



Test report No:
2560724R.703

TEST REPORT

Product Name	Nokia Industrial 5G fieldrouter FRRO505c
Trademark	Nokia
Model and /or type reference	FRRO505c
FCC ID	2AVO2FRRO505C
Applicant's name / address	Nokia of America Corp 3201 Olympus Blvd, Dallas, TX 75019, US
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	2025-08-21
Report Version	V1.1
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.

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GENERAL CONDITIONS

Test Location A	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Test Location B	No. 8213, Fanhua Avenue, Baohe District, Hefei City, Anhui Province, China
Date(receive sample)	Jun. 24, 2025
Date (start test)	Jun. 30, 2025
Date (finish test)	Aug. 14, 2025
Note: Radiated Emission and Radiated Emission Band Edge were completed at Test Location B, and other tests were completed at Test Location A.	

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.

ENVIRONMENTAL CONDITIONS

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

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%

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

POSSIBLE TEST CASE VERDICTS

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

ABBREVIATIONS

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

EUT	: Equipment Under Test
PK	: Peak
QP	: Quasi-Peak
CAV	: CISPR Average
AV	: Average
CDN	: Coupling Decoupling Network
SAC	: Semi-Anechoic Chamber
OATS	: Open Area Test Site
BW	: Bandwidth
AM	: Amplitude Modulation
PM	: Pulse Modulation
HCP	: Horizontal Coupling Plane
VCP	: Vertical Coupling Plane
U_N	: Nominal voltage
Tx	: Transmitter
Rx	: Receiver
N/A	: Not Applicable
N/M	: Not Measured
RMS	: Root Mean Squar
NT	: Normal Temperature
HT	: High Extreme Test Temperature
LT	: Low Extreme Test Temperature
NV	: Normal Voltage
HV	: High Extreme Test Voltage
LV	: Low Extreme Test Voltage

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
2560724R.703	V1.0	Initial issue of report.	2025-08-12
2560724R.703	V1.1	Page 30, 306: Add description for test chain. Page 62: Add MIMO PSD data and description for test method. (The test report No.: 2560724R.703 V1.1 is to replace the test report No.: 2560724R.703 V1.0, and test report 2560724R.703 V1.0 is obsoleted.)	2025-08-21

REMARKS AND COMMENTS

1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
2. These test results on a sample of the device are for the purpose of demonstrating Compliance with 47 CFR FCC Part 15 (Section 15.247)
3. 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.
4. The test results presented in this report relate only to the object tested.
5. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
6. This report will not be used for social proof function in China market.
7. DEKRA declines any responsibility with the following test data provided by customer that may affect the validity of result:

- Chapter 1 General Information.

USED EQUIPMENT

Test Location A :AC Power Line Conducted Emission / TR1

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100726	2025.05.18	2026.05.17
Two-Line V-Network	R&S	ENV 216	101044	2024.10.26	2025.10.25
Two-Line V-Network	R&S	ENV 216	101189	2025.05.10	2026.05.09
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2025.03.16	2026.03.15
Coaxial Cable	Huber+Suhner	RG 223	TR1-C1	2025.03.16	2026.03.15
Impedance Stabilization Network	Teseq GmbH	ISN T800	57318	2025.02.25	2026.02.24
Temperature/Humidity Meter	RTS	RTS-8S	EMC01	2025.06.17	2026.06.16
Dekra test software	Dekra	N/A	N/A	N/A	N/A

Test Location A :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

Test Location 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	2024.09.08	2025.09.07
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

Test Location B: Radiated Emission Band Edge / AC103

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal analyzer	keysight	N9020B	MY63490118	2024.07.26	2025.07.25
Signal analyzer	keysight	N9020B	MY63490118	2025.07.14	2026.07.13
Bilog Antenna	TESEQ	CBL6112D	64164	2024.11.23	2025.11.22
Horn Antenna	RF SPIN	DRH18-E	KV2D11A18ES	2024.11.02	2025.11.01
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	01312	2024.10.28	2025.10.27
Amplifier	ESE	LNA0118	LNA23100009	2025.05.10	2026.05.09
Amplifier	Tonscend	TAP01018048S	AP23J8060307	2024.11.16	2025.11.15
Band Reject Filter Group	Tonscend	JS0806-F	23G806F0701	2024.11.20	2025.11.19
Temperature/Humidity Meter	RTS	RTS-8S	026	2024.09.04	2025.09.03
Test Software	Tonscend	JS36	N/A	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 A	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

Test item Test Location B	Uncertainty
Radiated Emission(30MHz~1GHz)	Horizontal: 30MHz~300MHz: 4.9 dB, 300MHz~1GHz: 4.9 dB Vertical: 30MHz~300MHz: 4.9 dB, 300MHz~1GHz: 4.9 dB
Radiated Emission(1GHz~40GHz)	Horizontal: 1GHz~40GHz: 6.0 dB Vertical: 1GHz~40GHz: 5.8 dB
Radiated Emission Band Edge	± 6.0 dB

1 GENERAL INFORMATION

Product Name..... :	Nokia Industrial 5G fieldrouter FRRO505c	
Model No. :	FRRO505c	
Trademark. :	Nokia	
FCC ID..... :	2AVO2FRRO505C	
Manufacturer..... :	Shanghai Smawave Technology Co., Ltd	
Manufacturer Address..... :	2/F, Building 8, 1001 North Qinzhou Road , Xuhui District, Shanghai, China	
Power Supply..... :	9~36Vdc	
SN :	RF Conducted	RO505A00252300047
	RF Radiated	RO505A00252300029
Wireless specification..... :	Wi-Fi	
Operating frequency range(s)..... :	2400~2483.5MHz	
Type of modulation..... :	802.11b: DSSS-DBPSK, DQPSK, CCK 802.11g/n: OFDM-BPSK, QPSK, 16QAM, 64QAM 802.11ax/be: OFDMA -BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024 QAM, 4096QAM Note: The device not support partial RU function.	
Channel Spacing..... :	802.11b/g/n/ax/be: 20MHz 802.11n/ax/be: 40MHz	
Device category :	<input type="checkbox"/>	Fixed point-to-point
	<input type="checkbox"/>	Emit multiple directional beams, simultaneously or sequentially
	<input checked="" type="checkbox"/>	Other cases
Antenna type..... :	Dipole	
Antenna Gain..... :	Ant 1&2&3&4: 5.02 dBi	
<p>Note: The product has two identical Wi-Fi chips built in, each chip is equipped with two antennas, and the product has a total of four Wi-Fi antennas. The circuits, antennas, and firmware of the two Wi-Fi chips are exactly the same, so except for EIRP, other test items only show the data of one chip. The two chips work independently, so they can not be combined in MIMO 4*4 mode. After evaluation, this report only presents test data of one chip.</p>		

Remark:

- 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.
- Except for the power test of all antenna ports, other data only shows the worst mode data.

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
QRCT	4.0.156.1	Qualcomm	Qualcomm

Accessories Information	Cable		
	Length used during test [m]	Attached during test	Shielded
(2) Ethernet cable	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(3) Ethernet cable	8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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 D01V05r02	2019	Guidance for performing compliance measurements on Digital Transmission System (DTS) operating under section 15.247
KDB 662911 D01V02r01	2020	Provision to Allow Measurement of Directional Gain of Multi-Antenna Systems for Compliance Verification

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)

3.3 Overview of results

Requirement – Test Item of FCC	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 C63.10:2013	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	PASS	Test data please refer to Appendix F
Antenna Requirement	FCC 15.203	PASS	---

3.4 Power setting in test

Mode	Channel	Frequency (MHz)	Power setting	
			SISO	MIMO
11b	1	2412	23.00	N/A
	6	2437	24.00	N/A
	11	2462	24.00	N/A
11g	1	2412	21.00	N/A
	6	2437	21.00	N/A
	11	2462	21.00	N/A
11n (20MHz)	1	2412	21.00	18.00
	6	2437	21.00	18.00
	11	2462	21.00	18.00
11n (40MHz)	3	2422	20.50	17.50
	6	2437	20.50	17.50
	9	2452	20.00	17.00
11ax (20MHz)	1	2412	17.00	14.00
	6	2437	17.00	14.00
	11	2462	16.00	13.00
11ax (40MHz)	3	2422	17.00	14.00
	6	2437	17.00	14.00
	9	2452	15.50	12.50
11be (20MHz)	1	2412	17.50	14.50
	6	2437	18.00	15.00
	11	2462	18.00	15.00
11be (40MHz)	3	2422	18.00	15.00
	6	2437	18.00	15.00
	9	2452	17.00	14.00

3.5 Test Facility

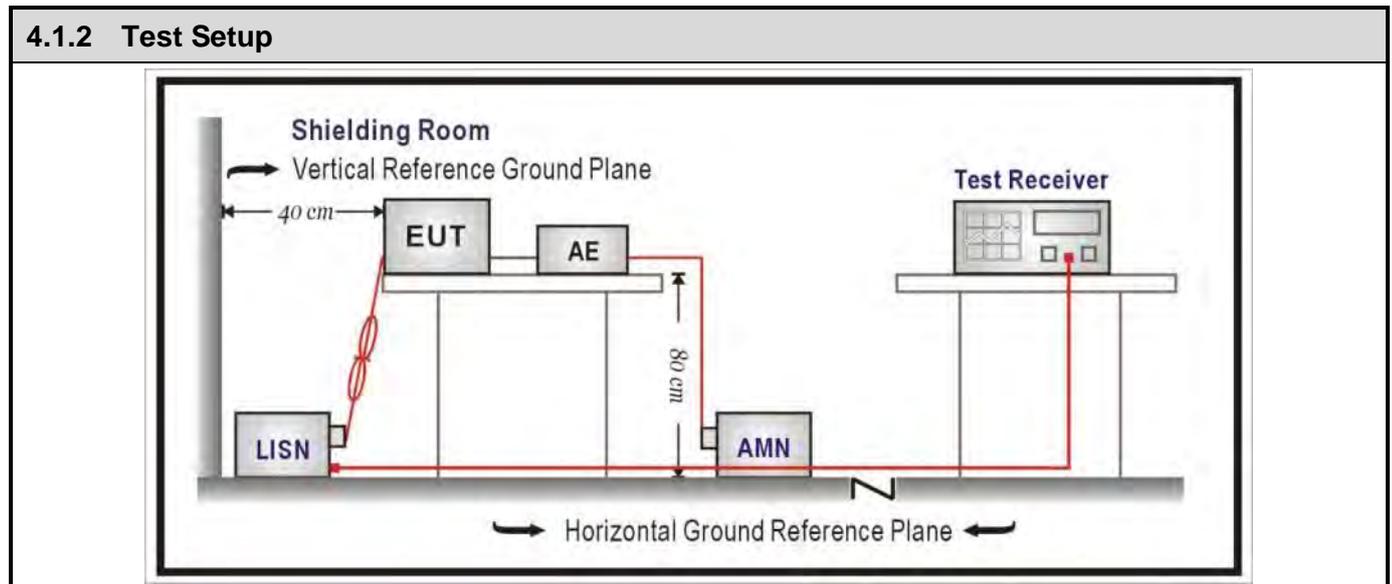
Tset Location A : FCC Designation Number: CN1199

Tset Location B : FCC Designation Number: CN1321

4 TEST RESULTS

4.1 AC Power Line Conducted Emission	VERDICT: N/A
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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.		



4.1.3 Test Procedure			
	References Rule	Chapter	Item
<input checked="" type="checkbox"/>	ANSI C63.10	6.2	Standard test method for ac power-line conducted emissions from unlicensed wireless devices

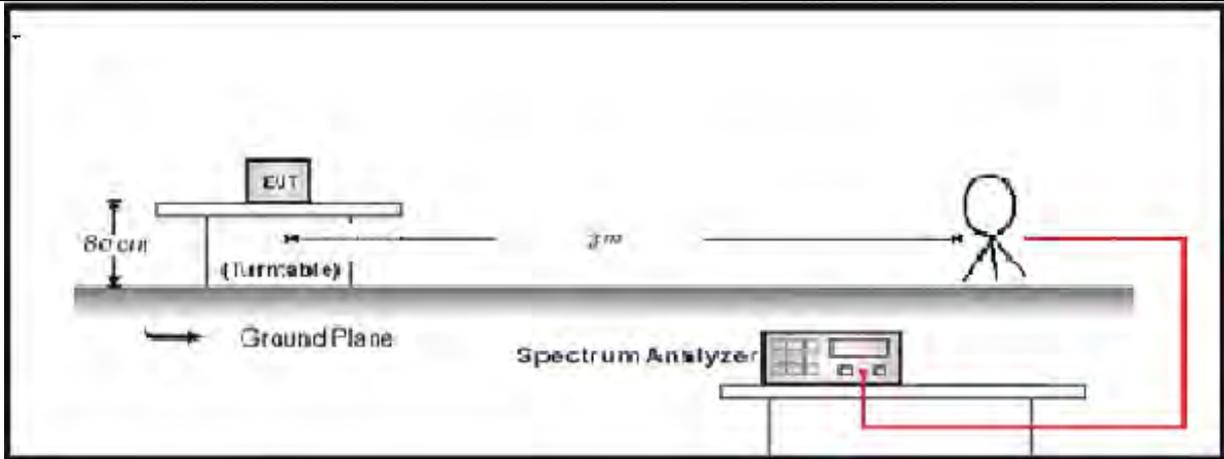
4.2 Emissions in restricted frequency bands	VERDICT: PASS
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4.2.1 Limit			
Standard		FCC Part 15 Subpart C Paragraph 15.205; 15.209	
Restricted Bands of operation for FCC			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	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)
<p>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).</p> <p>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</p>			

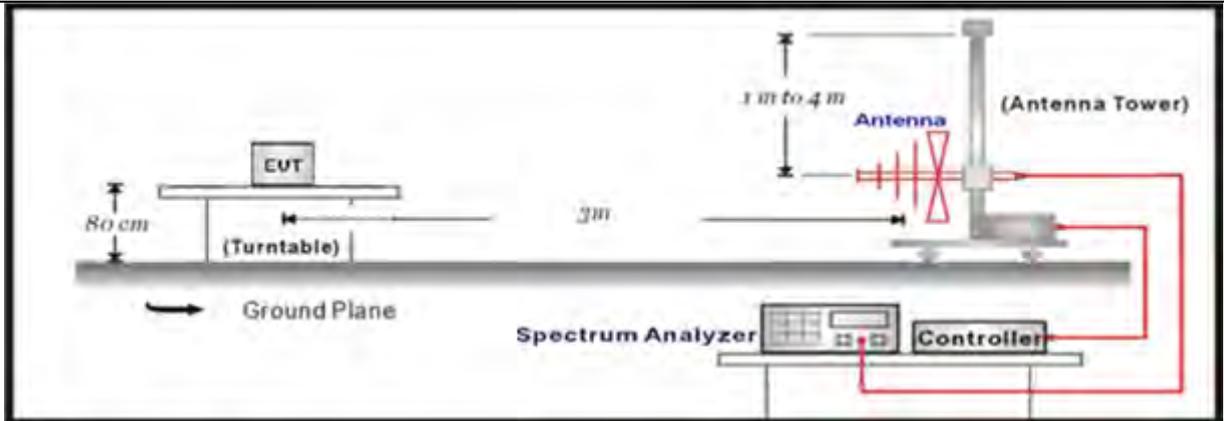
that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.2.2 Test Setup

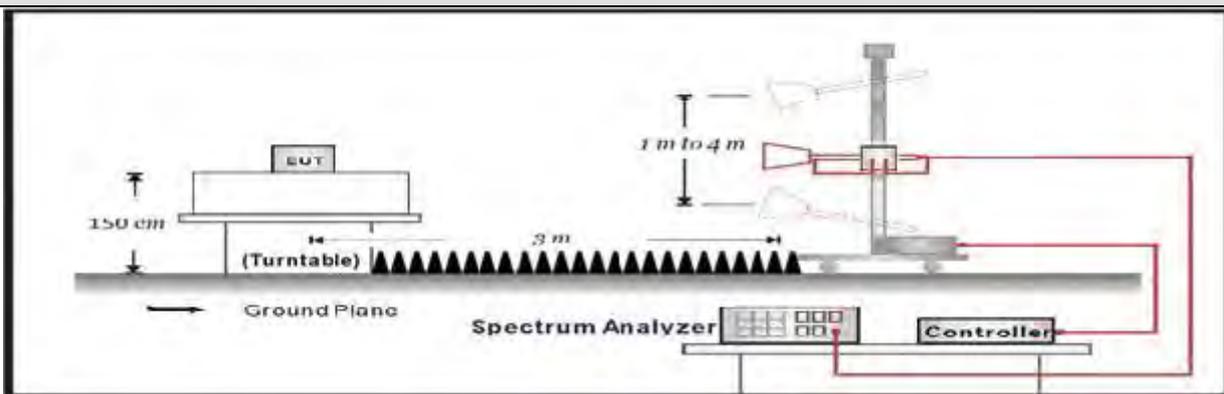
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



4.2.3 Test Procedure			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.12	Emissions in restricted frequency bands
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.1	Radiated emission measurements
	<input checked="" type="checkbox"/> ANSI C63.10	6.3	Radiated spurious emission test
	<input checked="" type="checkbox"/> ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
	<input checked="" type="checkbox"/> ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
	<input checked="" type="checkbox"/> ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

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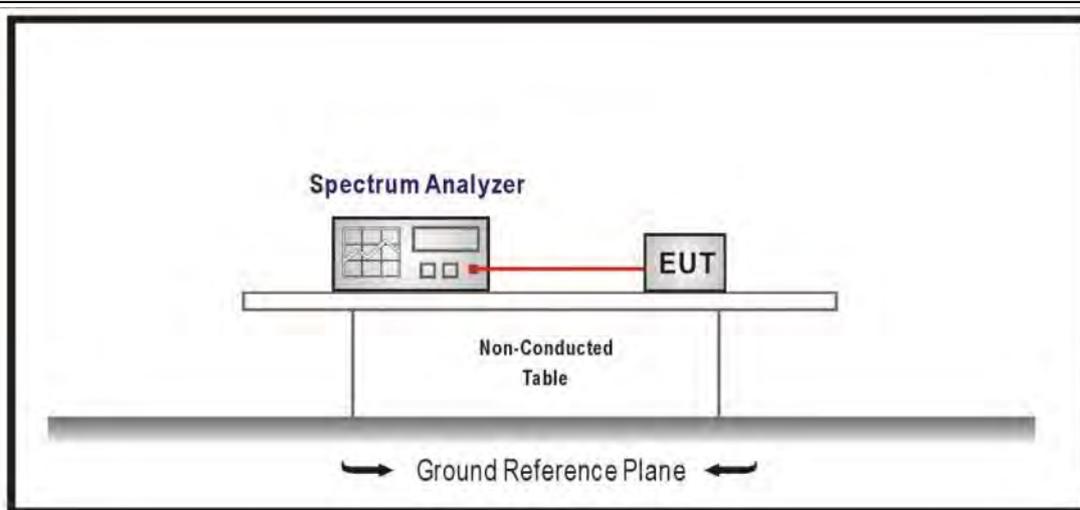
4.3.1 Limit

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

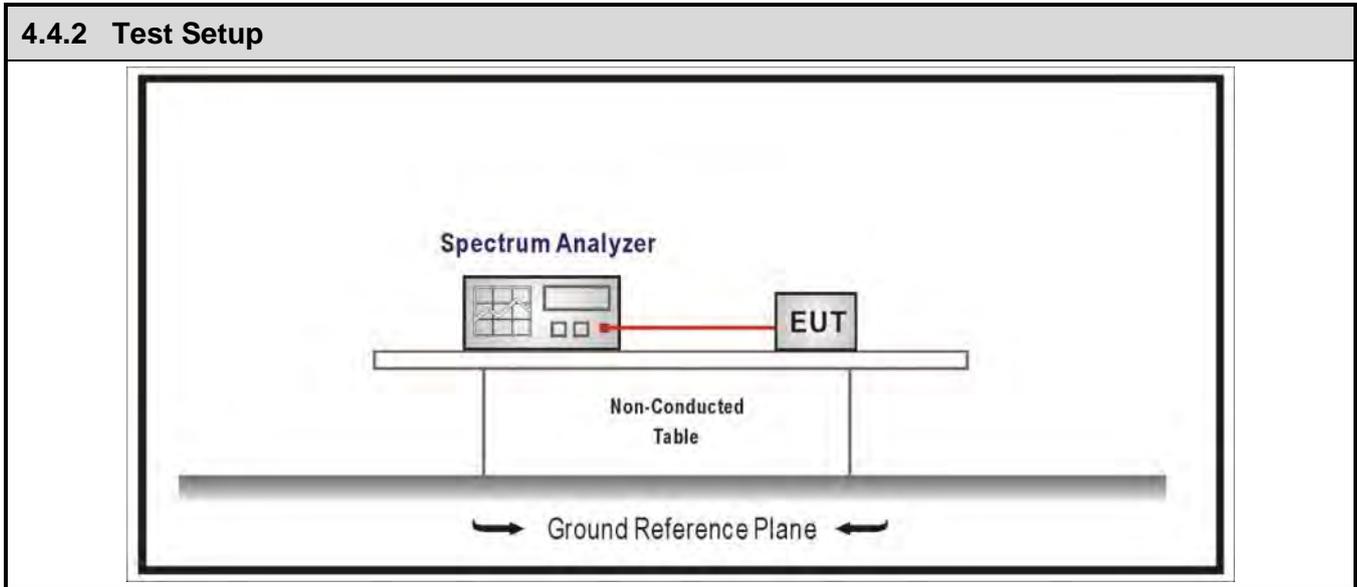


4.3.3 Test Procedure

References Rule	Chapter	Description
<input checked="" type="checkbox"/> ANSI C63.10	11.11	Emissions in non-restricted frequency bands
<input checked="" type="checkbox"/> ANSI C63.10	11.11.1	General
<input checked="" type="checkbox"/> ANSI C63.10	11.11.2	Reference level measurement
<input checked="" type="checkbox"/> ANSI C63.10	11.11.3	Emission level measurement

4.4 Duty cycle	VERDICT: PASS
-----------------------	----------------------

4.4.1 Limit
N/A



4.4.3 Test Procedure			
References Rule	Chapter	Description	
<input checked="" type="checkbox"/> ANSI C63.10	11.6	Duty cycle (D), transmission duration (T), and maximum power control level	

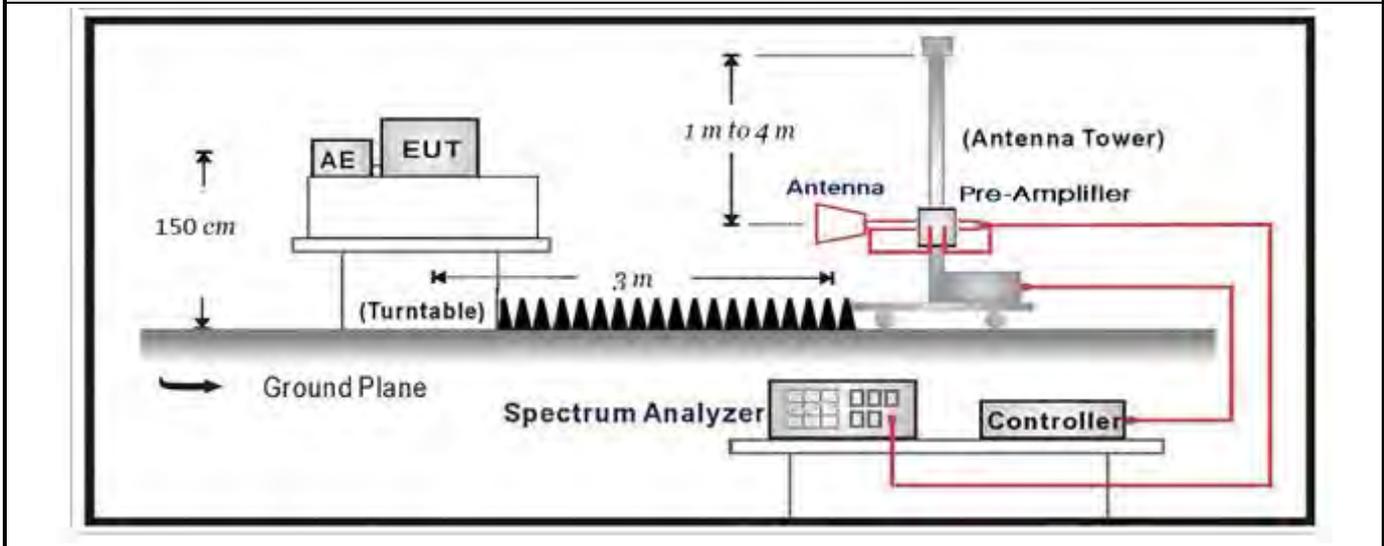
4.5 Radiated Emission Band Edge	VERDICT: PASS
--	----------------------

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

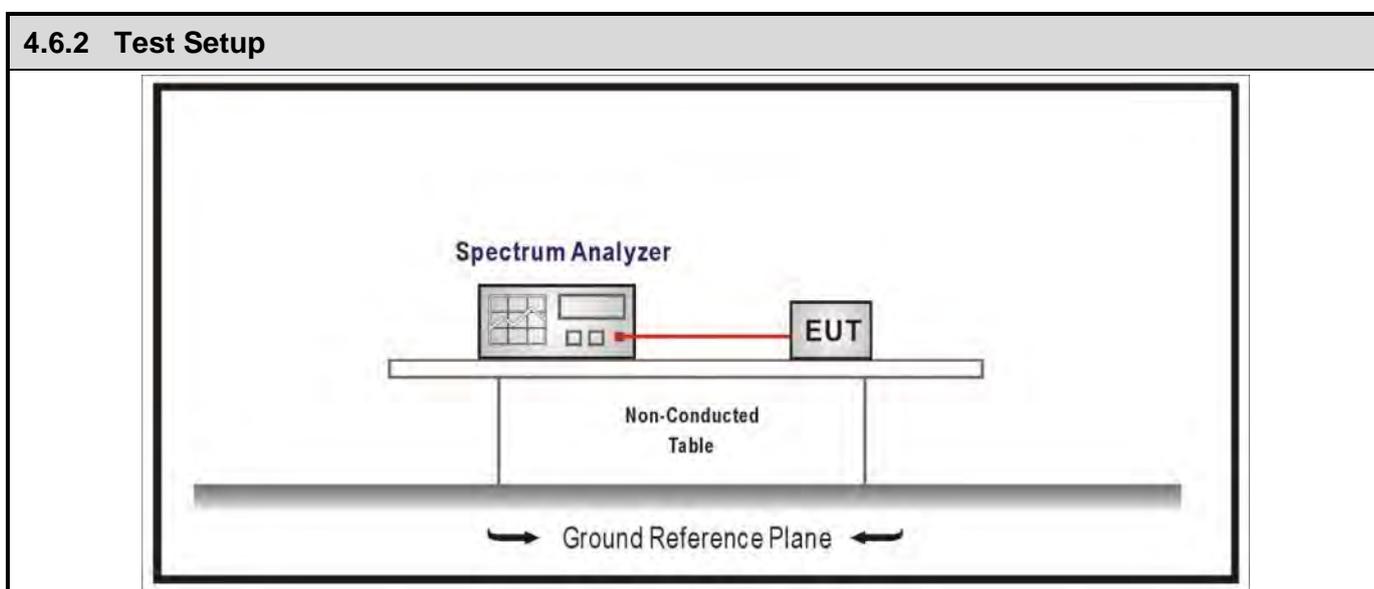
Above 1GHz Test Setup:



4.5.3 Test Procedure			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	6.10	Band-edge testing
	<input checked="" type="checkbox"/> ANSI C63.10	6.10.5	Restricted-band band-edge measurements
	<input type="checkbox"/> ANSI C63.10	6.10.6	Marker-delta method
<input checked="" type="checkbox"/>	ANSI C63.10	11.12	Emissions in restricted frequency bands
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.1	Radiated emission measurements
	<input checked="" type="checkbox"/> ANSI C63.10	6.3	Radiated spurious emission test
<input type="checkbox"/>	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
<input type="checkbox"/>	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
<input checked="" type="checkbox"/>	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.	

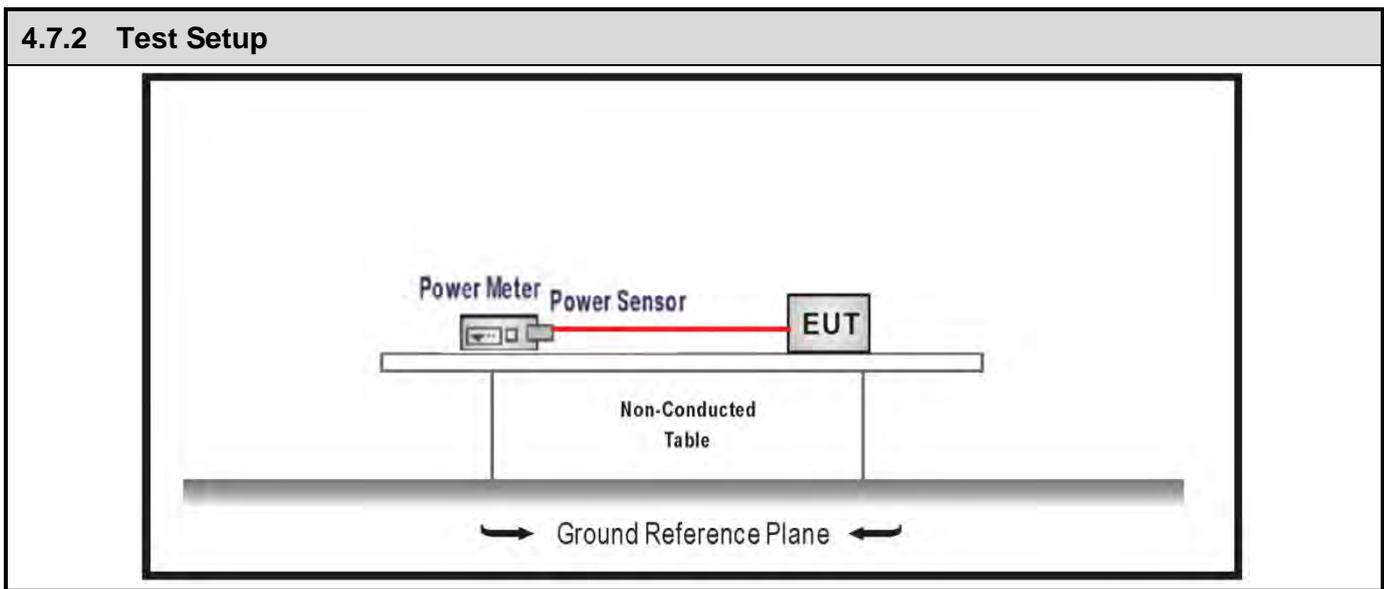


4.6.3 Test Procedure			
	Reference Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.8	DTS bandwidth
	<input checked="" type="checkbox"/> ANSI C63.10	11.8.1	Option 1
	<input type="checkbox"/> ANSI C63.10	11.8.2	Option 2
<input checked="" type="checkbox"/>	ANSI C63.10	6.9	Occupied bandwidth
	<input type="checkbox"/> ANSI C63.10	6.9.2	relative measurement procedure
	<input checked="" type="checkbox"/> 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)	
<input checked="" type="checkbox"/>	GTX < 6dBi	Pout ≤ 30dBm
<input type="checkbox"/>	GTX > 6dBi	
<input type="checkbox"/>	Non-Fix point-point	$P_{out} \leq 30 - (GTX - 6)$
<input type="checkbox"/>	Fix point-point	$P_{out} \leq 30 - [(GTX - 6)]/3$
<input type="checkbox"/>	Point-to-multipoint	$P_{out} \leq 30 - (GTX - 6)$
<input type="checkbox"/>	Overlap Beams	$P_{out} \leq 30 - [(GTX - 6)]/3$
<input type="checkbox"/>	Agregate power transmitted simultaneously on all beams	$P_{out} \leq 30 - [(GTX - 6)]/3$
<input type="checkbox"/>	single directional beam	$P_{out} \leq 30 - [(GTX - 6)]/3 + 8dB$

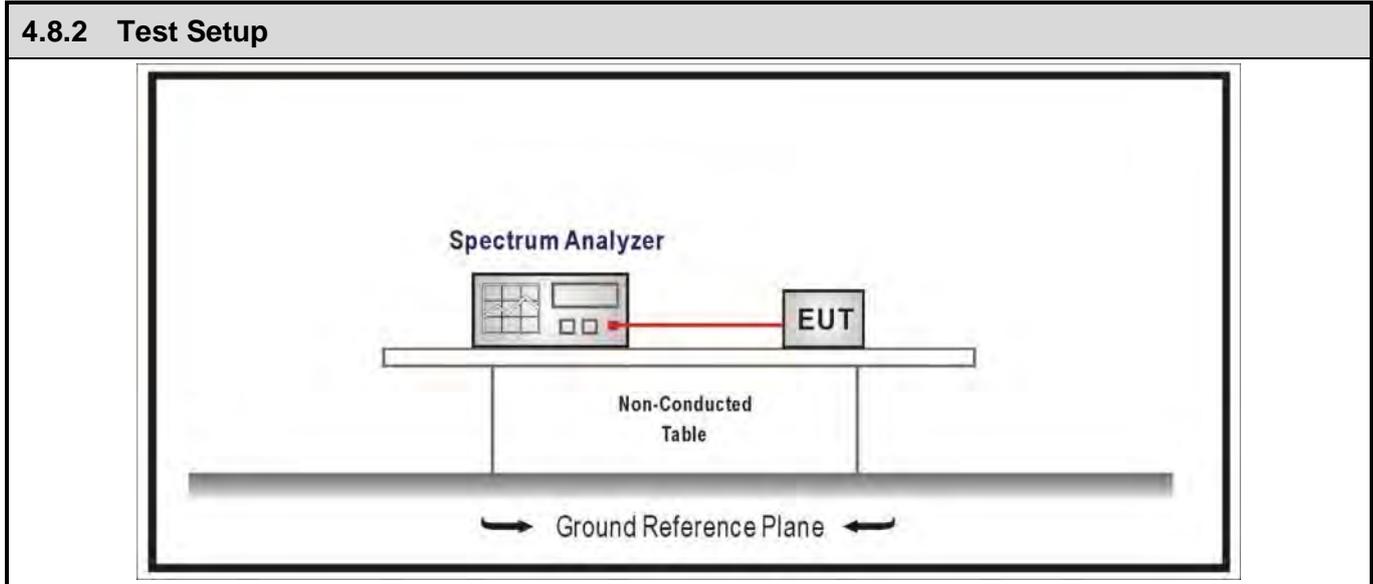
Note 1 : GTX directional gain of transmitting antennas.
 Note 2 : Pout is maximum conducted output power .



4.7.3 Test Procedure					
	References Rule			Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10			11.9	Fundamental emission output power
	<input checked="" type="checkbox"/>	ANSI C63.10		11.9.1	Maximum peak conducted output power
		<input type="checkbox"/>	ANSI C63.10	11.9.1.1	RBW \geq DTS bandwidth
		<input checked="" type="checkbox"/>	ANSI C63.10	11.9.1.2	PKPM1 Peak power meter method

4.8 Power Density	VERDICT: PASS
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4.8.1 Limit:	
Standard	FCC Part 15 Subpart C Paragraph 15.247 (e)
Power Spectral Density ≤ 8dBm/3kHz	



4.8.3 Test Procedure			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.10	Maximum power spectral density level in the fundamental emission
<input checked="" type="checkbox"/>	ANSI C63.10	11.10.2	Method PKPSD (peak PSD)

4.9 Antenna Requirement	VERDICT: PASS
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4.9.1 Limit:

Standard	FCC Part 15 Subpart C Paragraph 15.203
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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:

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> | The use of a permanently attached antenna |
| <input type="checkbox"/> | The antenna use of a unique coupling to the intentional radiator |
| <input checked="" type="checkbox"/> | 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:

TestMode	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	2412	8.040	2408.040	2416.080	0.5	PASS
11B	2437	8.040	2433.000	2441.040	0.5	PASS
11B	2462	7.040	2458.480	2465.520	0.5	PASS
11G	2412	16.360	2403.840	2420.200	0.5	PASS
11G	2437	16.360	2428.840	2445.200	0.5	PASS
11G	2462	16.440	2453.760	2470.200	0.5	PASS
11N20	2412	17.680	2403.160	2420.840	0.5	PASS
11N20	2437	17.720	2428.160	2445.880	0.5	PASS
11N20	2462	17.600	2453.200	2470.800	0.5	PASS
11N40	2422	36.480	2403.760	2440.240	0.5	PASS
11N40	2437	36.320	2418.840	2455.160	0.5	PASS
11N40	2452	36.320	2433.840	2470.160	0.5	PASS
11AX20	2412	19.080	2402.480	2421.560	0.5	PASS
11AX20	2437	19.080	2427.480	2446.560	0.5	PASS
11AX20	2462	19.160	2452.440	2471.600	0.5	PASS
11AX40	2422	38.000	2403.040	2441.040	0.5	PASS
11AX40	2437	37.920	2418.040	2455.960	0.5	PASS
11AX40	2452	37.840	2433.040	2470.880	0.5	PASS
11BE20	2412	18.920	2402.560	2421.480	0.5	PASS
11BE20	2437	19.040	2427.480	2446.520	0.5	PASS
11BE20	2462	18.960	2452.520	2471.480	0.5	PASS
11BE40	2422	37.920	2403.120	2441.040	0.5	PASS
11BE40	2437	38.000	2418.040	2456.040	0.5	PASS
11BE40	2452	37.840	2432.960	2470.800	0.5	PASS

Note: We have evaluated each antenna, only worst data shown in report.



