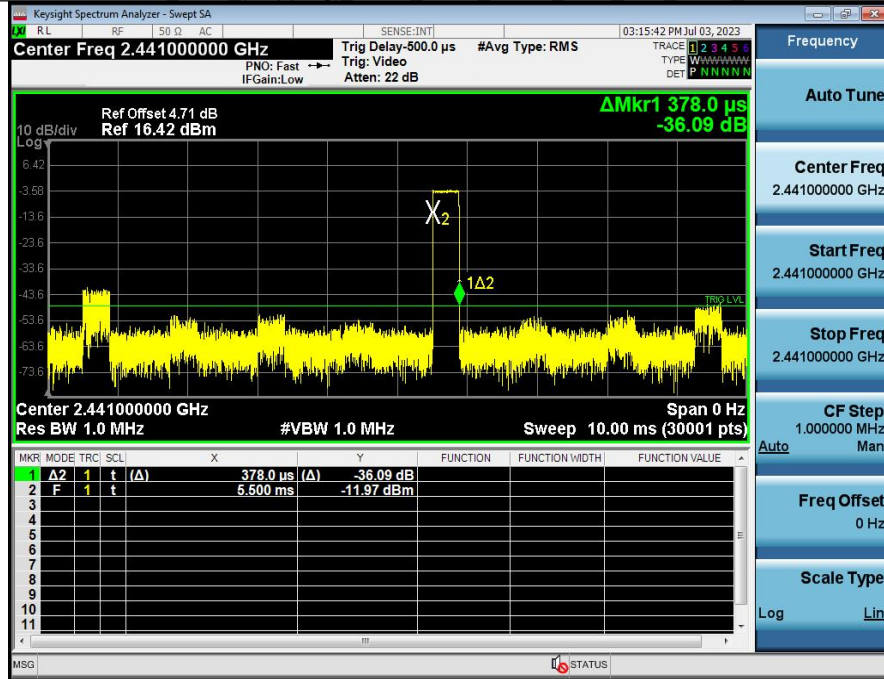


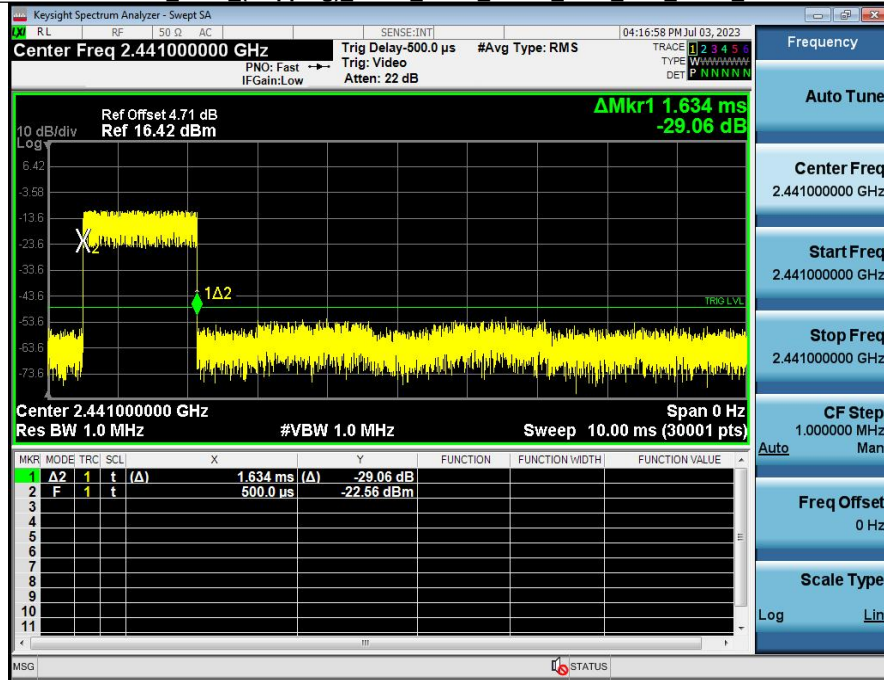
A.5 Average time of Occupancy

Packet Type	Pulse Time(ms)	Hops	Dwell Time(ms)	Limit(s)	Result
1-DH1	0.378	318.00	120.204	0.40	Pass
1-DH3	1.634	169.00	276.146	0.40	Pass
1-DH5	2.881	113.00	325.553	0.40	Pass

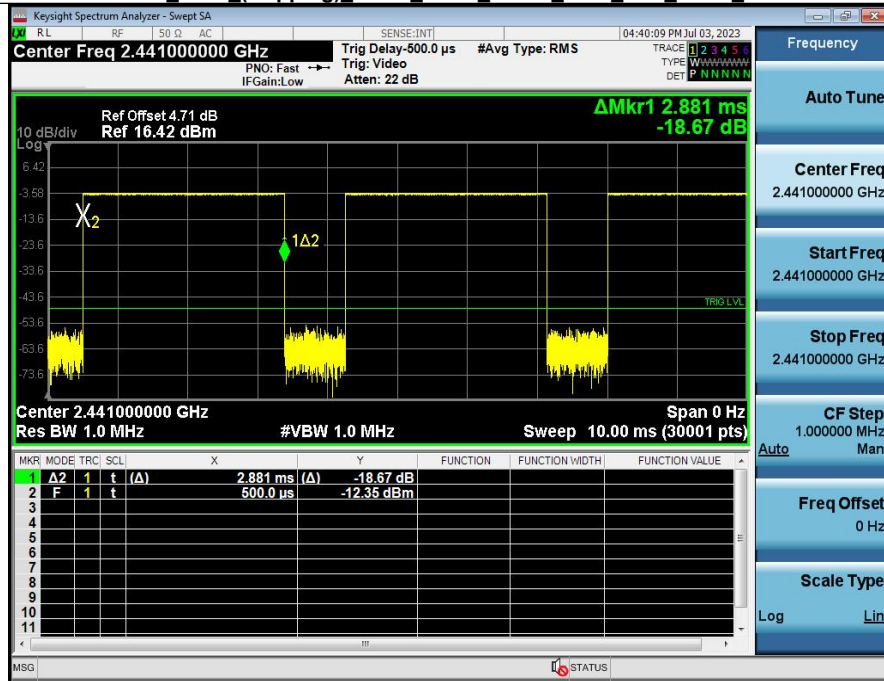
Dwell Time (Hopping) NVNT_ANT1 1-DH1_2441 One Burst Time



