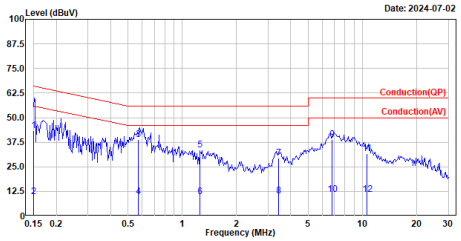
Appendix A. Test Result of AC Power Line Conducted Emission

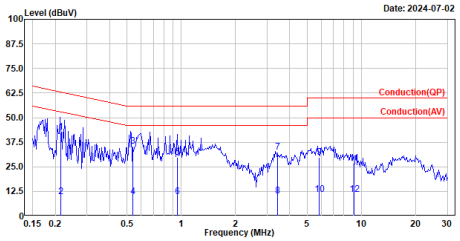
Site :HY-SR01
Condition :Line
Mode :TX_Wireless_2440MHz
test by :Jimmy



No.	Frequency MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	0.150	43.38	65.99	-22.61	33.70	9.68	QP
2	0.150	9.68	65.99	-56.31	0.00	9.68	Peak
3	0.571	38.70	56.00	-17.30	29.02	9.68	QP
4	0.571	9.69	56.00	-46.31	0.01	9.68	Peak
5	1.249	33.66	56.00	-22.34	23.92	9.74	QP
6	1.249	9.75	56.00	-46.25	0.01	9.74	Peak
7	3.423	29.31	56.00	-26.69	19.01	10.30	QP
8	3.423	10.30	56.00	-45.70	0.00	10.30	Peak
9	6.805	39.03	60.00	-20.97	28.21	10.82	QP
10	6.805	10.83	60.00	-49.17	0.01	10.82	Peak
11	10.545	31.68	60.00	-28.32	20.89	10.79	QP
12	10.545	10.80	60.00	-49.20	0.01	10.79	Peak

Note:
1. Level = Read Level + Factor
2. Factor = LISN insertion loss + Cable loss
3. Over Limit = Level - Limit Line

Site :HY-SR01
Condition :Neutral
Mode :TX_Wireless_2440MHz
test by :Jimmy



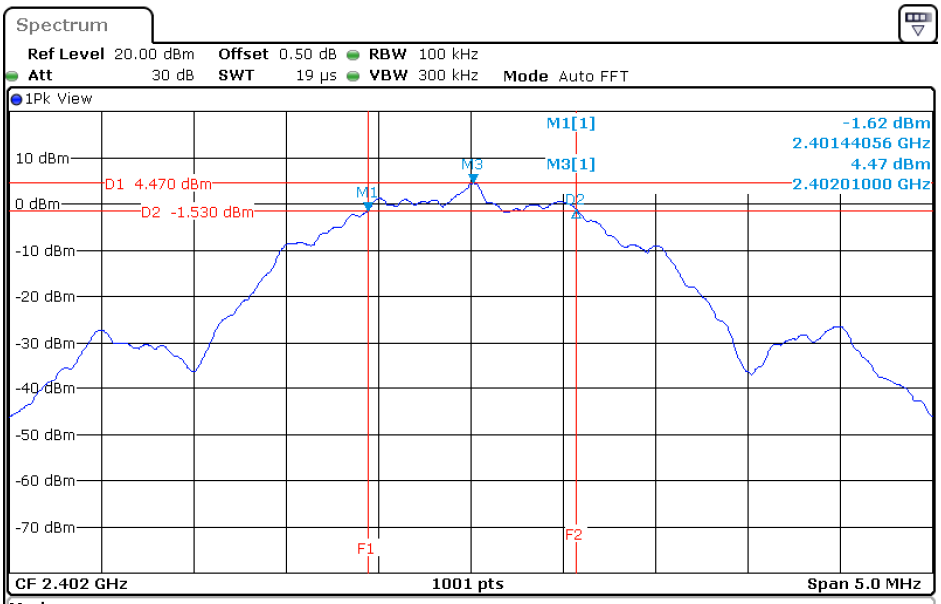
No.	Frequency MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	0.214	42.69	63.05	-20.36	33.03	9.66	QP
2	0.214	9.66	63.05	-53.39	0.00	9.66	Peak
3	0.537	35.34	56.00	-20.66	25.68	9.66	QP
4	0.537	9.67	56.00	-46.33	0.01	9.66	Peak
5	0.956	29.63	56.00	-26.37	19.93	9.70	QP
6	0.956	9.70	56.00	-46.30	0.00	9.70	Peak
7	3.427	32.61	56.00	-23.39	22.32	10.29	QP
8	3.427	10.28	56.00	-45.72	-0.01	10.29	Peak
9	5.826	29.97	60.00	-30.03	19.15	10.82	QP
10	5.826	10.82	60.00	-49.18	0.00	10.82	Peak
11	9.108	26.90	60.00	-33.10	16.11	10.79	QP
12	9.108	10.80	60.00	-49.20	0.01	10.79	Peak

