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CERTIFICATION TEST REPORT

Manufacturer: Grayshift LLC
931 Monroe Drive Northeast, Suite A 102-340
Atlanta, Georgia 30308 USA

Applicant: Same as Above

Product Name: GrayKey

Product Description: GrayKey - Digital Forensic Access Unit for Mobile Devices

Operating Voltage/Frequency: 120VAC.

Model: GK01

FCC ID: 2AV7EGK01

Testing Commenced: 2018-10-10

Testing Ended: 2020-06-01

Summary of Test Results: In Compliance

The EUT complies with the EMC requirements when manufactured identically as the unit tested in this report, including any required modifications and/or manufacturer's statement. Any changes to the design or build of this unit subsequent to this testing may deem it non-compliant.

Standards:

- ❖ **FCC Part 15 Subpart C, Section 15.249**
- ❖ **FCC Part 15 Subpart C, Section 15.215(c) – Additional provisions to the general radiated emission limitations**
- ❖ **FCC15.207 - Conducted Limits**
- ❖ **FCC Part 15 Subpart A, Section 15.31(e) – Measurement Standards**



Order Number: F2P19714A

Applicant: Grayshift LLC

Model: GK01

Evaluation Conducted by:

Julius Chiller, EMC/Wireless Engineer

Report Reviewed by:

Ken Littell, Director of EMC & Wireless Operations

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1 ADMINISTRATIVE INFORMATION

1.1 Measurement Location:

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

1.2 Measurement Procedure:

All measurements were performed according to the 2013 version of ANSI C63.10 and recommended FCC procedure of measurement of DXT operating under Section 15.249. A list of the measurement equipment can be found in Section 6.



1.3 Uncertainty Budget:

The uncertainty in EMC measurements arises from several factors which affect the results, some associated with environmental conditions in the measurement room, the test equipment being used, and the measurement techniques adopted.

The measurement uncertainty budgets detailed below are calculated from the test and calibration data and are expressed with a 95% confidence factor using a coverage factor of $k=2$. The Uncertainty for a laboratory is referred to as U_{lab} . For Radiated and Conducted Emissions, the Expanded Uncertainty is compared to the U_{cispr} values to determine if a specific margin is required to deem compliance.

U_{lab}

Measurement Range	Combined Uncertainty	Expanded Uncertainty
Radiated Emissions <1 GHz @ 3m	2.54	5.07dB
Radiated Emissions <1 GHz @ 10m	2.55	5.09dB
Radiated Emissions 1 GHz to 2.7 GHz	1.81	3.62dB
Radiated Emissions 2.7 GHz to 18 GHz	1.55	3.10dB
AC Power Line Conducted Emissions, 150kHz to 30 MHz	1.38	2.76dB
AC Power Line Conducted Emissions, 9kHz to 150kHz	1.66	3.32dB

U_{cispr}

Measurement Range	Expanded Uncertainty
Radiated Emissions <1 GHz @ 3m	5.2dB
Radiated Emissions <1 GHz @ 10m	5.2dB
Radiated Emissions 1 GHz to 2.7 GHz	Under Consideration
Radiated Emissions 2.7 GHz to 18 GHz	Under Consideration
AC Power Line Conducted Emissions, 150kHz to 30 MHz	3.6dB
AC Power Line Conducted Emissions, 9kHz to 150kHz	4.0dB

If U_{lab} is less than or equal to U_{cispr} , then:

- compliance is deemed to occur if no measured disturbance exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance exceeds the disturbance limit.

If U_{lab} is greater than U_{cispr} in table 1, then:

- compliance is deemed to occur if no measured disturbance, increased by ($U_{lab} - U_{cispr}$), exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance, increased by ($U_{lab} - U_{cispr}$), exceeds the disturbance limit.

Note: Only measurements listed in the tables above that relate to tests included in this Test Report are applicable.



Order Number: F2P19714A

Applicant: Grayshift LLC
Model: GK01

1.4 Document History:

Document Number	Description	Issue Date	Approved By
F2P19714A-08E	First Issue	2020-06-06	K. Littell



2 SUMMARY OF TEST RESULTS

Test Name	Standard(s)	Results
99% Occupied Bandwidth	CFR 47 Part 15.215(c)	Complies
-20dB Occupied Bandwidth	CFR 47 Part 15.215(c)	Complies
Field Strength of Emissions	CFR 47 Part 15.249(a)(d)	Complies
Variation of the Input Power	CFR 47 Part 15.231(e)	Complies
Conducted Emissions	CFR 47 Part 15.207(a)	Complies

Note: Product was operated using an AC to DC power supply, so Voltage Variation testing in 15.31(3)(e) was performed at the nominal voltage, and then the 85% and 115% of that voltage was tested also. The output power at the High, Mid, and Low channels was measured to verify how much the power and frequency were affected by the variation of the input power. No shift in frequency or power was measured at either of the varied voltages on any of the channels.

Modifications Made to the Equipment
No modifications were made to the EUT.



3 TABLE OF MEASURED RESULTS

Test		Low Channel 2402 MHz	Mid Channel 2440 MHz	High Channel 2480 MHz
Average Field Strength of Fundamental		53.1 dB μ V/m, 0.451 mV/m	52.0 dB μ V/m, 0.398 mV/m	50.8 dB μ V/m, 0.346 mV/m
Average Limit for Fundamental		50 millivolts/meter (93.97 dB μ V/m)	50 millivolts/meter (93.97 dB μ V/m)	50 millivolts/meter (93.97 dB μ V/m)
-20dB Occupied Bandwidth		1.104 MHz	1.098 MHz	1.144 MHz
99% Occupied Bandwidth (MHz)		1.112 MHz	1.100 MHz	1.112 MHz
Voltage Variations	-15%	52.1 dBuV/m, 0.402 mV/m	50.9 dBuV/m, 0.350 mV/m	48.9 dBuV/m, 0.278 mV/m
	+15%	53.0 dBuV/m, 0.446 mV/m	51.8 dBuV/m, 0.389 mV/m	50.0 dBuV/m, 0.316 mV/m

The -20dB bandwidth of the emission shall be contained within the frequency band designated in the rule section under which the equipment is operated.



4 ENGINEERING STATEMENT

This report has been prepared on behalf of Grayshift LLC to provide documentation for the testing described herein. This equipment has been tested and found to comply with part 15.249 of the FCC Rules using ANSI C63.10 2013 standard. The test results found in this test report relate only to the items tested.



5 EUT INFORMATION AND DATA

5.1 Equipment Under Test:

Product: GrayKey - Digital Forensic Access Unit for Mobile Devices

Model: GK01

Serial No.: None Specified

Firmware: Cypress/CYW4343W

Hardware: Rev.B

FCC ID: **2AV7EGK01**

5.2 Trade Name:

Grayshift LLC

5.3 Power Supply:

120VAC

5.4 Applicable Rules:

CFR 47, Part 15.249, subpart C

5.5 Equipment Category:

Radio Transmitter-DXT

5.6 Antenna:

Integral, 1.97dBi Gain

5.7 Accessories:

N/A

5.8 Test Item Condition:

The equipment to be tested was received in good condition.

5.9 Testing Algorithm:

EUT's Bluetooth radio was set to transmit a continuous modulated signal on low, mid and high channels in the 2.4 GHz band. The WL Command Scripts were embedded in the Operating System to allow for test mode. The power setting was set to the 17dBm setting, OS Ver. 1.33.11.

**6 LIST OF MEASUREMENT INSTRUMENTATION**

Equipment Type	Asset Number	Manufacturer	Model	Serial Number	Calibration Due Date
Shielded Chamber 2014	CL166-E	AlbatrossProjects	B83117-DF435-T261	US140023	2021-01-03
Temp/Hum. Recorder	CL261	Extech	445814	04	2021-02-12
Receiver	CL151	Rohde & Schwarz	ESU40	100319	2020-10-21
Antenna, JB3 Combination	CL175	Sunol Sciences	JB3	A030315	2020-10-14
Horn Antenna	CL098	Emco	3115	9809-5580	2021-01-31
Horn Antenna	CL114	AH Systems	SAS-572	237	2021-02-04
Pre-Amplifier	CL153	Agilent	83006-69007	MY39500791	2020-08-05
Antenna, 18" Active Loop	CL194	AH Systems	SAS-562B	281	2022-02-21
Software:	Tile Version 3.4.B		Software Verified: 2018-10-10, 2020-06-01		
Software:	EMC 32, Version 8.53.0		Software Verified: 2018-10-10, 2020-06-01		
Temp/Hum. Recorder	CL234	Extech	445814	03	2021-04-23
Spectrum Analyzer	0204	Hewlett Packard	HP8591A	3149A02546	2020-07-29
Software:	EMC Analyzer 85712D Rev. A.00.01			Date Verified:	2020-06-01
Transient Limiter	0202	Hewlett Packard	11947A	3107A00729	2020-07-29
Spectrum Analyzer	CL147	Agilent	E7402A	MY45101241	2021-01-06
LISN	CL181	Com-Power	LI-125A	191226	2020-09-06
LISN	CL182	Com-Power	LI-125A	191225	2020-09-06
Low Loss Cable Set	--	Pasternack	PE3C0666-252 / PE3C066-50CM	None Spec.	2020-07-16



7 FCC PART 15.215(e), OCCUPIED BANDWIDTH

7.1 Requirements:

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the -20dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage.

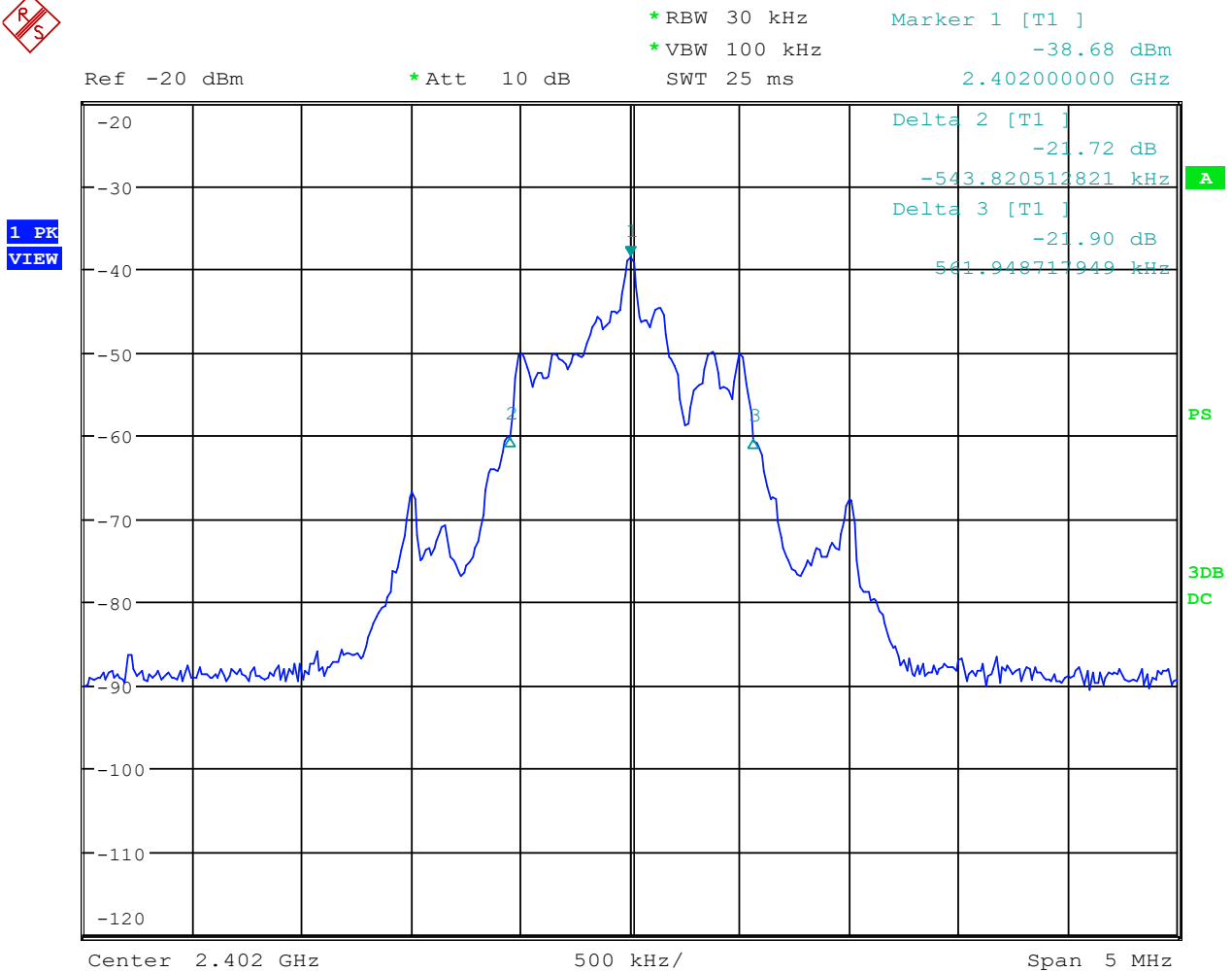
Bandwidth measurements were made at the low (2.402 GHz), mid (2.440 GHz) and upper (2.480 GHz) frequencies. The bandwidth was measured using the analyzer's marker function.



