

FCC Test Report

Report No. : 1812C50352412502

Applicant : Jinan USR IOT Technology Limited

Address : Floor F1 & Part of Floor F2, Building No. 9,
Diya shuang chuang Industrial Zone, No.2566
Century Main Road, Gaoxin District, Jinan,
Shandong, China

Product Name : Industrial Mini Computer

Report Date : 2025-09-05

Shenzhen Anbotek Compliance Laboratory Limited



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TEST REPORT

Applicant : Jinan USR IOT Technology Limited
Manufacturer : Jinan USR IOT Technology Limited
Product Name : Industrial Mini Computer
Model No. : USR-EG628, USR-EG328, USR-EG928, USR-EG828, USR-EG528,
USR-EG118, USR-EC100, USR-EC200, USR-EC300, USR-EC500,
USR-EC600, USR-EC800, USR-M050, EM628, USR-EG228, USR-EG1100
Trade Mark : 
Rating(s) : Input: 9-36V=2A

Test Standard(s) : 47 CFR Part 15E
ANSI C63.10: 2020
Test Method(s) : KDB 789033 D02 General UNII Test Procedures New Rules v02r01
KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02
KDB 905462 D03 Client Without DFS New Rules v01r02

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the 47 CFR Part 15E requirements.
This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Receipt 2025-07-18

Date of Test 2025-07-18 to 2025-08-13

Prepared by

Cecilia Chen

(Cecilia Chen)

Approved & Authorized Signer

Hugo Chen

(Hugo Chen)

Revision History

Report Version	Description	Issued Date
R00	Original Issue.	2025-09-05

Note 1:

The product contains a certified WiFi module: FCS960K-E. The RF conducted measurement data will retain the original test results. only Conducted Emission and Radiated Spurious Emission were retested.

1. General Information

1.1. Client Information

Applicant	:	Jinan USR IOT Technology Limited
Address	:	Floor F1 & Part of Floor F2, Building No. 9, Diya shuang chuang Industrial Zone, No.2566 Century Main Road, Gaoxin District, Jinan, Shandong, China
Manufacturer	:	Jinan USR IOT Technology Limited
Address	:	Floor F1 & Part of Floor F2, Building No. 9, Diya shuang chuang Industrial Zone, No.2566 Century Main Road, Gaoxin District, Jinan, Shandong, China
Factory	:	Jinan USR IOT Technology Limited
Address	:	Floor F1 & Part of Floor F2, Building No. 9, Diya shuang chuang Industrial Zone, No.2566 Century Main Road, Gaoxin District, Jinan, Shandong, China

1.2. Description of Device (EUT)

Product Name	:	Industrial Mini Computer
Model No.	:	USR-EG628, USR-EG328, USR-EG928, USR-EG828, USR-EG528, USR-EG118, USR-EC100, USR-EC200, USR-EC300, USR-EC500, USR-EC600, USR-EC800, USR-M050, EM628, USR-EG228, USR-EG1100 (Note: All samples are the same except the model number and the shell structure, so we prepare "USR-EG628" for test only.)
Trade Mark	:	
Test Power Supply	:	AC 120V/60Hz for adapter
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	Manufacturer: SHENZHEN TRANSIN TECHNOLOGIES CO.,LTD Model: TS-A024-120200AB Input: 110-240V~, 50/60Hz, 0.6A Output: 12V=2A
RF Specification		
Operation Mode	:	☒ a ☒ n(HT20) ☒ n(HT40) ☒ ac(VHT20) ☒ ac(VHT40) ☒ ac(VHT80) ☐ ac(VHT160) ☒ ax(HEW20) ☒ ax(HEW40) ☒ ax(HEW80) ☐ ax(HEW160)
Device Type	:	☐ Outdoor AP ☐ Indoor AP ☐ Point-to-point AP ☒ Client
TPC Function	:	☐ With TPC ☒ Without TPC
DFS Type	:	☒ Slave without radar detection ☐ Slave with radar detection ☐ Master
Operation Frequency	:	☒ Wi-Fi 5.2G: 5150~5250MHz ☒ Wi-Fi 5.3G: 5250~5350MHz ☒ Wi-Fi 5.6G: 5470~5725MHz ☒ Wi-Fi 5.8G: 5725~5850MHz

Number of Channel	:	Wi-Fi 5.2G: ☒ 4 Channels for 20MHz bandwidth (5180-5240MHz) ☒ 2 Channels for 40MHz bandwidth (5190-5230MHz) ☒ 1 Channels for 80MHz bandwidth (5210MHz) Wi-Fi 5.3G: ☒ 4 Channels for 20MHz bandwidth (5260-5320MHz) ☒ 2 Channels for 40MHz bandwidth (5270-5310MHz) ☒ 1 Channels for 80MHz bandwidth (5290MHz) Wi-Fi 5.6G: ☒ 11 Channels for 20MHz bandwidth (5500-5700MHz) ☒ 5 Channels for 40MHz bandwidth (5510-5670MHz) ☒ 2 Channels for 80MHz bandwidth (5530~5610MHz) Wi-Fi 5.8G: ☒ 5 Channels for 20MHz bandwidth (5745MHz ~ 5825MHz) ☒ 2 Channels for 40MHz bandwidth (5755MHz ~ 5795MHz) ☒ 1 Channels for 80MHz bandwidth (5775MHz)
Modulation Type	:	☒ 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) ☒ 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM) ☒ 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) ☒ 802.11ax: OFDMA(BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)
Antenna Type	:	External Antenna
Antenna Gain(Peak)	:	Wi-Fi 5.2G: -0.70dBi Wi-Fi 5.3G: -0.80dBi Wi-Fi 5.6G: -1.20dBi Wi-Fi 5.8G: -1.50dBi
Remark: 1) All of the RF specification are provided by customer. 2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.		

