Mode:		802.11n(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	84.77	-32.28	52.49	68.20	-15.71	PK
V	5150.00	82.59	-33.13	49.46	68.20	-18.74	PK

Mode:		802.11n(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	72.50	-30.53	41.97	54.00	-12.03	AV
V	5150.00	73.52	-31.69	41.82	54.00	-12.18	AV

Mode:		802.11n(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	86.14	-33.15	53.00	68.20	-15.20	PK
V	5350.00	83.29	-31.59	51.70	68.20	-16.50	PK

Mode:		802.11n(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	75.12	-33.17	41.95	54.00	-12.05	AV
V	5350.00	74.87	-33.49	41.38	54.00	-12.62	AV

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Mode:		802.11ac(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	84.87	-33.59	51.28	68.20	-16.92	PK
V	5150.00	84.33	-32.44	51.89	68.20	-16.31	PK

Mode:		802.11ac(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	73.27	-31.24	42.02	54.00	-11.98	AV
V	5150.00	75.30	-32.37	42.94	54.00	-11.06	AV

Mode:		802.11ac(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	84.18	-30.69	53.49	68.20	-14.71	PK
V	5350.00	83.10	-31.16	51.94	68.20	-16.26	PK

Mode:		802.11ac(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	75.61	-33.75	41.86	54.00	-12.14	AV
V	5350.00	73.71	-32.52	41.19	54.00	-12.81	AV

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Mode:		802.11n(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	84.11	-32.80	51.31	68.20	-16.89	PK
V	5150.00	82.88	-33.78	49.10	68.20	-19.10	PK

Mode:		802.11n(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	74.87	-32.88	41.98	54.00	-12.02	AV
V	5150.00	72.60	-31.19	41.42	54.00	-12.58	AV

Mode:		802.11n(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	84.98	-33.14	51.83	68.20	-16.37	PK
V	5350.00	83.34	-31.79	51.55	68.20	-16.65	PK

Mode:		802.11n(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	72.38	-33.94	38.44	54.00	-15.56	AV
V	5350.00	75.05	-30.60	44.46	54.00	-9.54	AV

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Mode:		802.11ac(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	82.81	-30.55	52.26	68.20	-15.94	PK
V	5150.00	83.34	-33.36	49.98	68.20	-18.22	PK

Mode:		802.11ac(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	73.49	-31.07	42.42	54.00	-11.58	AV
V	5150.00	72.50	-31.29	41.21	54.00	-12.79	AV

Mode:		802.11ac(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	82.71	-33.47	49.23	68.20	-18.97	PK
V	5350.00	83.97	-31.56	52.41	68.20	-15.79	PK

Mode:		802.11ac(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	74.45	-33.38	41.07	54.00	-12.93	AV
V	5350.00	71.58	-32.56	39.02	54.00	-14.98	AV

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Mode:		802.11ac(HT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	84.92	-32.33	52.59	68.20	-15.61	PK
V	5150.00	84.68	-30.64	54.04	68.20	-14.16	PK

Mode:		802.11ac(HT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	71.79	-30.44	41.35	54.00	-12.65	AV
V	5150.00	73.61	-33.54	40.07	54.00	-13.93	AV

Mode:		802.11ac(HT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	82.91	-32.33	50.59	68.20	-17.61	PK
V	5350.00	83.32	-31.29	52.04	68.20	-16.16	PK

Mode:		802.11ac(HT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	73.95	-30.52	43.43	54.00	-10.57	AV
V	5350.00	72.36	-33.36	38.99	54.00	-15.01	AV

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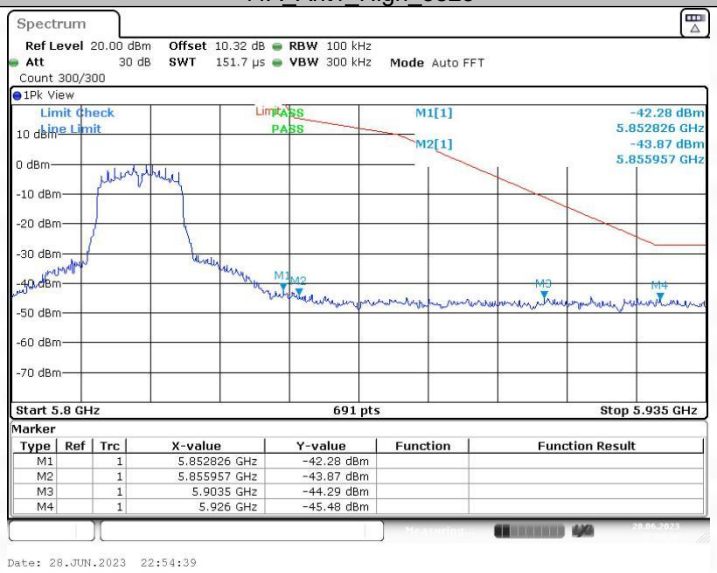
Band4

11A_Ant1_Low_5745

11A_Ant1_High_5825

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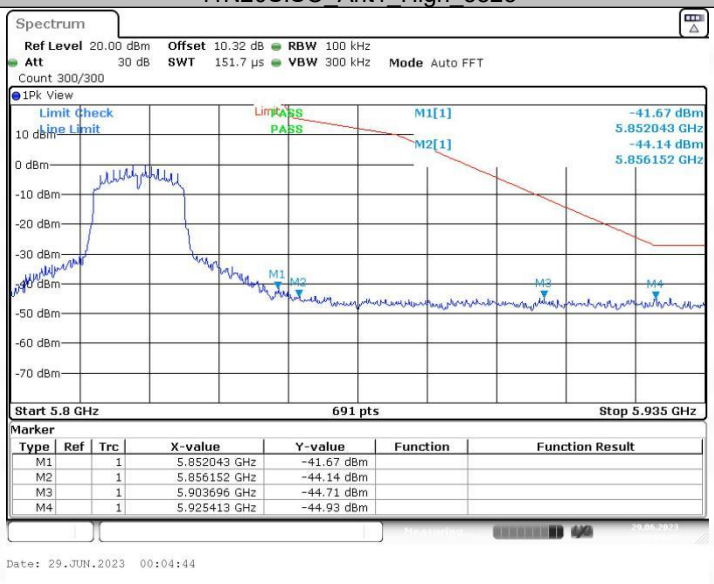
11N20SISO_Ant1_High_5825



