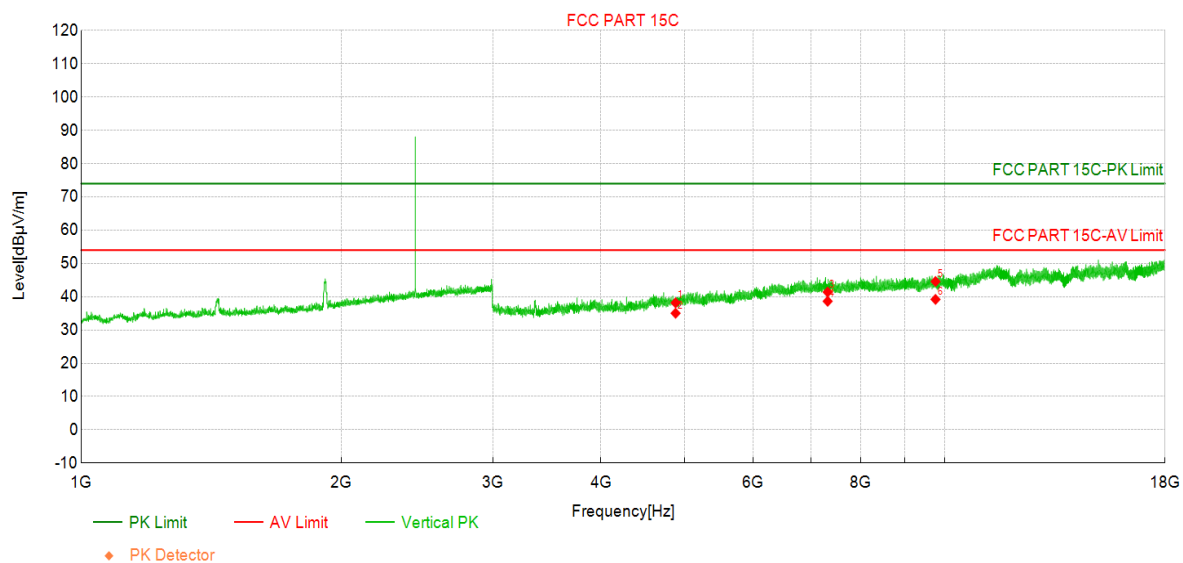


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	4880.00	46.3	38.14	-8.160	74.00	35.86	PK	Horizo	PASS
2	4880.00	42.3	34.16	-8.160	54.00	19.84	AV	Horizo	PASS
3	7320.00	45.7	44.21	-1.450	74.00	29.79	PK	Horizo	PASS
4	7320.00	40.4	38.91	-1.450	54.00	15.09	AV	Horizo	PASS
5	9760.00	42.3	43.76	1.450	74.00	30.24	PK	Horizo	PASS
6	9760.00	38.0	39.48	1.450	54.00	14.52	AV	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	4880.00	46.3	38.17	-8.160	74.00	35.83	PK	Vertic	PASS
2	4880.00	43.2	35.04	-8.160	54.00	18.96	AV	Vertic	PASS
3	7320.00	42.9	41.41	-1.450	74.00	32.59	PK	Vertic	PASS
4	7320.00	40.1	38.63	-1.450	54.00	15.37	AV	Vertic	PASS
5	9760.00	43.1	44.57	1.450	74.00	29.43	PK	Vertic	PASS
6	9760.00	37.8	39.20	1.450	54.00	14.80	AV	Vertic	PASS