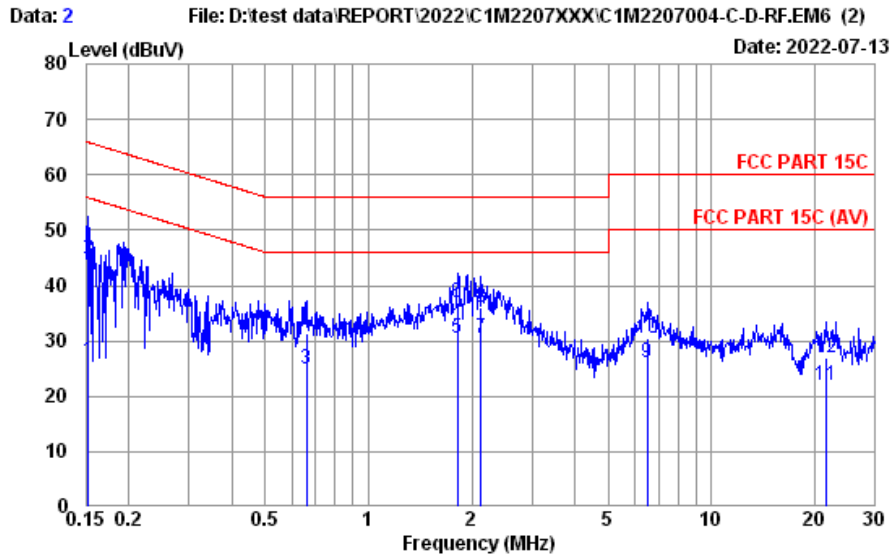


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## A.1 CONDUCTED EMISSION

Test Date	2022/07/13	Temp./Hum.	26°C/47%
Test Voltage	AC 120V 60Hz (Via AC Adapter)	Tested By	Chucky Chiu

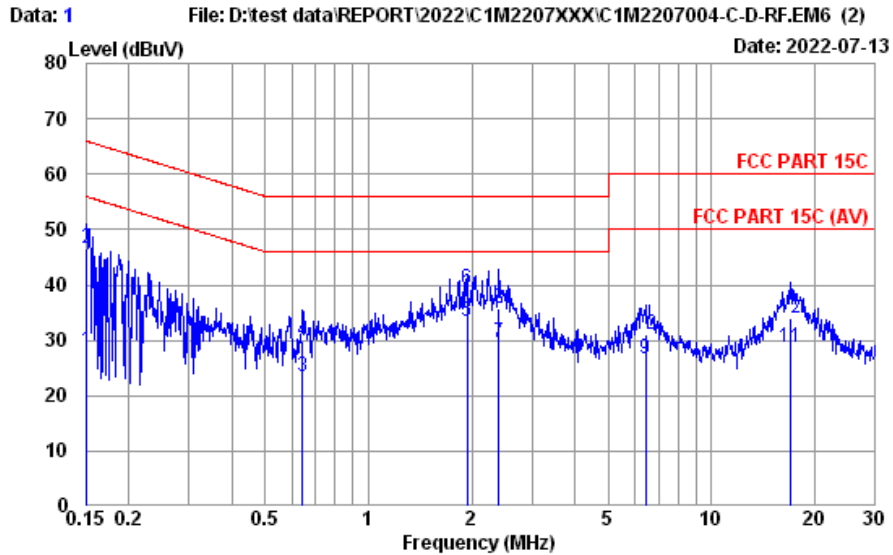


Site No.	: No.8 Shielded Room	Data No.	: 2
Instrument 1	: Receiver ESR3(774)		
Instrument 2	: EHV432 (567)(A) CE-08 ESH3-Z2 (354)		
Limit	: FCC PART 15C	Phase	: NEUTRAL
Environment	: 26°C / 47%	Engineer	: Roy Hung
EUT Model	: 17ZB90Q	Test Rating	: 120Vac/60Hz
Test Mode	: Operating		

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.152	10.34	0.03	9.85	6.07	26.29	55.87	29.58	Average
2	0.152	10.34	0.03	9.85	24.57	44.79	65.87	21.08	QP
3	0.661	10.33	0.04	9.85	4.81	25.03	46.00	20.97	Average
4	0.661	10.33	0.04	9.85	11.08	31.30	56.00	24.70	QP
5	1.819	10.36	0.06	9.86	10.24	30.52	46.00	15.48	Average
6	1.819	10.36	0.06	9.86	16.55	36.83	56.00	19.17	QP
7	2.133	10.36	0.06	9.86	10.10	30.38	46.00	15.62	Average
8	2.133	10.36	0.06	9.86	15.76	36.04	56.00	19.96	QP
9	6.488	10.52	0.11	9.87	5.60	26.10	50.00	23.90	Average
10	6.488	10.52	0.11	9.87	10.01	30.51	60.00	29.49	QP
11	21.486	11.11	0.20	9.95	0.81	22.07	50.00	27.93	Average
12	21.486	11.11	0.20	9.95	5.62	26.88	60.00	33.12	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.  
 2. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Test Date	2022/07/13	Temp./Hum.	26°C/47%
Test Voltage	AC 120V 60Hz (Via AC Adapter)	Tested By	Chucky Chiu



Site No.	: No.8 Shielded Room	Data No.	: 1
Instrument 1	: Receiver ESR3(774)		
Instrument 2	: EHV432 (567)(A) CE-08 ESH3-Z2 (354)		
Limit	: FCC PART 15C	Phase	: LIIE
Environment	: 26°C / 47%	Engineer	: Roy Hung
EUT Model	: 17ZB90Q	Test Rating	: 120Vac/60Hz
Test Mode	: Operating		

	Freq. (MHz)	AMI Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBμV)	Emission Level (dBμV)	Limits (dBμV)	Margin (dB)	Remark
1	0.151	10.22	0.03	9.85	7.89	27.99	55.96	27.97	Average
2	0.151	10.22	0.03	9.85	26.57	46.67	65.96	19.29	QP
3	0.641	10.23	0.04	9.85	3.46	23.58	46.00	22.42	Average
4	0.641	10.23	0.04	9.85	9.74	29.86	56.00	26.14	QP
5	1.939	10.25	0.06	9.86	13.11	33.28	46.00	12.72	Average
6	1.939	10.25	0.06	9.86	19.22	39.39	56.00	16.61	QP
7	2.396	10.26	0.07	9.86	9.29	29.48	46.00	16.52	Average
8	2.396	10.26	0.07	9.86	15.66	35.85	56.00	20.15	QP
9	6.420	10.35	0.11	9.87	6.21	26.54	50.00	23.46	Average
10	6.420	10.35	0.11	9.87	10.61	30.94	60.00	29.06	QP
11	16.928	10.59	0.18	9.92	8.09	28.78	50.00	21.22	Average
12	16.928	10.59	0.18	9.92	13.24	33.93	60.00	26.07	QP

Remarks: 1. Emission Level= AMI Factor + Cable Loss + Pulse Att. + Reading.  
 2. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

## A.2 RADIATED EMISSION

Test Date	2022/07/11 ~ 13	Temp./Hum.	23 ~ 24°C/58 ~ 66%
Test Voltage	AC 120V 60Hz (Via AC Adapter)	Tested By	Martin Chen

### A.2.1 Emissions within Restricted Frequency Bands

#### A.2.1.1 Frequency 9kHz~30MHz

**The emissions (9kHz~30MHz) not reported for there is no emission be found.**

#### A.2.1.2 Frequency Below 1GHz

Mode	GFSK	Frequency	TX 2480MHz
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#### Antenna at Horizontal Polarization

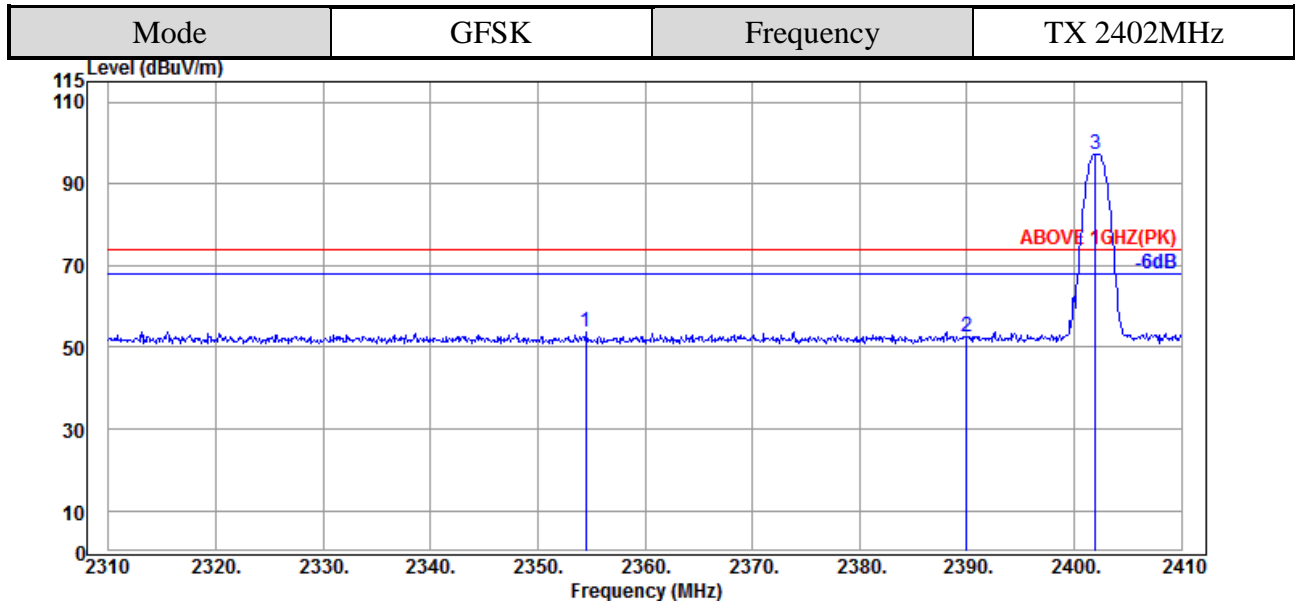
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
32.910	22.52	1.48	26.48	29.68	27.20	40.00	12.80	Peak
110.510	17.33	2.74	26.21	33.42	27.28	43.50	16.22	Peak
222.060	16.56	3.96	25.74	41.69	36.47	46.00	9.53	Peak
431.580	21.97	6.21	26.68	31.21	32.71	46.00	13.29	Peak
540.220	23.61	6.90	27.24	31.40	34.67	46.00	11.33	Peak
996.120	27.10	9.27	26.66	28.32	38.03	54.00	15.97	Peak

#### Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
30.000	23.65	1.41	26.49	39.83	38.40	40.00	1.60	Peak
191.020	15.05	3.62	25.82	42.62	35.47	43.50	8.03	Peak
323.910	19.70	5.02	25.82	32.11	31.01	46.00	14.99	Peak
404.420	21.48	5.97	26.47	32.99	33.97	46.00	12.03	Peak
540.220	23.61	6.90	27.24	31.28	34.55	46.00	11.45	Peak
982.540	26.99	9.20	26.72	28.84	38.31	54.00	15.69	Peak

