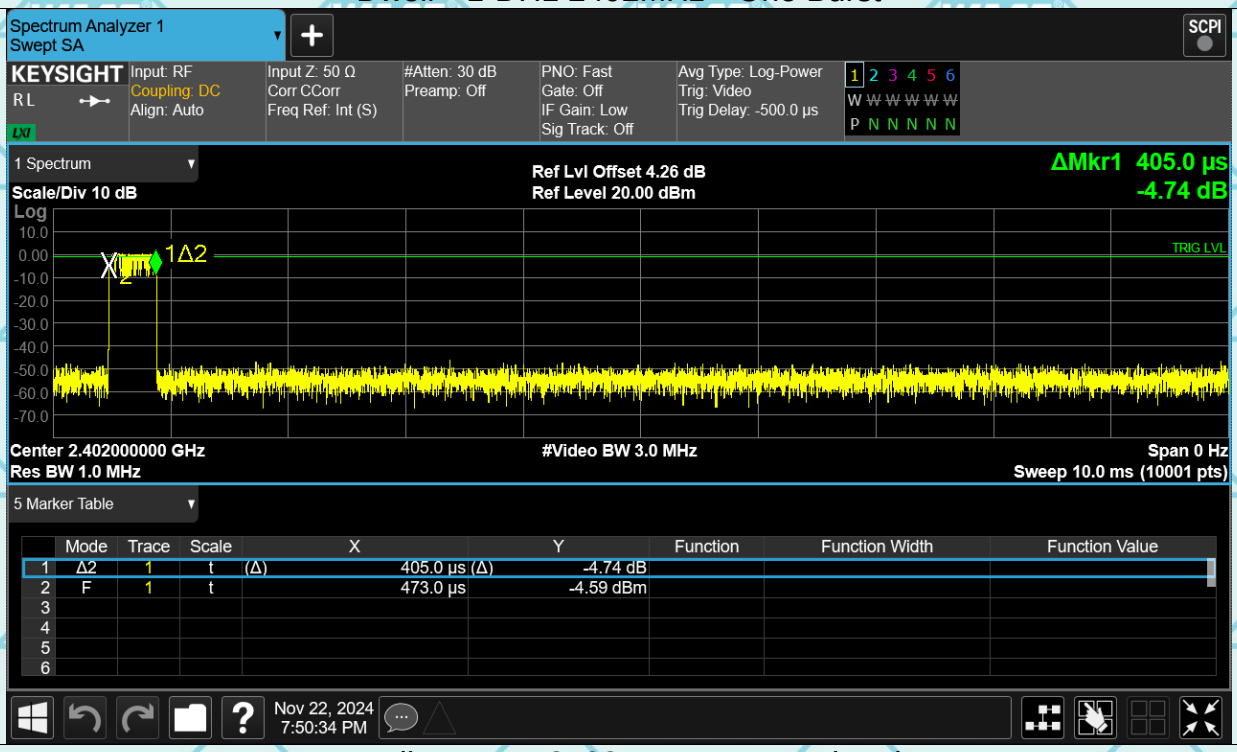
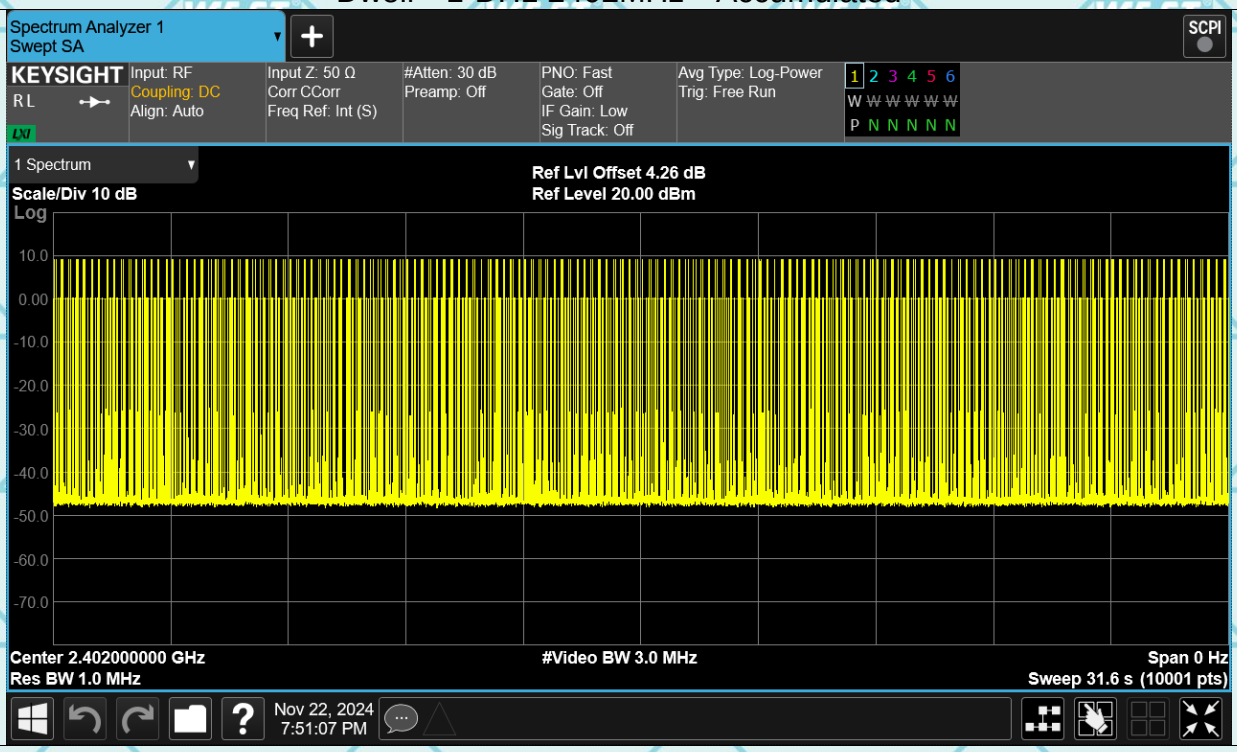
Test Graphs

