EUT	AC3000 Tri-Band Mesh Router	Model Name	TT-ND001
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5510MHz	Antenna	Vertical

PK Value

AV Value

EUT	AC3000 Tri-Band Mesh Router	Model Name	TT-ND001
Temperature	25℃	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5210MHz	Antenna	Horizontal

PK Value

AV Value

EUT	AC3000 Tri-Band Mesh Router	Model Name	TT-ND001
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5210MHz	Antenna	Vertical

PK Value

AV Value

EUT	AC3000 Tri-Band Mesh Router	Model Name	TT-ND001
Temperature	25℃	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5290MHz	Antenna	Horizontal

PK Value

AV Value

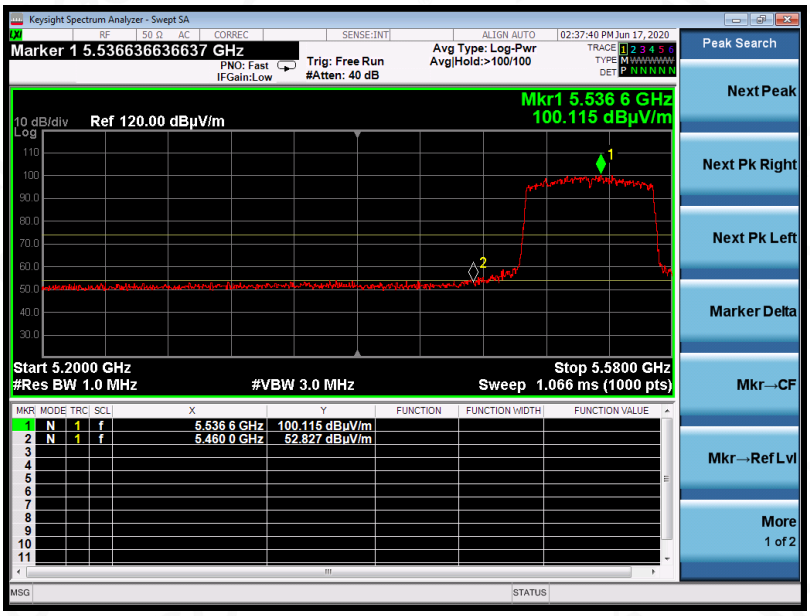
EUT	AC3000 Tri-Band Mesh Router	Model Name	TT-ND001
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5290MHz	Antenna	Vertical

PK Value

AV Value

EUT	AC3000 Tri-Band Mesh Router	Model Name	TT-ND001
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5530MHz	Antenna	Horizontal

