



Report No.: SUCR260700069005

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TEST REPORT

Application No.: SUCR2607000690TL
FCC ID: 2AH25T6F10NA
Applicant: Shanghai Sunmi Technology Co., Ltd.
Address of Applicant: Room 505, No. 388, Song Hu Road, Yang Pu District, Shanghai, China
Manufacturer: Shanghai Sunmi Technology Co., Ltd.
Address of Manufacturer: Room 505, No. 388, Song Hu Road, Yang Pu District, Shanghai, China
Equipment Under Test (EUT):
EUT Name: Smart POS System
Model No.: T6F1D
Trade Mark: SUNMI
Standard(s) : 47 CFR Part 15, Subpart E 15.407
Date of Receipt: 2026-07-21
Date of Test: 2026-07-24 to 2026-08-05
Date of Issue: 2026-08-06

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

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Revision Record			
Version	Description	Date	Remark
00	Original	2026-08-06	/

Authorized for issue by:				
Prepared By				
		Hayley_Zhang/Project Engineer		
Approved By				
		Cedar Cheng /Reviewer		

2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart C 15.203	Pass
Transmission in the Absence of Data		N/A	47 CFR Part 15, Subpart E 15.407 (c)	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart E 15.407	ANSI C63.10-2020+Cor.1-2023 Section 6.2	47 CFR Part 15, Subpart C 15.207 & Subpart E 15.407 b(9)	Reference Report 24T04I300106-034 & 24T04I300106-035
Radiated Emissions (Below 1GHz)		ANSI C63.10-2020+Cor.1-2023 Section 6.4,6.5	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Radiated Emissions (Above 1GHz)		ANSI C63.10-2020+Cor.1-2023 Section 6.6 & 12.7	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Radiated Emissions which fall in the restricted bands		ANSI C63.10-2020+Cor.1-2023 Section 6.10.5 & 12.7.2	47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)	Pass
Duty Cycle		ANSI C63.10-2020+Cor.1-2023 Section 12.2	ANSI C63.10-2020+Cor.1-2023 Section 12.2	Reference Report 24T04I300106-034 & 24T04I300106-035
99% Bandwidth		ANSI C63.10-2020+Cor.1-2023 Section 6.9.3	ANSI C63.10-2020+Cor.1-2023 Section 12.5.3	Reference Report 24T04I300106-034 & 24T04I300106-035
26dB Emission Bandwidth		ANSI C63.10-2020+Cor.1-2023 Section 12.5.2	47 CFR Part 15, Subpart E 15.407 (a)	Reference Report 24T04I300106-034 & 24T04I300106-035
Minimum 6 dB Bandwidth (5.725-5.85 GHz band)		ANSI C63.10-2020+Cor.1-2023 Section 12.5.1	47 CFR Part 15, Subpart E 15.407 (e)	Reference Report 24T04I300106-034
Maximum Conducted Output Power		ANSI C63.10-2020+Cor.1-2023 Section 12.4	47 CFR Part 15, Subpart E 15.407 (a)	Reference Report 24T04I300106-034 & 24T04I300106-035

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Power Spectral Density		ANSI C63.10-2020+Cor.1-2023 Section 12.6	47 CFR Part 15, Subpart E 15.407 (a)	Reference Report 24T04I300106-034 & 24T04I300106-035
Frequency Stability		ANSI C63.10-2020+Cor.1-2023 Section 6.8	47 CFR Part 15, Subpart E 15.407 (g)	Reference Report 24T04I300106-034 & 24T04I300106-035
Channel Move Time		KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Reference Report 24T04I300106-037
Channel Closing Transmission Time		KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Reference Report 24T04I300106-037

Remark:

This test report (Report No.: SUCR26070006905 issue on 2026-08-06) is based on the original test report (Report No.: 24T04I300106-034 & 4T04I300106-035 & 4T04I300106-037 issue on 2024-09-09). Review this report and original report, this report just changing the parts according to the declaration letter from client.

Considering to the difference, pre-scan was performed on the sample in this report to find the items which can be influential to the result in the original test report for fully retest, and only the worst mode data will be reflected in the report

Therefore in this report only Radiated Emissions were performed based on the worst case of the original report with report number 24T04I300106-034 & 4T04I300106-035 & 4T04I300106-037 issue on 2024-09-09, and other test data are referred to the previous report with report number 24T04I300106-034 & 4T04I300106-035 & 4T04I300106-037 issue on 2024-09-09.

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4 General Information

4.1 Details of E.U.T.

Power supply:	Adapter(TPA-418G050200UU01): INPUT: AC100-240V 50/60Hz 0.3A; OUTPUT: DC5V2A
Operation Frequency/Number of channels (20MHz):	U-NII-1: 5180-5240MHz (4 Channels); U-NII-2A: 5260-5320MHz (4 Channels); U-NII-2C: 5500-5700MHz (11 Channels); U-NII-3: 5745-5825MHz (5 Channels)
Operation Frequency/Number of channels/(40MHz):	U-NII-1: 5190-5230MHz (2 Channels); U-NII-2A: 5270-5310MHz (2 Channels); U-NII-2C: 5510-5670MHz (5 Channels); U-NII-3: 5755-5795MHz (2 Channels)
Operation Frequency/Number of channels (80MHz):	U-NII-1: 5210MHz (1 Channel); U-NII-2A: 5290MHz (1 Channels); U-NII-2C: 5530-5610MHz (2 Channels); U-NII-3: 5775MHz (1 Channel)
Modulation Type:	802.11a: OFDM (BPSK, QPSK, 16-QAM, 64-QAM); 802.11n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM); 802.11ac: OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)
Channel Spacing:	802.11a/n/ac 20: 20MHz; 802.11n/ac 40: 40MHz; 802.11ac 80: 80MHz
DFS Function:	Slave without Radar detection
TPC Function:	Without TPC function
Antenna Type:	FPC Antenna
Antenna Gain:	2.60dBi (Provided by the manufacturer)

4.2 Environment Parameter

Environment Parameter	Selected Values During Tests	
Relative Humidity	41-43%	
Value	Temperature(°C)	Voltage(V)
NTNV	24	7.7
Note:		
NV:Normal Voltage	LV:Low Extreme Test Voltage	HV:High Extreme Test Voltage
NT:Normal Temperature	LT:Low Extreme Test Temperature	HT:High Extreme Test Temperature

4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
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The EUT has been tested as an independent unit.			

