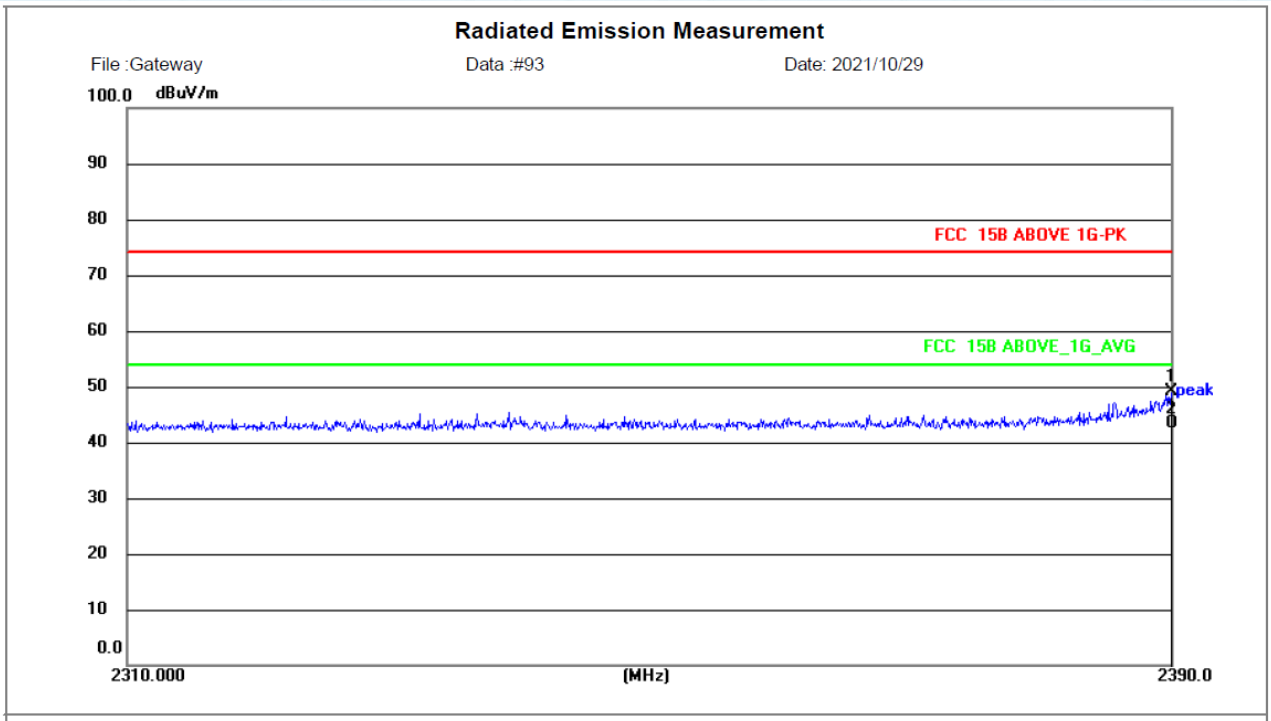
Test mode:	802.11g	Test channel:	Lowest



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2412MHz g
Note: Gateway

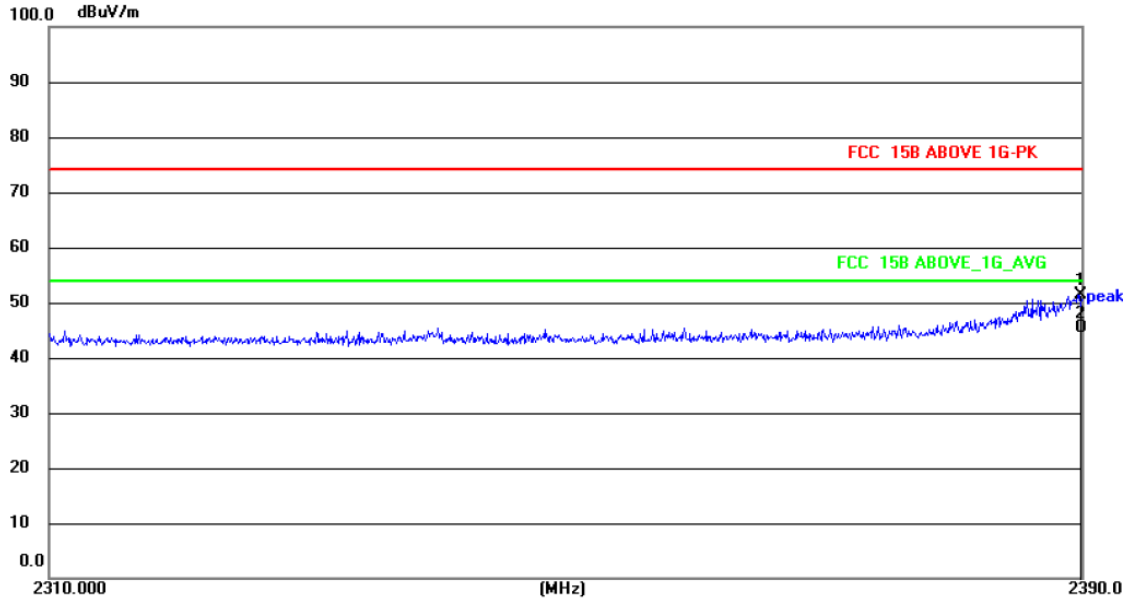
Polarization: *Horizontal*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2390.000	19.10	30.09	49.19	74.00	24.81	peak	134	226	P	
2 *	2390.000	13.25	30.09	43.34	54.00	10.66	AVG	141	207	P	

Radiated Emission Measurement

File :Gateway Data :#94 Date: 2021/10/29



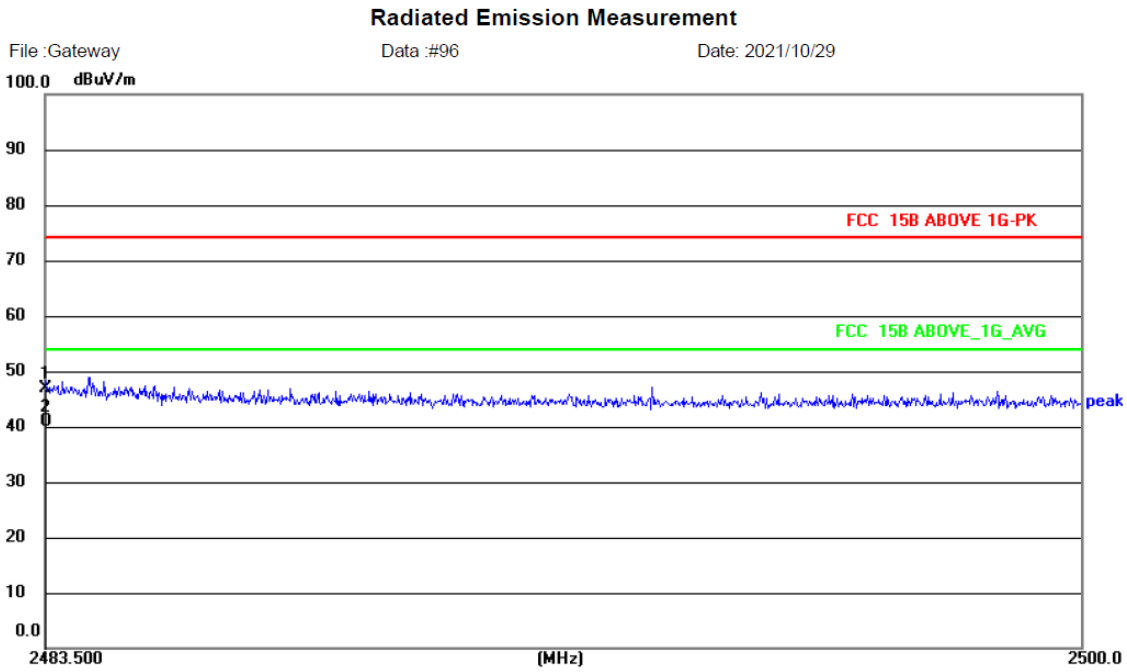
Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2412MHz g
Note: Gateway

Polarization: *Vertical*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2389.867	21.19	30.09	51.28	74.00	22.72	peak	143	157	P	
2 *	2389.867	15.36	30.09	45.45	54.00	8.55	AVG	129	166	P	

Test mode:	802.11g	Test channel:	Highest



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2462MHz g
Note: Gateway

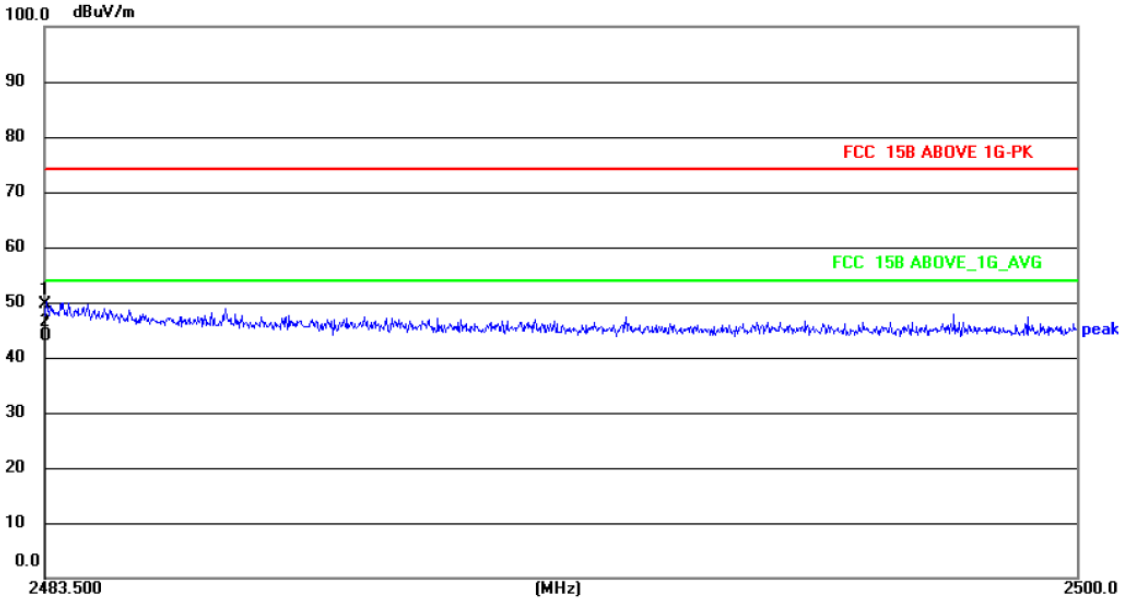
Polarization: *Horizontal*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2483.511	16.49	30.35	46.84	74.00	27.16	peak	116	109	P	
2 *	2483.511	10.53	30.35	40.88	54.00	13.12	AVG	121	165	P	