11N40SISO_Ant1_Low_5755

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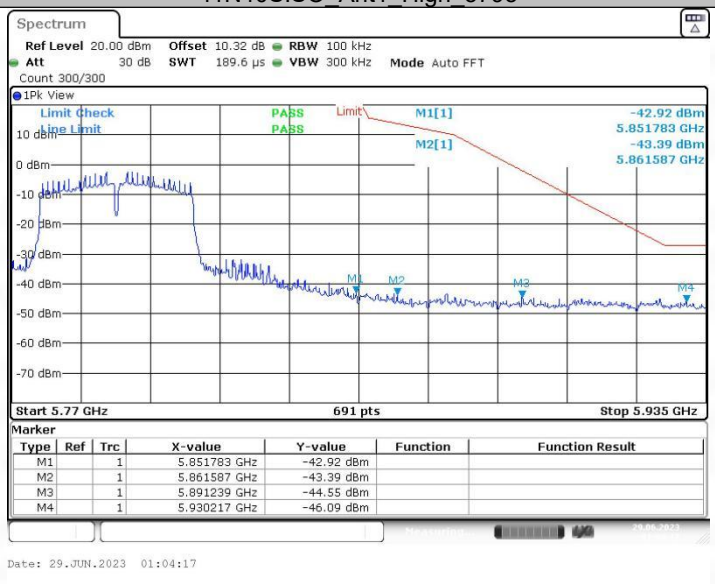
11N40SISO_Ant1_High_5795



11AC20SISO_Ant1_Low_5745

BTF Testing Lab (Shenzhen) Co., Ltd.
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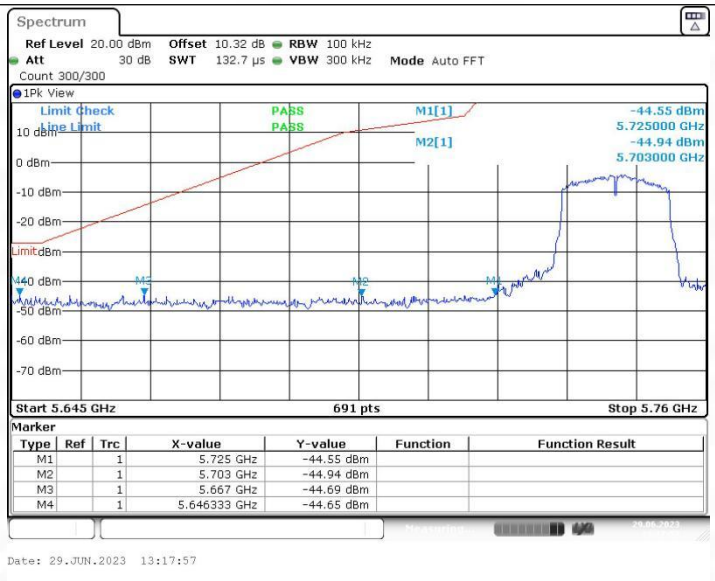

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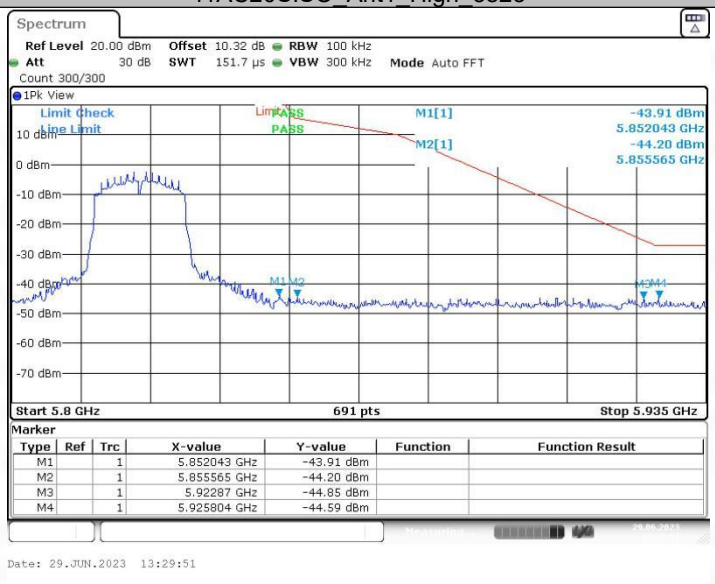

11AC40SISO_Ant1_Low_5755

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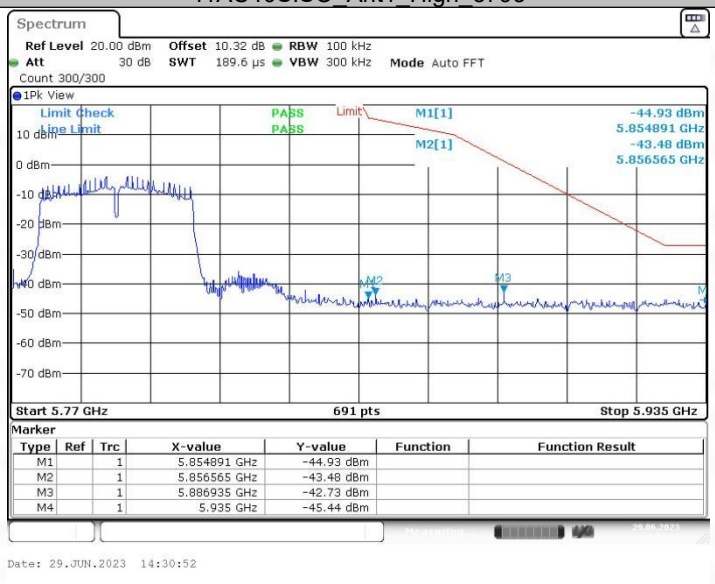
11AC40SISO_Ant1_High_5795