1.3. Auxiliary Equipment Used During Test

Title	Manufacturer	Model No.	Serial No.
/	/	/	/

1.4. Description of Test Modes

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

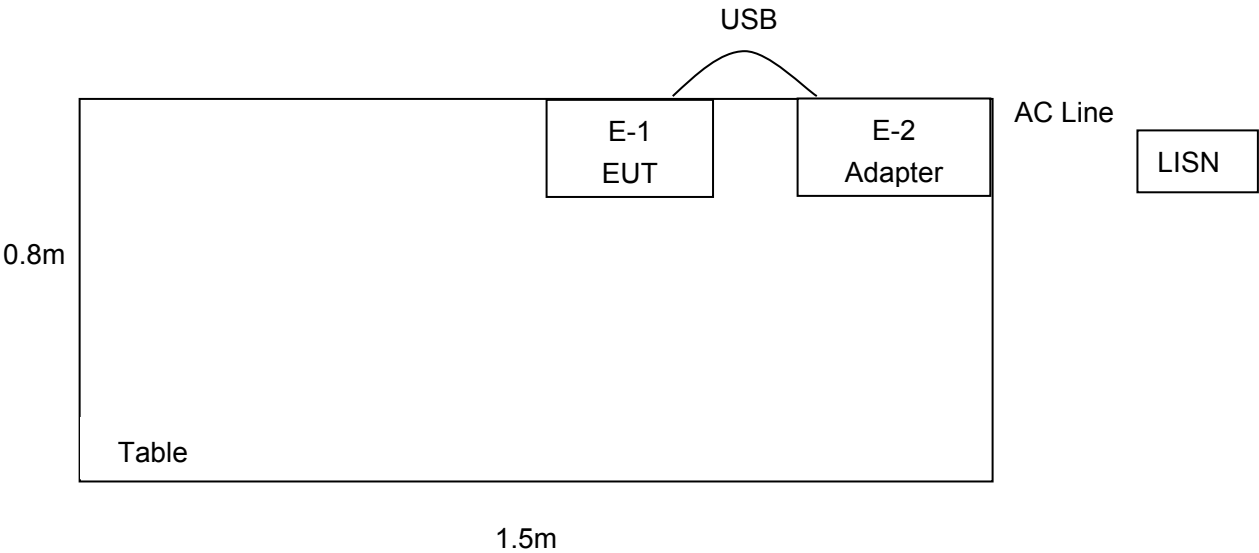
Frequency Band	Mode	Test channel	Frequency (MHz)
5.2GHz	OFDM 802.11a/n(HT20) /ac(HT20)/ax(HEW20)	CH 36	5180MHz
		CH 40	5200MHz
		CH 48	5240MHz
	OFDM 802.11n(HT40)/ac(HT40)/ax(HEW40)	CH 38	5190MHz
		CH 46	5230MHz
	OFDM 802.11ac(HT80)/ax(HEW80)	CH 42	5210MHz
5.3GHz	OFDM 802.11a/n(HT20) /ac(HT20)/ax(HEW20)	CH 52	5260MHz
		CH 60	5300MHz
		CH 64	5320MHz
	OFDM 802.11n(HT40)/ac(HT40)/ax(HEW40)	CH 54	5270MHz
		CH 62	5310MHz
	OFDM 802.11ac(HT80)/ax(HEW80)	CH 58	5290MHz
5.6GHz	OFDM 802.11a/n(HT20) /ac(HT20)/ax(HEW20)	CH 100	5500MHz
		CH 116	5580MHz
		CH 140	5700MHz
	OFDM 802.11n(HT40)/ac(HT40)/ax(HEW40)	CH 102	5510MHz
		CH 110	5550MHz
	OFDM 802.11ac(HT80)/ax(HEW80)	CH 134	5670MHz
5.8GHz	OFDM 802.11a/n(HT20) /ac(HT20)/ax(HEW20)	CH 106	5530MHz
		CH 149	5745MHz
		CH 157	5785MHz
	OFDM 802.11n(HT40)/ac(HT40)/ax(HEW40)	CH 165	5825MHz
		CH 151	5755MHz
	OFDM 802.11ac(HT80)/ax(HEW80)	CH 159	5795MHz
		CH 155	5775MHz

Note:

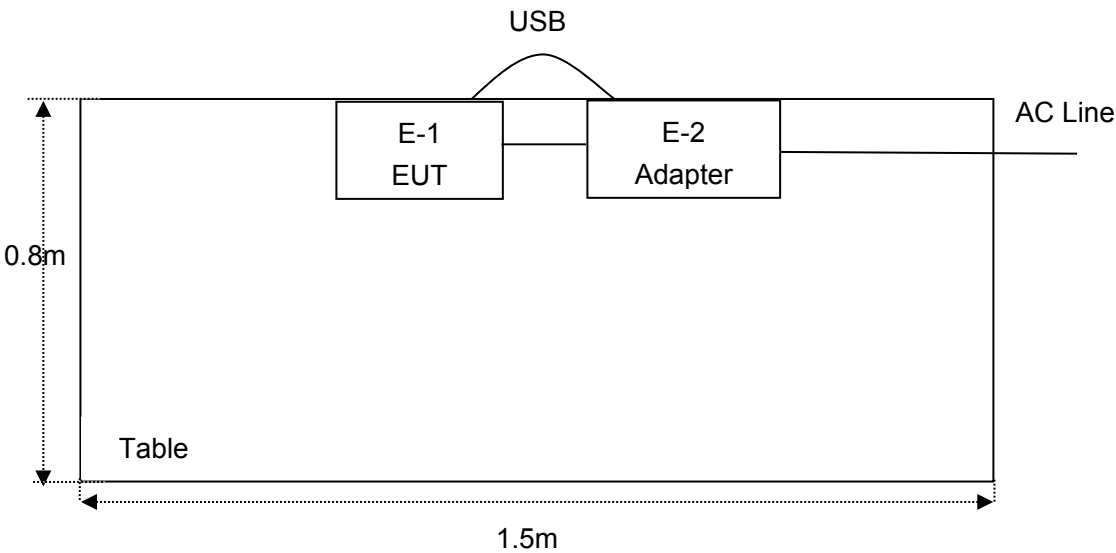
1. The measurements are performed at the highest, middle, lowest available channels.
2. The EUT has been tested as an independent unit. And Continual Transmitting in maximum power.
3. For the relevant Conducted Measurement, the temporary antenna connector is used during the measurement. Antenna Connector Impedance: 50Ω, Cable Loss: 1.0 dB
4. The EUT was programmed to be in continuously transmitting mode.

1.5. Description Of Test Setup

CE



RE



1.6. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	2024-09-09	1 Year
2.	Three Phase V-type Artificial Power Network	CYBERTEK	EM5040DT	E215040DT00 1	2025-01-13	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	2025-01-13	1 Year
4.	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	2025-01-14	1 Year
5.	MXA Spectrum Analysis	Agilent	N9020A	MY51170037	2024-09-09	1 Year
6.	EMI Preamplifier	SKET Electronic	LNPA-0118G- 45	SKET-PA-002	2025-01-13	1 Year
7.	Double Ridged Horn Antenna	SCHWARZBECK	BBHA 9120D	02555	2022-10-16	3 Year
8.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	345	2022-10-13	3 Year
9.	Loop Antenna(9K-30M)	Schwarzbeck	FMZB1519B	00053	2024-09-12	1 Year
10.	Horn Antenna	A-INFO	LB-180400-KF	J211060628	2024-01-22	3 Year
11.	Pre-amplifier	SONOMA	310N	186860	2025-01-14	1 Year
12.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A
13.	MXA Spectrum Analysis	KEYSIGHT	N9020A	MY53280032	2024-09-09	1 Year
14.	MXG RF Vector Signal Generator	Agilent	N5182A	MY47420647	2025-01-14	1 Year
15.	Signal Generator	Agilent	E4421B	MY41000743	2025-02-21	1 Year
16.	DC Power Supply	IVYTECH	IV3605	1804D360510	2024-09-09	1 Year
17.	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ-KHWS80B	N/A	2024-10-14	1 Year
18.	Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102150	2024-05-06	1 Year

