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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

arker 1 5.513913913914 GHz Avg Type: Log-Pwi Avg|Hold:>100/100 Trig: Free Run #Atten: 40 dB Next Pea Ref 120.00 dBµV/m Next Pk Right Next Pk Lef Marker Delt Stop 5.5500 GHz Sweep 1.066 ms (1000 pts Start 5.2000 GHz Res BW 1.0 MHz #VBW 3.0 MHz Mkr→C 5.513 9 GHz 100.644 dBµV/n 5 460 0 GHz 48 470 dBµV/n Mkr→RefL More 1 of 2

PK Value









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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	Horizontal

 Keysight Spectrum Analyzer - Swept SA
 Image: Compact Sector Sector

PK Value







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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

Avg Type: Log-Pwi Avg|Hold:>100/100 arker 1 5.22 Trig: Free Run #Atten: 30 dB Next Pea Ref 115.00 dBµV/m Next Pk Right Next Pk Lef Marker Delt Stop 5.2600 GHz Sweep 1.066 ms (1000 pts Start 5.0000 GHz Res BW 1.0 MHz #VBW 3.0 MHz Mkr→C 5.223 56 GHz 5.150 00 GHz 96.881 dBµV/n 52.274 dBµV/n Mkr→RefLv More 1 of 2

PK Value









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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	Horizontal

PK Value









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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









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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









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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

Avg Type: Log-Pwi Avg|Hold:>100/100 arker 1 5.5366 Trig: Free Run #Atten: 40 dB Next Pea Ref 120.00 dBµV/m Next Pk Right Next Pk Lef Marker Delt tart 5.2000 GHz Res BW 1.0 MHz #VBW 3.0 MHz Sweep 1.066 Mkr→C 5.536 6 GHz 98.095 dBµV/n 5.460 0 GHz 50.047 dBµV/n Mkr→RefL More 1 of 2

#### 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
	- 10℃	5180	within the band	PASS
	<b>0</b> °C	5180	within the band	PASS
0	<b>10</b> ℃	5180	within the band	PASS
	<b>20</b> ℃	5180	within the band	PASS
	<b>30</b> ℃	5180	within the band	PASS
	<b>40</b> ℃	5180	within the band	PASS
	<b>50</b> ℃	5180	within the band	PASS
	<b>60</b> ℃	5180	within the band	PASS
	- 10℃	5240	within the band	PASS
	<b>0</b> °C	5240	within the band	PASS
8	<b>10</b> ℃	5240	within the band	PASS
- 0	<b>20</b> ℃	5240	within the band	PASS
SC /	<b>30</b> ℃	5240	within the band	PASS
	<b>40</b> ℃	5240	within the band	PASS
0	<b>50</b> ℃	5240	within the band	PASS
G	<b>60</b> ℃	5240	within the band	PASS
	- 10℃	5260	within the band	PASS
	0°C	5260	within the band	PASS
	10°C	5260	within the band	PASS
0	20°C	5260	within the band	PASS
0.0	30°C	5260	within the band	PASS
	<u>40°C</u>	5260	within the band	PASS
	50°C	5260	within the band	PASS
802 11a	60°C	5260	within the band	PASS
	- 10°C	5320	within the band	PASS
	0°C	5320	within the band	PASS
	<u>0</u> € 10℃	5320	within the band	PASS
<b>C</b> .	20°C	5320	within the band	PASS
	<u>20 €</u> 30 °C	5320	within the band	PASS
	<u> </u>	5320	within the band	PASS
	<u>−+0 C</u> 50°C	5320	within the band	PASS
0	0°0	5320	within the band	PASS
- G	- 10°C	5500	within the band	PASS
	<u> </u>	5500	within the band	PASS
	10°C	5500	within the band	PASS
8	20°C	5500	within the band	PASS
c.O	20 C	5500	within the band	DASS
	<b>30</b> C	5500	within the band	PASS
	40 C	5500	within the band	PASS
0	50 C	5500	within the band	PASS
G		5300	within the hand	THOO DAGO
2 ~ C	- 100	5700	within the band	PASS
		5500	within the band	PASS
8	100	5500	within the band	PA55
omplian	20 0	5500	within the band	PASS
Sal Contra Co Sal	30°C	5500	within the band	PASS
ACC I	40°C	5500	within the band	PASS
	50 <sup>°</sup> C	5500	within the band	PASS

