FCC TEST REPORT
FCC ID:2BMSOCHARGINGT100

Report Number..... :	ZKT-241210L18085E-2
Date of Test.....	Dec.06, 2024 to Jan.03,2025
Date of issue ..... :	Jan.03, 2025
Total number of pages	69
Test Result ..... :	PASS
Testing Laboratory. ..... :	**Shenzhen ZKT Technology Co., Ltd.**
Address ..... :	1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China
Applicant's name ..... :	**Shenzhen Yuanjing intelligent Technology Co., LTD**
Address ..... :	Rm.1805,ShuimuYifang Building,No.286 Nanguang Rd. ,Shenzhen City, China.
Manufacturer's name ..... :	**Shenzhen Yuanjing intelligent Technology Co., LTD**
Address ..... :	Rm.1805,ShuimuYifang Building,No.286 Nanguang Rd. ,Shenzhen City, China.
Test specification:	
Standard..... :	FCC CFR Title 47 Part 15 Subpart C Section 15.247 ANSI C63.10:2013
Test procedure..... :	/
Non-standard test method ..... :	N/A
Test Report Form No. ..... :	TRF-EL-111_V0
Test Report Form(s) Originator .... :	ZKT Testing
Master TRF ..... :	Dated: 2020-01-06

This device described above has been tested by ZKT, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.
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Product name ..... :	**BestMov-Charging**
Trademark ..... :	N/A
Model/Type reference.....:	T100
Ratings..... :	Input:100-240Vac~ 50/60Hz 1.5A Output:26Vdc 2A

Testing procedure and testing location:

Testing Laboratory.....:	**Shenzhen ZKT Technology Co., Ltd.**
Address.....:	1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China
Tested by (name + signature).....:	Jim Liu
Reviewer (name + signature).....:	Tom Zou
Approved (name + signature).....:	Lake Xie

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1.VERSION

Report No.	Version	Description	Approved
ZKT-241210L18085E-2	Rev.01	Initial issue of report	Jan.03, 2025

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C			
Standard Section	Test Item	Judgment	Remark
FCC part 15.203/15.247 (c)	Antenna requirement	PASS	
FCC part 15.207	AC Power Line Conducted Emission	PASS	
FCC part 15.247 (b)(3)	Conducted Peak Output Power	PASS	
FCC part 15.247 (a)(2)	Channel Bandwidth& 99% OCB	PASS	
FCC part 15.247 (e)	Power Spectral Density	PASS	
FCC part 15.247(d)	Band Edge	PASS	
FCC part 15.205/15.209	Spurious Emission	PASS	

NOTE:

(1)“N/A” denotes test is not applicable in this Test Report

2.1 TEST FACILITY

Shenzhen ZKT Technology Co., Ltd.
Add. : 1/F, No. 101, Building B, No. 6, Tangwei Community Industrial Avenue, Fuhai Street, Bao'an District, Shenzhen, China

FCC Test Firm Registration Number: 692225
Designation Number: CN1299
IC Registered No.: 27033

2.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y ± U，where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2，providing a level of confidence of approximately 95 %。

No.	Item	Uncertainty
1	3m camber Radiated spurious emission(9KHz-30MHz)	U=4.5dB
2	3m camber Radiated spurious emission(30MHz-1GHz)	U=4.8dB
3	3m chamber Radiated spurious emission(1GHz-6GHz)	U=4.9dB
4	3m chamber Radiated spurious emission(6GHz-40GHz)	U=5.0dB
5	Conducted disturbance	U=3.2dB
6	RF Band Edge	U=1.68dB
7	RF power conducted	U=1.86dB
8	RF conducted Spurious Emission	U=2.2dB
9	RF Occupied Bandwidth	U=1.8dB
10	RF Power Spectral Density	U=1.75dB
11	humidity uncertainty	U=5.3%
12	Temperature uncertainty	U=0.59℃

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Product Name:	BestMov-Charging
Model No.:	T100
Model Different.:	N/A
Serial No.:	N/A
Sample ID	ZKT-241210L18085
Sample(s) Status:	Engineer sample
Operation Frequency:	902MHz~928MHz
Channel Numbers:	26
Channel Separation:	1MHz,2 MHz,4 MHz,8 MHz
Modulation Type:	OFDM
Antenna Type:	Chip ANT
Antenna gain:	5 dBi
Power supply:	Input: AC 120V,60Hz
SWITCHING POWER ADAPTER:	Input:100-240V~ 50/60Hz 1.5A Output:26Vdc 2A

Operation Frequency each of channel

	OFDM 1M		OFDM 2M		OFDM 4M		OFDM 8M	
	CH	Freq.(MHz)	CH	Freq.(MHz)	CH	Freq.(MHz)	CH	Freq.(MHz)
Channel List	1	902.5	1	903	1	906	1	908
	2	903.5	2	905	2	910	2	916
	3	904.5	3	907	3	914	3	924
	4	905.5	4	909	4	918		
	5	906.5	5	911	5	922		
	6	907.5	6	913	6	926		
	7	908.5	7	915				
	8	909.5	8	917				
	9	910.5	9	919				
	10	911.5	10	921				
	11	912.5	11	923				
	12	913.5	12	925				
	13	914.5	13	927				
	14	915.5						
	15	916.5						
	16	917.5						
	17	918.5						
	18	919.5						
	19	920.5						
	20	921.5						
	21	922.5						
	22	923.5						
	23	924.5						
	24	925.5						
	25	926.5						
	26	927.5						

aNote:
In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Mode	Available Frequency（MHz）	Tested Frequency（MHz）
802.11 ah 1M	902.5 to 927.5	902.5,914.5,927.5
802.11 ah 2M	903 to 927	903,915,927
802.11 ah 4M	906 to 926	906,914,926
802.11 ah 8M	908 t0 924	908,916,924

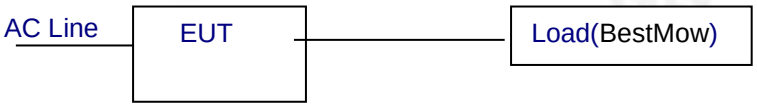
3.2 DESCRIPTION OF TEST MODES

Transmitting mode	Keep the EUT in continuously transmitting mode
Charging mode	Keep the EUT in Charging mode.
Remark: During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.	

Test Software	MobaXterm.exe
Power level setup	n/a

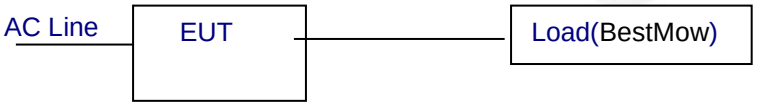
3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Emission



Radiated Emission

Conducted Spurious



3.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
1	Load (BestMow)	Yuanjing	T100	No	/

Item	Shielded Type	Ferrite Core	Length	Note
/	/	/	/	/

Note:

(1) The support equipment was authorized by Declaration of Confirmation.
(2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

3.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Spectrum Analyzer (9kHz-26.5GHz)	KEYSIGHT	9020A	MY55370835	Sep. 29, 2024	Sep. 28, 2025
2	Spectrum Analyzer (10kHz-39.9GHz)	R&S	FSQ	100363	Sep. 30, 2024	Sep. 29, 2025
3	EMI Test Receiver (9kHz-7GHz)	R&S	ESCI7	101169	Sep. 29, 2024	Sep. 28, 2025
4	Bilog Antenna (30MHz-1500MHz)	Schwarzbeck	VULB9168	00877	Sep. 30, 2024	Sep. 29, 2025
5	Horn Antenna (1GHz-18GHz)	Agilent	AH-118	071145	Sep. 30, 2024	Sep. 29, 2025
6	Horn Antenna (15GHz-40GHz)	A.H.System	SAS-574	588	Sep. 30, 2024	Sep. 29, 2025
7	Loop Antenna	TESEQ	HLA6121	58357	Oct. 11, 2024	Oct. 10, 2025
8	Amplifier (30-1000MHz)	EM Electronics	EM330 Amplifier	060747	Sep. 29, 2024	Sep. 28, 2025
9	Amplifier (1GHz-26.5GHz)	Agilent	8449B	3008A00315	Sep. 29, 2024	Sep. 28, 2025
10	Amplifier (18GHz -40GHz)	Tonscend	DLE-161	097	Sep. 30, 2024	Sep. 29, 2025
11	Test Cable	N/A	R-01	N/A	Sep. 30, 2024	Sep. 29, 2025
12	Test Cable	N/A	R-02	N/A	Sep. 30, 2024	Sep. 29, 2025
13	Test Cable	N/A	R-03	N/A	Sep. 30, 2024	Sep. 29, 2025
14	D.C. Power Supply	LongWei	TPR-6405D	N/A	\	\
15	EMC Software	Frad	EZ-EMC	Ver.EMC-CON 3A1.1	\	\
16	Turntable	MF	MF-7802BS	N/A	\	\
17	Antenna tower	MF	MF-7802BS	N/A	\	\

Conducted emissions Test

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	LISN	R&S	ENV216	101471	Sep. 30, 2024	Sep. 29, 2025
2	LISN	CYBERTEK	EM5040A	E1850400149	Sep. 30, 2024	Sep. 29, 2025
3	Test Cable	N/A	C-01	N/A	Sep. 30, 2024	Sep. 29, 2025
4	Test Cable	N/A	C-02	N/A	Sep. 30, 2024	Sep. 29, 2025
5	Test Cable	N/A	C-03	N/A	Sep. 30, 2024	Sep. 29, 2025
6	EMI Test Receiver	R&S	ESCI3	101393	Sep. 29, 2024	Sep. 28, 2025
7	Triple-Loop Antenna	N/A	RF300	9194	Sep. 29, 2024	Sep. 28, 2025
8	Absorbing Clamp	DZ	ZN23201	15034	Oct. 10, 2024	Oct. 09, 2025
9	EMC Software	Frad	EZ-EMC	Ver.EMC-CON 3A1.1	\	\

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.10:2013
Test Frequency Range:	150KHz to 30MHz
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto

4.1.1 POWER LINE CONDUCTED EMISSION Limits

FREQUENCY (MHz)	Limit (dBuV)		Standard
	Quas -peak	Average	
0.15 -0.5	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	56.00	46.00	FCC
5.0 -30.0	60.00	50.00	FCC

Note:

(1) *Decreases with the logarithm of the frequency.

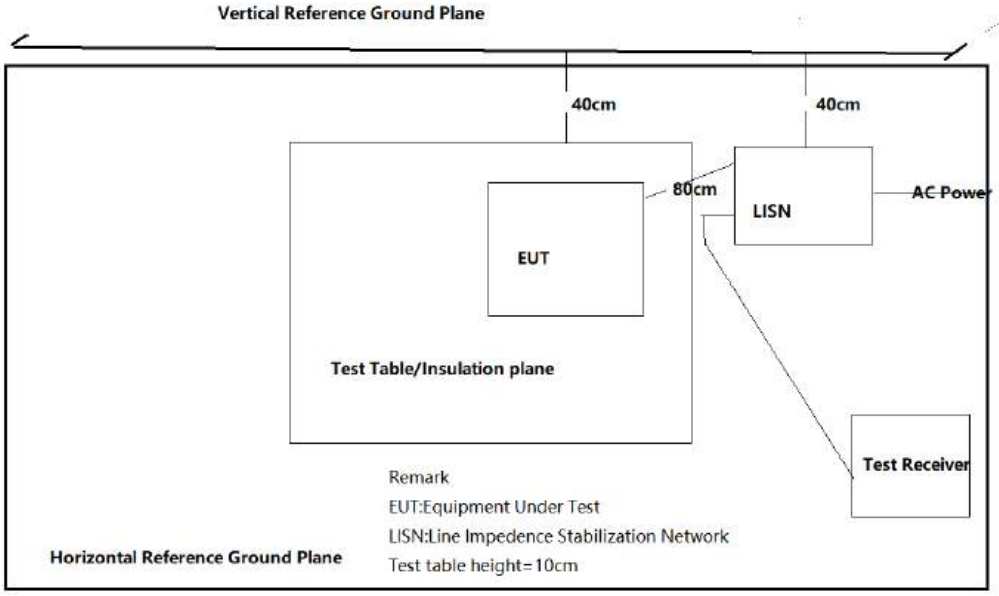
4.1.2 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.3 DEVIATION FROM TEST STANDARD

No deviation

4.1.4 TEST SETUP



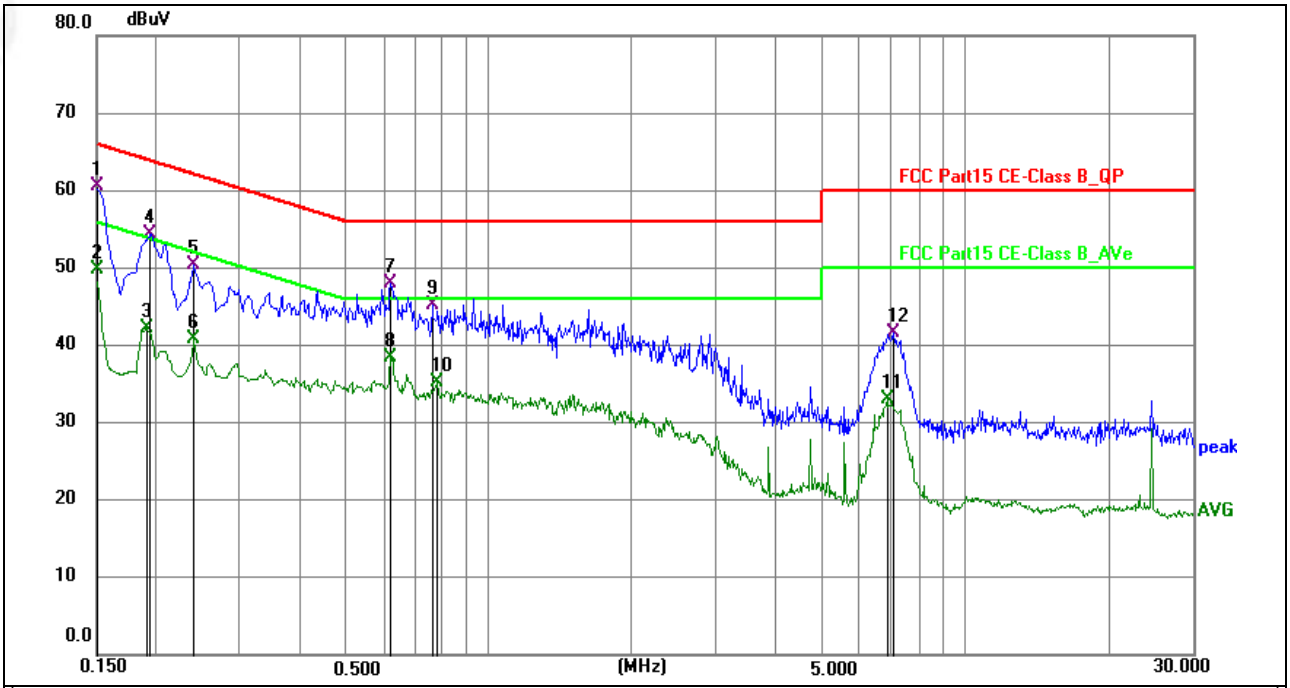
4.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to Charging during test. This operating condition was tested and used to collect the included data.

