

# **RF Test Report**

Applicant	:	Plume Design, Inc.
Product Name	:	SuperPod with WiFi 6E
Trade Name	:	Plume Design, Inc.
Model Number	:	M1A
Applicable Standard	:	FCC 47 CFR PART 15 SUBPART C ANSI C63.10:2013
Received Date	:	Dec. 12, 2022
Test Period	:	Mar. 25 ~ Mar. 27, 2023
Issued Date	:	Jan. 11, 2024

## Issued by

Eurofins E&E Wireless Taiwan Co., Ltd. No. 140-1, Changan Street, Bade District, Taoyuan City 334025, Taiwan (R.O.C.) Tel : +886-3-2710188 / Fax : +886-3-2710190



Taiwan Accreditation Foundation accreditation number: 1330 Frequency Range: 9 kHz to 325 GHz (Bade test site) Test Firm MRA designation number: TW0010 Frequency Range: 9 kHz to 40 GHz (Wugu test site) Test Firm MRA designation number: TW0034

#### Note:

The test results are valid only for samples provided by customers and under the test conditions described in this report.
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 The relevant information is provided by customers in this test report. According to the correctness, appropriateness or completeness of the information provided by the customer, if there is any doubt or error in the information which affects

the validity of the test results, the laboratory does not take the responsibility.



## **Revision History**

Version	Issued Date	Revisions	Revised By
00	Jan. 11, 2024	Initial Issue	Rowan Hsieh



# Verification of Compliance

Applicant	:	Plume Design, Inc.
Product Name	:	SuperPod with WiFi 6E
Trade Name	:	Plume Design, Inc.
Model Number	:	M1A
FCC ID	:	2AG7G-M1A
Applicable Standard	:	FCC 47 CFR PART 15 SUBPART C ANSI C63.10:2013
Test Result	:	Complied
Performing Lab.	:	Eurofins E&E Wireless Taiwan Co., Ltd. No. 140-1, Changan Street, Bade District, Taoyuan City 334025, Taiwan (R.O.C.) Tel : +886-3-2710188 / Fax : +886-3-2710190 Taiwan Accreditation Foundation accreditation number: 1330

Eurofins E&E Wireless Taiwan Co., Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by Eurofins E&E Wireless Taiwan Co., Ltd. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By :





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## **1** General Information

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## 1.1. Summary of Test Result

Standard	Item	Result	Remark
15.207	AC Power Conducted Emission	PASS	
15.247(d)	Transmitter Radiated Emissions PASS		
15.247(b)(3)	Max. Output Power PASS		
15.247(a)(2)	6 dB RF Bandwidth P		
15.247(e)	Maximum Power Spectral Density PASS		
15.247(d)	Out of Band Conducted Spurious Emission	PASS	
15.203	Antenna Requirement	PASS	

Decision Rule

- Uncertainty is not included.
- □ Uncertainty is included.

Standard	Description	
CFR47, Part 15, Subpart C	Intentional Radiators	
ANSI C63. 10: 2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	
KDB 558074 D01 15.247 Meas Guidance v05r02	GUIDANCE FOR COMPLIANCE MEASUREMENTS ON DIGITAL TRANSMISSION SYSTEM, FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM, AND HYBRID SYSTEM DEVICES OPERATING UNDER SECTION 15.247 OF THE FCC RULES	



## 1.2. Testing Location

Lab Name:	Eurofins E&E Wireless Taiwan Co., Ltd.
Site Address:	■ No. 140-1, Changan Street, Bade District, Taoyuan City 334025, Taiwan (R.O.C.)
Site Address:	🗌 No. 2, Wuquan 5th Rd. Wugu Dist., New Taipei City, Taiwan (R.O.C.)

## **1.3. Measurement Uncertainty**

Test Item	Frequency Range	Uncertainty	
Conducted Emission	150 kHz ~ 30 MHz	2.7 dB	
	9 kHz ~ 30 MHz	1.9 dB	
	30 MHz ~ 1000 MHz	4.9 dB	
Radiated Emission	1000 MHz ~ 18000 MHz	5.0 dB	
	18000 MHz ~ 26500 MHz	4.4 dB	
	26500 MHz ~ 40000 MHz	4.4 dB	
Conducted Output Power	1.1 dB		
RF Bandwidth	4.7 %		
Power Spectral Density	1.1 dB		



## 2 EUT Description

Applicant	Plume Design, Inc. 325 Lytton Ave., Palo Alto, CA 94301, United States			
Product Name	SuperPod with WiFi 6E			
Trade Name	Plume Design, Inc.			
Model Number	M1A			
FCC ID	2AG7G-M1A			
Frequency Range	2405 ~ 2480 MHz			
Modulation Type	O-QPSK			
Channel Number	16 CH			
Channel Bandwidth	2 MHz			
A	Туре	Max. Gain (dBi)		
Antenna information IFA Antenna 1.15				
RF Output Power	0.05082 W / 17.06 dBm			
EUT Power Rating	100-240 V, 50-60 Hz, 0.6 A			



## 3 Test Methodology

E&E

## 3.1. Mode of Operation

Decision of Test Eurofins has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode	
Transmit Mode	
Matter	

Software used to control the EUT for staying in continuous transmitting mode was programmed.

After verification, all tests were carried out with the worst case test modes.

By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that "Z axis" position was the worst, then the final test was executed the worst condition and test data were recorded in this report.

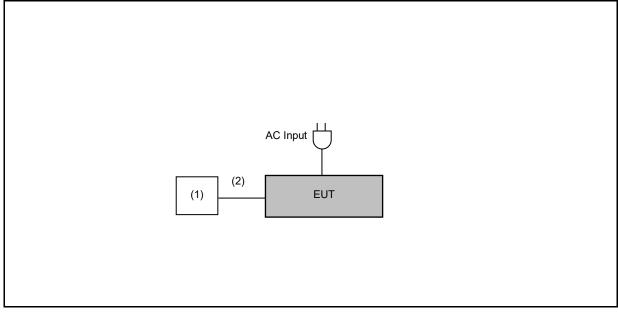
## 3.2. EUT Test Step

1	Setup the EUT shown on "Configuration of Test System Details".		
2	Turn on the power of all equipment.		
3	Turn on TX function.		
4	EUT run test program.		

