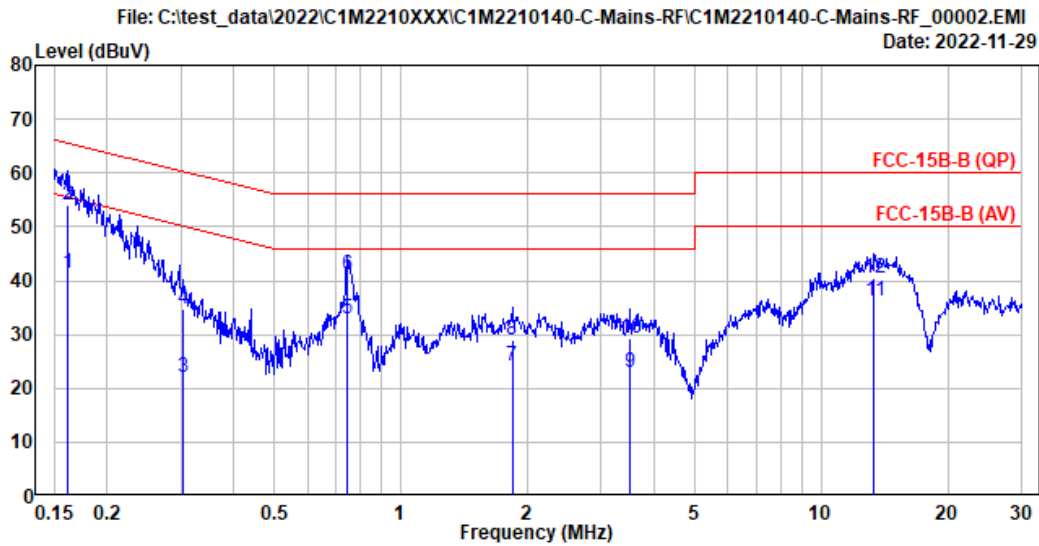


## TABLE OF CONTENTS

<b>A.1 CONDUCTED EMISSION</b> .....	<b>2</b>
<b>A.2 RADIATED EMISSION</b> .....	<b>4</b>
A.2.1 Emissions within Restricted Frequency Bands.....	4
A.2.2 Emissions outside the frequency band:.....	13
A.2.3 Emissions in Non-restricted Frequency Bands:.....	14
<b>A.3 20dB BANDWIDTH</b> .....	<b>15</b>
A.3.1 20dB Bandwidth Result.....	15
A.3.2 Measurement Plots .....	16
<b>A.4 CARRIER FREQUENCY SEPARATION</b> .....	<b>17</b>
<b>A.5 TIME OF OCCUPANCY</b> .....	<b>19</b>
A.5.1 Time of Occupancy .....	19
<b>A.6 NUMBER OF HOPPING CHANNELS</b> .....	<b>29</b>
<b>A.7 MAXIMUM PEAK OUTPUT POWER</b> .....	<b>30</b>
A.7.1 Maximum Peak Output Power.....	30
A.7.2 Measurement Plots .....	31
<b>A.8 EMISSION LIMITATIONS MEASUREMENT</b> .....	<b>32</b>
A.8.1 Band Edge.....	32
A.8.2 Spurious Emission .....	34

## A.1 CONDUCTED EMISSION

Test Date	2022/11/29	Temp./Hum.	25°C/62%
Test Voltage	AC 120V 60Hz (Via AC Adapter)	Tested By	Roy Hung

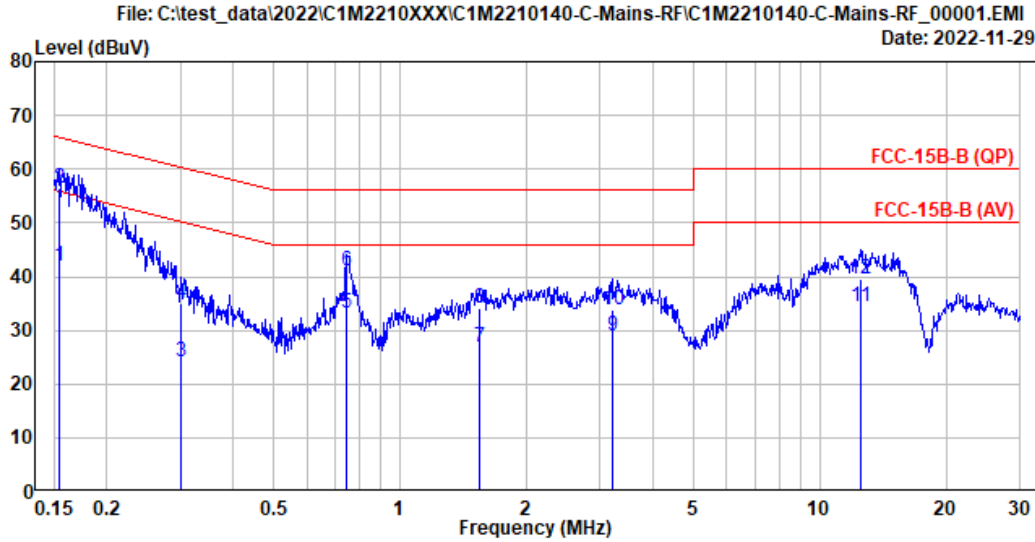


Site No.	: No.8 Shielded Room	Data No.	: 2
Instrument 1	: Receiver ESCI(923)		
Instrument 2	: ENV432 (567)(A) CE-08 ESH3-Z2 (354)		
Limit	: FCC-15B-B (QP)	Phase	: Neutral
Environment	: 25°C/62 %	Engineer	: Roy Hung
EUT Model	: 16Z90RS	Test Rating	: 120Vac/60Hz
Test Mode	: Operating		

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBμV)	Emission Level (dBμV)	Limits (dBμV)	Margin (dB)	Remark
1	0.161	10.34	0.03	9.85	21.27	41.49	55.42	13.93	Average
2	0.161	10.34	0.03	9.85	33.73	53.95	65.42	11.47	QP
3	0.304	10.32	0.03	9.85	1.94	22.14	50.12	27.98	Average
4	0.304	10.32	0.03	9.85	14.62	34.82	60.12	25.30	QP
5	0.747	10.33	0.04	9.85	12.72	32.94	46.00	13.06	Average
6	0.747	10.33	0.04	9.85	20.92	41.14	56.00	14.86	QP
7	1.840	10.36	0.06	9.86	3.92	24.20	46.00	21.80	Average
8	1.840	10.36	0.06	9.86	8.77	29.05	56.00	26.95	QP
9	3.501	10.39	0.08	9.86	2.59	22.92	46.00	23.08	Average
10	3.501	10.39	0.08	9.86	9.08	29.41	56.00	26.59	QP
11	13.380	10.81	0.16	9.90	15.33	36.20	50.00	13.80	Average
12	13.380	10.81	0.16	9.90	19.72	40.59	60.00	19.41	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	2022/11/29	Temp./Hum.	25°C/62%
Test Voltage	AC 120V 60Hz (Via AC Adapter)	Tested By	Roy Hung



Site No.	: No.8 Shielded Room	Data No.	: 1
Instrument 1	: Receiver ESCI(923)		
Instrument 2	: ENV432 (567)(A) CE-08 ESH3-Z2 (354)		
Limit	: FCC-15B-B (QP)	Phase	: Line
Environment	: 25°C/62 %	Engineer	: Roy Hung
EUT Model	: 16Z90RS	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	0.154	10.22	0.03	9.85	21.75	41.85	55.79	13.94	Average
2	0.154	10.22	0.03	9.85	36.36	56.46	65.79	9.33	QP
3	0.300	10.22	0.03	9.85	3.90	24.00	50.25	26.25	Average
4	0.300	10.22	0.03	9.85	14.80	34.90	60.25	25.35	QP
5	0.747	10.23	0.04	9.85	13.04	33.16	46.00	12.84	Average
6	0.747	10.23	0.04	9.85	21.02	41.14	56.00	14.86	QP
7	1.546	10.24	0.05	9.86	6.80	26.95	46.00	19.05	Average
8	1.546	10.24	0.05	9.86	13.84	33.99	56.00	22.01	QP
9	3.200	10.27	0.07	9.86	8.63	28.83	46.00	17.17	Average
10	3.200	10.27	0.07	9.86	13.62	33.82	56.00	22.18	QP
11	12.478	10.49	0.15	9.90	13.92	34.46	50.00	15.54	Average
12	12.478	10.49	0.15	9.90	19.10	39.64	60.00	20.36	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.

## A.2 RADIATED EMISSION

Test Date	2022/11/25 ~ 30	Temp./Hum.	22 ~ 26°C/60 ~ 70%
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	22.70	1.48	26.48	35.12	32.82	40.00	7.18	Peak
142.520	17.36	3.12	26.03	34.91	29.36	43.50	14.14	Peak
378.230	21.18	5.69	26.28	37.38	37.97	46.00	8.03	Peak
485.900	23.24	6.65	27.04	33.15	36.00	46.00	10.00	Peak
886.510	25.93	8.69	27.01	30.88	38.49	46.00	7.51	Peak
984.480	26.96	9.22	26.69	28.86	38.35	54.00	15.65	Peak

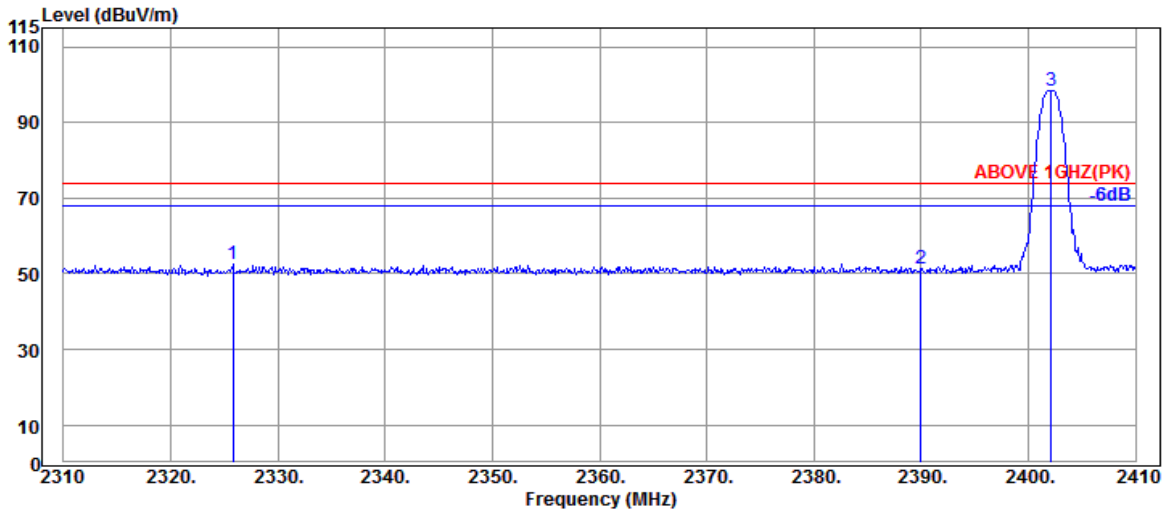
#### Antenna at Vertical Polarization

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
32.910	22.70	1.48	0.00	12.10	36.28	40.00	3.72	Peak
144.460	17.24	3.14	26.02	35.66	30.02	43.50	13.48	Peak
378.230	21.18	5.69	26.28	37.16	37.75	46.00	8.25	Peak
485.900	23.24	6.65	27.04	33.90	36.75	46.00	9.25	Peak
729.370	24.90	7.81	27.38	35.76	41.09	46.00	4.91	Peak
980.600	26.89	9.18	26.72	28.04	37.39	54.00	16.61	Peak

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

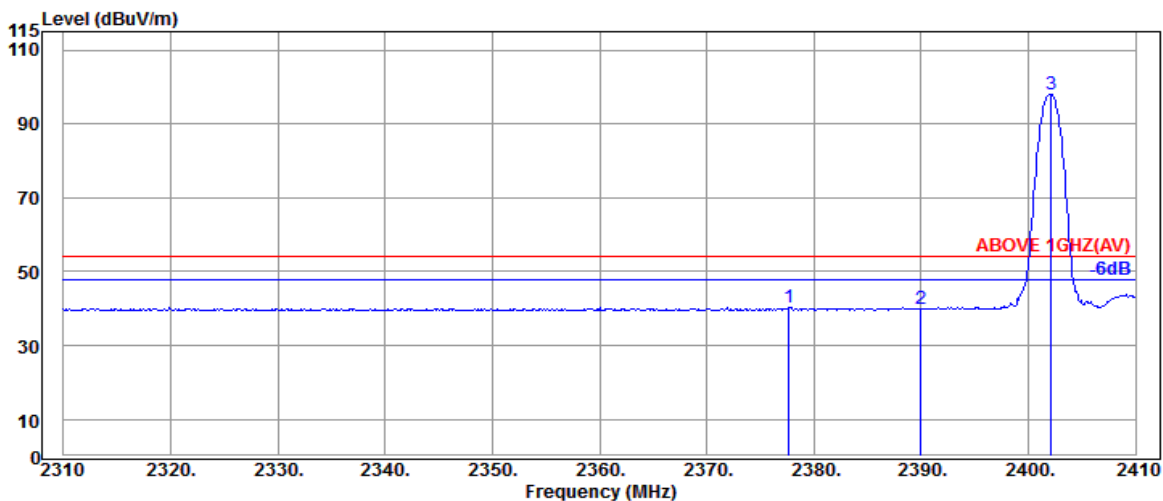
**Band Edge:**

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 (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2325.800	32.10	5.62	34.49	49.41	52.64	74.00	21.36	Peak
2390.000	32.00	5.72	34.51	48.04	51.25	74.00	22.75	Peak
@ 2402.100	32.00	5.74	34.51	95.37	98.60	---	---	Peak

