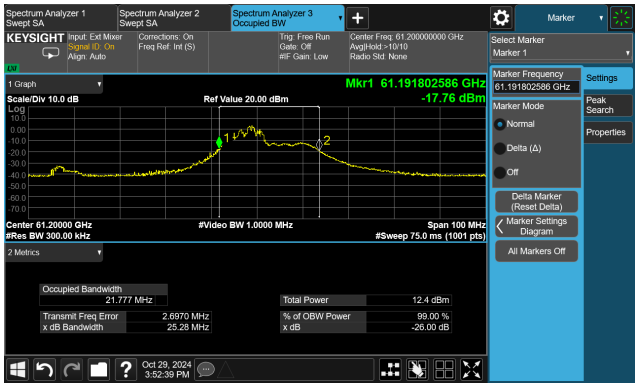
Appendix A. Test Result of AC Power Line Conducted Emission

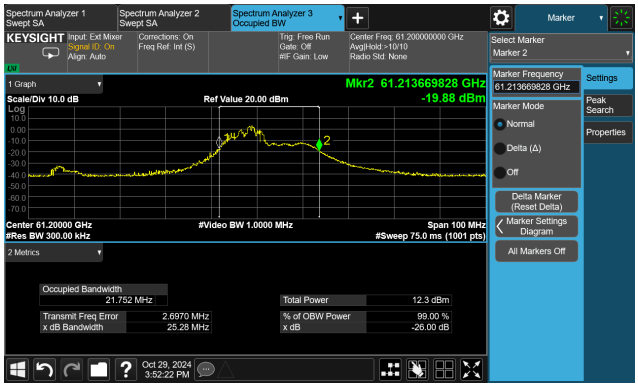
Owing to the EUT use DC-Powered, the test item is not performed.

Appendix B. Test Result of Occupied Bandwidth

M202404002

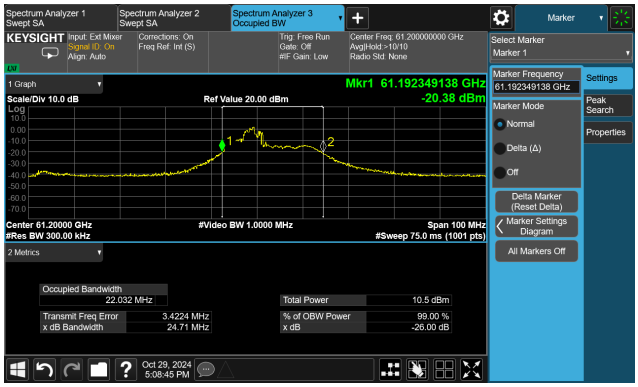
Test Frequency (GHz)	Measurement Value (fL) (GHz)	Measurement Value (fH) (GHz)	Measurement Level (MHz)	Limit (dBm)
61.2	61.1918	61.2136	21.86	<500MHz

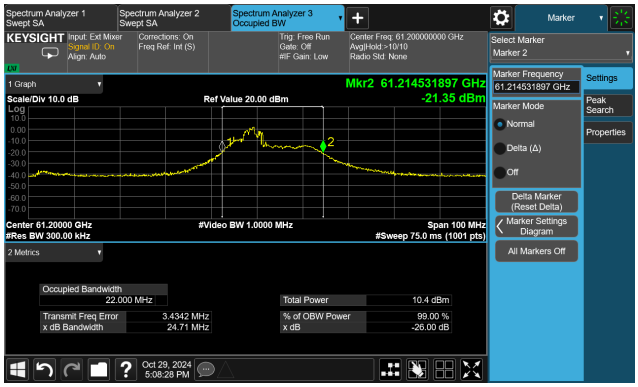




M202404001

Test Frequency (GHz)	Measurement Value (fL) (GHz)	Measurement Value (fH) (GHz)	Measurement Level (MHz)	Limit (dBm)
61.2	61.1923	61.2145	22.18	<500MHz