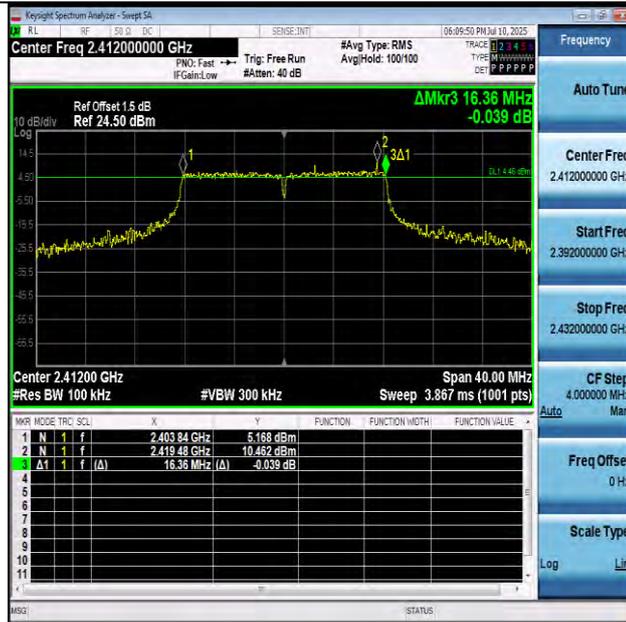
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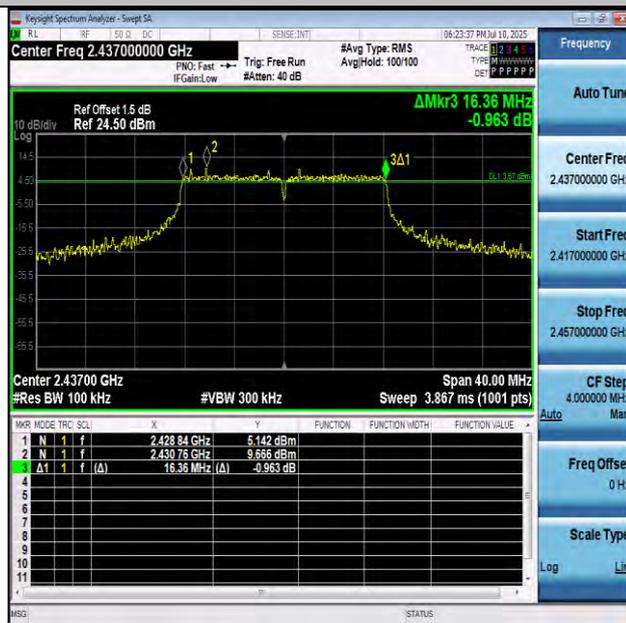
11B-Ant1-2437-PASS



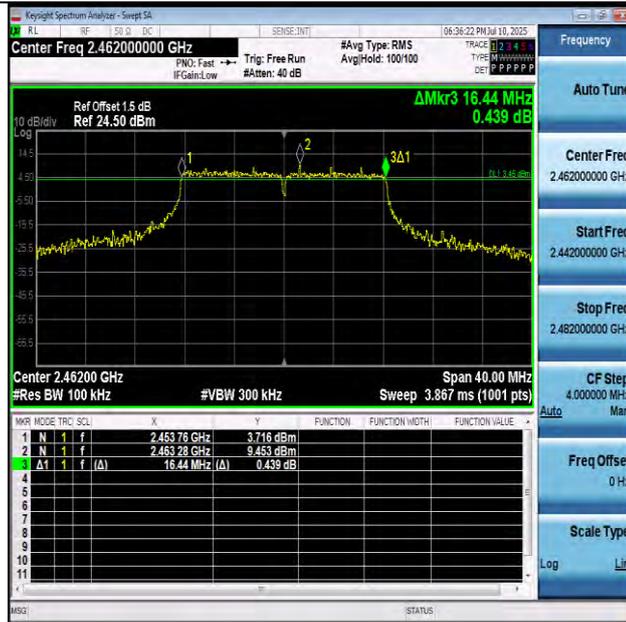
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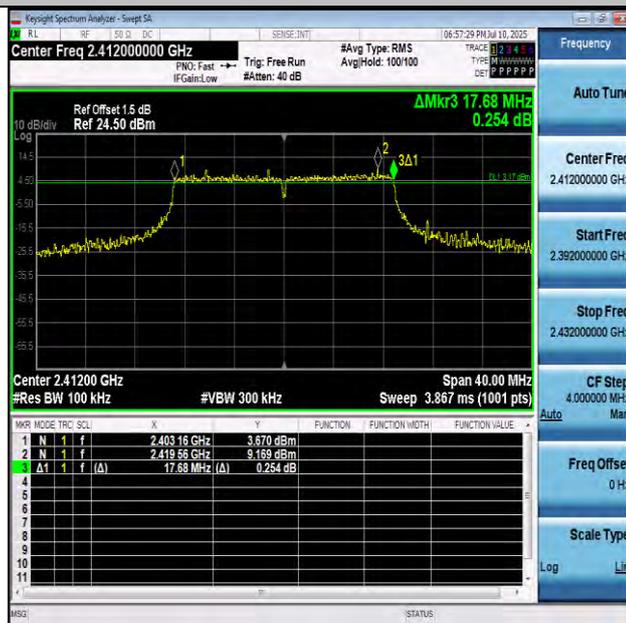
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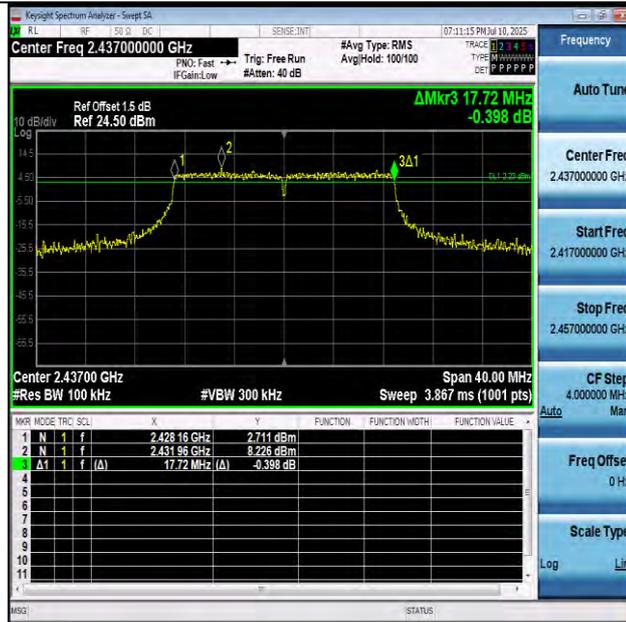
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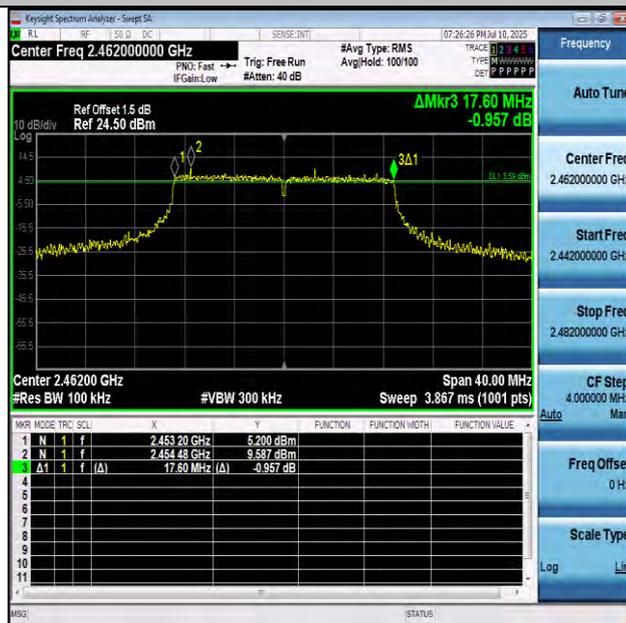
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11N20-2412-PASS



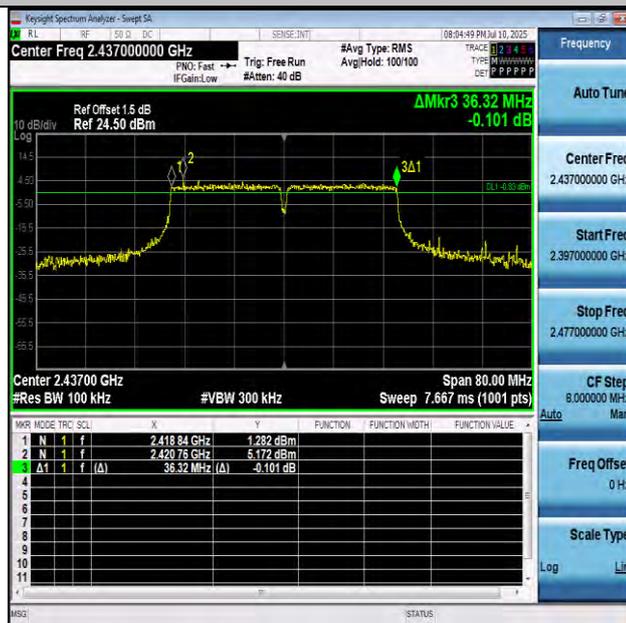
11N20-2437-PASS



11N20-2462-PASS



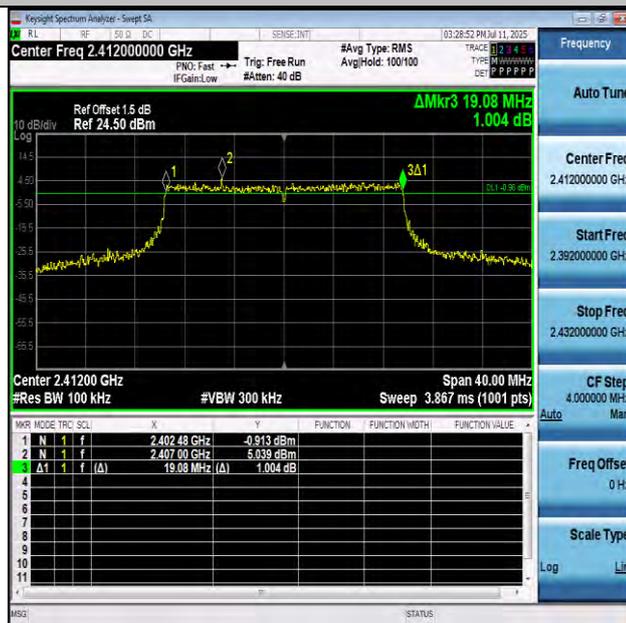
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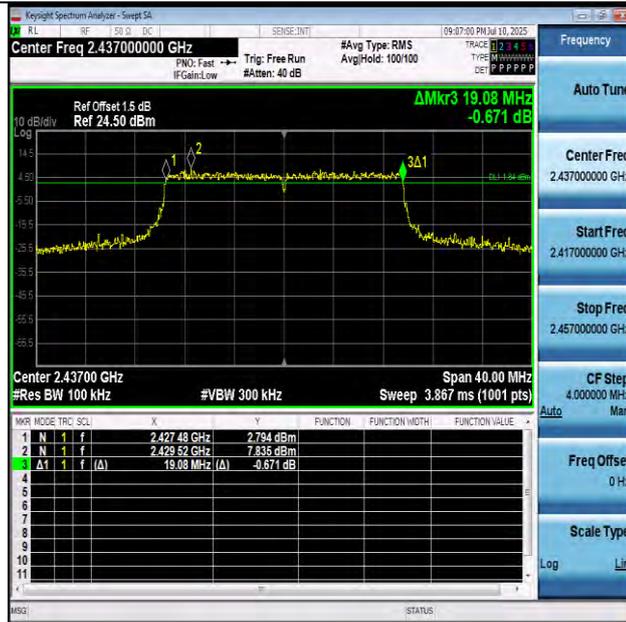
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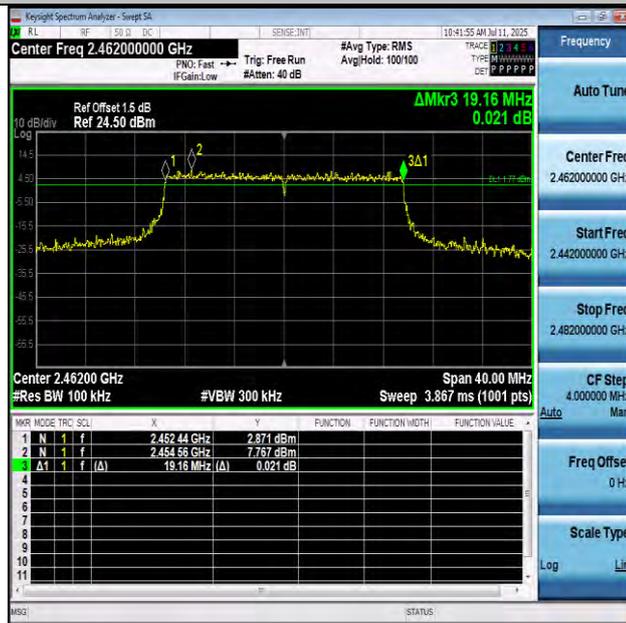
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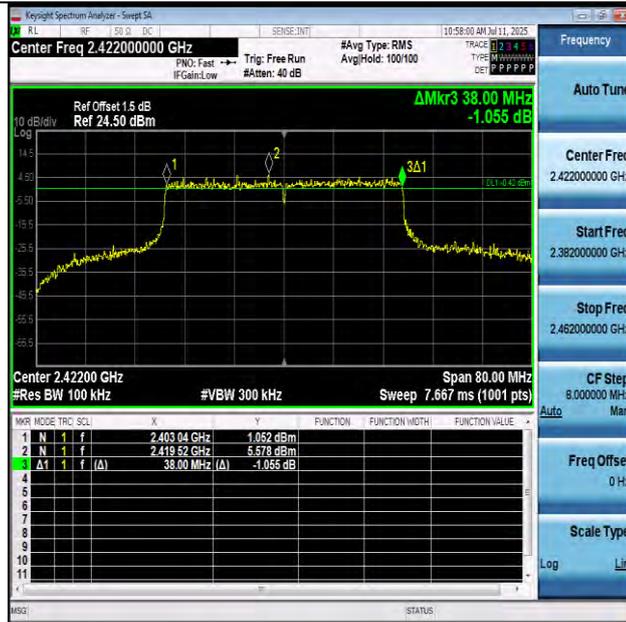
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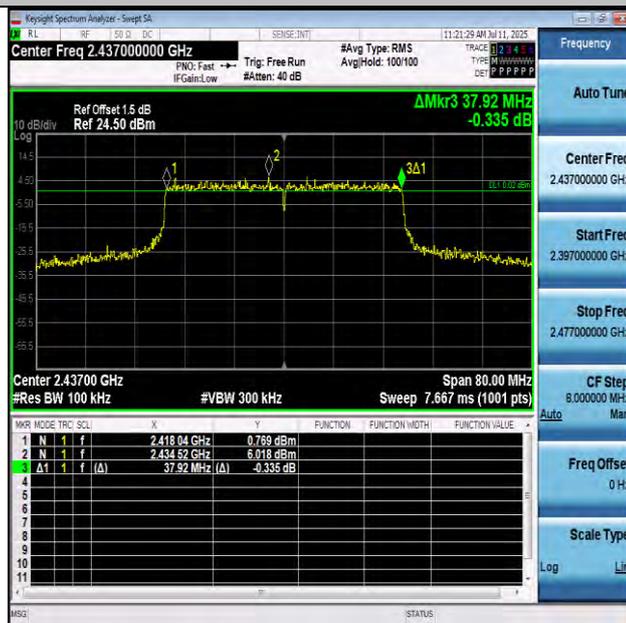
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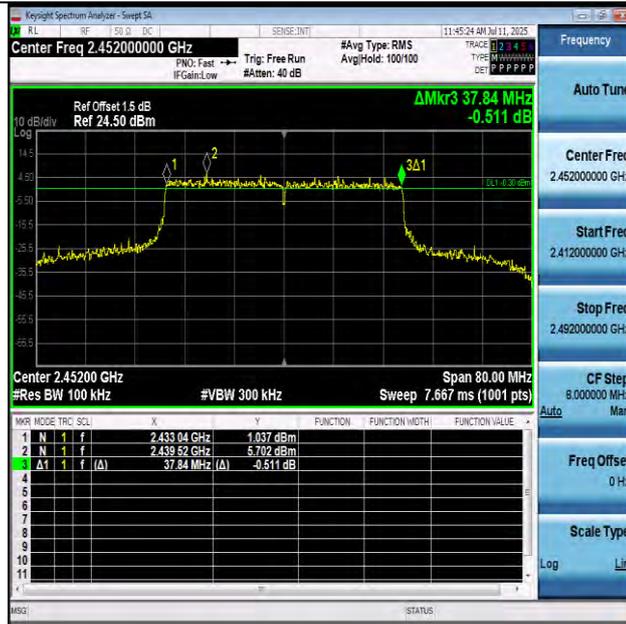
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11AX40-2422-PASS



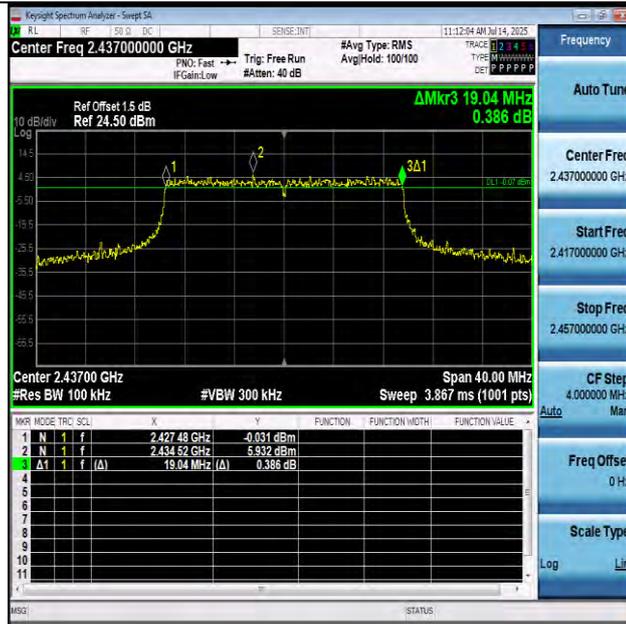
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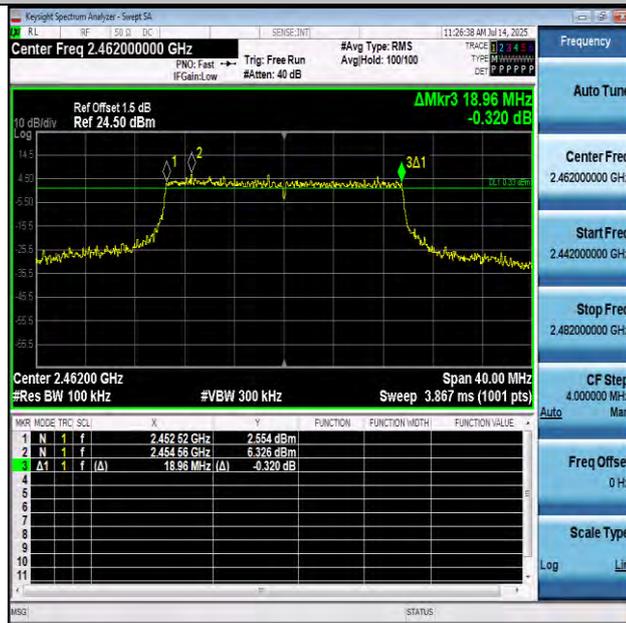
11AX40-2452-PASS



11BE20-2412-PASS



11BE20-2437-PASS



11BE20-2462-PASS



11BE40-2422-PASS



11BE40-2437-PASS

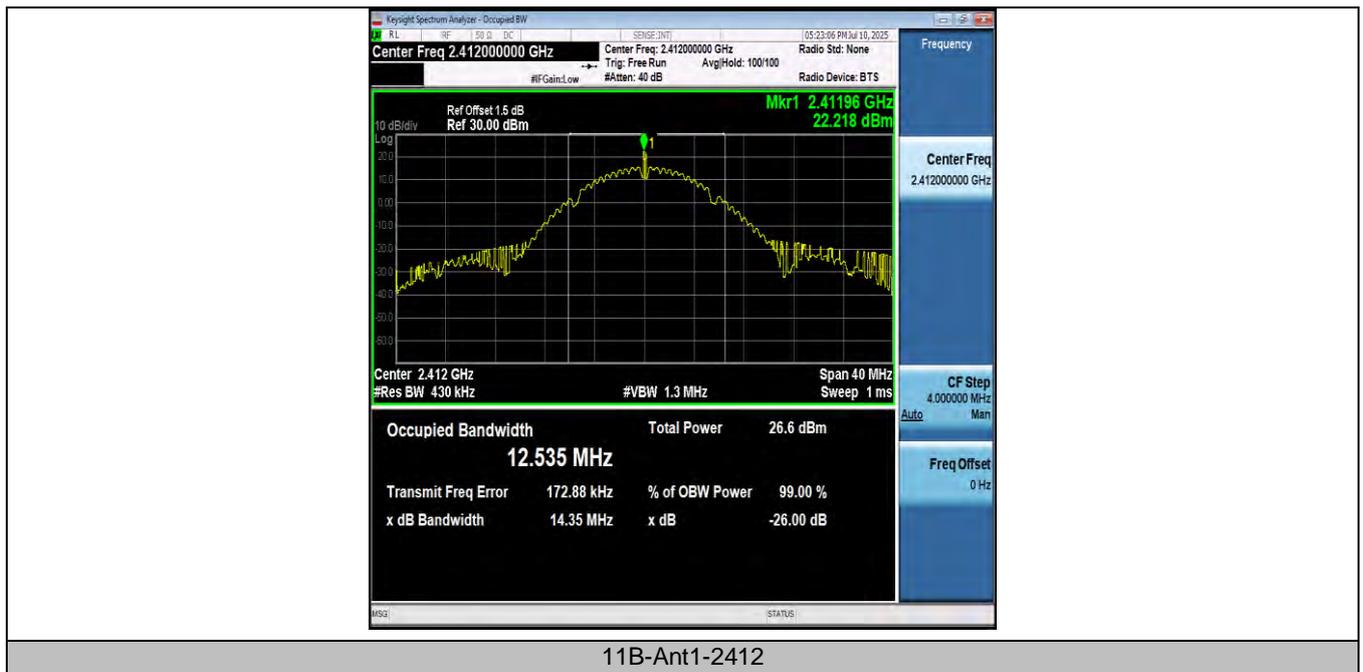


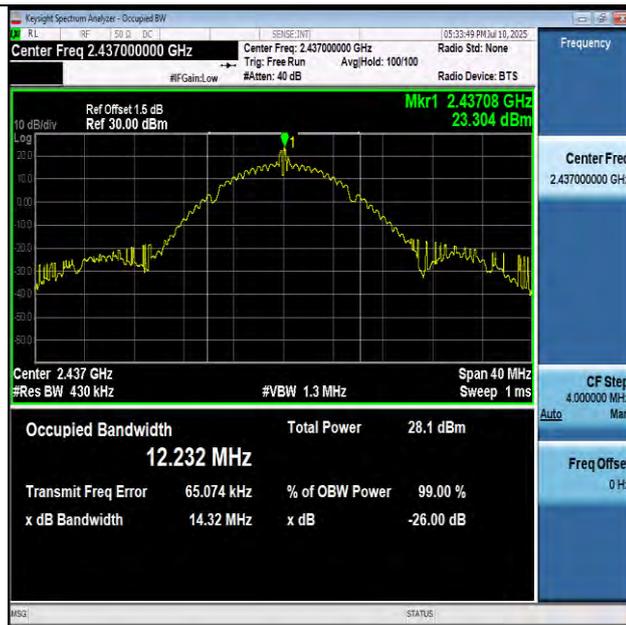
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99% Occupied bandwidth:

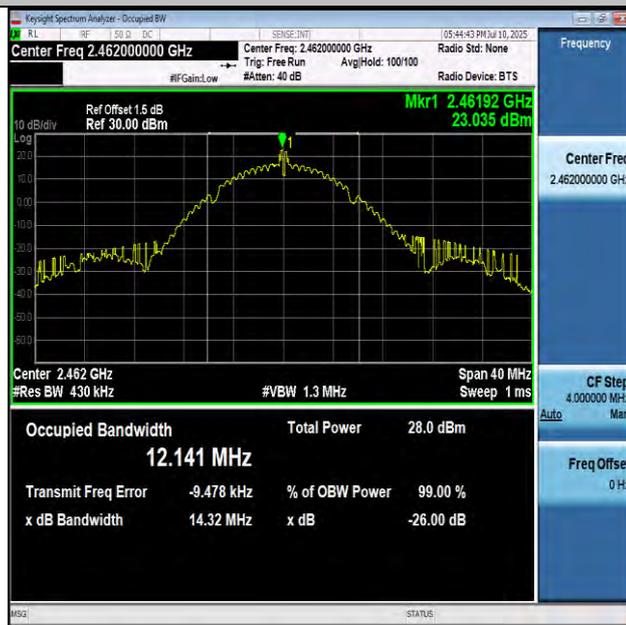
TestMode	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	2412	12.535	2405.9054	2418.4404	Within band	Pass
11B	2437	12.232	2430.9491	2443.1811	Within band	Pass
11B	2462	12.141	2455.9200	2468.0610	Within band	Pass
11G	2412	17.373	2403.3041	2420.6771	Within band	Pass
11G	2437	17.300	2428.2685	2445.5685	Within band	Pass
11G	2462	17.232	2453.2447	2470.4767	Within band	Pass
11N20	2412	18.482	2402.8084	2421.2904	Within band	Pass
11N20	2437	18.354	2427.8606	2446.2146	Within band	Pass
11N20	2462	18.362	2452.7723	2471.1343	Within band	Pass
11N40	2422	37.040	2403.6041	2440.6441	Within band	Pass
11N40	2437	37.001	2418.5251	2455.5261	Within band	Pass
11N40	2452	36.973	2433.3674	2470.3404	Within band	Pass
11AX20	2412	19.405	2402.3678	2421.7728	Within band	Pass
11AX20	2437	19.264	2427.4035	2446.6675	Within band	Pass
11AX20	2462	19.271	2452.3402	2471.6112	Within band	Pass
11AX40	2422	38.237	2402.9556	2441.1926	Within band	Pass
11AX40	2437	38.208	2417.9431	2456.1511	Within band	Pass
11AX40	2452	38.147	2432.8766	2471.0236	Within band	Pass
11BE20	2412	19.241	2402.4194	2421.6604	Within band	Pass
11BE20	2437	19.223	2427.4076	2446.6306	Within band	Pass
11BE20	2462	19.196	2452.4016	2471.5976	Within band	Pass
11BE40	2422	38.189	2403.0036	2441.1926	Within band	Pass
11BE40	2437	38.220	2417.9443	2456.1643	Within band	Pass
11BE40	2452	38.151	2432.8650	2471.0160	Within band	Pass

Note: We have evaluated each antenna, only worst data shown in report.

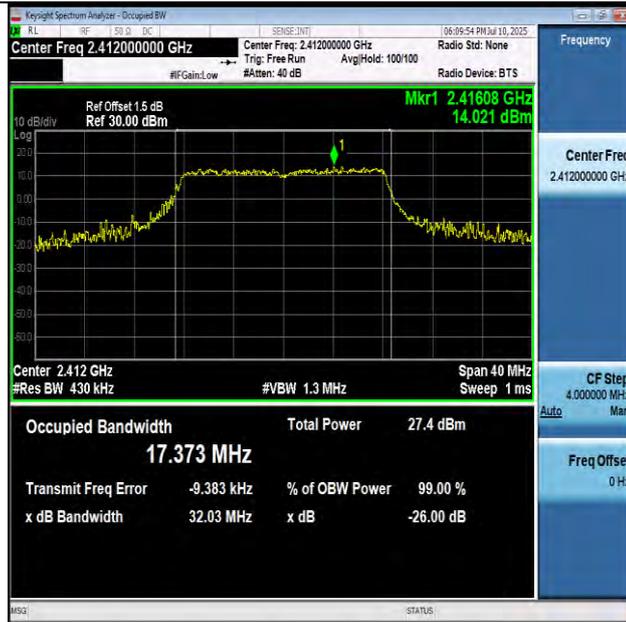




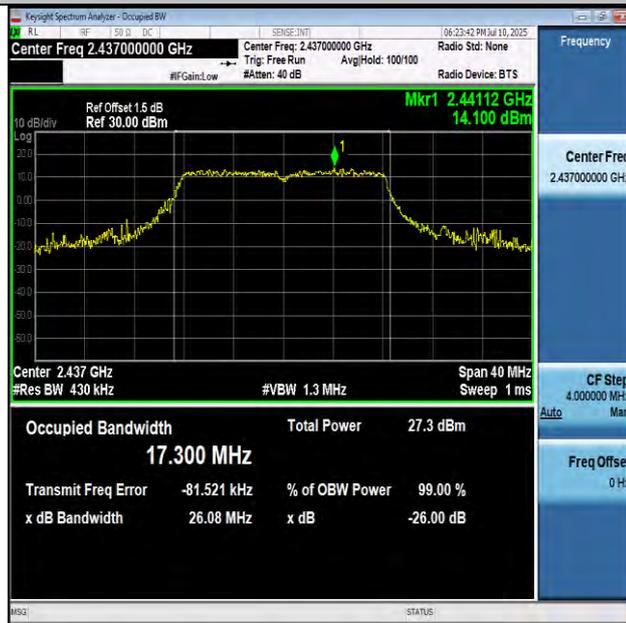
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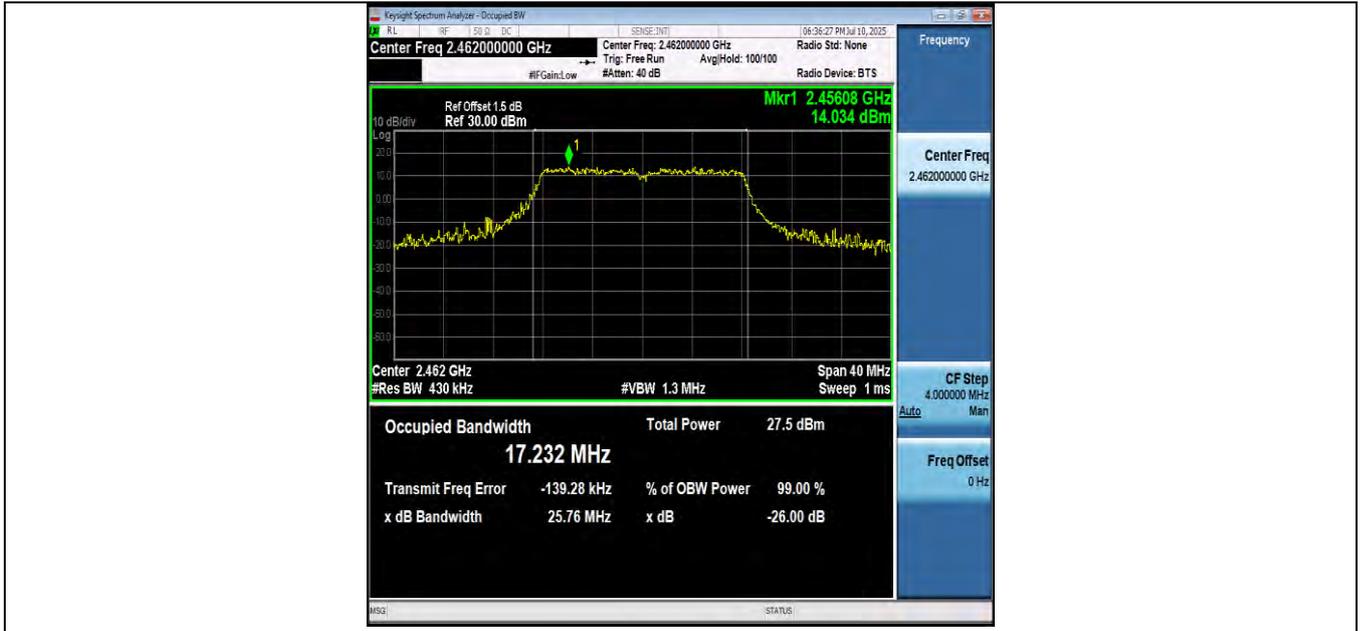
11B-Ant1-2462



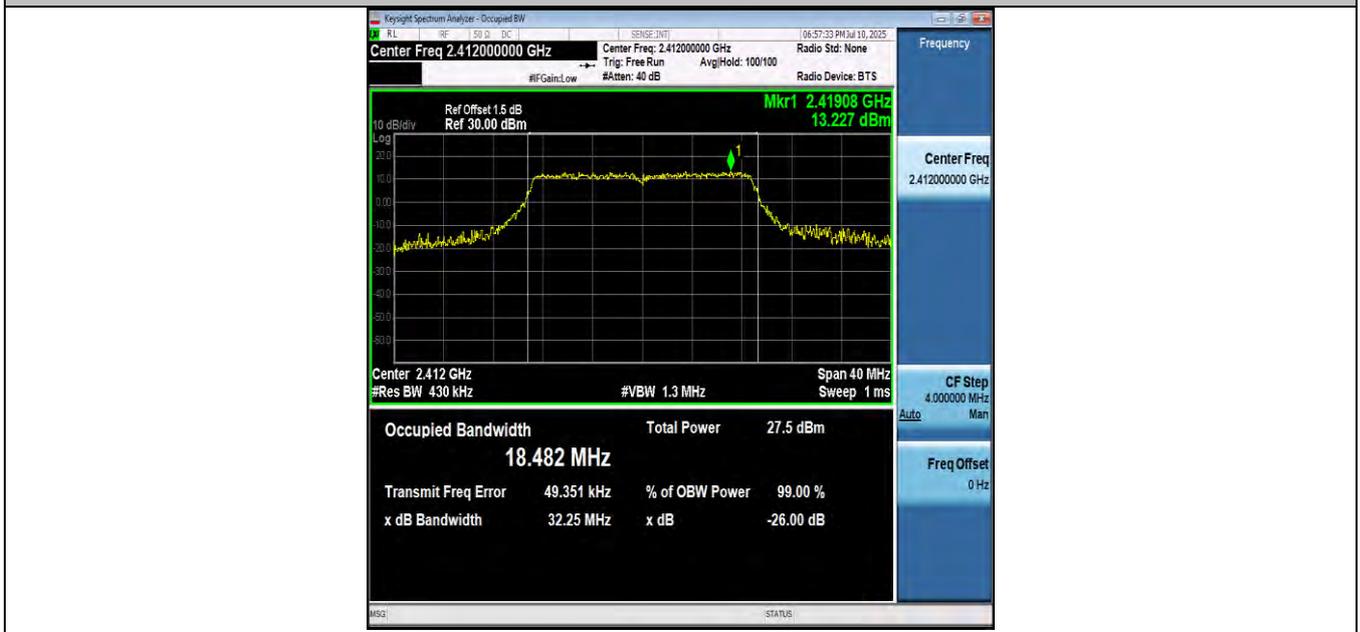
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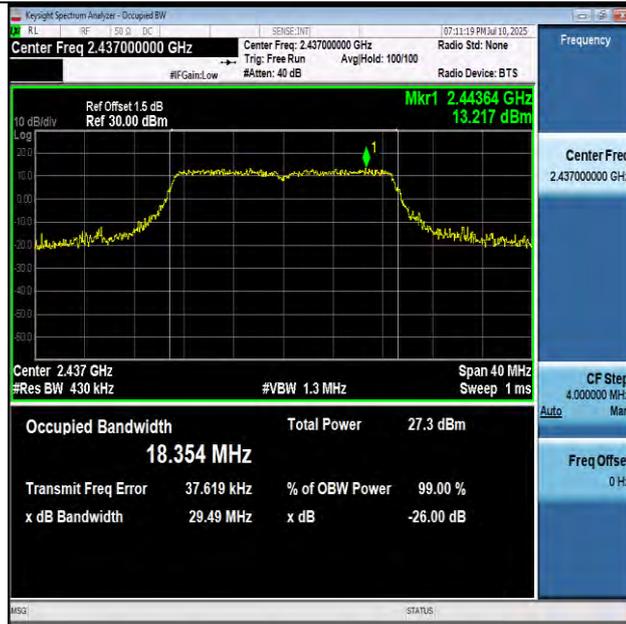
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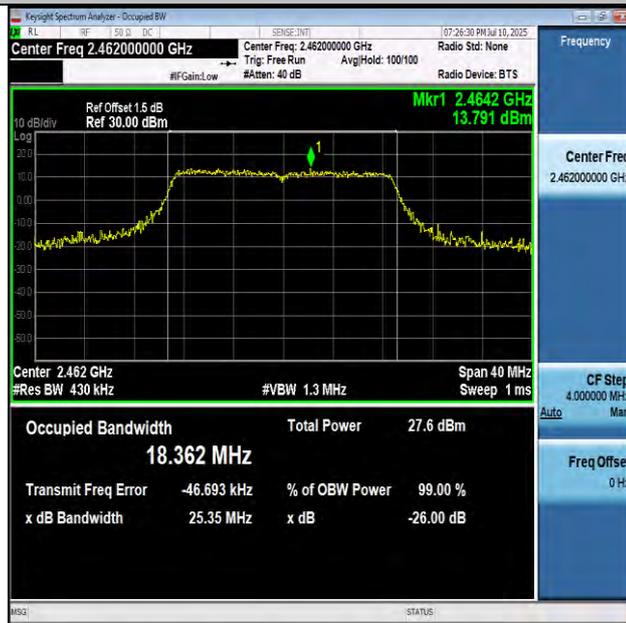
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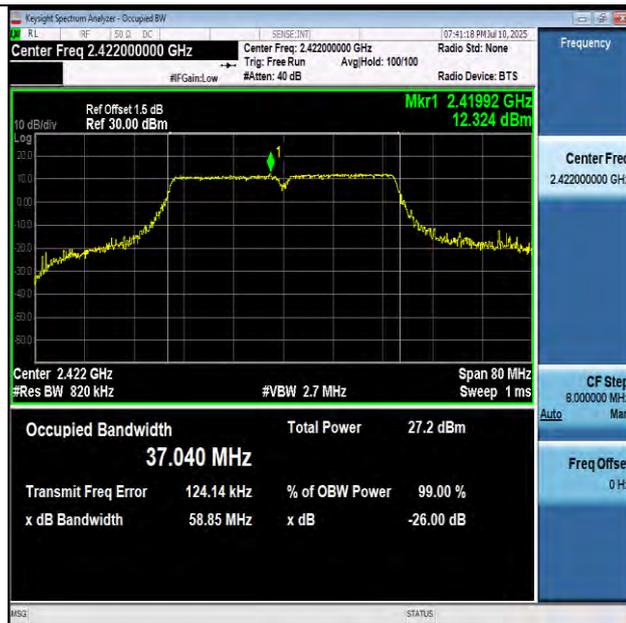
11N20-2412