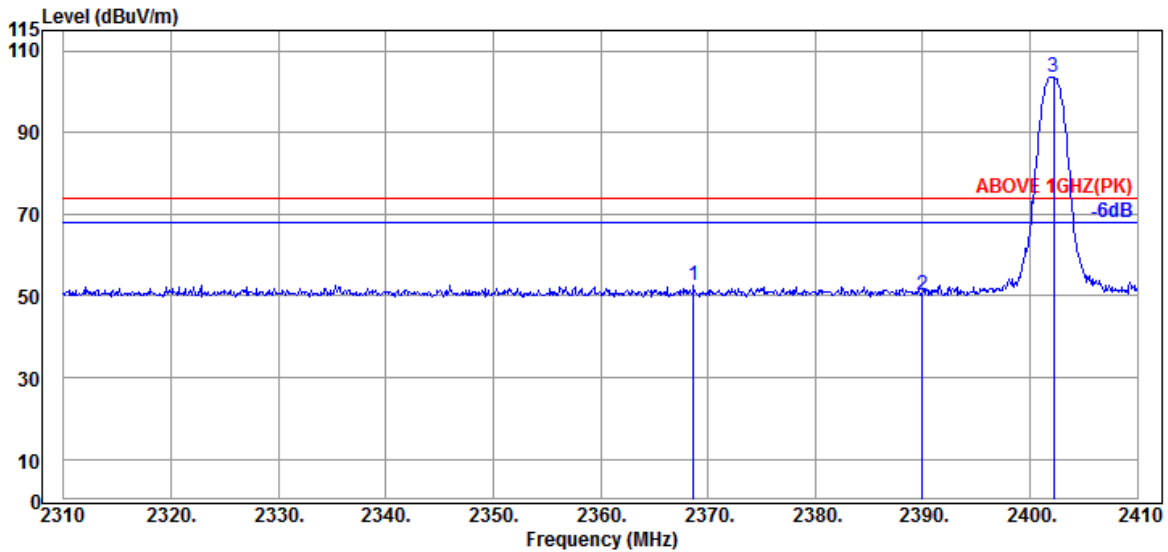


Antenna at Horizontal Polarization

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
2377.700	32.00	5.71	34.50	37.01	40.22	54.00	13.78	Average
2390.000	32.00	5.72	34.51	36.59	39.80	54.00	14.20	Average
@ 2402.100	32.00	5.74	34.51	94.97	98.20	---	---	Average

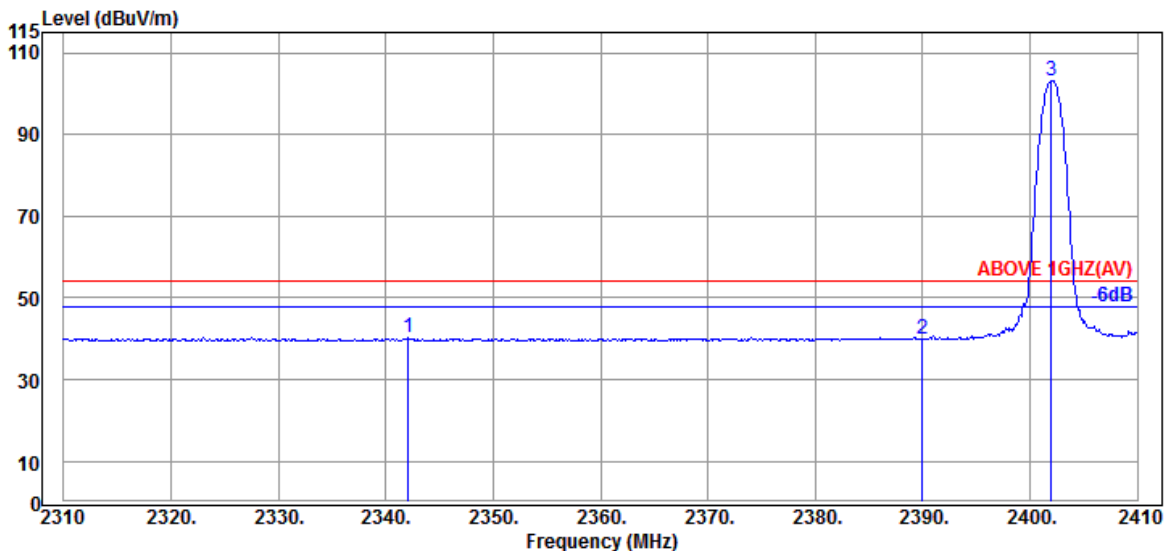
Remark: The “@” means fundamental frequency, it is ignored in this section.

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
2368.700	32.00	5.69	34.50	49.39	52.58	74.00	21.42	Peak
2390.000	32.00	5.72	34.51	46.88	50.09	74.00	23.91	Peak
@ 2402.200	32.00	5.74	34.51	100.25	103.48	---	---	Peak

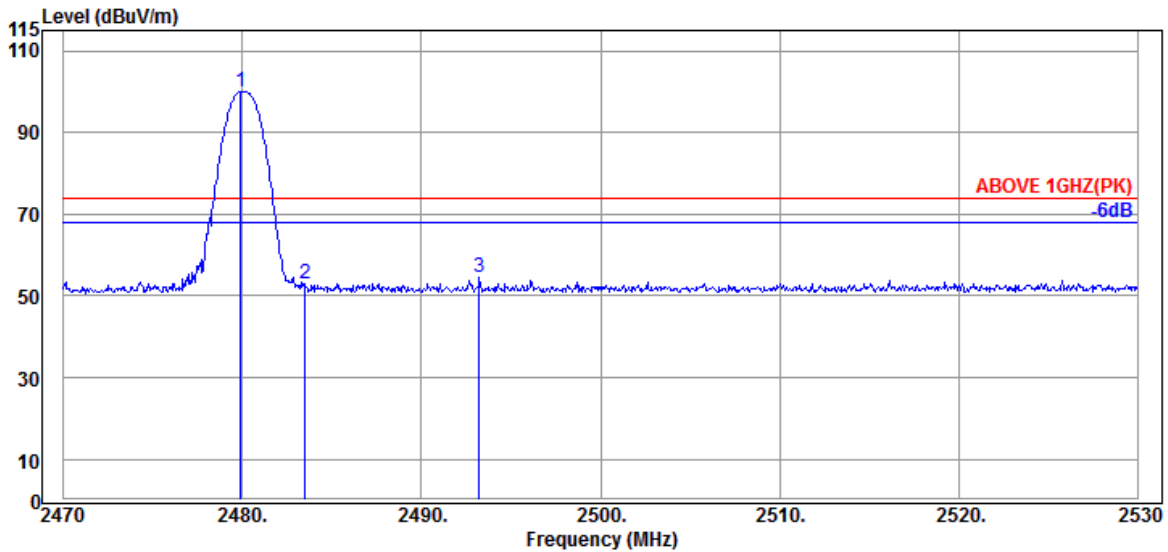


Antenna at Vertical Polarization

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
2342.100	32.05	5.64	34.50	37.26	40.45	54.00	13.55	Average
2390.000	32.00	5.72	34.51	36.89	40.10	54.00	13.90	Average
@ 2402.000	32.00	5.74	34.51	100.10	103.33	---	---	Average

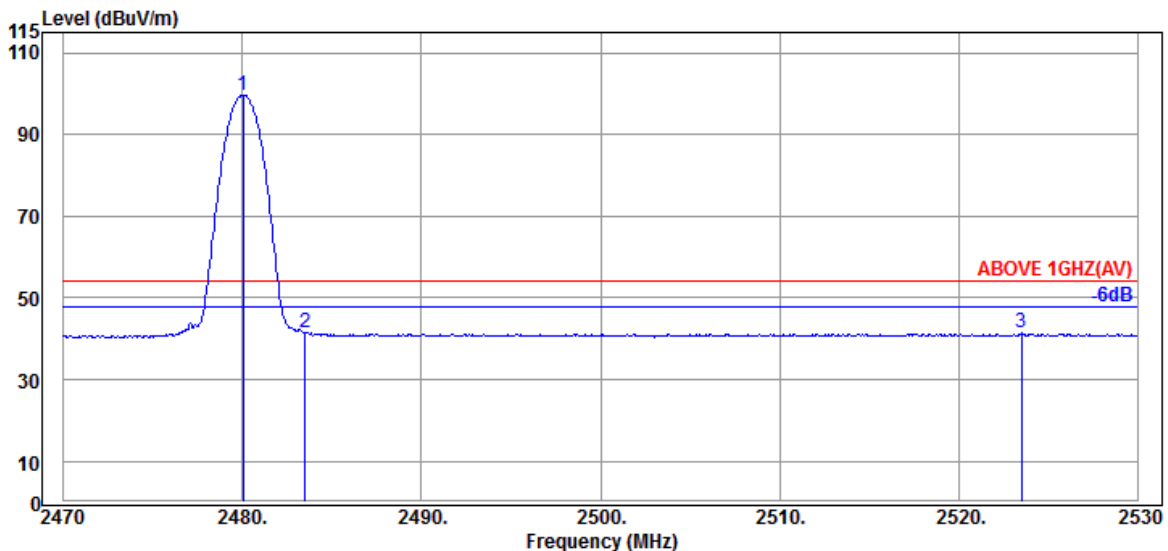
Remark: The "@" means fundamental frequency, it is ignored in this section.

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
@ 2479.900	32.34	5.86	34.53	96.21	99.88	---	---	Peak
2483.500	32.43	5.87	34.53	49.10	52.87	74.00	21.13	Peak
2493.220	32.51	5.88	34.53	50.54	54.40	74.00	19.60	Peak

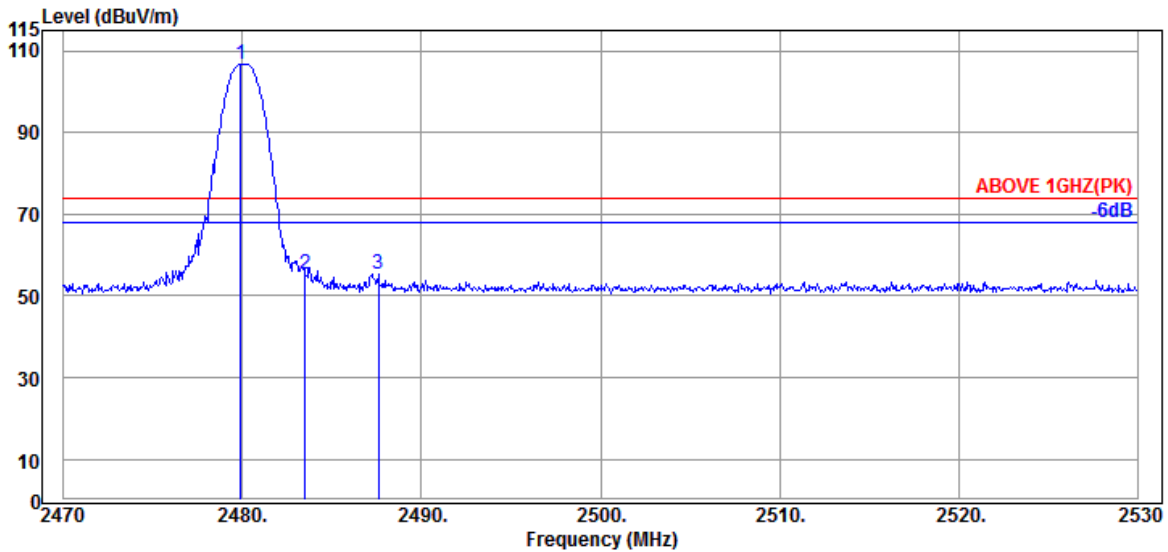


Antenna at Horizontal Polarization

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
@ 2480.020	32.34	5.86	34.53	96.03	99.70	---	---	Average
2483.500	32.43	5.87	34.53	37.85	41.62	54.00	12.38	Average
2523.520	32.51	5.94	34.53	37.41	41.33	54.00	12.67	Average

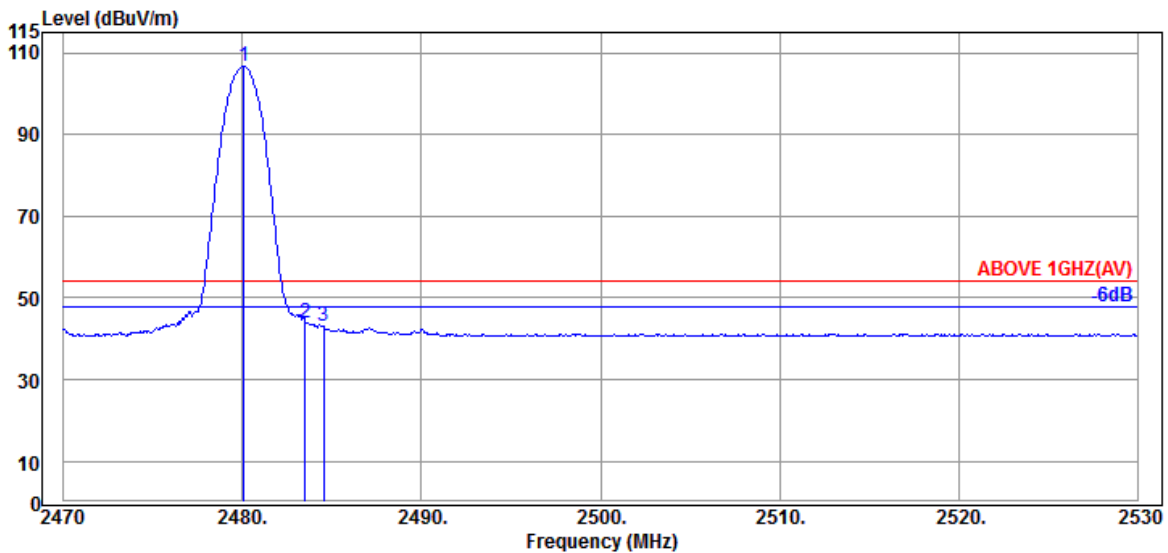
Remark: The "@" means fundamental frequency, it is ignored in this section.