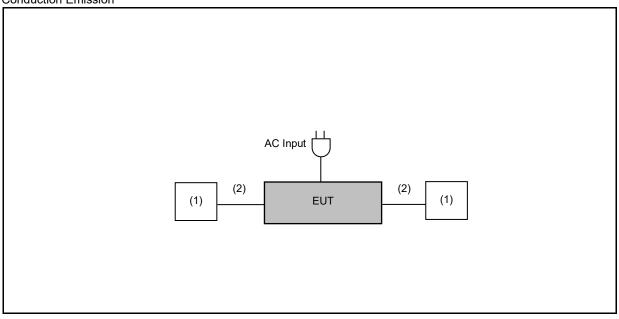


## 3.3. Configuration of Test System Details





Conduction Emission



	Devices Description					
	Product Manufacturer Model Number Serial Number Power Cord					
(1)	Notebook	HP	440G1			
(2)	RJ45					



## 3.4. Test Instruments

For Conducted Emission Test Period: Mar. 25, 2023 Testing Engineer: Jayson Hsieh

	Test Site	Conduction01-BD					
Use	Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period	
$\boxtimes$	Test Receiver	R&S	ESCI	100367	May 19, 2022	1 year	
$\boxtimes$	LISN	R&S	ENV216	101040	Apr. 06, 2022	1 year	
$\boxtimes$	LISN	R&S	ENV216	101140	Jan. 12, 2023	1 year	
$\boxtimes$	RF Cable	Woken	00100D1380194M	TE-02-03	May 27, 2022	1 year	
$\boxtimes$	Software	EZ EMC	1.1.4.3	N/A	N.C.R.		

For Conducted Test Period: Mar. 27, 2023 Testing Engineer: Andy Lu

	Test Site			RF01-BD		
Use	Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
	Power Sensor	Anritsu	MA2411B	1126022	Sep. 04, 2022	1 year
	Power Meter	Anritsu	ML2495A	1135009	Sep. 04, 2022	1 year
	Spectrum Analyzer (10 Hz~26.5 GHz)	Keysight	N9010B	MY59071418	Mar. 20, 2023	1 year

Note: N.C.R. = No Calibration Request.



For Radiated Emissions

Test Period: Mar. 27, 2023 Testing Engineer: Hung Chou

E&E

	Test Site	96603-BD						
Ra	adiation test sites	Semi Anechoic Room						
Use	Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period		
	Spectrum Analyzer (10 Hz~44 GHz)	Keysight	N9020B	MY60112363	Jan. 13, 2023	1 year		
	Amplifier (100 kHz~1.3 GHz)	Agilent	8447D	2944A11119	Jan. 07, 2023	1 year		
	Broadband Amplifier (1 GHz~26.5 GHz)	Titan	T0912E01263025A1F	002	Jul. 21, 2022	1 year		
	Loop Antenna (9 kHz~30 MHz)	COM-POWER CORPORATION	AL-130	121014	Mar. 23, 2023	1 year		
	Trilog Broadband Antenna (30 kHz~1 GHz)	Schwarzbeck Mess-Elektronik	VULB9168	01146	Jul. 22, 2022	1 year		
	Broadband Horn Antenna (1 GHz~18 GHz)	Schwarzbeck Mess-Elektronik	9120D	02207	Jul. 13, 2022	1 year		
	Broadband Horn Antenna (18 GHz~40 GHz)	Schwarzbeck Mess-Elektronik	9170	9170-320	Aug. 25, 2022	1 year		
$\boxtimes$	Coaxial Cable	Titan	T0710AT327A10A100	J11005	Aug. 04, 2022	1 year		
$\square$	Coaxial Cable	Titan	T0710AT327A10A900	J11004	Aug. 04, 2022	1 year		
$\boxtimes$	Coaxial Cable	Titan	CFD400NL-LW	001	Aug. 04, 2022	1 year		
	Software	EZ EMC	1.1.4.4	N/A	N.C.R.			

Note: N.C.R. = No Calibration Request.

## 3.5. Test Site Environment

Items	Required (IEC 60068-1)	Actual
Temperature (°C)	15-35	20-30
Humidity (%RH)	25-75	45-75



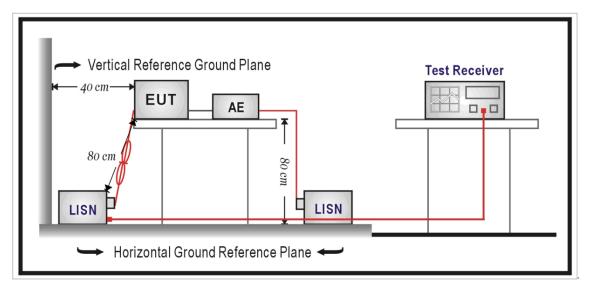
## 4 Measurement Procedure

## 4.1. AC Power Line Conducted Emission Measurement

E&E

■ Limit	Limit								
Frequency (MHz)	Quasi-peak	Average							
0.15 - 0.5	66 to 56	56 to 46							
0.50 - 5.0	56	46							
5.0 - 30.0	60	50							

### Test Setup





#### Test Procedure

E&E

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50  $\Omega$ // 50 uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50  $\Omega$ // 50 uH coupling impedance with 50 ohm termination.

Tabletop device shall be placed on a non-conducting platform, of nominal size 1 m by 1.5 m, raised 80 cm above the reference ground plane. The wall of screened room shall be located 40 cm to the rear of the EUT. Other surfaces of tabletop or floor standing EUT shall be at least 80 cm from any other ground conducting surface including one or more LISNs. For floor-standing device shall be placed under the EUT with a 12 mm insulating material.

Conducted emissions were investigated over the frequency range from 0.15 MHz to 30 MHz using a resolution bandwidth of 9 kHz. The equipment under test (EUT) shall be meet the limits in section 4.1, as applicable, including the average limit and the quasi-peak limit when using respectively, an average detector and quasi-peak detector measured in accordance with the methods described of related standard. When all of peak value were complied with quasi-peak and average limit from 150 kHz to 30 MHz to 30 MHz then quasi-peak and average measurement was unnecessary.