Radiated Emission Measurement

File :Gateway Data :#95 Date: 2021/10/29



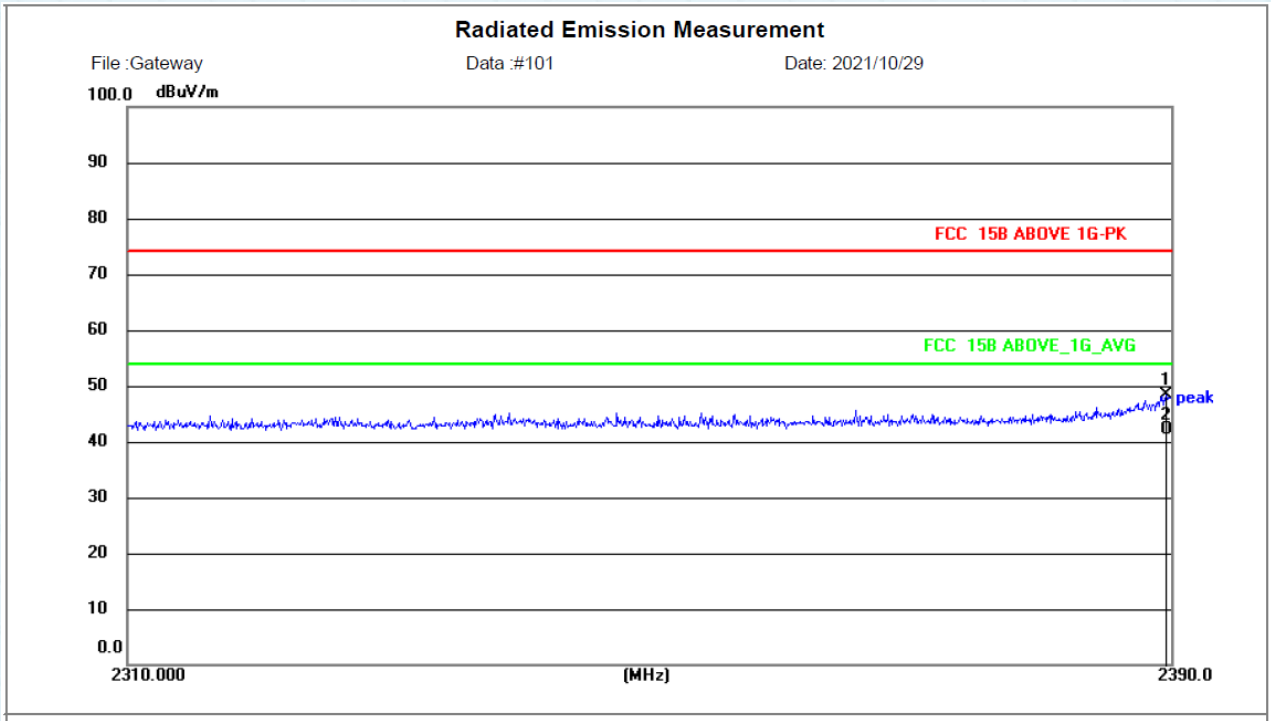
Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2462MHz g
Note: Gateway

Polarization: *Vertical*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2483.500	19.25	30.35	49.60	74.00	24.40	peak	142	158	P	
2 *	2483.500	13.59	30.35	43.94	54.00	10.06	AVG	133	229	P	

Test mode:	802.11n(HT20)	Test channel:	Lowest



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2412MHz n(HT20)
Note: Gateway

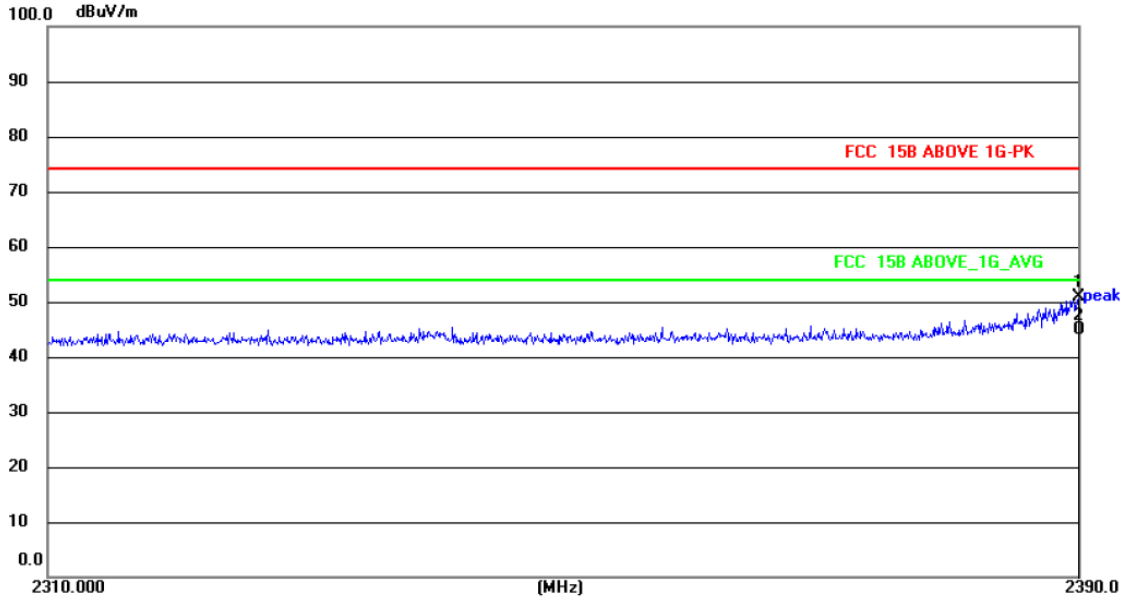
Polarization: *Horizontal*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2389.600	18.39	30.09	48.48	74.00	25.52	peak	116	210	P	
2 *	2389.600	12.02	30.09	42.11	54.00	11.89	AVG	134	227	P	

Radiated Emission Measurement

File :Gateway Data :#102 Date: 2021/10/29



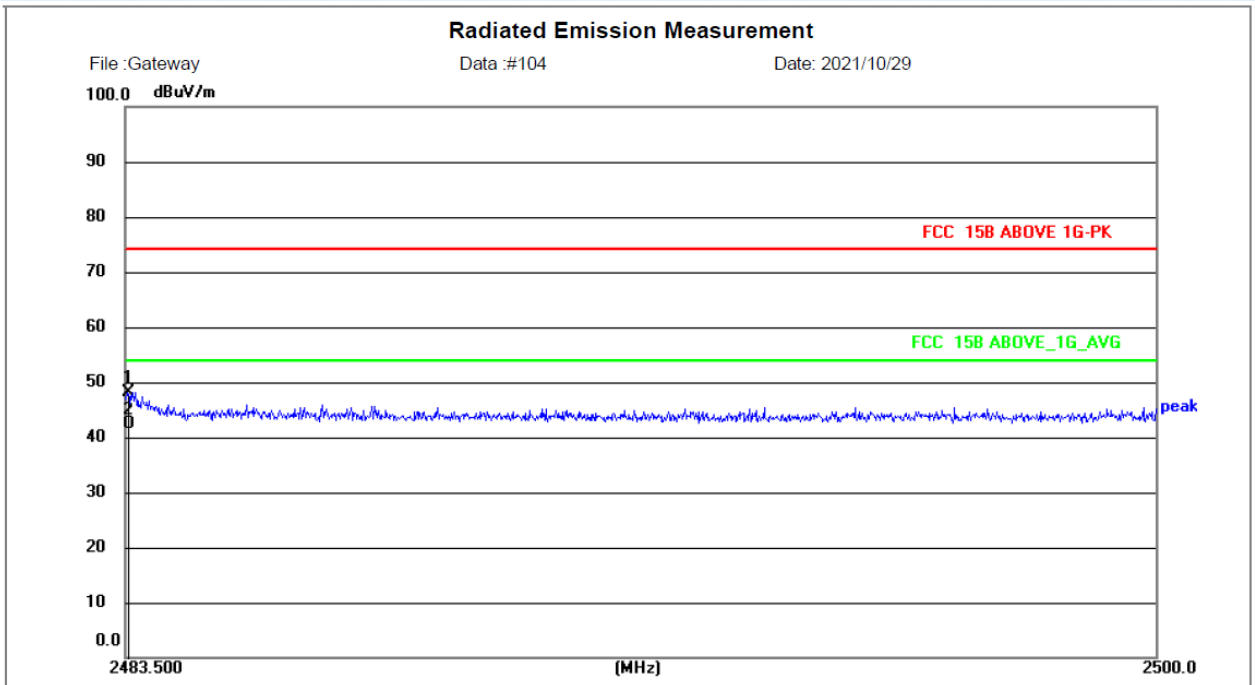
Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2412MHz n(HT20)
Note: Gateway

Polarization: *Vertical*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2390.000	20.83	30.09	50.92	74.00	23.08	peak	113	134	P	
2 *	2390.000	14.76	30.09	44.85	54.00	9.15	AVG	128	218	P	

Test mode:	802.11n(HT20)	Test channel:	Highest



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2462MHz n(HT20)
Note: Gateway