Dwell Time (Hopping) NVHT_ANT1 1-DH3_2441_One Burst Time



Dwell Time (Hopping) NVHT_ANT1 1-DH5_2441_One Burst Time

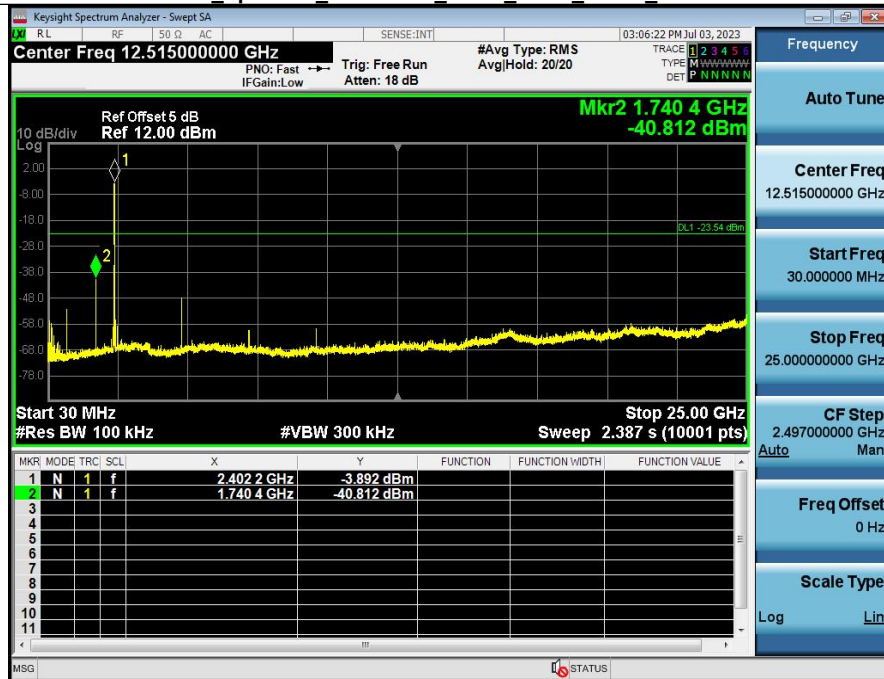


A.6 Conducted Spurious Emissions & Authorized-band band-edge

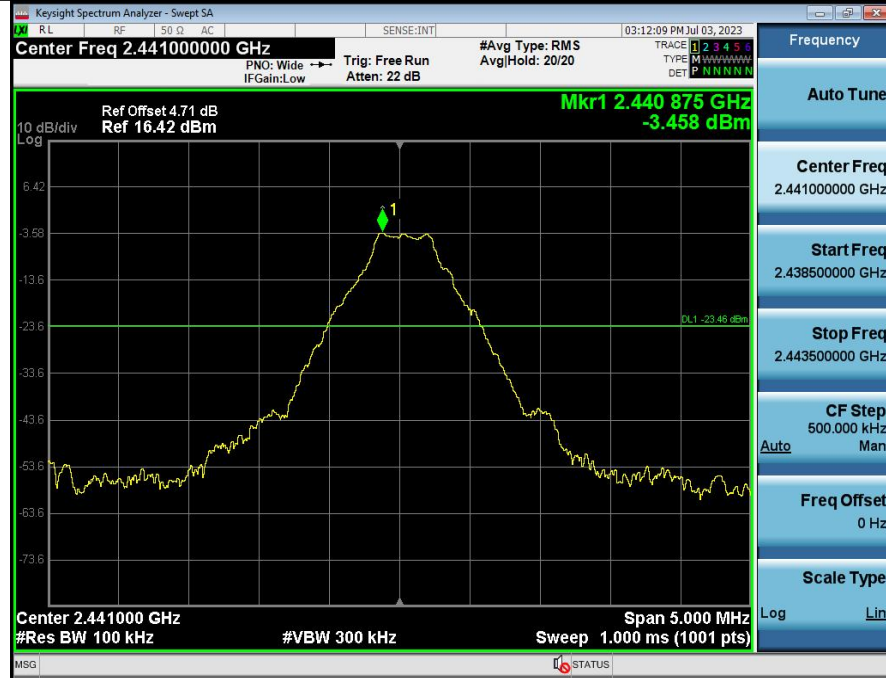
1 Reference Level NVNT_ANT1_1-DH1_2402



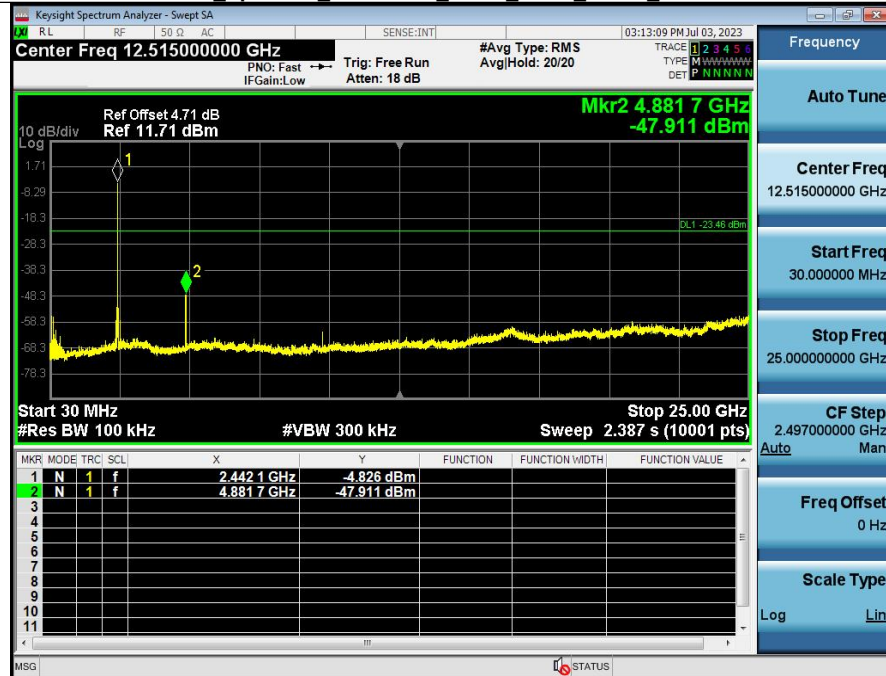
2 Spurious Emissions NVNT_ANT1_1-DH1_2402



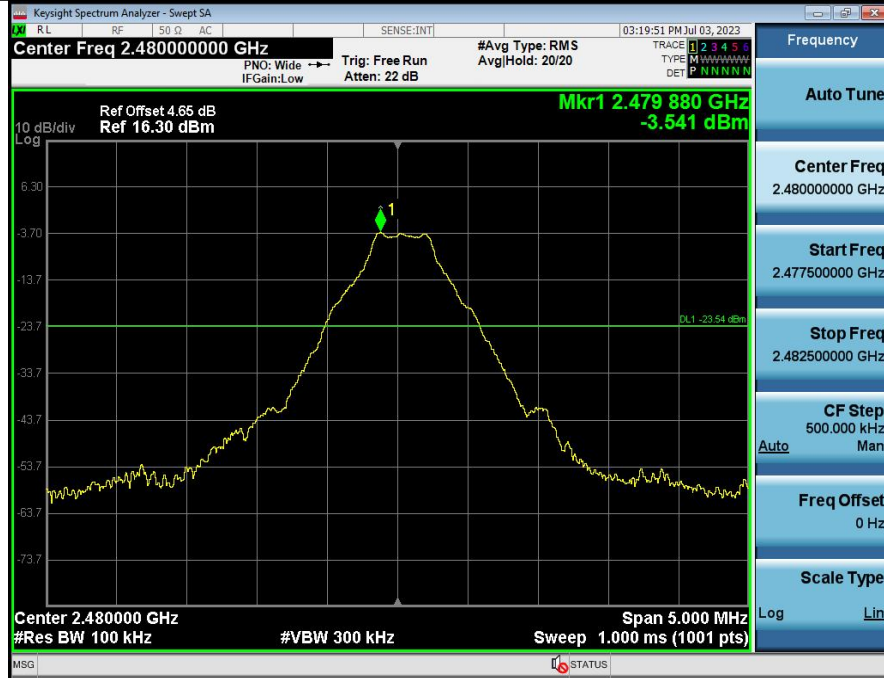
1 Reference_Level_NVNT_ANT1_1-DH1_2441



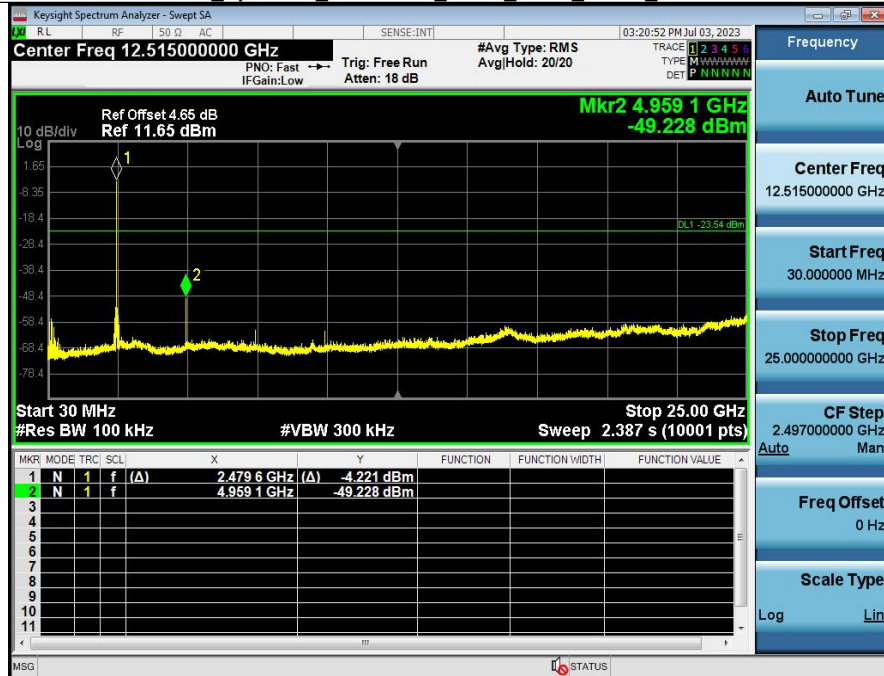
2 Spurious Emissions_NVNT_ANT1_1-DH1_2441



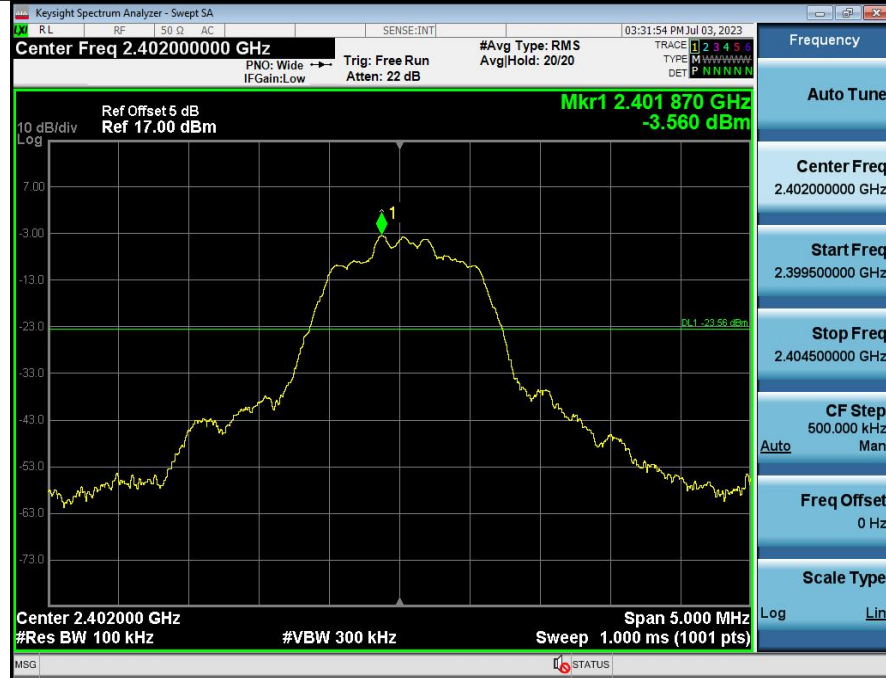
1 Reference Level NVNT_ANT1_1-DH1_2480



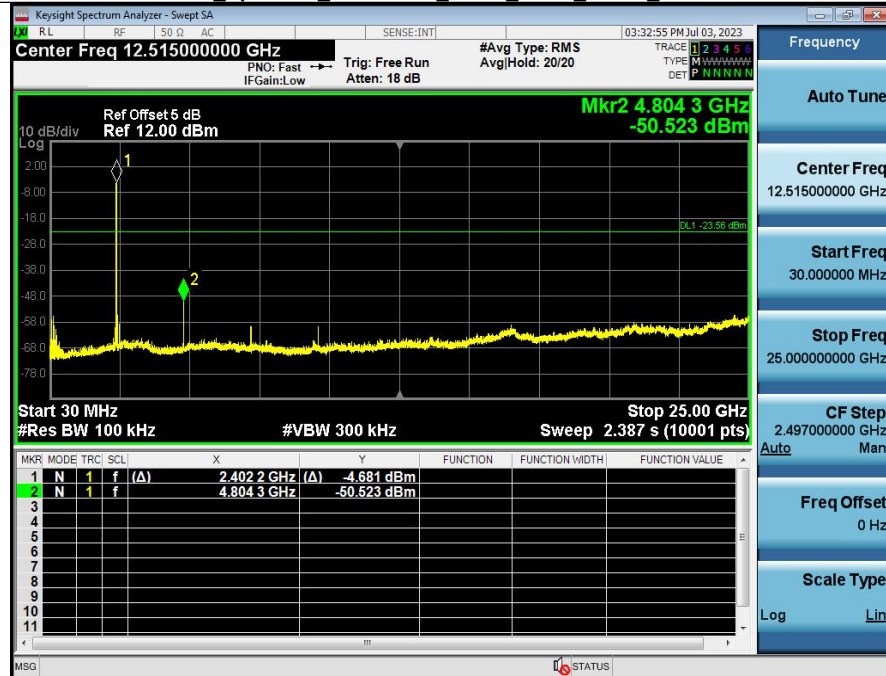
2 Spurious Emissions NVNT_ANT1_1-DH1_2480



