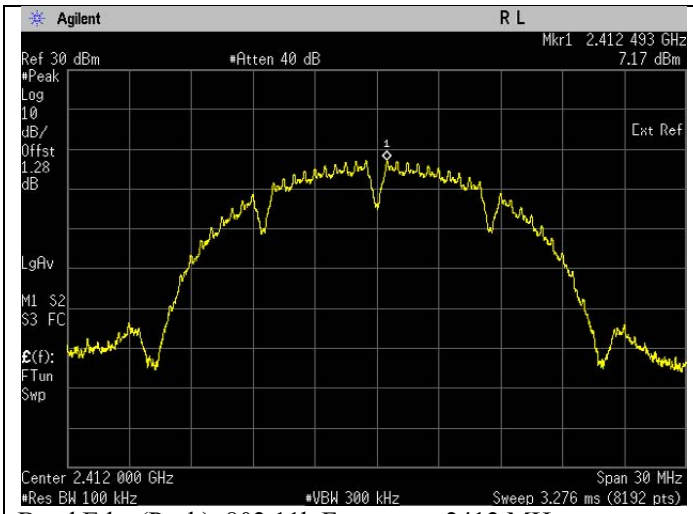
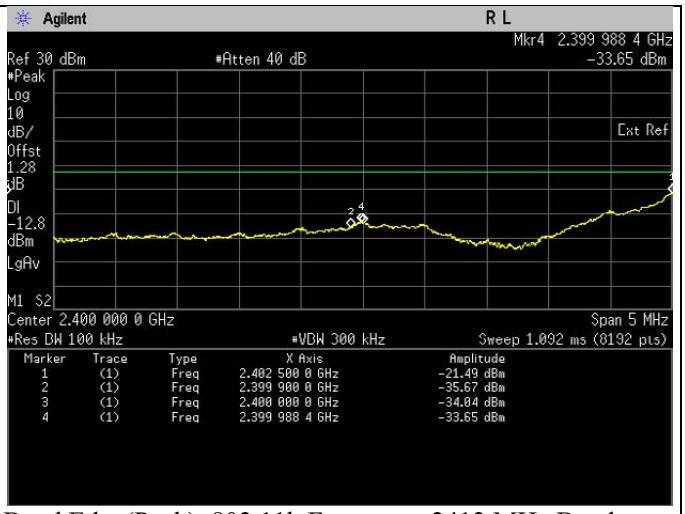
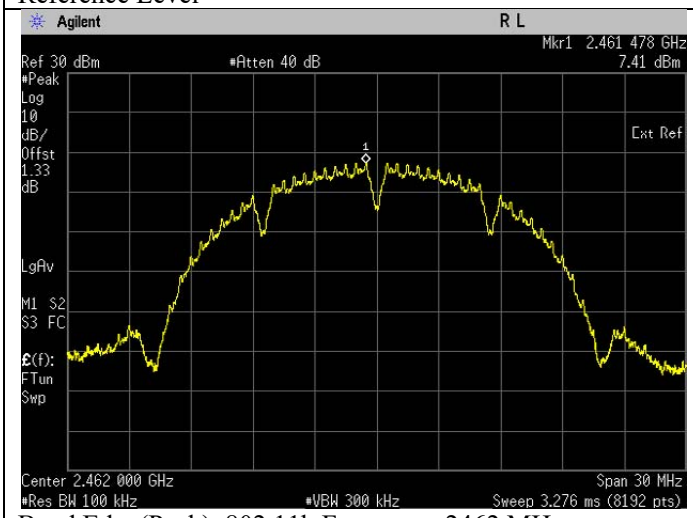


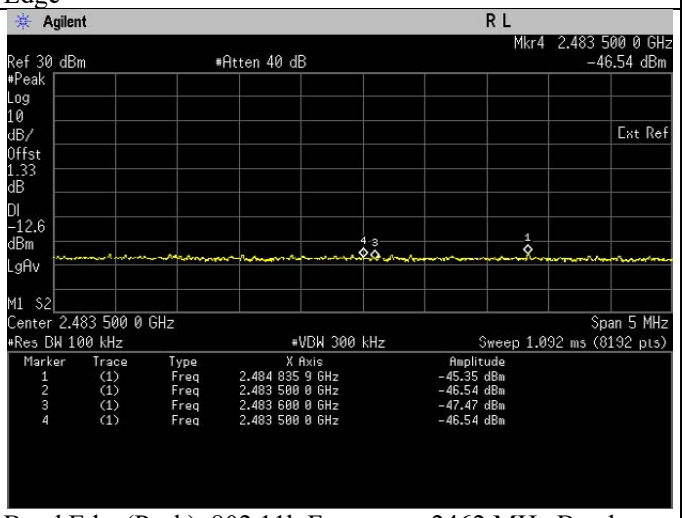
Band Edge(Peak). 802.11b Frequency 2412 MHz Reference Level



Band Edge(Peak). 802.11b Frequency 2412 MHz Band Edge



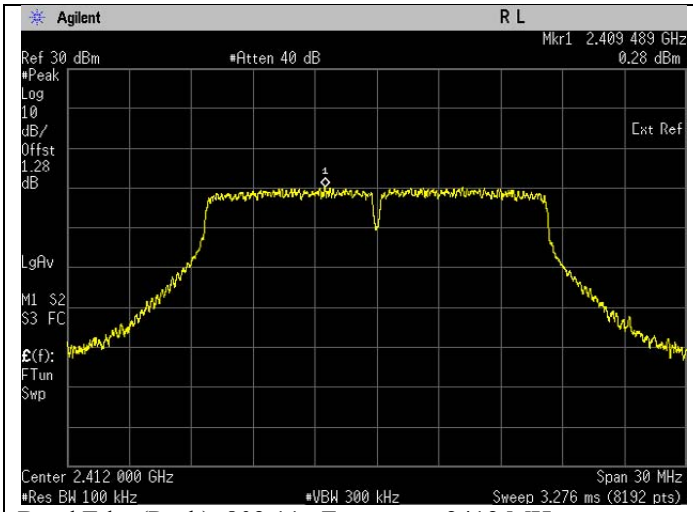
Band Edge(Peak). 802.11b Frequency 2462 MHz Reference Level



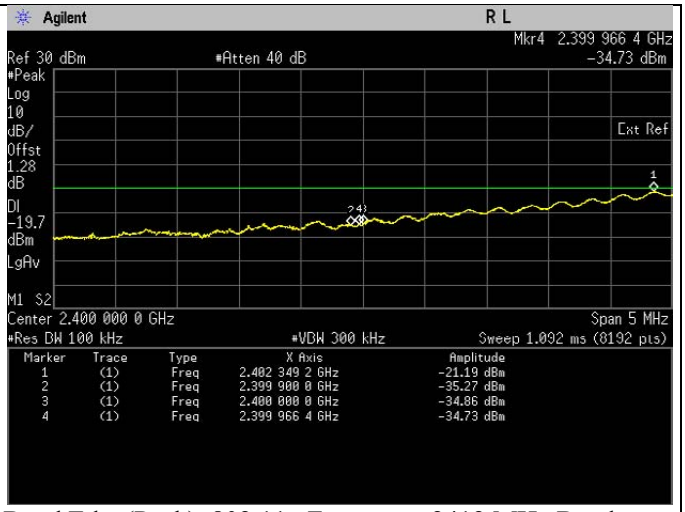
Band Edge(Peak). 802.11b Frequency 2462 MHz Band Edge

802.11g

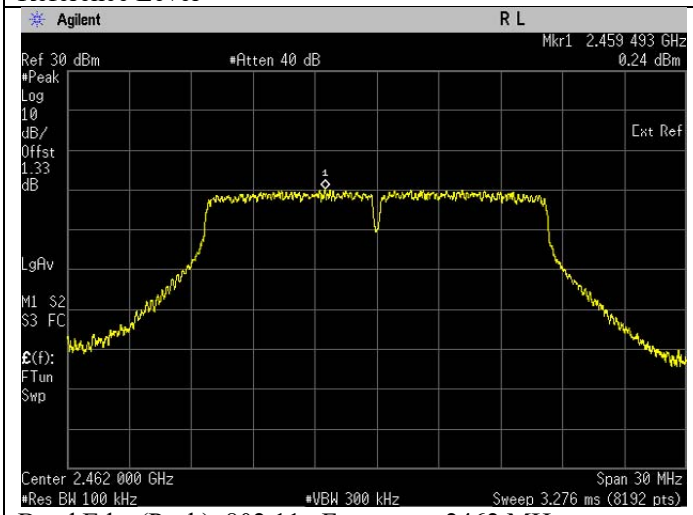
Test Conditions				Test Frequency	Results		
Standard	Modulation Type	Modulation Technology	Data Rate (mbps)	Tx (MHz)	Frequencies (MHz)	Power (dBm)	Status
802.11g	OFDM	BPSK	6	2412	2399.97	-34.73	Pass
802.11g	OFDM	BPSK	6	2462	2483.54	-46.13	Pass



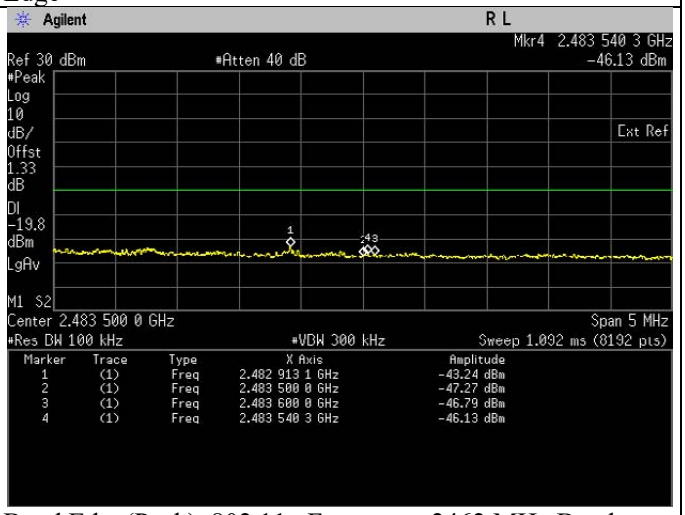
Band Edge(Peak). 802.11g Frequency 2412 MHz Reference Level



Band Edge(Peak). 802.11g Frequency 2412 MHz Band Edge



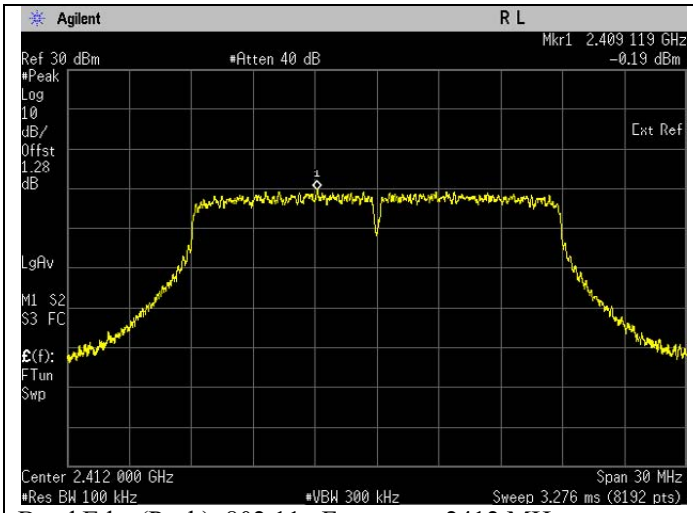
Band Edge(Peak). 802.11g Frequency 2462 MHz Reference Level



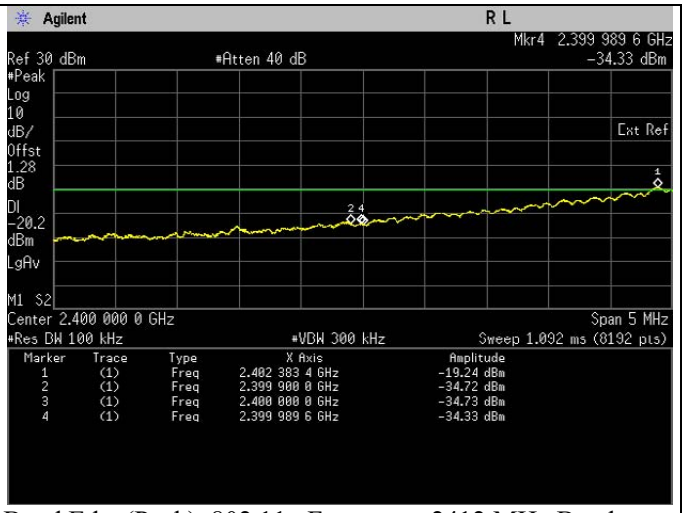
Band Edge(Peak). 802.11g Frequency 2462 MHz Band Edge

802.11n (HT20)

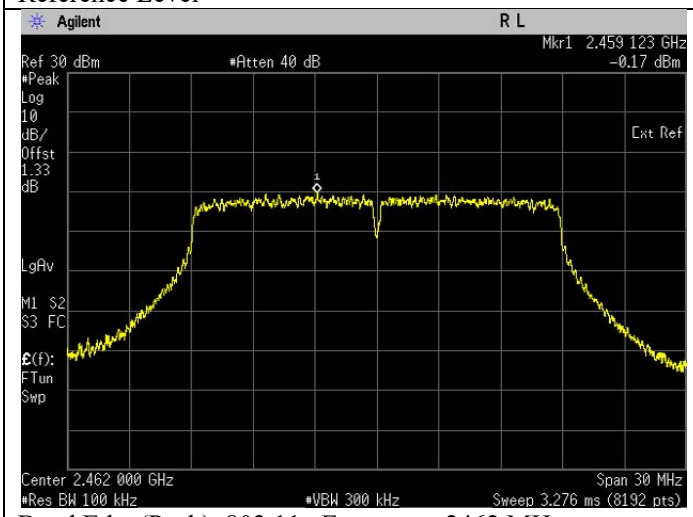
Test Conditions				Test Frequency	Results		
Standard	Modulation Type	Modulation Technology	Data Rate (mbps)	Tx (MHz)	Frequencies (MHz)	Power (dBm)	Status
802.11n	OFDM	BPSK	6.5	2412	2399.99	-34.33	Pass
802.11n	OFDM	BPSK	6.5	2462	2483.59	-46.89	Pass



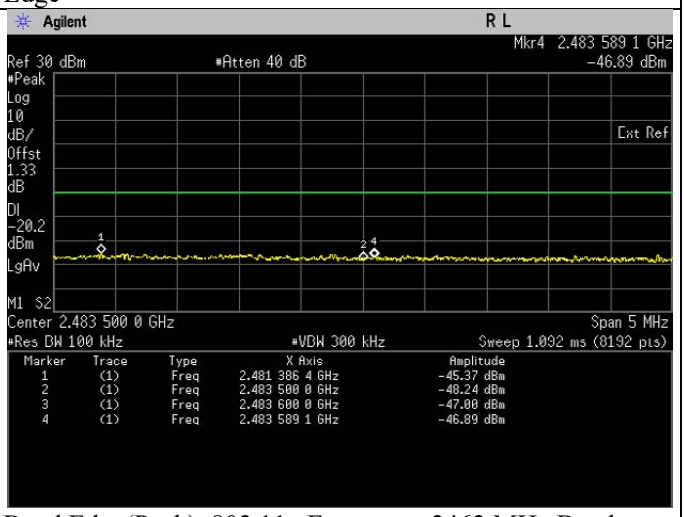
Band Edge(Peak). 802.11n Frequency 2412 MHz Reference Level



Band Edge(Peak). 802.11n Frequency 2412 MHz Band Edge



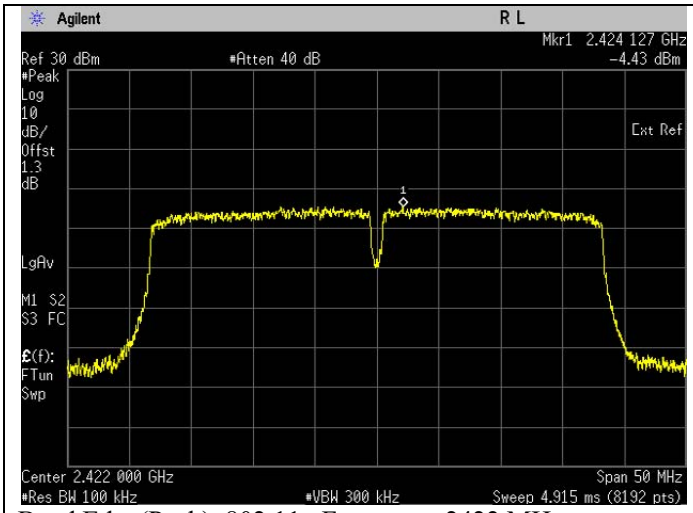
Band Edge(Peak). 802.11n Frequency 2462 MHz Reference Level



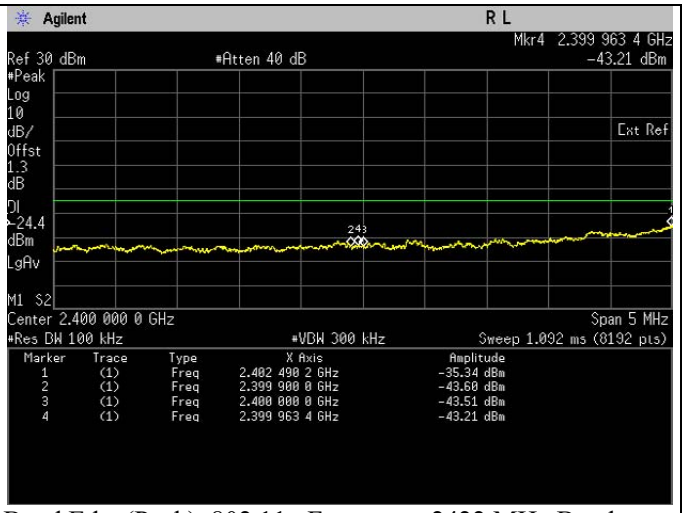
Band Edge(Peak). 802.11n Frequency 2462 MHz Band Edge

802.11n (HT40)

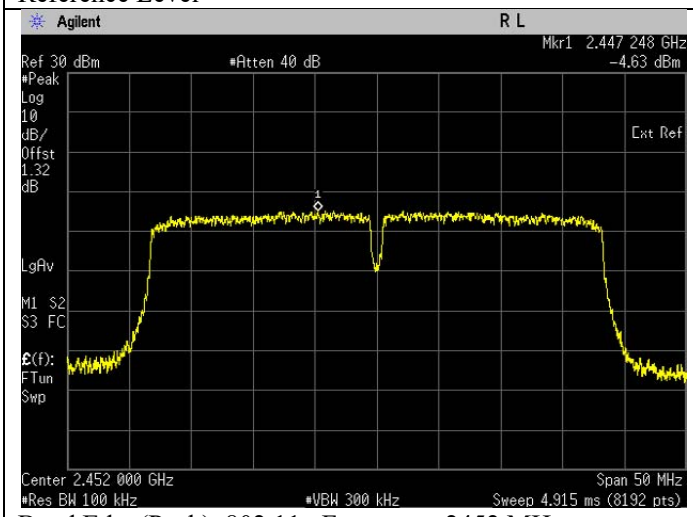
Test Conditions				Test Frequency	Results		
Standard	Modulation Type	Modulation Technology	Data Rate (mbps)	Tx (MHz)	Frequencies (MHz)	Power (dBm)	Status
802.11n	OFDM	BPSK	13.5	2422	2399.96	-43.20	Pass
802.11n	OFDM	BPSK	13.5	2452	2483.51	-46.55	Pass



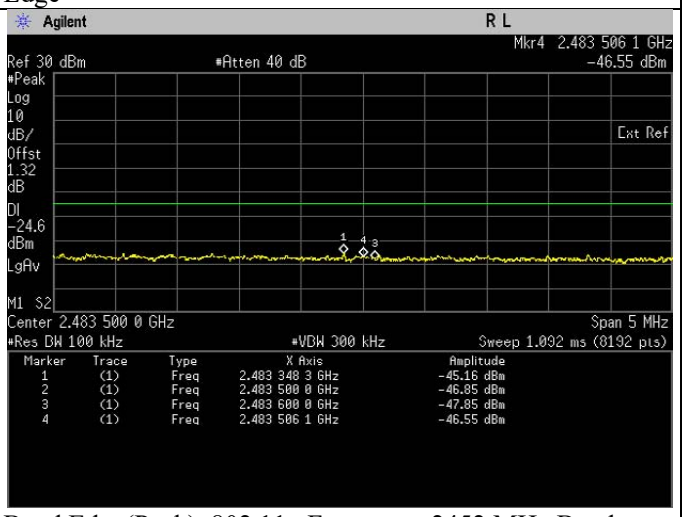
Band Edge(Peak). 802.11n Frequency 2422 MHz Reference Level



Band Edge(Peak). 802.11n Frequency 2422 MHz Band Edge



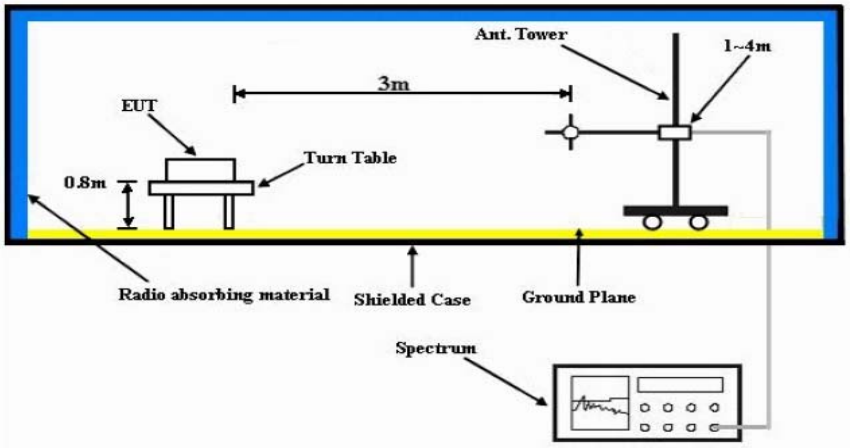
Band Edge(Peak). 802.11n Frequency 2452 MHz Reference Level



Band Edge(Peak). 802.11n Frequency 2452 MHz Band Edge

4.7. Radiated Emission within restricted Bands

4.7.1. Test Setup



a. The EUT is placed on the top of a rotating table 0.8m above the ground (<1GHz) and 1.5m above the ground (>1GHz) at a 3m semi-anechoic chamber. The table is rotated 360 degrees to determine the position of the highest radiation.
b. The EUT is set 3m away from the interference-receiving antenna, which is mounted on the top of a variable-height antenna tower.
c. The antenna is Bilog/Horn antenna depend on which frequency range uses, and its 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 is arranged to its worst case and then the antenna is tuned to heights from 1m to 4m and the rotatable table is turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system is set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode is fall within the range of 10dB from the limit specified, the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. Otherwise, the testing could be stopped and the peak values of the EUT would be reported.

NOTE:

a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection at frequency below 1GHz.
b. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3 MHz for Peak detection at frequency above 1 GHz.
c. All modes of operation were investigated and the worst-case emissions are reported.

4.7.2. **Test Limits:**

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power.

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

NOTE:

a. The lower limit shall apply at the transition frequencies.
b. Emission level (dBuV/m) = 20 log Emission level (uV/m).
c. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.7.3. Test Data:

Test: WIFI SAC Restricted Band Edge
Model Number: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: Low Test Frequency: 2412.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11b)

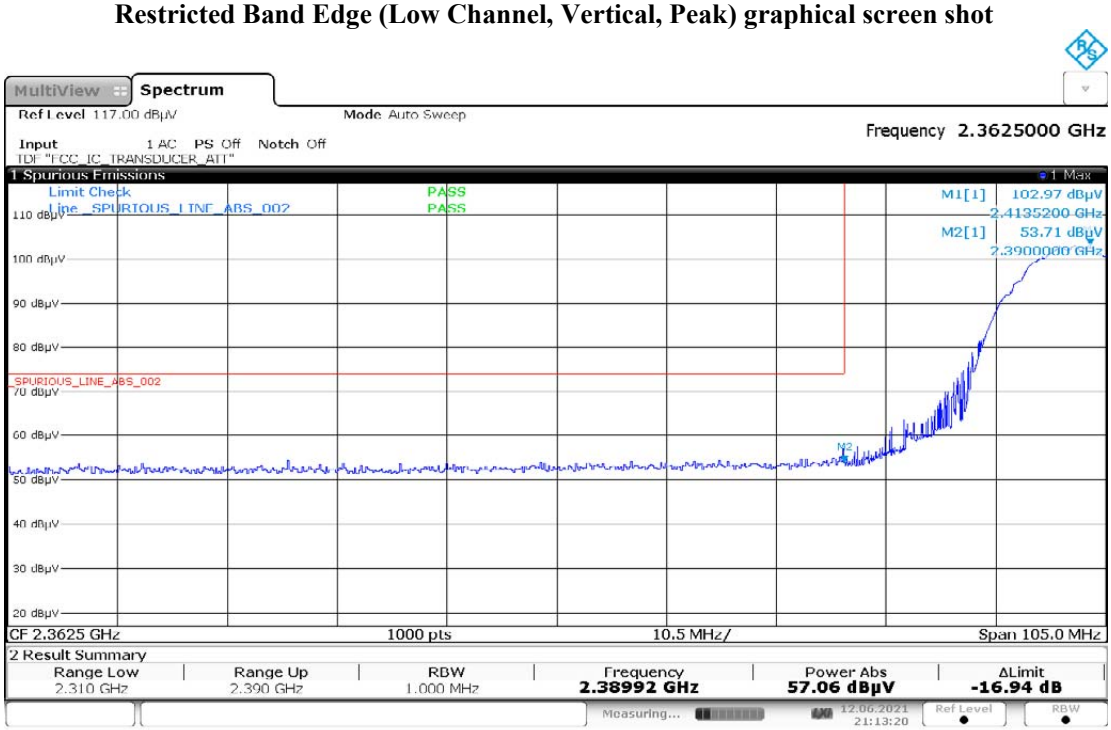
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2390.0000	-	53.7083	43.4437	-	74.0000	54.0000	-	-20.2917	-10.5563	-
Horizontal Radiated Emission Result										
2390.0000	-	56.0419	45.4546	-	74.0000	54.0000	-	-17.9581	-8.5454	-

Remarks: Pass Result	Marginal Result	Fail Result

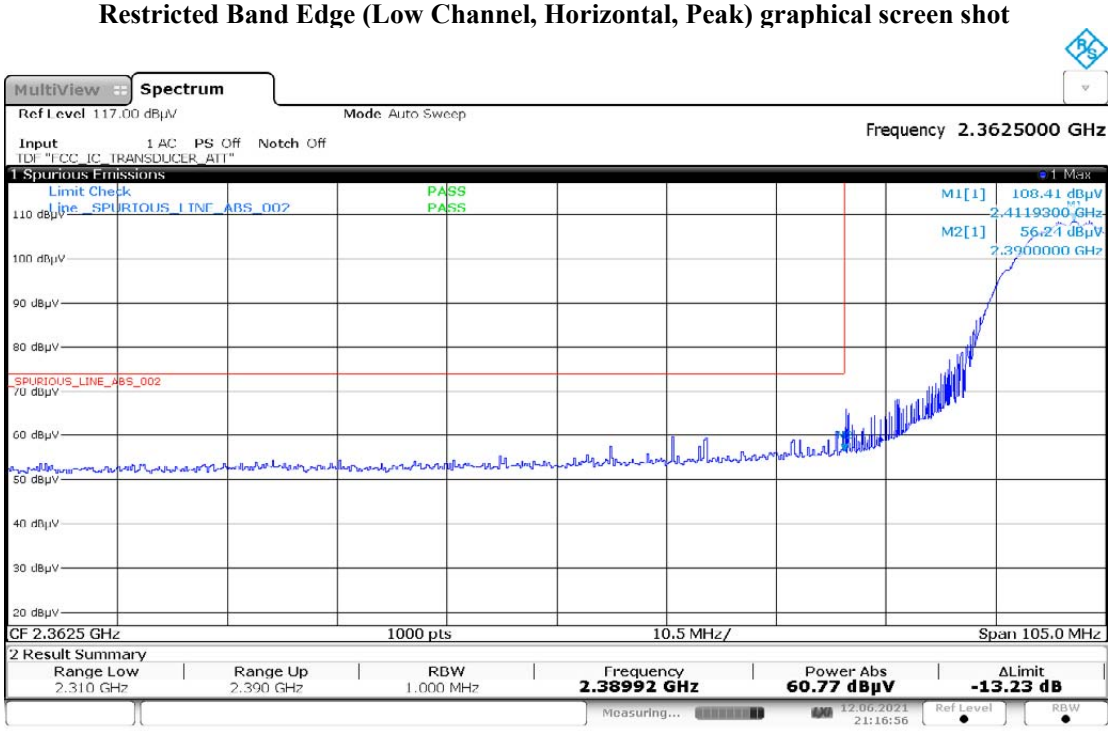
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sat, 12 Jun, 2021**
System MU: 4.03dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



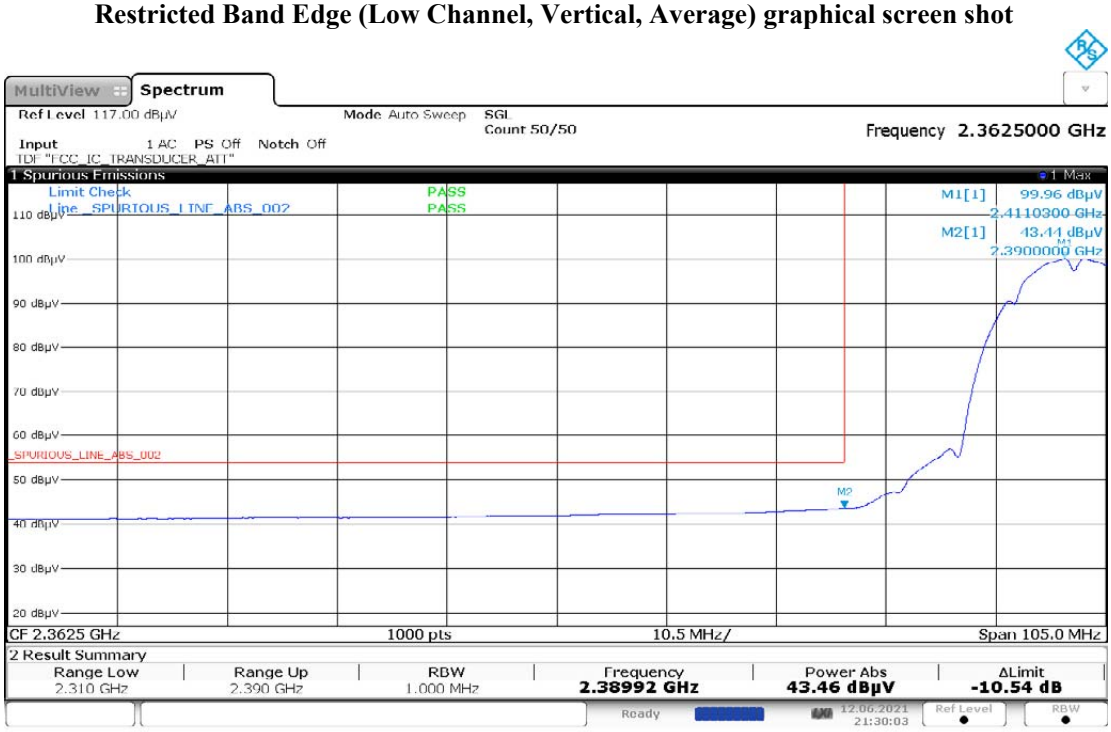
21:13:21 12.06.2021

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



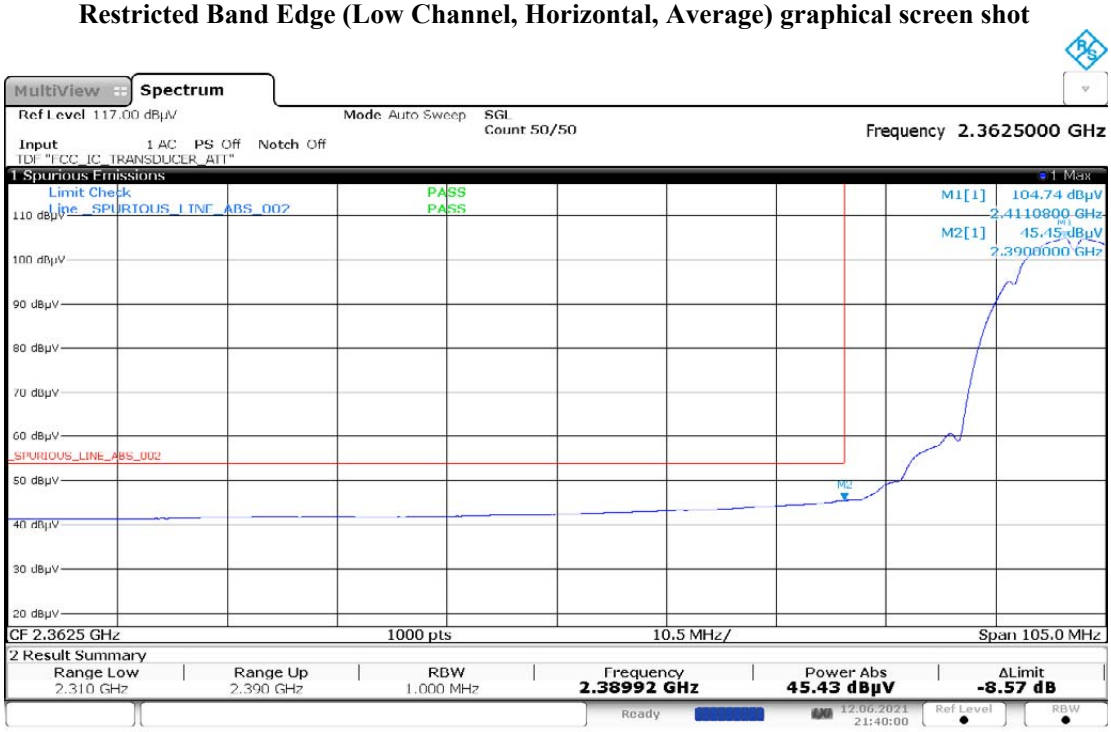
21:16:56 12.06.2021

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



21:30:04 12.06.2021

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



21:40:00 12.06.2021

Test: WIFI SAC Restricted Band Edge
Model Number: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: High Test Frequency: 2462.0000 MHz Test Standard: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11b)

