

Test Report

Report No.: MTi231109003-07E3
Date of issue: 2024-01-18
Applicant: SHENZHEN POWEROAK NEWENER CO., LTD
Product: EMS Controller
Model(s): SEC-G1
FCC ID: 2AYT3-SEC-G1

Shenzhen Microtest Co., Ltd.

<http://www.mtitest.com>

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Test Result Certification	
Applicant:	SHENZHEN POWEROAK NEWENER CO., LTD
Address:	F19, BLD No.1, Kaidaer, Tongsha Rd No.168, Xili Street, Nanshan, Shenzhen, China
Manufacturer:	SHENZHEN POWEROAK NEWENER CO., LTD
Address:	F19, BLD No.1, Kaidaer, Tongsha Rd No.168, Xili Street, Nanshan, Shenzhen, China
Product description	
Product name:	EMS Controller
Trademark:	BLUETTI
Model name:	SEC-G1
Series Model(s):	N/A
Standards:	47 CFR Part 15.247
Test Method:	ANSI C63.10-2013 KDB 558074 D01 15.247 Meas Guidance v05r02
Date of Test	
Date of test:	2024-01-02 to 2024-01-18
Test result:	Pass

Test Engineer	:	<i>David. Lee</i>
		(David Lee)
Reviewed By	:	<i>Leon Chen</i>
		(Leon Chen)
Approved By	:	<i>Tom Xue</i>
		(Tom Xue)

1 General Description

1.1 Description of the EUT

Product name:	EMS Controller
Model name:	SEC-G1
Series Model(s):	N/A
Model difference:	N/A
Electrical rating:	Input: DC 9-15V, 0.6A Max, power by POE
Accessories:	N/A
Hardware version:	V6.0
Software version:	905209
Test sample(s) number:	MTi231109003-07S1001
RF specification	
Operating frequency range:	802.11b/g/n20:2412~2462 MHz 802.11n40:2422~2452 MHz
Channel number:	802.11b/g/n20: 11 Channels; 802.11n40: 7 Channels
Modulation type:	IEEE 802.11b: DSSS (DBPSK, DQPSK, CCK) IEEE 802.11g/n (HT20/HT40) : OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna(s) gain:	Module 1(ESP32-WROVER-E): PCB Antenna: 3.4 dBi Module 2(ESP32-WROVER-IE): Omni Antenna with SMA: 2.33 dBi

1.2 Description of test modes

No.	Emission test modes
Mode1	802.11b TX mode(Module 1)
Mode2	802.11g TX mode(Module 1)
Mode3	802.11n(HT20) TX mode(Module 1)
Mode4	802.11n(HT40) TX mode(Module 1)
Mode5	802.11b TX mode(Module 2)
Mode6	802.11g TX mode(Module 2)
Mode7	802.11n(HT20) TX mode(Module 2)
Mode8	802.11n(HT40) TX mode(Module 2)

1.2.1 Operation channel list

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	5	2432	9	2452
2	2417	6	2437	10	2457
3	2422	7	2442	11	2462
4	2427	8	2447	/	/

Test Channel List
Operation Band: 2400-2483.5 MHz

Bandwidth (MHz)	Lowest Channel (LCH) (MHz)	Middle Channel (MCH) (MHz)	Highest Channel (HCH) (MHz)
20	2412	2437	2462
40	2422	2437	2452

Note: The test software provided by manufacturer is used to control EUT for working in engineering mode, that enables selectable channel, and capable of continuous transmitting mode.

Test Software:

For power setting, refer to below table.

Module 1:

Test Software		EspRFTestTool		
Mode	2412MHz	2437MHz	2462MHz	
802.11b	13	0	13	
802.11g	26	0	26	
802.11n(HT20)	25	0	26	
/	2422MHz	2437MHz	2452MHz	
802.11n(HT40)	23	0	28	

Module 2:

Test Software		EspRFTestTool		
Mode	2412MHz	2437MHz	2462MHz	
802.11b	15	1	15	
802.11g	10	0	12	
802.11n(HT20)	12	0	13	
/	2422MHz	2437MHz	2452MHz	
802.11n(HT40)	8	0	15	

1.3 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15°C ~ 35°C
Humidity:	20% RH ~ 75% RH
Atmospheric pressure:	98 kPa ~ 101 kPa

1.4 Description of support units

Support equipment list			
Description	Model	Serial No.	Manufacturer
DC power source	RNX-305D	/	SHENZHEN ZHAOXIN ELECTRONIC INSTRUMENT EQUIPMENT CO., LTD.
Battery	DC 12V	/	camel
Support cable list			
Description	Length (m)	From	To
/	/	/	/

1.5 Measurement uncertainty

Measurement	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	±3.1dB
Occupied channel bandwidth	±3 %
RF output power, conducted	±1 dB
Power Spectral Density, conducted	±1 dB
Unwanted Emissions, conducted	±1 dB
Radiated spurious emissions (above 1GHz)	±5.3dB
Radiated spurious emissions (9kHz~30MHz)	±4.3dB
Radiated spurious emissions (30MHz~1GHz)	±4.7dB
Temperature	±1 °C
Humidity	± 5 %

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

2 Summary of Test Result

No.	Item	Standard	Requirement	Result
1	Antenna requirement	47 CFR Part 15.247	47 CFR 15.203	Pass
2	Conducted Emission at AC power line	47 CFR Part 15.247	47 CFR 15.207(a)	Pass
3	6dB Bandwidth	47 CFR Part 15.247	47 CFR 15.247(a)(2)	Pass
4	Maximum Conducted Output Power	47 CFR Part 15.247	47 CFR 15.247(b)(3)	Pass
5	Power Spectral Density	47 CFR Part 15.247	47 CFR 15.247(e)	Pass
6	RF conducted spurious emissions and band edge measurement	47 CFR Part 15.247	47 CFR 15.247(d), 15.209, 15.205	Pass
7	Band edge emissions (Radiated)	47 CFR Part 15.247	47 CFR 15.247(d), 15.209, 15.205	Pass
8	Radiated emissions (below 1GHz)	47 CFR Part 15.247	47 CFR 15.247(d), 15.209, 15.205	Pass
9	Radiated emissions (above 1GHz)	47 CFR Part 15.247	47 CFR 15.247(d), 15.209, 15.205	Pass

3 Test Facilities and accreditations

3.1 Test laboratory

Test laboratory:	Shenzhen Microtest Co., Ltd.
Test site location:	101, No.7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Telephone:	(86-755)88850135
Fax:	(86-755)88850136
CNAS Registration No.:	CNAS L5868
FCC Registration No.:	448573
IC Registration No.:	21760
CABID:	CN0093

4 List of test equipment

No.	Equipment	Manufacturer	Model	Serial No.	Cal. date	Cal. Due
Conducted Emission at AC power line						
1	EMI Test Receiver	Rohde&schwarz	ESCI3	101368	2023-04-26	2024-04-25
2	Artificial mains network	Schwarzbeck	NSLK 8127	183	2023-05-05	2024-05-04
3	Artificial Mains Network	Rohde & Schwarz	ESH2-Z5	100263	2023-06-03	2024-06-02
6dB Bandwidth Maximum Conducted Output Power Power Spectral Density RF conducted spurious emissions and band edge measurement						
1	Wideband Radio Communication Tester	Rohde&schwarz	CMW500	149155	2023-04-26	2024-04-25
2	ESG Series Analog Signal Generator	Agilent	E4421B	GB40051240	2023-04-25	2024-04-24
3	PXA Signal Analyzer	Agilent	N9030A	MY51350296	2023-04-25	2024-04-24
4	Synthesized Sweeper	Agilent	83752A	3610A01957	2023-04-25	2024-04-24
5	MXA Signal Analyzer	Agilent	N9020A	MY50143483	2023-04-26	2024-04-25
6	RF Control Unit	Tonscend	JS0806-1	19D8060152	2023-04-26	2024-04-25
7	Band Reject Filter Group	Tonscend	JS0806-F	19D8060160	2023-05-05	2024-05-04
8	ESG Vector Signal Generator	Agilent	N5182A	MY50143762	2023-04-25	2024-04-24
9	DC Power Supply	Agilent	E3632A	MY40027695	2023-05-05	2024-05-04
Band edge emissions (Radiated) Radiated emissions (above 1GHz)						
1	EMI Test Receiver	Rohde&schwarz	ESCI7	101166	2023-04-26	2024-04-25
2	Double Ridged Broadband Horn Antenna	schwarabeck	BBHA 9120 D	2278	2023-06-17	2025-06-16
3	Amplifier	Agilent	8449B	3008A01120	2023-06-26	2024-06-25
4	Multi-device Controller	TuoPu	TPMDC	/	2023-05-04	2024-05-03
5	MXA signal analyzer	Agilent	N9020A	MY54440859	2023-06-01	2024-05-31
Radiated emissions (below 1GHz)						
1	EMI Test Receiver	Rohde&schwarz	ESCI7	101166	2023-04-26	2024-04-25
2	TRILOG Broadband Antenna	schwarabeck	VULB 9163	9163-1338	2023-06-11	2025-06-10
3	Active Loop Antenna	Schwarzbeck	FMZB 1519 B	00066	2023-06-11	2025-06-10
4	Amplifier	Hewlett-Packard	8447F	3113A06184	2023-04-25	2024-04-24
5	Multi-device Controller	TuoPu	TPMDC	/	2023-05-04	2024-05-03