1 Reference Level NVNT_ANT1_2-DH1_2402



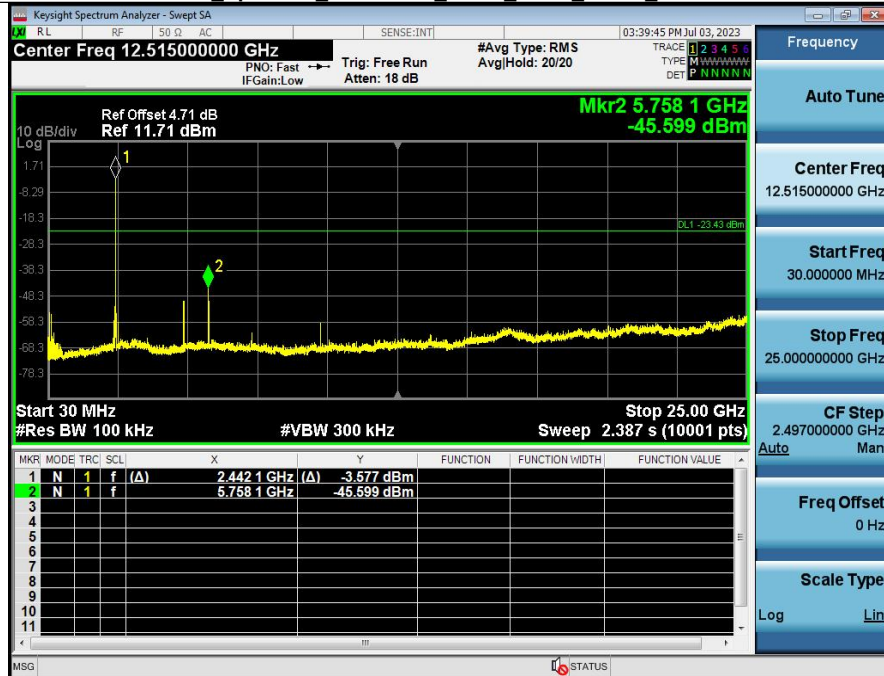
2 Spurious Emissions NVNT_ANT1_2-DH1_2402



1 Reference Level NVNT_ANT1_2-DH1_2441



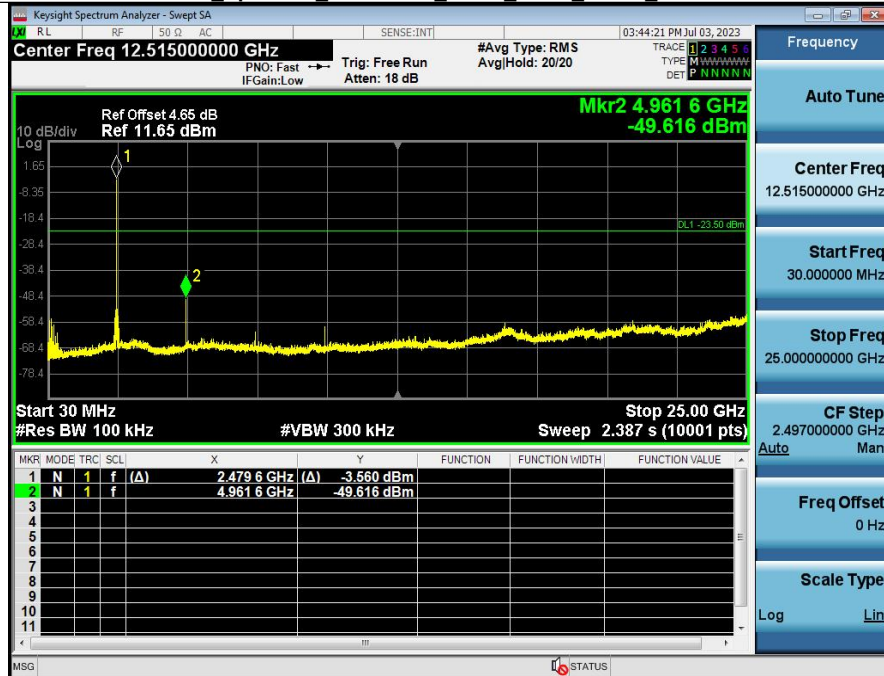
2 Spurious Emissions NVNT_ANT1_2-DH1_2441



1 Reference Level NVNT_ANT1_2-DH1_2480



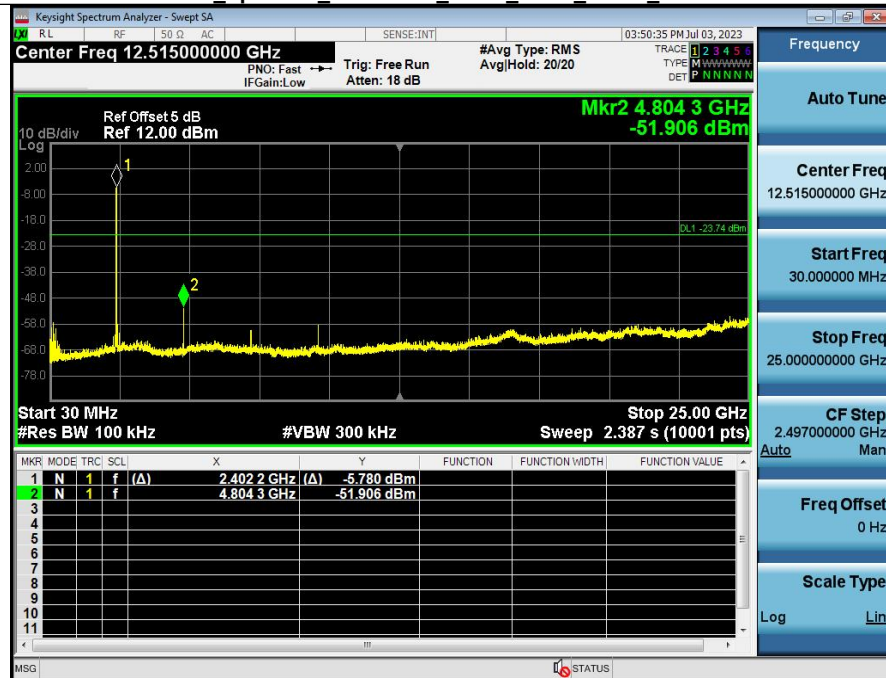
2 Spurious Emissions NVNT_ANT1_2-DH1_2480



1 Reference Level NVNT_ANT1_3-DH1_2402



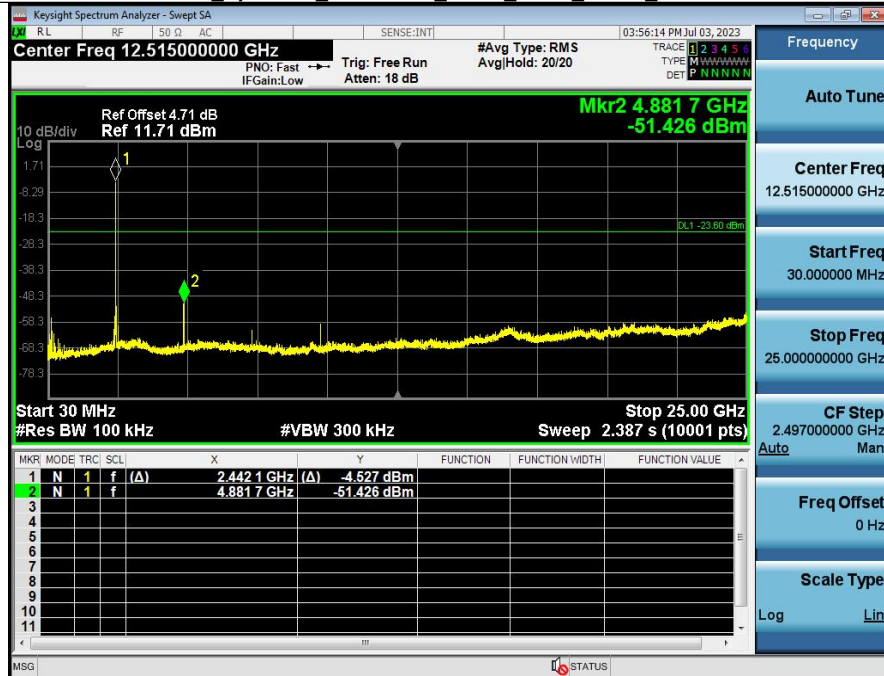
2 Spurious Emissions NVNT_ANT1_3-DH1_2402