1.7. Measurement Uncertainty

Parameter	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	3.2dB
Time	2%
Occupied Bandwidth	925Hz
Conducted Output Power	0.76dB
Conducted Spurious Emission	1.24dB
Radiated spurious emissions (Below 30MHz)	3.26dB
Radiated spurious emissions (30MHz~1GHz)	Horizontal: 3.70dB; Vertical: 4.42dB
Radiated spurious emissions (above 1GHz)	1G-6GHz: 4.64dB 6G-18GHz: 4.82dB 18G-40GHz: 5.62dB
The measurement uncertainty and decision risk evaluated according to AB/WI-RF-F-032. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

1.8. Description of Test Facility

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

FCC-Registration No.: 279531

Shenzhen Anbotek Compliance Laboratory Limited, 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 No. 279531.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.

Sogood Industrial Zone Laboratory & 1/F. of Building D, Sogood Science and Technology Park, Sanwei Community, Hangcheng Subdistrict, Bao'an District, Shenzhen, Guangdong, China.

1.9. Disclaimer

1. The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
2. The test report is invalid if there is any evidence and/or falsification.
3. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
4. This document may not be altered or revised in any way unless done so by Anbotek and all revisions are duly noted in the revisions section.
5. Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
6. The authenticity of the information provided by the customer is the responsibility of the customer and the laboratory is not responsible for its authenticity.
7. The data in this report will be synchronized with the corresponding national market supervision and management departments and cross-border e-commerce platforms as required by regulatory agencies.

The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2. Summary of Test Results

Standard	Test Type	Result
15.207 & 15.407(b)	Conducted Emission	PASS
15.205 & 15.209 & 15.407(b)	Radiated Spurious Emission	PASS
Remark: "N/A" is an abbreviation for Not Applicable.		

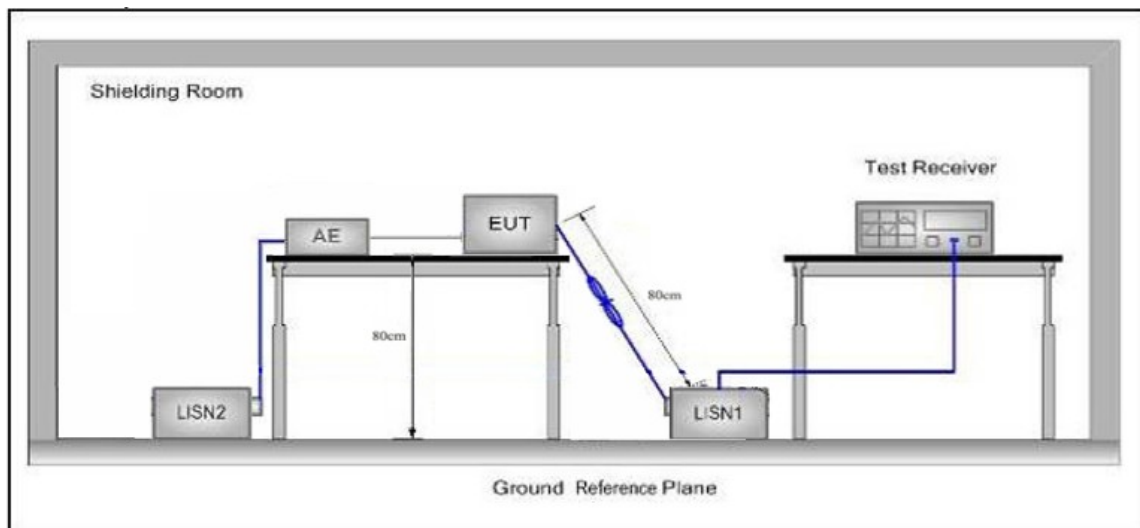
3. Conducted Emission Test

3.1. Test Standard and Limit

Test Standard	FCC Part15 Section 15.207 & 15.407(b)		
Test Limit	Frequency	Maximum RF Line Voltage (dBuV)	
		Quasi-peak Level	Average Level
	150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
	500kHz~5MHz	56	46
	5MHz~30MHz	60	50

Remark: (1) *Decreasing linearly with logarithm of the frequency.
(2) The lower limit shall apply at the transition frequency.

3.2. Test Setup



3.3. Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC ANSI C63.10: 2020 on Conducted Emission Measurement.

The bandwidth of test receiver (ESCI) set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

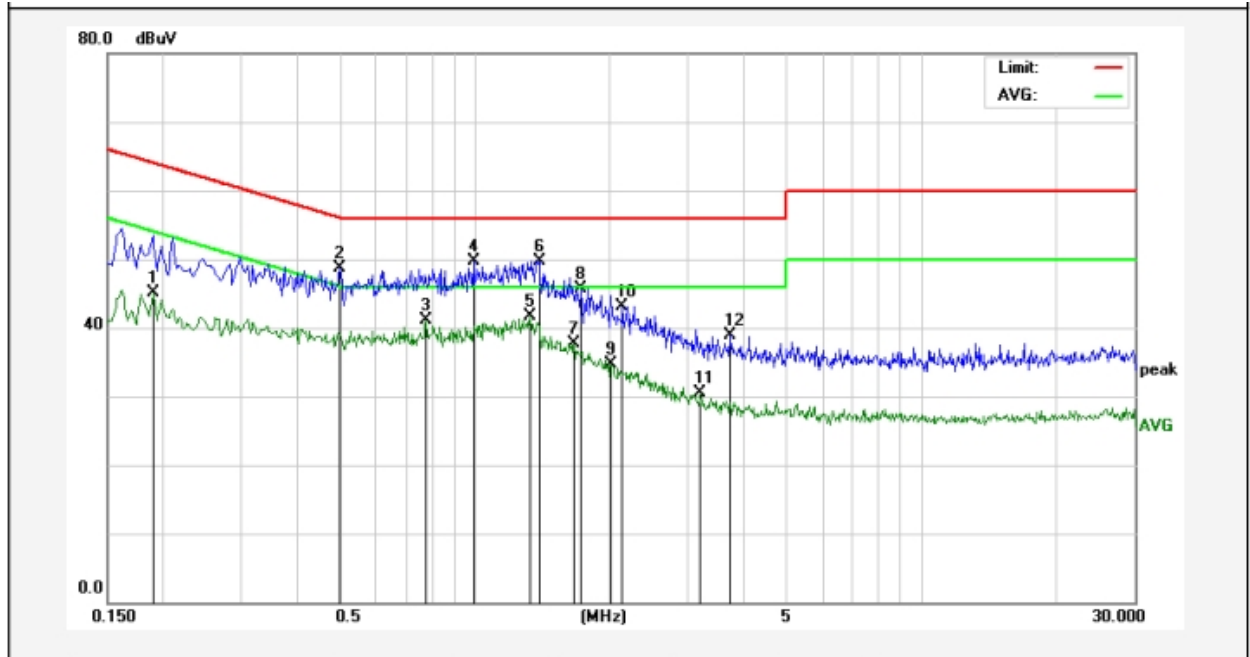
3.4. Test Data

During the test, pre-scan all modes, only the worst case is recorded in the report.