Appendix C. Test Result of Maximum output power (EIRP)

M202404002

Peak Output Power

Test Frequency (GHz)	Measurement Level (dBm)	FMCW Desensitization factor (dB)	EIRP (dBm)	EIRP Limit (dBm)
61.2	5.85	-2.76	8.61	43

Average Output Power

Test Frequency (GHz)	Measurement Level (dBm)	Limit (dBm)
61.2	-13.85	40

M202404001

Peak Output Power

Test Frequency (GHz)	Measurement Level (dBm)	FMCW Desensitization factor (dB)	EIRP (dBm)	EIRP Limit (dBm)
61.2	5.84	-1.97	7.81	43

Average Output Power

Test Frequency (GHz)	Measurement Level (dBm)	Limit (dBm)
61.2	-13.93	40

Note:

Step 1: $E = 126.8 - 20\log(\lambda) + P - G$

E is the field strength of the emission at the measurement distance, in dBμV/m.

P is the power measured at the output of the test antenna, in dBm.

λ is the wavelength of the emission under investigation [300/fMHz], in m.

G is the gain of the test antenna, in dBi.

Step 2: $EIRP\ (dBm) = E + 20\log(D) - 104.8$

where D is the measurement distance (in the far field region) in m.

EIRP= Measurement Level - FMCW Desensitization factor.

Desensitization factor was calculated from follow equation;

$$\alpha = \frac{1}{\sqrt[4]{1 + \left(\frac{2In(2)}{\pi}\right)^2 \left(\frac{Fs}{Ts\,B^2}\right)^2}}$$

and

FMCW Desensitization factor = 20 Log (a)

Where

Fs is FMCW Sweep Width or Chirp Width, is used the actual measurement value.

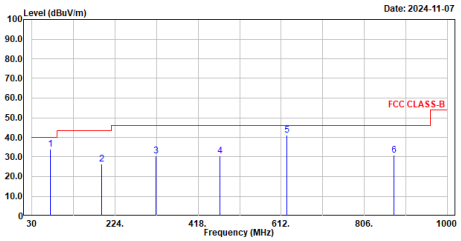
Ts is FMCW Sweep Time, is referred to the values in the specifications.

B is -3dB Bandwidth of Gaussian RBW Filter, is used the actual measurement value.

Appendix D. Test Result of Radiated Emissions

M202404002

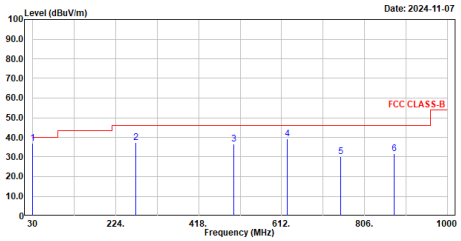
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_30M-1G_61.2GHz
Test by :nova



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	73.747	34.07	40.00	-5.93	61.06	-26.99	QP
2	193.542	26.35	43.50	-17.15	52.61	-26.26	QP
3	319.545	30.39	46.00	-15.61	52.39	-22.00	QP
4	468.731	30.74	46.00	-15.26	48.81	-18.07	QP
5	625.095	41.23	46.00	-4.77	56.05	-14.82	QP
6	875.064	30.97	46.00	-15.03	42.49	-11.52	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.

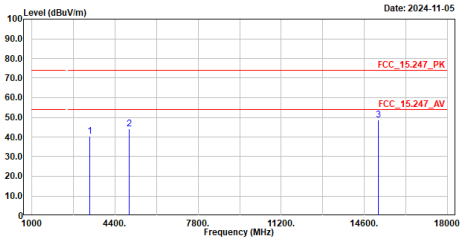
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_30M-1G_61.2GHz
Test by :nova



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	30.097	36.80	40.00	-3.20	61.49	-24.69	QP
2	270.366	37.50	46.00	-8.50	61.08	-23.58	QP
3	500.062	36.74	46.00	-9.26	54.33	-17.59	QP
4	625.095	39.29	46.00	-6.71	54.11	-14.82	QP
5	750.031	30.26	46.00	-15.74	42.92	-12.66	QP
6	875.064	31.60	46.00	-14.40	43.12	-11.52	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.