Note:
1. Level = Read Level + Factor
2. Factor = LISN insertion loss + Cable loss
3. Over Limit = Level - Limit Line

Appendix B. 6 dB Bandwidth

Modulation	Frequency (MHz)	Measured Value (kHz)	Limit (kHz)	Result
GFSK	2402	1129	500	Pass
	2440	1129	500	Pass
	2480	1129	500	Pass

GFSK / 2402 MHz



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40144056 GHz	-1.62 dBm		
D2	M1	1	1.12887 MHz	0.44 dB		
M3		1	2.40201 GHz	4.47 dBm		

Date: 22.MAY.2024 15:55:20

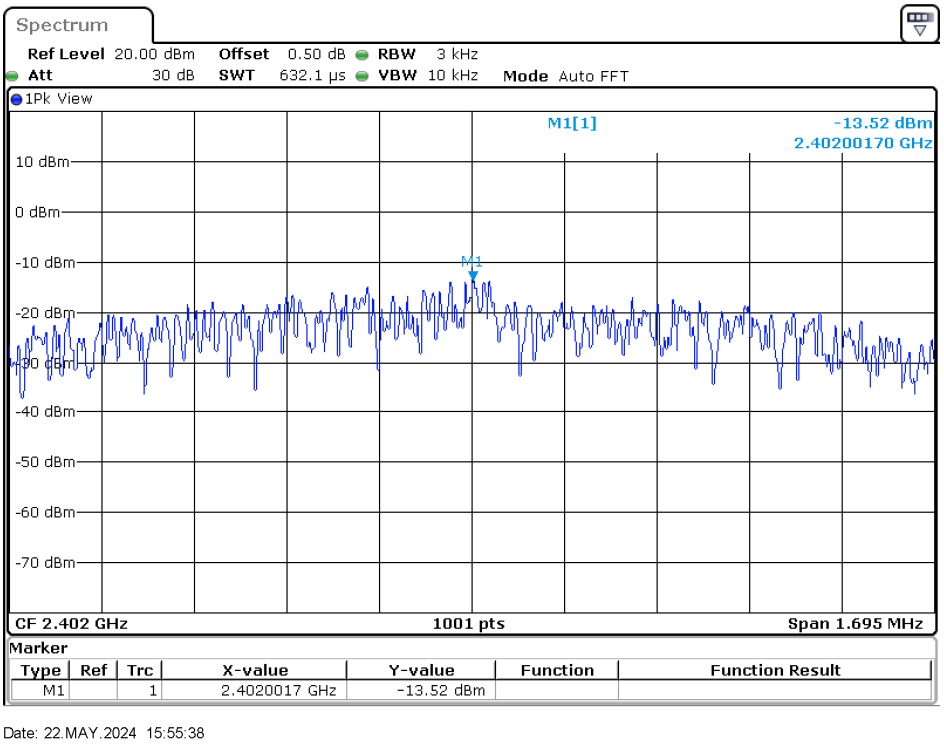
Appendix C. Test Result of Maximum Conducted Output Power