5 Evaluation Results (Evaluation)

5.1 Antenna requirement

Test Requirement:	Refer to 47 CFR Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.
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5.1.1 Conclusion:

The antenna of the EUT is permanently attached. The EUT complies with the requirement of FCC PART 15.203.
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6 Radio Spectrum Matter Test Results (RF)

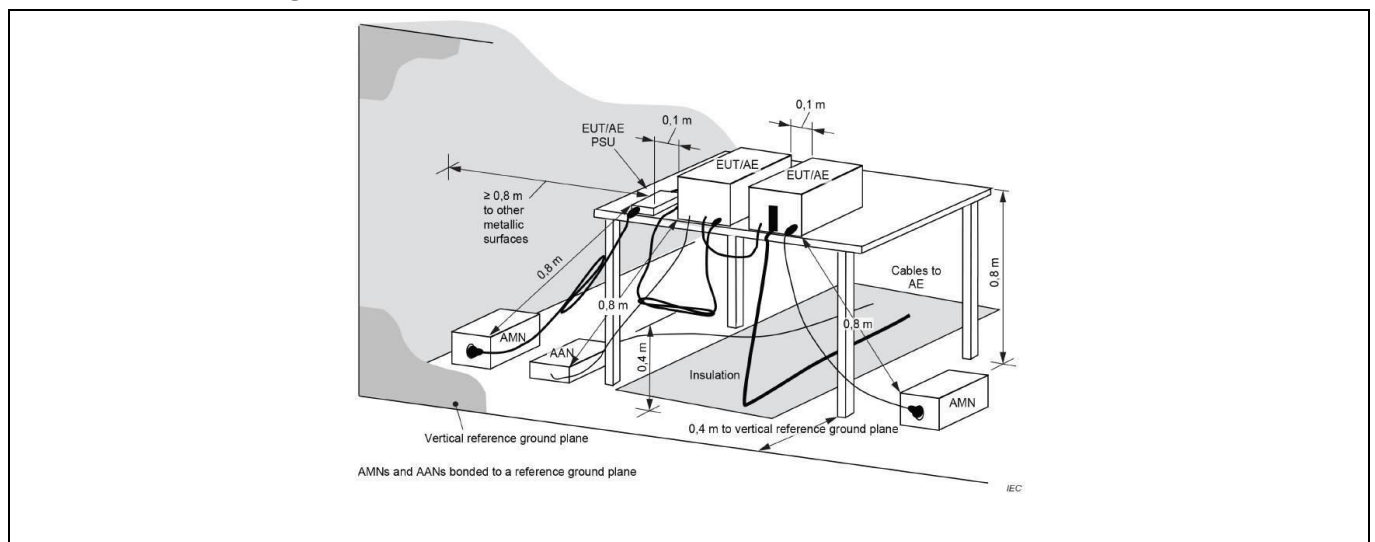
6.1 Conducted Emission at AC power line

Test Requirement:	Refer to 47 CFR 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).		
Test Limit:	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.		
Test Method:	ANSI C63.10-2013 section 6.2		
Procedure:	Refer to ANSI C63.10-2013 section 6.2, standard test method for ac power-line conducted emissions from unlicensed wireless devices		

6.1.1 E.U.T. Operation:

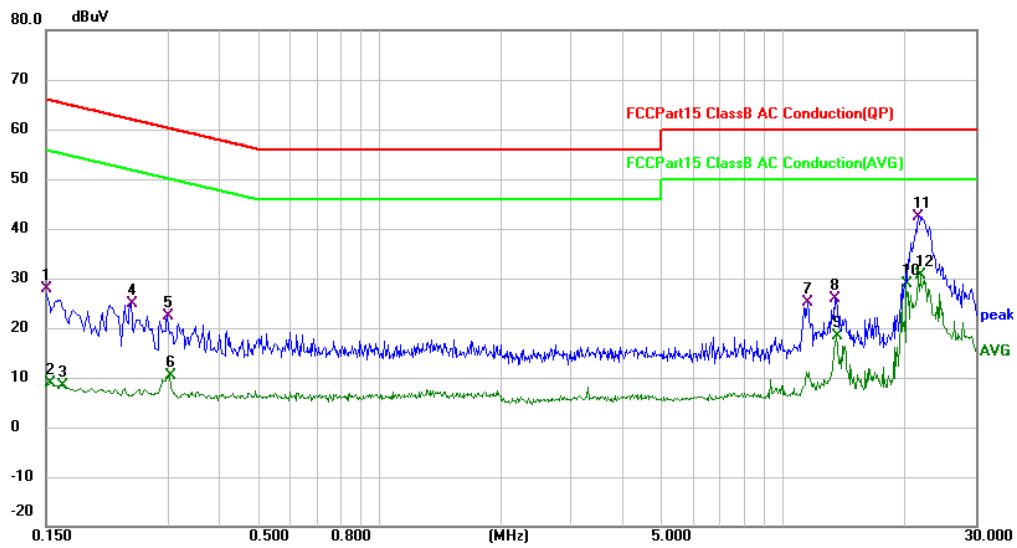
Operating Environment:					
Temperature:	24.8 °C	Humidity:	42 %	Atmospheric Pressure:	101 kPa
Pre test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8				
Final test mode:	All of the listed pre-test mode were tested, only the data of the worst mode (Mode1) is recorded in the report				

6.1.2 Test Setup Diagram:



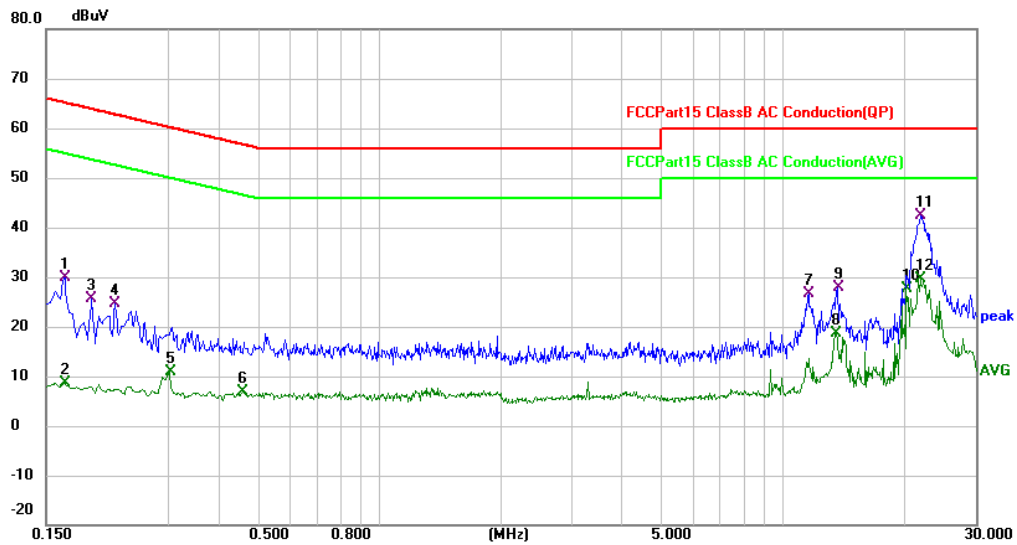
6.1.3 Test Data:

Mode1 / Line: Line / CH: L



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dB	Over dB	Detector	Comment
1		0.1500	17.58	10.28	27.86	66.00	-38.14	QP	
2		0.1539	-1.35	10.28	8.93	55.79	-46.86	AVG	
3		0.1641	-1.93	10.28	8.35	55.25	-46.90	AVG	
4		0.2420	14.22	10.75	24.97	62.03	-37.06	QP	
5		0.2980	11.50	10.87	22.37	60.30	-37.93	QP	
6		0.3020	-0.61	10.87	10.26	50.19	-39.93	AVG	
7		11.5219	14.61	10.45	25.06	60.00	-34.94	QP	
8		13.4780	15.34	10.47	25.81	60.00	-34.19	QP	
9		13.6020	7.85	10.49	18.34	50.00	-31.66	AVG	
10		20.2580	18.24	10.65	28.89	50.00	-21.11	AVG	
11	*	21.6660	31.72	10.69	42.41	60.00	-17.59	QP	
12		21.9100	19.91	10.71	30.62	50.00	-19.38	AVG	

Mode1 / Line: Neutral / CH: L



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1660	19.72	10.26	29.98	65.16	-35.18	QP	
2		0.1660	-1.55	10.26	8.71	55.16	-46.45	AVG	
3		0.1940	15.09	10.59	25.68	63.86	-38.18	QP	
4		0.2220	13.87	10.65	24.52	62.74	-38.22	QP	
5		0.3020	0.10	10.84	10.94	50.19	-39.25	AVG	
6		0.4580	-4.37	11.21	6.84	46.73	-39.89	AVG	
7		11.5859	16.36	10.37	26.73	60.00	-33.27	QP	
8		13.6019	8.31	10.44	18.75	50.00	-31.25	AVG	
9		13.6619	17.55	10.45	28.00	60.00	-32.00	QP	
10		20.2580	16.99	10.69	27.68	50.00	-22.32	AVG	
11	*	21.9060	31.65	10.74	42.39	60.00	-17.61	QP	
12		21.9060	18.91	10.74	29.65	50.00	-20.35	AVG	