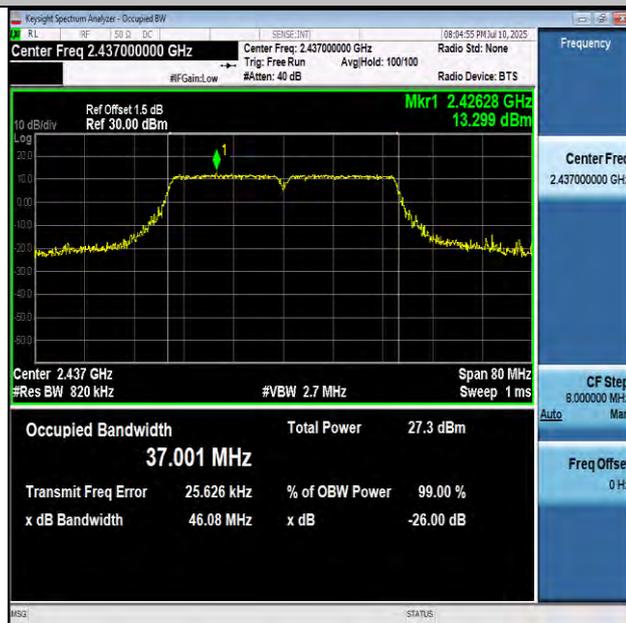
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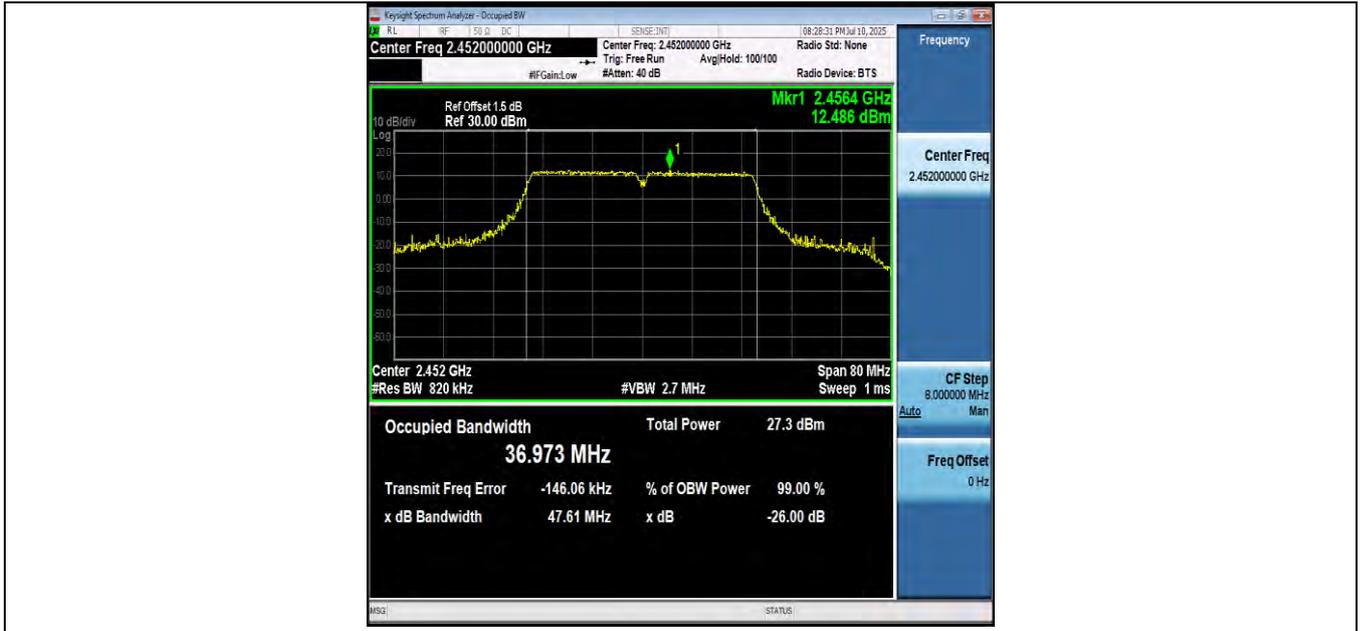
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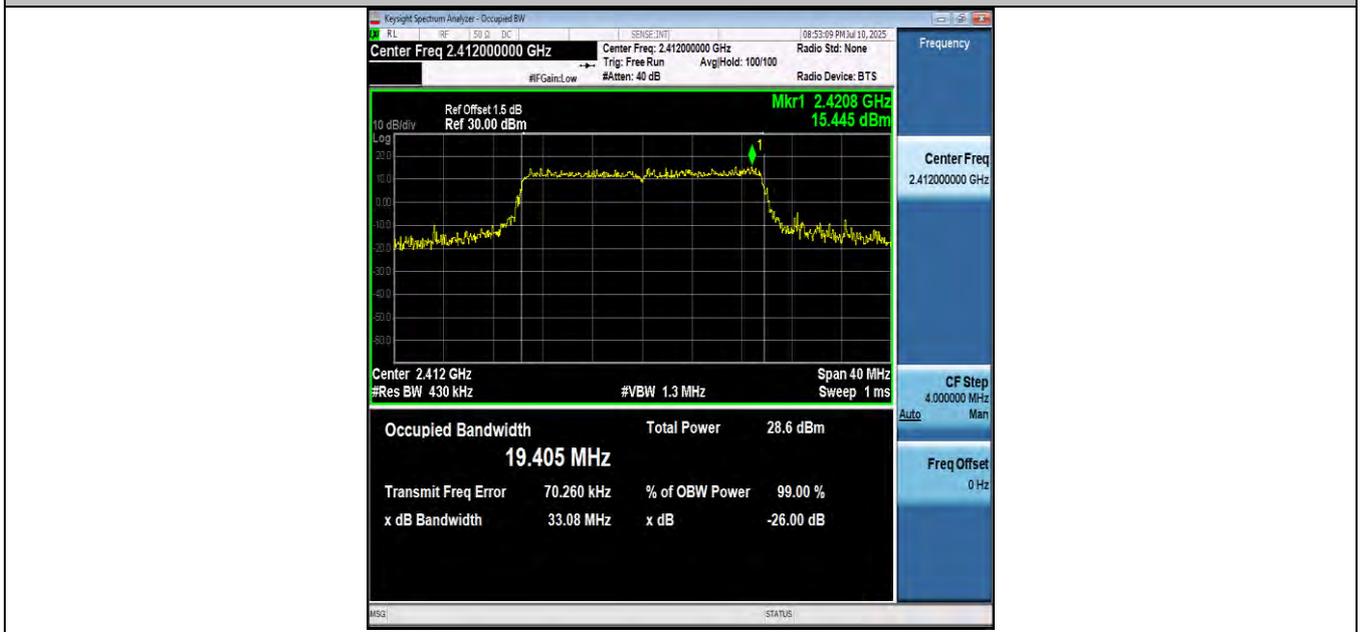
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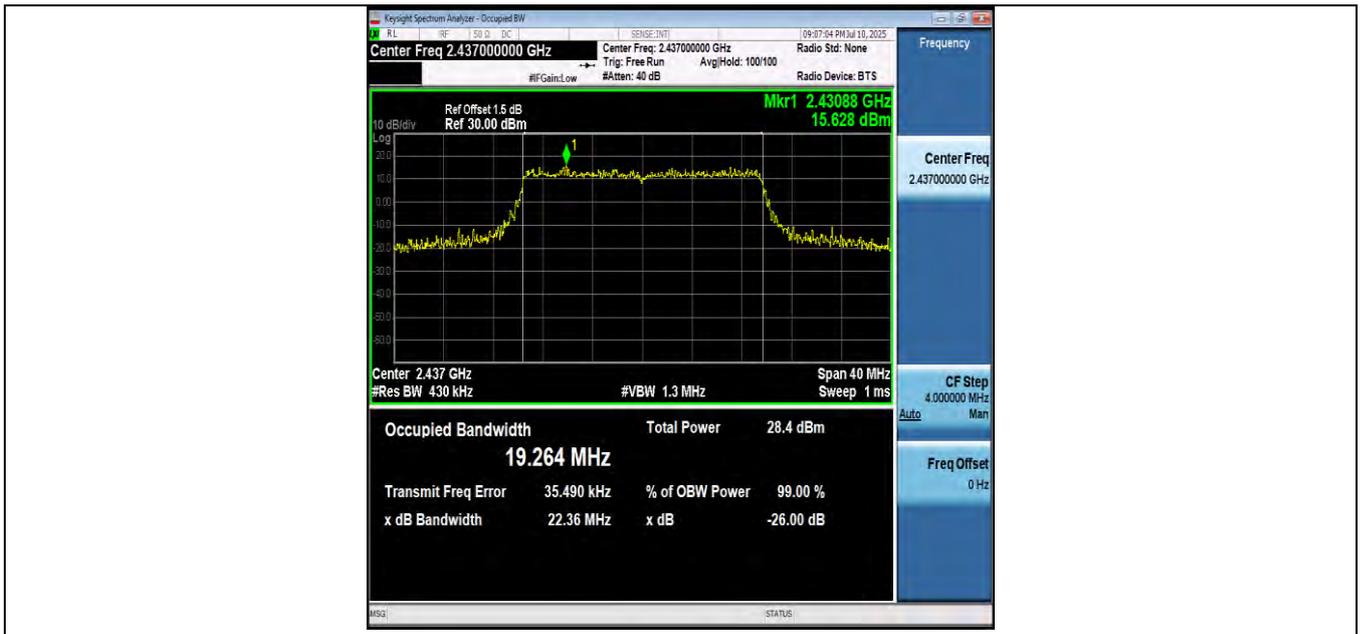
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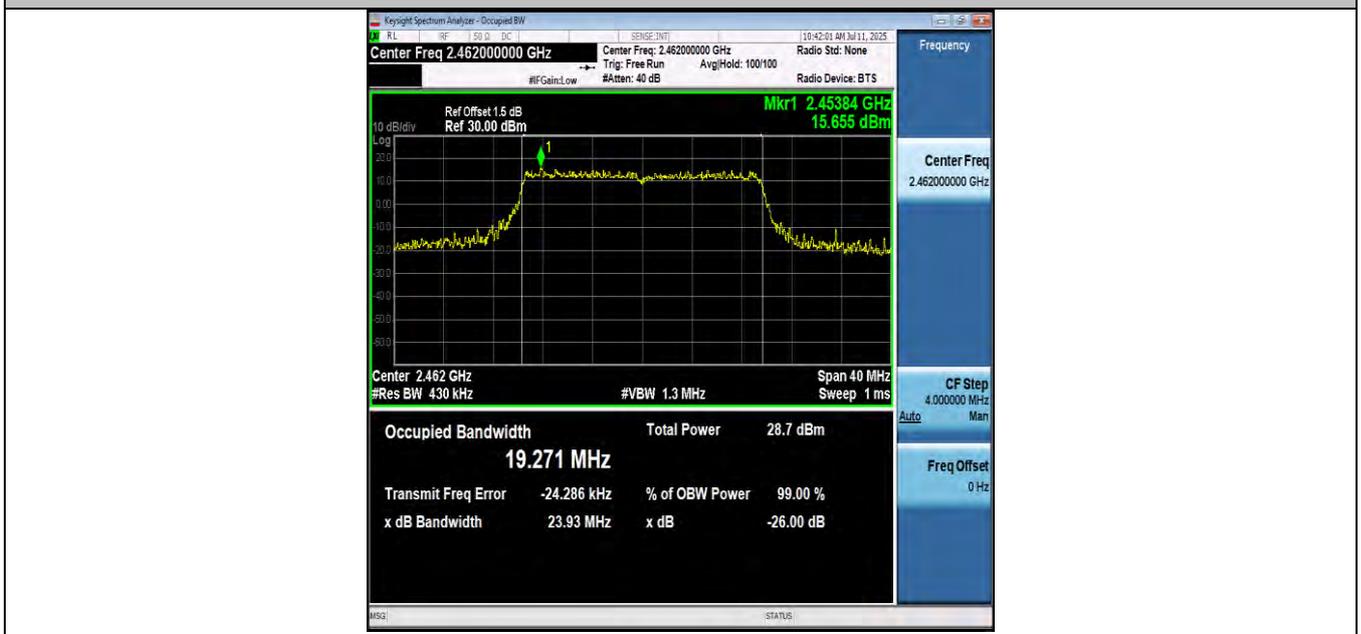
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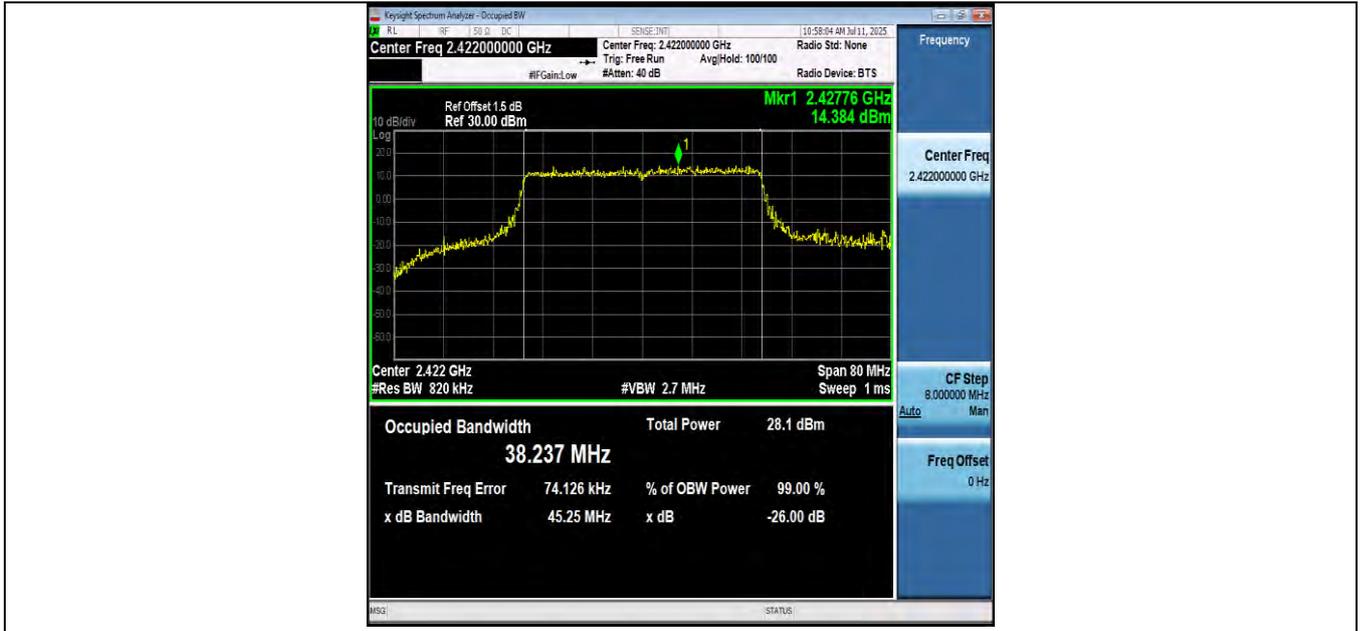
11AX20-2412



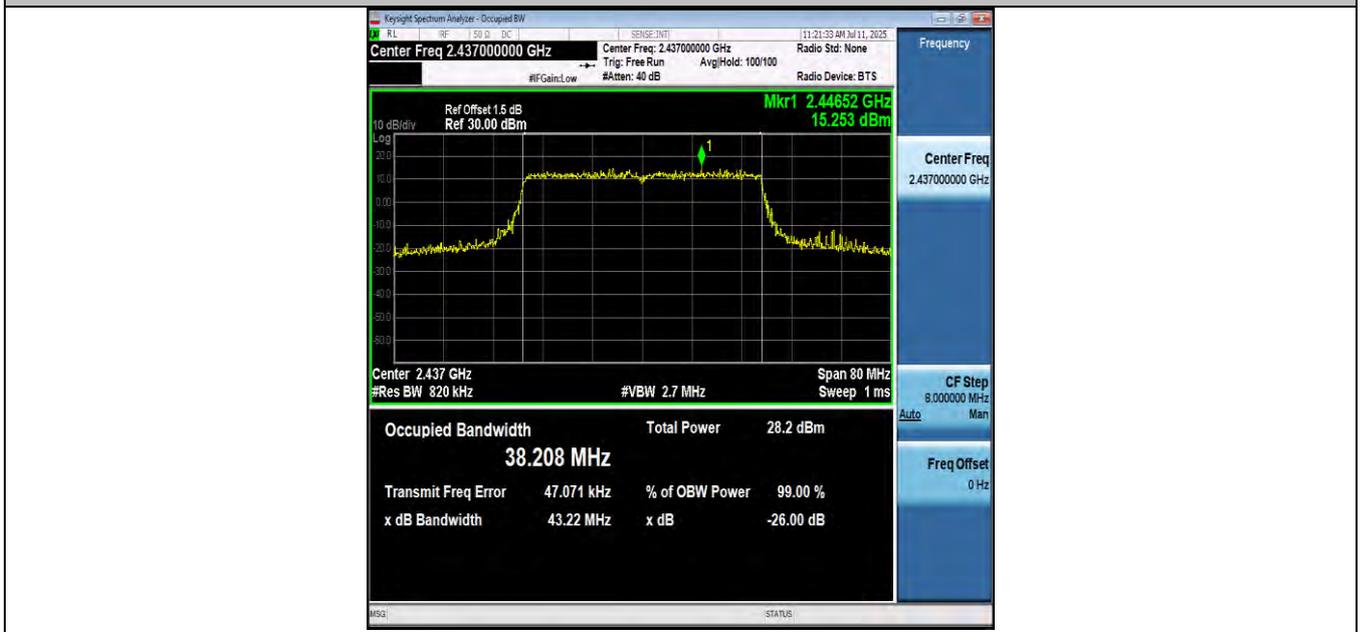
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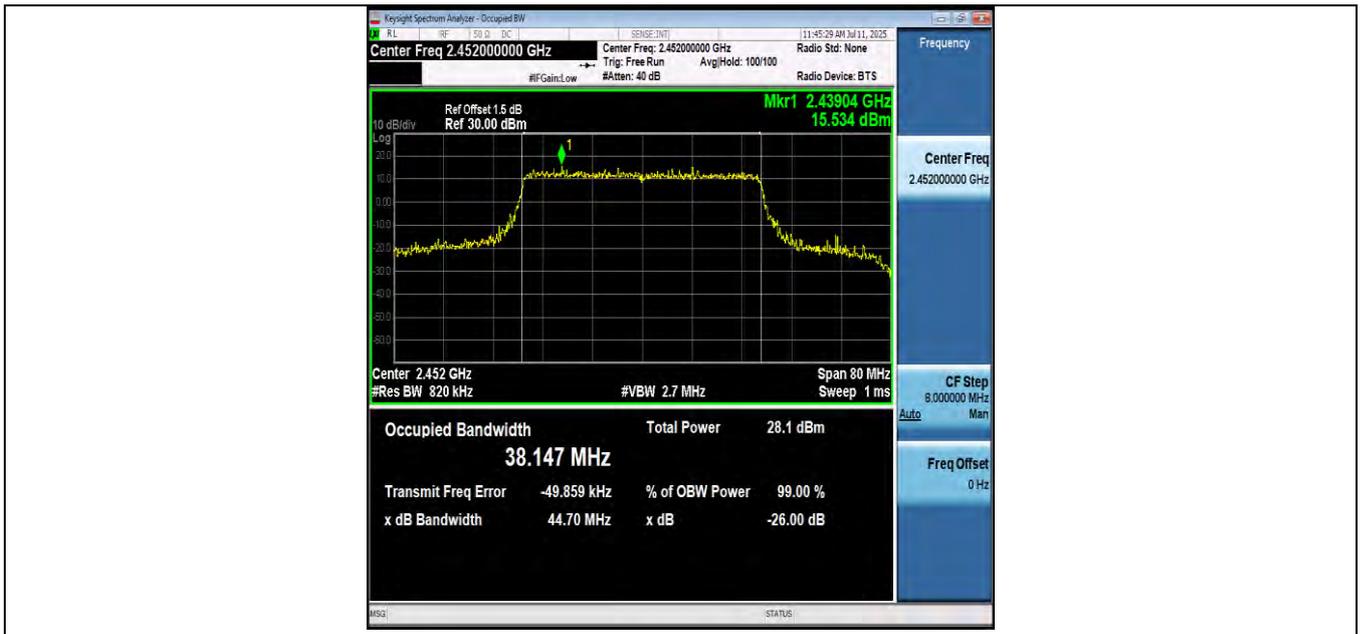
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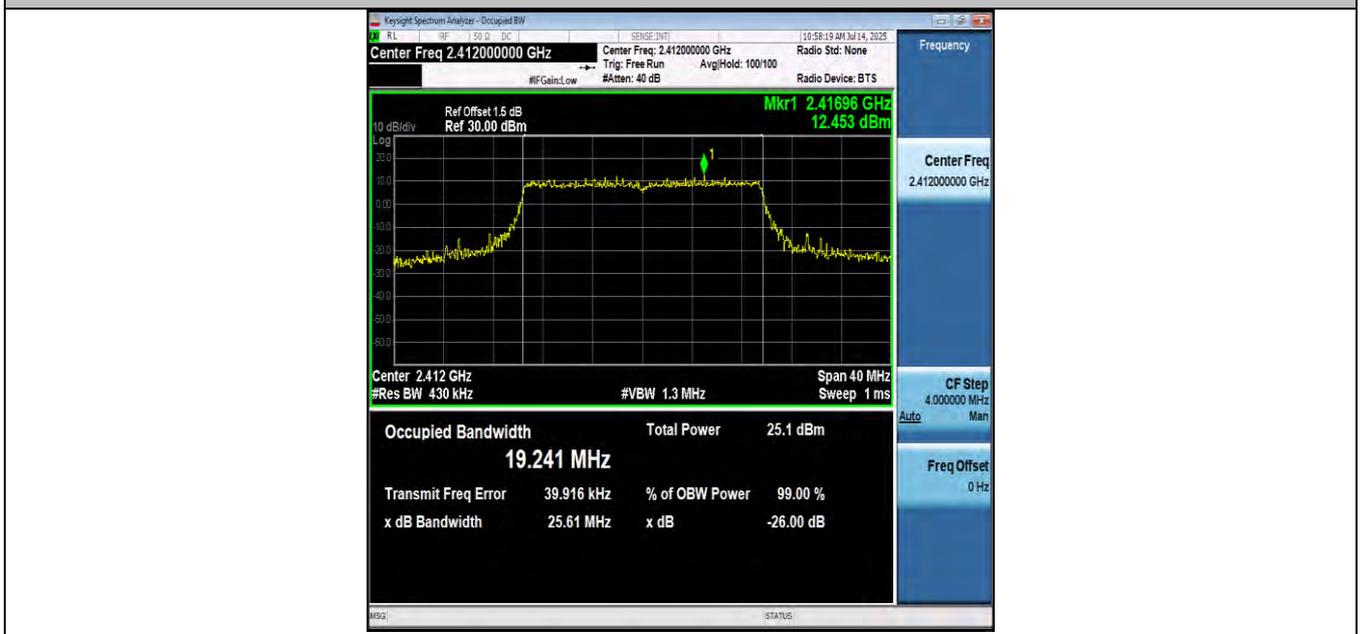
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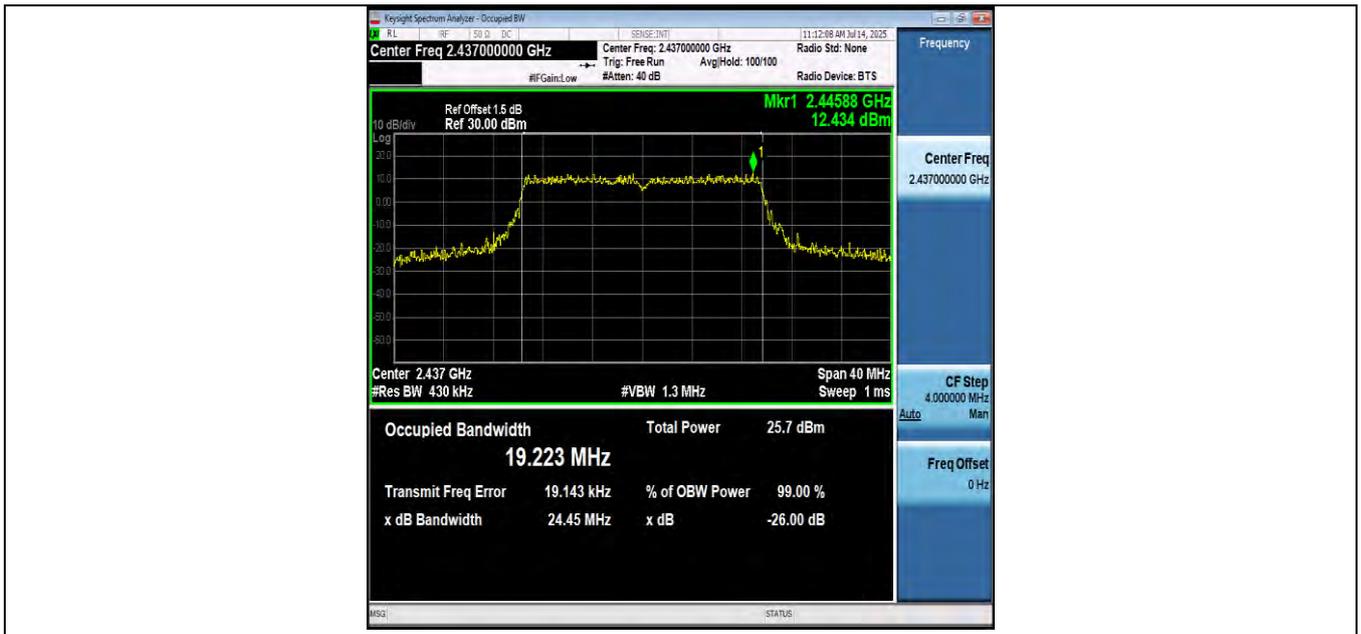
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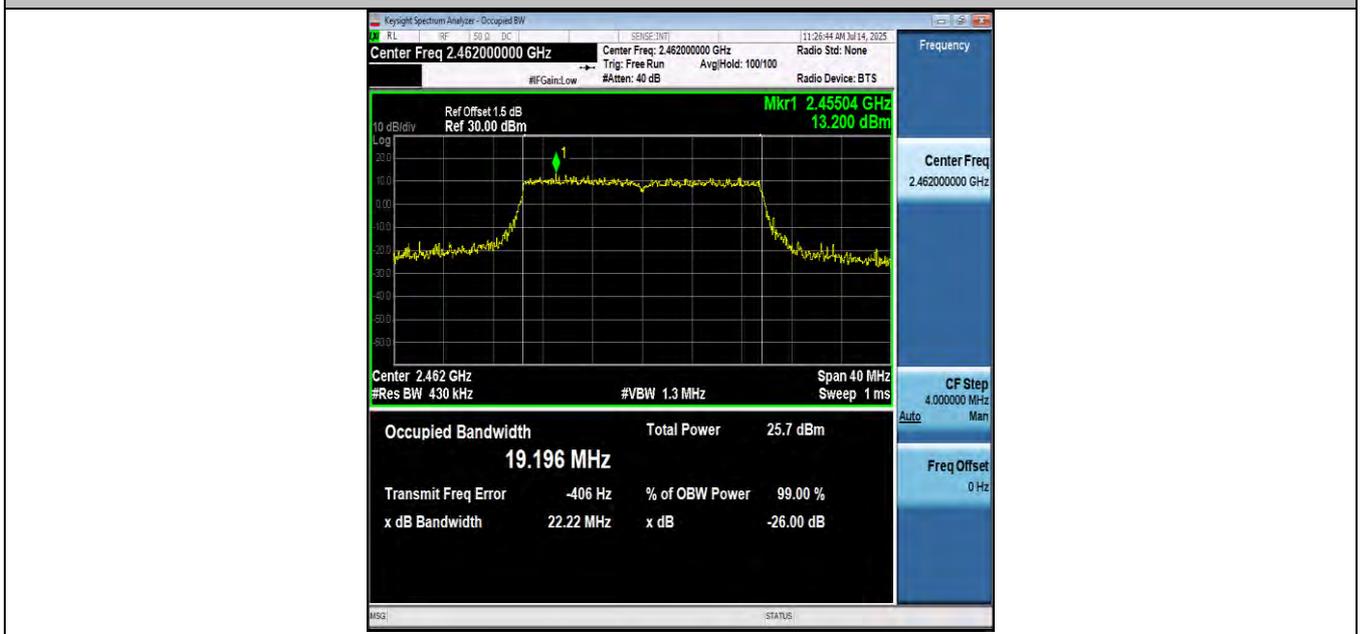
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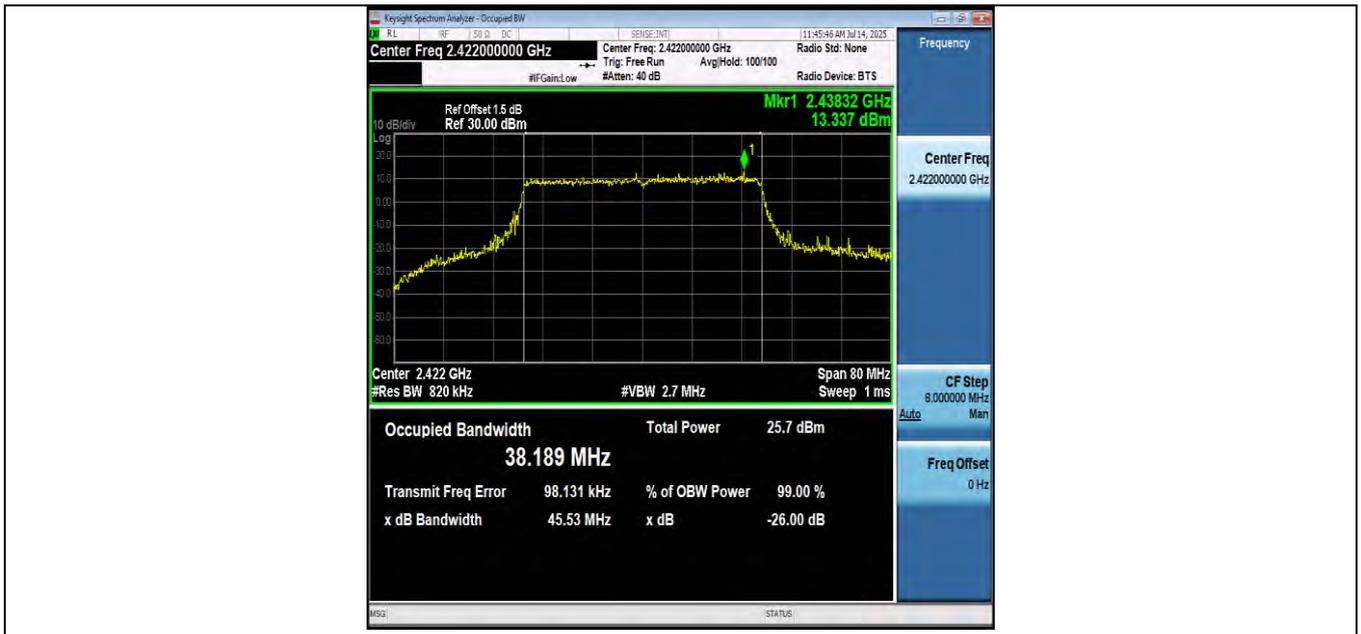
11BE20-2412