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<b>60</b> ℃	5500	within the band	PASS
- 10℃	5745	within the band	PASS
0°C	5745	within the band	PASS
<b>10</b> ℃	5745	within the band	PASS
<b>20</b> ℃	5745	within the band	PASS
<b>30</b> ℃	5745	within the band	PASS
<b>40</b> ℃	5745	within the band	PASS
<b>50</b> ℃	5745	within the band	PASS
<b>60</b> ℃	5240	within the band	PASS
- 10℃	5825	within the band	PASS
0°C	5825	within the band	PASS
<b>10</b> ℃	5825	within the band	PASS
<b>20</b> ℃	5825	within the band	PASS
<b>30</b> ℃	5825	within the band	PASS
<b>40</b> ℃	5825	within the band	PASS
<b>50</b> ℃	5825	within the band	PASS
<b>60</b> ℃	5825	within the band	PASS





Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
	- 10°C	5180	within the band	PASS
	<b>0</b> °C	5180	within the band	PASS
0	<b>10</b> ℃	5180	within the band	PASS
	<b>20</b> ℃	5180	within the band	PASS
- O	<b>30</b> ℃	5180	within the band	PASS
	<b>40</b> ℃	5180	within the band	PASS
	<b>50</b> ℃	5180	within the band	PASS
8	<b>60</b> ℃	5180	within the band	PASS
60	- 10℃	5240	within the band	PASS
	<b>0</b> °C	5240	within the band	PASS
	<b>10</b> ℃	5240	within the band	PASS
	<b>20</b> ℃	5240	within the band	PASS
	<b>30</b> °C	5240	within the band	PASS
	<b>40</b> ℃	5240	within the band	PASS
	50°C	5240	within the band	PASS
	<b>60°</b> C	5240	within the band	PASS
- 0	- 10°C	5260	within the band	PASS
	0°C	5260	within the band	PASS
-	10°C	5260	within the band	PASS
®	20°C	5260	within the band	PASS
<i>c.</i> C	20 C	5260	within the band	PASS
	<u> </u>	5260	within the band	PASS
	<b>40</b> ℃	5260	within the band	PASS
8	<b>50</b> °C	5260	within the band	PASS
02.11n20	10°C	5200	within the band	PASS
	- 10 C	5320	within the band	PASS
	10°C	5320	within the band	PASS
0	10 C	5320	within the band	PASS
1	20 C	5320	within the band	PASS
- 64	30 C	5320	within the band	PASS
	40 C	5320	within the band	PASS
0	50 C	5320	within the band	PASS
	60 C	5320	within the band	PASS
	- 10 C	5500	within the band	PASS
	<b>0</b> C	5500	within the band	PASS
0	<u>10°C</u>	5500	within the band	PASS
- C	20°C	5500	within the band	PASS
50	30°C	5500	within the band	PASS
	<b>40</b> ℃	5500	within the band	PASS
	<b>50</b> ℃	5500	within the band	PASS
	<b>60</b> ℃	5500	within the band	PASS
	<b>- 10</b> ℃	5700	within the band	PASS
	<b>0</b> °C	5500	within the band	PASS
	<b>10</b> ℃	5500	within the band	PASS
®	<b>20</b> ℃	5500	within the band	PASS
Compliance	<b>30</b> °C	5500	within the band	PASS
onen l	<b>40</b> °C	5500	within the band	PASS
	<b>50</b> °C	5500	within the band	PASS
	60°C Attestatio	on of Global C <b>5500</b> nce(Shen:	and the band	PASS



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- 1	<b>10</b> ℃	5745	within the band	PASS
C	)°C	5745	within the band	PASS
® 10	<b>0</b> °C	5745	within the band	PASS
20	<b>0</b> °C	5745	within the band	PASS
3	0°C	5745	within the band	PASS
4	<b>0</b> °C	5745	within the band	PASS
5	<b>0</b> °C	5745	within the band	PASS
6	<b>0</b> °C	5240	within the band	PASS
- 1	<b>10</b> ℃	5825	within the band	PASS
0	)°C	5825	within the band	PASS
1	<b>0</b> °C	5825	within the band	PASS
2	0°C 💿	5825	within the band	PASS
3	0°C	5825	within the band	PASS
4	0°C	5825	within the band	PASS
© 50	<b>0</b> °C	5825	within the band	PASS
6	<b>0</b> °C	5825	within the band	PASS





Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
0	- 10°C	5190	within the band	PASS
	<b>0</b> °C	5190	within the band	PASS
0	<b>10</b> ℃	5190	within the band	PASS
	<b>20</b> ℃	5190	within the band	PASS
C.C	<b>30</b> ℃	5190	within the band	PASS
	<b>40</b> ℃	5190	within the band	PASS
	<b>50</b> ℃	5190	within the band	PASS
8	<b>60</b> ℃	5190	within the band	PASS
- 69	<b>- 10</b> ℃	5230	within the band	PASS
	<b>0</b> °C	5230	within the band	PASS
	<b>10</b> ℃	5230	within the band	PASS
C.	<b>20</b> ℃	5230	within the band	PASS
6	<b>30</b> ℃	5230	within the band	PASS
	<b>40</b> ℃	5230	within the band	PASS
0	<b>50</b> ℃	5230	within the band	PASS
	<b>60</b> ℃	5230	within the band	PASS
- C	- 10℃	5270	within the band	PASS
	0°C	5270	within the band	PASS
	<b>10℃</b>	5270	within the band	PASS
®	<b>20</b> °C	5270	within the band	PASS
-C	<b>30</b> °C	5270	within the band	PASS
	<b>40</b> ℃	5270	within the band	PASS
	50°C	5270	within the band	PASS
© .	<b>60°</b> C	5270	within the band	PASS
302.11n40	- 10°C	5310	within the band	PASS
	0°C	5310	within the band	PASS
	10°C	5310	within the band	PASS
	20°C	5310	within the band	PASS
	<b>30</b> °C	5310	within the band	PASS
	40°C	5310	within the band	PASS
	<b>50°</b> C	5310	within the band	PASS
0	<u>60°C</u>	5310	within the band	PASS
	- 10°C	5510	within the hand	PASS
	<u> </u>	5510	within the hand	PASS
	10°C	5510	within the hand	PASS
0	20°C	5510	within the hand	PASS
-0	20 C 30°C	5510	within the hand	PASS
	<u> </u>	5510	within the band	PASS
	40 C	5510	within the band	DAGG
0	60°C	5510	within the hand	DAGO
20 200	10°C	5670	within the band	DAGG
		5670	within the band	DAGO
	10°0	5670	within the band	DAGO
	2000	5670	within the band	DAGE
mplian	200	5070	within the band	PASS
al Combinatice of	<b>30</b> C	5070	within the band	<u> </u>
ienzi	40 C	5670	within the band	PASS
		D10C		PASS
·	60 C Allestatic	-755 2523 4088 E-maile		PASS



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	- 10℃	5755	within the band	PASS
	<b>0</b> °C	5755	within the band	PASS
ĺ	<b>10</b> ℃	5755	within the band	PASS
	<b>20</b> ℃	5755	within the band	PASS
	<b>30</b> ℃	5755	within the band	PASS
	<b>40</b> ℃	5755	within the band	PASS
0	<b>50</b> ℃	5755	within the band	PASS
	<b>60</b> °C	5755	within the band	PASS
	- 10℃	5795	within the band	PASS
	<b>0</b> °C	5795	within the band	PASS
ĺ	<b>10</b> ℃	5795	within the band	PASS
	<b>20</b> °C	5795	within the band	PASS
-	<b>30</b> ℃	5795	within the band	PASS
	<b>40</b> ℃	5795	within the band	PASS
	<b>50</b> ℃	5795	within the band	PASS
	<b>60</b> ℃	5795	within the band	PASS





Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
	- 10°C	5180	within the band	PASS
	<b>0</b> °C	5180	within the band	PASS
0	<b>10</b> ℃	5180	within the band	PASS
	<b>20</b> ℃	5180	within the band	PASS
0.0	<b>30</b> °C	5180	within the band	PASS
	<b>40</b> ℃	5180	within the band	PASS
	<b>50</b> ℃	5180	within the band	PASS
	<b>60</b> °C	5180	within the band	PASS
	<b>- 10</b> ℃	5240	within the band	PASS
	<b>0</b> °C	5240	within the band	PASS
	<b>10</b> °C	5240	within the band	PASS
	<b>20</b> ℃	5240	within the band	PASS
30	<b>30</b> °C	5240	within the band	PASS
	<b>40</b> °C	5240	within the band	PASS
	<b>50</b> ℃	5240	within the band	PASS
1	<b>60</b> ℃	5240	within the band	PASS
- C	- 10℃	5260	within the band	PASS
	<b>0</b> °C	5260	within the band	PASS
	<b>10</b> ℃	5260	within the band	PASS
8	<b>20</b> ℃	5260	within the band	PASS
C C	<b>30</b> ℃	5260	within the band	PASS
	<b>40</b> ℃	5260	within the band	PASS
	<b>50℃</b>	5260	within the band	PASS
	60°C	5260	within the band	PASS
02.11ac20	- 10°C	5320	within the band	PASS
	0°C	5320	within the band	PASS
	10°C	5320	within the band	PASS
	<b>20</b> ℃	5320	within the band	PASS
- C	<b>30</b> °C	5320	within the band	PASS
NO T	<b>40</b> ℃	5320	within the band	PASS
	50°C	5320	within the band	PASS
6	<b>60</b> °C	5320	within the band	PASS
- C	- 10°C	5500	within the band	PASS
	0°C	5500	within the band	PASS
	10°C	5500	within the band	PASS
0	<b>20</b> °C	5500	within the band	PASS
0	<b>30</b> °C	5500	within the band	PASS
	40°C	5500	within the band	PASS
	50°C	5500	within the band	PASS
•	<b>60°</b> C	5500	within the band	PASS
6	- 10°C	5700	within the band	PASS
	0°C	5500	within the band	PASS
	10°C	5500	within the band	PASS
	20°C	5500	within the hand	PASS
omplian	20 C 20 °C	5500	within the hand	PASS
ALCO OF	<b>10°</b> C	5500	within the hand	
Acc ex	40 C 50°C	5500	within the hand	PASS
	<b>30</b> C			1700



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- 10	°C 5	745	within the band	PASS
0°0	5	745	within the band	PASS
10°	°C 5	745	within the band	PASS
20°	°C 5	745	within the band	PASS
30°	°C 5	745	within the band	PASS
40°	°C 5	745	within the band	PASS
50°	°C 5	745	within the band	PASS
60°	°C 5	240	within the band	PASS
- 10	°C 5	825	within the band	PASS
0°0	5	825	within the band	PASS
10°	°C 5	825	within the band	PASS
20°	°C 💿 💆 5	825	within the band	PASS
30°	°C 5	825	within the band	PASS
40°	°C 5	825	within the band	PASS
50°	C 5	825	within the band	PASS
60°	°C 5	825	within the band	PASS