11AC80SISO_Ant1_Low_5775

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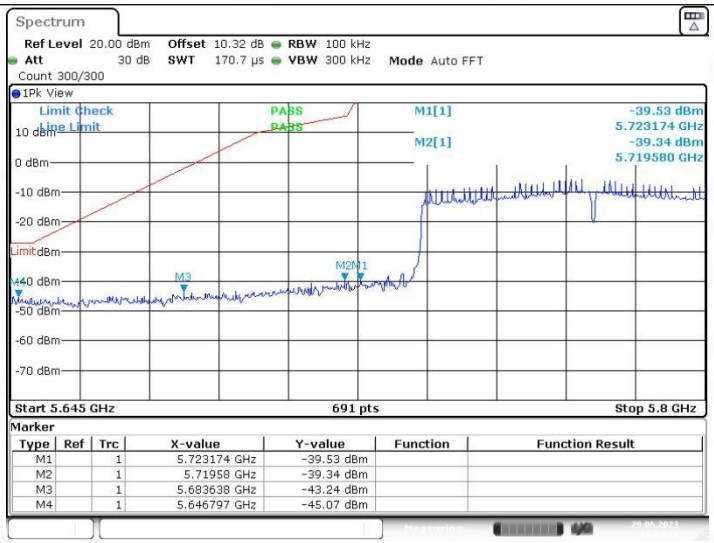

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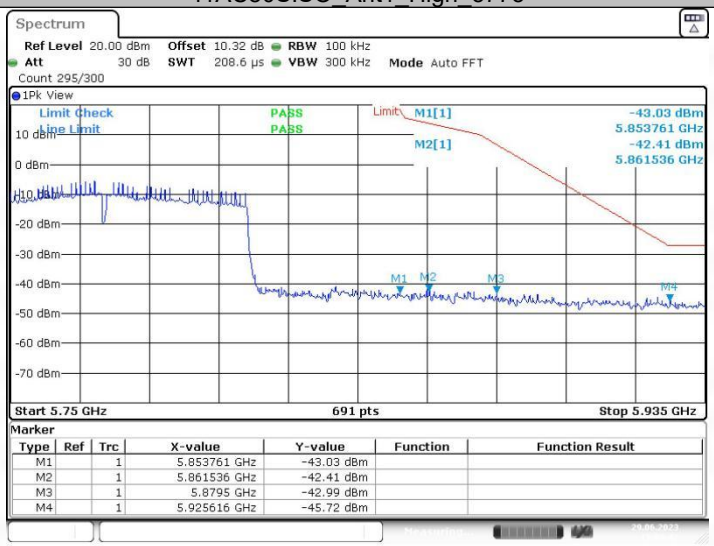

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6.7 Undesirable emission limits (below 1GHz)

Test Requirement:	47 CFR Part 15.407(b)(9)
Test Method:	ANSI C63.10-2013, section 12.7.4, 12.7.5, 12.7.6
Test Limit:	Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table: 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
Procedure:	Below 1GHz: a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. b. 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. 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 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. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor 2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above 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. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

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	Above 1GHz: 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 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above 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 harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

6.7.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.5 °C
Humidity:	50.6 %
Atmospheric Pressure:	1010 mbar

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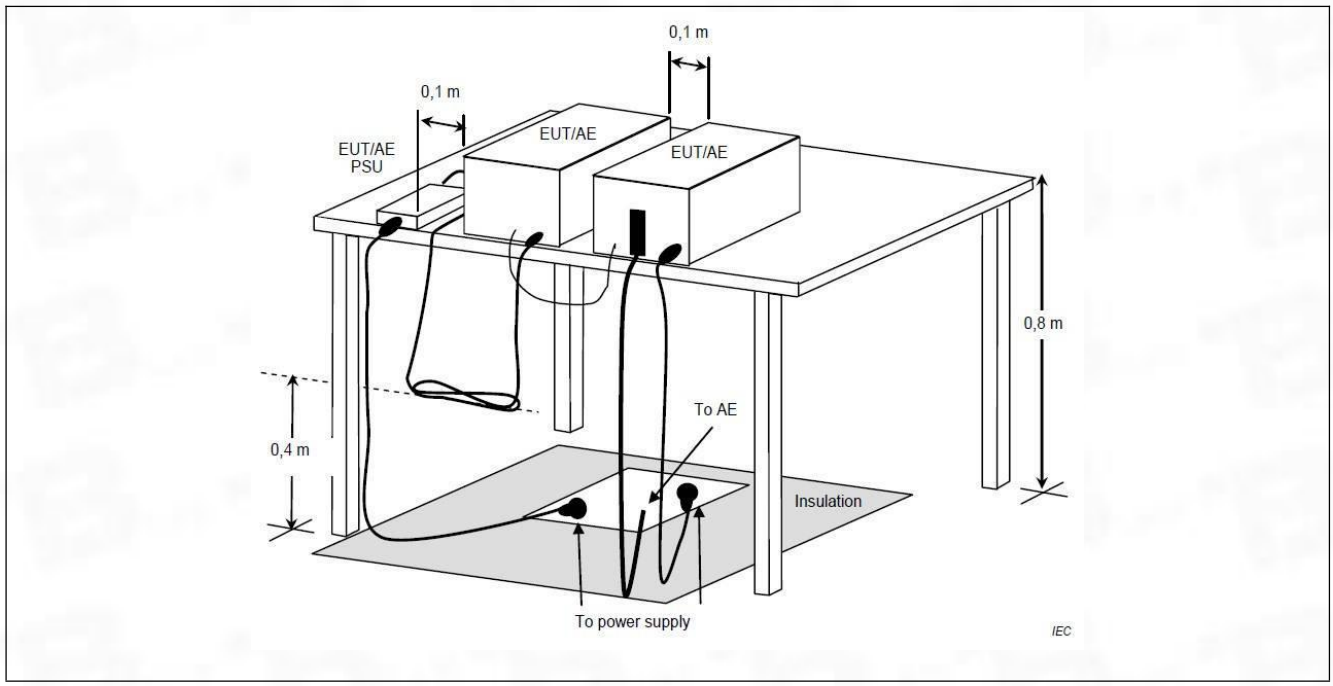
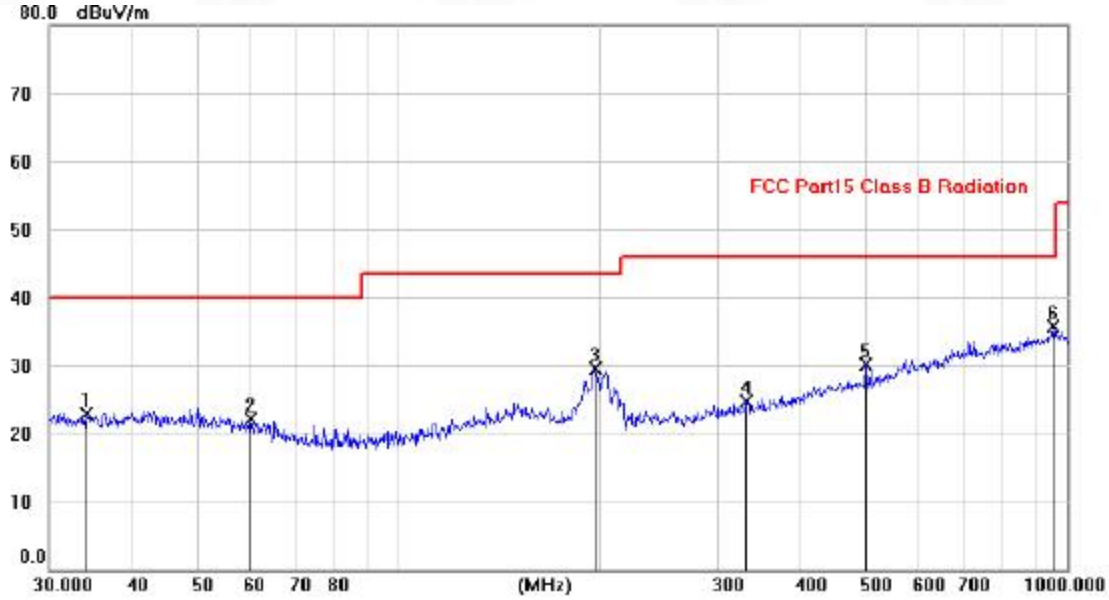
6.7.2 Test Setup Diagram:



6.7.3 Test Data:

Note: All the mode have been tested, and only the worst case mode are in the report
TM1 / Polarization: Horizontal / Band: U-NII 1 / BW: 20 / CH: L



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		34.0643	9.30	13.70	23.00	40.00	-17.00	peak			
2		60.0760	8.81	13.22	22.03	40.00	-17.97	peak			
3		196.7165	18.45	11.09	29.54	43.50	-13.96	peak			
4		331.1997	9.95	14.85	24.80	46.00	-21.20	peak			
5		500.0086	11.97	18.21	30.18	46.00	-15.82	peak			
6	*	952.5389	11.14	24.65	35.79	46.00	-10.21	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

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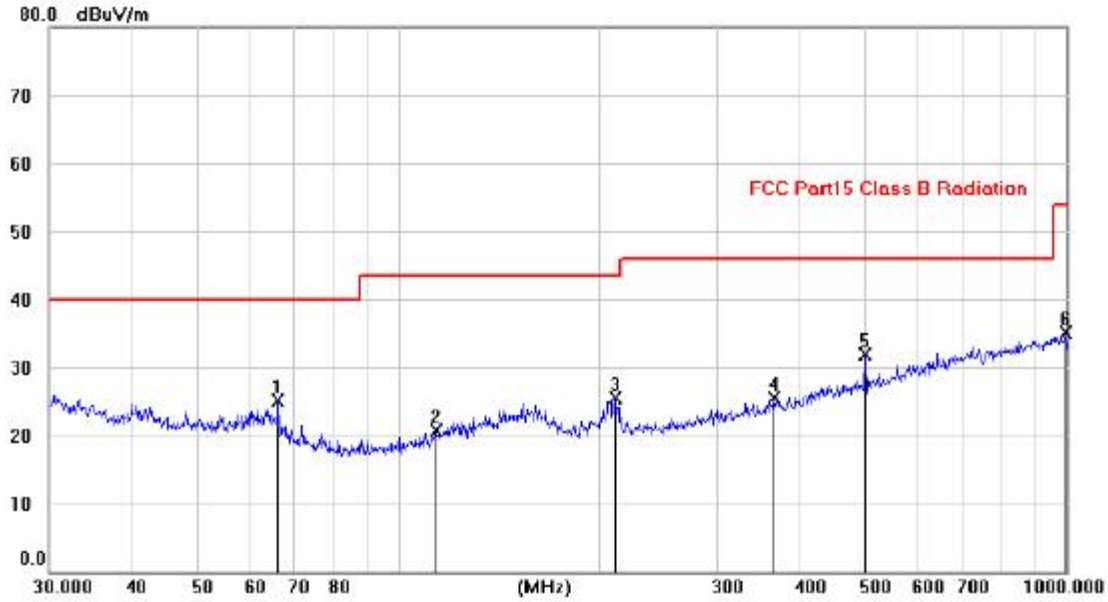
TM1 / Polarization: Vertical / Band: U-NII 1 / BW: 20 / CH: L



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		66.1654	13.11	12.09	25.20	40.00	-14.80	peak			
2		114.0604	8.41	12.32	20.73	43.50	-22.77	peak			
3		210.9338	14.39	11.13	25.52	43.50	-17.98	peak			
4		364.6854	9.93	15.53	25.46	46.00	-20.54	peak			
5	*	500.0086	13.75	18.21	31.96	46.00	-14.04	peak			
6		996.9655	10.38	24.80	35.18	54.00	-18.82	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

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6.8 Undesirable emission limits (above 1GHz)

Test Requirement:	47 CFR Part 15.407(b)(1) 47 CFR Part 15.407(b)(2) 47 CFR Part 15.407(b)(4) 47 CFR Part 15.407(b)(10)
Test Method:	ANSI C63.10-2013, section 12.7.4, 12.7.5, 12.7.6
Test Limit:	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. 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. For transmitters operating solely in the 5.725-5.850 GHz band: 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.

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

[1]Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
[2]Above 38.6

The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in § 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in § 15.209shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in § 15.209shall be demonstrated based on the average value of the measured emissions. The provisions in § 15.35apply to these measurements.

Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength	Measurement

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		(microvolts/meter)	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
Procedure:	Above 1GHz: 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 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above 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 harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.		