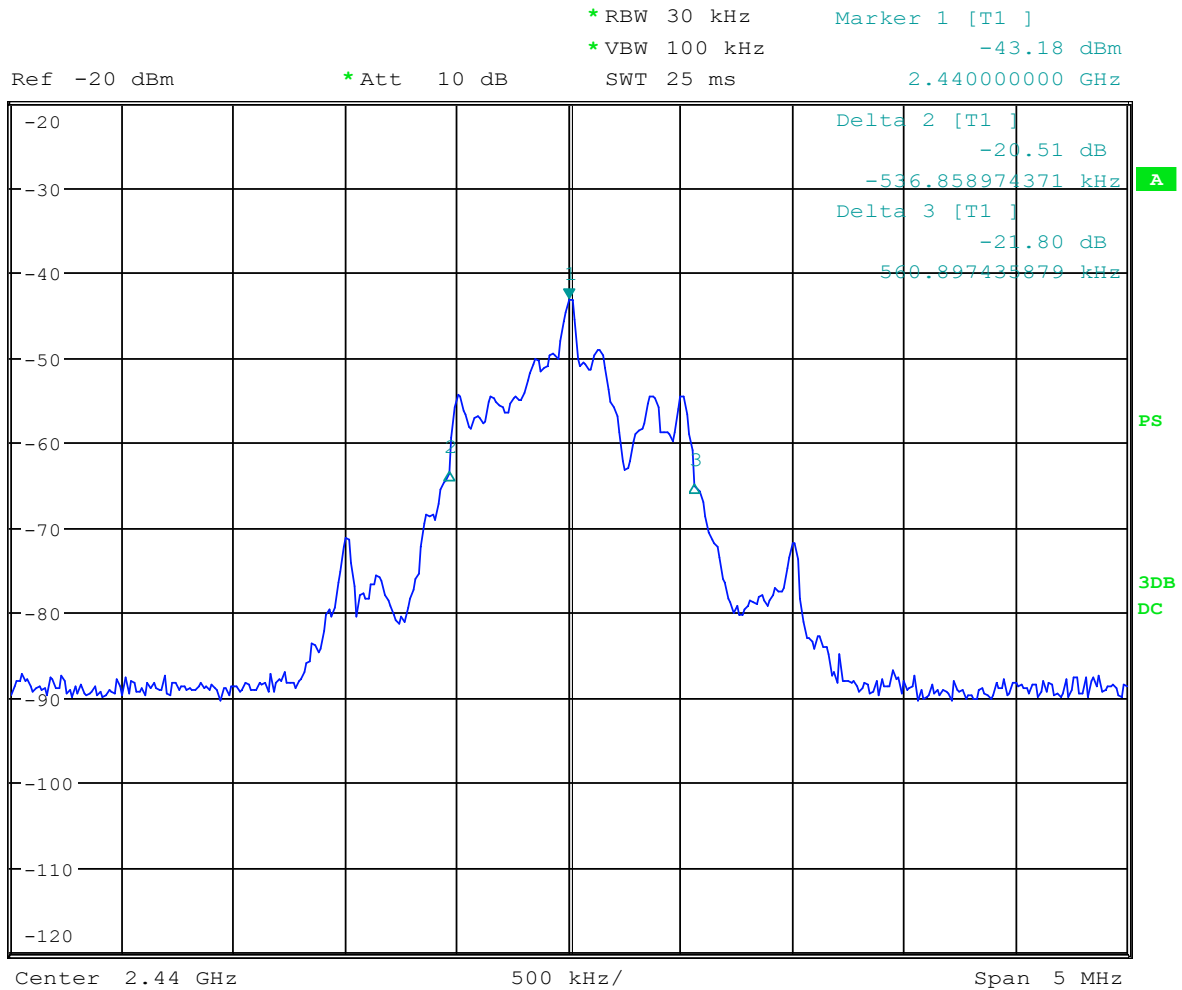
7.2 Occupied Bandwidth Test Data

Test Date(s):	2020-06-01	Test Engineer(s):	J. Chiller
Standards:	CFR 47 Part 15.215(c)	Air Temperature:	23.9°C
		Relative Humidity:	31%