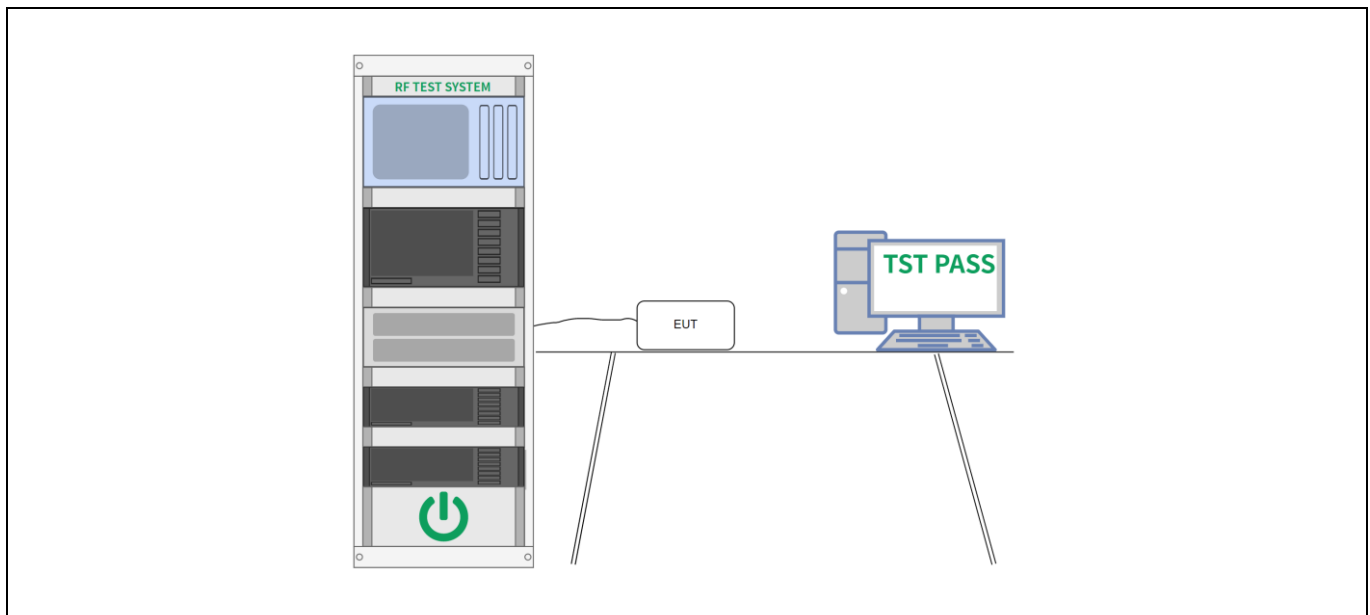
6.2 6dB Bandwidth

Test Requirement:	47 CFR 15.247(a)(2)
Test Limit:	Refer to 47 CFR 15.247(a)(2), Systems using digital modulation techniques may operate in the 902-928 MHz, and 2400-2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.
Test Method:	ANSI C63.10-2013, section 11.8 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	a) Set RBW = 100 kHz. b) Set the VBW \geq [3 × RBW]. c) Detector = peak. d) Trace mode = max hold. e) Sweep = auto couple. f) Allow the trace to stabilize. g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.2.1 E.U.T. Operation:

Operating Environment:					
Temperature:	24 °C	Humidity:	50 %	Atmospheric Pressure:	100 kPa
Pre test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8				
Final test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8				

6.2.2 Test Setup Diagram:



6.2.3 Test Data:

Please Refer to Appendix- 2.4G WIFI test data (Module 1), Appendix- 2.4G WIFI test data (Module 2) for Details.

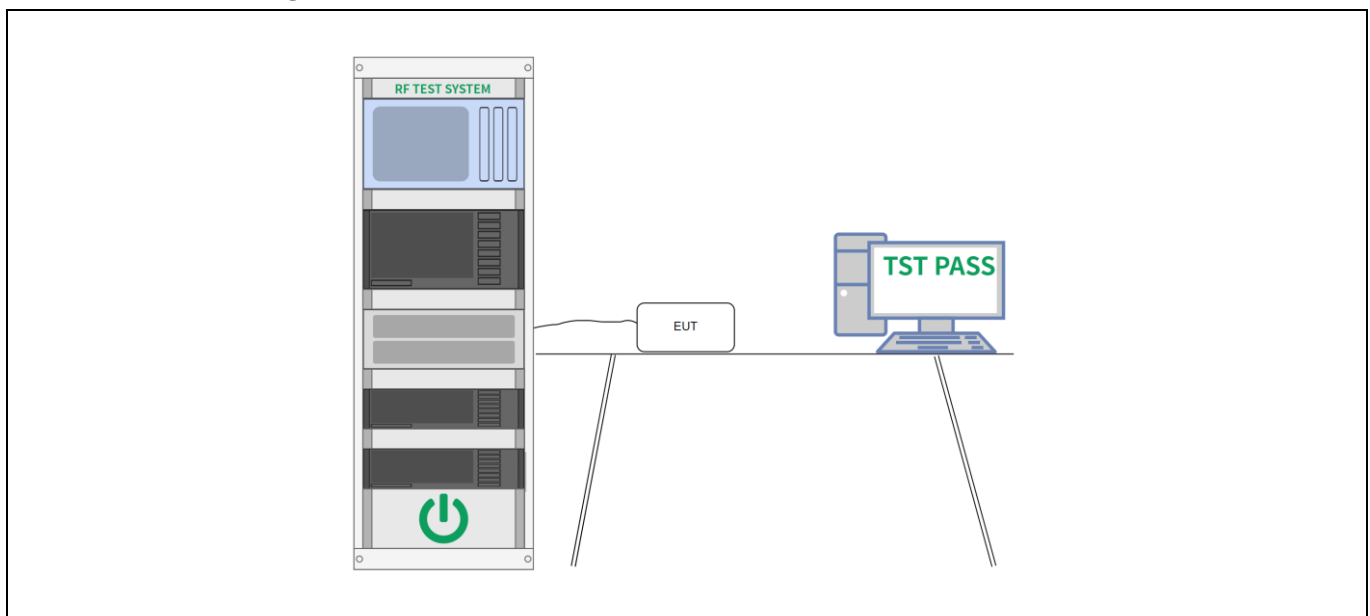
6.3 Maximum Conducted Output Power

Test Requirement:	47 CFR 15.247(b)(3)
Test Limit:	Refer to 47 CFR 15.247(b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.
Test Method:	ANSI C63.10-2013, section 11.9.1 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013, section 11.9.1 Maximum peak conducted output power

6.3.1 E.U.T. Operation:

Operating Environment:					
Temperature:	24 °C	Humidity:	50 %	Atmospheric Pressure:	100 kPa
Pre test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8				
Final test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8				

6.3.2 Test Setup Diagram:



6.3.3 Test Data:

Please Refer to Appendix- 2.4G WIFI test data (Module 1), Appendix- 2.4G WIFI test data (Module 2) for Details

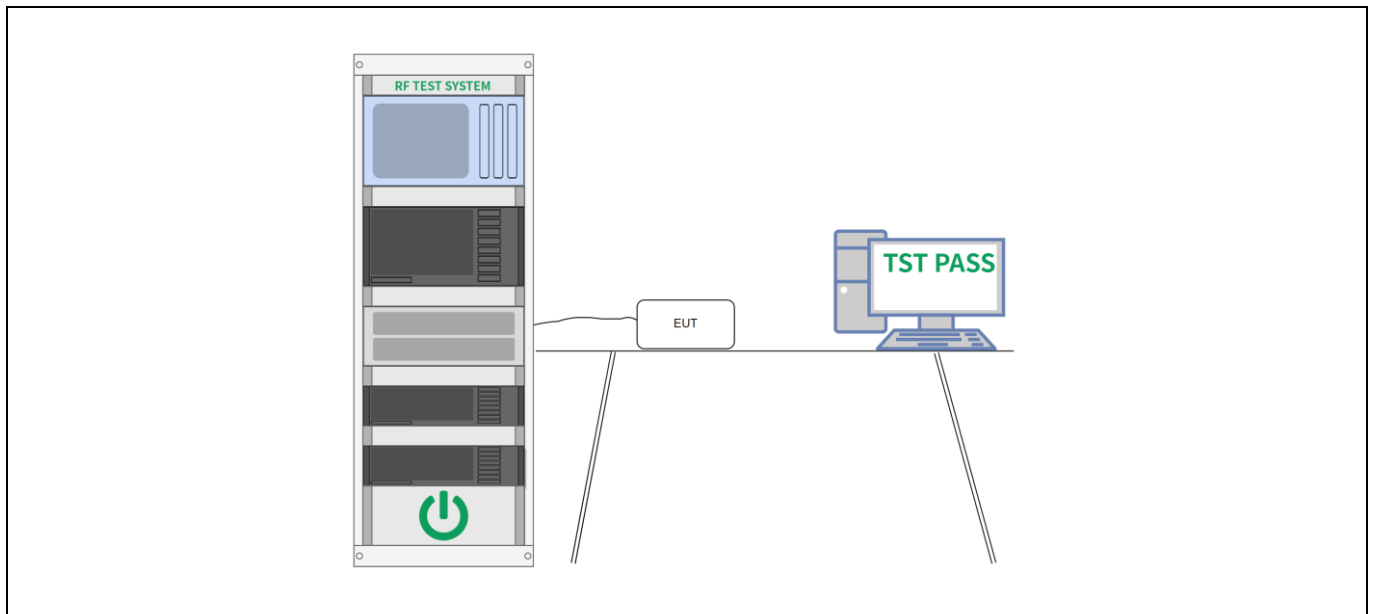
6.4 Power Spectral Density

Test Requirement:	47 CFR 15.247(e)
Test Limit:	Refer to 47 CFR 15.247(e), 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. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.
Test Method:	ANSI C63.10-2013, section 11.10 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013, section 11.10, Maximum power spectral density level in the fundamental emission

