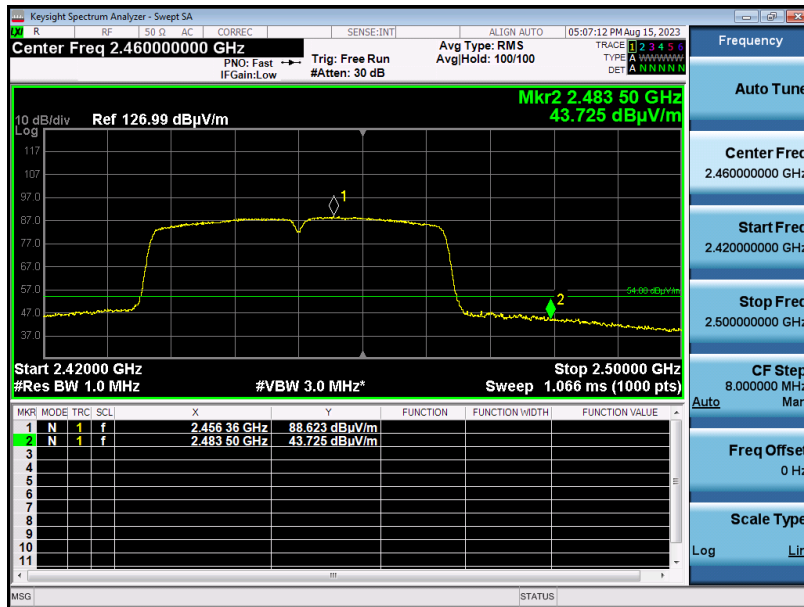


EUT	Network Video Recorder	Model Name	RLN12W
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 with data rate 13.5 2452MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement



**RESULT: PASS**

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## 12. LINE CONDUCTED EMISSION TEST

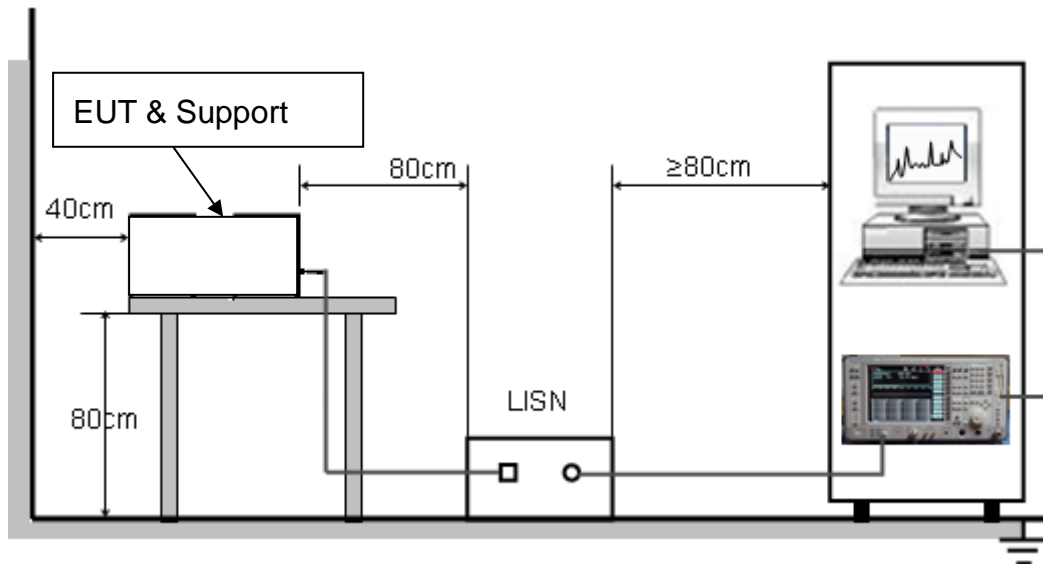
### 12.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Frequency	Maximum RF Line Voltage	
	Q.P (dB $\mu$ V)	Average (dB $\mu$ V)
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 0.50 MHz.

### 12.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



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### 12.3. 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 equipment received AC120V/60Hz power from a LISN, if any.
5. The EUT received DC 12V power from adapter which received AC120V/60Hz power from 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.

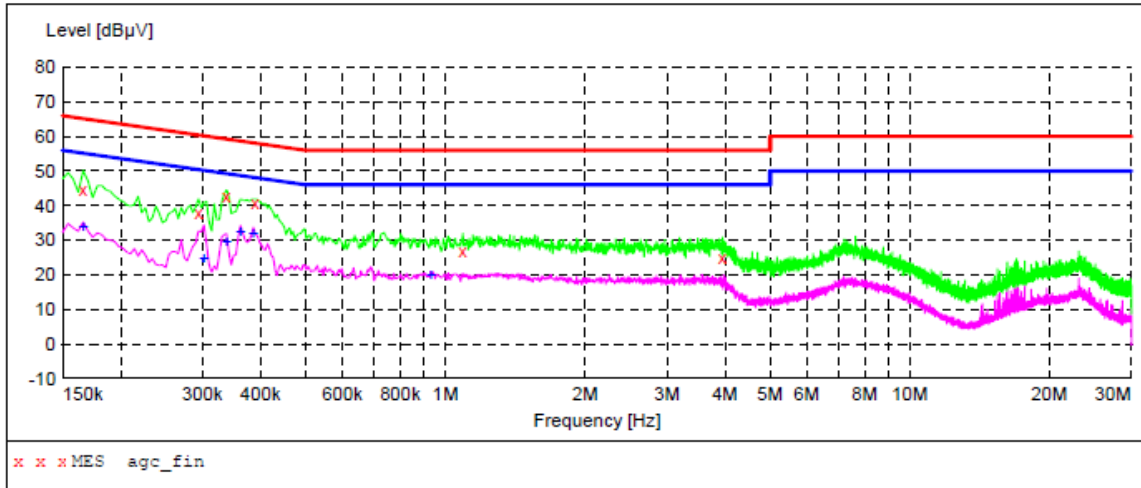
Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