-20dB, Low Channel



Date: 1.JUN.2020 12:04:19

**-20dB, Mid Channel**1 PK
VIEW

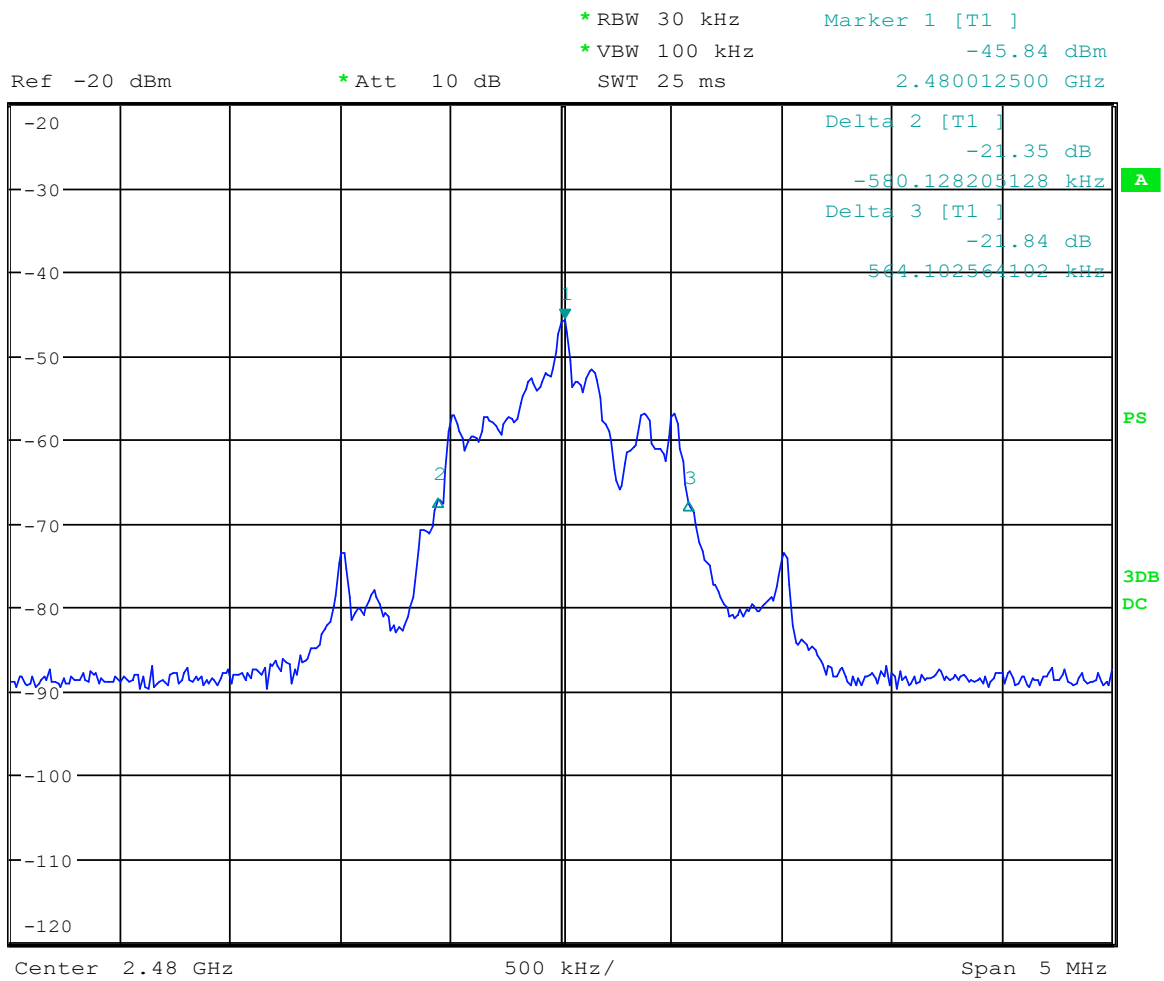
Date: 1.JUN.2020 12:06:51



-20dB, High Channel



1 PK
VIEW



Date: 1.JUN.2020 12:09:18



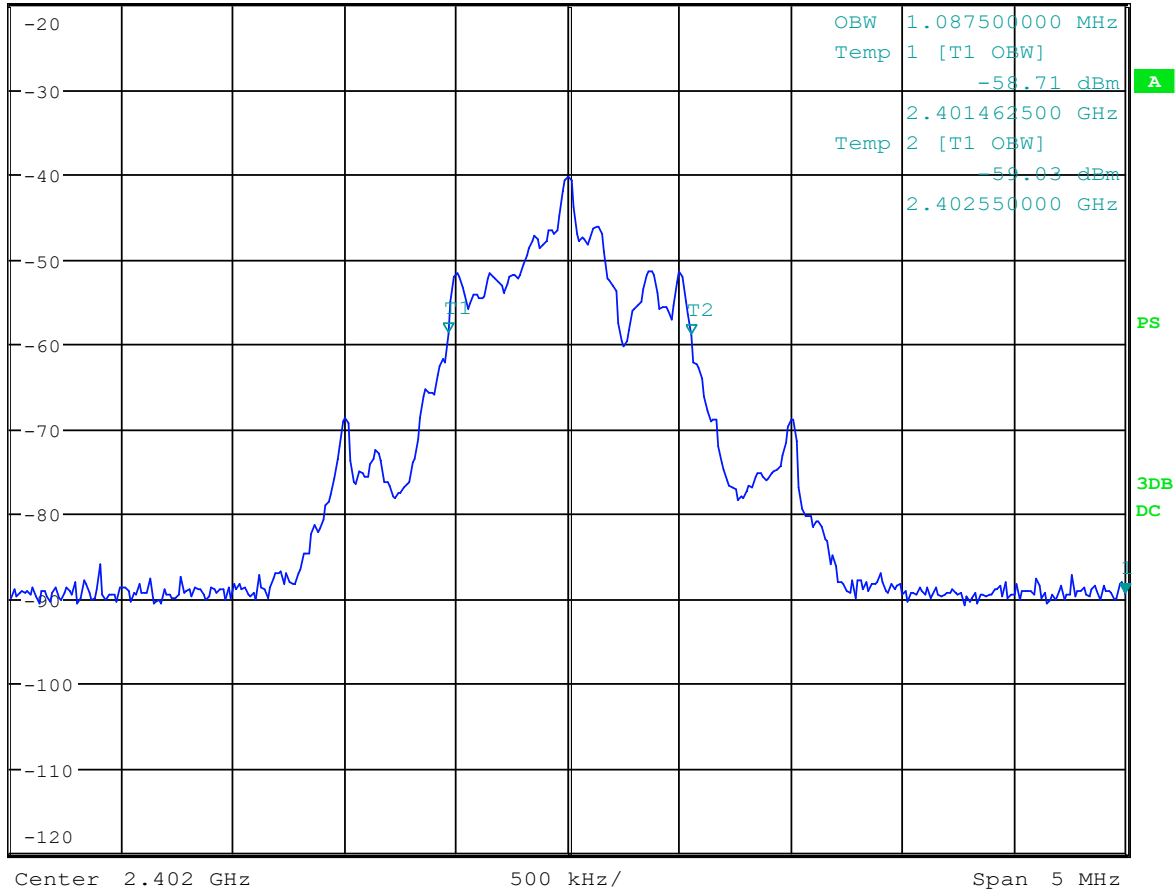
99%, Low Channel



Ref -20 dBm * Att 10 dB * RBW 30 kHz * VBW 100 kHz SWT 25 ms

Marker 1 [T1]
-89.46 dBm
2.404500000 GHz

1 PK
VIEW



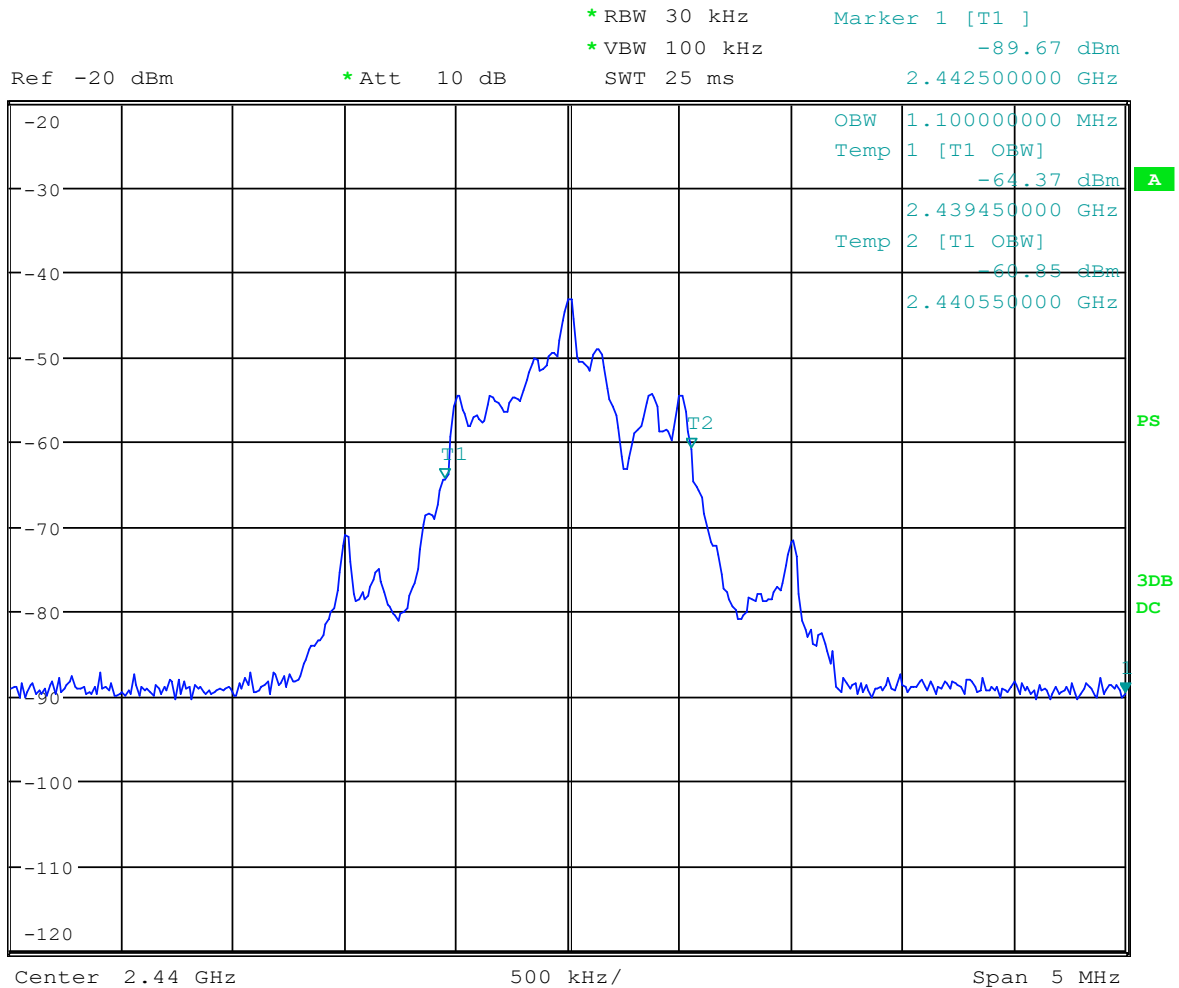
Date: 1.JUN.2020 12:20:46



99%, Mid Channel



1 PK
VIEW



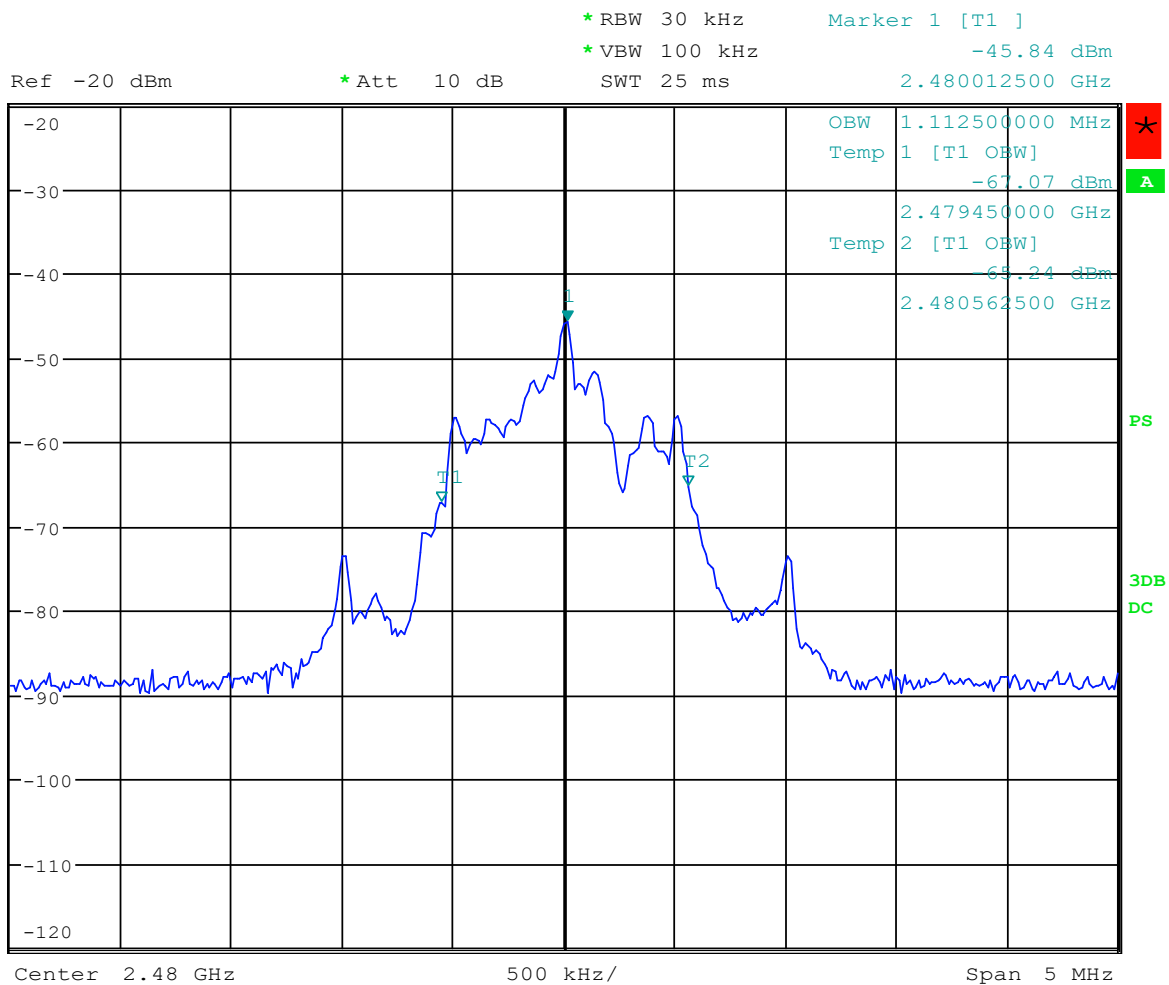
Date: 1.JUN.2020 12:19:39



99%, High Channel



1 PK
VIEW



Date: 1.JUN.2020 12:18:40

**8 FCC PART 15.249(a)(d) – FIELD STRENGTH OF EMISSIONS FROM INTENTIONAL RADIATORS**

(a) Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	250	2500

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

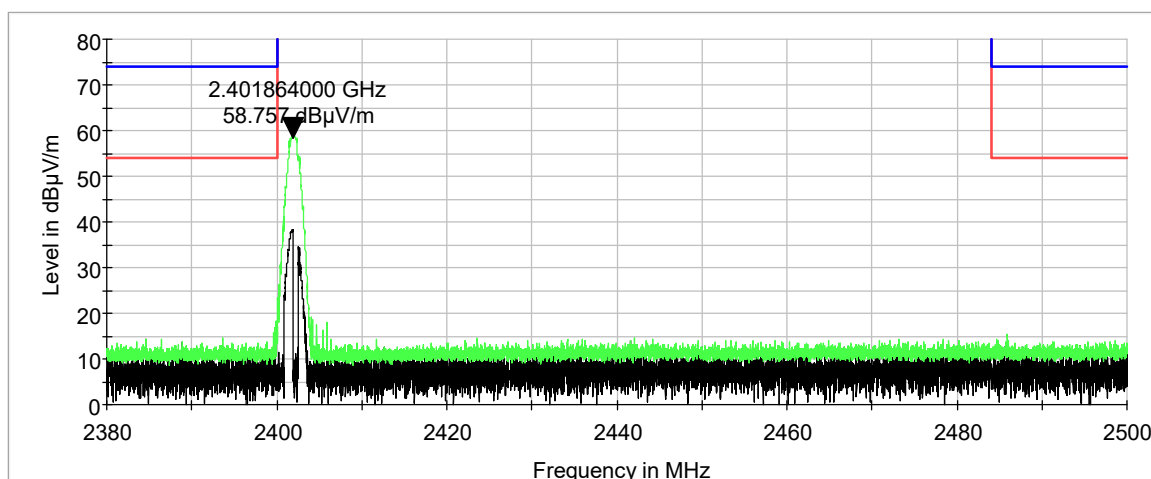
NOTE: During the pre-scan evaluation, the EUT was rotated in all possible directions to find the maximum emissions. The orthogonal position that showed the highest emissions was used. The antenna was raised between 1 and 4 meters and the EUT turntable was rotated 360 degrees to maximize the emissions.