6.8.1 E.U.T. Operation:

Operating Environment:	
Temperature:	25.5 °C
Humidity:	50.6 %
Atmospheric Pressure:	1010 mbar

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6.8.2 Test Data:

UNII-1_20M_5180MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4476.695	78.26	-28.15	50.11	68.20	-18.09	peak	P
2	6454.826	80.34	-28.47	51.87	68.20	-16.33	peak	P
3	9069.062	82.22	-29.39	52.83	68.20	-15.37	peak	P
4	10049.367	83.13	-30.00	53.13	68.20	-15.07	peak	P
5	12351.808	83.93	-30.55	53.38	68.20	-14.82	peak	P
6	16009.871	84.60	-32.36	52.23	68.20	-15.97	peak	P

UNII-1_20M_5180MHz_Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4477.471	78.22	-28.28	49.94	68.20	-18.26	peak	P
2	6453.945	80.90	-29.03	51.86	68.20	-16.34	peak	P
3	9069.536	82.41	-29.22	53.19	68.20	-15.01	peak	P
4	10049.997	82.99	-30.23	52.76	68.20	-15.44	peak	P
5	12351.897	83.97	-30.02	53.95	68.20	-14.25	peak	P
6	16010.287	84.92	-32.79	52.13	68.20	-16.07	peak	P

UNII-1_20M_5240MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3464.545	79.06	-28.53	50.53	68.20	-17.67	peak	P
2	5441.845	80.80	-29.04	51.76	68.20	-16.44	peak	P
3	8056.925	82.46	-29.26	53.20	68.20	-15.00	peak	P
4	9037.195	83.76	-30.04	53.72	68.20	-14.48	peak	P
5	11339.086	84.47	-30.53	53.94	68.20	-14.26	peak	P
6	14997.697	85.32	-32.92	52.40	68.20	-15.80	peak	P

UNII-1_20M_5240MHz_Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3465.328	79.06	-28.01	51.05	68.20	-17.15	peak	P
2	5442.664	81.63	-28.16	53.47	68.20	-14.73	peak	P
3	8057.754	82.50	-28.32	54.18	68.20	-14.02	peak	P
4	9037.799	84.00	-29.60	54.40	68.20	-13.80	peak	P
5	11339.379	85.30	-29.90	55.41	68.20	-12.79	peak	P
6	14998.278	86.19	-32.08	54.12	68.20	-14.08	peak	P

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UNII-3_20M_5745MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3510.811	79.01	-27.19	51.82	68.2	-16.38	peak	P
2	5488.223	80.21	-28.16	52.05	68.2	-16.15	peak	P
3	8103.339	82.31	-28.03	54.28	68.2	-13.92	peak	P
4	9083.709	83.62	-29.59	54.02	68.2	-14.18	peak	P
5	11385.552	83.64	-29.84	53.80	68.2	-14.40	peak	P
6	15047.105	84.94	-31.72	53.22	68.2	-14.98	peak	P

UNII-3_20M_5745MHz_Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3511.114	78.10	-27.98	50.12	68.20	-18.08	peak	P
2	5487.874	79.91	-27.85	52.06	68.20	-16.14	peak	P
3	8103.799	81.63	-28.39	53.24	68.20	-14.96	peak	P
4	9083.359	82.93	-29.28	53.65	68.20	-14.55	peak	P
5	11385.033	83.59	-30.12	53.47	68.20	-14.73	peak	P
6	15047.219	85.84	-31.50	54.34	68.20	-13.86	peak	P

UNII-3_20M_5785MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4002.203	78.46	-27.12	51.34	68.20	-16.86	peak	P
2	5979.607	79.81	-28.17	51.64	68.20	-16.56	peak	P
3	8594.891	82.01	-28.02	53.98	68.20	-14.22	peak	P
4	9574.841	82.91	-29.41	53.49	68.20	-14.71	peak	P
5	11876.078	83.73	-29.85	53.88	68.20	-14.32	peak	P
6	15534.874	84.47	-31.47	53.00	68.20	-15.20	peak	P

UNII-3_20M_5785MHz_Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4001.635	78.88	-27.39	51.49	68.20	-16.71	peak	P
2	5979.052	80.42	-27.99	52.43	68.20	-15.77	peak	P
3	8594.250	82.16	-28.16	54.00	68.20	-14.20	peak	P
4	9574.801	83.52	-28.84	54.68	68.20	-13.52	peak	P
5	11876.881	83.36	-29.99	53.37	68.20	-14.83	peak	P
6	15535.240	84.44	-32.11	52.33	68.20	-15.87	peak	P

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UNII-3_20M_5825MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4012.003	79.01	-27.23	51.78	68.20	-16.42	peak	P
2	5989.135	80.76	-27.63	53.13	68.20	-15.07	peak	P
3	8604.726	82.53	-27.51	55.02	68.20	-13.18	peak	P
4	9584.333	83.70	-29.06	54.64	68.20	-13.56	peak	P
5	11886.635	84.87	-28.72	56.15	68.20	-12.05	peak	P
6	15544.893	85.78	-31.23	54.55	68.20	-13.65	peak	P

UNII-3_20M_5825MHz_Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4011.696	79.26	-27.01	52.25	68.20	-15.95	peak	P
2	5989.506	81.23	-27.80	53.43	68.20	-14.77	peak	P
3	8604.592	82.55	-28.05	54.51	68.20	-13.69	peak	P
4	9584.649	83.73	-28.12	55.60	68.20	-12.60	peak	P
5	11886.370	84.64	-29.42	55.23	68.20	-12.97	peak	P
6	15544.925	85.10	-31.64	53.46	68.20	-14.74	peak	P

UNII-1_40M_5190MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4668.250	80.36	-27.94	52.42	68.20	-15.78	peak	P
2	6645.456	81.75	-28.10	53.65	68.20	-14.55	peak	P
3	9260.624	83.50	-28.54	54.96	68.20	-13.24	peak	P
4	10240.952	84.47	-28.72	55.76	68.20	-12.44	peak	P
5	12542.689	85.19	-29.05	56.14	68.20	-12.06	peak	P
6	16200.811	86.46	-31.75	54.71	68.20	-13.49	peak	P

UNII-1 & 2A_40M_5190MHz_Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4668.051	80.21	-27.48	52.72	68.20	-15.48	peak	P
2	6644.891	82.31	-28.39	53.92	68.20	-14.28	peak	P
3	9260.571	83.36	-27.90	55.46	68.20	-12.74	peak	P
4	10240.256	85.17	-28.69	56.48	68.20	-11.72	peak	P
5	12542.304	85.26	-29.34	55.92	68.20	-12.28	peak	P
6	16201.220	86.00	-31.64	54.35	68.20	-13.85	peak	P

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UNII-1_40M_5230MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4668.267	78.78	-28.00	50.78	68.20	-17.42	peak	P
2	6645.279	81.09	-28.08	53.01	68.20	-15.19	peak	P
3	9260.386	82.20	-28.39	53.81	68.20	-14.39	peak	P
4	10241.133	83.54	-28.97	54.58	68.20	-13.62	peak	P
5	12542.334	84.79	-29.59	55.20	68.20	-13.00	peak	P
6	16201.338	85.58	-31.77	53.81	68.20	-14.39	peak	P

