TEST REPORT

Reference No.	:	WTN16S0754891E
FCC ID	:	2AFOYL654UCNN
Applicant	:	Le Shi Zhi Xin Electronic Technology（Tian jin） Limited
Address	:	201-427 2F B1 District, Anime building,No.126 Anime Middle Road, Eco-city Tianjin, China
Manufacturer	:	TPV Technology (Qingdao) Co.,Ltd
Address	:	NO.99 Huoju Road, High-tech Industrial Development Zone, Qingdao City, Shandong Province, China(PRC)
Product Name	:	LED TV
Model No.	:	L654UCNN
Brand		LeEco
Standards	:	FCC CFR47 Part 15 Section 15.249: 2015
Date of Receipt sample	:	Jul. 04, 2016
Date of Test	:	Jul. 05 - 20, 2016
Date of Issue	:	Jul. 21, 2016
Test Result	:	Pass

Remarks:
The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:
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Tested by:

Zero Zhou / Test Engineer

Approved by:

Philo Zhong / Manager

2 Test Summary

Test Items	Test Requirement	Result
Conducted Emissions	15.207	PASS
Radiated Emission	15.249(a) 15.209 15.205(a)	PASS
Periodic Operation	15.35(c)	PASS
Outside of Band Emission	15.249 15.205 15.209	PASS
20dB Bandwidth	15:215(c)	PASS
Antenna Requirement	15.203	PASS

3 Contents

4 General Information

4.1 General Description of E.U.T.

Product Name:	LED TV
Model No.:	L654UCNN
Model Description:	N/A
Operation Frequency:	IEEE 802.11b/g/n(HT20):2412MHz ~ 2462MHz IEEE 802.11n(HT40):2422MHz~2452MHz IEEE 802.11a/ n(HT20/40)/ac(HT20/40/80): 5150MHz to 5250MHz IEEE 802.11a/ n(HT20/40)/ac(HT20/40/80): 5725MHz to 5850MHz BT: 2402-2480MHz SRD: 2403-2480MHz
Type of modulation:	IEEE 802.11b DSSS(CCK/QPSK/BPSK) IEEE 802.11g OFDM(BPSK/QPSK/16QAM/64QAM) IEEE 802.11n OFDM(BPSK/QPSK/16QAM/64QAM) IEEE for 802.11a: OFDM(BPSK/QPSK/16QAM/64QAM) IEEE for 802.11n : OFDM(BPSK/QPSK/16QAM/64QAM) IEEE for 802.11ac : OFDM (BPSK/QPSK/16QAM/64QAM/256QAM) BT: GFSK,PI/4-DQPSK,8DPSK SRD: GFSK
The Lowest Oscillator:	32.768KHz
Antenna installation:	internal permanent antenna
Antenna Gain:	ANT 0 2.4GHz WIFI:3.2 dBi 5.2GHz WIFI:2.8 dBi 5.8GHz WIFI:4.5 dBi ANT 1 2.4GHz WIFI:3.2 dBi 5.2GHz WIFI:3.3 dBi 5.8GHz WIFI:3.4 dBi ANT 2 2.4GHz BT:3.2 dBi ANT 3 2.4GHz SRD:3.2 dBi

4.2 Details of E.U.T.

Technical Data : AC 120V~60Hz, 170W

4.3 Channel List

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
1	2403	2	2408	3	2413	4	2418

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
5	2423	6	2428	7	2433	8	2440
9	2445	10	2450	11	2455	12	2460
13	2465	14	2470	15	2475	16	2480

4.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **IC – Registration No.: 7760A-1**

Waltek Services (Shenzhen) Co., Ltd. has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration 7760A-1, Oct. 15, 2015.

- **FCC Test Site 1#– Registration No.: 880581**

Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory `has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 880581, April 29, 2014.

- **FCC Test Site 2#– Registration No.: 328995**

Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory `has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 328995, December 3, 2014

4.4.1 Test Mode

All test mode(s) and condition(s) mentioned were considered and evaluated respectively by performing full tests, the worst data were recorded and reported.

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Transmitting duty cycle is normal.

The software is installed in operation system, named “RFTestTool.apk” ,Version 1,date 20160518.

Test mode	channel
Transmitting	2403MHz
Transmitting	2440MHz
Transmitting	2480MHz

5 Equipment Used during Test

5.1 Equipments List

Conducted Emissions at Mains Terminals Disturbance Voltage(1#)						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1	EMI Test Receiver	R&S	ESCI	100947	2015.09.14	2016.09.13
2	LISN	R&S	ENV216	100115	2015.09.14	2016.09.13
3	Cable	Top	TYPE16(3.5M)	-	2015.09.14	2016.09.13
Conducted Emissions at Mains Terminals Disturbance Voltage(2#)						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1	EMI Test Receiver	R&S	ESCI	101155	2015.09.14	2016.09.13
2	LISN	SCHWARZBECK	NSLK 8128	8128-289	2015.09.14	2016.09.13
3	Limiter	York	MTS-IMP-136	261115-001-0024	2015.09.14	2016.09.13
4	Cable	**Laplace**	RF300	-	2015.09.14	2016.09.13
3m Semi-anechoic Chamber for Radiation(1#)						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1	Spectrum Analyzer	R&S	FSP	100091	2015.09.14	2016.09.13
2	Amplifier	Agilent	8447D	2944A10178	2015.09.14	2016.09.13
3	Active Loop Antenna	Beijing Dazhi	ZN30900A	0703	2015.09.14	2016.09.13
4	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	2015.09.14	2016.09.13
5	Coaxial Cable (below 1GHz)	Top	TYPE16(13M)	-	2015.09.14	2016.09.13
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	2015.09.14	2016.09.13
7	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	2015.09.14	2016.09.13
8	Coaxial Cable (above 1GHz)	Top	1GHz-25GHz	EW02014-7	2015.09.14	2016.09.13
3m Semi-anechoic Chamber for Radiation(2#)						
Item	**Equipment**	**Manufacturer**	**Model No.**	**Serial No.**	**Last Calibration Date**	**Calibration Due Date**
1	Test Receiver	R&S	ESCI	101296	2016.03.23	2017.03.22
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	2016.03.23	2017.03.22
3	Amplifier	ANRITSU	MH648A	M43381	2016.03.23	2017.03.22
4	Cable	HUBER+SUHNER	CBL2	525178	2016.03.23	2017.03.22

5.2 Measurement Uncertainty

Parameter	Uncertainty
Radio Frequency	± 1 x 10^{-6}
RF Power	± 1.0 dB
RF Power Density	± 2.2 dB
Radiated Spurious Emissions test	± 5.03 dB (Bilog antenna 30M~1000MHz)
	± 5.47 dB (Horn antenna 1000M~25000MHz)

5.3 Test Equipment Calibration

All the test equipments used are valid and calibrated by CEPREI Certification Body that address is No.110 Dongguan Zhuang RD. Guangzhou, P.R.China.