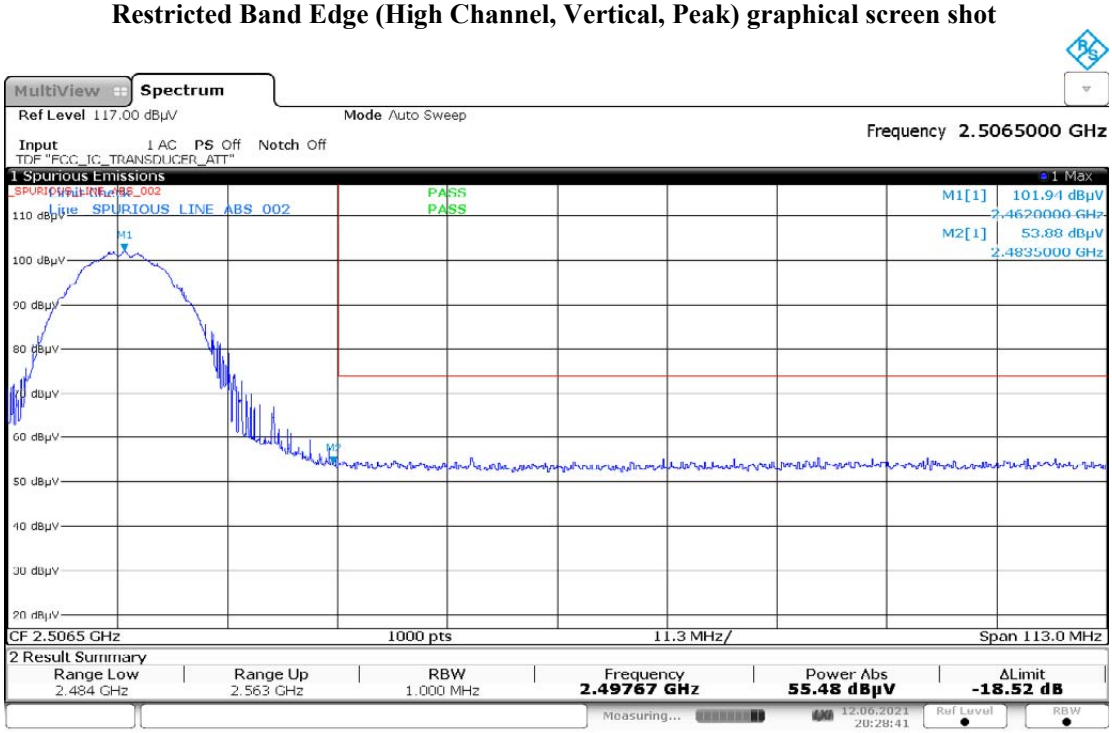
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2483.5000	-	53.0147	42.2069	-	74.0000	54.0000	-	-20.9853	-11.7931	-
Horizontal Radiated Emission Result										
2483.5000	-	58.0964	46.7628	-	74.0000	54.0000	-	-15.9036	-7.2372	-

Remarks: Pass Result	Marginal Result	Fail Result

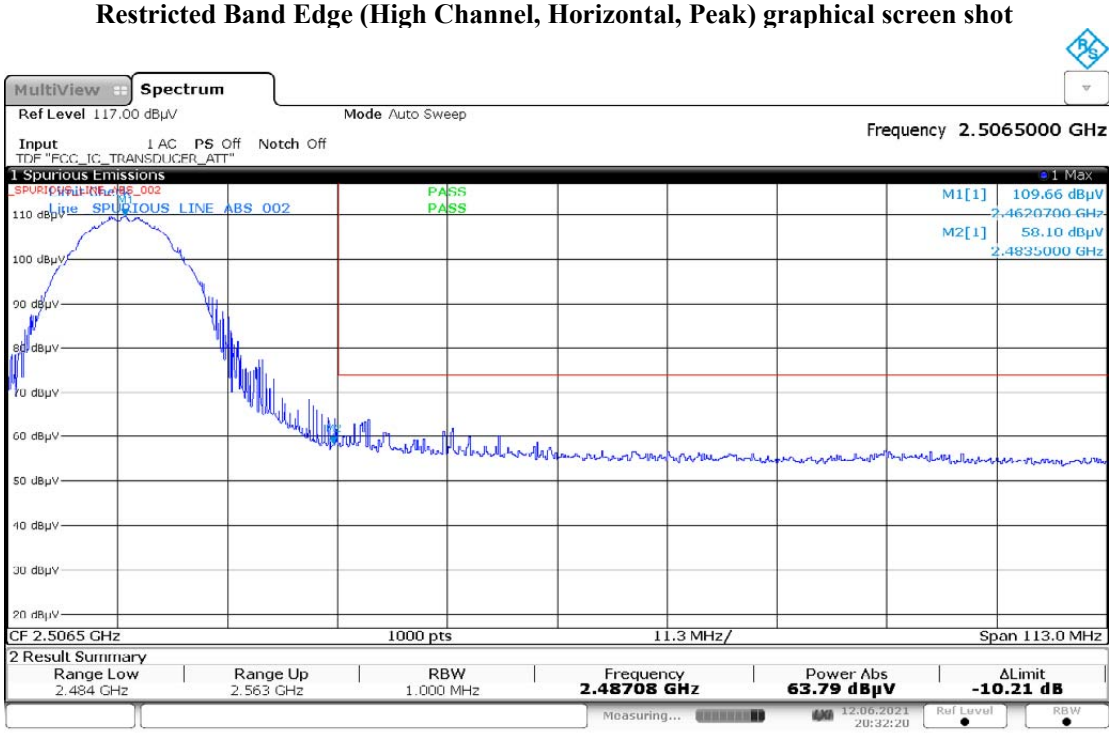
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sat, 12 Jun, 2021**
System MU: 4.03dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



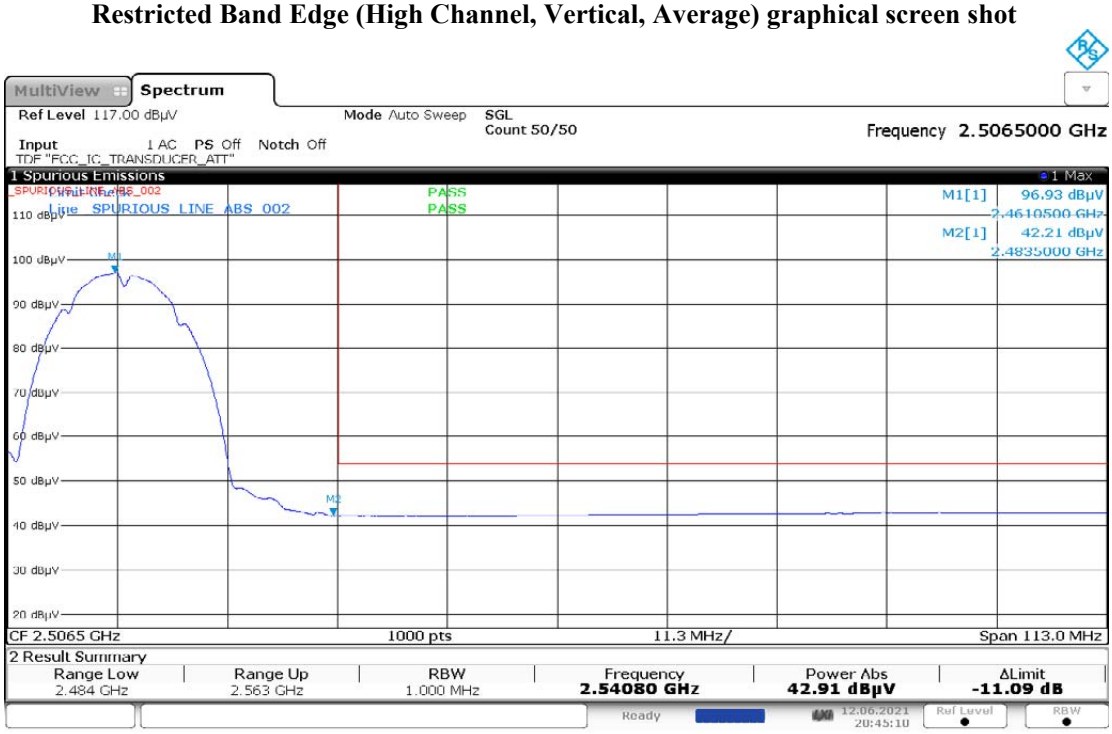
20:28:42 12.06.2021

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



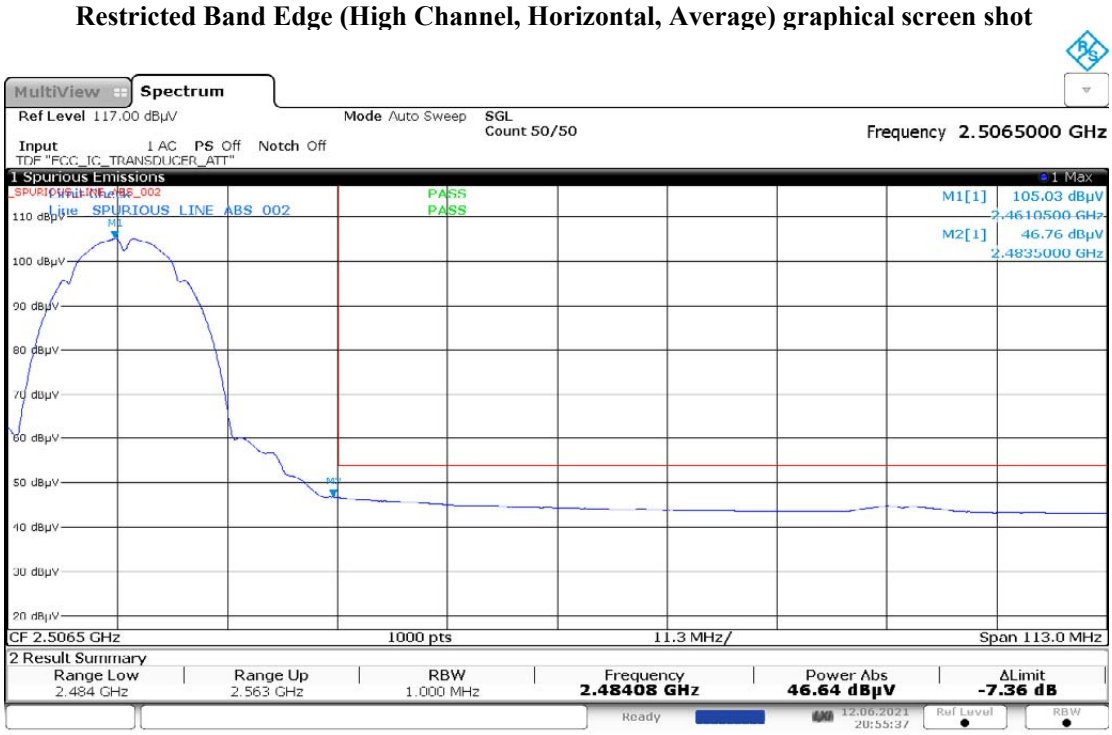
20:32:21 12.06.2021

Restricted Band Edge (High Channel, Vertical, Average) graphical screen shot



20:45:10 12.06.2021

Restricted Band Edge (High Channel, Horizontal, Average) graphical screen shot



20:55:38 12.06.2021

Test: WIFI SAC Restricted Band Edge
Model Number: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: Low Test Frequency: 2412.0000 MHz Test Standard: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11g)

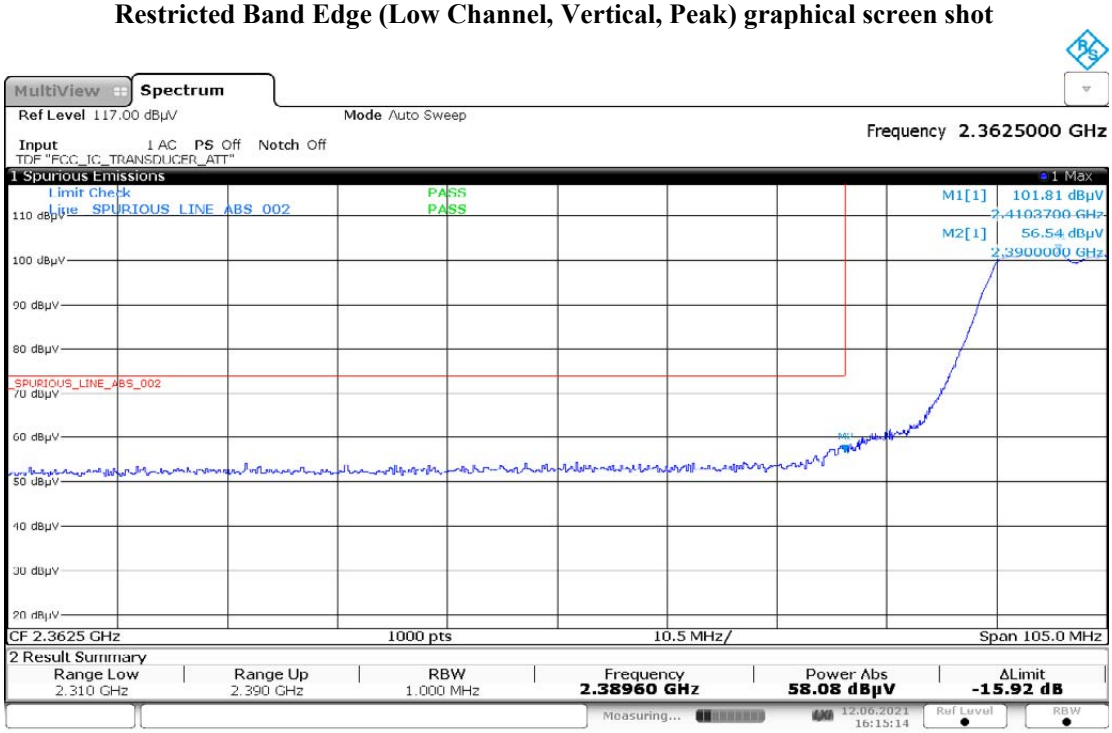
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2390.0000	-	56.5356	43.3704	-	74.0000	54.0000	-	-17.4644	-10.6296	-
Horizontal Radiated Emission Result										
2390.0000	-	58.9419	45.7394	-	74.0000	54.0000	-	-15.0581	-8.2606	-

Remarks: Pass Result	Marginal Result	Fail Result

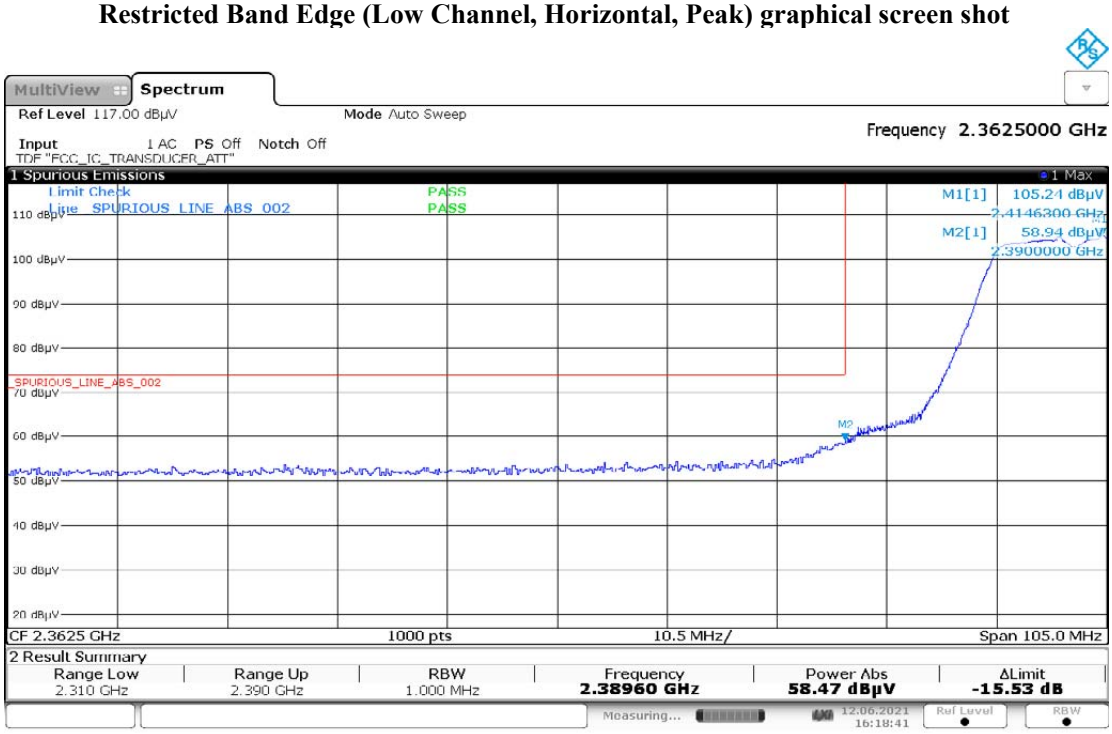
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sat, 12 Jun, 2021**
System MU: 4.03dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



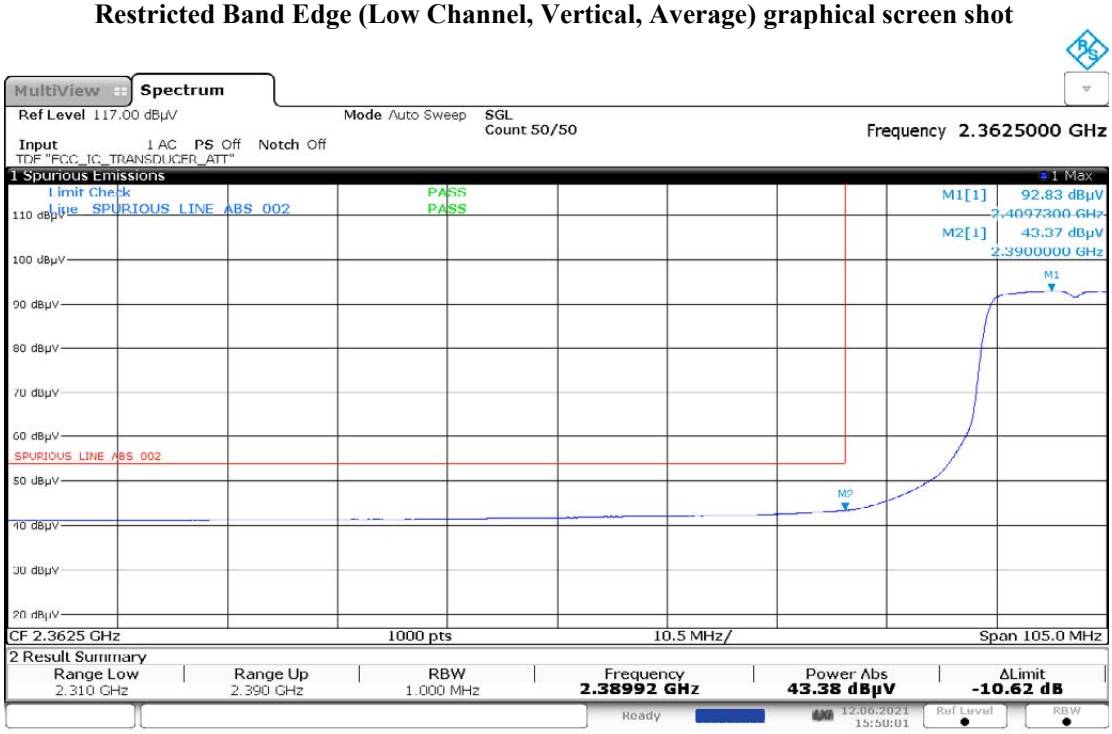
16:15:15 12.06.2021

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



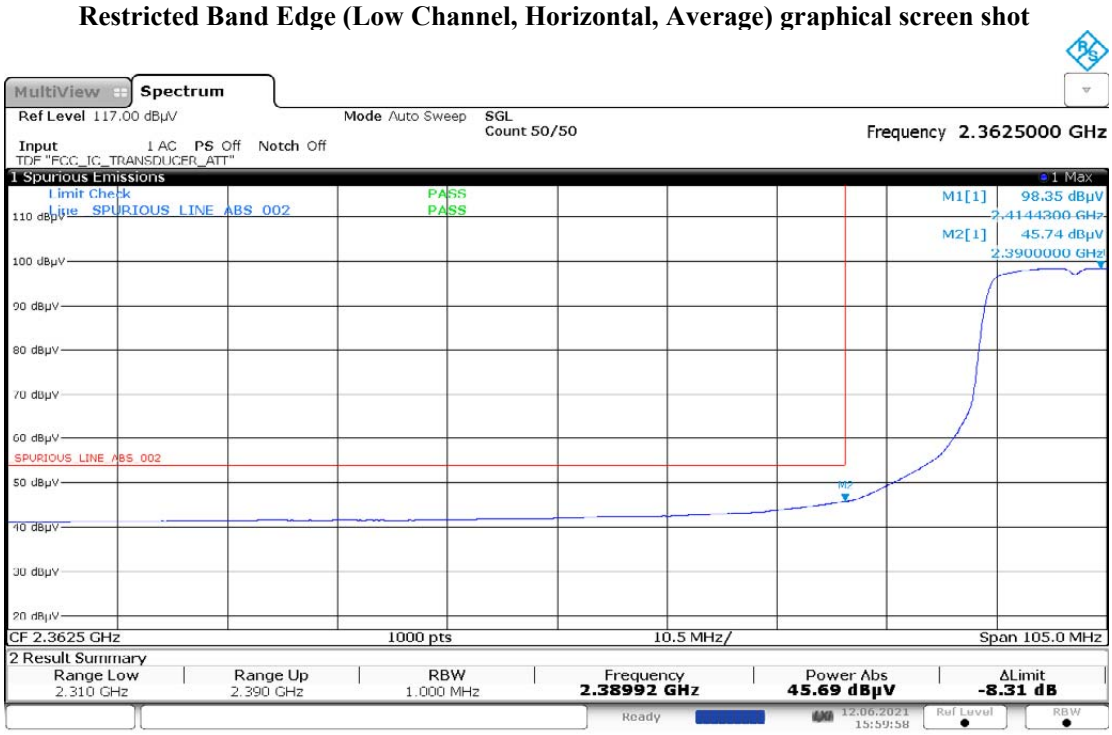
16:18:41 12.06.2021

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



15:50:01 12.06.2021

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



15:59:58 12.06.2021

Test: WIFI SAC Restricted Band Edge
Model Number: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: High Test Frequency: 2462.0000 MHz Test Standard: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11g)

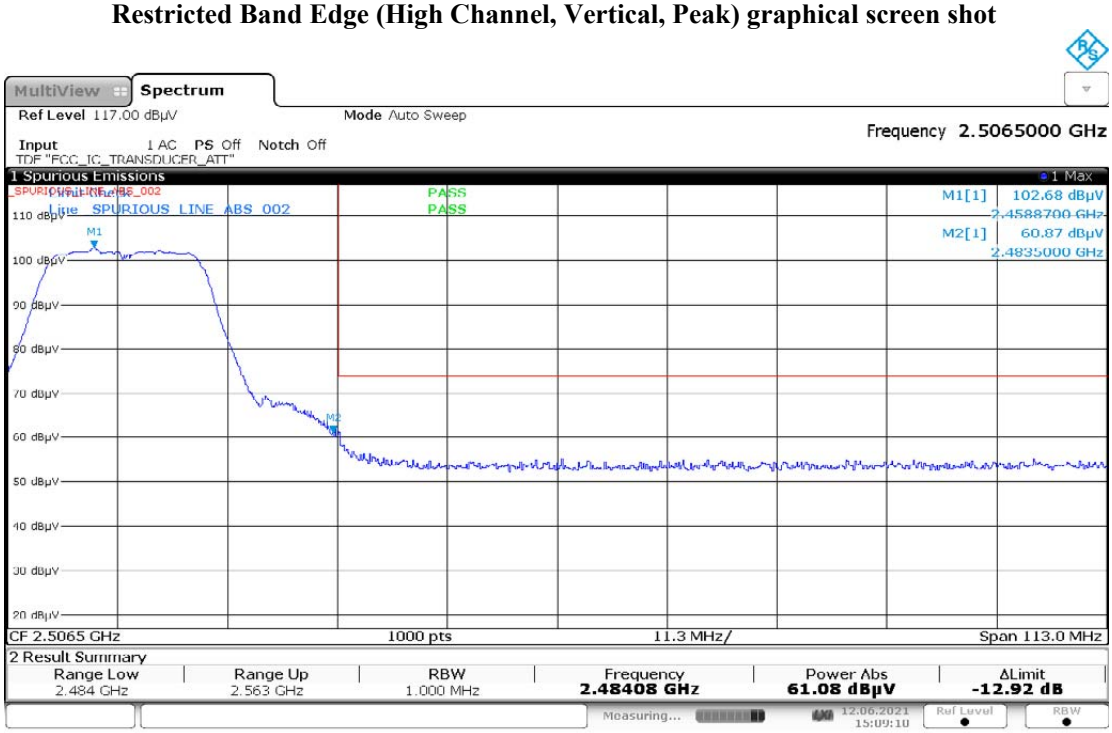
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2483.5000	-	60.8743	43.5244	-	74.0000	54.0000	-	-13.1257	-10.4756	-
Horizontal Radiated Emission Result										
2483.5000	-	65.5972	49.1501	-	74.0000	54.0000	-	-8.4028	-4.8499	-

Remarks: Pass Result	Marginal Result	Fail Result

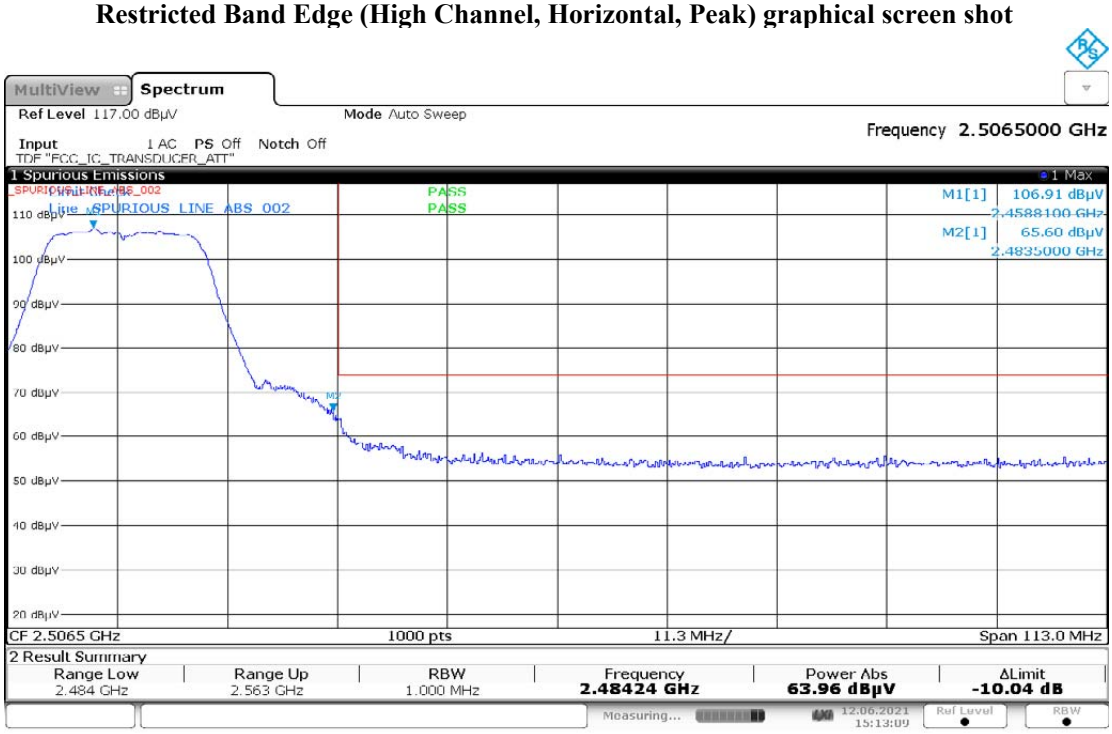
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sat, 12 Jun, 2021**
System MU: 4.03dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



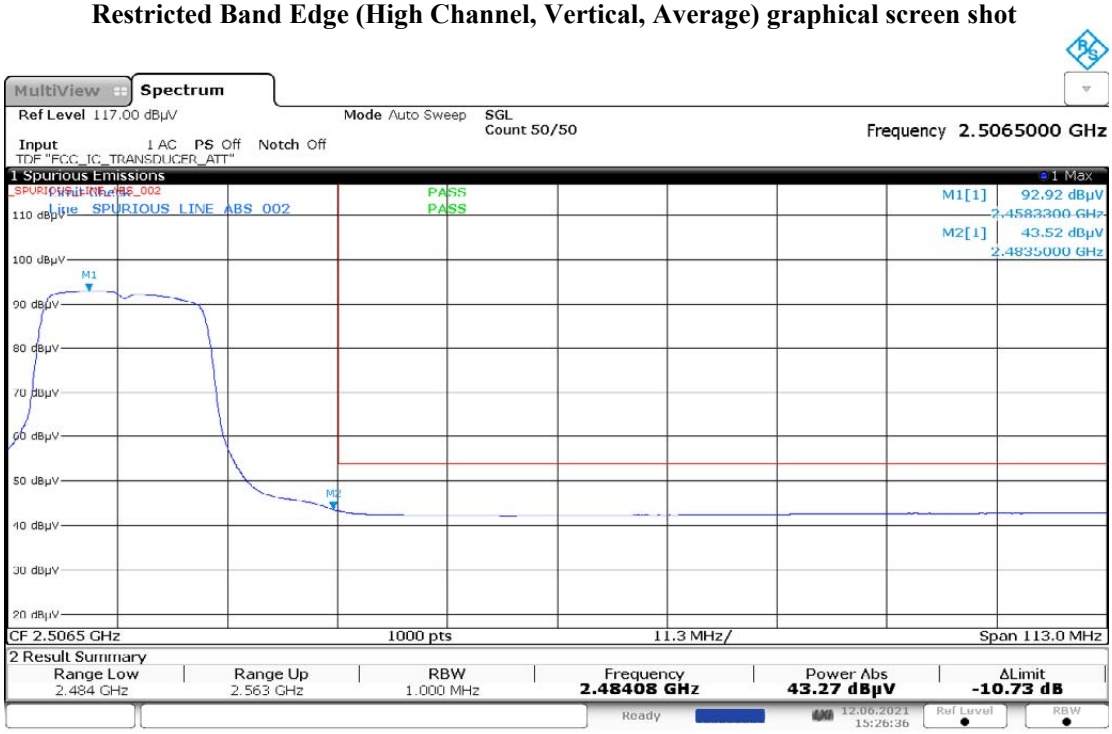
15:09:11 12.06.2021

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



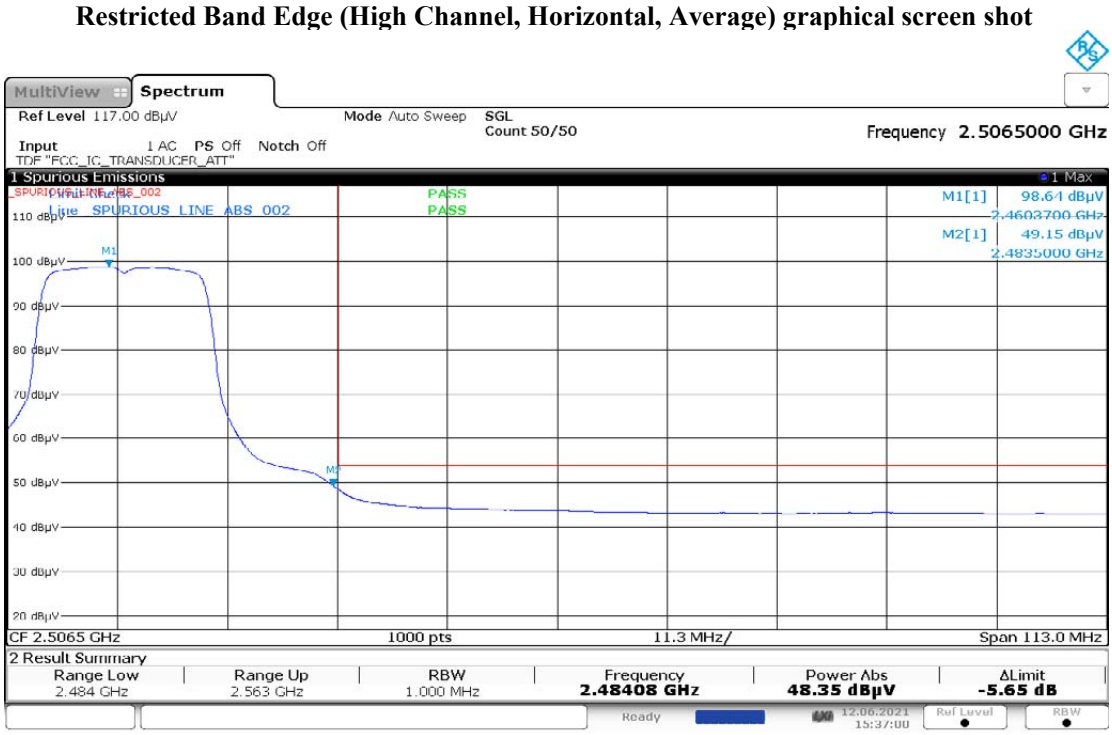
15:13:10 12.06.2021

Restricted Band Edge (High Channel, Vertical, Average) graphical screen shot



15:26:37 12.06.2021

Restricted Band Edge (High Channel, Horizontal, Average) graphical screen shot



15:37:01 12.06.2021

Test: WIFI SAC Restricted Band Edge
Model Number: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: Low Test Frequency: 2412.0000 MHz Test Standard: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11n20)