UNII-1_40M_5230MHz_Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4668.138	78.78	-27.63	51.15	68.20	-17.05	peak	P
2	6645.397	80.59	-28.14	52.46	68.20	-15.74	peak	P
3	9260.718	81.90	-28.15	53.75	68.20	-14.45	peak	P
4	10241.041	84.08	-29.15	54.93	68.20	-13.27	peak	P
5	12542.941	84.66	-29.41	55.25	68.20	-12.95	peak	P
6	16201.372	85.63	-32.32	53.31	68.20	-14.89	peak	P

UNII-3_40M_5755MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2910.001	74.33	-30.63	43.69	68.20	-24.51	peak	P
2	4010.547	74.65	-31.59	43.06	68.20	-25.14	peak	P
3	6285.988	78.34	-31.51	46.83	68.20	-21.37	peak	P
4	9586.664	83.63	-32.56	51.07	68.20	-17.13	peak	P
5	11467.462	84.17	-34.51	49.65	68.20	-18.55	peak	P
6 *	17014.006	81.65	-30.97	50.68	68.20	-17.52	peak	P

UNII-3_40M_5755MHz_Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2910.205	74.28	-30.33	43.95	68.20	-24.25	peak	P
2	4010.523	75.56	-31.03	44.53	68.20	-23.67	peak	P
3	6286.235	78.15	-31.02	47.13	68.20	-21.07	peak	P
4	9586.273	83.08	-32.25	50.83	68.20	-17.37	peak	P
5	11467.113	84.07	-34.12	49.95	68.20	-18.25	peak	P
6	17014.236	81.20	-30.90	50.30	68.20	-17.90	peak	P

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UNII-3_40M_5795MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3614.395	78.58	-28.11	50.46	68.20	-17.74	peak	P
2	5591.072	80.68	-28.29	52.39	68.20	-15.81	peak	P
3	8206.287	82.38	-28.15	54.22	68.20	-13.98	peak	P
4	9186.500	83.71	-29.25	54.47	68.20	-13.73	peak	P
5	11488.542	84.00	-29.68	54.32	68.20	-13.88	peak	P
6	15147.168	85.70	-31.94	53.76	68.20	-14.44	peak	P

UNII-3_40M_5795MHz_Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3613.575	78.96	-27.55	51.41	68.20	-16.79	peak	P
2	5590.866	80.26	-28.47	51.79	68.20	-16.41	peak	P
3	8206.232	82.34	-28.53	53.81	68.20	-14.39	peak	P
4	9187.044	84.07	-29.00	55.07	68.20	-13.13	peak	P
5	11488.246	84.59	-29.99	54.60	68.20	-13.60	peak	P
6	15147.125	84.97	-32.32	52.65	68.20	-15.55	peak	P

UNII-1_80M_5210MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4667.936	78.52	-27.73	50.79	68.20	-17.41	peak	P
2	6645.257	81.10	-27.67	53.42	68.20	-14.78	peak	P
3	9260.389	82.75	-27.94	54.80	68.20	-13.40	peak	P
4	10240.996	84.04	-28.84	55.21	68.20	-12.99	peak	P
5	12542.347	84.24	-29.58	54.66	68.20	-13.54	peak	P
6	16201.437	85.02	-31.53	53.48	68.20	-14.72	peak	P

UNII-1_80M_5210MHz_Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4668.139	78.59	-27.44	51.15	68.20	-17.05	peak	P
2	6645.757	80.88	-27.98	52.90	68.20	-15.30	peak	P
3	9259.959	82.62	-28.26	54.36	68.20	-13.84	peak	P
4	10240.515	83.32	-29.45	53.88	68.20	-14.32	peak	P
5	12543.032	84.02	-29.99	54.03	68.20	-14.17	peak	P
6	16200.756	84.92	-31.82	53.09	68.20	-15.11	peak	P

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UNII-3_80M_5775MHz_Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3613.606	79.39	-28.16	51.23	68.20	-16.97	peak	P
2	5591.261	81.08	-28.24	52.83	68.20	-15.37	peak	P
3	8206.824	82.35	-28.53	53.83	68.20	-14.37	peak	P
4	9186.551	83.22	-28.93	54.30	68.20	-13.90	peak	P
5	11488.453	84.79	-29.33	55.45	68.20	-12.75	peak	P
6	15146.966	85.62	-32.14	53.48	68.20	-14.72	peak	P

UNII-3_80M_5775MHz_Vertical

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3613.907	79.17	-27.99	51.18	68.20	-17.02	peak	P
2	5590.886	80.61	-28.54	52.07	68.20	-16.13	peak	P
3	8206.482	82.62	-28.61	54.00	68.20	-14.20	peak	P
4	9187.025	84.10	-28.81	55.29	68.20	-12.91	peak	P
5	11488.745	84.48	-29.97	54.51	68.20	-13.69	peak	P
6	15147.344	85.16	-31.77	53.39	68.20	-14.81	peak	P