6 Conducted Emission

Test Requirement:	FCC CFR 47 Part 15 Section 15.207
Test Method:	ANSI C63.10:2013
Test Result:	PASS
Frequency Range:	150kHz to 30MHz
Class/Severity:	Class B
Limit:	66-56 dBμV between 0.15MHz & 0.5MHz
	56 dBμV between 0.5MHz & 5MHz
	60 dBμV between 5MHz & 30MHz
Detector:	Peak for pre-scan (9kHz Resolution Bandwidth)

6.1 E.U.T. Operation

Operating Environment **:**

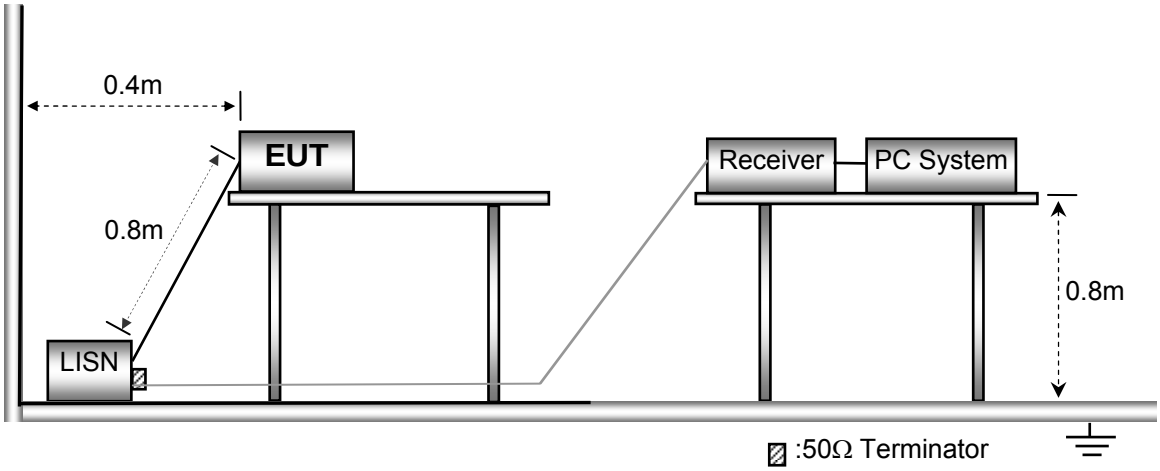
Temperature:	25.5 °C
Humidity:	51 % RH
Atmospheric Pressure:	101.2kPa

EUT Operation **:**

The test was performed in transmitting mode, the test data were shown in the report.

6.2 EUT Setup

The conducted emission tests were performed using the setup accordance with the ANSI C63.10:2013.