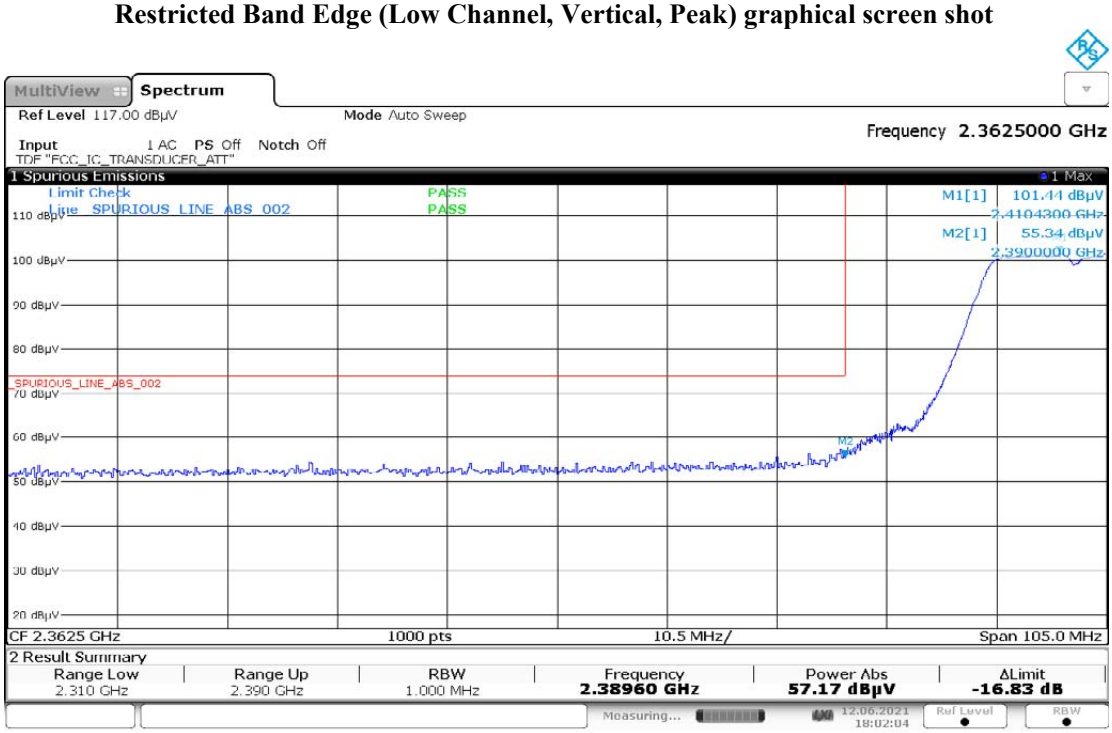
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2390.0000	-	55.2000	43.0708	-	74.0000	54.0000	-	-18.8000	-10.9292	-
Horizontal Radiated Emission Result										
2390.0000	-	57.6879	44.8553	-	74.0000	54.0000	-	-16.3121	-9.1447	-

Remarks: Pass Result	Marginal Result	Fail Result

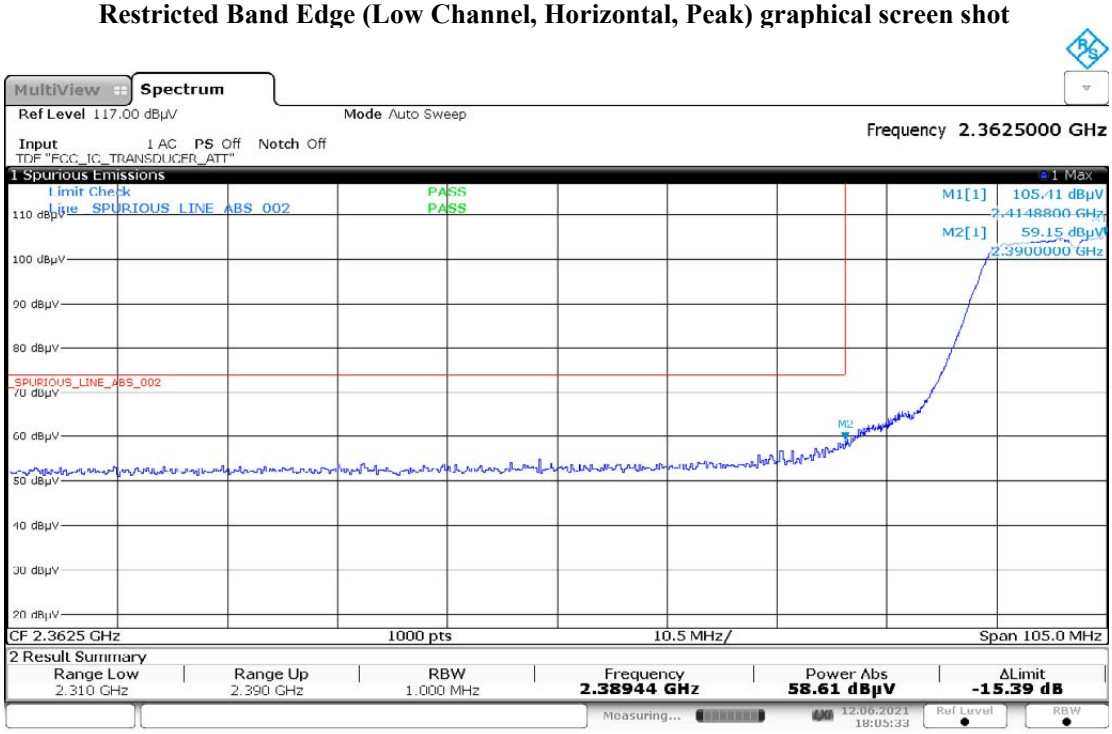
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sat, 12 Jun, 2021**
System MU: 4.03dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



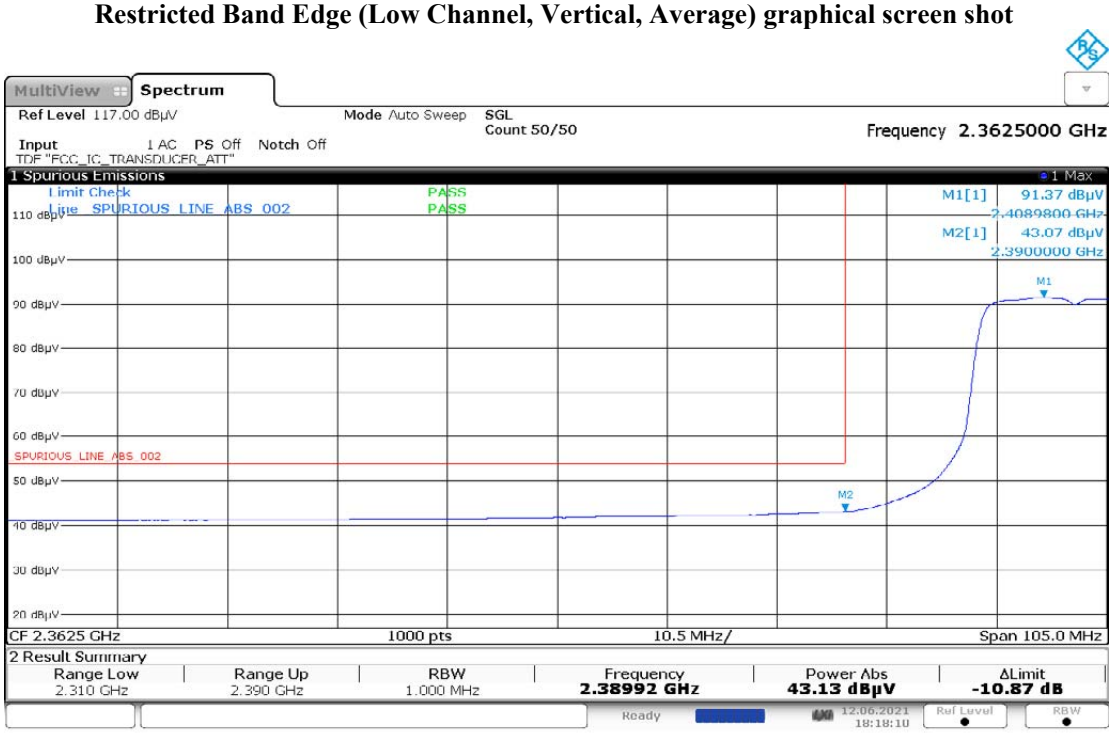
18:02:05 12.06.2021

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



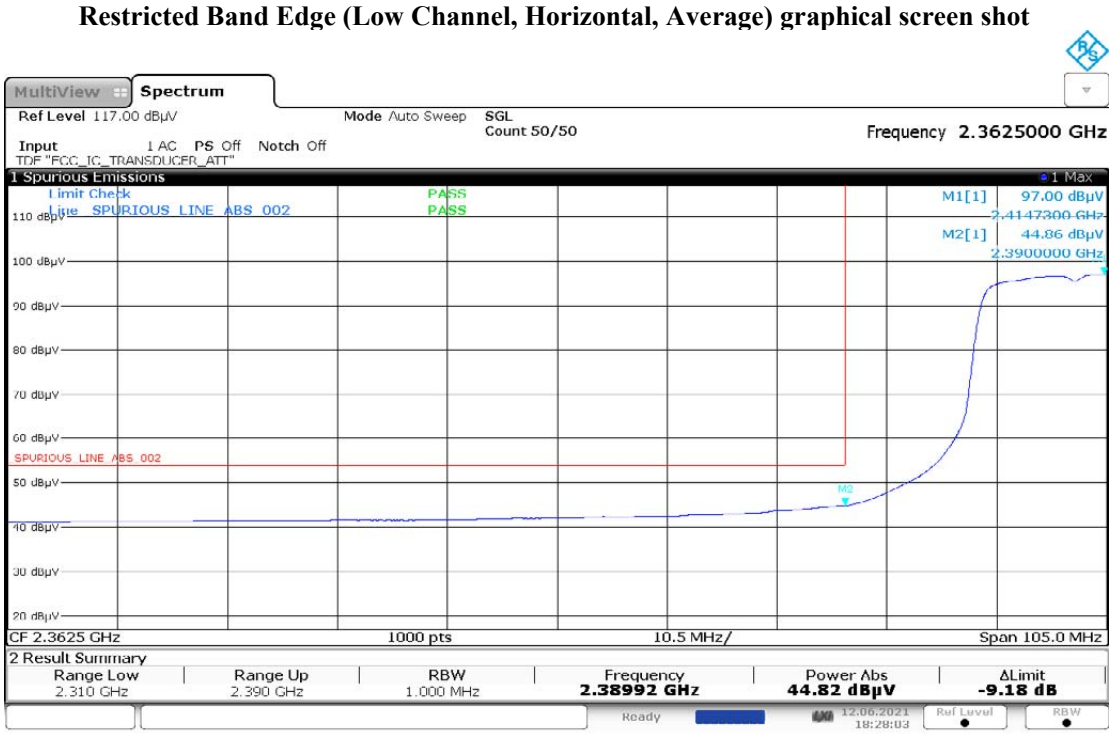
18:05:34 12.06.2021

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



18:18:10 12.06.2021

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



18:28:03 12.06.2021

Test: WIFI SAC Restricted Band Edge
Model Number: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: High Test Frequency: 2462.0000 MHz Test Standard: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11n20)

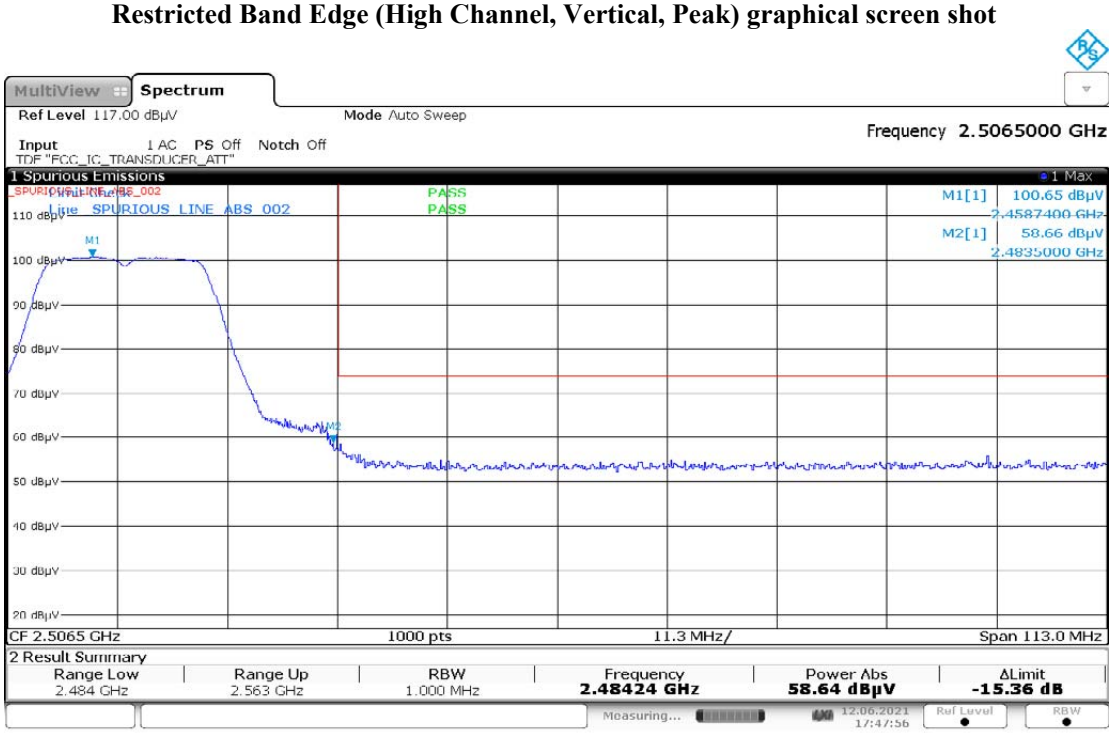
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2483.5000	-	58.5188	42.9938	-	74.0000	54.0000	-	-15.4812	-11.0062	-
Horizontal Radiated Emission Result										
2483.5000	-	62.1349	49.2172	-	74.0000	54.0000	-	-11.8651	-4.7828	-

Remarks: Pass Result	Marginal Result	Fail Result

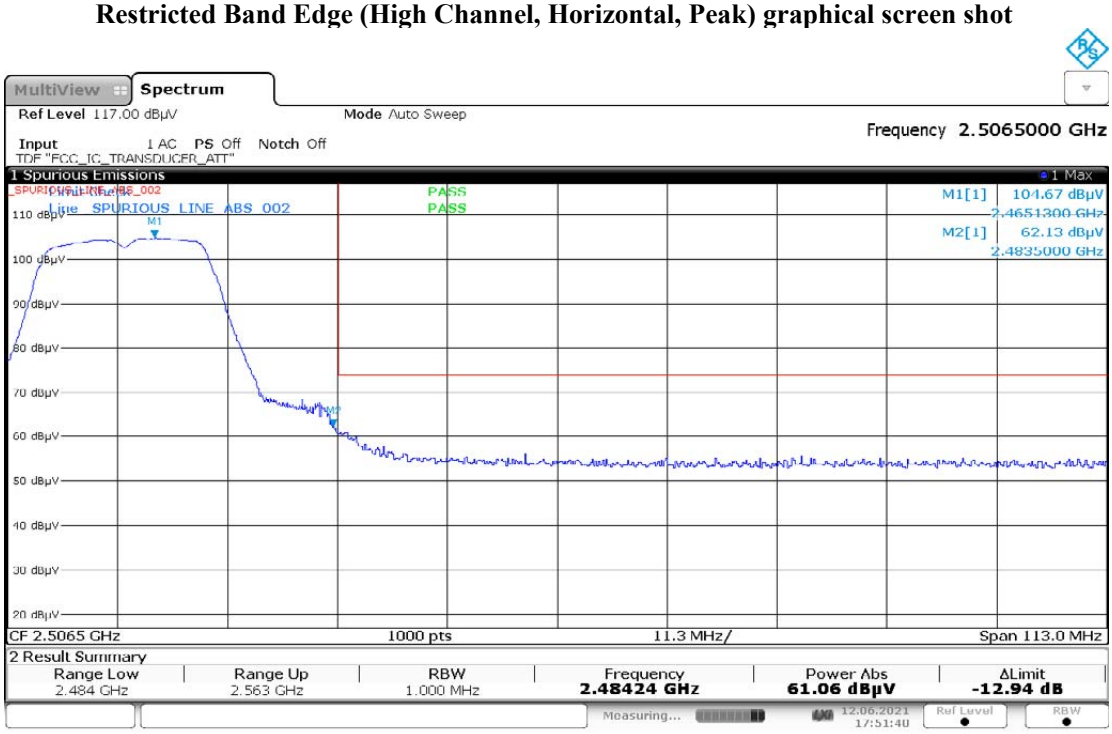
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sat, 12 Jun, 2021**
System MU: 4.03dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



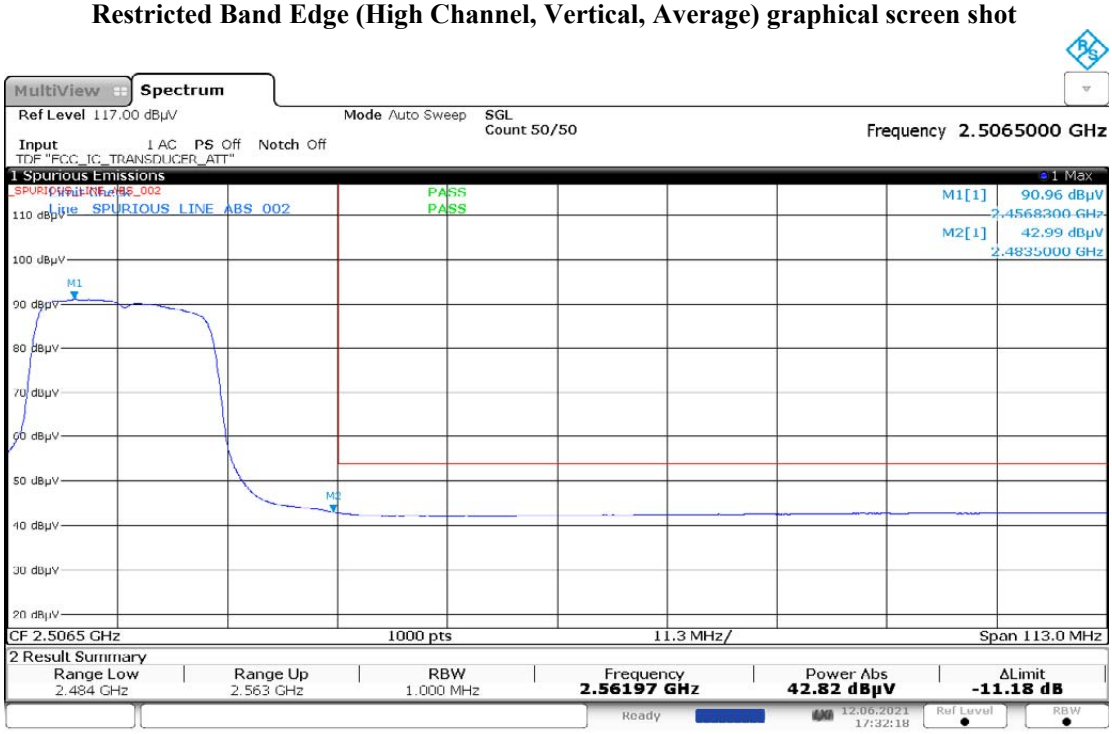
17:47:56 12.06.2021

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



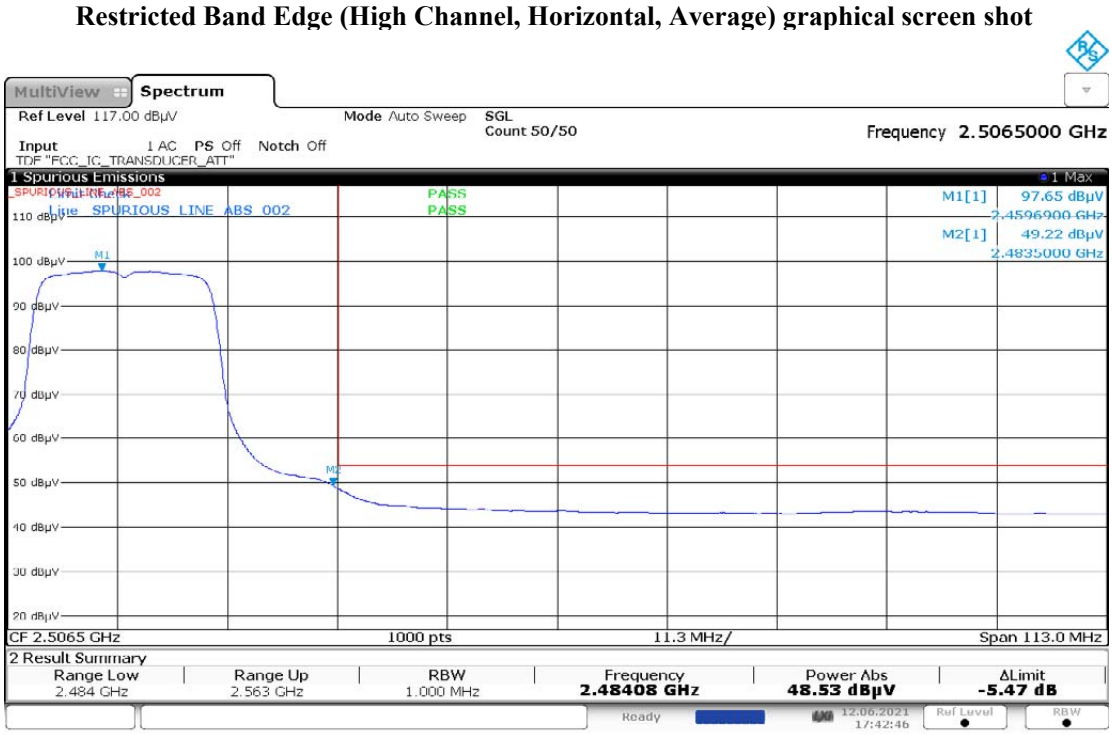
17:51:40 12.06.2021

Restricted Band Edge (High Channel, Vertical, Average) graphical screen shot



17:32:18 12.06.2021

Restricted Band Edge (High Channel, Horizontal, Average) graphical screen shot



17:42:46 12.06.2021

Test: WIFI SAC Restricted Band Edge
Model Number: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: Low Test Frequency: 2422.0000 MHz Test Standard: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11n40)

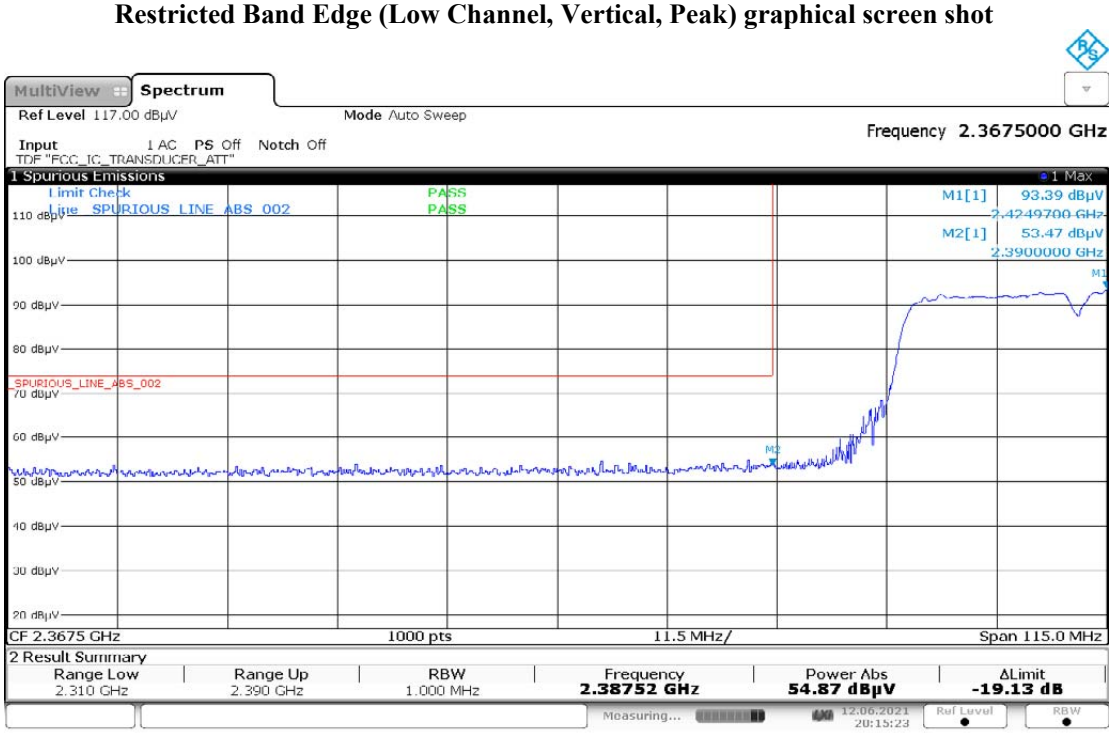
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2390.0000	-	53.4686	42.4391	-	74.0000	54.0000	-	-20.5314	-11.5609	-
Horizontal Radiated Emission Result										
2390.0000	-	56.9605	44.5396	-	74.0000	54.0000	-	-17.0395	-9.4604	-

Remarks: Pass Result	Marginal Result	Fail Result

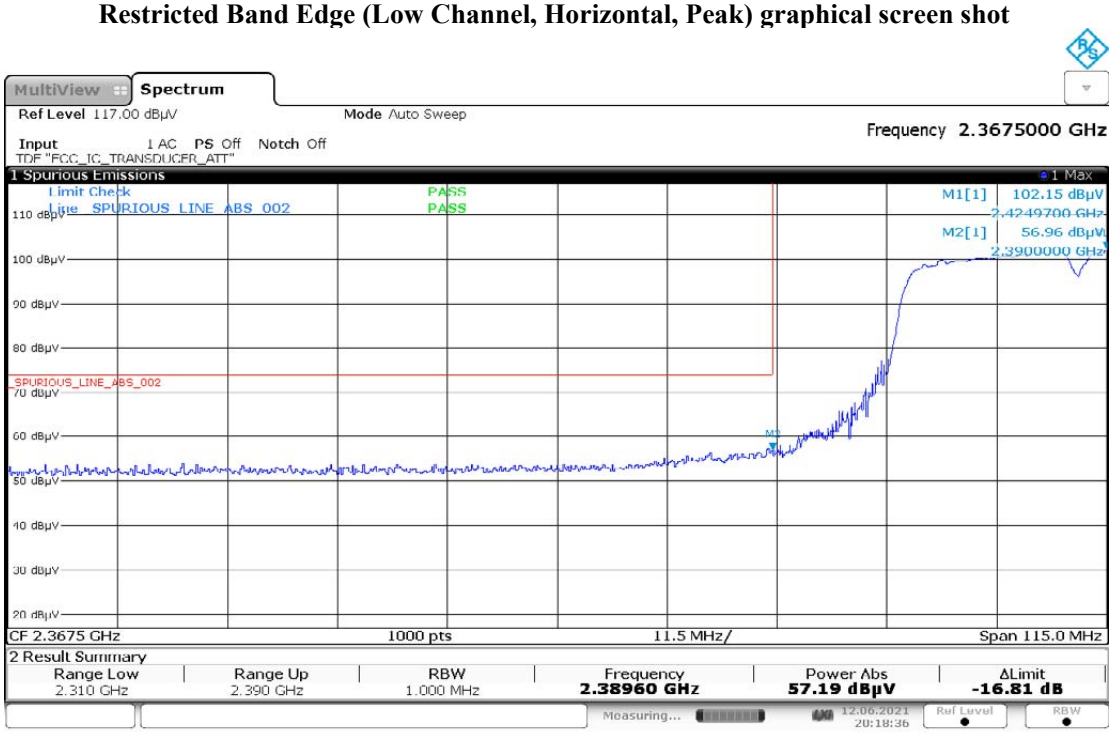
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sat, 12 Jun, 2021**
System MU: 4.03dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