6.4.1 E.U.T. Operation:

Operating Environment:					
Temperature:	24 °C	Humidity:	50 %	Atmospheric Pressure:	100 kPa
Pre test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8				
Final test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8				

6.4.2 Test Setup Diagram:



6.4.3 Test Data:

Please Refer to Appendix- 2.4G WIFI test data (Module 1), Appendix- 2.4G WIFI test data (Module 2) for Details

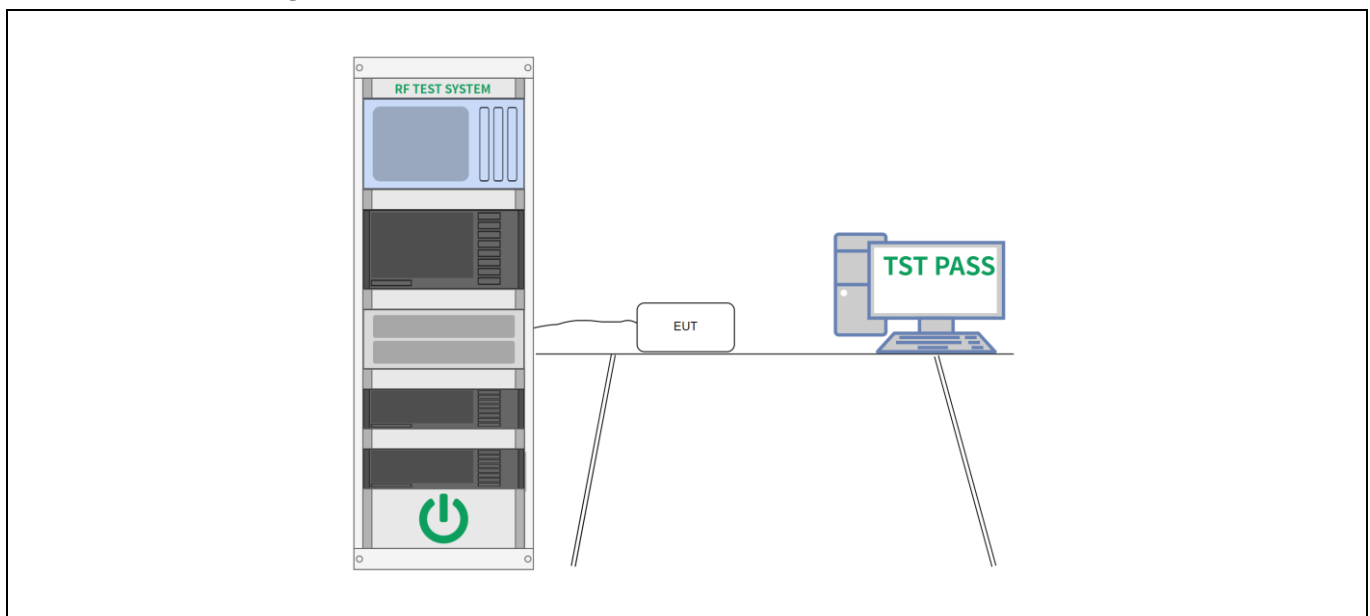
6.5 RF conducted spurious emissions and band edge measurement

Test Requirement:	47 CFR 15.247(d), 15.209, 15.205
Test Limit:	Refer to 47 CFR 15.247(d), 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, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required.
Test Method:	ANSI C63.10-2013 section 11.11 KDB 558074 D01 15.247 Meas Guidance v05r02
Procedure:	ANSI C63.10-2013 Section 11.11.1, Section 11.11.2, Section 11.11.3

6.5.1 E.U.T. Operation:

Operating Environment:					
Temperature:	24 °C	Humidity:	50 %	Atmospheric Pressure:	100 kPa
Pre test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8				
Final test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8				

6.5.2 Test Setup Diagram:



6.5.3 Test Data:

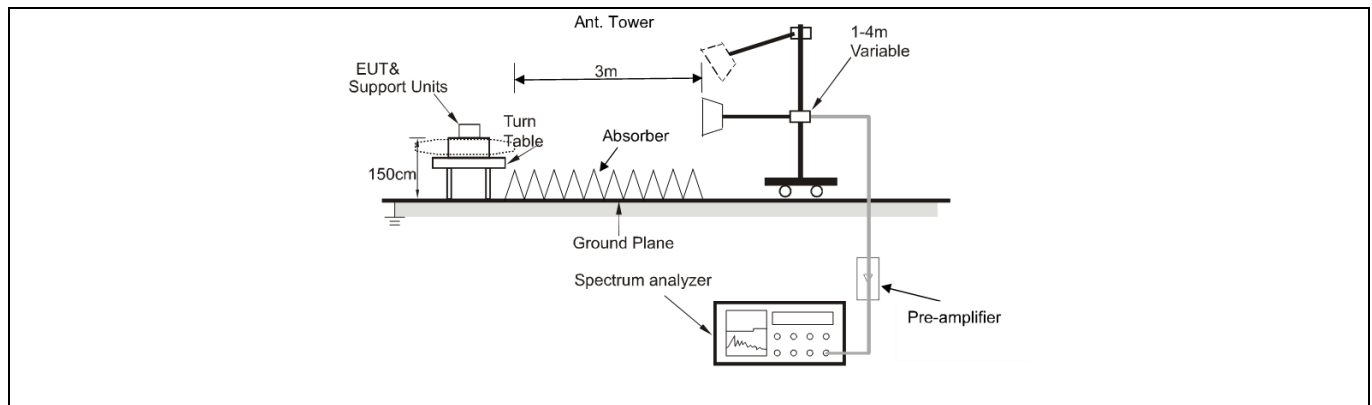
Please Refer to Appendix- 2.4G WIFI test data (Module 1), Appendix- 2.4G WIFI test data (Module 2) for Details

6.6 Band edge emissions (Radiated)

Test Requirement:	Refer to 47 CFR 15.247(d), In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).`		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (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., §§ 15.231 and 15.241. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.		
Test Method:	ANSI C63.10-2013 section 6.10 KDB 558074 D01 15.247 Meas Guidance v05r02		
Procedure:	ANSI C63.10-2013 section 6.10.5.2		

6.6.1 E.U.T. Operation:

Operating Environment:					
Temperature:	26 °C	Humidity:	54 %	Atmospheric Pressure:	100 kPa
Pre test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8				
Final test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8				
Note: The amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported.					

6.6.2 Test Setup Diagram:


6.6.3 Test Data:

Mode1 / Polarization: Horizontal / CH: L

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2310.000	52.35	-2.66	49.69	74.00	-24.31	peak
2	2310.000	42.16	-2.66	39.50	54.00	-14.50	AVG
3	2390.000	58.82	-2.03	56.79	74.00	-17.21	peak
4 *	2390.000	49.95	-2.03	47.92	54.00	-6.08	AVG

Mode1 / Polarization: Vertical / CH: L

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2310.000	48.74	-2.66	46.08	74.00	-27.92	peak
2	2310.000	38.46	-2.66	35.80	54.00	-18.20	AVG
3	2390.000	52.22	-2.03	50.19	74.00	-23.81	peak
4 *	2390.000	43.04	-2.03	41.01	54.00	-12.99	AVG

Mode1 / Polarization: Horizontal / CH: H

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2483.500	58.78	-1.91	56.87	74.00	-17.13	peak
2 *	2483.500	51.39	-1.91	49.48	54.00	-4.52	AVG
3	2500.000	54.81	-1.80	53.01	74.00	-20.99	peak
4	2500.000	45.95	-1.80	44.15	54.00	-9.85	AVG

Mode1 / Polarization: Vertical / CH: H

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2483.500	52.02	-1.91	50.11	74.00	-23.89	peak
2 *	2483.500	43.12	-1.91	41.21	54.00	-12.79	AVG
3	2500.000	49.19	-1.80	47.39	74.00	-26.61	peak
4	2500.000	39.77	-1.80	37.97	54.00	-16.03	AVG

Mode2 / Polarization: Horizontal / CH: L

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2310.000	51.36	-2.66	48.70	74.00	-25.30	peak
2		2310.000	41.26	-2.66	38.60	54.00	-15.40	AVG
3		2390.000	64.87	-2.03	62.84	74.00	-11.16	peak
4	*	2390.000	51.94	-2.03	49.91	54.00	-4.09	AVG