1 Reference Level NVNT_ANT1_3-DH1_2441



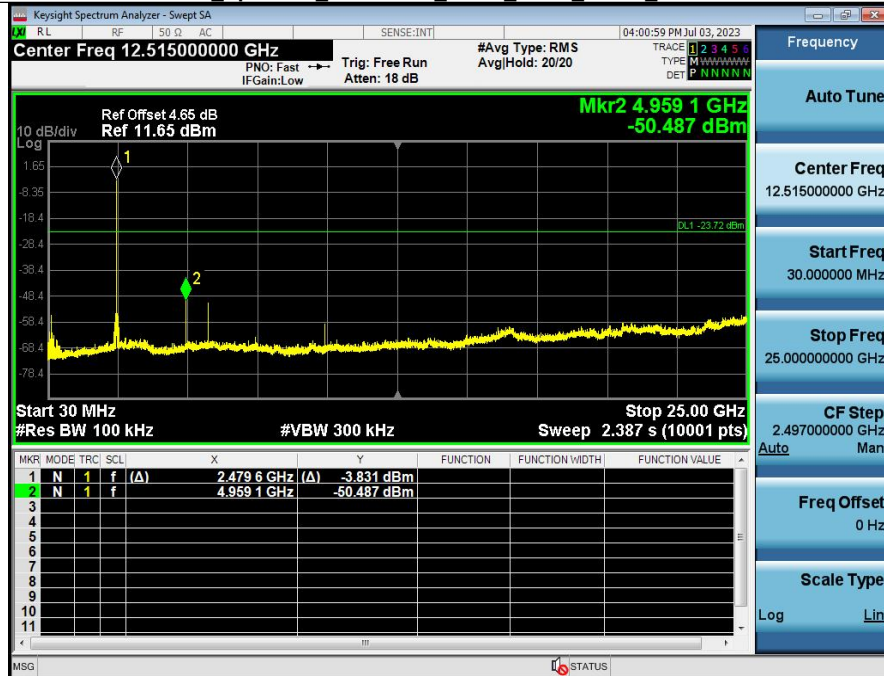
2 Spurious Emissions NVNT_ANT1_3-DH1_2441



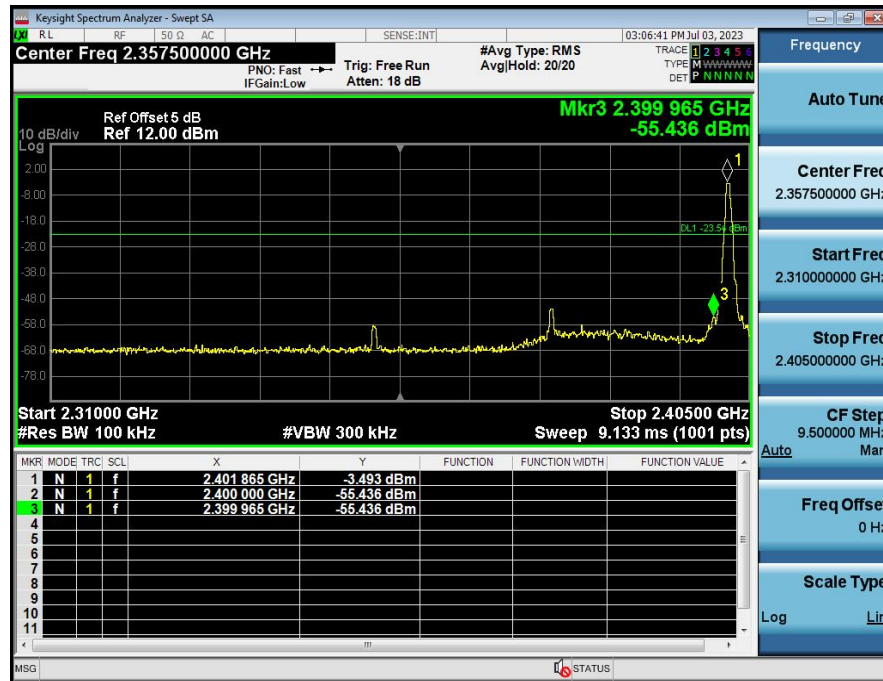
1 Reference_Level_NVNT_ANT1_3-DH1_2480



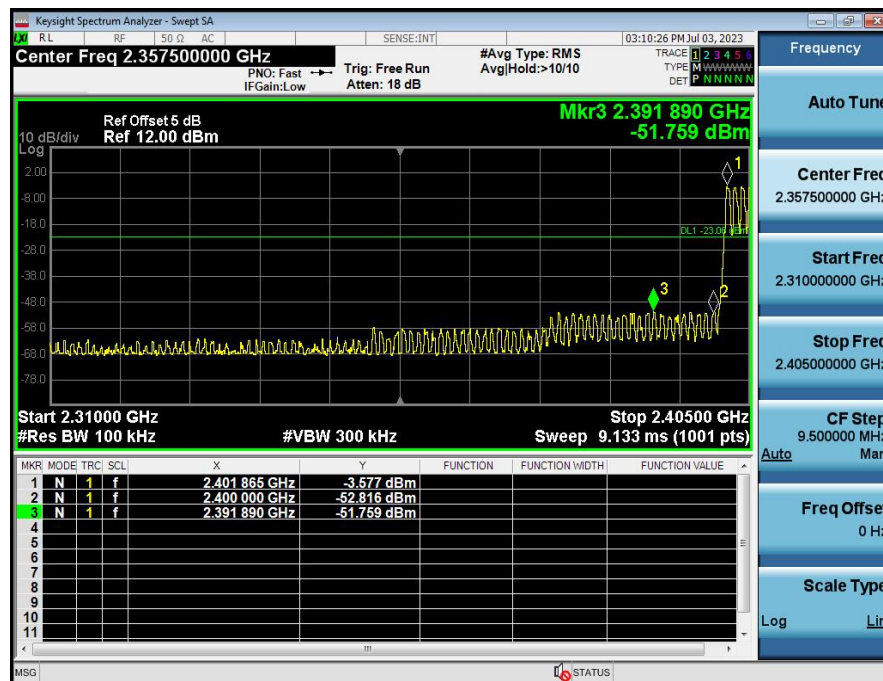
2 Spurious Emissions_NVNT_ANT1_3-DH1_2480