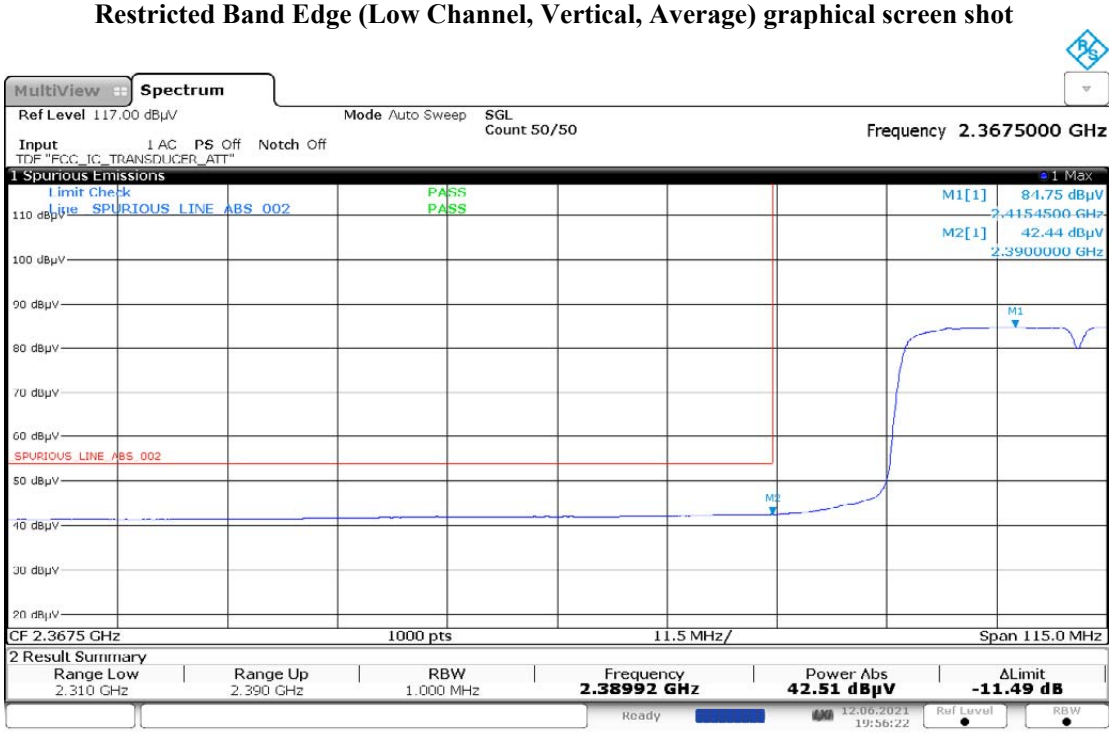
20:15:24 12.06.2021

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



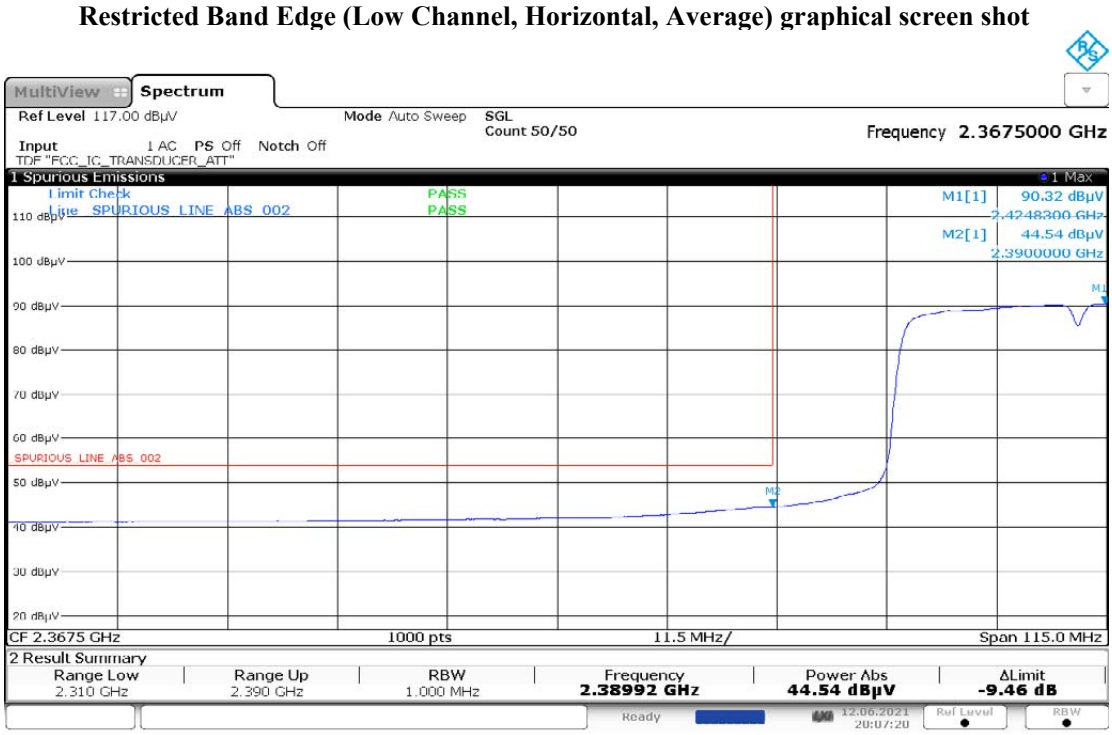
20:18:37 12.06.2021

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



19:56:22 12.06.2021

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



20:07:20 12.06.2021

Test: WIFI SAC Restricted Band Edge
Model Number: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: High Test Frequency: 2452.0000 MHz Test Standard: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11n40)

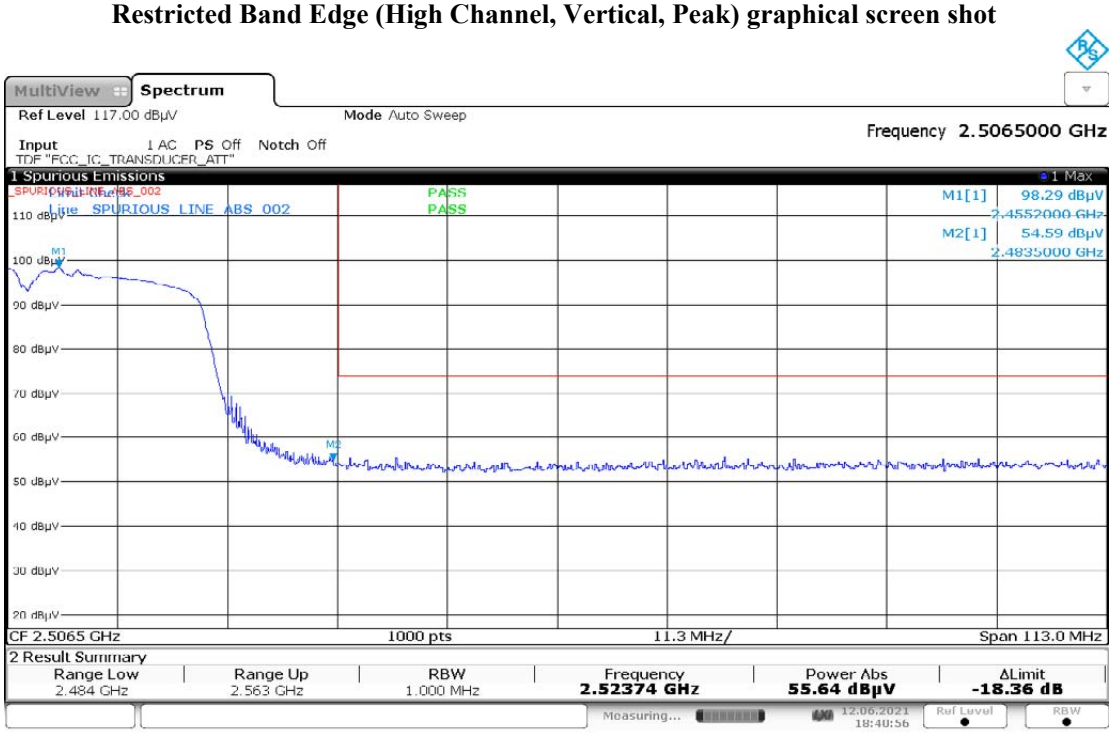
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
2483.5000	-	54.5879	43.7780	-	74.0000	54.0000	-	-19.4121	-10.2220	-
Horizontal Radiated Emission Result										
2483.5000	-	60.1858	47.1528	-	74.0000	54.0000	-	-13.8142	-6.8472	-

Remarks: Pass Result	Marginal Result	Fail Result

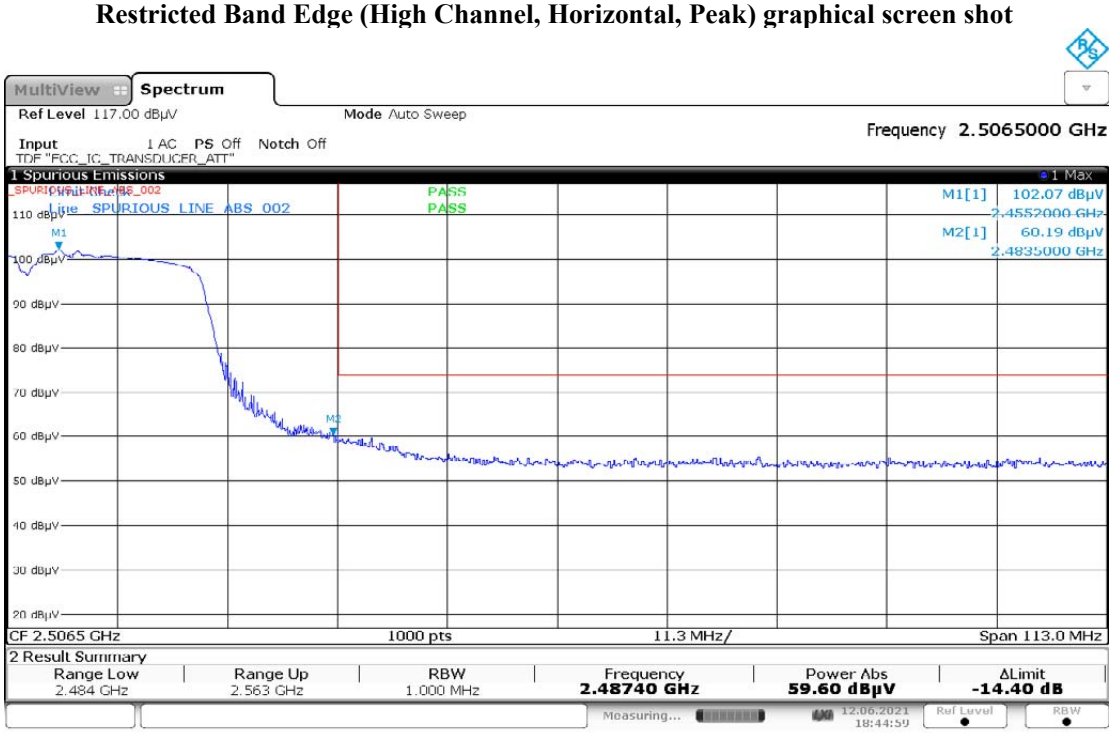
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sat, 12 Jun, 2021**
System MU: 4.03dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



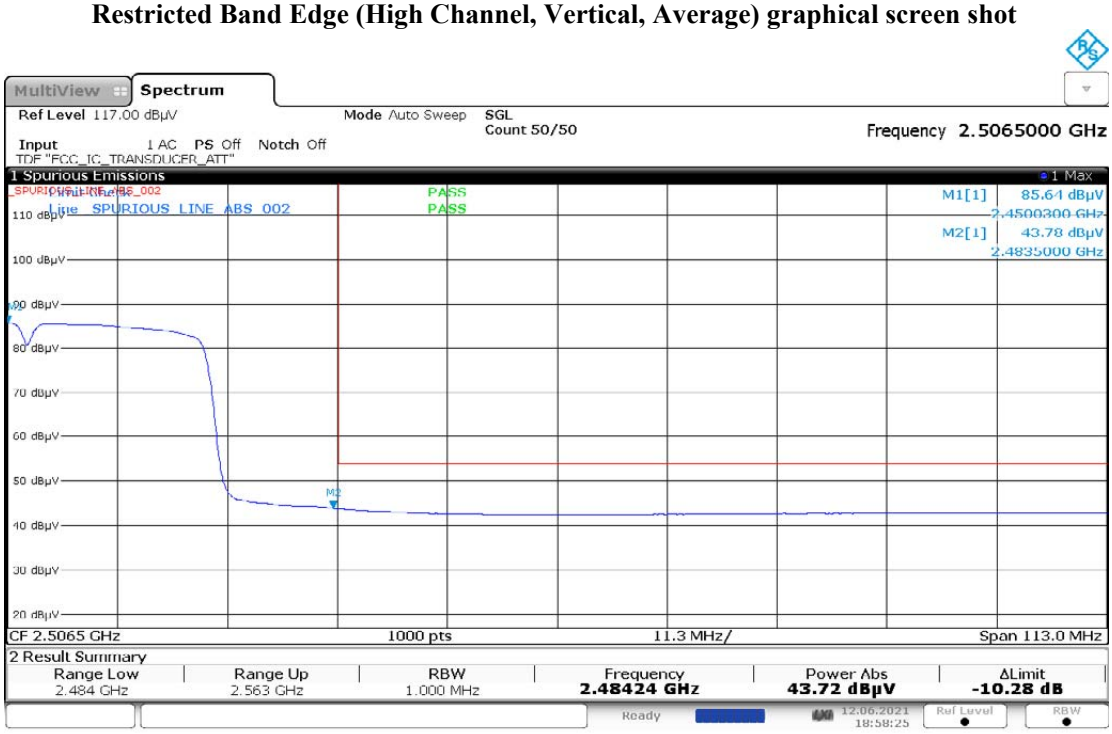
18:40:56 12.06.2021

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



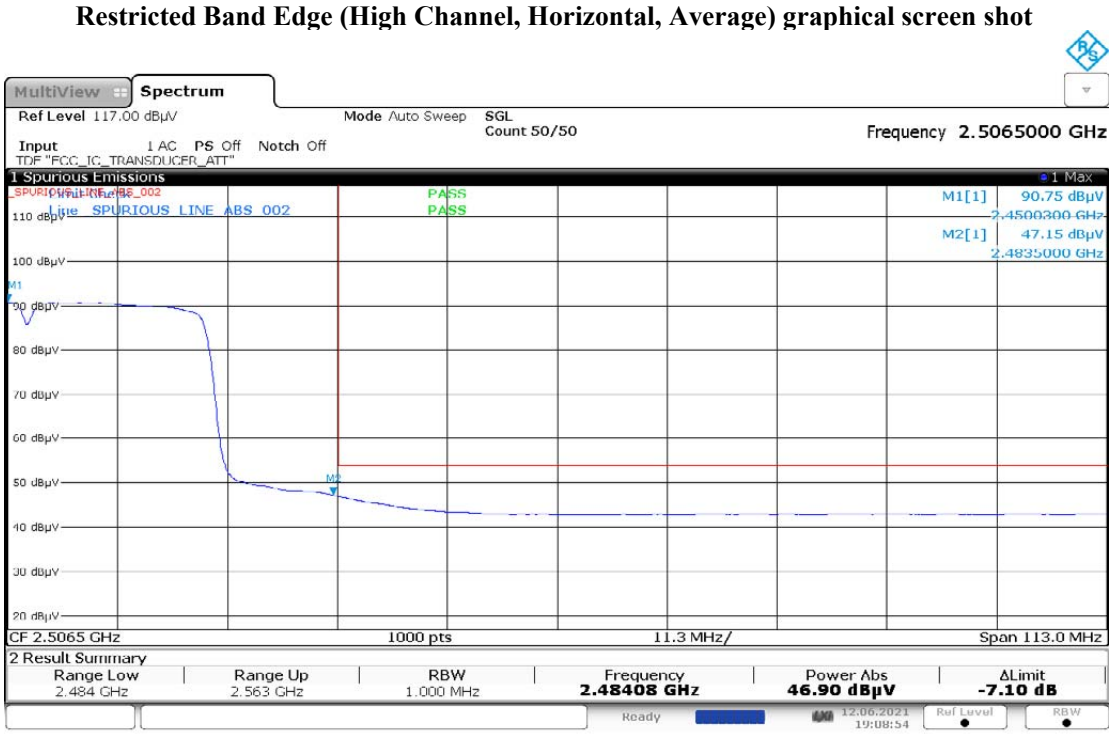
18:44:59 12.06.2021

Restricted Band Edge (High Channel, Vertical, Average) graphical screen shot



18:58:25 12.06.2021

Restricted Band Edge (High Channel, Horizontal, Average) graphical screen shot



19:08:54 12.06.2021

Test: WIFI SAC Transmitter Radiated Emission
Model#: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: Low Test Frequency: 2412.0000 MHz Test Standard: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11b)

Radiated Emission (Low Channel) tabular data

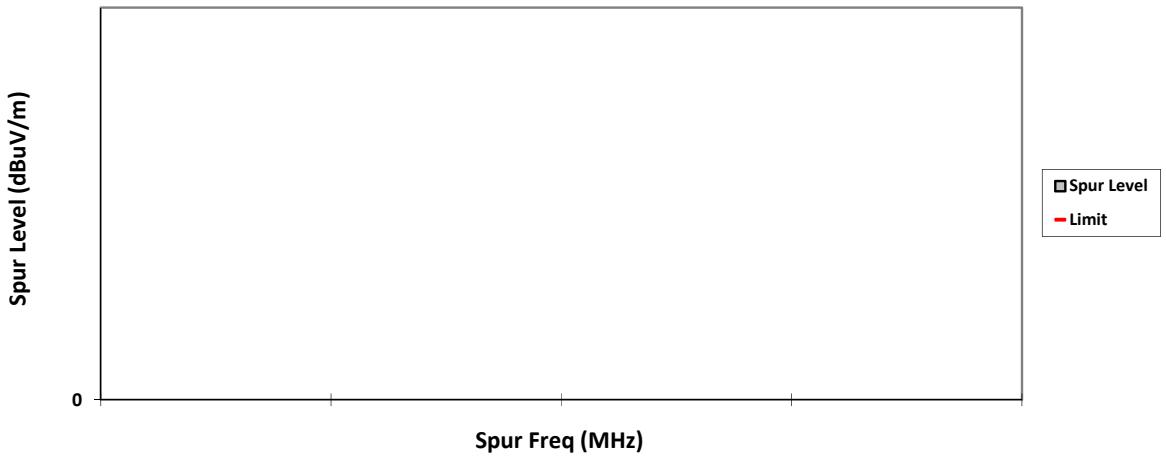
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4824.1600	-	53.2006	43.5188	-	74.0000	54.0000	-	20.7994	10.4812	-
Horizontal Radiated Emission Result										
4823.5900	-	52.4719	42.2116	-	74.0000	54.0000	-	21.5281	11.7884	-

Remarks: Pass Result	Marginal Result	Fail Result

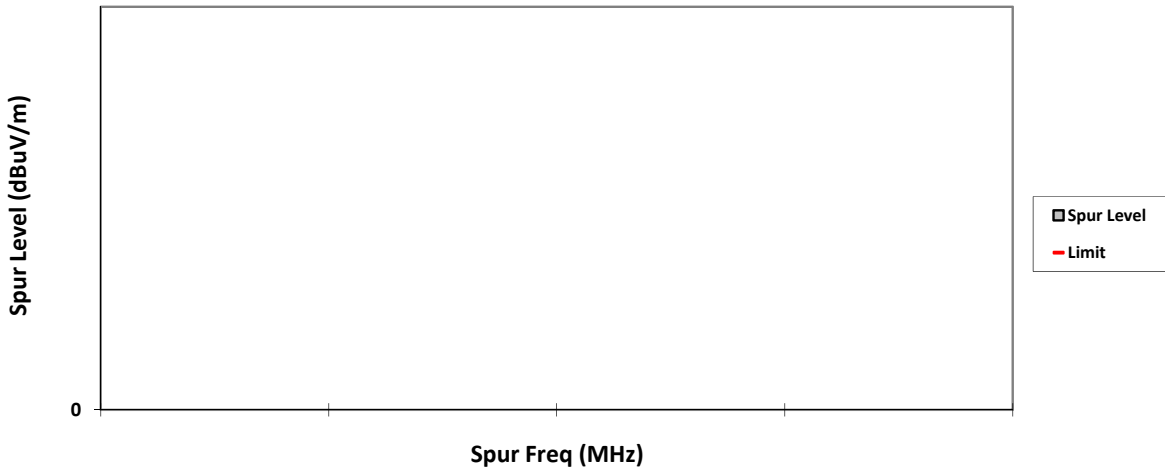
Temperature (degC): 24.3 **Humidity (%): 69.6**
Test Performed by: Nazrin&Qawiman **Test Date: Tue, 1 Jun, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

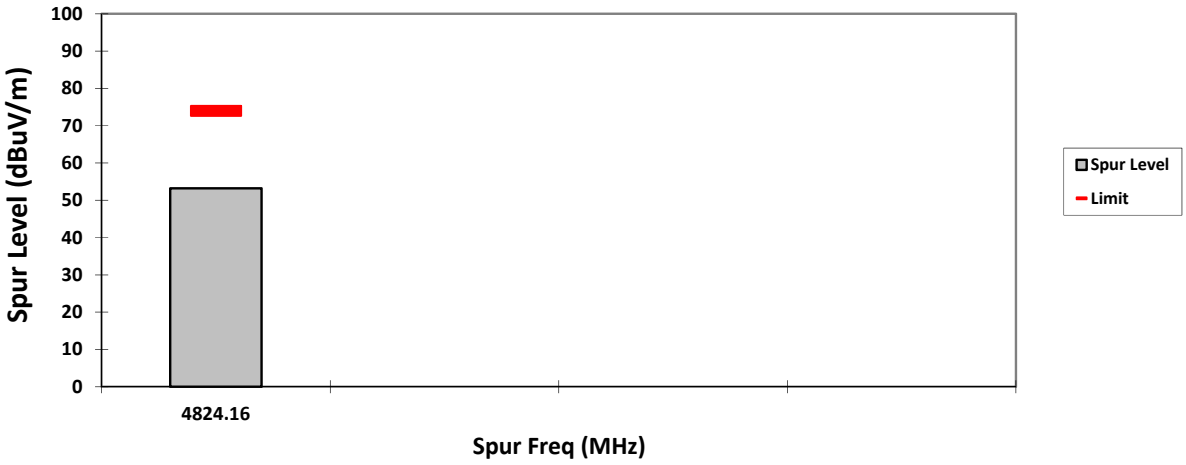
VERTICAL, QPK



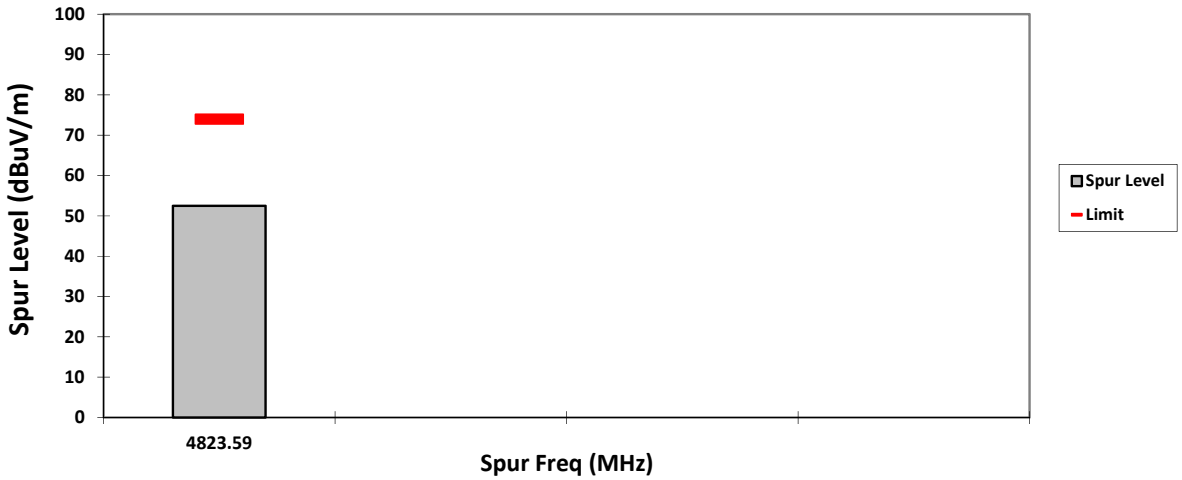
HORIZONTAL, QPK



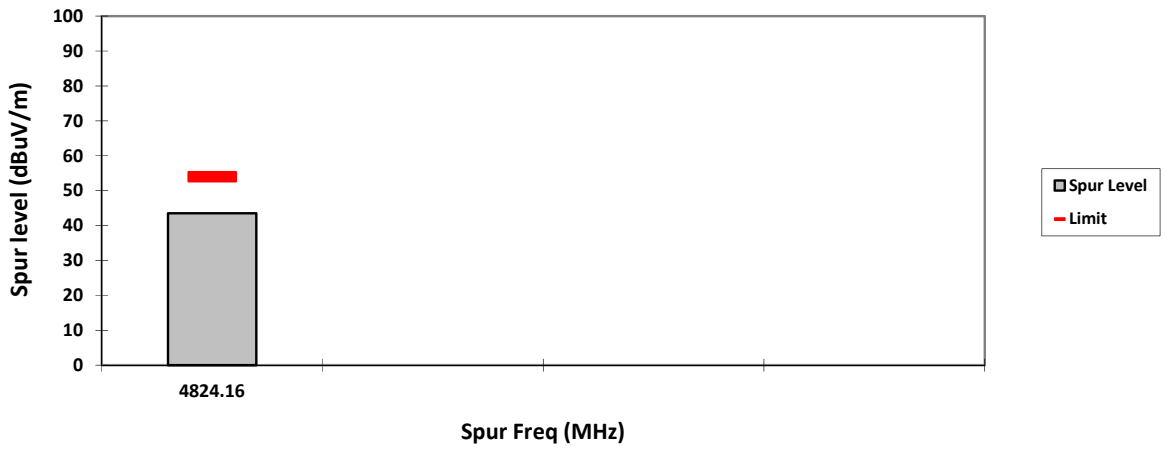
VERTICAL, PK



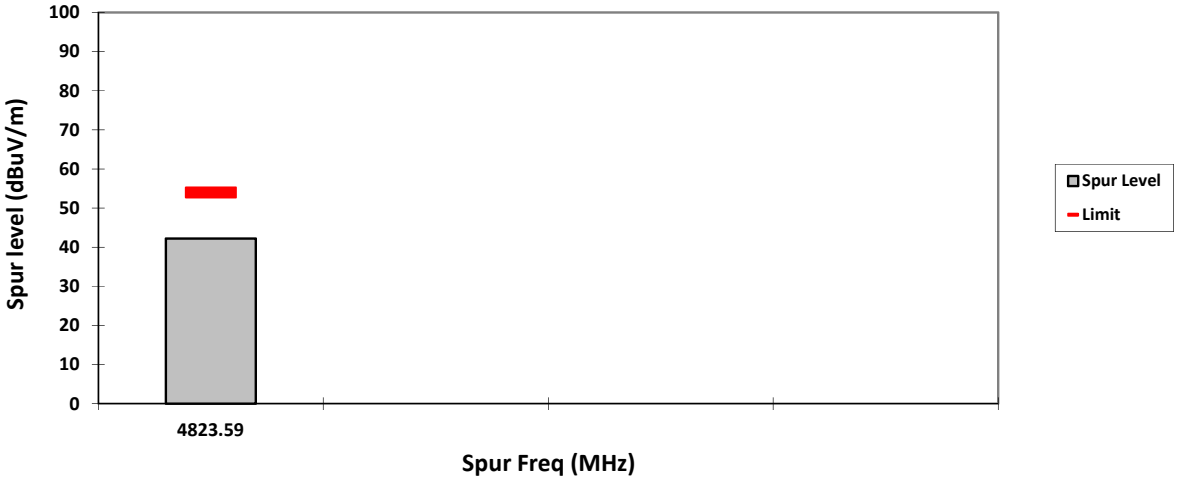
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: Mid Test Frequency: 2437.0000 MHz Test Standard: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11b)

Radiated Emission (Mid Channel) tabular data

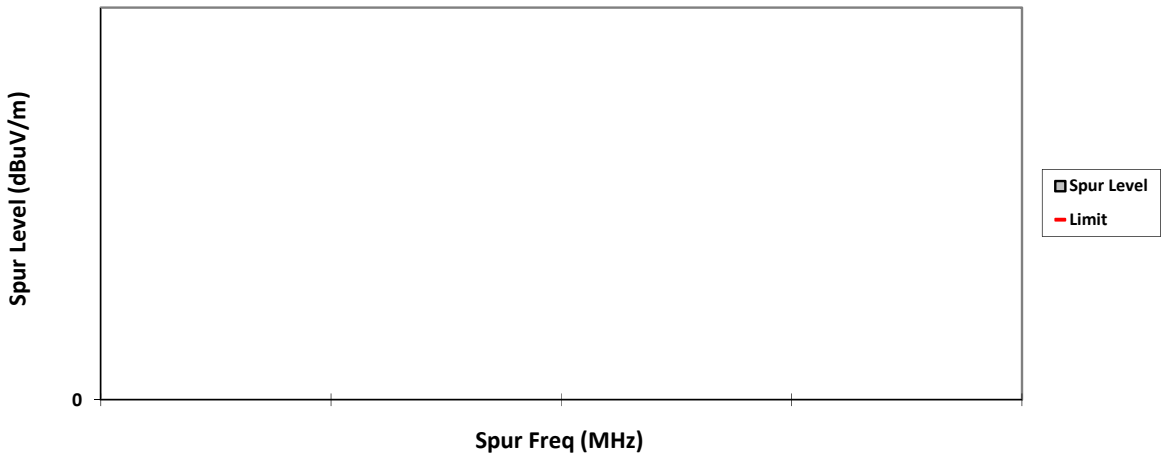
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4874	-	48.7933**	-	-	74.0	-	-	25.2067	-	-
7311	-	52.9299**	-	-	74.0	-	-	21.0701	-	-
9748	-	56.5411**	-	-	74.0	-	-	17.4589	-	-
12185	-	59.1628**	-	-	74.0	-	-	14.8372	-	-
14622	-	64.3721**	-	-	74.0	-	-	9.6279	-	-
17059	-	64.7337**	-	-	74.0	-	-	9.2663	-	-
19496	-	40.4277**	-	-	74.0	-	-	33.5723	-	-
21933	-	43.7191**	-	-	74.0	-	-	30.2809	-	-
24370	-	42.2236**	-	-	74.0	-	-	31.7764	-	-
Horizontal Radiated Emission Result										
4874	-	48.4260**	-	-	74.0	-	-	25.5740	-	-
7311	-	54.0432**	-	-	74.0	-	-	19.9568	-	-
9748	-	57.3499**	-	-	74.0	-	-	16.6501	-	-
12185	-	59.3071**	-	-	74.0	-	-	14.6929	-	-
14622	-	62.8777**	-	-	74.0	-	-	11.1223	-	-
17059	-	62.8692**	-	-	74.0	-	-	11.1308	-	-
19496	-	41.0812**	-	-	74.0	-	-	32.9188	-	-
21933	-	44.0726**	-	-	74.0	-	-	29.9274	-	-
24370	-	43.4523**	-	-	74.0	-	-	30.5477	-	-

Remarks: Pass Result	Marginal Result	Fail Result

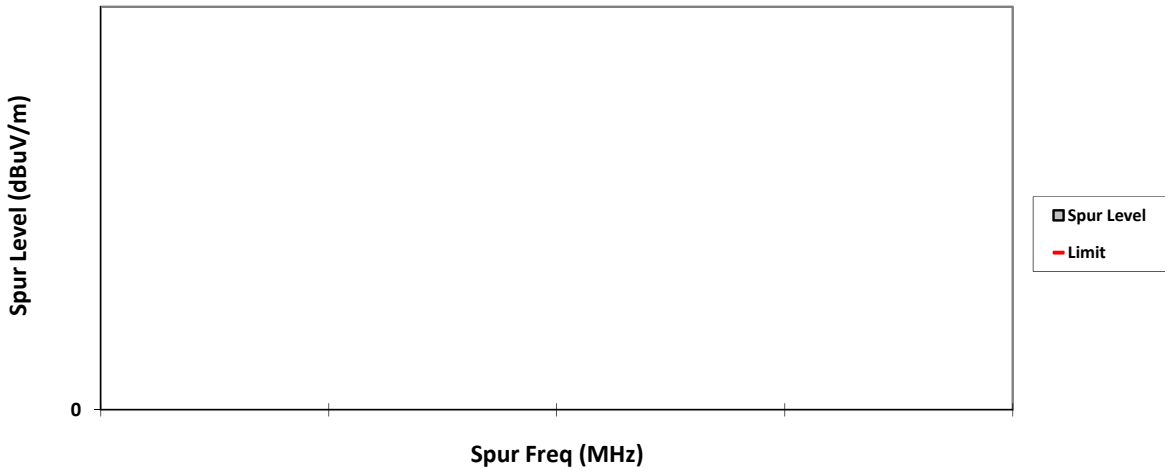
Temperature (degC): 24.3 **Humidity (%): 69.6**
Test Performed by: Nazrin&Qawiman **Test Date: Tue, 1 Jun, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