Please to see the following pages.

Conducted Emission Test Data

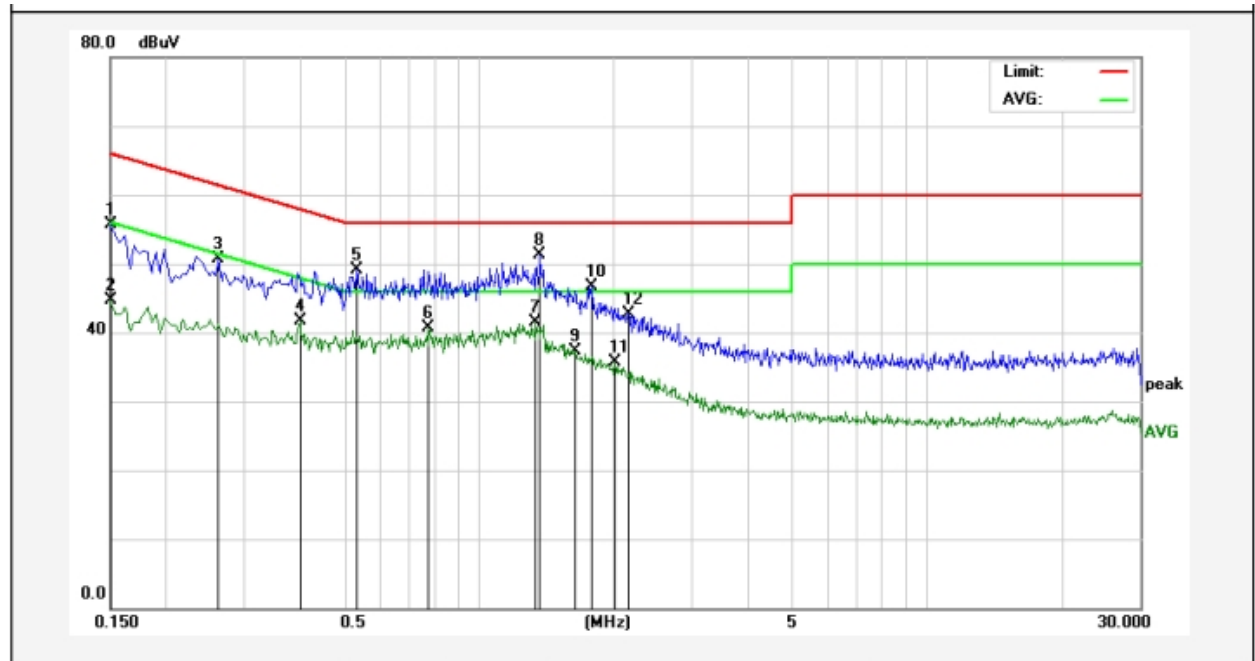
Test Site: 1# Shielded Room
Operating Condition: 802.11n(HT20) 5580MHz
Test Specification: AC 120V/60Hz for adapter
Comment: Live Line
Temp.(°C)/Hum.(%RH): 26.3°C/59%RH



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1900	17.18	27.83	45.01	54.03	-9.02	AVG	
2	0.4980	20.74	27.87	48.61	56.03	-7.42	QP	
3	0.7780	13.16	27.88	41.04	46.00	-4.96	AVG	
4	0.9940	21.79	27.87	49.66	56.00	-6.34	QP	
5	1.3260	13.89	27.87	41.76	46.00	-4.24	AVG	
6	1.3940	21.93	27.87	49.80	56.00	-6.20	QP	
7	1.6660	9.92	27.86	37.78	46.00	-8.22	AVG	
8	1.7260	17.88	27.86	45.74	56.00	-10.26	QP	
9	2.0180	6.80	27.86	34.66	46.00	-11.34	AVG	
10	2.1380	15.31	27.86	43.17	56.00	-12.83	QP	
11	3.2139	2.68	27.86	30.54	46.00	-15.46	AVG	
12	3.7260	11.06	27.87	38.93	56.00	-17.07	QP	

Conducted Emission Test Data

Test Site: 1# Shielded Room
Operating Condition: 802.11n(HT20) 5580MHz
Test Specification: AC 120V/60Hz for adapter
Comment: Neutral Line
Temp.(°C)/Hum.(%RH): 26.3°C/59%RH



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1500	27.87	27.83	55.70	65.99	-10.29	QP	
2	0.1500	16.86	27.83	44.69	55.99	-11.30	AVG	
3	0.2620	22.83	27.85	50.68	61.36	-10.68	QP	
4	0.3980	13.91	27.82	41.73	47.89	-6.16	AVG	
5	0.5340	21.32	27.87	49.19	56.00	-6.81	QP	
6	0.7740	12.90	27.88	40.78	46.00	-5.22	AVG	
7	1.3380	13.54	27.87	41.41	46.00	-4.59	AVG	
8	1.3700	23.43	27.87	51.30	56.00	-4.70	QP	
9	1.6420	9.43	27.86	37.29	46.00	-8.71	AVG	
10	1.7900	18.86	27.87	46.73	56.00	-9.27	QP	
11	2.0140	7.83	27.86	35.69	46.00	-10.31	AVG	
12	2.1660	14.88	27.86	42.74	56.00	-13.26	QP	