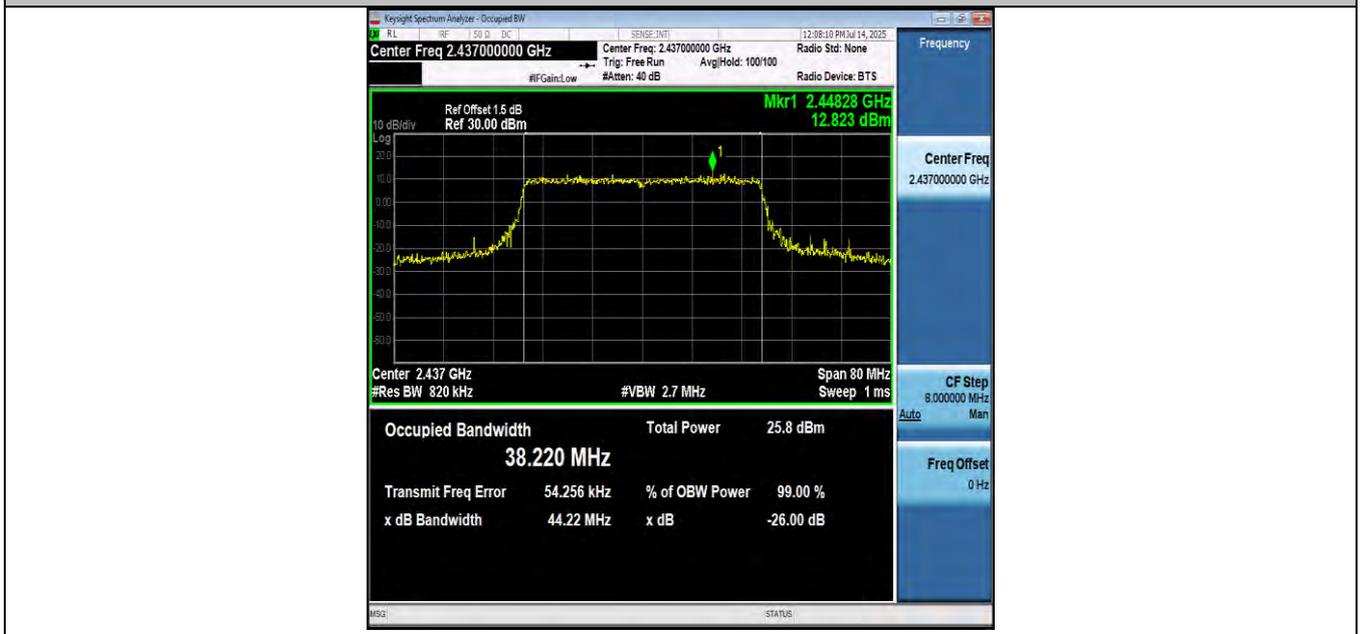
11BE20-2437



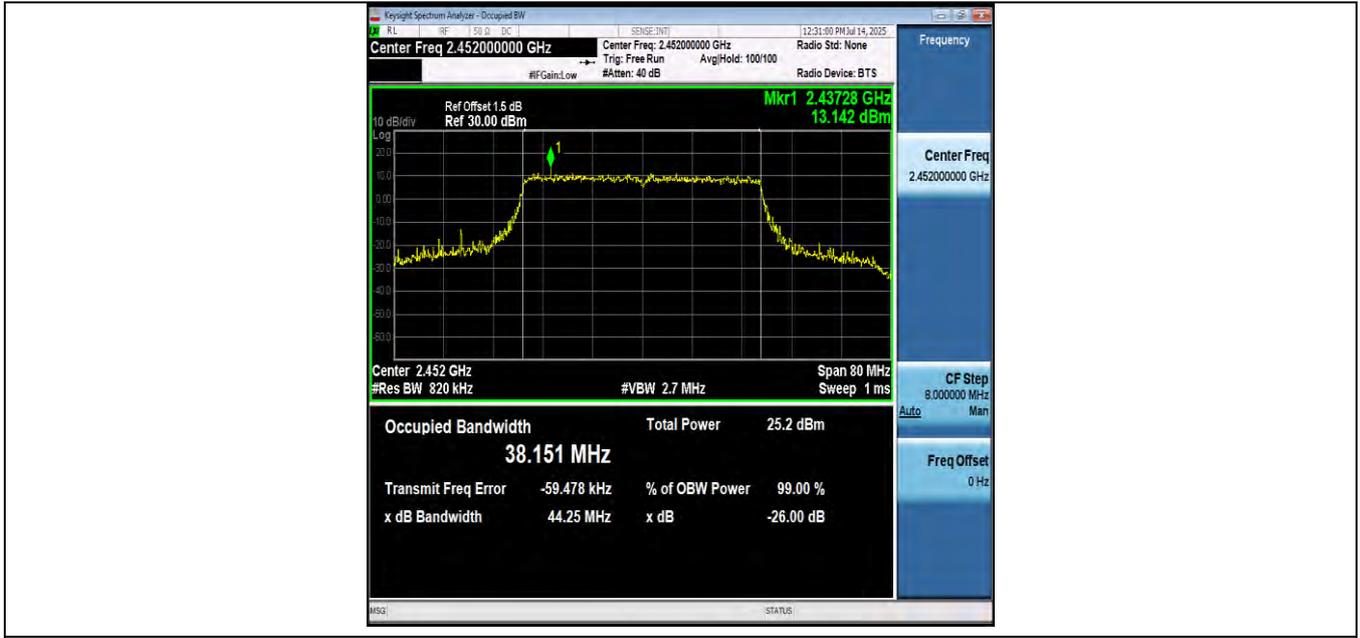
11BE20-2462



11BE40-2422



11BE40-2437



11BE40-2452

Appendix B: Test results of Maximum conducted output power

SISO- Ant1

Mode	Channel	Frequency (MHz)	Measure result (dBm)	Limit (dBm)	Verdict
11b	1	2412	23.25	≤30	Pass
	6	2437	24.49	≤30	Pass
	11	2462	24.00	≤30	Pass
11g	1	2412	21.35	≤30	Pass
	6	2437	21.29	≤30	Pass
	11	2462	21.43	≤30	Pass
11n(20MHz)	1	2412	21.41	≤30	Pass
	6	2437	21.26	≤30	Pass
	11	2462	21.38	≤30	Pass
11n(40MHz)	3	2422	20.33	≤30	Pass
	6	2437	20.32	≤30	Pass
	9	2452	20.34	≤30	Pass
11ax(20MHz)	1	2412	17.61	≤30	Pass
	6	2437	17.30	≤30	Pass
	11	2462	16.43	≤30	Pass
11ax(40MHz)	3	2422	16.83	≤30	Pass
	6	2437	16.87	≤30	Pass
	9	2452	15.79	≤30	Pass
11be(20MHz)	1	2412	17.86	≤30	Pass
	6	2437	18.42	≤30	Pass
	11	2462	18.46	≤30	Pass
11be(40MHz)	3	2422	17.97	≤30	Pass
	6	2437	17.94	≤30	Pass
	9	2452	17.39	≤30	Pass

SISO- Ant2

Mode	Channel	Frequency (MHz)	Measure result (dBm)	Limit (dBm)	Verdict
11b	1	2412	23.25	≤30	Pass
	6	2437	24.49	≤30	Pass
	11	2462	24.00	≤30	Pass
11g	1	2412	21.35	≤30	Pass
	6	2437	21.29	≤30	Pass
	11	2462	21.43	≤30	Pass
11n(20MHz)	1	2412	21.41	≤30	Pass
	6	2437	21.26	≤30	Pass
	11	2462	21.38	≤30	Pass
11n(40MHz)	3	2422	20.33	≤30	Pass
	6	2437	20.32	≤30	Pass
	9	2452	20.34	≤30	Pass
11ax(20MHz)	1	2412	17.61	≤30	Pass
	6	2437	17.30	≤30	Pass
	11	2462	16.43	≤30	Pass
11ax(40MHz)	3	2422	16.83	≤30	Pass
	6	2437	16.87	≤30	Pass
	9	2452	15.79	≤30	Pass
11be(20MHz)	1	2412	17.86	≤30	Pass
	6	2437	18.42	≤30	Pass
	11	2462	18.46	≤30	Pass
11be(40MHz)	3	2422	17.97	≤30	Pass
	6	2437	17.94	≤30	Pass
	9	2452	17.39	≤30	Pass

SISO- Ant3

Mode	Channel	Frequency (MHz)	Measure result (dBm)	Limit (dBm)	Verdict
11b	1	2412	23.20	≤30	Pass
	6	2437	24.61	≤30	Pass
	11	2462	23.87	≤30	Pass
11g	1	2412	21.23	≤30	Pass
	6	2437	21.31	≤30	Pass
	11	2462	21.28	≤30	Pass
11n(20MHz)	1	2412	21.49	≤30	Pass
	6	2437	21.24	≤30	Pass
	11	2462	21.38	≤30	Pass
11n(40MHz)	3	2422	20.37	≤30	Pass
	6	2437	20.28	≤30	Pass
	9	2452	20.42	≤30	Pass
11ax(20MHz)	1	2412	17.71	≤30	Pass
	6	2437	17.37	≤30	Pass
	11	2462	16.38	≤30	Pass
11ax(40MHz)	3	2422	16.81	≤30	Pass
	6	2437	16.89	≤30	Pass
	9	2452	15.73	≤30	Pass
11be(20MHz)	1	2412	17.72	≤30	Pass
	6	2437	18.46	≤30	Pass
	11	2462	18.56	≤30	Pass
11be(40MHz)	3	2422	18.01	≤30	Pass
	6	2437	17.89	≤30	Pass
	9	2452	17.43	≤30	Pass

SISO- Ant4

Mode	Channel	Frequency (MHz)	Measure result (dBm)	Limit (dBm)	Verdict
11b	1	2412	23.12	≤30	Pass
	6	2437	24.33	≤30	Pass
	11	2462	24.14	≤30	Pass
11g	1	2412	21.24	≤30	Pass
	6	2437	20.99	≤30	Pass
	11	2462	21.44	≤30	Pass
11n(20MHz)	1	2412	21.30	≤30	Pass
	6	2437	21.08	≤30	Pass
	11	2462	21.31	≤30	Pass
11n(40MHz)	3	2422	20.39	≤30	Pass
	6	2437	20.14	≤30	Pass
	9	2452	20.36	≤30	Pass
11ax(20MHz)	1	2412	17.39	≤30	Pass
	6	2437	17.25	≤30	Pass
	11	2462	16.34	≤30	Pass
11ax(40MHz)	3	2422	16.83	≤30	Pass
	6	2437	16.74	≤30	Pass
	9	2452	15.68	≤30	Pass
11be(20MHz)	1	2412	17.63	≤30	Pass
	6	2437	18.36	≤30	Pass
	11	2462	18.53	≤30	Pass
11be(40MHz)	3	2422	17.99	≤30	Pass
	6	2437	17.84	≤30	Pass
	9	2452	17.32	≤30	Pass

MIMO- Ant1+2

Mode	Channel	Frequency (MHz)	Measure result (dBm)			Limit (dBm)	Verdict
			Ant1	Ant2	Total		
11n(20MHz)	1	2412	18.36	18.22	21.30	≤30	Pass
	6	2437	18.19	17.89	21.05	≤30	Pass
	11	2462	18.22	18.27	21.26	≤30	Pass
11n(40MHz)	3	2422	17.29	17.13	20.22	≤30	Pass
	6	2437	17.24	17.17	20.22	≤30	Pass
	9	2452	17.21	17.11	20.17	≤30	Pass
11ax(20MHz)	1	2412	14.58	14.35	17.48	≤30	Pass
	6	2437	14.20	14.03	17.13	≤30	Pass
	11	2462	13.25	13.17	16.22	≤30	Pass
11ax(40MHz)	3	2422	13.78	13.73	16.77	≤30	Pass
	6	2437	13.82	13.74	16.79	≤30	Pass
	9	2452	12.75	12.55	15.66	≤30	Pass
11be(20MHz)	1	2412	14.76	14.54	17.66	≤30	Pass
	6	2437	15.40	15.20	18.31	≤30	Pass
	11	2462	15.33	15.28	18.32	≤30	Pass
11be(40MHz)	3	2422	14.95	14.76	17.87	≤30	Pass
	6	2437	14.75	14.75	17.76	≤30	Pass
	9	2452	14.27	14.21	17.25	≤30	Pass

MIMO- Ant3+4

Mode	Channel	Frequency (MHz)	Measure result (dBm)			Limit (dBm)	Verdict
			Ant1	Ant2	Total		
11n(20MHz)	1	2412	18.36	18.09	21.24	≤30	Pass
	6	2437	18.18	18.02	21.11	≤30	Pass
	11	2462	18.29	18.14	21.23	≤30	Pass
11n(40MHz)	3	2422	17.17	17.28	20.24	≤30	Pass
	6	2437	17.31	17.27	20.30	≤30	Pass
	9	2452	17.16	17.05	20.12	≤30	Pass
11ax(20MHz)	1	2412	14.44	14.42	17.44	≤30	Pass
	6	2437	14.06	14.01	17.05	≤30	Pass
	11	2462	13.20	13.12	16.17	≤30	Pass
11ax(40MHz)	3	2422	13.66	13.88	16.78	≤30	Pass
	6	2437	13.82	13.73	16.79	≤30	Pass
	9	2452	12.73	12.41	15.58	≤30	Pass
11be(20MHz)	1	2412	14.63	14.43	17.54	≤30	Pass
	6	2437	15.51	15.13	18.33	≤30	Pass
	11	2462	15.22	15.28	18.26	≤30	Pass
11be(40MHz)	3	2422	15.05	14.74	17.91	≤30	Pass
	6	2437	14.76	14.64	17.71	≤30	Pass
	9	2452	14.42	14.36	17.40	≤30	Pass

Appendix C: Test results of Maximum power spectral density

Test Mode	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	2412	-3.18	≤8.00	PASS
11B	2437	-2.38	≤8.00	PASS
11B	2462	-2.48	≤8.00	PASS
11G	2412	-11.16	≤8.00	PASS
11G	2437	-11.70	≤8.00	PASS
11G	2462	-11.38	≤8.00	PASS

Note: Only the highest power chain date shown in this report.

Test Mode	Frequency[MHz]	SISO Result[dBm/3kHz]	SISO Limit[dBm/3kHz]	MIMO Result[dBm/3kHz]	MIMO Limit[dBm/3kHz]	Verdict
11N20	2412	-12.81	≤8.00	-9.80	≤5.97	PASS
11N20	2437	-13.23	≤8.00	-10.22	≤5.97	PASS
11N20	2462	-12.81	≤8.00	-9.80	≤5.97	PASS
11N40	2422	-17.23	≤8.00	-14.22	≤5.97	PASS
11N40	2437	-17.42	≤8.00	-14.41	≤5.97	PASS
11N40	2452	-17.06	≤8.00	-14.05	≤5.97	PASS
11AX20	2412	-17.61	≤8.00	-14.60	≤5.97	PASS
11AX20	2437	-18.25	≤8.00	-15.24	≤5.97	PASS
11AX20	2462	-18.42	≤8.00	-15.41	≤5.97	PASS
11AX40	2422	-21.66	≤8.00	-18.65	≤5.97	PASS
11AX40	2437	-21.45	≤8.00	-18.44	≤5.97	PASS
11AX40	2452	-22.30	≤8.00	-19.29	≤5.97	PASS
11BE20	2412	-17.13	≤8.00	-14.12	≤5.97	PASS
11BE20	2437	-16.41	≤8.00	-13.40	≤5.97	PASS
11BE20	2462	-16.86	≤8.00	-13.85	≤5.97	PASS
11BE40	2422	-19.96	≤8.00	-16.95	≤5.97	PASS
11BE40	2437	-20.71	≤8.00	-17.70	≤5.97	PASS
11BE40	2452	-21.12	≤8.00	-18.11	≤5.97	PASS

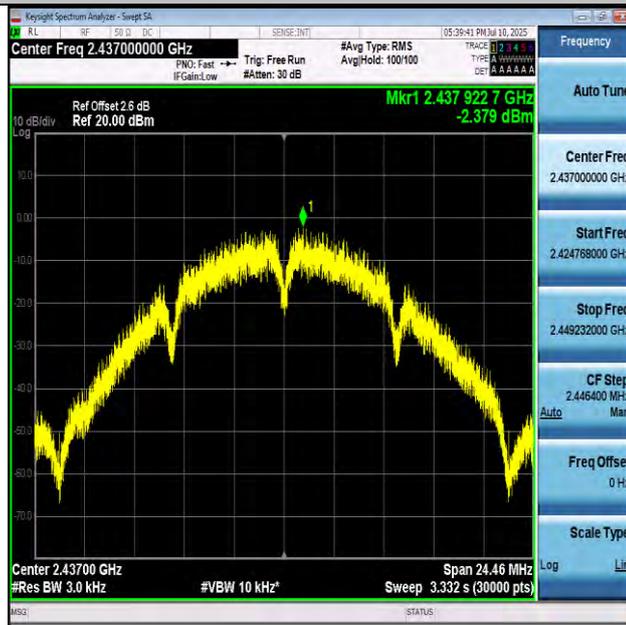
Note 1: The SISO PSD data is measure by highest power chain.

Note 2: The MIMO PSD is calculate form SISO PSD,which is tight than real result: $MIMO\ PSD = SISO\ PSD + 10\log(n) = SISO\ PSD + 3.01$ n= chain number.

Note 3: $MIMO\ Limit = limit - (Directional\ gain - 6dBi) = 8 - (5 + 10\log(2) - 6) = 5.97$



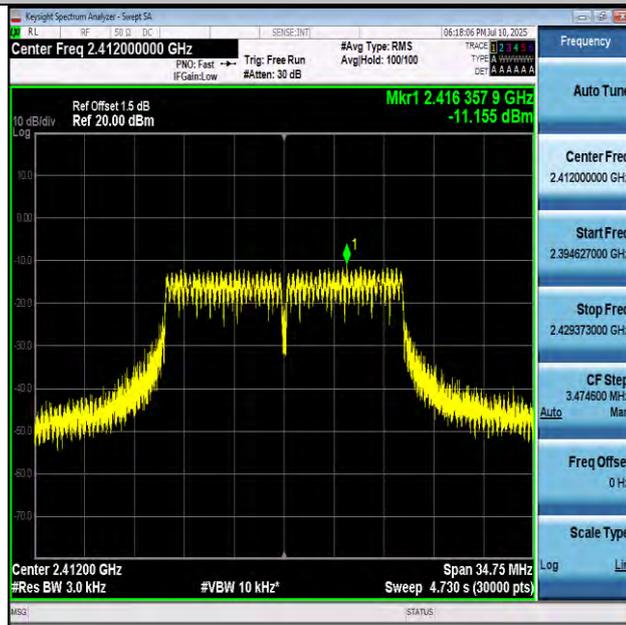
11B-Ant1-2412-PASS



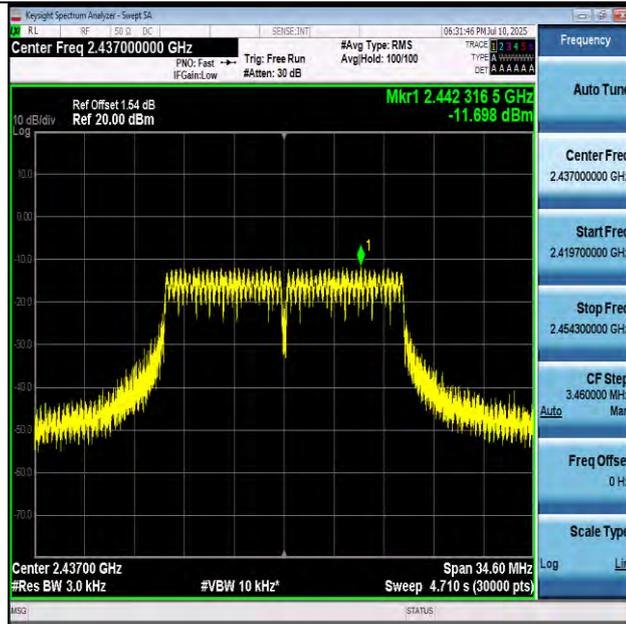
11B-Ant1-2437-PASS



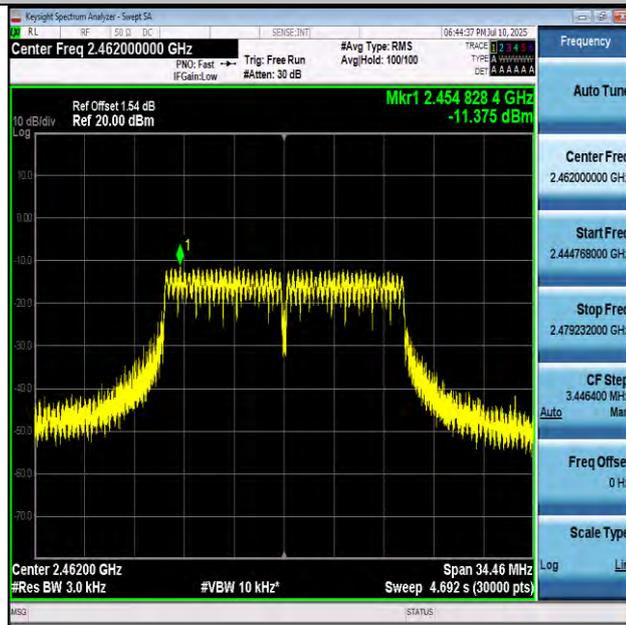
11B-Ant1-2462-PASS



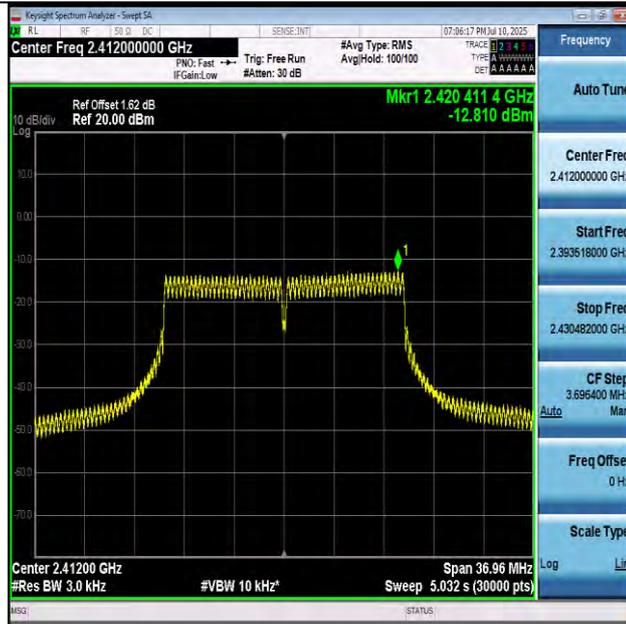
11G-Ant1-2412-PASS



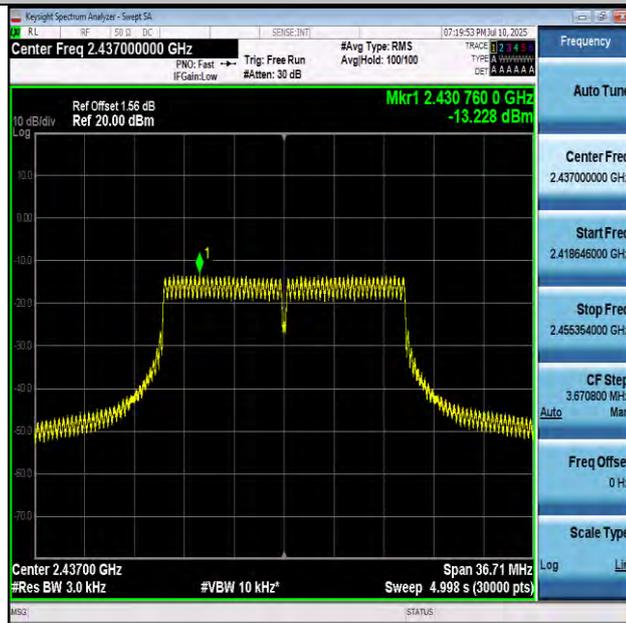
11G-Ant1-2437-PASS



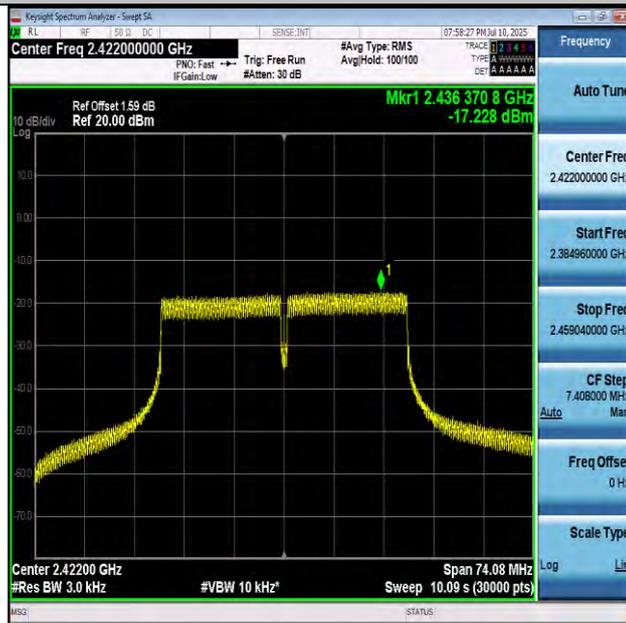
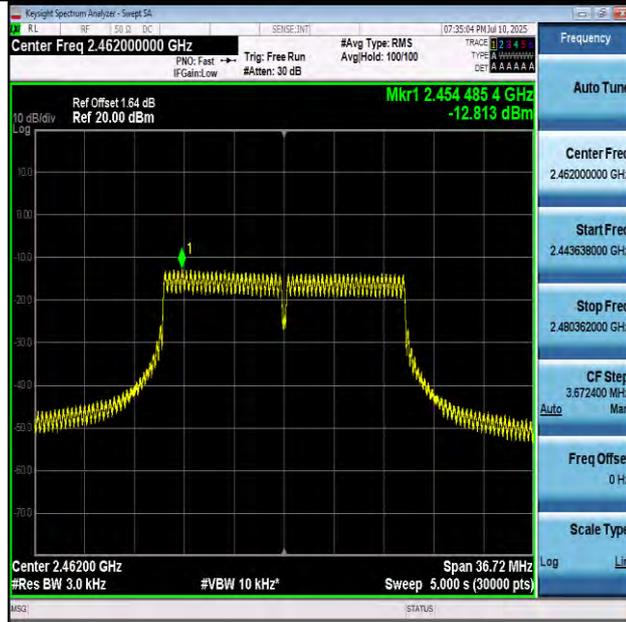
11G-Ant1-2462-PASS