### 12.4. 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 was reported on the Summary Data page.

**12.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST**

Line Conducted Emission Test Line 1-L



**MEASUREMENT RESULT: "agc\_fin"**

2023/8/17 18:17

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line
0.166000	44.50	6.1	65	20.7	QP	L1
0.294000	38.10	6.1	60	22.3	QP	L1
0.338000	42.50	6.1	59	16.8	QP	L1
0.390000	40.60	6.1	58	17.5	QP	L1
1.090000	26.70	6.2	56	29.3	QP	L1
3.950000	24.90	6.3	56	31.1	QP	L1

**MEASUREMENT RESULT: "agc\_fin2"**

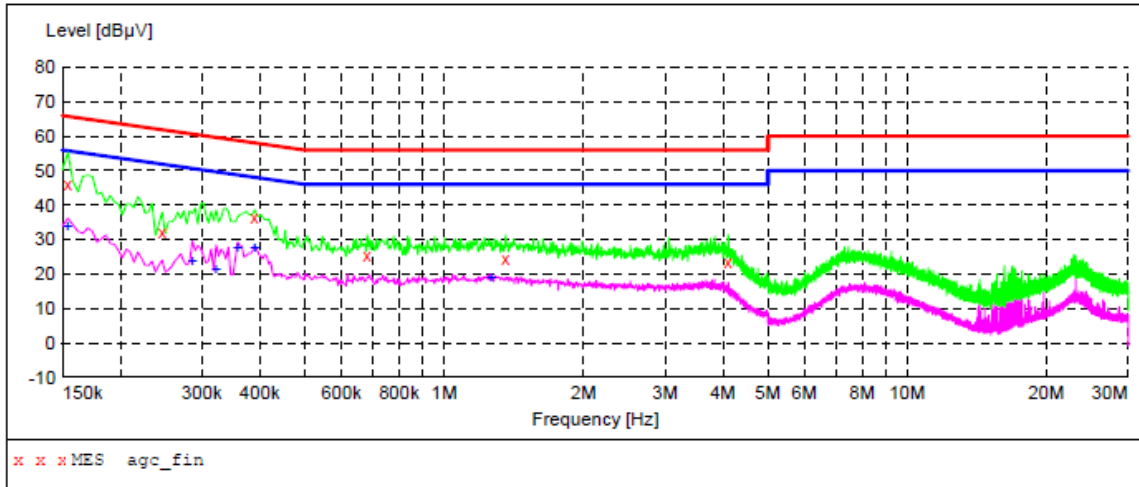
2023/8/17 18:17

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line
0.166000	33.90	6.1	55	21.3	AV	L1
0.302000	24.90	6.1	50	25.3	AV	L1
0.338000	29.90	6.1	49	19.4	AV	L1
0.362000	32.40	6.1	49	16.3	AV	L1
0.386000	32.30	6.1	48	15.8	AV	L1
0.930000	20.20	6.2	46	25.8	AV	L1

**RESULT: PASS**

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Line Conducted Emission Test Line 2-N



**MEASUREMENT RESULT: "agc\_fin"**

2023/8/17 18:14

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line
0.154000	46.00	6.1	66	19.8	QP	N
0.246000	32.20	6.1	62	29.7	QP	N
0.390000	36.30	6.1	58	21.8	QP	N
0.682000	25.20	6.2	56	30.8	QP	N
1.358000	24.20	6.2	56	31.8	QP	N
4.106000	23.40	6.3	56	32.6	QP	N

**MEASUREMENT RESULT: "agc\_fin2"**

2023/8/17 18:14

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line
0.154000	34.20	6.1	56	21.6	AV	N
0.286000	23.80	6.1	51	26.8	AV	N
0.322000	21.60	6.1	50	28.1	AV	N
0.358000	27.80	6.1	49	21.0	AV	N
0.390000	27.70	6.1	48	20.4	AV	N
1.262000	19.20	6.2	46	26.8	AV	N

**RESULT: PASS**

**Note:** All test modes had been pre-tested. The antenna 1+antenna 2 of 802.11n40 at high channel mode is the worst case and recorded in the report.

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## **APPENDIX A: PHOTOGRAPHS OF TEST SETUP**

Refer to the Report No.: AGC11034230801AP01

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

Refer to the Report No.: AGC11034230801AP02

**----END OF REPORT----**

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