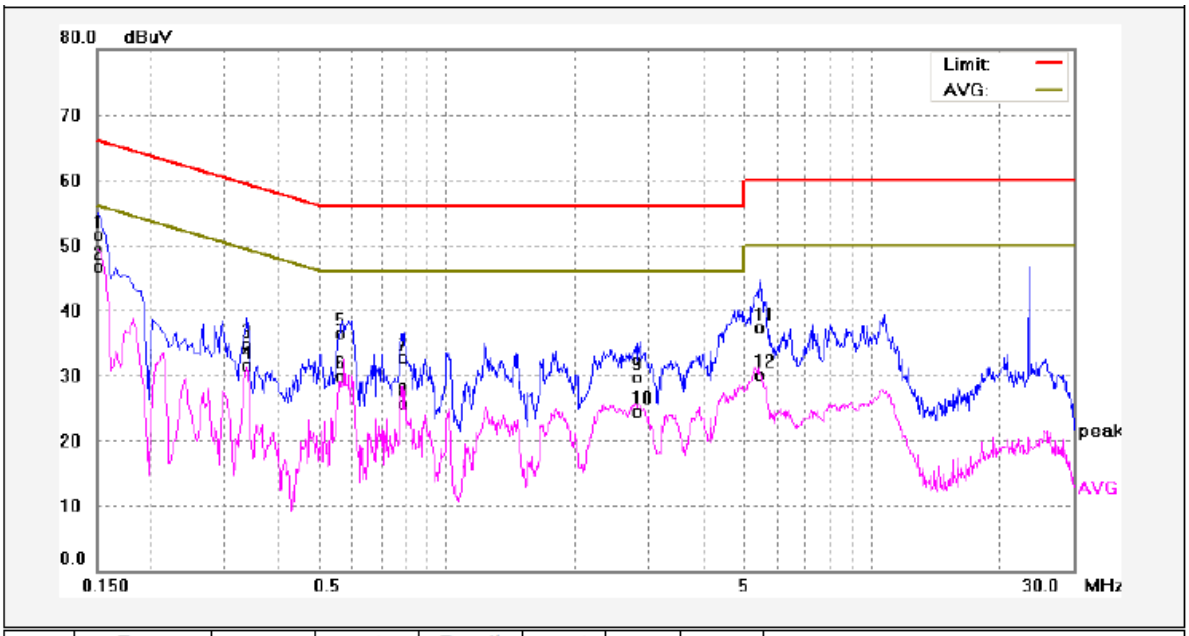


6.3 Measurement Description

The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

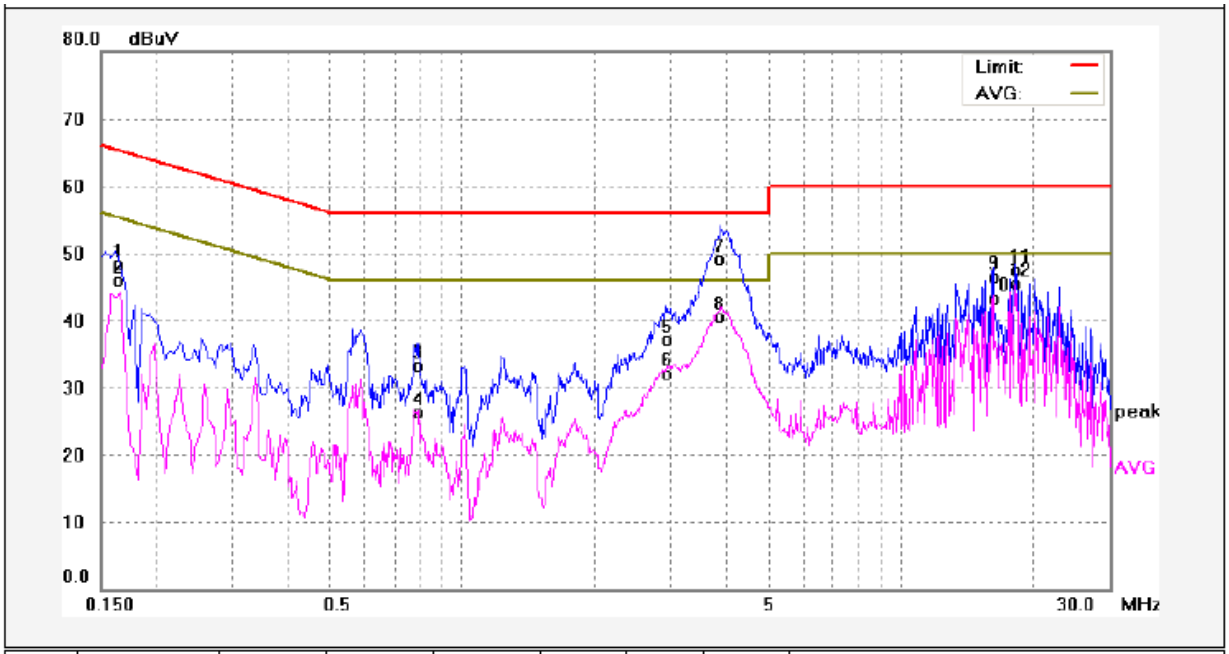
6.4 Conducted Emission Test Result

Live line:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1500	41.74	9.75	51.49	65.99	-14.50	QP	
2	0.1500	37.05	9.75	46.80	55.99	-9.19	AVG	
3	0.3379	24.99	9.75	34.74	59.25	-24.51	QP	
4	0.3379	21.66	9.75	31.41	49.25	-17.84	AVG	
5	0.5660	26.84	9.76	36.60	56.00	-19.40	QP	
6	0.5660	20.08	9.76	29.84	46.00	-16.16	AVG	
7	0.7940	22.82	9.79	32.61	56.00	-23.39	QP	
8	0.7940	15.95	9.79	25.74	46.00	-20.26	AVG	
9	2.8420	19.70	9.91	29.61	56.00	-26.39	QP	
10	2.8420	14.68	9.91	24.59	46.00	-21.41	AVG	
11	5.4780	27.39	10.01	37.40	60.00	-22.60	QP	
12	5.4780	20.00	10.01	30.01	50.00	-19.99	AVG	

Neutral line:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1624	38.53	9.74	48.27	65.34	-17.07	QP	
2	0.1624	36.20	9.74	45.94	55.34	-9.40	AVG	
3	0.7940	23.59	9.79	33.38	56.00	-22.62	QP	
4	0.7940	16.61	9.79	26.40	46.00	-19.60	AVG	
5	2.9020	27.28	9.91	37.19	56.00	-18.81	QP	
6	2.9020	22.25	9.91	32.16	46.00	-13.84	AVG	
7	3.8820	39.28	9.91	49.19	56.00	-6.81	QP	
8	3.8820	30.58	9.91	40.49	46.00	-5.51	AVG	
9	16.2300	35.99	10.48	46.47	60.00	-13.53	QP	
10	16.2300	32.74	10.48	43.22	50.00	-6.78	AVG	
11	18.2420	36.87	10.60	47.47	60.00	-12.53	QP	
12	18.2420	34.81	10.60	45.41	50.00	-4.59	AVG	

7 Radiation Emission Test

Test Requirement: FCC Part15 Paragraph 15.249

Test Method: ANSI 63.10: 2013

Measurement Distance: 3m

Test Result: PASS

15.249(a)Limit:

Fundamental frequency	Field strength of fundamental		Field strength of harmonics	
	mV/m	dBuV/m	uV/m	dBuV/m
902-928 MHz	50	94	500	54
2400-2483.5 MHz	50	94	500	54
5725-5875 MHz	50	94	500	54
24.0-24.25 GHz	250	108	2500	68

15.209 Limit:

Frequency (MHz)	Field Strength		Field Strength Limit at 3m Measurement Distance	
	uV/m	Distance (m)	uV/m	dBuV/m
0.009 ~ 0.490	2400/F(kHz)	300	10000 * 2400/F(kHz)	$20\log^{(2400/F(kHz))} + 80$
0.490 ~ 1.705	24000/F(kHz)	30	100 * 24000/F(kHz)	$20\log^{(24000/F(kHz))} + 40$
1.705 ~ 30	30	30	100 * 30	$20\log^{(30)} + 40$
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

Note: RF Voltage(dBuV)=20 $\log_{10}$ RF Voltage(uV)