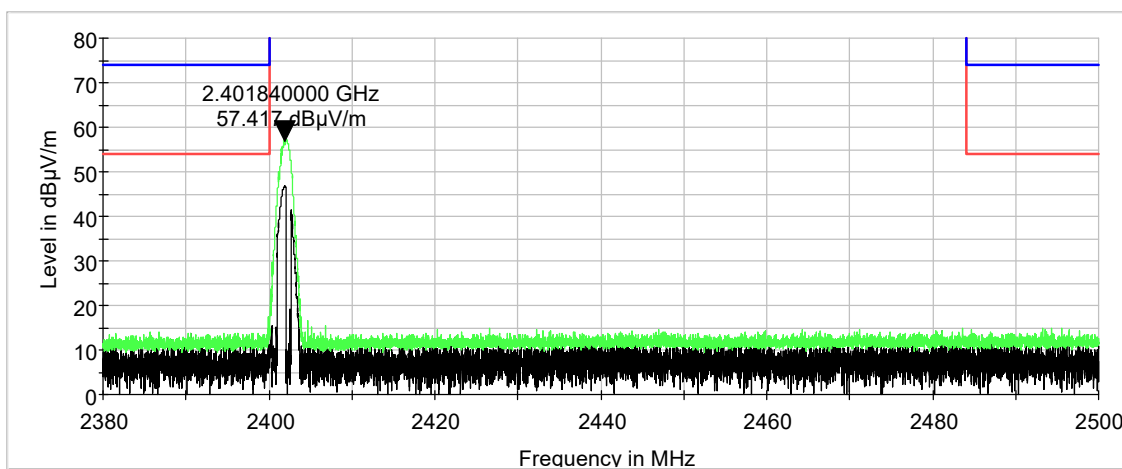
8.1 Test Data - Field Strength of Emissions from Intentional Radiators

Test Date(s):	2020-06-01	Test Engineer(s):	J. Chiller
Standards:	CFR 47 Part 15.249(a)	Air Temperature:	23.7°C
		Relative Humidity:	31%

Band Edge: Low Channel, Vertical

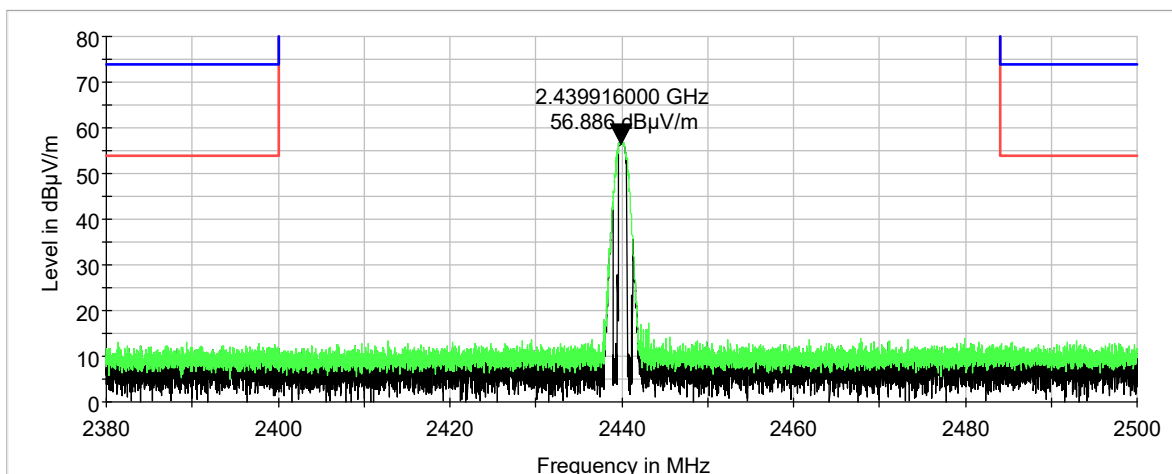


Band Edge: Low Channel, Horizontal

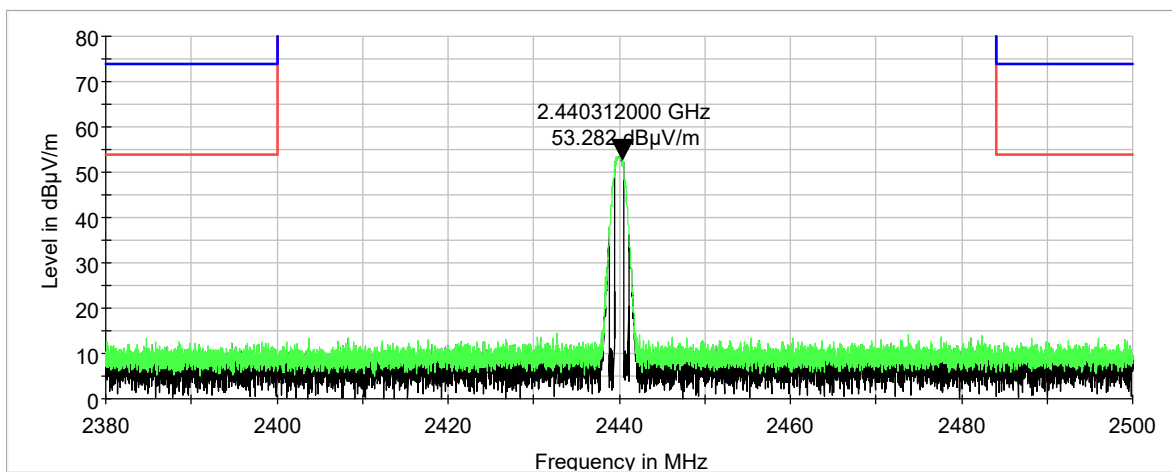




Band Edge: Mid Channel, Vertical

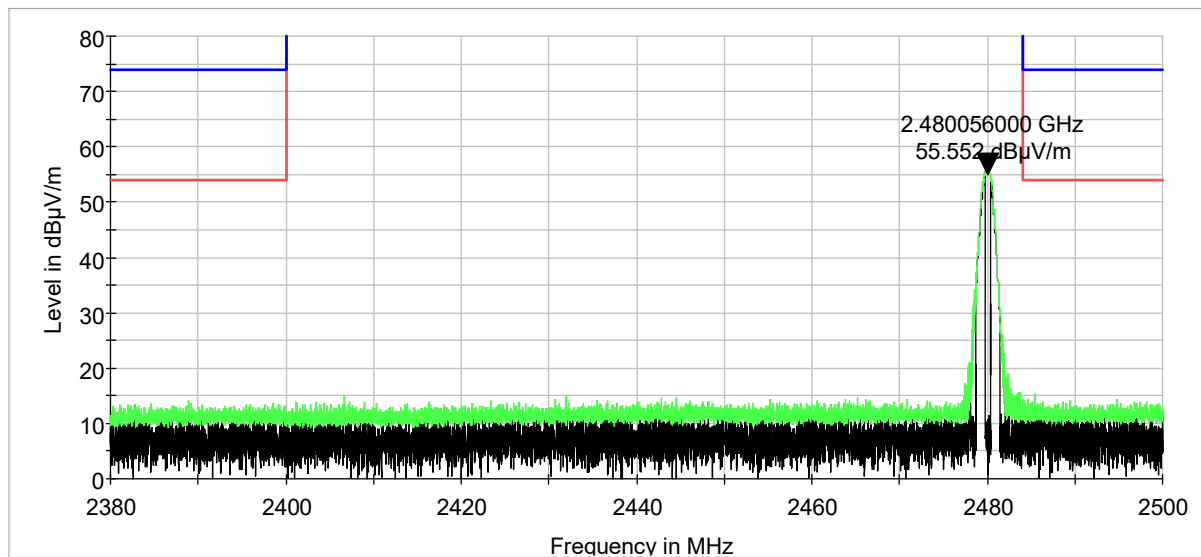


Band Edge: Mid Channel, Horizontal

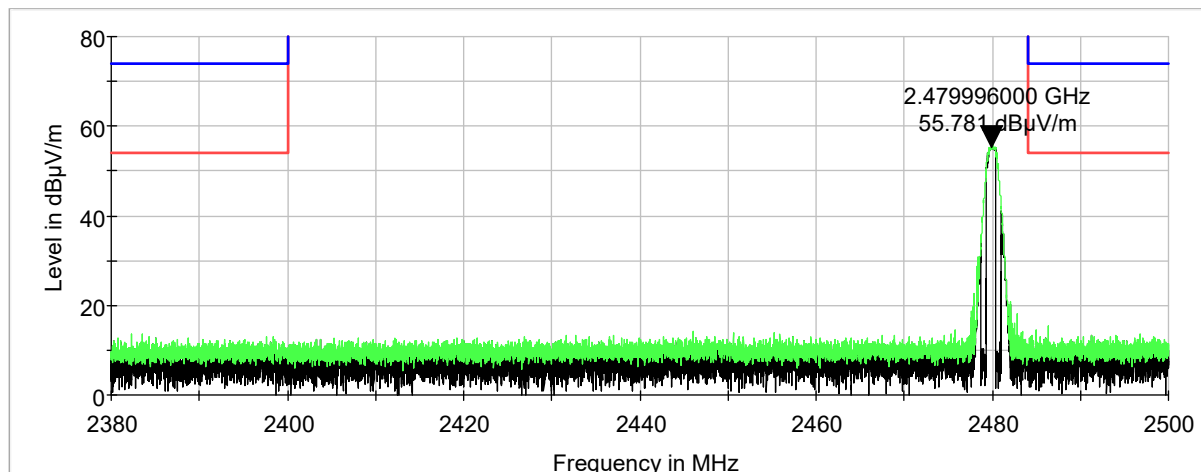


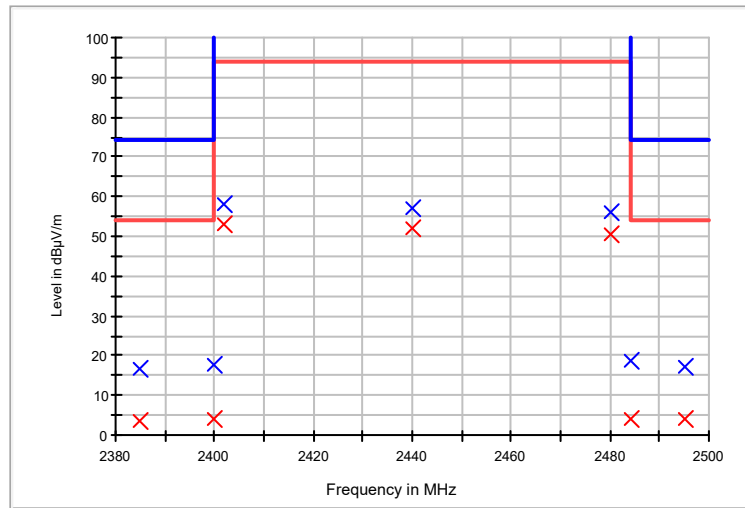


Band Edge: High Channel, Vertical



Band Edge: High Channel, Horizontal





Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
2385.000000	16.7	3.6	1000.0	1000.000	150.0	V	124.0	-19.1	50.4	54.0
2400.000000	17.9	3.9	1000.0	1000.000	150.0	V	0.0	-19.4	50.1	54.0
2402.000000	58.1	53.1	1000.0	1000.000	150.0	V	106.0	-19.4	40.9	94.0
2440.000000	57.0	52.0	1000.0	1000.000	150.0	V	103.0	-19.1	42.0	94.0
2480.000000	55.9	50.8	1000.0	1000.000	150.0	V	106.0	-19.1	43.2	94.0
2483.500000	18.9	4.1	1000.0	1000.000	150.0	V	106.0	-19.0	49.9	54.0
2495.000000	17.2	4.0	1000.0	1000.000	150.0	V	106.0	-18.9	50.0	54.0



8.2 Test Data – Spurious Emissions

Notes: Plots are peak, max hold pre-scan data included only to determine what frequencies to investigate and measure. During the pre-scan evaluation, the EUT was rotated in all possible directions to find the maximum emissions. The orthogonal position that showed the highest emissions was used. At some frequencies, no emissions from the EUT were measurable over the ambient noise floor. The readings did not change with EUT on and EUT off.