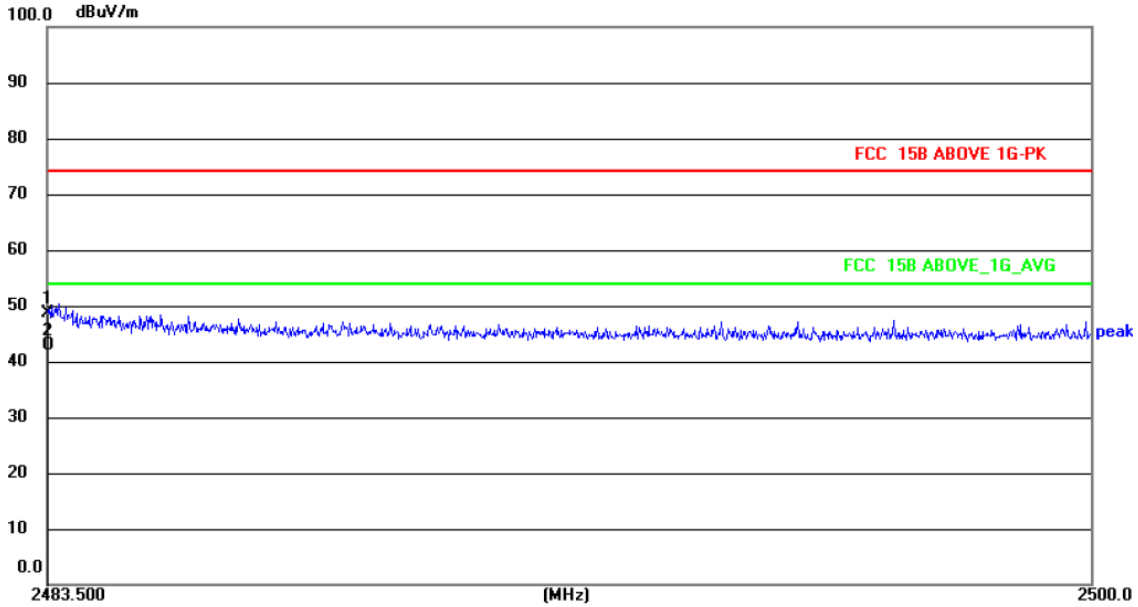
Polarization: *Horizontal*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2483.533	17.67	30.35	48.02	74.00	25.98	peak	142	217	P	
2 *	2483.533	11.96	30.35	42.31	54.00	11.69	AVG	131	228	P	

Radiated Emission Measurement

File :Gateway Data :#103 Date: 2021/10/29



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2462MHz n(HT20)
Note: Gateway

Polarization: *Vertical*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

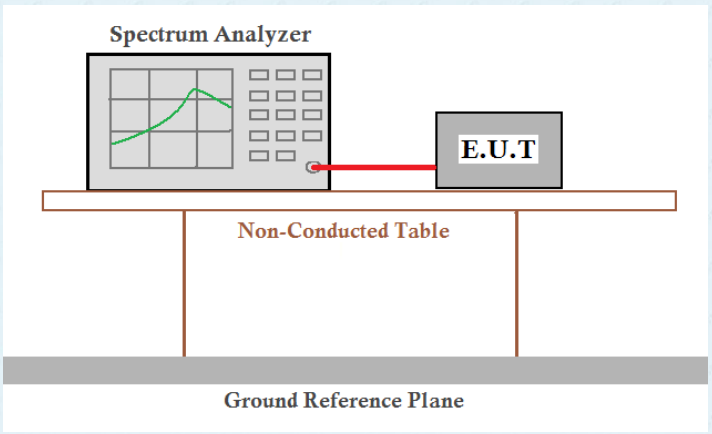
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	2483.511	18.28	30.35	48.63	74.00	25.37	peak	151	128	P	
2 *	2483.511	12.65	30.35	43.00	54.00	11.00	AVG	136	229	P	

Remarks:

1. *The tests were performed on lowest and highest freque ncies.*
2. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

7.7 Spurious Emission

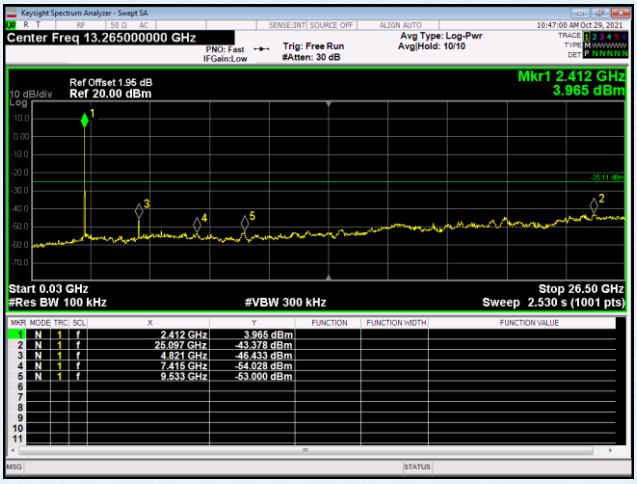
7.7.1 Conducted Emission Method

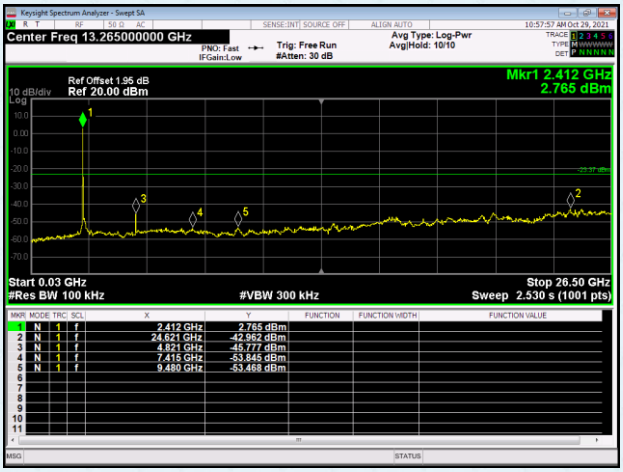
Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	ANSI C63.10:2013 and KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Test plot as follows:

Test mode:	802.11b	Test mode:	802.11g

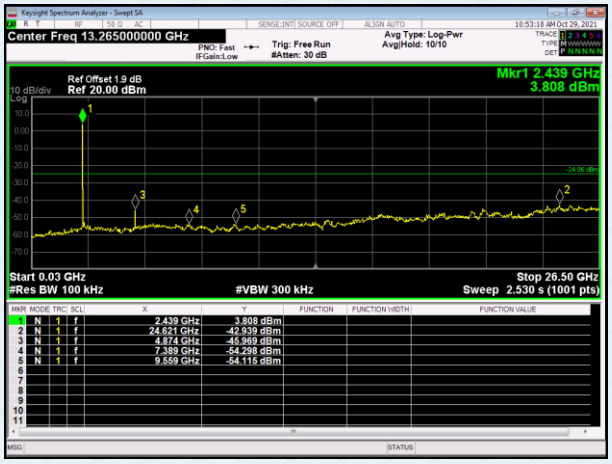
Lowest channel

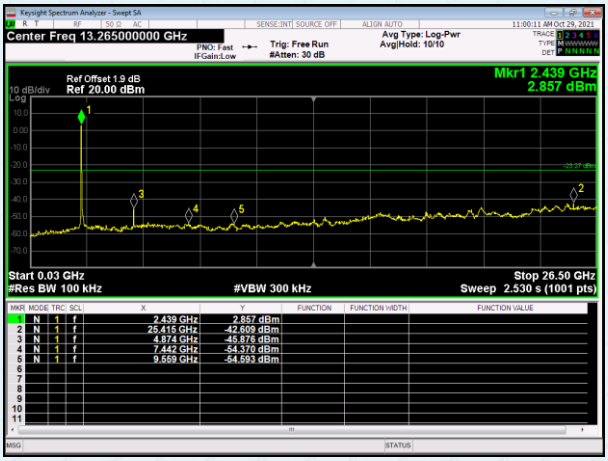




30MHz~26.5GHz

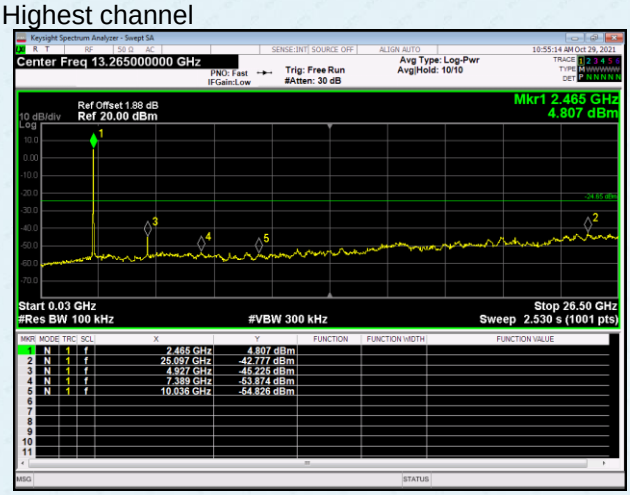
Middle channel

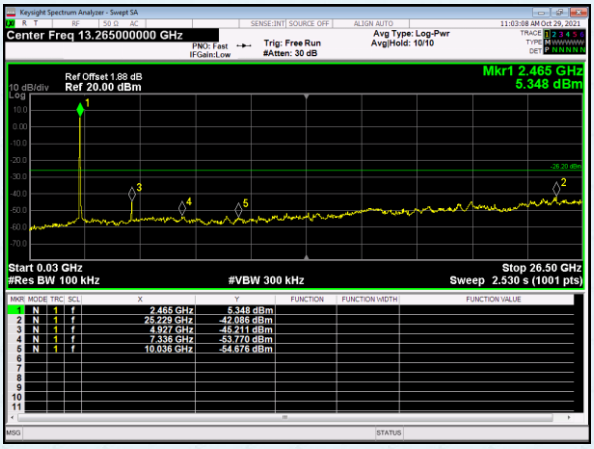




30MHz~26.5GHz

Highest channel

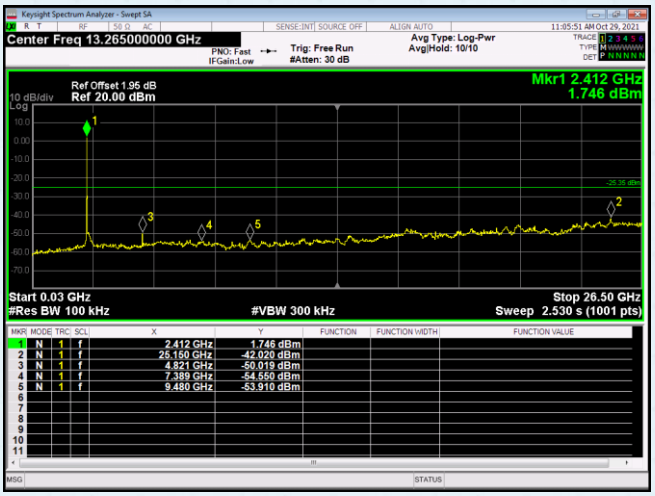




30MHz~26.5GHz

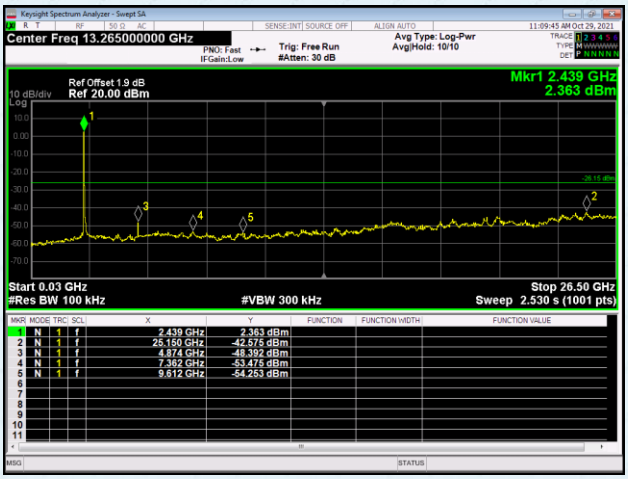
Test mode:	802.11n(HT20)