7.1 EUT Operation

Operating Environment **:**

Temperature: 23.5 °C

Humidity: 51.1 % RH

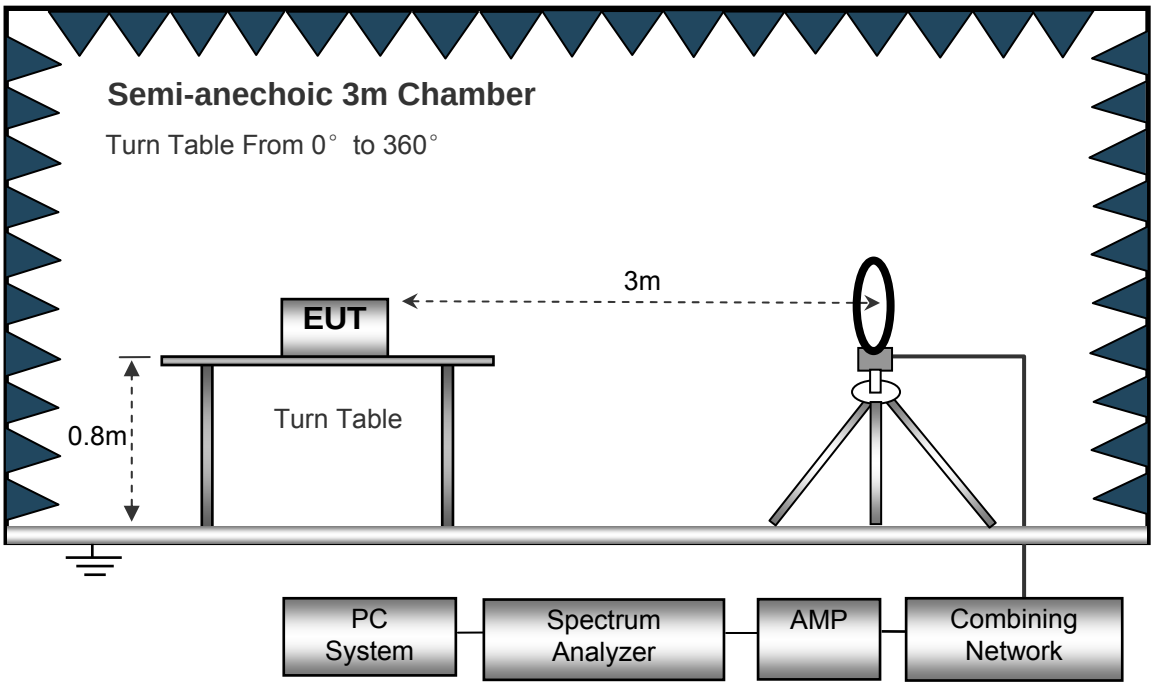
Atmospheric Pressure: 101.2kPa

EUT Operation **:**

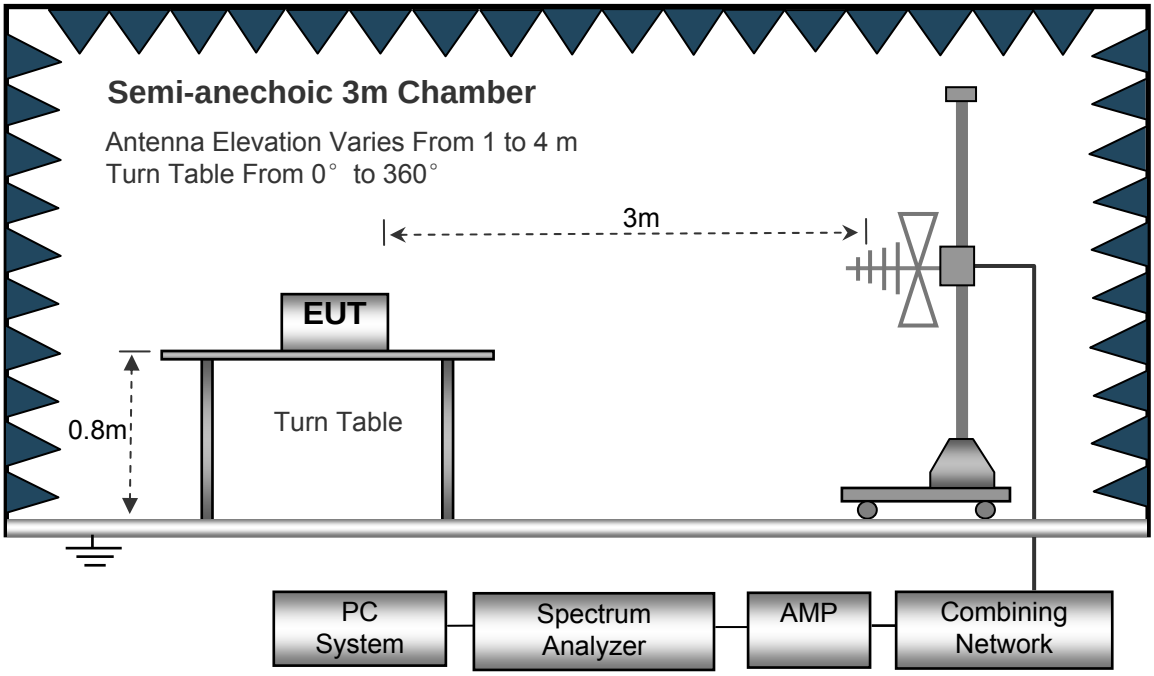
The test was performed in transmitting mode, the test data were shown in the report.

7.2 Test Setup

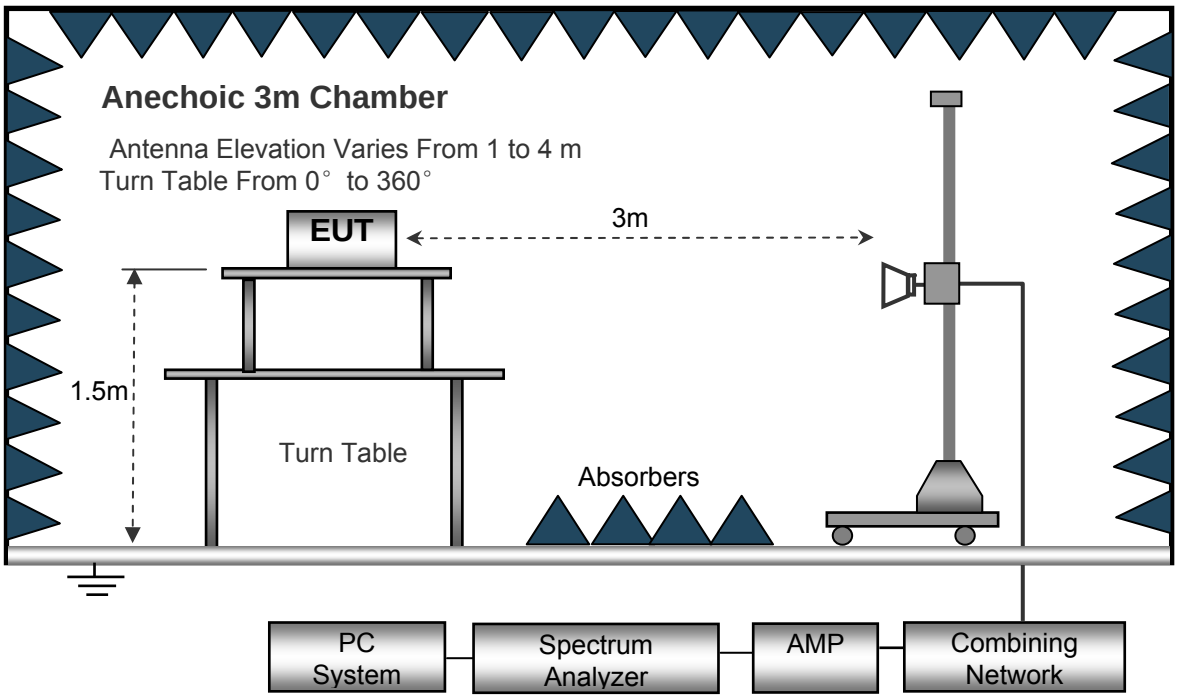
The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI 63.10: 2013.
The test setup for emission measurement below 30MHz.



The test setup for emission measurement from 30MHz to 1GHz.



The test setup for emission measurement above 1 GHz.



7.3 Spectrum Analyzer Setup

Below 30MHz

Sweep Speed ..... Auto
IF Bandwidth..... 10kHz
Video Bandwidth..... 10kHz

Resolution Bandwidth..... 10kHz

30MHz ~ 1GHz

Sweep Speed ..... Auto
Detector ..... PK
Resolution Bandwidth..... 100kHz
Video Bandwidth..... 300kHz

Above 1GHz

Sweep Speed ..... Auto
Detector ..... PK
Resolution Bandwidth..... 1MHz
Video Bandwidth..... 3MHz
Detector ..... Ave.
Resolution Bandwidth..... 1MHz
Video Bandwidth..... 10Hz

7.4 Test Procedure

1. The EUT is placed on a turntable, which is above ground plane for below 1GHz and 1.5m for above 1GHz.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions. The spectrum was investigated from the lowest radio frequency signal generated in the device, without going below 9 kHz, up to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The radiation measurements are tested under 3-axes(X,Y,Z) position(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand), After pre-test, It was found that the worse radiation emission was get at the X position. So the data shown was the X position only.