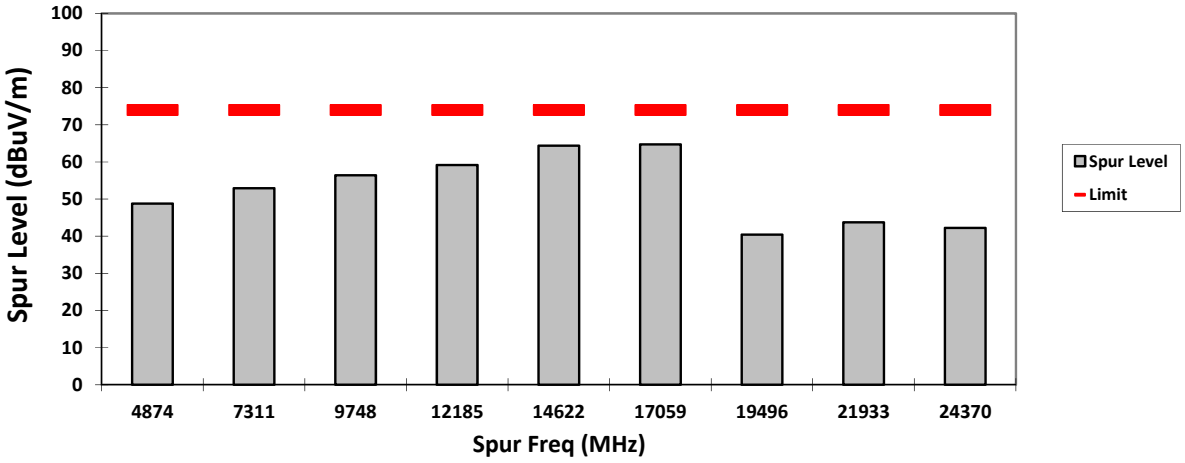
VERTICAL, QPK



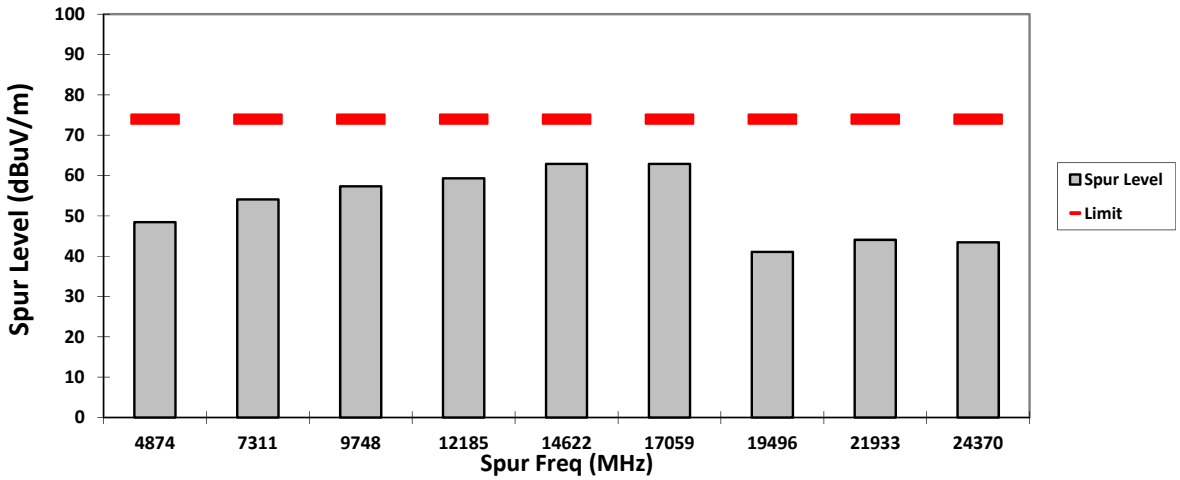
HORIZONTAL, QPK



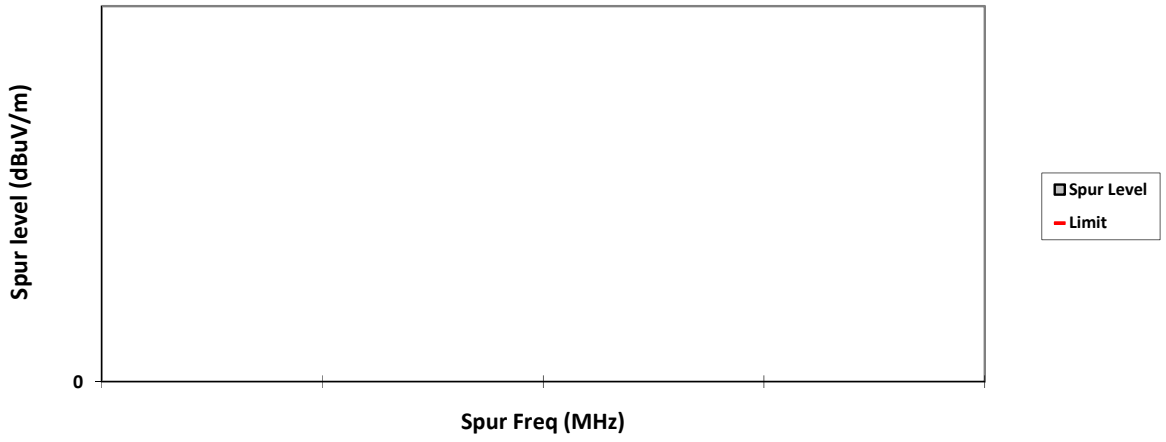
VERTICAL, PK



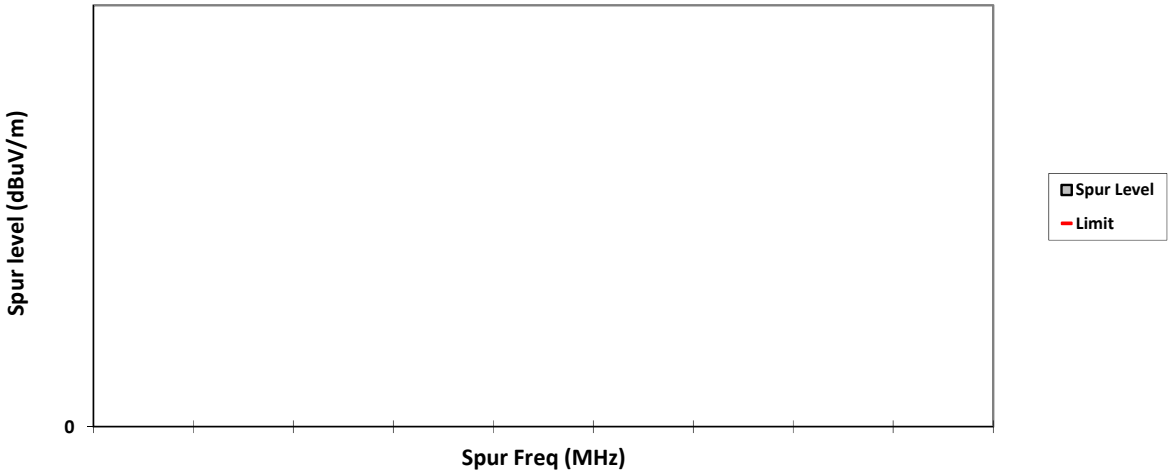
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: High Test Frequency: 2462.0000 MHz Test Standard: ANSI C63.10-2013 Worst Case Plane: X-Plane (802.11b)

Radiated Emission (High Channel) tabular data

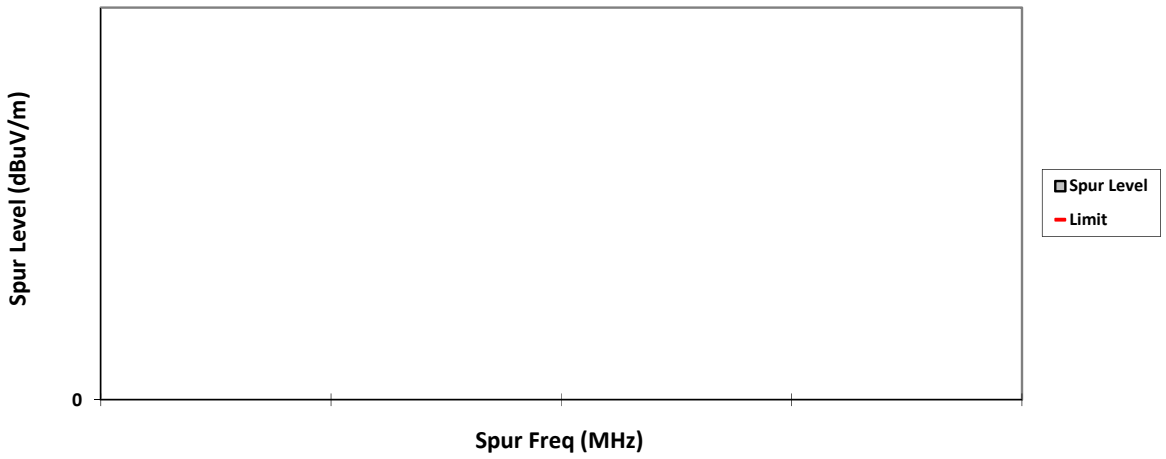
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4924	-	48.6308**	-	-	74.0	-	-	25.3692	-	-
7386	-	53.6944**	-	-	74.0	-	-	20.3056	-	-
9848	-	57.5654**	-	-	74.0	-	-	16.4346	-	-
12310	-	59.9305**	-	-	74.0	-	-	14.0695	-	-
14772	-	61.2660**	-	-	74.0	-	-	12.7340	-	-
17234	-	64.6974**	-	-	74.0	-	-	9.3026	-	-
19696	-	40.4810**	-	-	74.0	-	-	33.5190	-	-
22158	-	41.8441**	-	-	74.0	-	-	32.1559	-	-
24620	-	42.5773**	-	-	74.0	-	-	31.4227	-	-
Horizontal Radiated Emission Result										
4924	-	48.0727**	-	-	74.0	-	-	25.9273	-	-
7386	-	52.5598**	-	-	74.0	-	-	21.4402	-	-
9848	-	55.7754**	-	-	74.0	-	-	18.2246	-	-
12310	-	58.4800**	-	-	74.0	-	-	15.5200	-	-
14772	-	63.2234**	-	-	74.0	-	-	10.7766	-	-
17234	-	63.3612**	-	-	74.0	-	-	10.6388	-	-
19696	-	41.3693**	-	-	74.0	-	-	32.6307	-	-
22158	-	43.0429**	-	-	74.0	-	-	30.9571	-	-
24620	-	45.5816**	-	-	74.0	-	-	28.4184	-	-

Remarks: Pass Result	Marginal Result	Fail Result

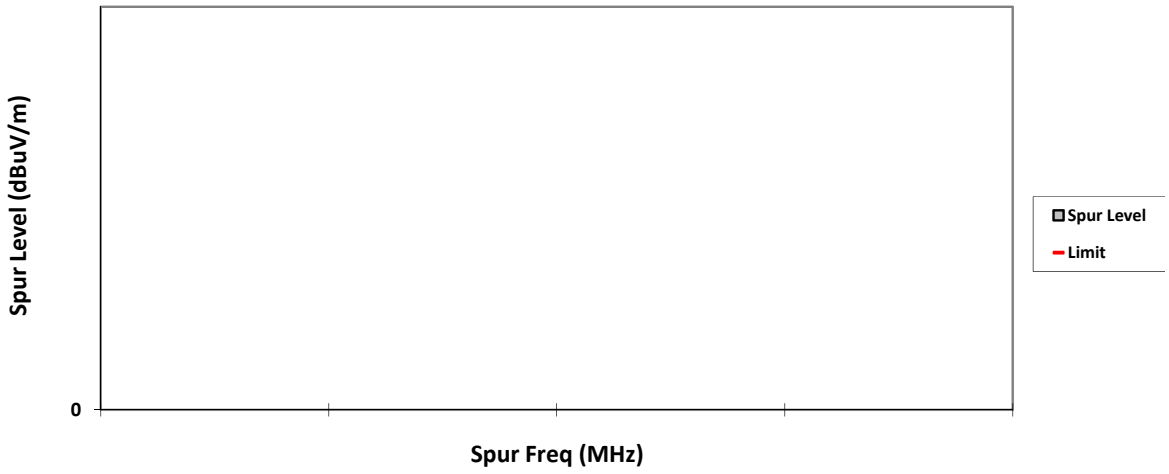
Temperature (degC): 24.3 **Humidity (%): 69.6**
Test Performed by: Nazrin&Qawiman **Test Date: Tue, 1 Jun, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

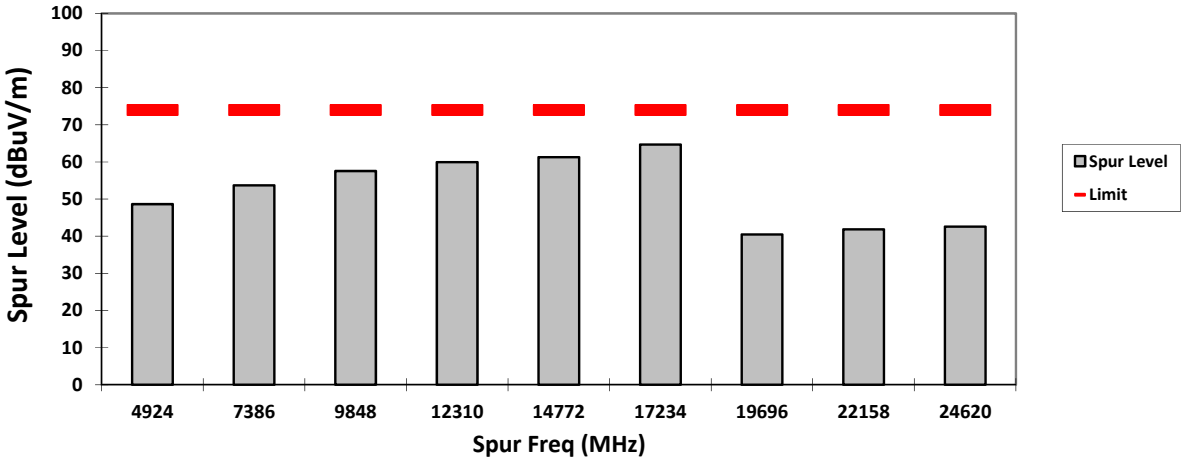
VERTICAL, QPK



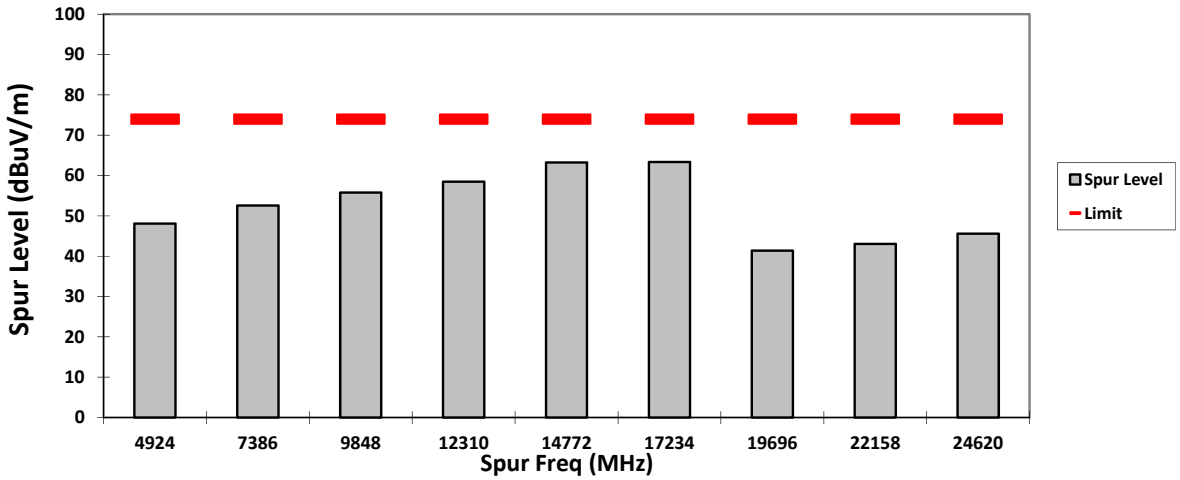
HORIZONTAL, QPK



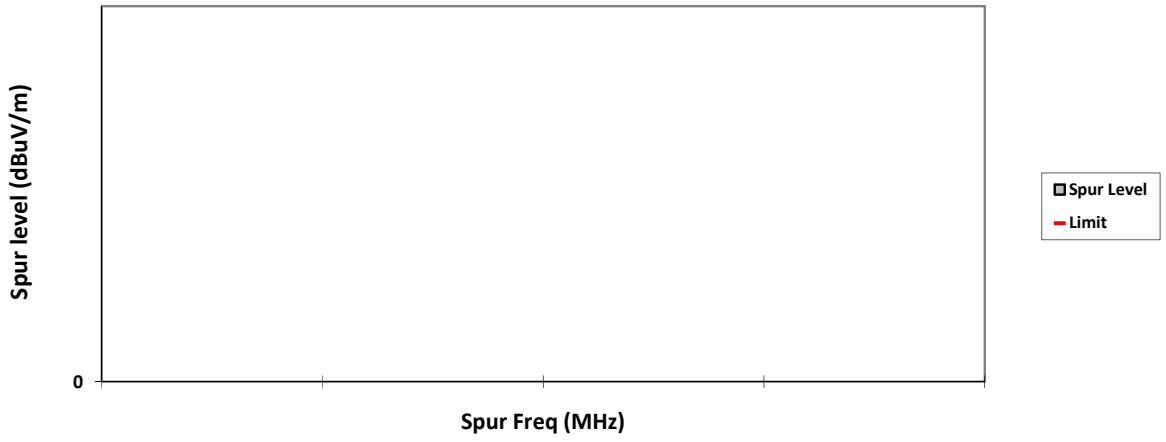
VERTICAL, PK



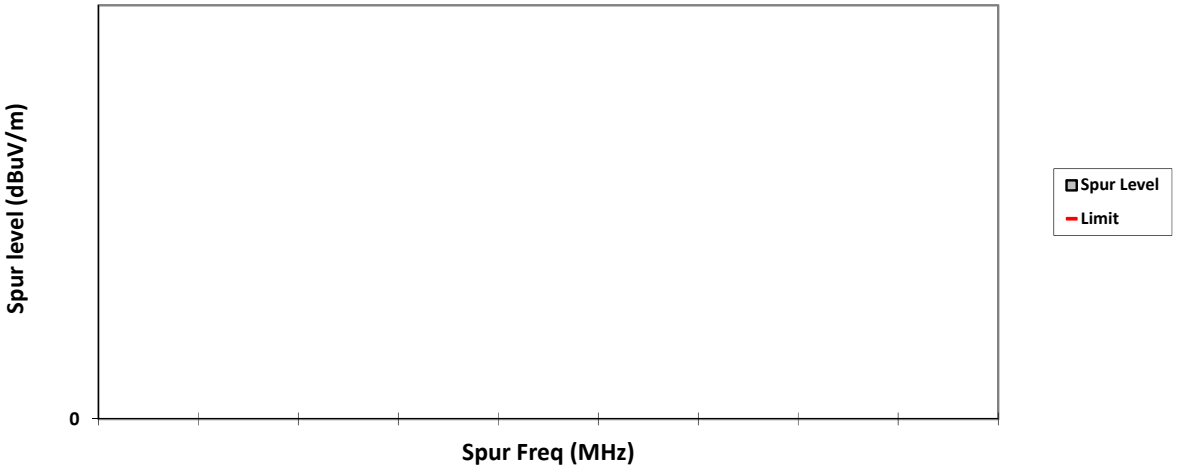
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: Low Test Frequency: 2412.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11g)

Radiated Emission (Low Channel) tabular data

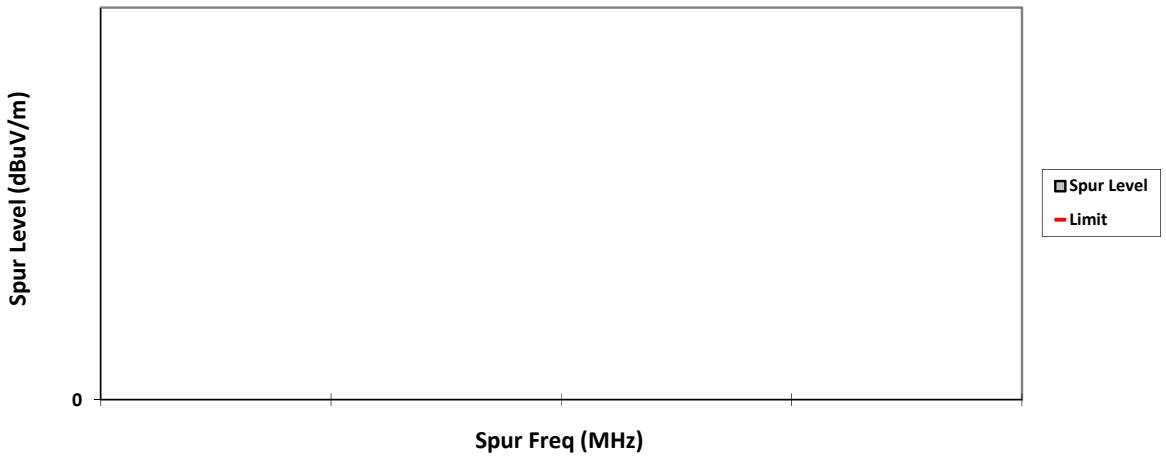
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4824	-	48.7289**	-	-	74.0	-	-	25.2711	-	-
7236	-	53.5046**	-	-	74.0	-	-	20.4954	-	-
9648	-	55.6977**	-	-	74.0	-	-	18.3023	-	-
12060	-	59.4180**	-	-	74.0	-	-	14.5820	-	-
14472	-	62.3214**	-	-	74.0	-	-	11.6786	-	-
16884	-	63.5879**	-	-	74.0	-	-	10.4121	-	-
19296	-	41.1602**	-	-	74.0	-	-	32.8398	-	-
21708	-	41.9361**	-	-	74.0	-	-	32.0639	-	-
24120	-	41.7210**	-	-	74.0	-	-	32.2790	-	-
Horizontal Radiated Emission Result										
4824	-	47.8873**	-	-	74.0	-	-	26.1127	-	-
7236	-	52.6332**	-	-	74.0	-	-	21.3668	-	-
9648	-	56.4681**	-	-	74.0	-	-	17.5319	-	-
12060	-	59.2799**	-	-	74.0	-	-	14.7201	-	-
14472	-	61.7931**	-	-	74.0	-	-	12.2069	-	-
16884	-	63.1797**	-	-	74.0	-	-	10.8203	-	-
19296	-	40.9292**	-	-	74.0	-	-	33.0708	-	-
21708	-	41.0206**	-	-	74.0	-	-	32.9794	-	-
24120	-	41.1109**	-	-	74.0	-	-	32.8891	-	-

Remarks: Pass Result	Marginal Result	Fail Result

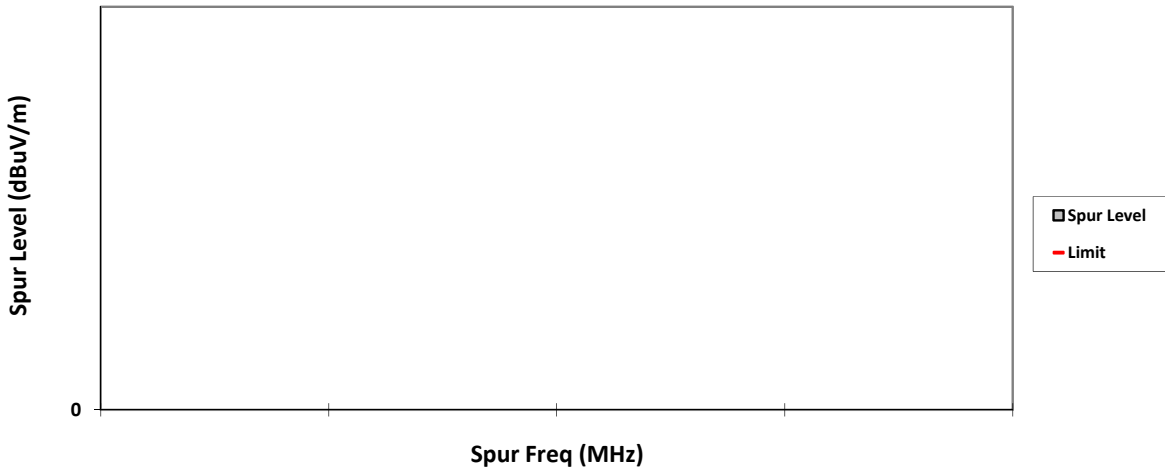
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sun, 13 Jun, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

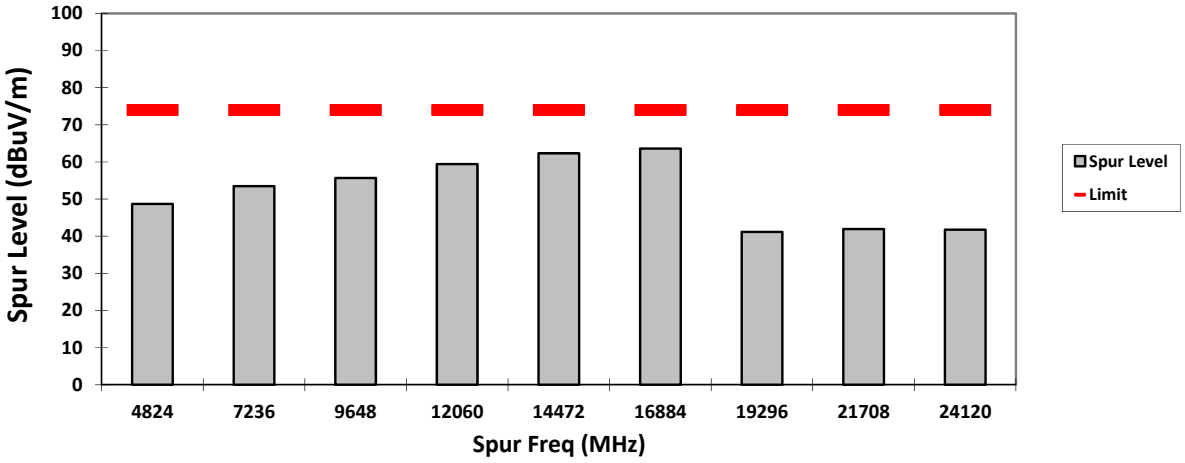
VERTICAL, QPK



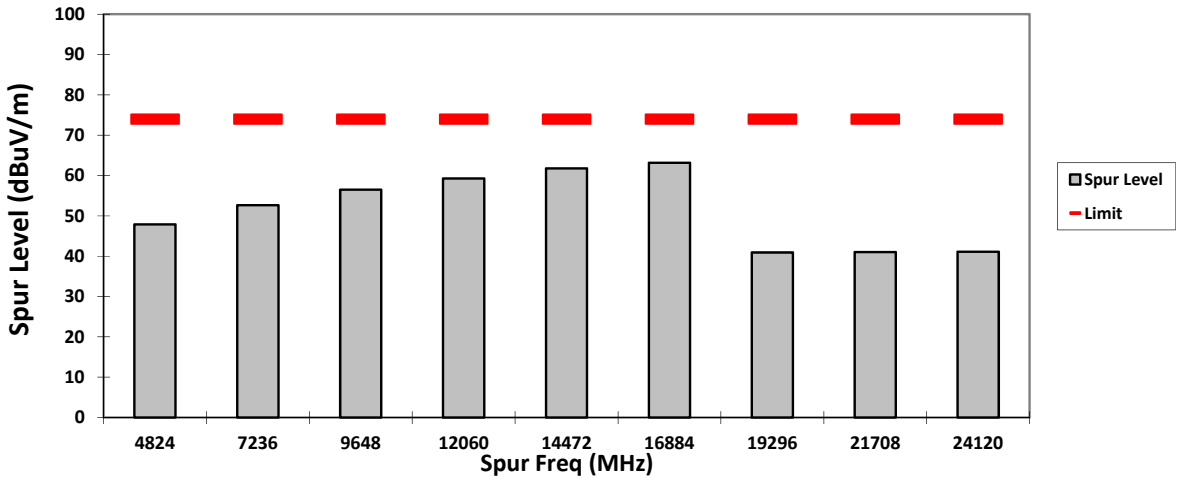
HORIZONTAL, QPK



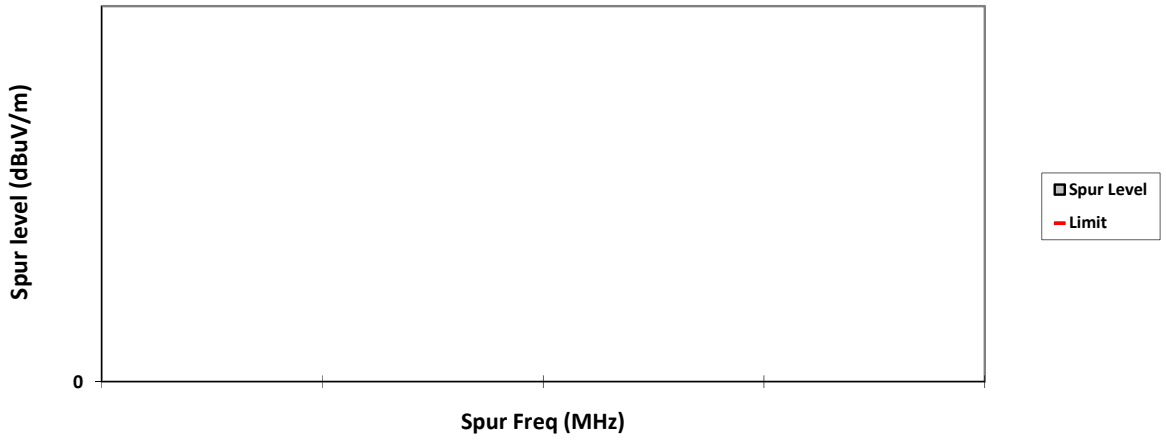
VERTICAL, PK



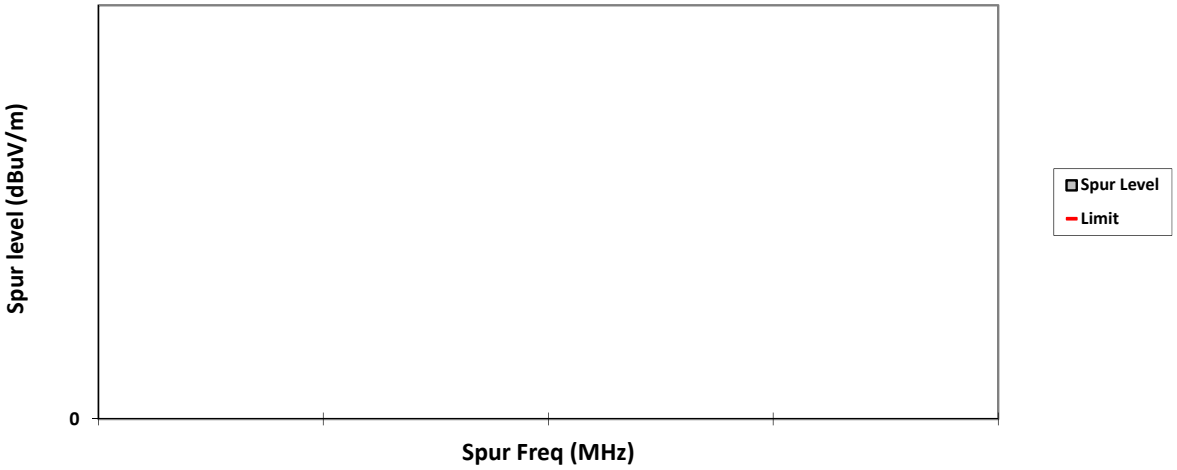
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: Mid Test Frequency: 2437.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11g)

Radiated Emission (Mid Channel) tabular data

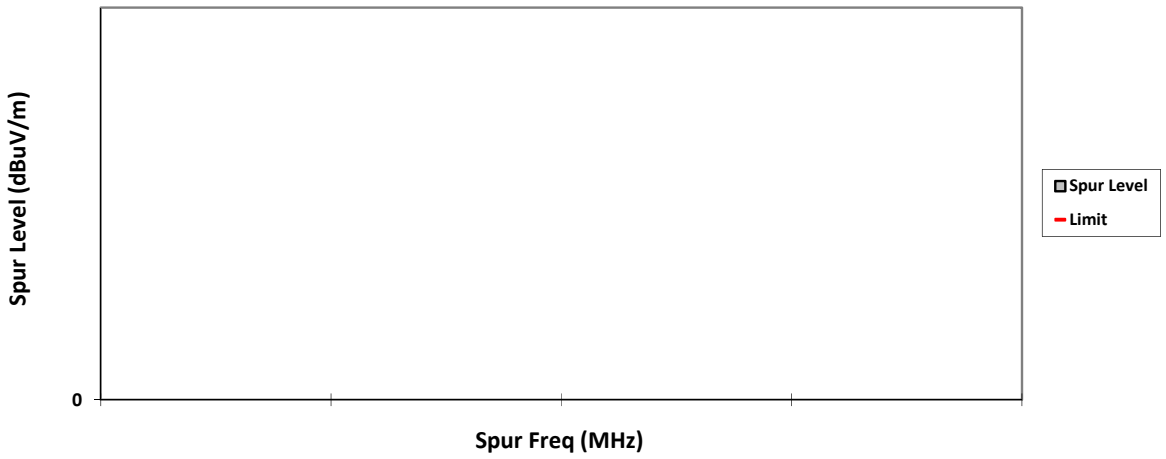
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4874	-	49.8623**	-	-	74.0	-	-	24.1377	-	-
7311	-	52.3751**	-	-	74.0	-	-	21.6249	-	-
9748	-	56.9424**	-	-	74.0	-	-	17.0576	-	-
12185	-	59.4611**	-	-	74.0	-	-	14.5389	-	-
14622	-	60.7605**	-	-	74.0	-	-	13.2395	-	-
17059	-	63.8978**	-	-	74.0	-	-	10.1022	-	-
19496	-	41.5002**	-	-	74.0	-	-	32.4998	-	-
21933	-	44.9572**	-	-	74.0	-	-	29.0428	-	-
24370	-	41.4515**	-	-	74.0	-	-	32.5485	-	-
Horizontal Radiated Emission Result										
4874	-	48.3297**	-	-	74.0	-	-	25.6703	-	-
7311	-	52.6951**	-	-	74.0	-	-	21.3049	-	-
9748	-	57.3616**	-	-	74.0	-	-	16.6384	-	-
12185	-	59.2798**	-	-	74.0	-	-	14.7202	-	-
14622	-	61.3488**	-	-	74.0	-	-	12.6512	-	-
17059	-	64.2550**	-	-	74.0	-	-	9.7450	-	-
19496	-	40.0306**	-	-	74.0	-	-	33.9694	-	-
21933	-	43.1722**	-	-	74.0	-	-	30.8278	-	-
24370	-	42.1108**	-	-	74.0	-	-	31.8892	-	-