Lowest channel



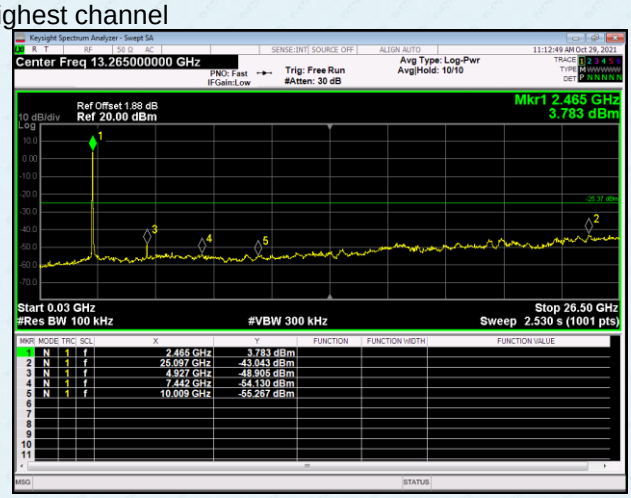
30MHz~26.5GHz

Middle channel



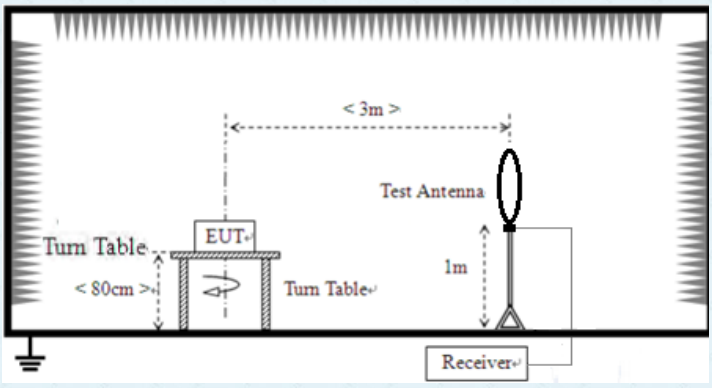
30MHz~26.5GHz

Highest channel

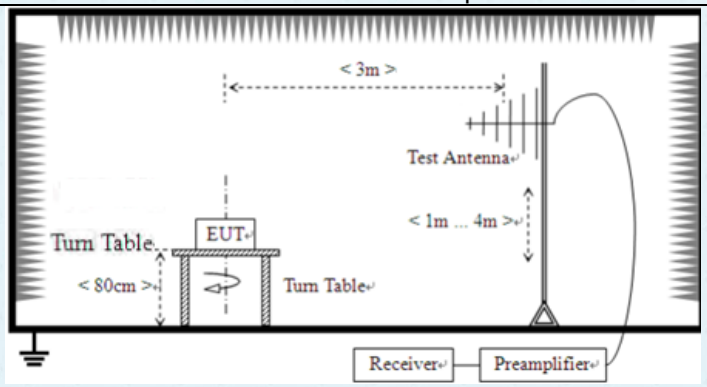


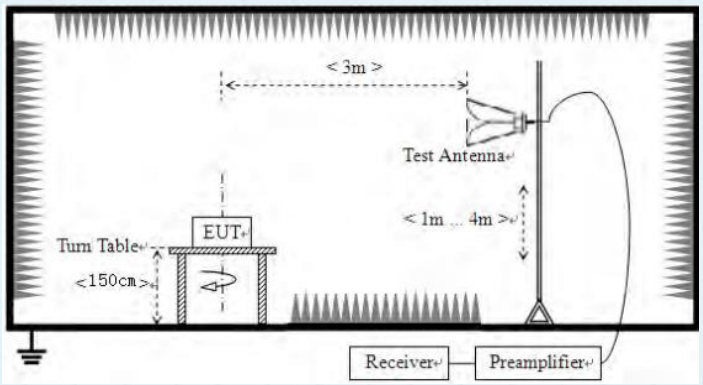
30MHz~26.5GHz

7.7.2 Radiated Emission Method

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.209</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10: 2013</td></tr>
<tr><td>Test Frequency Range:</td><td>9kHz to 26.5GHz</td></tr>
<tr><td>Test site:</td><td>Measurement Distance: 3m</td></tr>
<tr><td>Receiver setup:</td><td>
<table>
<tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Value</td></tr>
<tr><td>9KHz-150KHz</td><td>Quasi-peak</td><td>200Hz</td><td>600Hz</td><td>Quasi-peak</td></tr>
<tr><td>150KHz-30MHz</td><td>Quasi-peak</td><td>9KHz</td><td>30KHz</td><td>Quasi-peak</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak</td></tr>
<tr><td>Peak</td><td>1MHz</td><td>10Hz</td><td>Average</td></tr>
</table>
</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><td>Frequency</td><td>Limit (uV/m)</td><td>Value</td><td>Measurement Distance</td></tr>
<tr><td>0.009MHz-0.490MHz</td><td>2400/F(KHz)</td><td>QP</td><td>300m</td></tr>
<tr><td>0.490MHz-1.705MHz</td><td>24000/F(KHz)</td><td>QP</td><td>300m</td></tr>
<tr><td>1.705MHz-30MHz</td><td>30</td><td>QP</td><td>30m</td></tr>
<tr><td>30MHz-88MHz</td><td>100</td><td>QP</td><td rowspan="6">3m</td></tr>
<tr><td>88MHz-216MHz</td><td>150</td><td>QP</td></tr>
<tr><td>216MHz-960MHz</td><td>200</td><td>QP</td></tr>
<tr><td>960MHz-1GHz</td><td>500</td><td>QP</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>500</td><td>Average</td></tr>
<tr><td>5000</td><td>Peak</td></tr>
</table>
</td></tr>
<tr><td>Test setup:</td><td>For radiated emissions from 9kHz to 30MHz
 

For radiated emissions from 30MHz to1GHz</td></tr>
</table>

<table>
<tr><td></td><td> 

For radiated emissions above 1GHz

</td></tr>
<tr><td>Test Procedure:</td><td>1. The EUT was placed on the top of a rotating table (0.8m for below 1G and 1.5m for above 1G) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</td></tr>
<tr><td>Test Instruments:</td><td>Refer to section 6.0 for details</td></tr>
<tr><td>Test mode:</td><td>Refer to section 5.2 for details</td></tr>
</table>

Test environment:	Temp.:	26 °C	Humid.:	54%	Press.:	1012mbar
Test voltage:	DC 12V(Powered by adaptor)					
Test results:	Pass					

Remarks:

1. *Only the worst case Main Antenna test data.*
2. *Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.*

Measurement data:

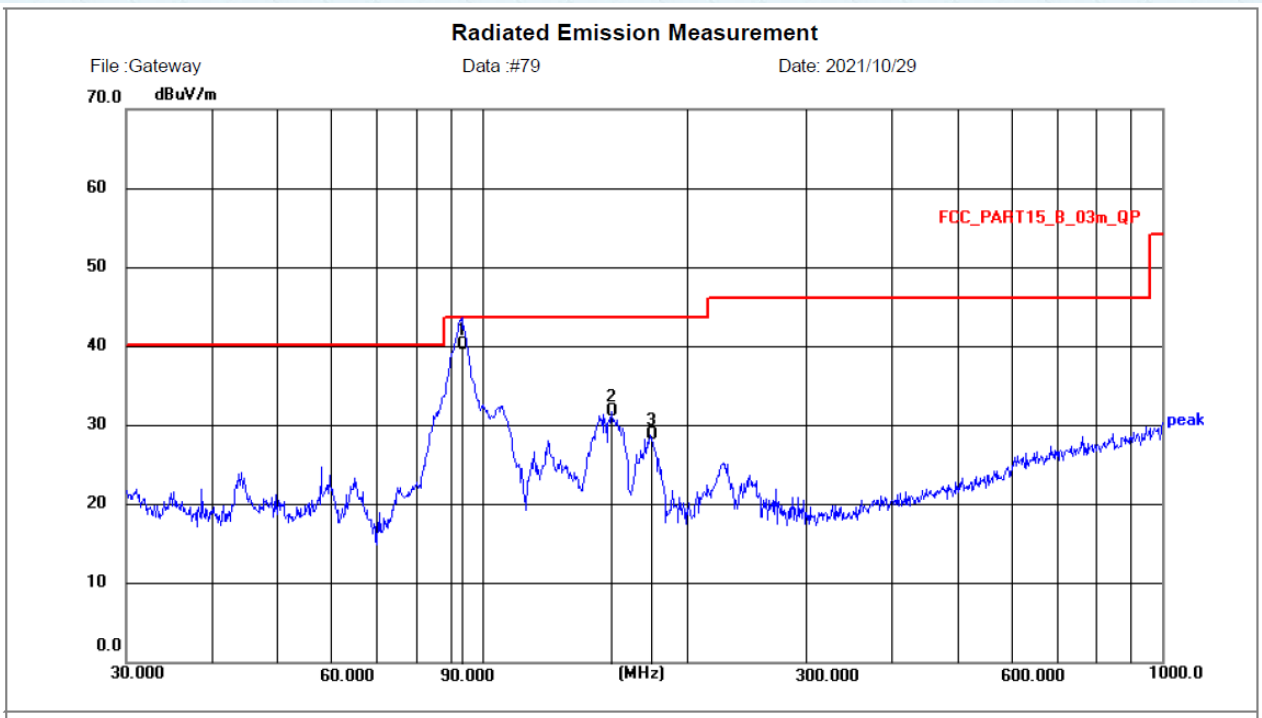
■ **9kHz~30MHz**

The emission from 9 kHz-30MHz and 18-26.5GHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