	Frequency (MHz)	Result	Conclusion
- 10℃	5190	within the band	PASS
<b>0</b> °C	5190	within the band	PASS
<b>10</b> ℃	5190	within the band	PASS
<b>20</b> ℃	5190	within the band	PASS
<b>30</b> °C	5190	within the band	PASS
<b>40</b> ℃	5190	within the band	PASS
<b>50</b> ℃	5190	within the band	PASS
<b>60</b> ℃	5190	within the band	PASS
- 10℃	5230	within the band	PASS
<b>0</b> °C	5230	within the band	PASS
<b>10</b> ℃	5230	within the band	PASS
<b>20</b> °C	5230	within the band	PASS
<b>30</b> ℃	5230	within the band	PASS
<b>40</b> ℃	5230	within the band	PASS
<b>50</b> ℃	5230	within the band	PASS
<b>60</b> ℃	5230	within the band	PASS
- 10℃	5270	within the band	PASS
0°C	5270	within the band	PASS
<b>10</b> ℃	5270	within the band	PASS
<b>20°</b> C	5270	within the band	PASS
<b>30</b> °C	5270	within the band	PASS
<b>40°</b> ℃	5270	within the band	PASS
50°C	5270	within the band	PASS
60°C	5270	within the band	PASS
- 10°C	5310	within the band	PASS
0°C	5310	within the band	PASS
10°C	5310	within the band	PASS
20°C	5310	within the band	PASS
30°C	5310	within the band	PASS
<u>40°</u> C	5310	within the band	PASS
<u>−−−−</u> 50°C	5310	within the band	PASS
<u> </u>	5310	within the band	PASS
- 10°C	5510	within the band	PASS
<u> </u>	5510	within the band	PASS
10°C	5510	within the band	PASS
<u>10 C</u>	5510	within the band	PASS
<u>20</u> ℃	5510	within the band	PASS
<b>30</b> °C	5510	within the band	PASS
50°C	5510	within the hand	PASS
60°C	5510	within the hand	PAGE
- 10°C	5670	within the band	PAGG
- 100	5670	within the hand	PAGE
100	5070	within the head	PAGO
	5070	within the band	PASS
20 C	5070	within the band	PASS
30 C	5670	within the band	PASS
40°C	5670	within the band	PASS
50°C	5670	within the band	PASS
	- 10°C   0°C   10°C   20°C   30°C   40°C   50°C   60°C   - 10°C   0°C   10°C   20°C   30°C   40°C   50°C   60°C   - 10°C   0°C   10°C   20°C   30°C   40°C   50°C   60°C   - 10°C   0°C   10°C   20°C   30°C   40°C   50°C   60°C   - 10°C   0°C   10°C   20°C   30°C   40°C   50°C   60°C   - 10°C   0°C   10°C   20°C   30°C   40°C   50°C   60°C   - 10°C   0°C   10°C   20°C	- 10°C   5190     0°C   5190     10°C   5190     20°C   5190     30°C   5190     40°C   5190     60°C   5190     -10°C   5230     0°C   5230     0°C   5230     10°C   5230     20°C   5230     30°C   5230     20°C   5230     30°C   5230     30°C   5230     60°C   5230     50°C   5230     60°C   5230     60°C   5230     0°C   5270     0°C   5270     0°C   5270     20°C   5270     30°C   5270     40°C   5270     0°C   5270     60°C   5270     30°C   5270     60°C   5270     50°C   5270     60°C   5270     50°C	$-10^{\circ}$ C $5190$ within the band $0^{\circ}$ C $5190$ within the band $10^{\circ}$ C $5190$ within the band $30^{\circ}$ C $5190$ within the band $40^{\circ}$ C $5190$ within the band $50^{\circ}$ C $5190$ within the band $60^{\circ}$ C $5190$ within the band $60^{\circ}$ C $5190$ within the band $0^{\circ}$ C $5230$ within the band $0^{\circ}$ C $5230$ within the band $10^{\circ}$ C $5230$ within the band $20^{\circ}$ C $5230$ within the band $30^{\circ}$ C $5230$ within the band $40^{\circ}$ C $5230$ within the band $60^{\circ}$ C $5270$ within the band $0^{\circ}$ C $5270$ within the band $10^{\circ}$ C $5270$ within the band $20^{\circ}$ C $5270$ within the band $30^{\circ}$ C $5270$ within the band $30^{\circ}$ C $5270$ within the band $40^{\circ}$ C $5270$ within the band $30^{\circ}$ C $5270$ within the band $30^{\circ}$ C $5270$ within the band $40^{\circ}$ C $5270$ within the band $50^{\circ}$ C $5270$ within the band $40^{\circ}$ C $5310$ within the band $50^{\circ}$ C $5310$ within the band $40^{\circ}$ C $5310$ within the band



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-	- 10℃	5755	within the band	PASS
	<b>0</b> °C	5755	within the band	PASS
	<b>10</b> ℃	5755	within the band	PASS
	<b>20</b> ℃	5755	within the band	PASS
	<b>30</b> ℃	5755	within the band	PASS
	<b>40</b> ℃	5755	within the band	PASS
0	<b>50</b> ℃	5755	within the band	PASS
	<b>60</b> ℃	5755	within the band	PASS
	- <b>10</b> ℃	5795	within the band	PASS
	<b>0</b> °C	5795	within the band	PASS
	<b>10</b> ℃	5795	within the band	PASS
	<b>20</b> ℃	5795	within the band	PASS
	<b>30</b> ℃	5795	within the band	PASS
	<b>40</b> ℃	5795	within the band	PASS
	<b>50</b> ℃	5795	within the band	PASS
	<b>60</b> ℃	5795	within the band	PASS