4.4 Measurement Uncertainty & Decision Rule

No.	Item	Measurement Uncertainty
1	Radio Frequency	$\pm 7.25 \times 10^{-8}$
2	Duty cycle	$\pm 0.37\%$
3	Occupied Bandwidth	$\pm 3\%$
4	Conduction emission	$\pm 3.0\text{dB}$ (150kHz to 30MHz)
5	RF conducted power	$\pm 0.75\text{dB}$
6	RF power density	$\pm 2.84\text{dB}$
7	Conducted Spurious emissions	$\pm 0.75\text{dB}$
8	RF Radiated power	$\pm 1.56\text{dB}$ (9KHz-30MHz)
		$\pm 4.80\text{dB}$ (30MHz-1GHz)
		$\pm 4.80\text{dB}$ (1GHz-18GHz)
		$\pm 4.80\text{dB}$ (18GHz-40GHz)
9	Temperature test	$\pm 1^\circ\text{C}$
10	Humidity test	$\pm 3\%$
11	Supply voltages	$\pm 1\%$
12	Time	$\pm 3\%$
Remark: The U_{lab} (lab Uncertainty) is less than $U_{\text{CISPR/ETSI}}$ (CISPR/ETSI Uncertainty), so the test results – compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit; – non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.		

4.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.

South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu)
Pilot Free Trade Zone

No tests were sub-contracted.

Note:

1.SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).

2.SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).

3. Sample source: sent by customer.

4.6 Test Facility

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

- **A2LA (Certificate No. 6336.01)**

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.is accredited by the American Association for Laboratory Accreditation (A2LA).

- **FCC (Designation Number: CN1312)**

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd. has been recognized as an accredited testing laboratory. Test Firm Registration Number:717327

- **ISED (CAB Identifier: CN0120)**

SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 27594

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None

5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
RF Radiated Test						
1	Semi-Anechoic Chamber	Brilliant-emc	N/A	SUWI-04-02-01	6/9/2026	6/8/2029
2	Signal Analyzer	ROHDE&SCHWARZ	FSW43	SUWI-01-02-04	1/14/2026	1/13/2027
3	Signal Analyzer	KEYSIGHT	N9020A	SUWI-01-02-07	11/20/2025	11/19/2026
4	Test receiver	ROHDE&SCHWARZ	ESR7	SUWI-01-10-01	1/14/2026	1/13/2027
5	Signal Generator	ROHDE&SCHWARZ	SMW100A	SUWI-01-18-01	1/14/2026	1/13/2027
6	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	VULB 9168	SUWI-01-11-04	11/29/2025	11/28/2027
7	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9120D	SUWI-01-11-02	5/7/2025	5/6/2027
8	Receiving antenna	SCHWRZBECK MESS-ELEKTRONIK	BBHA 9170	SUWI-01-11-03	5/7/2025	5/6/2027
9	Active Loop Antenna	SCHWRZBECK MESS-ELEKTRONIK	FMZB 1519B	SUWI-01-21-01	5/7/2025	5/6/2027
10	Amplifier	Tonscend	TAP9K3G40	SUWI-01-14-01	1/14/2026	1/13/2027
11	Amplifier	Tonscend	TAP01018050	SUWI-01-14-02	1/14/2026	1/13/2027
12	Amplifier	Tonscend	TAP18040048	SUWI-01-14-03	1/14/2026	1/13/2027
13	Wideband Radio Communication Tester	Anritsu	MT8820C	SUWI-01-26-01	8/25/2025	8/24/2026
14	Wideband Radio Communication Tester	Anritsu	MT8821C	SUWI-01-26-03	8/25/2025	8/24/2026
15	Wideband Radio Communication Tester	ROHDE&SCHWARZ	CMW500	SUWI-01-16-09	8/26/2025	8/25/2026
16	Radio Communication Analyzer	StarPoint	SP9500E	SUWI-01-28-06	11/21/2025	11/20/2026
17	Signal Generator	ROHDE&SCHWARZ	SMB100A	SUWI-01-08-01	1/14/2026	1/13/2027
18	DC Power Supply	HYELEC	HY3005B	SUWI-01-18-01	1/14/2026	1/13/2027
19	Temperature and humidity meter	MingGao	TH101B	SUWI-01-01-05	2/11/2026	2/10/2027
20	Measurement Software	Tonscend	JS32-RE 4.0.0.0	SUWI-02-09-06	NCR	NCR
21	RF Control unit	Tonscend	JS0806-1	SUWI-02-20-01	NCR	NCR
22	RFCables	Tonscend	NA	SUWI-01-03-02	NCR	NCR

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

6.1.2 Conclusion

Standard 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 antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is FPC Antenna and no consideration of replacement. The best case gain of the 2.60dBi.

Antenna location: Refer to internal photo.

6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

47 CFR Part 15, Subpart E 15.407 (c)

6.2.2 Conclusion

Standard Requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

Applicants shall include in their application for equipment authorization a description of how this requirement is met.