7.5 Test Result

Test Frequency: 32.768kHz~30MHz

Frequency (MHz)	Measurement results	Detector	Correct factor	Extrapolation factor	Measurement results (calculated)	Limits	Margin
	dBμV @3m	PK/QP	dB/m	dB	dBμV/m @30m	dBμV/m @30m	dB
26.581	26.00	QP	19.90	40.00	5.90	29.54	-23.64

Test Frequency: 30MHz ~ 18GHz

Test Mode: Low channel(2403MHz)

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.249/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP)	Degree	(m)	(H/V)	(dB/m)	(dBμV/m)	(dBμV/m)	(dB)
302.56	39.21	QP	173	1.4	V	-11.40	27.81	40.00	-12.19
2403.00	72.56	PK	255	1.8	H	-13.08	59.48	114.00	-54.52
2403.00	61.74	PK	180	1.8	V	-13.08	48.66	114.00	-65.34
4806.00	68.14	PK	335	1.1	H	0.09	68.23	74.00	-5.77
4806.00	60.60	PK	203	1.3	V	0.09	60.69	74.00	-13.31
7209.00	58.49	PK	84	1.8	H	3.01	61.50	74.00	-12.50
7209.00	56.57	PK	117	1.5	V	3.01	59.58	74.00	-14.42

* Fundamental Frequency

Frequency	PK	Turn table Angle	RX Antenna		Duty cycle Factor	AV	FCC Part 15.249/209/205	
			Height	Polar			Limit	Margin
(MHz)	(dBμV/m)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
2403.00	59.48	255	1.8	H	-40.00	19.48	94.00	-74.52
2403.00	48.66	180	1.8	V	-40.00	8.66	94.00	-85.34
4806.00	68.23	335	1.1	H	-40.00	28.23	54.00	-25.77
4806.00	60.69	203	1.3	V	-40.00	20.69	54.00	-33.31
7209.00	61.50	84	1.8	H	-40.00	21.50	54.00	-32.50
7209.00	59.58	117	1.5	V	-40.00	19.58	54.00	-34.42

* Fundamental Frequency

Test Mode: Middle channel(2440MHz)

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.249/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP)	Degree	(m)	(H/V)	(dB/m)	(dBμV/m)	(dBμV/m)	(dB)
302.56	39.21	QP	283	1.1	V	-11.40	27.81	40.00	-12.19
2440.00	72.56	PK	182	1.2	H	-13.08	59.48	114.00	-54.52
2440.00	61.74	PK	135	1.5	V	-13.08	48.66	114.00	-65.34
4880.00	68.14	PK	118	1.3	H	0.09	68.23	74.00	-5.77
4880.00	60.60	PK	259	1.2	V	0.09	60.69	74.00	-13.31
7320.00	58.49	PK	77	1.9	H	3.01	61.50	74.00	-12.50
7320.00	56.57	PK	36	2.0	V	3.01	59.58	74.00	-14.42

* Fundamental Frequency

Frequency	PK	Turn table Angle	RX Antenna		Duty cycle Factor	AV	FCC Part 15.249/209/205	
			Height	Polar			Limit	Margin
(MHz)	(dBμV/m)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
2440.00	59.48	182	1.2	H	-40.00	19.48	94.00	-74.52
2440.00	48.66	135	1.5	V	-40.00	8.66	94.00	-85.34
4880.00	68.23	118	1.3	H	-40.00	28.23	54.00	-25.77
4880.00	60.69	259	1.2	V	-40.00	20.69	54.00	-33.31
7320.00	61.50	77	1.9	H	-40.00	21.50	54.00	-32.50
7320.00	59.58	36	2.0	V	-40.00	19.58	54.00	-34.42

* Fundamental Frequency

Test Mode: High channel(2480MHz)

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	FCC Part 15.249/209/205	
				Height	Polar			Limit	Margin
(MHz)	(dBμV)	(PK/QP)	Degree	(m)	(H/V)	(dB/m)	(dBμV/m)	(dBμV/m)	(dB)
302.56	39.21	QP	128	1.7	V	-11.40	27.81	40.00	-12.19
2480.00	72.56	PK	129	1.2	H	-13.08	59.48	114.00	-54.52
2480.00	61.74	PK	281	1.6	V	-13.08	48.66	114.00	-65.34
4960.00	68.14	PK	176	1.3	H	0.09	68.23	74.00	-5.77
4960.00	60.60	PK	192	1.7	V	0.09	60.69	74.00	-13.31
7440.00	58.49	PK	146	1.2	H	3.01	61.50	74.00	-12.50
7440.00	56.57	PK	190	1.8	V	3.01	59.58	74.00	-14.42

* Fundamental Frequency

Frequency	PK	Turn table Angle	RX Antenna		Duty cycle Factor	AV	FCC Part 15.249/209/205	
			Height	Polar			Limit	Margin
(MHz)	(dBμV/m)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
2480.00	59.48	129	1.2	H	-40.00	19.48	94.00	-74.52
2480.00	48.66	281	1.6	V	-40.00	8.66	94.00	-85.34
4960.00	68.23	176	1.3	H	-40.00	28.23	54.00	-25.77
4960.00	60.69	192	1.7	V	-40.00	20.69	54.00	-33.31
7440.00	61.50	146	1.2	H	-40.00	21.50	54.00	-32.50
7440.00	59.58	190	1.8	V	-40.00	19.58	54.00	-34.42

* Fundamental Frequency

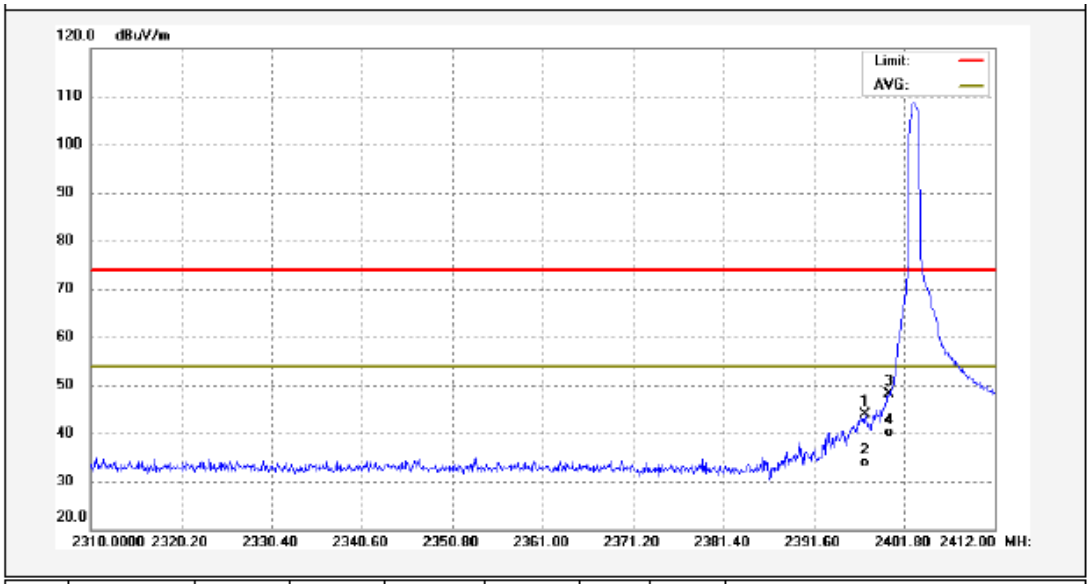
Test Frequency :From 18GHz to 25GHz

The measurements were more than 20 dB below the limit and not reported.