Remarks: Pass Result	Marginal Result	Fail Result

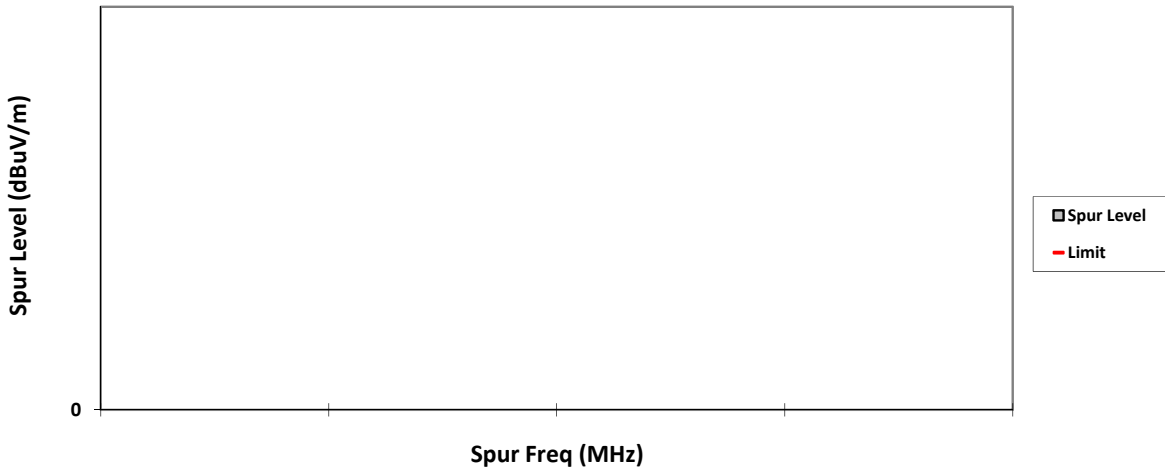
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sun, 13 Jun, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

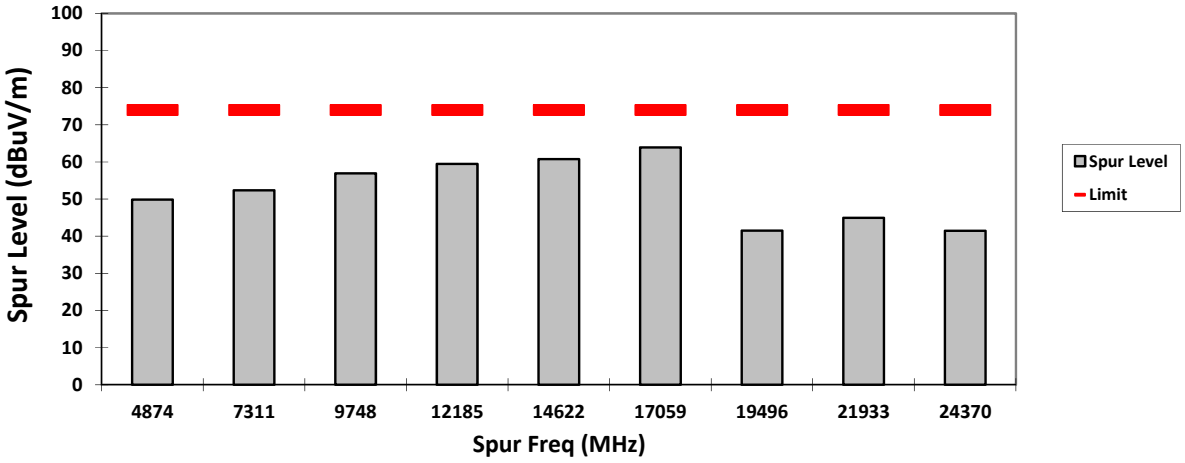
VERTICAL, QPK



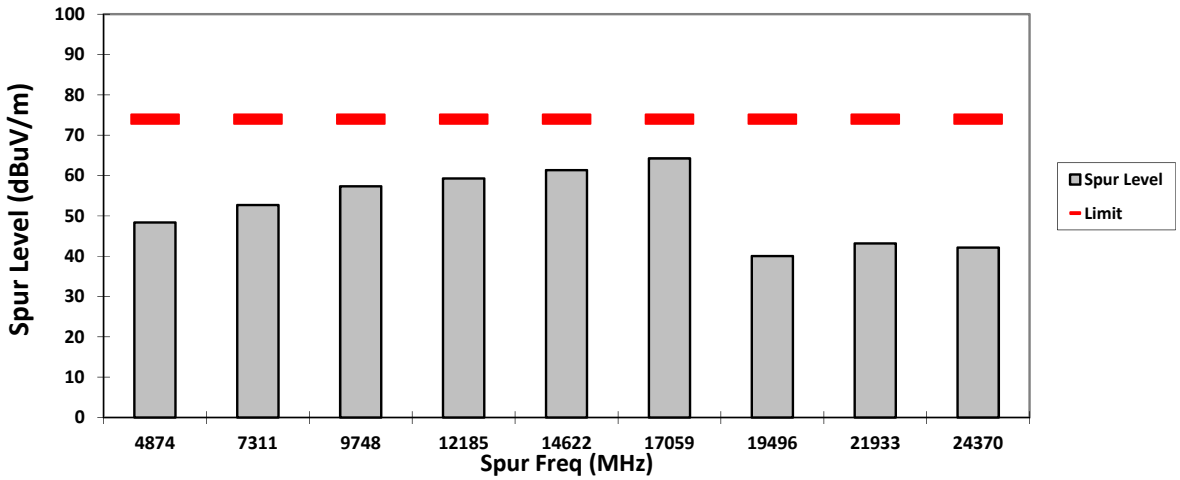
HORIZONTAL, QPK



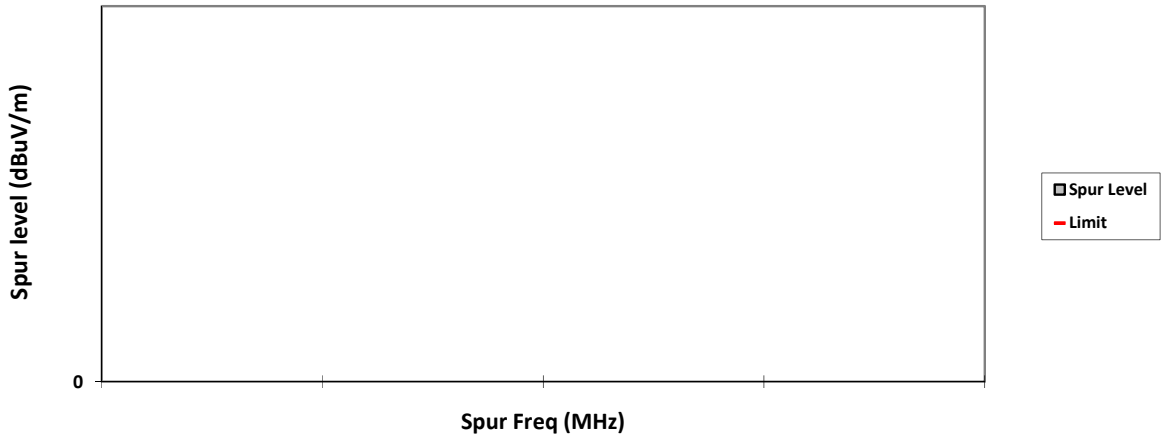
VERTICAL, PK



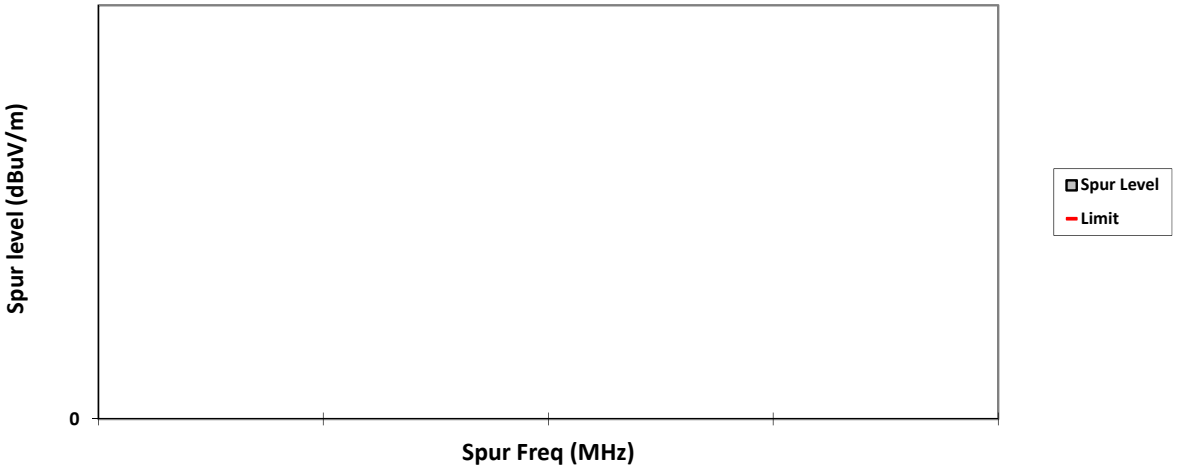
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: High Test Frequency: 2462.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11g)

Radiated Emission (High Channel) tabular data

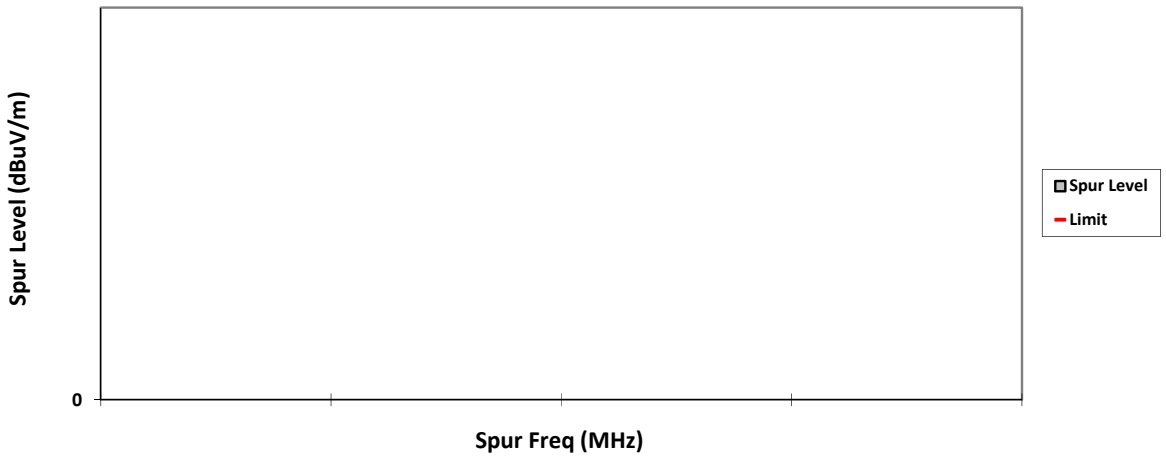
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4924	-	49.0418**	-	-	74.0	-	-	24.9582	-	-
7386	-	52.6783**	-	-	74.0	-	-	21.3217	-	-
9848	-	56.6227**	-	-	74.0	-	-	17.3773	-	-
12310	-	60.1941**	-	-	74.0	-	-	13.8059	-	-
14772	-	61.2306**	-	-	74.0	-	-	12.7694	-	-
17234	-	64.1120**	-	-	74.0	-	-	9.8880	-	-
19696	-	40.3907**	-	-	74.0	-	-	33.6093	-	-
22158	-	42.7967**	-	-	74.0	-	-	31.2033	-	-
24620	-	41.9753**	-	-	74.0	-	-	32.0247	-	-
Horizontal Radiated Emission Result										
4924	-	47.9970**	-	-	74.0	-	-	26.0030	-	-
7386	-	53.9542**	-	-	74.0	-	-	20.0458	-	-
9848	-	55.8743**	-	-	74.0	-	-	18.1257	-	-
12310	-	58.7018**	-	-	74.0	-	-	15.2982	-	-
14772	-	61.2059**	-	-	74.0	-	-	12.7941	-	-
17234	-	63.9982**	-	-	74.0	-	-	10.0018	-	-
19696	-	40.4707**	-	-	74.0	-	-	33.5293	-	-
22158	-	41.9443**	-	-	74.0	-	-	32.0557	-	-
24620	-	43.7078**	-	-	74.0	-	-	30.2922	-	-

Remarks: Pass Result	Marginal Result	Fail Result

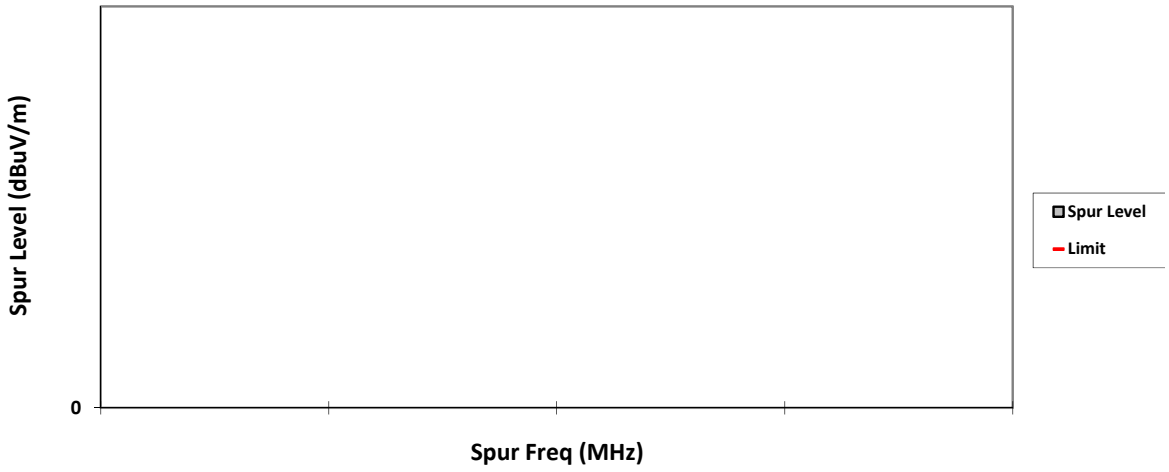
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sun, 13 Jun, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

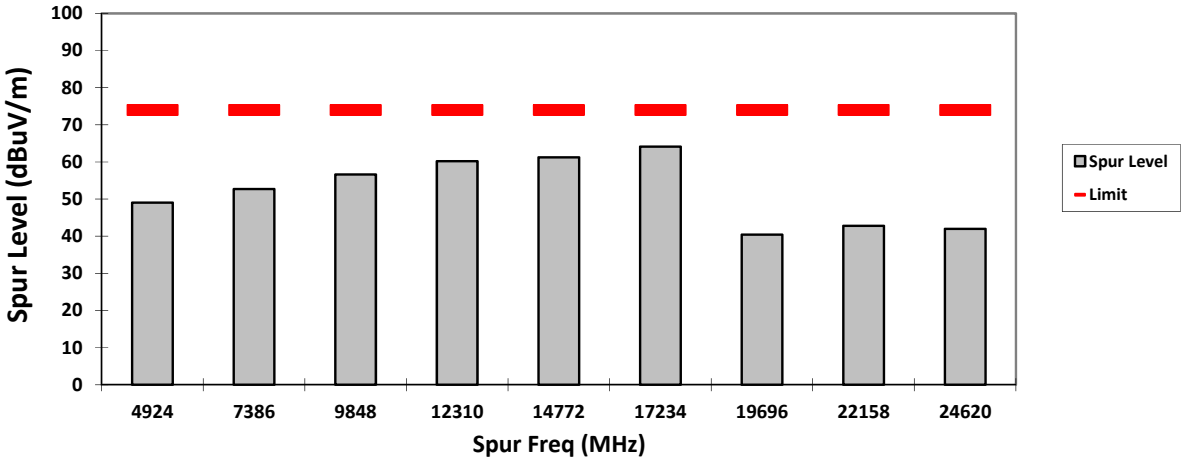
VERTICAL, QPK



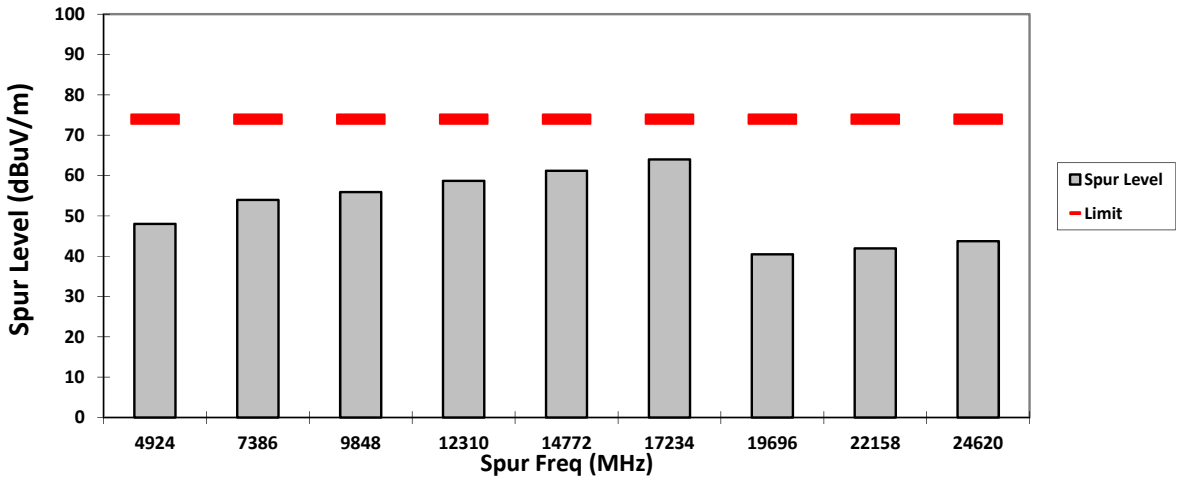
HORIZONTAL, QPK



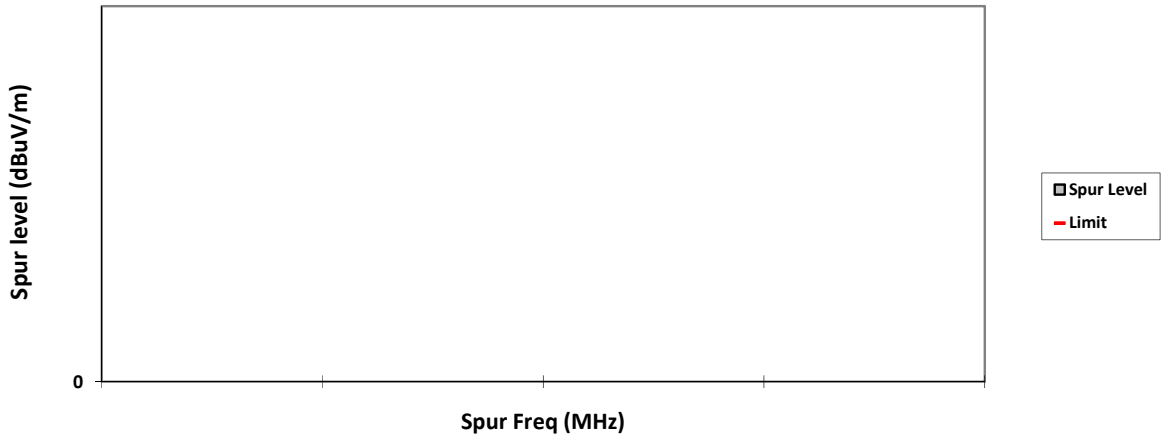
VERTICAL, PK



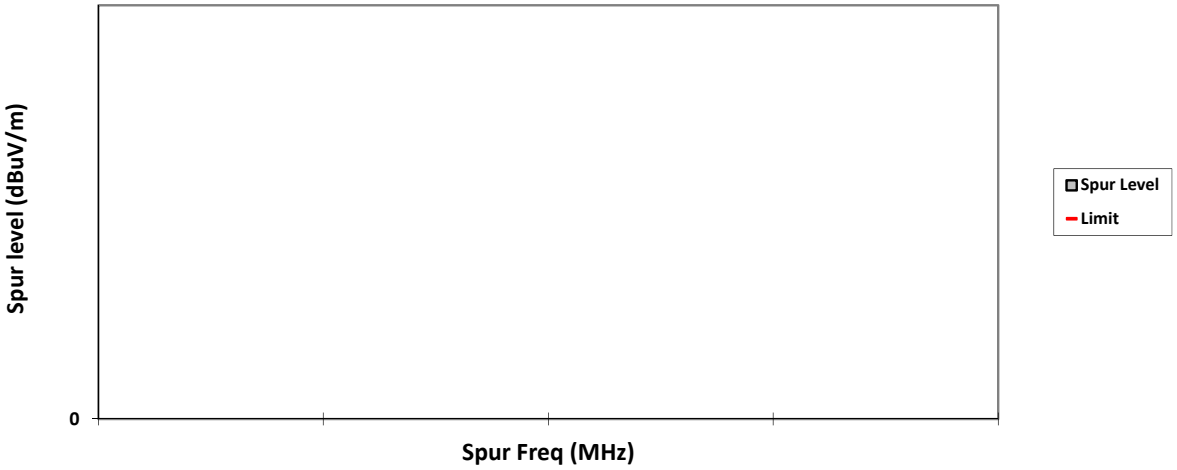
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: Low Test Frequency: 2412.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n20)

Radiated Emission (Low Channel) tabular data

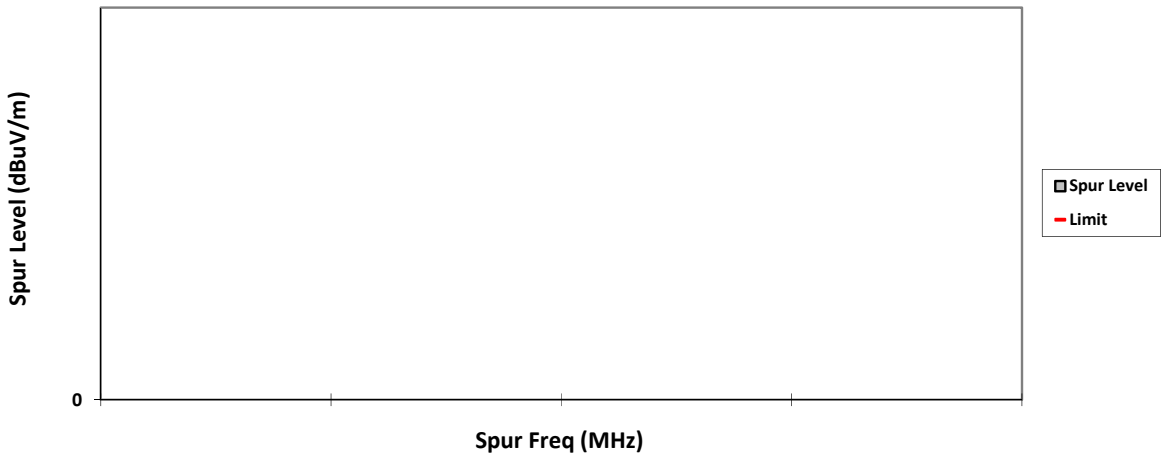
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4824	-	48.9036**	-	-	74.0	-	-	25.0964	-	-
7236	-	52.6073**	-	-	74.0	-	-	21.3927	-	-
9648	-	57.7530**	-	-	74.0	-	-	16.2470	-	-
12060	-	59.7536**	-	-	74.0	-	-	14.2464	-	-
14472	-	62.5548**	-	-	74.0	-	-	11.4452	-	-
16884	-	63.8183**	-	-	74.0	-	-	10.1817	-	-
19296	-	41.0866**	-	-	74.0	-	-	32.9134	-	-
21708	-	42.2169**	-	-	74.0	-	-	31.7831	-	-
24120	-	40.4449**	-	-	74.0	-	-	33.5551	-	-
Horizontal Radiated Emission Result										
4824	-	50.0416**	-	-	74.0	-	-	23.9584	-	-
7236	-	52.9548**	-	-	74.0	-	-	21.0452	-	-
9648	-	56.5453**	-	-	74.0	-	-	17.4547	-	-
12060	-	60.1904**	-	-	74.0	-	-	13.8096	-	-
14472	-	61.1167**	-	-	74.0	-	-	12.8833	-	-
16884	-	63.3174**	-	-	74.0	-	-	10.6826	-	-
19296	-	39.8222**	-	-	74.0	-	-	34.1778	-	-
21708	-	40.8421**	-	-	74.0	-	-	33.1579	-	-
24120	-	40.7469**	-	-	74.0	-	-	33.2531	-	-

Remarks: Pass Result	Marginal Result	Fail Result

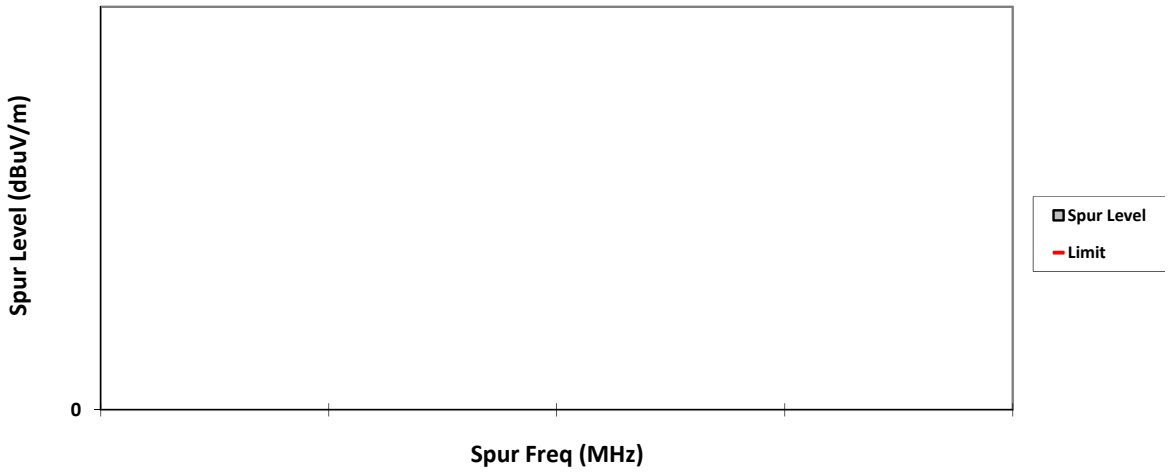
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sun, 13 Jun, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

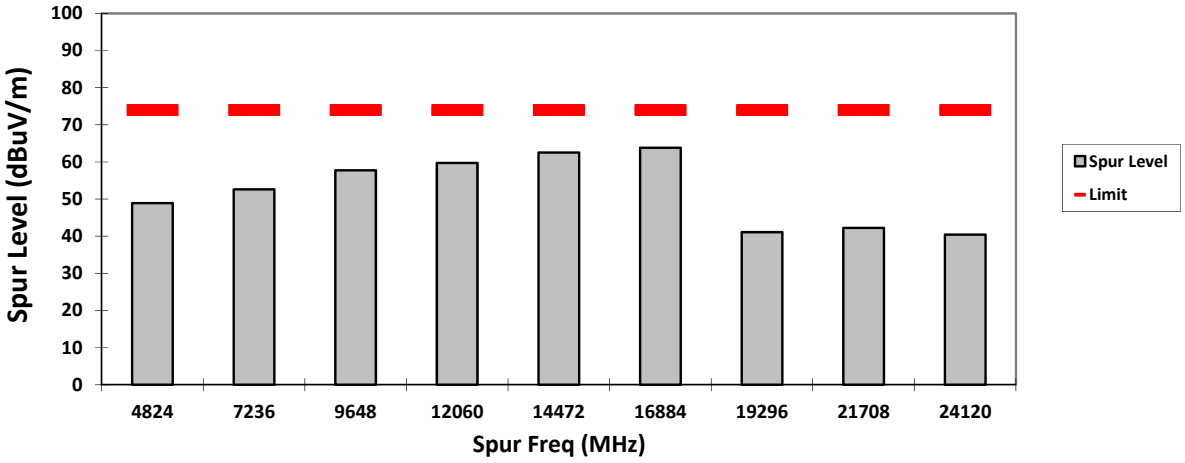
VERTICAL, QPK



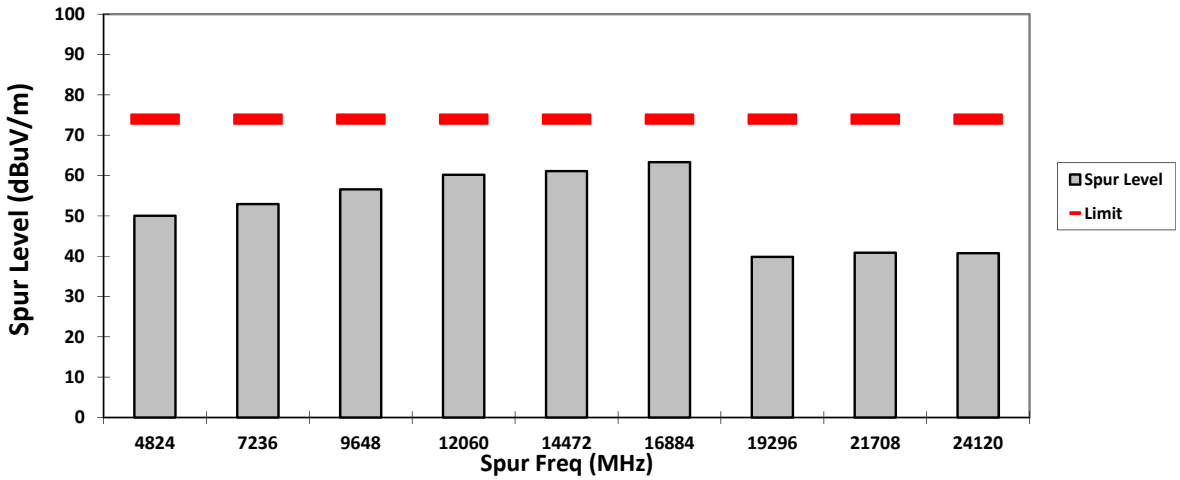
HORIZONTAL, QPK



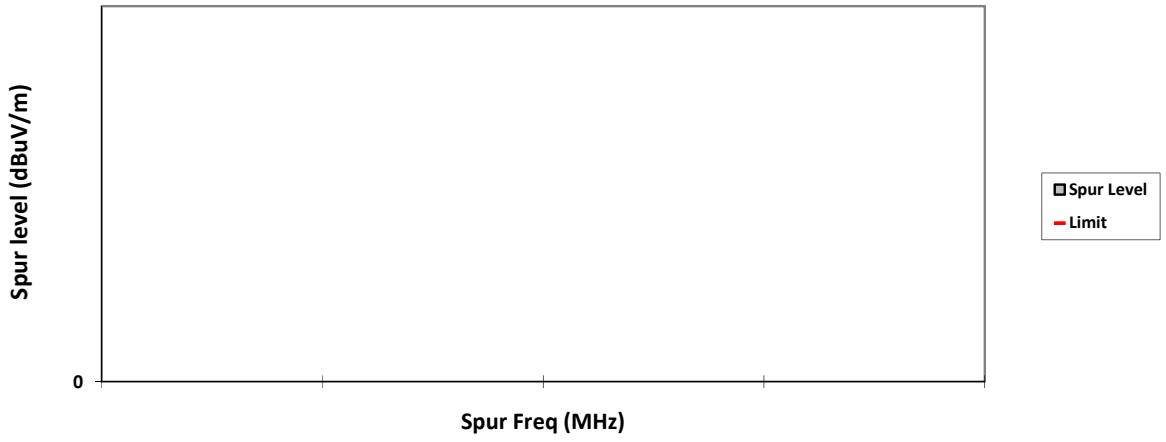
VERTICAL, PK



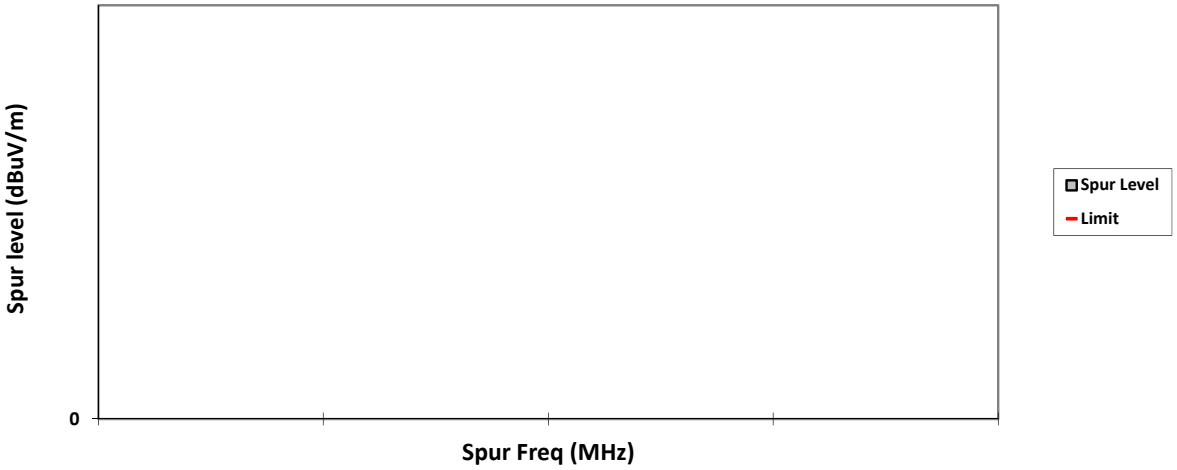
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: Mid Test Frequency: 2437.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n20)