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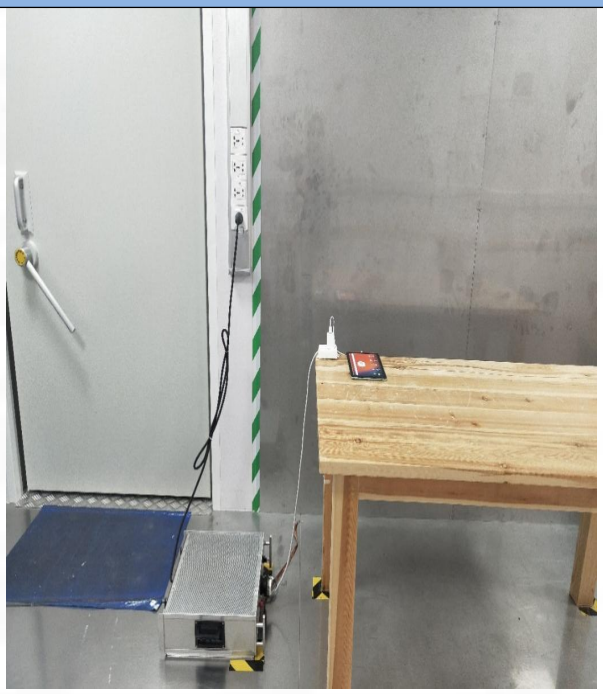
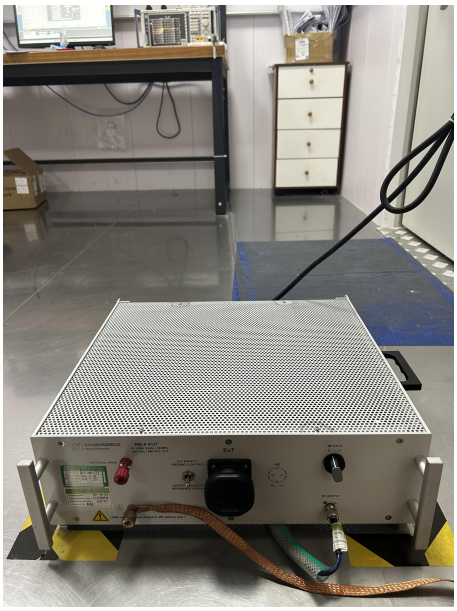
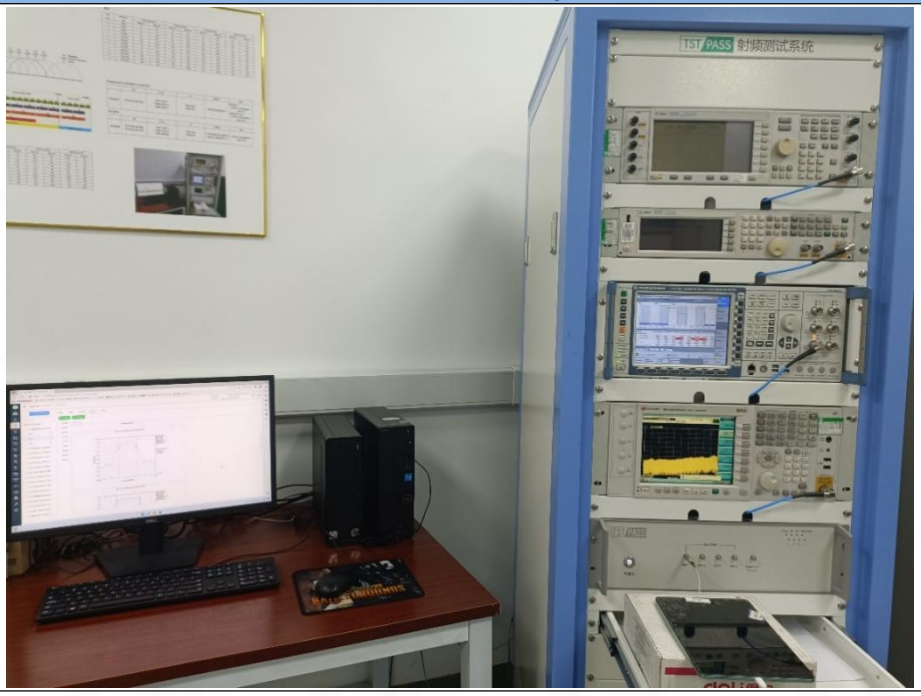
7 Test Setup Photos

Conducted Emission at AC power line
 

Duty Cycle Maximum conducted output power Power spectral density Emission bandwidth and occupied bandwidth


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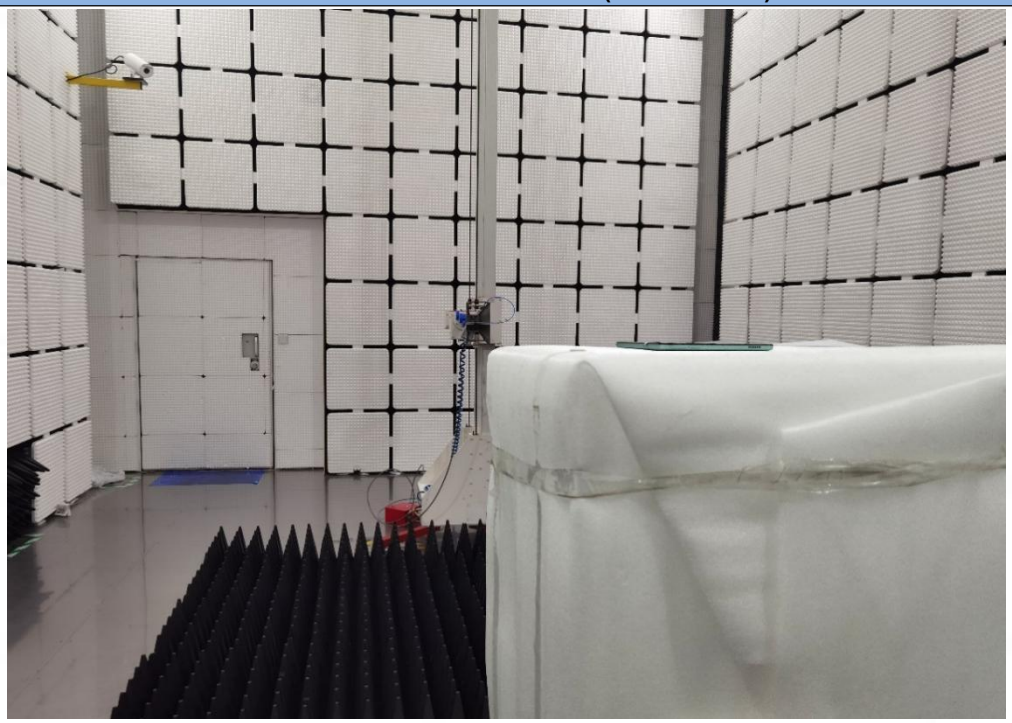
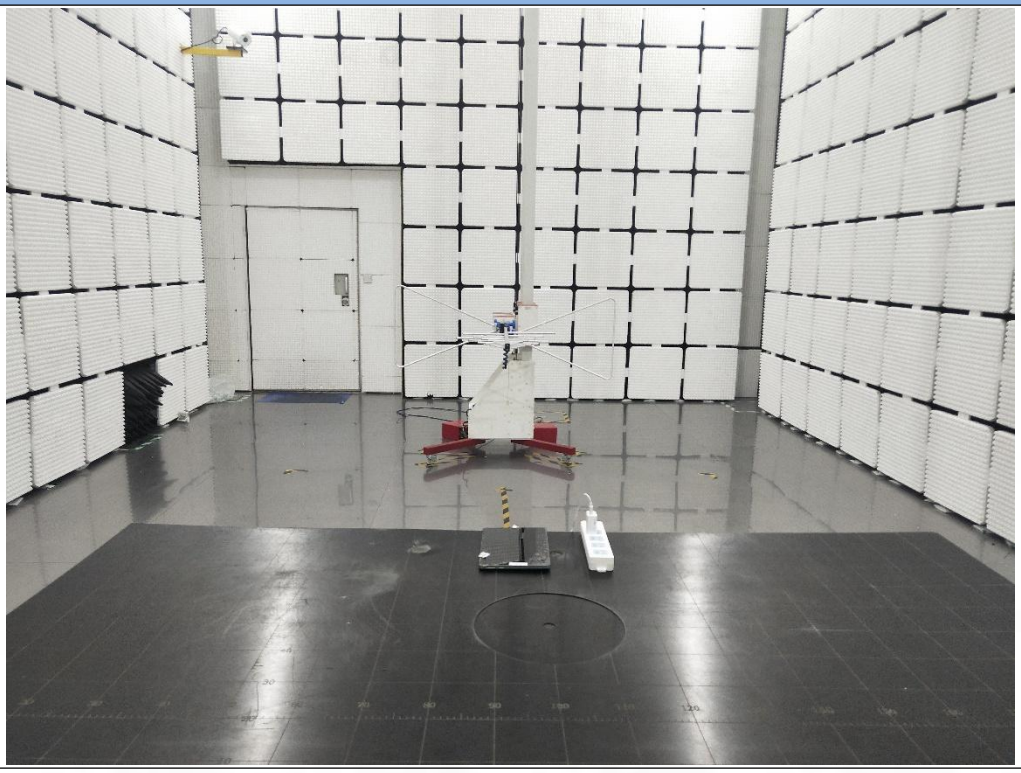
Band edge emissions (Radiated) Undesirable emission limits (above 1GHz)