Below 1GHz

Pre-scan all test modes, found worst case at 802.11b 2412MHz, and so only show the test result of 802.11b 2412MHz

Horizontal:



Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2412MHz b
Note: Gateway

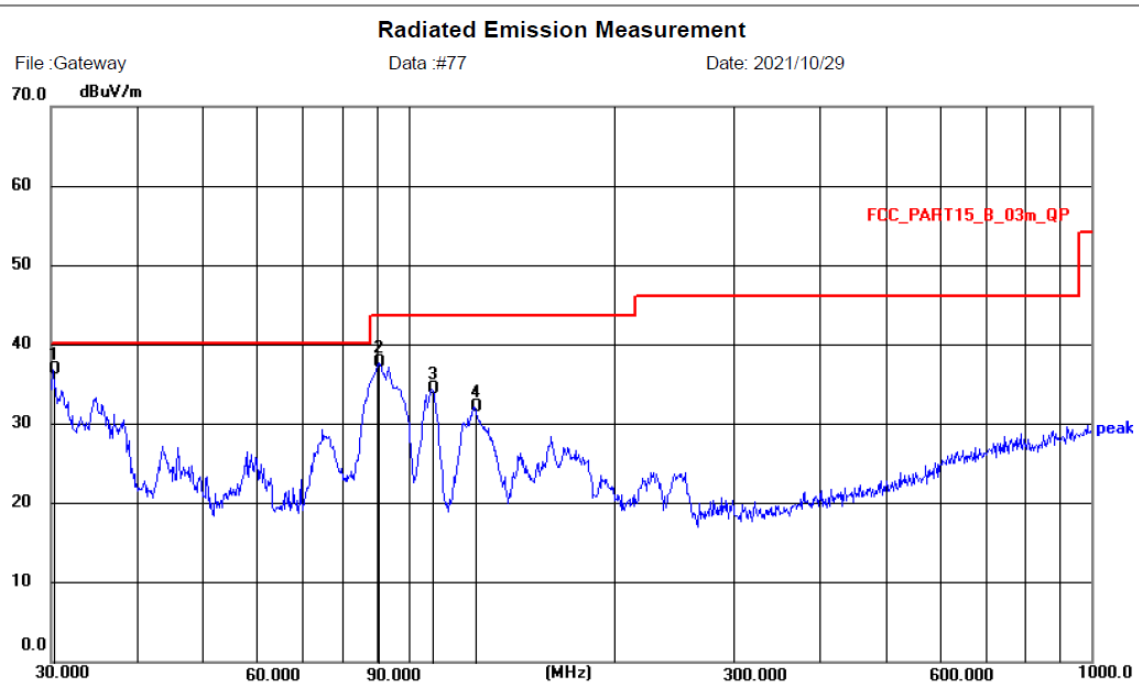
Polarization: *Horizontal*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	93.4402	28.76	11.42	40.18	43.50	3.32	QP	156	133	P	
2	154.8204	15.69	15.99	31.68	43.50	11.82	QP	210	185	P	
3	176.8875	14.83	14.01	28.84	43.50	14.66	QP	206	214	P	

Remark:
1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2 The emission levels of other frequencies are very lower than the limit and not show in test report.

Vertical:



Site 966 Chamber
Limit: FCC_PART15_B_03m_QP
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2412MHz b
Note: Gateway

Polarization: *Vertical*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	30.2111	22.51	14.41	36.92	40.00	3.08	QP	138	220	P	
2	90.5374	26.50	11.20	37.70	43.50	5.80	QP	122	197	P	
3	108.2667	21.56	12.77	34.33	43.50	9.17	QP	100	205	P	
4	125.0066	17.71	14.34	32.05	43.50	11.45	QP	150	115	P	

Remark:

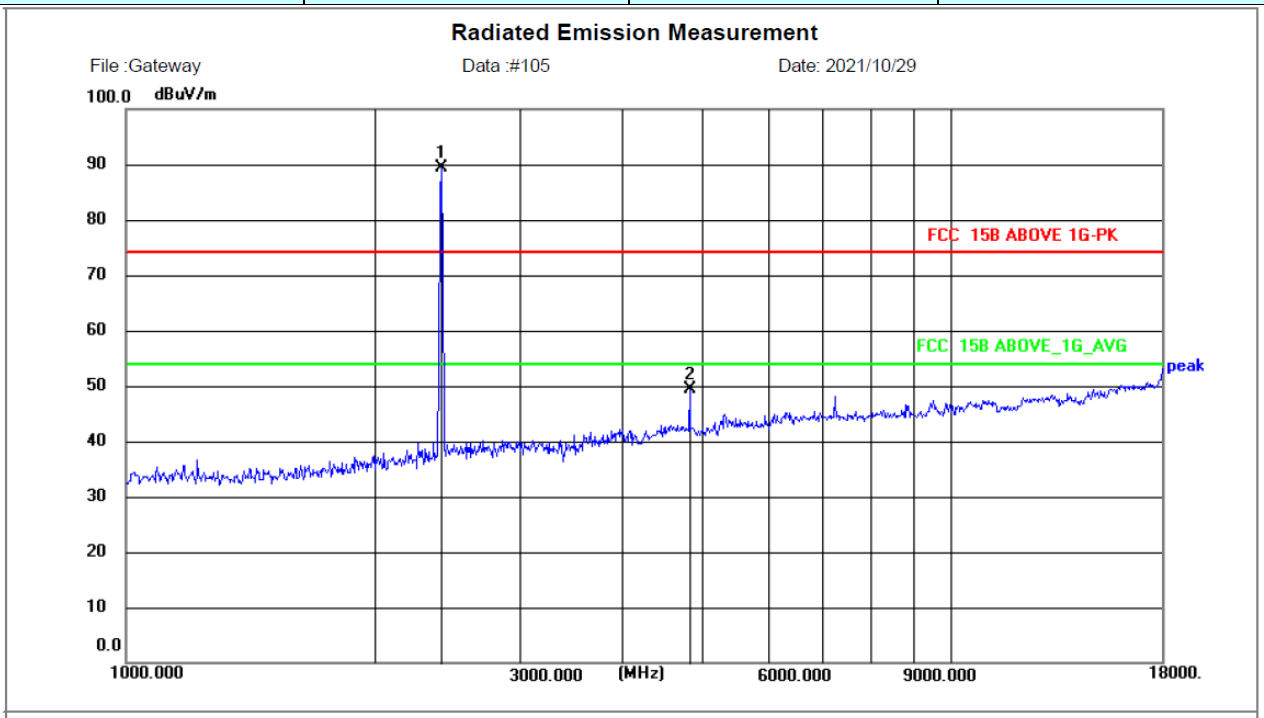
1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

2 The emission levels of other frequencies are very lower than the limit and not show in test report.

Above 1GHz

Pre-scan all test modes, found worst case at 802.11b, and so only show the test result of 802.11b.

Test mode:	802.11b	Test channel:	Lowest



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2412MHz b
Note: Gateway

Polarization: *Horizontal*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	2411.000	100.85	-11.39	89.46	/	/	peak	132	188	/	
2	4830.667	55.84	-6.37	49.47	74.00	24.53	peak	146	134	P	

Remark:

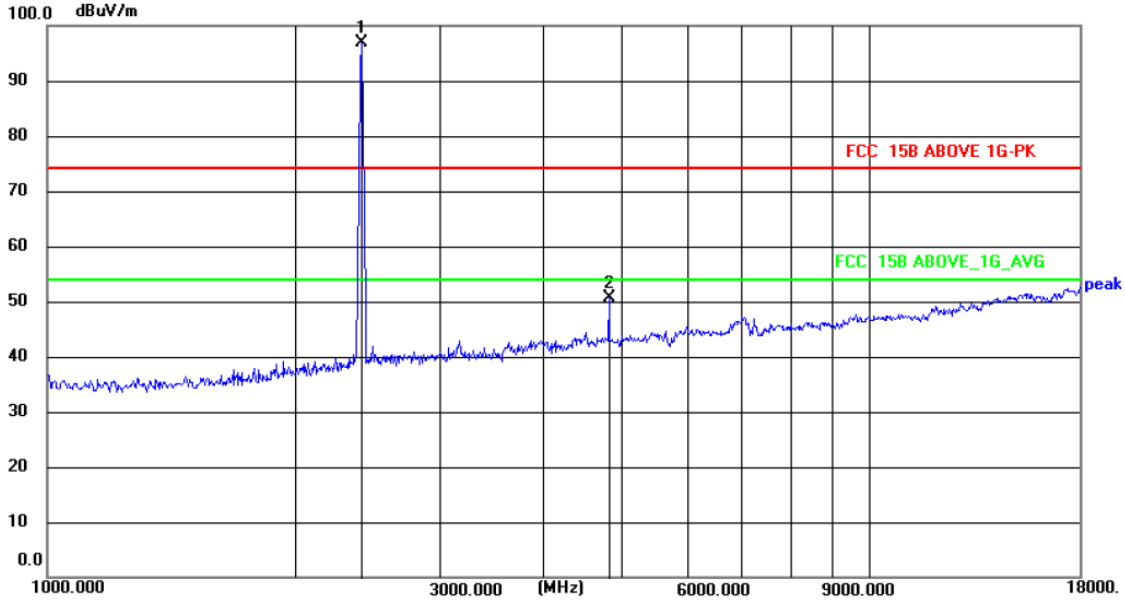
1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