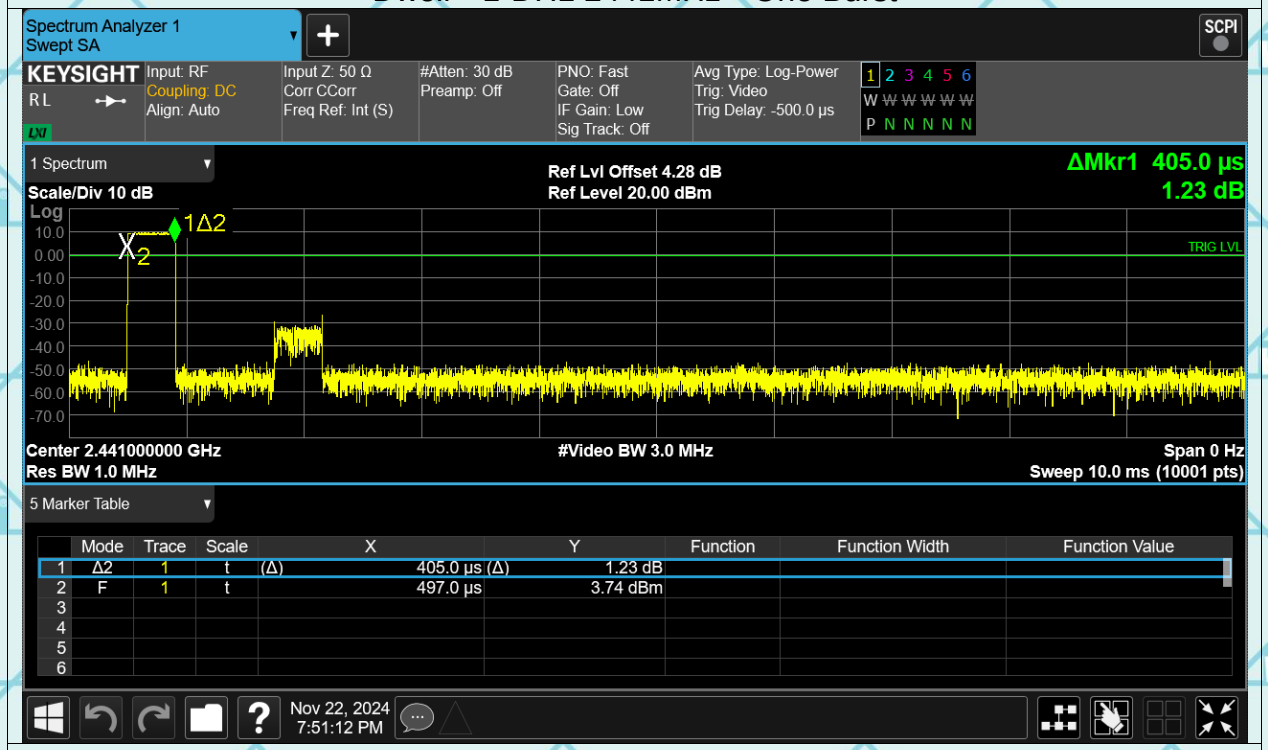
Dwell 1-DH1 2402MHz One Burst



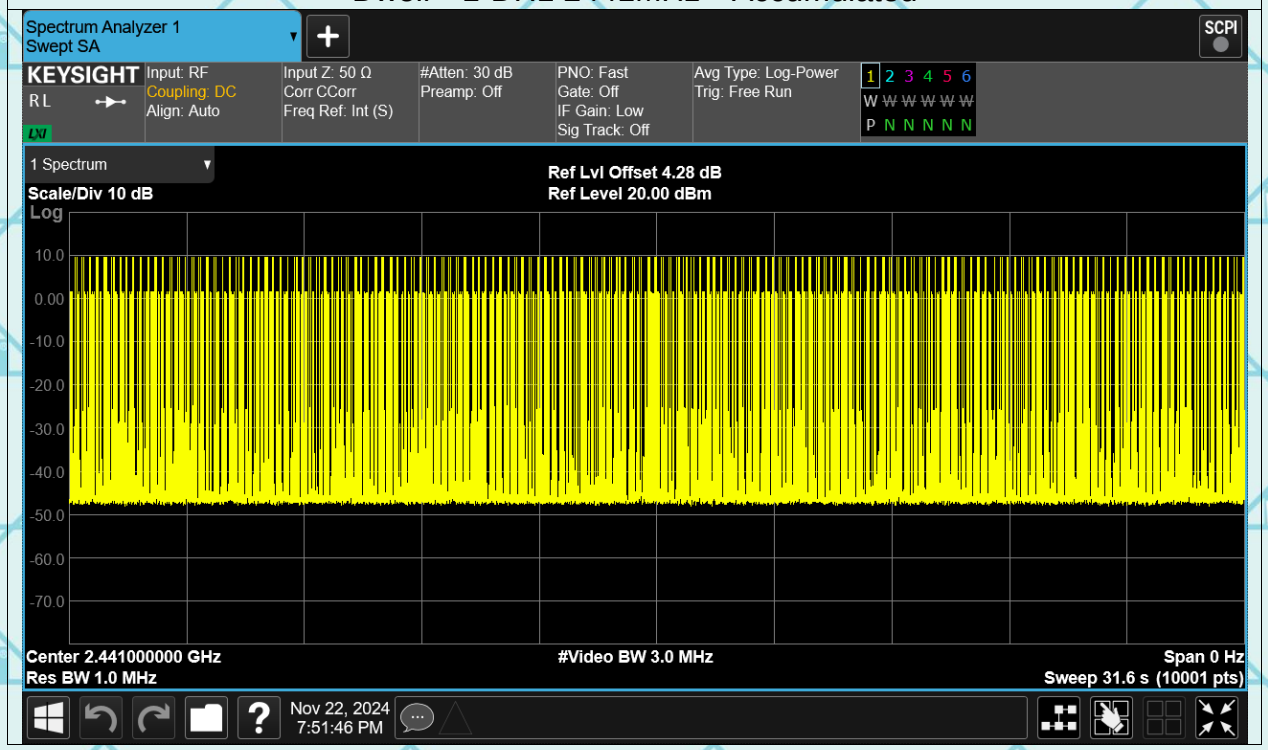
Dwell 1-DH1 2402MHz Accumulated



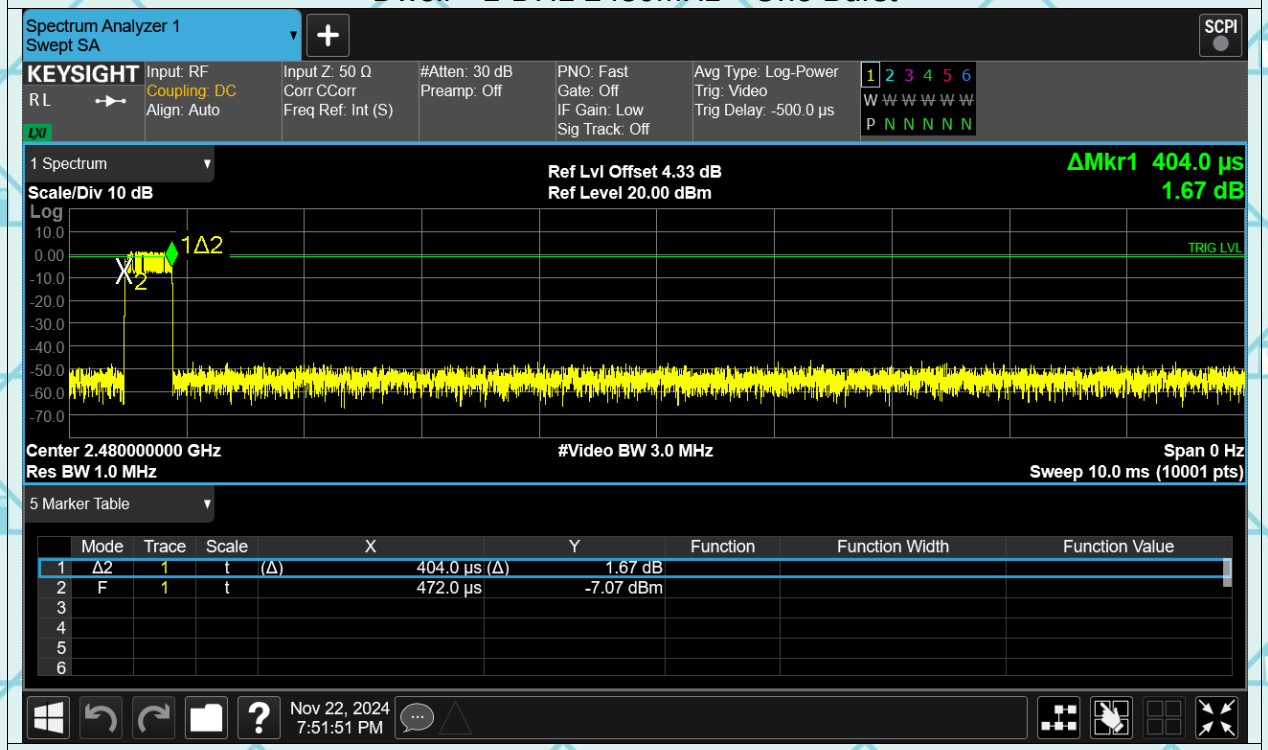
Dwell 1-DH1 2441MHz One Burst



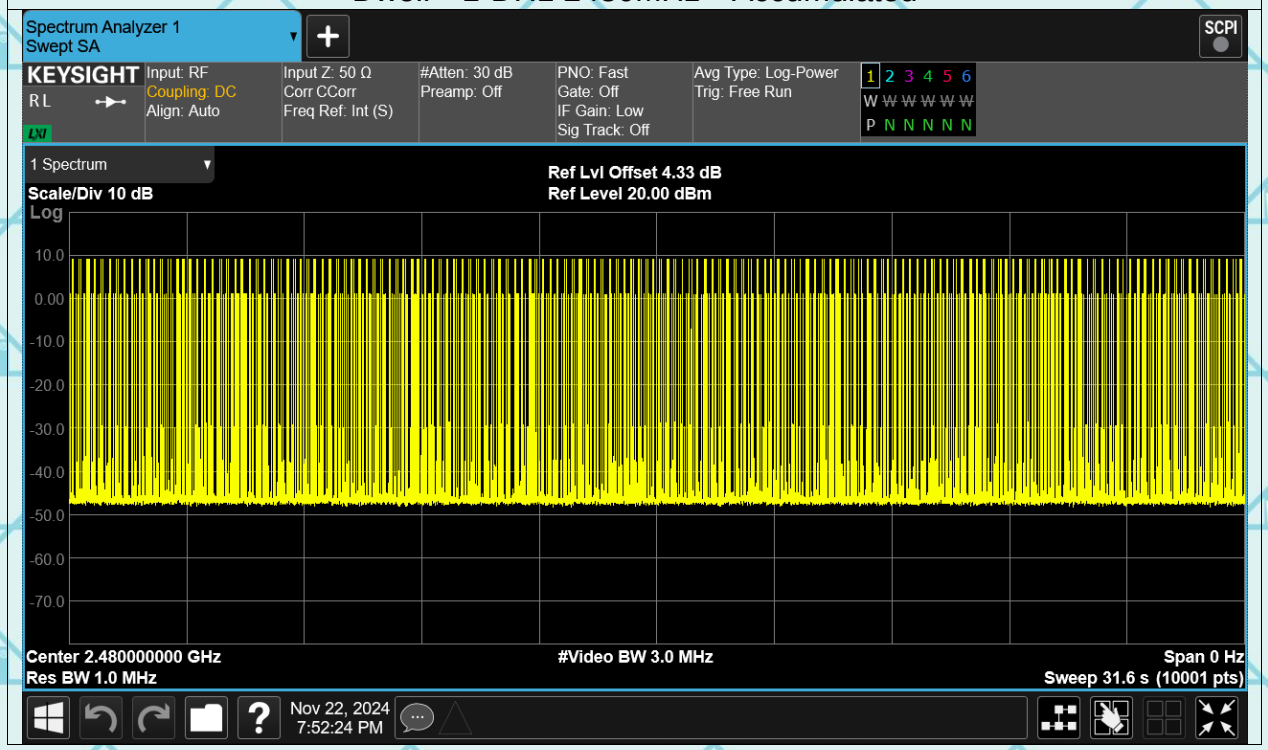
Dwell 1-DH1 2441MHz Accumulated



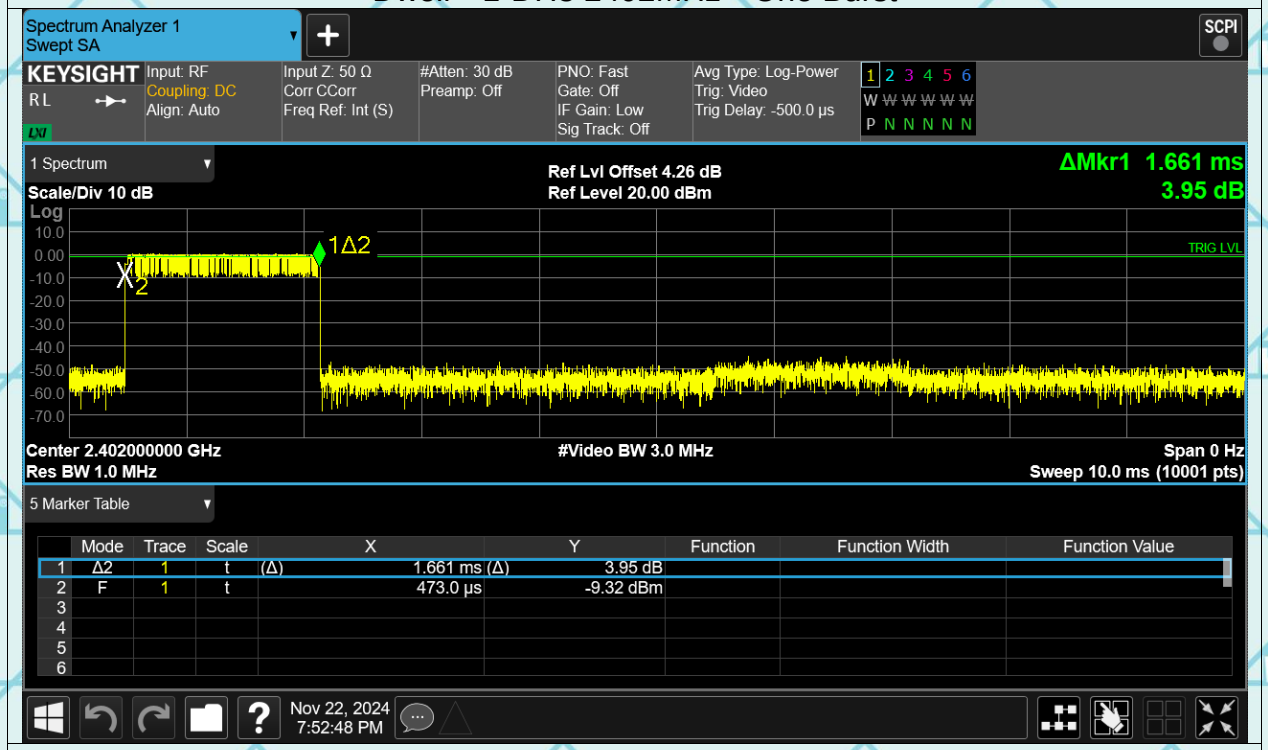
Dwell 1-DH1 2480MHz One Burst



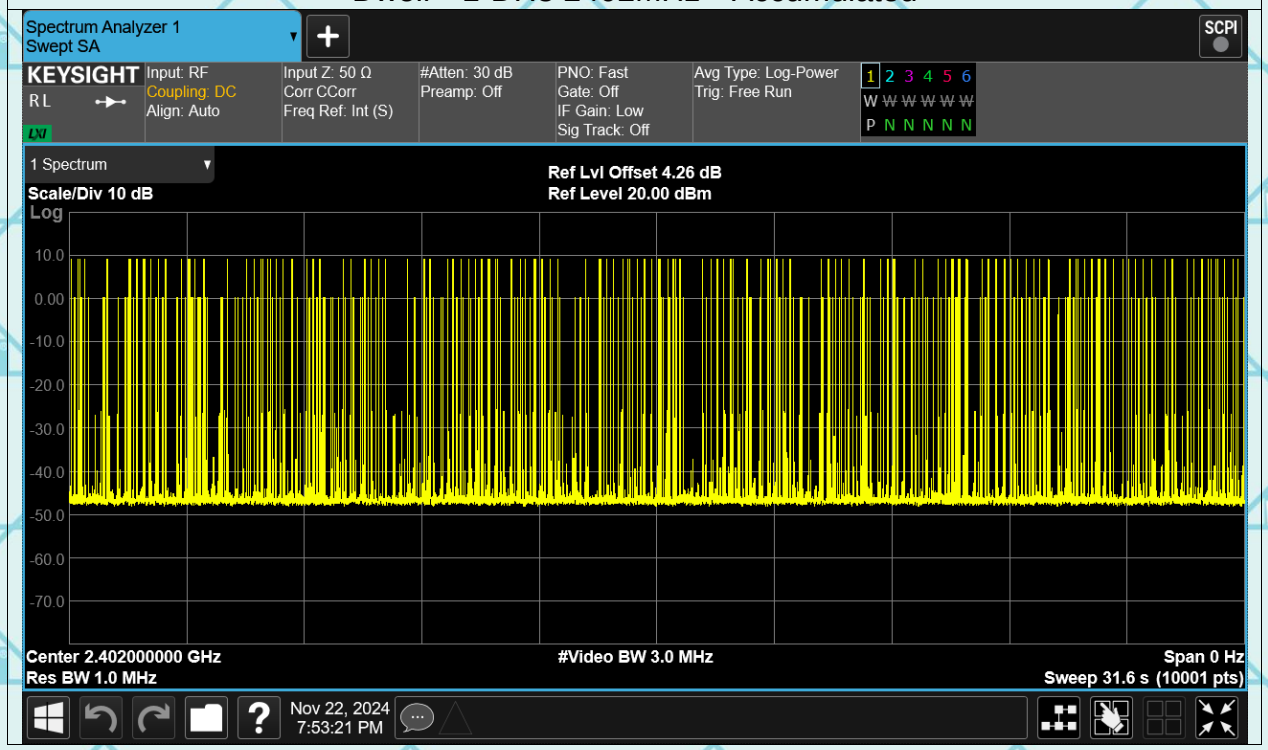
Dwell 1-DH1 2480MHz Accumulated



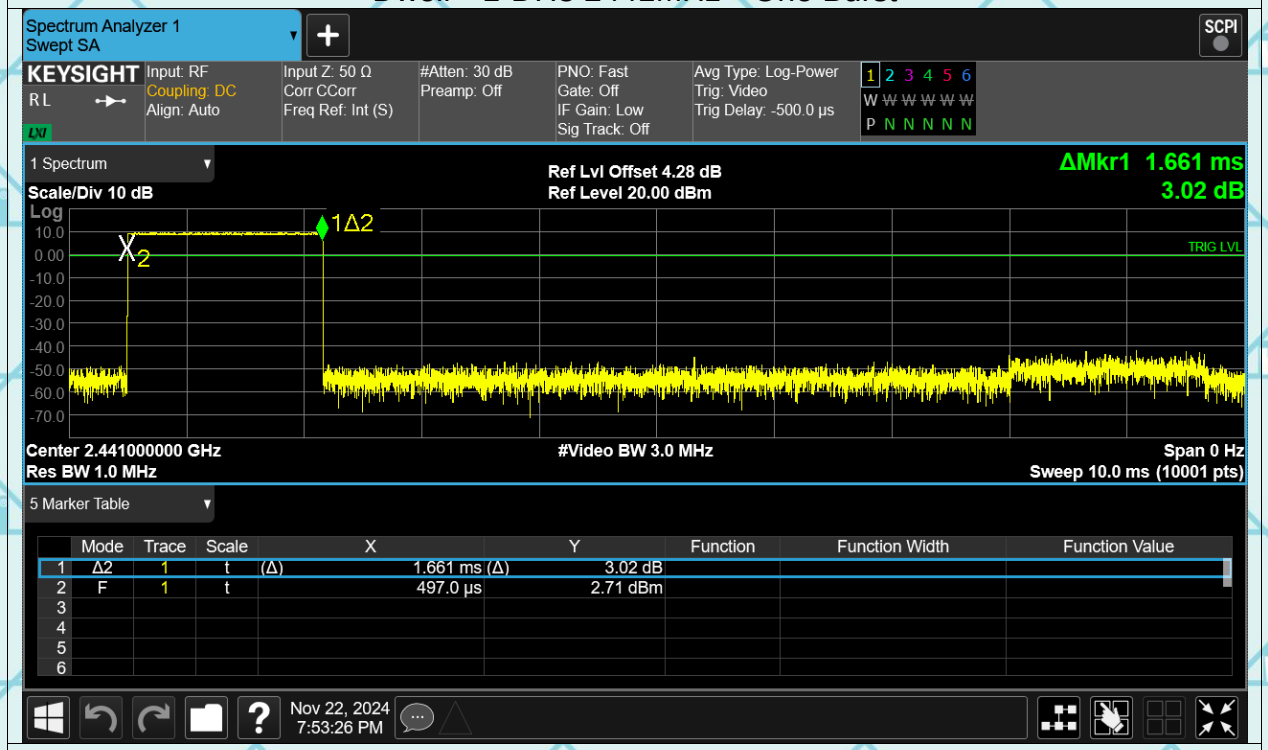
Dwell 1-DH3 2402MHz One Burst



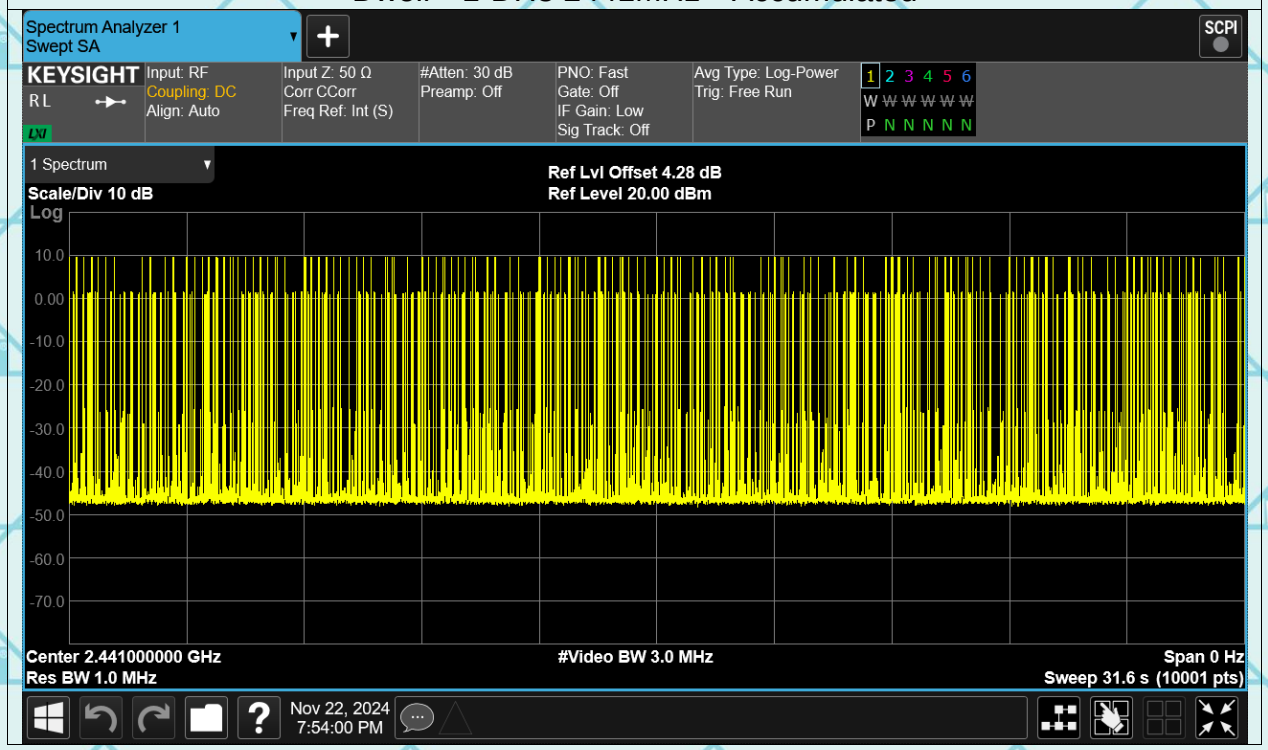
Dwell 1-DH3 2402MHz Accumulated



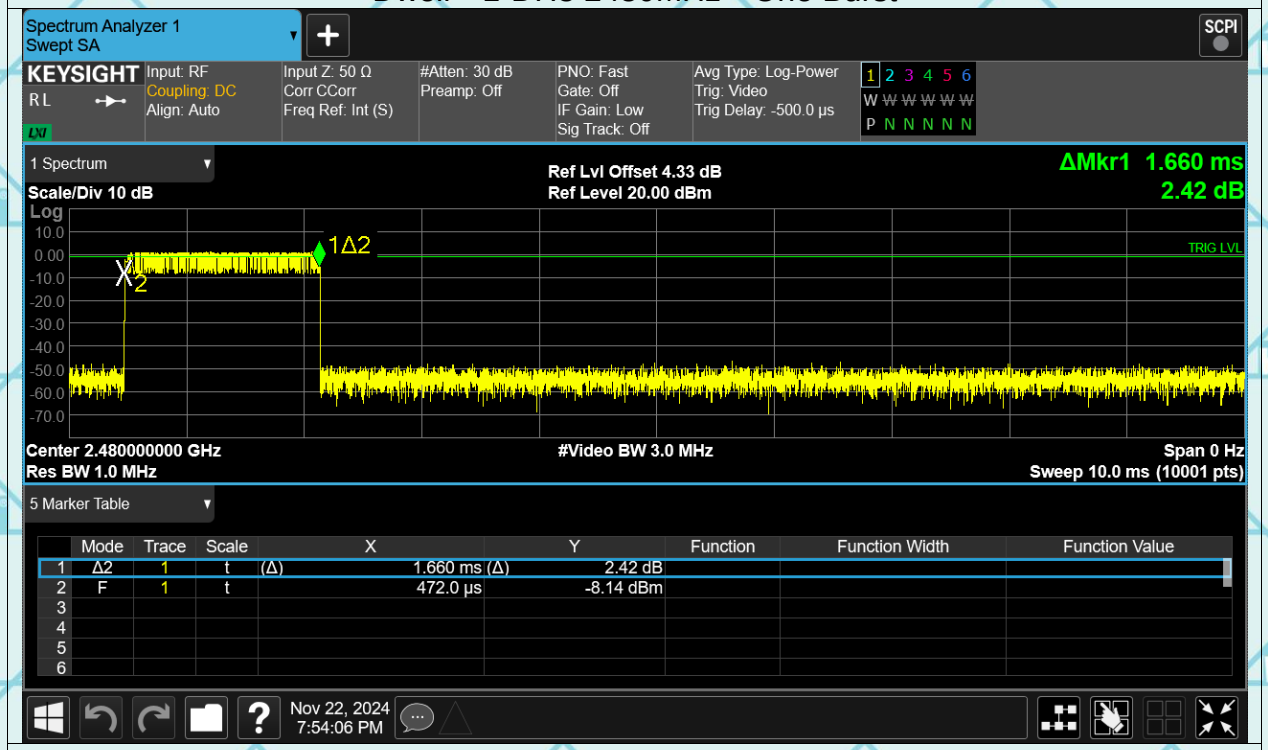
Dwell 1-DH3 2441MHz One Burst



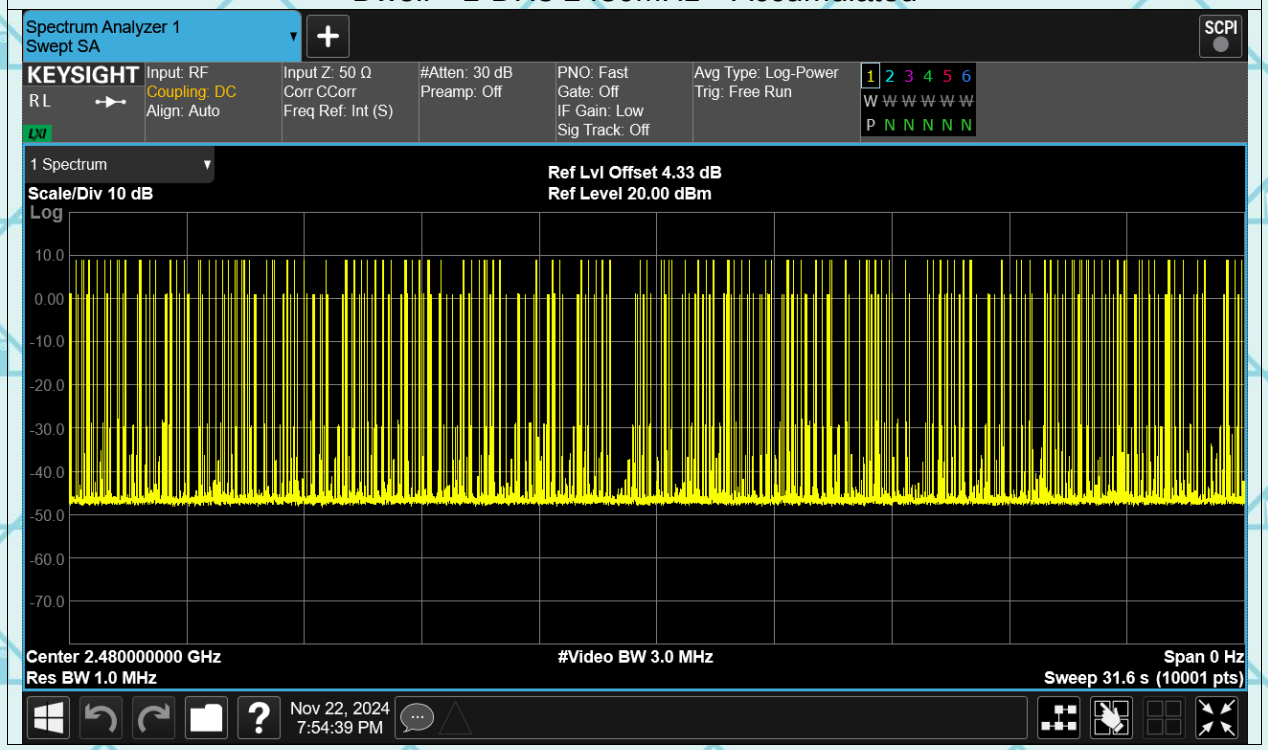
Dwell 1-DH3 2441MHz Accumulated



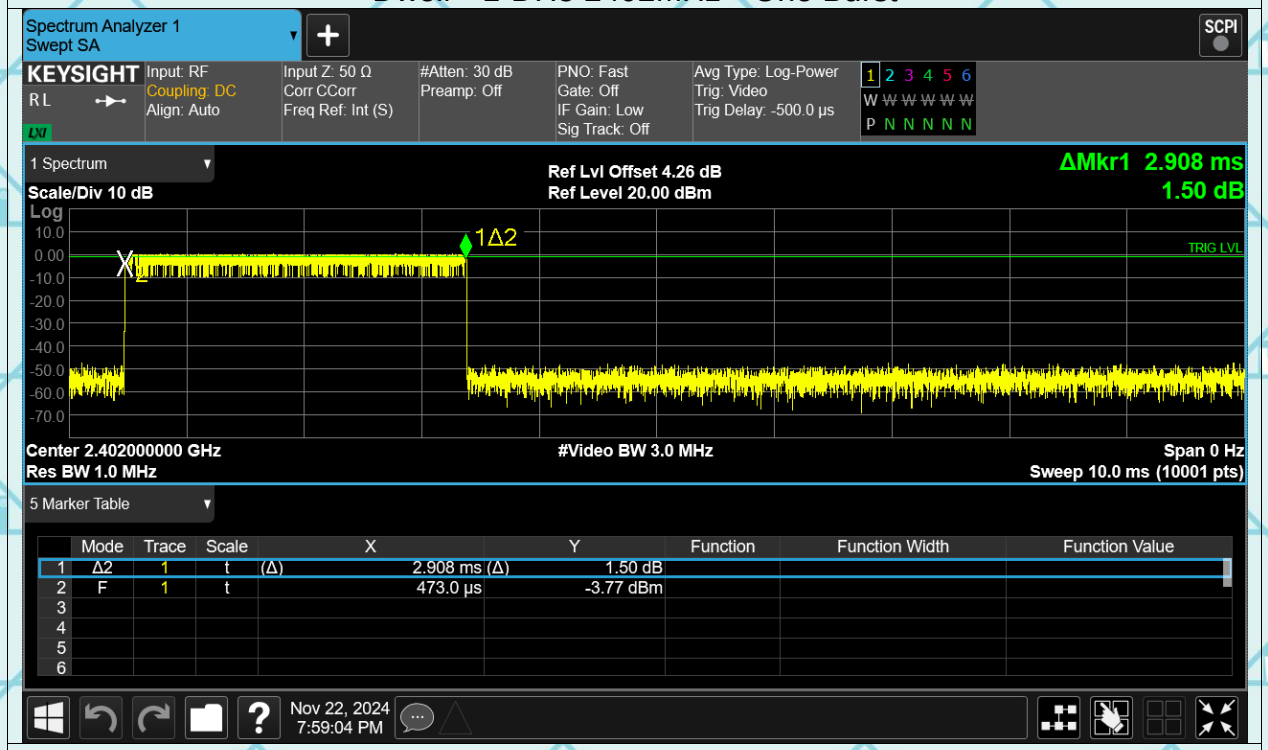
Dwell 1-DH3 2480MHz One Burst



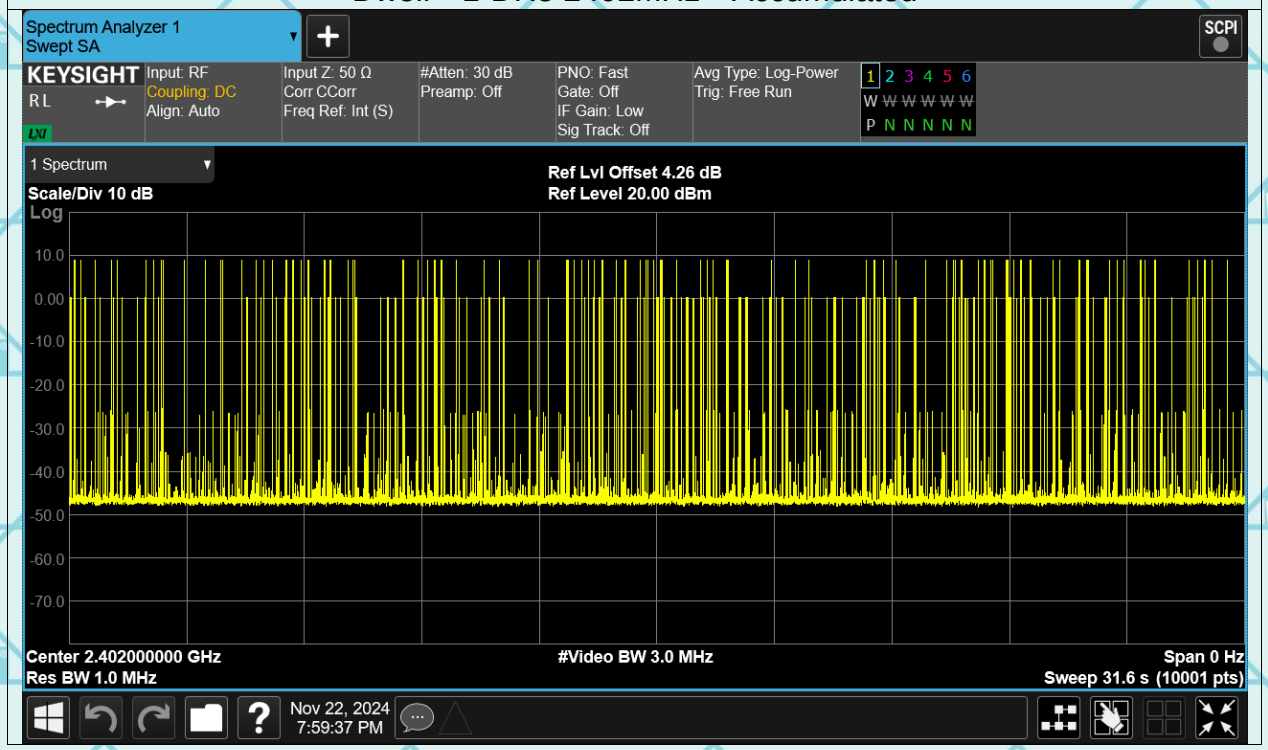
Dwell 1-DH3 2480MHz Accumulated



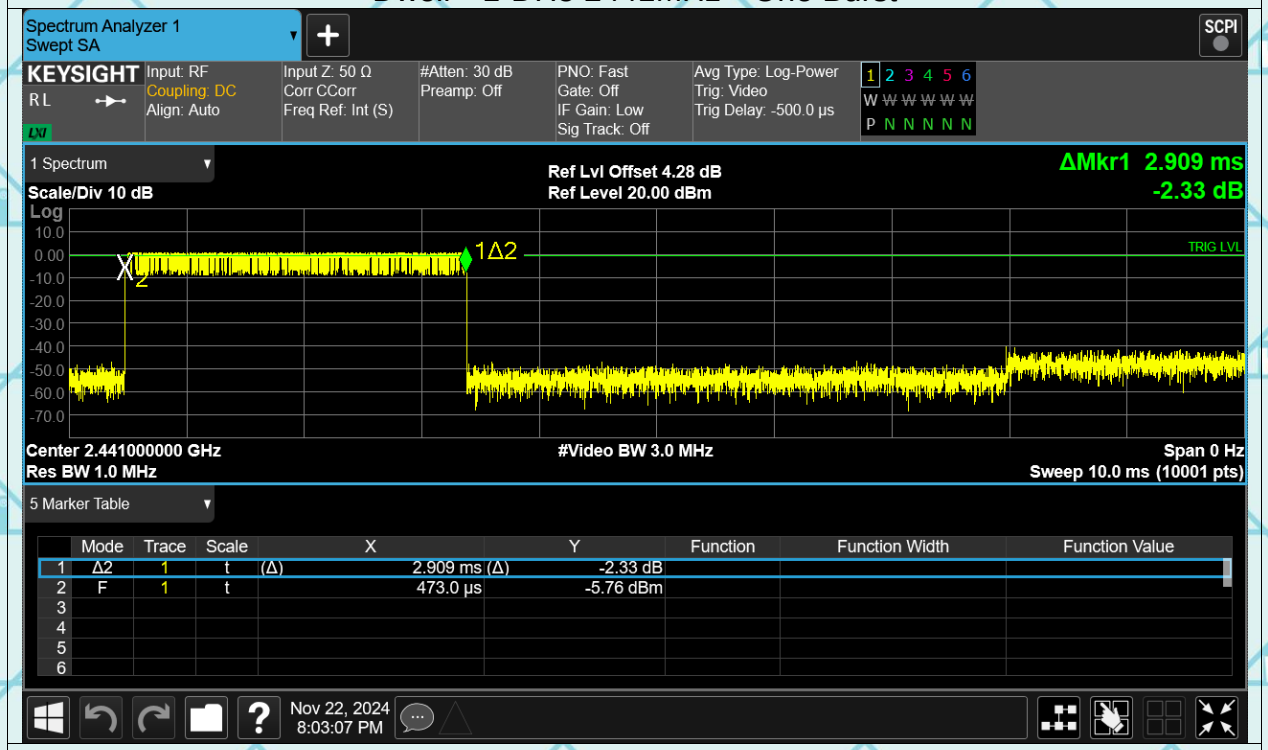
Dwell 1-DH5 2402MHz One Burst



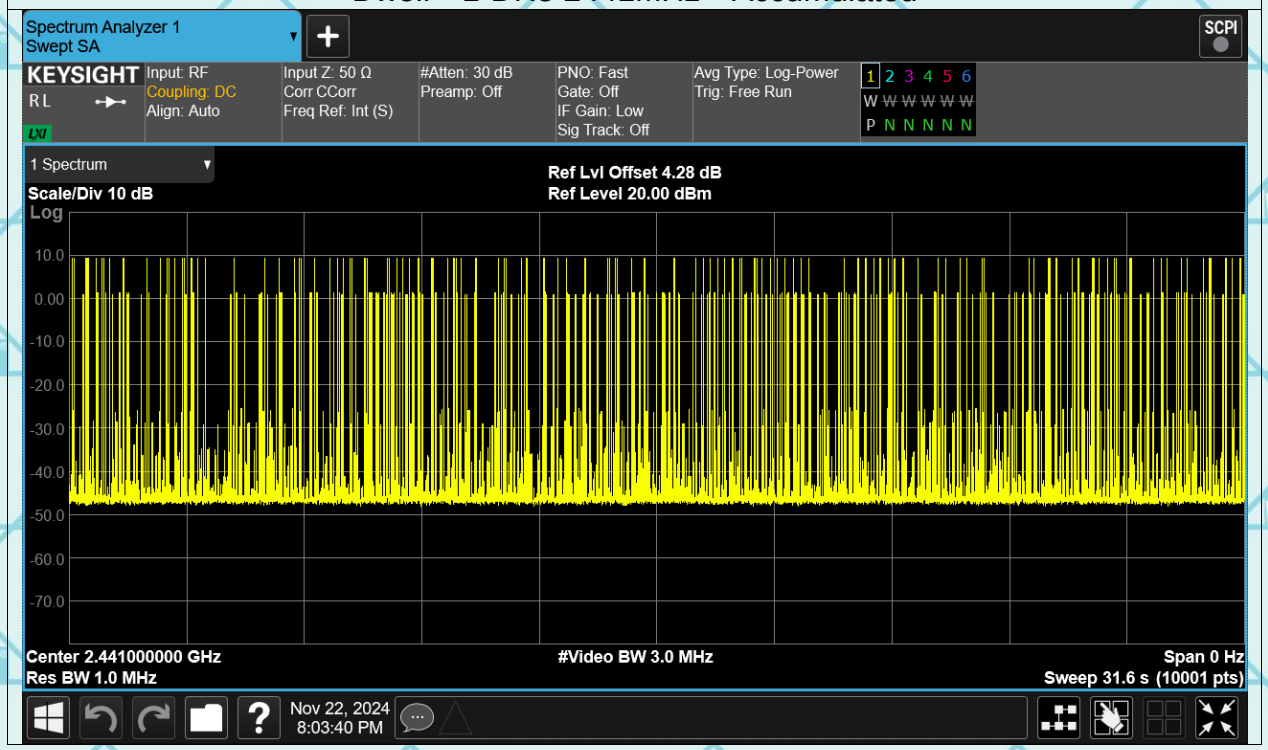
Dwell 1-DH5 2402MHz Accumulated



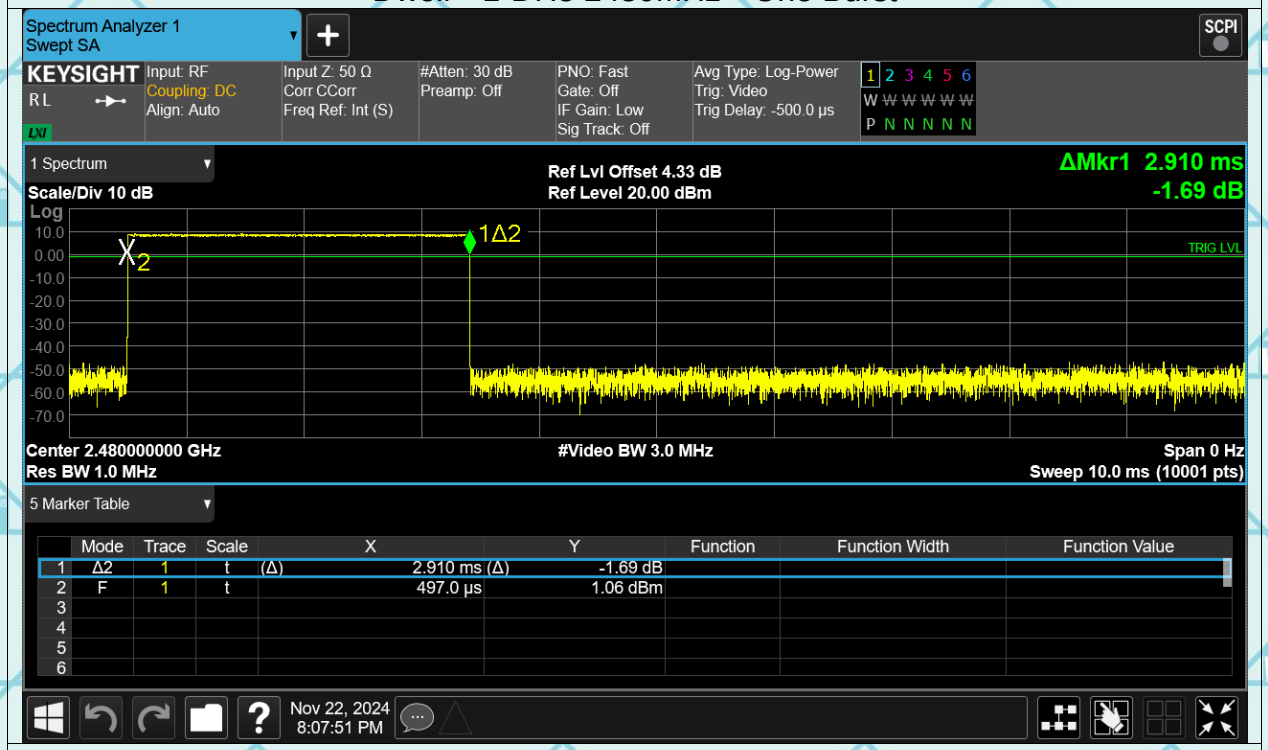
Dwell 1-DH5 2441MHz One Burst



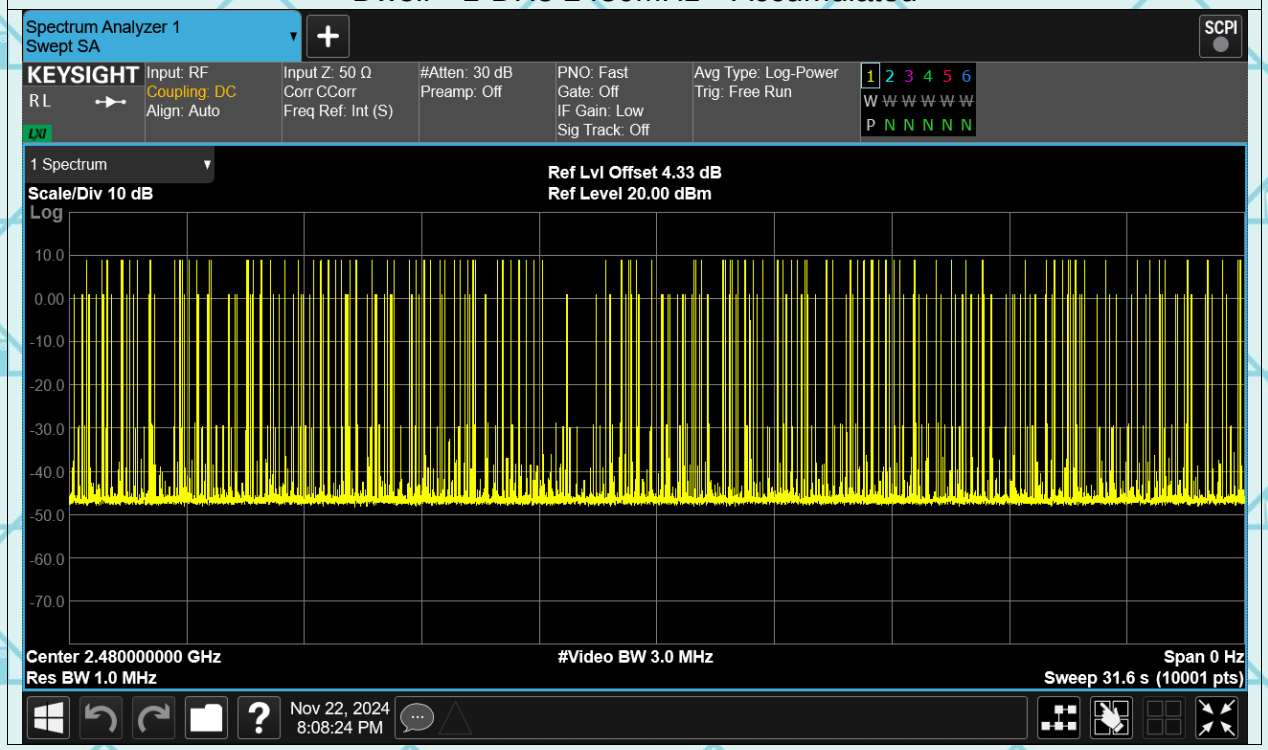
Dwell 1-DH5 2441MHz Accumulated