We pretest AC 120V and AC 230V, the worst voltage was AC 120V and the data recording in the report.

4.1.6 Test Result

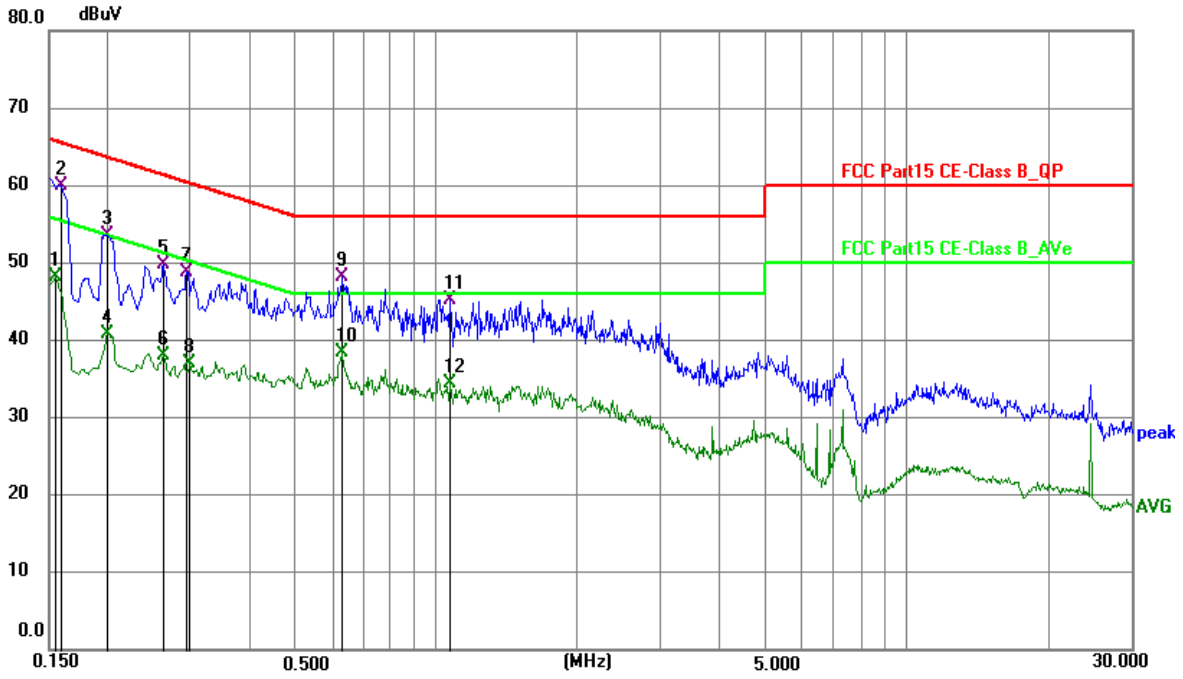
Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Phase :	L
Test Voltage ：	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1500	40.32	20.14	60.46	66.00	-5.54	QP
2	0.1500	29.55	20.14	49.69	56.00	-6.31	AVG
3	0.1905	22.22	19.95	42.17	54.01	-11.84	AVG
4	0.1949	34.45	19.92	54.37	63.83	-9.46	QP
5	0.2400	30.21	20.09	50.30	62.10	-11.80	QP
6	0.2400	20.63	20.09	40.72	52.10	-11.38	AVG
7	0.6225	27.85	20.08	47.93	56.00	-8.07	QP
8	0.6225	18.24	20.08	38.32	46.00	-7.68	AVG
9	0.7620	25.05	20.08	45.13	56.00	-10.87	QP
10	0.7799	15.08	20.08	35.16	46.00	-10.84	AVG
11	6.8775	13.01	20.00	33.01	50.00	-16.99	AVG
12	7.0754	21.50	20.00	41.50	60.00	-18.50	QP

Notes:
1.An initial pre-scan was performed on the line and neutral lines with peak detector.
2.Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3.Mesurement Level = Reading level + Correct Factor

Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Phase :	N
Test Voltage ：	AC 120V/60Hz		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1545	28.09	20.07	48.16	55.75	-7.59	AVG
2	0.1590	39.87	20.06	59.93	65.52	-5.59	QP
3	0.1995	33.70	19.95	53.65	63.63	-9.98	QP
4	0.1995	20.92	19.95	40.87	53.63	-12.76	AVG
5	0.2625	29.56	20.17	49.73	61.35	-11.62	QP
6	0.2625	17.90	20.17	38.07	51.35	-13.28	AVG
7	0.2940	28.44	20.27	48.71	60.41	-11.70	QP
8	0.2985	16.64	20.29	36.93	50.28	-13.35	AVG
9	0.6315	28.02	20.06	48.08	56.00	-7.92	QP
10	0.6315	18.32	20.06	38.38	46.00	-7.62	AVG
11	1.0680	25.17	19.99	45.16	56.00	-10.84	QP
12	1.0680	14.37	19.99	34.36	46.00	-11.64	AVG

Notes:
1.An initial pre-scan was performed on the line and neutral lines with peak detector.
2.Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3.Mesurement Level = Reading level + Correct Factor

4.2 RADIATED EMISSION MEASUREMENT

<table>
<tr><td>Test Requirement:</td><td colspan="5">FCC Part15 C Section 15.209</td></tr>
<tr><td>Test Method:</td><td colspan="5">ANSI C63.10:2013</td></tr>
<tr><td>Test Frequency Range:</td><td colspan="5">9kHz to 25GHz</td></tr>
<tr><td>Test site:</td><td colspan="5">Measurement Distance: 3m</td></tr>
<tr><td>Receiver setup:</td><td colspan="5"><table>
<tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Value</td></tr>
<tr><td>9KHz-150KHz</td><td>Quasi-peak</td><td>200Hz</td><td>600Hz</td><td>Quasi-peak</td></tr>
<tr><td>150KHz-30MHz</td><td>Quasi-peak</td><td>9KHz</td><td>30KHz</td><td>Quasi-peak</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak</td></tr>
<tr><td>Peak</td><td>1MHz</td><td>10Hz</td><td>Average</td></tr>
</table></td></tr>
</table>

4.2.1 RADIATED EMISSION LIMITS

Frequencies (MHz)	Field Strength (micorvolts/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

LIMITS OF RADIATED EMISSION MEASUREMENT

FREQUENCY (MHz)	Limit (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

4.2.2 TEST PROCEDURE

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 25GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-chamber test. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8m; above 1GHz, the height was 1.5m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.
g. For the radiated emission test above 1GHz:
Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response.
The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
Note:

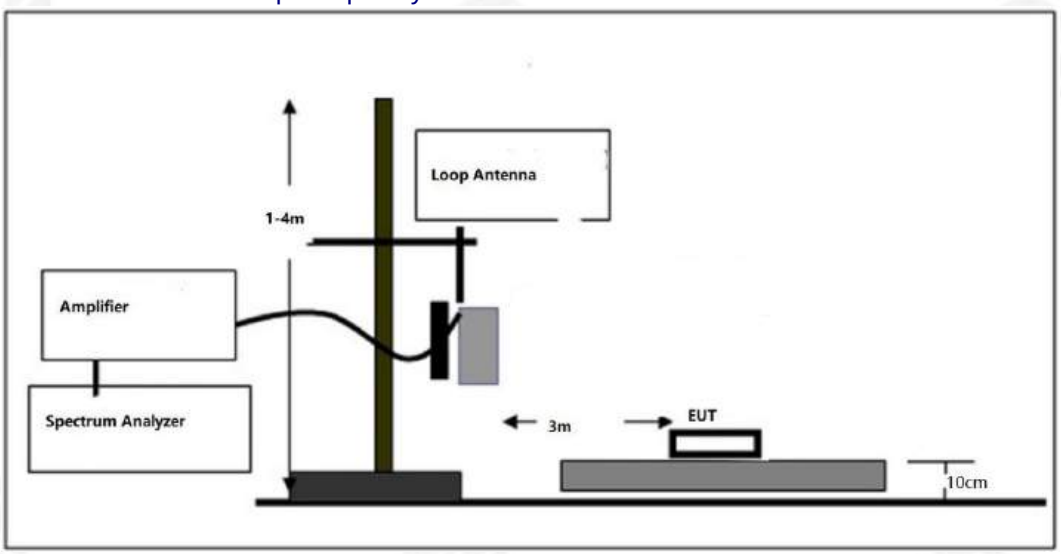
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

4.2.3 DEVIATION FROM TEST STANDARD

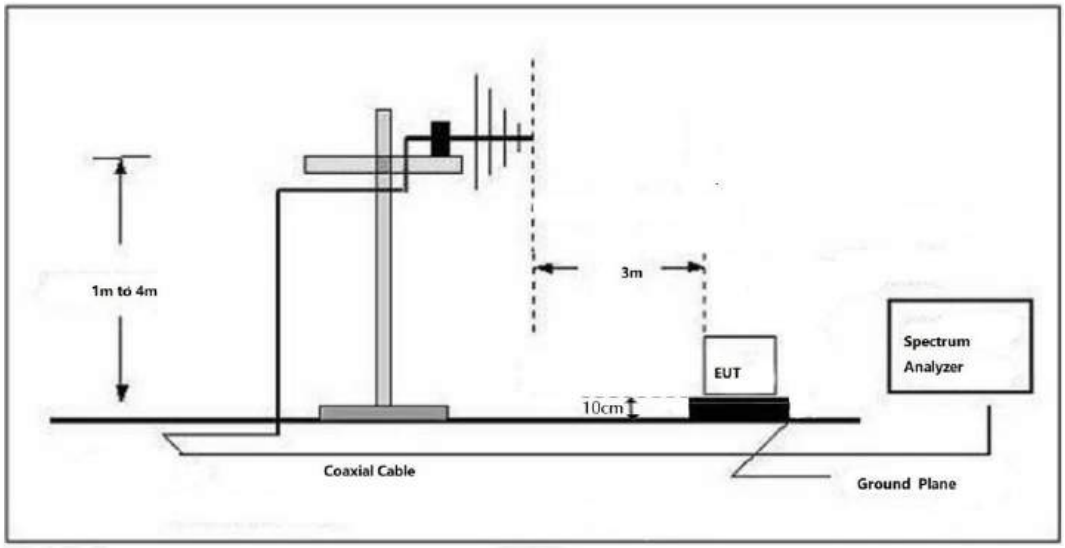
No deviation

4.2.4 TEST SETUP

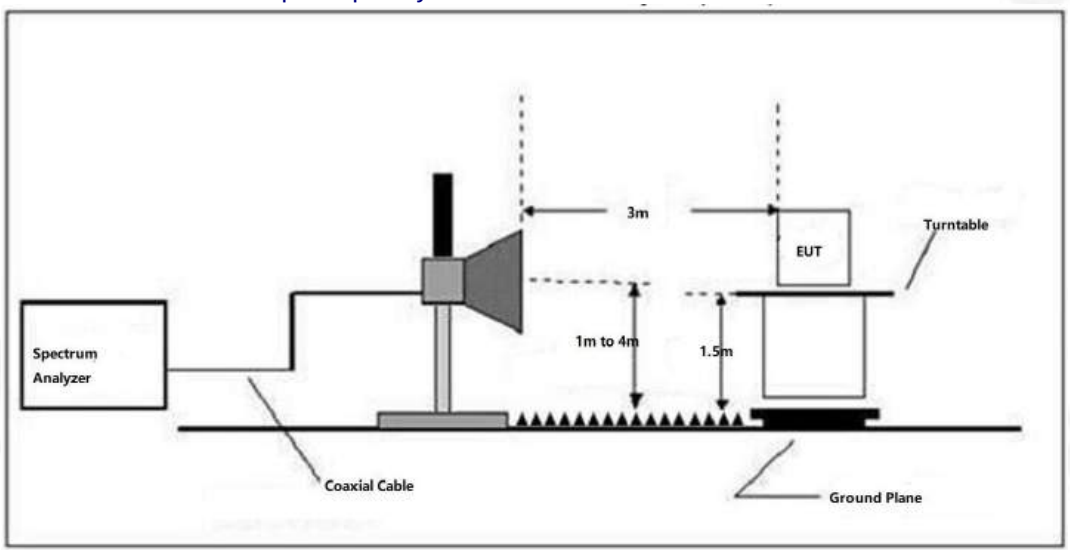
（A）Radiated Emission Test-Up Frequency Below 30MHz