EUT Details:

WIFI chip support automatically discontinue transmission in case of either absence of information to transmit or operational failure, if the chip detect absence of information to transmit or operational failure, it will be automatically shut off.

7 Radio Spectrum Matter Test Results

7.1 Radiated Emissions (Below 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)

Test Method: ANSI C63.10-2020+Cor.1-2023 Section 6.4,6.5

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
960-1000	500	3

Note

1.The above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

2. At frequencies below 1GHz, measurements may be performed at a distance different to specified in the regulations.

Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor+ Aux Factor (if applicable)

The aux factor needs to be added when measurements are performed at a distance other than the limit distance provided.

EX. Below 30MHz, Aux Factor = 40 dB/decade of distance, the aux factor is $40\log(3/300) = -80\text{dB}$ (for 3m test distance).

EX. Above 30MHz, Aux Factor = 20 dB/decade of distance, the aux factor is $20\log(10/3) = 10.46\text{dB}$ (for 10m test distance).

7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 24 °C

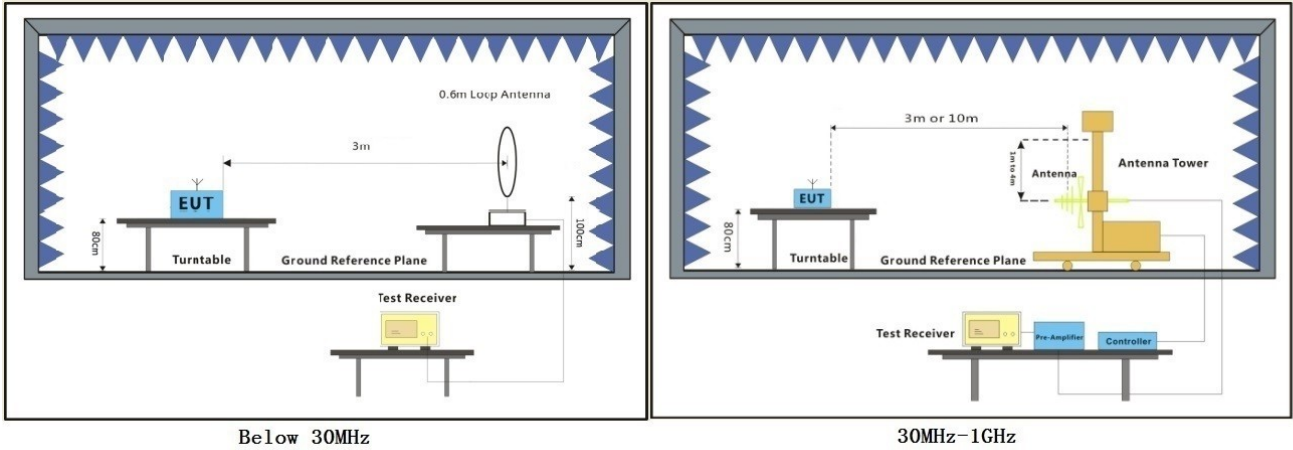
Humidity: 43 % RH

Atmospheric Pressure: 1001 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac 20/40/80, Only the data of worst case is recorded in the report.

7.1.3 Test Setup Diagram



7.1.4 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8m above the ground at a semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3m or 10m away from the interference-receiving antenna, which was mounted on the variable-height antenna tower.
- c. The antenna height is varied from 1m to 4m 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 1m to 4m (for the test frequency of below 30MHz, the antenna was tuned to heights 1m) and the rotatable 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 quasi-peak method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. At frequencies below 1GHz, measurements may be performed at a distance different to specified in the regulations.

Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor+ Aux Factor (if applicable)

The aux factor needs to be added when measurements are performed at a distance other than the limit distance provided.

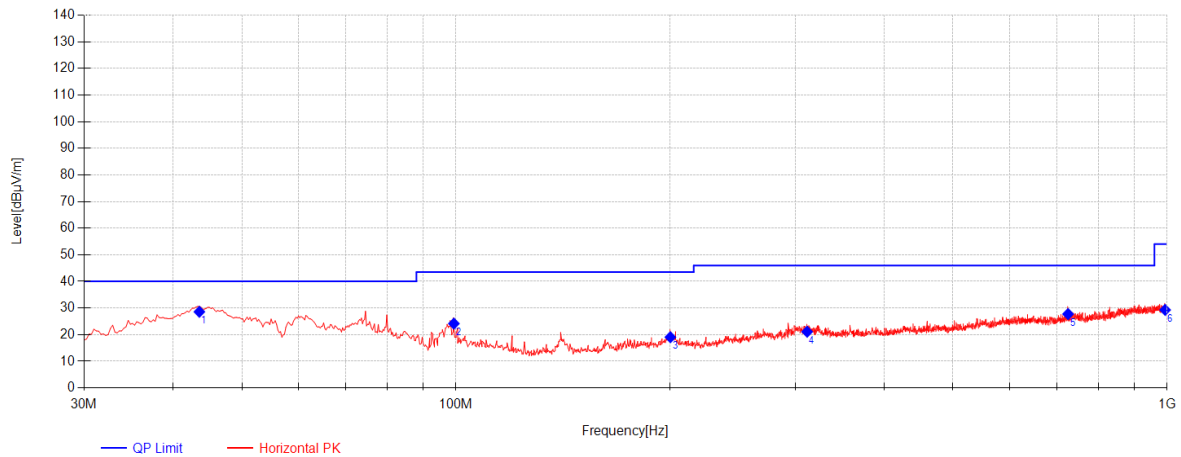
EX. Below 30MHz, Aux Factor = 40 dB/decade of distance, the aux factor is $40\log(3/300) = -80\text{dB}$ (for 3m test distance).