The AMN shall be placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for AMNs mounted on top of the ground reference plane. This distance is between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8 m from the AMN. If the mains power cable is longer than 1 m then the cable shall be folded back and forth at the centre of the lead to form a bundle no longer than 0.4 m. All of interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long. All of EUT and AE shall be separate place more than 0.1 m. All 50  $\Omega$  ports of the LISN shall be resistively terminated into 50  $\Omega$  loads when not connected to the measuring instrument.

If the reading of the measuring receiver shows fluctuations close to the limit, the reading shall be observed for at least 15 s at each measurement frequency; the higher reading shall be recorded with the exception of any brief isolated high reading which shall be ignored.



## 4.2. Radiated Emission Measurement

E&E

#### Limit

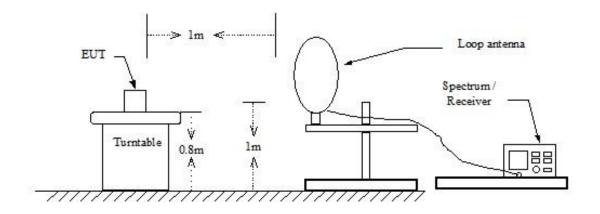
According to §15.209(a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency	Field Strength	Measurement Distance
(MHz)	(μV/m at meter)	(meters)
0.009 - 0.490	2400 / F (kHz)	300
0.490 – 1.705	24000 / F (kHz)	30
1.705 – 30.0	30	30
30 - 88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

\*\* Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

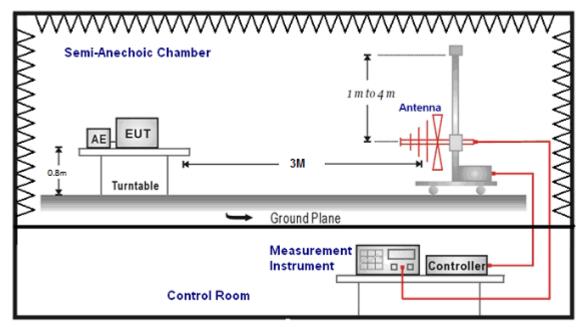
Setup

9 kHz ~ 30 MHz

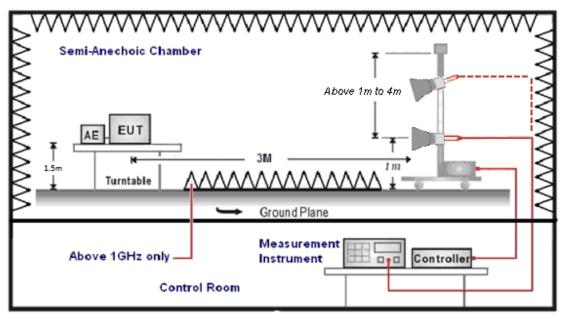




Below 1 GHz



Above 1 GHz





#### Test Procedure

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Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 or 1.5 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 9 kHz to 26.5 GHz is investigated.

For measurements below 30 MHz the resolution bandwidth is set to 10 kHz for peak detection measurements or 9 kHz for quasi-peak detection measurements. The video bandwidth is 3 times of the resolution bandwidth.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 3 MHz for peak measurements and 10 Hz for average measurements when Duty cycle >0.98 / 1/T for average measurements when Duty cycle <0.98. A nonconductive material surrounded the EUT to supporting the EUT for standing on tree orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Biconilog Antenna at 3 Meter and the SCHWARZBECK Double Ridged Guide Antenna was used in frequencies 1 –26.5 GHz at a distance of 3 meter. The antenna at an angle toward the source of the emission. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20 dB/decade).

For testing above 1 GHz, the emission level of the EUT in peak mode was 20 dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts pre meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro colts per meter (dBuV/m). The actual field is intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

(1) Amplitude (dBuV/m) = FI (dBuV) +AF (dBuV) +CL (dBuV)-Gain (dB)

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

(2) Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

- (a) For fundamental frequency : Transmitter Output < +30 dBm
- (b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

Data of measurement within this frequency range without mark in the table above means the reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.



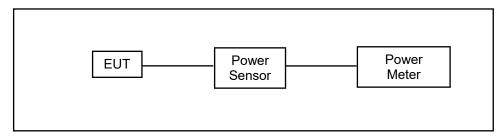
## 4.3. Maximum Conducted Output Power Measurement

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#### ■ Limit

For systems using digital modulation in the 2400-2483.5 MHz, the limit for peak output power is 30 dBm.

#### Test Setup



#### Test Procedure

The testing follows the Measurement Procedure of ANSI C63.10:2013 section 11.9.2.3.2 Method AVGPM. The tests below are run with the EUT's transmitter set at high power in TX mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuously. Remove the Subjective device's antenna and connect the RF output port to power sensor..



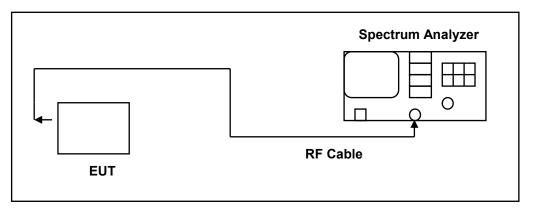
## 4.4. 6 dB RF Bandwidth Measurement

E&E

#### Limit

6 dB RF Bandwidth: Systems using digital modulation techniques may operate in the 2400–2483.5 MHz bands. The minimum 6 dB band-width shall be at least 500 kHz. 99 % Occupied Bandwidth: N/A

#### **Test Setup**



#### **Test Procedure**

The EUT tested to DTS test procedure of ANSI C63.10:2013 section 11.8.2 option2 for compliance to FCC 47CFR 15.247 requirements.

6 dB RF Bandwidth: The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RBW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A peak output reading was taken, a DISPLAY line was drawn 6 dB lower than peak level. The 6 dB bandwidth was determined from where the channel output spectrum intersected the display line.