（B）Radiated Emission Test-Up Frequency 30MHz~1GHz



（C）Radiated Emission Test-Up Frequency Above 1GHz



4.2.5 EUT OPERATING CONDITIONS

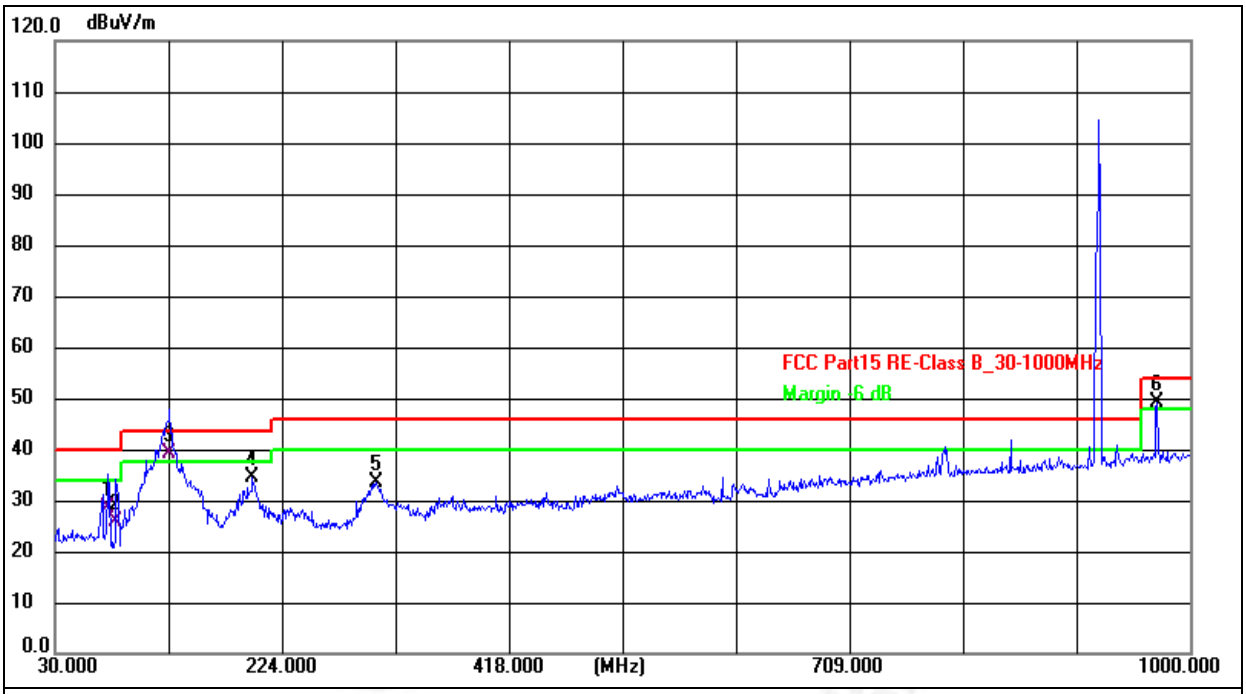
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

4.2.6 TEST RESULTS (Between 9KHz – 30 MHz)

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

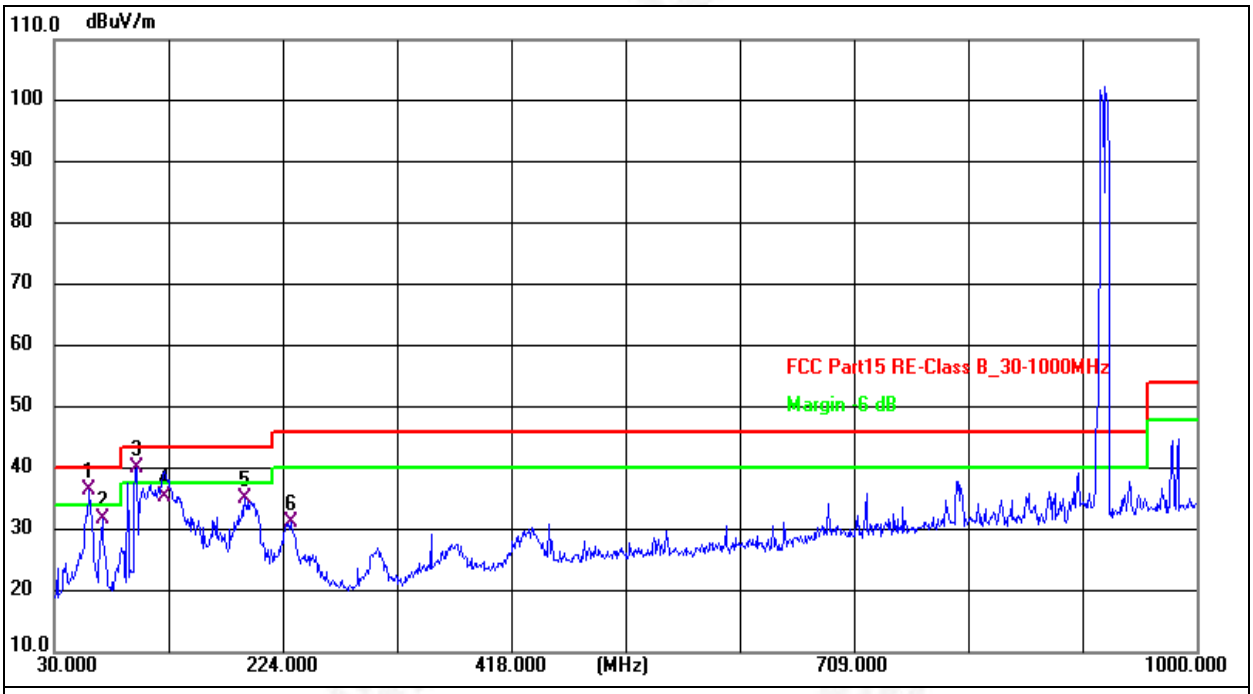
Between 30MHz – 1GHz

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	Horizontal
Test Voltage:	DC 25.2V		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	75.590	47.44	-18.94	28.50	40.00	-11.50	QP	/
2	82.380	45.15	-19.35	25.80	40.00	-14.20	QP	/
3 *	127.970	54.68	-15.58	39.10	43.50	-4.40	QP	/
4	198.780	52.60	-17.95	34.65	43.50	-8.85	QP	/
5	304.510	48.26	-14.90	33.36	46.00	-12.64	QP	/
6	971.870	49.17	0.01	49.18	54.00	-4.82	QP	/

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101kPa	Polarization:	Vertical
Test Voltage:	DC 25.2V		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1 !	60.070	53.16	-16.56	36.60	40.00	-3.40	QP	/
2	70.740	50.00	-18.16	31.84	40.00	-8.16	QP	/
3 *	99.840	57.96	-17.83	40.13	43.50	-3.37	QP	/
4	123.120	51.34	-15.84	35.50	43.50	-8.00	QP	/
5	191.990	52.72	-17.52	35.20	43.50	-8.30	QP	/
6	230.790	48.30	-17.14	31.16	46.00	-14.84	QP	/

Remarks:
1.Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2.The emission levels of other frequencies are very lower than the limit and not show in test report.
3.The test data shows only the worst case OFDM 1MHz mode

1GHz~25GHz

OFDM-1M

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:902.5MHz									
V	1805	52.21	30.57	5.32	24.66	51.62	74	-22.38	Pk
V	1805	43.45	30.57	5.32	24.66	42.86	54	-11.14	AV
V	2707.5	53.33	30.31	6.11	24.55	53.68	74	-20.32	Pk
V	2707.5	42.23	30.31	6.11	24.55	42.58	54	-11.42	AV
V	3610	52.36	30.9	7.45	24.69	53.6	74	-20.4	Pk
V	3610	42.68	30.9	7.45	24.69	43.92	54	-10.08	AV
V	4512.5	52.32	31.12	8.46	25.57	55.23	74	-18.77	Pk
V	4512.5	43.12	31.12	8.46	25.57	46.03	54	-7.97	AV
H	1805	53.21	30.57	5.32	24.66	52.62	74	-21.38	Pk
H	1805	43.62	30.57	5.32	24.66	43.03	54	-10.97	AV
H	2707.5	52.67	30.31	6.11	24.55	53.02	74	-20.98	Pk
H	2707.5	42.43	30.31	6.11	24.55	42.78	54	-11.22	AV
H	3610	53.32	30.9	7.45	24.69	54.56	74	-19.44	Pk
H	3610	43.15	30.9	7.45	24.69	44.39	54	-9.61	AV
H	4512.5	51.23	31.12	8.46	25.57	54.14	74	-19.86	Pk
H	4512.5	42.33	31.12	8.46	25.57	45.24	54	-8.76	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:914.5MHz									
V	1829	52.43	30.55	5.36	24.67	51.91	74	-22.09	Pk
V	1829	43.21	30.55	5.36	24.67	42.69	54	-11.31	AV
V	2743.5	53.56	30.36	6.14	24.59	53.93	74	-20.07	Pk
V	2743.5	42.34	30.36	6.14	24.59	42.71	54	-11.29	AV
V	3658	52.38	30.78	7.49	24.69	53.78	74	-20.22	Pk
V	3658	42.47	30.78	7.49	24.69	43.87	54	-10.13	AV
V	4572.5	52.43	31.32	8.54	25.71	55.36	74	-18.64	Pk
V	4572.5	43.78	31.32	8.54	25.71	46.71	54	-7.29	AV
H	1829	53.56	30.55	5.36	24.67	53.04	74	-20.96	Pk
H	1829	43.43	30.55	5.36	24.67	42.91	54	-11.09	AV
H	2743.5	52.33	30.36	6.14	24.59	52.7	74	-21.3	Pk
H	2743.5	42.56	30.36	6.14	24.59	42.93	54	-11.07	AV
H	3658	53.43	30.78	7.49	24.69	54.83	74	-19.17	Pk
H	3658	43.46	30.78	7.49	24.69	44.86	54	-9.14	AV
H	4572.5	51.47	31.32	8.54	25.71	54.4	74	-19.6	Pk
H	4572.5	42.26	31.32	8.54	25.71	45.19	54	-8.81	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:927.5MHz									
V	1855	52.45	30.51	5.36	24.68	51.98	74	-22.02	Pk
V	1855	43.67	30.51	5.36	24.68	43.2	54	-10.8	AV
V	2782.5	53.32	30.36	6.18	24.46	53.6	74	-20.4	Pk
V	2782.5	42.21	30.36	6.18	24.46	42.49	54	-11.51	AV
V	3710	52.58	30.29	7.49	24.62	54.4	74	-19.6	Pk
V	3710	42.44	30.29	7.49	24.62	44.26	54	-9.74	AV
V	4637.5	52.02	31.17	8.41	25.51	54.77	74	-19.23	Pk
V	4637.5	43.32	31.17	8.41	25.51	46.07	54	-7.93	AV
H	1855	53.49	30.51	5.36	24.68	53.02	74	-20.98	Pk
H	1855	43.48	30.51	5.36	24.68	43.01	54	-10.99	AV
H	2782.5	52.36	30.36	6.18	24.46	52.64	74	-21.36	Pk
H	2782.5	42.63	30.36	6.18	24.46	42.91	54	-11.09	AV
H	3710	53.56	30.29	7.49	24.62	55.38	74	-18.62	Pk
H	3710	43.58	30.29	7.49	24.62	45.4	54	-8.6	AV
H	4637.5	51.65	31.17	8.41	25.51	54.4	74	-19.6	Pk
H	4637.5	42.14	31.17	8.41	25.51	44.89	54	-9.11	AV