EX. Above 30MHz, Aux Factor = 20 dB/decade of distance, the aux factor is $20\log(10/3) = 10.46\text{dB}$ (for 10m test distance).

2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

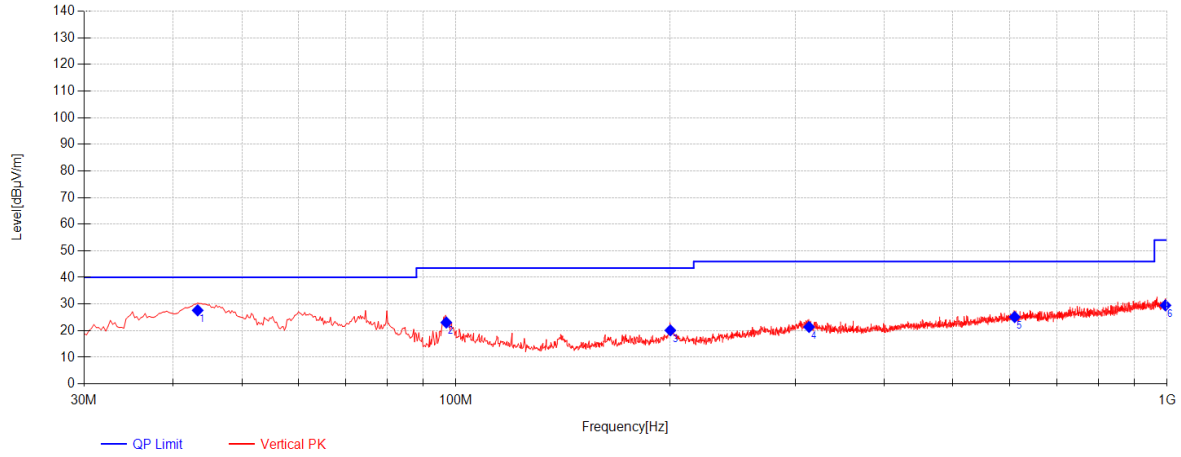
3. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the worst-case test curve is displayed.

Test Mode: 04; Polarity: Horizontal



Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Polarity
1	43.58	50.24	19.46	-41.11	28.59	40.00	11.41	Horizontal
2	99.355	47.27	17.28	-40.40	24.15	43.50	19.35	Horizontal
3	200.235	36.84	21.47	-39.26	19.05	43.50	24.45	Horizontal
4	311.785	39.44	19.66	-38.00	21.10	46.00	24.90	Horizontal
5	725.7325	38.09	25.13	-35.48	27.74	46.00	18.26	Horizontal
6	993.695	35.06	28.00	-33.76	29.30	54.00	24.70	Horizontal

Test Mode: 04; Polarity: Vertical



Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Polarity
1	43.3375	49.32	19.43	-41.12	27.63	40.00	12.37	Vertical
2	96.93	47.1	16.38	-40.41	23.07	43.50	20.43	Vertical
3	200.235	37.9	21.47	-39.26	20.11	43.50	23.39	Vertical
4	313.725	39.78	19.63	-38.03	21.38	46.00	24.62	Vertical
5	610.545	36.68	24.68	-36.24	25.12	46.00	20.88	Vertical
6	994.9075	35.15	28.09	-33.74	29.50	54.00	24.50	Vertical

7.2 Radiated Emissions (Above 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)

Test Method: ANSI C63.10-2020+Cor.1-2023 Section 6.6 & 12.7

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

*(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Remark:

1. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

2. Above 18GHz, measurements may be performed at a distance shorter than that specified in the regulations

Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor+ Aux Factor (if applicable)

The aux factor needs to be added when measurements are performed at a distance other than the limit distance provided.

EX. Above 18GHz, Aux Factor = 20 dB/decade of distance, the aux factor is $20\log(1/3) = -9.54\text{dB}$ (for 1m test distance).

7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 24 °C

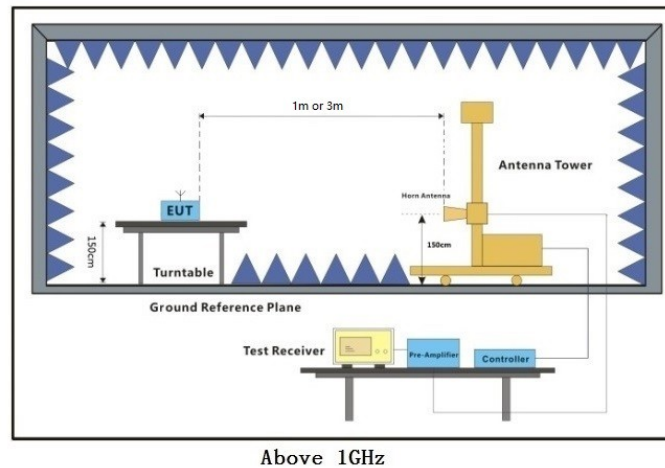
Humidity: 41 % RH

Atmospheric Pressure: 1001 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac 20/40/80, Only the data of worst case is recorded in the report.