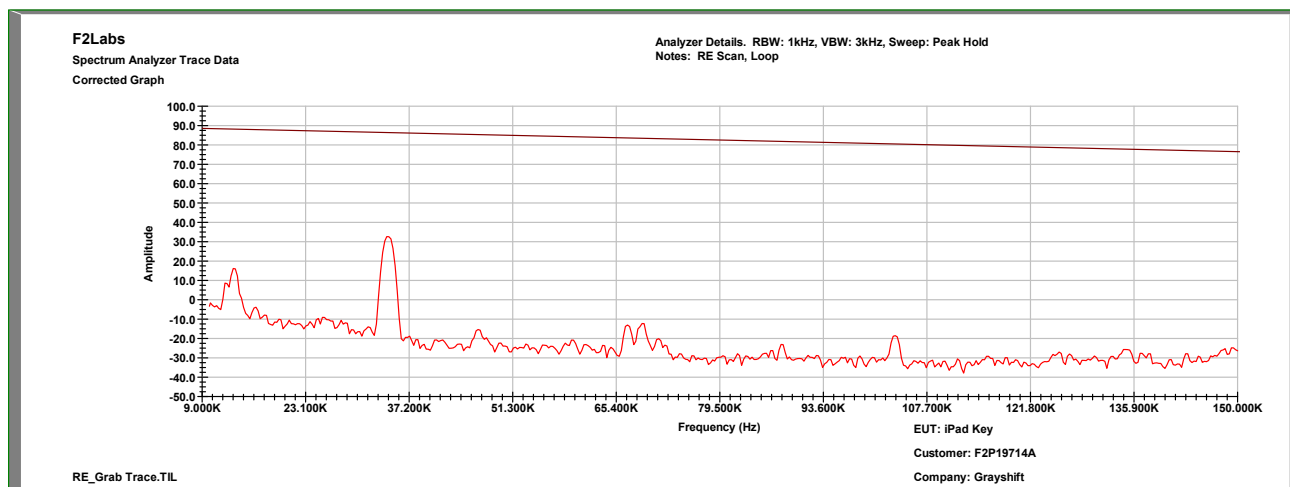
At least 6 of the highest frequencies were measured per ANSI 63.4 in a 3-meter anechoic chamber. Frequencies below 1GHz were measured using a quasi-peak detector. The antenna was raised between 1 and 4 meters and the EUT turntable was rotated 360 degrees to maximize the emissions. Some of the frequencies did not change with the EUT on or off. At those frequencies, the test distance was shortened to 1 meter and still no emissions from the EUT were visible or over the ambient or limit. Frequencies were scanned from 9kHz to 26 GHz and the highest emissions are listed below.

In the following plots, the black line indicates ambient noise and the red line indicates the measurement with the EUT on. Emissions to be found by the EUT were measured and listed in tables below.

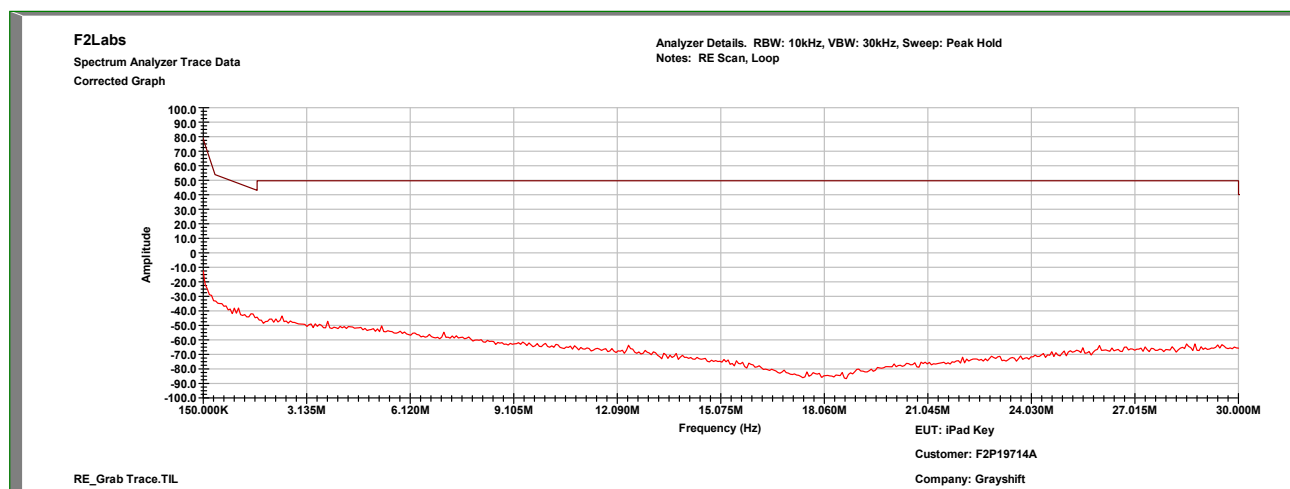


Test Date(s):	2020-06-01	Test Engineer(s):	J. Chiller
Standards:	CFR 47 Part 15.249(d) / Part 15.209	Air Temperature:	23.7°C
		Relative Humidity:	31%

Characterization Scan, 9 kHz to 150 kHz



Characterization Scan, 150 kHz to 30 MHz

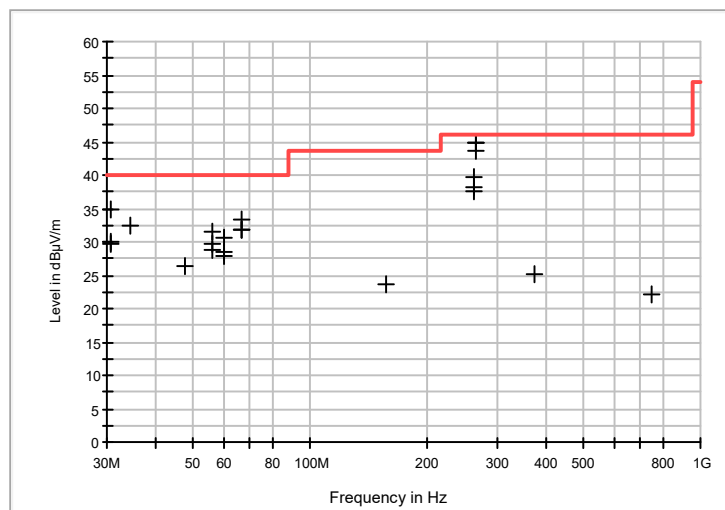




30 MHz to 1000 MHz

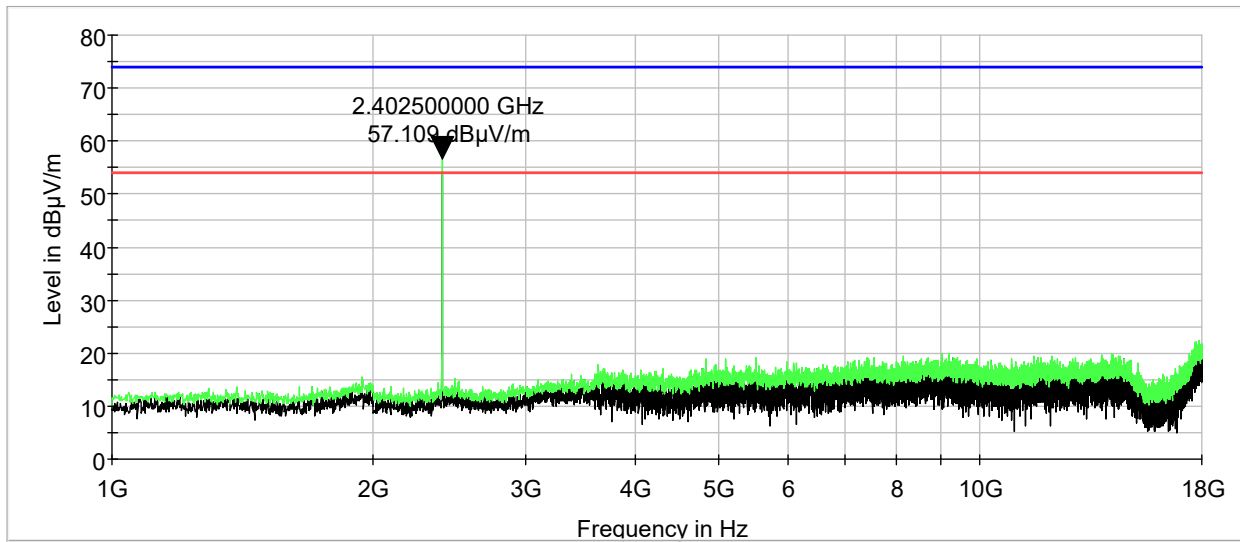
Note: Chart below includes data from all three channels.

Frequency (MHz)	Antenna Polarization	Antenna Height (cm)	Azimuth (degrees)	Reading (dBµV)	Correcton Factors (dB)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
30.600000	V	100.00	53.00	23.0	6.8	29.80	40.0	-10.2
30.600000	V	100.00	351.00	23.1	6.8	29.90	40.0	-10.1
30.600000	V	100.00	164.00	28.2	6.8	35.00	40.0	-5.0
34.640000	V	100.00	164.00	28.9	3.6	32.50	40.0	-7.5
47.640000	V	100.00	108.00	31.7	-5.4	26.30	40.0	-13.7
55.800000	V	100.00	111.00	36.0	-7.2	28.80	40.0	-11.2
55.800000	V	100.00	122.00	36.8	-7.2	29.60	40.0	-10.4
55.800000	V	100.00	210.00	38.6	-7.2	31.40	40.0	-8.6
60.280000	V	100.00	354.00	34.8	-7.0	27.80	40.0	-12.2
60.280000	V	100.00	157.00	37.6	-7.0	30.60	40.0	-9.4
60.280000	V	100.00	11.00	35.5	-7.0	28.50	40.0	-11.5
66.280000	V	100.00	53.00	38.4	-6.5	31.90	40.0	-8.1
66.280000	V	100.00	195.00	39.8	-6.5	33.30	40.0	-6.7
66.280000	V	100.00	5.00	38.2	-6.5	31.70	40.0	-8.3
156.880000	V	100.00	194.00	24.7	-1.1	23.60	43.5	-19.9
262.040000	V	100.00	167.00	38.0	0.2	38.20	46.0	-7.8
263.800000	H	100.00	32.00	39.2	0.4	39.60	46.0	-6.4
263.800000	H	100.00	0.00	37.2	0.4	37.60	46.0	-8.4
264.160000	H	100.00	135.00	43.3	0.4	43.70	46.0	-2.3
264.200000	H	100.00	137.00	44.6	0.4	45.00	46.0	-1.0
374.920000	H	100.00	149.00	21.8	3.5	25.30	46.0	-20.7
750.720000	H	100.00	8.00	11.8	10.3	22.10	46.0	-23.9