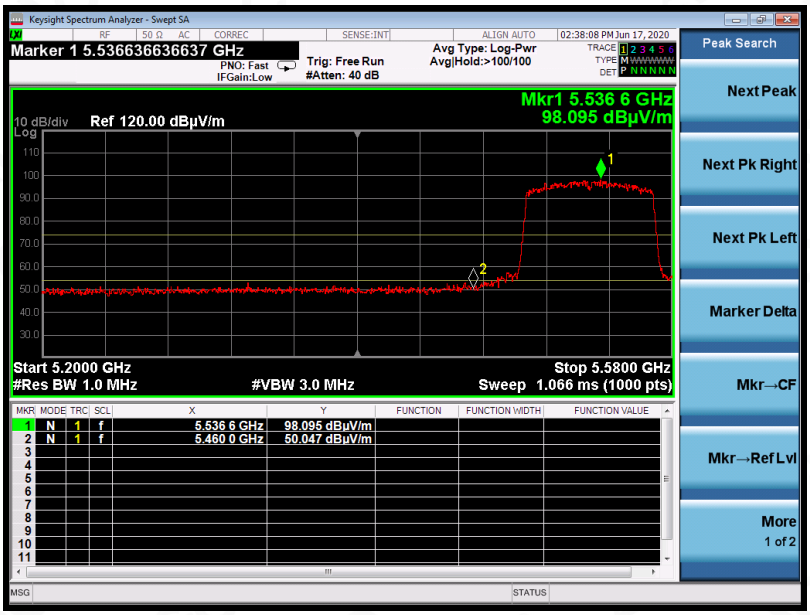
PK Value



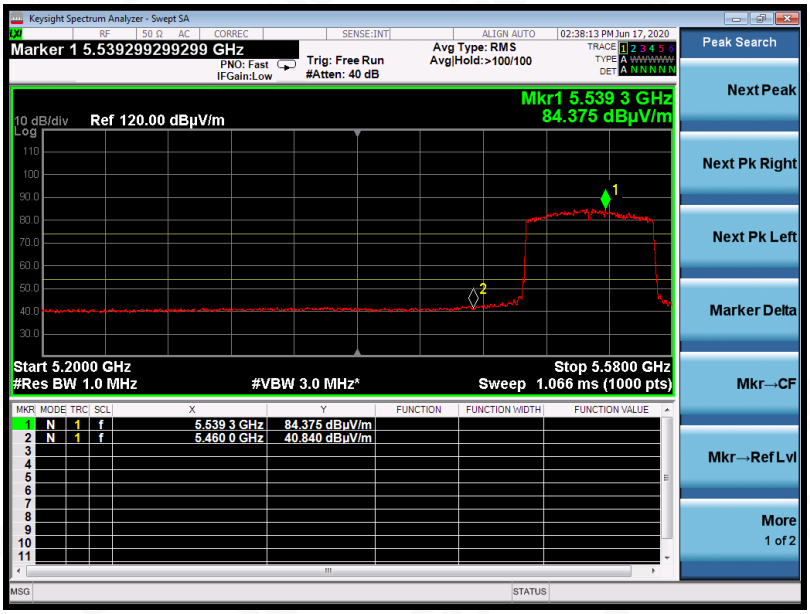
AV Value

EUT	AC3000 Tri-Band Mesh Router	Model Name	TT-ND001
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5530MHz	Antenna	Vertical

PK Value



AV Value



RESULT: PASS

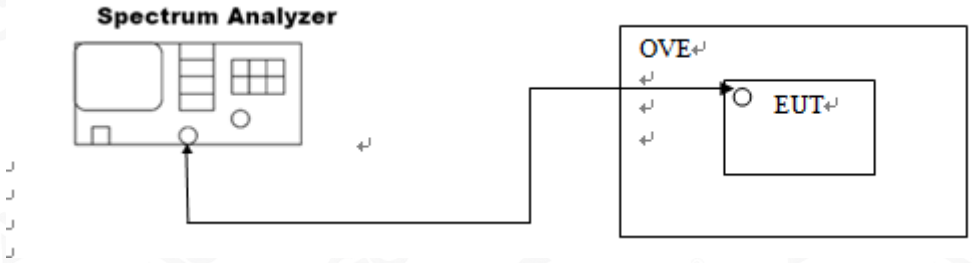
Note: All the 20MHz bandwidth modulation had been tested, the 802.11a20 was the worst case and record in his test report. All the 40MHz bandwidth modulation had been tested, the 802.11N40 was the worst case and record in his test report.

14. FREQUENCY STABILITY

14.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the operation frequency.
3. Set SPA Centre Frequency = Operation Frequency. SPAN=enough to measure the emission is maintained within the band
4. Set SPA Trace 1 Max hold, then View.
5. Extreme temperature rule is -10°C~60°C.

14.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)



14.3. MEASUREMENT RESULTS

Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
802.11a	- 10℃	5180	within the band	PASS
	0℃	5180	within the band	PASS
	10℃	5180	within the band	PASS
	20℃	5180	within the band	PASS
	30℃	5180	within the band	PASS
	40℃	5180	within the band	PASS
	50℃	5180	within the band	PASS
	60℃	5180	within the band	PASS
	- 10℃	5240	within the band	PASS
	0℃	5240	within the band	PASS
	10℃	5240	within the band	PASS
	20℃	5240	within the band	PASS
	30℃	5240	within the band	PASS
	40℃	5240	within the band	PASS
	50℃	5240	within the band	PASS
	60℃	5240	within the band	PASS
	- 10℃	5260	within the band	PASS
	0℃	5260	within the band	PASS
	10℃	5260	within the band	PASS
	20℃	5260	within the band	PASS
	30℃	5260	within the band	PASS
	40℃	5260	within the band	PASS
	50℃	5260	within the band	PASS
	60℃	5260	within the band	PASS
	- 10℃	5320	within the band	PASS
	0℃	5320	within the band	PASS
	10℃	5320	within the band	PASS
	20℃	5320	within the band	PASS
	30℃	5320	within the band	PASS
	40℃	5320	within the band	PASS
	50℃	5320	within the band	PASS
	60℃	5320	within the band	PASS
	- 10℃	5500	within the band	PASS
	0℃	5500	within the band	PASS
	10℃	5500	within the band	PASS
	20℃	5500	within the band	PASS
	30℃	5500	within the band	PASS
	40℃	5500	within the band	PASS
	50℃	5500	within the band	PASS
	60℃	5500	within the band	PASS
	- 10℃	5700	within the band	PASS
	0℃	5500	within the band	PASS
	10℃	5500	within the band	PASS
	20℃	5500	within the band	PASS
	30℃	5500	within the band	PASS
	40℃	5500	within the band	PASS
	50℃	5500	within the band	PASS

	60℃	5500	within the band	PASS
	- 10℃	5745	within the band	PASS
	0℃	5745	within the band	PASS
	10℃	5745	within the band	PASS
	20℃	5745	within the band	PASS
	30℃	5745	within the band	PASS
	40℃	5745	within the band	PASS
	50℃	5745	within the band	PASS
	60℃	5240	within the band	PASS
	- 10℃	5825	within the band	PASS
	0℃	5825	within the band	PASS
	10℃	5825	within the band	PASS
	20℃	5825	within the band	PASS
	30℃	5825	within the band	PASS
	40℃	5825	within the band	PASS
	50℃	5825	within the band	PASS
	60℃	5825	within the band	PASS

Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
802.11n20	- 10℃	5180	within the band	PASS
	0℃	5180	within the band	PASS
	10℃	5180	within the band	PASS
	20℃	5180	within the band	PASS
	30℃	5180	within the band	PASS
	40℃	5180	within the band	PASS
	50℃	5180	within the band	PASS
	60℃	5180	within the band	PASS
	- 10℃	5240	within the band	PASS
	0℃	5240	within the band	PASS
	10℃	5240	within the band	PASS
	20℃	5240	within the band	PASS
	30℃	5240	within the band	PASS
	40℃	5240	within the band	PASS
	50℃	5240	within the band	PASS
	60℃	5240	within the band	PASS
	- 10℃	5260	within the band	PASS
	0℃	5260	within the band	PASS
	10℃	5260	within the band	PASS
	20℃	5260	within the band	PASS
	30℃	5260	within the band	PASS
	40℃	5260	within the band	PASS
	50℃	5260	within the band	PASS
	60℃	5260	within the band	PASS
	- 10℃	5320	within the band	PASS
	0℃	5320	within the band	PASS
	10℃	5320	within the band	PASS
	20℃	5320	within the band	PASS
	30℃	5320	within the band	PASS
	40℃	5320	within the band	PASS
	50℃	5320	within the band	PASS
	60℃	5320	within the band	PASS
	- 10℃	5500	within the band	PASS
	0℃	5500	within the band	PASS
	10℃	5500	within the band	PASS
	20℃	5500	within the band	PASS
	30℃	5500	within the band	PASS
	40℃	5500	within the band	PASS
	50℃	5500	within the band	PASS
	60℃	5500	within the band	PASS
	- 10℃	5700	within the band	PASS
	0℃	5500	within the band	PASS
	10℃	5500	within the band	PASS
	20℃	5500	within the band	PASS
	30℃	5500	within the band	PASS
	40℃	5500	within the band	PASS
	50℃	5500	within the band	PASS
	60℃	5500	within the band	PASS

	- 10℃	5745	within the band	PASS
	0℃	5745	within the band	PASS
	10℃	5745	within the band	PASS
	20℃	5745	within the band	PASS
	30℃	5745	within the band	PASS
	40℃	5745	within the band	PASS
	50℃	5745	within the band	PASS
	60℃	5240	within the band	PASS
	- 10℃	5825	within the band	PASS
	0℃	5825	within the band	PASS
	10℃	5825	within the band	PASS
	20℃	5825	within the band	PASS
	30℃	5825	within the band	PASS
	40℃	5825	within the band	PASS
	50℃	5825	within the band	PASS
	60℃	5825	within the band	PASS

Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
802.11n40	- 10℃	5190	within the band	PASS
	0℃	5190	within the band	PASS
	10℃	5190	within the band	PASS
	20℃	5190	within the band	PASS
	30℃	5190	within the band	PASS
	40℃	5190	within the band	PASS
	50℃	5190	within the band	PASS
	60℃	5190	within the band	PASS
	- 10℃	5230	within the band	PASS
	0℃	5230	within the band	PASS
	10℃	5230	within the band	PASS
	20℃	5230	within the band	PASS
	30℃	5230	within the band	PASS
	40℃	5230	within the band	PASS
	50℃	5230	within the band	PASS
	60℃	5230	within the band	PASS
	- 10℃	5270	within the band	PASS
	0℃	5270	within the band	PASS
	10℃	5270	within the band	PASS
	20℃	5270	within the band	PASS
	30℃	5270	within the band	PASS
	40℃	5270	within the band	PASS
	50℃	5270	within the band	PASS
	60℃	5270	within the band	PASS
	- 10℃	5310	within the band	PASS
	0℃	5310	within the band	PASS
	10℃	5310	within the band	PASS
	20℃	5310	within the band	PASS
	30℃	5310	within the band	PASS
	40℃	5310	within the band	PASS
	50℃	5310	within the band	PASS
	60℃	5310	within the band	PASS
	- 10℃	5510	within the band	PASS
	0℃	5510	within the band	PASS
	10℃	5510	within the band	PASS
	20℃	5510	within the band	PASS
	30℃	5510	within the band	PASS
	40℃	5510	within the band	PASS
	50℃	5510	within the band	PASS
	60℃	5510	within the band	PASS
	- 10℃	5670	within the band	PASS
	0℃	5670	within the band	PASS
	10℃	5670	within the band	PASS
	20℃	5670	within the band	PASS
	30℃	5670	within the band	PASS
	40℃	5670	within the band	PASS
	50℃	5670	within the band	PASS
	60℃	5670	within the band	PASS