Dwell 1-DH5 2480MHz One Burst



Dwell 1-DH5 2480MHz Accumulated



6.8. Pseudorandom Frequency Hopping Sequence

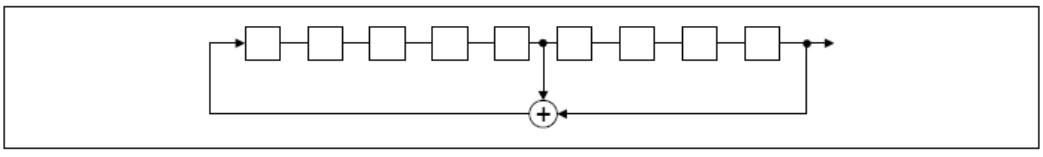
Test Requirement:	FCC Part15 C Section 15.247 (a)(1) requirement:

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.
Alternatively. Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a Pseudorandom ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

EUT Pseudorandom Frequency Hopping Sequence

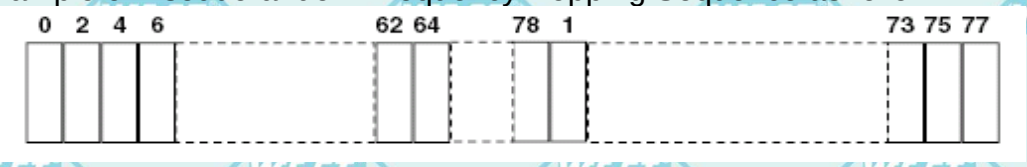
The pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first one of 9 consecutive ones; i.e. the shift register is initialized with nine ones.

- Number of shift register stages: 9
- Length of pseudo-random sequence: 2^9 -1 = 511 bits
- Longest sequence of zeros: 8 (non-inverted signal)



Linear Feedback Shift Register for Generation of the PRBS sequence

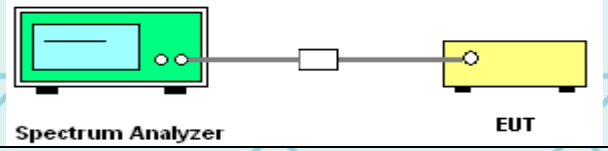
An example of Pseudorandom Frequency Hopping Sequence as follow:



Each frequency used equally on the average by each transmitter.
The system receivers have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shift frequencies in synchronization with the transmitted signals.