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 (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2479.900	32.34	5.86	34.53	103.03	106.70	---	---	Peak
2483.500	32.43	5.87	34.53	51.59	55.36	74.00	18.64	Peak
2487.580	32.43	5.87	34.53	51.44	55.21	74.00	18.79	Peak



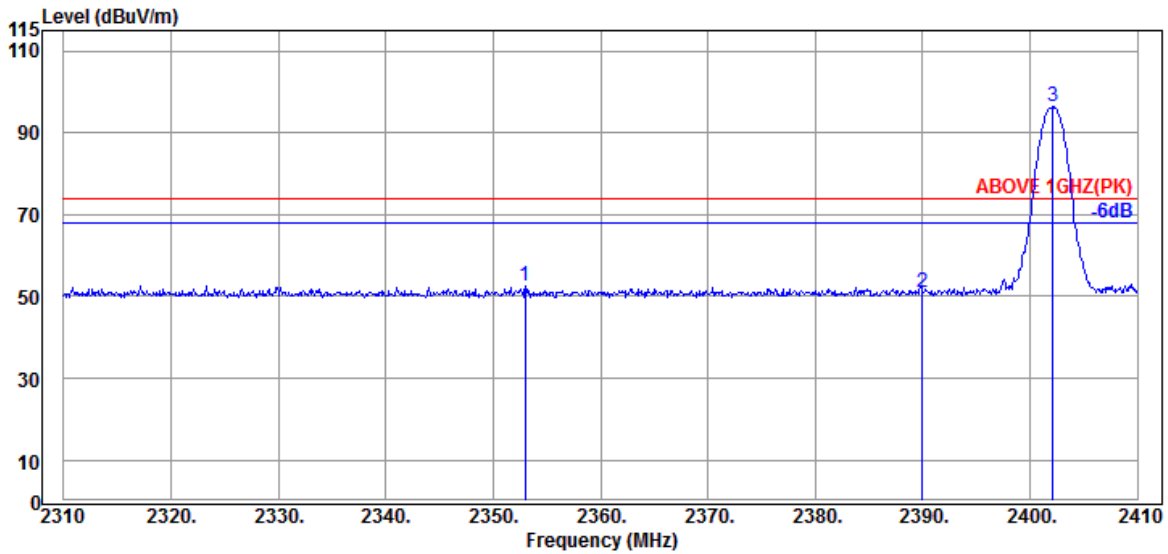
Antenna at Vertical Polarization

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
@ 2480.080	32.34	5.86	34.53	102.96	106.63	---	---	Average
2483.500	32.43	5.87	34.53	40.24	44.01	54.00	9.99	Average
2484.520	32.43	5.87	34.53	39.21	42.98	54.00	11.02	Average

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

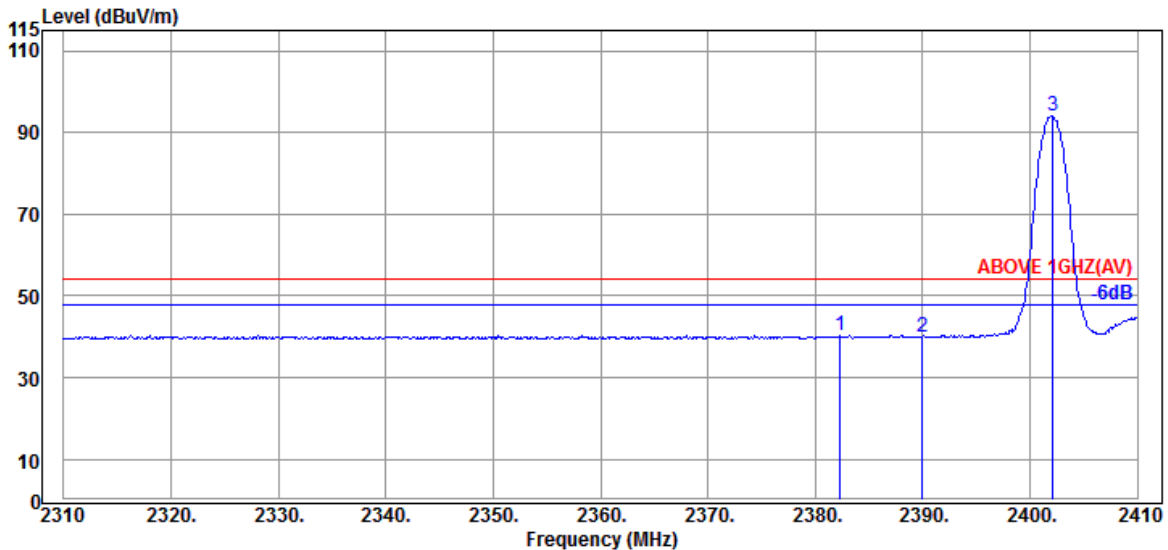


Mode	8-DPSK	Frequency	TX 2402MHz
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Antenna at Horizontal Polarization

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
2353.000	32.00	5.66	34.50	49.37	52.53	74.00	21.47	Peak
2390.000	32.00	5.72	34.51	47.65	50.86	74.00	23.14	Peak
@ 2402.100	32.00	5.74	34.51	93.04	96.27	---	---	Peak

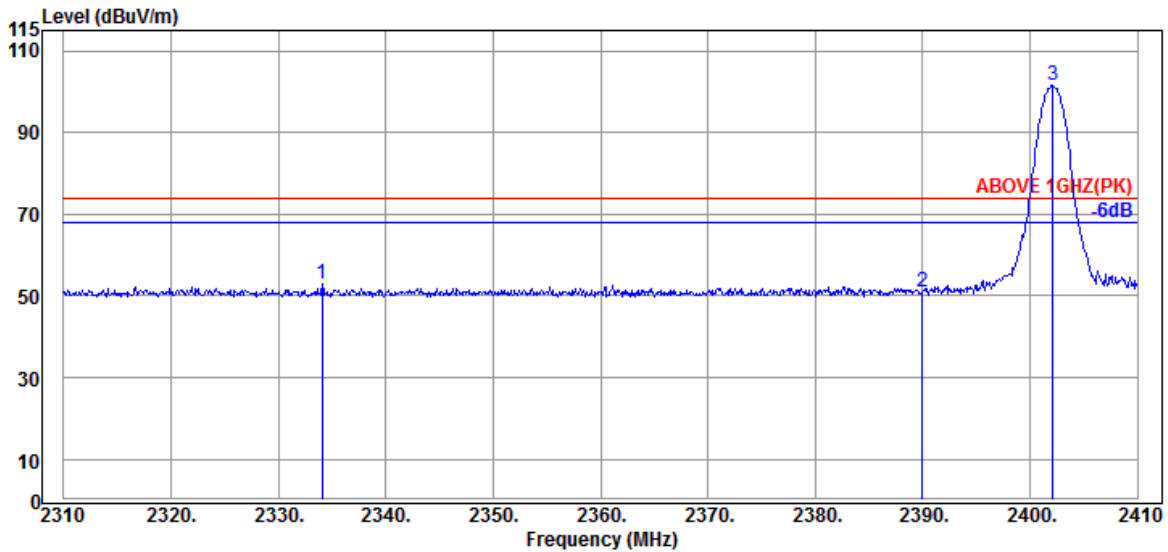


Antenna at Horizontal Polarization

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
2382.300	32.00	5.71	34.51	37.09	40.29	54.00	13.71	Average
2390.000	32.00	5.72	34.51	36.74	39.95	54.00	14.05	Average
@ 2402.100	32.00	5.74	34.51	90.75	93.98	---	---	Average

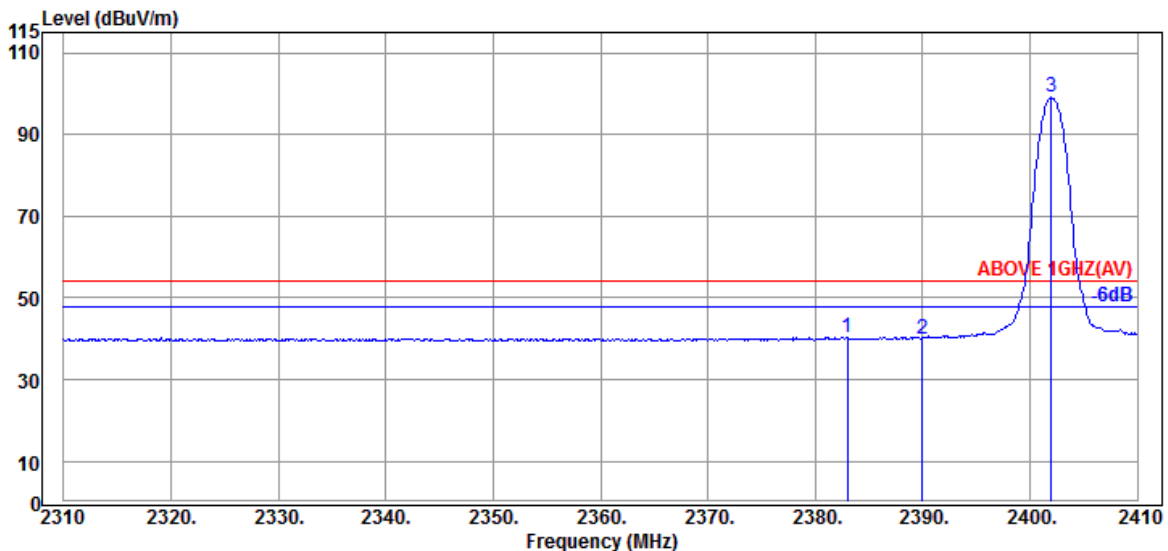
Remark: The “@” means fundamental frequency, it is ignored in this section.

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
2334.100	32.08	5.63	34.50	49.62	52.83	74.00	21.17	Peak
2390.000	32.00	5.72	34.51	47.90	51.11	74.00	22.89	Peak
@ 2402.100	32.00	5.74	34.51	98.15	101.38	---	---	Peak

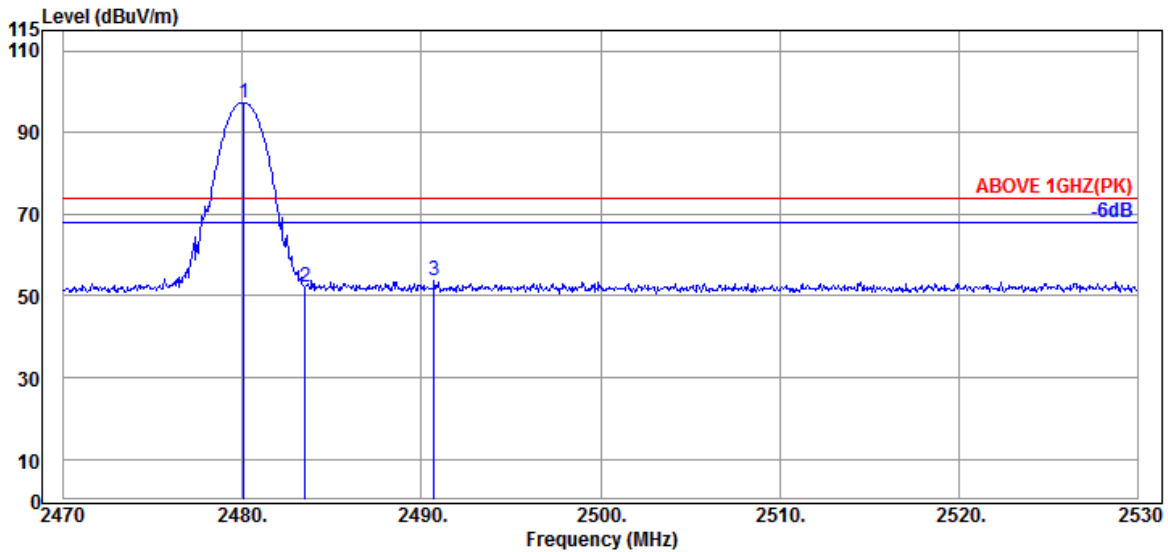


Antenna at Vertical Polarization

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
2383.000	32.00	5.71	34.51	37.22	40.42	54.00	13.58	Average
2390.000	32.00	5.72	34.51	36.89	40.10	54.00	13.90	Average
@ 2402.000	32.00	5.74	34.51	95.77	99.00	---	---	Average

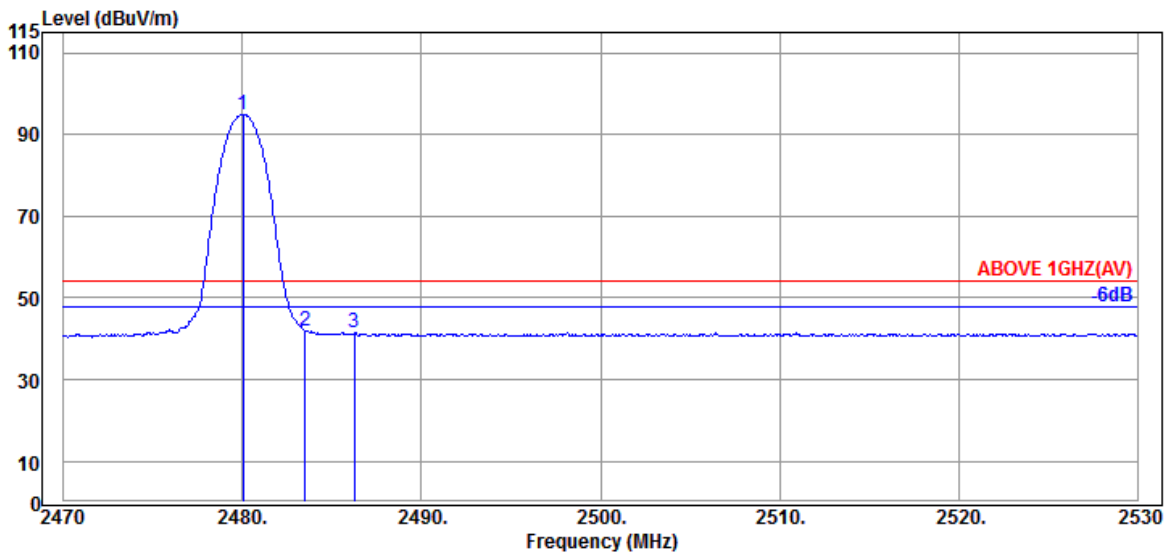
Remark: The “@” means fundamental frequency, it is ignored in this section.