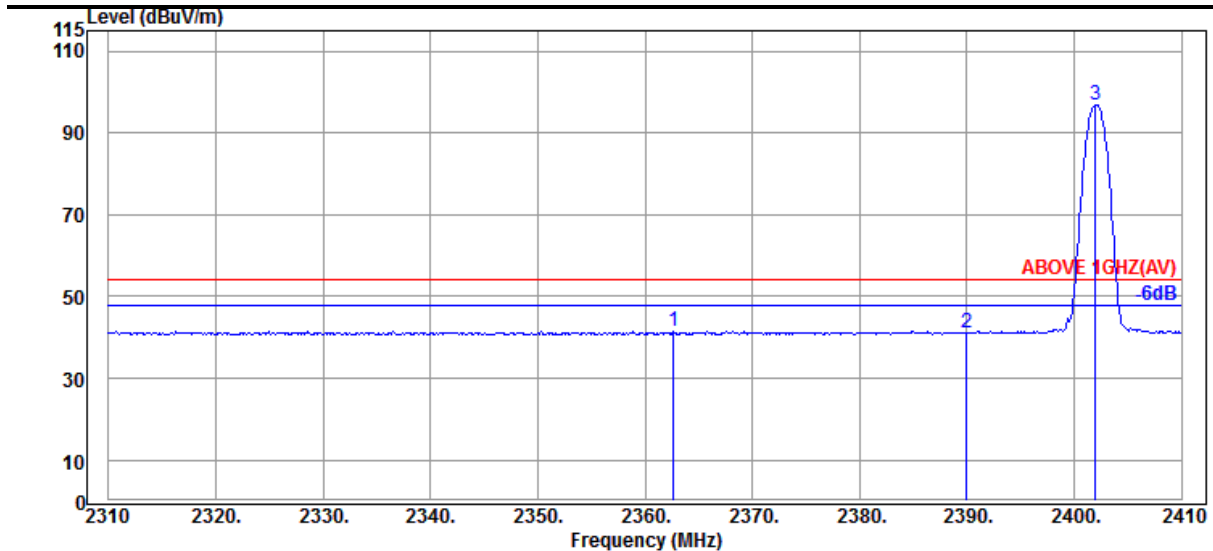
A.2.1.3 Frequency Above 1 GHz to 10<sup>th</sup> harmonics

**Band Edge:**



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2354.500	28.50	5.66	39.93	59.70	53.93	74.00	20.07	Peak
2390.000	28.21	5.72	39.93	58.41	52.41	74.00	21.59	Peak
@ 2402.000	28.10	5.74	39.93	103.31	97.22	---	---	Peak

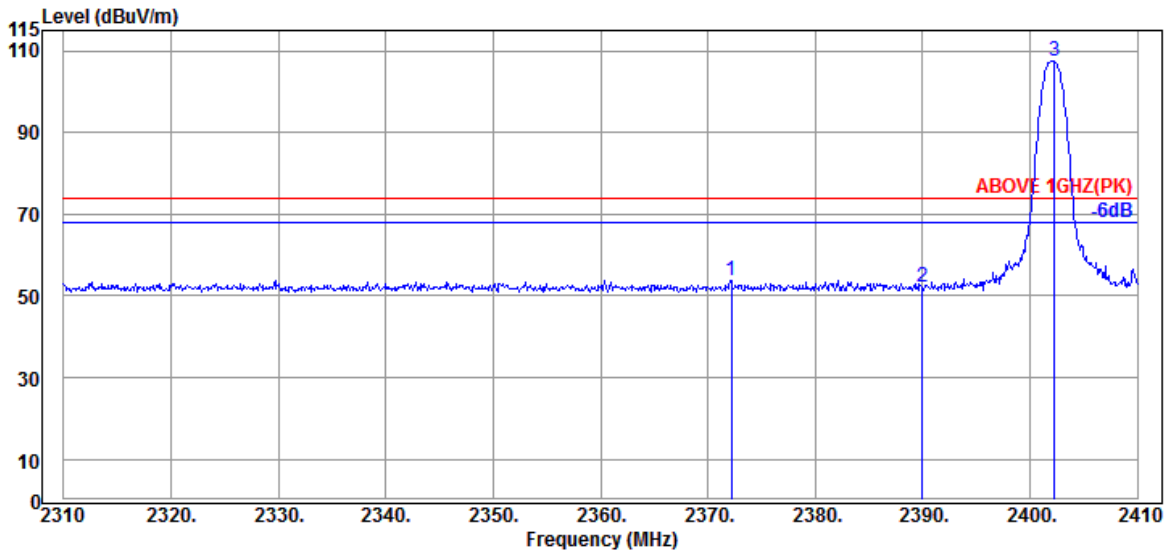


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2362.700	28.44	5.67	39.93	47.34	41.52	54.00	12.48	Average
2390.000	28.21	5.72	39.93	47.00	41.00	54.00	13.00	Average
@ 2402.000	28.10	5.74	39.93	103.10	97.01	---	---	Average

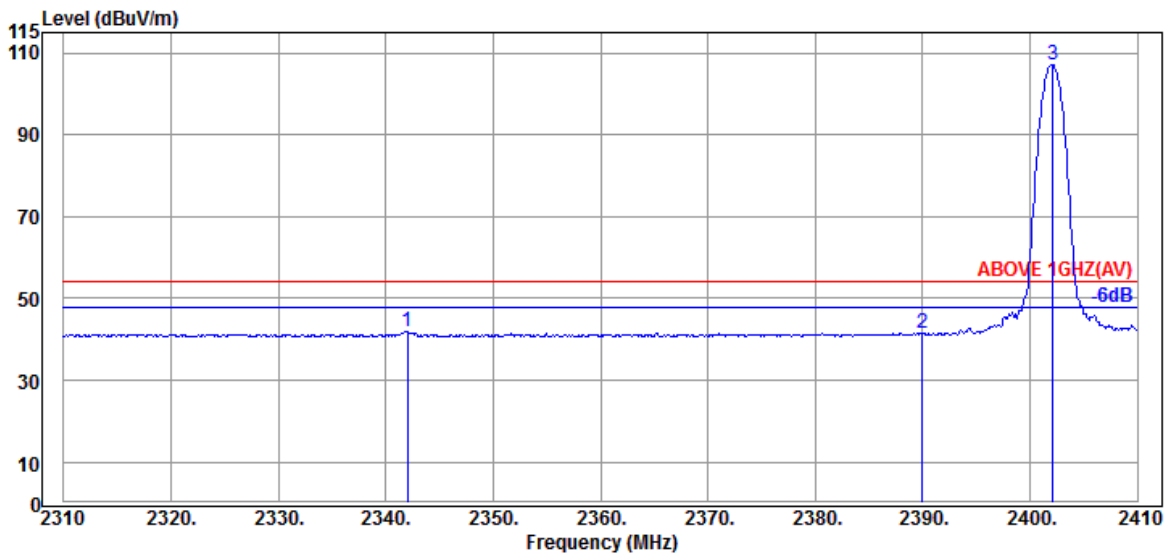
Remark: The “@” means fundamental frequency, it is ignored in this section.

Mode	GFSK	Frequency	TX 2402MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2372.200	28.33	5.70	39.93	59.71	53.81	74.00	20.19	Peak
2390.000	28.21	5.72	39.93	58.00	52.00	74.00	22.00	Peak
@ 2402.300	28.10	5.74	39.93	113.42	107.33	---	---	Peak

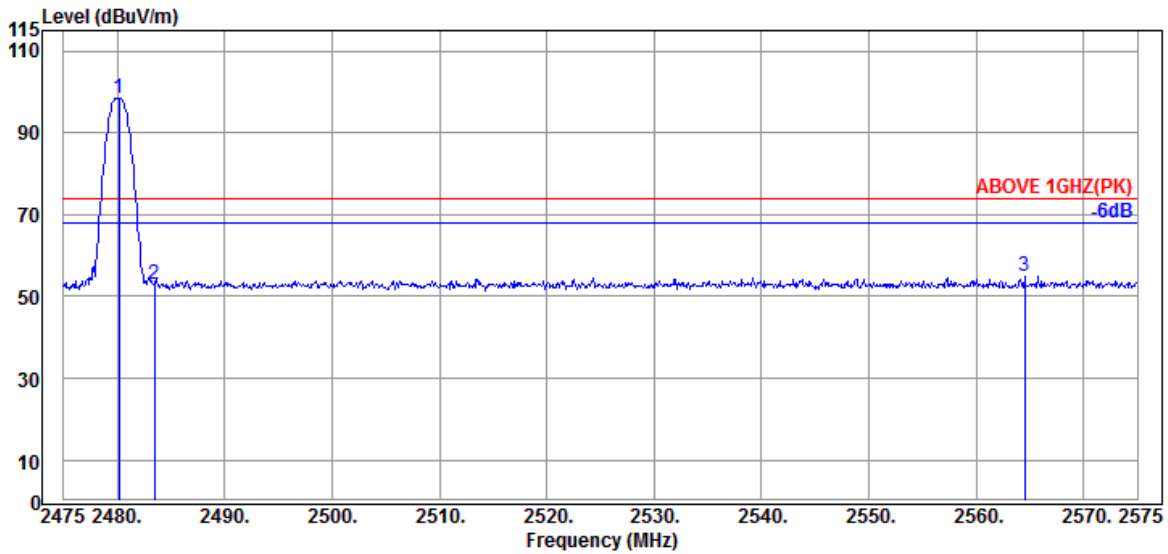


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2342.000	28.40	5.64	39.93	47.72	41.83	54.00	12.17	Average
2390.000	28.21	5.72	39.93	47.50	41.50	54.00	12.50	Average
@ 2402.100	28.10	5.74	39.93	113.17	107.08	---	---	Average

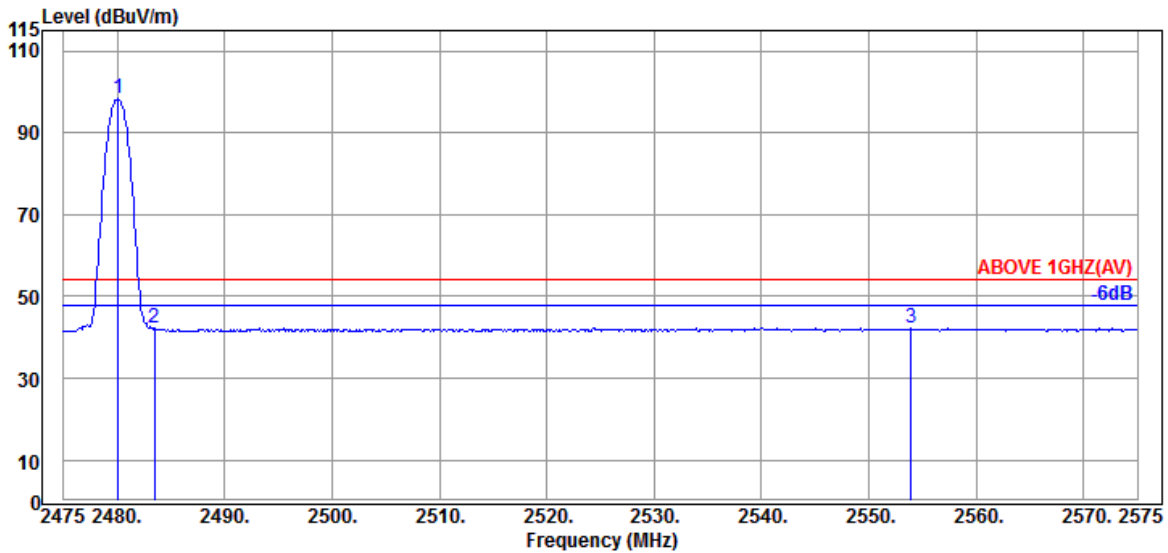
Remark: The “@” means fundamental frequency, it is ignored in this section.