6.9. Conducted Band Edge Measurement

6.9.1. Test Specification

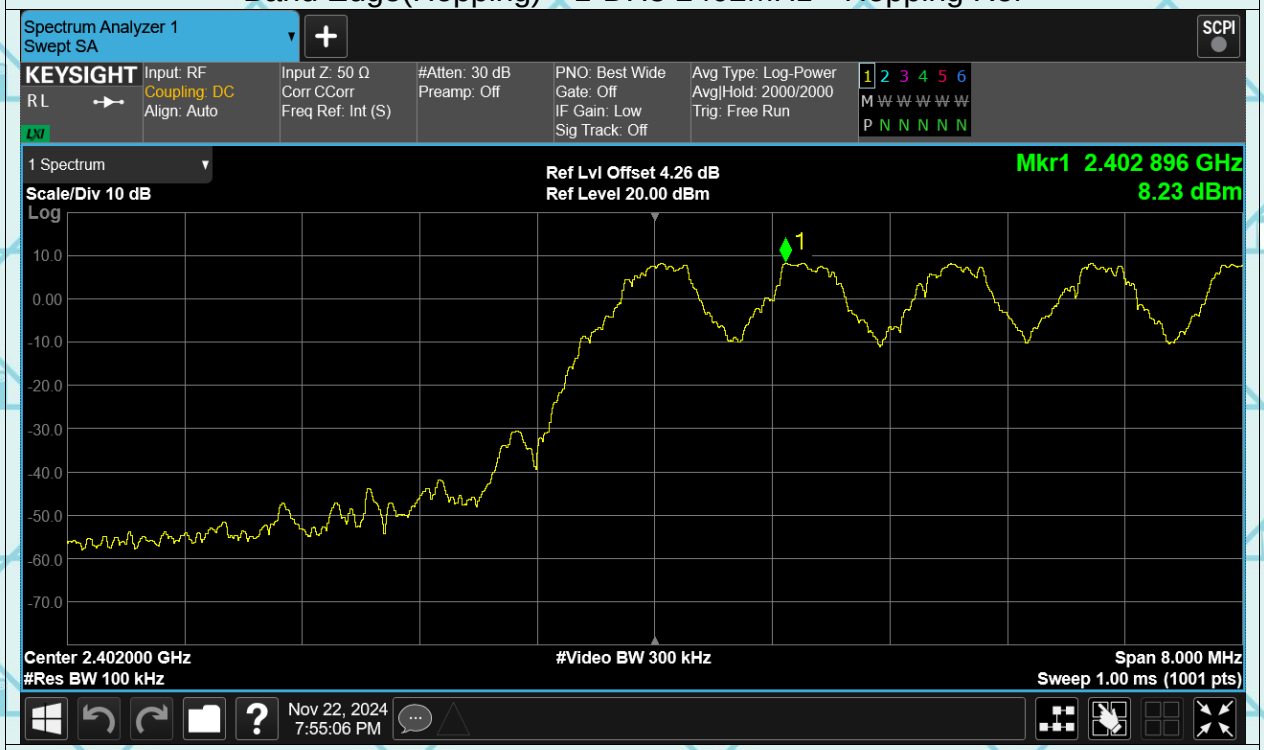
Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	ANSI C63.10:2014
Limit:	In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.
Test Setup:	
Test Mode:	Transmitting mode with modulation
Test Procedure:	1. The testing follows the guidelines in Band-edge Compliance of RF Conducted Emissions of ANSI C63.10:2014 Measurement Guidelines. 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Set RBW = 100 kHz (≥1% span=10MHz), VBW = 300 kHz (≥RBW). Band edge emissions must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100kHz RBW. The attenuation shall be 30 dB instead of 20 dB when RMS conducted output power procedure is used. 4. Enable hopping function of the EUT and then repeat step 2 and 3. 5. Measure and record the results in the test report.
Test Result:	PASS

6.9.2. Test Data

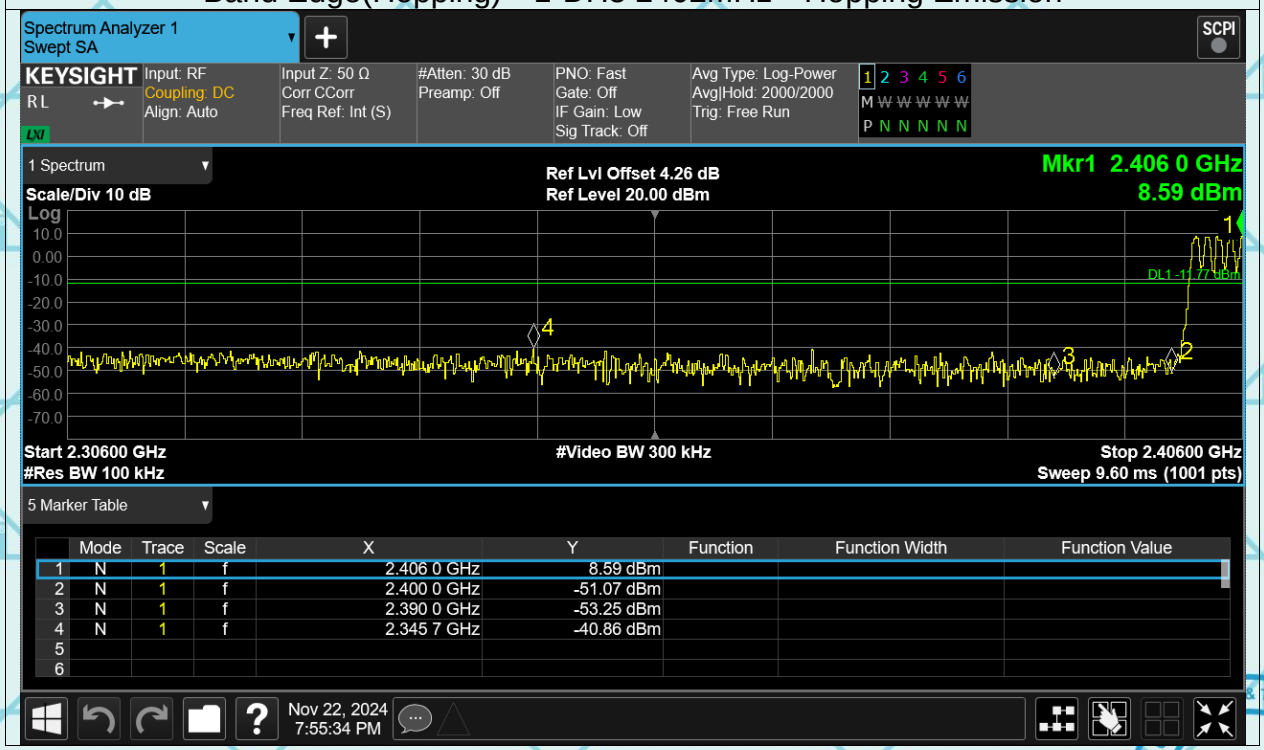
GFSK Modulation (the worst case)

Test Graphs

Band Edge(Hopping) 1-DH5 2402MHz Hopping Ref

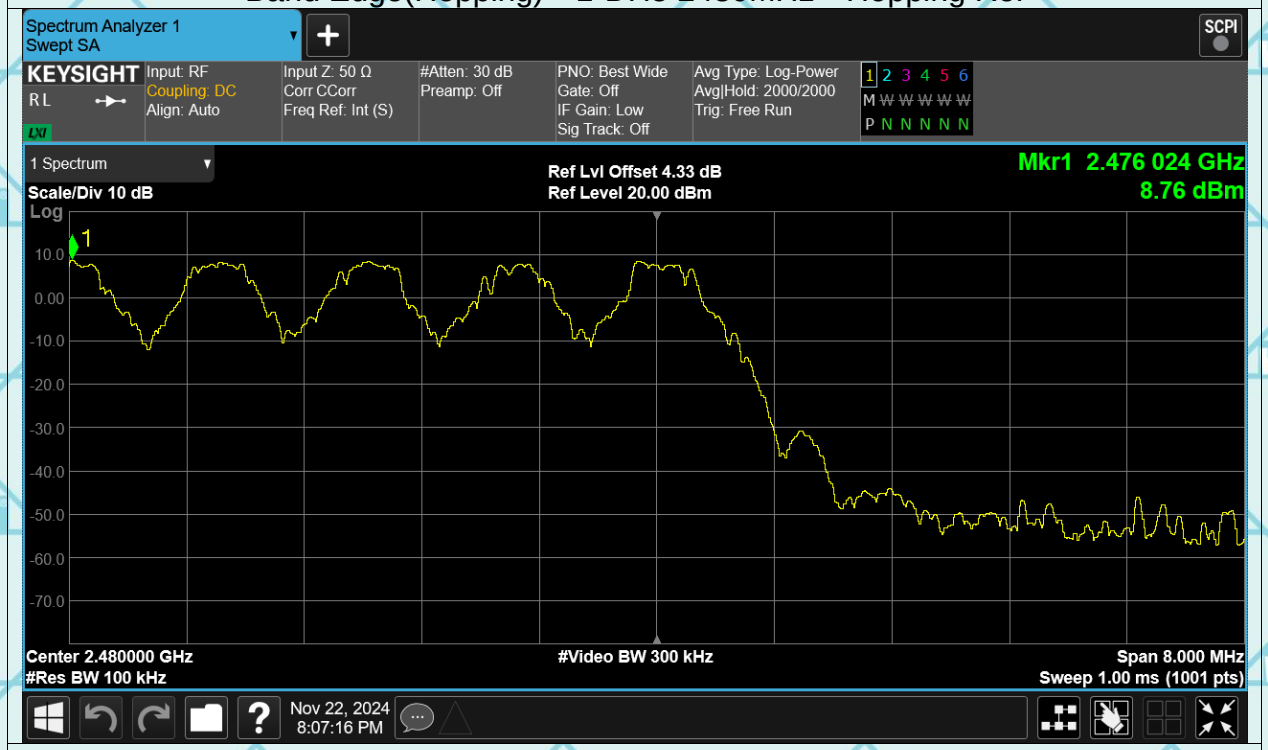


Band Edge(Hopping) 1-DH5 2402MHz Hopping Emission

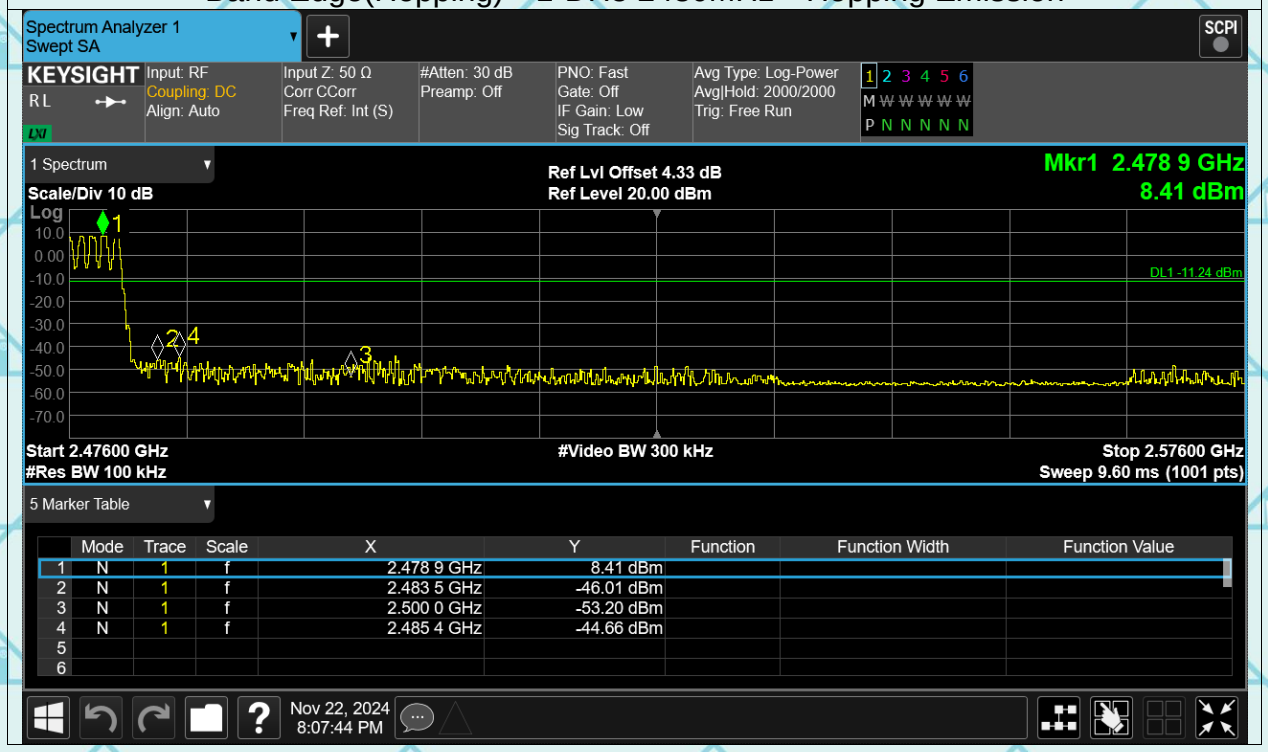


	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.406 0 GHz	8.59 dBm			
2	N	1	f	2.400 0 GHz	-51.07 dBm			
3	N	1	f	2.390 0 GHz	-53.25 dBm			
4	N	1	f	2.345 7 GHz	-40.86 dBm			
5								
6								

Band Edge(Hopping) 1-DH5 2480MHz Hopping Ref



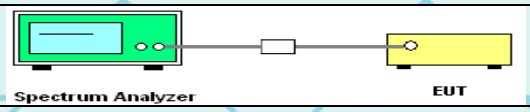
Band Edge(Hopping) 1-DH5 2480MHz Hopping Emission



	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.478 9 GHz	8.41 dBm			
2	N	1	f	2.483 5 GHz	-46.01 dBm			
3	N	1	f	2.500 0 GHz	-53.20 dBm			
4	N	1	f	2.485 4 GHz	-44.66 dBm			
5								
6								

6.10. Conducted Spurious Emission Measurement

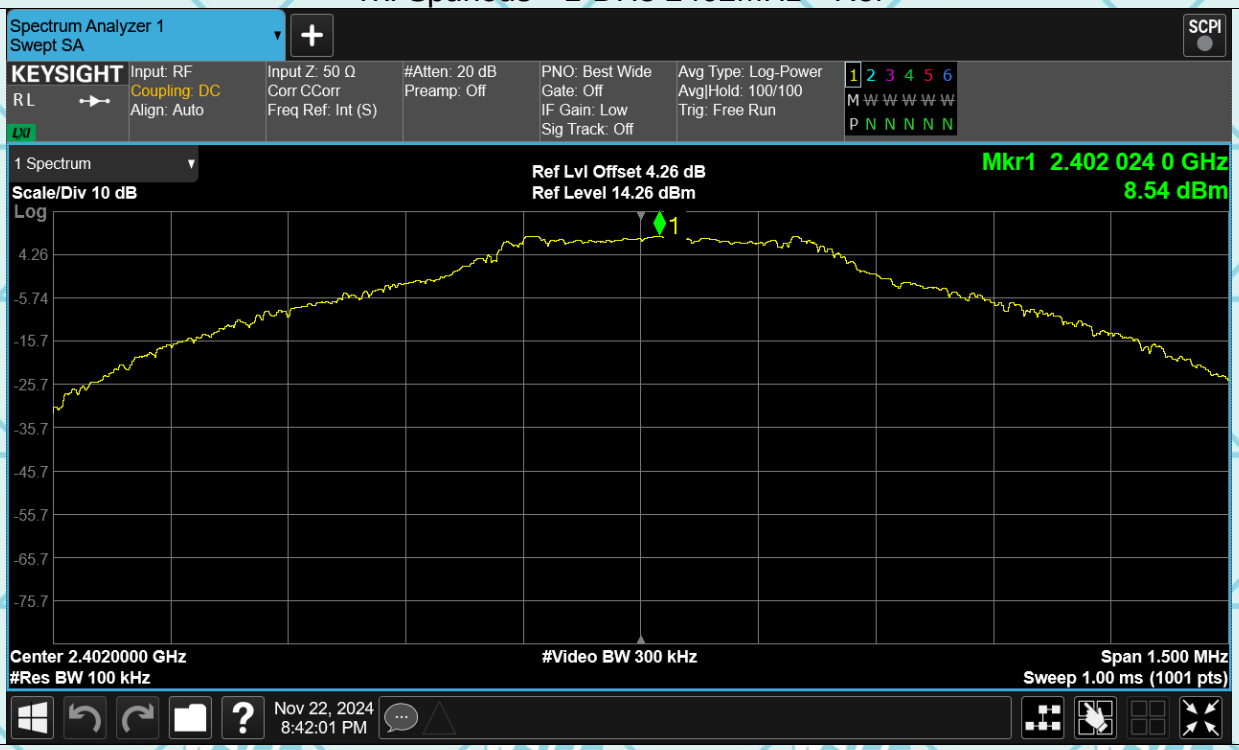
6.10.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	ANSI C63.10:2014
Limit:	In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.
Test Setup:	
Test Mode:	Transmitting mode with modulation
Test Procedure:	1. The testing follows the guidelines in Spurious RF Conducted Emissions of ANSI C63.10:2014 Measurement Guidelines 2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 3. Set to the maximum power setting and enable the EUT transmit continuously. 4. Set RBW = 100 kHz, VBW = 300kHz, scan up through 10th harmonic. All harmonics / spurs must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW. 5. Measure and record the results in the test report. 6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
Test Result:	PASS

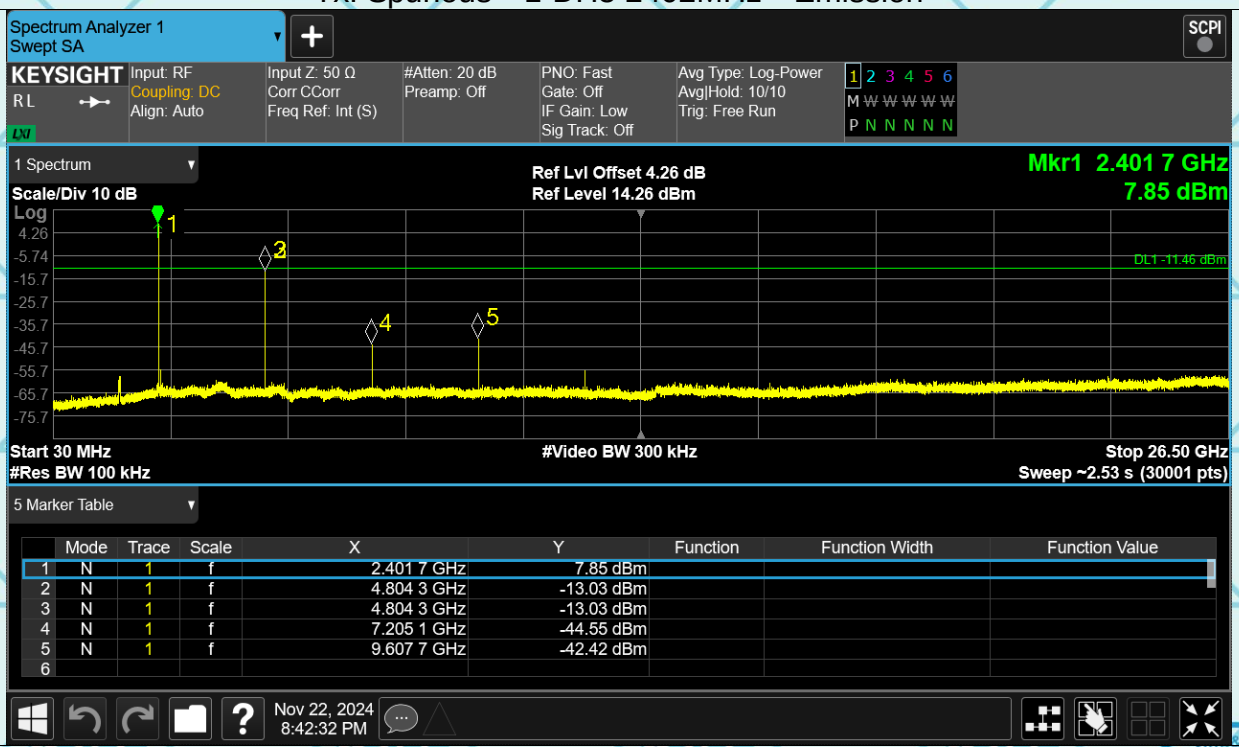
Test Data

Test Graphs

Tx. Spurious 1-DH5 2402MHz Ref

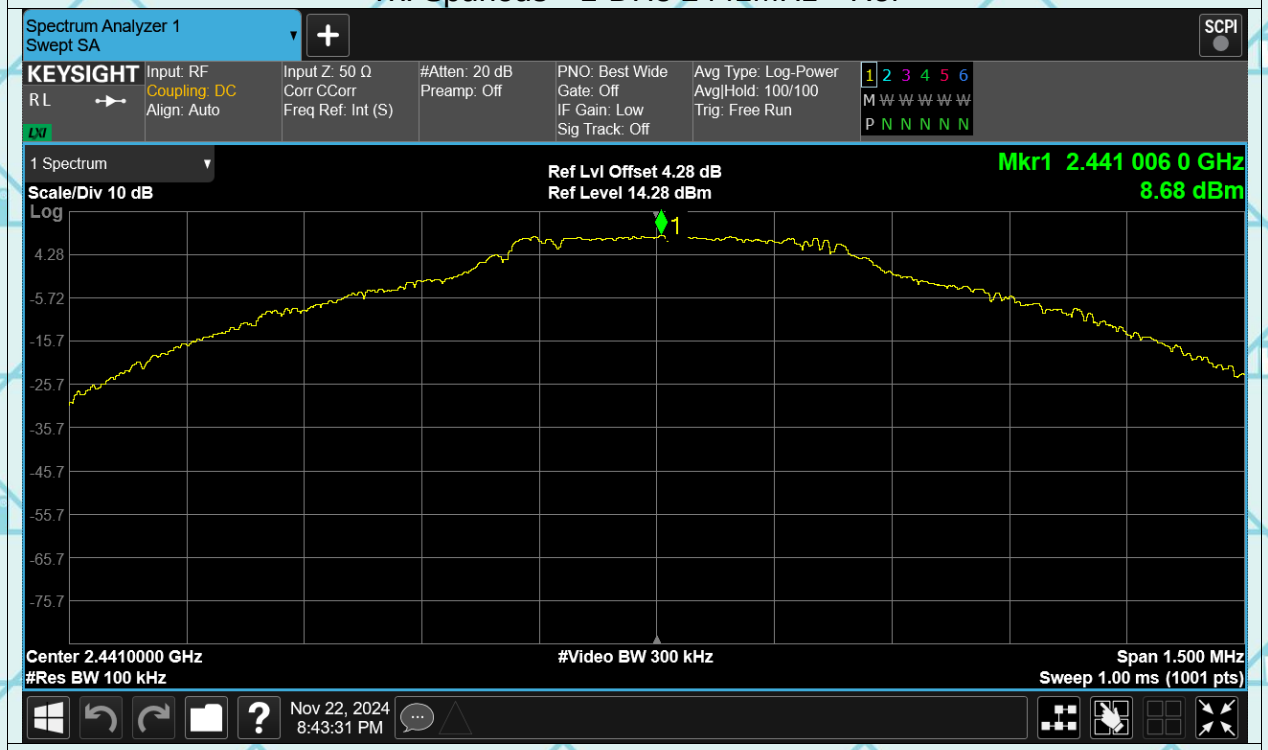


Tx. Spurious 1-DH5 2402MHz Emission



	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.401 7 GHz	7.85 dBm			
2	N	1	f	4.804 3 GHz	-13.03 dBm			
3	N	1	f	4.804 3 GHz	-13.03 dBm			
4	N	1	f	7.205 1 GHz	-44.55 dBm			
5	N	1	f	9.607 7 GHz	-42.42 dBm			
6								