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
@ 2480.080	32.34	5.86	34.53	93.68	97.35	---	---	Peak
2483.500	32.43	5.87	34.53	48.47	52.24	74.00	21.76	Peak
2490.700	32.51	5.88	34.53	50.01	53.87	74.00	20.13	Peak

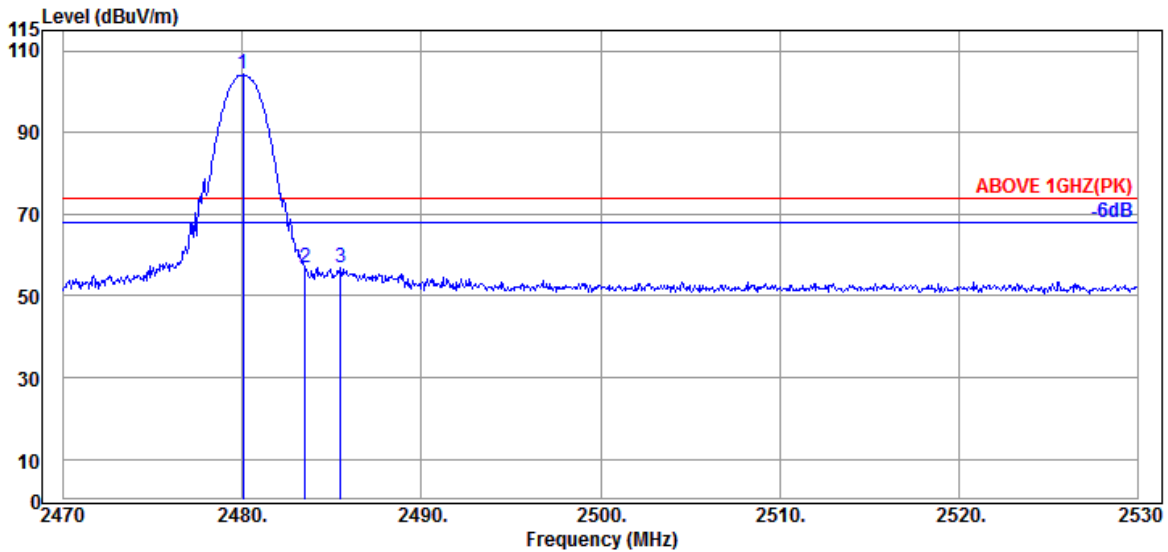


Antenna at Horizontal Polarization

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
@ 2480.020	32.34	5.86	34.53	91.30	94.97	---	---	Average
2483.500	32.43	5.87	34.53	38.09	41.86	54.00	12.14	Average
2486.260	32.43	5.87	34.53	37.61	41.38	54.00	12.62	Average

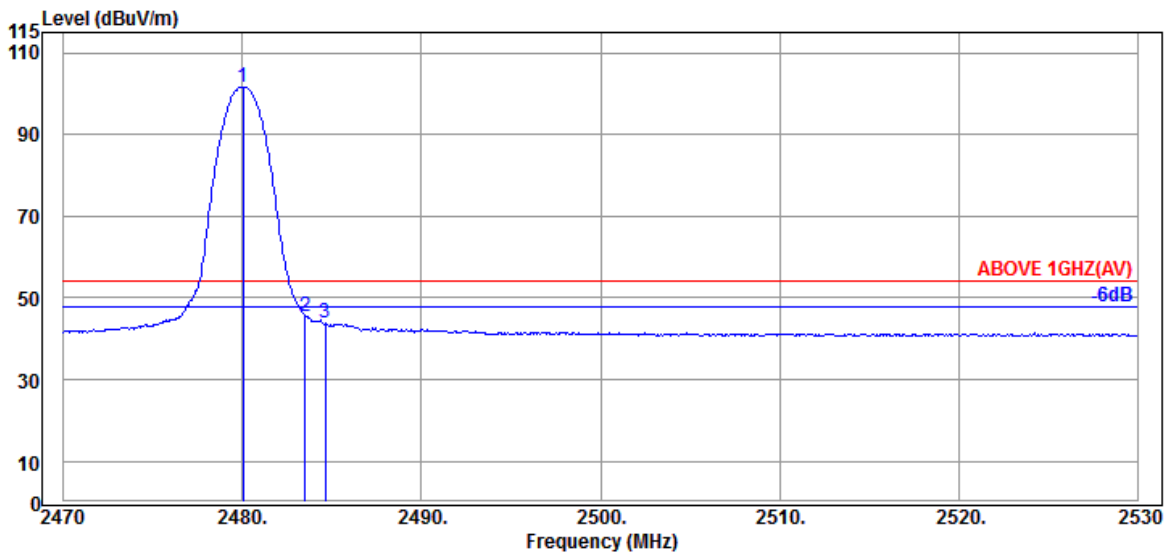
Remark: The "@" means fundamental frequency, it is ignored in this section.

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 (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2480.020	32.34	5.86	34.53	100.54	104.21	---	---	Peak
2483.500	32.43	5.87	34.53	52.99	56.76	74.00	17.24	Peak
2485.480	32.43	5.87	34.53	53.25	57.02	74.00	16.98	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
@ 2480.020	32.34	5.86	34.53	98.00	101.67	---	---	Average
2483.500	32.43	5.87	34.53	41.77	45.54	54.00	8.46	Average
2484.640	32.43	5.87	34.53	39.97	43.74	54.00	10.26	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 (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4804.000	34.10	8.53	34.43	32.29	40.49	54.00	13.51	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
4804.000	34.10	8.53	34.43	34.23	42.43	54.00	11.57	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 (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4882.000	34.05	8.64	34.42	31.19	39.46	54.00	14.54	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
4882.000	34.05	8.64	34.42	32.30	40.57	54.00	13.43	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 (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4960.000	34.22	8.74	34.41	33.17	41.72	54.00	12.28	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
4960.000	34.22	8.74	34.41	34.37	42.92	54.00	11.08	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

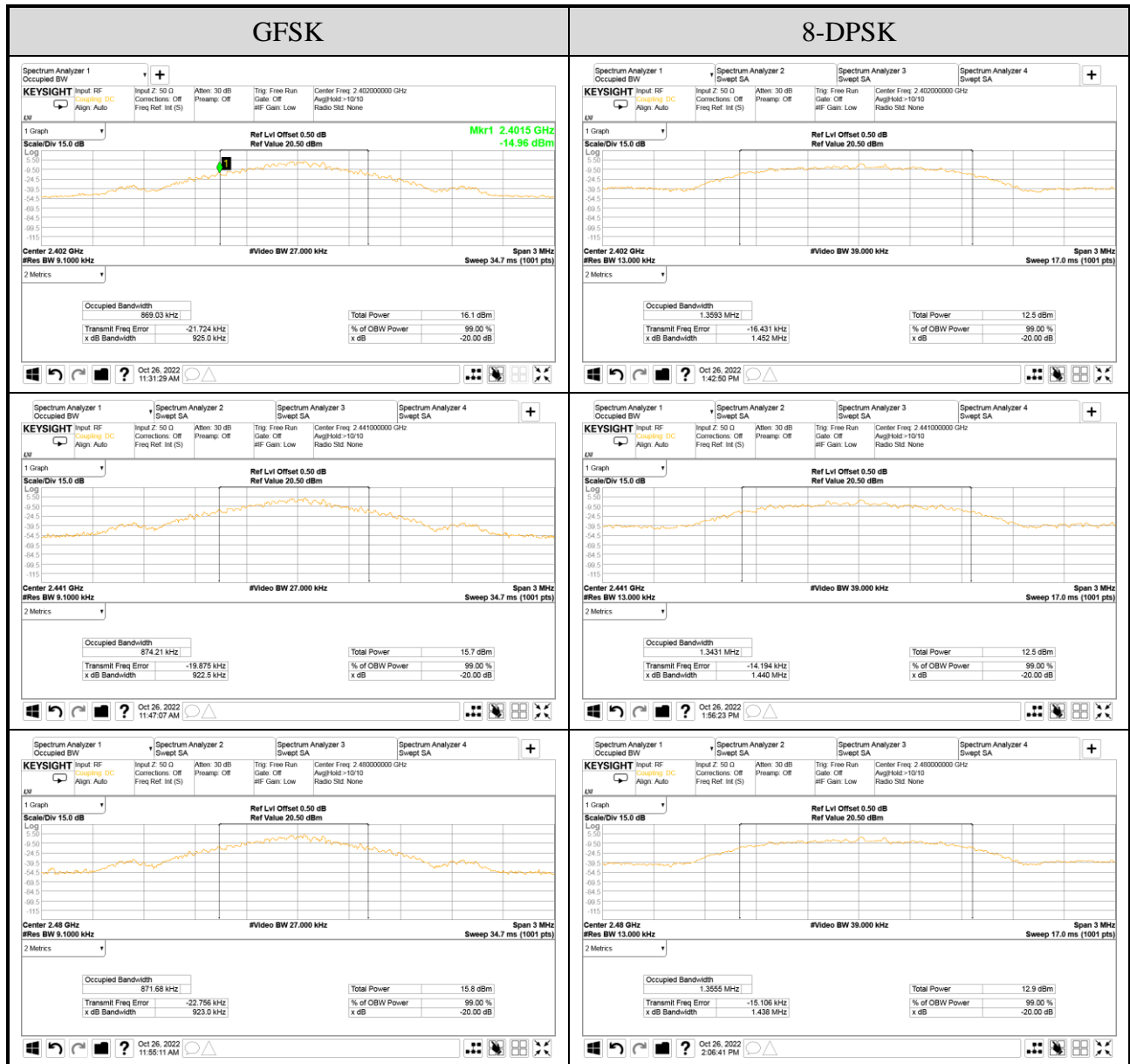
Test Date	2022/10/26	Temp./Hum.	24°C/62%
Cable Loss	0.5dB	Tested By	Brian Hsieh
Test Voltage	AC 120V 60Hz (Via AC Adapter)		

### 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	0.9250	0.86903	0.617
	2441	0.9202	0.87421	0.613
	2480	0.9230	0.87168	0.615
8-DPSK	2402	1.452	1.3593	0.968
	2441	1.440	1.3431	0.960
	2480	1.438	1.3555	0.959