Mode	GFSK	Frequency	TX 2480MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2480.200	28.46	5.86	39.92	104.05	98.45	---	---	Peak
2483.500	28.47	5.87	39.92	58.66	53.08	74.00	20.92	Peak
2564.500	28.83	6.05	39.94	60.08	55.02	74.00	18.98	Peak

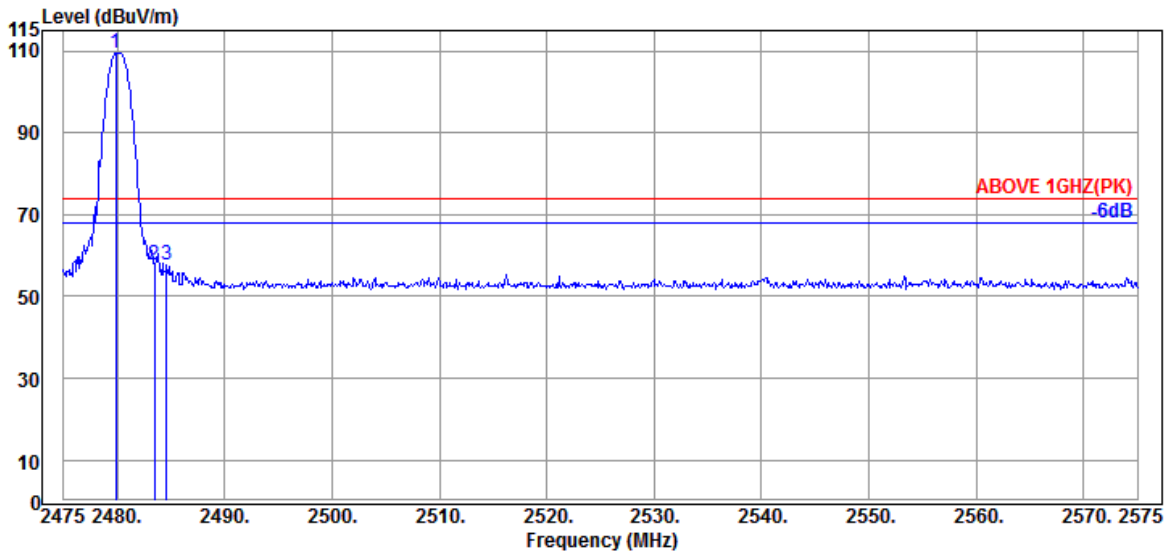


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2480.100	28.46	5.86	39.92	103.91	98.31	---	---	Average
2483.500	28.47	5.87	39.92	47.72	42.14	54.00	11.86	Average
2553.900	28.80	6.01	39.94	47.42	42.29	54.00	11.71	Average

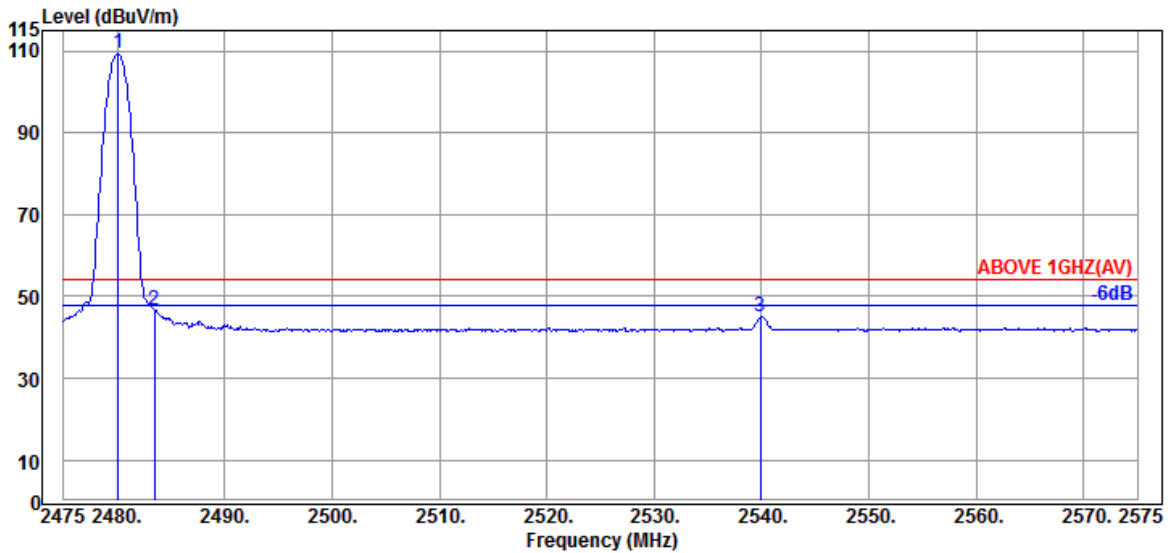
Remark: The “@” means fundamental frequency, it is ignored in this section.

Mode	GFSK	Frequency	TX 2480MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 2479.900	28.46	5.86	39.92	115.03	109.43	---	---	Peak
2483.500	28.47	5.87	39.92	63.46	57.88	74.00	16.12	Peak
2484.600	28.47	5.87	39.92	63.30	57.72	74.00	16.28	Peak



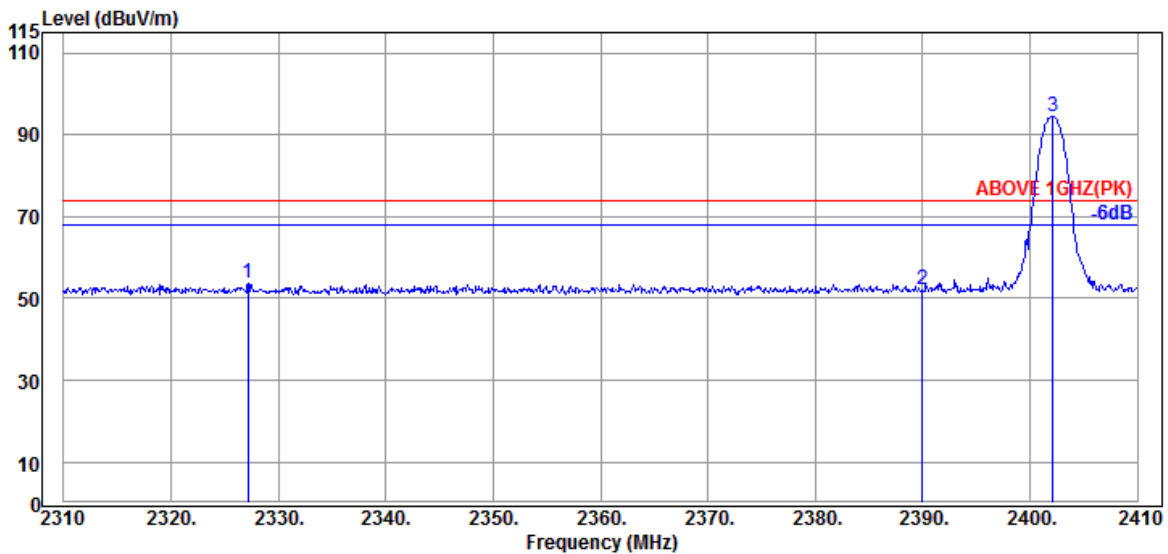
Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 2480.100	28.46	5.86	39.92	114.89	109.29	---	---	Average
2483.500	28.47	5.87	39.92	52.17	46.59	54.00	7.41	Average
2539.900	28.71	5.98	39.93	50.32	45.08	54.00	8.92	Average

Remark: The “@” means fundamental frequency, it is ignored in this section.

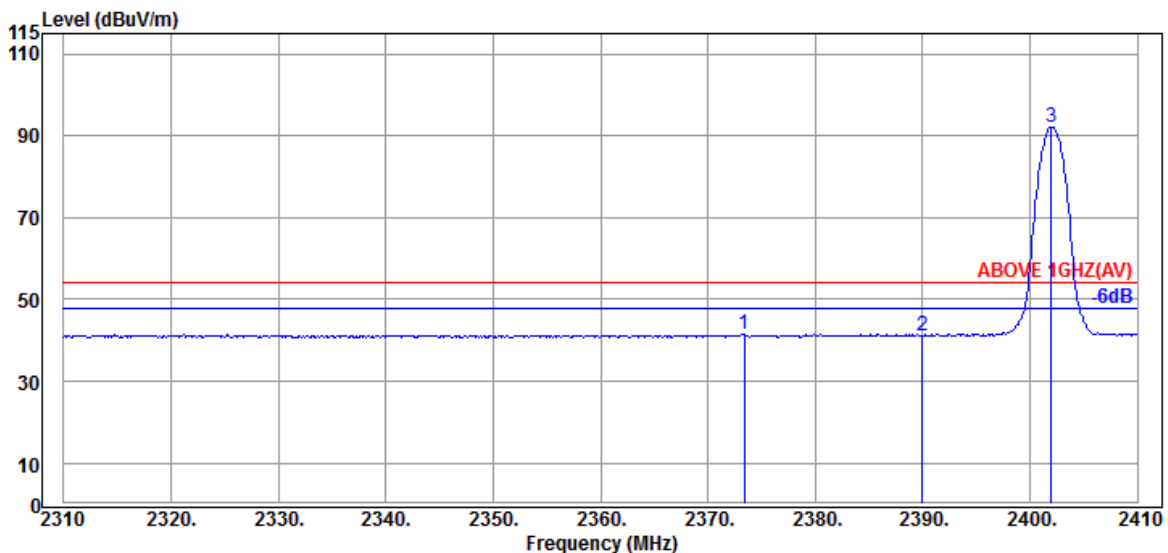


Mode	8-DPSK	Frequency	TX 2402MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
2327.200	28.30	5.62	39.94	59.93	53.91	74.00	20.09	Peak
2390.000	28.21	5.72	39.93	58.23	52.23	74.00	21.77	Peak
@ 2402.100	28.10	5.74	39.93	100.66	94.57	---	---	Peak

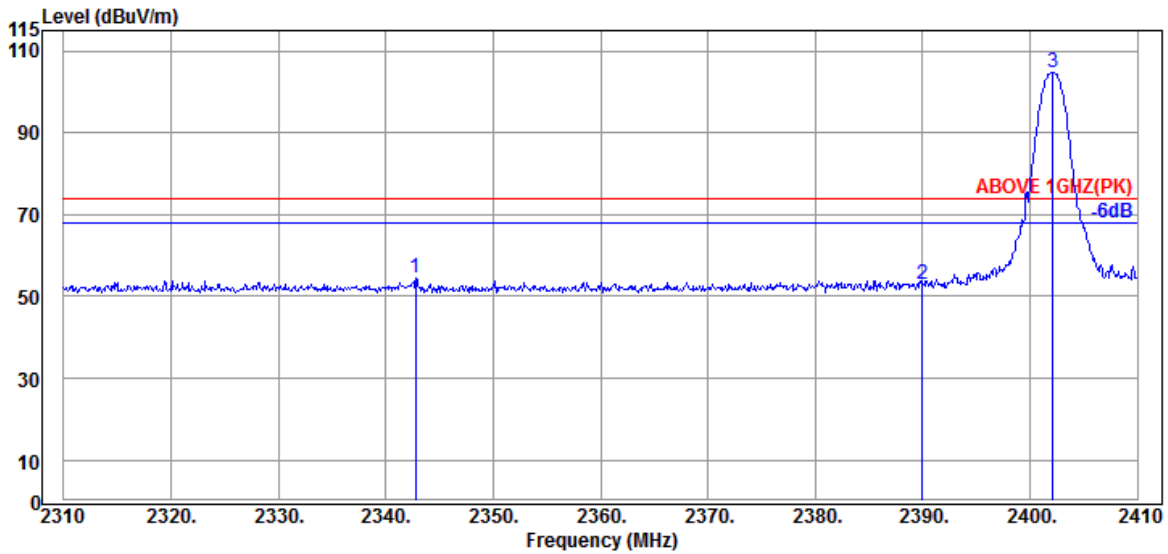


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
2373.400	28.33	5.70	39.93	47.46	41.56	54.00	12.44	Average
2390.000	28.21	5.72	39.93	47.14	41.14	54.00	12.86	Average
@ 2402.000	28.10	5.74	39.93	98.23	92.14	---	---	Average