Mode2 / Polarization: Vertical / CH: L

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2310.000	47.92	-2.66	45.26	74.00	-28.74	peak
2		2310.000	37.85	-2.66	35.19	54.00	-18.81	AVG
3		2390.000	57.33	-2.03	55.30	74.00	-18.70	peak
4	*	2390.000	44.08	-2.03	42.05	54.00	-11.95	AVG

Mode2 / Polarization: Horizontal / CH: H

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2483.500	66.08	-1.91	64.17	74.00	-9.83	peak
2	*	2483.500	52.77	-1.91	50.86	54.00	-3.14	AVG
3		2500.000	52.77	-1.80	50.97	74.00	-23.03	peak
4		2500.000	43.03	-1.80	41.23	54.00	-12.77	AVG

Mode2 / Polarization: Vertical / CH: H

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2483.500	57.34	-1.91	55.43	74.00	-18.57	peak
2	*	2483.500	44.06	-1.91	42.15	54.00	-11.85	AVG
3		2500.000	47.98	-1.80	46.18	74.00	-27.82	peak
4		2500.000	38.70	-1.80	36.90	54.00	-17.10	AVG

Mode3 / Polarization: Horizontal / CH: L

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2310.000	51.48	-2.66	48.82	74.00	-25.18	peak
2	2310.000	41.03	-2.66	38.37	54.00	-15.63	AVG
3	2390.000	68.34	-2.03	66.31	74.00	-7.69	peak
4 *	2390.000	52.26	-2.03	50.23	54.00	-3.77	AVG

Mode3 / Polarization: Vertical / CH: L

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2310.000	47.26	-2.66	44.60	74.00	-29.40	peak
2	2310.000	37.85	-2.66	35.19	54.00	-18.81	AVG
3	2390.000	59.27	-2.03	57.24	74.00	-16.76	peak
4 *	2390.000	44.08	-2.03	42.05	54.00	-11.95	AVG

Mode3 / Polarization: Horizontal / CH: H

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2483.500	69.85	-1.91	67.94	74.00	-6.06	peak
2 *	2483.500	53.27	-1.91	51.36	54.00	-2.64	AVG
3	2500.000	52.70	-1.80	50.90	74.00	-23.10	peak
4	2500.000	42.94	-1.80	41.14	54.00	-12.86	AVG

Mode3 / Polarization: Vertical / CH: H

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2483.500	59.59	-1.91	57.68	74.00	-16.32	peak
2 *	2483.500	44.33	-1.91	42.42	54.00	-11.58	AVG
3	2500.000	47.97	-1.80	46.17	74.00	-27.83	peak
4	2500.000	38.60	-1.80	36.80	54.00	-17.20	AVG

Mode4 / Polarization: Horizontal / CH: L

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2310.000	50.38	-2.66	47.72	74.00	-26.28	peak
2		2310.000	40.76	-2.66	38.10	54.00	-15.90	AVG
3		2390.000	71.17	-2.03	69.14	74.00	-4.86	peak
4	*	2390.000	53.89	-2.03	51.86	54.00	-2.14	AVG

Mode4 / Polarization: Vertical / CH: L

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2310.000	47.74	-2.66	45.08	74.00	-28.92	peak
2		2310.000	37.81	-2.66	35.15	54.00	-18.85	AVG
3		2390.000	61.28	-2.03	59.25	74.00	-14.75	peak
4	*	2390.000	45.39	-2.03	43.36	54.00	-10.64	AVG

Mode4 / Polarization: Horizontal / CH: H

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2483.500	68.95	-1.91	67.04	74.00	-6.96	peak
2	*	2483.500	53.79	-1.91	51.88	54.00	-2.12	AVG
3		2500.000	59.92	-1.80	58.12	74.00	-15.88	peak
4		2500.000	46.64	-1.80	44.84	54.00	-9.16	AVG

Mode4 / Polarization: Vertical / CH: H

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2483.500	58.31	-1.91	56.40	74.00	-17.60	peak
2	*	2483.500	44.86	-1.91	42.95	54.00	-11.05	AVG
3		2500.000	52.22	-1.80	50.42	74.00	-23.58	peak
4		2500.000	39.89	-1.80	38.09	54.00	-15.91	AVG

Mode5 / Polarization: Horizontal / CH: L

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2310.000	58.21	-12.83	45.38	74.00	-28.62	peak
2	2310.000	48.60	-12.83	35.77	54.00	-18.23	AVG
3	2390.000	70.96	-12.42	58.54	74.00	-15.46	peak
4 *	2390.000	62.95	-12.42	50.53	54.00	-3.47	AVG

Mode5 / Polarization: Vertical / CH: L

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2310.000	53.18	-12.83	40.35	74.00	-33.65	peak
2	2310.000	42.62	-12.83	29.79	54.00	-24.21	AVG
3	2390.000	53.35	-12.42	40.93	74.00	-33.07	peak
4 *	2390.000	43.42	-12.42	31.00	54.00	-23.00	AVG

Mode5 / Polarization: Horizontal / CH: H

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2483.500	70.32	-12.44	57.88	74.00	-16.12	peak
2 *	2483.500	64.36	-12.44	51.92	54.00	-2.08	AVG
3	2500.000	64.07	-12.35	51.72	74.00	-22.28	peak
4	2500.000	55.83	-12.35	43.48	54.00	-10.52	AVG

Mode5 / Polarization: Vertical / CH: H

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2483.500	52.82	-12.44	40.38	74.00	-33.62	peak
2 *	2483.500	43.58	-12.44	31.14	54.00	-22.86	AVG
3	2500.000	53.40	-12.35	41.05	74.00	-32.95	peak
4	2500.000	42.55	-12.35	30.20	54.00	-23.80	AVG

Mode6 / Polarization: Horizontal / CH: L

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2310.000	49.87	-2.66	47.21	74.00	-26.79	peak
2	2310.000	41.00	-2.66	38.34	54.00	-15.66	AVG
3	2390.000	66.90	-2.03	64.87	74.00	-9.13	peak
4 *	2390.000	53.91	-2.03	51.88	54.00	-2.12	AVG

Mode6 / Polarization: Vertical / CH: L

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2310.000	48.66	-2.66	46.00	74.00	-28.00	peak
2	2310.000	37.99	-2.66	35.33	54.00	-18.67	AVG
3	2390.000	59.38	-2.03	57.35	74.00	-16.65	peak
4 *	2390.000	45.99	-2.03	43.96	54.00	-10.04	AVG

Mode6 / Polarization: Horizontal / CH: H

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2483.500	66.65	-1.91	64.74	74.00	-9.26	peak
2 *	2483.500	52.82	-1.91	50.91	54.00	-3.09	AVG
3	2500.000	53.83	-1.80	52.03	74.00	-21.97	peak
4	2500.000	44.19	-1.80	42.39	54.00	-11.61	AVG

Mode6 / Polarization: Vertical / CH: H

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	2483.500	56.77	-1.91	54.86	74.00	-19.14	peak
2 *	2483.500	43.21	-1.91	41.30	54.00	-12.70	AVG
3	2500.000	48.09	-1.80	46.29	74.00	-27.71	peak
4	2500.000	38.54	-1.80	36.74	54.00	-17.26	AVG

Mode7 / Polarization: Horizontal / CH: L

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2310.000	52.19	-2.66	49.53	74.00	-24.47	peak
2		2310.000	42.19	-2.66	39.53	54.00	-14.47	AVG
3		2390.000	71.08	-2.03	69.05	74.00	-4.95	peak
4	*	2390.000	53.09	-2.03	51.06	54.00	-2.94	AVG

Mode7 / Polarization: Vertical / CH: L

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2310.000	47.50	-2.66	44.84	74.00	-29.16	peak
2		2310.000	37.79	-2.66	35.13	54.00	-18.87	AVG
3		2390.000	63.11	-2.03	61.08	74.00	-12.92	peak
4	*	2390.000	46.01	-2.03	43.98	54.00	-10.02	AVG

Mode7 / Polarization: Horizontal / CH: H

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2483.500	70.26	-1.91	68.35	74.00	-5.65	peak
2	*	2483.500	52.48	-1.91	50.57	54.00	-3.43	AVG
3		2500.000	58.80	-1.80	57.00	74.00	-17.00	peak
4		2500.000	43.22	-1.80	41.42	54.00	-12.58	AVG

Mode7 / Polarization: Vertical / CH: H

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2483.500	58.21	-1.91	56.30	74.00	-17.70	peak
2	*	2483.500	42.10	-1.91	40.19	54.00	-13.81	AVG
3		2500.000	48.65	-1.80	46.85	74.00	-27.15	peak
4		2500.000	37.97	-1.80	36.17	54.00	-17.83	AVG

Mode8 / Polarization: Horizontal / CH: L

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2310.000	51.55	-2.66	48.89	74.00	-25.11	peak
2		2310.000	41.19	-2.66	38.53	54.00	-15.47	AVG
3		2390.000	70.99	-2.03	68.96	74.00	-5.04	peak
4	*	2390.000	53.77	-2.03	51.74	54.00	-2.26	AVG