	- 10℃	5755	within the band	PASS
	0℃	5755	within the band	PASS
	10℃	5755	within the band	PASS
	20℃	5755	within the band	PASS
	30℃	5755	within the band	PASS
	40℃	5755	within the band	PASS
	50℃	5755	within the band	PASS
	60℃	5755	within the band	PASS
	- 10℃	5795	within the band	PASS
	0℃	5795	within the band	PASS
	10℃	5795	within the band	PASS
	20℃	5795	within the band	PASS
	30℃	5795	within the band	PASS
	40℃	5795	within the band	PASS
	50℃	5795	within the band	PASS
	60℃	5795	within the band	PASS

Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
802.11ac20	- 10℃	5180	within the band	PASS
	0℃	5180	within the band	PASS
	10℃	5180	within the band	PASS
	20℃	5180	within the band	PASS
	30℃	5180	within the band	PASS
	40℃	5180	within the band	PASS
	50℃	5180	within the band	PASS
	60℃	5180	within the band	PASS
	- 10℃	5240	within the band	PASS
	0℃	5240	within the band	PASS
	10℃	5240	within the band	PASS
	20℃	5240	within the band	PASS
	30℃	5240	within the band	PASS
	40℃	5240	within the band	PASS
	50℃	5240	within the band	PASS
	60℃	5240	within the band	PASS
	- 10℃	5260	within the band	PASS
	0℃	5260	within the band	PASS
	10℃	5260	within the band	PASS
	20℃	5260	within the band	PASS
	30℃	5260	within the band	PASS
	40℃	5260	within the band	PASS
	50℃	5260	within the band	PASS
	60℃	5260	within the band	PASS
	- 10℃	5320	within the band	PASS
	0℃	5320	within the band	PASS
	10℃	5320	within the band	PASS
	20℃	5320	within the band	PASS
	30℃	5320	within the band	PASS
	40℃	5320	within the band	PASS
	50℃	5320	within the band	PASS
	60℃	5320	within the band	PASS
	- 10℃	5500	within the band	PASS
	0℃	5500	within the band	PASS
	10℃	5500	within the band	PASS
	20℃	5500	within the band	PASS
	30℃	5500	within the band	PASS
	40℃	5500	within the band	PASS
	50℃	5500	within the band	PASS
	60℃	5500	within the band	PASS
	- 10℃	5700	within the band	PASS
	0℃	5500	within the band	PASS
	10℃	5500	within the band	PASS
	20℃	5500	within the band	PASS
	30℃	5500	within the band	PASS
	40℃	5500	within the band	PASS
	50℃	5500	within the band	PASS
	60℃	5500	within the band	PASS

	- 10℃	5745	within the band	PASS
	0℃	5745	within the band	PASS
	10℃	5745	within the band	PASS
	20℃	5745	within the band	PASS
	30℃	5745	within the band	PASS
	40℃	5745	within the band	PASS
	50℃	5745	within the band	PASS
	60℃	5240	within the band	PASS
	- 10℃	5825	within the band	PASS
	0℃	5825	within the band	PASS
	10℃	5825	within the band	PASS
	20℃	5825	within the band	PASS
	30℃	5825	within the band	PASS
	40℃	5825	within the band	PASS
	50℃	5825	within the band	PASS
	60℃	5825	within the band	PASS

Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
802.11ac40	- 10℃	5190	within the band	PASS
	0℃	5190	within the band	PASS
	10℃	5190	within the band	PASS
	20℃	5190	within the band	PASS
	30℃	5190	within the band	PASS
	40℃	5190	within the band	PASS
	50℃	5190	within the band	PASS
	60℃	5190	within the band	PASS
	- 10℃	5230	within the band	PASS
	0℃	5230	within the band	PASS
	10℃	5230	within the band	PASS
	20℃	5230	within the band	PASS
	30℃	5230	within the band	PASS
	40℃	5230	within the band	PASS
	50℃	5230	within the band	PASS
	60℃	5230	within the band	PASS
	- 10℃	5270	within the band	PASS
	0℃	5270	within the band	PASS
	10℃	5270	within the band	PASS
	20℃	5270	within the band	PASS
	30℃	5270	within the band	PASS
	40℃	5270	within the band	PASS
	50℃	5270	within the band	PASS
	60℃	5270	within the band	PASS
	- 10℃	5310	within the band	PASS
	0℃	5310	within the band	PASS
	10℃	5310	within the band	PASS
	20℃	5310	within the band	PASS
	30℃	5310	within the band	PASS
	40℃	5310	within the band	PASS
	50℃	5310	within the band	PASS
	60℃	5310	within the band	PASS
	- 10℃	5510	within the band	PASS
	0℃	5510	within the band	PASS
	10℃	5510	within the band	PASS
	20℃	5510	within the band	PASS
	30℃	5510	within the band	PASS
	40℃	5510	within the band	PASS
	50℃	5510	within the band	PASS
	60℃	5510	within the band	PASS
	- 10℃	5670	within the band	PASS
	0℃	5670	within the band	PASS
	10℃	5670	within the band	PASS
	20℃	5670	within the band	PASS
	30℃	5670	within the band	PASS
	40℃	5670	within the band	PASS
	50℃	5670	within the band	PASS
	60℃	5670	within the band	PASS