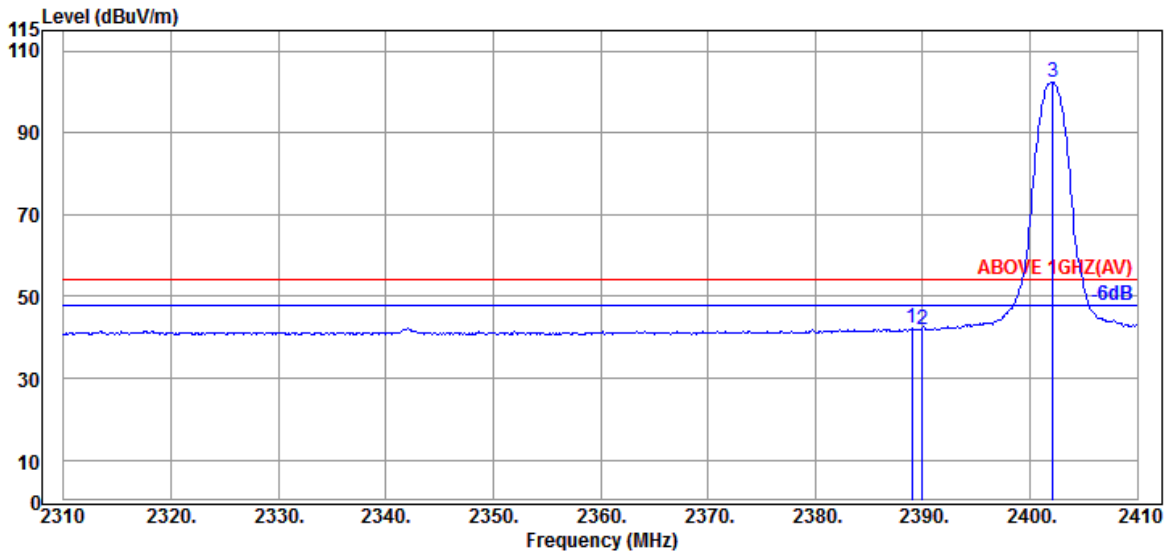
Remark: The “@” means fundamental frequency, it is ignored in this section.

Mode	8-DPSK	Frequency	TX 2402MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2342.800	28.45	5.65	39.93	60.21	54.38	74.00	19.62	Peak
2390.000	28.21	5.72	39.93	58.90	52.90	74.00	21.10	Peak
@ 2402.100	28.10	5.74	39.93	110.97	104.88	---	---	Peak

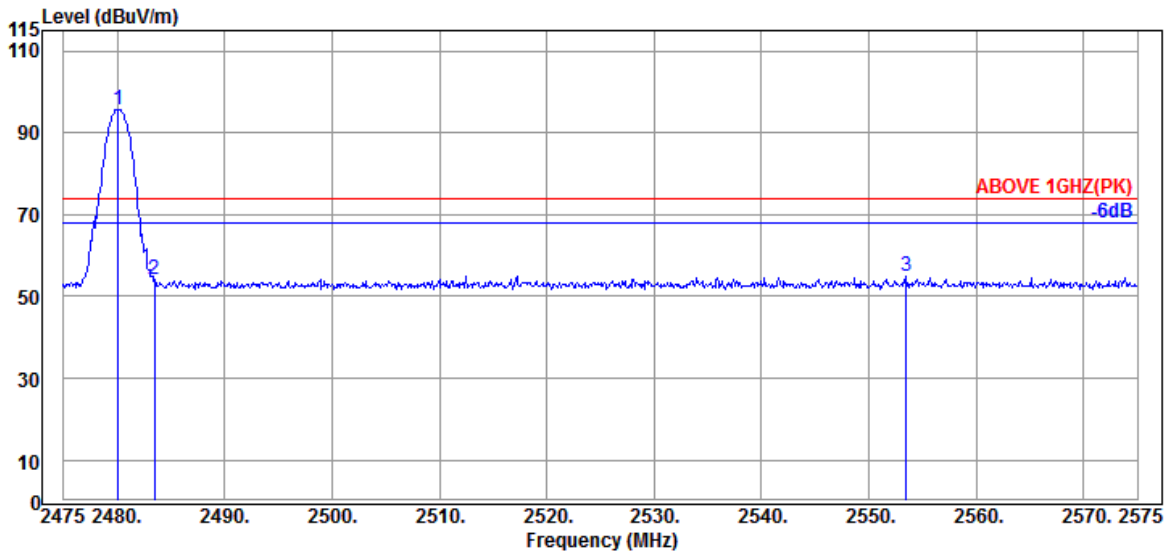


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.000	28.21	5.72	39.93	48.16	42.16	54.00	11.84	Average
2390.000	28.21	5.72	39.93	48.08	42.08	54.00	11.92	Average
@ 2402.100	28.10	5.74	39.93	108.58	102.49	---	---	Average

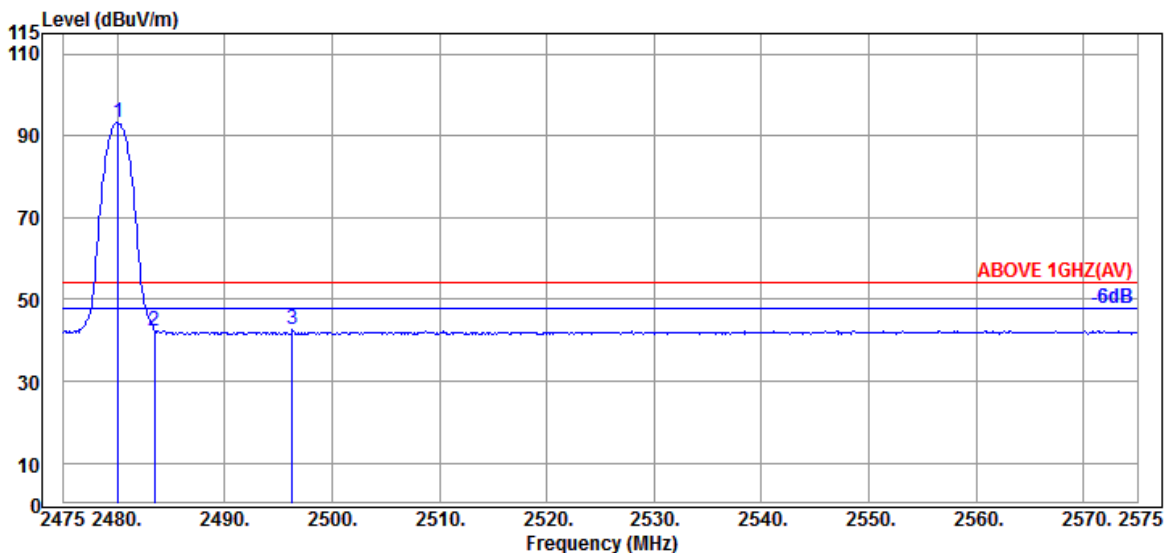
Remark: The “@” means fundamental frequency, it is ignored in this section.

Mode	8-DPSK	Frequency	TX 2480MHz
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Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2480.100	28.46	5.86	39.92	101.35	95.75	---	---	Peak
2483.500	28.47	5.87	39.92	59.60	54.02	74.00	19.98	Peak
2553.500	28.80	6.01	39.94	60.16	55.03	74.00	18.97	Peak

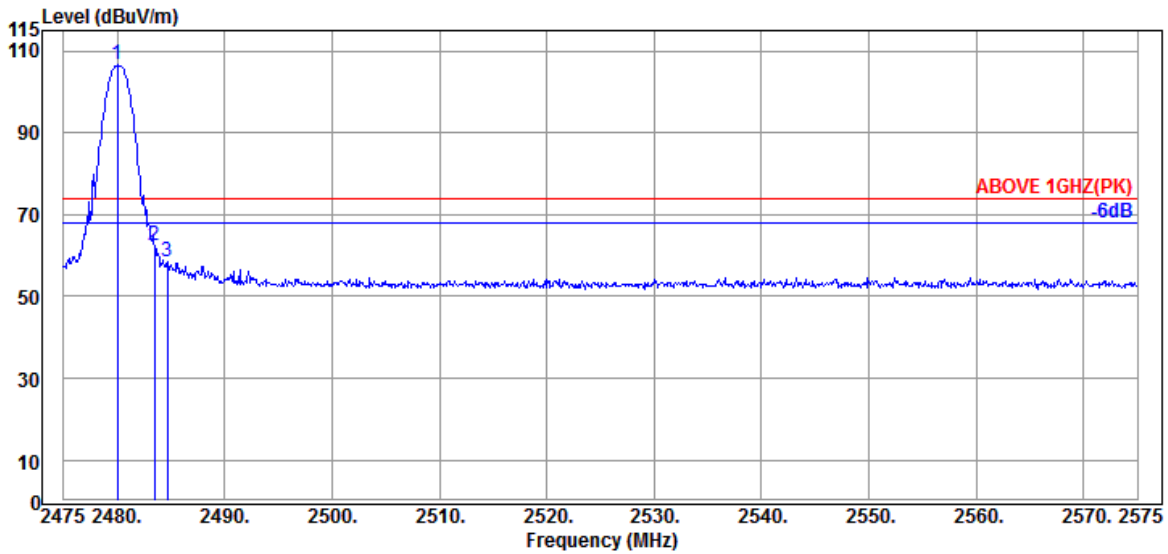


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2480.100	28.46	5.86	39.92	98.81	93.21	---	---	Average
2483.500	28.47	5.87	39.92	47.91	42.33	54.00	11.67	Average
2496.300	28.50	5.89	39.92	48.05	42.52	54.00	11.48	Average

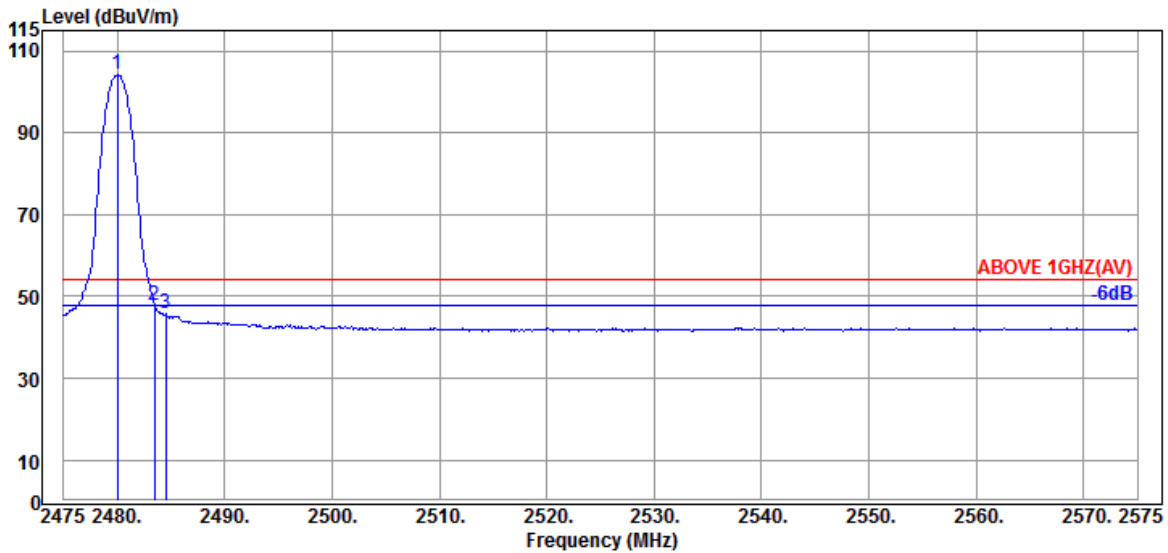
Remark: The “@” means fundamental frequency, it is ignored in this section.