Mode8 / Polarization: Vertical / CH: L

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2310.000	47.53	-2.66	44.87	74.00	-29.13	peak
2		2310.000	37.54	-2.66	34.88	54.00	-19.12	AVG
3		2390.000	57.40	-2.03	55.37	74.00	-18.63	peak
4	*	2390.000	41.78	-2.03	39.75	54.00	-14.25	AVG

Mode8 / Polarization: Horizontal / CH: H

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2483.500	67.02	-1.91	65.11	74.00	-8.89	peak
2	*	2483.500	53.00	-1.91	51.09	54.00	-2.91	AVG
3		2500.000	58.92	-1.80	57.12	74.00	-16.88	peak
4		2500.000	45.36	-1.80	43.56	54.00	-10.44	AVG

Mode8 / Polarization: Vertical / CH: H

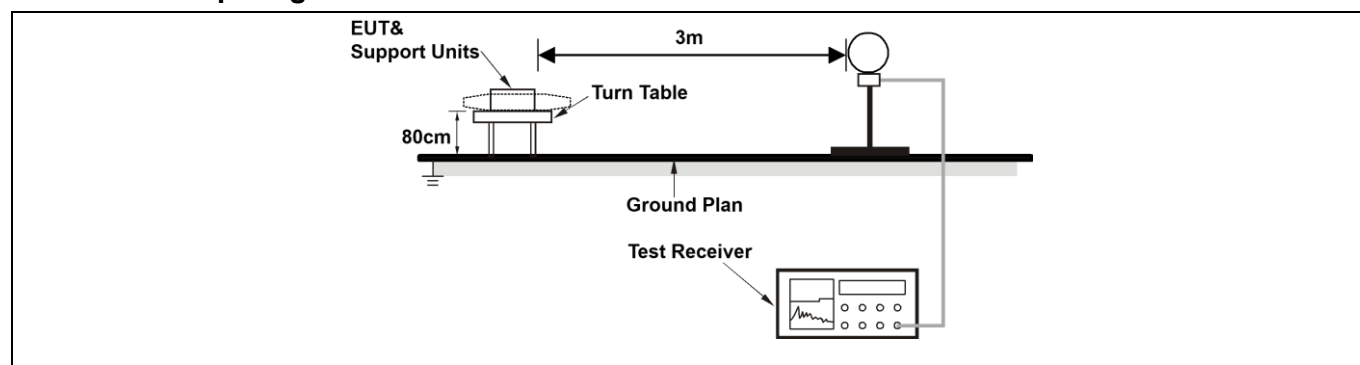
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		2483.500	56.53	-1.91	54.62	74.00	-19.38	peak
2	*	2483.500	42.97	-1.91	41.06	54.00	-12.94	AVG
3		2500.000	48.70	-1.80	46.90	74.00	-27.10	peak
4		2500.000	38.56	-1.80	36.76	54.00	-17.24	AVG

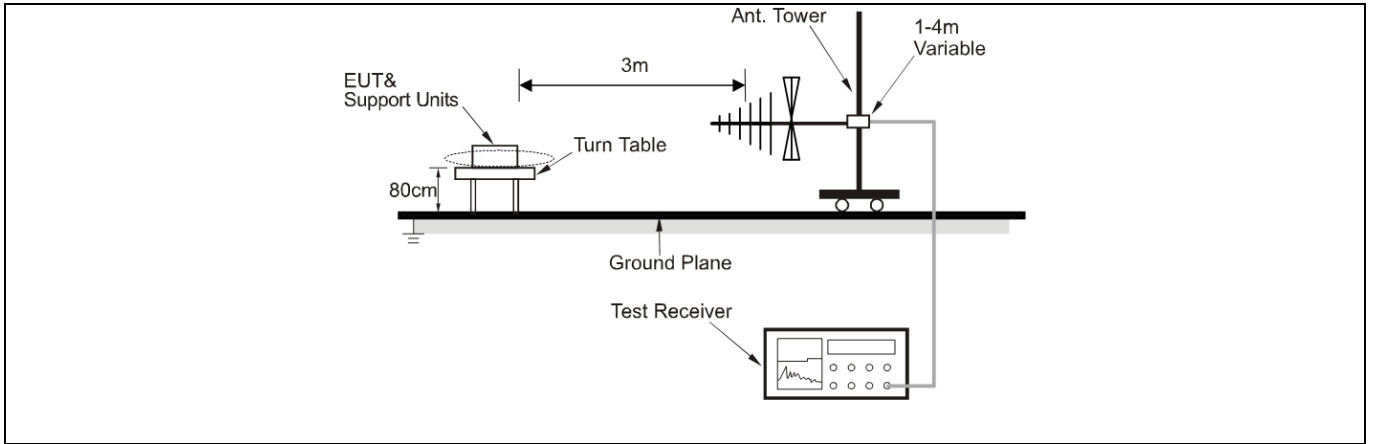
6.7 Radiated emissions (below 1GHz)

Test Requirement:	Refer to 47 CFR 15.247(d), In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).`		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (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., §§ 15.231 and 15.241. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.		
Test Method:	ANSI C63.10-2013 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02		
Procedure:	ANSI C63.10-2013 section 6.6.4		

6.7.1 E.U.T. Operation:

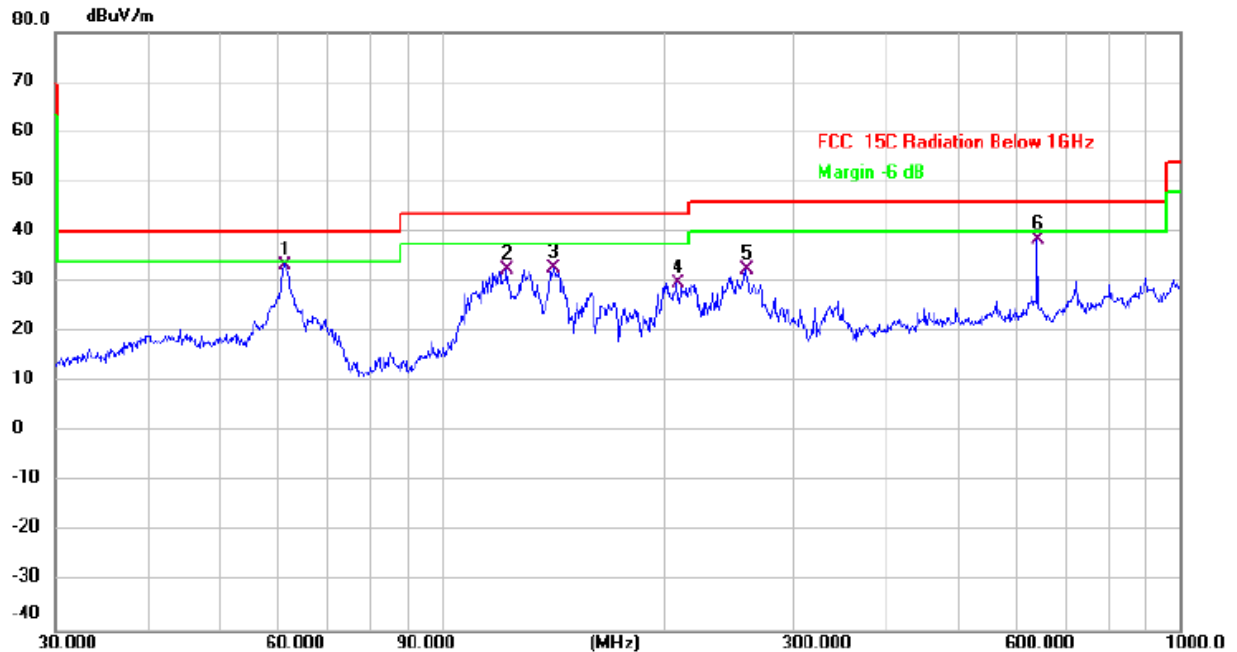
Operating Environment:					
Temperature:	26 °C	Humidity:	54 %	Atmospheric Pressure:	100 kPa
Pre test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8				
Final test mode:	Mode1, Mode5				
Note: The amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported. All modes of operation of the EUT were investigated, and only the worst-case results are reported. There were no emissions found below 30MHz within 20dB of the limit.					