	- 10℃	5755	within the band	PASS
	0℃	5755	within the band	PASS
	10℃	5755	within the band	PASS
	20℃	5755	within the band	PASS
	30℃	5755	within the band	PASS
	40℃	5755	within the band	PASS
	50℃	5755	within the band	PASS
	60℃	5755	within the band	PASS
	- 10℃	5795	within the band	PASS
	0℃	5795	within the band	PASS
	10℃	5795	within the band	PASS
	20℃	5795	within the band	PASS
	30℃	5795	within the band	PASS
	40℃	5795	within the band	PASS
	50℃	5795	within the band	PASS
	60℃	5795	within the band	PASS

Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
802.11ac80	- 10℃	5210	within the band	PASS
	0℃	5210	within the band	PASS
	10℃	5210	within the band	PASS
	20℃	5210	within the band	PASS
	30℃	5210	within the band	PASS
	40℃	5210	within the band	PASS
	50℃	5210	within the band	PASS
	60℃	5210	within the band	PASS
	- 10℃	5290	within the band	PASS
	0℃	5290	within the band	PASS
	10℃	5290	within the band	PASS
	20℃	5290	within the band	PASS
	30℃	5290	within the band	PASS
	40℃	5290	within the band	PASS
	50℃	5290	within the band	PASS
	60℃	5290	within the band	PASS
	- 10℃	5530	within the band	PASS
	0℃	5530	within the band	PASS
	10℃	5530	within the band	PASS
	20℃	5530	within the band	PASS
	30℃	5530	within the band	PASS
	40℃	5530	within the band	PASS
	50℃	5530	within the band	PASS
	60℃	5530	within the band	PASS
	- 10℃	5610	within the band	PASS
	0℃	5610	within the band	PASS
	10℃	5610	within the band	PASS
	20℃	5610	within the band	PASS
	30℃	5610	within the band	PASS
	40℃	5610	within the band	PASS
	50℃	5610	within the band	PASS
	60℃	5610	within the band	PASS
	- 10℃	5775	within the band	PASS
	0℃	5775	within the band	PASS
	10℃	5775	within the band	PASS
	20℃	5775	within the band	PASS
	30℃	5775	within the band	PASS
	40℃	5775	within the band	PASS
	50℃	5775	within the band	PASS
	60℃	5775	within the band	PASS

15. FCC LINE CONDUCTED EMISSION TEST

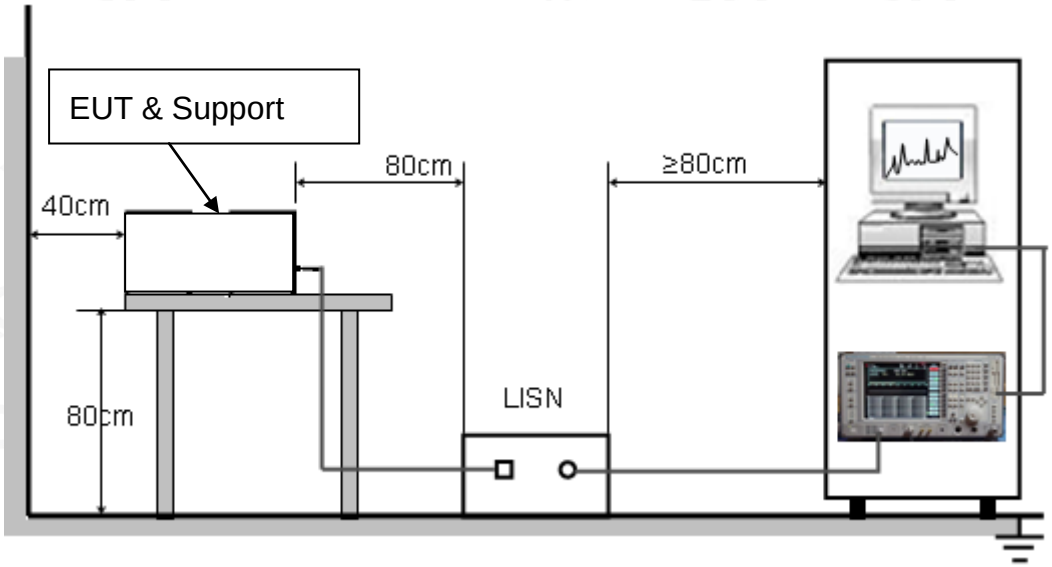
15.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Frequency	Maximum RF Line Voltage	
	Q.P.(dBuV)	Average(dBuV)
150kHz~500kHz	66-56	56-46
500kHz~5MHz	56	46
5MHz~30MHz	60	50

Note:

1. The lower limit shall apply at the transition frequency.
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50MHz.

15.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



15.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
2. Support equipment, if needed, was placed as per ANSI C63.10.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
4. All support equipments received AC120V/60Hz power from a LISN, if any.
5. The EUT received charging voltage by adapter which received 120V/60Hzpower by a LISN.
6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
8. During the above scans, the emissions were maximized by cable manipulation.
9. The test mode(s) were scanned during the preliminary test.