7.2.3 Test Setup Diagram



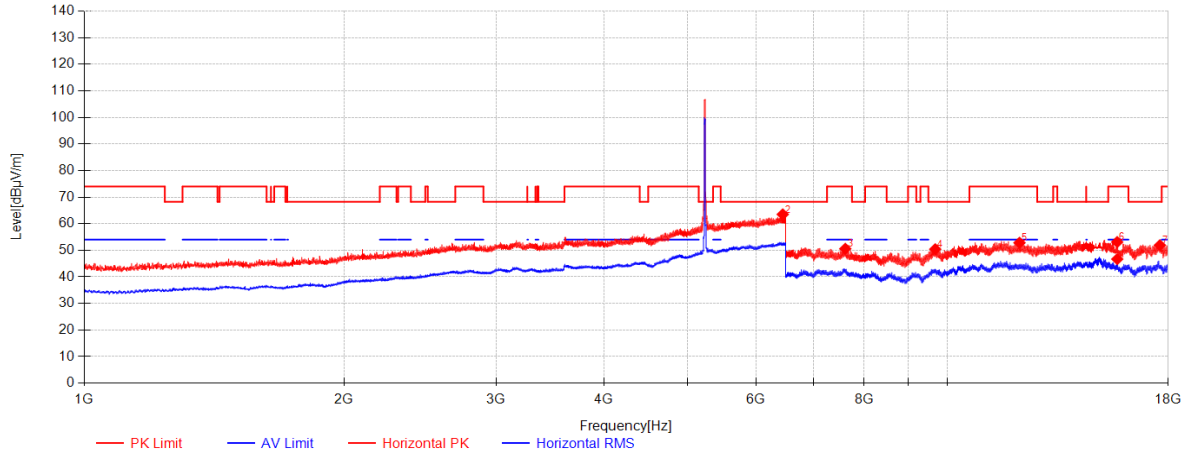
7.2.4 Measurement Procedure and Data

- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable 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 or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

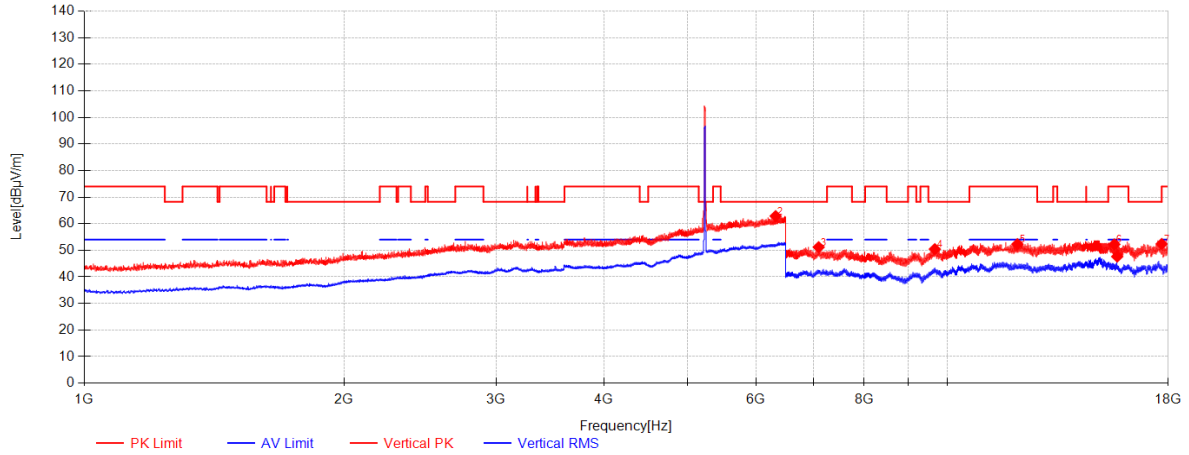
1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. Scan from 1GHz to 40GHz, The points marked on below plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
4. The disturbance above 18GHz were very low and the below harmonics were the highest point could be found when testing, so only the below harmonics had been displayed.
5. For devices with multiple operating modes, measurements on the middle channel is used to determine the worst-case mode(s). Only the worst case mode with the highest output power and the mode with the highest output power spectral density for each modulation family (e.g., OFDM and direct sequence spread spectrum) is recorded in the test report.
6. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.
7. For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle<98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.

11a_TX_CH_48_Horizontal



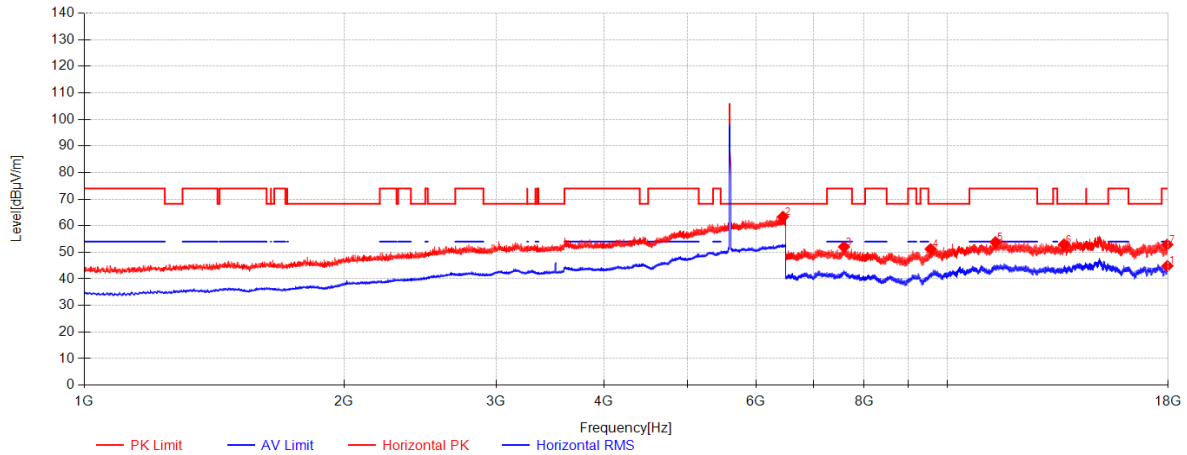
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	15721.47	44.65	38.71	-36.68	46.68	54.00	7.32	Horizontal
2	6442.25	41.02	34.08	-11.59	63.51	68.20	4.69	Horizontal
3	7612.05	53.78	36.88	-40.09	50.57	74.00	22.43	Horizontal
4	9675.92	51.98	38.45	-40.02	50.41	68.20	16.79	Horizontal
5	12112.38	53.52	39.81	-40.51	52.82	74.00	21.18	Horizontal
6	15717.25	51.08	38.73	-36.70	53.11	74.00	20.89	Horizontal
7	17615.13	49.41	44.90	-42.41	51.90	68.20	15.30	Horizontal