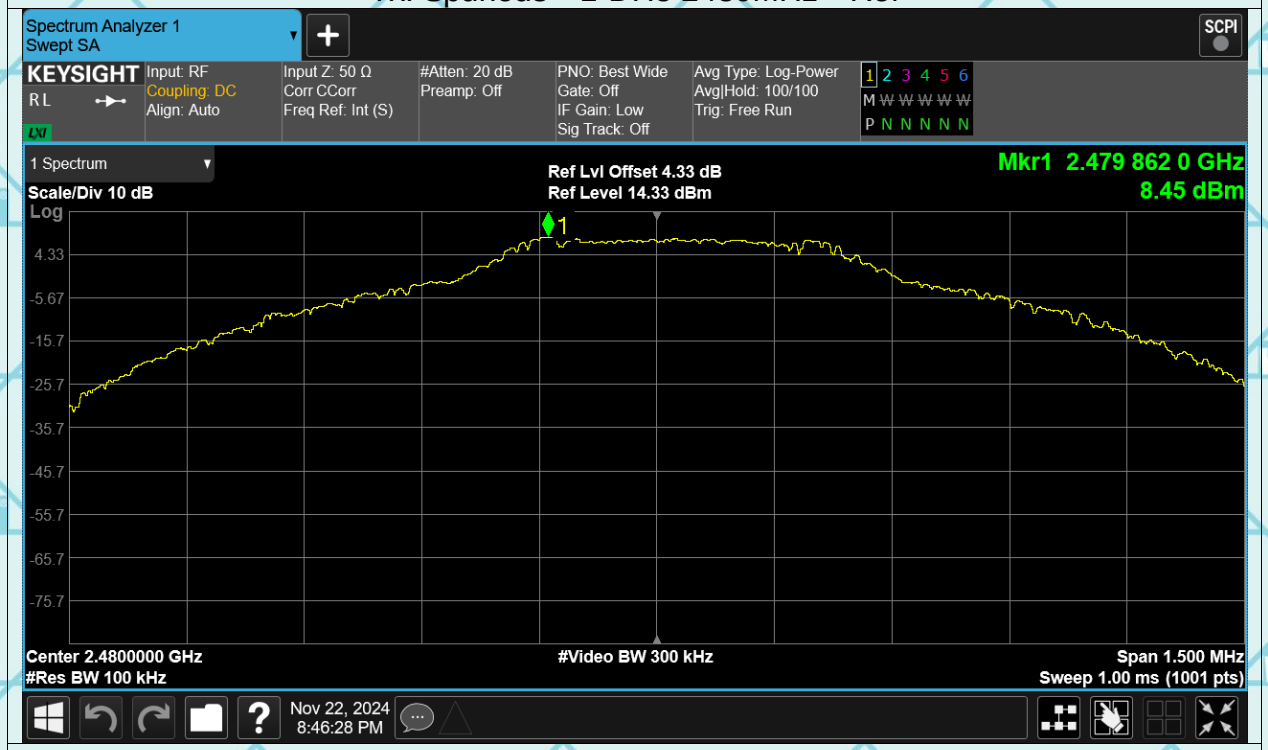
Tx. Spurious 1-DH5 2441MHz Ref



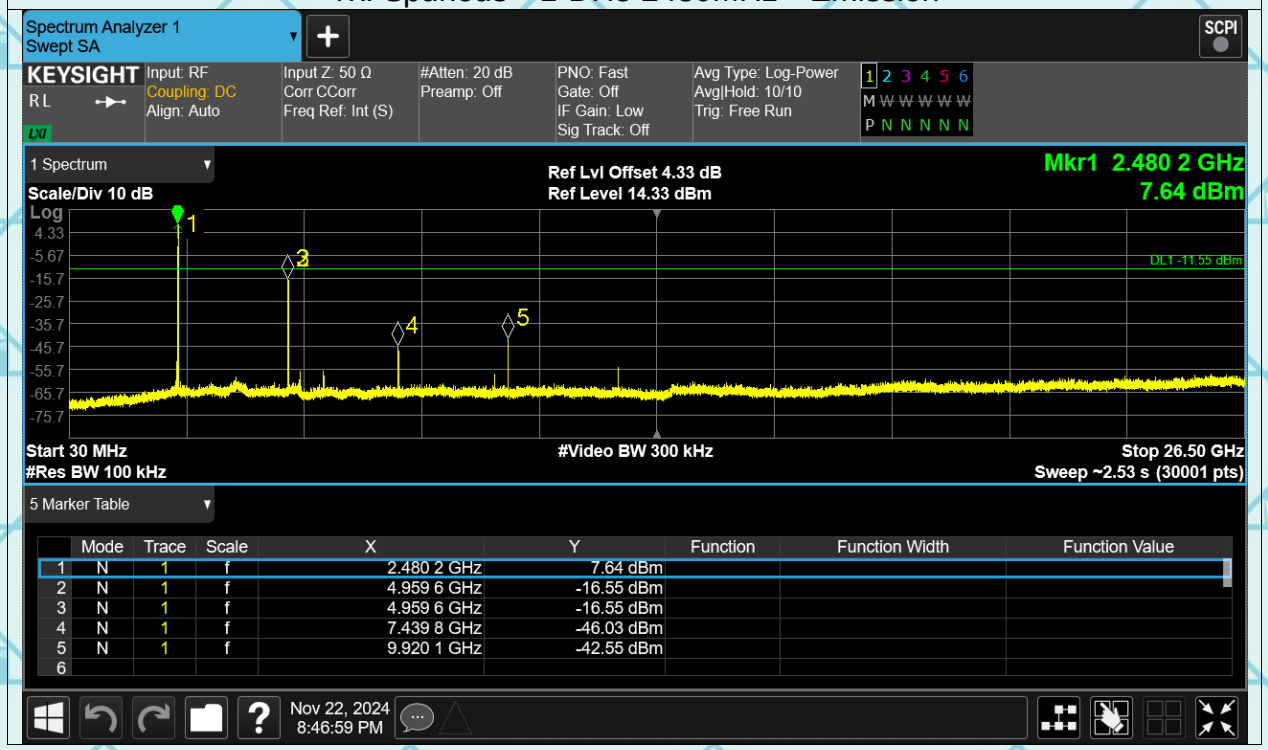
Tx. Spurious 1-DH5 2441MHz Emission

	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.441 4 GHz	8.01 dBm			
2	N	1	f	4.882 0 GHz	-14.18 dBm			
3	N	1	f	4.882 0 GHz	-14.18 dBm			
4	N	1	f	7.322 5 GHz	-42.94 dBm			
5	N	1	f	9.764 8 GHz	-43.72 dBm			
6								

Tx. Spurious 1-DH5 2480MHz Ref

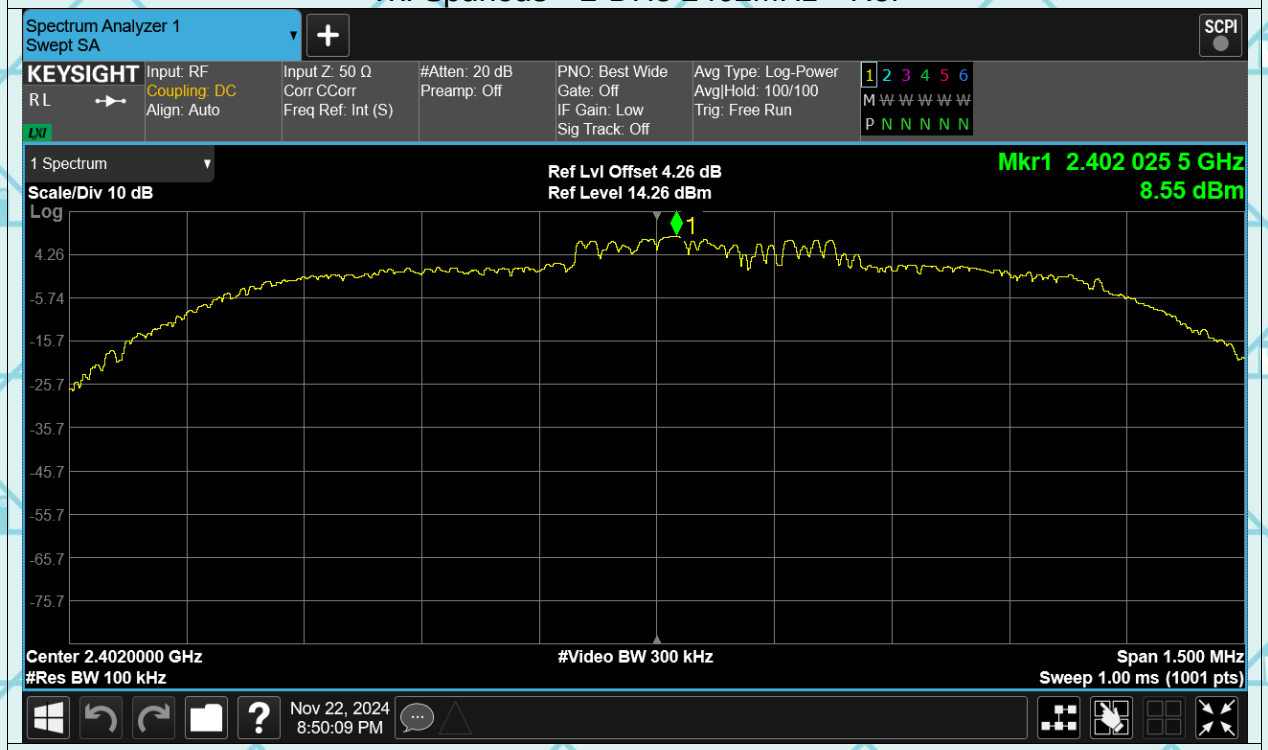


Tx. Spurious 1-DH5 2480MHz Emission



	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.480 2 GHz	7.64 dBm			
2	N	1	f	4.959 6 GHz	-16.55 dBm			
3	N	1	f	4.959 6 GHz	-16.55 dBm			
4	N	1	f	7.439 8 GHz	-46.03 dBm			
5	N	1	f	9.920 1 GHz	-42.55 dBm			
6								

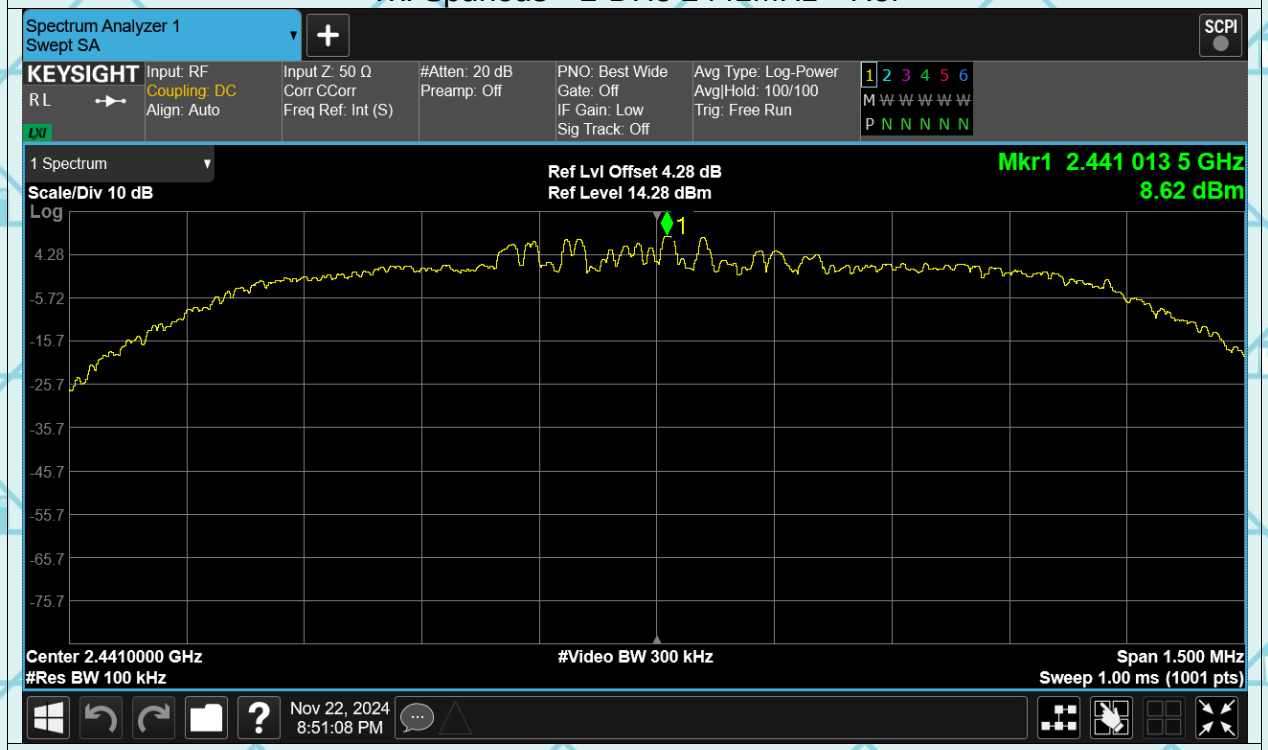
Tx. Spurious 2-DH5 2402MHz Ref



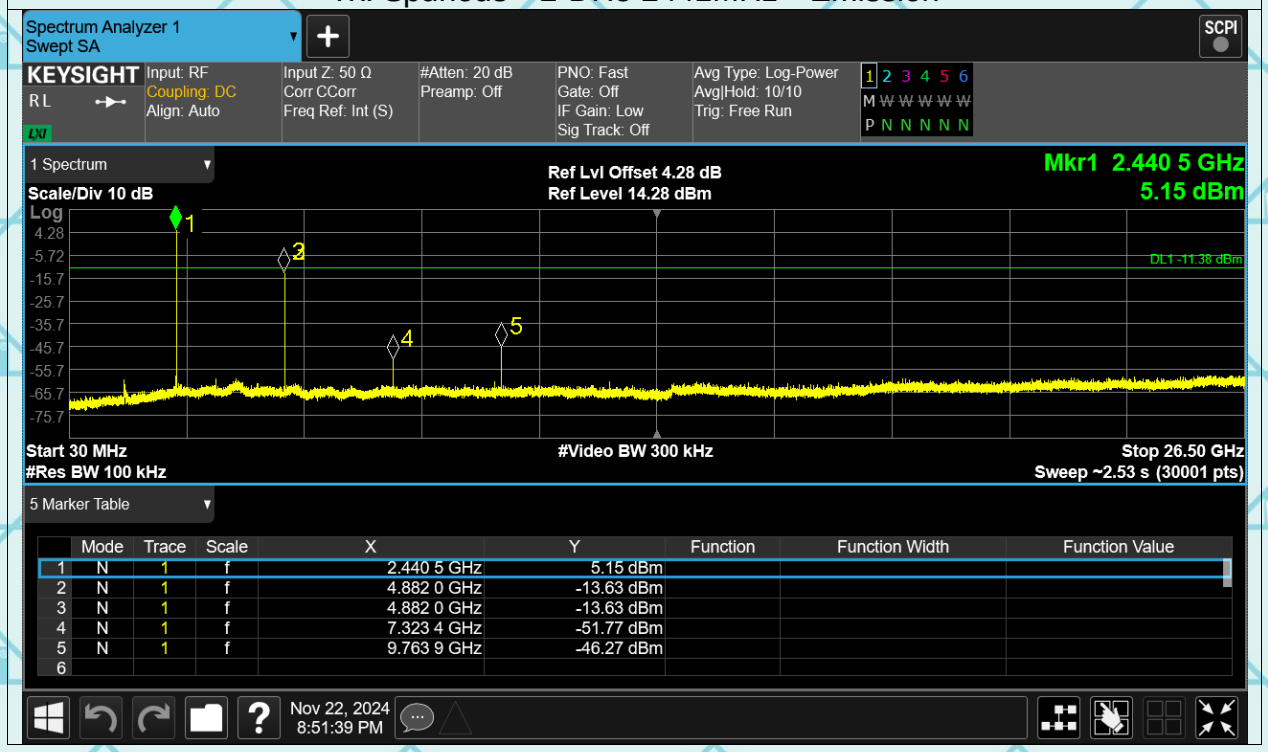
Tx. Spurious 2-DH5 2402MHz Emission

	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.401 7 GHz	2.44 dBm			
2	N	1	f	4.803 4 GHz	-20.04 dBm			
3	N	1	f	4.803 4 GHz	-20.04 dBm			
4	N	1	f	7.206 0 GHz	-51.71 dBm			
5	N	1	f	9.607 7 GHz	-47.27 dBm			
6								