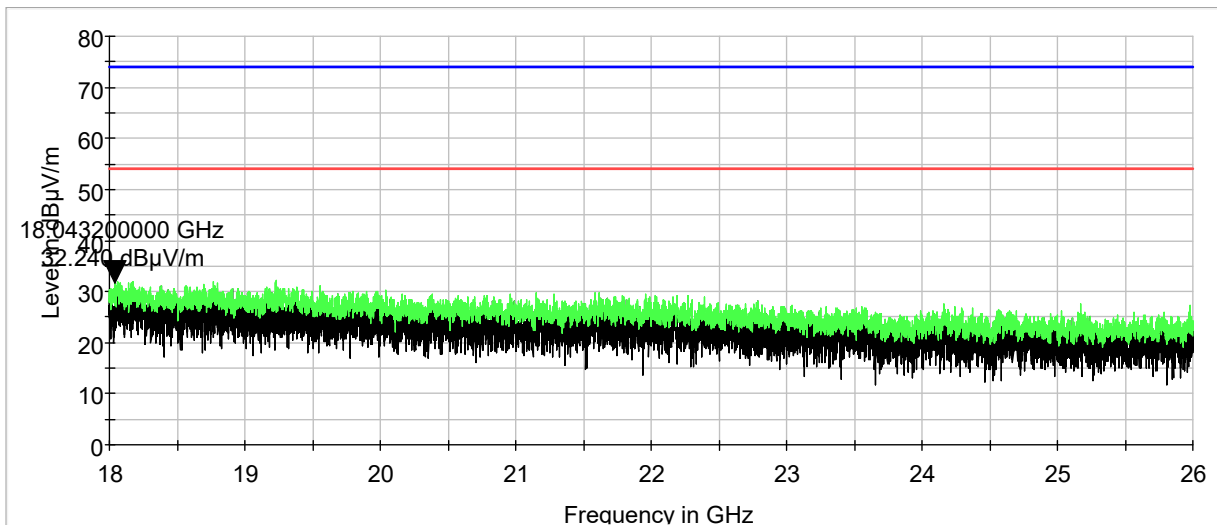




Low Channel, 1 GHz to 18 GHz, Vertical

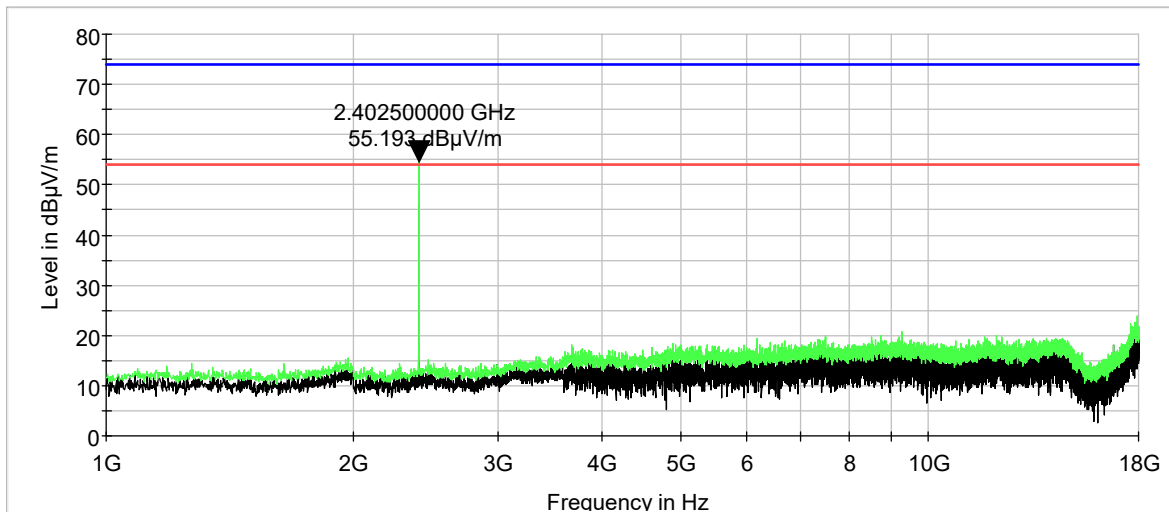


Low Channel, 18 GHz to 26 GHz, Vertical

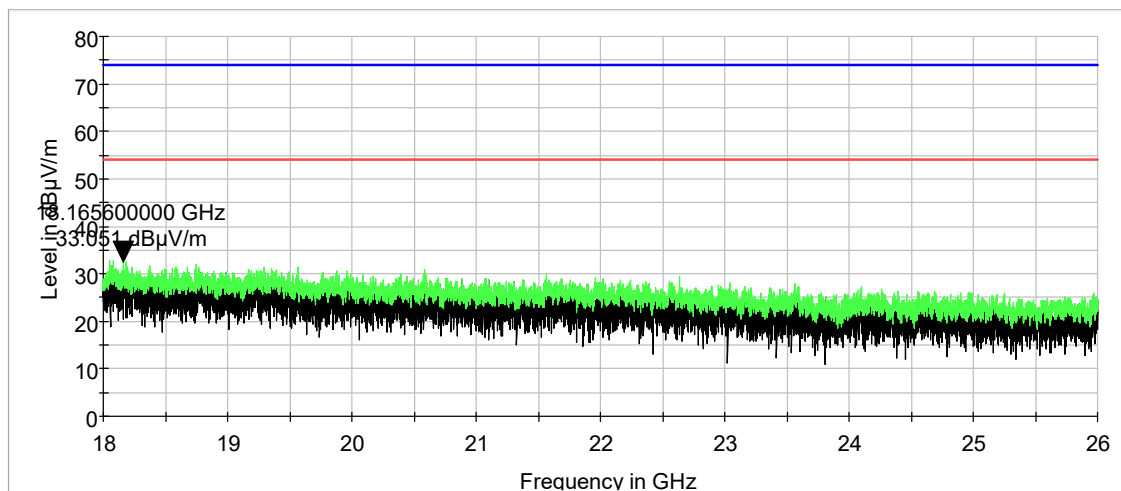




Low Channel, 1 GHz to 18 GHz, Horizontal

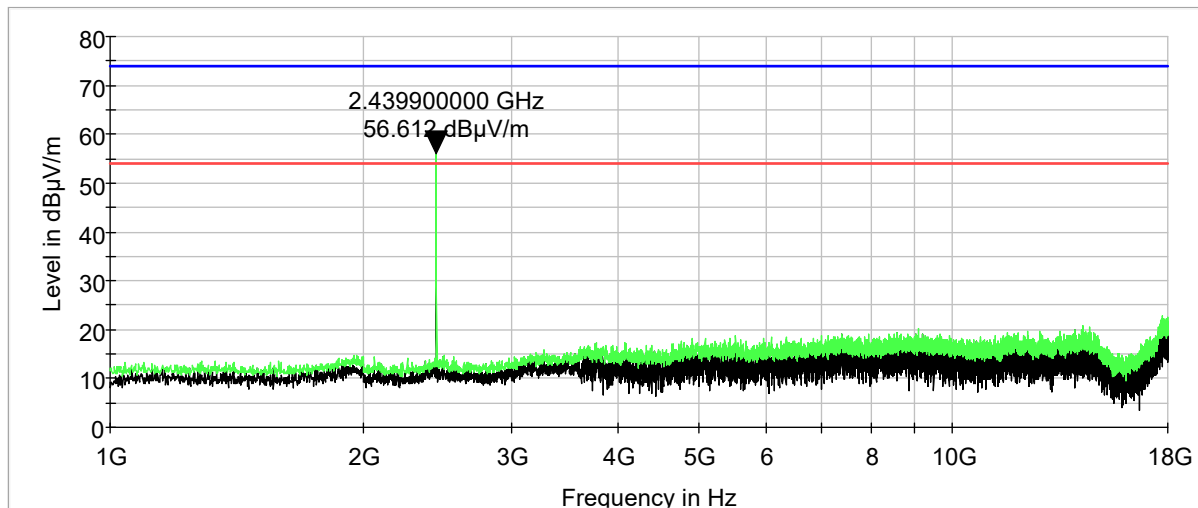


Low Channel, 18 GHz to 26 GHz, Horizontal

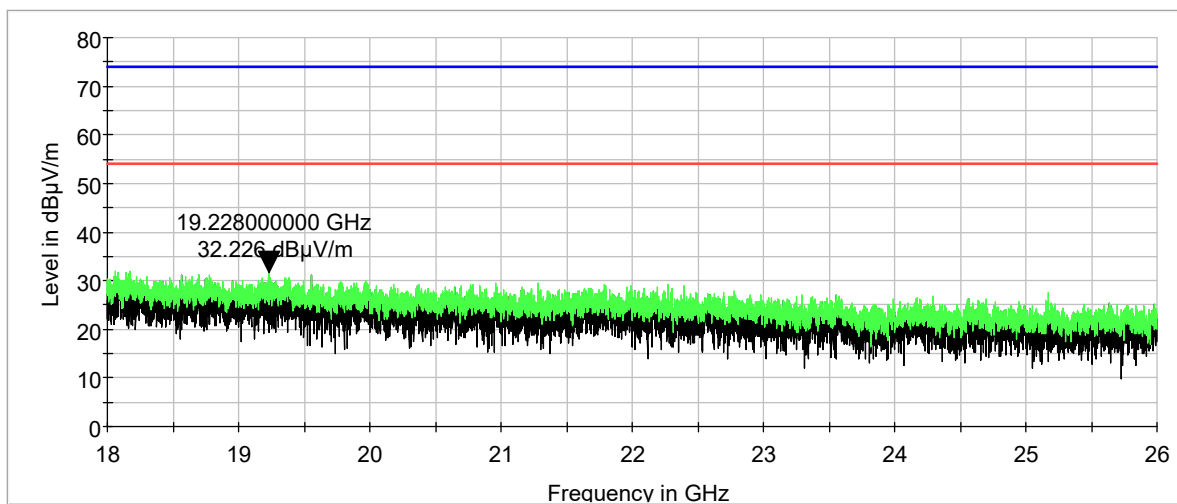




Mid Channel, 1 GHz to 18 GHz, Vertical

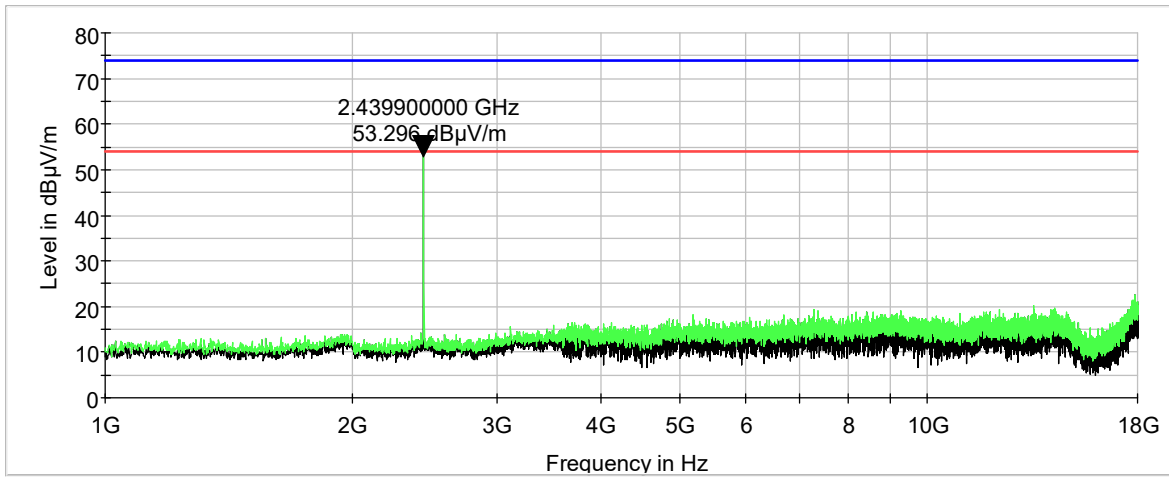


Mid Channel, 18 GHz to 26 GHz, Vertical

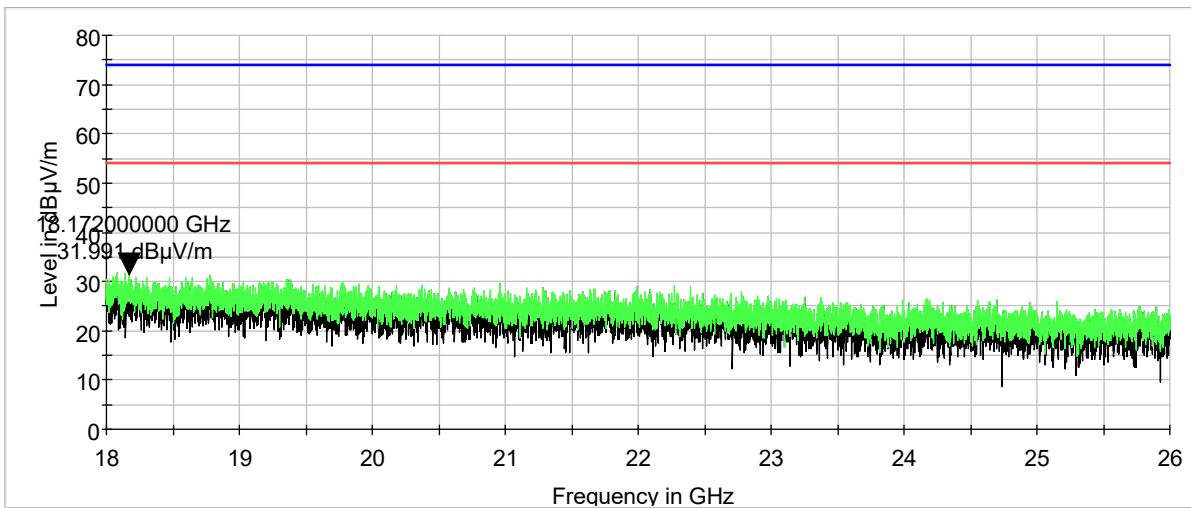




Mid Channel, 1 GHz to 18 GHz, Horizontal

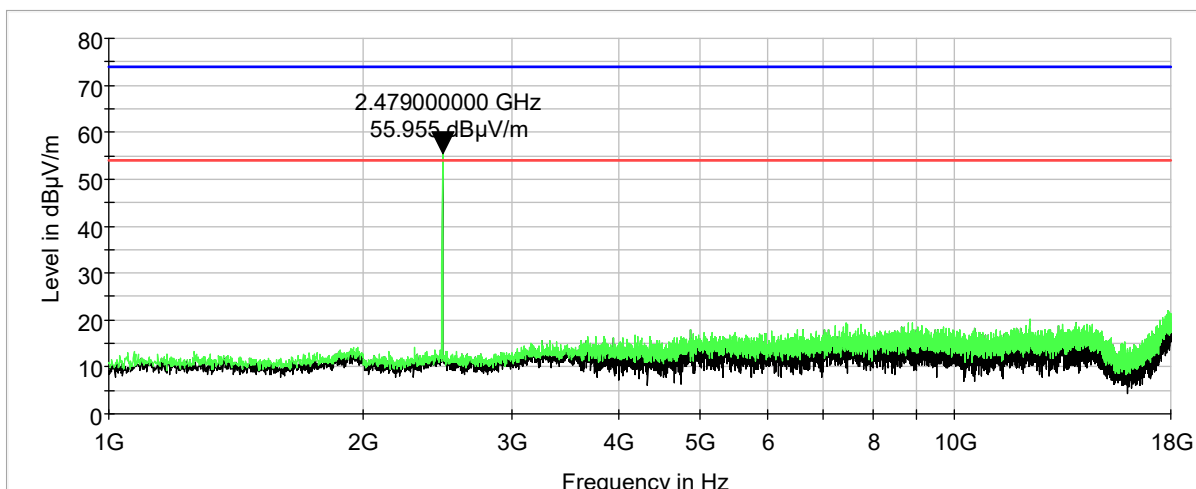


Mid Channel, 18 GHz to 26 GHz, Horizontal

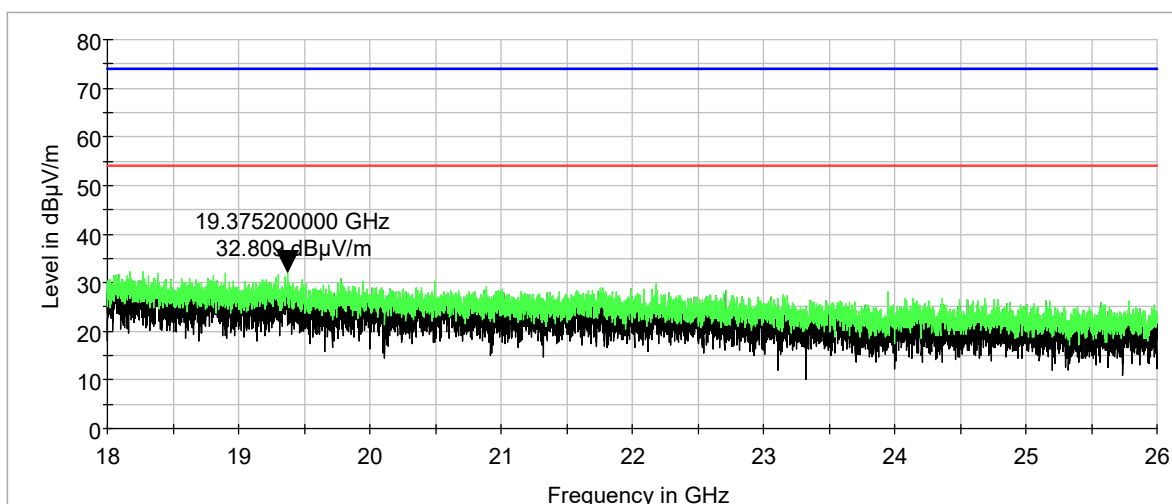




High Channel, 1 GHz to 18 GHz, Vertical