6.7.2 Test Setup Diagram:




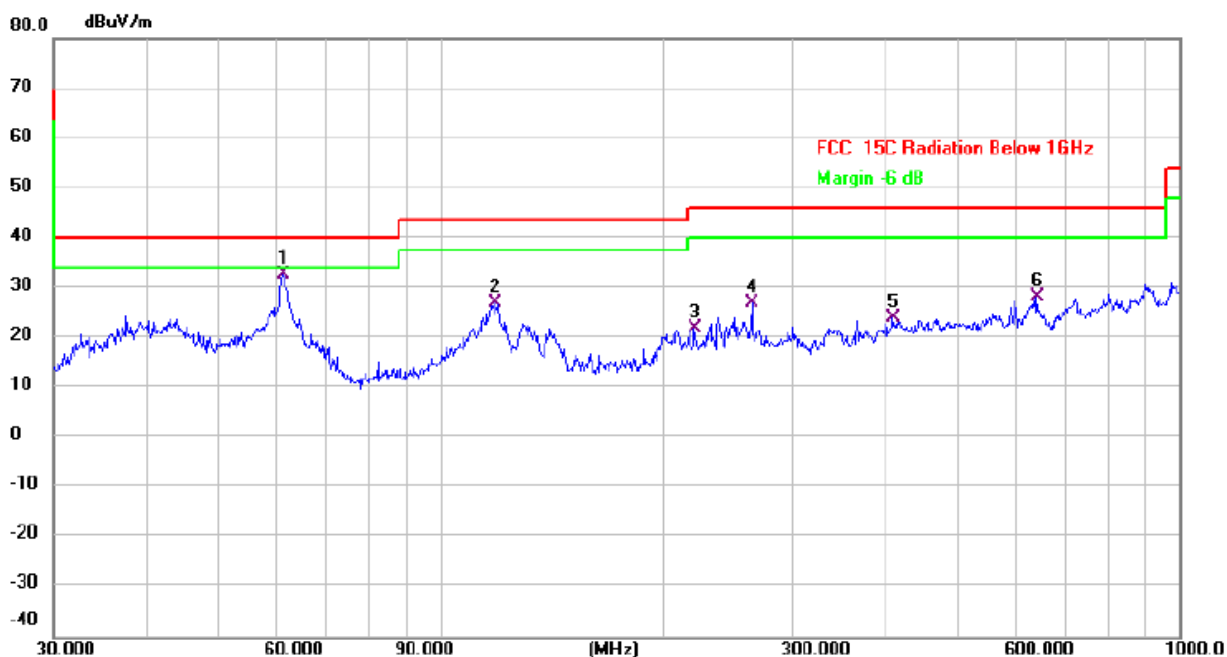
6.7.3 Test Data:

Mode1 / Polarization: Horizontal / CH: H



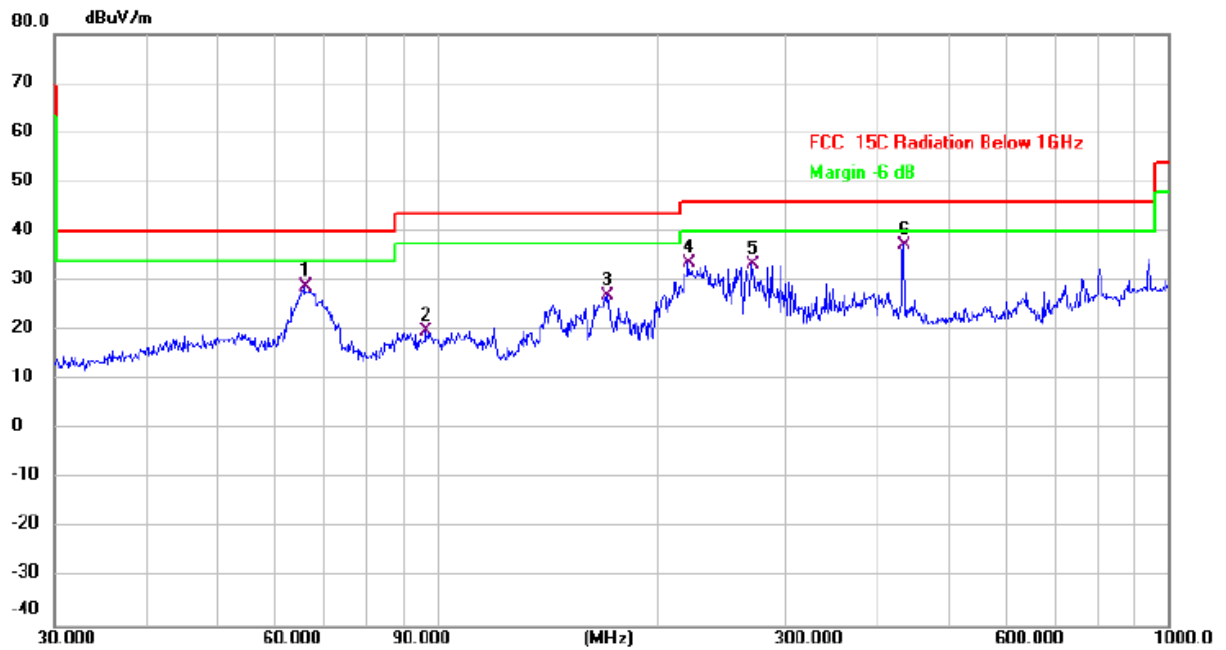
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	61.1316	42.58	-9.08	33.50	40.00	-6.50	QP	
2		122.4040	43.68	-11.31	32.37	43.50	-11.13	QP	
3		141.8262	42.57	-9.75	32.82	43.50	-10.68	QP	
4		208.5803	38.32	-8.47	29.85	43.50	-13.65	QP	
5		258.3264	39.97	-7.44	32.53	46.00	-13.47	QP	
6		640.6110	38.94	-0.53	38.41	46.00	-7.59	QP	

Mode1 / Polarization: Vertical / CH: H



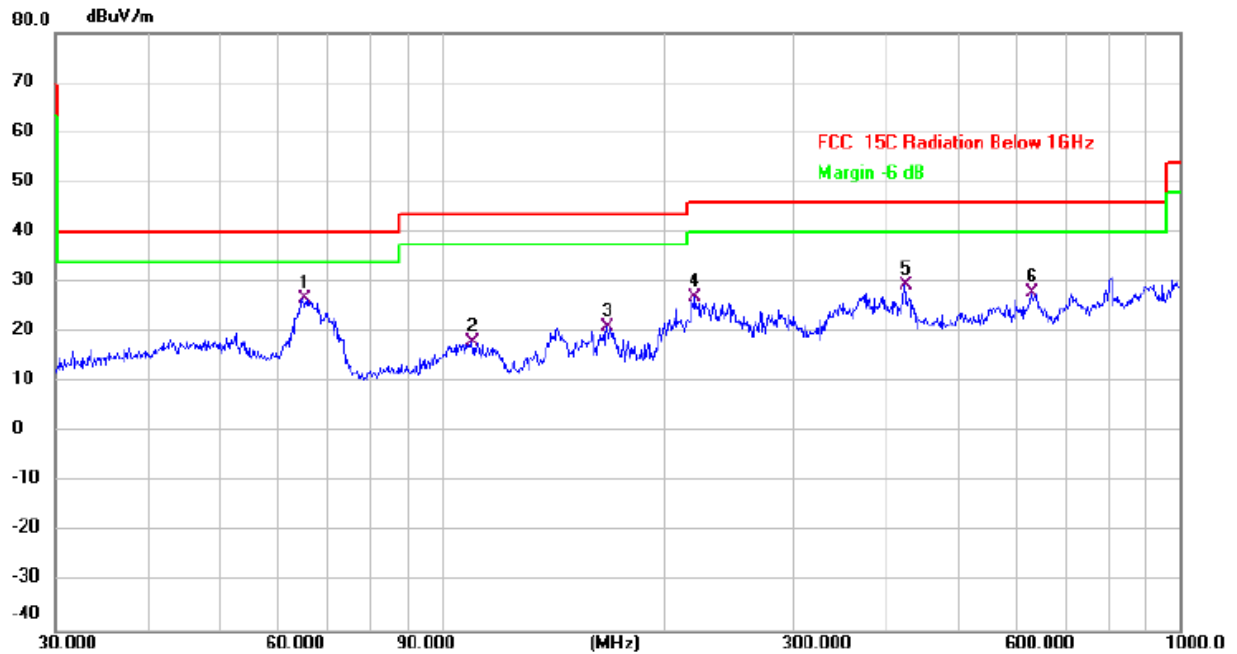
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	61.1316	41.78	-9.08	32.70	40.00	-7.30	QP	
2		118.1862	35.53	-8.48	27.05	43.50	-16.45	QP	
3		220.6171	30.46	-8.48	21.98	46.00	-24.02	QP	
4		263.8190	34.50	-7.39	27.11	46.00	-18.89	QP	
5		408.9460	28.93	-4.86	24.07	46.00	-21.93	QP	
6		640.6110	28.67	-0.53	28.14	46.00	-17.86	QP	

Mode5 / Polarization: Horizontal / CH: H



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		66.0342	40.02	-11.17	28.85	40.00	-11.15	QP	
2		96.4362	30.32	-10.45	19.87	43.50	-23.63	QP	
3		170.7926	38.17	-11.10	27.07	43.50	-16.43	QP	
4		220.6171	42.17	-8.48	33.69	46.00	-12.31	QP	
5		269.4284	40.70	-7.28	33.42	46.00	-12.58	QP	
6	*	434.0651	42.31	-5.03	37.28	46.00	-8.72	QP	