Outside of Band Emissions

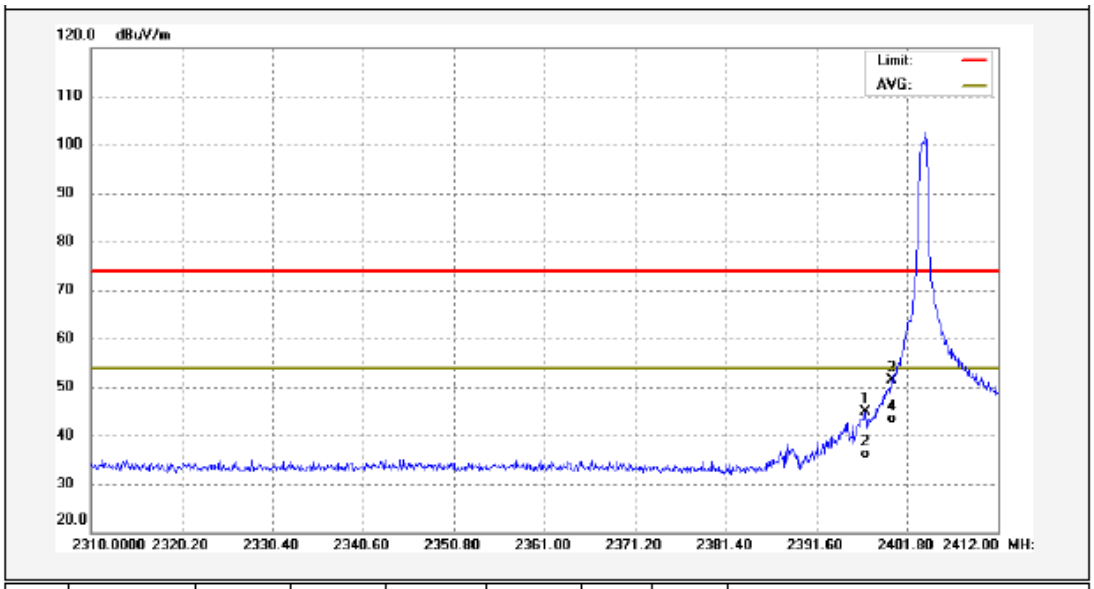
Left band- 2403MHz transmitting

Horizontal



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	2397.414	59.13	-15.23	43.90	74.00	-30.10	peak	
2	2397.414	49.17	-15.23	33.94	54.00	-20.06	AVG	
3	2400.000	63.30	-15.24	48.06	74.00	-25.94	peak	
4	2400.000	55.36	-15.24	40.12	54.00	-13.88	AVG	

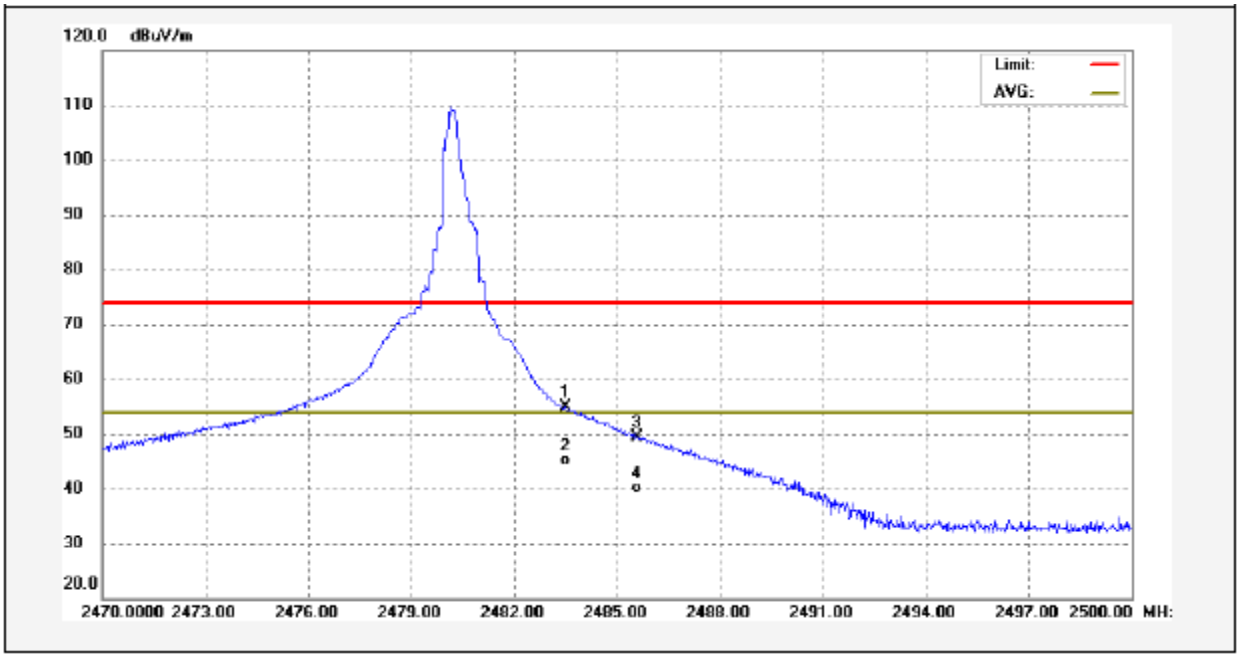
Vertical



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	2397.108	60.06	-15.23	44.83	74.00	-29.17	peak	
2	2397.108	51.35	-15.23	36.12	54.00	-17.88	AVG	
3	2400.000	66.57	-15.24	51.33	74.00	-22.67	peak	
4	2400.000	58.52	-15.24	43.28	54.00	-10.72	AVG	