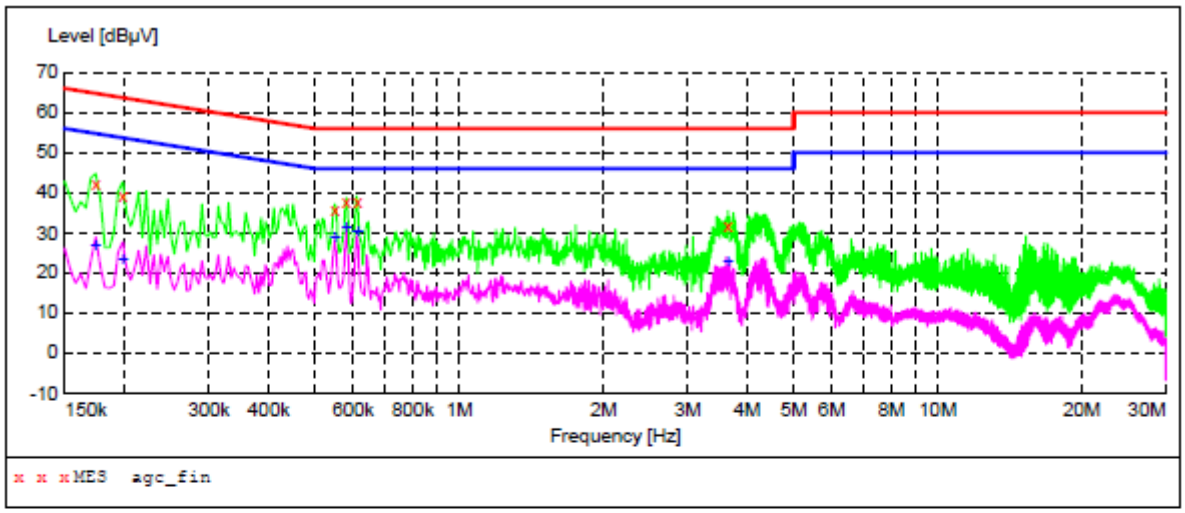
Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

15.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
3. The test data of the worst case condition(s) was reported on the Summary Data page.

15.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

LINE CONDUCTED EMISSION TEST-L



MEASUREMENT RESULT: "agc_fin"

2020/6/15 13:08

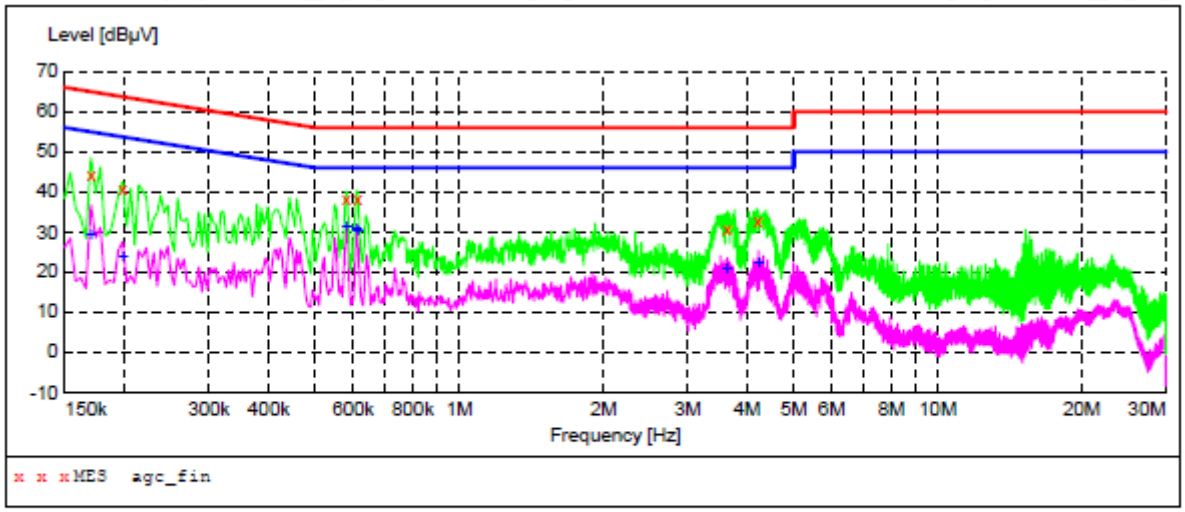
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.174000	42.10	9.3	65	22.7	QP	L1	FLO
0.198000	39.20	9.3	64	24.5	QP	L1	FLO
0.550000	35.70	9.3	56	20.3	QP	L1	FLO
0.582000	37.80	9.3	56	18.2	QP	L1	FLO
0.614000	37.60	9.3	56	18.4	QP	L1	FLO
3.646000	31.80	9.4	56	24.2	QP	L1	FLO

MEASUREMENT RESULT: "agc_fin2"