The test was performed at 3 channels (Channel low, middle, high)



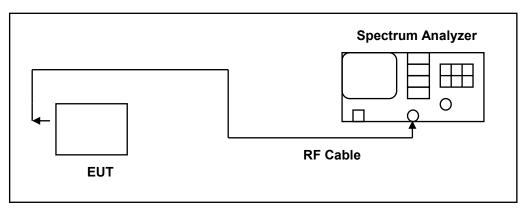
### 4.5. Maximum Power Density Measurement

E&E

#### ■ Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

#### Test Setup



#### Test Procedure

The EUT tested to DTS test procedure of ANSI C63.10:2013 section 11.10.2 Method PKPSD.

- 1. Set analyzer center frequency to DTS channel center frequency.
- 2. Set the span to 1.5 times the DTS bandwidth.
- 3. Set the RBW to:  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .
- 4. Set the VBW  $\ge$  3  $\times$  RBW.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level within the RBW.
- 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.



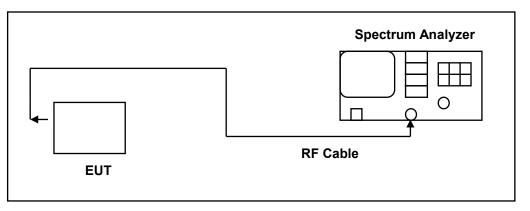
## 4.6. Out of Band Conducted Emissions Measurement

E&E

#### ■ Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

#### Test Setup



#### Test Procedure

In any 100 kHz bandwidth outside the EUT pass band, the RF power produced by the modulation products of the spreading sequence, the information sequence, and the carrier frequency shall be at least 20 dB below that of the maximum in-band 100 kHz emission, antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function. All other types of emissions from the EUT shall meet the general limits for radiated frequencies outside the pass band. The test was performed at 3 channels.

### 4.7. Antenna Measurement

#### Limit

For intentional device, according to 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.

And According to 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

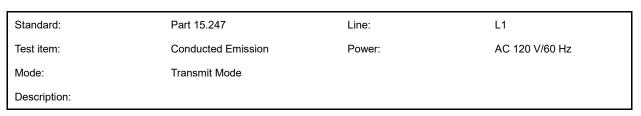
#### Antenna Connector Construction

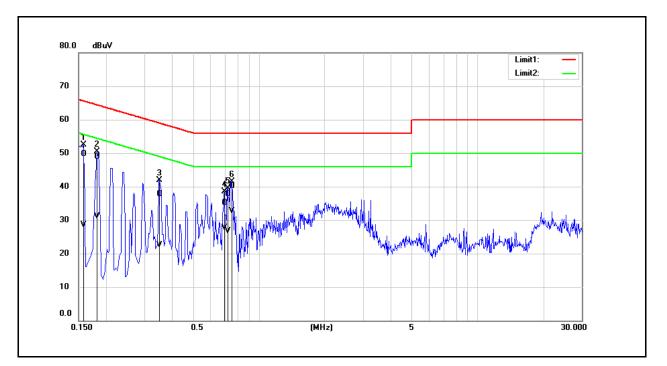
See section 2 – antenna information.



## 5 Test Results

## 5.1. Conducted Emission



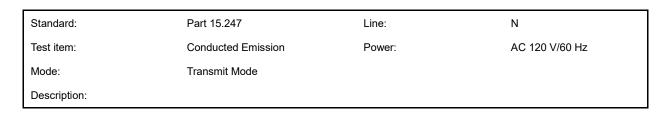


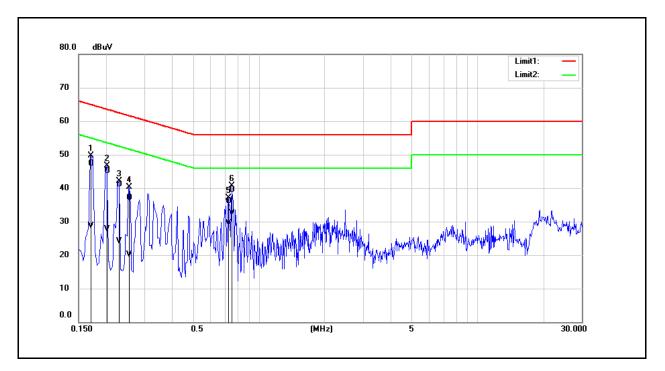
No.	Frequency	QP	AVG	Correction	QP	AVG	QP	AVG	QP	AVG	Remark
		reading	reading	factor	result	result	limit	limit	margin	margin	
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	
1	0.1580	40.08	19.01	9.54	49.62	28.55	65.57	55.57	-15.95	-27.02	Pass
2	0.1820	39.34	21.55	9.54	48.88	31.09	64.39	54.39	-15.51	-23.30	Pass
3	0.3500	28.25	13.06	9.54	37.79	22.60	58.96	48.96	-21.17	-26.36	Pass
4	0.6940	25.46	18.08	9.56	35.02	27.64	56.00	46.00	-20.98	-18.36	Pass
5	0.7180	28.19	17.20	9.57	37.76	26.77	56.00	46.00	-18.24	-19.23	Pass
6	0.7500	30.47	23.17	9.57	40.04	32.74	56.00	46.00	-15.96	-13.26	Pass

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

2. Correction factor (dB) = Cable loss (dB) + L.I.S.N. factor (dB).







No.	Frequency	QP 	AVG	Correction	QP	AVG	QP	AVG	QP	AVG	Remark
		reading	reading	factor	result	result	limit	limit	margin	margin	
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	
1	0.1700	37.63	19.15	9.60	47.23	28.75	64.96	54.96	-17.73	-26.21	Pass
2	0.2020	35.47	18.12	9.60	45.07	27.72	63.53	53.53	-18.46	-25.81	Pass
3	0.2300	31.51	14.49	9.60	41.11	24.09	62.45	52.45	-21.34	-28.36	Pass
4	0.2540	27.52	10.52	9.60	37.12	20.12	61.63	51.63	-24.51	-31.51	Pass
5	0.7260	26.44	19.81	9.63	36.07	29.44	56.00	46.00	-19.93	-16.56	Pass
6	0.7540	29.80	22.78	9.63	39.43	32.41	56.00	46.00	-16.57	-13.59	Pass