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

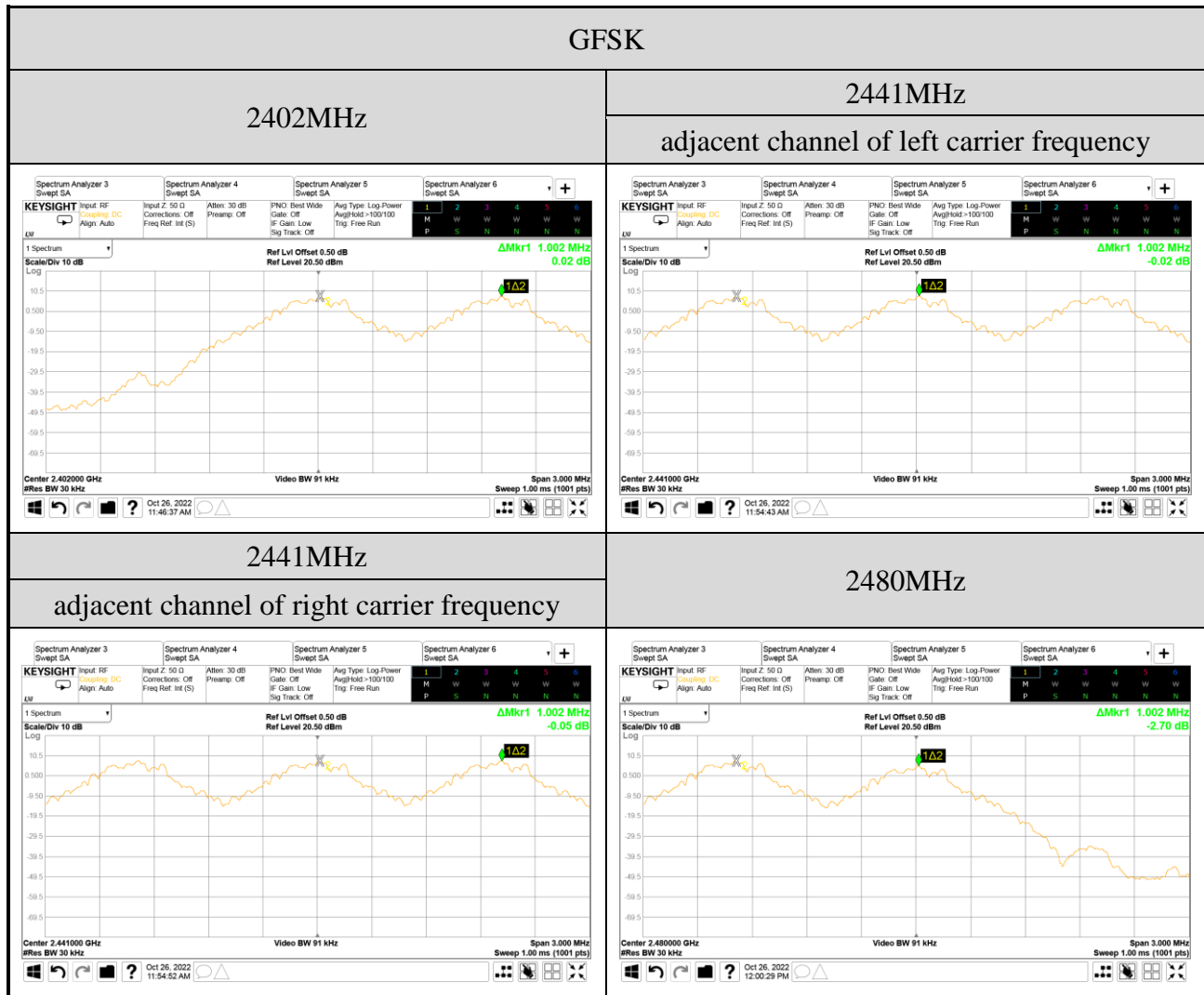
A.3.2 Measurement Plots

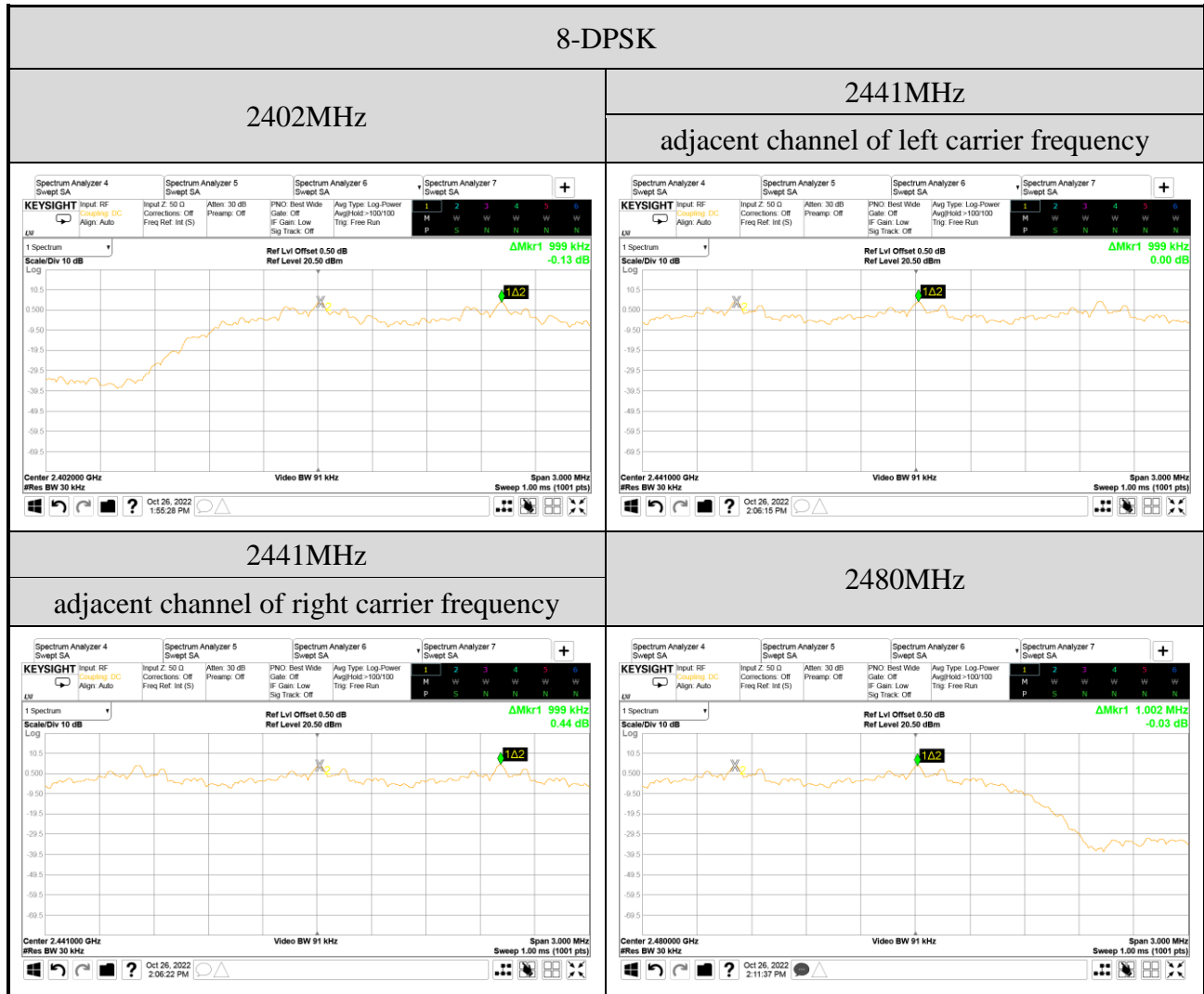




## A.4 CARRIER FREQUENCY SEPARATION

Test Date	2022/10/26	Temp./Hum.	24°C/62%
Cable Loss	0.5dB	Tested By	Brian Hsieh
Test Voltage	AC 120V 60Hz (Via AC Adapter)		





## A.5 TIME OF OCCUPANCY

Test Date	2022/10/26	Temp./Hum.	24°C/62%
Cable Loss	0.5dB	Tested By	Brian Hsieh
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	0.380	120.080	<400
		DH3	5	1.640	259.120	<400
		DH5	3	2.890	273.972	<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 \* 2.890 ms = 273.972 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	0.380	120.080	<400
		DH3	5	1.630	257.540	<400
		DH5	3	2.890	273.972	<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 \* 1.630 ms = 257.540 ms (<400ms)

#### DH5 Mode

For each second of 3 transmission appearance, the longest time of occupancy is  
 3 transmission \* 31.6 seconds \* 2.890 ms = 273.972 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	0.380	120.080	<400
		DH3	5	1.640	259.120	<400
		DH5	3	2.890	273.972	<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)

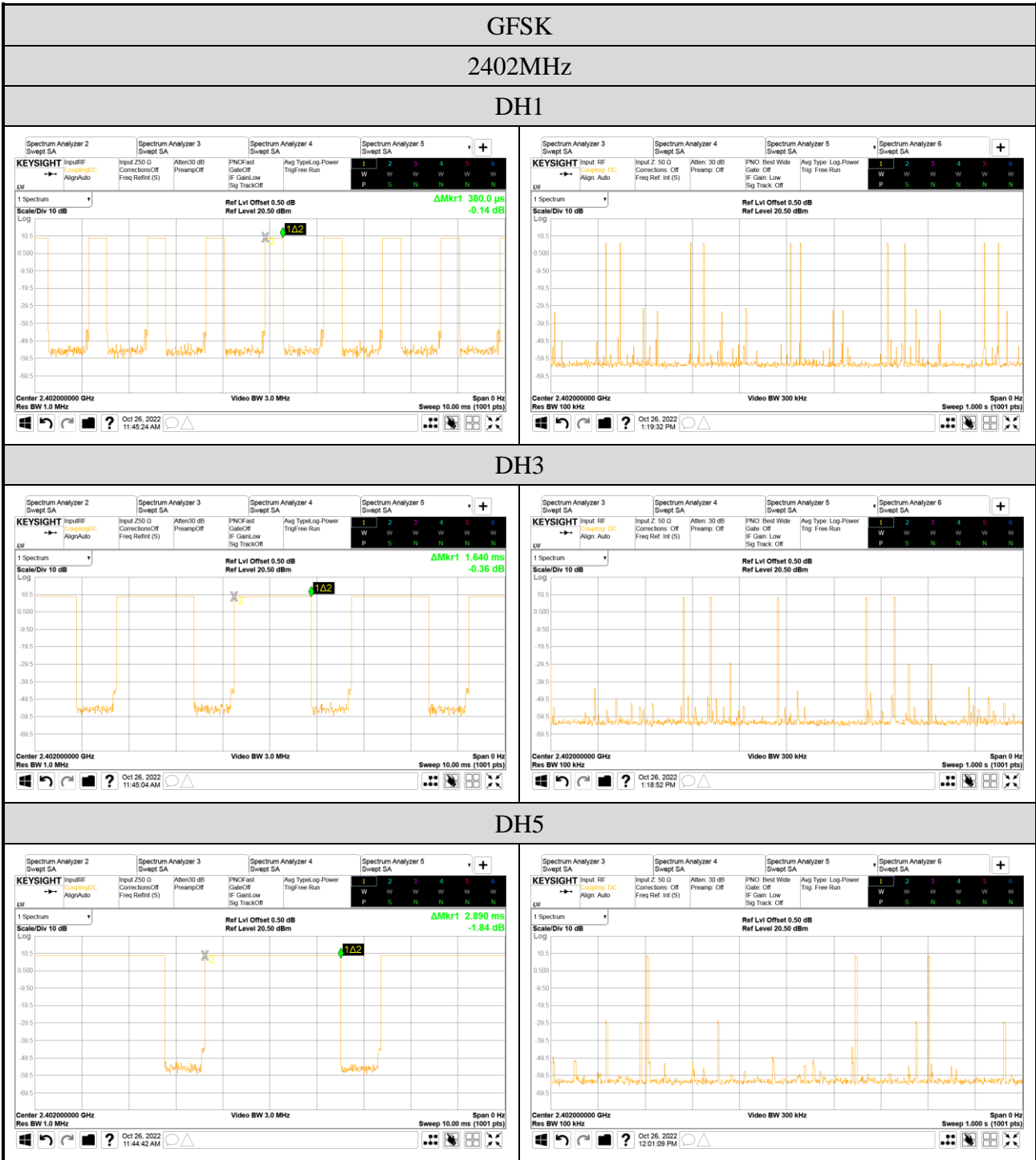
**DH3 Mode**

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\* **2.890** ms= **273.972** ms (<400ms)