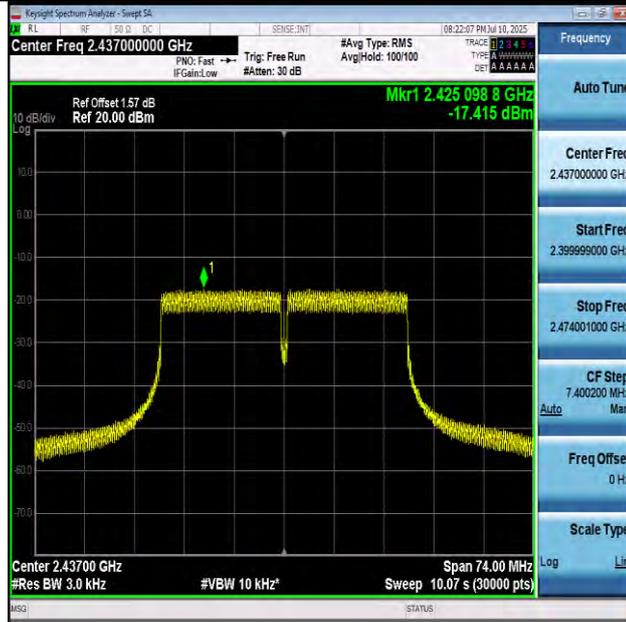


11N20-2412-PASS

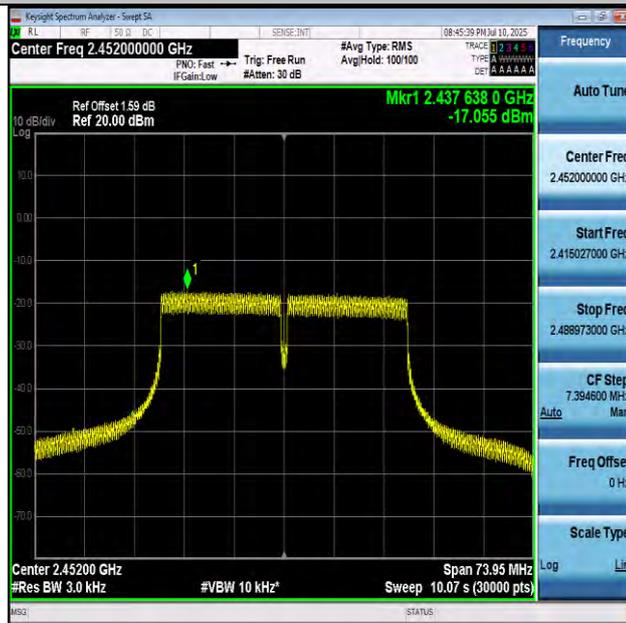


11N20-2437-PASS

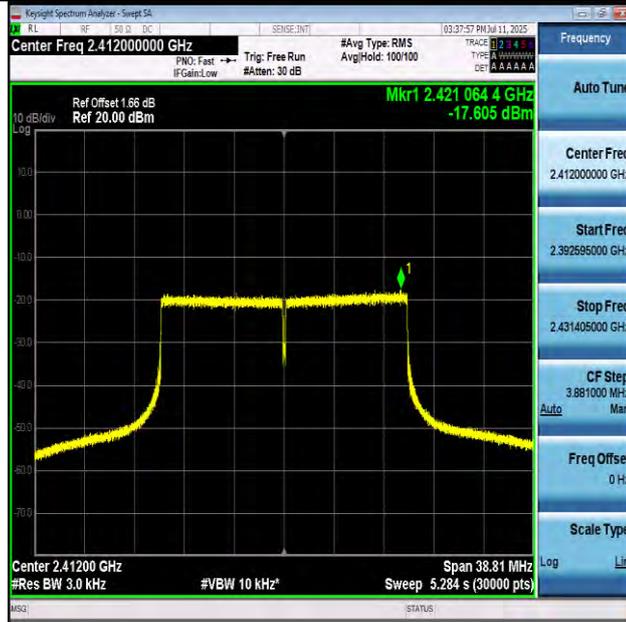




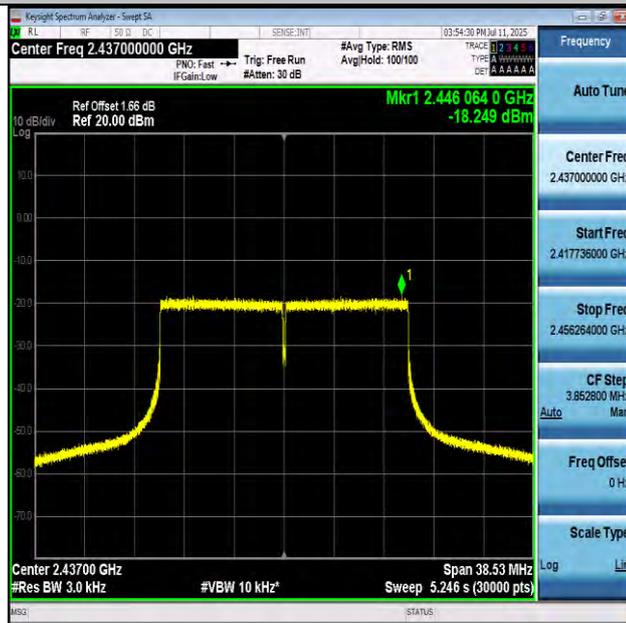
11N40-2437-PASS



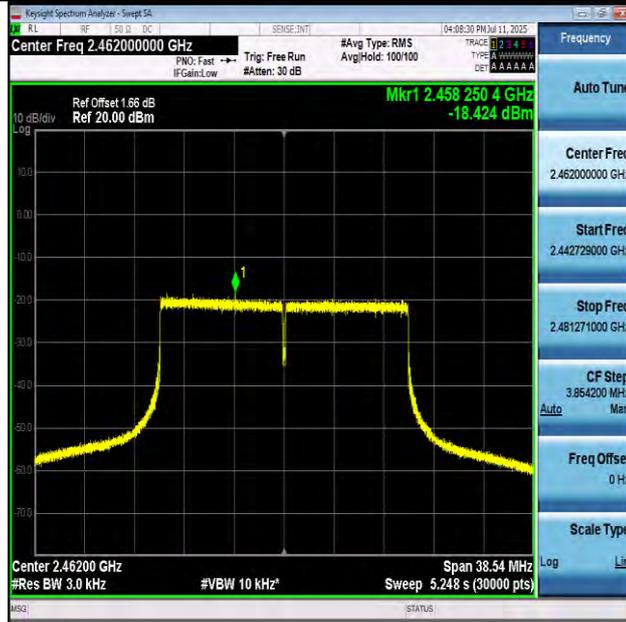
11N40-2452-PASS



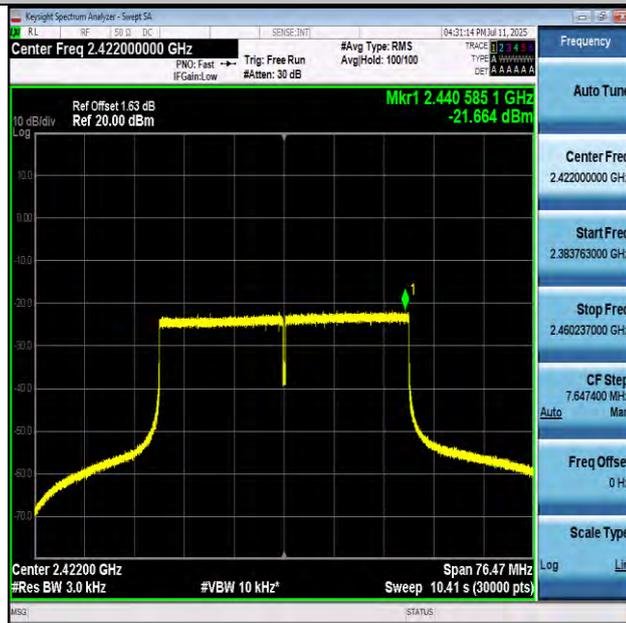
11AX20-2412-PASS



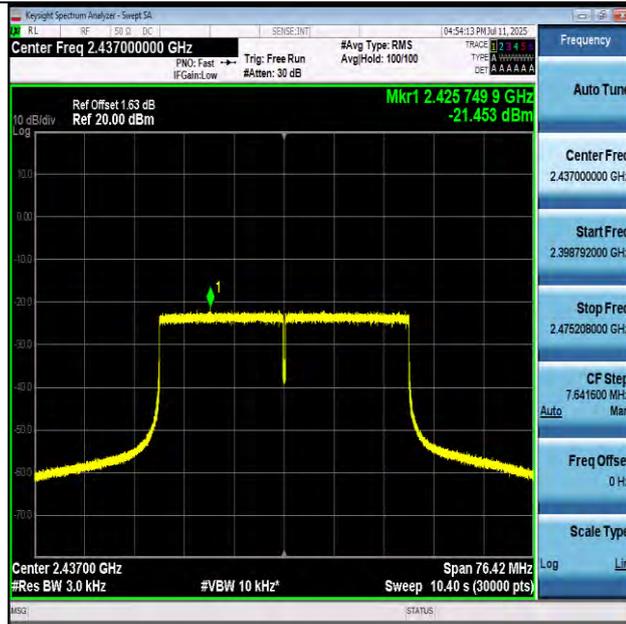
11AX20-2437-PASS



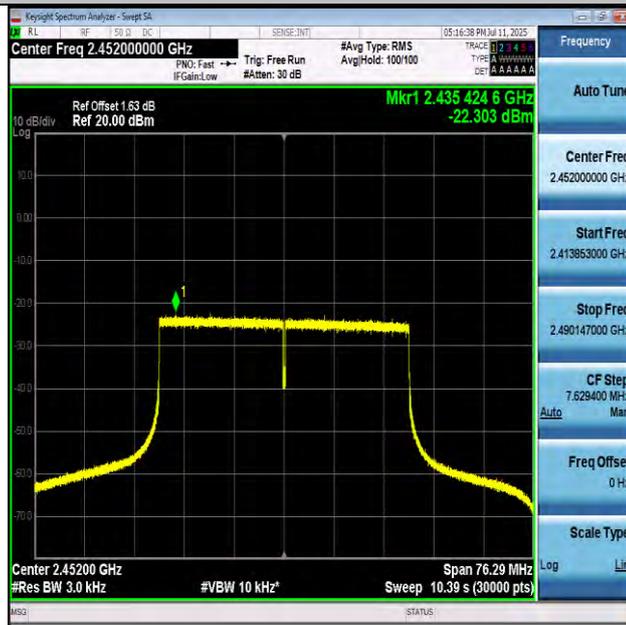
11AX20-2462-PASS



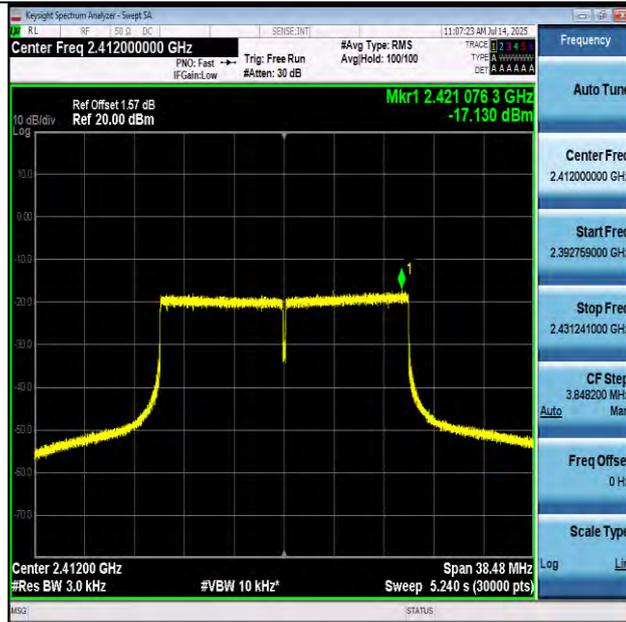
11AX40-2422-PASS



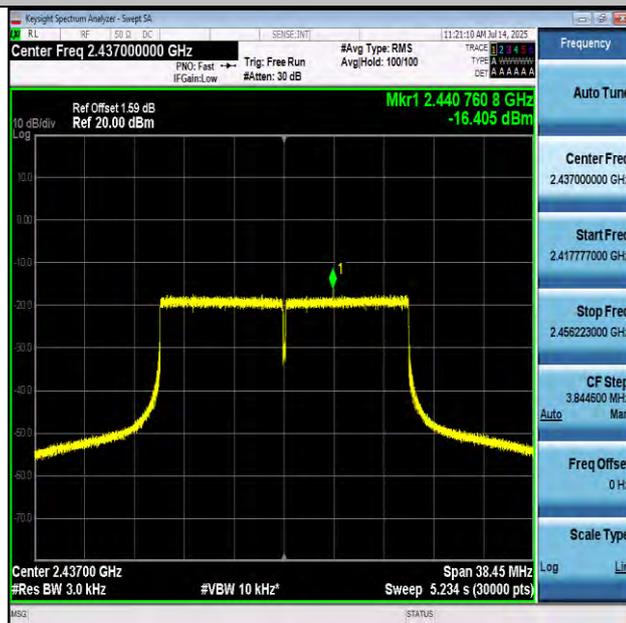
11AX40-2437-PASS



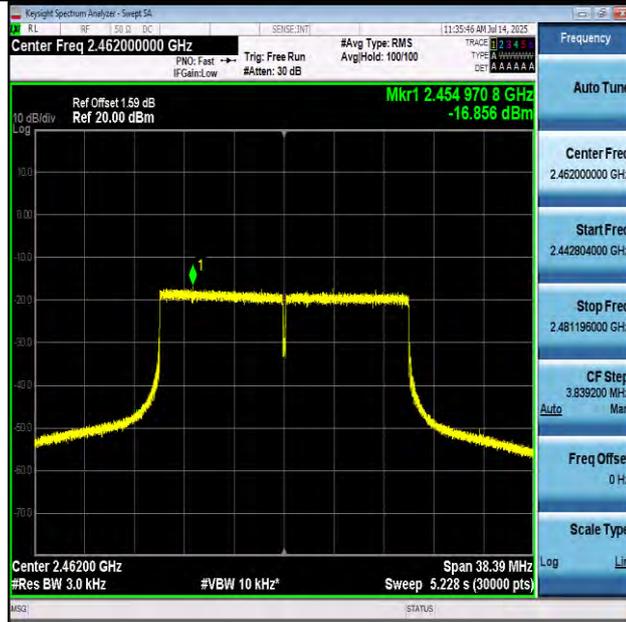
11AX40-2452-PASS



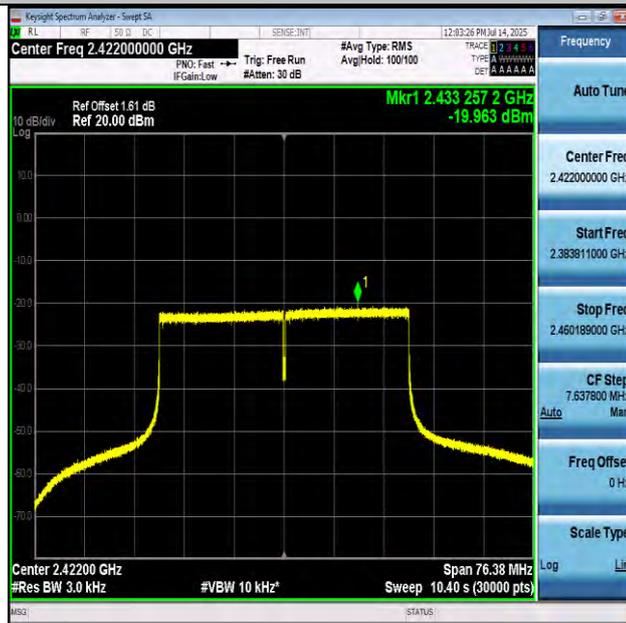
11BE20-2412-PASS



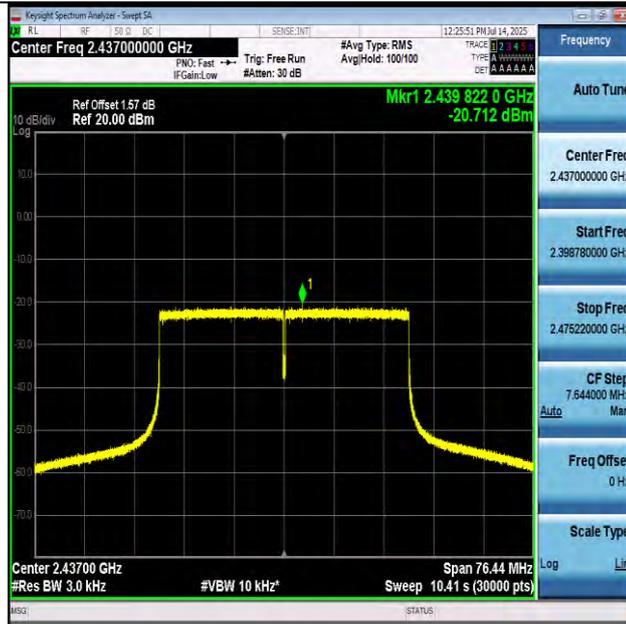
11BE20-2437-PASS



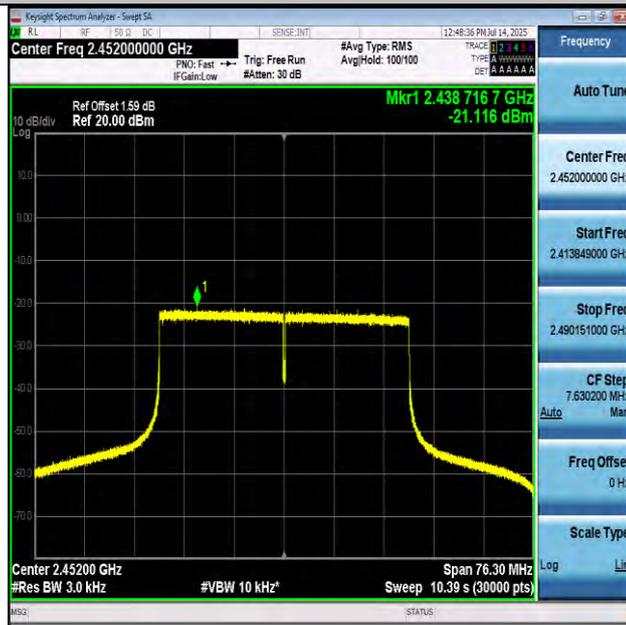
11BE20-2462-PASS



11BE40-2422-PASS



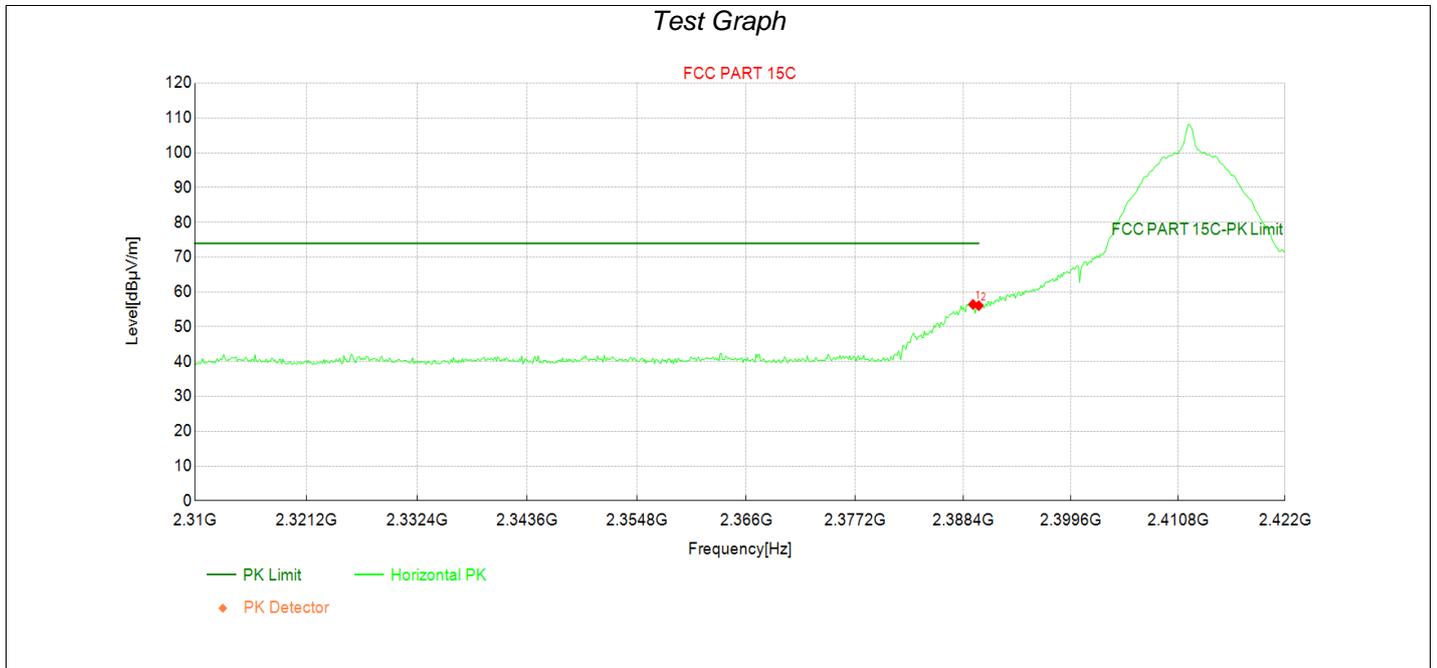
11BE40-2437-PASS



11BE40-2452-PASS

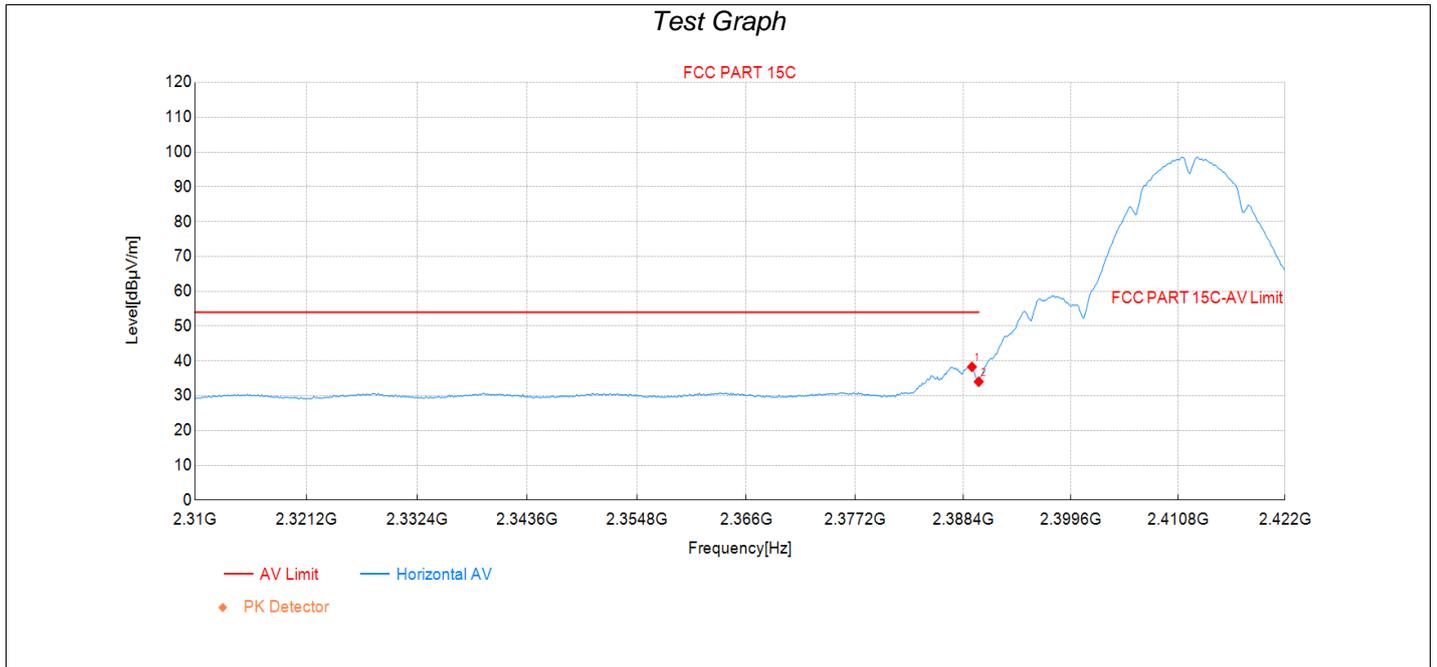
Appendix D: Test results of Band edge measurements

Transmit at 2412MHz by 802.11b



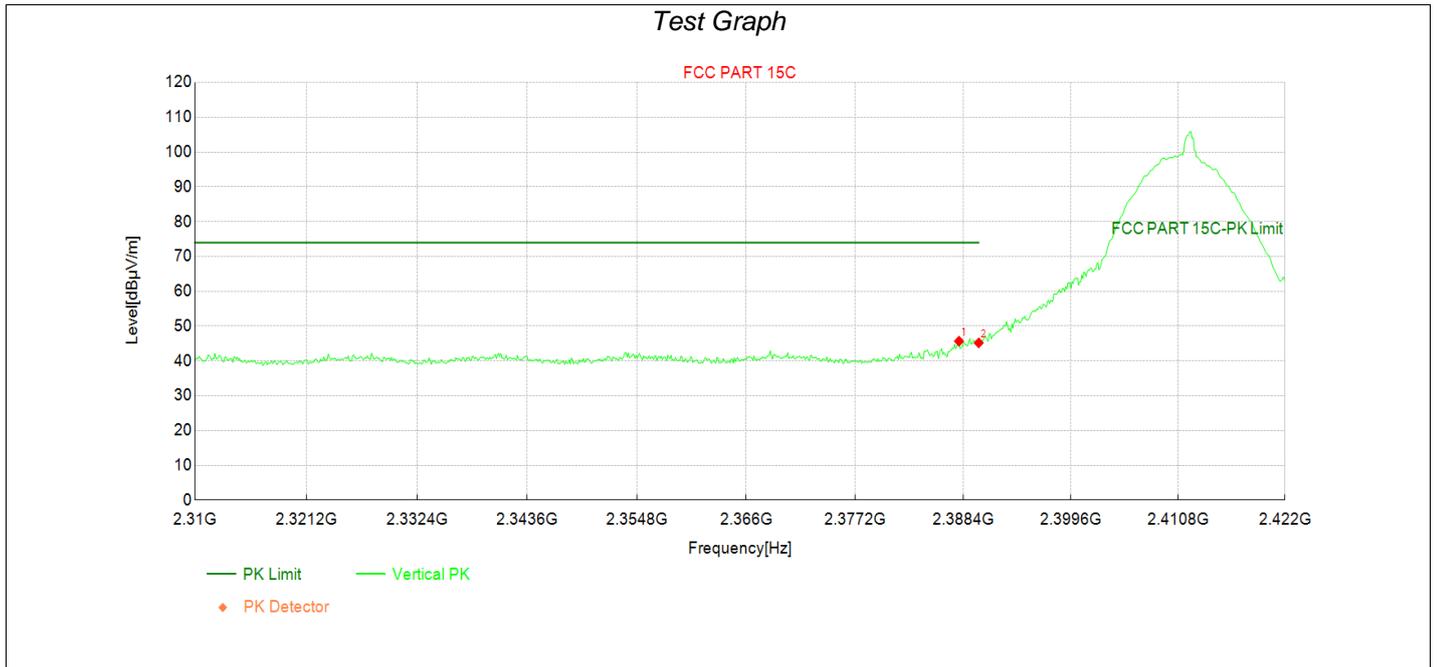
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2389.41	52.78	56.43	3.65	74.00	17.57	PK	Horizo	PASS
2	2390.00	52.43	56.08	3.65	74.00	17.92	PK	Horizo	PASS

Transmit at 2412MHz by 802.11b



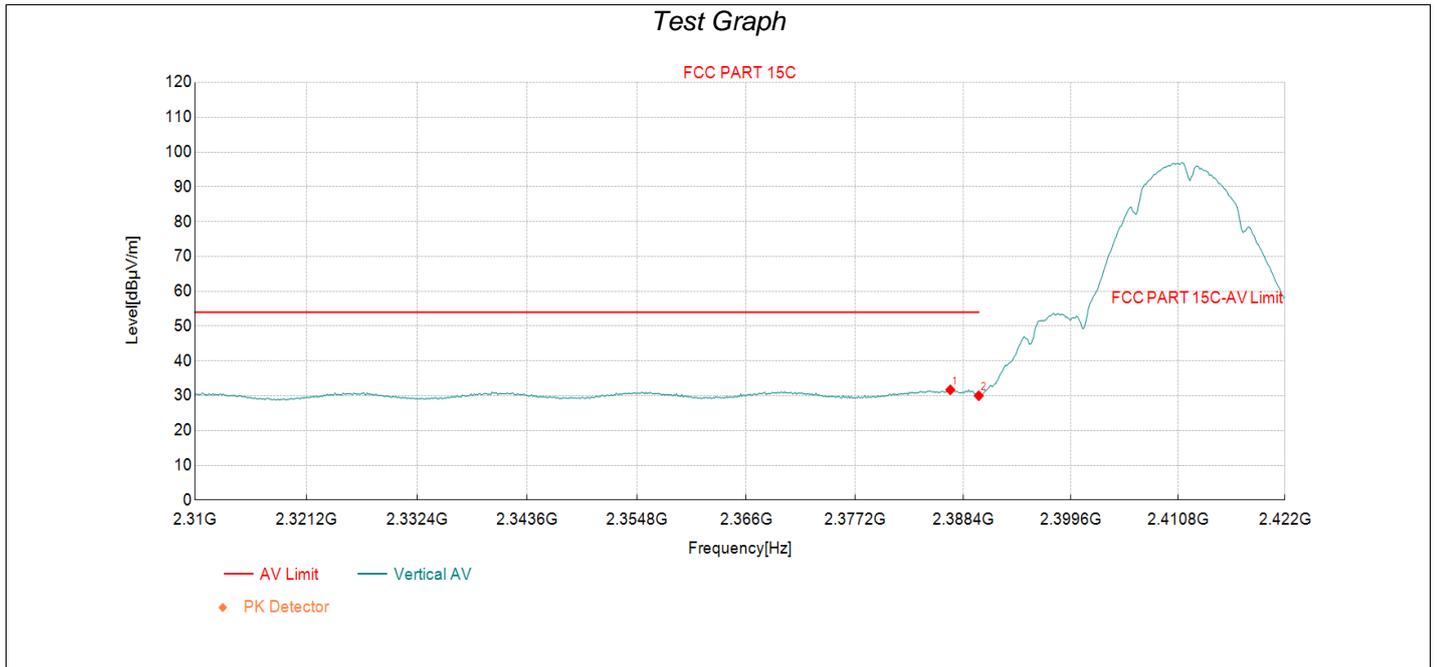
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2389.30	34.62	38.27	3.65	54.00	15.73	AV	Horizo	PASS
2	2390.00	30.36	34.01	3.65	54.00	19.99	AV	Horizo	PASS

Transmit at 2412MHz by 802.11b



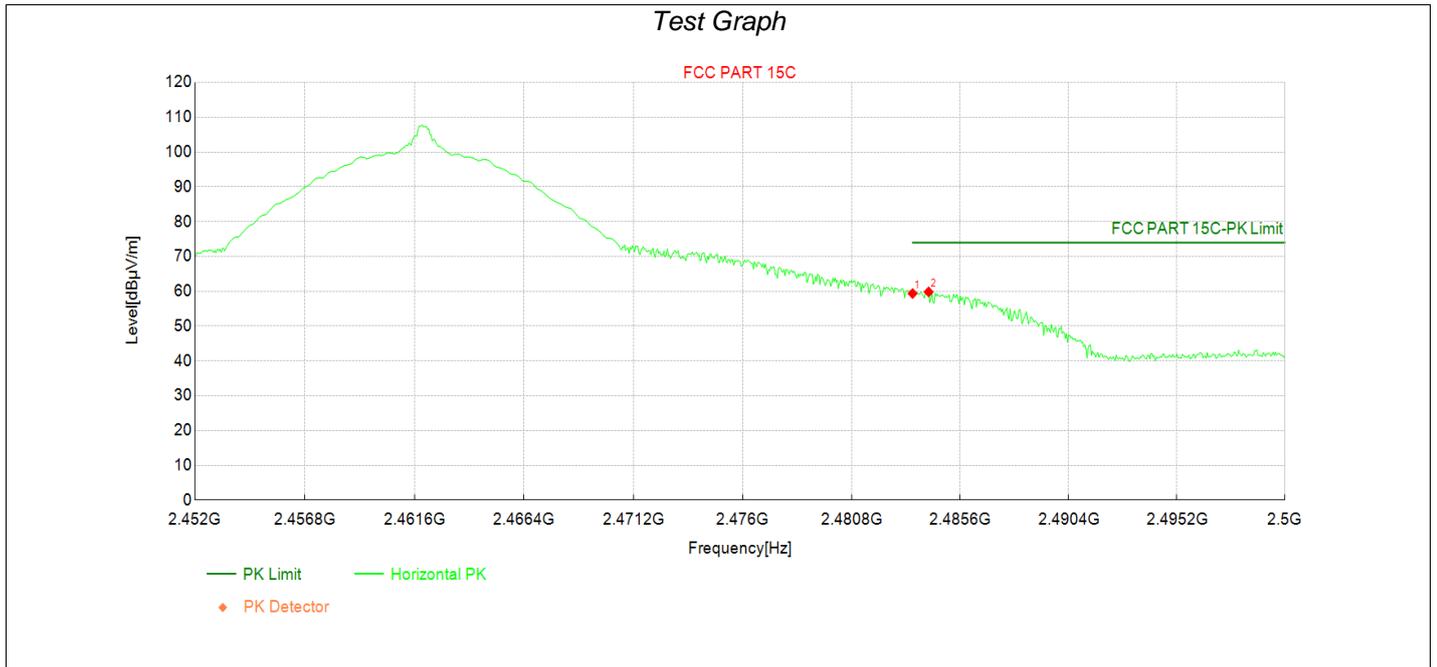
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2387.95	42.03	45.66	3.63	74.00	28.34	PK	Vertic	PASS
2	2390.00	41.53	45.18	3.65	74.00	28.82	PK	Vertic	PASS

Transmit at 2412MHz by 802.11b



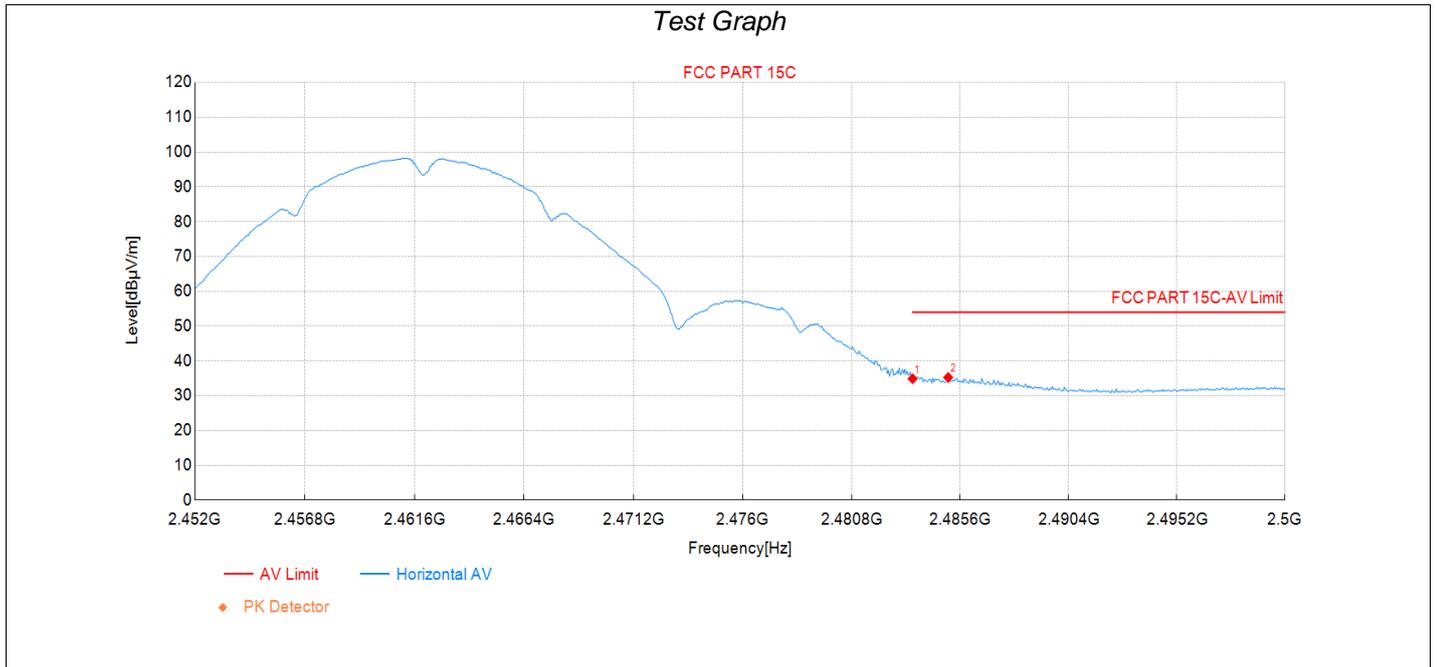
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2387.06	28.05	31.68	3.63	54.00	22.32	AV	Vertic	PASS
2	2390.00	26.34	29.99	3.65	54.00	24.01	AV	Vertic	PASS

Transmit at 2462MHz by 802.11b



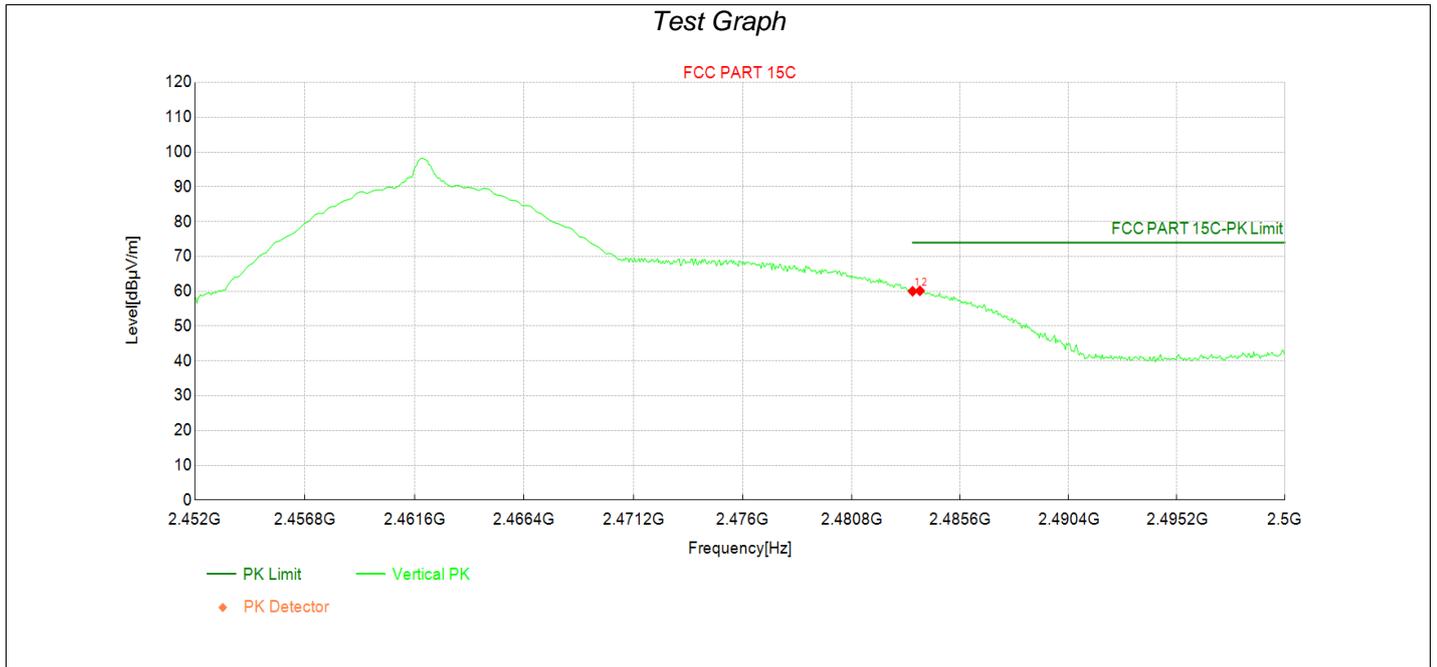
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	55.26	59.35	4.09	74.00	14.65	PK	Horizo	PASS
2	2484.21	55.71	59.82	4.11	74.00	14.18	PK	Horizo	PASS

Transmit at 2462MHz by 802.11b



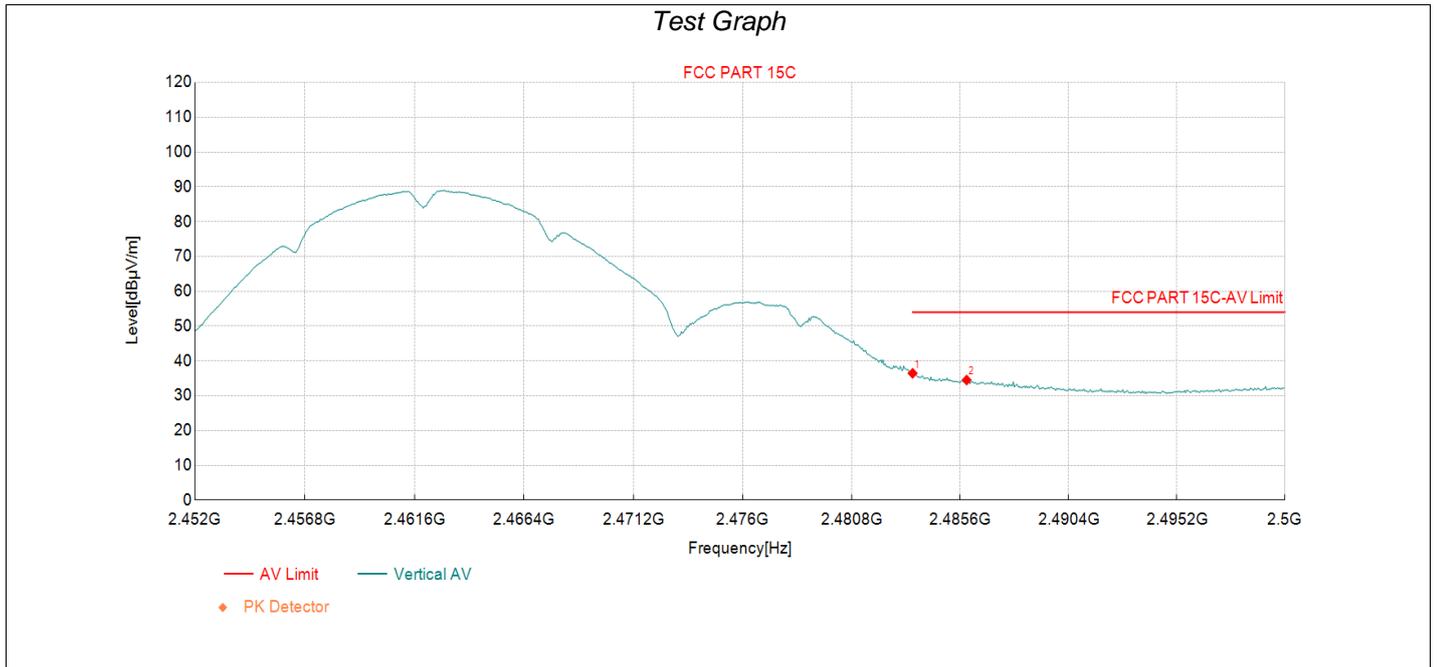
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	30.77	34.86	4.09	54.00	19.14	AV	Horizo	PASS
2	2485.07	31.14	35.25	4.11	54.00	18.75	AV	Horizo	PASS

Transmit at 2462MHz by 802.11b



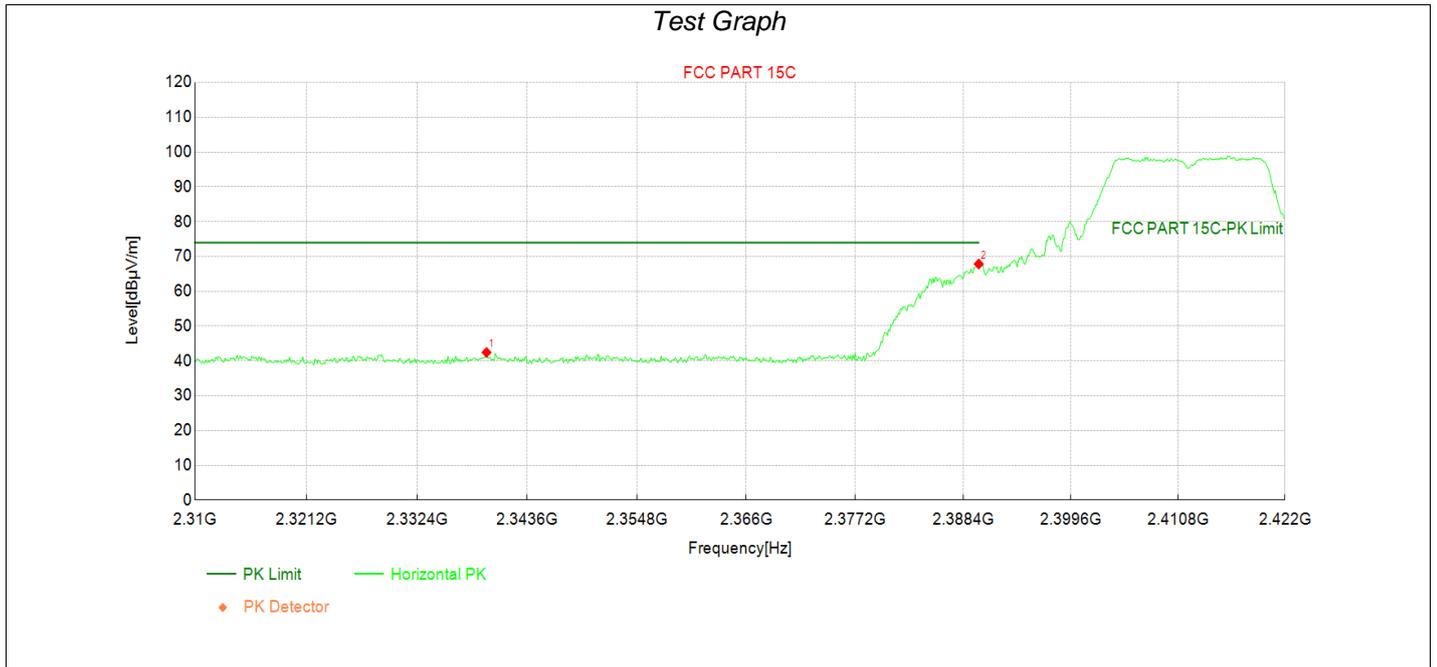
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	55.91	60.00	4.09	74.00	14.00	PK	Vertic	PASS
2	2483.82	56.04	60.13	4.09	74.00	13.87	PK	Vertic	PASS