Tx. Spurious 2-DH5 2441MHz Ref

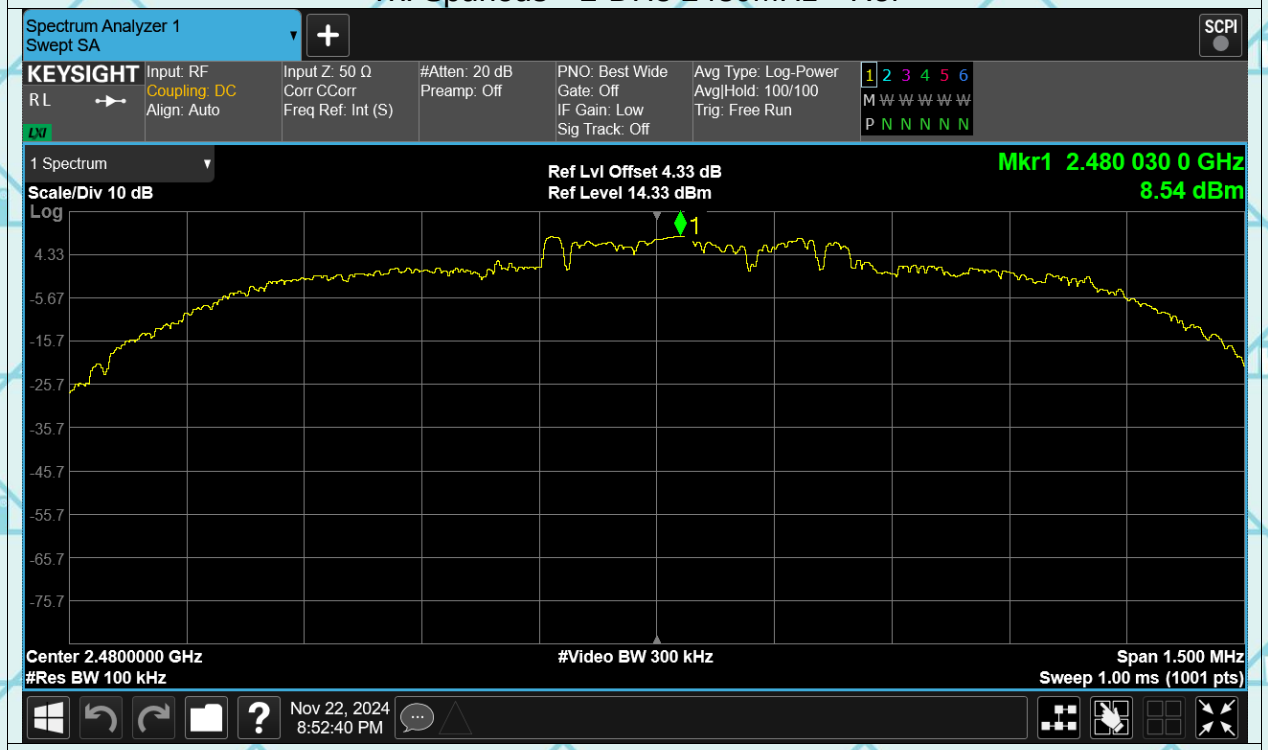


Tx. Spurious 2-DH5 2441MHz Emission

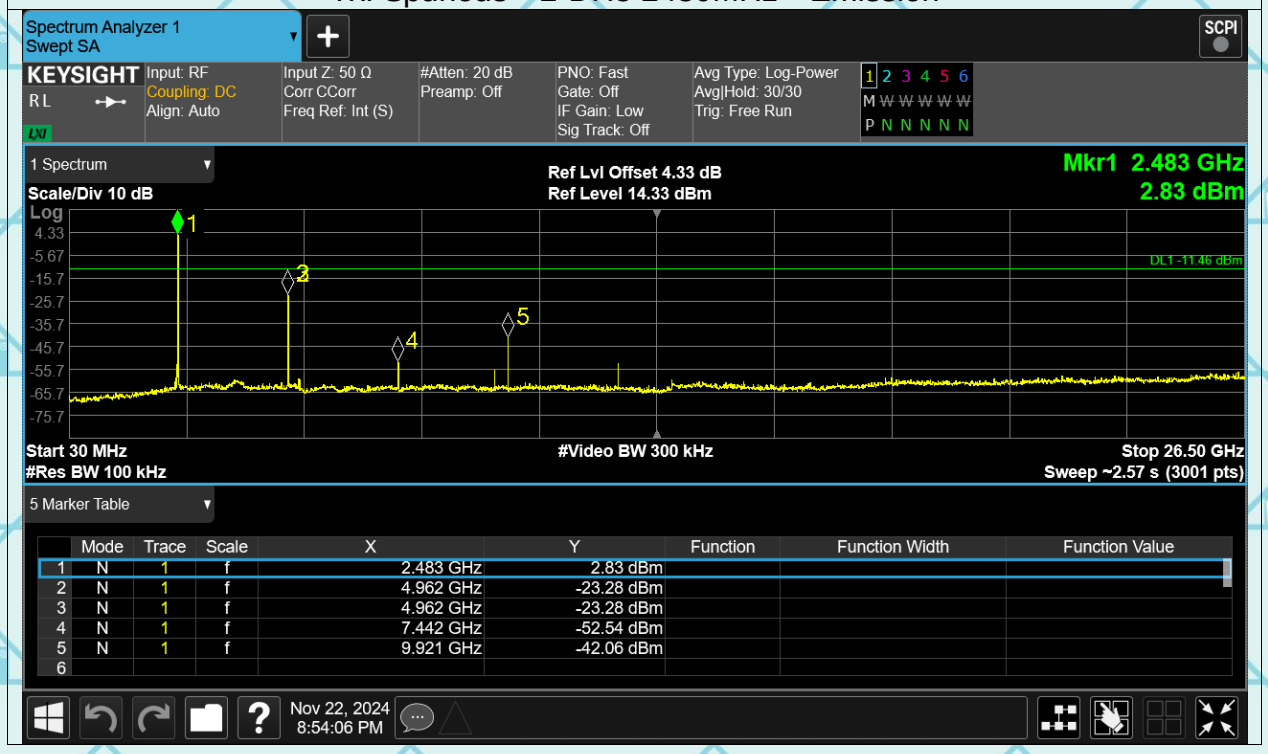


	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.440 5 GHz	5.15 dBm			
2	N	1	f	4.882 0 GHz	-13.63 dBm			
3	N	1	f	4.882 0 GHz	-13.63 dBm			
4	N	1	f	7.323 4 GHz	-51.77 dBm			
5	N	1	f	9.763 9 GHz	-46.27 dBm			
6								

Tx. Spurious 2-DH5 2480MHz Ref

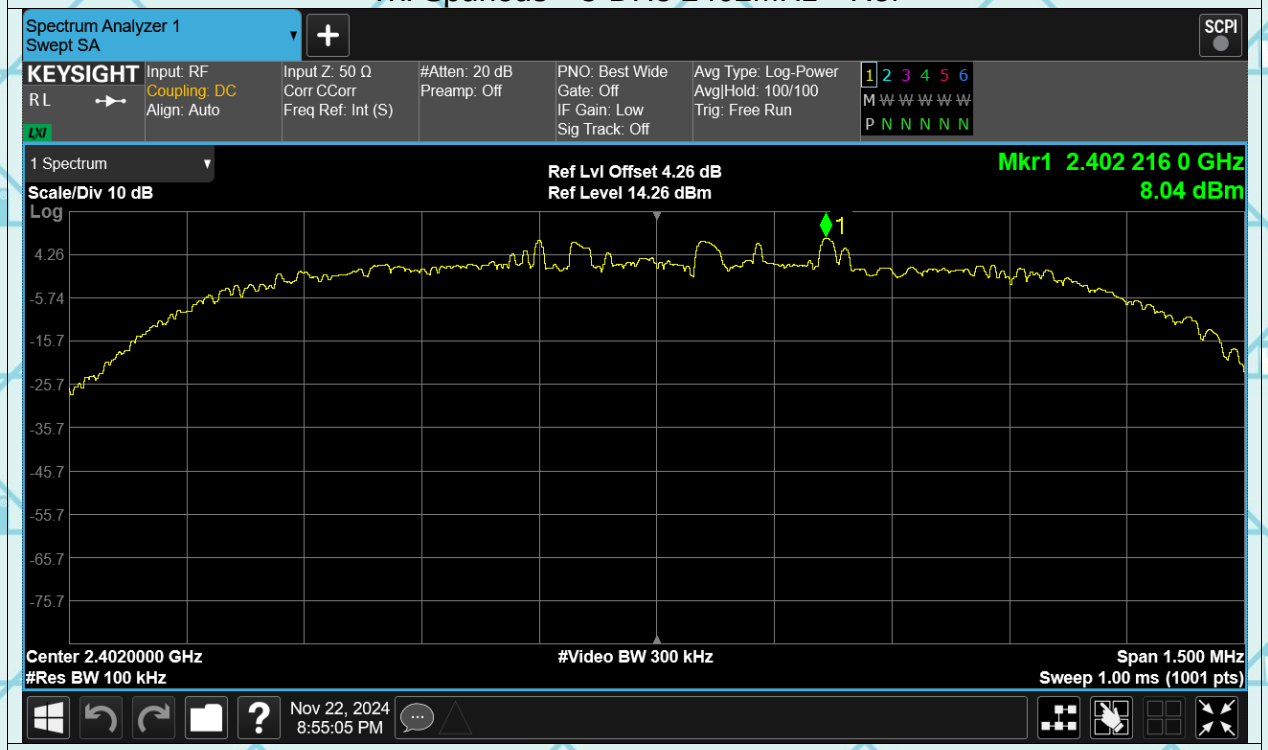


Tx. Spurious 2-DH5 2480MHz Emission



	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.483 GHz	2.83 dBm			
2	N	1	f	4.962 GHz	-23.28 dBm			
3	N	1	f	4.962 GHz	-23.28 dBm			
4	N	1	f	7.442 GHz	-52.54 dBm			
5	N	1	f	9.921 GHz	-42.06 dBm			
6								

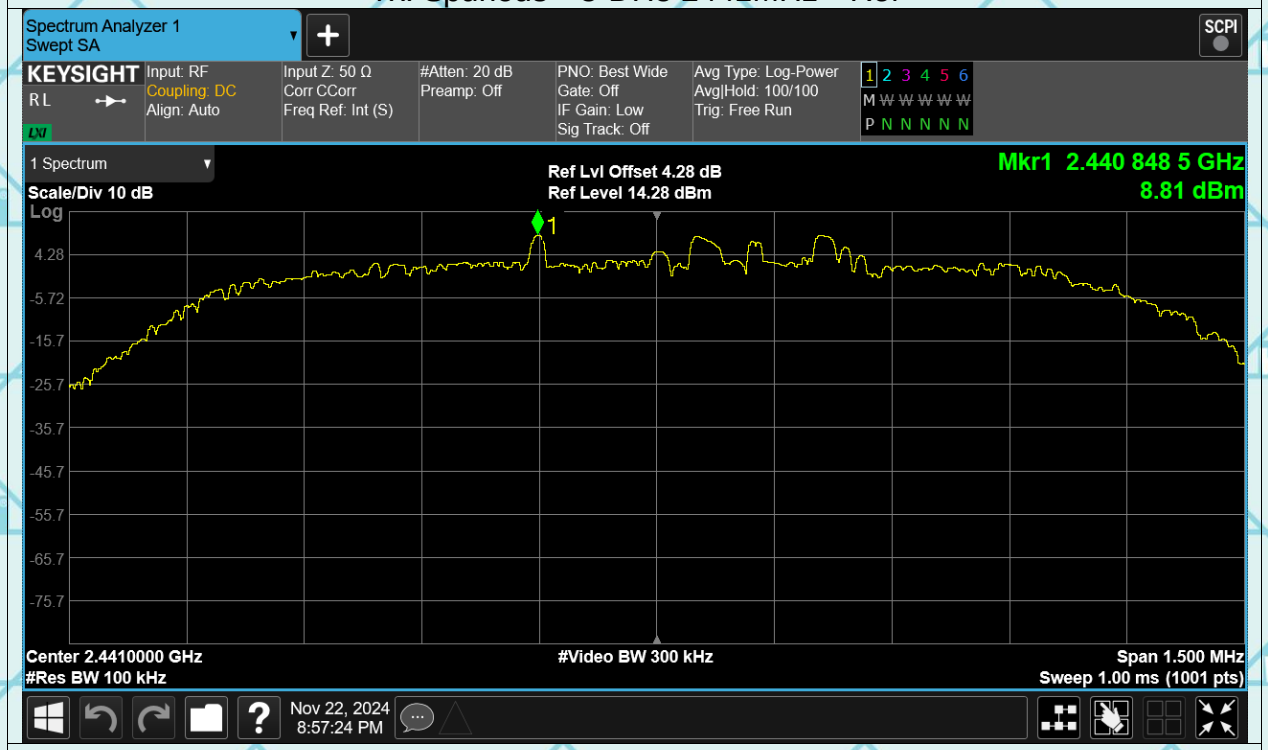
Tx. Spurious 3-DH5 2402MHz Ref



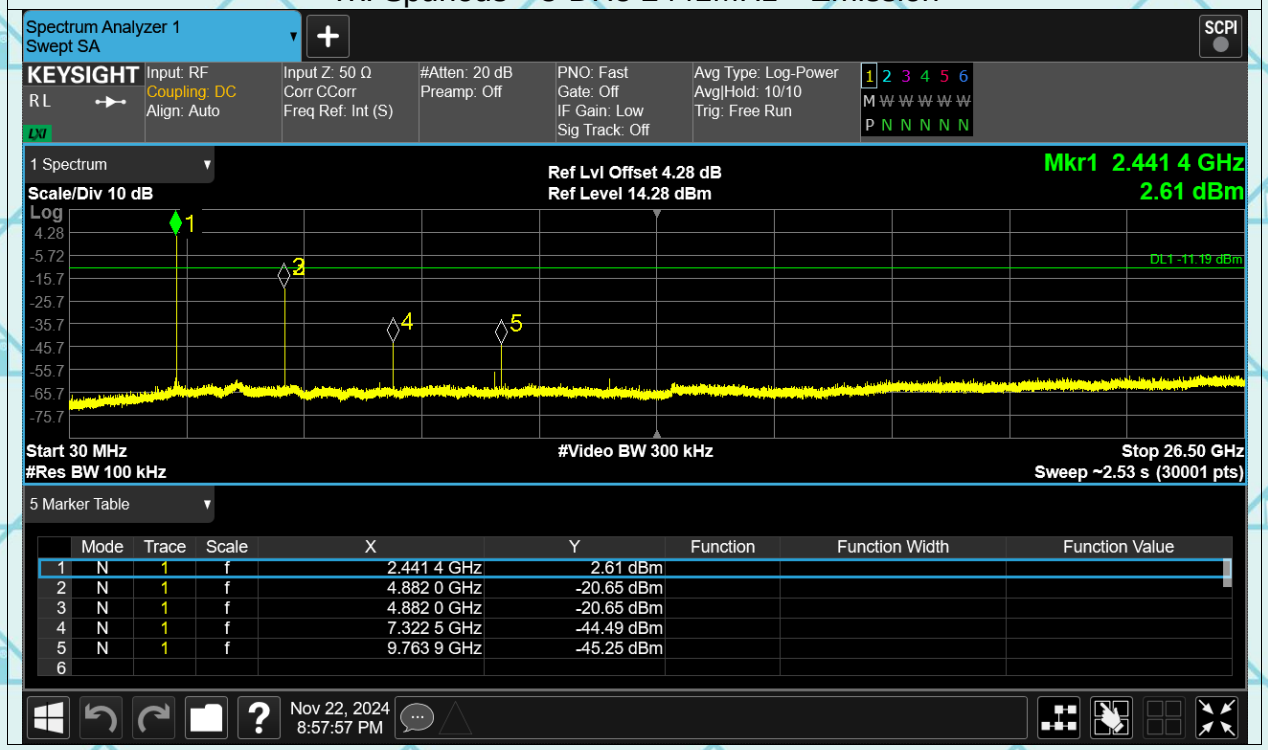
Tx. Spurious 3-DH5 2402MHz Emission

	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.401 7 GHz	2.81 dBm			
2	N	1	f	4.804 3 GHz	-17.87 dBm			
3	N	1	f	4.804 3 GHz	-17.87 dBm			
4	N	1	f	7.206 0 GHz	-46.11 dBm			
5	N	1	f	9.607 7 GHz	-39.97 dBm			
6								