Mode5 / Polarization: Vertical / CH: H



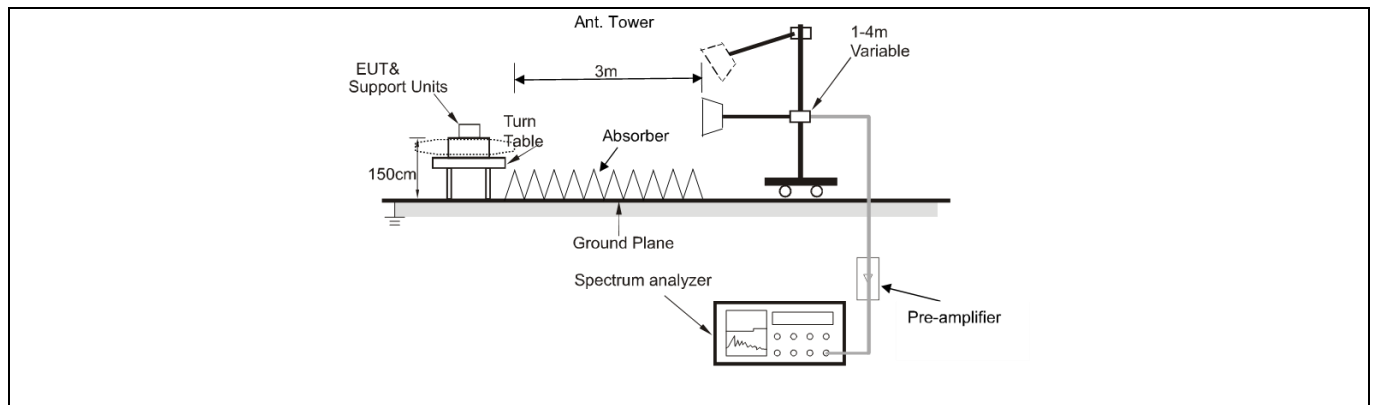
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	65.1145	37.35	-10.56	26.79	40.00	-13.21	QP	
2		109.7960	25.35	-7.28	18.07	43.50	-25.43	QP	
3		167.2368	32.15	-11.01	21.14	43.50	-22.36	QP	
4		220.6171	35.42	-8.48	26.94	46.00	-19.06	QP	
5		423.5403	34.80	-5.25	29.55	46.00	-16.45	QP	
6		629.4772	27.56	0.39	27.95	46.00	-18.05	QP	

6.8 Radiated emissions (above 1GHz)

Test Requirement:	In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)(see § 15.205(c)).`		
Test Limit:	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (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., §§ 15.231 and 15.241. In the emission table above, the tighter limit applies at the band edges. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.		
Test Method:	ANSI C63.10-2013 section 6.6.4 KDB 558074 D01 15.247 Meas Guidance v05r02		
Procedure:	ANSI C63.10-2013 section 6.6.4		

6.8.1 E.U.T. Operation:

Operating Environment:					
Temperature:	26 °C	Humidity:	54 %	Atmospheric Pressure:	100 kPa
Pre test mode:	Mode1, Mode2, Mode3, Mode4, Mode5, Mode6, Mode7, Mode8				
Final test mode:	Mode1, Mode5				
Note: Test frequency are from 1GHz to 25GHz, the amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported. All modes of operation of the EUT were investigated, and only the worst-case results are reported.					

6.8.2 Test Setup Diagram:


6.8.3 Test Data:

Mode1 / Polarization: Horizontal / CH: L

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	4824.000	57.44	-7.42	50.02	74.00	-23.98	peak
2	4824.000	53.34	-7.42	45.92	54.00	-8.08	AVG
3	7311.000	48.00	0.70	48.70	74.00	-25.30	peak
4	7311.000	43.65	0.70	44.35	54.00	-9.65	AVG
5	9648.000	48.71	2.34	51.05	74.00	-22.95	peak
6 *	9648.000	45.28	2.34	47.62	54.00	-6.38	AVG

Mode1 / Polarization: Vertical / CH: L

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	4824.000	56.09	-7.42	48.67	74.00	-25.33	peak
2	4824.000	51.78	-7.42	44.36	54.00	-9.64	AVG
3	7311.000	47.61	0.70	48.31	74.00	-25.69	peak
4	7311.000	43.62	0.70	44.32	54.00	-9.68	AVG
5	9648.000	48.55	2.34	50.89	74.00	-23.11	peak
6 *	9648.000	44.04	2.34	46.38	54.00	-7.62	AVG

Mode1 / Polarization: Horizontal / CH: M

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	4874.000	55.11	-7.44	47.67	74.00	-26.33	peak
2	4874.000	50.59	-7.44	43.15	54.00	-10.85	AVG
3	7311.000	51.53	0.70	52.23	74.00	-21.77	peak
4 *	7311.000	47.61	0.70	48.31	54.00	-5.69	AVG
5	9748.000	48.92	3.03	51.95	74.00	-22.05	peak
6	9748.000	44.62	3.03	47.65	54.00	-6.35	AVG

Mode1 / Polarization: Vertical / CH: M

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	C
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	4874.000	57.03	-7.44	49.59	74.00	-24.41	peak	
2	4874.000	51.82	-7.44	44.38	54.00	-9.62	AVG	
3	7311.000	54.06	0.70	54.76	74.00	-19.24	peak	
4 *	7311.000	48.95	0.70	49.65	54.00	-4.35	AVG	
5	9748.000	48.94	3.03	51.97	74.00	-22.03	peak	
6	9748.000	42.59	3.03	45.62	54.00	-8.38	AVG	

Mode1 / Polarization: Horizontal / CH: H

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	4924.000	53.47	-7.37	46.10	74.00	-27.90	peak
2	4924.000	49.72	-7.37	42.35	54.00	-11.65	AVG
3	7386.000	49.63	1.06	50.69	74.00	-23.31	peak
4	7386.000	45.29	1.06	46.35	54.00	-7.65	AVG
5	9848.000	47.73	2.75	50.48	74.00	-23.52	peak
6 *	9848.000	43.63	2.75	46.38	54.00	-7.62	AVG

Mode1 / Polarization: Vertical / CH: H

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	4924.000	54.95	-7.37	47.58	74.00	-26.42	peak
2	4924.000	50.62	-7.37	43.25	54.00	-10.75	AVG
3	7386.000	47.89	1.06	48.95	74.00	-25.05	peak
4	7386.000	43.30	1.06	44.36	54.00	-9.64	AVG
5	9848.000	48.26	2.75	51.01	74.00	-22.99	peak
6 *	9848.000	44.87	2.75	47.62	54.00	-6.38	AVG

Mode5 / Polarization: Horizontal / CH: L

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		4824.000	58.81	-7.42	51.39	74.00	-22.61	peak
2	*	4824.000	54.12	-7.42	46.70	54.00	-7.30	AVG
3		7236.000	47.87	0.75	48.62	74.00	-25.38	peak
4		7236.000	42.50	0.75	43.25	54.00	-10.75	AVG
5		9648.000	48.47	2.34	50.81	74.00	-23.19	peak
6		9648.000	42.93	2.34	45.27	54.00	-8.73	AVG

Mode5 / Polarization: Vertical / CH: L

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		4824.000	53.93	-7.42	46.51	74.00	-27.49	peak
2		4824.000	48.77	-7.42	41.35	54.00	-12.65	AVG
3		7236.000	47.25	0.75	48.00	74.00	-26.00	peak
4		7236.000	42.87	0.75	43.62	54.00	-10.38	AVG
5		9648.000	49.04	2.34	51.38	74.00	-22.62	peak
6	*	9648.000	43.87	2.34	46.21	54.00	-7.79	AVG

Mode5 / Polarization: Horizontal / CH: M

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		4874.000	59.85	-7.44	52.41	74.00	-21.59	peak
2	*	4874.000	56.40	-7.44	48.96	54.00	-5.04	AVG
3		7311.000	47.74	0.70	48.44	74.00	-25.56	peak
4		7311.000	43.65	0.70	44.35	54.00	-9.65	AVG
5		9748.000	49.44	3.03	52.47	74.00	-21.53	peak
6		9748.000	45.59	3.03	48.62	54.00	-5.38	AVG

Mode5 / Polarization: Vertical / CH: M

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		4874.000	55.16	-7.44	47.72	74.00	-26.28	peak
2		4874.000	50.79	-7.44	43.35	54.00	-10.65	AVG
3		7311.000	47.12	0.70	47.82	74.00	-26.18	peak
4		7311.000	42.92	0.70	43.62	54.00	-10.38	AVG
5		9748.000	48.29	3.03	51.32	74.00	-22.68	peak
6	*	9748.000	44.33	3.03	47.36	54.00	-6.64	AVG

Mode5 / Polarization: Horizontal / CH: H

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	4924.000	57.37	-7.37	50.00	74.00	-24.00	peak
2	4924.000	53.69	-7.37	46.32	54.00	-7.68	AVG
3	7386.000	50.47	1.06	51.53	74.00	-22.47	peak
4 *	7386.000	46.46	1.06	47.52	54.00	-6.48	AVG
5	9848.000	47.94	2.75	50.69	74.00	-23.31	peak
6	9848.000	43.61	2.75	46.36	54.00	-7.64	AVG

Mode5 / Polarization: Vertical / CH: H

No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	4924.000	53.66	-7.37	46.29	74.00	-27.71	peak
2	4924.000	48.72	-7.37	41.35	54.00	-12.65	AVG
3	7386.000	48.30	1.06	49.36	74.00	-24.64	peak
4	7386.000	43.18	1.06	44.24	54.00	-9.76	AVG
5	9848.000	47.69	2.75	50.44	74.00	-23.56	peak
6 *	9848.000	42.60	2.75	45.35	54.00	-8.65	AVG

Photographs of the test setup

Refer to Appendix - Test Setup Photos

Photographs of the EUT

Refer to Appendix - EUT Photos

----End of Report----