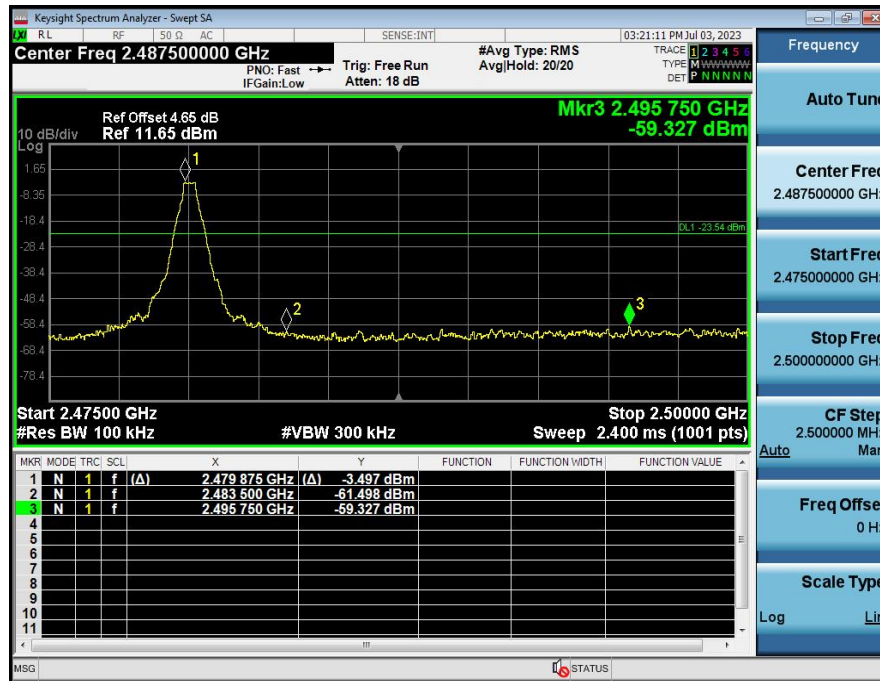
GFSK No-hopping Band edge-left side



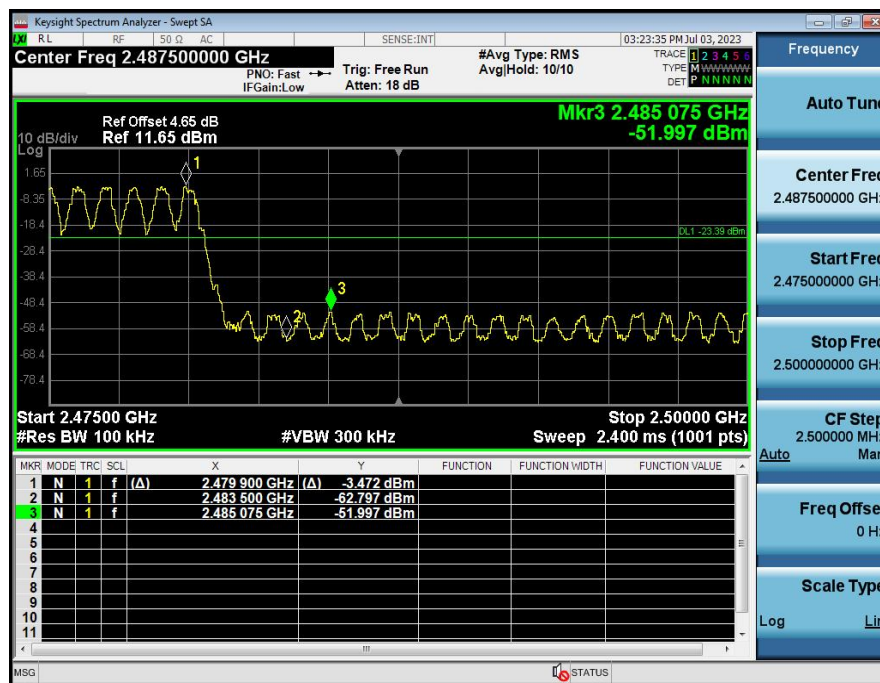
GFSK Hopping Band edge-left side

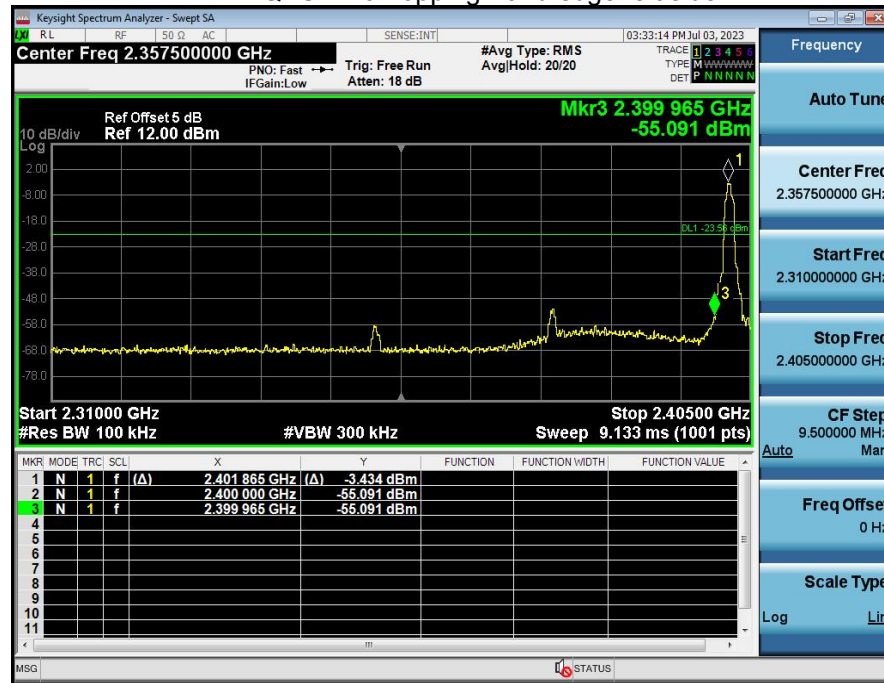
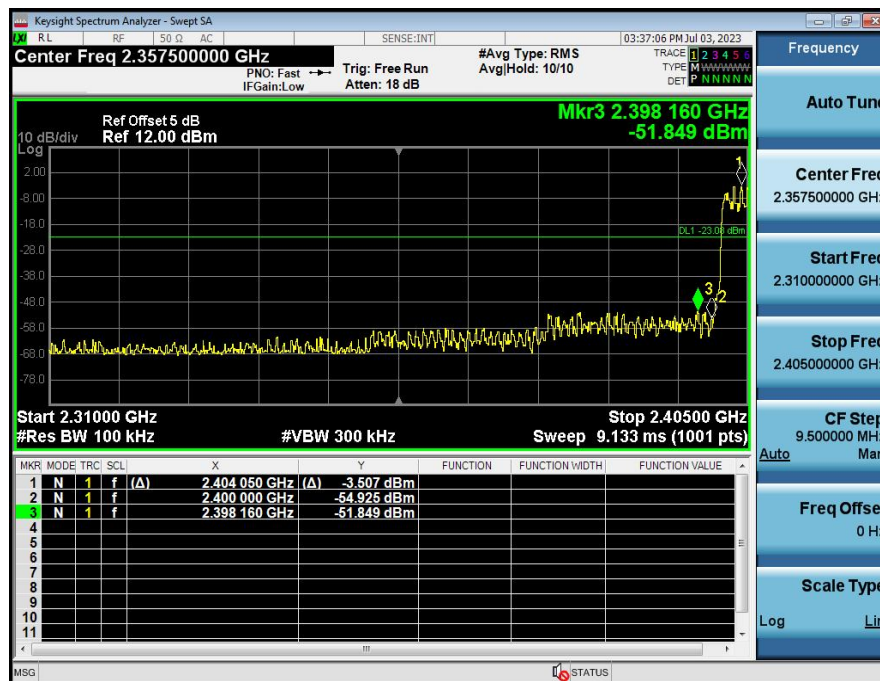


GFSK No-hopping Band edge-right side

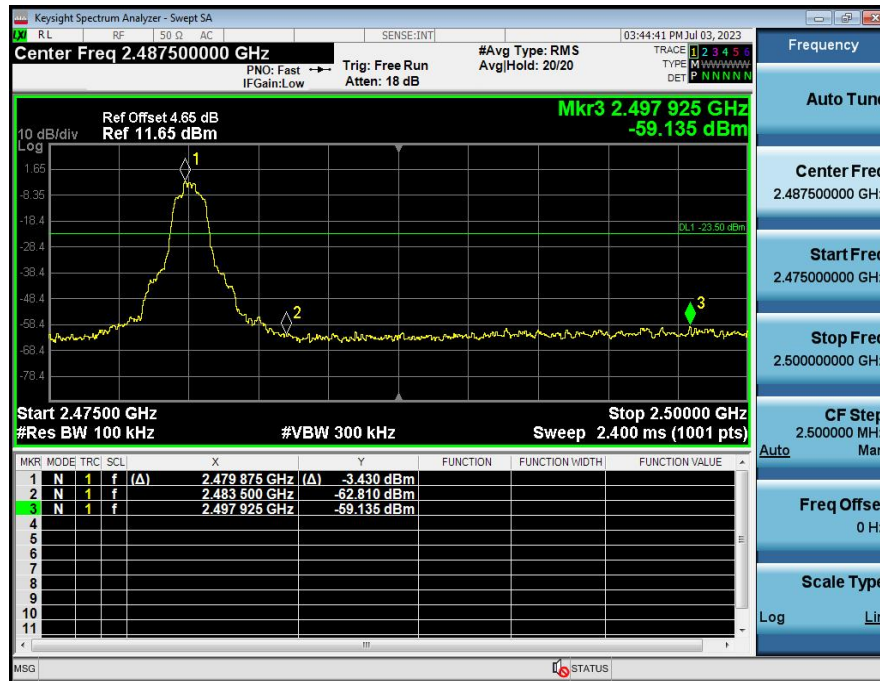


GFSK Hopping Band edge-right side

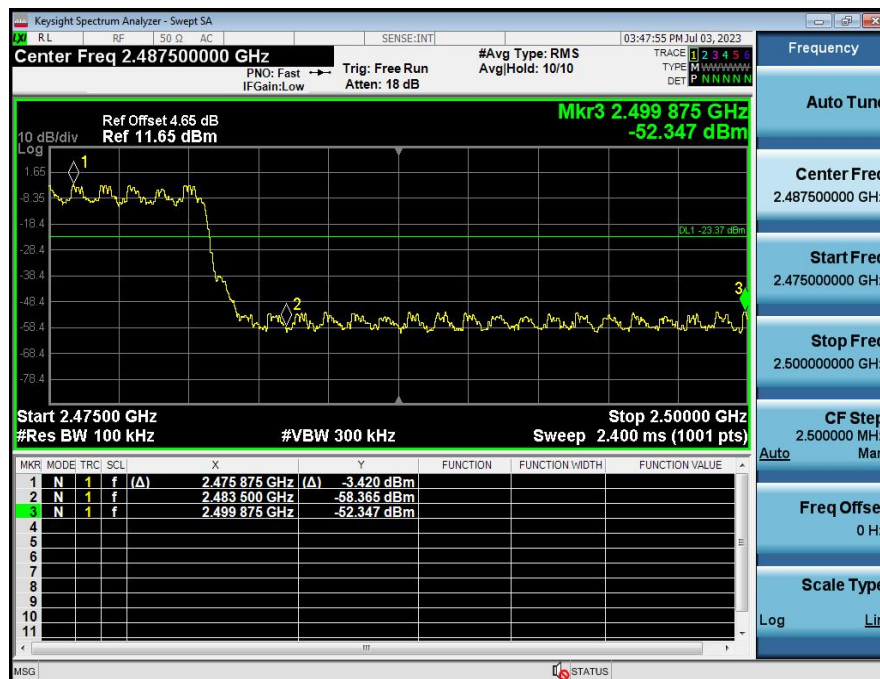


$\pi/4$ -DQPSK No-hopping Band edge-left side

 $\pi/4$ -DQPSK Hopping Band edge-left side


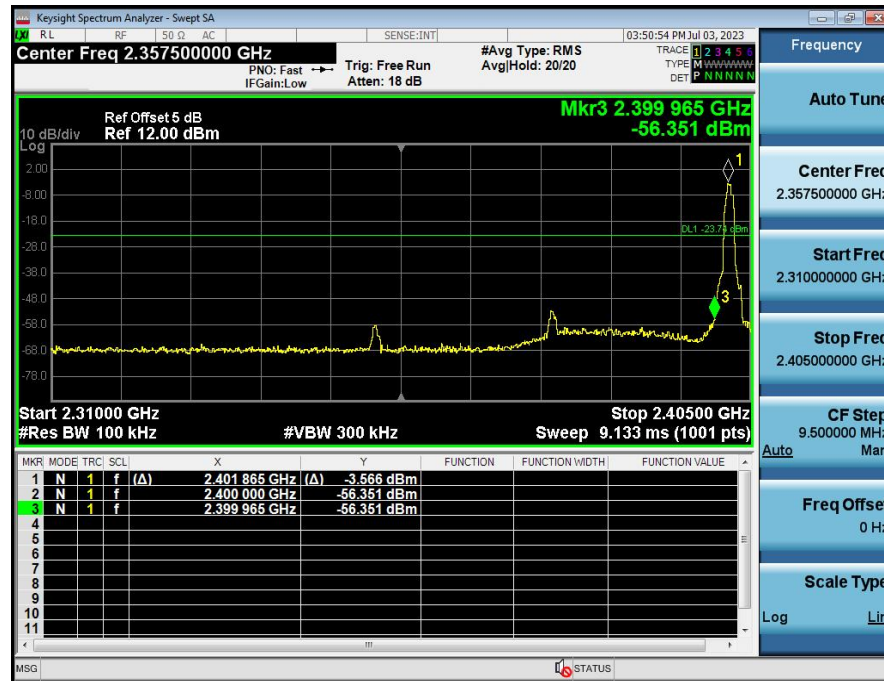
$\pi/4$ -DQPSK No-hopping Band edge-right side