4. Radiation Spurious Emission and Restricted Band Test

4.1. Test Standard and Limit

Radiated Spurious Emission					
Test Standard	FCC Part15 C Section 15.205 & 15.209 & 15.407(b)				
Test Limit	Frequency (MHz)	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
	0.009MHz~0.490MHz	2400/F(kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz~88MHz	100	40.0	Quasi-peak	3
	88MHz~216MHz	150	43.5	Quasi-peak	3
	216MHz~960MHz	200	46.0	Quasi-peak	3
	960MHz~1000MHz	500	54.0	Quasi-peak	3
	Above 1000MHz	500	54.0	Average	3
		-	68.2	Peak	3
Band Edge					
Test Standard	15.407(b)				
Test Limit	Operating Band	Frequency	EIRP Limit		Remark
	5150-5250MHz	Out of operation band	-27dBm/MHz(68.2dBuV/m)@3m		Peak
	5250-5350MHz	Out of operation band	-27dBm/MHz(68.2dBuV/m)@3m		Peak
	5470-5725MHz	Out of operation band	-27dBm/MHz(68.2dBuV/m)@3m		Peak
	5725-5850 MHz	Below 5.65GHz	-27dBm/MHz(68.2dBuV/m)@3m		Peak
		5.65GHz-5.7GHz	-27*dBm/MHz to 10dBm/MHz (68.2* dBuV/m to 105.6dBuV/m)		Peak
		5.7GHz-5.72GHz	10*dBm/MHz to 15.6dBm/MHz (105.6*dBuV/m to 110.8dBuV/m)		Peak
		5.72GHz-5.725GHz	15.6*dBm/MHz to 27dBm/MHz (110.8dBuV/m to* 122.2dBuV/m)		Peak
		5.85GHz-5.855GHz	27dBm/MHz to 15.6*dBm/MHz (122.2dBuV/m to110.8* dBuV/m)		Peak
		5.855GHz-5.875GHz	15.6dBm/MHz to 10*dBm/MHz (110.8dBuV/m to 105.6* dBuV/m)		Peak

	5.875GHz-5.925GHz	10dBm/MHz to -27*dBm/MHz (105.6dBuV/m to 68.2* dBuV/m)	Peak
	Above 5.925GHz	-27 dBm/MHz(68.2dBuV/m)@3m	Peak

Remark:

(1)The lower limit shall apply at the transition frequency.

(2) 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

(3)Above 1GHz limit: $E[dBuV/m] = EIRP[dBm] + 95.2=68.2\text{ dBuV/m}$, for $EIPR[dBm]=-27dBm$.