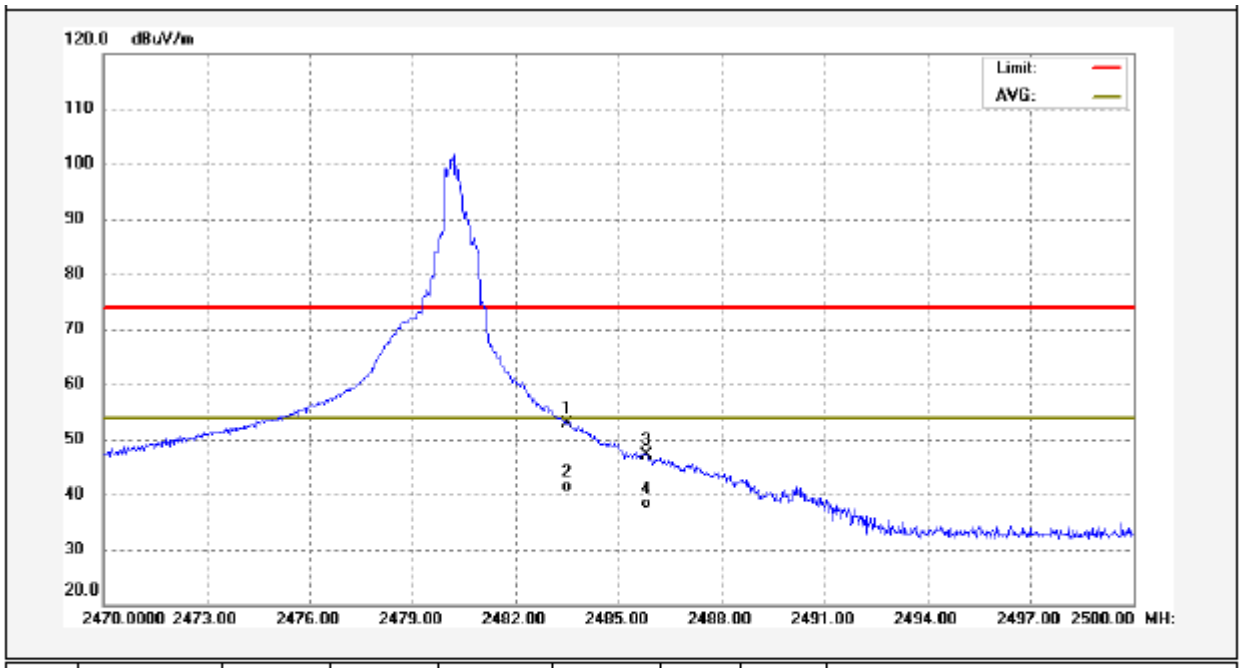
Right band-2480MHz transmitting

Horizontal



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	2483.500	70.27	-15.39	54.88	74.00	-19.12	peak	
2	2483.500	60.51	-15.39	45.12	54.00	-8.88	AVG	
3	2485.570	64.84	-15.40	49.44	74.00	-24.56	peak	
4	2485.570	55.55	-15.40	40.15	54.00	-13.85	AVG	

Vertical



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	2483.500	68.27	-15.39	52.88	74.00	-21.12	peak	
2	2483.500	56.67	-15.39	41.28	54.00	-12.72	AVG	
3	2485.810	62.52	-15.40	47.12	74.00	-26.88	peak	
4	2485.810	53.76	-15.40	38.36	54.00	-15.64	AVG	

8 Periodic Operation

The duty cycle was determined by the following equation:

To calculate the actual field intensity,the duty cycle correction factor in decibel is needed for later use and can be obtained from following conversion

Duty Cycle(%)=Total On interval in a complete pulse train/ Length of a complete pulse train * %

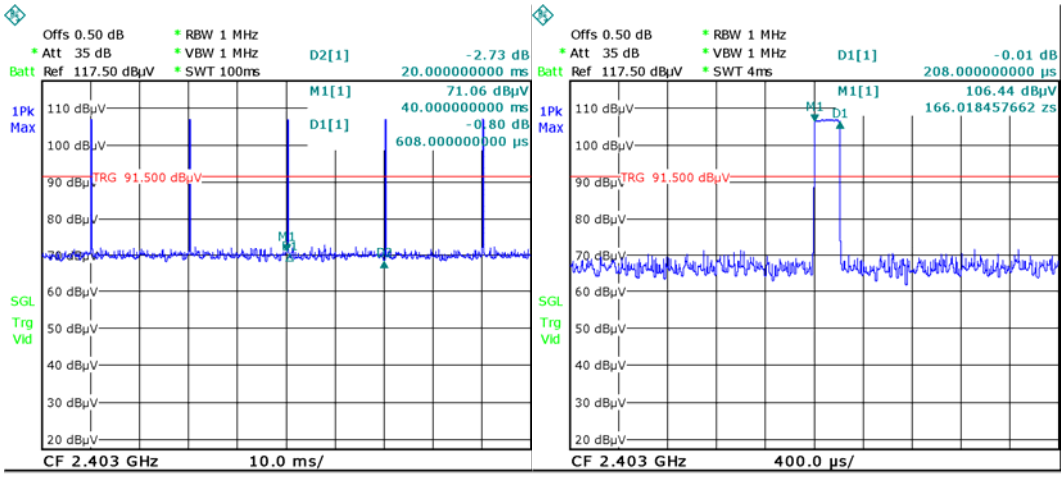
Duty Cycle Correction Factor(dB)=20 * Log_{10}(Duty Cycle(%))

Total transmission time(ms)	0.208
Length of a complete transmission period(ms)	20.00
Duty Cycle(%)	1.04
Duty Cycle Correction Factor(dB)	-40

Refer to the duty cycle plot (as below),This device meets the FCC requirement.

Length of a complete pulse train:

Remark: FCC part15.35(c) required that a complete pulse train is more than 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.



9 20 dB Bandwidth Measurement

Test Requirement: FCC CFR47 Part 15 Section 15.215(c)

Test Method: ANSI C63.10:2013

Test Mode: Transmitting

9.1 Test Procedure

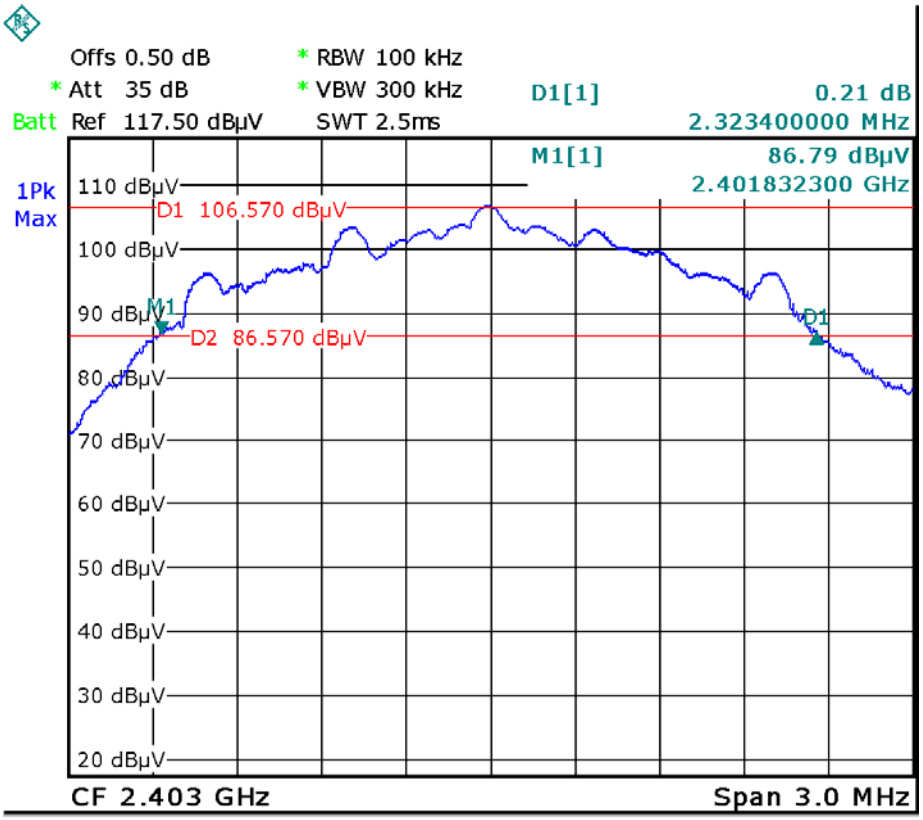
1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 30kHz, VBW = 100kHz