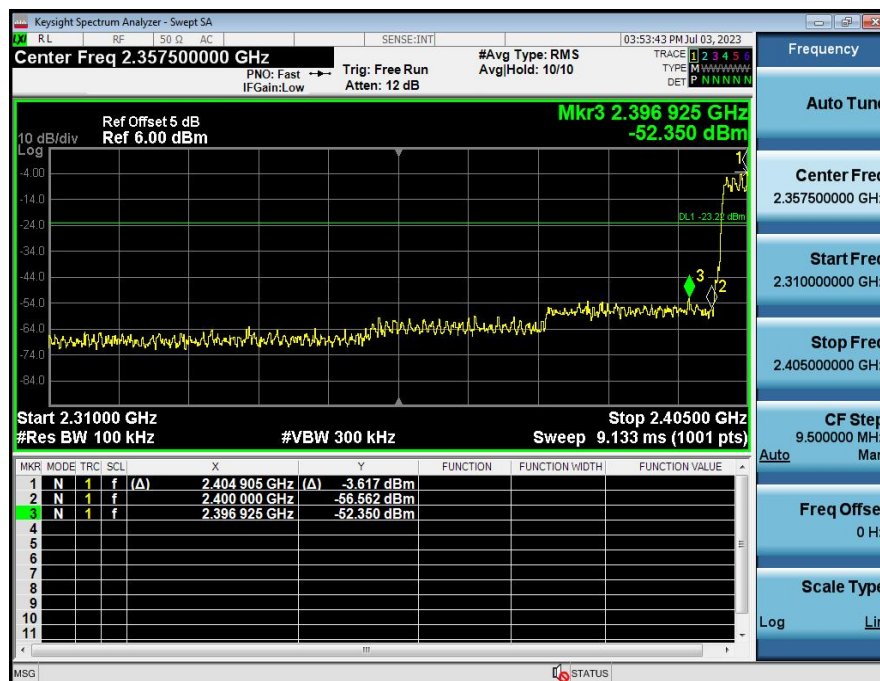
$\pi/4$ -DQPSK Hopping Band edge-right side



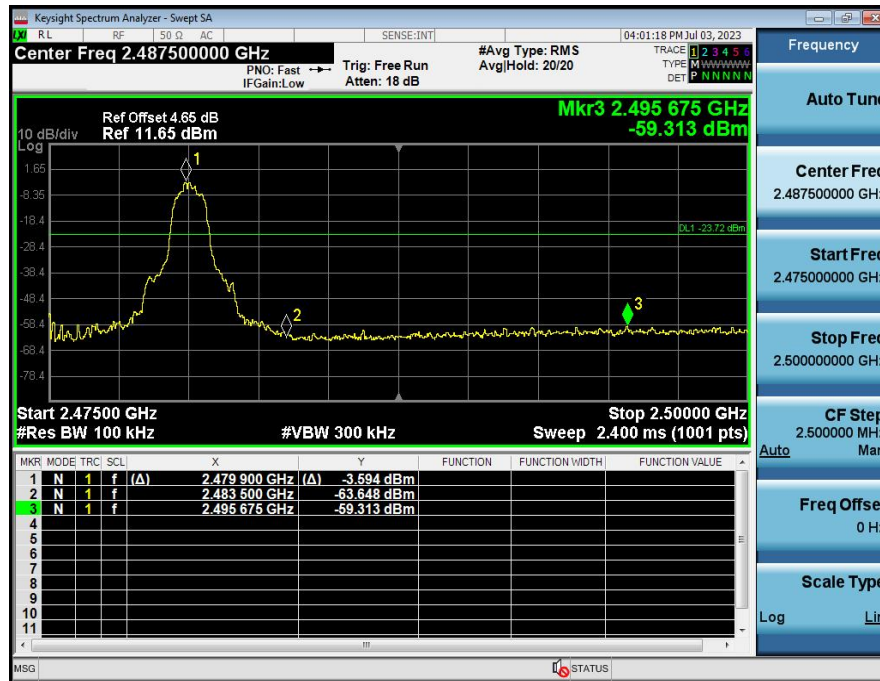
8-DPSK No-hopping Band edge-left side



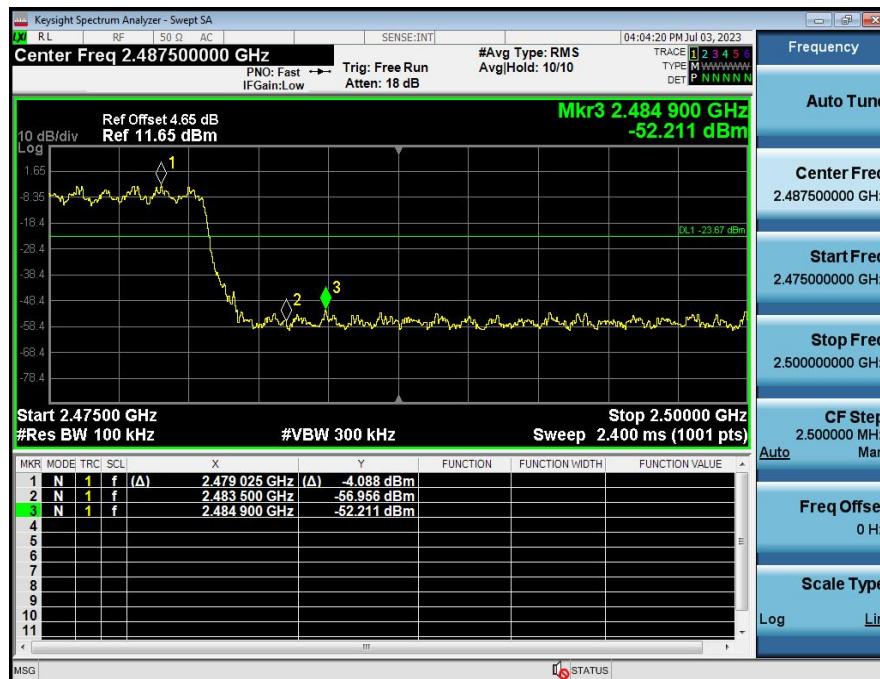
8-DPSK Hopping Band edge-left side



8-DPSK No-hopping Band edge-right side



8-DPSK Hopping Band edge-right side

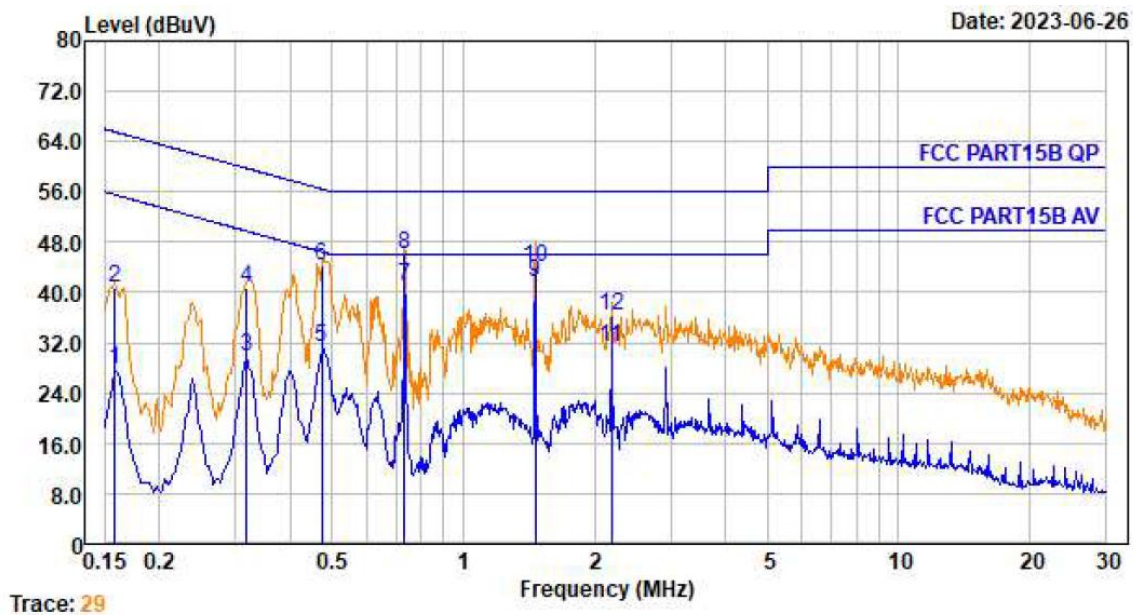


A.7 Conducted Emission

Note 1: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

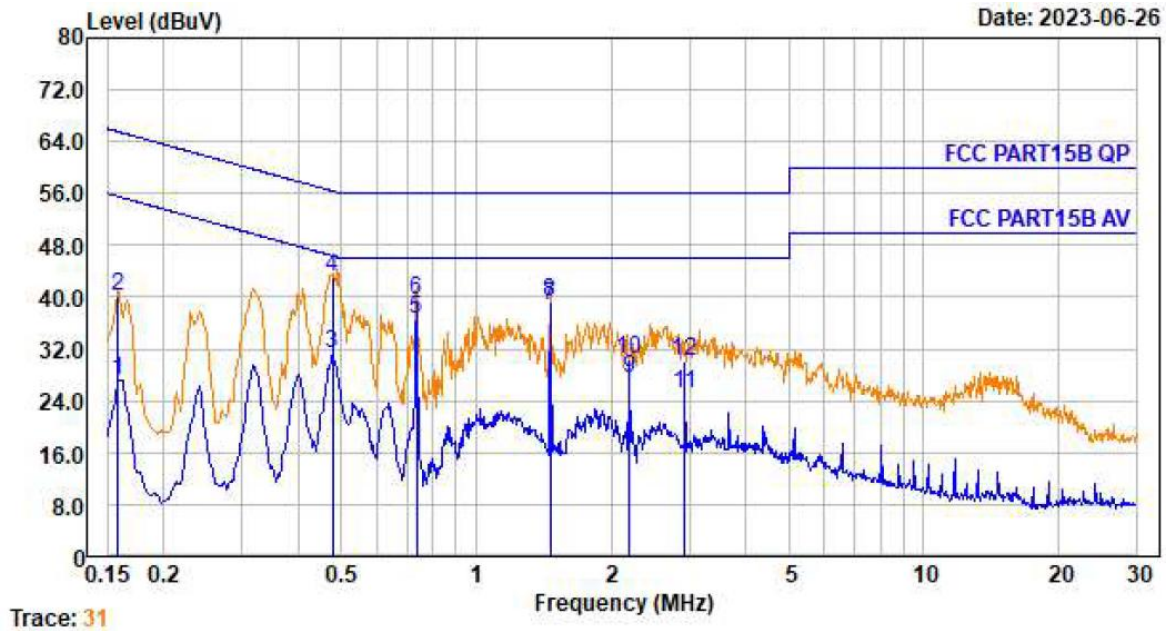
Test Data and plots.