Undesirable emission limits (below 1GHz)


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8 EUT Constructional Details (EUT Photos)

Please refer to the report No.BTF230710R00301

Appendix

BTF Testing Lab (Shenzhen) Co., Ltd.
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1. Duty Cycle

1.1 Ant1

1.1.1 Test Result

TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	1.38	1.43	96.50
		5200	1.39	1.43	97.20
		5240	1.40	1.43	97.90
		5745	1.39	1.42	97.89
		5785	1.39	1.43	97.20
		5825	1.39	1.43	97.20
11N20SISO	Ant1	5180	1.29	1.34	96.27
		5200	1.30	1.33	97.74
		5240	1.30	1.34	97.01
		5745	1.30	1.34	97.01
		5785	1.30	1.34	97.01
		5825	1.30	1.34	97.01
11N40SISO	Ant1	5190	0.65	0.68	95.59
		5230	0.65	0.68	95.59
		5755	0.64	0.68	94.12
		5795	0.65	0.68	95.59
11AC20SISO	Ant1	5180	1.29	1.33	96.99
		5200	1.29	1.33	96.99
		5240	1.29	1.32	97.73
		5745	1.29	1.32	97.73
		5785	1.29	1.32	97.73
		5825	1.28	1.32	96.97
11AC40SISO	Ant1	5190	0.64	0.67	95.52
		5230	0.64	0.67	95.52
		5755	0.64	0.67	95.52
		5795	0.64	0.67	95.52
11AC80SISO	Ant1	5210	0.32	0.36	88.89
		5775	0.33	0.36	91.67

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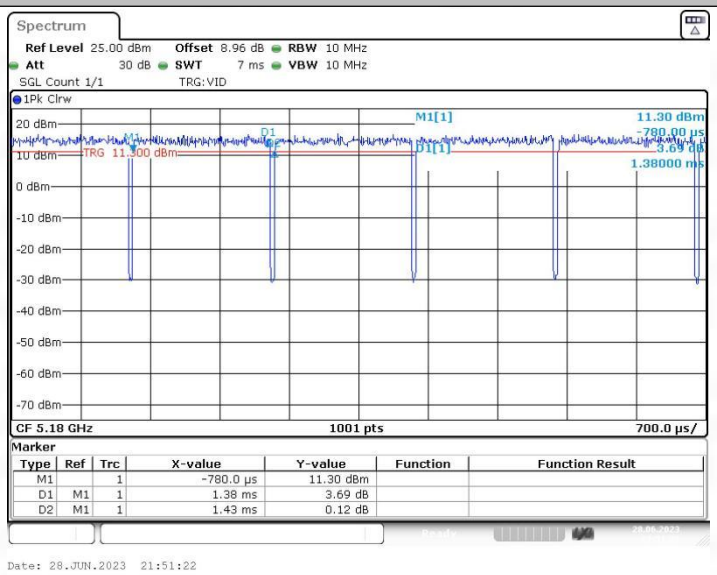
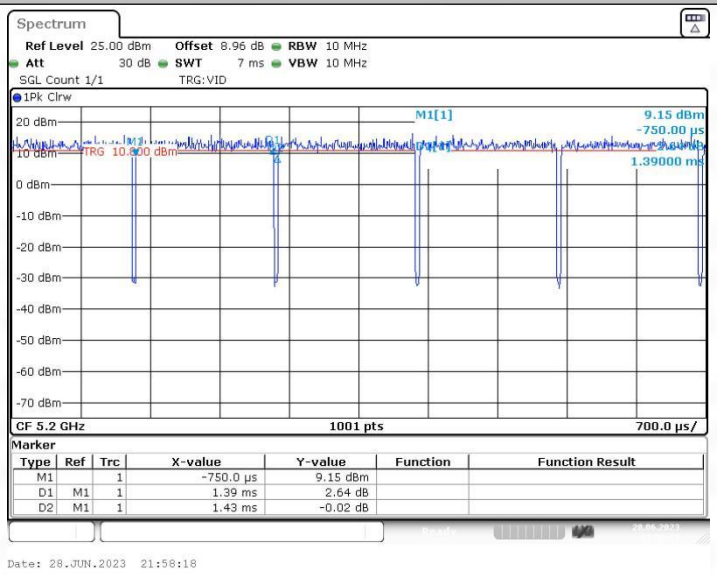
1.1.2 Test Graph

11A_Ant1_5180



11A_Ant1_5200



11A_Ant1_5240