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

2. Correction factor (dB) = Cable loss (dB) + L.I.S.N. factor (dB).



## 5.2. Conducted Test Results

**Duty cycle** Reference Appendix A / Appendix B

Maximum Conducted Output Power Measurement Reference Appendix A

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6 dB RF Bandwidth Measurement Reference Appendix A / Appendix B

Maximum Power Density Measurement Reference Appendix A / Appendix B

Out of Band Conducted Emissions Measurement Reference level Reference Appendix B

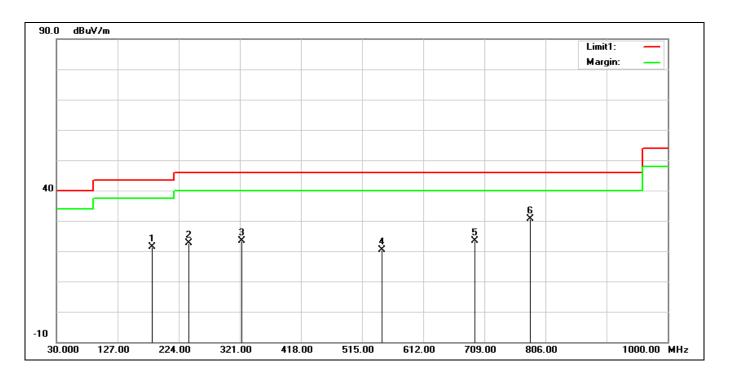
Out of Band Conducted Emissions Reference Appendix B

**Conducted Band Edge** Reference Appendix B



## 5.3. Radiated Emission Measurement

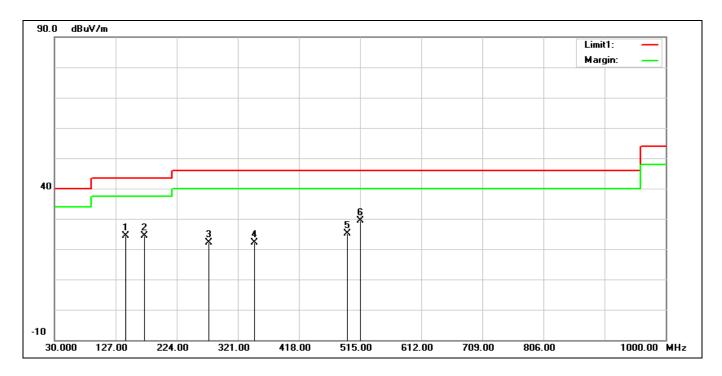
	Te	st Site:	966 Chamber
•			
;			



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	182.2900	46.45	-25.19	21.26	43.50	-22.24	QP
2	240.4900	47.47	-24.80	22.67	46.00	-23.33	QP
3	323.9100	45.68	-22.42	23.26	46.00	-22.74	QP
4	546.0400	37.39	-17.12	20.27	46.00	-25.73	QP
5	693.4800	38.00	-14.55	23.45	46.00	-22.55	QP
6*	781.7500	43.36	-12.72	30.64	46.00	-15.36	QP



Standard:	Part 15C	Test Site:	966 Chamber
Polarization:	Vertical		
Test Mode:	Transmit Mode		
Remark:			



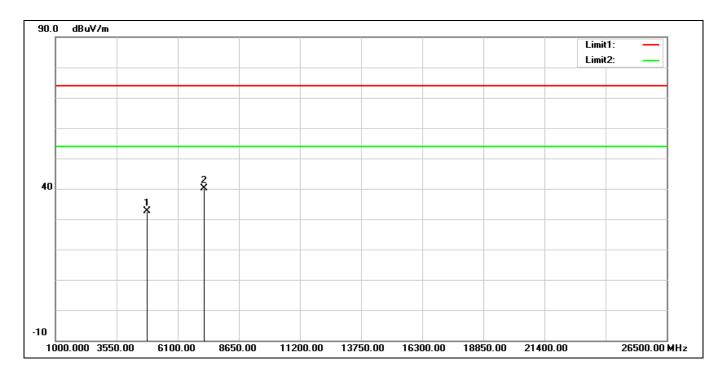
No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	143.4900	48.61	-24.33	24.28	43.50	-19.22	QP
2	172.5900	48.52	-24.18	24.34	43.50	-19.16	QP
3	274.4400	45.83	-23.76	22.07	46.00	-23.93	QP
4	347.1900	43.90	-21.77	22.13	46.00	-23.87	QP
5	494.6300	43.12	-18.10	25.02	46.00	-20.98	QP
6*	515.9700	47.20	-17.70	29.50	46.00	-16.50	QP



#### Harmonic

Above 1 GHz

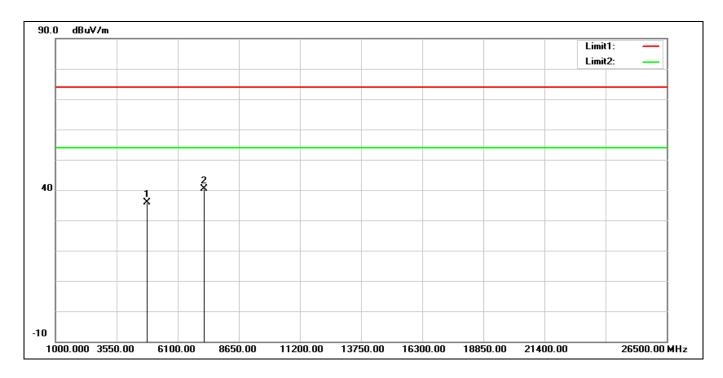
Standard:	Part 15C	Test Site:	966 Chamber
Stanuaru.	Tait 150	lest one.	
Polarization:	Horizontal		
Test Mode:	Matter 2405 MHz		
Remark:			



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4810.000	32.44	0.28	32.72	74.00	-41.28	peak
2*	7215.000	32.30	7.87	40.17	74.00	-33.83	peak