Mode	8-DPSK	Frequency	TX 2480MHz
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Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 2480.000	28.46	5.86	39.92	112.26	106.66	---	---	Peak
2483.500	28.47	5.87	39.92	67.90	62.32	74.00	11.68	Peak
2484.700	28.47	5.87	39.92	63.97	58.39	74.00	15.61	Peak



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 2480.000	28.46	5.86	39.92	109.81	104.21	---	---	Average
2483.500	28.47	5.87	39.92	53.47	47.89	54.00	6.11	Average
2484.500	28.47	5.87	39.92	51.38	45.80	54.00	8.20	Average

Remark: The “@” means fundamental frequency, it is ignored in this section.

### A.2.2 Emissions outside the frequency band:

The emissions (up to 25GHz) not reported for there is no emission be found.

Mode	GFSK	Frequency	TX 2402MHz
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#### Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dB $\mu$ V)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Detector
4804.000	33.00	8.53	39.39	40.12	42.26	54.00	11.74	Peak

#### Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dB $\mu$ V)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Detector
4804.000	33.00	8.53	39.39	38.96	41.10	54.00	12.90	Peak

Mode	GFSK	Frequency	TX 2441MHz
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#### Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dB $\mu$ V)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Detector
4882.000	33.25	8.64	39.35	38.75	41.29	54.00	12.71	Peak

#### Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dB $\mu$ V)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Detector
4882.000	33.25	8.64	39.35	38.69	41.23	54.00	12.77	Peak

Mode	GFSK	Frequency	TX 2480MHz
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**Antenna at Horizontal Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dB $\mu$ V)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Detector
4960.000	33.40	8.74	39.31	38.13	40.96	54.00	13.04	Peak

**Antenna at Vertical Polarization**

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dB $\mu$ V)	Emission Level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB)	Detector
4960.000	33.40	8.74	39.31	39.22	42.05	54.00	11.95	Peak

**A.2.3 Emissions in Non-restricted Frequency Bands:**

All emission levels below the FCC 15.209(a)/RSS-Gen Section 8.9 table 4 general radiated emissions limits is not required.

### A.3 20dB BANDWIDTH

Test Date	2022/07/14	Temp./Hum.	24°C/48%
Cable Loss	0.5dB	Tested By	Kuper Hsu
Test Voltage	AC 120V 60Hz (Via AC Adapter)		

#### A.3.1 20dB Bandwidth Result

Mode	Centre Frequency (MHz)	20dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz) (Reference only)	2/3 (20dB Bandwidth)
GFSK	2402	0.9204	0.87632	0.614
	2441	0.9213	0.87568	0.614
	2480	0.9221	0.87953	0.615
8-DPSK	2402	1.409	1.3562	0.939
	2441	1.432	1.3552	0.955
	2480	1.432	1.3567	0.955

Remark: The maximum two-thirds of the 20dB bandwidth is the limit for carrier frequency separation presented.

A.3.2 Measurement Plots





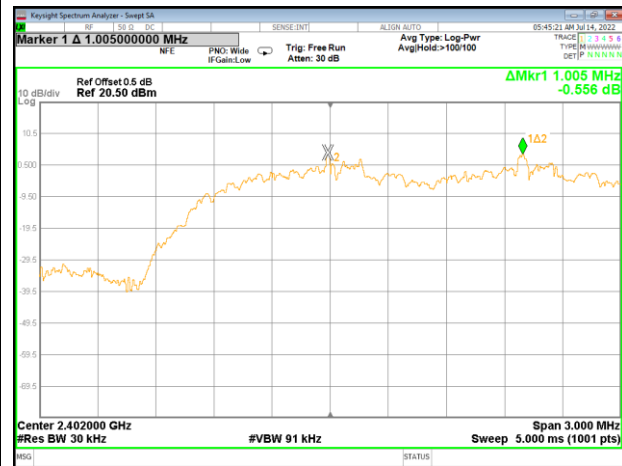
## A.4 CARRIER FREQUENCY SEPARATION

Test Date	2022/07/14	Temp./Hum.	24°C/48%
Cable Loss	0.5dB	Tested By	Kuper Hsu
Test Voltage	AC 120V 60Hz (Via AC Adapter)		



8-DPSK

2402MHz



2441MHz

adjacent channel of left carrier frequency



2441MHz

adjacent channel of right carrier frequency



2480MHz



## A.5 TIME OF OCCUPANCY

Test Date	2022/07/14	Temp./Hum.	24°C/48%
Cable Loss	0.5dB	Tested By	Kuper Hsu
Test Voltage	AC 120V 60Hz (Via AC Adapter)		

### A.5.1 Time of Occupancy

Mode	Centre Frequency (MHz)	Mode	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
GFSK	2402	DH1	10	0.3800	120.080	<400
		DH3	5	1.6400	259.120	<400
		DH5	3	2.9000	274.920	<400

Observation Period:

$$79 \text{ channels} * 0.4 \text{ seconds} = 31.6 \text{ seconds}$$

#### DH1 Mode

For each second of 10 transmission appearance, the longest time of occupancy is  
 10 transmission \* 31.6 seconds \* 0.380 ms = 120.080 ms (<400ms)

#### DH3 Mode

For each second of 5 transmission appearance, the longest time of occupancy is  
 5 transmission \* 31.6 seconds \* 1.640 ms = 259.120 ms (<400ms)

#### DH5 Mode

For each second of 3 transmission appearance, the longest time of occupancy is  
 3 transmission \* 31.6 seconds \* 2.900 ms = 274.920 ms (<400ms)

Mode	Centre Frequency (MHz)	Mode	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
GFSK	2441	DH1	10	0.3800	120.080	<400
		DH3	4	1.6400	207.296	<400
		DH5	3	2.9000	274.920	<400

Observation Period:

$$79 \text{ channels} * 0.4 \text{ seconds} = 31.6 \text{ seconds}$$

#### DH1 Mode

For each second of 10 transmission appearance, the longest time of occupancy is  
 10 transmission \* 31.6 seconds \* 0.380 ms = 120.080 ms (<400ms)

#### DH3 Mode

For each second of 4 transmission appearance, the longest time of occupancy is  
 4 transmission \* 31.6 seconds \* 1.640 ms = 207.296 ms (<400ms)

#### DH5 Mode

For each second of 3 transmission appearance, the longest time of occupancy is  
 3 transmission \* 31.6 seconds \* 2.900 ms = 274.920 ms (<400ms)

Mode	Centre Frequency (MHz)	Mode	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
GFSK	2480	DH1	10	0.3800	120.080	<400
		DH3	5	1.6400	259.120	<400
		DH5	3	2.9000	274.920	<400

Observation Period:

**79** channels \* **0.4** seconds = **31.6** seconds

**DH1 Mode**

For each second of **10** transmission appearance, the longest time of occupancy is  
**10** transmission \* **31.6** seconds \* **0.380** ms = **120.080** ms (<400ms)

**DH3 Mode**

For each second of **5** transmission appearance, the longest time of occupancy is  
**5** transmission \* **31.6** seconds \* **1.640** ms = **259.120** ms (<400ms)

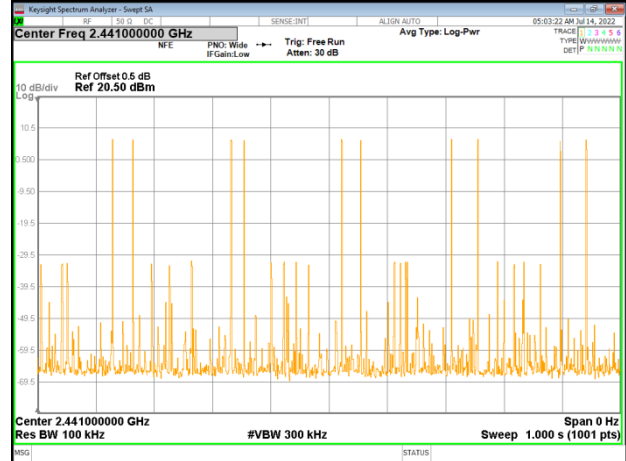
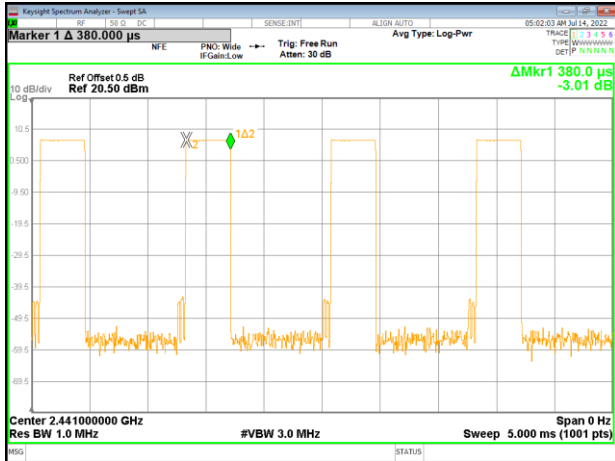
**DH5 Mode**

For each second of **3** transmission appearance, the longest time of occupancy is  
**3** transmission \* **31.6** seconds \* **2.900** ms = **274.920** ms (<400ms)

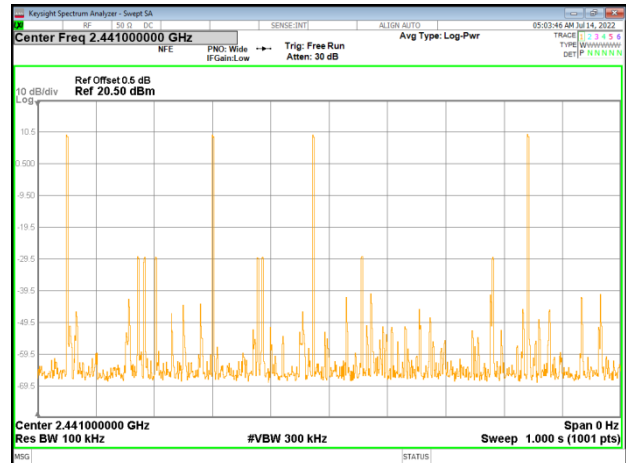
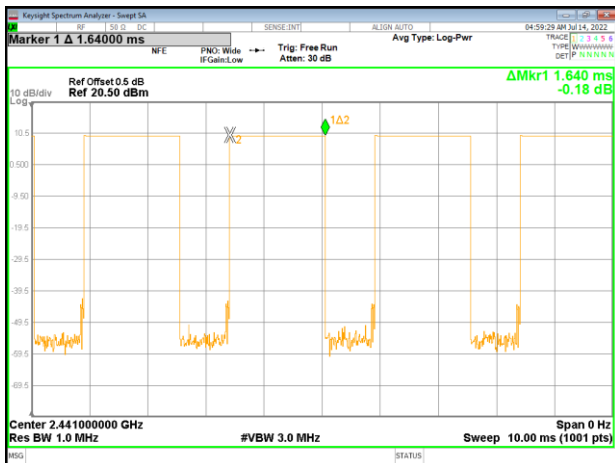
● Measurement Plots