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

OFDM-2M

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:903MHz									
V	1806	52.25	30.51	5.34	24.66	51.74	74	-22.26	Pk
V	1806	43.21	30.51	5.34	24.66	42.7	54	-11.3	AV
V	2709	53.67	30.34	6.11	24.55	53.99	74	-20.01	Pk
V	2709	42.41	30.34	6.11	24.55	42.73	54	-11.27	AV
V	3612	52.67	30.92	7.47	24.69	53.91	74	-20.09	Pk
V	3612	42.45	30.92	7.47	24.69	43.69	54	-10.31	AV
V	4515	52.21	31.12	8.49	25.57	55.15	74	-18.85	Pk
V	4515	43.23	31.12	8.49	25.57	46.17	54	-7.83	AV
H	1806	53.38	30.51	5.34	24.66	52.87	74	-21.13	Pk
H	1806	43.67	30.51	5.34	24.66	43.16	54	-10.84	AV
H	2709	52.46	30.34	6.11	24.55	52.78	74	-21.22	Pk
H	2709	42.33	30.34	6.11	24.55	42.65	54	-11.35	AV
H	3612	53.23	30.92	7.47	24.69	54.47	74	-19.53	Pk
H	3612	43.21	30.92	7.47	24.69	44.45	54	-9.55	AV
H	4515	51.18	31.12	8.49	25.57	54.12	74	-19.88	Pk
H	4515	42.36	31.12	8.49	25.57	45.3	54	-8.7	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:915MHz									
V	1830	52.68	30.55	5.36	24.67	52.16	74	-21.84	Pk
V	1830	43.32	30.55	5.36	24.67	42.8	54	-11.2	AV
V	2745	53.21	30.36	6.14	24.59	53.58	74	-20.42	Pk
V	2745	42.34	30.36	6.14	24.59	42.71	54	-11.29	AV
V	3660	52.67	30.78	7.49	24.69	54.07	74	-19.93	Pk
V	3660	42.45	30.78	7.49	24.69	43.85	54	-10.15	AV
V	4575	52.32	31.32	8.54	25.71	55.25	74	-18.75	Pk
V	4575	43.27	31.32	8.54	25.71	46.2	54	-7.8	AV
H	1830	53.89	30.55	5.36	24.67	53.37	74	-20.63	Pk
H	1830	43.43	30.55	5.36	24.67	42.91	54	-11.09	AV
H	2745	52.46	30.36	6.14	24.59	52.83	74	-21.17	Pk
H	2745	42.43	30.36	6.14	24.59	42.8	54	-11.2	AV
H	3660	53.23	30.78	7.49	24.69	54.63	74	-19.37	Pk
H	3660	43.45	30.78	7.49	24.69	44.85	54	-9.15	AV
H	4575	51.21	31.32	8.54	25.71	54.14	74	-19.86	Pk
H	4575	42.32	31.32	8.54	25.71	45.25	54	-8.75	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:927MHz									
V	1854	52.23	30.51	5.36	24.68	51.76	74	-22.24	Pk
V	1854	43.22	30.51	5.36	24.68	42.75	54	-11.25	AV
V	2781	53.56	30.36	6.18	24.46	53.84	74	-20.16	Pk
V	2781	42.43	30.36	6.18	24.46	42.71	54	-11.29	AV
V	3708	52.47	30.29	7.49	24.62	54.29	74	-19.71	Pk
V	3708	42.56	30.29	7.49	24.62	44.38	54	-9.62	AV
V	4635	52.32	31.17	8.41	25.51	55.07	74	-18.93	Pk
V	4635	43.78	31.17	8.41	25.51	46.53	54	-7.47	AV
H	1854	53.46	30.51	5.36	24.68	52.99	74	-21.01	Pk
H	1854	43.24	30.51	5.36	24.68	42.77	54	-11.23	AV
H	2781	52.41	30.36	6.18	24.46	52.69	74	-21.31	Pk
H	2781	42.87	30.36	6.18	24.46	43.15	54	-10.85	AV
H	3708	53.32	30.29	7.49	24.62	55.14	74	-18.86	Pk
H	3708	43.12	30.29	7.49	24.62	44.94	54	-9.06	AV
H	4635	51.77	31.17	8.41	25.51	54.52	74	-19.48	Pk
H	4635	42.32	31.17	8.41	25.51	45.07	54	-8.93	AV

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

OFDM-4M

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:906MHz									
V	1812	52.12	30.55	5.33	24.66	51.56	74	-22.44	Pk
V	1812	43.56	30.55	5.33	24.66	43	54	-11	AV
V	2718	53.38	30.32	6.15	24.55	53.76	74	-20.24	Pk
V	2718	42.59	30.32	6.15	24.55	42.97	54	-11.03	AV
V	3624	52.43	30.96	7.48	24.69	53.64	74	-20.36	Pk
V	3624	42.23	30.96	7.48	24.69	43.44	54	-10.56	AV
V	4530	52.47	31.32	8.44	25.57	55.16	74	-18.84	Pk
V	4530	43.87	31.32	8.44	25.57	46.56	54	-7.44	AV
H	1812	53.31	30.55	5.33	24.66	52.75	74	-21.25	Pk
H	1812	43.39	30.55	5.33	24.66	42.83	54	-11.17	AV
H	2718	52.36	30.32	6.15	24.55	52.74	74	-21.26	Pk
H	2718	42.33	30.32	6.15	24.55	42.71	54	-11.29	AV
H	3624	53.12	30.96	7.48	24.69	54.33	74	-19.67	Pk
H	3624	43.73	30.96	7.48	24.69	44.94	54	-9.06	AV
H	4530	51.27	31.32	8.44	25.57	53.96	74	-20.04	Pk
H	4530	42.38	31.32	8.44	25.57	45.07	54	-8.93	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:914MHz									
V	1828	52.36	30.51	5.35	24.67	51.87	74	-22.13	Pk
V	1828	43.45	30.51	5.35	24.67	42.96	54	-11.04	AV
V	2742	53.34	30.33	6.14	24.59	53.74	74	-20.26	Pk
V	2742	42.21	30.33	6.14	24.59	42.61	54	-11.39	AV
V	3656	52.36	30.71	7.44	24.69	53.78	74	-20.22	Pk
V	3656	42.12	30.71	7.44	24.69	43.54	54	-10.46	AV
V	4570	52.38	31.35	8.57	25.71	55.31	74	-18.69	Pk
V	4570	43.32	31.35	8.57	25.71	46.25	54	-7.75	AV
H	1828	53.78	30.51	5.35	24.67	53.29	74	-20.71	Pk
H	1828	43.69	30.51	5.35	24.67	43.2	54	-10.8	AV
H	2742	52.54	30.33	6.14	24.59	52.94	74	-21.06	Pk
H	2742	42.56	30.33	6.14	24.59	42.96	54	-11.04	AV
H	3656	53.38	30.71	7.44	24.69	54.8	74	-19.2	Pk
H	3656	43.67	30.71	7.44	24.69	45.09	54	-8.91	AV
H	4570	51.49	31.35	8.57	25.71	54.42	74	-19.58	Pk
H	4570	42.37	31.35	8.57	25.71	45.3	54	-8.7	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:926MHz									
V	1852	52.33	30.51	5.36	24.68	51.86	74	-22.14	Pk
V	1852	43.79	30.51	5.36	24.68	43.32	54	-10.68	AV
V	2778	53.22	30.36	6.18	24.46	53.5	74	-20.5	Pk
V	2778	42.67	30.36	6.18	24.46	42.95	54	-11.05	AV
V	3704	52.12	30.29	7.49	24.62	53.94	74	-20.06	Pk
V	3704	42.22	30.29	7.49	24.62	44.04	54	-9.96	AV
V	4630	52.67	31.17	8.41	25.51	55.42	74	-18.58	Pk
V	4630	43.89	31.17	8.41	25.51	46.64	54	-7.36	AV
H	1852	53.68	30.51	5.36	24.68	53.21	74	-20.79	Pk
H	1852	43.43	30.51	5.36	24.68	42.96	54	-11.04	AV
H	2778	52.38	30.36	6.18	24.46	52.66	74	-21.34	Pk
H	2778	42.56	30.36	6.18	24.46	42.84	54	-11.16	AV
H	3704	53.39	30.29	7.49	24.62	55.21	74	-18.79	Pk
H	3704	43.47	30.29	7.49	24.62	45.29	54	-8.71	AV
H	4630	51.73	31.17	8.41	25.51	54.48	74	-19.52	Pk
H	4630	42.34	31.17	8.41	25.51	45.09	54	-8.91	AV

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

OFDM-8M

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:908MHz									
V	1816	52.25	30.54	5.37	24.67	51.75	74	-22.25	Pk
V	1816	43.68	30.54	5.37	24.67	43.18	54	-10.82	AV
V	2724	53.45	30.36	6.19	24.59	53.87	74	-20.13	Pk
V	2724	42.66	30.36	6.19	24.59	43.08	54	-10.92	AV
V	3632	52.39	30.67	7.56	24.61	53.89	74	-20.11	Pk
V	3632	42.21	30.67	7.56	24.61	43.71	54	-10.29	AV
V	4540	52.45	31.39	8.44	25.53	55.03	74	-18.97	Pk
V	4540	43.67	31.39	8.44	25.53	46.25	54	-7.75	AV
H	1816	53.69	30.54	5.37	24.67	53.19	74	-20.81	Pk
H	1816	43.44	30.54	5.37	24.67	42.94	54	-11.06	AV
H	2724	52.59	30.36	6.19	24.59	53.01	74	-20.99	Pk
H	2724	42.51	30.36	6.19	24.59	42.93	54	-11.07	AV
H	3632	53.47	30.67	7.56	24.61	54.97	74	-19.03	Pk
H	3632	43.41	30.67	7.56	24.61	44.91	54	-9.09	AV
H	4540	51.68	31.39	8.44	25.53	54.26	74	-19.74	Pk
H	4540	42.39	31.39	8.44	25.53	44.97	54	-9.03	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:916MHz									
V	1832	52.36	30.51	5.35	24.67	51.87	74	-22.13	Pk
V	1832	43.35	30.51	5.35	24.67	42.86	54	-11.14	AV
V	2748	53.23	30.33	6.14	24.59	53.63	74	-20.37	Pk
V	2748	42.12	30.33	6.14	24.59	42.52	54	-11.48	AV
V	3664	52.45	30.71	7.44	24.69	53.87	74	-20.13	Pk
V	3664	42.43	30.71	7.44	24.69	43.85	54	-10.15	AV
V	4580	52.54	31.35	8.57	25.71	55.47	74	-18.53	Pk
V	4580	43.12	31.35	8.57	25.71	46.05	54	-7.95	AV
H	1832	53.36	30.51	5.35	24.67	52.87	74	-21.13	Pk
H	1832	43.67	30.51	5.35	24.67	43.18	54	-10.82	AV
H	2748	52.68	30.33	6.14	24.59	53.08	74	-20.92	Pk
H	2748	42.36	30.33	6.14	24.59	42.76	54	-11.24	AV
H	3664	53.35	30.71	7.44	24.69	54.77	74	-19.23	Pk
H	3664	43.51	30.71	7.44	24.69	44.93	54	-9.07	AV
H	4580	51.77	31.35	8.57	25.71	54.7	74	-19.3	Pk
H	4580	42.53	31.35	8.57	25.71	45.46	54	-8.54	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:924MHz									
V	1852	52.31	30.55	5.38	24.68	51.82	74	-22.18	Pk
V	1852	43.78	30.55	5.38	24.68	43.29	54	-10.71	AV
V	2778	53.43	30.34	6.12	24.46	53.67	74	-20.33	Pk
V	2778	42.57	30.34	6.12	24.46	42.81	54	-11.19	AV
V	3704	52.38	30.22	7.41	24.62	54.19	74	-19.81	Pk
V	3704	42.56	30.22	7.41	24.62	44.37	54	-9.63	AV
V	4630	52.43	31.17	8.32	25.51	55.09	74	-18.91	Pk
V	4630	43.21	31.17	8.32	25.51	45.87	54	-8.13	AV
H	1852	53.22	30.55	5.38	24.68	52.73	74	-21.27	Pk
H	1852	43.78	30.55	5.38	24.68	43.29	54	-10.71	AV
H	2778	52.47	30.34	6.12	24.46	52.71	74	-21.29	Pk
H	2778	42.43	30.34	6.12	24.46	42.67	54	-11.33	AV
H	3704	53.12	30.22	7.41	24.62	54.93	74	-19.07	Pk
H	3704	43.24	30.22	7.41	24.62	45.05	54	-8.95	AV
H	4630	51.13	31.17	8.32	25.51	53.79	74	-20.21	Pk
H	4630	42.32	31.17	8.32	25.51	44.98	54	-9.02	AV

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
   Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

5.RADIATED BAND EMISSION MEASUREMENT

5.1 TEST REQUIREMENT:

<table>
<tr><td>Test Requirement:</td><td colspan="5">FCC Part15 C Section 15.209 and 15.205</td></tr>
<tr><td>Test Method:</td><td colspan="5">ANSI C63.10: 2013</td></tr>
<tr><td>Test Frequency Range:</td><td colspan="5">All of the restrict bands were tested, only the worst band’s (890MHz to 940MHz) data was showed.</td></tr>
<tr><td>Test site:</td><td colspan="5">Measurement Distance: 3m</td></tr>
<tr><td>Receiver setup:</td><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Value</td></tr>
<tr><td></td><td>9KHz-150KHz</td><td>Quasi-peak</td><td>200Hz</td><td>MX5Hz</td><td>Quasi-peak</td></tr>
<tr><td></td><td>150KHz-30MHz</td><td>Quasi-peak</td><td>9KHz</td><td>30KHz</td><td>Quasi-peak</td></tr>
<tr><td></td><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak</td></tr>
<tr><td></td><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak</td></tr>
<tr><td></td><td>Peak</td><td>1MHz</td><td>10Hz</td><td>Average</td></tr>
</table>

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

5.2 TEST PROCEDURE

Above 1GHz test procedure as below:

a. 1. The EUT was placed on the top of a rotating table 0.1 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
g. Test the EUT in the lowest channel, the Highest channel

Note:

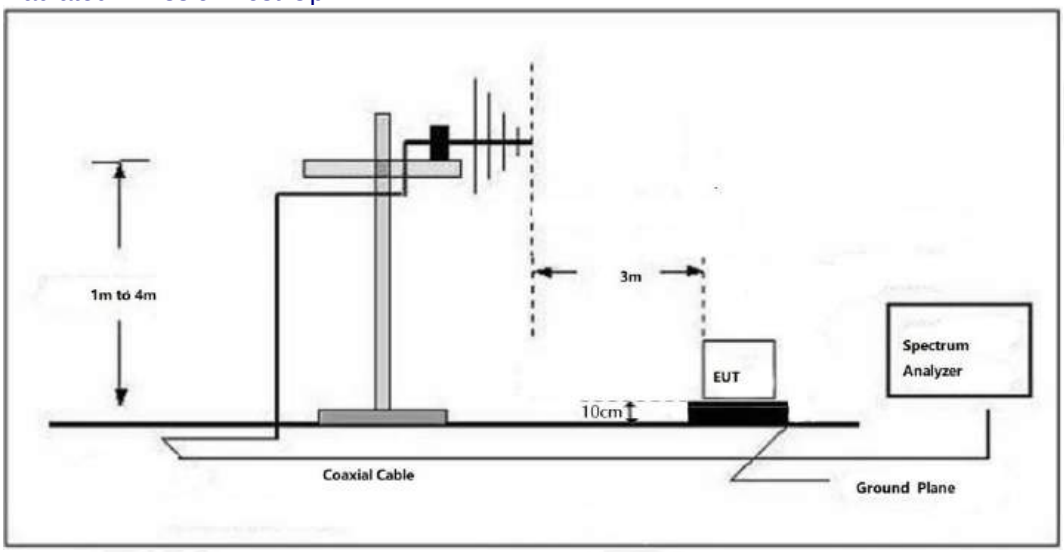
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

5.3 DEVIATION FROM TEST STANDARD

No deviation

5.4 TEST SETUP

Radiated Emission Test-Up



5.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

5.6 TEST RESULT

Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	101 kPa	Test Voltage ：	DC 25.2V
Test Mode ：	TX Mode		

	Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Detector Type	Margin (dBuV/m	Result
OFDM-1M	Low Channel: 902.5MHz										
	H	890.00	45.87	31.28	4.67	21.64	40.9	46	QP	-5.1	PASS
	H	902.00	46.54	31.28	4.67	21.64	41.57	46	QP	-4.43	PASS
	V	890.00	46.78	31.28	4.67	20.98	41.15	46	QP	-4.85	PASS
	V	902.00	46.21	31.28	4.67	20.98	40.58	46	QP	-5.42	PASS
	High Channel: 927.5MHz										
	H	928.00	45.12	31.51	4.98	20.61	39.2	46	QP	-6.8	PASS
	H	940.00	46.29	31.51	4.98	20.61	40.37	46	QP	-5.63	PASS
	V	928.00	46.43	31.51	4.98	19.21	39.11	46	QP	-6.89	PASS
	V	940.00	46.89	31.51	4.98	19.21	39.57	46	QP	-6.43	PASS
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit											

	Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Detector Type	Margin (dBuV/m	Result
OFDM-2M	Low Channel: 903MHz										
	H	890	45.45	31.28	4.67	21.64	40.48	46	QP	-5.52	PASS
	H	902	46.5	31.28	4.67	21.64	41.53	46	QP	-4.47	PASS
	V	890	26.21	31.28	4.67	20.98	20.58	46	QP	-25.42	PASS
	V	902	45.47	31.28	4.67	20.98	39.84	46	QP	-6.16	PASS
	High Channel: 927MHz										
	H	928	45.22	31.51	4.98	20.61	39.3	46	QP	-6.7	PASS
	H	940	45.43	31.51	4.98	20.61	39.51	46	QP	-6.49	PASS
	V	928	46.33	31.51	4.98	19.21	39.01	46	QP	-6.99	PASS
	V	940	46.32	31.51	4.98	19.21	39	46	QP	-7	PASS
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit											

	Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Detector Type	Margin (dBuV/m	Result
OFDM-4M	Low Channel: 906MHz										
	H	890	45.76	31.28	4.67	21.64	40.79	46	QP	-5.21	PASS
	H	902	46.89	31.28	4.67	21.64	41.92	46	QP	-4.08	PASS
	V	890	46.67	31.28	4.67	20.98	41.04	46	QP	-4.96	PASS
	V	902	45.64	31.28	4.67	20.98	40.01	46	QP	-5.99	PASS
	High Channel: 926MHz										
	H	928	44.67	31.51	4.98	20.61	38.75	46	QP	-7.25	PASS
	H	940	45.32	31.51	4.98	20.61	39.4	46	QP	-6.6	PASS
	V	928	46.12	31.51	4.98	19.21	38.8	46	QP	-7.2	PASS
	V	940	46.53	31.51	4.98	19.21	39.21	46	QP	-6.79	PASS

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

	Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Detector Type	Margin (dBuV/m	Result
OFDM-8M	Low Channel: 908MHz										
	H	890	45.34	31.28	4.67	21.64	40.37	46	QP	-5.63	PASS
	H	902	46.67	31.28	4.67	21.64	41.7	46	QP	-4.3	PASS
	V	890	46.12	31.28	4.67	20.98	40.49	46	QP	-5.51	PASS
	V	902	46.09	31.28	4.67	20.98	40.46	46	QP	-5.54	PASS
	High Channel: 924MHz										
	H	45.04	44.67	31.51	4.98	20.61	38.75	46	QP	-7.25	PASS
	H	46.21	45.34	31.51	4.98	20.61	39.42	46	QP	-6.58	PASS
	V	47.28	47.01	31.51	4.98	19.21	39.69	46	QP	-6.31	PASS
	V	46.83	46.22	31.51	4.98	19.21	38.9	46	QP	-7.1	PASS

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

6.POWER SPECTRAL DENSITY TEST

Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	KDB558074 D0115.247 Meas Guidance v05r02

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8dBm/3kHz	902-928	PASS

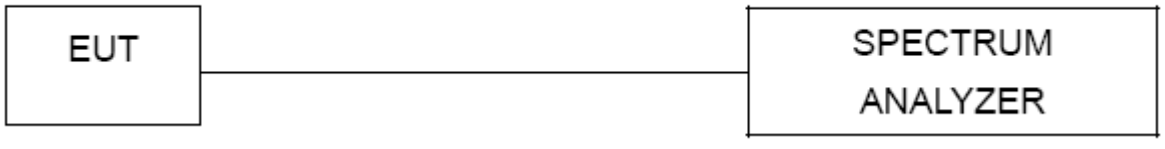
6.2 TEST PROCEDURE

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

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

6.6 TEST RESULT

Temperature：	26℃	Relative Humidity：	54%
Test Mode ：	OFDM	Test Voltage ：	DC 25.2V

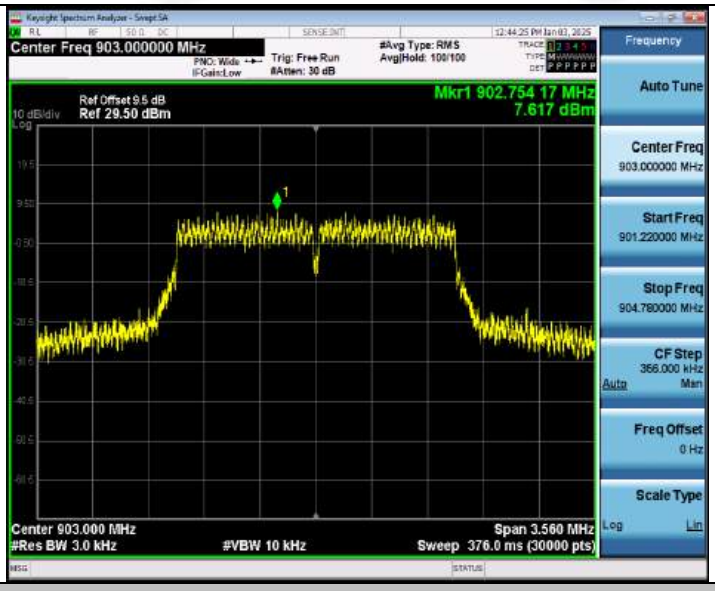
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
OFDM-1M	Ant1	902.5	6.03	≤8.00	PASS
		914.5	7.00	≤8.00	PASS
		927.5	6.05	≤8.00	PASS
OFDM-2M	Ant1	903	7.62	≤8.00	PASS
		915	7.63	≤8.00	PASS
		927	7.72	≤8.00	PASS
OFDM-4M	Ant1	906	0.53	≤8.00	PASS
		914	0.63	≤8.00	PASS
		926	0.60	≤8.00	PASS
OFDM-8M	Ant1	908	-2.08	≤8.00	PASS
		916	-2.08	≤8.00	PASS
		924	-2.06	≤8.00	PASS

OFDM-1M_Ant1_902.5

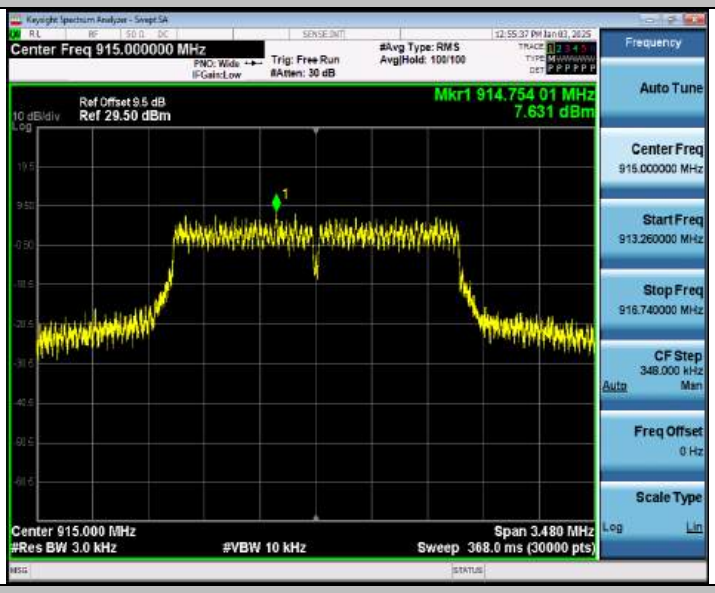
OFDM-1M_Ant1_914.5

OFDM-1M_Ant1_927.5

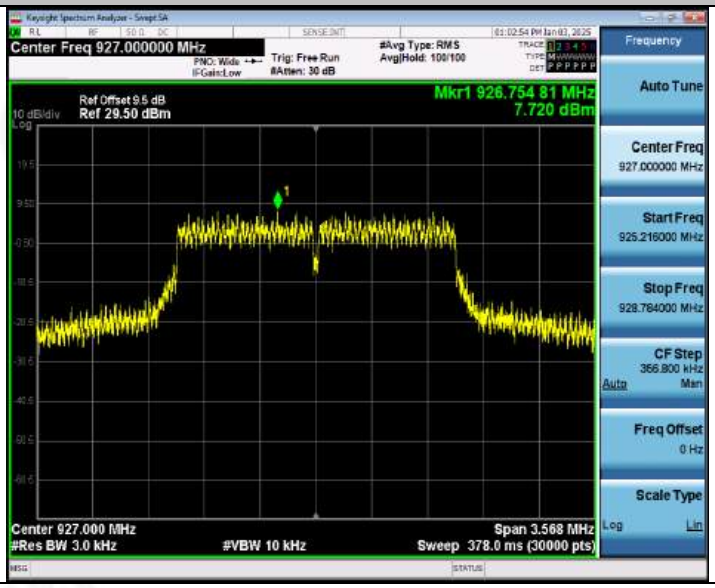
OFDM-2M_Ant1_903

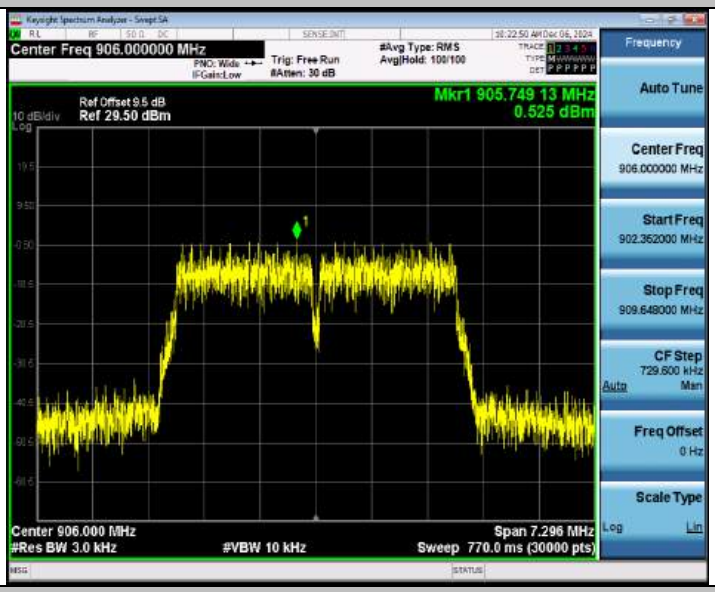
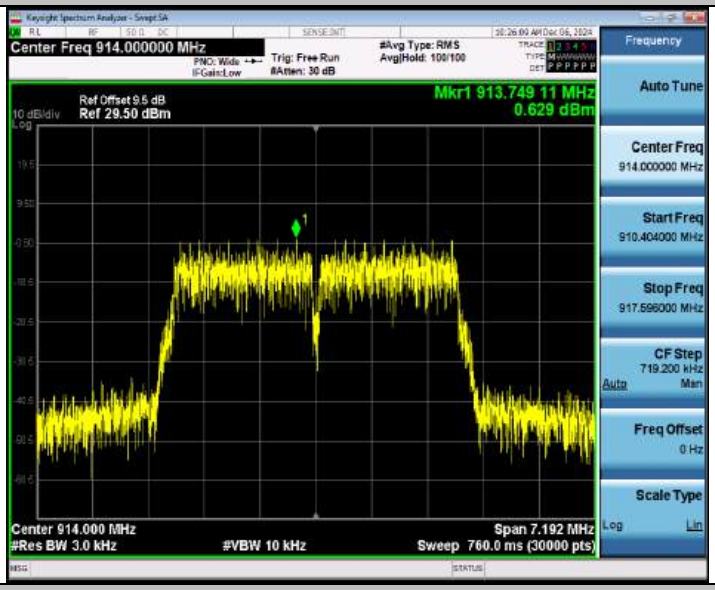