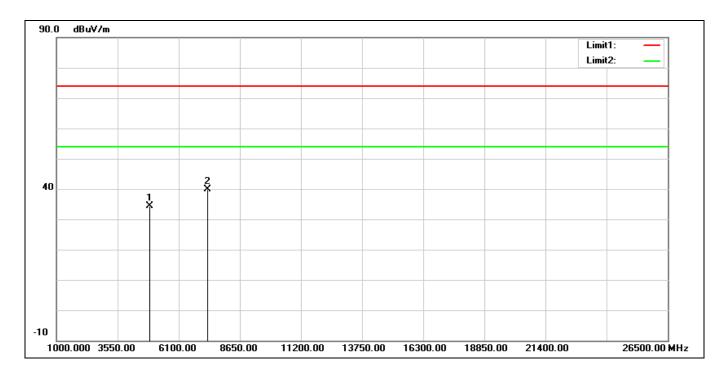
Standard:	Part 15C	Test Site:	966 Chamber
Polarization:	Vertical		
Test Mode:	Matter 2405 MHz		
Remark:			



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4810.000	35.64	0.28	35.92	74.00	-38.08	peak
2*	7215.000	32.60	7.87	40.47	74.00	-33.53	peak



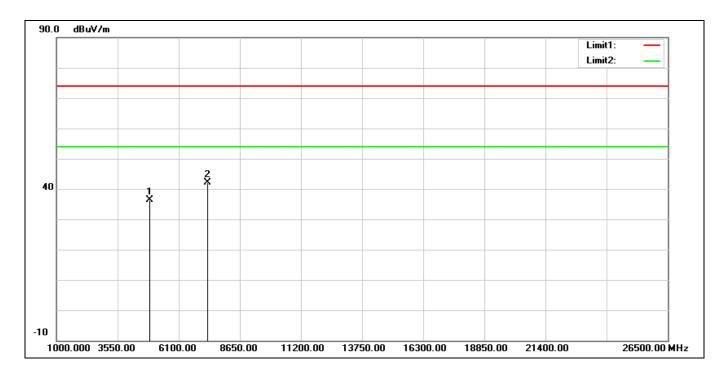
Standard:	Part 15C	Test Site:	966 Chamber
Polarization:	Horizontal		
Test Mode:	Matter 2440 MHz		
Remark:			



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4880.000	33.97	0.38	34.35	74.00	-39.65	peak
2*	7320.000	31.96	7.99	39.95	74.00	-34.05	peak



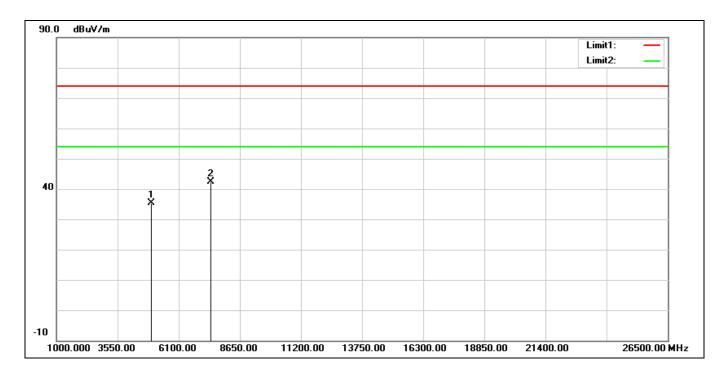
Standard:	Part 15C	Test Site:	966 Chamber
Polarization:	Vertical		
Test Mode:	Matter 2440 MHz		
Remark:			



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4880.000	35.92	0.38	36.30	74.00	-37.70	peak
2*	7320.000	34.11	7.99	42.10	74.00	-31.90	peak



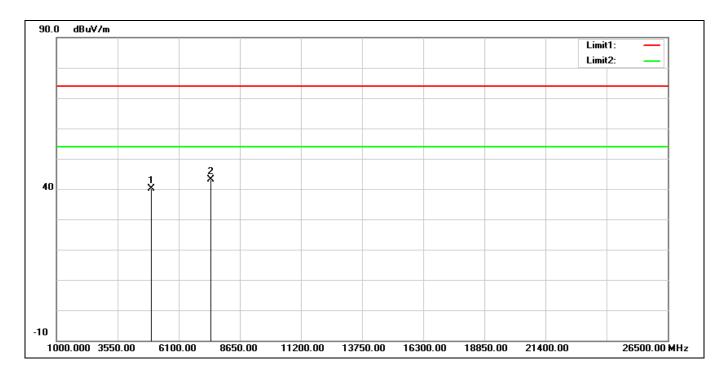
Standard:	Part 15C	Test Site:	966 Chamber
Polarization:	Horizontal		
Test Mode:	Matter 2480 MHz		
Remark:			



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4960.000	34.69	0.57	35.26	74.00	-38.74	peak
2*	7440.000	34.04	8.34	42.38	74.00	-31.62	peak



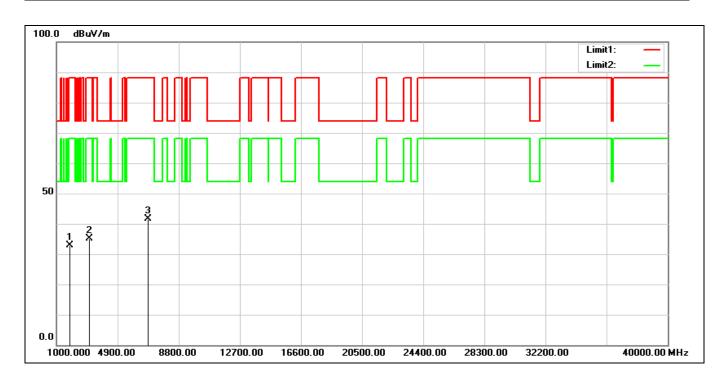
Standard:	Part 15C	Test Site:	966 Chamber
Polarization:	Vertical		
Test Mode:	Matter 2480 MHz		
Remark:			



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4960.000	39.65	0.57	40.22	74.00	-33.78	peak
2*	7440.000	34.71	8.34	43.05	74.00	-30.95	peak