9.2 Test Result

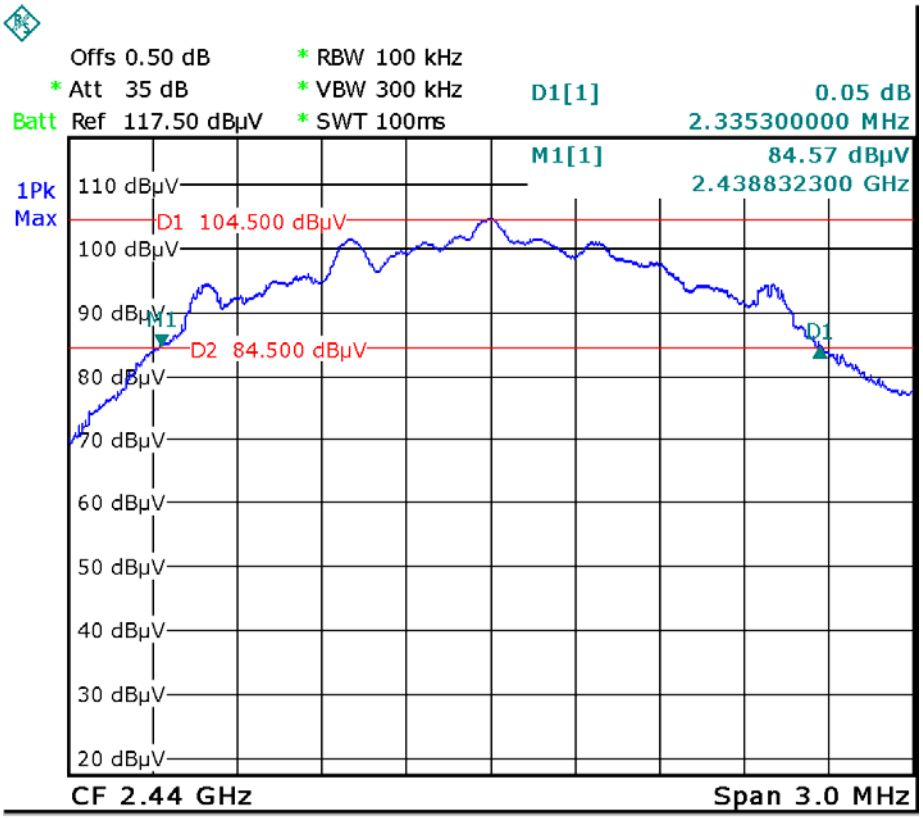
Test Channel	Bandwidth
2403MHz	2401.8MHz
2440MHz	2438.9MHz
2480MHz	2478.8MHz

Test plots

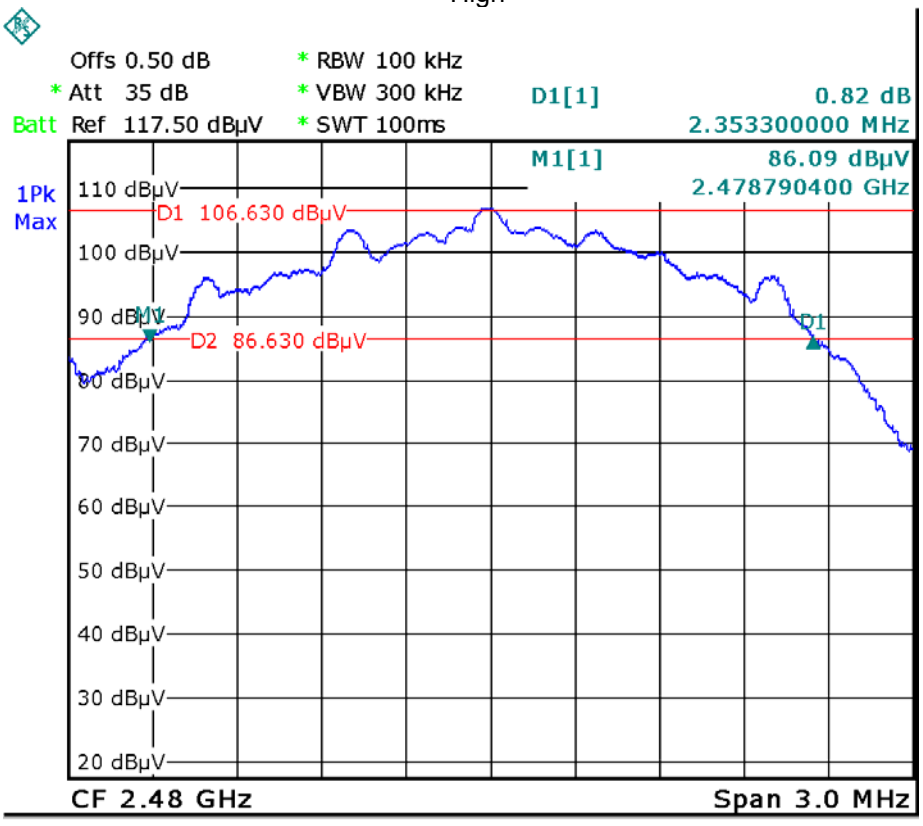
Low



Middle


Offs 0.50 dB
* RBW 100 kHz
* Att 35 dB
* VBW 300 kHz
D1[1]
0.05 dB
Batt Ref 117.50 dBµV
* SWT 100ms
2.335300000 MHz
M1[1]
84.57 dBµV
2.438832300 GHz
1Pk
Max
110 dBµV
D1 104.500 dBµV
100 dBµV
90 dBµV
M1
D2 84.500 dBµV
D1
80 dBµV
70 dBµV
60 dBµV
50 dBµV
40 dBµV
30 dBµV
20 dBµV
CF 2.44 GHz
Span 3.0 MHz

High


Offs 0.50 dB
* RBW 100 kHz
* Att 35 dB
* VBW 300 kHz
D1[1]
0.82 dB
Batt Ref 117.50 dBµV
* SWT 100ms
2.353300000 MHz
M1[1]
86.09 dBµV
2.478790400 GHz
1Pk
Max
110 dBµV
D1 106.630 dBµV
100 dBµV
90 dBµV
M1
D2 86.630 dBµV
D1
80 dBµV
70 dBµV
60 dBµV
50 dBµV
40 dBµV
30 dBµV
20 dBµV
CF 2.48 GHz
Span 3.0 MHz

10 Antenna Requirement

According to the FCC Part 15 Paragraph 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. This product has a RF connector to connect internal integrated antenna fulfill the requirement of this section.

======End of Report======