11a_TX_CH_48_Vertical



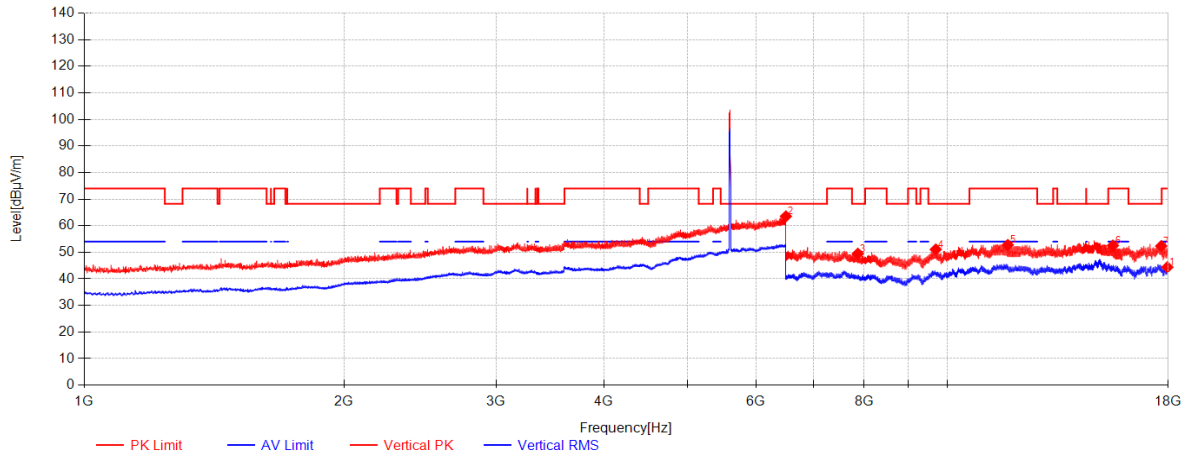
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	15718.02	45.61	38.73	-36.70	47.64	54.00	6.36	Vertical
2	6321.71	41.10	33.43	-11.66	62.87	68.20	5.33	Vertical
3	7090.33	55.27	36.14	-40.23	51.18	68.20	16.02	Vertical
4	9665.18	52.03	38.43	-40.02	50.44	68.20	16.76	Vertical
5	12046.83	52.90	39.85	-40.43	52.32	74.00	21.68	Vertical
6	15598.42	50.09	38.81	-36.66	52.24	74.00	21.76	Vertical
7	17698.32	51.40	44.90	-43.92	52.38	68.20	14.82	Vertical

11n(HT20)_TX_CH_120_Horizontal



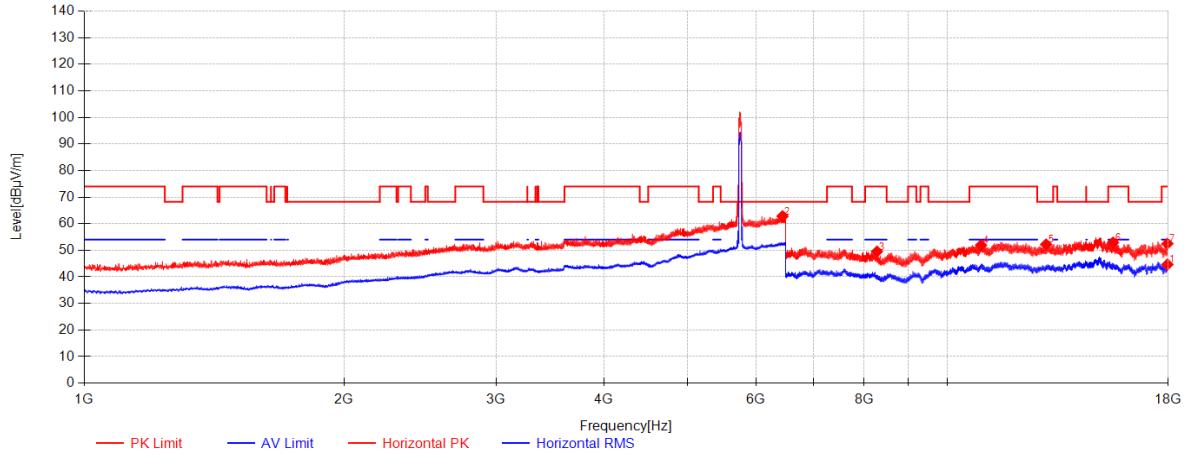
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	17972.78	43.50	47.41	-46.04	44.87	54.00	9.13	Horizontal
2	6446.38	40.88	34.09	-11.60	63.37	68.20	4.83	Horizontal
3	7585.98	55.31	36.84	-40.11	52.04	74.00	21.96	Horizontal
4	9557.47	53.56	37.84	-40.17	51.23	68.20	16.97	Horizontal
5	11362.97	54.01	40.53	-40.72	53.82	74.00	20.18	Horizontal
6	13640.73	53.19	40.44	-40.67	52.96	68.20	15.24	Horizontal
7	17964.35	51.60	47.26	-45.98	52.88	74.00	21.12	Horizontal