Standard:	Part 15C	Test Site:	966 Chamber
Polarization:	Horizontal		
Test Mode:	Simultaneous Transmitting		
	(WLAN 2.4 GHz + 5 GHz + 6GHz + Bluetooth	LE + Matter)	
Remark:			



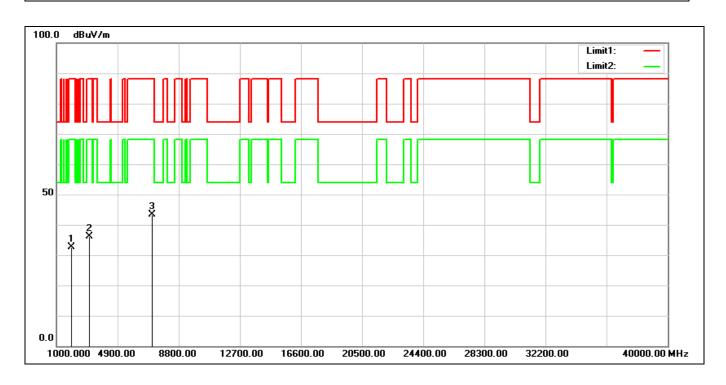
No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1833.000	42.26	-9.28	32.98	68.20	-35.22	peak
2	3074.000	39.58	-4.34	35.24	68.20	-32.96	peak
3*	6831.000	35.43	6.08	41.51	68.20	-26.69	peak

Note: All unwanted emissions outside the restricted band are limited using a peak value of 68.2 dBuV/MHz to meet

Bluetooth + Matter + WLAN 2.4 GHz + 5 GHz + 6 GHz RSE simultaneous transmissions.



Standard:	Part 15C	Test Site:	966 Chamber
Polarization:	Vertical		
Test Mode:	Simultaneous Transmitting		
	(WLAN 2.4 GHz + 5 GHz + 6GHz + Bluetod	oth LE + Matter)	
Remark:			



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1986.000	40.79	-8.13	32.66	68.20	-35.54	peak
2	3091.000	40.27	-4.22	36.05	68.20	-32.15	peak
3*	7103.000	35.86	7.43	43.29	68.20	-24.91	peak

Note: All unwanted emissions outside the restricted band are limited using a peak value of 68.2 dBuV/MHz to meet

Bluetooth + Matter + WLAN 2.4 GHz + 5 GHz + 6 GHz RSE simultaneous transmissions.



Band Edge

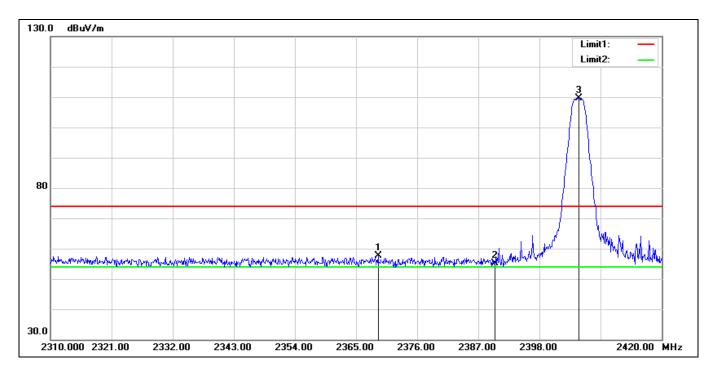
 Peak

 Standard:
 Part 15C
 Test Site:
 966 Chamber

 Polarization:
 Horizontal
 1
 1

 Test Mode:
 Matter 2405 MHz
 1
 1

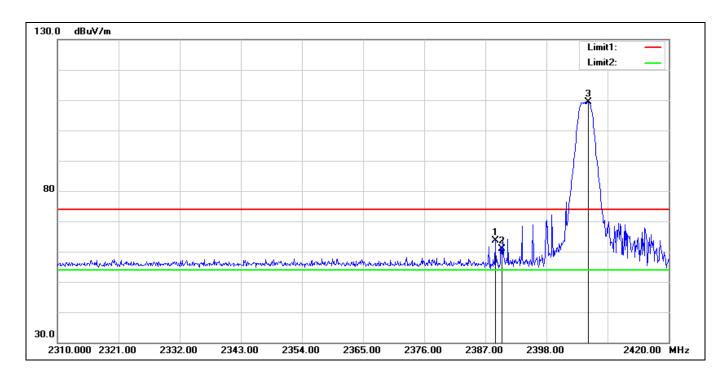
 Remark:
 1
 1
 1
 1



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2368.960	63.60	-6.08	57.52	74.00	-16.48	peak
2	2390.000	61.35	-6.19	55.16	74.00	-18.84	peak
3*	2405.040	115.80	-6.24	109.56	74.00	35.56	peak



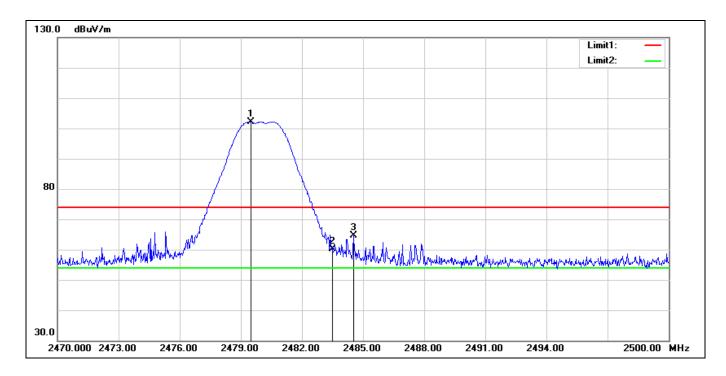
Standard:	Part 15C	Test Site:	966 Chamber
Polarization:	Vertical		
Test Mode:	Matter 2405 MHz		
Remark:			



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2388.760	69.80	-6.18	63.62	74.00	-10.38	peak
2	2390.000	67.05	-6.19	60.86	74.00	-13.14	peak
3*	2405.590	115.63	-6.24	109.39	74.00	35.39	peak