Modulation	Frequency (MHz)	Maximum Conducted Peak Output Power (dBm)	Limit (dBm)	Result
GFSK	2402	4.38	30.00	Pass
	2440	3.99	30.00	Pass
	2480	3.14	30.00	Pass

Appendix D. Test Result of Power Spectral Density

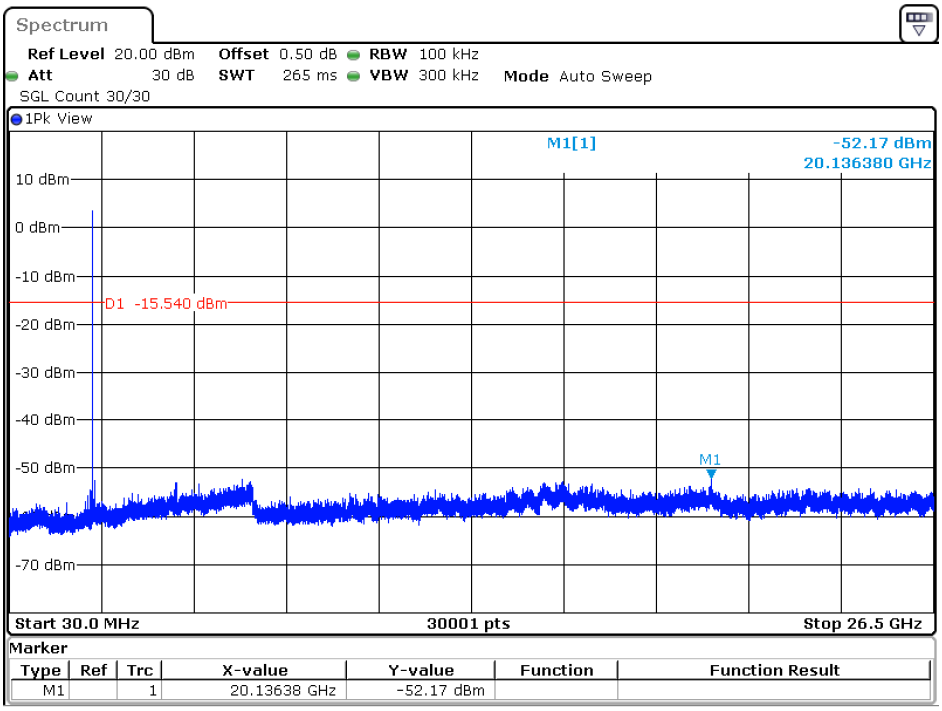
Modulation	Frequency (MHz)	Measure Value (dBm/3kHz)	Limit (dBm/3kHz)	Result
GFSK	2402	-13.52	8.00	Pass
	2440	-13.96	8.00	Pass
	2480	-14.94	8.00	Pass