Tx. Spurious 3-DH5 2441MHz Ref

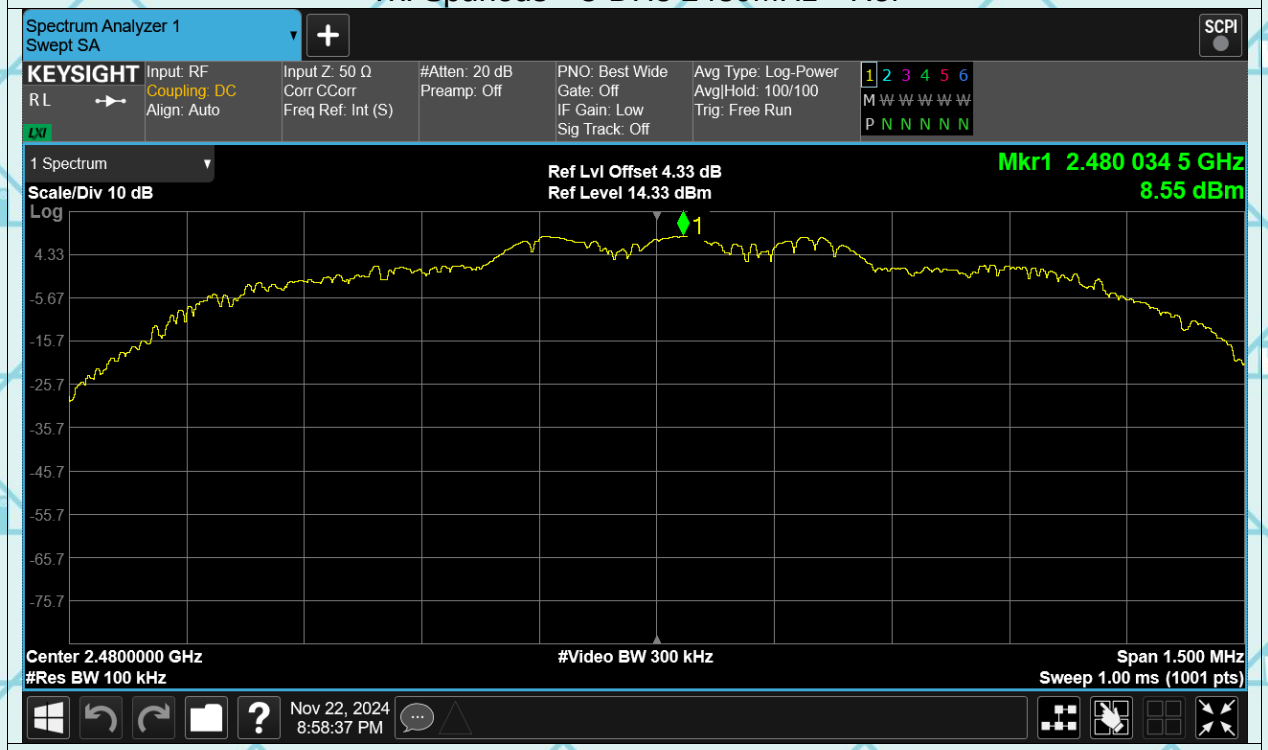


Tx. Spurious 3-DH5 2441MHz Emission

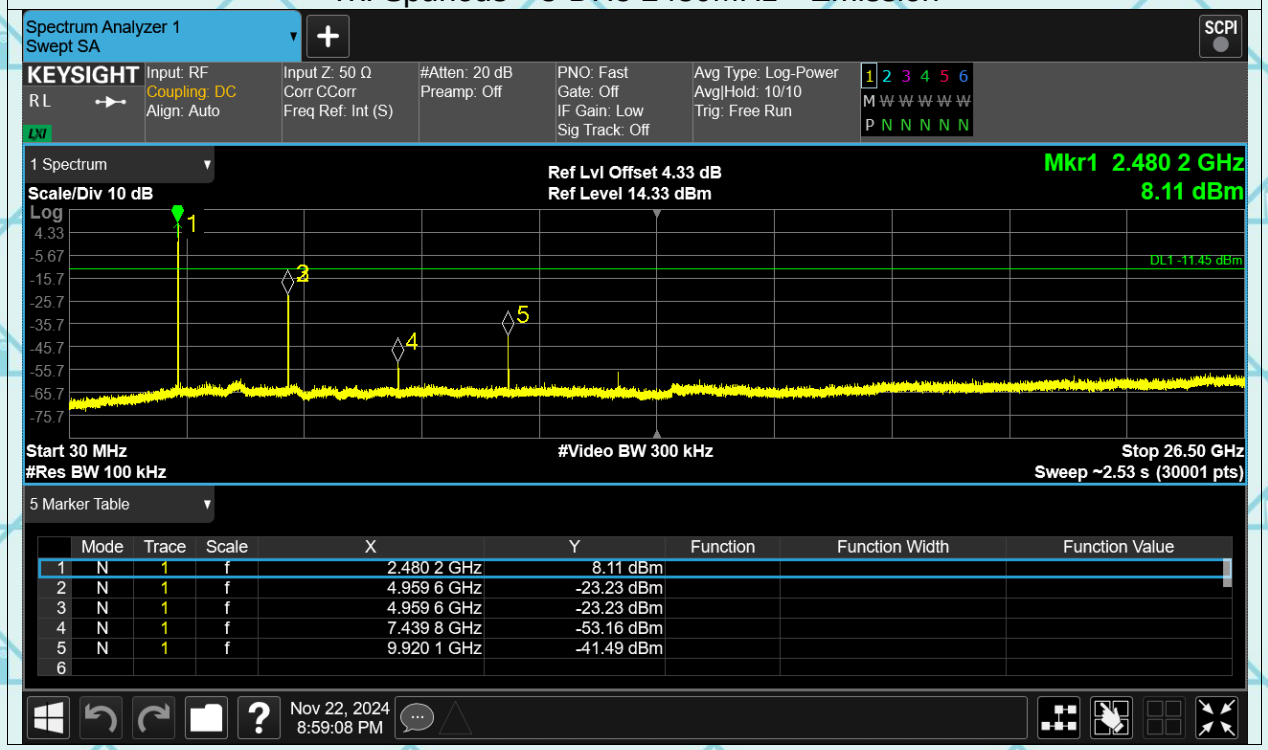


	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.441 4 GHz	2.61 dBm			
2	N	1	f	4.882 0 GHz	-20.65 dBm			
3	N	1	f	4.882 0 GHz	-20.65 dBm			
4	N	1	f	7.322 5 GHz	-44.49 dBm			
5	N	1	f	9.763 9 GHz	-45.25 dBm			
6								

Tx. Spurious 3-DH5 2480MHz Ref



Tx. Spurious 3-DH5 2480MHz Emission



	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.480 2 GHz	8.11 dBm			
2	N	1	f	4.959 6 GHz	-23.23 dBm			
3	N	1	f	4.959 6 GHz	-23.23 dBm			
4	N	1	f	7.439 8 GHz	-53.16 dBm			
5	N	1	f	9.920 1 GHz	-41.49 dBm			
6								

6.11. Radiated Spurious Emission Measurement

6.11.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.209
Test Method:	ANSI C63.10:2014
Frequency Range:	9 kHz to 25 GHz
Measurement Distance:	3 m
Antenna Polarization:	Horizontal & Vertical

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
9kHz- 150kHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value
150kHz-30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value
30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value
Above 1GHz	Peak	1MHz	3MHz	Peak Value
	Peak	1MHz	10Hz	Average Value

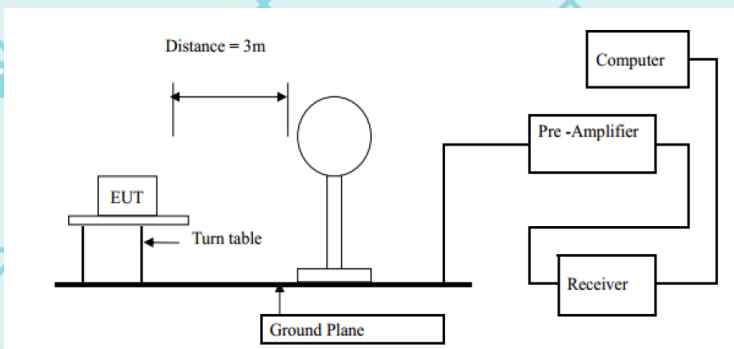
Limit:

Frequency	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009-0.490	2400/F(KHz)	300
0.490-1.705	24000/F(KHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

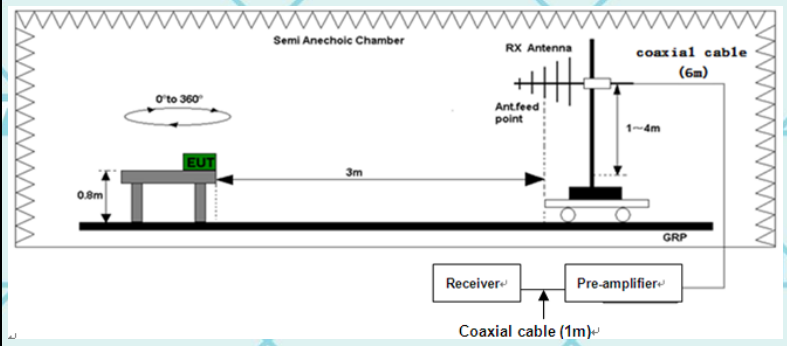
Frequency	Field Strength (microvolts/meter)	Measurement Distance (meters)	Detector
Above 1GHz	500	3	Average
	5000	3	Peak

Test setup:

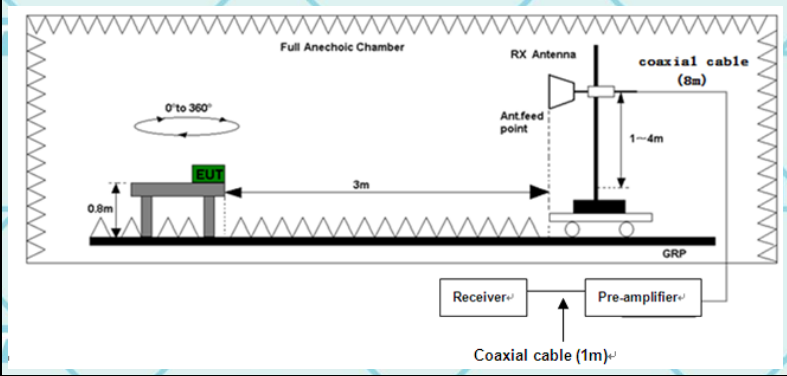
For radiated emissions below 30MHz



30MHz to 1GHz



Above 1GHz



Test Mode:	Transmitting mode with modulation
Test Procedure:	1. The testing follows the guidelines in Spurious Radiated Emissions of ANSI C63.10:2014 Measurement Guidelines. 2. For the radiated emission test below 1GHz: The EUT was placed on a turntable with 0.8 meter above ground. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high PASS filter are used for the test in order to get better signal level. For the radiated emission test above 1GHz: Place the measurement antenna on a turntable with 1.5 meter above ground, which is away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final

	measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane. 3. Set to the maximum power setting and enable the EUT transmit continuously. 4. Use the following spectrum analyzer settings: (1) Span shall wide enough to fully capture the emission being measured; (2) Set RBW=100 kHz for f < 1 GHz, RBW=1MHz for f>1GHz ; VBW≥RBW; Sweep = auto; Detector function = peak; Trace = max hold for peak (3) For average measurement: use duty cycle correction factor method per 15.35(c). Duty cycle = On time/100 milliseconds On time =N1*L1+N2*L2+...+Nn-1*LNn-1+Nn*Ln Where N1 is number of type 1 pulses, L1 is length of type 1 pulses, etc. Average Emission Level = Peak Emission Level + 20*log(Duty cycle) Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
Test results:	PASS

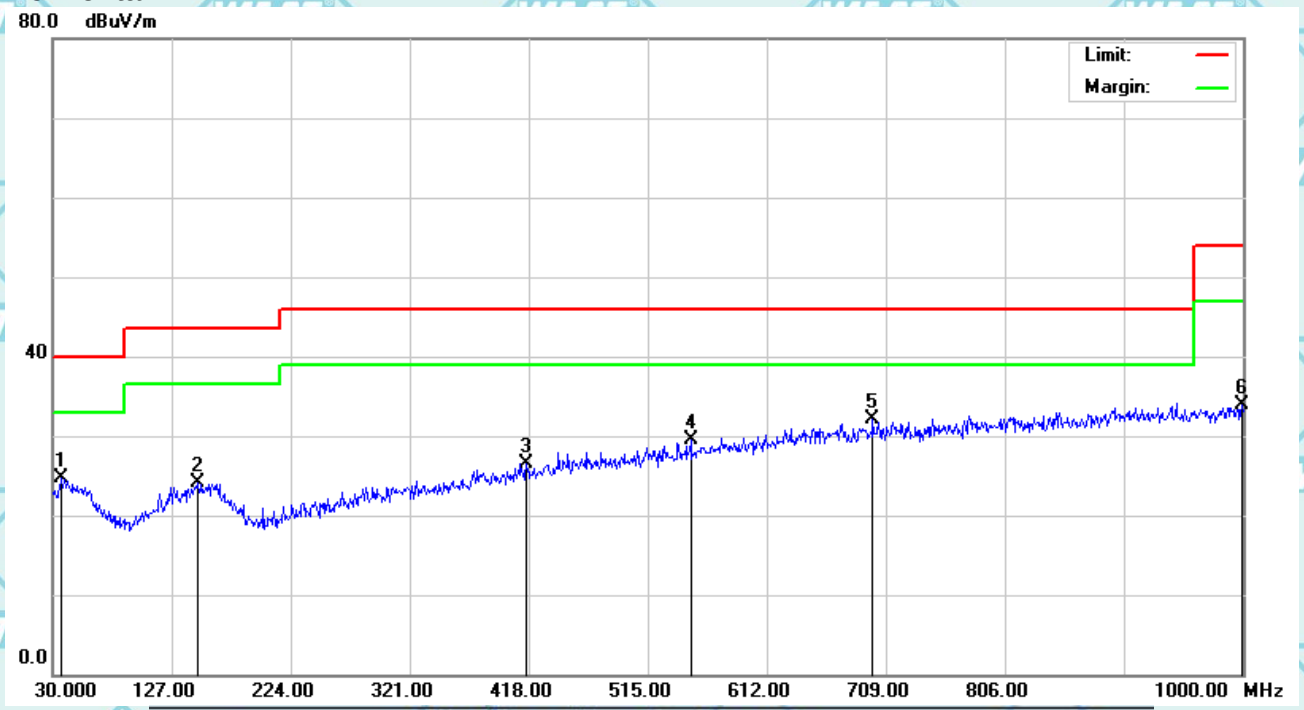
6.11.2. Test Data

Please refer to following diagram for individual

Below 1GHz

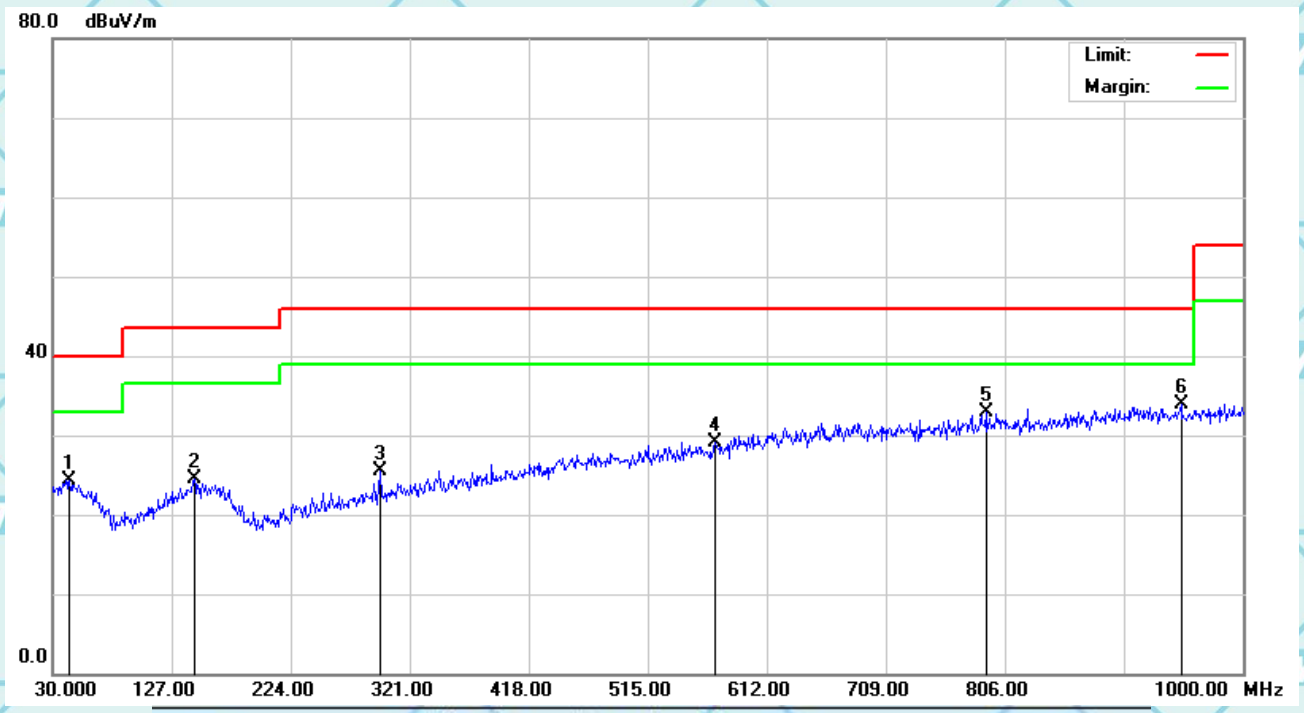
The worst mode is GFSK

Horizontal:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		36.7900	26.68	-1.90	24.78	40.00	-15.22	QP
2		148.3400	25.90	-1.79	24.11	43.50	-19.39	QP
3		416.0600	26.40	0.18	26.58	46.00	-19.42	QP
4		549.9200	26.84	2.62	29.46	46.00	-16.54	QP
5	*	698.3300	27.05	5.07	32.12	46.00	-13.88	QP
6		999.0300	25.43	8.44	33.87	54.00	-20.13	QP

Vertical:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		43.5800	26.28	-1.88	24.40	40.00	-15.60	QP
2		145.4299	26.51	-1.98	24.53	43.50	-18.97	QP
3		296.7500	28.22	-2.63	25.59	46.00	-20.41	QP
4		570.2900	26.00	3.13	29.13	46.00	-16.87	QP
5		790.4800	26.51	6.31	32.82	46.00	-13.18	QP
6	*	949.5600	25.75	8.10	33.85	46.00	-12.15	QP

Note1:
Freq. = Emission frequency in MHz
Reading level (dBµV) = Receiver reading
Corr. Factor (dB) = Antenna factor + Cable loss - Amplifier factor.
Measurement (dBµV) = Reading level (dBµV) + Corr. Factor (dB)
Limit (dBµV) = Limit stated in standard
Margin (dB) = Measurement (dBµV) – Limits (dBµV)

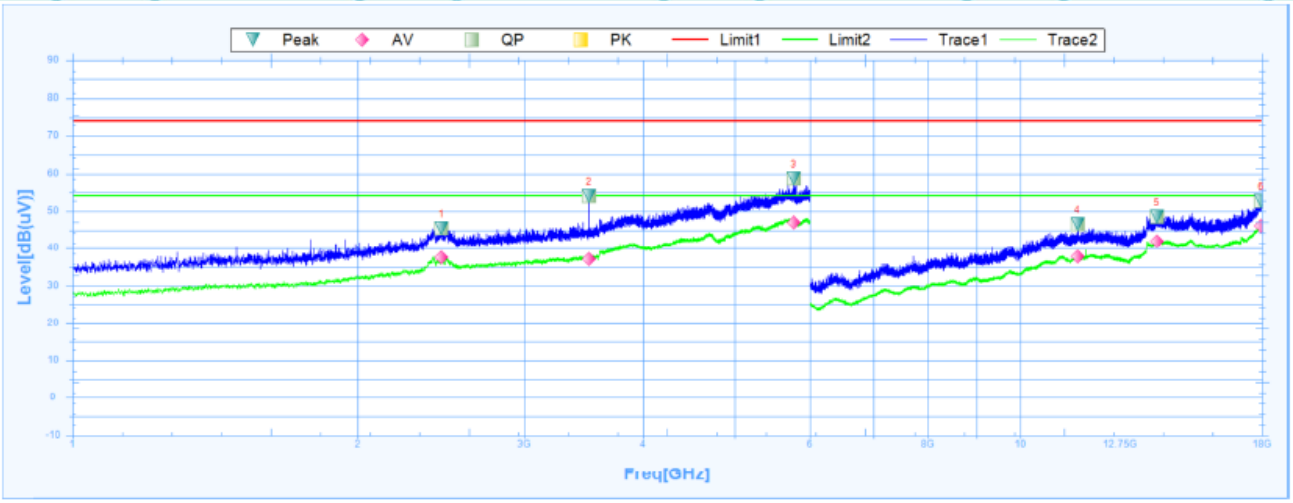
Above 1GHz

Note 1: The marked spikes near 2400 MHz with circle should be ignored because they are Fundamental signal.