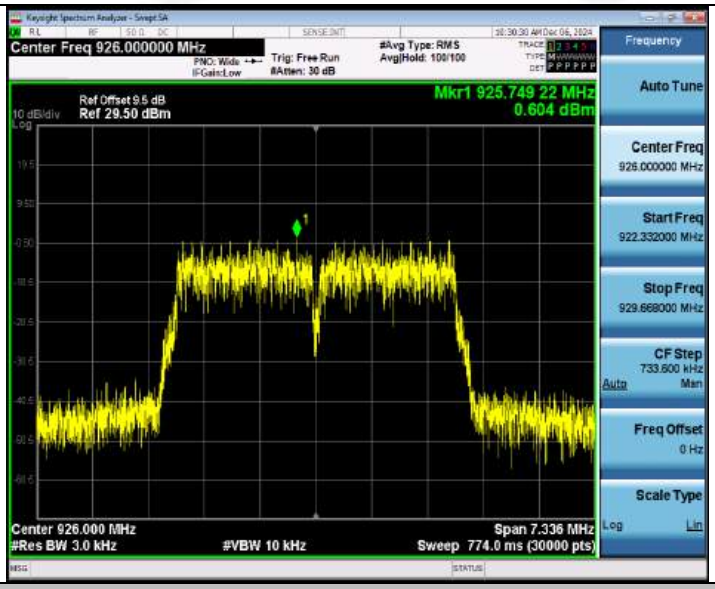
OFDM-2M_Ant1_915



OFDM-2M_Ant1_927

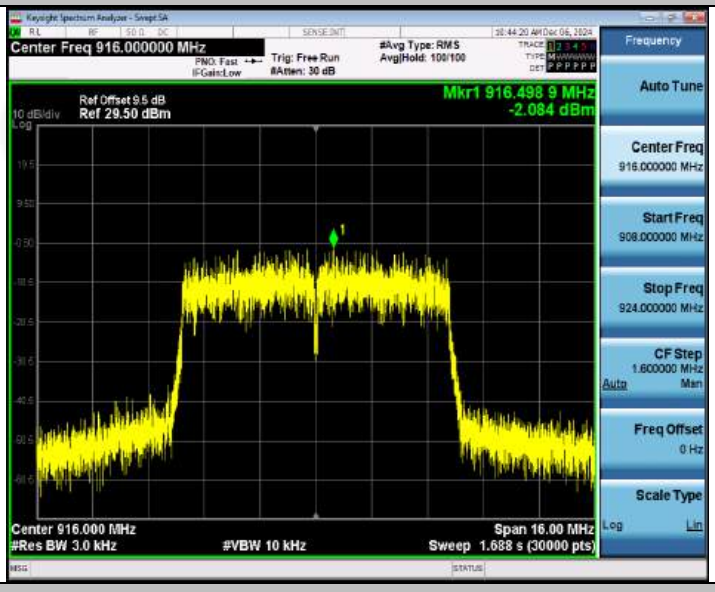


OFDM-4M_Ant1_906

OFDM-4M_Ant1_914

OFDM-4M_Ant1_926

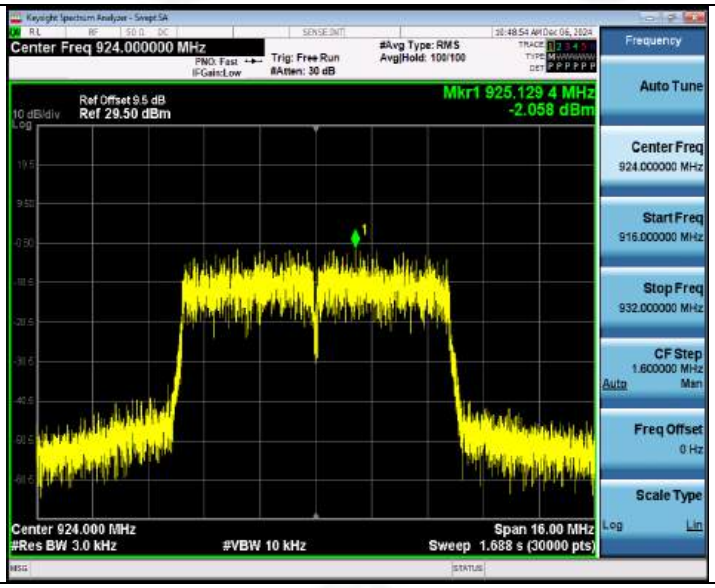


OFDM-8M_Ant1_908

OFDM-8M_Ant1_916



OFDM-8M_Ant1_924


Center Freq 924.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 9.5 dB
10 dB/div
Ref 29.50 dBm
Mkr1 925.129 4 MHz
-2.058 dBm
Center 924.000 MHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 16.00 MHz
Sweep 1.688 s (30000 pts)
Frequency
Auto Tune
Center Freq
924.000000 MHz
Start Freq
916.000000 MHz
Stop Freq
932.000000 MHz
CF Step
1.600000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

7. CHANNEL BANDWIDTH

Test Requirement:	FCC Part15 C Section 15.247 (a)(2)
Test Method:	KDB558074 D0115.247 Meas Guidance v05r02

7.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	902-928	PASS

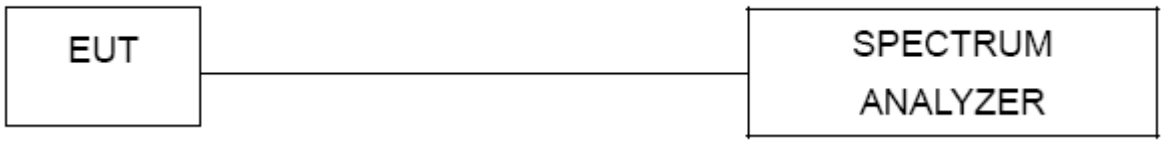
7.2 TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 x RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. 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.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

7.6 TEST RESULT

Temperature：	26℃	Relative Humidity：	54%
Test Mode ：	OFDM	Test Voltage ：	DC 25.2V

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
OFDM-1M	Ant1	902.5	0.880	902.080	902.960	0.5	PASS
		914.5	0.836	914.092	914.928	0.5	PASS
		927.5	0.852	927.080	927.932	0.5	PASS
OFDM-2M	Ant1	903	1.780	902.128	903.908	0.5	PASS
		915	1.740	914.128	915.868	0.5	PASS
		927	1.784	926.112	927.896	0.5	PASS
OFDM-4M	Ant1	906	3.648	904.176	907.824	0.5	PASS
		914	3.608	912.216	915.824	0.5	PASS
		926	3.648	924.160	927.808	0.5	PASS
OFDM-8M	Ant1	908	7.392	904.400	911.792	0.5	PASS
		916	7.488	912.304	919.792	0.5	PASS
		924	7.200	920.336	927.536	0.5	PASS

WIFI_1M_Ant1_902.5

WIFI_1M_Ant1_914.5

WIFI_1M_Ant1_927.5

WIFI_2M_Ant1_903

WIFI_2M_Ant1_915

WIFI_2M_Ant1_927

OFDM-4M_Ant1_906
OFDM-4M_Ant1_914
OFDM-4M_Ant1_926

OFDM-8M_Ant1_908

OFDM-8M_Ant1_916

OFDM-8M_Ant1_924

Center Freq 924.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 9.5 dB
10 dB/div
Ref 29.50 dBm
ΔMkr3 7.200 MHz
-1.999 dB
Center 924.000 MHz
#Res BW 100 kHz
#VBW 300 kHz
Span 16.00 MHz
Sweep 1.533 ms (1001 pts)
1 N 1 f 920.336 MHz 6.176 dBm
2 N 1 f 923.344 MHz 10.012 dBm
3 Δ1 1 f (Δ) 7.200 MHz (Δ) -1.999 dB
Frequency
Auto Tune
Center Freq
924.000000 MHz
Start Freq
916.000000 MHz
Stop Freq
932.000000 MHz
CF Step
1.600000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

8.PEAK OUTPUT POWER TEST

Test Requirement:	FCC Part15 C Section 15.247 (b)(3)
Test Method:	KDB558074 D0115.247 Meas Guidance v05r02

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	902-928	PASS

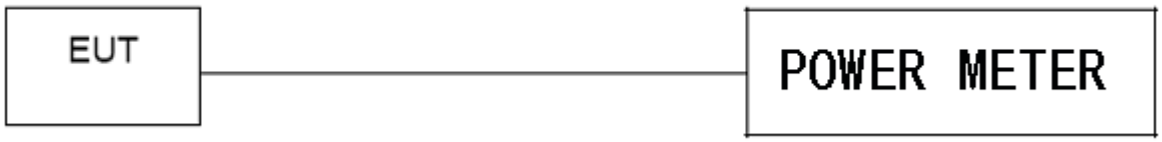
8.2 TEST PROCEDURE

a. The EUT was directly connected to the Power meter

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

8.6 TEST RESULT

Temperature：	26℃	Relative Humidity：	54%
Test Mode ：	OFDM	Test Voltage ：	DC 25.2V

Test Mode	Antenna	Frequency[MHz]	Peak Powert[dBm]	Result [dBm]	Limit [dBm]	Directional gain [dBm]	Limit [dBm]	Verdict
OFDM-1M	Ant1	902.5	28.35	28.35	≤30.00	33.35	≤36.00	PASS
	Ant1	914.5	28.41	28.41	≤30.00	33.41	≤36.00	PASS
	Ant1	927.5	28.29	28.29	≤30.00	33.29	≤36.00	PASS
OFDM-2M	Ant1	903	28.53	28.53	≤30.00	33.53	≤36.00	PASS
	Ant1	915	28.56	28.56	≤30.00	33.56	≤36.00	PASS
	Ant1	927	28.51	28.51	≤30.00	33.51	≤36.00	PASS
OFDM-4M	Ant1	906	27.86	27.86	≤30.00	32.86	≤36.00	PASS
	Ant1	914	28.27	28.27	≤30.00	33.27	≤36.00	PASS
	Ant1	926	27.73	27.73	≤30.00	32.73	≤36.00	PASS
OFDM-8M	Ant1	908	28.24	28.24	≤30.00	33.24	≤36.00	PASS
	Ant1	916	28.61	28.61	≤30.00	33.61	≤36.00	PASS
	Ant1	924	28.32	28.32	≤30.00	33.32	≤36.00	PASS
Remark： gain = 5 dBi；								

9. CONDUCTED BAND EDGE AND SPURIOUS EMISSION

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	KDB558074 D0115.247 Meas Guidance v05r02

9.1 APPLICABLE STANDARD

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.

9.2 TEST PROCEDURE

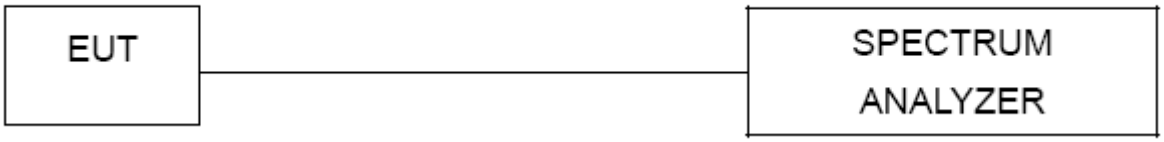
Using the following spectrum analyzer setting:

A) Set the RBW = 100KHz.
B) Set the VBW = 300KHz.
C) Sweep time = auto couple.
D) Detector function = peak.
E) Trace mode = max hold.
F) Allow trace to fully stabilize.

9.3 DEVIATION FROM STANDARD

No deviation.