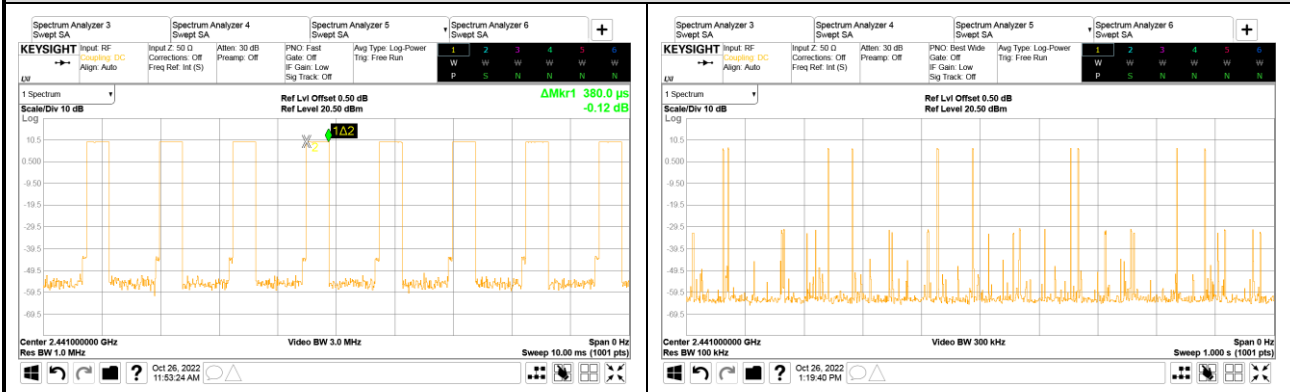
● Measurement Plots



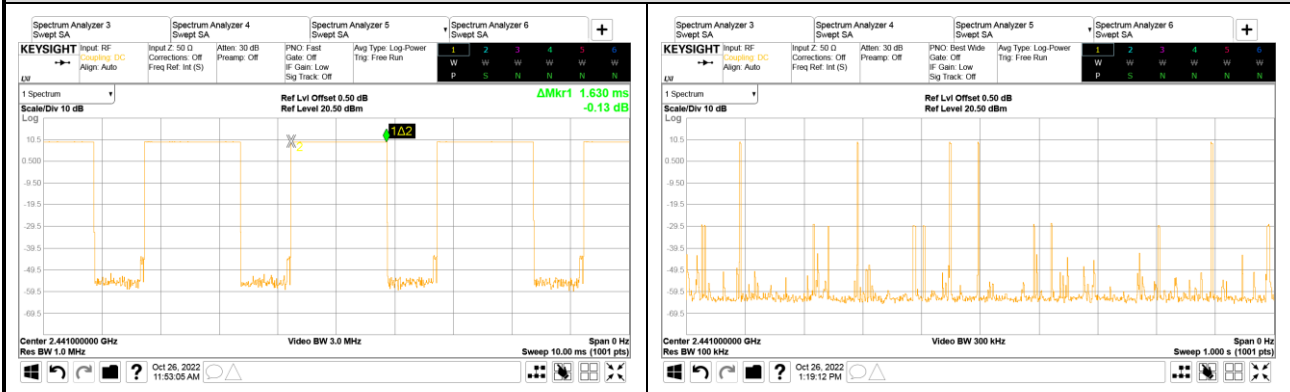
GFSK

2441MHz

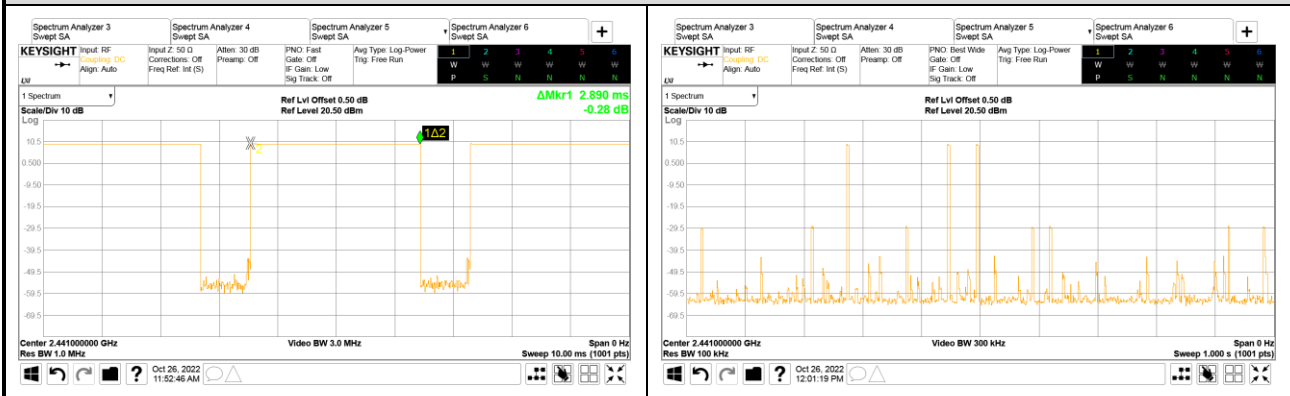
DH1

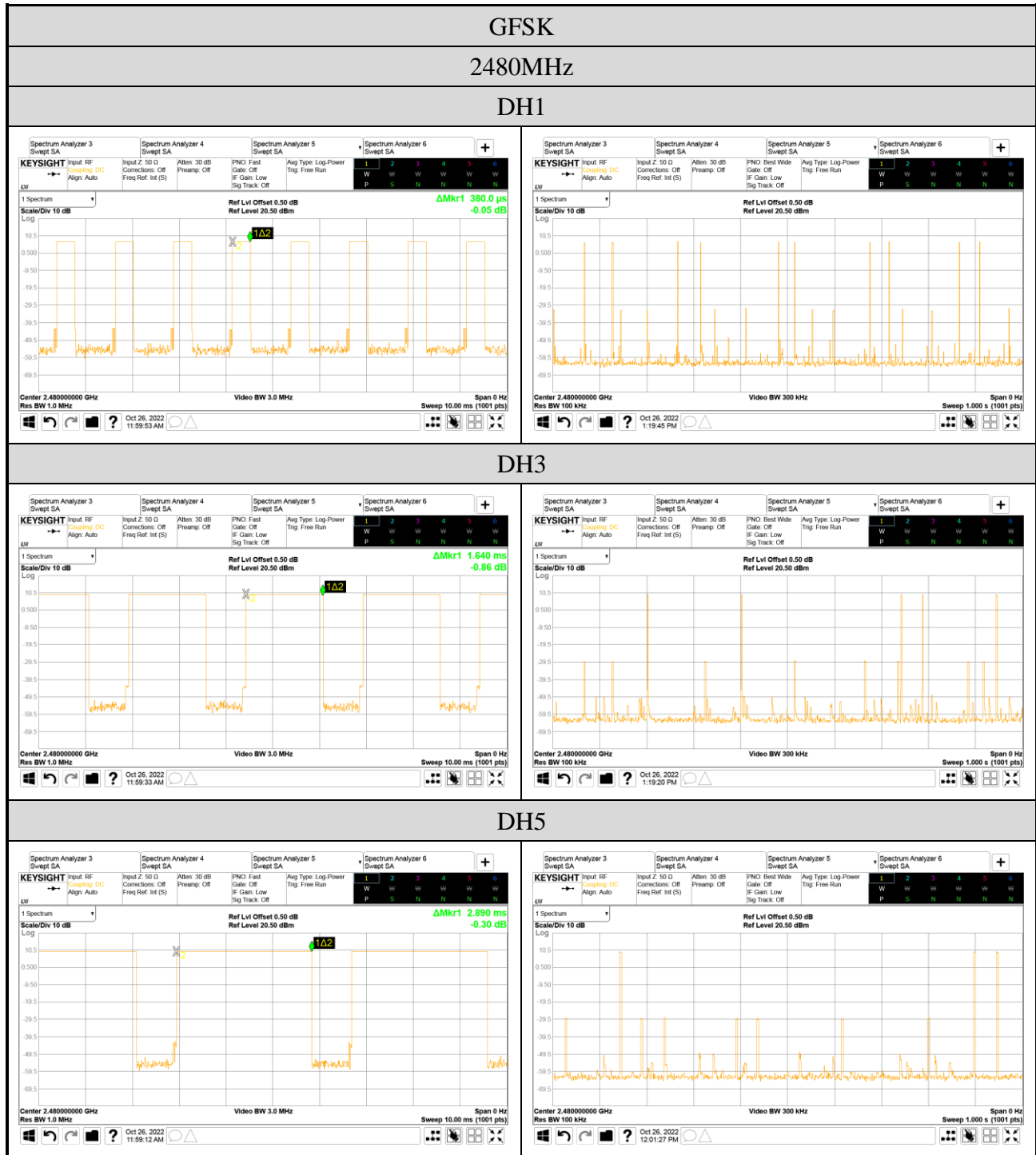


DH3



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	0.390	123.240	<400
		3DH3	5	1.640	259.120	<400
		3DH5	3	2.890	273.972	<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\* **2.890** ms= **273.972** 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	0.390	123.240	<400
		3DH3	5	1.640	259.120	<400
		3DH5	3	2.890	273.972	<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\* **2.890** ms= **273.972** 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	0.390	123.240	<400
		3DH3	5	1.640	259.120	<400
		3DH5	3	2.890	273.972	<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  
 $10 \text{ transmission} * 31.6 \text{ seconds} * 0.390 \text{ ms} = 123.240 \text{ ms} (<400\text{ms})$

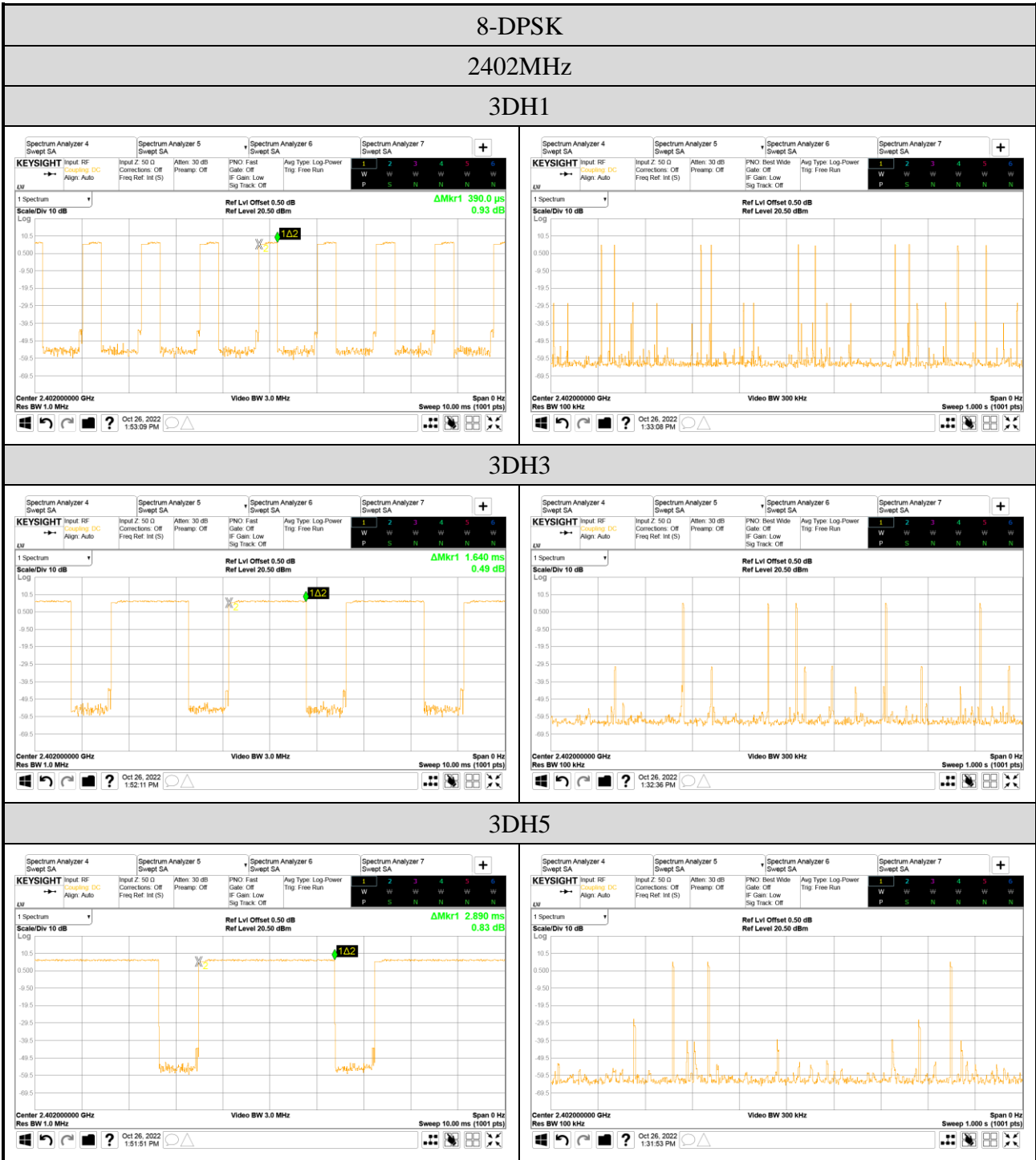
**3DH3 Mode**

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

**3DH5 Mode**

For each second of **3** transmission appearance,the longest time of occupancy is  
 $3 \text{ transmission} * 31.6 \text{ seconds} * 2.890 \text{ ms} = 273.972 \text{ ms} (<400\text{ms})$