11n(HT20)_TX_CH_120_Vertical



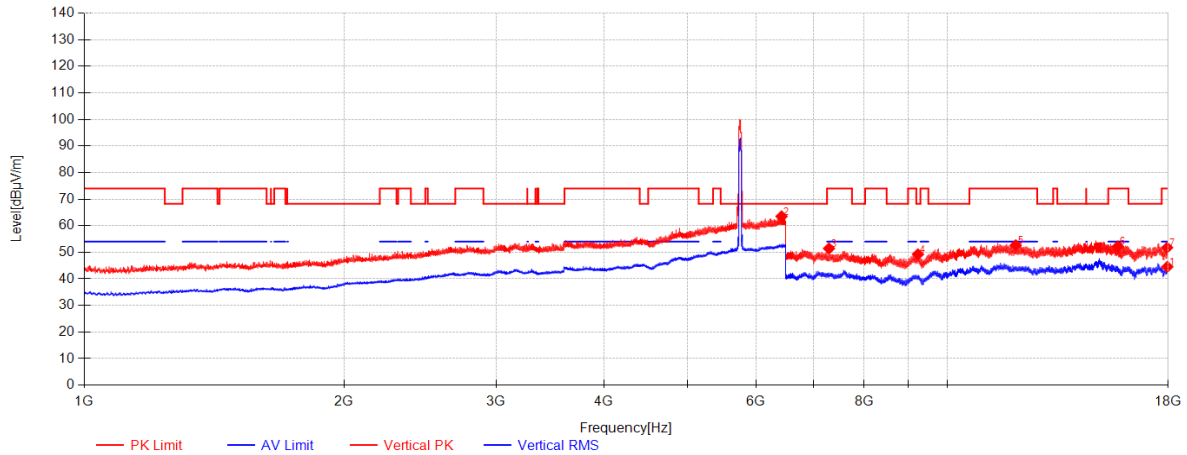
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	17968.57	43.07	47.33	-46.01	44.39	54.00	9.61	Vertical
2	6496.79	40.63	34.57	-11.67	63.53	68.20	4.67	Vertical
3	7871.18	53.06	36.68	-40.26	49.48	68.20	17.72	Vertical
4	9689.33	52.61	38.48	-40.01	51.08	68.20	16.12	Vertical
5	11740.55	53.09	40.08	-40.39	52.78	74.00	21.22	Vertical
6	15541.30	50.07	39.03	-36.55	52.55	74.00	21.45	Vertical
7	17677.23	50.99	44.90	-43.54	52.35	68.20	14.85	Vertical

11n(HT40)_TX_CH_151_Horizontal



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	17971.25	43.30	47.38	-46.03	44.65	54.00	9.35	Horizontal
2	6438.58	40.34	34.08	-11.59	62.83	68.20	5.37	Horizontal
3	8284.03	53.66	36.73	-40.85	49.54	74.00	23.46	Horizontal
4	10932.87	52.63	40.06	-40.77	51.92	74.00	21.08	Horizontal
5	13004.02	52.95	39.51	-40.25	52.21	68.20	14.99	Horizontal
6	15545.13	50.46	39.02	-36.56	52.92	74.00	21.08	Horizontal
7	17970.87	51.13	47.38	-46.03	52.48	74.00	20.52	Horizontal

11n(HT40)_TX_CH_151_Veritical



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	17965.50	43.24	47.28	-45.99	44.53	54.00	9.47	Vertical
2	6421.63	41.04	34.04	-11.57	63.51	68.20	4.69	Vertical
3	7288.13	54.97	36.68	-40.23	51.42	74.00	21.58	Vertical
4	9239.30	52.52	37.44	-40.72	49.24	68.20	17.96	Vertical
5	11990.87	53.10	39.87	-40.35	52.62	74.00	20.38	Vertical
6	15747.92	50.15	38.61	-36.55	52.21	74.00	21.79	Vertical
7	17958.60	50.54	47.15	-45.94	51.75	74.00	21.25	Vertical

7.3 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.209 & Subpart E 15.407(b)

Test Method: ANSI C63.10-2020+Cor.1-2023 Section 6.10.5 & 12.7.2

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

*(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
 (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
 (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
 (4) For transmitters operating in the 5.725-5.85 GHz band:
 (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
 Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 24 °C

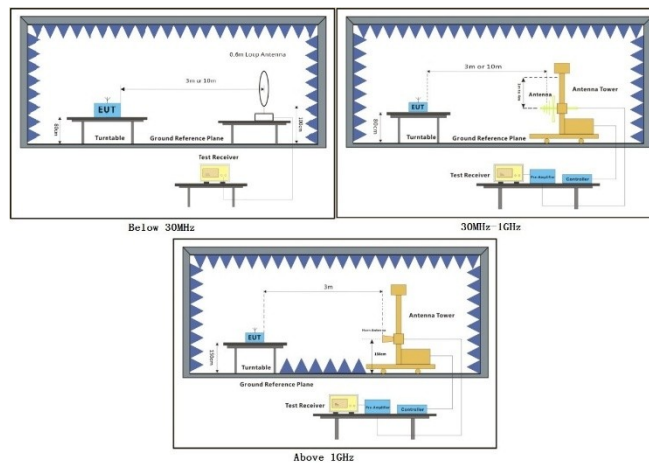
Humidity: 43 % RH

Atmospheric Pressure: 1001 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac 20/40/80, Only the data of worst case is recorded in the report.