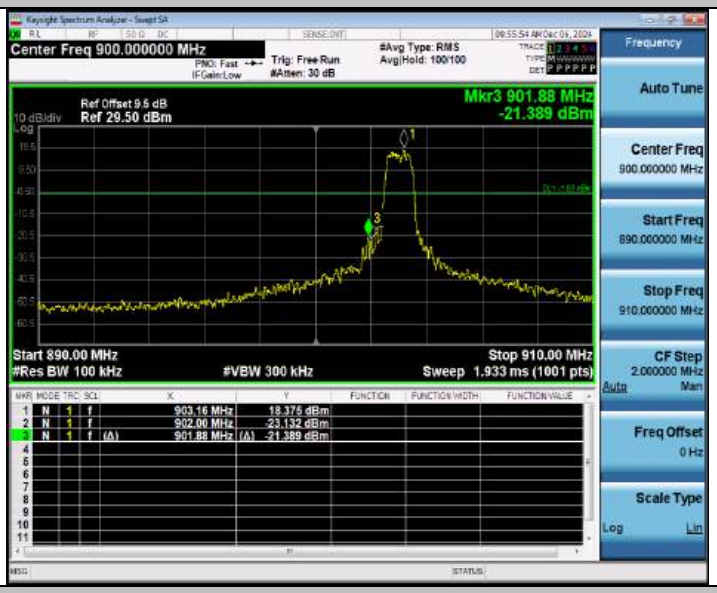
9.4 TEST SETUP



9.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

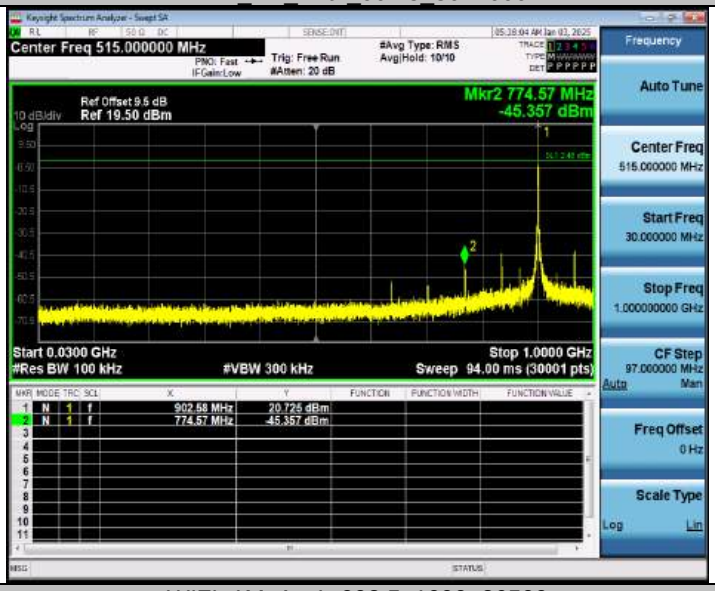
9.6 TEST RESULTS

OFDM-1M_Ant1_Low_902.5

OFDM-1M_Ant1_High_927.5
OFDM-2M_Ant1_Low_903

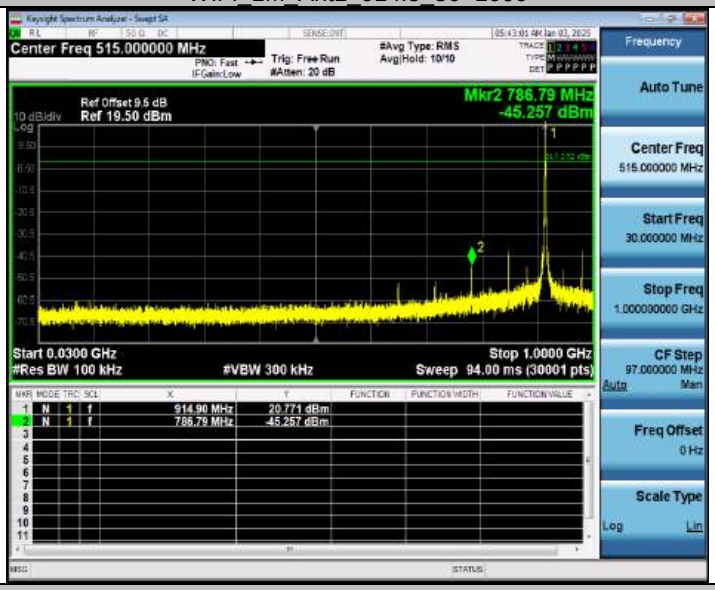
OFDM-2M_Ant1_High_927

OFDM-4M_Ant1_Low_906
OFDM-4M_Ant1_High_926
OFDM-8M_Ant1_Low_908

OFDM-8M_Ant1_High_924

WIFI_1M_Ant1_902.5_0~Reference
WIFI_1M_Ant1_902.5_30~1000

WIFI_1M_Ant1_902.5_1000~26500
WIFI_1M_Ant1_914.5_0~Reference

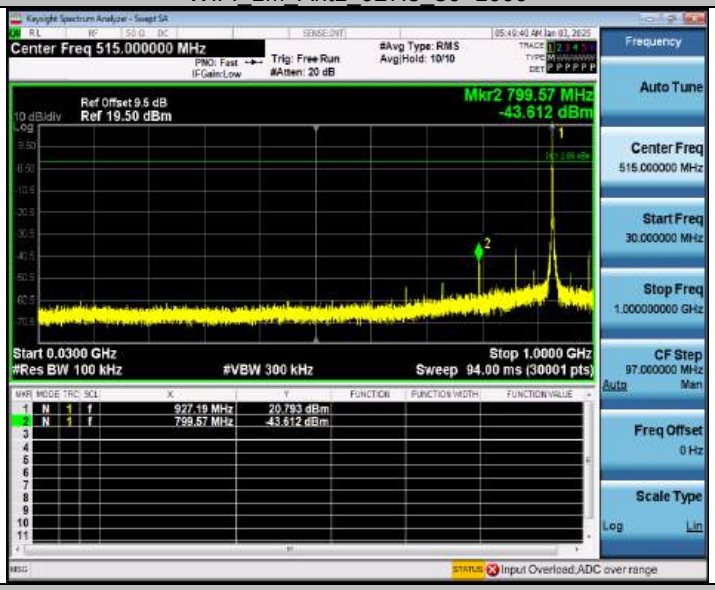
WIFI_1M_Ant1_914.5_30~1000



WIFI_1M_Ant1_914.5_1000~26500

WIFI_1M_Ant1_927.5_0~Reference

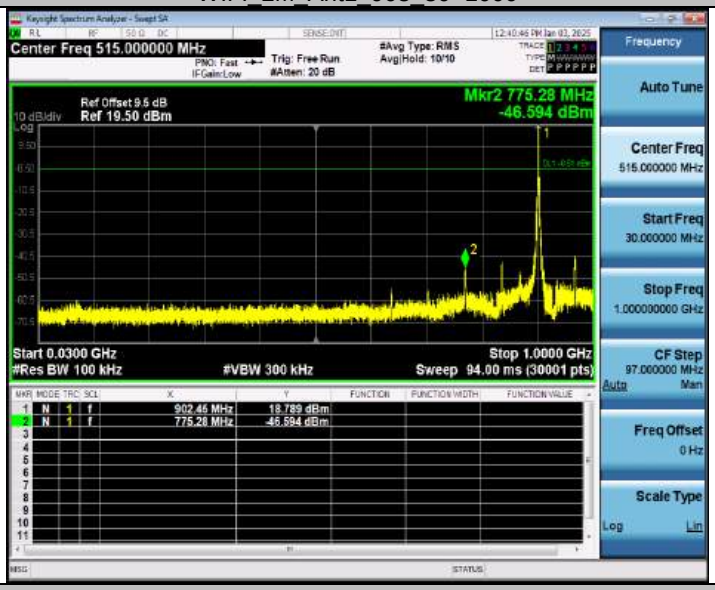
WIFI_1M_Ant1_927.5_30~1000



WIFI_1M_Ant1_927.5_1000~26500

WIFI_2M_Ant1_903_0~Reference

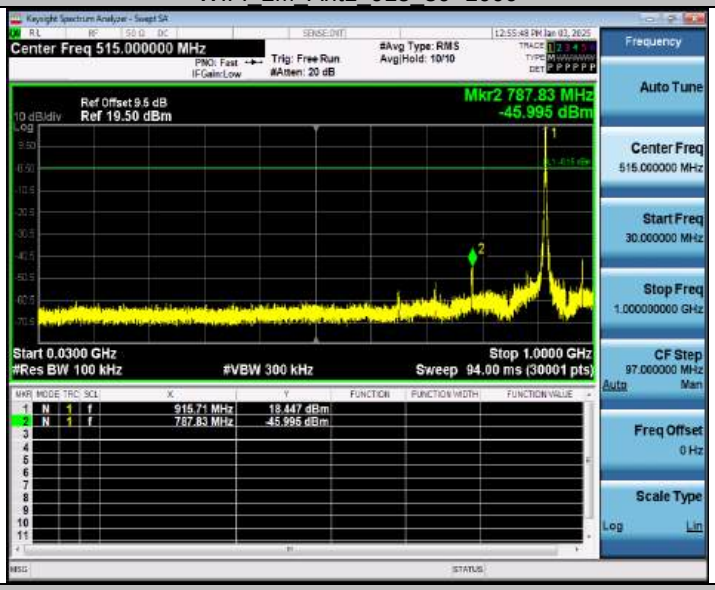
WIFI_2M_Ant1_903_30~1000



WIFI_2M_Ant1_903_1000~26500

WIFI_2M_Ant1_915_0~Reference

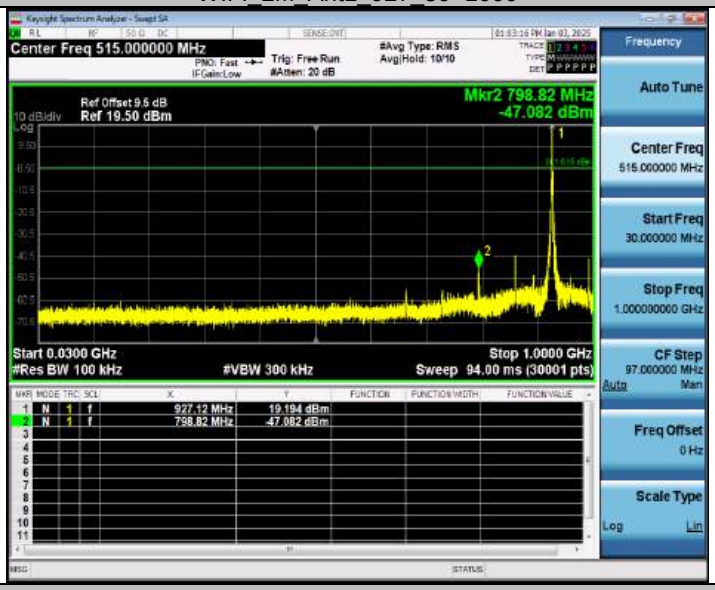
WIFI_2M_Ant1_915_30~1000



WIFI_2M_Ant1_915_1000~26500

WIFI_2M_Ant1_927_0~Reference

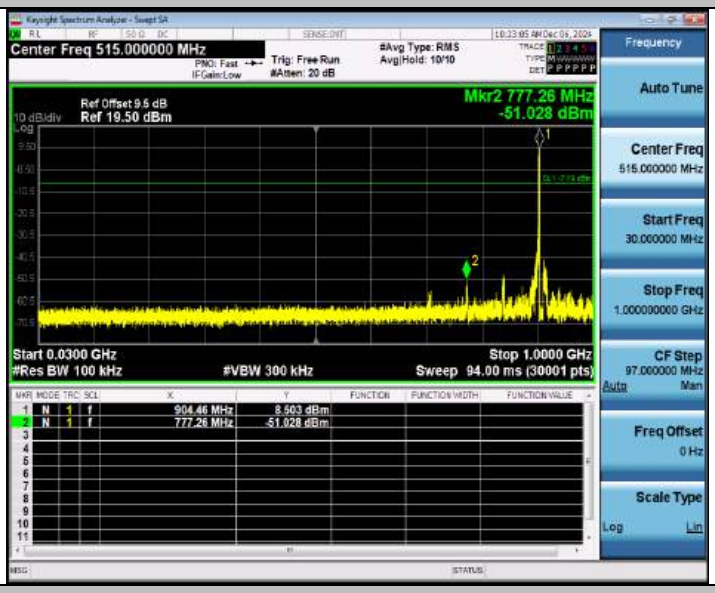
WIFI_2M_Ant1_927_30~1000



WIFI_2M_Ant1_927_1000~26500

WLAN_4M_Ant1_906_0~Reference

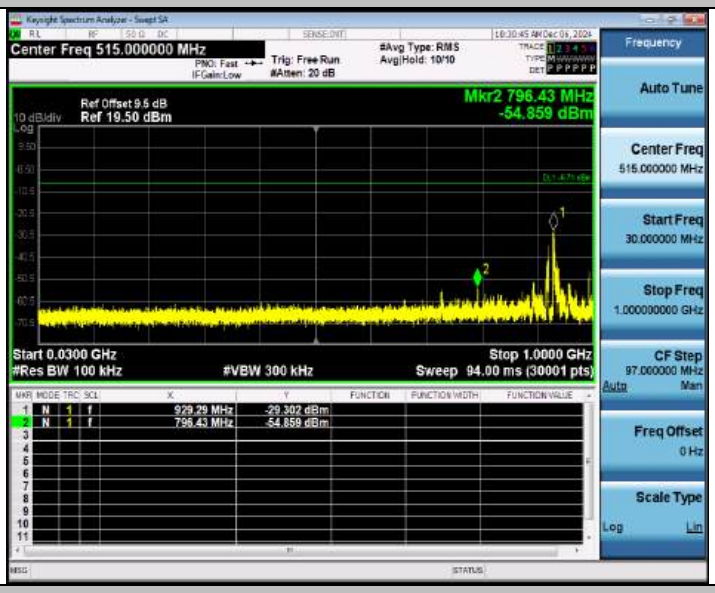
WLAN_4M_Ant1_906_30~1000



WLAN_4M_Ant1_906_1000~26500

WLAN_4M_Ant1_926_0~Reference

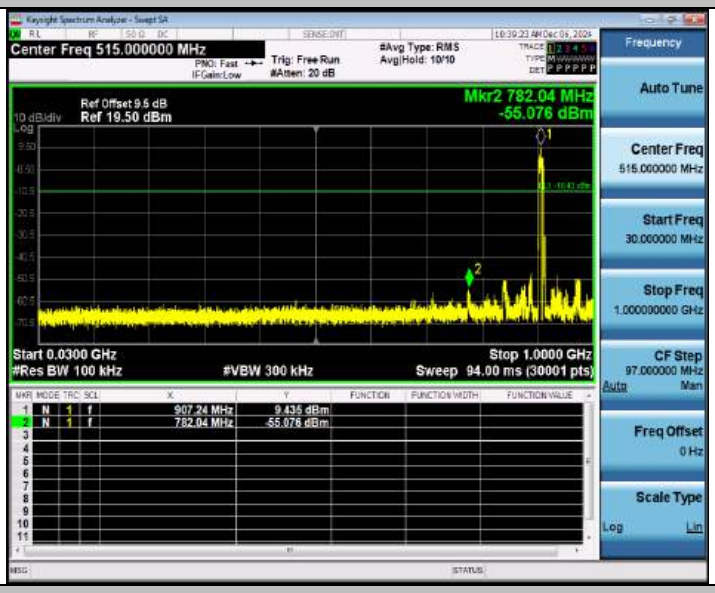
WLAN_4M_Ant1_926_30~1000



WLAN_4M_Ant1_926_1000~26500

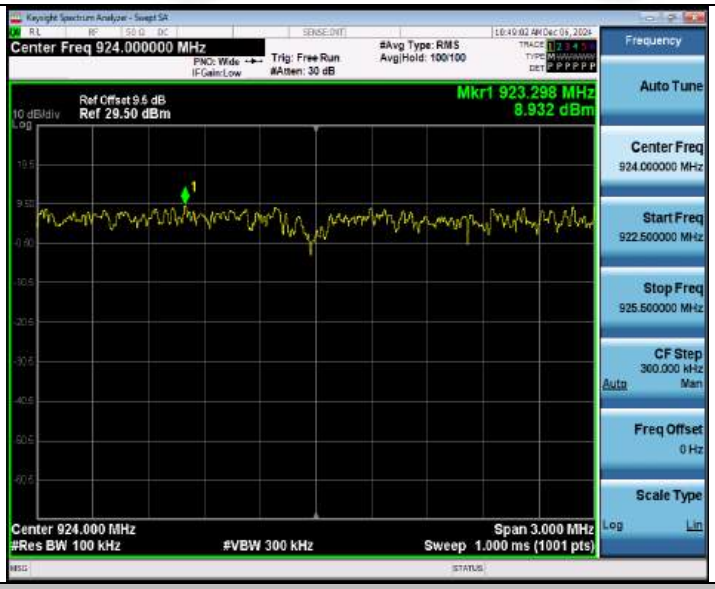
WLAN_8M_Ant1_908_0~Reference

WLAN_8M_Ant1_908_30~1000

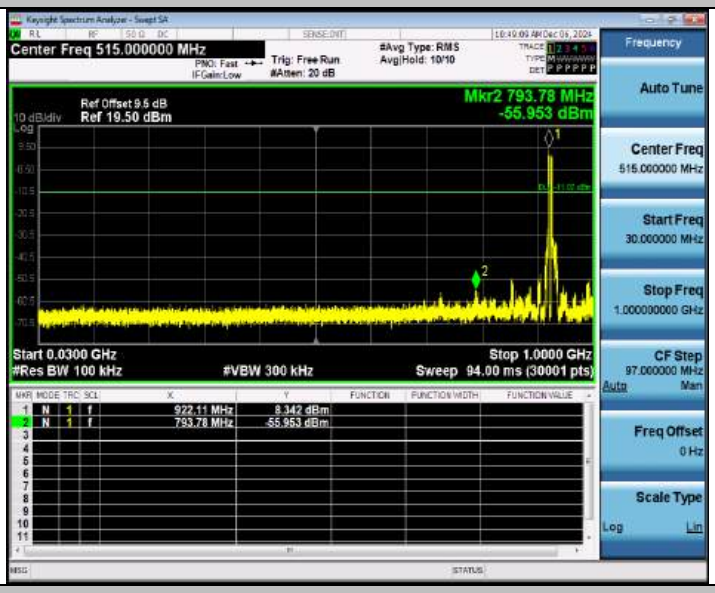


WLAN_8M_Ant1_908_1000~26500

WLAN_8M_Ant1_924_0~Reference



WLAN_8M_Ant1_924_30~1000



WLAN_8M_Ant1_924_1000~26500

10. DUTY CYCLE

Test Method:	ANSI C63.10:2013

10.1 APPLIED PROCEDURES / LIMIT

Measurements of duty cycle and transmission duration shall be performed using one of the following techniques:

a) A diode detector and an oscilloscope that together have a sufficiently short response time to permit accurate measurements of the ON and OFF times of the transmitted signal.