4.2. Test Setup

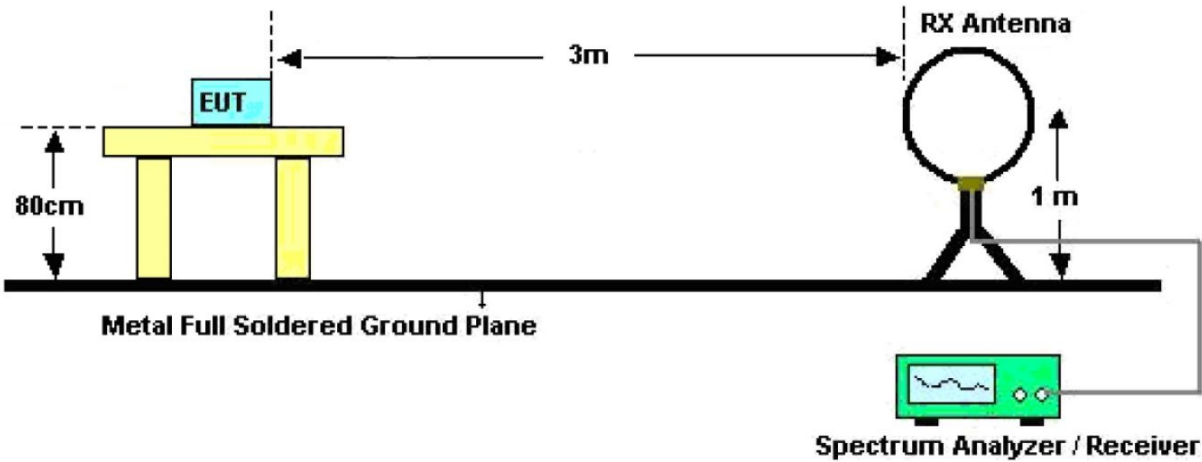


Figure 1. Below 30MHz

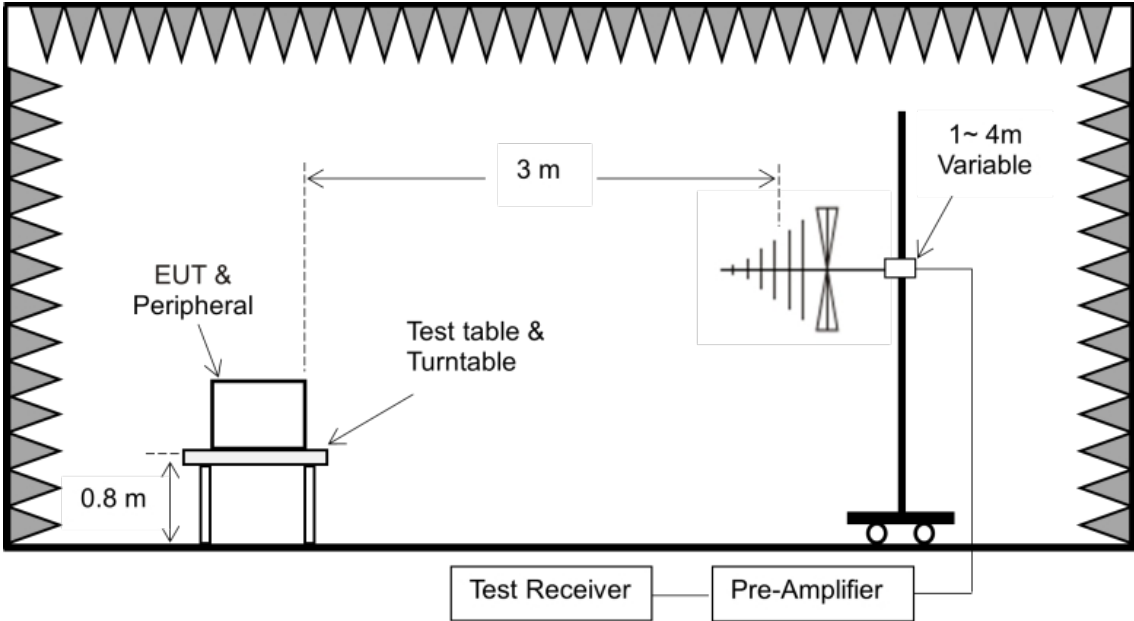


Figure 2. 30MHz to 1GHz

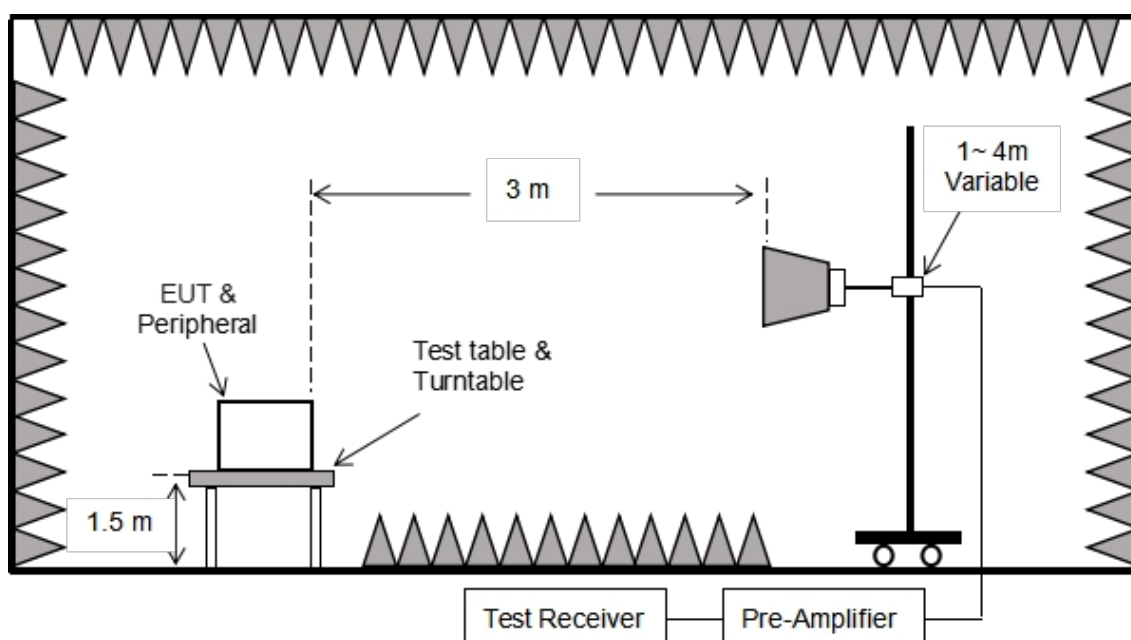


Figure 3. Above 1 GHz

4.3. Test Procedure

For below 1GHz: The EUT is placed on a turntable, which is 0.8m above the ground plane.

For above 1GHz: The EUT is placed on a turntable, which is 1.5m above the ground plane.

The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Rotated the EUT through three orthogonal axes to determine the maximum emissions, both horizontal and vertical polarization of the antenna are set on test. The EUT is tested in 9*6*6 Chamber. The device is evaluated in xyz orientation.

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.

For 9kHz to 150kHz, Set the spectrum analyzer as:

RBW = 200Hz, VBW =1kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 150kHz to 30MHz, Set the spectrum analyzer as:

RBW = 9KHz, VBW =30kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 30MHz to 1000MHz, Set the spectrum analyzer as:

RBW = 100kHz, VBW =300kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For above 1GHz, Set the spectrum analyzer as:

RBW =1MHz, VBW =1MHz, Detector= Peak, Trace mode= Max hold, Sweep- auto couple.

RBW =1MHz, VBW =10Hz, Detector= Average, Trace mode= Max hold, Sweep- auto couple.

4.4. Test Data

Pass

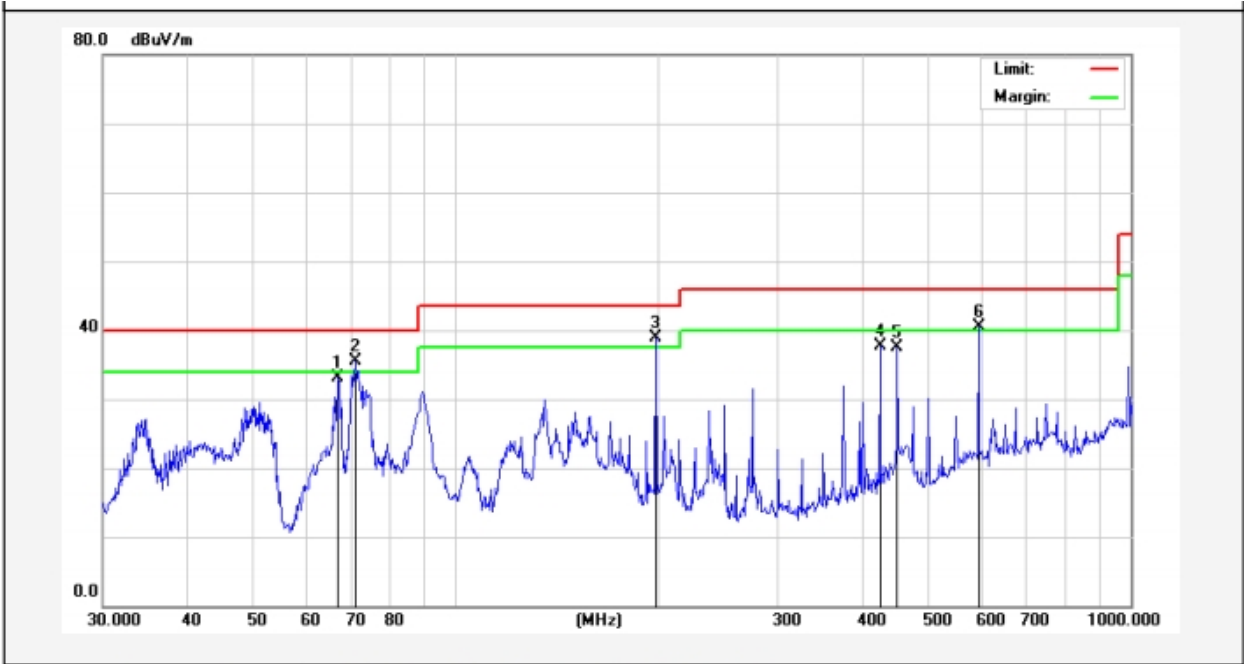
During the test, Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the X-axis is the worst case.

The test results of 9kHz-30MHz was attenuated more than 20dB below the permissible limits, so the results don't record in the report.

During the test, pre-scan all modes, only the worst case is recorded in the report.