AGC	R

Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
	- 10℃	5210	within the band	PASS
	<b>0</b> °C	5210	within the band	PASS
0	<b>10</b> ℃	5210	within the band	PASS
-0 -	<b>20</b> ℃	5210	within the band	PASS
	<b>30</b> °C	5210	within the band	PASS
	<b>40</b> ℃	5210	within the band	PASS
0	<b>50</b> ℃	5210	within the band	PASS
	<b>60</b> ℃	5210	within the band	PASS
- 60	- 10℃	5290	within the band	PASS
	<b>0</b> °C	5290	within the band	PASS
	<b>10</b> ℃	5290	within the band	PASS
<b>C</b>	<b>20</b> ℃	5290	within the band	PASS
	<b>30</b> ℃	5290	within the band	PASS
	<b>40</b> ℃	5290	within the band	PASS
0	<b>50</b> ℃	5290	within the band	PASS
- 0	<b>60</b> ℃	5290	within the band	PASS
0 ~ 0	<b>- 10</b> ℃	5530	within the band	PASS
	<b>0</b> °C	5530	within the band	PASS
0	<b>10</b> ℃	5530	within the band	PASS
002 11 0 200	<b>20</b> ℃	5530	within the band	PASS
802.112080	<b>30</b> ℃	5530	within the band	PASS
	<b>40</b> ℃	5530	within the band	PASS
	<b>50</b> ℃	5530	within the band	PASS
	<b>60</b> ℃	5530	within the band	PASS
	- 10℃	5610	within the band	PASS
	<b>0</b> °C	5610	within the band	PASS
	<b>10</b> ℃	5610	within the band	PASS
- C	<b>20</b> ℃	5610	within the band	PASS
	<b>30</b> ℃	5610	within the band	PASS
	<b>40</b> ℃	5610	within the band	PASS
0	<b>50</b> ℃	5610	within the band	PASS
	<b>60</b> ℃	5610	within the band	PASS
20	- 10℃	5775	within the band	PASS
	<b>0</b> °C	5775	within the band	PASS
	<b>10</b> ℃	5775	within the band	PASS
	<b>20</b> °C	5775	within the band	PASS
	<b>30</b> °C	5775	within the band	PASS
	<b>40</b> °C	5775	within the band	PASS
	<b>50</b> °C	5775	within the band	PASS
8	<b>60</b> ℃	5775	within the band	PASS



## **15. FCC LINE CONDUCTED EMISSION TEST**

## **15.1. LIMITS OF LINE CONDUCTED EMISSION TEST**

Framman	Maximum RF Line Voltage					
Frequency	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

- 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.
- 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.





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## 15.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST





### MEASUREMENT RESULT: "agc\_fin"

20/6/15 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	Ll	FLO
0.198000	39.20	9.3	64	24.5	QP	Ll	FLO
0.550000	35.70	9.3	56	20.3	QP	Ll	FLO
0.582000	37.80	9.3	56	18.2	QP	Ll	FLO
0.614000	37.60	9.3	56	18.4	QP	Ll	FLO
3.646000	31.80	9.4	56	24.2	QP	L1	FLO

#### MEASUREMENT RESULT: "agc fin2"

2020/6/15 13:0	08						
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.174000	26.90	9.3	55	27.9	AV	Ll	FLO
0.198000	23.10	9.3	54	30.6	AV	Ll	FLO
0.550000	28.60	9.3	46	17.4	AV	Ll	FLO
0.582000	31.00	9.3	46	15.0	AV	Ll	FLO
0.614000	30.20	9.3	46	15.8	AV	Ll	FLO
3.646000	22.50	9.4	46	23.5	AV	Ll	FLO





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#### MEASUREMENT RESULT: "agc fin"

20/6/15 12: Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0 170000	44 40	0.2	65	20 6	OP	м	FIO
0.170000	44.40	9.0	0.5	20.0	QP .	IN	F LO
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**





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APPENDIX A: PHOTOGRAPHS OF TEST SETUP FCC LINE CONDUCTED EMISSION TEST SETUP



FCC RADIATED EMISSION TEST SETUP BELOW 1GHZ







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FCC RADIATED EMISSION TEST SETUP ABOVE 1GHZ

CONDUCTED TEST SETUP







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## **APPENDIX B: PHOTOGRAPHS OF EUT**

Refer to the Report No.: AGC00210200519AP01

----END OF REPORT----