Transmit at 2462MHz by 802.11b



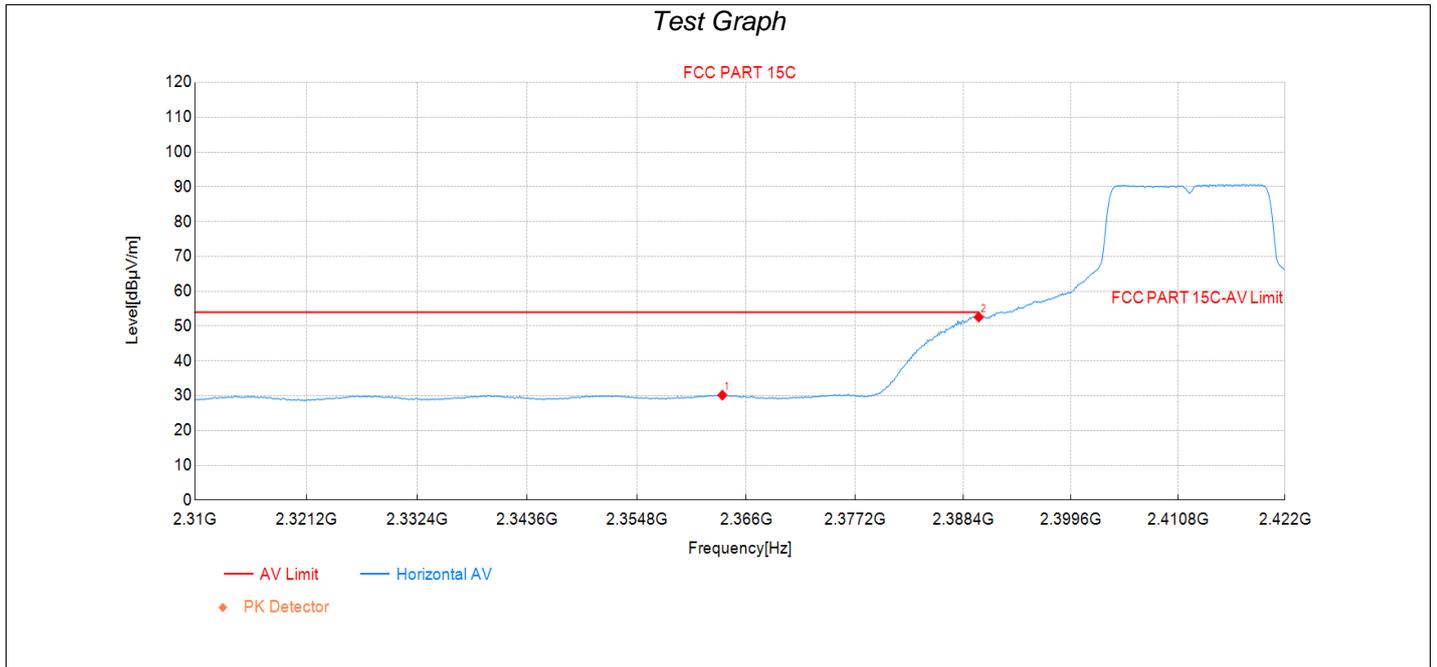
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	32.35	36.44	4.09	54.00	17.56	AV	Vertic	PASS
2	2485.89	30.39	34.50	4.11	54.00	19.50	AV	Vertic	PASS

Transmit at 2412MHz by 802.11g



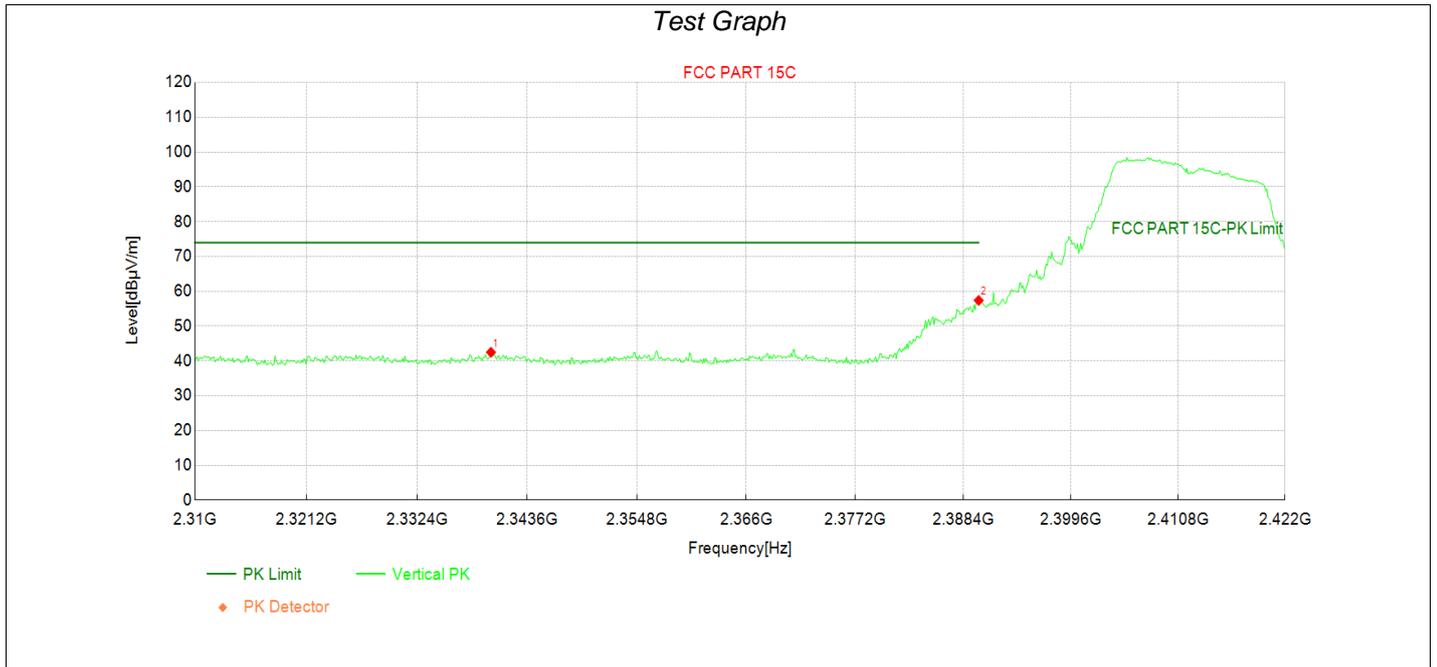
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2339.46	39.01	42.44	3.43	74.00	31.56	PK	Horizo	PASS
2	2390.00	64.18	67.83	3.65	74.00	6.17	PK	Horizo	PASS

Transmit at 2412MHz by 802.11g



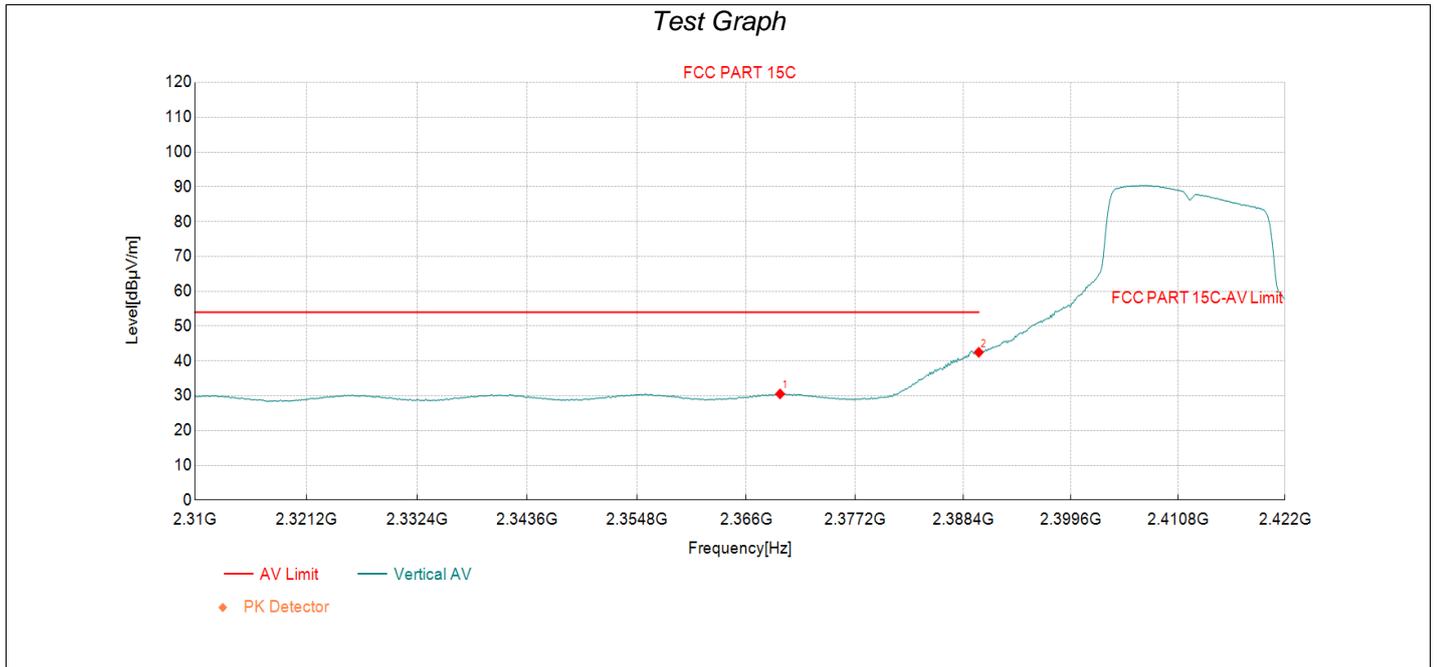
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2363.54	26.61	30.14	3.53	54.00	23.86	AV	Horizo	PASS
2	2390.00	48.94	52.59	3.65	54.00	1.41	AV	Horizo	PASS

Transmit at 2412MHz by 802.11g



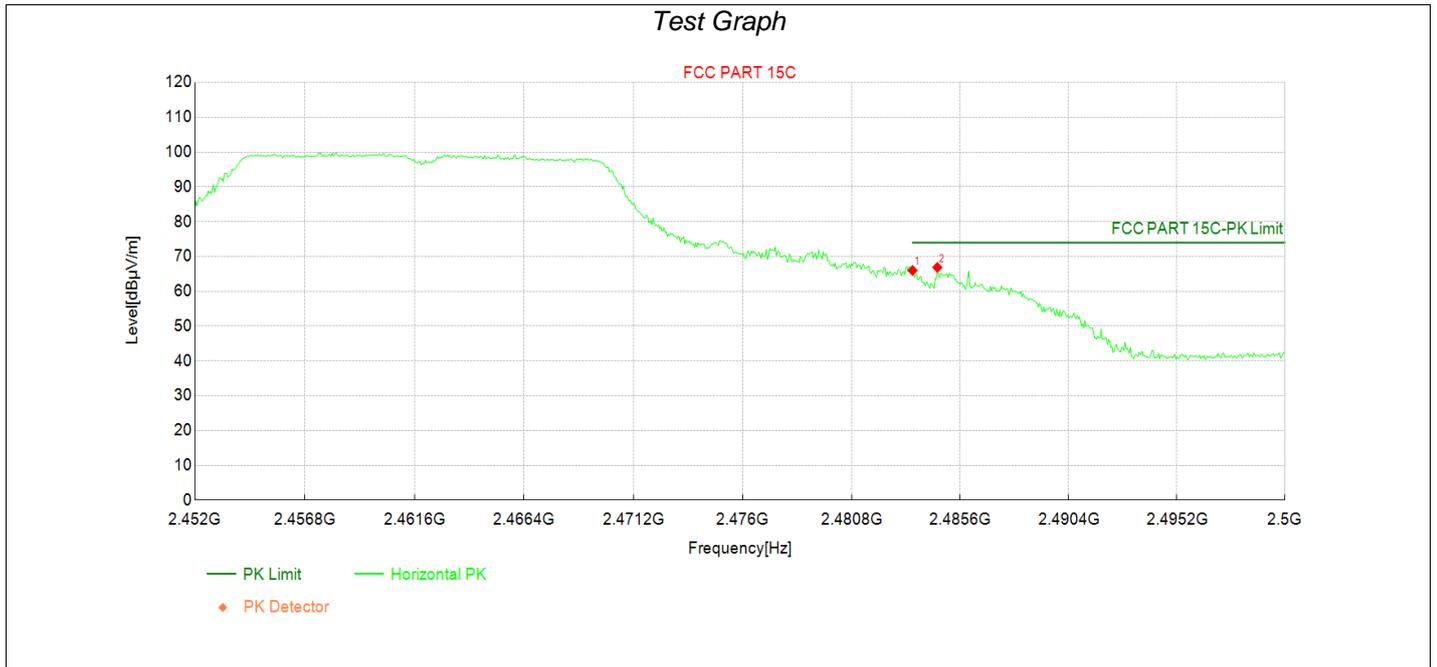
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2339.90	39.05	42.48	3.43	74.00	31.52	PK	Vertic	PASS
2	2390.00	53.73	57.38	3.65	74.00	16.62	PK	Vertic	PASS

Transmit at 2412MHz by 802.11g



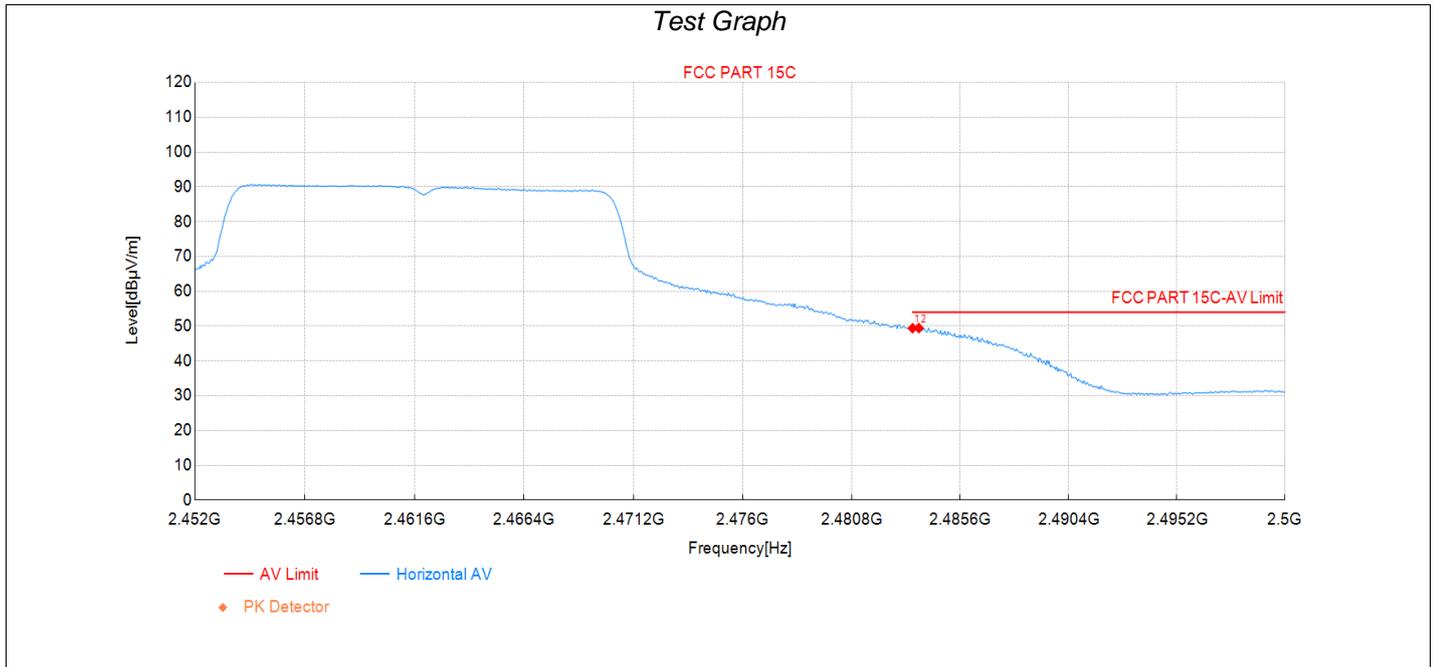
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2369.47	26.95	30.51	3.56	54.00	23.49	AV	Vertic	PASS
2	2390.00	38.81	42.46	3.65	54.00	11.54	AV	Vertic	PASS

Transmit at 2462MHz by 802.11g



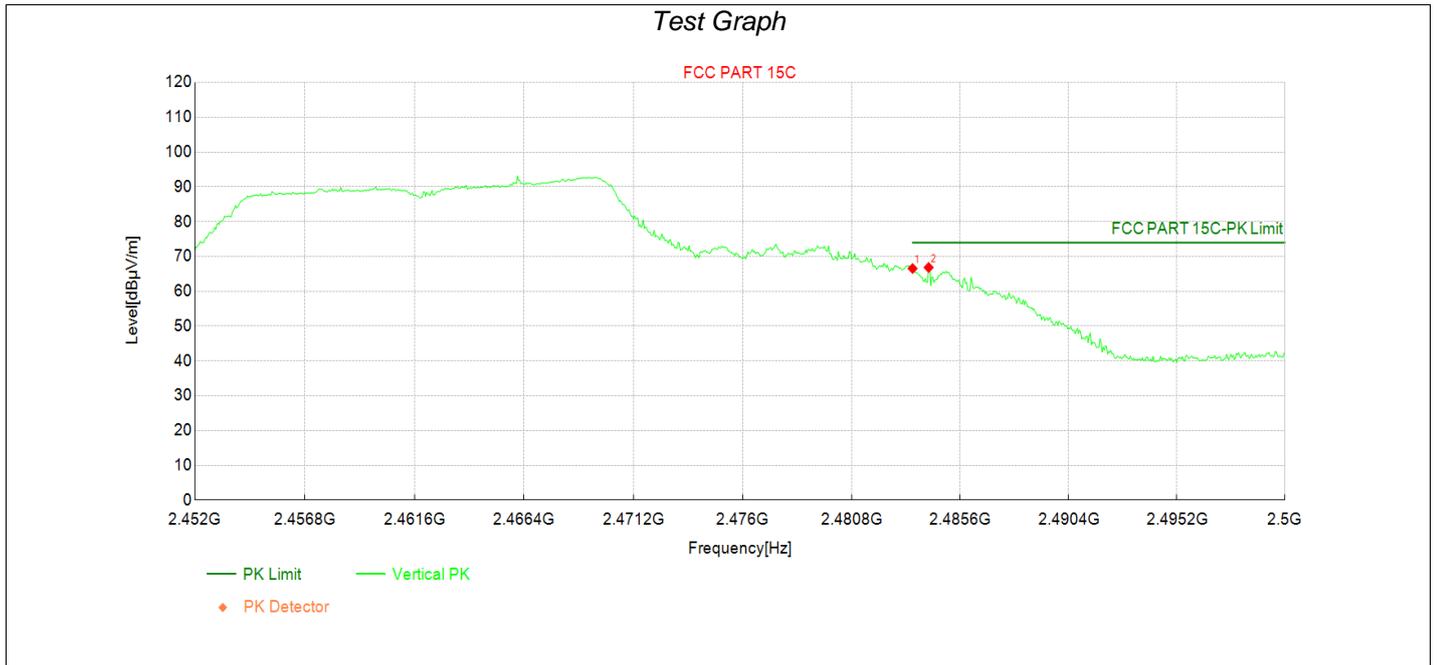
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	61.90	65.99	4.09	74.00	8.01	PK	Horizo	PASS
2	2484.59	62.75	66.86	4.11	74.00	7.14	PK	Horizo	PASS

Transmit at 2462MHz by 802.11g



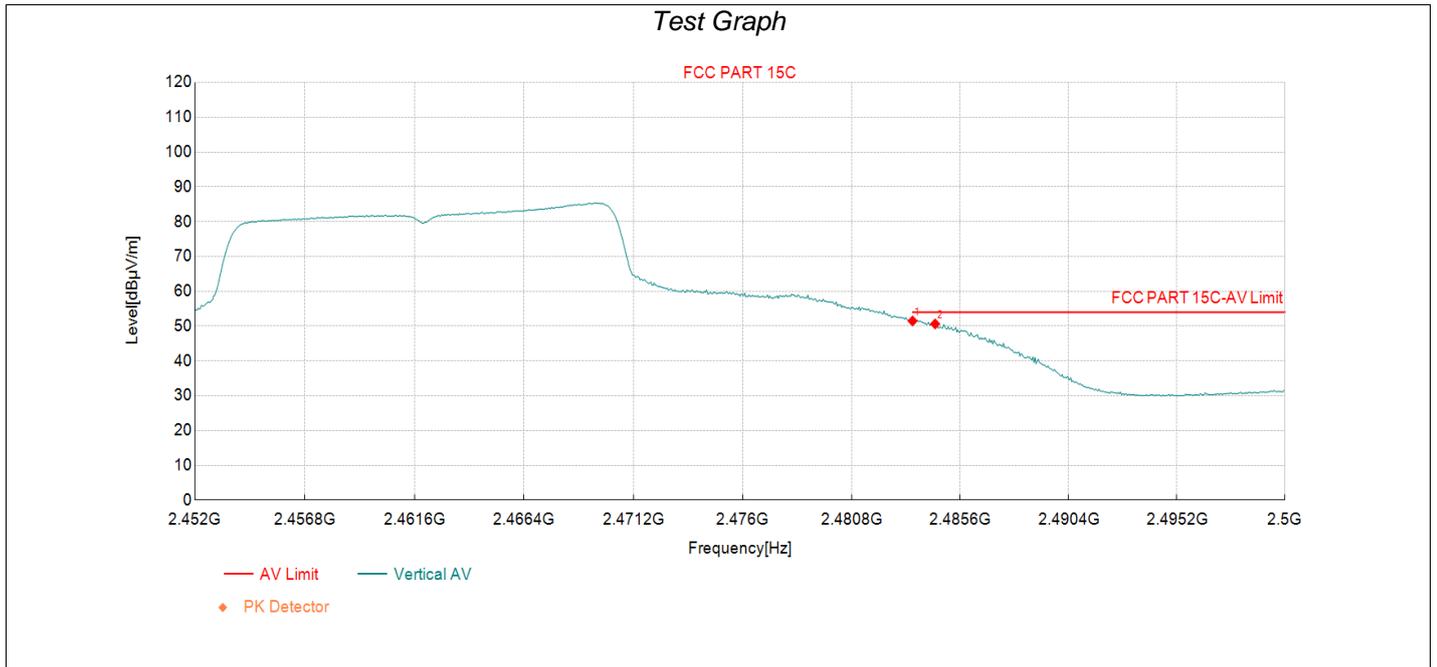
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	45.30	49.39	4.09	54.00	4.61	AV	Horizo	PASS
2	2483.78	45.35	49.44	4.09	54.00	4.56	AV	Horizo	PASS

Transmit at 2462MHz by 802.11g



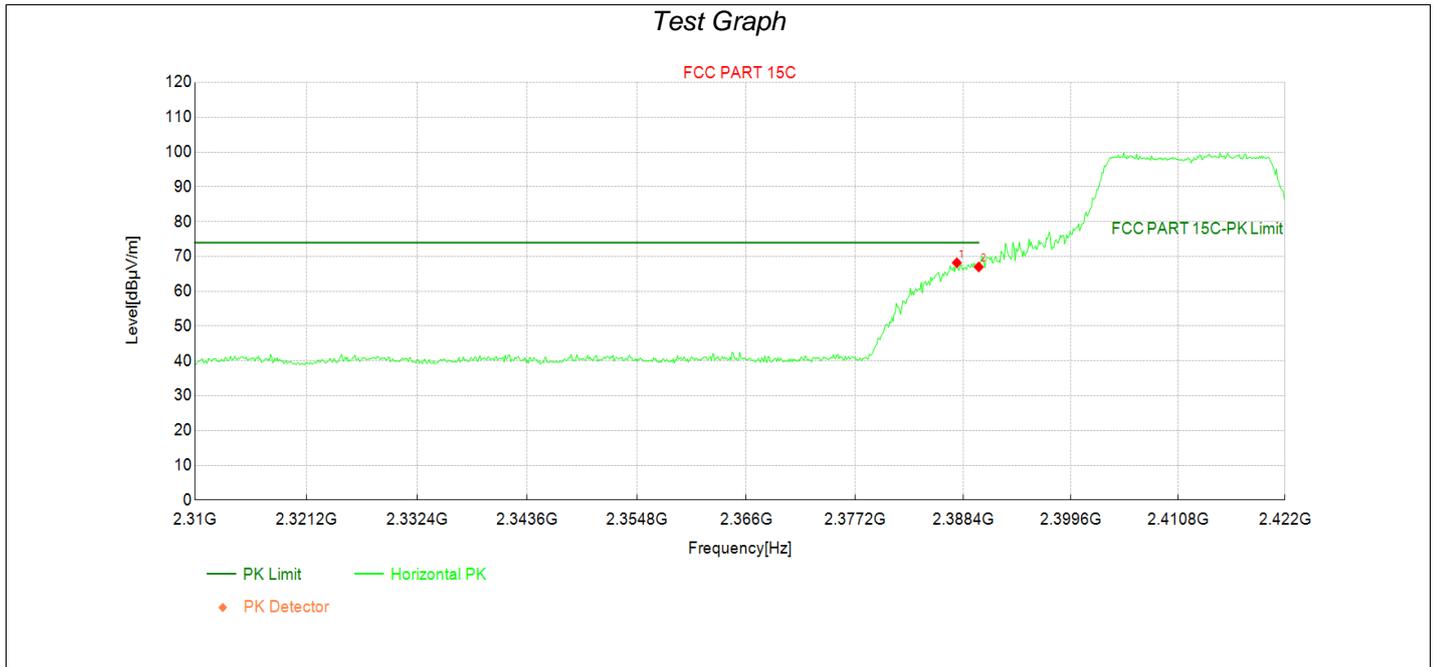
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	62.44	66.53	4.09	74.00	7.47	PK	Vertic	PASS
2	2484.21	62.73	66.84	4.11	74.00	7.16	PK	Vertic	PASS

Transmit at 2462MHz by 802.11g



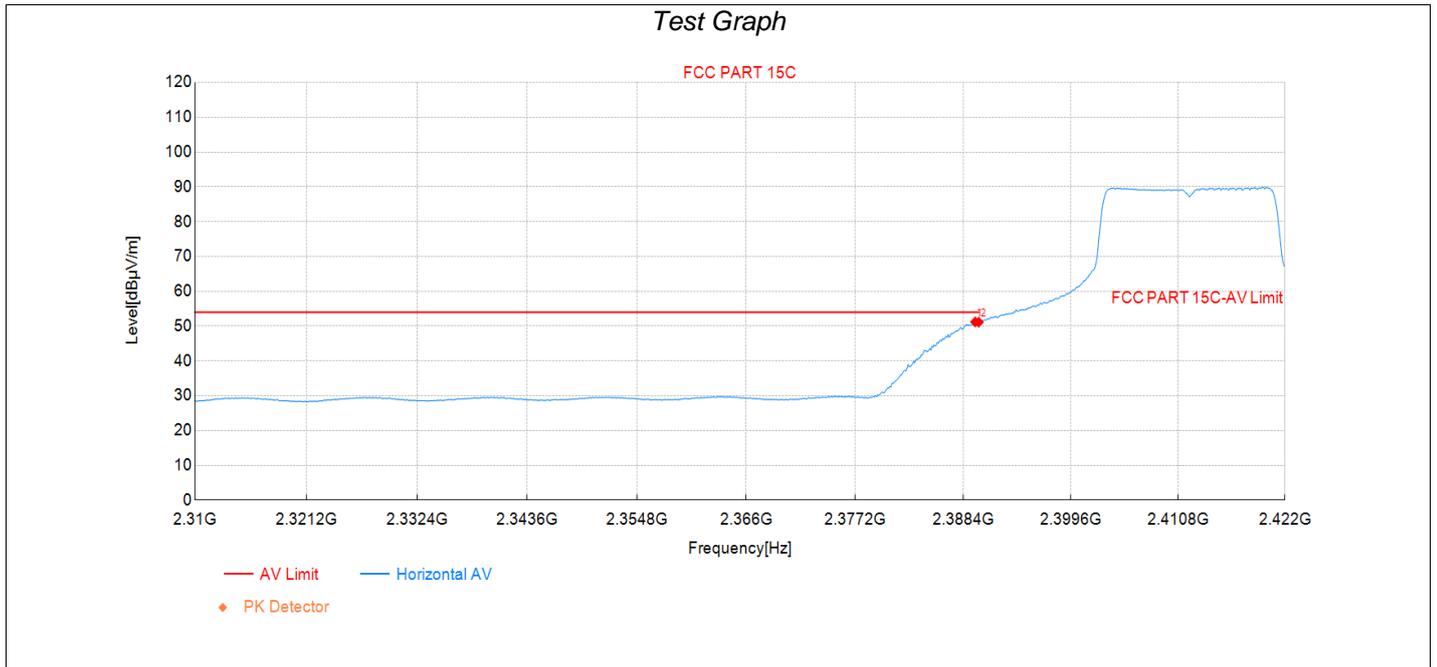
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	47.38	51.47	4.09	54.00	2.53	AV	Vertic	PASS
2	2484.50	46.51	50.62	4.11	54.00	3.38	AV	Vertic	PASS

Transmit at 2412MHz by 802.11n(20MHz)



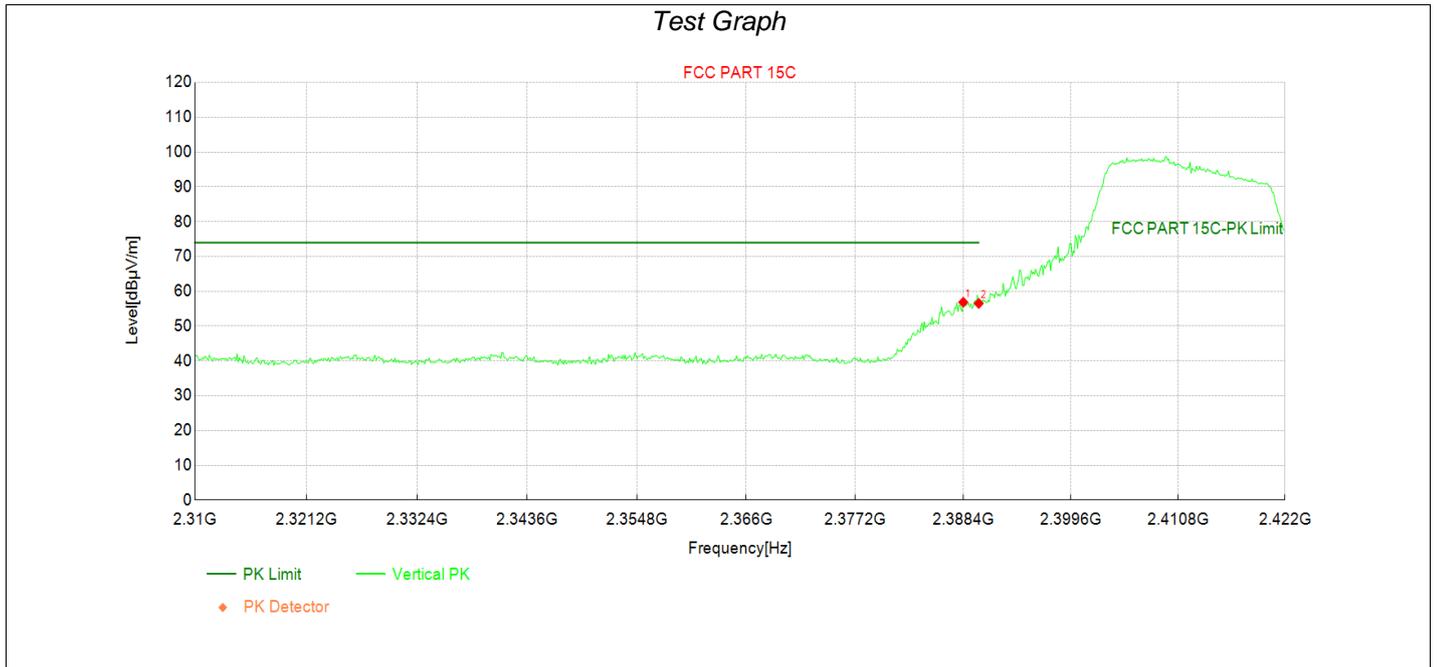
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2387.73	64.55	68.18	3.63	74.00	5.82	PK	Horizo	PASS
2	2390.00	63.34	66.99	3.65	74.00	7.01	PK	Horizo	PASS

Transmit at 2412MHz by 802.11n(20MHz)



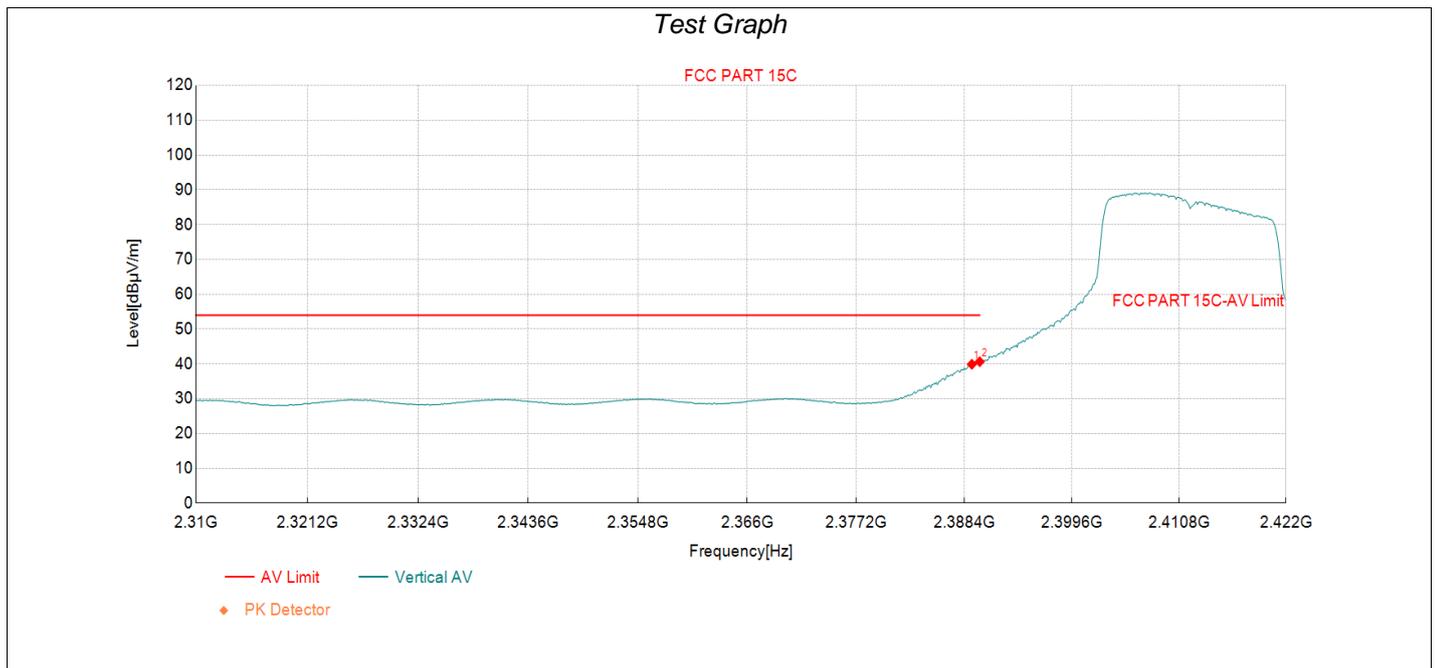
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2389.63	47.54	51.19	3.65	54.00	2.81	AV	Horizo	PASS
2	2390.00	47.47	51.12	3.65	54.00	2.88	AV	Horizo	PASS

Transmit at 2412MHz by 802.11n(20MHz)



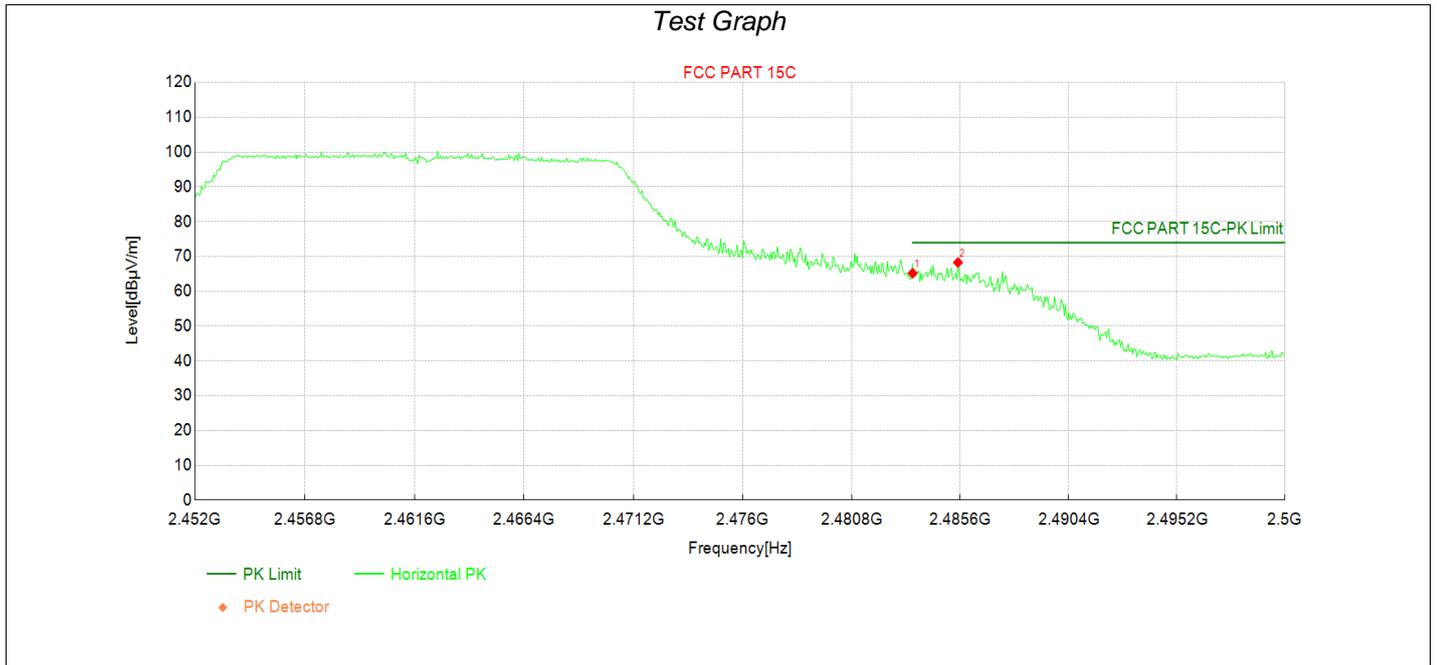
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2388.40	53.22	56.86	3.64	74.00	17.14	PK	Vertic	PASS
2	2390.00	52.87	56.52	3.65	74.00	17.48	PK	Vertic	PASS