2 The emission levels of other frequencies are very lower than the limit and not show in test report

Test mode:	802.11b	Test channel:	Lowest

Radiated Emission Measurement

File :Gateway Data :#106 Date: 2021/10/29



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2412MHz b
Note: Gateway

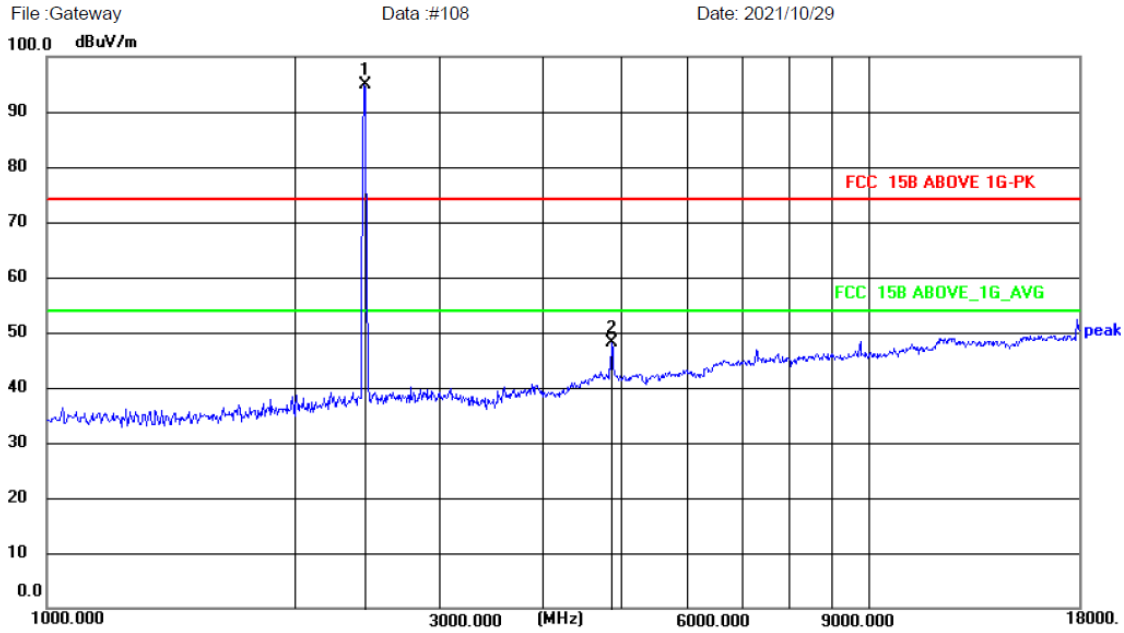
Polarization: *Vertical*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	2411.000	108.37	-11.39	96.98	/	/	peak	187	225	/	
2	4830.667	57.11	-6.37	50.74	74.00	23.26	peak	169	159	P	

Remark:
1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2 The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11b	Test channel:	Middle



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2437MHz b
Note: Gateway

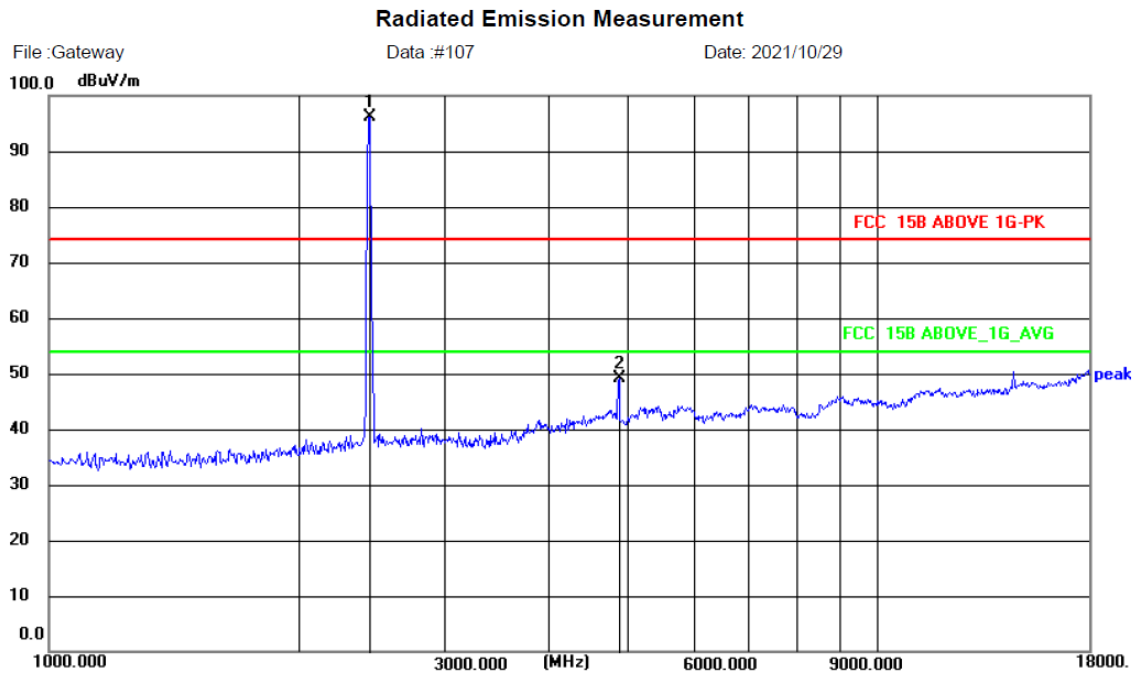
Polarization: *Horizontal*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	2437.667	106.12	-11.29	94.83	/	/	peak	132	241	/	
2	4870.333	54.55	-6.30	48.25	74.00	25.75	peak	126	223	P	

Remark:
1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2 The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11b	Test channel:	Middle



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2437MHz b
Note: Gateway

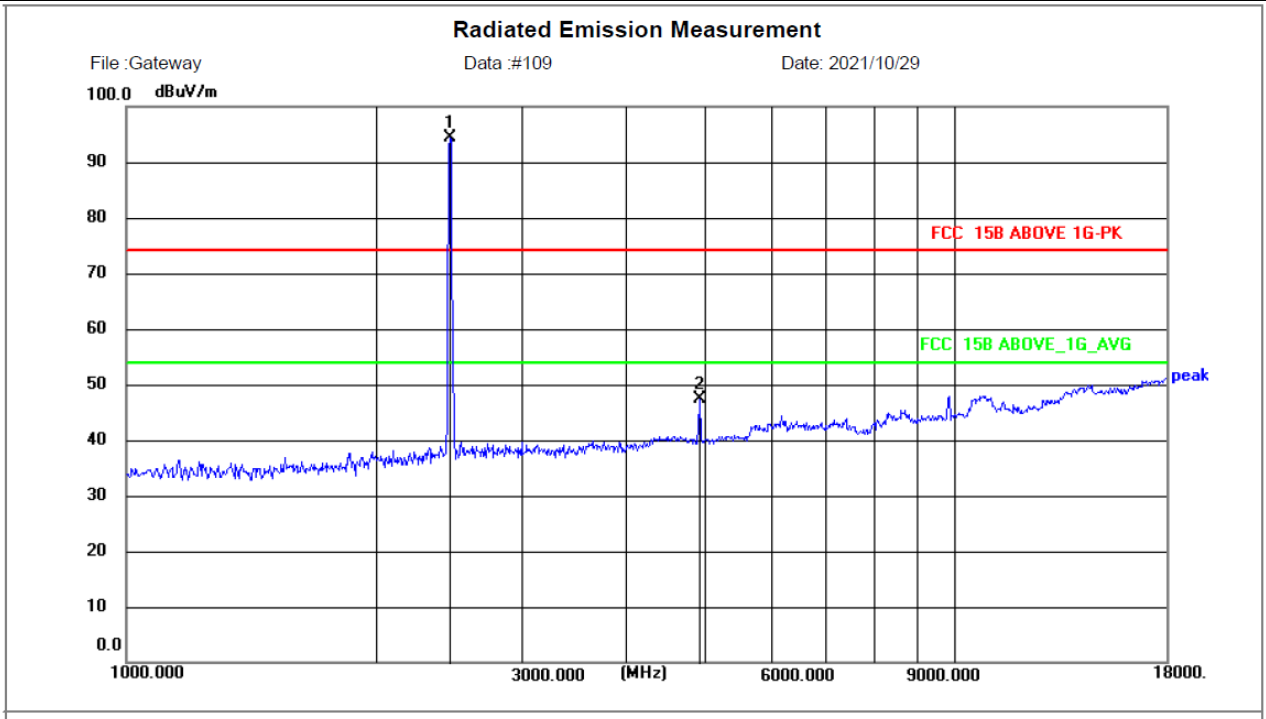
Polarization: *Vertical*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	2437.333	107.45	-11.31	96.14	/	/	peak	153	214	/	
2	4876.000	55.48	-6.28	49.20	74.00	24.80	peak	145	130	P	

Remark:
1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2 The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11b	Test channel:	Highest



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2462MHz b
Note: Gateway

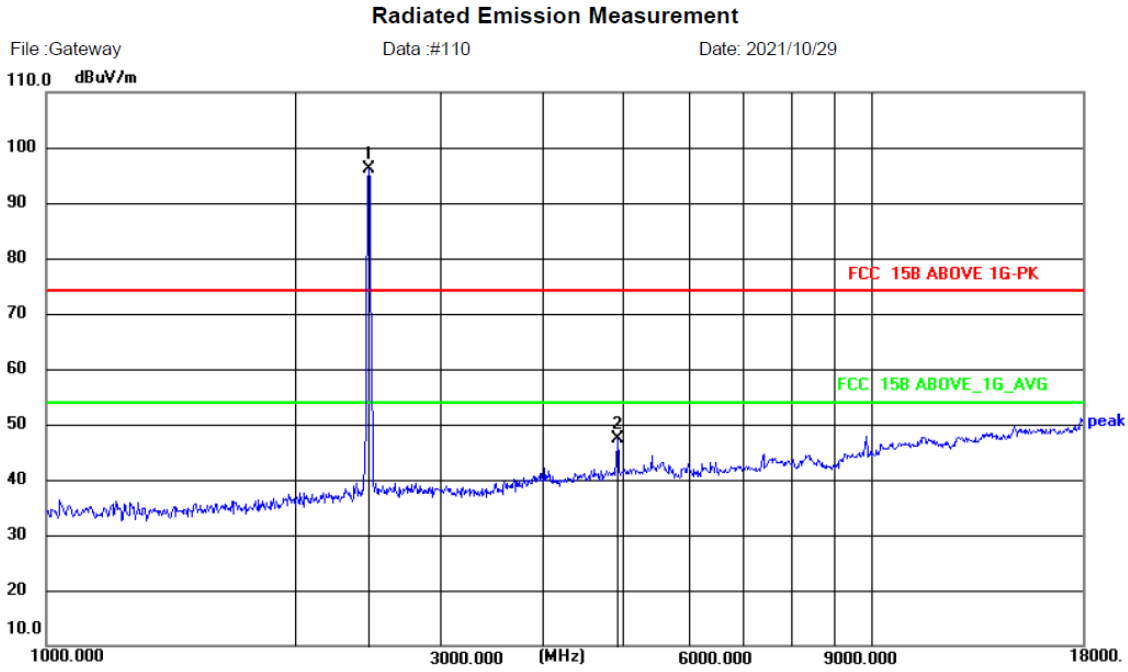
Polarization: *Horizontal*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	2462.000	105.59	-11.23	94.36	/	/	peak	116	135	/	
2	4927.000	53.60	-6.18	47.42	74.00	26.58	peak	142	166	P	