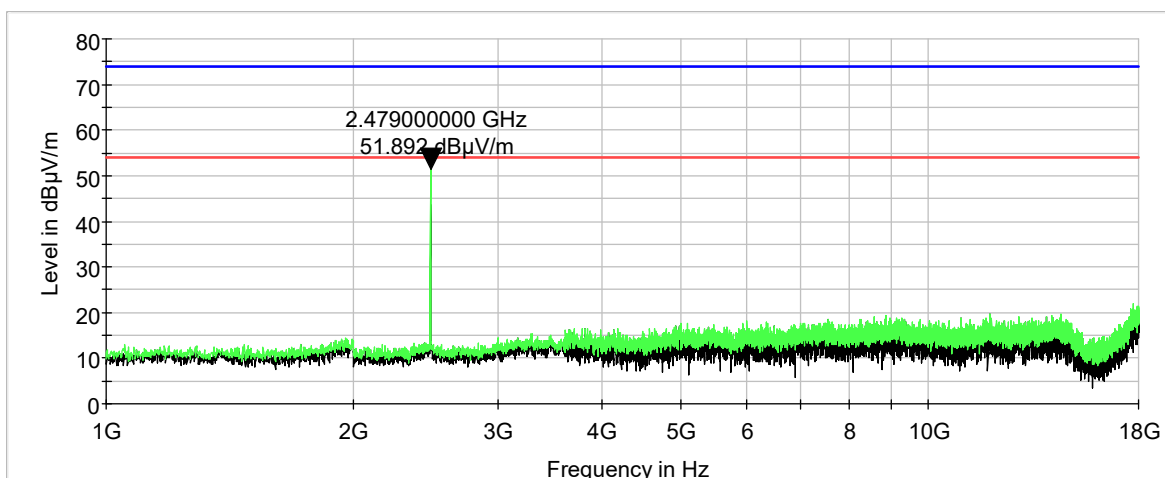


High Channel, 18 GHz to 26 GHz, Vertical

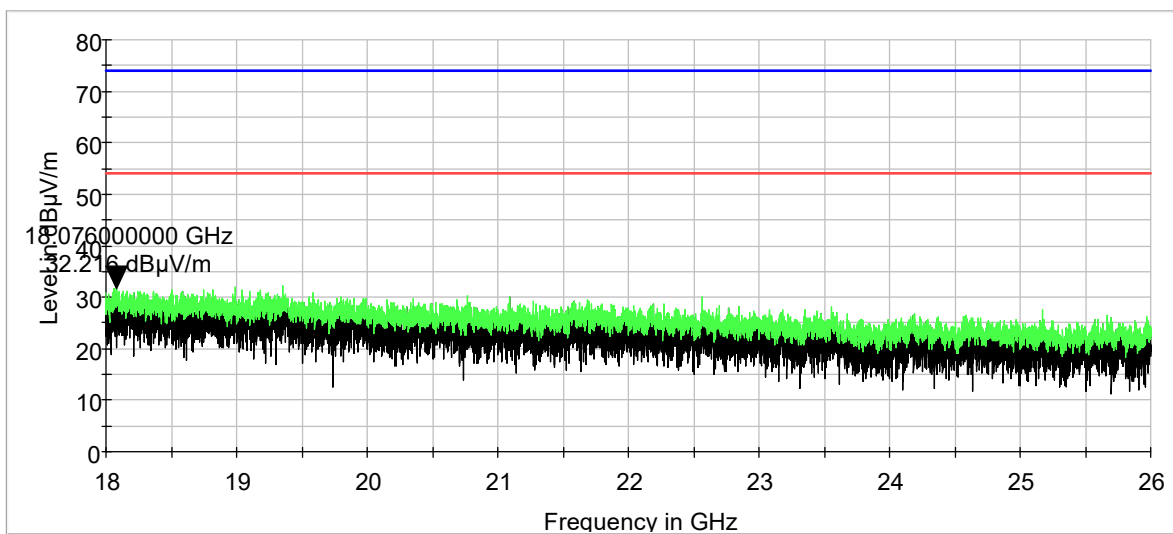




High Channel, 1 GHz to 18 GHz, Horizontal



High Channel, 18 GHz to 26 GHz, Horizontal





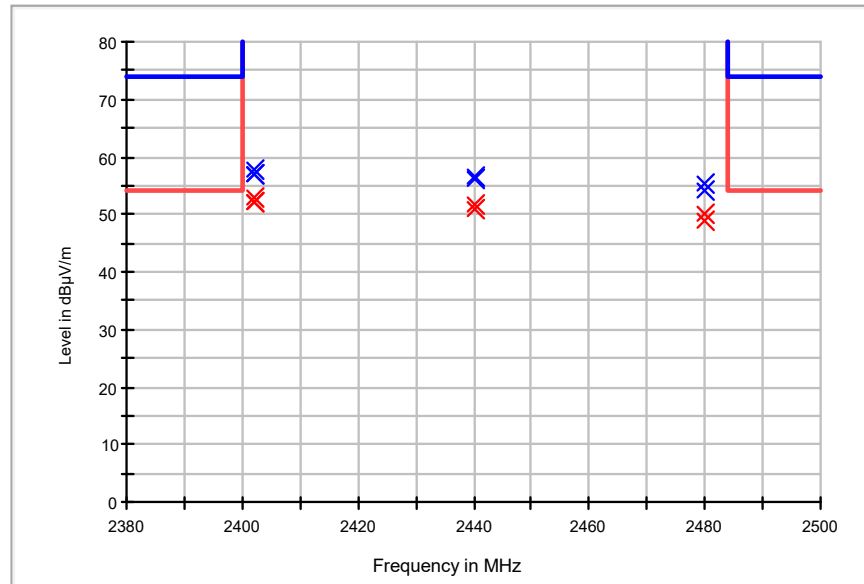
9 VOLTAGE VARIATIONS, 15.31(e)

For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. For battery operated equipment, the equipment tests shall be performed using a new battery. A nominal voltage of 120VAC was used and then 102VAC and 138VAC were used as the 85% and 115% variations.

RESULTS: The results showed that the fundamental frequency did not move outside the frequency band and the field strength did not increase above the limit during the variations.