GFSK / 2402 MHz



Appendix E. Test Result of Antenna Port Conducted Emission

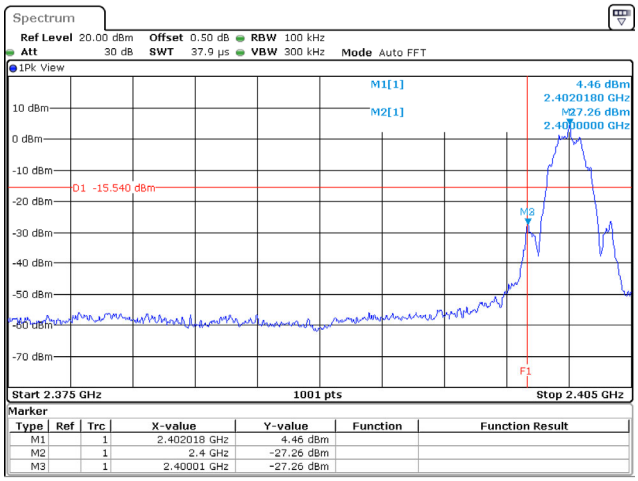
GFSK / 2402 MHz



Date: 22.MAY.2024 15:56:34

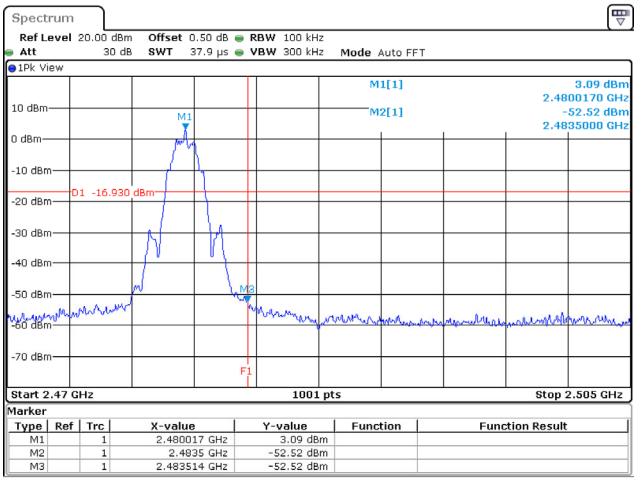
Modulation	Measurement Level Δ (dB)	Result
GFSK	> 20	PASS

GFSK / 2402 MHz



Date: 22.MAY.2024 15:55:56

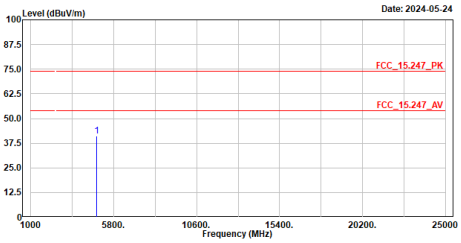
GFSK / 2480 MHz



Date: 22.MAY.2024 16:00:39

Appendix F. Test Result of Radiated Emission

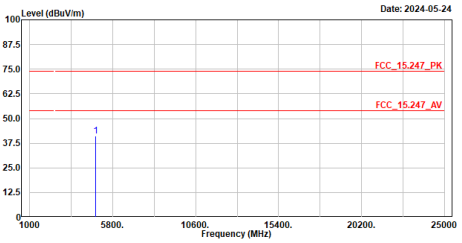
Site :HY-CB01
Condition :3m ,HORIZONTAL
Mode :TX_Wireless_2402MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	4804.000	41.24	74.00	-32.76	56.06	-14.82	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

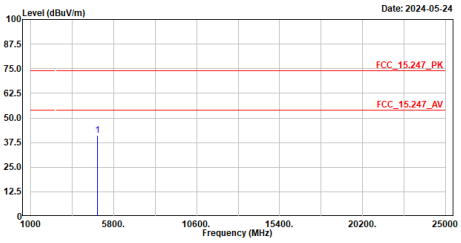
Site :HY-CB01
Condition :3m ,VERTICAL
Mode :TX_Wireless_2402MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	4804.000	41.20	74.00	-32.80	56.02	-14.82	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

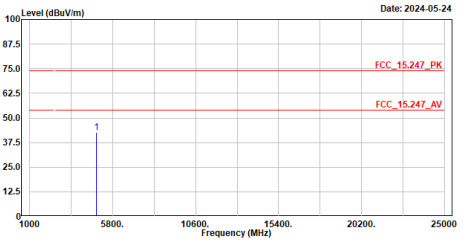
Site :HY-CB01
Condition :3m ,HORIZONTAL
Mode :TX_Wireless_2440MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	4880.000	40.99	74.00	-33.01	55.56	-14.57	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

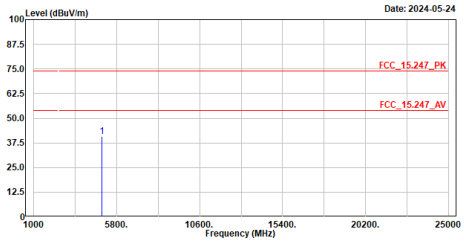
Site :HY-CB01
Condition :3m ,VERTICAL
Mode :TX_Wireless_2440MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	4880.000	42.46	74.00	-31.54	57.03	-14.57	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