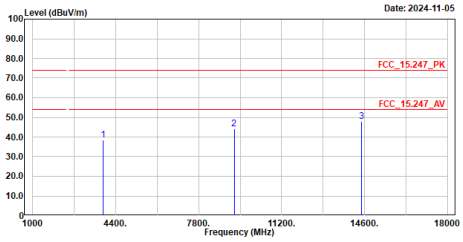
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_1-18G
Test by :nova



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	3359.600	40.41	74.00	-33.59	51.78	-11.37	Peak
2	4983.100	44.20	74.00	-29.80	50.64	-6.44	Peak
3	15181.400	48.67	74.00	-25.33	41.74	6.93	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.

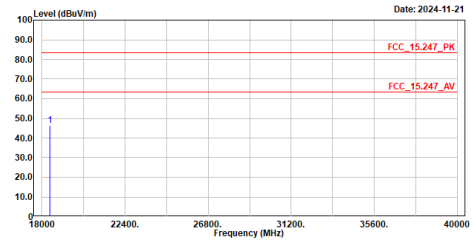
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_1-18G
Test by :nova



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	3898.500	38.35	74.00	-35.65	47.29	-8.94	Peak
2	9256.900	44.12	74.00	-29.88	42.66	1.46	Peak
3	14486.100	47.80	74.00	-26.20	40.78	7.02	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.

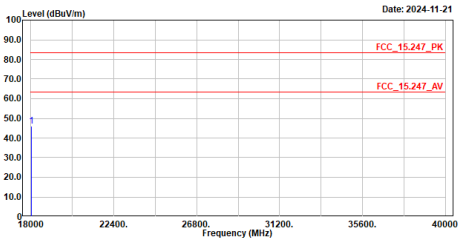
Site :HY-CB02
Condition :1m ,Horizontal
mode :TX_18-40G_61.2GHz
Test by :nova



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	18418.000	46.53	83.54	-37.01	42.70	3.83	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-CB02
Condition :1m ,Vertical
mode :TX_18-40G_61.2GHz
Test by :nova

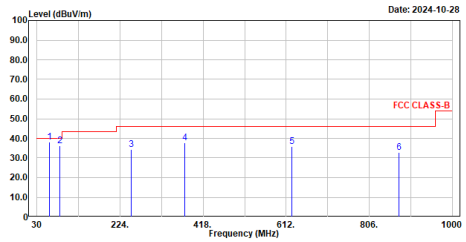


No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	18044.000	46.12	83.54	-37.42	42.63	3.49	Peak

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.

M202404001

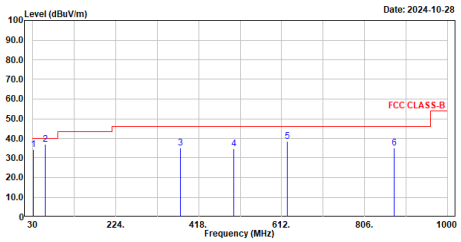
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_30M-1G_61.2GHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	59.876	38.12	40.00	-1.88	62.06	-23.94	QP
2	82.962	36.20	40.00	-3.80	65.55	-29.35	QP
3	249.996	34.29	46.00	-11.71	58.78	-24.49	QP
4	374.932	37.82	46.00	-8.18	58.31	-20.49	QP
5	624.998	35.78	46.00	-10.22	50.60	-14.82	QP
6	875.064	32.89	46.00	-13.11	44.41	-11.52	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.