Test Results (30~1000MHz)

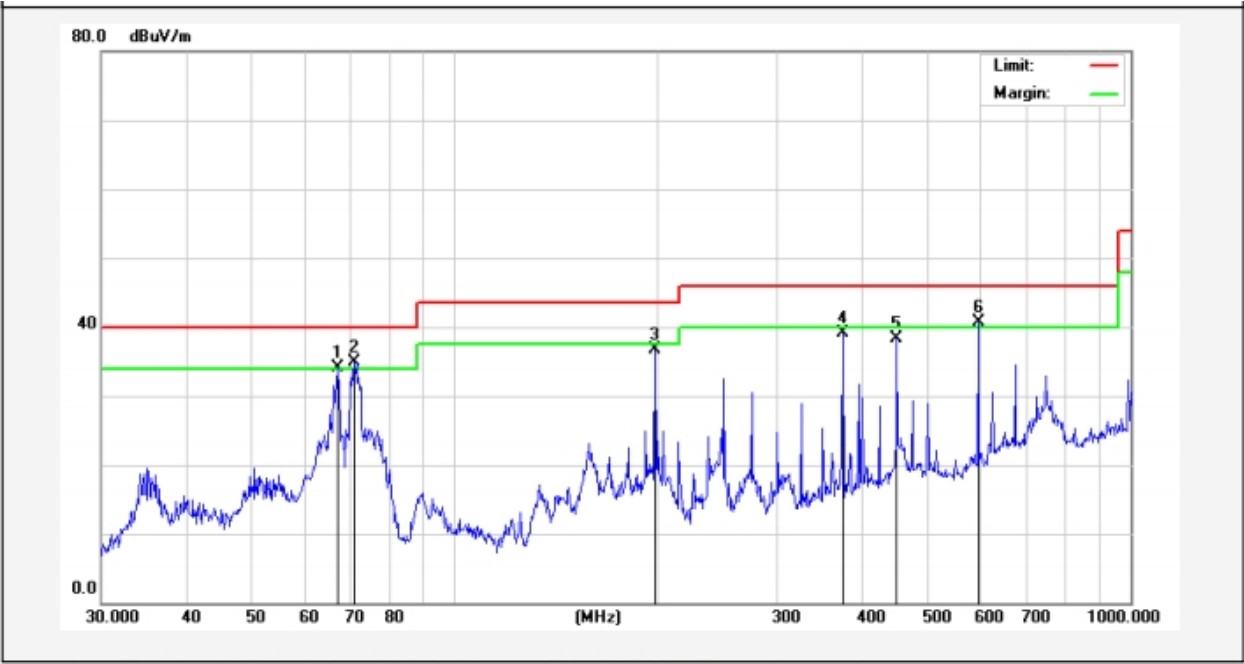
Test Mode: 802.11n(HT20) 5580MHz
Power Source: AC 120V/60Hz for adapter
Polarization: Vertical
Temp.(°C)/Hum.(%RH): 22.5°C/55%RH



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Remark
1	66.7325	53.93	-20.81	33.12	40.00	-6.88	QP	
2	71.0802	57.83	-22.35	35.48	40.00	-4.52	QP	
3	197.8926	59.12	-20.15	38.97	43.50	-4.53	QP	
4	425.0280	50.77	-13.12	37.65	46.00	-8.35	QP	
5	451.1349	50.04	-12.54	37.50	46.00	-8.50	QP	
6	595.1327	50.37	-9.92	40.45	46.00	-5.55	QP	

Test Results (30~1000MHz)

Test Mode: 802.11n(HT20) 5580MHz
Power Source: AC 120V/60Hz for adapter
Polarization: Horizontal
Temp.(°C)/Hum.(%RH): 22.5°C/55%RH



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Remark
1	67.2022	55.06	-21.03	34.03	40.00	-5.97	QP	
2	71.0802	57.25	-22.35	34.90	40.00	-5.10	QP	
3	197.8926	56.94	-20.25	36.69	43.50	-6.81	QP	
4	375.9384	53.67	-14.53	39.14	46.00	-6.86	QP	
5	451.1349	50.94	-12.55	38.39	46.00	-7.61	QP	
6	595.1327	50.53	-9.79	40.74	46.00	-5.26	QP	

Test Results (Above 1000MHz)

Test Mode: IEEE 802.11a / Band: 5150-5250 MHz / BW: 20							
Test channel: Low CH							
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
10360.00	31.54	23.81	55.35	68.20	-12.85	V	Peak
15540.00	32.92	28.68	61.60	68.20	-6.60	V	Peak
10360.00	32.00	23.81	55.81	68.20	-12.39	H	Peak
15540.00	32.98	28.68	61.66	68.20	-6.54	H	Peak
10360.00	20.965	23.81	44.78	54.00	-9.22	V	AVG
15540.00	22.096	28.68	50.78	54.00	-3.22	V	AVG
10360.00	21.186	23.81	45.00	54.00	-9.00	H	AVG
15540.00	21.635	28.68	50.32	54.00	-3.68	H	AVG
Test channel: Middle CH							
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
10400.00	30.90	23.81	54.71	68.20	-13.49	V	Peak
15600.00	32.45	29.13	61.58	68.20	-6.62	V	Peak
10400.00	31.49	23.81	55.30	68.20	-12.90	H	Peak
15600.00	32.50	29.13	61.63	68.20	-6.57	H	Peak
10400.00	21.235	23.81	45.05	54.00	-8.95	V	AVG
15600.00	22.216	29.13	51.35	54.00	-2.65	V	AVG
10400.00	21.176	23.81	44.99	54.00	-9.01	H	AVG
15600.00	21.715	29.13	50.85	54.00	-3.15	H	AVG
Test channel: High CH							
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
10480.00	30.47	23.80	54.27	68.20	-13.93	V	Peak
15720.00	31.93	30.03	61.96	68.20	-6.24	V	Peak
10480.00	31.13	23.80	54.93	68.20	-13.27	H	Peak
15720.00	31.41	30.03	61.44	68.20	-6.76	H	Peak
10480.00	19.91	23.80	43.71	54.00	-10.29	V	AVG
15720.00	20.98	30.03	51.01	54.00	-2.99	V	AVG
10480.00	20.39	23.80	44.19	54.00	-9.81	H	AVG
15720.00	20.51	30.03	50.54	54.00	-3.46	H	AVG

Remark:

1. During the test, pre-scan all the modes, and found the 802.11a mode is worse case , the report only record this mode.
2. Result =Reading + Factor
3. Test frequency are from 1GHz to 40GHz, the amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported.