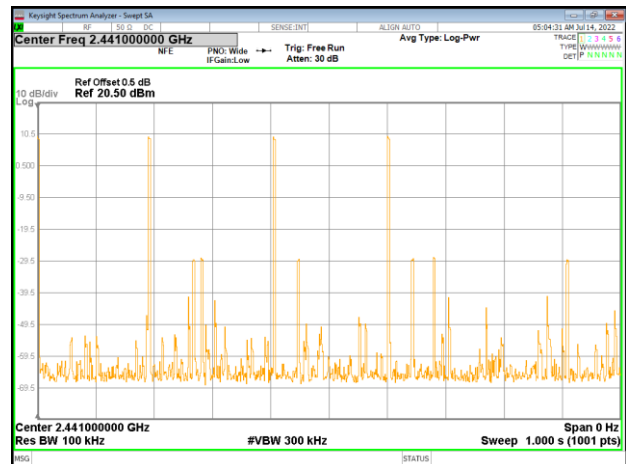
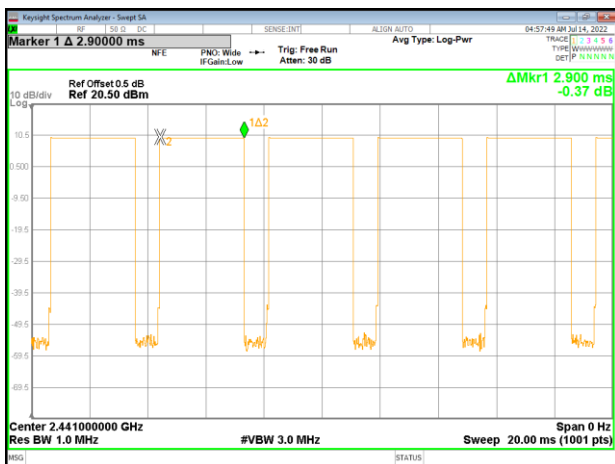
**GFSK**  
**2441MHz**  
**DH1**



**DH3**

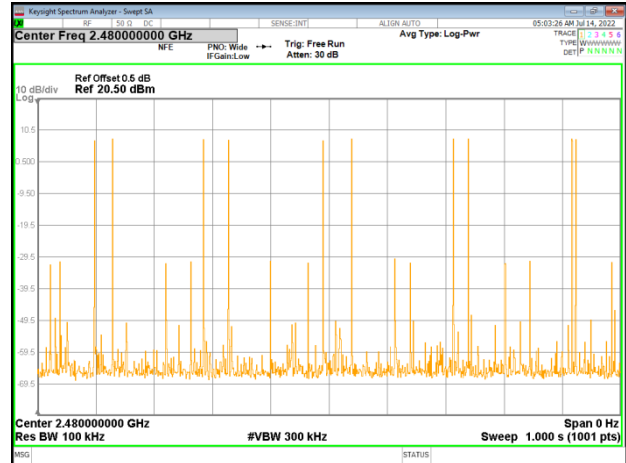


**DH5**

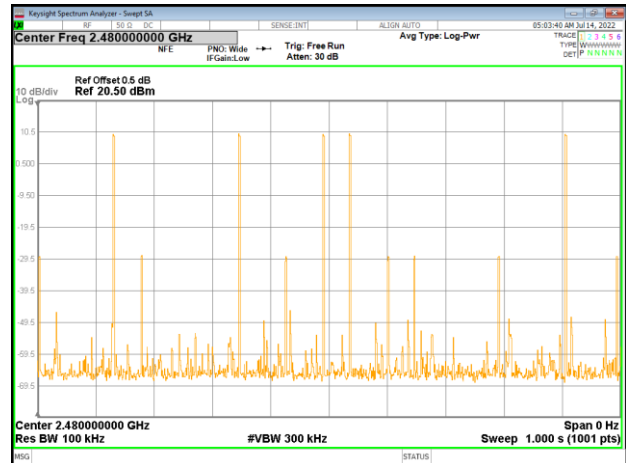
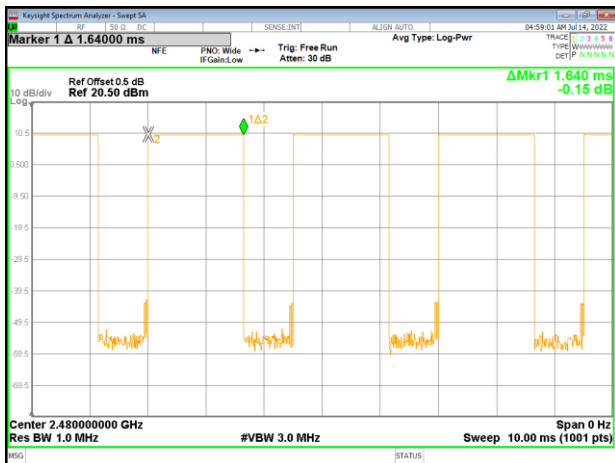


GFSK  
 2480MHz

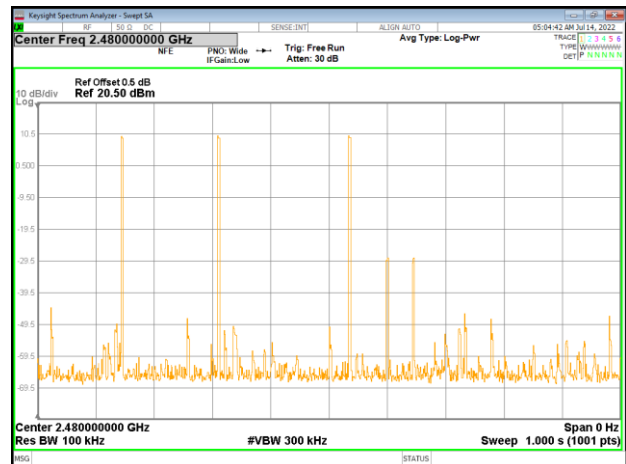
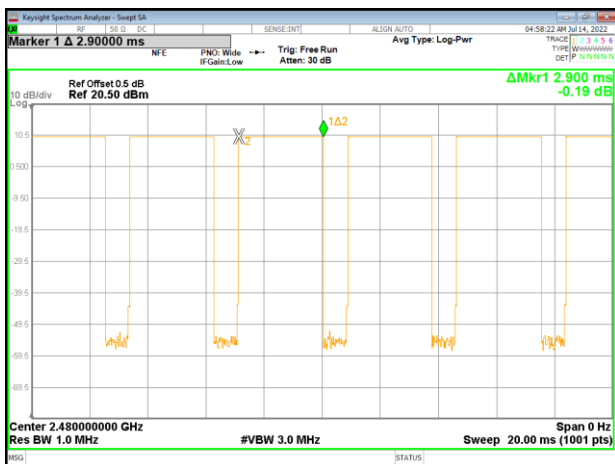
DH1



DH3



DH5



Mode	Centre Frequency (MHz)	Mode	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
8-DPSK	2402	3DH1	10	0.3800	120.080	<400
		3DH3	5	1.6400	259.120	<400
		3DH5	3	2.8800	273.024	<400

Observation Period:

**79** channels\* **0.4** seconds= **31.6** seconds

**3DH1 Mode**

For each second of **10** transmission appearance,the longest time of occupancy is  
**10** transmission\* **31.6** seconds\* **0.380** ms= **120.080** ms (<400ms)

**3DH3 Mode**

For each second of **5** transmission appearance,the longest time of occupancy is  
**5** transmission\* **31.6** seconds\* **1.640** ms= **259.120** ms (<400ms)

**3DH5 Mode**

For each second of **3** transmission appearance,the longest time of occupancy is  
**3** transmission\* **31.6** seconds\* **2.880** ms= **273.024** ms (<400ms)

Mode	Centre Frequency (MHz)	Mode	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
8-DPSK	2441	3DH1	10	0.3850	121.660	<400
		3DH3	5	1.6400	259.120	<400
		3DH5	3	2.8800	273.024	<400

Observation Period:

**79** channels\* **0.4** seconds= **31.6** seconds

**3DH1 Mode**

For each second of **10** transmission appearance,the longest time of occupancy is  
**10** transmission\* **31.6** seconds\* **0.385** ms= **121.660** ms (<400ms)

**3DH3 Mode**

For each second of **5** transmission appearance,the longest time of occupancy is  
**5** transmission\* **31.6** seconds\* **1.640** ms= **259.120** ms (<400ms)

**3DH5 Mode**

For each second of **3** transmission appearance,the longest time of occupancy is  
**3** transmission\* **31.6** seconds\* **2.880** ms= **273.024** ms (<400ms)



Mode	Centre Frequency (MHz)	Mode	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
8-DPSK	2480	3DH1	10	0.3900	123.240	<400
		3DH3	5	1.6400	259.120	<400
		3DH5	3	2.9000	274.920	<400

Observation Period:

$$79 \text{ channels} * 0.4 \text{ seconds} = 31.6 \text{ seconds}$$

**3DH1 Mode**

For each second of **10** transmission appearance, the longest time of occupancy is  
**10** transmission \* **31.6** seconds \* **0.390** ms = **123.240** ms (<400ms)

**3DH3 Mode**

For each second of **5** transmission appearance, the longest time of occupancy is  
**5** transmission \* **31.6** seconds \* **1.640** ms = **259.120** ms (<400ms)

**3DH5 Mode**

For each second of **3** transmission appearance, the longest time of occupancy is  
**3** transmission \* **31.6** seconds \* **2.900** ms = **274.920** ms (<400ms)

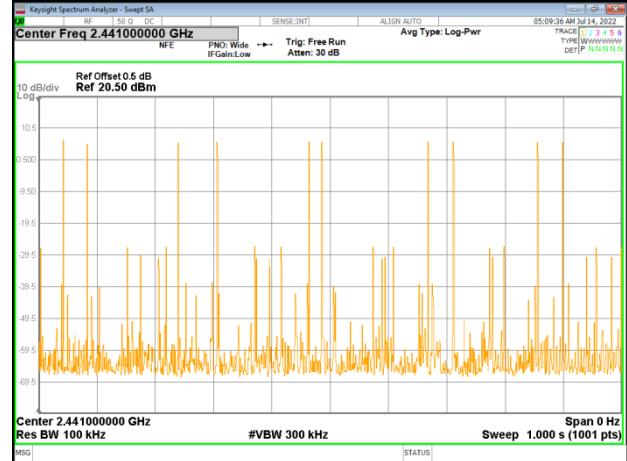
● Measurement Plots



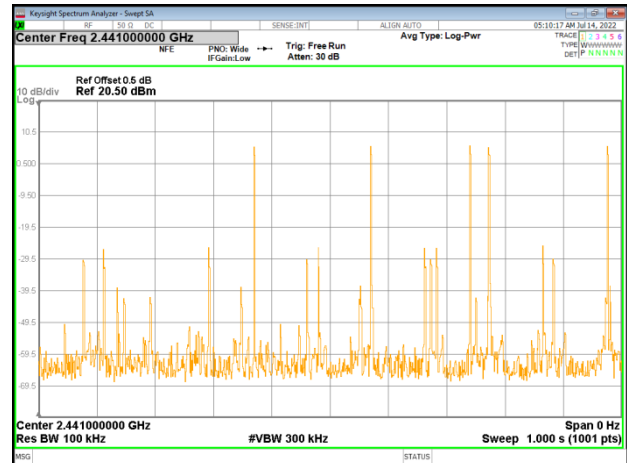
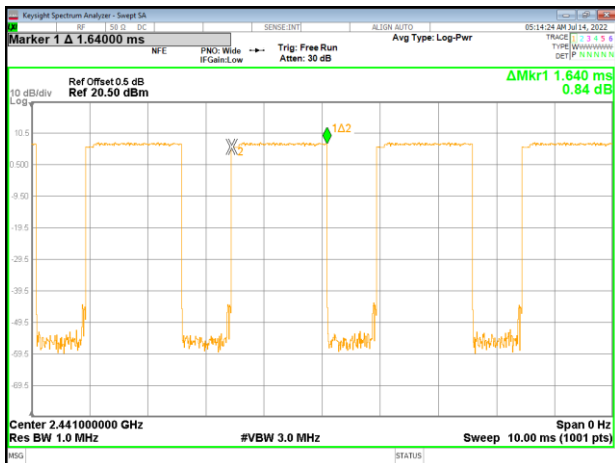
8-DPSK