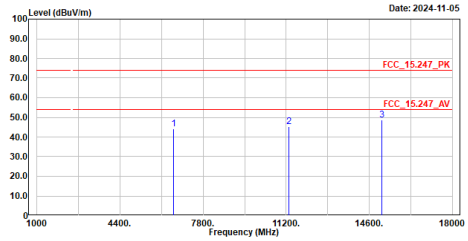
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_30M-1G_61.2GHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	30.873	34.45	40.00	-5.55	59.14	-24.69	QP
2	59.876	36.87	40.00	-3.13	60.81	-23.94	QP
3	374.932	35.21	46.00	-10.79	55.70	-20.49	QP
4	499.965	34.55	46.00	-11.45	52.14	-17.59	QP
5	624.998	38.59	46.00	-7.41	53.41	-14.82	QP
6	875.064	35.25	46.00	-10.75	46.77	-11.52	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.

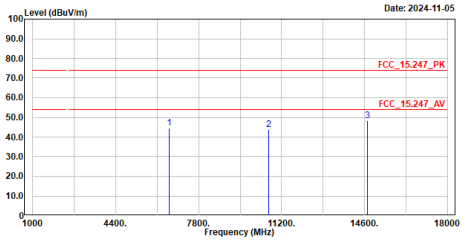
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_1-18G
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	6586.200	44.31	74.00	-29.69	46.19	-1.88	Peak
2	11307.100	45.37	74.00	-28.63	41.27	4.10	Peak
3	15108.300	48.60	74.00	-25.40	41.63	6.97	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.

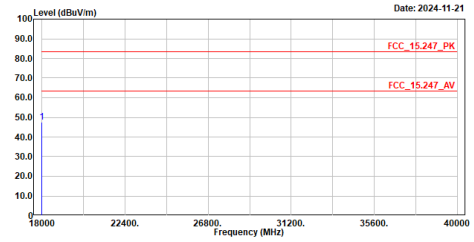
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_1-18G
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	6591.300	44.67	74.00	-29.33	46.54	-1.87	Peak
2	10666.200	43.64	74.00	-30.36	40.58	3.06	Peak
3	14729.200	48.13	74.00	-25.87	41.06	7.07	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.

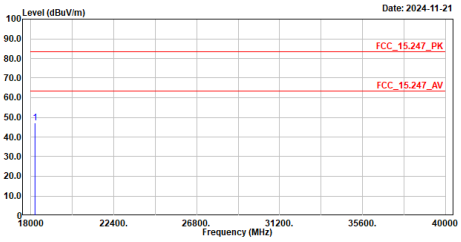
Site :HY-CB02
Condition :1m ,Horizontal
mode :TX_18-40G_61.2GHz
Test by :nova



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	18000.000	47.42	83.54	-36.12	43.97	3.45	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-CB02
Condition :1m ,Vertical
mode :TX_18-40G_61.2GHz
Test by :nova



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	18242.000	47.23	83.54	-36.31	43.56	3.67	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.

Above 40 GHz _ M202404002

Frequency (GHz)	EIRP (dBm)	Power Density ((pW / cm²)	Limit (pW / cm²)
140.78	-18.90	11.38	90

Above 40 GHz _ M202404001

Frequency (GHz)	EIRP (dBm)	Power Density ((pW / cm²)	Limit (pW / cm²)
140.78	-19.03	11.05	90

Appendix E. Test Result of Frequency Stability

M202404002

Voltage (V)	Temperature (℃)	Measurement Frequency (MHz)	Limit
DC 48 V	50	61203.65	Within band
	40	61203.65	Within band
	30	61203.65	Within band
	20	61202.05	Within band
	10	61201.80	Within band
	0	61202.05	Within band
	-10	61202.05	Within band
	-20	61201.80	Within band

Temperature (℃)	Voltage (V)	Measurement Frequency (MHz)	Limit
20 ℃	DC 55.2 V	61202.40	Within band
	DC 48 V	61202.70	Within band
	AC 40.8 V	61202.40	Within band