PHASE L



No.	Freq MHz	Cable Loss dB	LISN Factor dB/m	Receiver Reading dBuV	Emission Level dBuV/m	Limit dBuV/m	Over Limit dB	Remark
1.	0.158	0.00	9.54	18.24	27.78	55.56	-27.78	Average
2.	0.158	0.00	9.54	31.21	40.75	65.56	-24.81	QP
3.	0.318	0.01	9.56	20.23	29.80	49.75	-19.95	Average
4.	0.318	0.01	9.56	31.25	40.82	59.75	-18.93	QP
5.	0.474	0.01	9.57	21.63	31.21	46.45	-15.24	Average
6.	0.474	0.01	9.57	34.62	44.20	56.45	-12.25	QP
7.	0.731	0.02	9.58	31.33	40.93	46.00	-5.07	Average
8.	0.731	0.02	9.58	36.32	45.92	56.00	-10.08	QP
9.	1.464	0.03	9.58	32.08	41.69	46.00	-4.31	Average
10.	1.464	0.03	9.58	34.50	44.11	56.00	-11.89	QP
11.	2.190	0.05	9.58	21.75	31.38	46.00	-14.62	Average
12.	2.190	0.05	9.58	26.74	36.37	56.00	-19.63	QP

PHASE N



No.	Freq MHz	Cable Loss dB	LISN Factor dB/m	Receiver Reading dBuV	Emission Level dBuV/m	Limit dBuV/m	Over Limit dB	Remark
1.	0.158	0.00	9.53	17.74	27.27	55.56	-28.29	Average
2.	0.158	0.00	9.53	30.73	40.26	65.56	-25.30	QP
3.	0.479	0.01	9.58	21.57	31.16	46.36	-15.20	Average
4.	0.479	0.01	9.58	33.50	43.09	56.36	-13.27	QP
5.	0.735	0.02	9.58	27.09	36.69	46.00	-9.31	Average
6.	0.735	0.02	9.58	30.10	39.70	56.00	-16.30	QP
7.	1.464	0.03	9.58	29.01	38.62	46.00	-7.38	Average
8.	1.464	0.03	9.58	29.70	39.31	56.00	-16.69	QP
9.	2.201	0.05	9.58	17.79	27.42	46.00	-18.58	Average
10.	2.201	0.05	9.58	20.78	30.41	56.00	-25.59	QP
11.	2.931	0.06	9.60	15.56	25.22	46.00	-20.78	Average
12.	2.931	0.06	9.60	20.58	30.24	56.00	-25.76	QP

A.8 Radiated Spurious Emission

Note 1: The symbol of “--” in the table which means not application.

Note 2: For the test data above 1 GHz, according the ANSI C63.10-2013, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

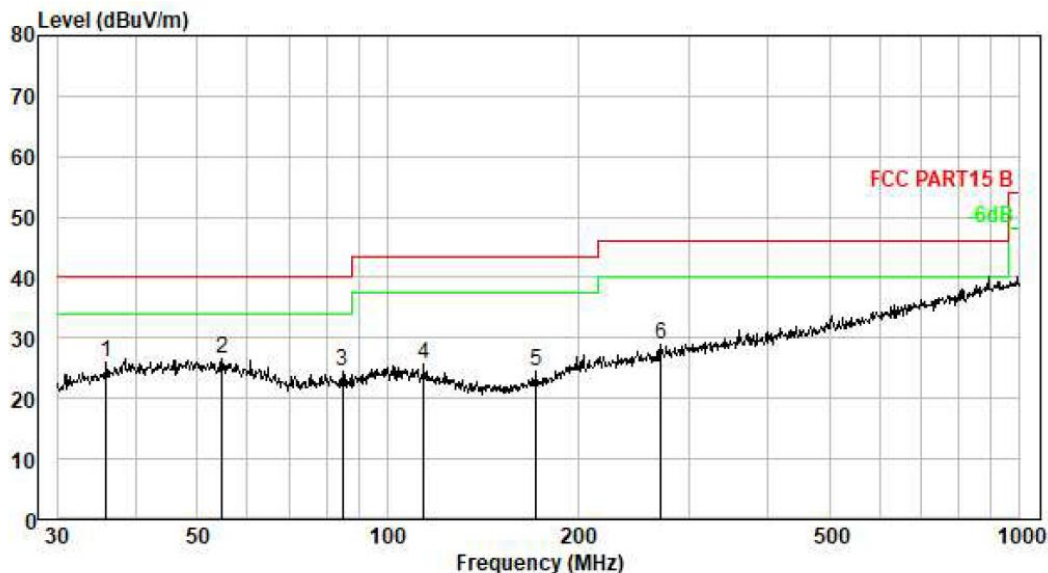
Note 3: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and DH5-Hopping mode is the worst.

Note 4: Results (dBuV/m) = Original reading level of Spectrum Analyzer (dBuV/m) + Factor (dB)

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

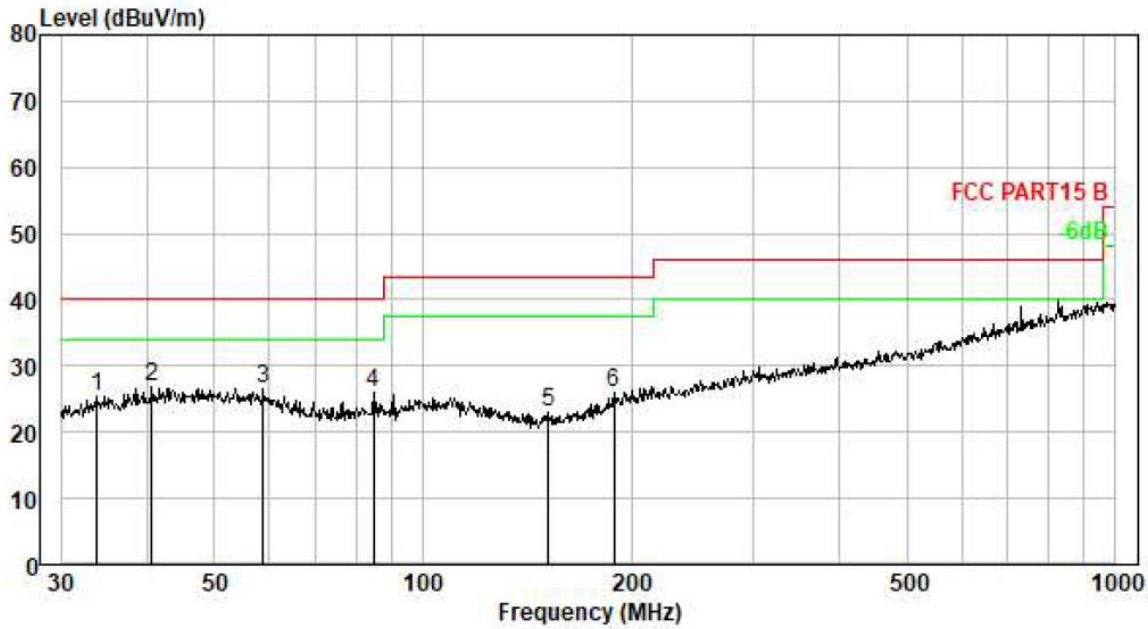
(30 MHz ~ 1GHz Harmonic)

30 MHz to 1 GHz, ANT Vertical



No.	Freq MHz	Cable Loss dB	ANT Factor dB/m	Receiver Reading dBμV	Emission Level dBμV/m	Limit dBμV/m	Over Limit dB	Remark
1	35.875	0.31	11.40	14.35	26.06	40.00	-13.94	QP
2	54.643	0.46	12.21	13.93	26.60	40.00	-13.40	QP
3	84.999	0.63	9.80	13.98	24.41	40.00	-15.59	QP
4	114.114	0.76	10.82	14.05	25.63	43.50	-17.87	QP
5	171.995	0.98	9.40	14.05	24.43	43.50	-19.07	QP
6	270.375	1.22	13.56	14.26	29.04	46.00	-16.96	QP

30 MHz to 1 GHz, ANT Horizontal



No.	Freq MHz	Cable Loss dB	ANT Factor dB/m	Receiver Reading dBμV	Emission Level dBμV/m	Limit dBμV/m	Over Limit dB	Remark
1	33.799	0.28	10.80	14.38	25.46	40.00	-14.54	QP
2	40.559	0.35	12.51	13.90	26.76	40.00	-13.24	QP
3	58.819	0.49	11.81	14.27	26.57	40.00	-13.43	QP
4	84.999	0.63	9.80	15.54	25.97	40.00	-14.03	QP
5	151.597	0.91	8.38	13.61	22.90	43.50	-20.60	QP
6	189.074	1.03	10.98	14.00	26.01	43.50	-17.49	QP

(1 GHz ~ 25 GHz)