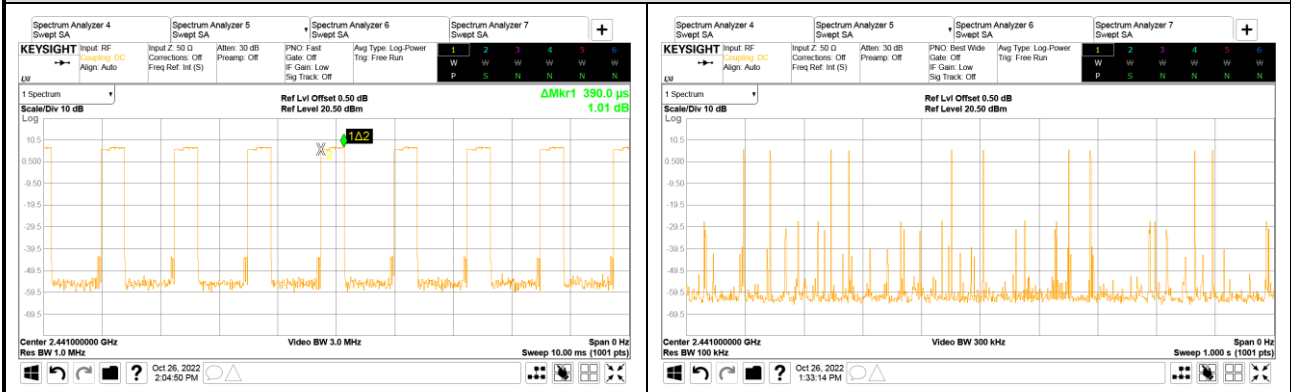
● Measurement Plots



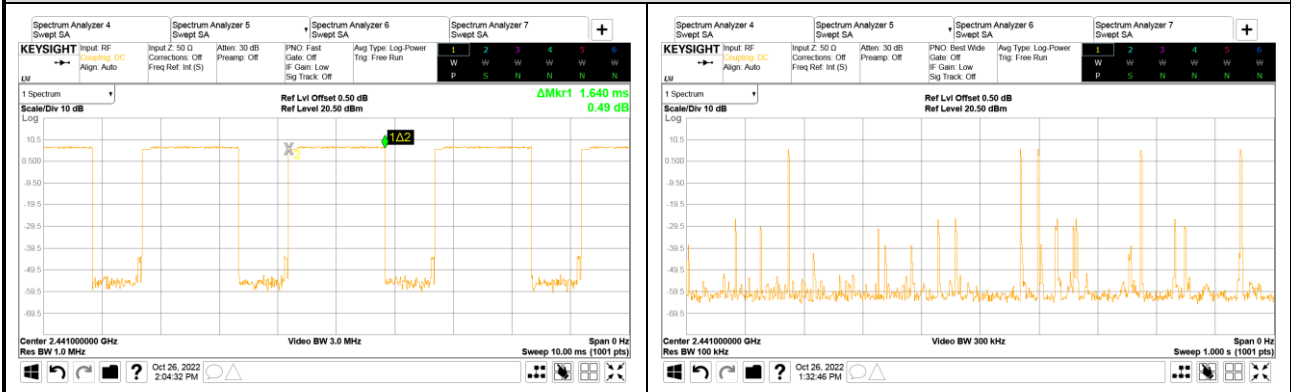
8-DPSK

2441MHz

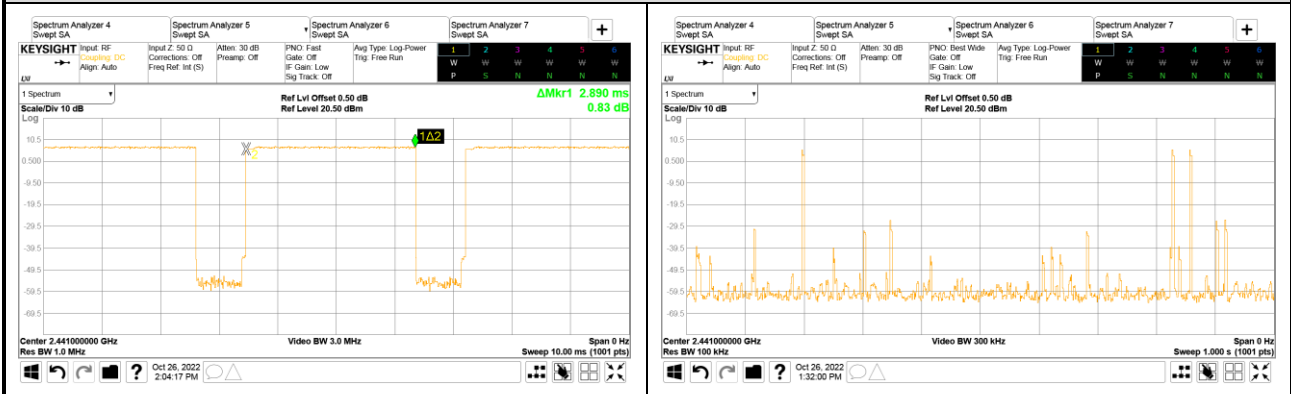
3DH1



3DH3



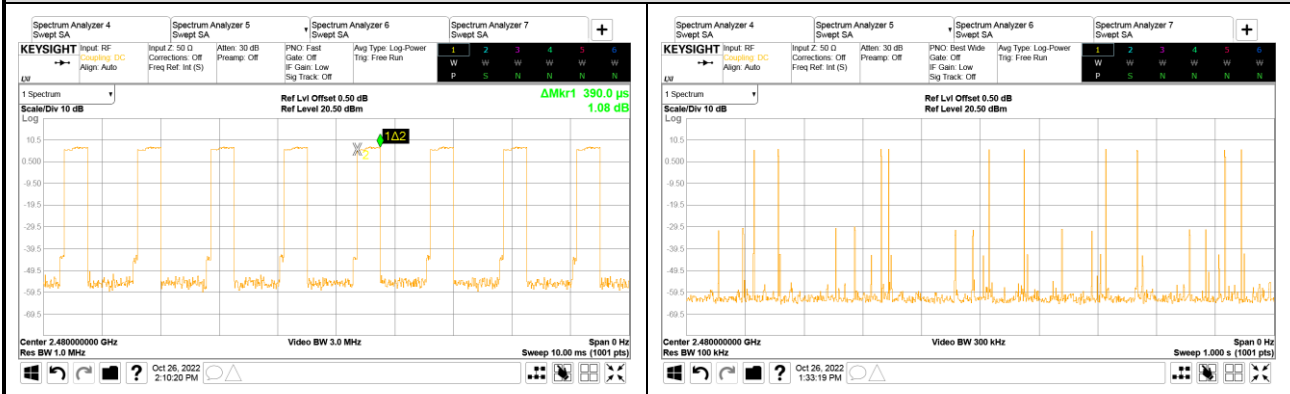
3DH5



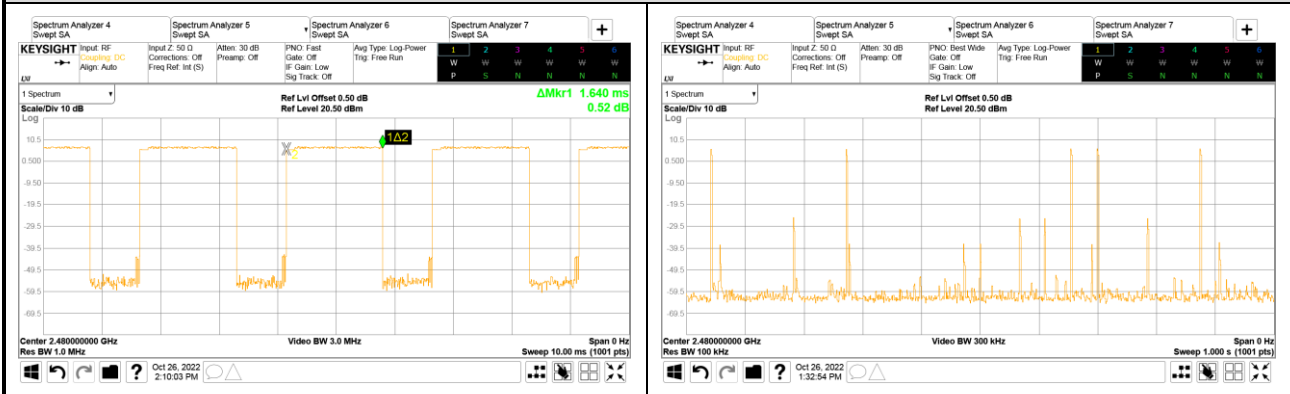
8-DPSK

2480MHz

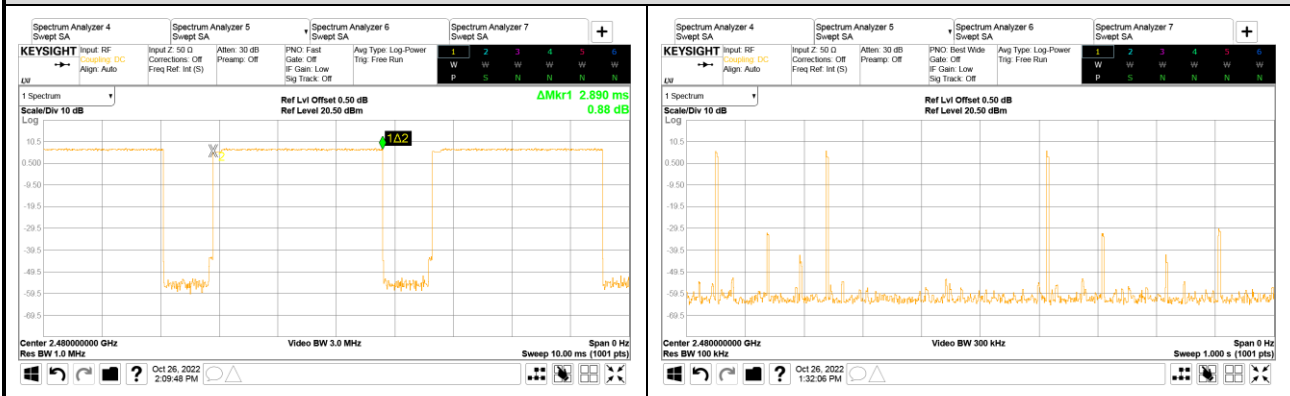
3DH1



3DH3

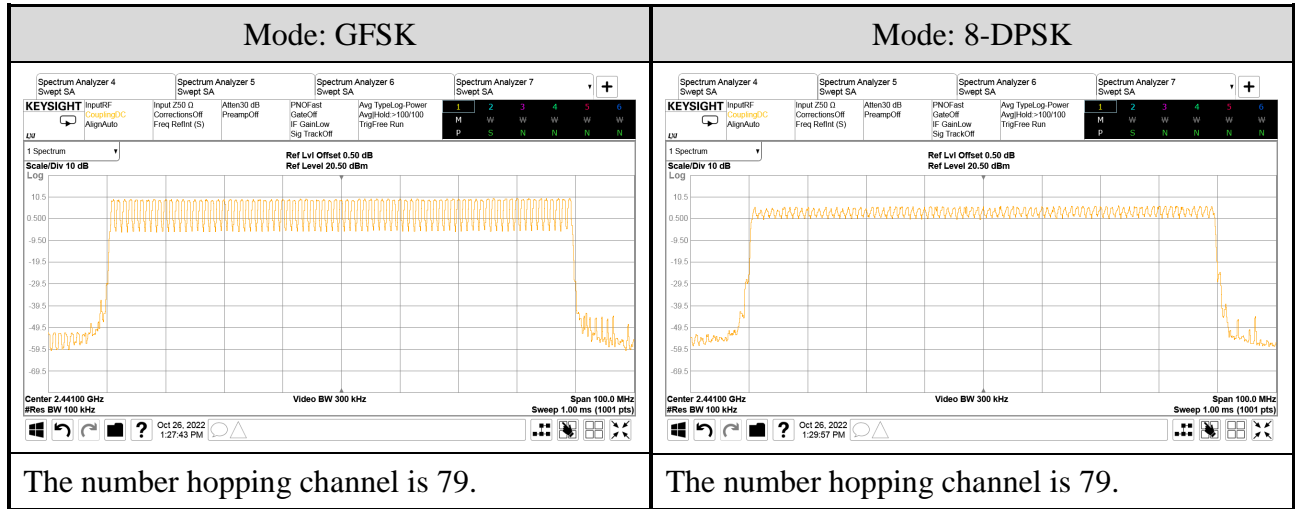


3DH5



## A.6 NUMBER OF HOPPING CHANNELS

Test Date	2022/10/26	Temp./Hum.	24°C/62%
Cable Loss	0.5dB	Tested By	Brian Hsieh
Test Voltage	AC 120V 60Hz (Via AC Adapter)		



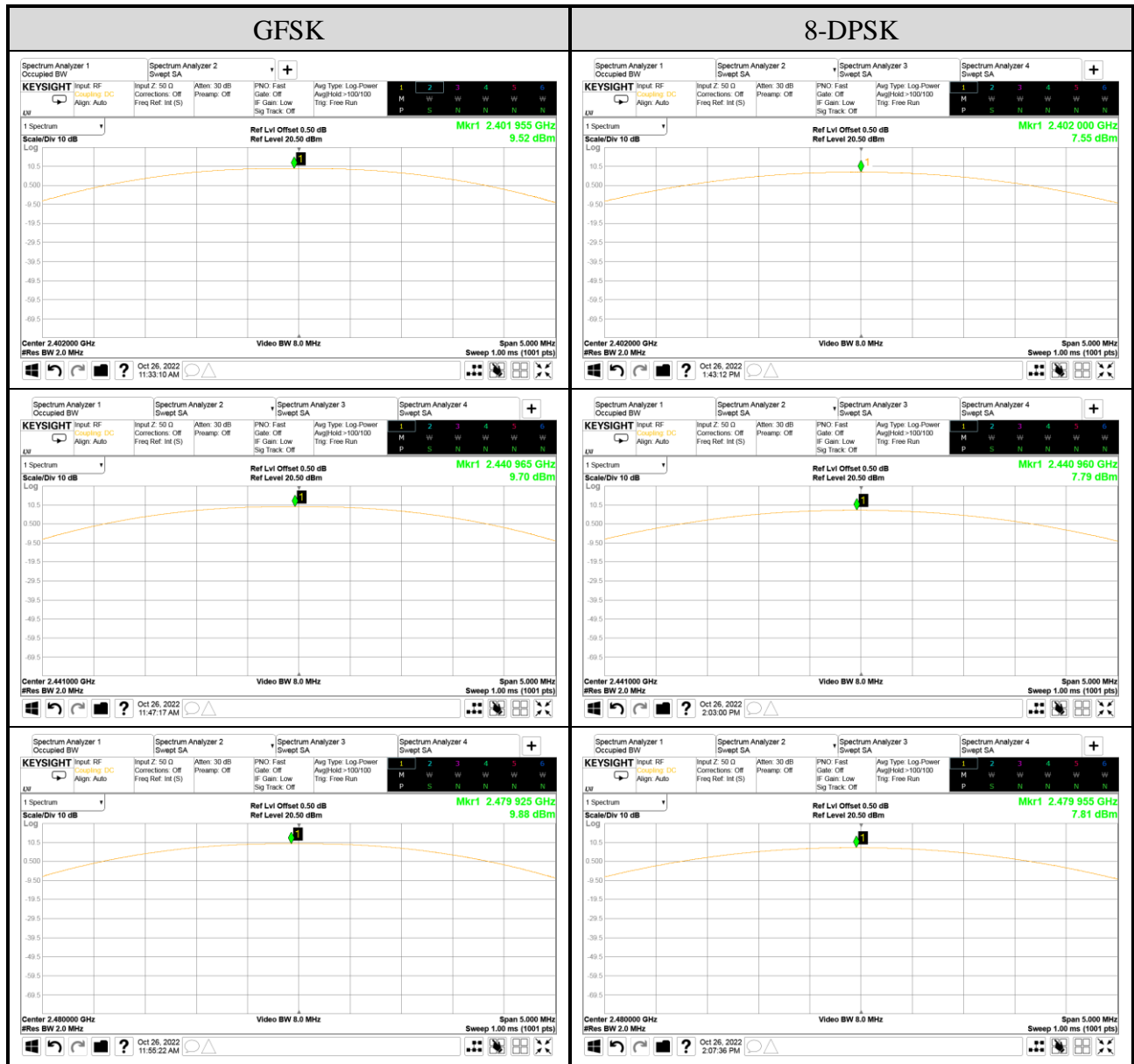
## A.7 MAXIMUM PEAK OUTPUT POWER

Test Date	2022/10/26	Temp./Hum.	24°C/62%
Cable Loss	0.5dB	Tested By	Brian Hsieh
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	9.52	0.009	21dBm (0.125W)
	2441	9.70	0.009	
	2480	9.88	0.010	
8-DPSK	2402	7.55	0.006	
	2441	7.79	0.006	
	2480	7.81	0.006	