Test Date:	2020-06-01	Test Engineer:	J. Chiller
Rule:	RSS GEN Part 6.11	Air Temperature:	24.1° C
Test Results:	Pass	Relative Humidity:	31%



Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
2402.000000	57.9	53.0	1000.0	1000.000	150.0	V	106.0	-19.4	41.0	94.0
2402.000000	57.0	52.1	1000.0	1000.000	150.0	V	106.0	-19.4	41.9	94.0
2440.000000	56.8	51.8	1000.0	1000.000	150.0	V	106.0	-19.1	42.2	94.0
2440.000000	56.0	50.9	1000.0	1000.000	150.0	V	106.0	-19.1	43.1	94.0
2480.000000	55.2	50.0	1000.0	1000.000	150.0	V	106.0	-19.1	44.0	94.0
2480.000000	54.0	48.9	1000.0	1000.000	150.0	V	106.0	-19.1	45.1	94.0



10 CONDUCTED EMISSIONS

10.1 Requirements

In accordance with FCC CFR 47 Part 15.207(a), "Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

13.2 Procedure

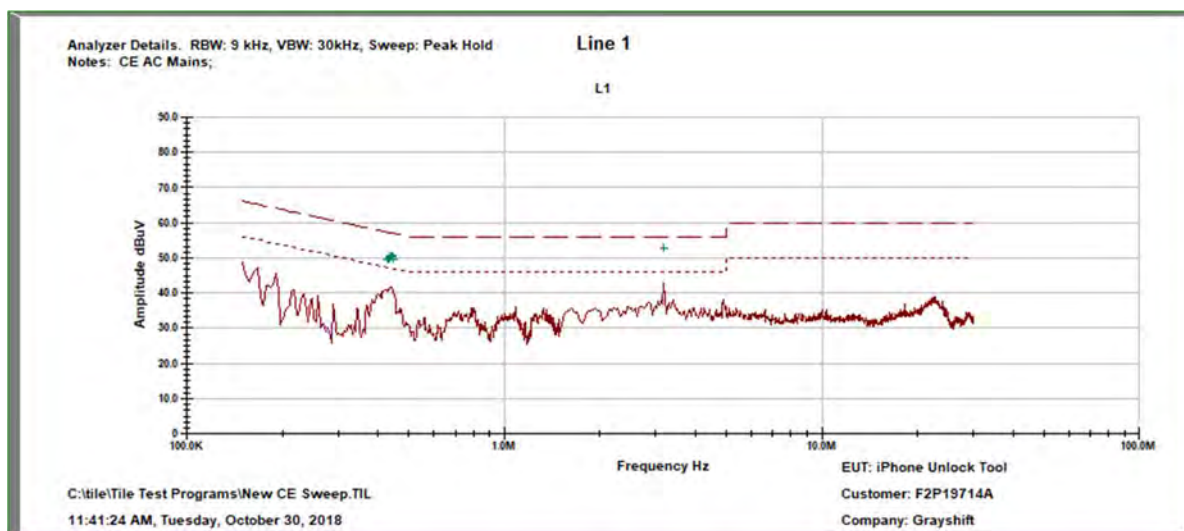
The EUT was placed on a 1.0 x 1.5 meter non-conductive table, 0.8 meter above a horizontal ground plane and 0.4 meter from a vertical ground plane. Power was provided to the EUT through a LISN bonded to a 3 x 2 meter ground plane. The LISN and peripherals were supplied power through a filtered AC power source. The output of the LISN was connected to the input of the receiver via a transient limiter, and emissions in the range 150 kHz to 30 MHz were measured. The measurements were recorded using the quasi-peak and average detectors as directed by the standard, and the resolution bandwidth during testing was 9 kHz. The raw measurements were corrected to allow for attenuation from the LISN, transient limiter and cables.



10.3 Conducted Emissions Test Data

Test Date:	2018-10-10	Test Engineer:	J. Chiller
Rule:	15.207	Air Temperature:	22.1° C
Test Results:	Pass	Relative Humidity:	43%

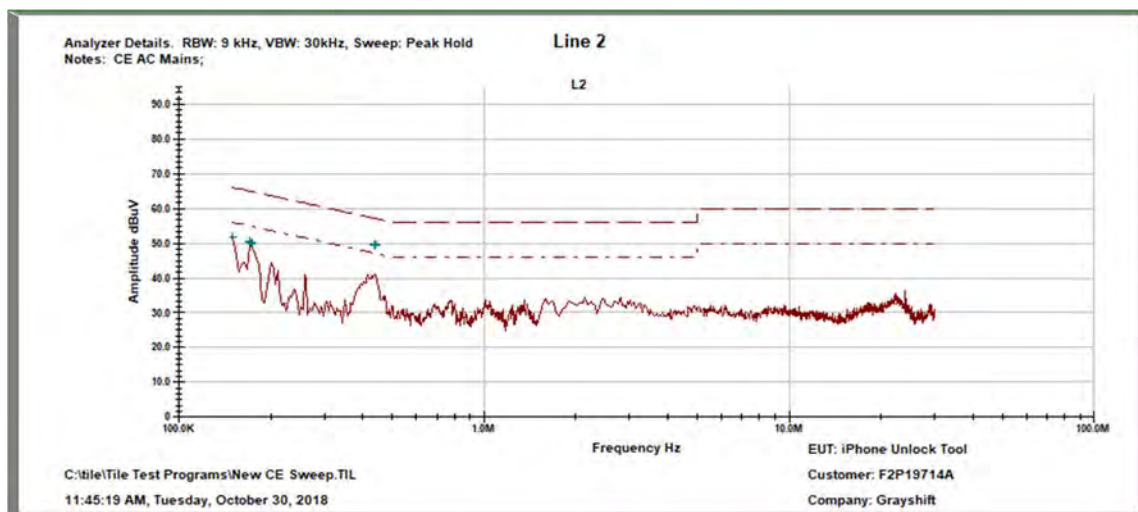
Line 1: 0.15 MHz to 30 MHz



Top Discrete Measurements								
No.	Conductor	Frequency (MHz)	Detector	Level (dBμV)	Adjustment (dB)	Results (dBμV)	Limit (dBμV)	Margin (dB)
1	Line 1	0.42675	Quasi-Peak	29.385	10.457	39.842	57.316	-17.474
		0.42675	Average	25.269	10.457	35.726	47.316	-11.590
2	Line 1	0.4335	Quasi-Peak	30.559	10.452	41.011	57.186	-16.175
		0.4335	Average	23.301	10.452	33.753	57.186	-23.433
3	Line 1	0.435	Quasi-Peak	30.650	10.451	41.101	57.157	-16.056
		0.435	Average	21.353	10.451	31.804	47.157	-15.353
4	Line 1	0.436875	Quasi-Peak	30.474	10.450	40.924	57.121	-16.197
		0.436875	Average	23.086	10.450	33.536	57.121	-23.585
5	Line 1	0.44	Quasi-Peak	30.062	10.448	40.510	57.062	-16.55
		0.44	Average	24.075	10.448	34.523	47.062	-12.539
6	Line 1	0.44025	Quasi-Peak	30.163	10.448	40.611	57.057	-16.446
		0.44025	Average	26.241	10.448	36.689	47.057	-10.368
7	Line 1	0.443625	Quasi-Peak	29.004	10.446	39.450	56.994	-17.544
		0.443625	Average	23.006	10.446	33.452	46.994	-13.542
8	Line 1	0.445	Quasi-Peak	28.806	10.445	39.251	56.968	-17.717
		0.445	Average	23.209	10.445	33.654	46.968	-13.314
9	Line 1	0.447	Quasi-Peak	27.483	10.444	37.927	56.931	-19.004
		0.447	Average	20.920	10.444	31.364	46.931	-15.567
10	Line 1	3.1875	Quasi-Peak	22.032	10.287	32.319	56.0	-23.681
		3.1875	Average	13.569	10.287	23.856	46.0	-22.144



Conducted Test – Line 2: 0.15 MHz to 30 MHz



Top Discrete Measurements								
No.	Conductor	Frequency (MHz)	Detector	Level (dBμV)	Adjustment (dB)	Results (dBμV)	Limit (dBμV)	Margin (dB)
1	Line 2	0.15	Quasi-Peak	34.520	11.555	46.075	66.0	-19.925
		0.15	Average	18.326	11.555	29.881	56.0	-26.119
2	Line 2	0.17	Quasi-Peak	31.516	11.290	42.806	64.961	-22.155
		0.17	Average	20.788	11.290	32.078	54.961	-22.883
3	Line 2	0.17025	Quasi-Peak	31.499	11.287	42.786	64.949	-22.163
		0.17025	Average	17.739	11.287	29.026	54.949	-25.923
4	Line 2	0.172749	Quasi-Peak	30.964	11.259	42.223	64.828	-22.605
		0.172749	Average	16.866	11.259	28.125	54.828	-26.703
5	Line 2	0.173625	Quasi-Peak	31.065	11.252	42.317	64.786	-22.47
		0.173625	Average	15.374	11.252	26.626	54.786	-28.160
6	Line 2	0.435	Quasi-Peak	28.630	10.451	39.081	57.157	-18.076
		0.435	Average	22.339	10.451	32.790	47.157	-14.367
7	Line 2	0.436875	Quasi-Peak	28.452	10.450	38.902	57.121	-18.219
		0.436875	Average	23.097	10.450	33.547	47.121	-13.574
8	Line 2	0.44	Quasi-Peak	27.917	10.448	38.365	57.062	-18.697
		0.44	Average	21.999	10.448	32.447	47.062	-14.615
9	Line 2	0.44025	Quasi-Peak	27.942	10.448	38.390	57.057	-18.667
		0.44025	Average	23.135	10.448	33.583	47.057	-13.474
10	Line 2	0.443625	Quasi-Peak	26.620	10.446	37.066	56.994	-19.928
		0.443625	Average	21.291	10.446	31.737	46.994	-15.257

11 PHOTOGRAPHS - TEST SETUPS

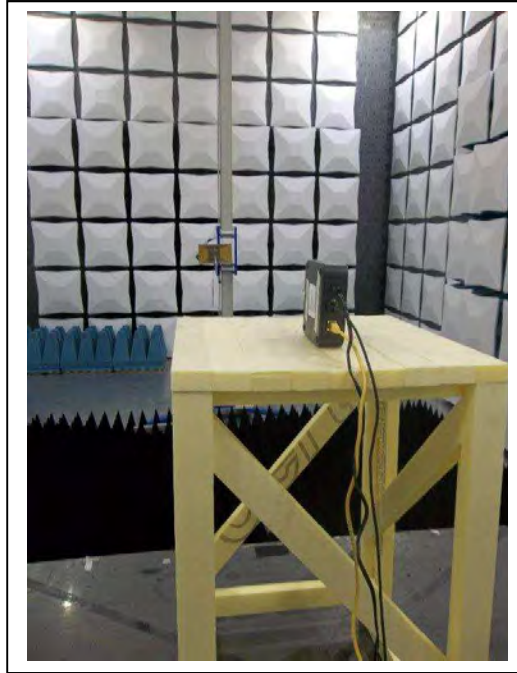
Radiated Spurious Emissions: 0.15 MHz to 30 MHz



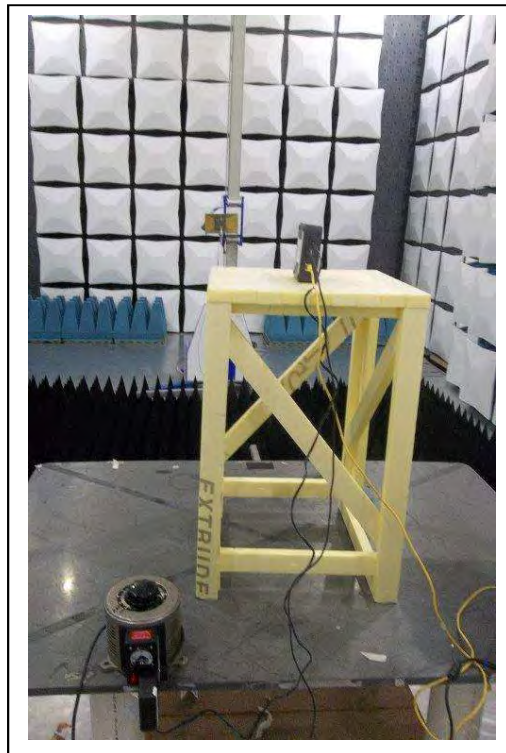
Radiated Spurious Emissions: 30 MHz to 1000 MHz



Field Strength of Emissions, Greater Than 1 GHz



Voltage Variations





Conducted Emissions