2020/6/15 13:08

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.174000	26.90	9.3	55	27.9	AV	L1	FLO
0.198000	23.10	9.3	54	30.6	AV	L1	FLO
0.550000	28.60	9.3	46	17.4	AV	L1	FLO
0.582000	31.00	9.3	46	15.0	AV	L1	FLO
0.614000	30.20	9.3	46	15.8	AV	L1	FLO
3.646000	22.50	9.4	46	23.5	AV	L1	FLO

LINE CONDUCTED EMISSION TEST-N



MEASUREMENT RESULT: "agc_fin"

2020/6/15 12:55

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.170000	44.40	9.3	65	20.6	QP	N	FLO
0.198000	40.60	9.3	64	23.1	QP	N	FLO
0.582000	38.10	9.3	56	17.9	QP	N	FLO
0.614000	38.00	9.3	56	18.0	QP	N	FLO
3.630000	30.90	9.4	56	25.1	QP	N	FLO
4.214000	32.70	9.4	56	23.3	QP	N	FLO

MEASUREMENT RESULT: "agc_fin2"

2020/6/15 12:55

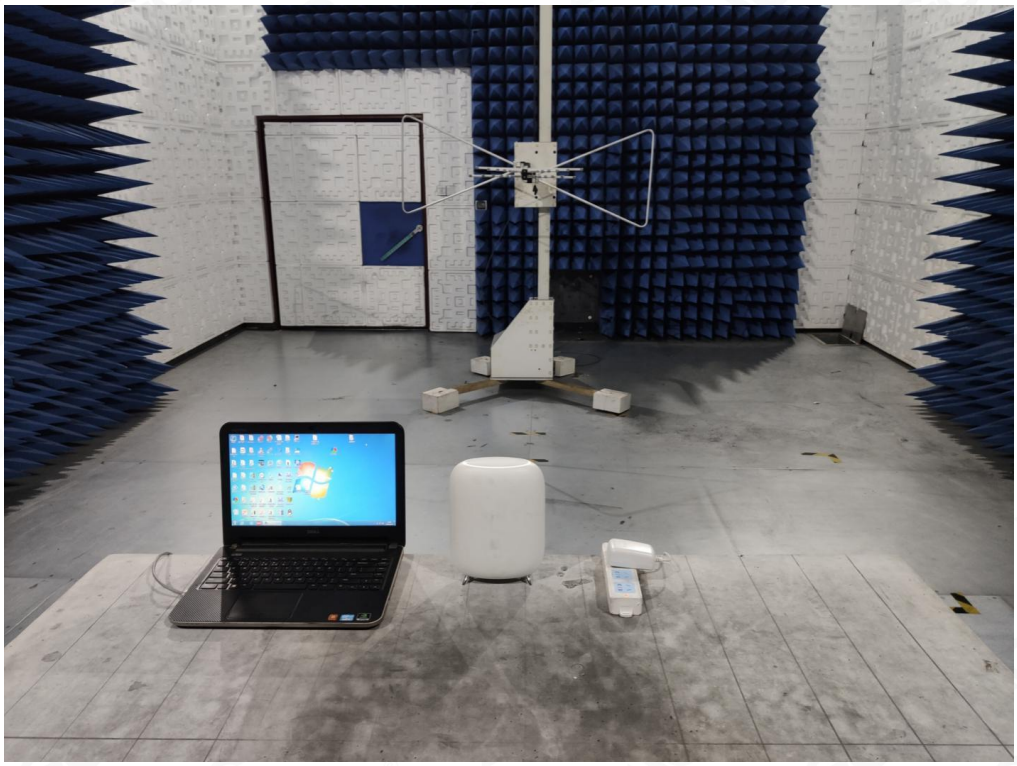
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.170000	29.30	9.3	55	25.7	AV	N	FLO
0.198000	23.90	9.3	54	29.8	AV	N	FLO
0.582000	31.30	9.3	46	14.7	AV	N	FLO
0.610000	30.70	9.3	46	15.3	AV	N	FLO
0.614000	30.30	9.3	46	15.7	AV	N	FLO
3.618000	20.80	9.4	46	25.2	AV	N	FLO
4.222000	22.10	9.4	46	23.9	AV	N	FLO