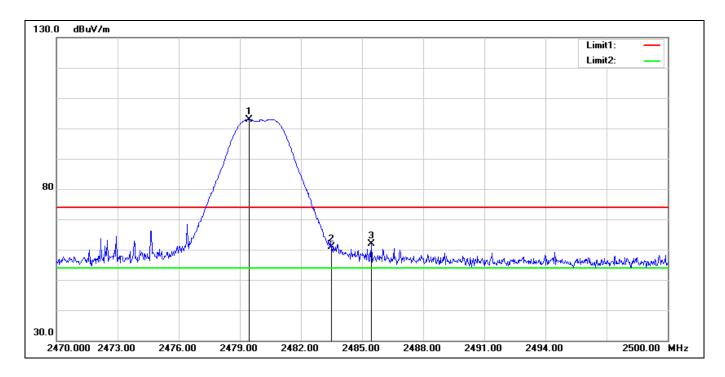




No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1*	2479.480	108.64	-6.46	102.18	74.00	28.18	peak
2	2483.500	66.59	-6.46	60.13	74.00	-13.87	peak
3	2484.520	71.20	-6.47	64.73	74.00	-9.27	peak







No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1*	2479.450	109.46	-6.46	103.00	74.00	29.00	peak
2	2483.500	67.33	-6.46	60.87	74.00	-13.13	peak
3	2485.450	68.28	-6.46	61.82	74.00	-12.18	peak



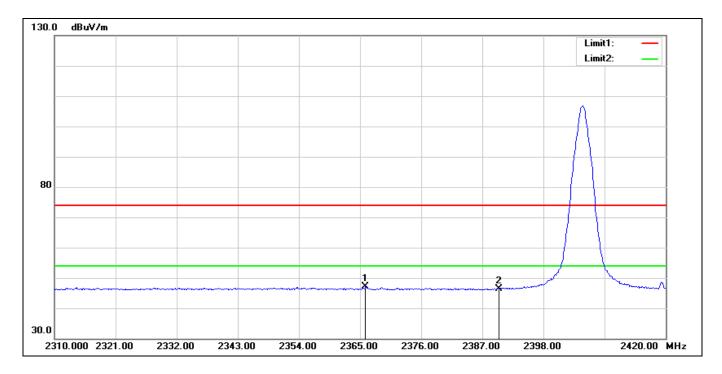
Average

Test Site:

966 Chamber

Standard:Part 15CPolarization:HorizontalTest Mode:Matter 2405 MHz

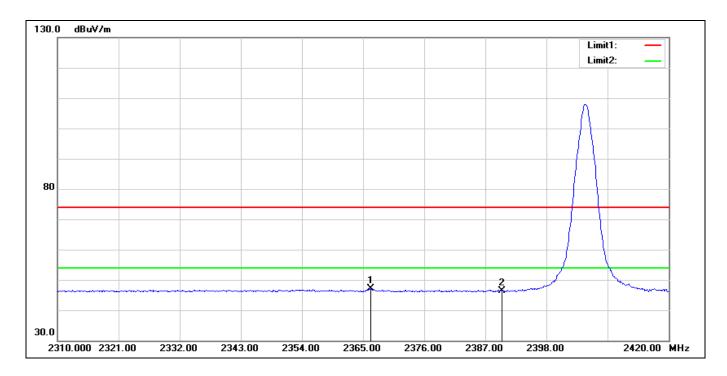
Remark:



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1*	2365.990	53.20	-6.07	47.13	54.00	-6.87	AVG
2	2390.000	52.54	-6.19	46.35	54.00	-7.65	AVG



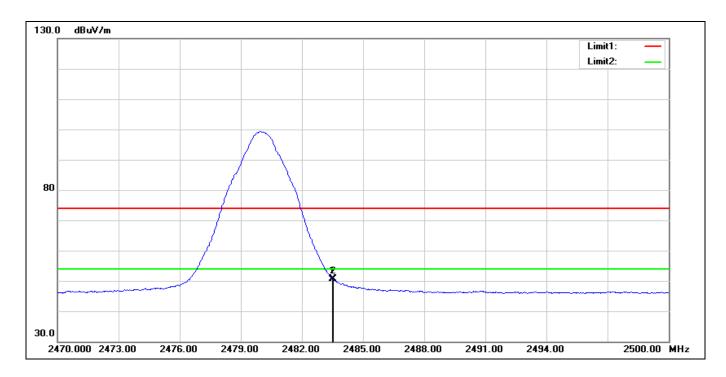
Standard:	Part 15C	Test Site:	966 Chamber
Polarization:	Vertical		
Test Mode:	Matter 2405 MHz		
Remark:			



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1*	2366.430	53.25	-6.07	47.18	54.00	-6.82	AVG
2	2390.000	52.53	-6.19	46.34	54.00	-7.66	AVG



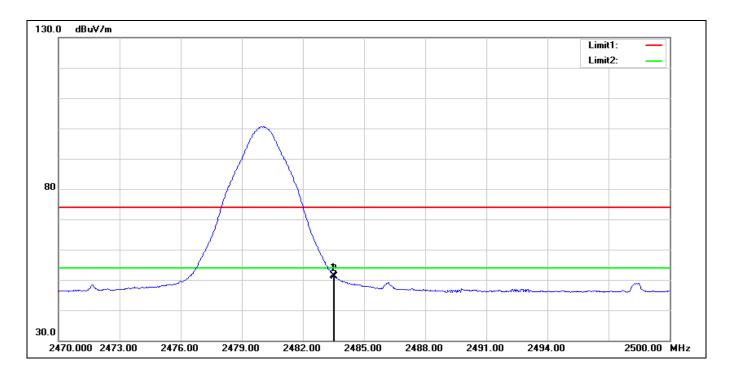
Standard:	Part 15C	Test Site:	966 Chamber
Polarization:	Horizontal		
Test Mode:	Matter 2480 MHz		
Remark:			



No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1*	2483.500	57.18	-6.46	50.72	54.00	-3.28	AVG
2	2483.530	57.04	-6.46	50.58	54.00	-3.42	AVG







No.	Frequency	Reading	Correction	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1*	2483.500	57.90	-6.46	51.44	54.00	-2.56	AVG
2	2483.530	57.71	-6.46	51.25	54.00	-2.75	AVG

### ---END----