Transmit at 2412MHz by 802.11n(20MHz)



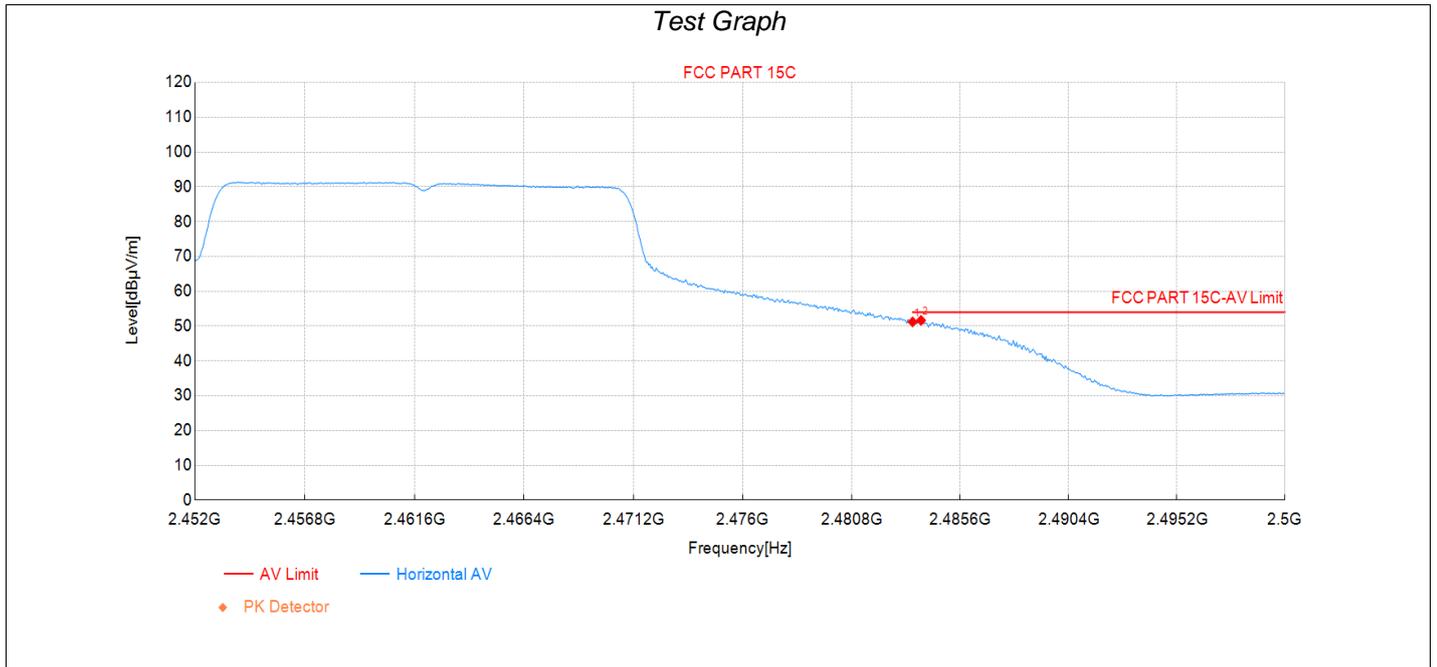
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2389.18	36.24	39.88	3.64	54.00	14.12	AV	Vertic	PASS
2	2390.00	36.98	40.63	3.65	54.00	13.37	AV	Vertic	PASS

Transmit at 2462MHz by 802.11n(20MHz)



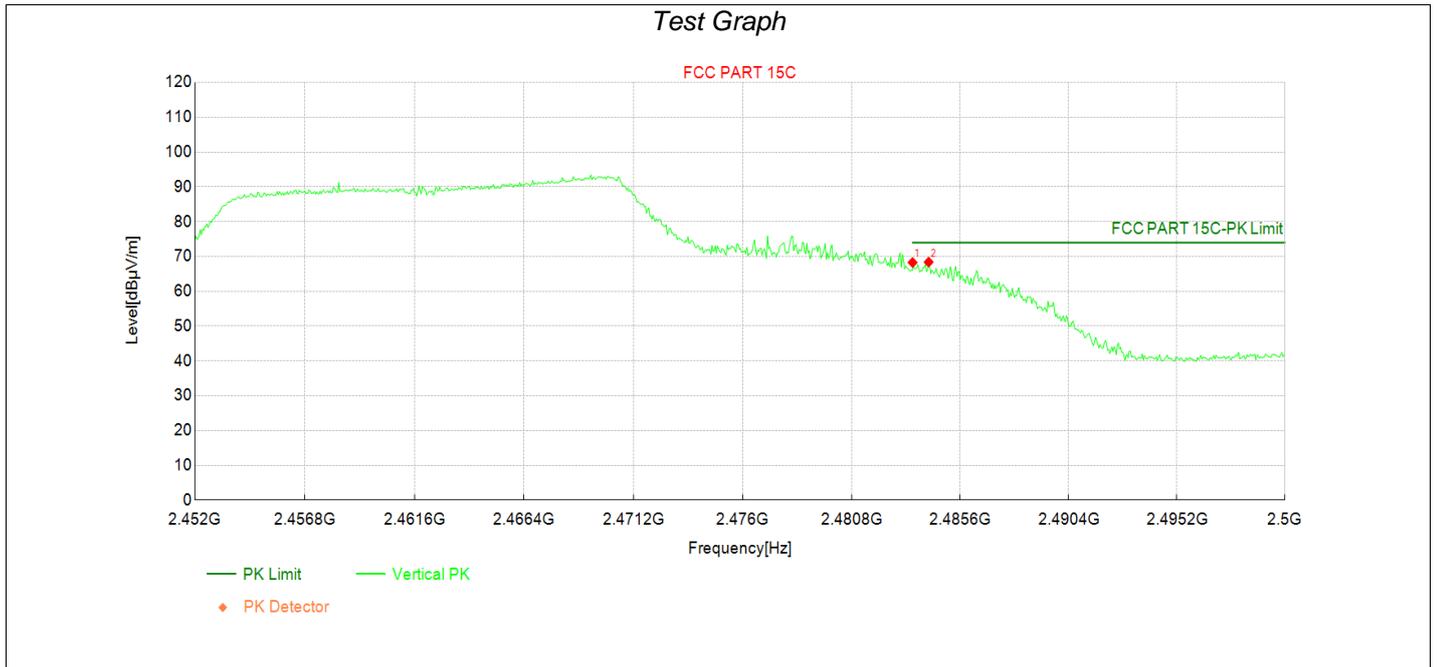
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	61.10	65.19	4.09	74.00	8.81	PK	Horizo	PASS
2	2485.50	64.15	68.26	4.11	74.00	5.74	PK	Horizo	PASS

Transmit at 2462MHz by 802.11n(20MHz)



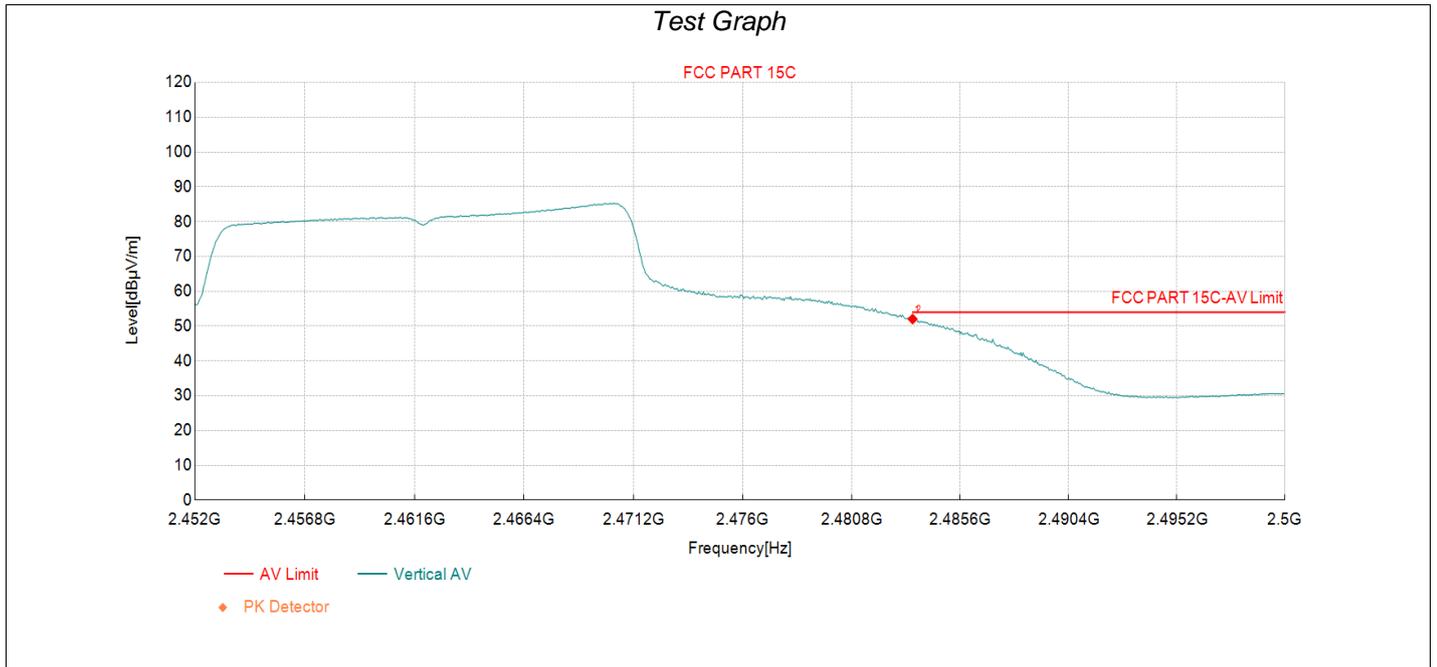
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	47.10	51.19	4.09	54.00	2.81	AV	Horizo	PASS
2	2483.87	47.55	51.64	4.09	54.00	2.36	AV	Horizo	PASS

Transmit at 2462MHz by 802.11n(20MHz)



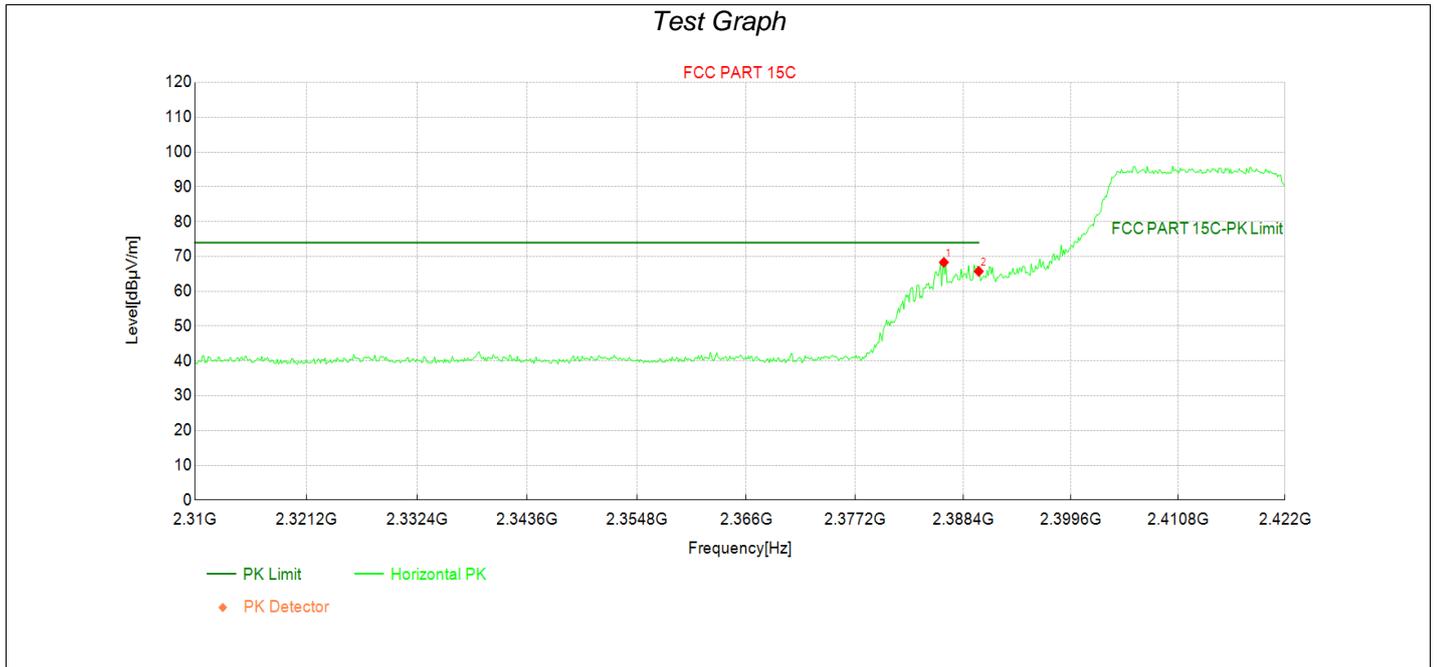
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	64.17	68.26	4.09	74.00	5.74	PK	Vertic	PASS
2	2484.21	64.28	68.39	4.11	74.00	5.61	PK	Vertic	PASS

Transmit at 2462MHz by 802.11n(20MHz)



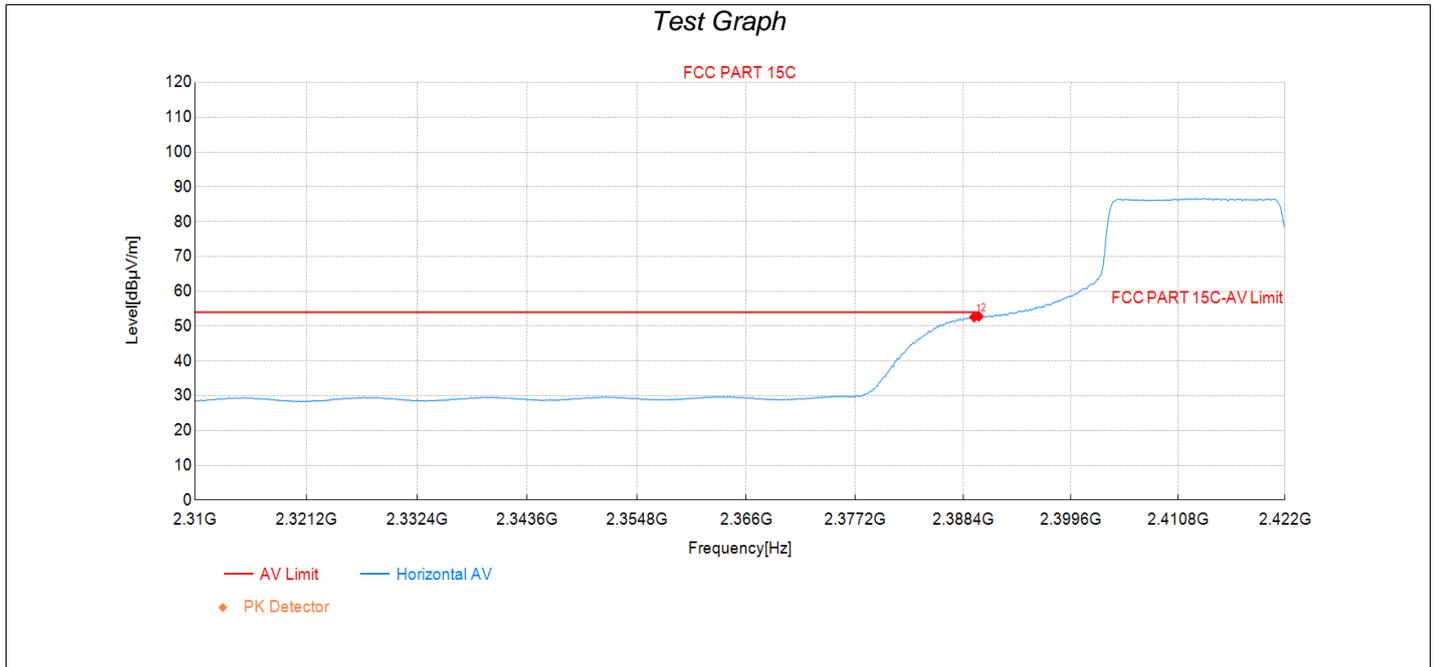
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	47.93	52.02	4.09	54.00	1.98	AV	Vertic	PASS
2	2483.58	48.11	52.20	4.09	54.00	1.80	AV	Vertic	PASS

Transmit at 2422MHz by 802.11n(40MHz)



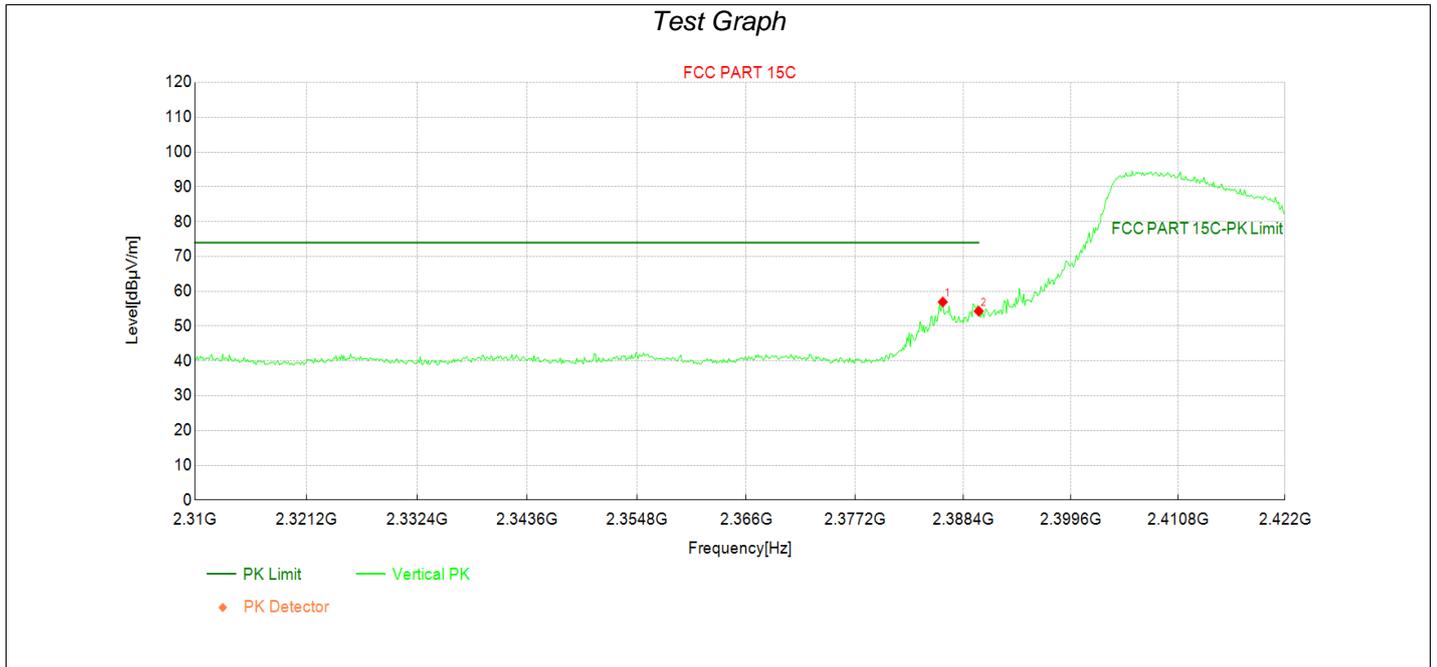
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2386.38	64.68	68.31	3.63	74.00	5.69	PK	Horizo	PASS
2	2390.00	62.08	65.73	3.65	74.00	8.27	PK	Horizo	PASS

Transmit at 2422MHz by 802.11n(40MHz)



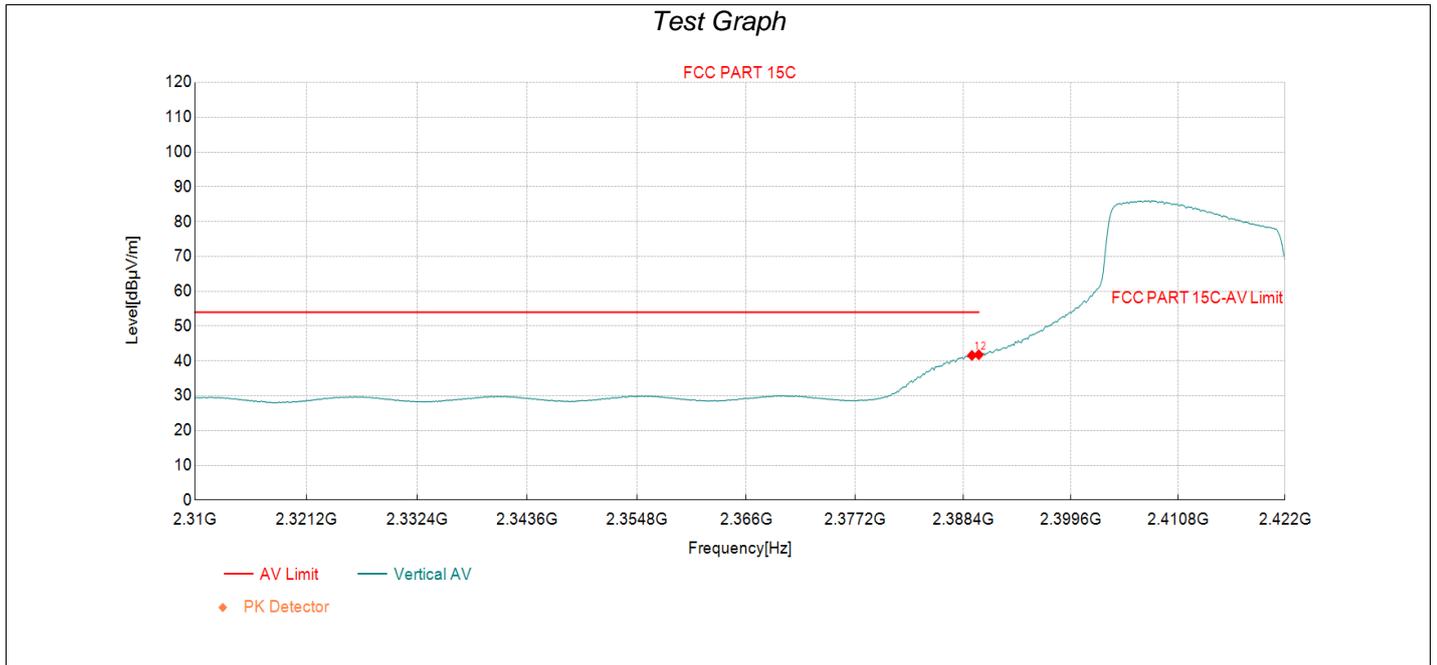
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2389.52	48.92	52.57	3.65	54.00	1.43	AV	Horizo	PASS
2	2390.00	49.14	52.79	3.65	54.00	1.21	AV	Horizo	PASS

Transmit at 2422MHz by 802.11n(40MHz)



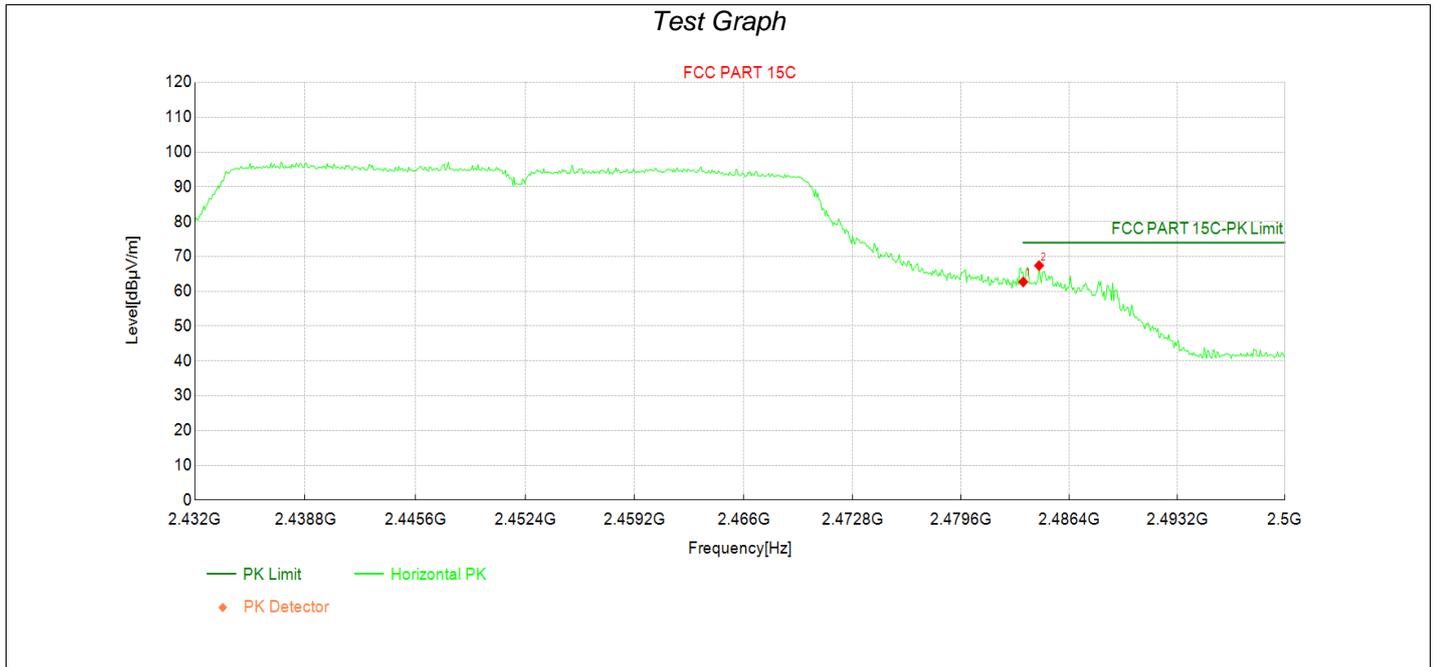
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2386.27	53.30	56.93	3.63	74.00	17.07	PK	Vertic	PASS
2	2390.00	50.64	54.29	3.65	74.00	19.71	PK	Vertic	PASS

Transmit at 2422MHz by 802.11n(40MHz)



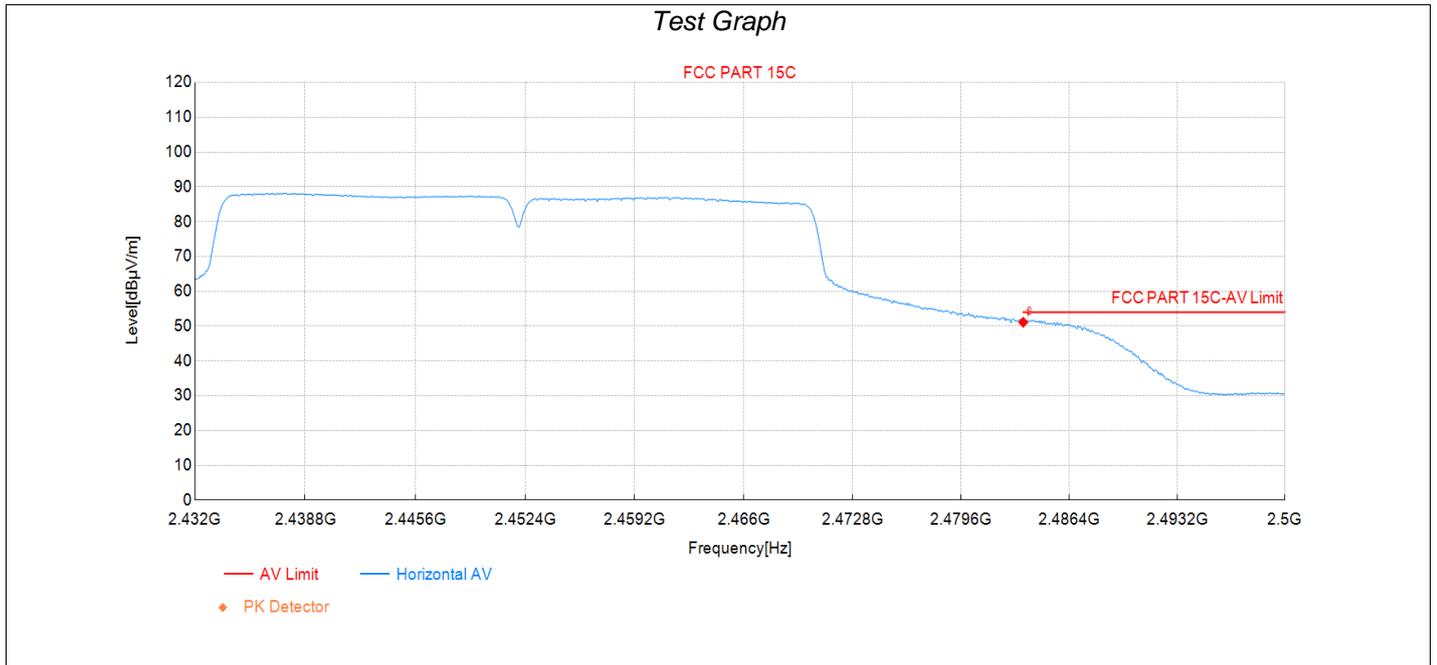
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2389.30	37.92	41.57	3.65	54.00	12.43	AV	Vertic	PASS
2	2390.00	38.12	41.77	3.65	54.00	12.23	AV	Vertic	PASS

Transmit at 2452MHz by 802.11n(40MHz)



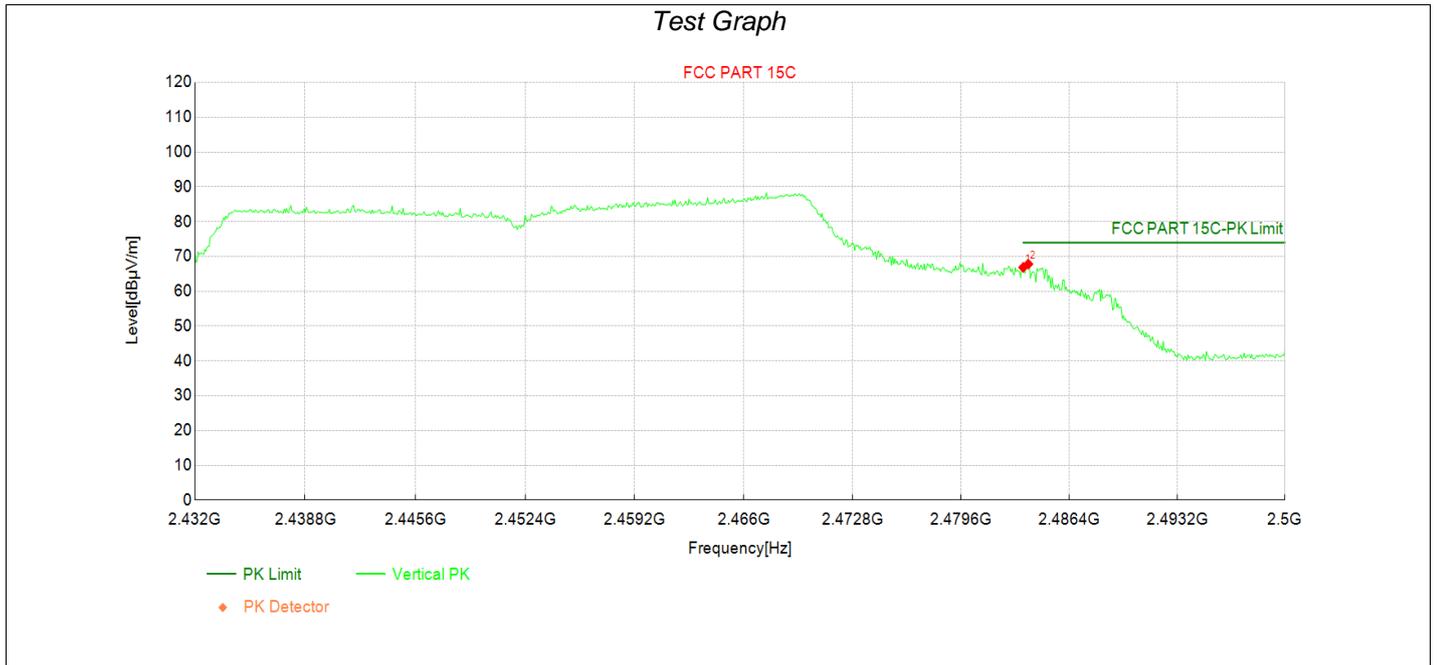
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	58.59	62.68	4.09	74.00	11.32	PK	Horizo	PASS
2	2484.50	63.27	67.38	4.11	74.00	6.62	PK	Horizo	PASS

Transmit at 2452MHz by 802.11n(40MHz)



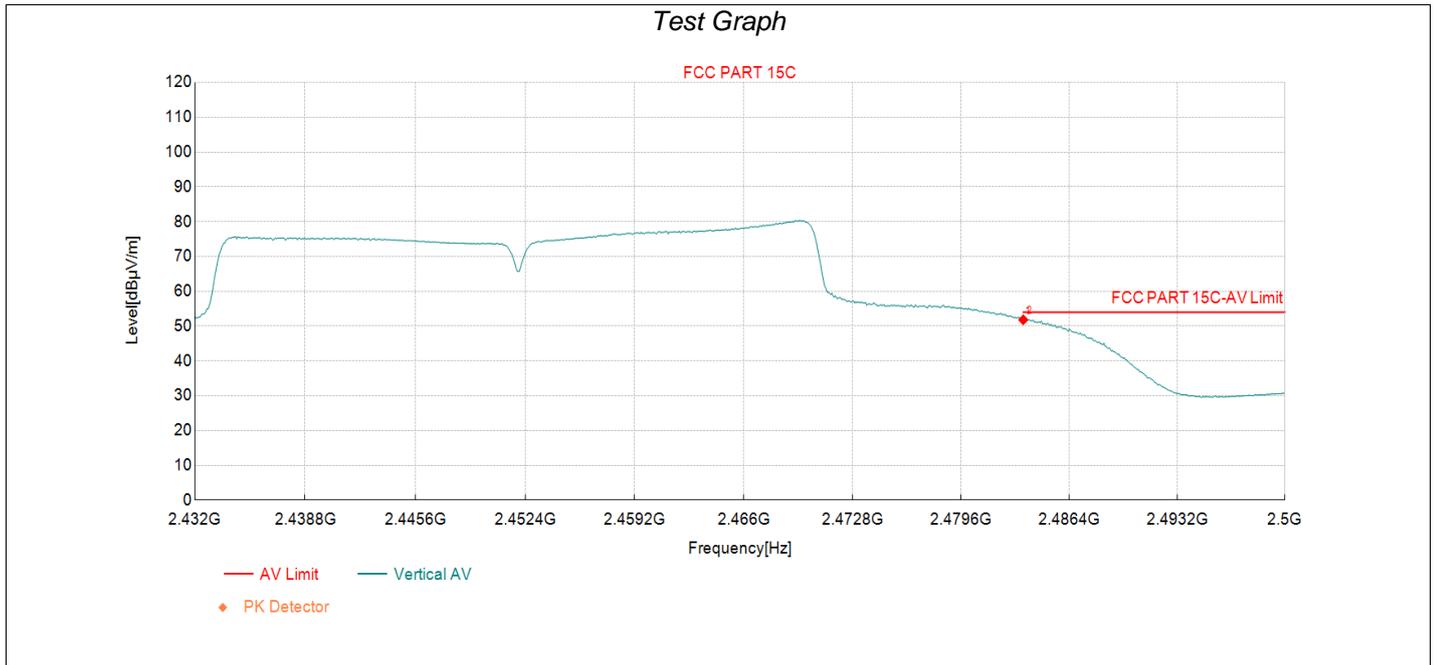
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	47.00	51.09	4.09	54.00	2.91	AV	Horizo	PASS
2	2483.61	47.59	51.68	4.09	54.00	2.32	AV	Horizo	PASS