Note 2: The spurious above 18G is noise only, do not show on the report.
The worst mode is GFSK

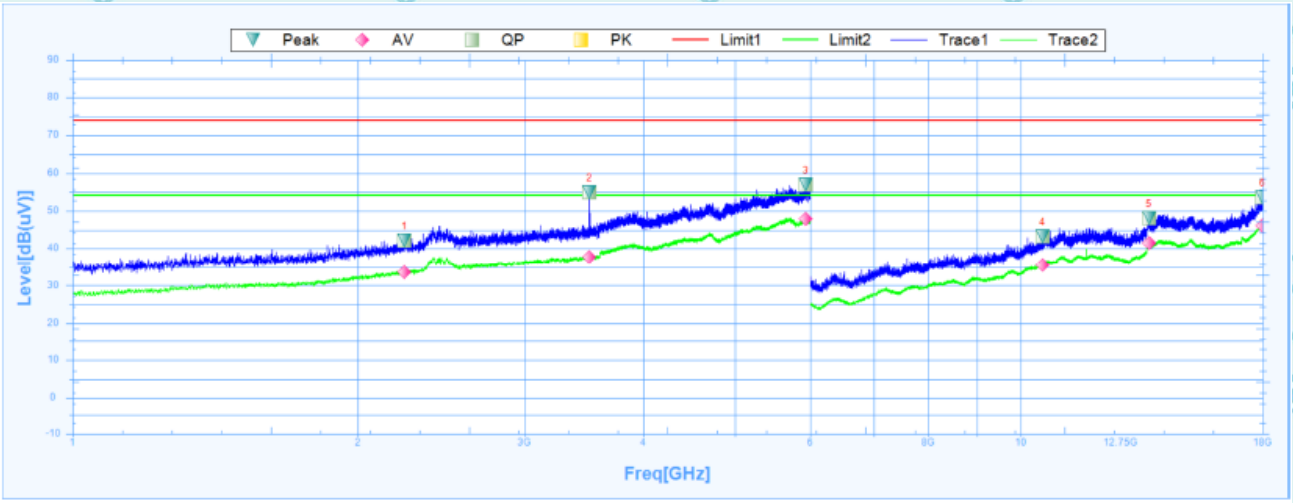
Low channel: 2402MHz

Horizontal:



Susputed Data List										
NO.	Freq. [MHz]	Reading [dB(uV)]	Factor [dB]	Level [dB(uV)]	Limit [dB]	Margin [dB]	Deg [°]	Polarity	Trace	Verdict
1	2450.6250	45.38	7.74	37.64	74	-28.62	-0.1	Horizontal	PK	Pass
1	2450.6250	37.53	7.74	29.79	54	-16.47	-0.1	Horizontal	AV	Pass
2	3510.0000	54.01	9.7	44.31	74	-19.99	18.9	Horizontal	PK	Pass
2	3510.0000	37.1	9.7	27.4	54	-16.9	18.9	Horizontal	AV	Pass
3	5770.0000	58.7	21	37.7	74	-15.3	241.2	Horizontal	PK	Pass
3	5770.0000	46.94	21	25.94	54	-7.06	241.2	Horizontal	AV	Pass
4	11494.5000	46.49	39.05	7.44	74	-27.51	0.1	Horizontal	PK	Pass
4	11494.5000	37.66	39.05	-1.39	54	-16.34	0.1	Horizontal	AV	Pass
5	13939.5000	48.64	41.34	7.3	74	-25.36	291.5	Horizontal	PK	Pass
5	13939.5000	41.87	41.34	0.53	54	-12.13	291.5	Horizontal	AV	Pass
6	17959.5000	52.76	46.23	6.53	74	-21.24	155.2	Horizontal	PK	Pass
6	17959.5000	46.02	46.23	-0.21	54	-7.98	155.2	Horizontal	AV	Pass

Vertical:

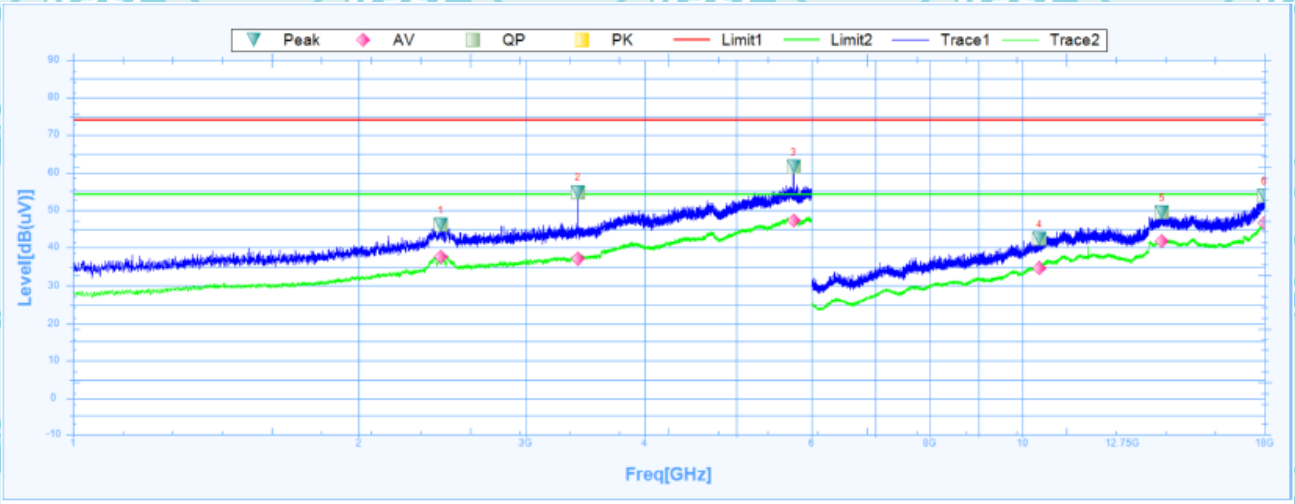


Susputed Data List

NO.	Freq. [MHz]	Reading [dB(uV)]	Factor [dB]	Level [dB(uV)]	Limit [dB]	Margin [dB]	Deg [°]	Polarity	Trace	Verdict
1	2239.3750	42.12	4.42	37.7	74	-31.88	159.4	Vertical	PK	Pass
1	2239.3750	33.6	4.42	29.18	54	-20.4	159.4	Vertical	AV	Pass
2	3511.8750	54.9	9.71	45.19	74	-19.1	258.6	Vertical	PK	Pass
2	3511.8750	37.65	9.71	27.94	54	-16.35	258.6	Vertical	AV	Pass
3	5938.1250	57.03	22.05	34.98	74	-16.97	333.8	Vertical	PK	Pass
3	5938.1250	47.85	22.05	25.8	54	-6.15	333.8	Vertical	AV	Pass
4	10549.5000	43.31	38.87	4.44	74	-30.69	0	Vertical	PK	Pass
4	10549.5000	35.56	38.87	-3.31	54	-18.44	0	Vertical	AV	Pass
5	13659.0000	48.02	40.61	7.41	74	-25.98	295	Vertical	PK	Pass
5	13659.0000	41.38	40.61	0.77	54	-12.62	295	Vertical	AV	Pass
6	17995.5000	53.61	46.47	7.14	74	-20.39	0	Vertical	PK	Pass
6	17995.5000	46.22	46.47	-0.25	54	-7.78	0	Vertical	AV	Pass

Middle channel: 2440MHz

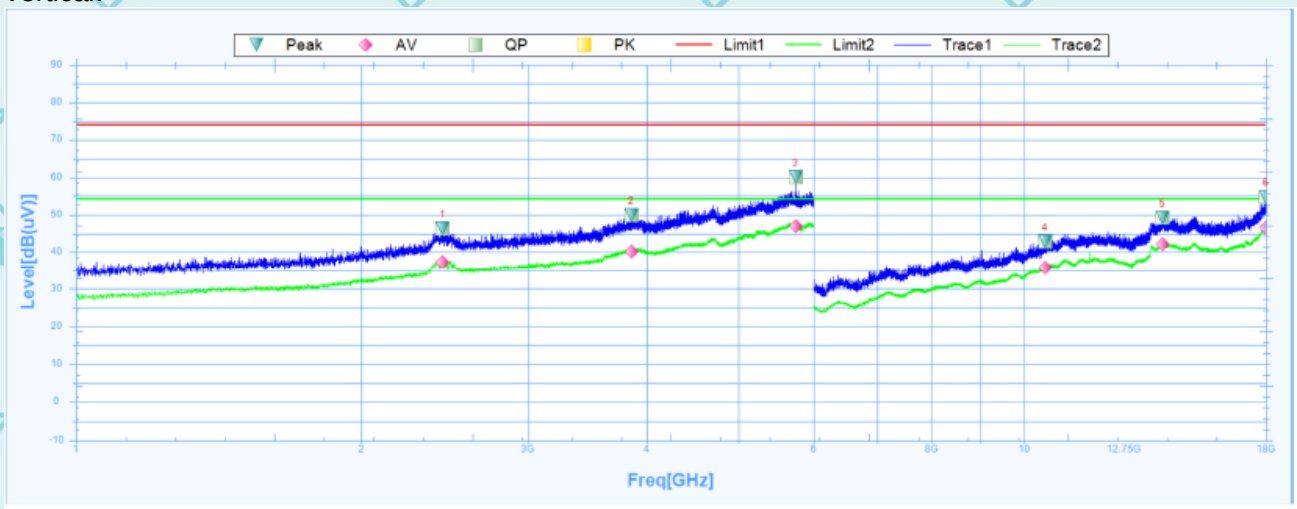
Horizontal:



Susputed Data List

NO.	Freq. [MHz]	Reading [dB(uV)]	Factor [dB]	Level [dB(uV)]	Limit [dB]	Margin [dB]	Deg [°]	Polarity	Trace	Verdict
1	2440.0000	46.2	7.71	38.49	74	-27.8	154.7	Horizontal	PK	Pass
1	2440.0000	37.51	7.71	29.8	54	-16.49	154.7	Horizontal	AV	Pass
2	3405.0000	54.84	9.37	45.47	74	-19.16	240.9	Horizontal	PK	Pass
2	3405.0000	37.11	9.37	27.74	54	-16.89	240.9	Horizontal	AV	Pass
3	5743.7500	61.48	21.16	40.32	74	-12.52	14.2	Horizontal	PK	Pass
3	5743.7500	47.33	21.16	26.17	54	-6.67	14.2	Horizontal	AV	Pass
4	10429.5000	42.33	38.7	3.63	74	-31.67	180.2	Horizontal	PK	Pass
4	10429.5000	34.72	38.7	-3.98	54	-19.28	180.2	Horizontal	AV	Pass
5	14043.0000	49.47	41.44	8.03	74	-24.53	27.2	Horizontal	PK	Pass
5	14043.0000	41.6	41.44	0.16	54	-12.4	27.2	Horizontal	AV	Pass
6	17994.0000	53.93	46.46	7.47	74	-20.07	136	Horizontal	PK	Pass
6	17994.0000	46.62	46.46	0.16	54	-7.38	136	Horizontal	AV	Pass

Vertical:

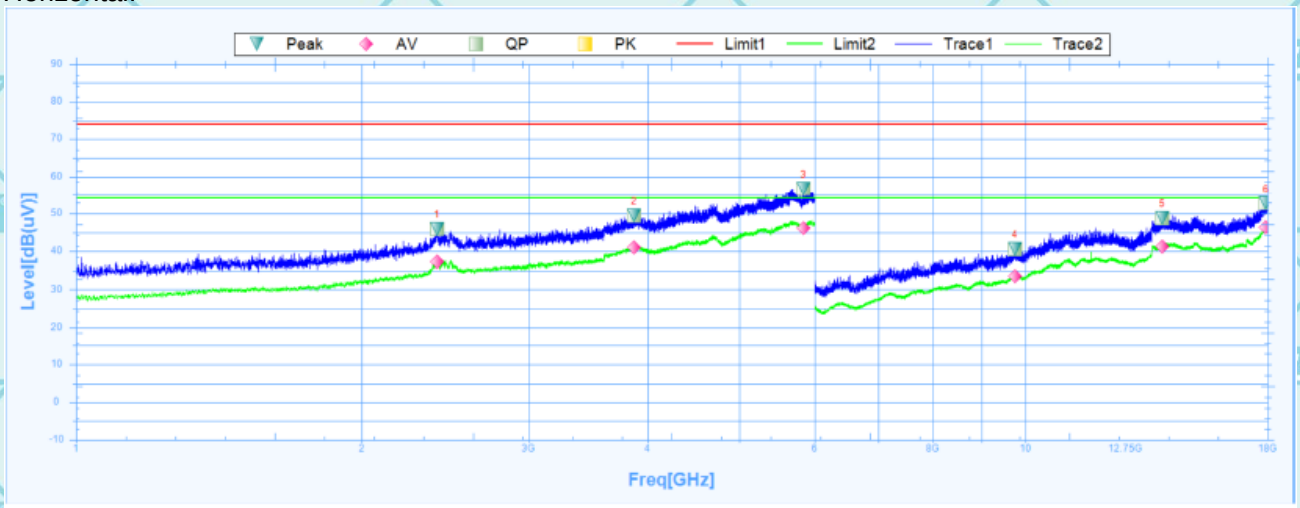


Susputed Data List

NO.	Freq. [MHz]	Reading [dB(uV)]	Factor [dB]	Level [dB(uV)]	Limit [dB]	Margin [dB]	Deg [°]	Polarity	Trace	Verdict
1	2435.6250	46.42	7.69	38.73	74	-27.58	323.1	Vertical	PK	Pass
1	2435.6250	37.22	7.69	29.53	54	-16.78	323.1	Vertical	AV	Pass
2	3852.5000	49.87	11.34	38.53	74	-24.13	192.8	Vertical	PK	Pass
2	3852.5000	40.23	11.34	28.89	54	-13.77	192.8	Vertical	AV	Pass
3	5742.5000	59.95	21.17	38.78	74	-14.05	282.5	Vertical	PK	Pass
3	5742.5000	47.02	21.17	25.85	54	-6.98	282.5	Vertical	AV	Pass
4	10522.5000	42.9	38.83	4.07	74	-31.1	332	Vertical	PK	Pass
4	10522.5000	35.78	38.83	-3.05	54	-18.22	332	Vertical	AV	Pass
5	13995.0000	49.18	41.49	7.69	74	-24.82	353.5	Vertical	PK	Pass
5	13995.0000	42.09	41.49	0.6	54	-11.91	353.5	Vertical	AV	Pass
6	17995.5000	54.74	46.47	8.27	74	-19.26	225.6	Vertical	PK	Pass
6	17995.5000	46.67	46.47	0.2	54	-7.33	225.6	Vertical	AV	Pass

High channel: 2480MHz

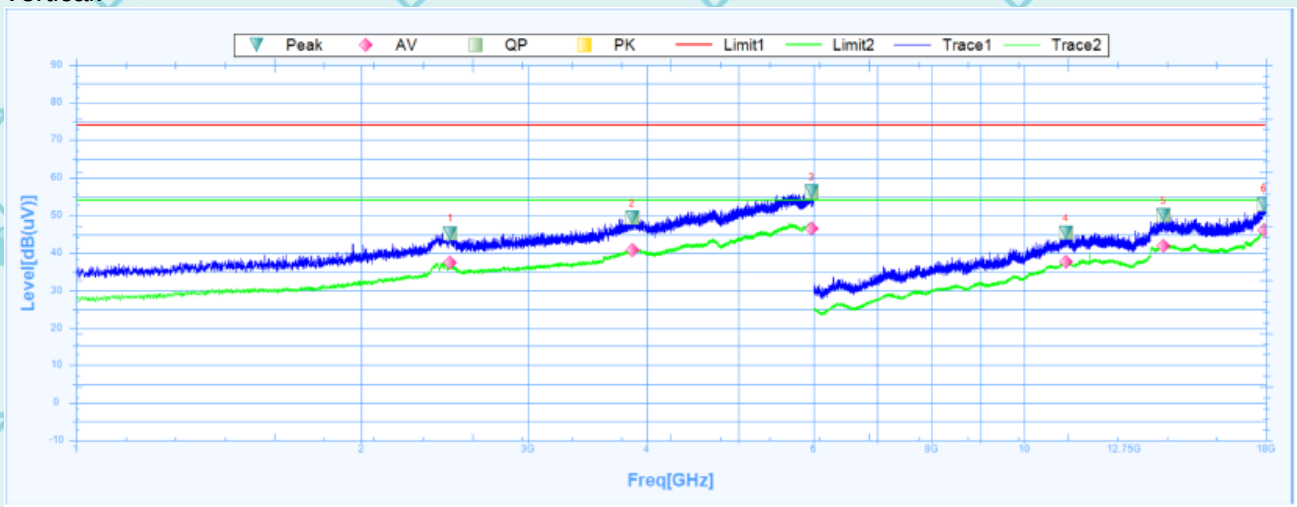
Horizontal:



Susputed Data List

NO.	Freq. [MHz]	Reading [dB(uV)]	Factor [dB]	Level [dB(uV)]	Limit [dB]	Margin [dB]	Deg [°]	Polarity	Trace	Verdict
1	2400.6250	45.94	7.57	38.37	74	-28.06	304.2	Horizontal	PK	Pass
1	2400.6250	37.23	7.57	29.66	54	-16.77	304.2	Horizontal	AV	Pass
2	3873.7500	49.52	11.52	38	74	-24.48	164.3	Horizontal	PK	Pass
2	3873.7500	40.98	11.52	29.46	54	-13.02	164.3	Horizontal	AV	Pass
3	5842.5000	56.65	20.87	35.78	74	-17.35	95	Horizontal	PK	Pass
3	5842.5000	46.22	20.87	25.35	54	-7.78	95	Horizontal	AV	Pass
4	9756.0000	40.64	37.93	2.71	74	-33.36	225.7	Horizontal	PK	Pass
4	9756.0000	33.44	37.93	-4.49	54	-20.56	225.7	Horizontal	AV	Pass
5	13945.5000	48.79	41.36	7.43	74	-25.21	271.1	Horizontal	PK	Pass
5	13945.5000	41.34	41.36	-0.02	54	-12.66	271.1	Horizontal	AV	Pass
6	17935.5000	52.83	46.07	6.76	74	-21.17	60.7	Horizontal	PK	Pass
6	17935.5000	46.44	46.07	0.37	54	-7.56	60.7	Horizontal	AV	Pass

Vertical:



Susputed Data List

NO.	Freq. [MHz]	Reading [dB(uV)]	Factor [dB]	Level [dB(uV)]	Limit [dB]	Margin [dB]	Deg [°]	Polarity	Trace	Verdict
1	2481.8750	45.34	7.85	37.49	74	-28.66	241.3	Vertical	PK	Pass
1	2481.8750	37.43	7.85	29.58	54	-16.57	241.3	Vertical	AV	Pass
2	3860.0000	49.38	11.39	37.99	74	-24.62	359.5	Vertical	PK	Pass
2	3860.0000	40.92	11.39	29.53	54	-13.08	359.5	Vertical	AV	Pass
3	5973.1250	56.24	21.8	34.44	74	-17.76	105	Vertical	PK	Pass
3	5973.1250	46.59	21.8	24.79	54	-7.41	105	Vertical	AV	Pass
4	11067.0000	45.5	39.44	6.06	74	-28.5	128.4	Vertical	PK	Pass
4	11067.0000	37.81	39.44	-1.63	54	-16.19	128.4	Vertical	AV	Pass
5	14032.5000	50.12	41.46	8.66	74	-23.88	114.1	Vertical	PK	Pass
5	14032.5000	41.99	41.46	0.53	54	-12.01	114.1	Vertical	AV	Pass
6	17910.0000	53.07	45.9	7.17	74	-20.93	35.2	Vertical	PK	Pass
6	17910.0000	46.02	45.9	0.12	54	-7.98	35.2	Vertical	AV	Pass

Note:

1. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
2. *Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency.*
3. *Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.*
4. *Measurements were conducted in all three modulation (GFSK, Pi/4 DQPSK, 8DPSK), and the worst case Mode (GFSK) was submitted only.*

6.11.3 Restricted Bands Requirements

Bluetooth (GFSK, Pi/4-DQPSK, 8DPSK)mode have been tested, and the worst result GFSK model was report as below

Frequency	Reading	Correct Factor	Emission Level	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel							
2387	64.29	-8.76	55.53	74	18.47	H	PK
2387	55.13	-8.76	46.37	54	7.63	H	AV
2387	60.65	-8.73	51.92	74	22.08	V	PK
2387	55.88	-8.73	47.15	54	6.85	V	AV
2390	60.37	-8.76	51.61	74	22.39	H	PK
2390	54.98	-8.76	46.22	54	7.78	H	AV
2390	61.22	-8.73	52.49	74	21.51	V	PK
2390	56.02	-8.73	47.29	54	6.71	V	AV
High Channel							
2483.5	61.09	-8.76	52.33	74	21.67	H	PK
2483.5	55.69	-8.76	46.93	54	7.07	H	AV
2483.5	59.38	-8.73	50.65	74	23.35	V	PK
2483.5	55.70	-8.73	46.97	54	7.03	V	AV

Note: Freq. = Emission frequency in MHz
Reading level (dBµV) = Receiver reading
Corr. Factor (dB) = Attenuation factor + Cable loss
Level (dBµV) = Reading level (dBµV) + Corr. Factor (dB)
Limit (dBµV) = Limit stated in standard
Margin (dB) = Level (dBµV) – Limits (dBµV)

*******END OF REPORT*******