Remark:
1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2 The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11b	Test channel:	Highest



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2462MHz b
Note: Gateway

Polarization: *Vertical*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

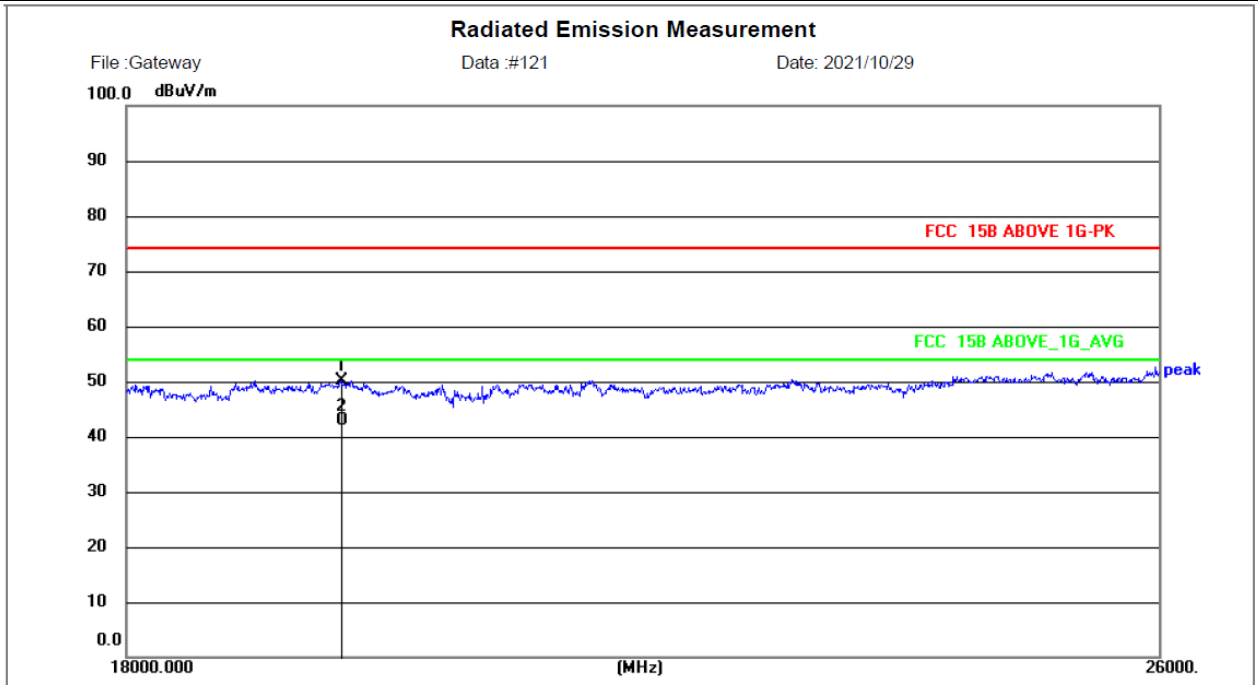
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	2462.000	107.40	-11.23	96.17	/	/	peak	152	28	/	
2	4927.000	53.50	-6.18	47.32	74.00	26.68	peak	161	304	P	

Remark:

1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

2 The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11b	Test channel:	Lowest



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2412MHz b
Note: Gateway

Polarization: *Horizontal*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

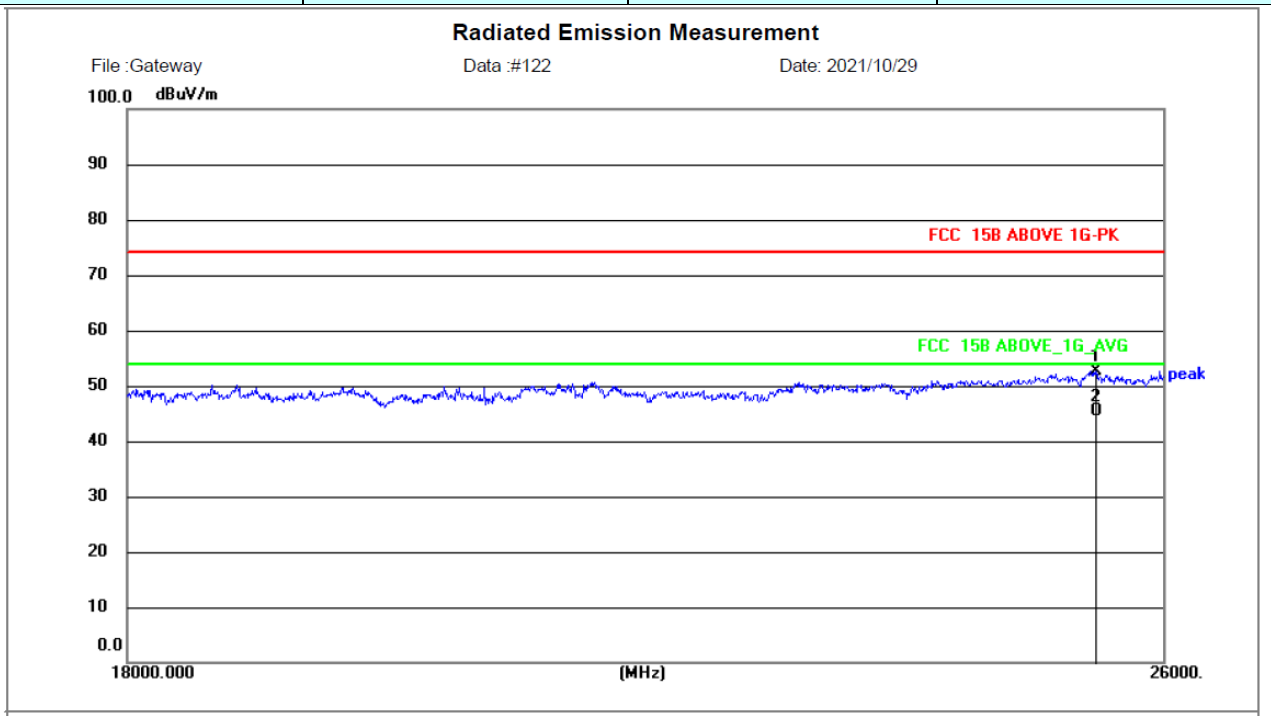
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	19426.667	27.36	22.82	50.18	74.00	23.82	peak	108	214	P	
2 *	19426.667	20.14	22.82	42.96	54.00	11.04	AVG	112	207	P	

Remark:

1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

2 The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11b	Test channel:	Lowest



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2412MHz b
Note: Gateway

Polarization: *Vertical*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

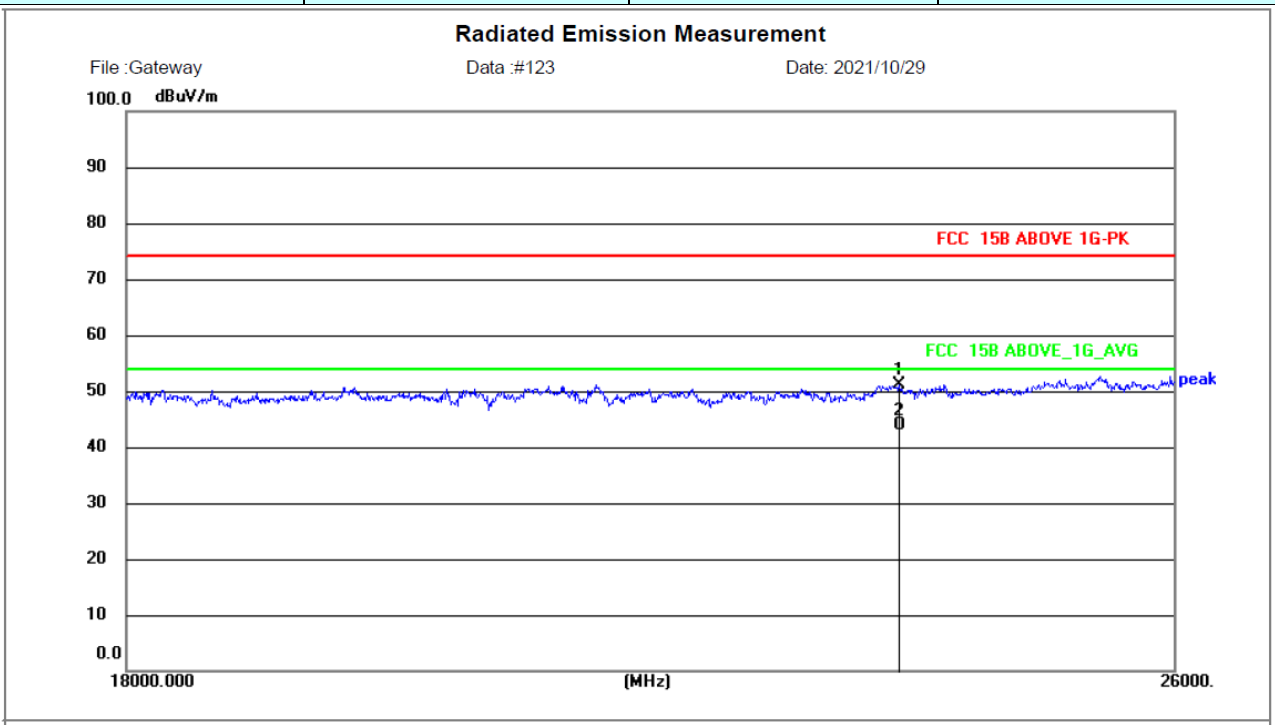
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	25389.333	32.30	20.35	52.65	74.00	21.35	peak	105	56	P	
2 *	25389.333	24.93	20.35	45.28	54.00	8.72	AVG	116	249	P	