Transmit at 2452MHz by 802.11n(40MHz)



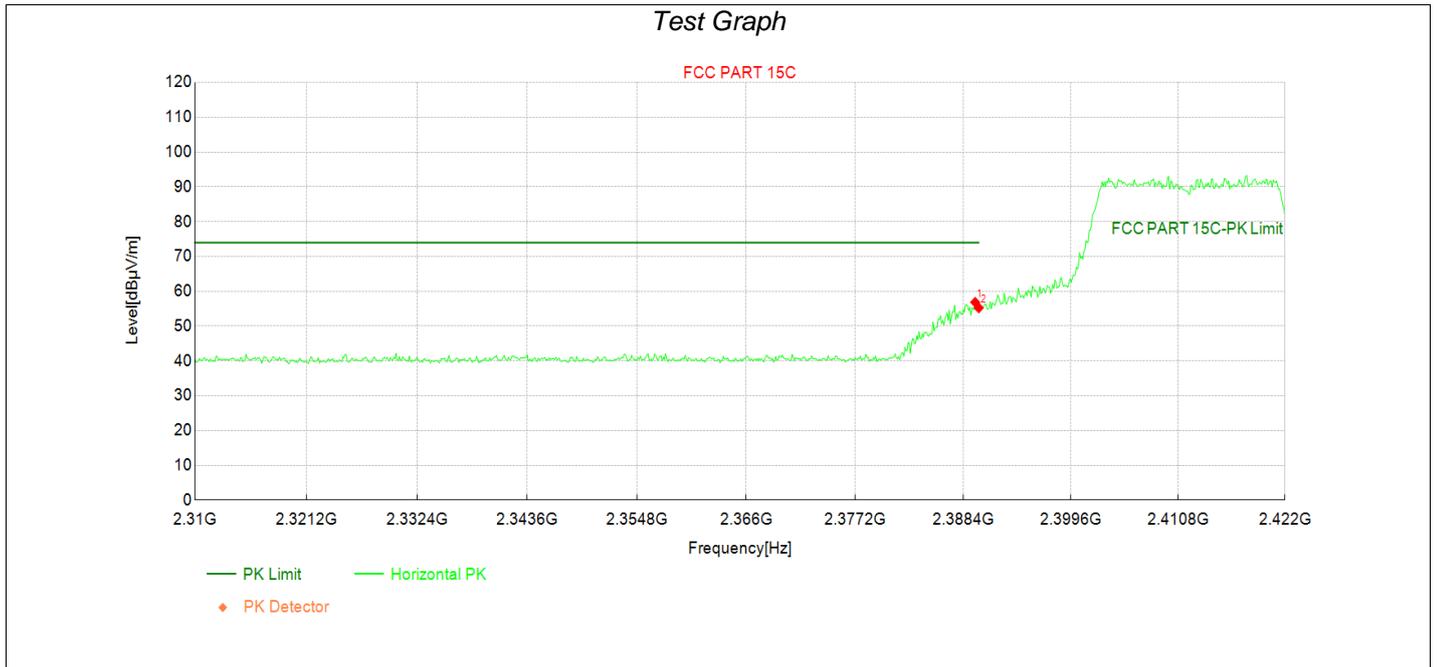
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	62.77	66.86	4.09	74.00	7.14	PK	Vertic	PASS
2	2483.82	63.72	67.81	4.09	74.00	6.19	PK	Vertic	PASS

Transmit at 2452MHz by 802.11n(40MHz)



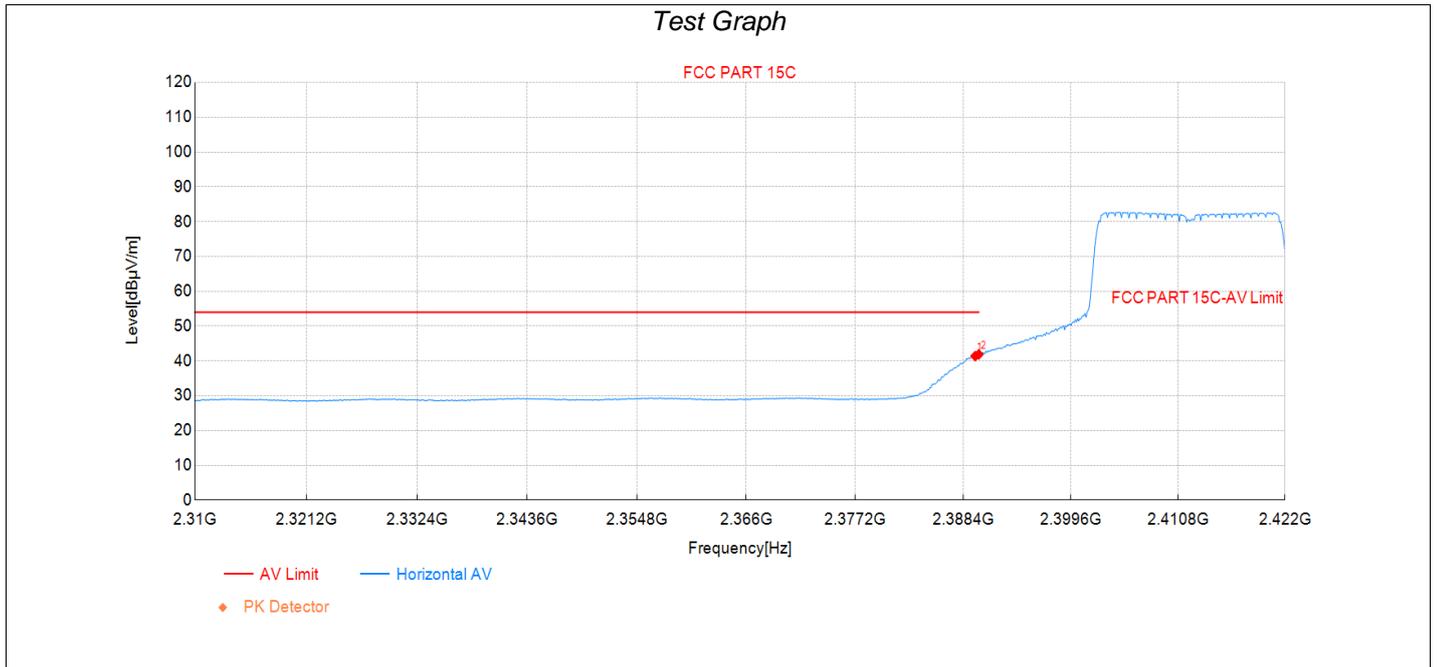
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	47.72	51.81	4.09	54.00	2.19	AV	Vertic	PASS
2	2483.61	47.99	52.08	4.09	54.00	1.92	AV	Vertic	PASS

Transmit at 2412MHz by 802.11ax(20MHz)



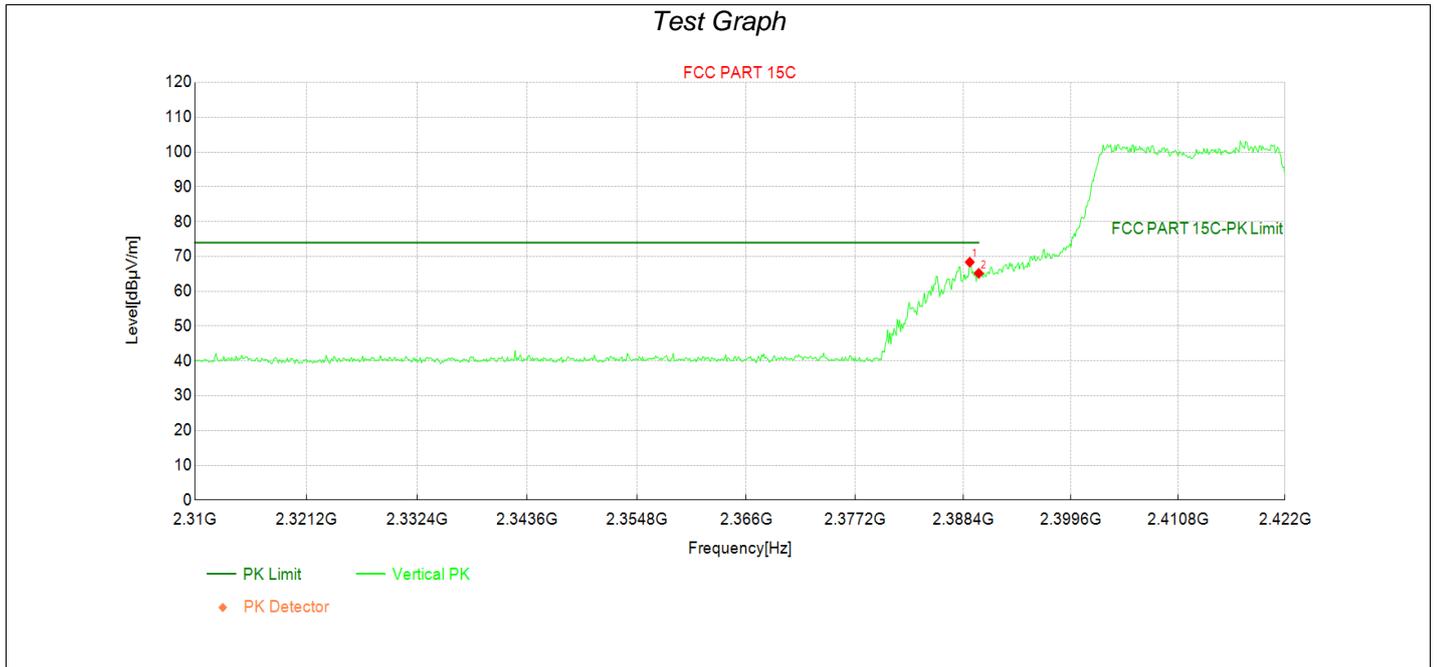
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2389.63	53.19	56.84	3.65	74.00	17.16	PK	Horizo	PASS
2	2390.00	51.58	55.23	3.65	74.00	18.77	PK	Horizo	PASS

Transmit at 2412MHz by 802.11ax(20MHz)



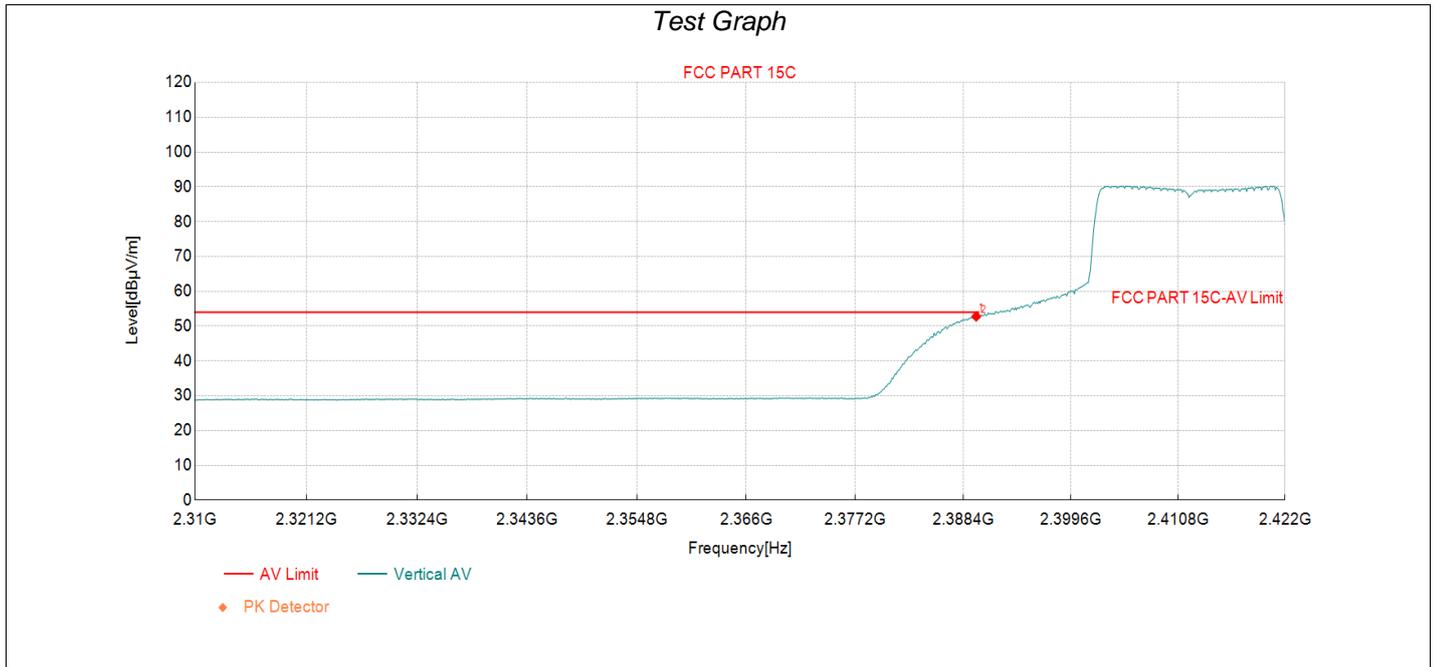
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2389.63	37.72	41.37	3.65	54.00	12.63	AV	Horizo	PASS
2	2390.00	38.21	41.86	3.65	54.00	12.14	AV	Horizo	PASS

Transmit at 2412MHz by 802.11ax(20MHz)



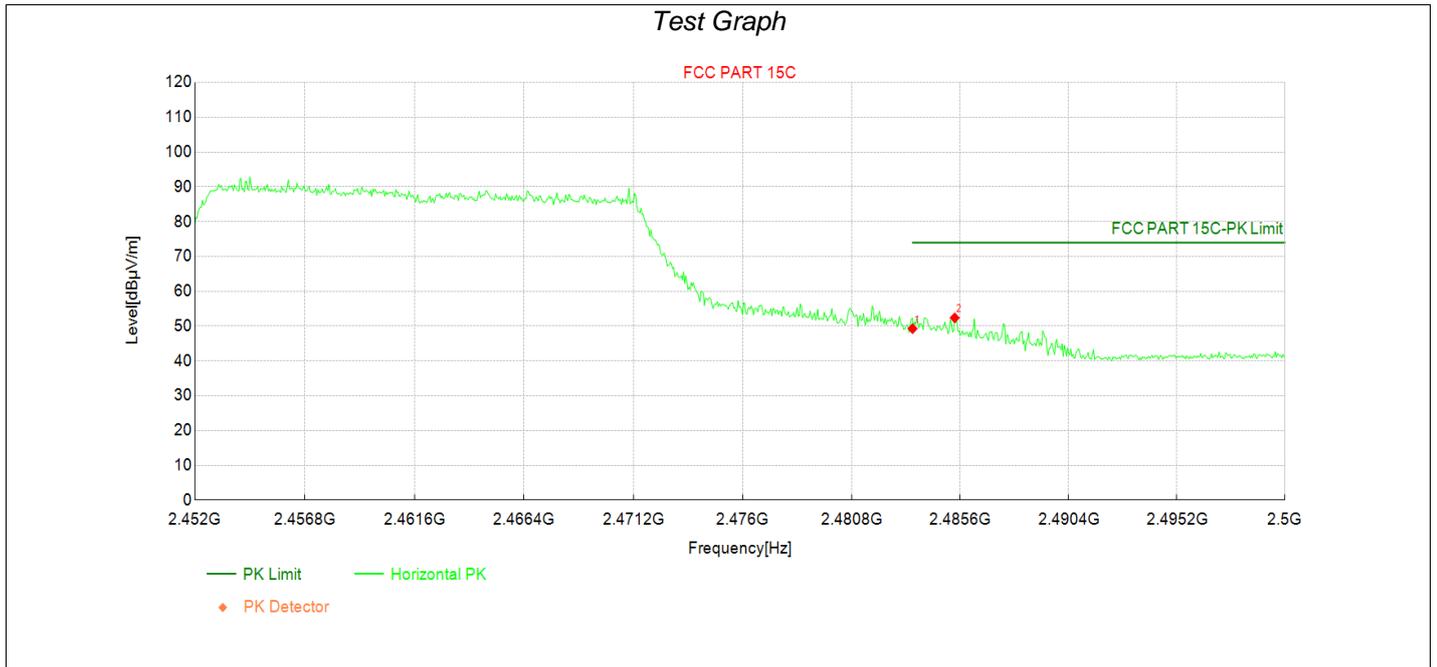
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2389.07	64.72	68.36	3.64	74.00	5.64	PK	Vertic	PASS
2	2390.00	61.51	65.16	3.65	74.00	8.84	PK	Vertic	PASS

Transmit at 2412MHz by 802.11ax(20MHz)



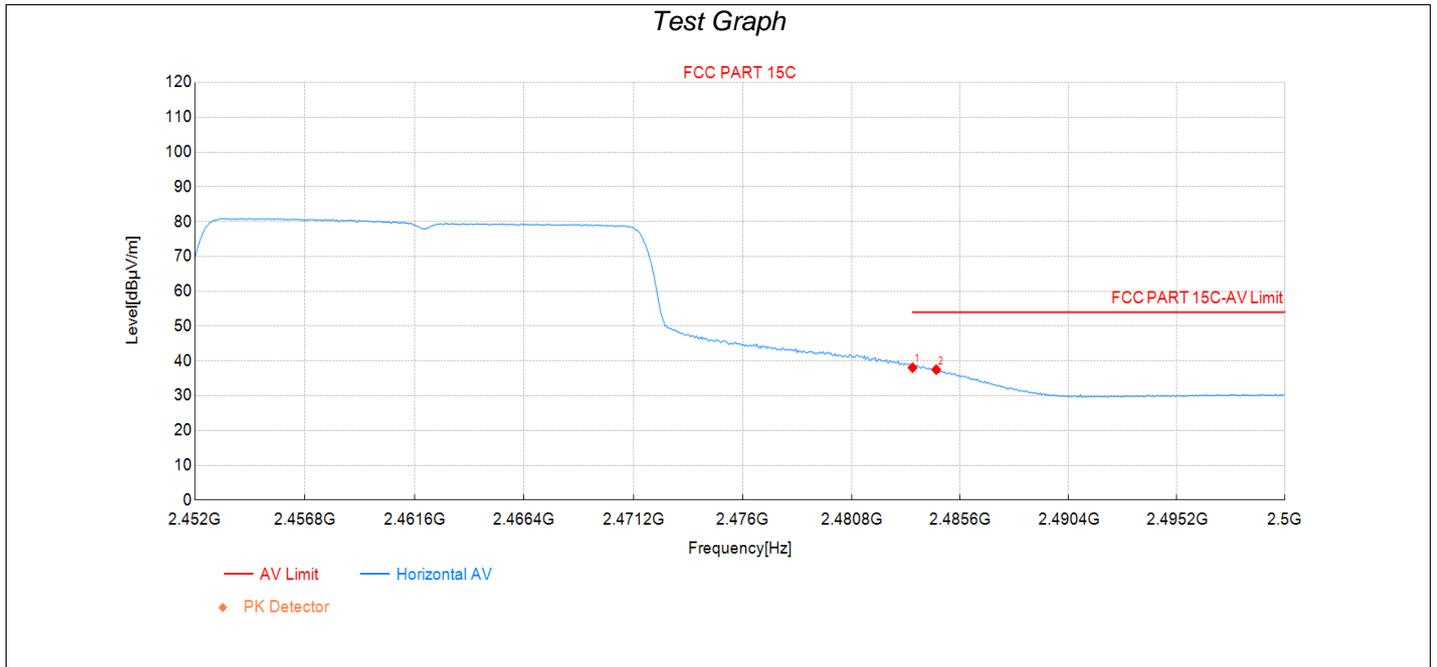
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2389.74	49.13	52.78	3.65	54.00	1.22	AV	Vertic	PASS
2	2390.00	48.52	52.17	3.65	54.00	1.83	AV	Vertic	PASS

Transmit at 2462MHz by 802.11ax(20MHz)



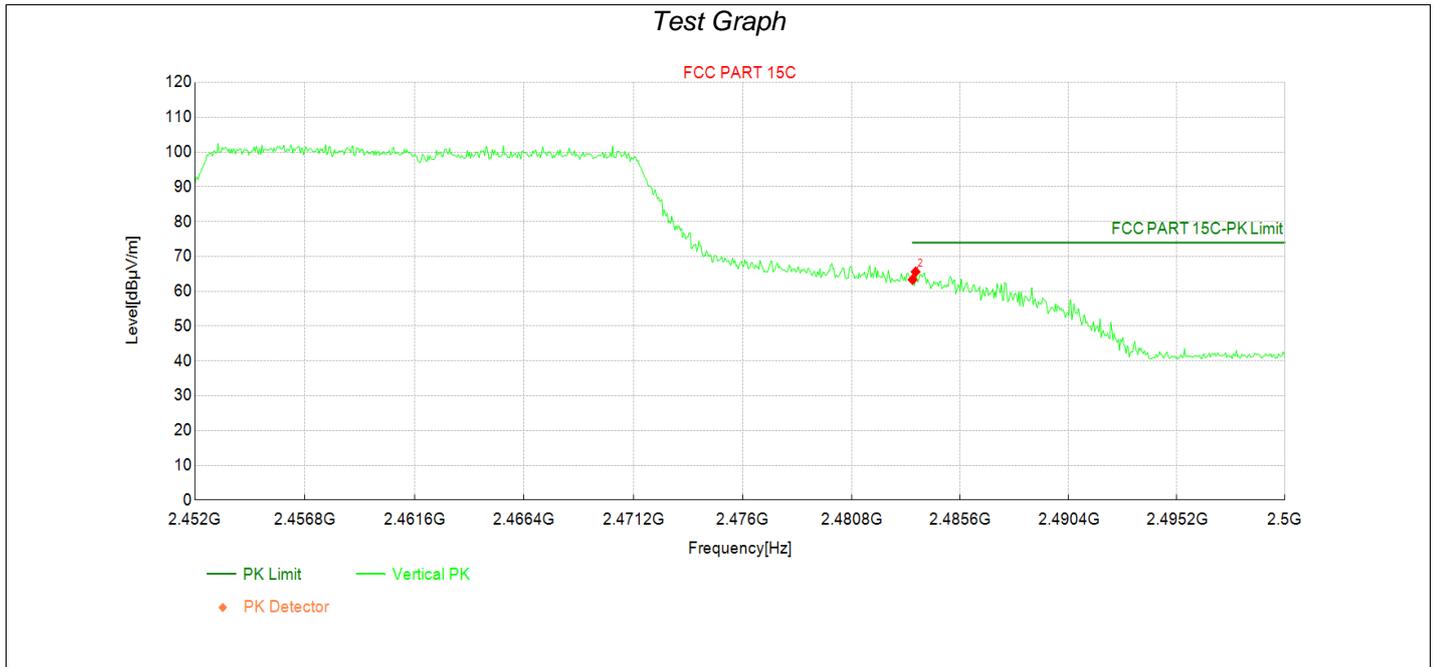
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	45.18	49.27	4.09	74.00	24.73	PK	Horizo	PASS
2	2485.36	48.25	52.36	4.11	74.00	21.64	PK	Horizo	PASS

Transmit at 2462MHz by 802.11ax(20MHz)



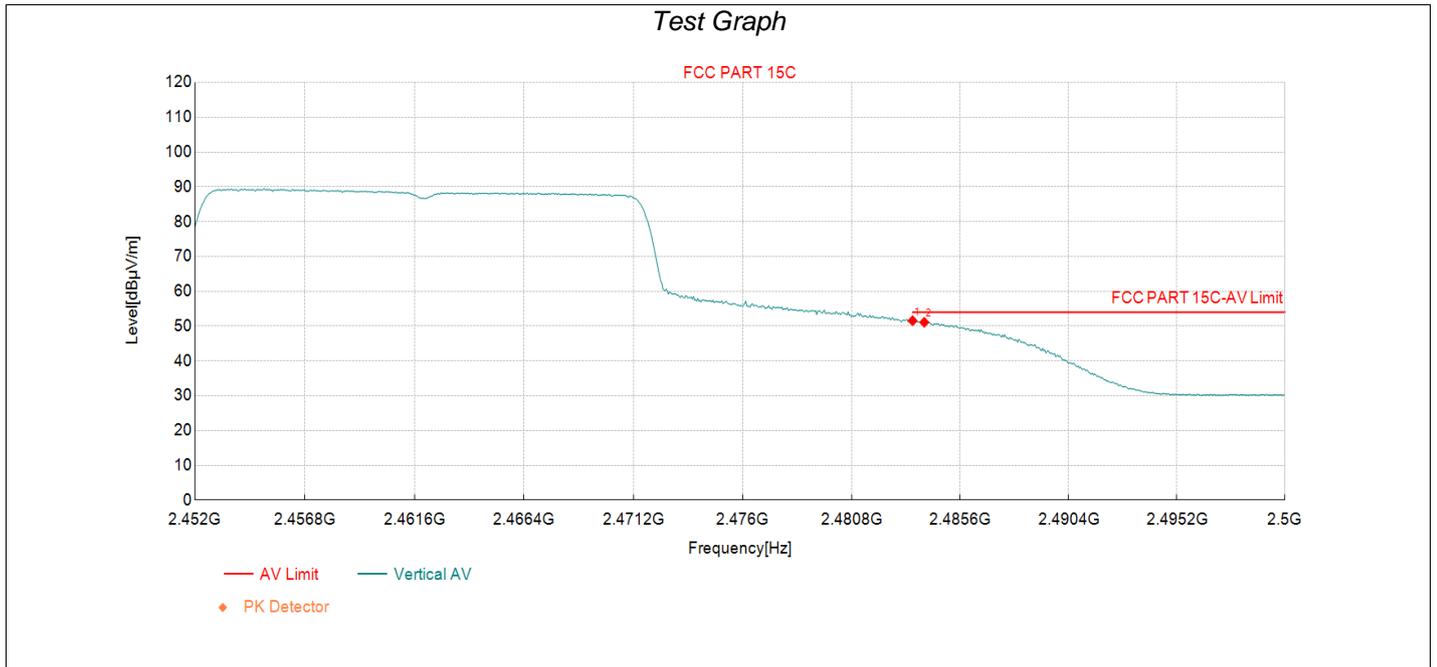
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	33.96	38.05	4.09	54.00	15.95	AV	Horizo	PASS
2	2484.54	33.37	37.48	4.11	54.00	16.52	AV	Horizo	PASS

Transmit at 2462MHz by 802.11ax(20MHz)



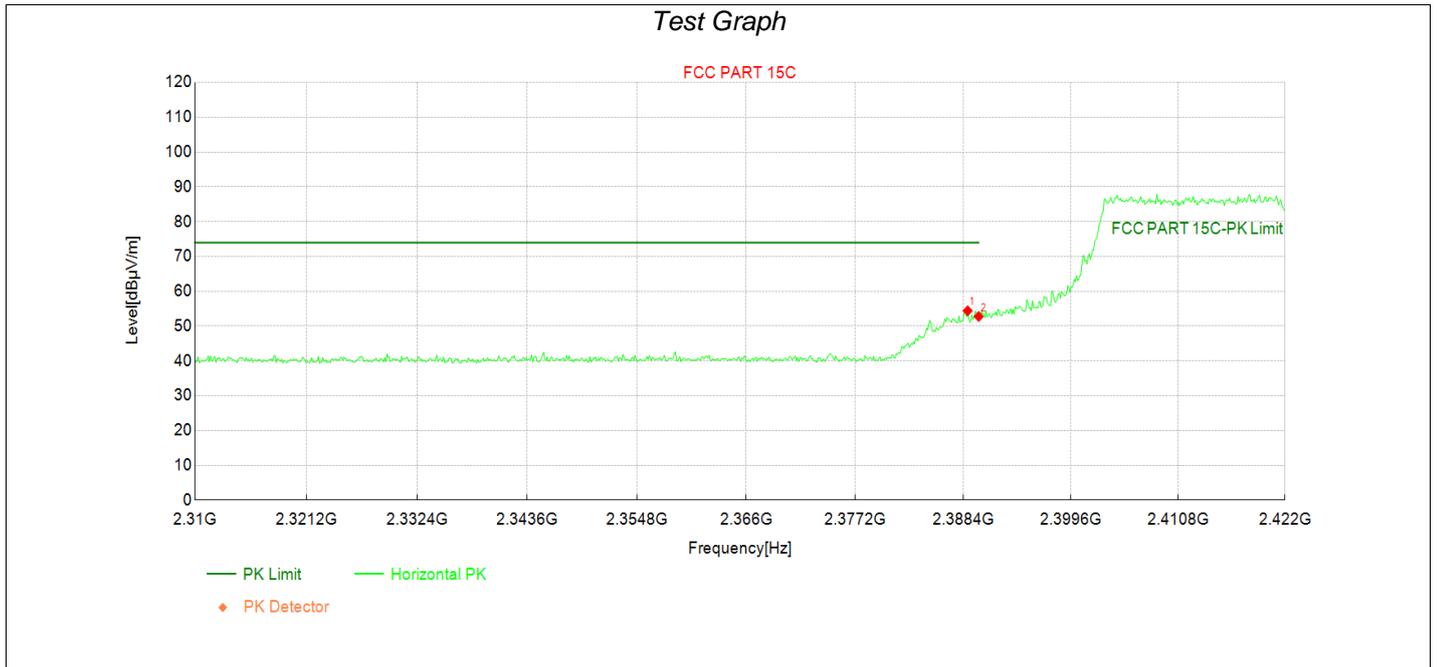
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	59.24	63.33	4.09	74.00	10.67	PK	Vertic	PASS
2	2483.63	61.49	65.58	4.09	74.00	8.42	PK	Vertic	PASS

Transmit at 2462MHz by 802.11ax(20MHz)



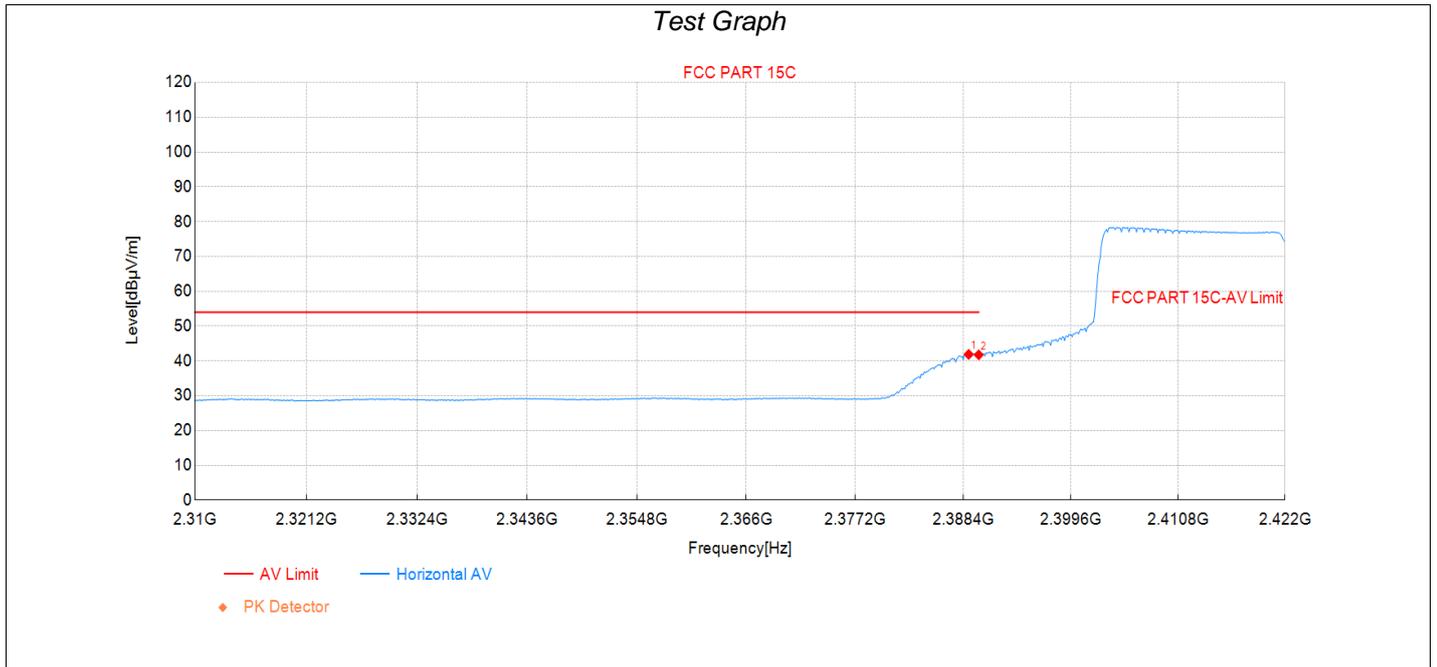
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2483.50	47.45	51.54	4.09	54.00	2.46	AV	Vertic	PASS
2	2484.02	46.98	51.09	4.11	54.00	2.91	AV	Vertic	PASS

Transmit at 2422MHz by 802.11ax(40MHz)



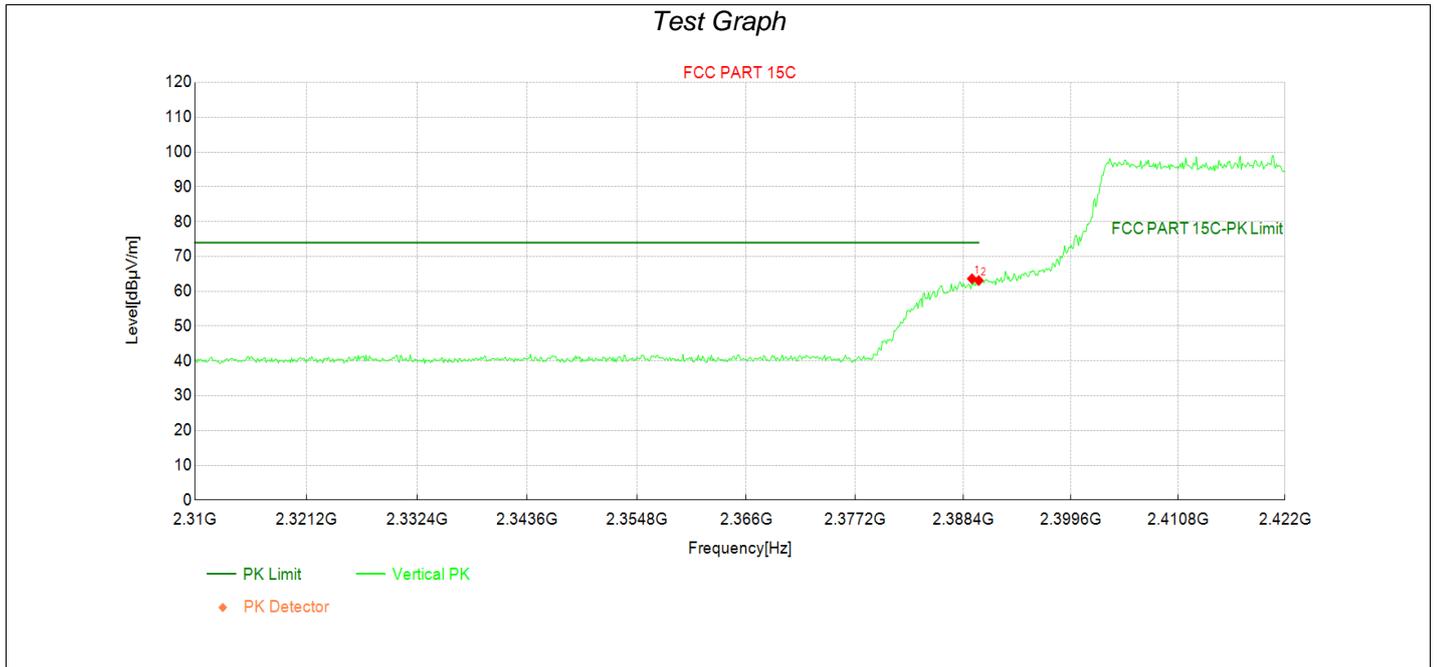
Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2388.85	50.76	54.40	3.64	74.00	19.60	PK	Horizo	PASS
2	2390.00	49.11	52.76	3.65	74.00	21.24	PK	Horizo	PASS

Transmit at 2422MHz by 802.11ax(40MHz)



Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2388.96	38.23	41.87	3.64	54.00	12.13	AV	Horizo	PASS
2	2390.00	38.08	41.73	3.65	54.00	12.27	AV	Horizo	PASS

Transmit at 2422MHz by 802.11ax(40MHz)



Data List									
NO	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Det	Pol	Verdict
1	2389.30	59.95	63.60	3.65	74.00	10.40	PK	Vertic	PASS
2	2390.00	59.43	63.08	3.65	74.00	10.92	PK	Vertic	PASS