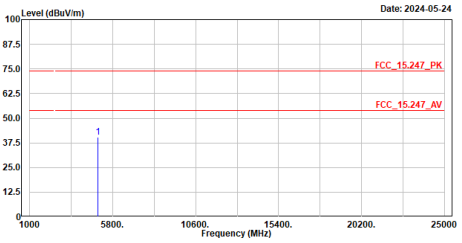
Site :HY-CB01
Condition :3m ,HORIZONTAL
Mode :TX_Wireless_2480MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	4960.000	40.62	74.00	-33.38	54.94	-14.32	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

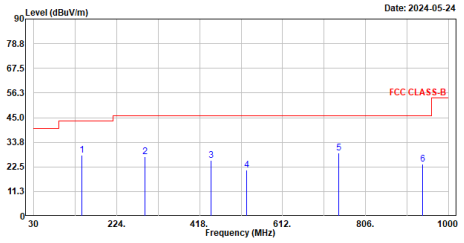
Site :HY-CB01
Condition :3m ,VERTICAL
Mode :TX_Wireless_2480MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	4960.000	40.42	74.00	-33.58	54.74	-14.32	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

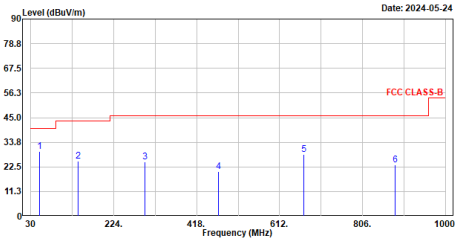
Site :HY-CB01
Condition :3m ,HORIZONTAL
Mode :TX_Wireless_2440MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	142.520	27.82	43.50	-15.68	51.95	-24.13	QP
2	289.960	27.32	46.00	-18.68	50.55	-23.23	QP
3	444.190	25.45	46.00	-20.55	44.37	-18.92	QP
4	527.610	21.11	46.00	-24.89	38.58	-17.47	QP
5	742.950	28.85	46.00	-17.15	42.03	-13.18	QP
6	938.890	23.71	46.00	-22.29	34.52	-10.81	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.

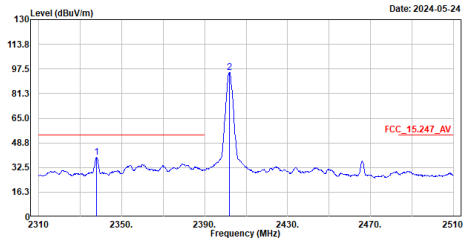
Site :HY-CB01
Condition :3m ,VERTICAL
Mode :TX_Wireless_2440MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	51.340	29.41	40.00	-10.59	52.86	-23.45	QP
2	141.550	25.19	43.50	-18.31	49.38	-24.19	QP
3	296.750	24.68	46.00	-21.32	47.75	-23.07	QP
4	468.440	20.27	46.00	-25.73	38.70	-18.43	QP
5	668.260	28.02	46.00	-17.98	42.61	-14.59	QP
6	881.660	23.38	46.00	-22.62	35.33	-11.95	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.

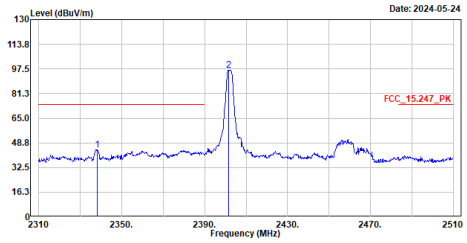
Site :HY-CB01
Condition :3m ,Horizontal
Mode :TX_Wireless_2402MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	2337.800	39.43	54.00	-14.57	33.70	5.73	Average
2	2402.000	95.22	------	------	89.42	5.80	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