b) The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:

1) Set the center frequency of the instrument to the center frequency of the transmission.

2) Set RBW ≥ OBW if possible; otherwise, set RBW to the largest available value.

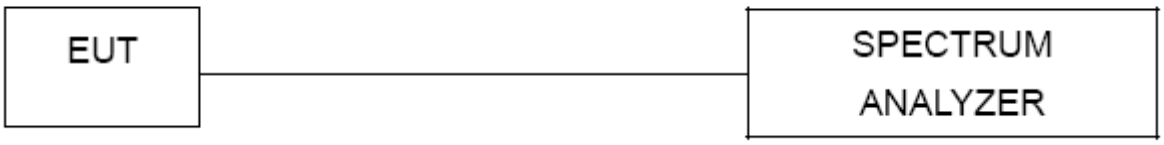
3) Set VBW ≥ RBW. Set detector = peak or average.

4) The zero-span measurement method shall not be used unless both RBW and VBW are > 50/*T* and the number of sweep points across duration *T* exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring the duty cycle shall not be used if $T \leq 16.7$ µs.)

10.2 DEVIATION FROM STANDARD

No deviation.

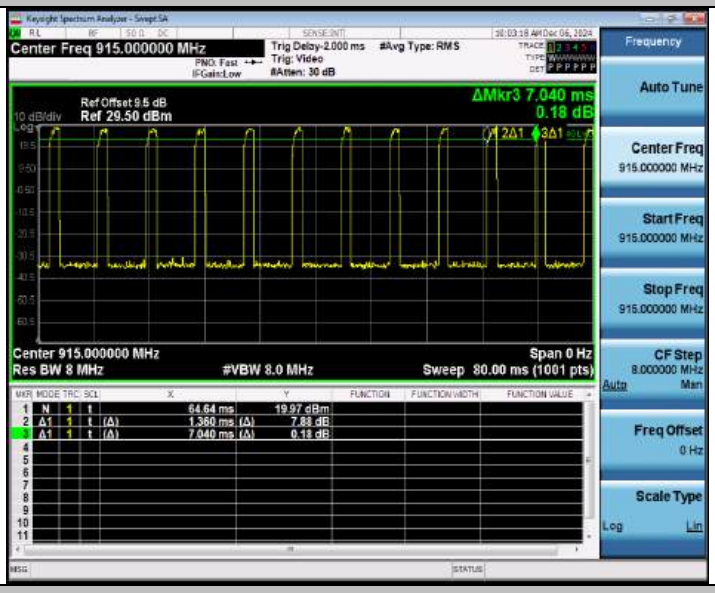
10.3 TEST SETUP



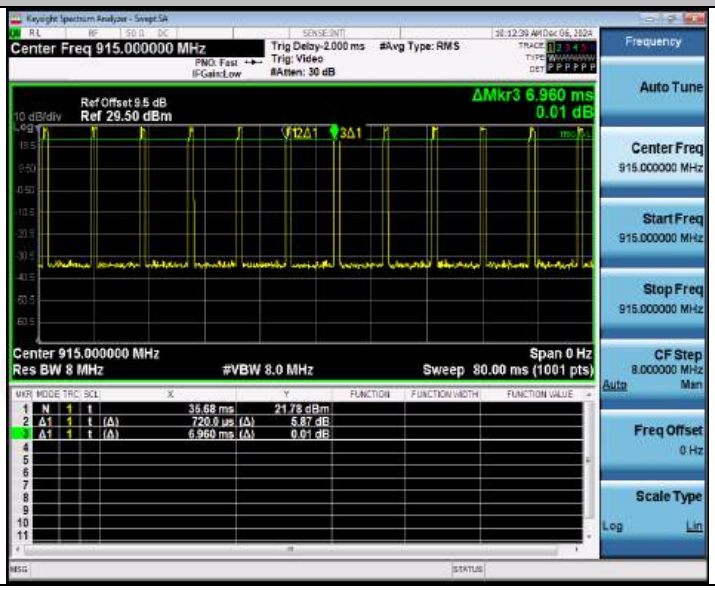
10.4 TEST RESULTS

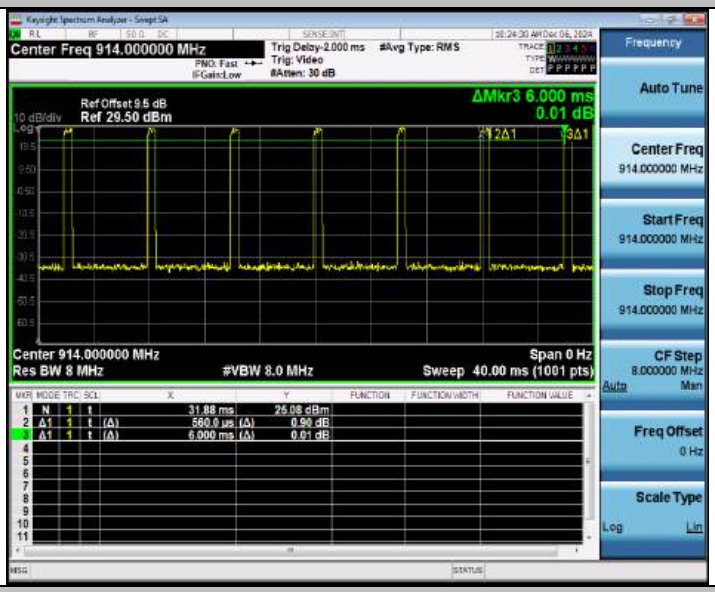
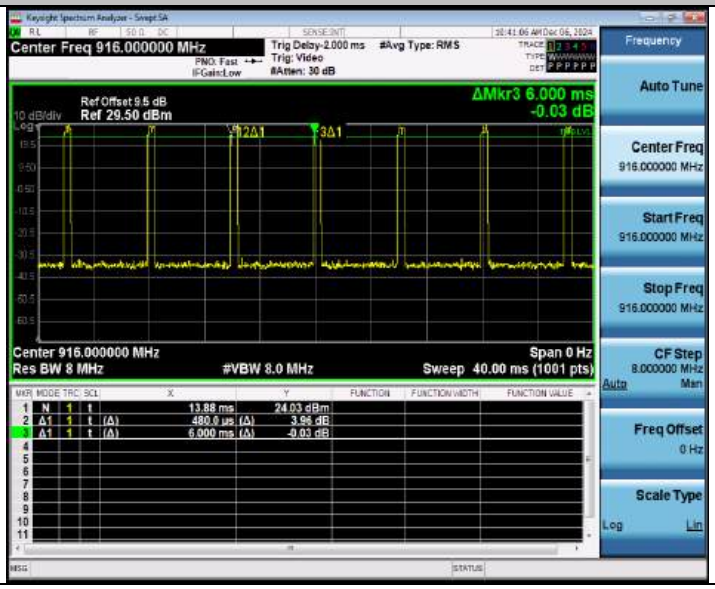
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
OFDM-1M	Ant1	914.5	1.36	7.04	0.1932	19.32	7.14	---	---
OFDM-2M	Ant1	915	0.72	6.96	0.1034	10.34	9.85	---	---
OFDM-4M	Ant1	914	0.56	6.00	0.0933	9.33	10.30	---	---
OFDM-8M	Ant1	916	0.48	6.00	0.0800	8.00	10.97	---	---

OFDM-1M_Ant1_914.5



OFDM-2M_Ant1_915



OFDM-4M_Ant1_914

OFDM-8M_Ant1_916

Note: All channel and ant have been tested, and the report only reflects the worst case data. Duty Cycle= Ton /Total*100% Duty Cycle Correction Factor = 10log (1/Duty Cycle)

11. ANTENNA REQUIREMENT

Standard requirement:	FCC Part15 C Section 15.203 /247(c)
15.203 requirement: 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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. 15.247(c) (1)(i) requirement: (i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi. A transmitter can only be sold or operated with antennas with which it was approved.	
EUT Antenna:	
The antenna is Chip Antenna, the best case gain of the antenna is 5dBi, reference to the appendix II for details	

12. TEST SETUP PHOTO

Reference to the appendix I for details.

13. EUT CONSTRUCTIONAL DETAILS

Reference to the appendix II for details.

※※※※※ END OF REPORT ※※※※※