RESULT: PASS

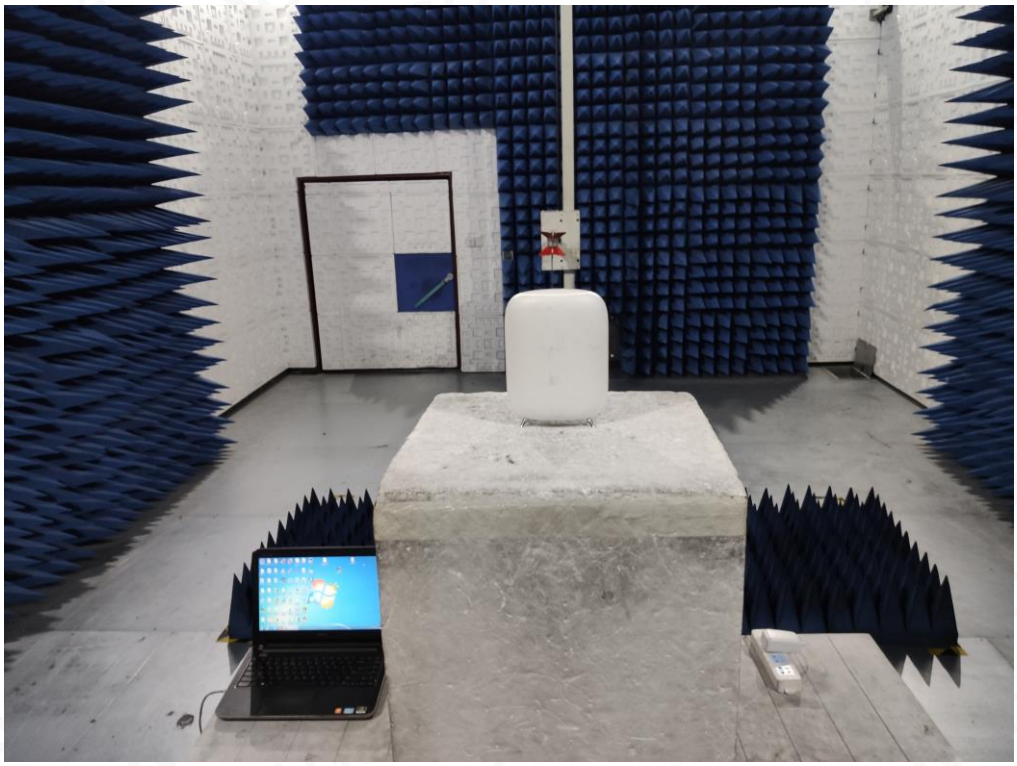
APPENDIX A: PHOTOGRAPHS OF TEST SETUP

FCC LINE CONDUCTED EMISSION TEST SETUP

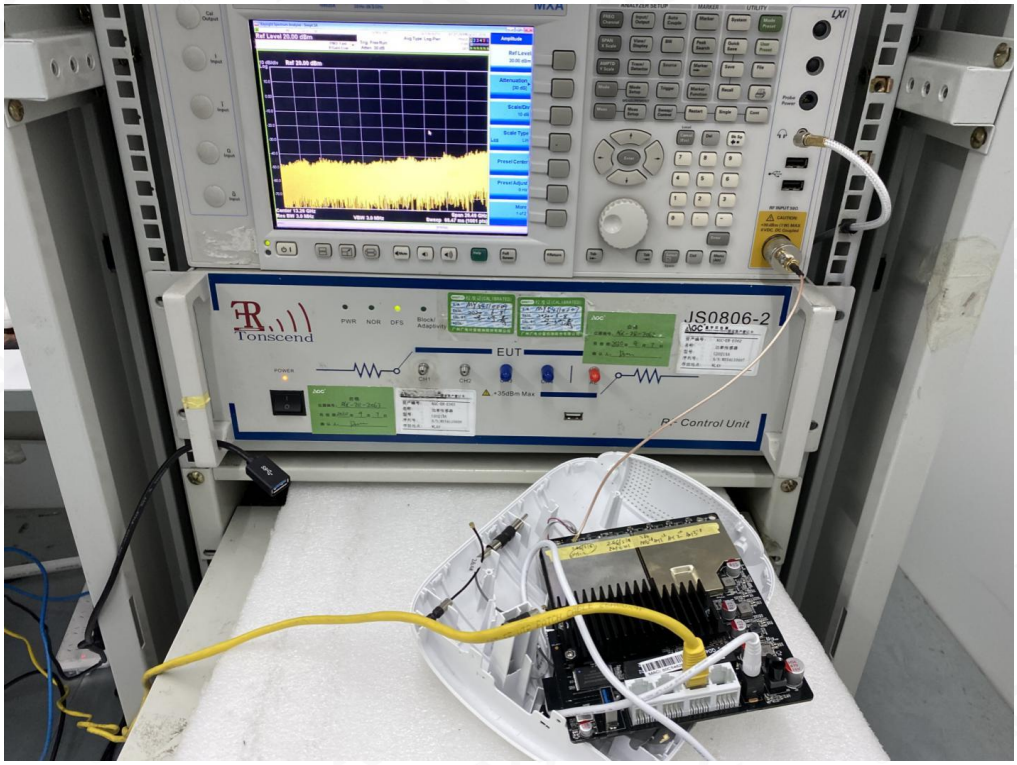
FCC RADIATED EMISSION TEST SETUP BELOW 1GHZ



FCC RADIATED EMISSION TEST SETUP ABOVE 1GHZ



CONDUCTED TEST SETUP



APPENDIX B: PHOTOGRAPHS OF EUT

Refer to the Report No.: AGC00210200519AP01

----END OF REPORT----