2441MHz

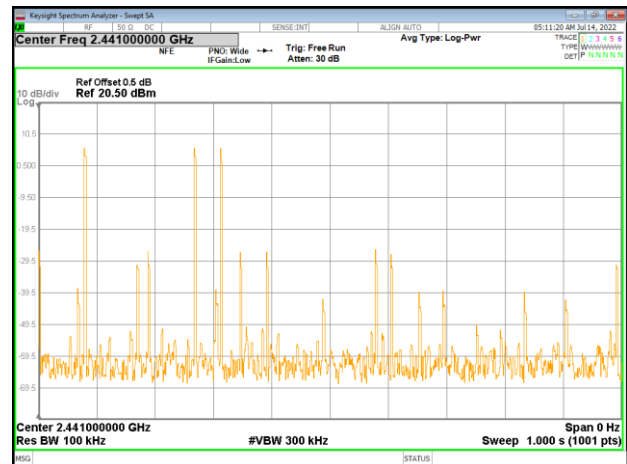
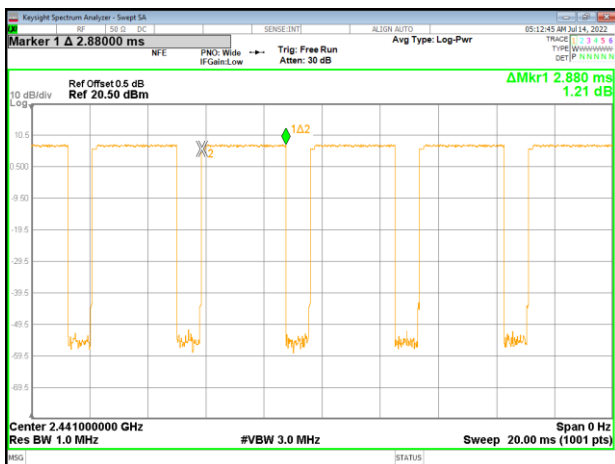
3DH1



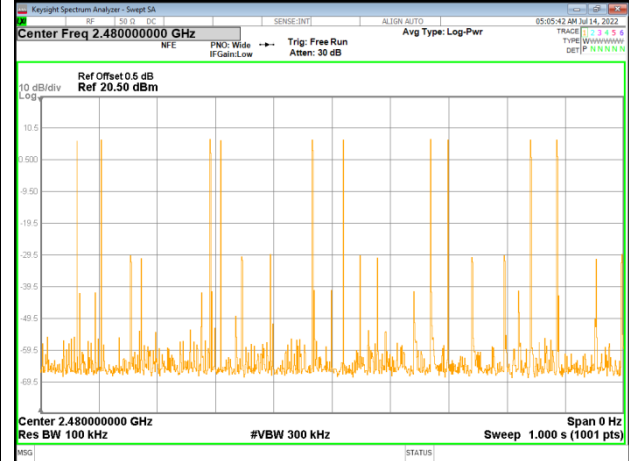
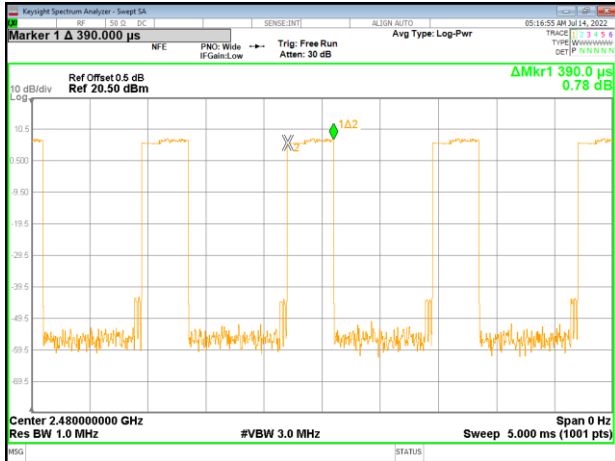
3DH3



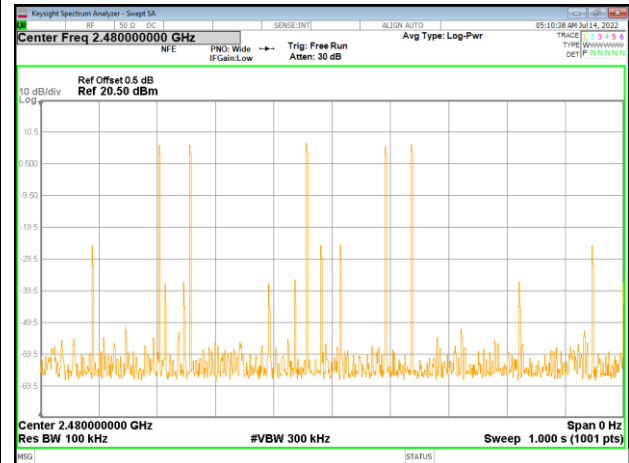
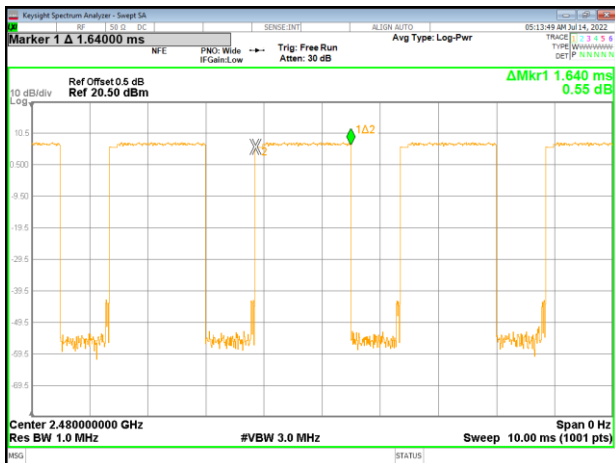
3DH5



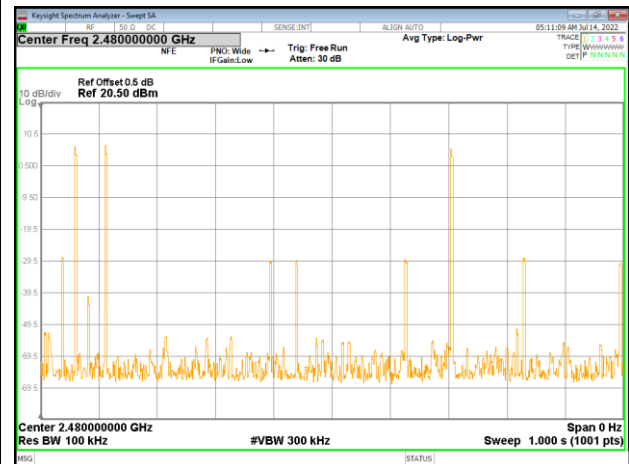
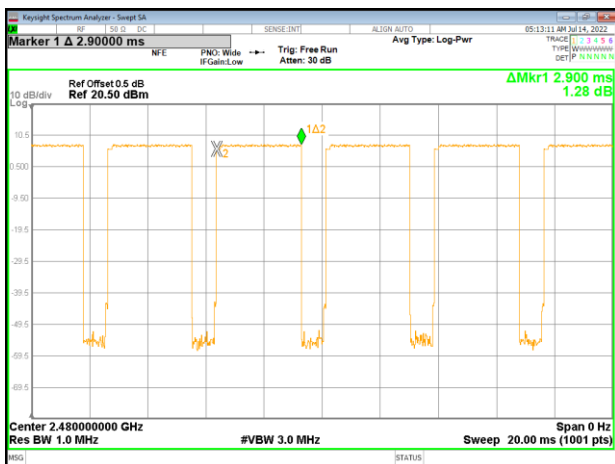
8-DPSK  
 2480MHz  
 3DH1



3DH3

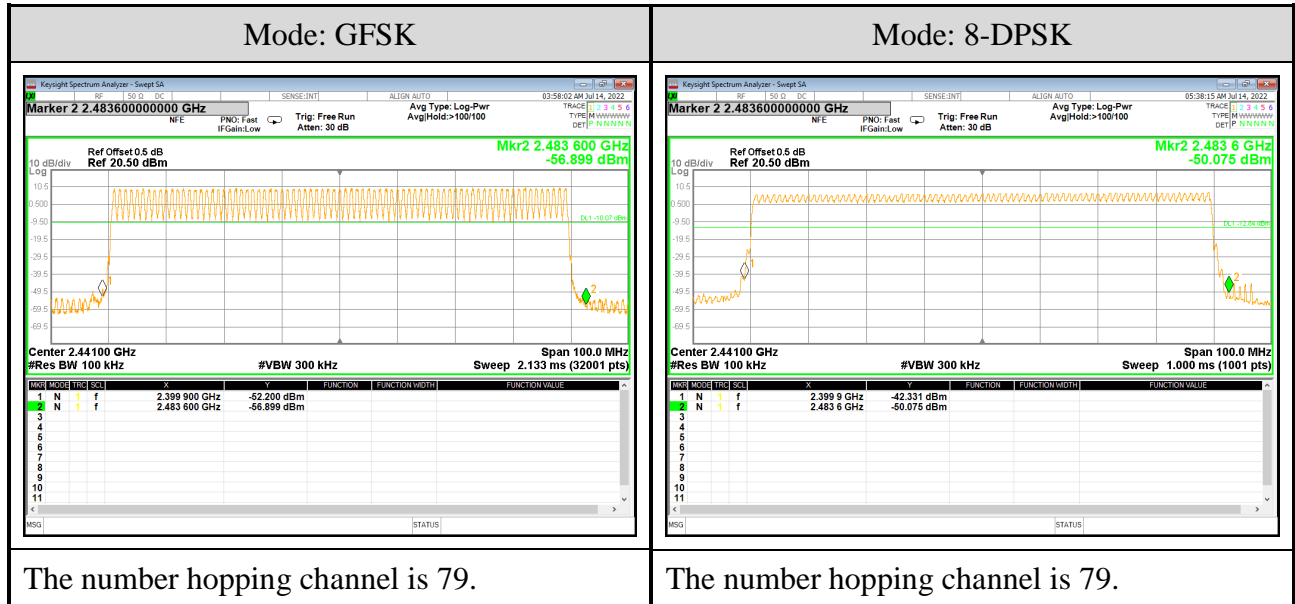


3DH5



## A.6 NUMBER OF HOPPING CHANNELS

Test Date	2022/07/14	Temp./Hum.	24°C/48%
Cable Loss	0.5dB	Tested By	Kuper Hsu
Test Voltage	AC 120V 60Hz (Via AC Adapter)		



## A.7 MAXIMUM PEAK OUTPUT POWER

Test Date	2022/07/14	Temp./Hum.	24°C/48%
Cable Loss	0.5dB	Tested By	Kuper Hsu
Test Voltage	AC 120V 60Hz (Via AC Adapter)		

### A.7.1 Maximum Peak Output Power

Mode	Centre Frequency (MHz)	Maximum Peak Output Power		Limit
		dBm	W	
GFSK	2402	9.812	0.010	21dBm (0.125W)
	2441	9.956	0.010	
	2480	<b>10.208</b>	<b>0.010</b>	
8-DPSK	2402	7.879	0.006	
	2441	7.965	0.006	
	2480	8.035	0.006	