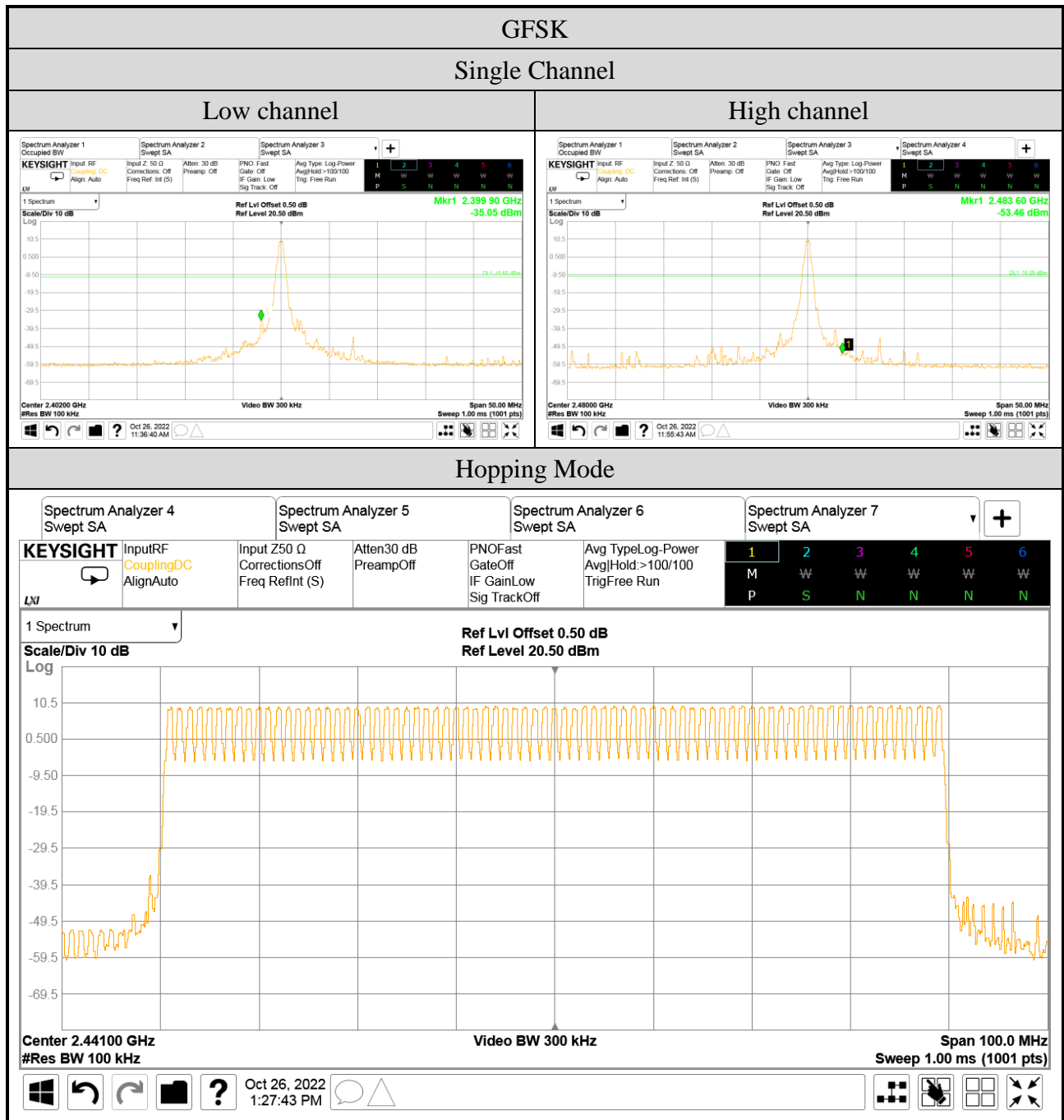
A.7.2 Measurement Plots



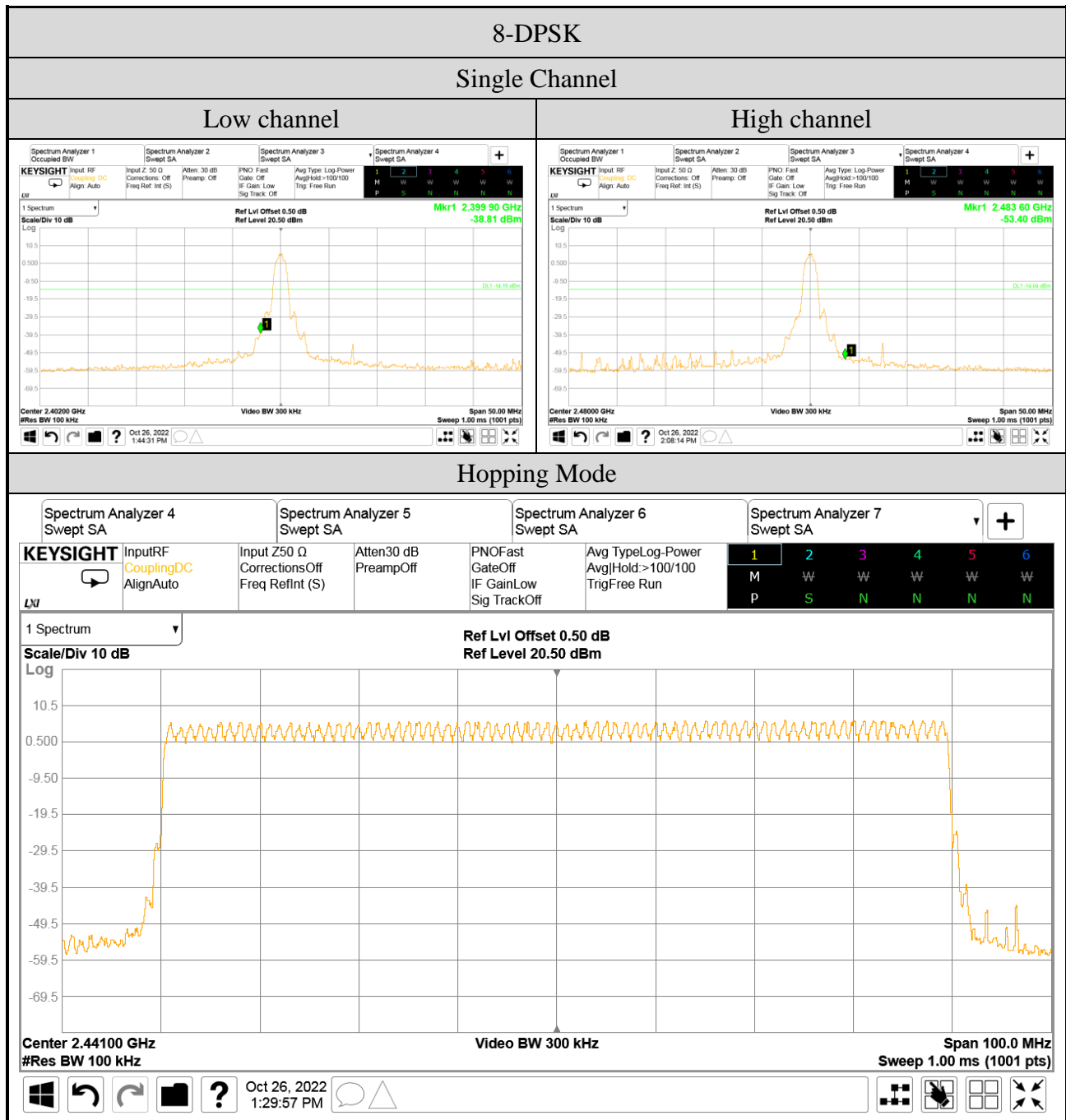
## A.8 EMISSION LIMITATIONS MEASUREMENT

Test Date	2022/10/26	Temp./Hum.	24°C/62%
Cable Loss	0.5dB	Tested By	Brian Hsieh
Test Voltage	AC 120V 60Hz (Via AC Adapter)		

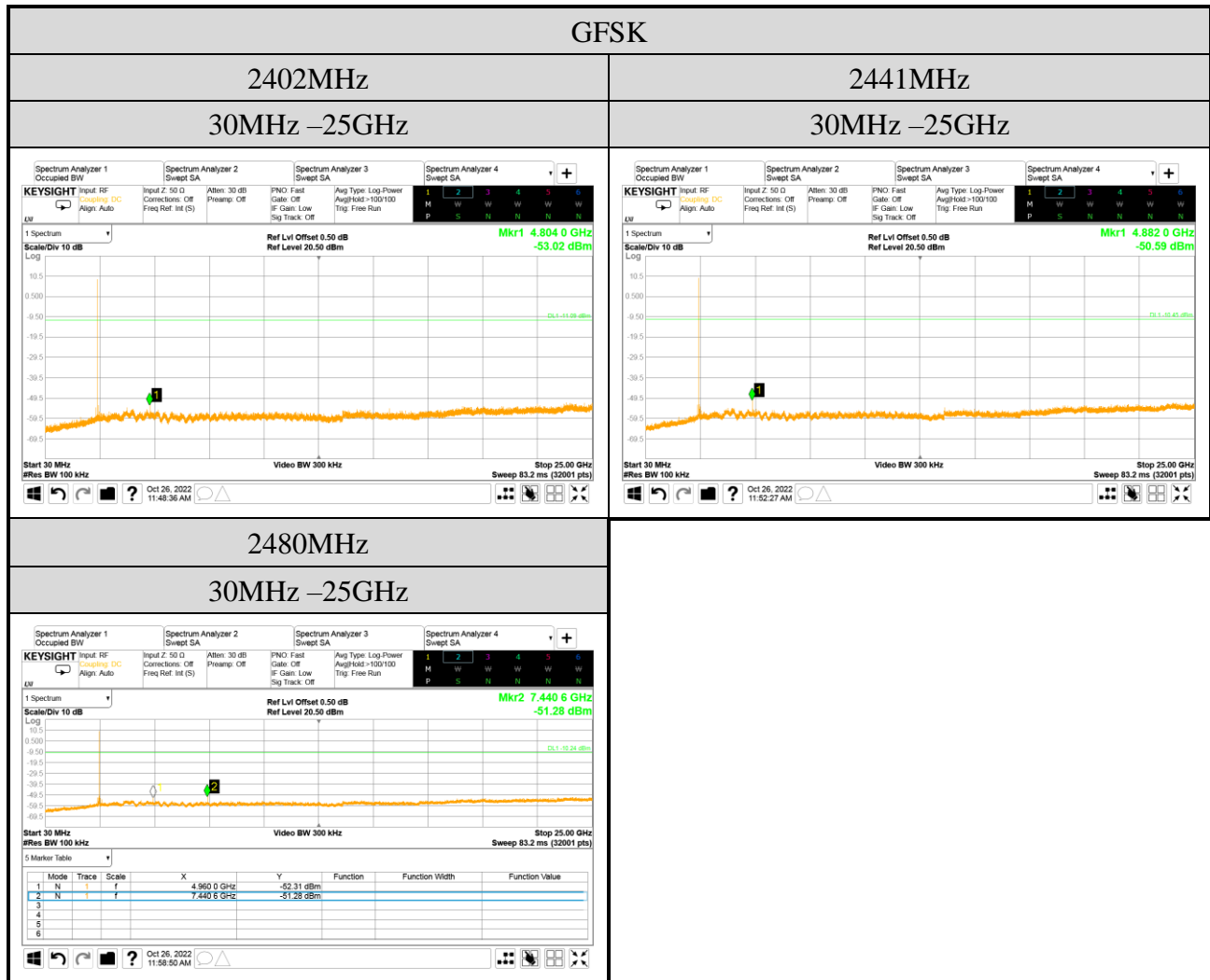
### A.8.1 Band Edge



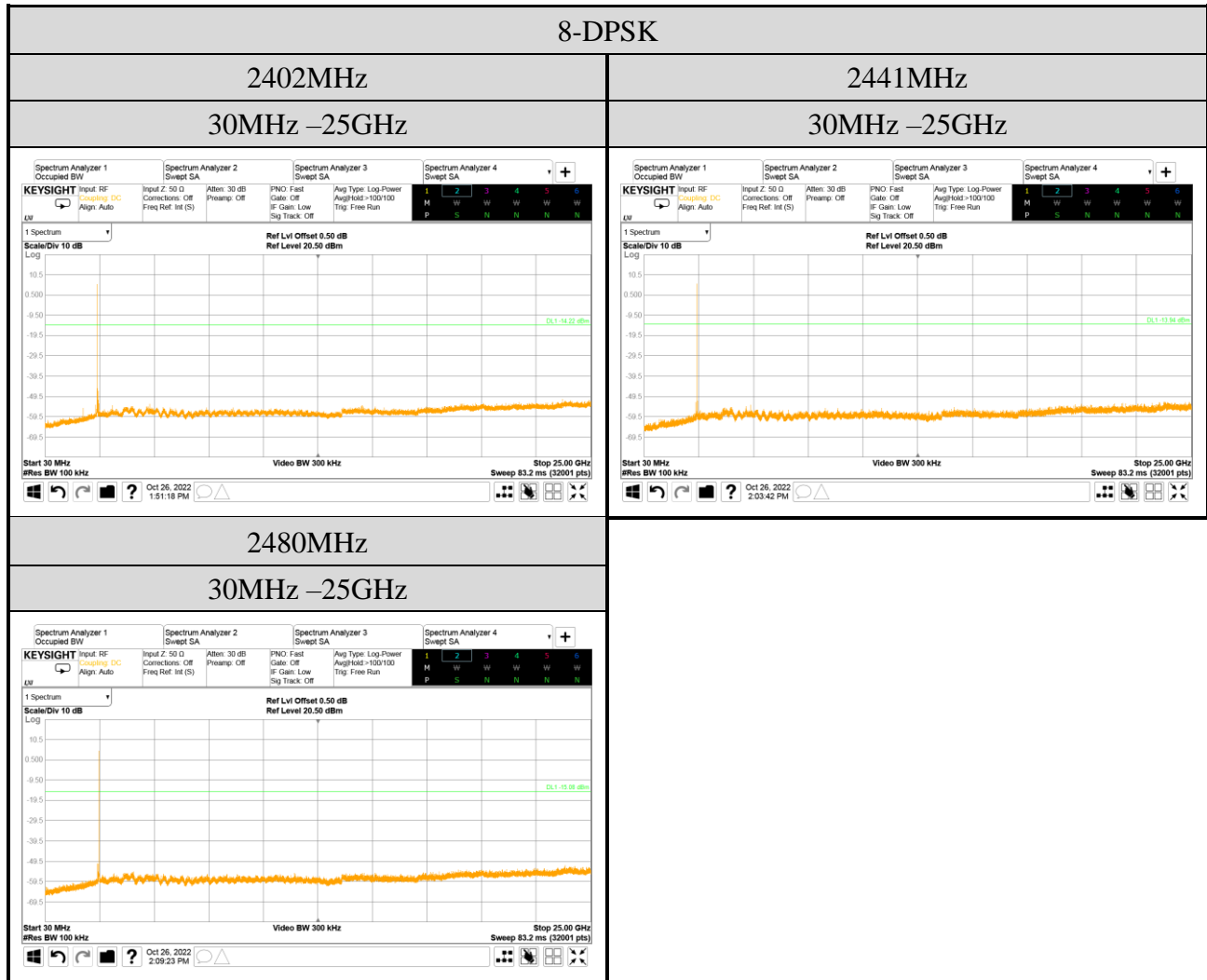




A.8.2 Spurious Emission



Note: All results have been included cable loss.



Note: All results have been included cable loss.