Radiated Emission (Mid Channel) tabular data

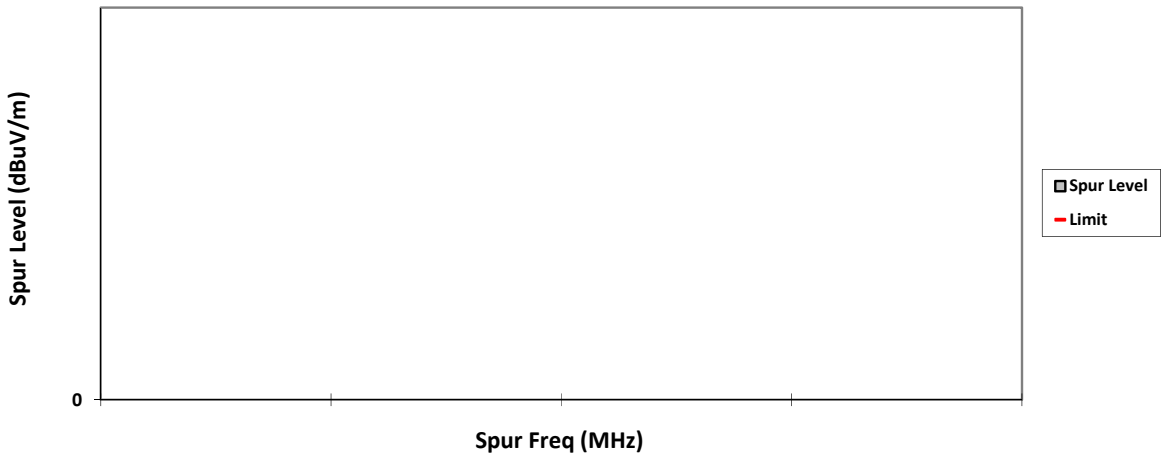
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4874	-	48.0388**	-	-	74.0	-	-	25.9612	-	-
7311	-	52.9655**	-	-	74.0	-	-	21.0345	-	-
9748	-	56.6627**	-	-	74.0	-	-	17.3373	-	-
12185	-	60.5211**	-	-	74.0	-	-	13.4789	-	-
14622	-	61.2945**	-	-	74.0	-	-	12.7055	-	-
17059	-	62.8793**	-	-	74.0	-	-	11.1207	-	-
19496	-	41.4882**	-	-	74.0	-	-	32.5118	-	-
21933	-	45.4639**	-	-	74.0	-	-	28.5361	-	-
24370	-	42.2286**	-	-	74.0	-	-	31.7714	-	-
Horizontal Radiated Emission Result										
4874	-	49.5902**	-	-	74.0	-	-	24.4098	-	-
7311	-	51.9800**	-	-	74.0	-	-	22.0200	-	-
9748	-	57.9268**	-	-	74.0	-	-	16.0732	-	-
12185	-	59.0808**	-	-	74.0	-	-	14.9192	-	-
14622	-	62.5319**	-	-	74.0	-	-	11.4681	-	-
17059	-	62.5353**	-	-	74.0	-	-	11.4647	-	-
19496	-	41.7981**	-	-	74.0	-	-	32.2019	-	-
21933	-	43.6938**	-	-	74.0	-	-	30.3062	-	-
24370	-	42.2847**	-	-	74.0	-	-	31.7153	-	-

Remarks: Pass Result	Marginal Result	Fail Result

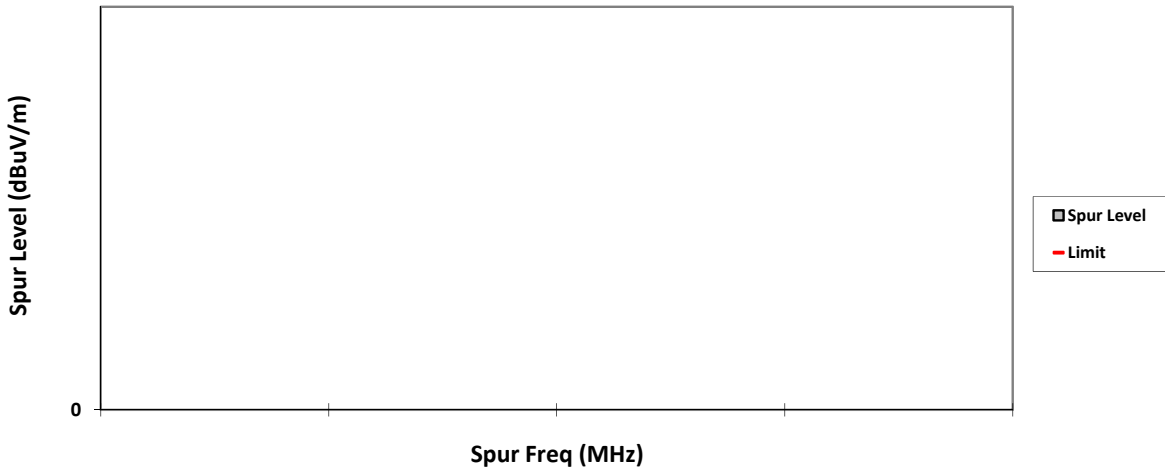
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sun, 13 Jun, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

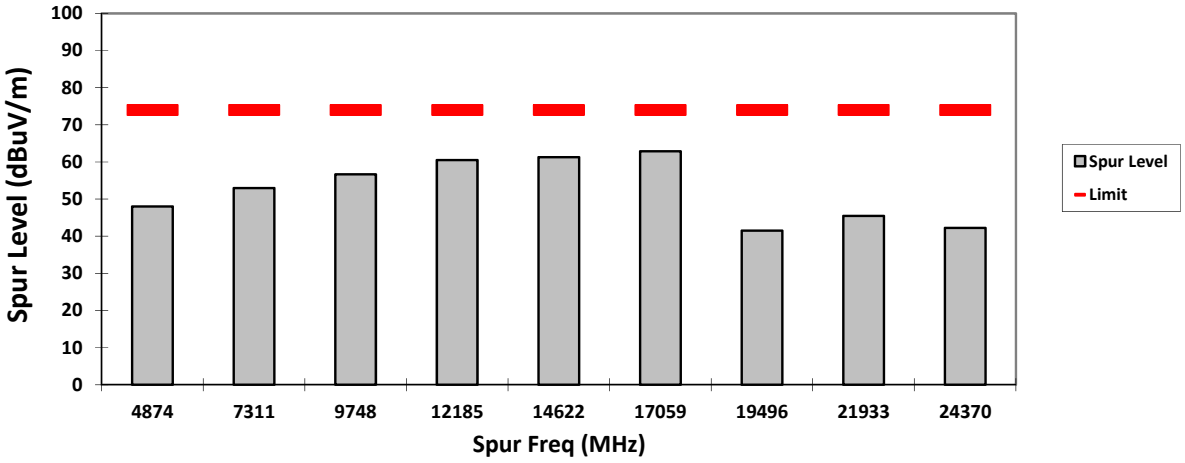
VERTICAL, QPK



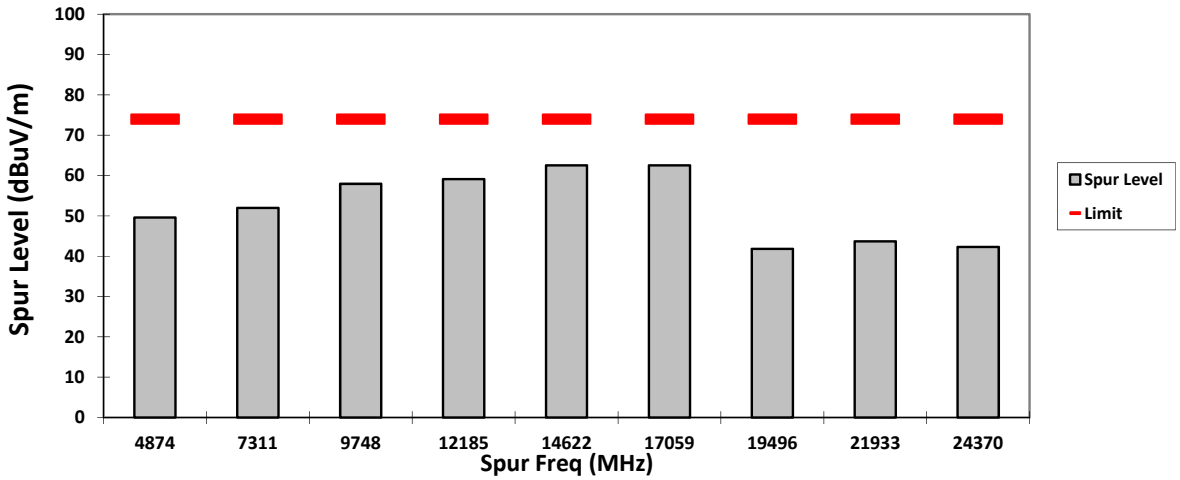
HORIZONTAL, QPK



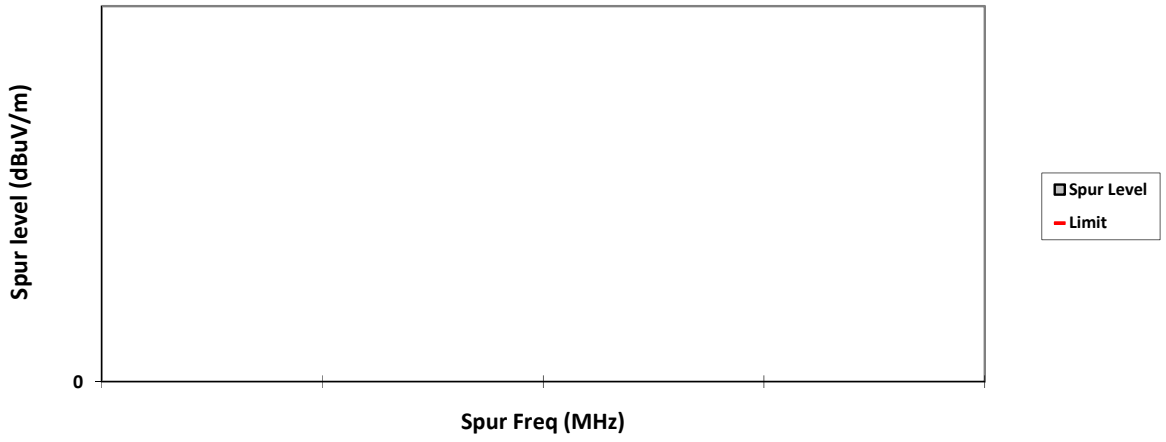
VERTICAL, PK



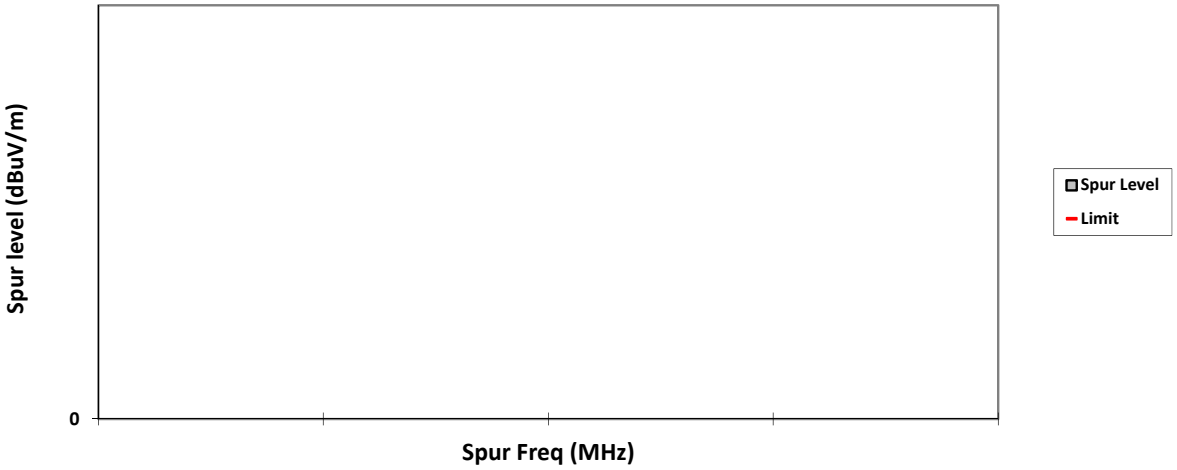
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: High Test Frequency: 2462.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n20)

Radiated Emission (High Channel) tabular data

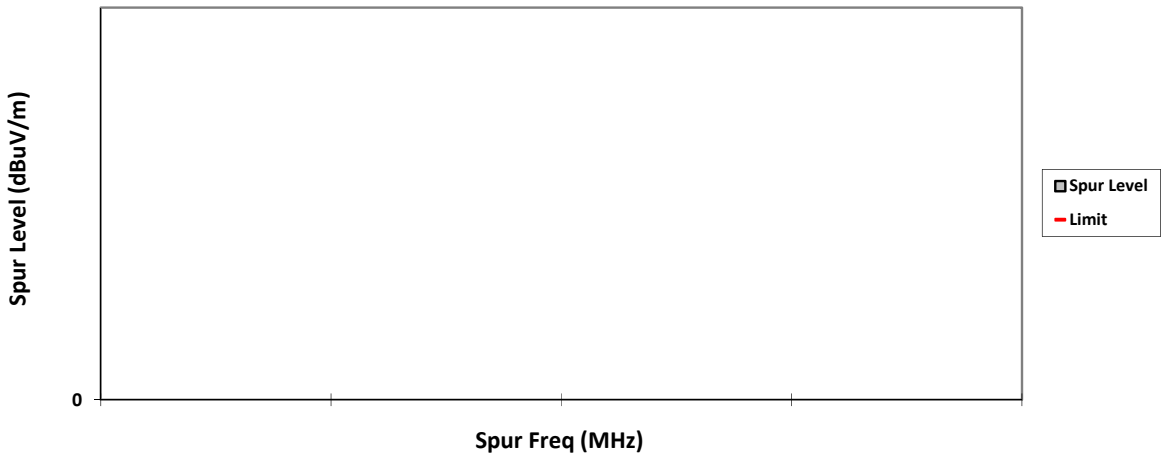
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4924	-	49.3861**	-	-	74.0	-	-	24.6139	-	-
7386	-	53.1629**	-	-	74.0	-	-	20.8371	-	-
9848	-	57.0416**	-	-	74.0	-	-	16.9584	-	-
12310	-	59.2723**	-	-	74.0	-	-	14.7277	-	-
14772	-	60.2037**	-	-	74.0	-	-	13.7963	-	-
17234	-	63.1824**	-	-	74.0	-	-	10.8176	-	-
19696	-	40.3586**	-	-	74.0	-	-	33.6414	-	-
22158	-	41.4606**	-	-	74.0	-	-	32.5394	-	-
24620	-	42.6559**	-	-	74.0	-	-	31.3441	-	-
Horizontal Radiated Emission Result										
4924	-	48.7566**	-	-	74.0	-	-	25.2434	-	-
7386	-	55.5433**	-	-	74.0	-	-	18.4567	-	-
9848	-	56.2349**	-	-	74.0	-	-	17.7651	-	-
12310	-	60.1062**	-	-	74.0	-	-	13.8938	-	-
14772	-	63.2502**	-	-	74.0	-	-	10.7498	-	-
17234	-	63.1759**	-	-	74.0	-	-	10.8241	-	-
19696	-	40.8796**	-	-	74.0	-	-	33.1204	-	-
22158	-	42.3165**	-	-	74.0	-	-	31.6835	-	-
24620	-	42.3992**	-	-	74.0	-	-	31.6008	-	-

Remarks: Pass Result	Marginal Result	Fail Result

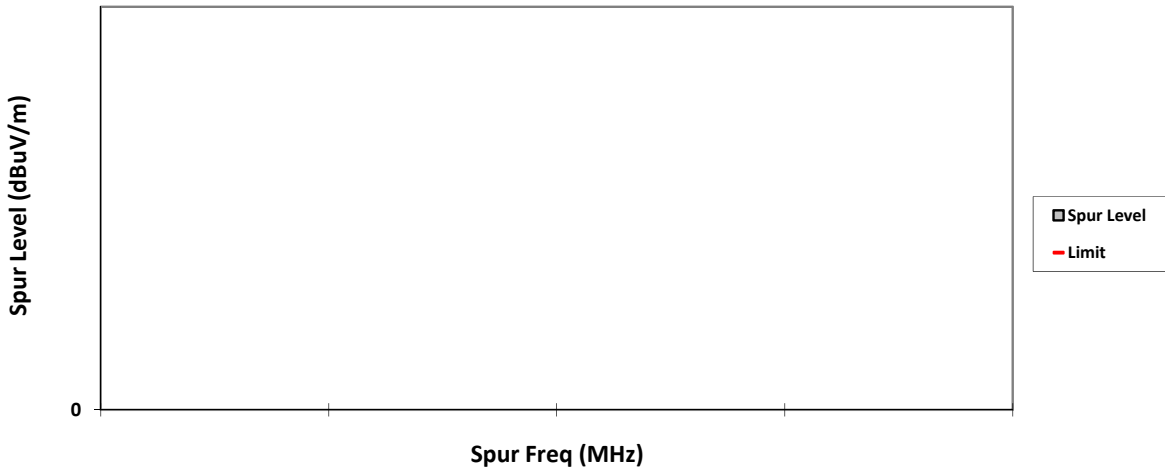
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sun, 13 Jun, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

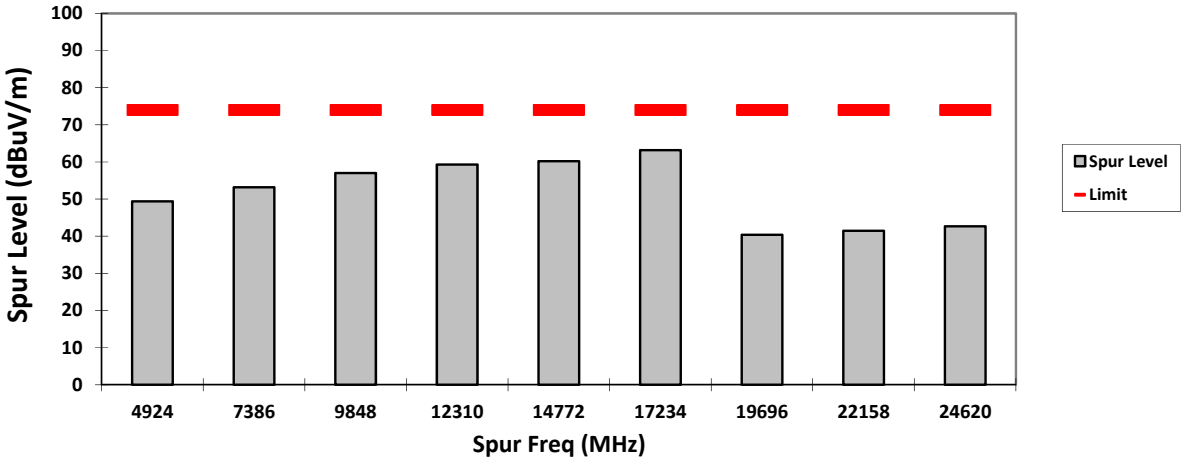
VERTICAL, QPK



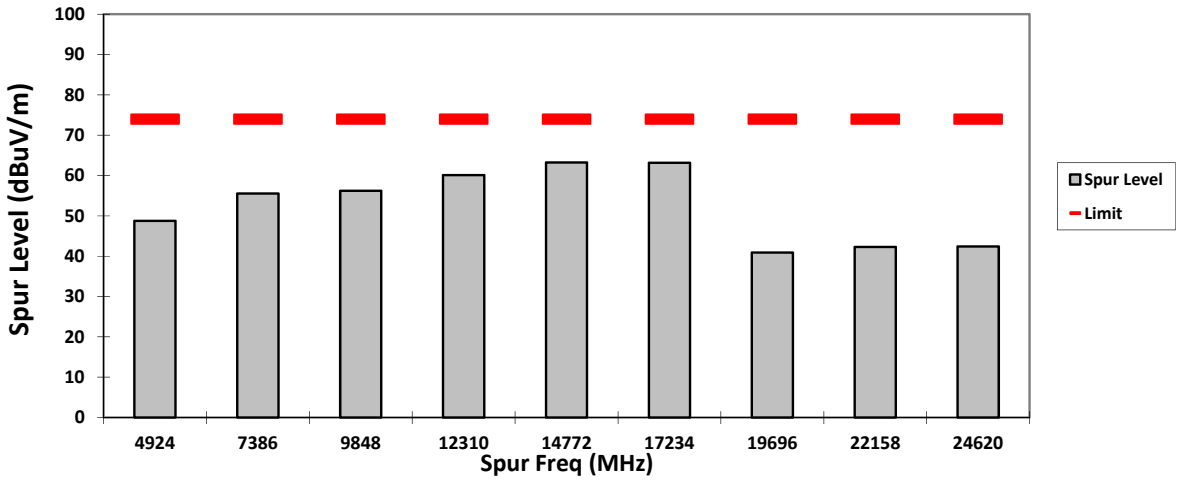
HORIZONTAL, QPK



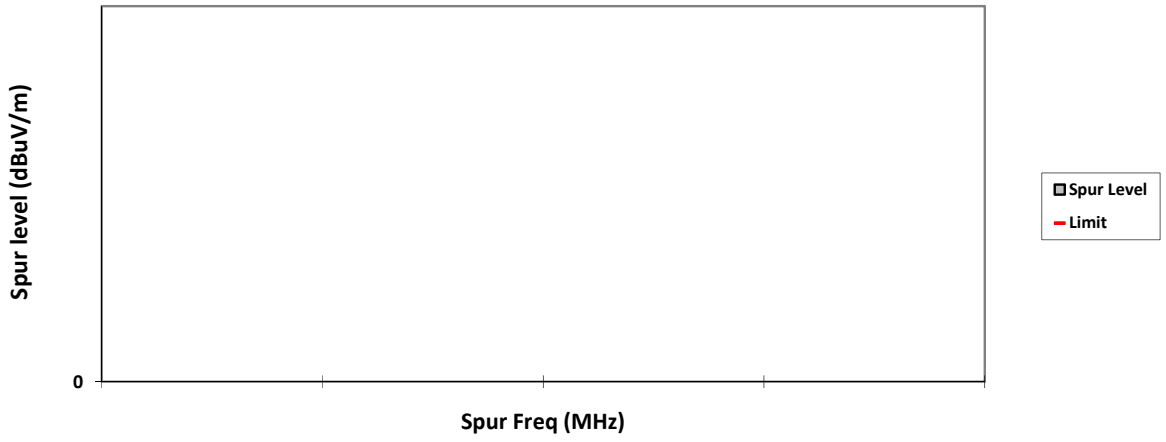
VERTICAL, PK



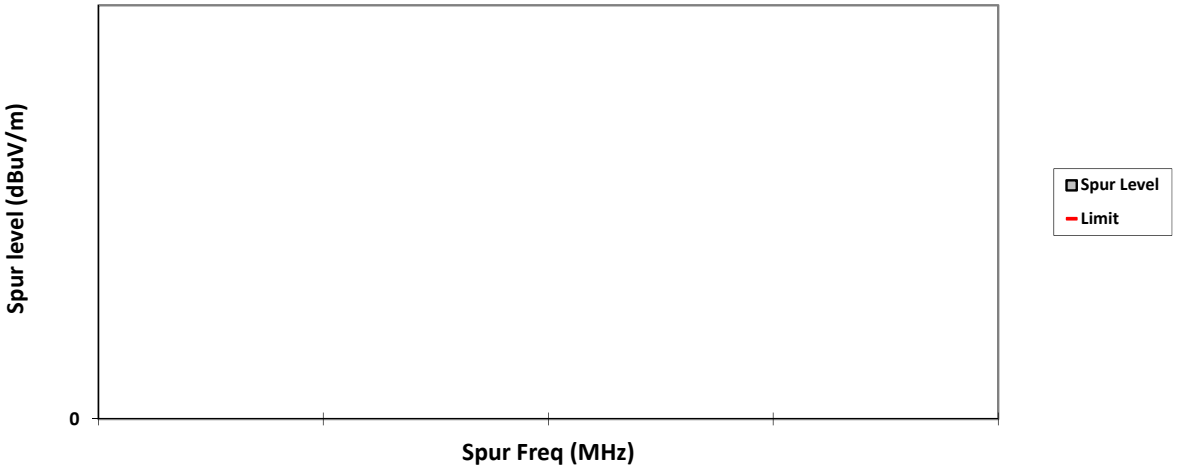
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: Low Test Frequency: 2422.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n40)

Radiated Emission (Low Channel) tabular data

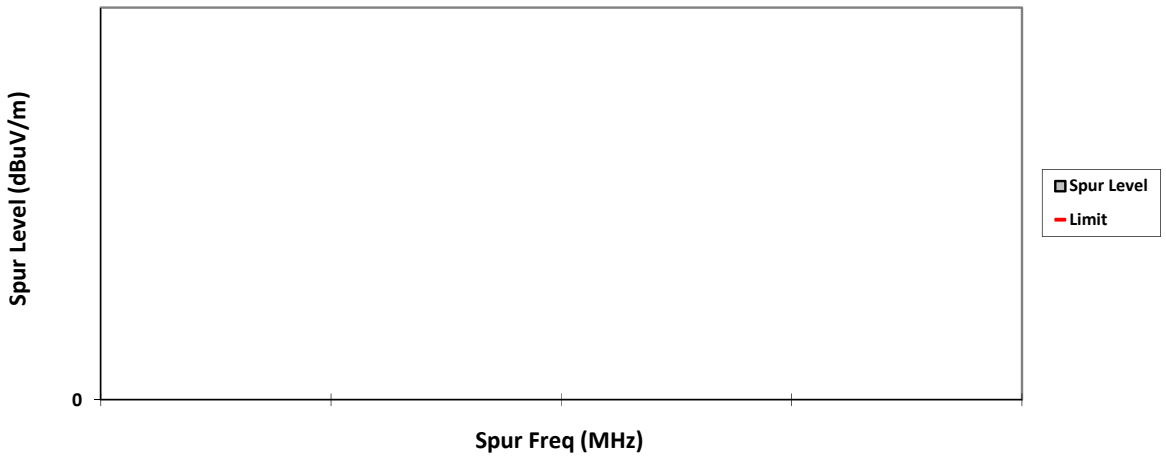
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4844	-	48.8548**	-	-	74.0	-	-	25.1452	-	-
7266	-	52.9656**	-	-	74.0	-	-	21.0344	-	-
9688	-	56.6260**	-	-	74.0	-	-	17.3740	-	-
12110	-	58.9492**	-	-	74.0	-	-	15.0508	-	-
14532	-	62.0456**	-	-	74.0	-	-	11.9544	-	-
16954	-	63.7579**	-	-	74.0	-	-	10.2421	-	-
19376	-	40.4802**	-	-	74.0	-	-	33.5198	-	-
21798	-	42.5199**	-	-	74.0	-	-	31.4801	-	-
24220	-	41.1566**	-	-	74.0	-	-	32.8434	-	-
Horizontal Radiated Emission Result										
4844	-	48.1346**	-	-	74.0	-	-	25.8654	-	-
7266	-	52.7984**	-	-	74.0	-	-	21.2016	-	-
9688	-	56.6876**	-	-	74.0	-	-	17.3124	-	-
12110	-	60.2266**	-	-	74.0	-	-	13.7734	-	-
14532	-	61.2531**	-	-	74.0	-	-	12.7469	-	-
16954	-	63.3629**	-	-	74.0	-	-	10.6371	-	-
19376	-	42.4340**	-	-	74.0	-	-	31.5660	-	-
21798	-	42.4417**	-	-	74.0	-	-	31.5583	-	-
24220	-	42.5027**	-	-	74.0	-	-	31.4973	-	-

Remarks: Pass Result	Marginal Result	Fail Result

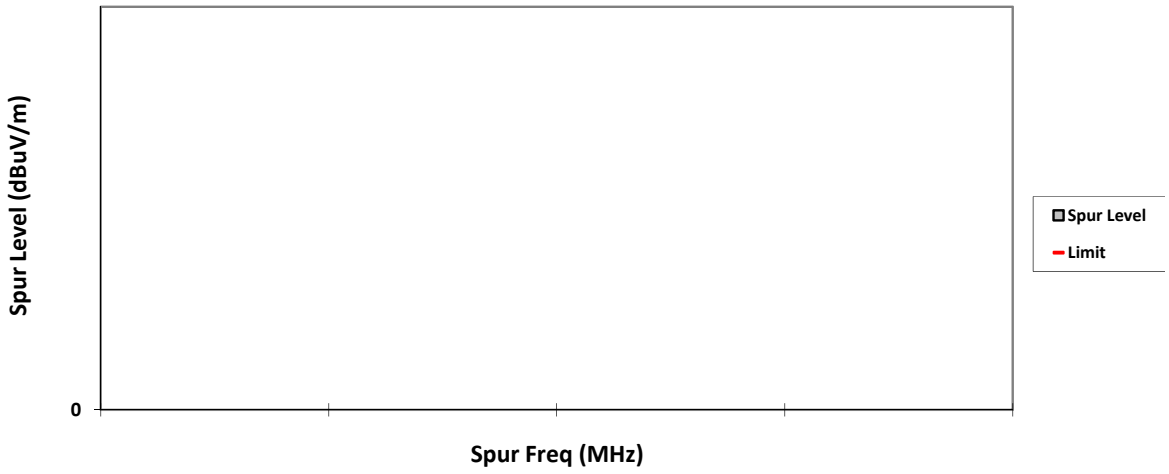
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sun, 13 Jun, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