Test Mode: IEEE 802.11a / Band: 5250-5350 MHz / BW: 20							
Test channel: Low CH							
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
10520.00	27.71	23.81	51.52	68.20	-16.68	V	Peak
15780.00	29.05	30.48	59.53	68.20	-8.67	V	Peak
10520.00	28.64	23.81	52.45	68.20	-15.75	H	Peak
15780.00	27.75	30.48	58.23	68.20	-9.97	H	Peak
10520.00	17.580	23.81	41.39	54.00	-12.61	V	AVG
15780.00	19.256	30.48	49.74	54.00	-4.26	V	AVG
10520.00	19.011	23.81	42.82	54.00	-11.18	H	AVG
15780.00	18.470	30.48	48.95	54.00	-5.05	H	AVG
Test channel: Middle CH							
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
10600.00	28.90	23.87	52.77	68.20	-15.43	V	Peak
15900.00	28.10	31.38	59.48	68.20	-8.72	V	Peak
10600.00	27.94	23.87	51.81	68.20	-16.39	H	Peak
15900.00	28.17	31.38	59.55	68.20	-8.65	H	Peak
10600.00	18.250	23.87	42.12	54.00	-11.88	V	AVG
15900.00	19.006	31.38	50.39	54.00	-3.61	V	AVG
10600.00	18.291	23.87	42.16	54.00	-11.84	H	AVG
15900.00	18.620	31.38	50.00	54.00	-4.00	H	AVG
Test channel: High CH							
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
10640.00	28.24	23.90	52.14	68.20	-16.06	V	Peak
15960.00	27.60	31.83	59.43	68.20	-8.77	V	Peak
10640.00	28.31	23.90	52.21	68.20	-15.99	H	Peak
15960.00	27.73	31.83	59.56	68.20	-8.64	H	Peak
10640.00	16.99	23.90	40.89	54.00	-13.11	V	AVG
15960.00	17.97	31.83	49.80	54.00	-4.20	V	AVG
10640.00	17.46	23.90	41.36	54.00	-12.64	H	AVG
15960.00	18.94	31.83	50.77	54.00	-3.23	H	AVG

Remark:

1. During the test, pre-scan all the modes, and found the 802.11a mode is worse case , the report only record this mode.
2. Result =Reading + Factor
3. Test frequency are from 1GHz to 40GHz, the amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported.

Test Mode: IEEE 802.11a / Band: 5470-5725 MHz / BW: 20							
Test channel: Low CH							
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
11000.00	27.07	24.15	51.22	68.20	-16.98	V	Peak
16500.00	29.24	33.05	62.29	68.20	-5.91	V	Peak
11000.00	28.89	24.15	53.04	68.20	-15.16	H	Peak
16500.00	29.23	33.05	62.28	68.20	-5.92	H	Peak
11000.00	16.814	24.15	40.96	54.00	-13.04	V	AVG
16500.00	18.221	33.05	51.27	54.00	-2.73	V	AVG
11000.00	17.057	24.15	41.21	54.00	-12.79	H	AVG
16500.00	16.838	33.05	49.89	54.00	-4.11	H	AVG
Test channel: Middle CH							
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
11200.000	26.75	23.83	50.58	68.20	-17.62	V	Peak
16800.000	27.41	32.16	59.57	68.20	-8.63	V	Peak
11200.000	27.82	23.83	51.65	68.20	-16.55	H	Peak
16800.000	27.84	32.16	60.00	68.20	-8.20	H	Peak
11200.000	17.064	23.83	40.89	54.00	-13.11	V	AVG
16800.000	18.621	32.16	50.78	54.00	-3.22	V	AVG
11200.000	17.557	23.83	41.39	54.00	-12.61	H	AVG
16800.000	18.698	32.16	50.86	54.00	-3.14	H	AVG
Test channel: High CH							
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
11400.000	25.84	23.51	49.35	68.20	-18.85	V	Peak
17100.000	27.30	31.73	59.03	68.20	-9.17	V	Peak
11400.000	26.72	23.51	50.23	68.20	-17.97	H	Peak
17100.000	27.84	31.73	59.57	68.20	-8.63	H	Peak
11400.000	16.44	23.51	39.95	54.00	-14.05	V	AVG
17100.000	17.83	31.73	49.56	54.00	-4.44	V	AVG
11400.000	20.35	23.51	43.86	54.00	-10.14	H	AVG
17100.000	18.49	31.73	50.22	54.00	-3.78	H	AVG

Remark:

1. During the test, pre-scan all the modes, and found the 802.11n(HT20) mode is worse case , the report only record this mode.
2. Result =Reading + Factor
3. Test frequency are from 1GHz to 40GHz, the amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported.

Test Mode: IEEE 802.11a / Band: 5725-5850 MHz / BW: 20							
Test channel: Low CH							
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
11490.000	28.53	23.36	51.89	68.20	-16.31	V	Peak
17235.000	29.89	31.97	61.86	68.20	-6.34	V	Peak
11490.000	29.00	23.36	52.36	68.20	-15.84	H	Peak
17235.000	30.11	31.97	62.08	68.20	-6.12	H	Peak
11490.000	17.84	23.36	41.20	54.00	-12.80	V	AVG
17235.000	18.61	31.97	50.58	54.00	-3.42	V	AVG
11490.000	18.03	23.36	41.39	54.00	-12.61	H	AVG
17235.000	18.06	31.97	50.03	54.00	-3.97	H	AVG
Test channel: Middle CH							
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
11570.000	29.11	23.42	52.53	68.20	-15.67	V	Peak
17355.000	29.77	32.18	61.95	68.20	-6.25	V	Peak
11570.000	29.20	23.42	52.62	68.20	-15.58	H	Peak
17355.000	30.20	32.18	62.38	68.20	-5.82	H	Peak
11570.000	19.108	23.42	42.53	54.00	-11.47	V	AVG
17355.000	18.931	32.18	51.11	54.00	-2.89	V	AVG
11570.000	19.020	23.42	42.44	54.00	-11.56	H	AVG
17355.000	18.444	32.18	50.62	54.00	-3.38	H	AVG
Test channel: High CH							
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over limit (dB)	Antenna Pol.	Detector
11650.000	28.62	23.49	52.11	68.20	-16.09	V	Peak
17475.000	30.01	32.39	62.40	68.20	-5.80	V	Peak
11650.000	28.94	23.49	52.43	68.20	-15.77	H	Peak
17475.000	29.81	32.39	62.20	68.20	-6.00	H	Peak
11650.000	18.18	23.49	41.67	54.00	-12.33	V	AVG
17475.000	18.73	32.39	51.12	54.00	-2.88	V	AVG
11650.000	18.20	23.49	41.69	54.00	-12.31	H	AVG
17475.000	18.41	32.39	50.80	54.00	-3.20	H	AVG

Remark:

1. During the test, pre-scan all the modes, and found the 802.11a mode is worse case , the report only record this mode.
2. Result =Reading + Factor
3. Test frequency are from 1GHz to 40GHz, the amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported.

APPENDIX I -- TEST SETUP PHOTOGRAPH

Please refer to separated files Appendix I -- Test Setup Photograph_RF

APPENDIX II -- EXTERNAL PHOTOGRAPH

Please refer to separated files Appendix II -- External Photograph

APPENDIX III -- INTERNAL PHOTOGRAPH

Please refer to separated files Appendix III -- Internal Photograph

----- End of Report -----