7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

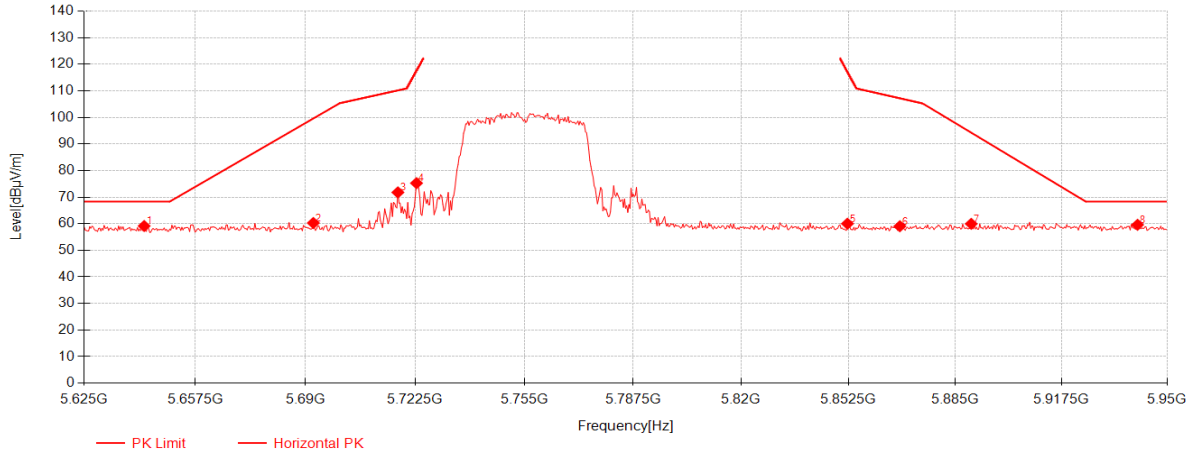
- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. 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.
- e. 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. 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.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2:The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.

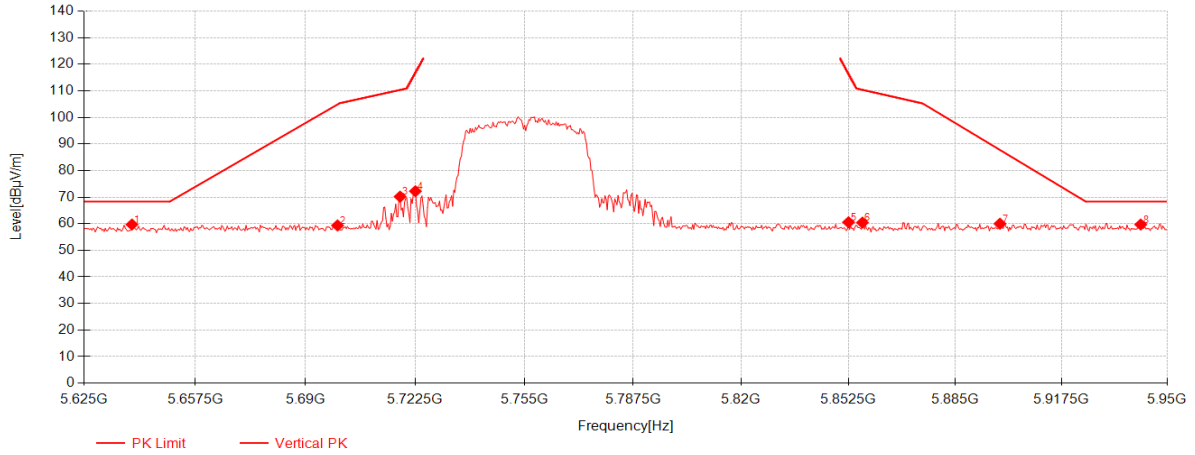
Remark 3: For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle<98%) or 10Hz (Duty cycle $\geq$ 98%) for Average detection (AV) at frequency above 1GHz.

11n(HT40)_TX_CH_151_Horizontal_Peak



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5642.55	38.65	32.81	-12.31	59.15	68.30	9.15	Horizontal
2	5692.28	39.80	32.80	-12.34	60.26	99.60	39.34	Horizontal
3	5717.30	51.49	32.59	-12.29	71.79	110.15	38.36	Horizontal
4	5722.83	54.99	32.53	-12.27	75.25	117.34	42.09	Horizontal
5	5852.18	39.50	32.53	-12.03	60.00	117.34	57.34	Horizontal
6	5868.10	38.37	32.72	-12.04	59.05	107.23	48.18	Horizontal
7	5889.88	39.02	32.98	-12.05	59.95	94.26	34.31	Horizontal
8	5940.90	38.41	33.18	-12.00	59.59	68.30	8.71	Horizontal

11n(HT40)_TX_CH_151_Veritical_Peak



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5638.98	39.18	32.82	-12.31	59.69	68.30	8.61	Vertical
2	5699.43	38.89	32.80	-12.35	59.34	104.88	45.54	Vertical
3	5717.95	49.90	32.58	-12.29	70.19	110.33	40.14	Vertical
4	5722.50	51.96	32.53	-12.27	72.22	116.60	44.38	Vertical
5	5852.50	40.04	32.53	-12.03	60.54	116.60	56.06	Vertical
6	5856.73	39.86	32.58	-12.03	60.41	110.42	50.01	Vertical
7	5898.65	38.97	33.08	-12.06	59.99	87.76	27.77	Vertical
8	5941.88	38.51	33.18	-12.00	59.69	68.30	8.61	Vertical



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8 Test Setup Photo

Refer to Appendix A.3_Photos of Test Setup for SUCR2607000690TL

9 EUT Constructional Details (EUT Photos)

Refer to Appendix A.1_External Photos for SUCR2607000690TL and Appendix A.2_Internal Photos for SUCR2607000690TL

- End of the Report -