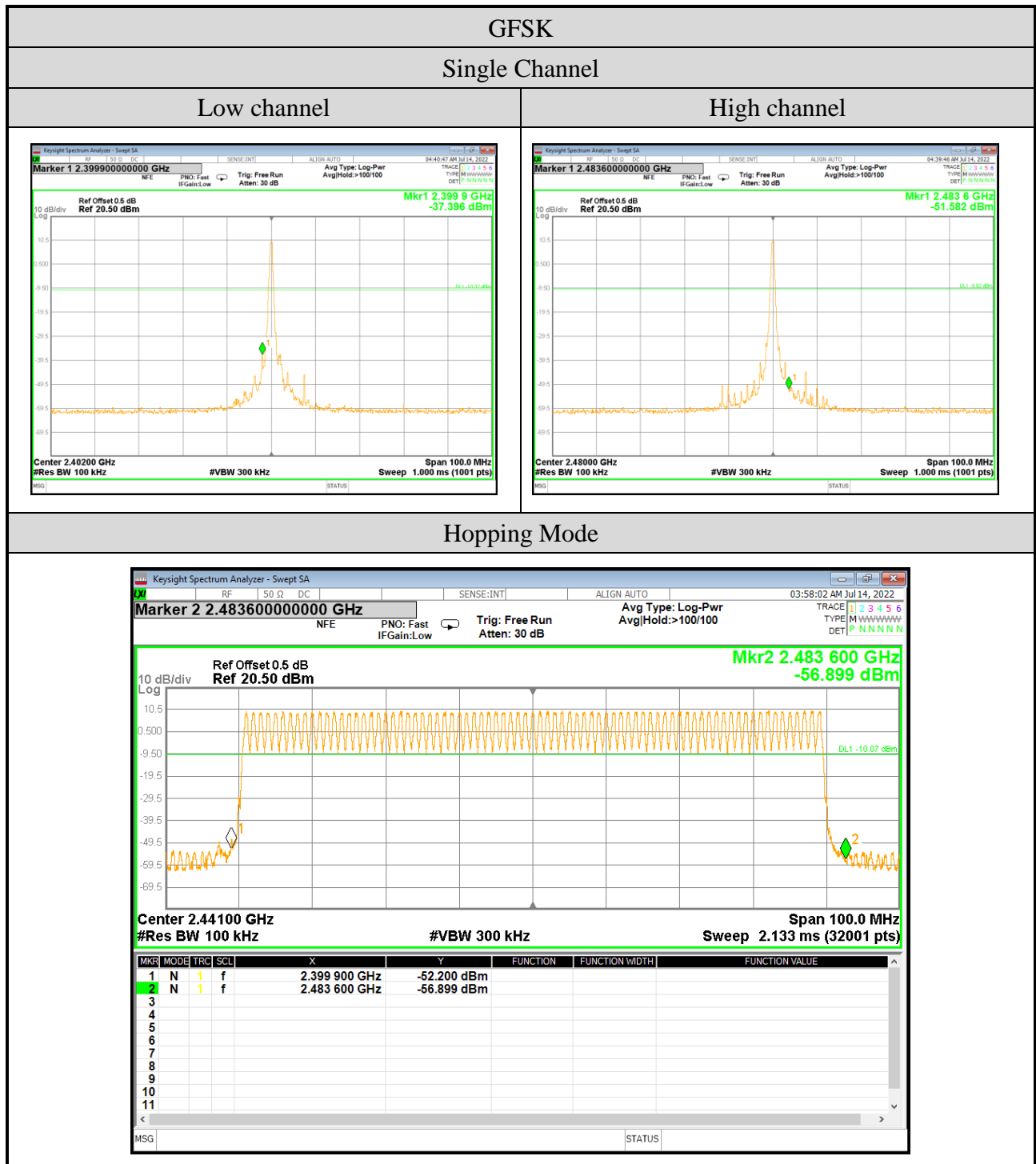
A.7.2 Measurement Plots



## A.8 EMISSION LIMITATIONS MEASUREMENT

Test Date	2022/07/14	Temp./Hum.	24°C/48%
Cable Loss	0.5dB	Tested By	Kuper Hsu
Test Voltage	AC 120V 60Hz (Via AC Adapter)		

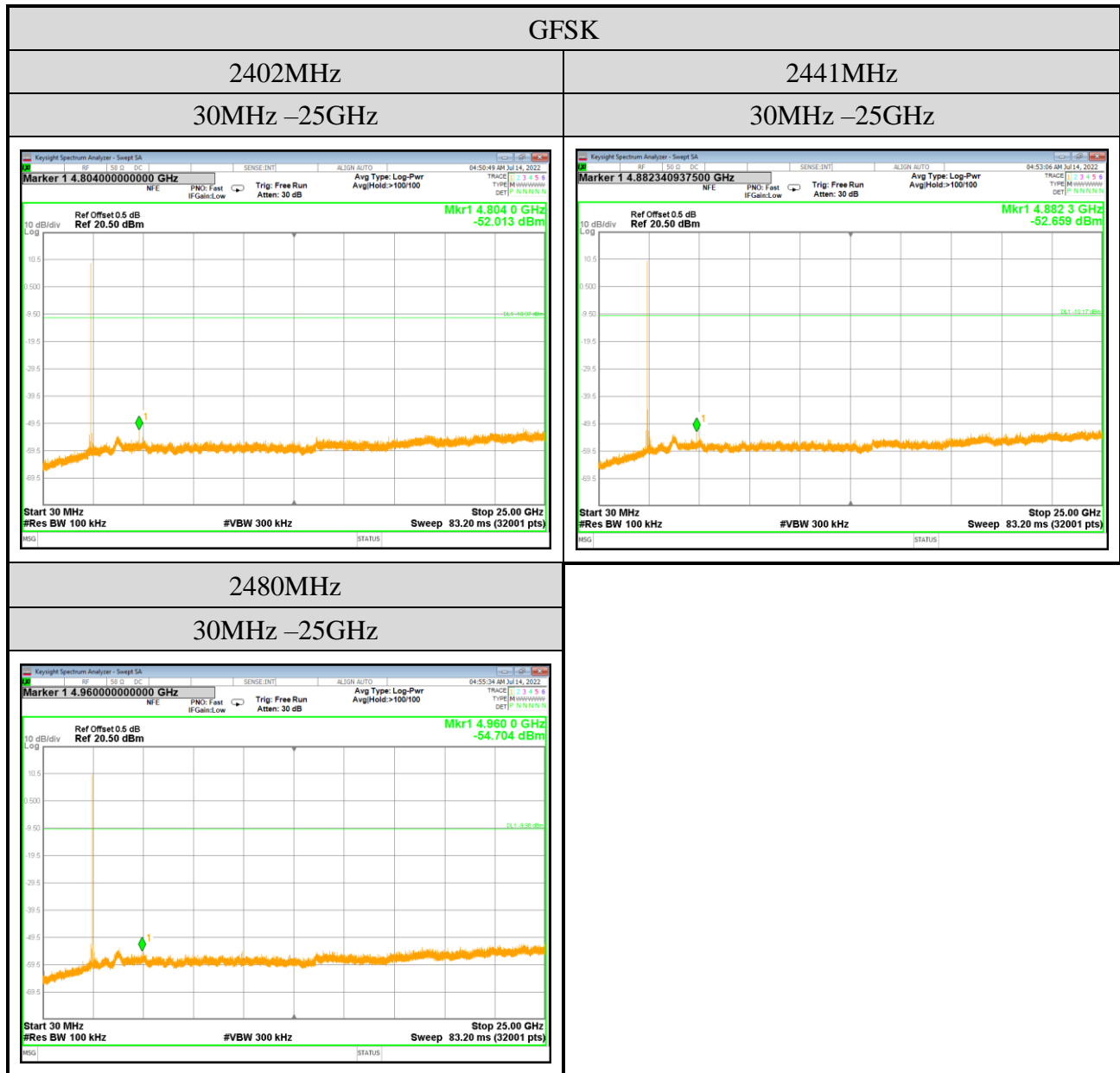
### A.8.1 Band Edge



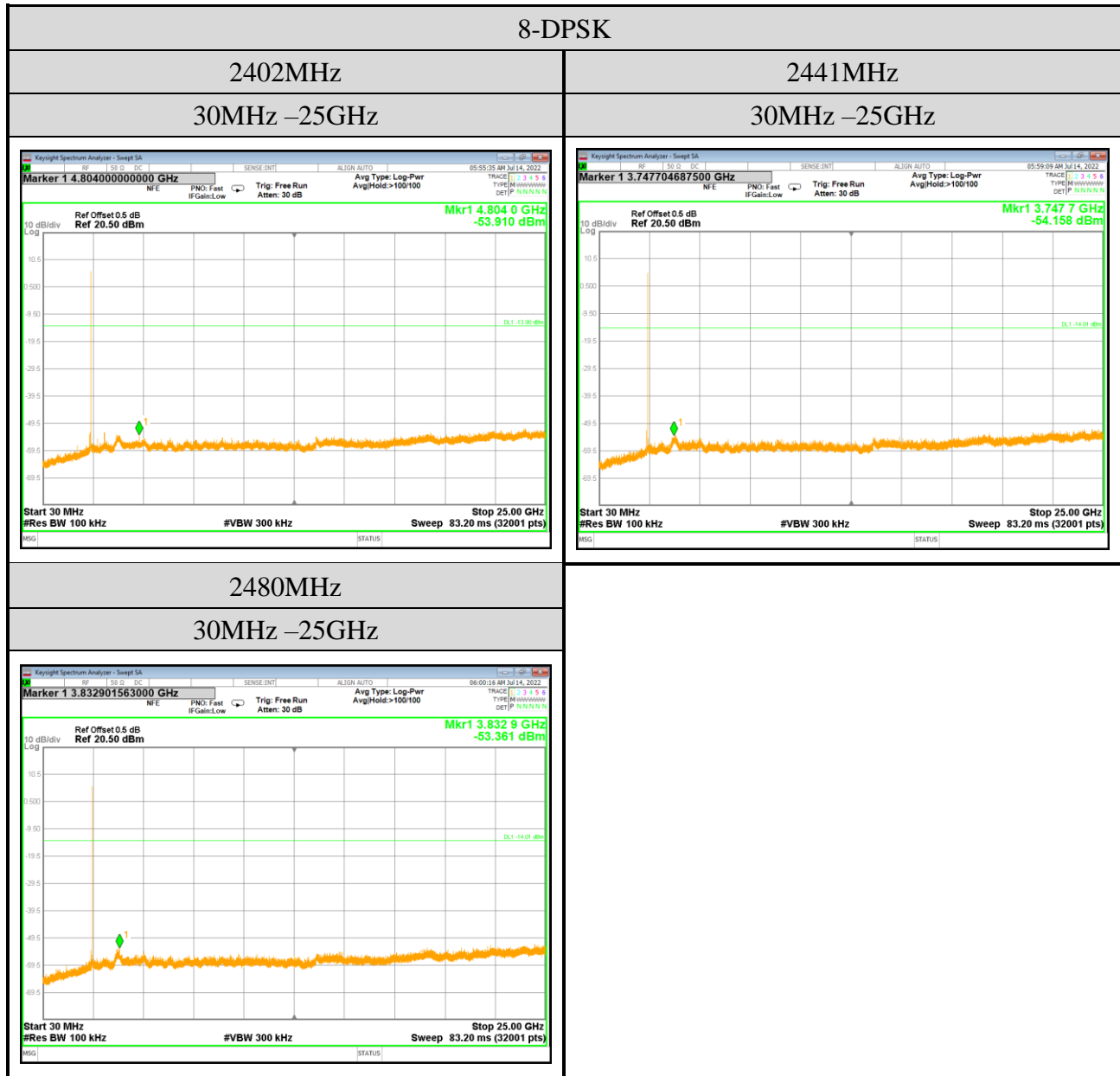




A.8.2 Spurious Emission



Note: All results have been included cable loss.



Note: All results have been included cable loss.