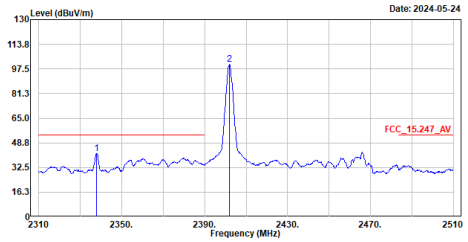
Site :HY-CB01
Condition :3m ,Horizontal
Mode :TX_Wireless_2402MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	2338.200	44.07	74.00	-29.93	38.34	5.73	Peak
2	2401.600	96.80	------	------	91.00	5.80	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

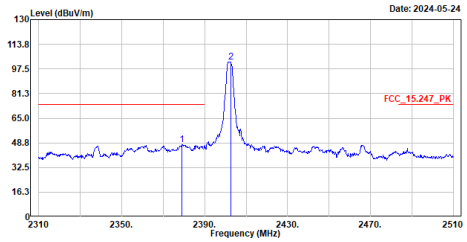
Site :HY-CB01
Condition :3m ,VERTICAL
Mode :TX_Wireless_2402MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	2338.000	41.91	54.00	-12.09	36.18	5.73	Average
2	2402.000	100.39	------	------	94.59	5.80	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

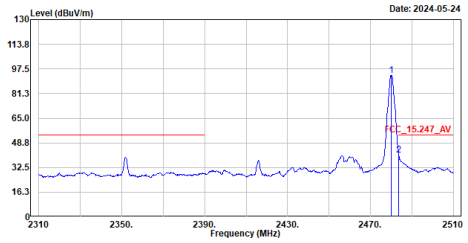
Site :HY-CB01
Condition :3m ,VERTICAL
Mode :TX_Wireless_2402MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	2379.200	47.60	74.00	-26.40	41.83	5.77	Peak
2	2402.600	101.99	------	------	96.18	5.81	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

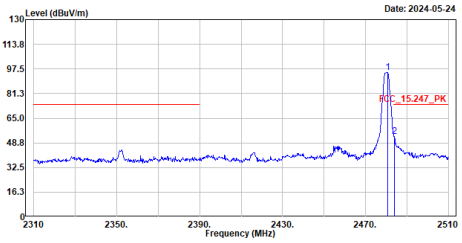
Site :HY-CB01
Condition :3m ,Horizontal
Mode :TX_Wireless_2480MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	2480.000	93.39	------	------	87.67	5.72	Average
2	2483.600	40.80	54.00	-13.20	35.08	5.72	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

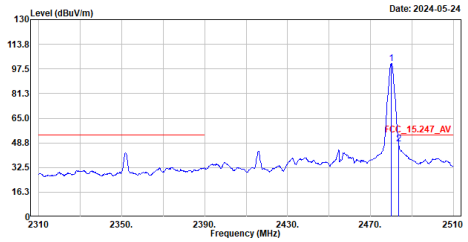
Site :HY-CB01
Condition :3m ,Horizontal
Mode :TX_Wireless_2480MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	2480.600	95.11	------	------	89.39	5.72	Peak
2	2484.000	53.06	74.00	-20.94	47.34	5.72	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

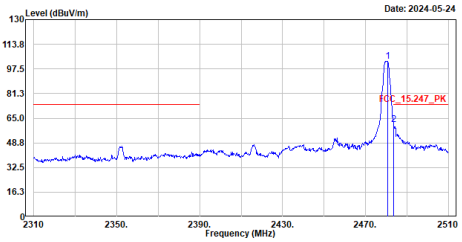
Site :HY-CB01
Condition :3m ,VERTICAL
Mode :TX_Wireless_2480MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	2480.000	100.83	------	------	95.11	5.72	Average
2	2483.600	47.89	54.00	-6.11	42.17	5.72	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

Site :HY-CB01
Condition :3m ,VERTICAL
Mode :TX_Wireless_2480MHz
Test BY :Caster



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	2480.600	102.52	------	------	96.80	5.72	Peak
2	2483.600	60.65	74.00	-13.35	54.93	5.72	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.