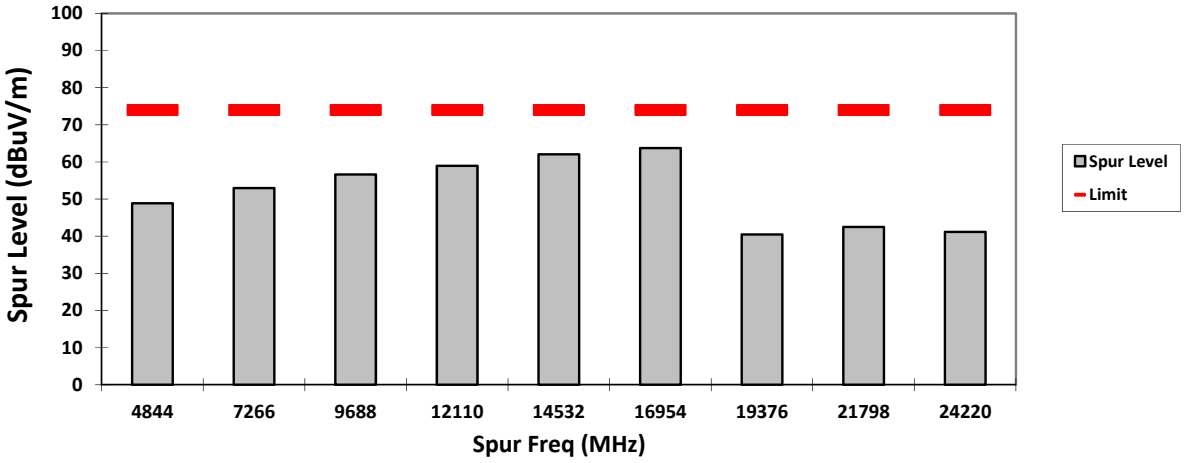
VERTICAL, QPK



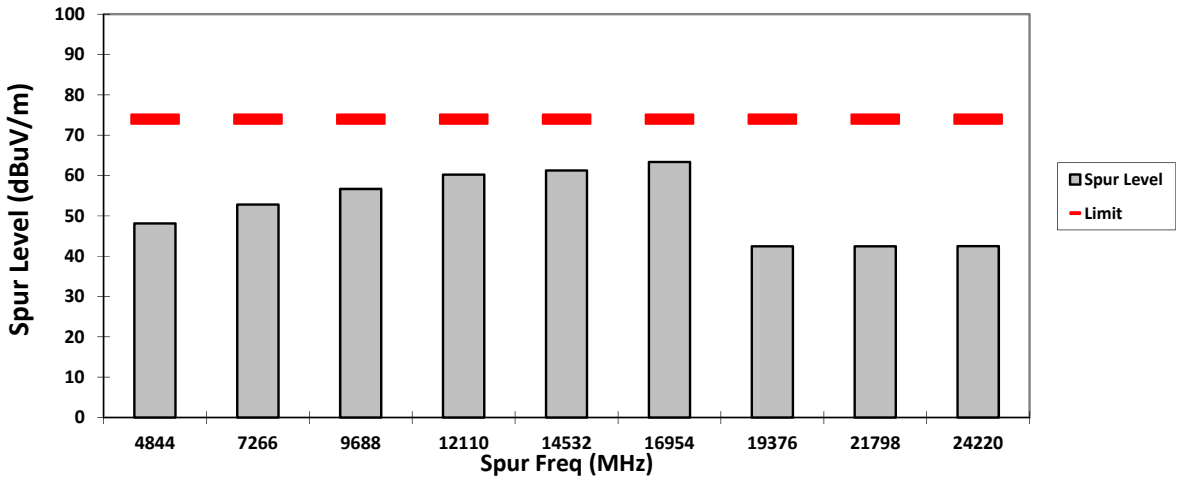
HORIZONTAL, QPK



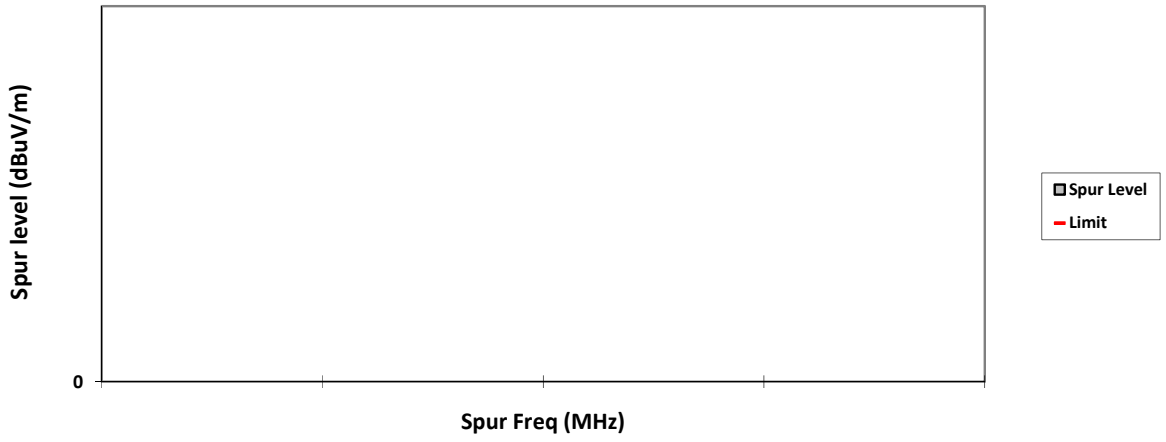
VERTICAL, PK



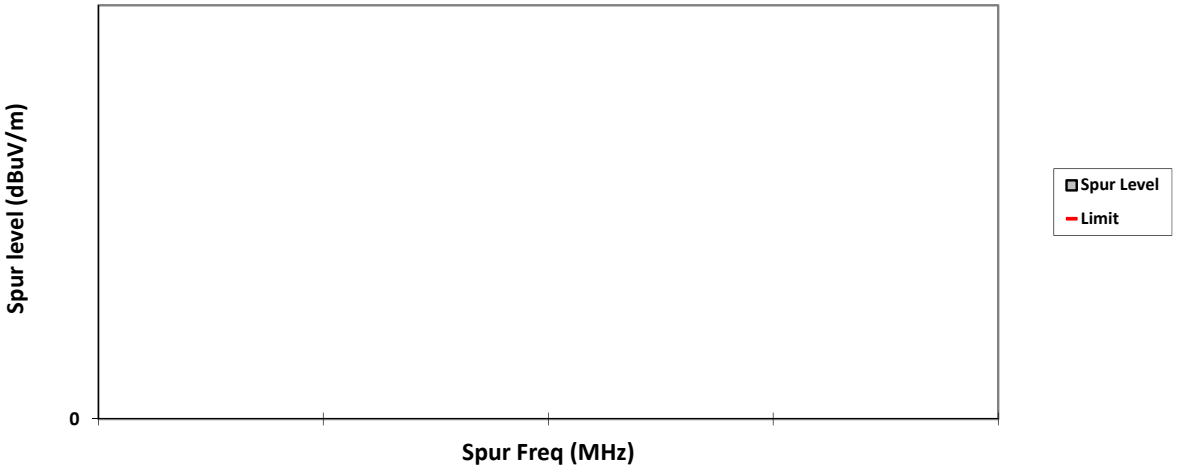
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: Mid Test Frequency: 2437.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n40)

Radiated Emission (Mid Channel) tabular data

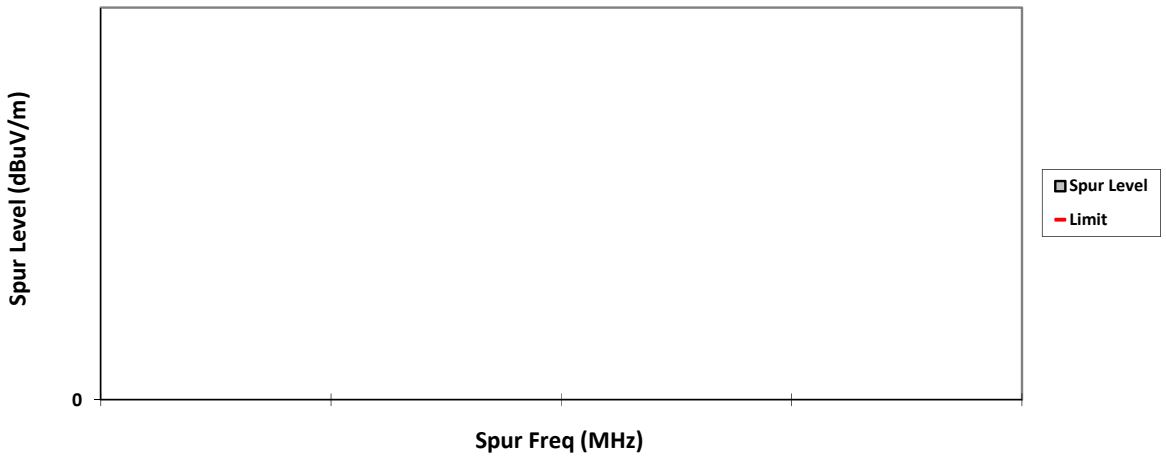
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4874	-	48.4724**	-	-	74.0	-	-	25.5276	-	-
7311	-	55.0276**	-	-	74.0	-	-	18.9724	-	-
9748	-	58.1878**	-	-	74.0	-	-	15.8122	-	-
12185	-	59.0624**	-	-	74.0	-	-	14.9376	-	-
14622	-	62.1744**	-	-	74.0	-	-	11.8256	-	-
17059	-	63.0390**	-	-	74.0	-	-	10.9610	-	-
19496	-	39.7555**	-	-	74.0	-	-	34.2445	-	-
21933	-	43.1508**	-	-	74.0	-	-	30.8492	-	-
24370	-	41.8697**	-	-	74.0	-	-	32.1303	-	-
Horizontal Radiated Emission Result										
4874	-	50.0401**	-	-	74.0	-	-	23.9599	-	-
7311	-	53.6424**	-	-	74.0	-	-	20.3576	-	-
9748	-	57.4538**	-	-	74.0	-	-	16.5462	-	-
12185	-	58.6758**	-	-	74.0	-	-	15.3242	-	-
14622	-	61.3033**	-	-	74.0	-	-	12.6967	-	-
17059	-	63.2729**	-	-	74.0	-	-	10.7271	-	-
19496	-	40.9505**	-	-	74.0	-	-	33.0495	-	-
21933	-	44.5211**	-	-	74.0	-	-	29.4789	-	-
24370	-	41.6307**	-	-	74.0	-	-	32.3693	-	-

Remarks: Pass Result	Marginal Result	Fail Result

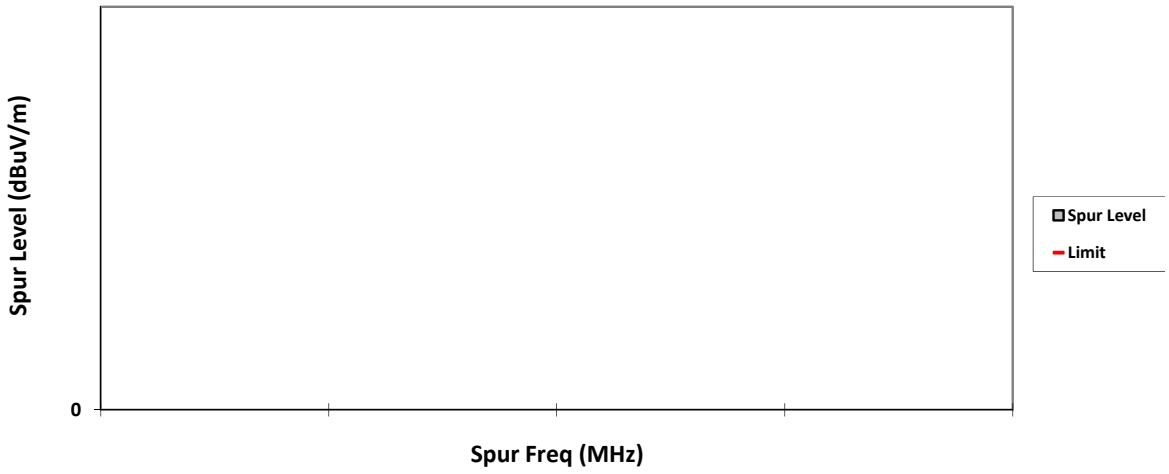
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sun, 13 Jun, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

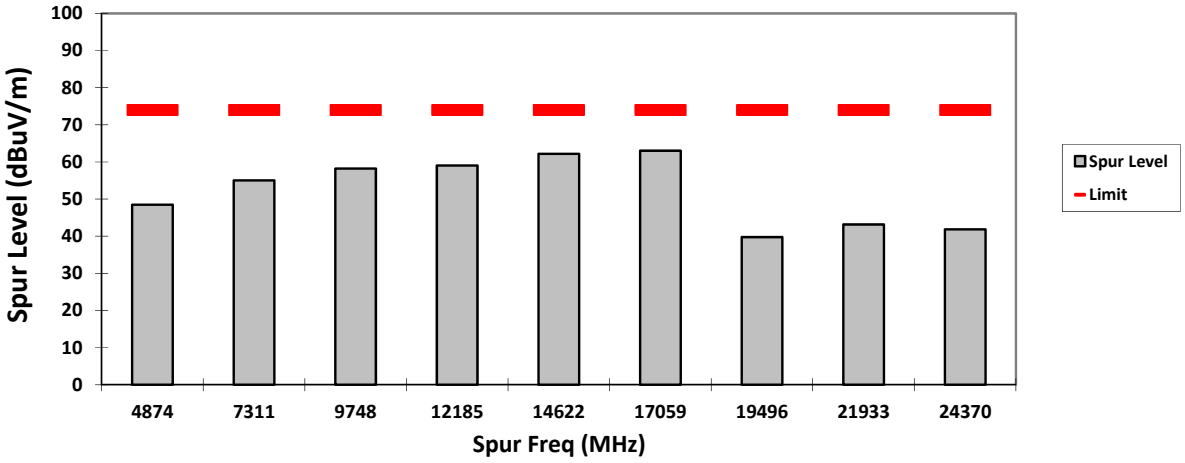
VERTICAL, QPK



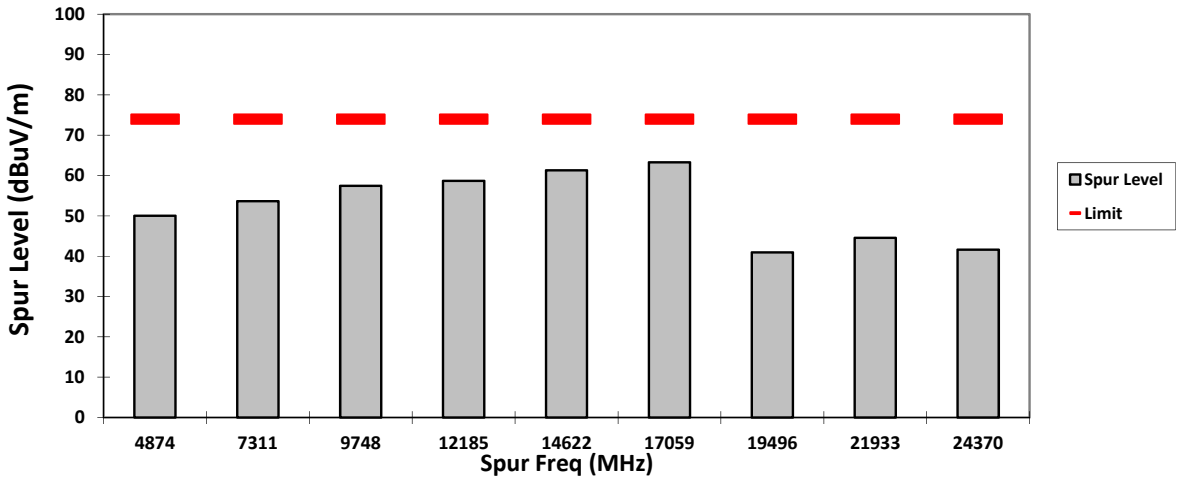
HORIZONTAL, QPK



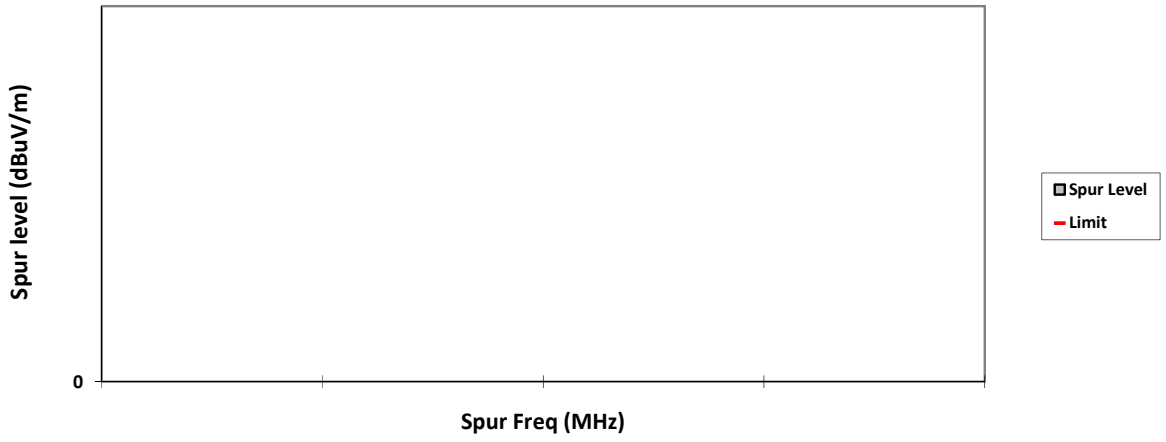
VERTICAL, PK



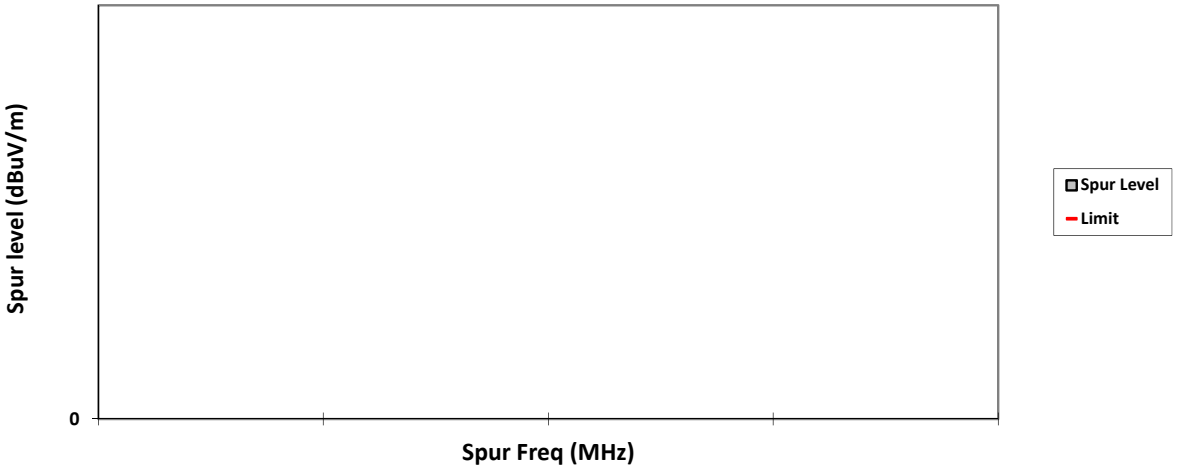
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: DLR110NBHLAA S/N: 55017XJ0059 EMC SR ID#: 27179-EMC-00035
Battery: PMNN4578A Accessory: NA
Test Channel: High Test Frequency: 2452.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: X-Plane (802.11n40)

Radiated Emission (High Channel) tabular data

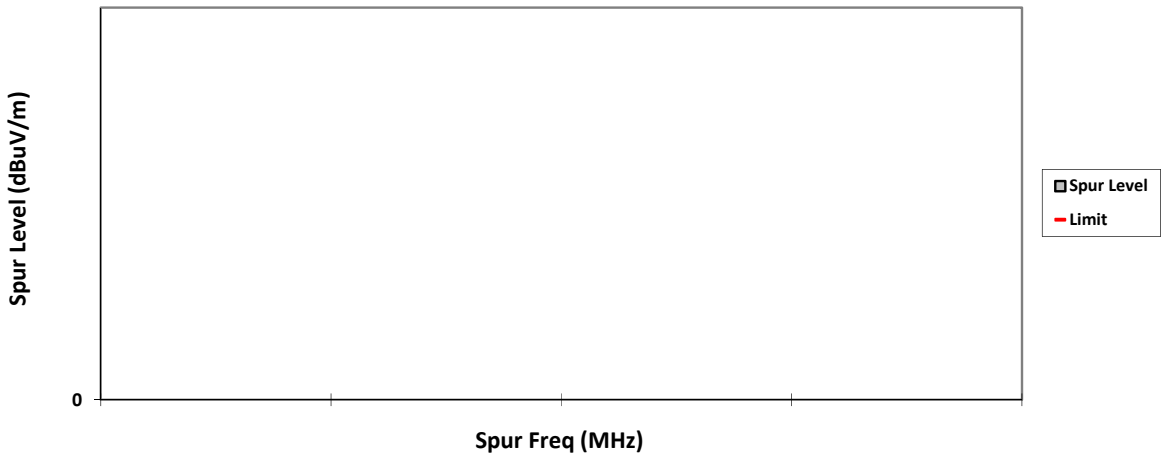
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
4904	-	49.6626**	-	-	74.0	-	-	24.3374	-	-
7356	-	52.3897**	-	-	74.0	-	-	21.6103	-	-
9808	-	57.3030**	-	-	74.0	-	-	16.6970	-	-
12260	-	59.8592**	-	-	74.0	-	-	14.1408	-	-
14712	-	61.0506**	-	-	74.0	-	-	12.9494	-	-
17164	-	64.3662**	-	-	74.0	-	-	9.6338	-	-
19616	-	40.1983**	-	-	74.0	-	-	33.8017	-	-
22068	-	43.7005**	-	-	74.0	-	-	30.2995	-	-
24520	-	43.3708**	-	-	74.0	-	-	30.6292	-	-
Horizontal Radiated Emission Result										
4904	-	50.5491**	-	-	74.0	-	-	23.4509	-	-
7356	-	53.0675**	-	-	74.0	-	-	20.9325	-	-
9808	-	56.8070**	-	-	74.0	-	-	17.1930	-	-
12260	-	60.0863**	-	-	74.0	-	-	13.9137	-	-
14712	-	62.1936**	-	-	74.0	-	-	11.8064	-	-
17164	-	63.9907**	-	-	74.0	-	-	10.0093	-	-
19616	-	40.6676**	-	-	74.0	-	-	33.3324	-	-
22068	-	42.9208**	-	-	74.0	-	-	31.0792	-	-
24520	-	41.5289**	-	-	74.0	-	-	32.4711	-	-

Remarks: Pass Result	Marginal Result	Fail Result

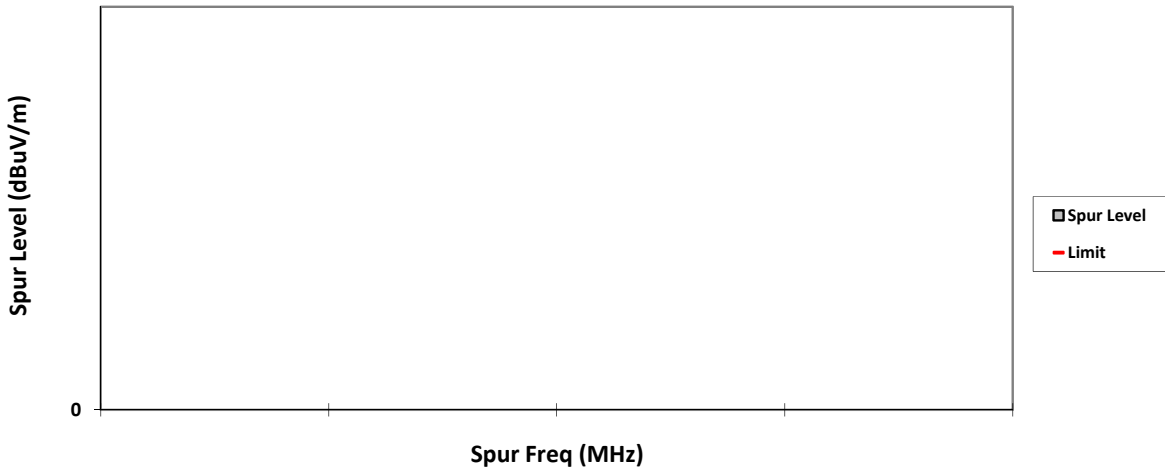
Temperature (degC): 23.4 **Humidity (%): 68.6**
Test Performed by: Qawiman&Nazrin **Test Date: Sun, 13 Jun, 2021**
System MU: 4.03dB

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

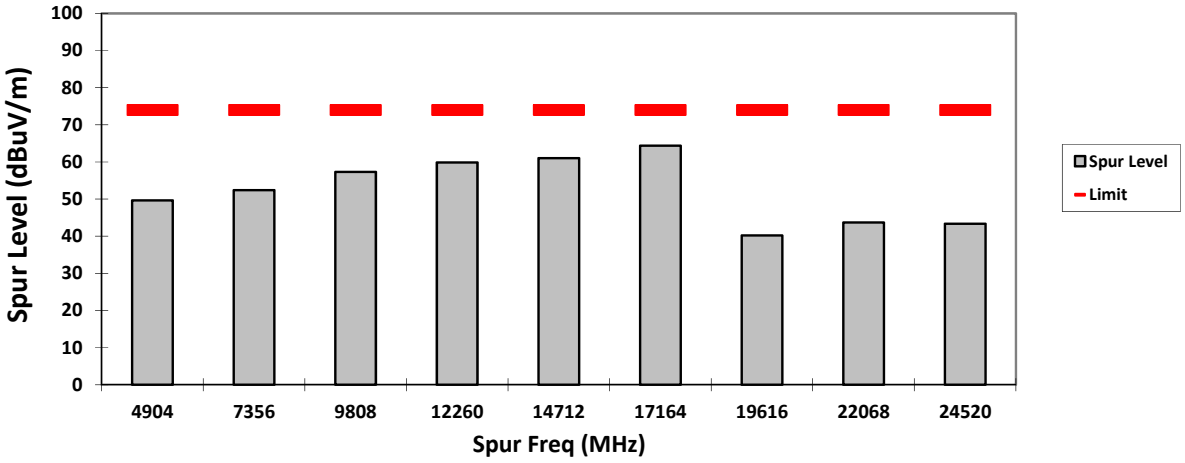
VERTICAL, QPK



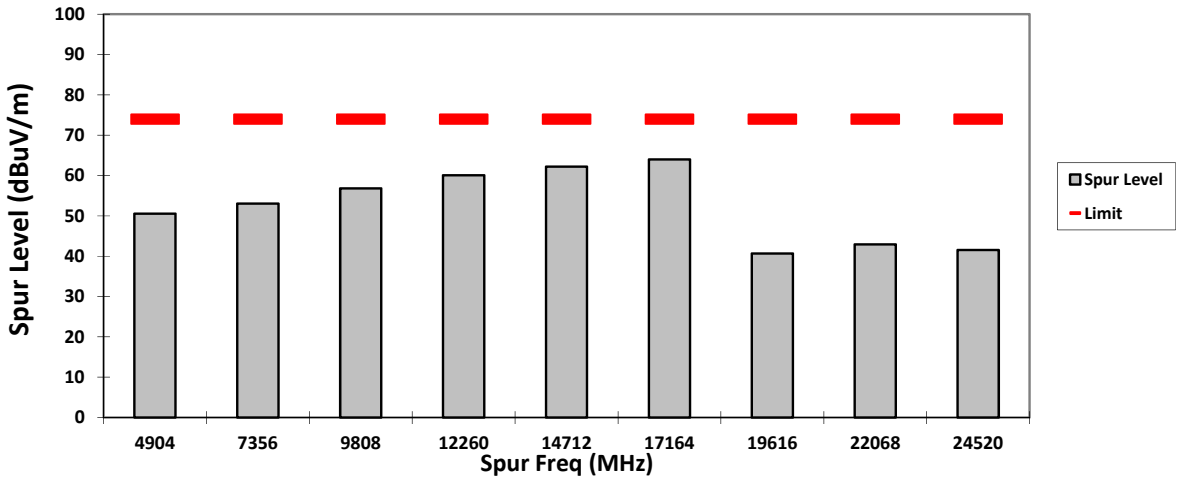
HORIZONTAL, QPK



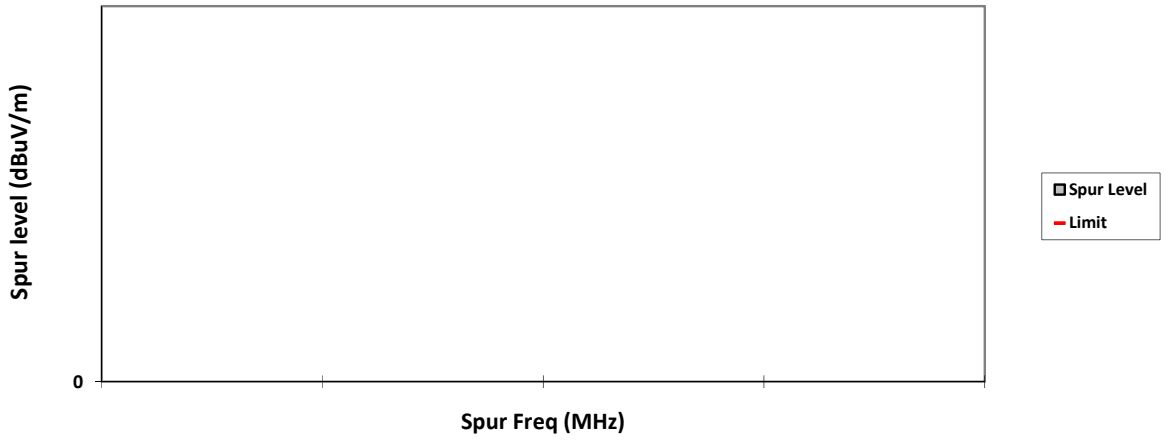
VERTICAL, PK



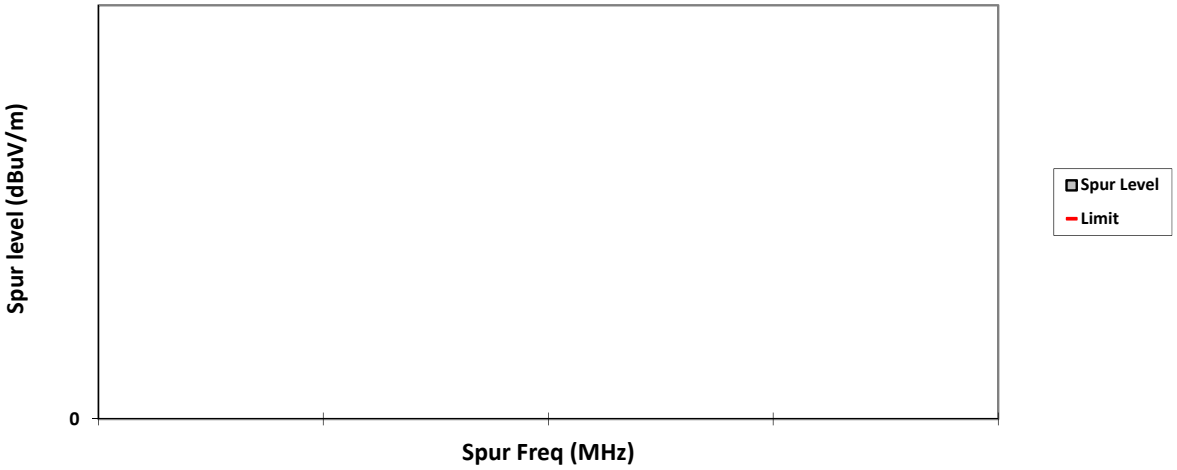
HORIZONTAL, PK



VERTICAL, AV

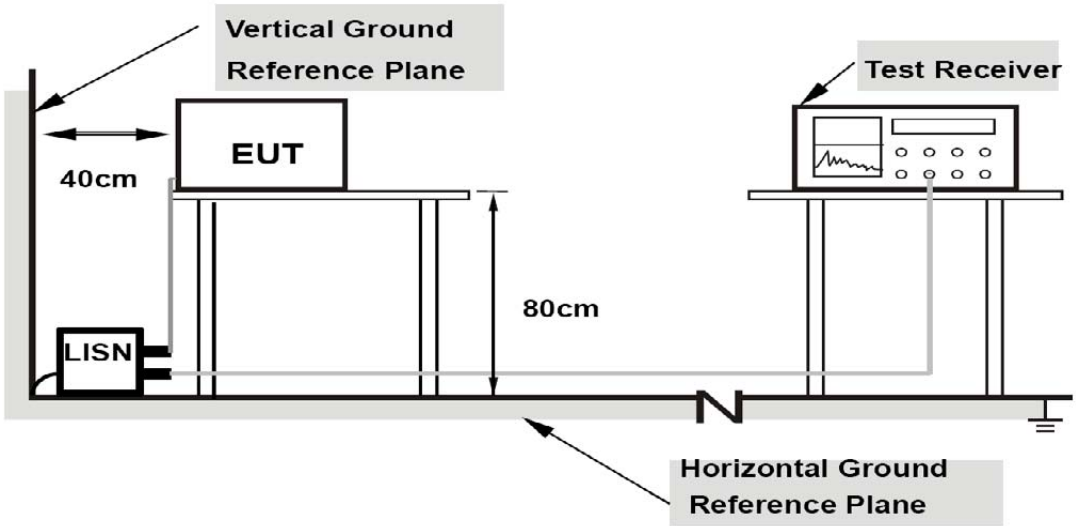


HORIZONTAL, AV



4.8. AC Powerline Conducted Emission

4.8.1. Test Setup



1) Tests were conducted for both Receive and Transmit Mode of the EUT.
2) The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/50uH of coupling impedance for the measuring instrument.
3) Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
4) The frequency range from 150 kHz to 30MHz was measured.

4.8.2. Test Limits:

For AC Power Line Conducted Test Limit can be Class A or B depends on product classification.

Limits for conducted disturbance at the mains ports of class A ITE

Frequency range MHz	Limits dB(µV)	
	Quasi-peak	Average
0,15 to 0,50	79	66
0,50 to 30	73	60
NOTE The lower limit shall apply at the transition frequency.		

Table 1: Limits for Conducted Disturbance at the Mains Ports of Class A ITE.

Limits for conducted disturbance at the mains ports of class B ITE

Frequency range MHz	Limits dB(µV)	
	Quasi-peak	Average
0,15 to 0,50	66 to 56	56 to 46
0,50 to 5	56	46
5 to 30	60	50
NOTE 1 The lower limit shall apply at the transition frequencies. NOTE 2 The limit decreases linearly with the logarithm of the frequency in the range 0,15 MHz to 0,50 MHz.		

Table 2: Limits for Conducted Disturbance at the Mains Ports of Class B ITE

4.8.3. Test Result

Not Applicable. Testing is not required, radio shall turn off during charging mode.

END OF TEST REPORT