Remark:

1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

2 The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11b	Test channel:	Middle



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2437MHz b
Note: Gateway

Polarization: *Horizontal*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

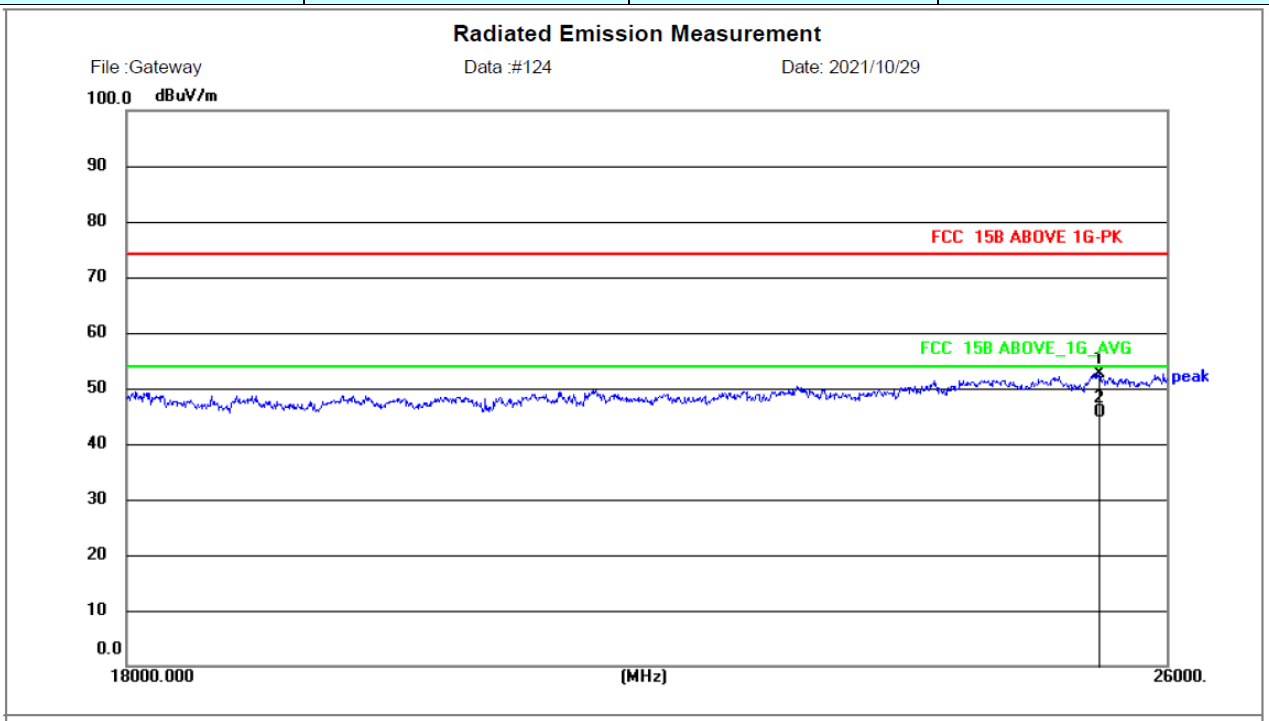
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	23616.000	29.09	21.92	51.01	74.00	22.99	peak	103	358	P	
2 *	23616.000	21.96	21.92	43.88	54.00	10.12	AVG	112	201	P	

Remark:

1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

2 The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11b	Test channel:	Middle



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2437MHz b
Note: Gateway

Polarization: *Vertical*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	25389.333	32.30	20.35	52.65	74.00	21.35	peak	112	241	P	
2 *	25389.333	25.31	20.35	45.66	54.00	8.34	AVG	109	152	P	

Remark:

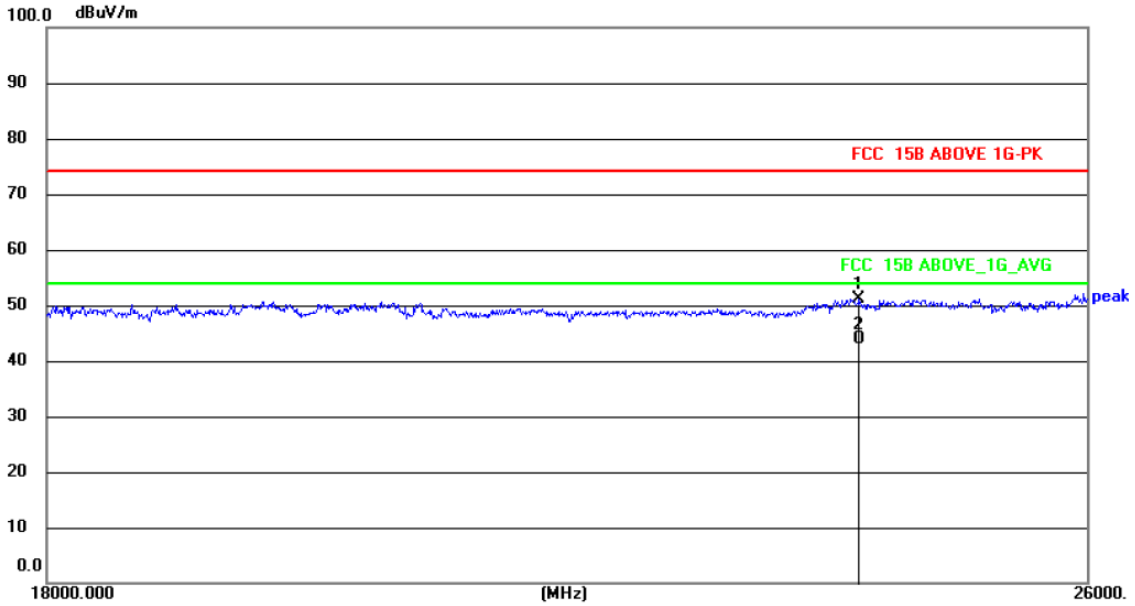
1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

2 The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11b	Test channel:	Highest

Radiated Emission Measurement

File :Gateway Data :#125 Date: 2021/10/29



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2462MHz b
Note: Gateway

Polarization: *Horizontal*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

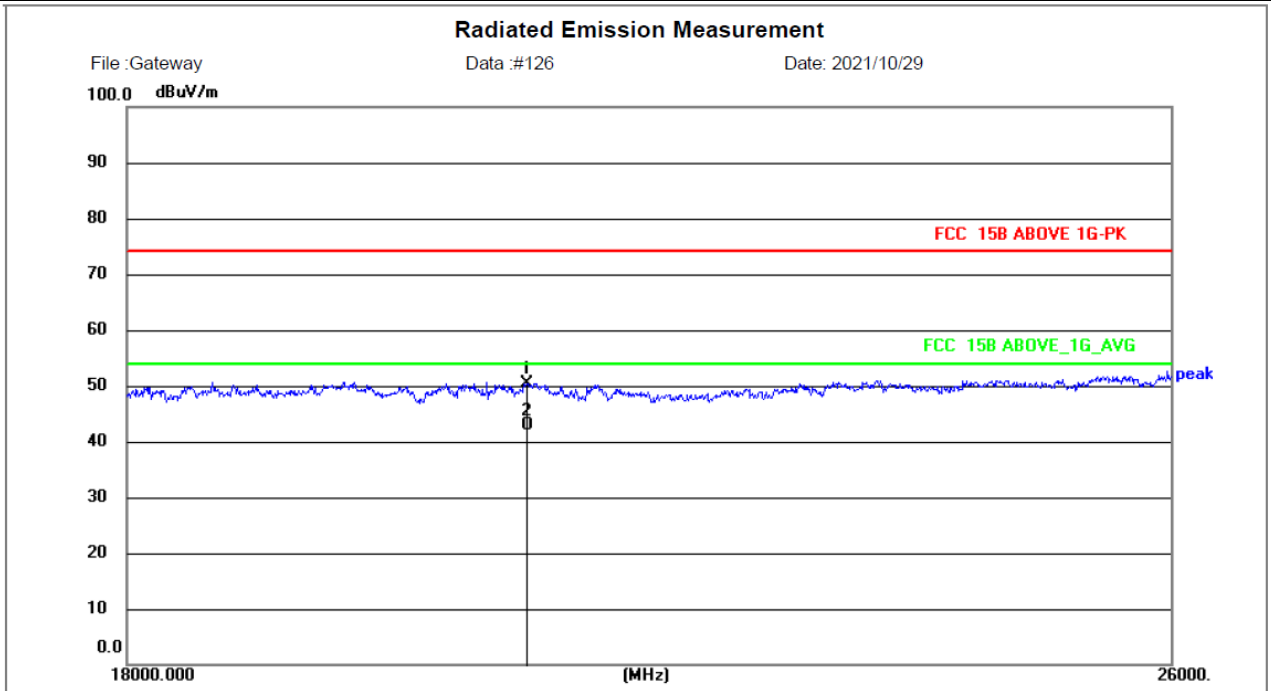
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	23989.333	30.37	20.83	51.20	74.00	22.80	peak	123	301	P	
2 *	23989.333	23.12	20.83	43.95	54.00	10.05	AVG	121	158	P	

Remark:

1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

2 The emission levels of other frequencies are very lower than the limit and not show in test report.

Test mode:	802.11b	Test channel:	Highest



Site 966 Chamber
Limit: FCC 15B ABOVE 1G-PK
EUT: Wifi Controller
M/N: GWWIC02
Mode: WIFI 2462MHz b
Note: Gateway

Polarization: *Vertical*
Power: DC 12V(Powered by adaptor)
Distance: 3m

Temperature: 26(C)
Humidity: 54 %

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	20725.333	27.67	22.78	50.45	74.00	23.55	peak	117	258	P	
2 *	20725.333	20.15	22.78	42.93	54.00	11.07	AVG	132	204	P	

Remark:
1 Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2 The emission levels of other frequencies are very lower than the limit and not show in test report.

8 Test Setup Photo

eference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

------End------