GFSK

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:2402MHz									
V	4804.00	49.90	30.55	5.77	24.66	49.78	74.00	-24.22	Pk
V	4804.00	40.52	30.55	5.77	24.66	40.40	54.00	-13.60	AV
V	7206.00	47.97	30.33	6.32	24.55	48.51	74.00	-25.49	Pk
V	7206.00	41.41	30.33	6.32	24.55	41.95	54.00	-12.05	AV
V	9608.00	48.68	30.85	7.45	24.69	49.97	74.00	-24.03	Pk
V	9608.00	40.79	30.85	7.45	24.69	42.08	54.00	-11.92	AV
V	12010.00	48.24	31.02	8.99	25.57	51.78	74.00	-22.22	Pk
V	12010.00	38.70	31.02	8.99	25.57	42.24	54.00	-11.76	AV
H	4804.00	51.02	30.55	5.77	24.66	50.90	74.00	-23.10	Pk
H	4804.00	40.83	30.55	5.77	24.66	40.71	54.00	-13.29	AV
H	7206.00	49.59	30.33	6.32	24.55	50.13	74.00	-23.87	Pk
H	7206.00	40.54	30.33	6.32	24.55	41.08	54.00	-12.92	AV
H	9608.00	49.45	30.85	7.45	24.69	50.74	74.00	-23.26	Pk
H	9608.00	40.46	30.85	7.45	24.69	41.75	54.00	-12.25	AV
H	12010.00	49.16	31.02	8.99	25.57	52.70	74.00	-21.30	Pk
H	12010.00	39.09	31.02	8.99	25.57	42.63	54.00	-11.37	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:2441MHz									
V	4882.00	49.64	30.55	5.77	24.66	49.52	74.00	-24.48	Pk
V	4882.00	39.23	30.55	5.77	24.66	39.11	54.00	-14.89	AV
V	7323.00	46.88	30.33	6.32	24.55	47.42	74.00	-26.58	Pk
V	7323.00	39.94	30.33	6.32	24.55	40.48	54.00	-13.52	AV
V	9764.00	46.66	30.85	7.45	24.69	47.95	74.00	-26.05	Pk
V	9764.00	39.00	30.85	7.45	24.69	40.29	54.00	-13.71	AV
V	12205.00	47.65	31.02	8.99	25.57	51.19	74.00	-22.81	Pk
V	12205.00	37.66	31.02	8.99	25.57	41.20	54.00	-12.80	AV
H	4882.00	49.20	30.55	5.77	24.66	49.08	74.00	-24.92	Pk
H	4882.00	39.65	30.55	5.77	24.66	39.53	54.00	-14.47	AV
H	7323.00	49.10	30.33	6.32	24.55	49.64	74.00	-24.36	Pk
H	7323.00	38.86	30.33	6.32	24.55	39.40	54.00	-14.60	AV
H	9764.00	49.04	30.85	7.45	24.69	50.33	74.00	-23.67	Pk
H	9764.00	40.26	30.85	7.45	24.69	41.55	54.00	-12.45	AV
H	12205.00	48.91	31.02	8.99	25.57	52.45	74.00	-21.55	Pk
H	12205.00	38.60	31.02	8.99	25.57	42.14	54.00	-11.86	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:2480MHz									
V	4960.00	49.64	30.55	5.77	24.66	49.52	74.00	-24.48	Pk
V	4960.00	39.23	30.55	5.77	24.66	39.11	54.00	-14.89	AV
V	7440.00	46.88	30.33	6.32	24.55	47.42	74.00	-26.58	Pk
V	7440.00	39.94	30.33	6.32	24.55	40.48	54.00	-13.52	AV
V	9920.00	46.66	30.85	7.45	24.69	47.95	74.00	-26.05	Pk
V	9920.00	39.00	30.85	7.45	24.69	40.29	54.00	-13.71	AV
V	12400.00	47.65	31.02	8.99	25.57	51.19	74.00	-22.81	Pk
V	12400.00	37.66	31.02	8.99	25.57	41.20	54.00	-12.80	AV
H	4960.00	49.20	30.55	5.77	24.66	49.08	74.00	-24.92	Pk
H	4960.00	39.65	30.55	5.77	24.66	39.53	54.00	-14.47	AV
H	7440.00	49.10	30.33	6.32	24.55	49.64	74.00	-24.36	Pk
H	7440.00	38.86	30.33	6.32	24.55	39.40	54.00	-14.60	AV
H	9920.00	49.04	30.85	7.45	24.69	50.33	74.00	-23.67	Pk
H	9920.00	40.26	30.85	7.45	24.69	41.55	54.00	-12.45	AV
H	12400.00	48.91	31.02	8.99	25.57	52.45	74.00	-21.55	Pk
H	12400.00	38.60	31.02	8.99	25.57	42.14	54.00	-11.86	AV

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
4. The test data shows only the worst case GFSK mode

A.9 Band Edge (Restricted-band-edge)

Note 1: The lowest and highest channels are tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

Note 2: The test data all are tested in the vertical and horizontal antenna which the trace is max hold. So these plots have shown the worst case.

Note 3: According the ANSI C63.10-2013, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note 4: The Level (dBuV/m) has been corrected by factor.

	Polar (H/V)	Frequenc y (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV /m)	Detec tor Type	Result
GFSK	Low Channel: 2402MHz									
	H	2390.00	53.73	30.22	4.85	23.98	52.34	74.00	PK	PASS
	H	2390.00	45.17	30.22	4.85	23.98	43.78	54.00	AV	PASS
	H	2400.00	57.19	30.22	4.85	23.98	55.80	74.00	PK	PASS
	H	2400.00	47.43	30.22	4.85	23.98	46.04	54.00	AV	PASS
	V	2390.00	56.52	30.22	4.85	23.98	55.13	74.00	PK	PASS
	V	2390.00	47.89	30.22	4.85	23.98	46.50	54.00	AV	PASS
	V	2400.00	54.07	30.22	4.85	23.98	52.68	74.00	PK	PASS
	V	2400.00	48.20	30.22	4.85	23.98	46.81	54.00	AV	PASS
	High Channel: 2480MHz									
	H	2483.50	56.37	30.22	4.85	23.98	54.98	74.00	PK	PASS
	H	2483.50	44.69	30.22	4.85	23.98	43.30	54.00	AV	PASS
	H	2500.00	55.63	30.22	4.85	23.98	54.24	74.00	PK	PASS
	H	2500.00	48.53	30.22	4.85	23.98	47.14	54.00	AV	PASS
	V	2483.50	56.66	30.22	4.85	23.98	55.27	74.00	PK	PASS
	V	2483.50	44.87	30.22	4.85	23.98	43.48	54.00	AV	PASS
	V	2500.00	58.00	30.22	4.85	23.98	56.61	74.00	PK	PASS
	V	2500.00	44.94	30.22	4.85	23.98	43.55	54.00	AV	PASS
π/4- DQPSK	Low Channel: 2402MHz									
	H	2390.00	55.67	30.22	4.85	23.98	54.28	74.00	PK	PASS
	H	2390.00	47.74	30.22	4.85	23.98	46.35	54.00	AV	PASS
	H	2400.00	57.20	30.22	4.85	23.98	55.81	74.00	PK	PASS
	H	2400.00	45.08	30.22	4.85	23.98	43.69	54.00	AV	PASS
	V	2390.00	56.42	30.22	4.85	23.98	55.03	74.00	PK	PASS
	V	2390.00	47.61	30.22	4.85	23.98	46.22	54.00	AV	PASS
	V	2400.00	55.35	30.22	4.85	23.98	53.96	74.00	PK	PASS
	V	2400.00	46.01	30.22	4.85	23.98	44.62	54.00	AV	PASS
	High Channel: 2480MHz									
	H	2483.50	51.22	30.22	4.85	23.98	49.83	74.00	PK	PASS
	H	2483.50	44.02	30.22	4.85	23.98	42.63	54.00	AV	PASS
	H	2500.00	57.93	30.22	4.85	23.98	56.54	74.00	PK	PASS
	H	2500.00	43.89	30.22	4.85	23.98	42.50	54.00	AV	PASS
	V	2483.50	54.19	30.22	4.85	23.98	52.80	74.00	PK	PASS
	V	2483.50	47.58	30.22	4.85	23.98	46.19	54.00	AV	PASS
	V	2500.00	52.40	30.22	4.85	23.98	51.01	74.00	PK	PASS

	V	2500.00	46.30	30.22	4.85	23.98	44.91	54.00	AV	PASS
8-DPSK	Low Channel: 2402MHz									
	H	2390.00	54.65	30.22	4.85	23.98	53.26	74.00	PK	PASS
	H	2390.00	47.09	30.22	4.85	23.98	45.70	54.00	AV	PASS
	H	2400.00	57.66	30.22	4.85	23.98	56.27	74.00	PK	PASS
	H	2400.00	45.41	30.22	4.85	23.98	44.02	54.00	AV	PASS
	V	2390.00	55.20	30.22	4.85	23.98	53.81	74.00	PK	PASS
	V	2390.00	48.91	30.22	4.85	23.98	47.52	54.00	AV	PASS
	V	2400.00	58.86	30.22	4.85	23.98	57.47	74.00	PK	PASS
	V	2400.00	48.16	30.22	4.85	23.98	46.77	54.00	AV	PASS
	High Channel: 2480MHz									
	H	2483.50	54.46	30.22	4.85	23.98	53.07	74.00	PK	PASS
	H	2483.50	46.78	30.22	4.85	23.98	45.39	54.00	AV	PASS
	H	2500.00	57.74	30.22	4.85	23.98	56.35	74.00	PK	PASS
	H	2500.00	45.11	30.22	4.85	23.98	43.72	54.00	AV	PASS
	V	2483.50	55.38	30.22	4.85	23.98	53.99	74.00	PK	PASS
	V	2483.50	48.69	30.22	4.85	23.98	47.30	54.00	AV	PASS
	V	2500.00	58.23	30.22	4.85	23.98	56.84	74.00	PK	PASS
	V	2500.00	48.23	30.22	4.85	23.98	46.84	54.00	AV	PASS

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

ANNEX B TEST SETUP PHOTOS

Please see the attachment for the test setup photos.

ANNEX C EUT EXTERNAL PHOTOS

Please see the attachment for the External photos.

ANNEX D EUT INTERNAL PHOTOS

Please see the attachment for the Internal photos.



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