11. TX Radiated Spurious Emission and Conducted Spurious Emission

11.1 Test Setup

Refer to the APPENDIX I.

11.2 Limit

According to §15.247(d), in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph(b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in section §15.209(a) is not required. In addition, radiated emission which in the restricted band, as define in section §15.205(a), must also comply the radiated emission limits specified in section §15.209(a) (see section §15.205(c))

According to § 15.209(a), except as provided elsewhere in this Subpart, the emissions from an intentional
radiator shall not exceed the field strength levels specified in the following table

Frequency (MHz)	Limit (uV/m)	Measurement Distance (meter)
0.009 ~ 0.490	2400/F (kHz)	300
0.490 ~ 1705	24000/F (kHz)	30
1705 ~ 30.0	30	30
30 ~ 88	100 **	3
88 ~ 216	150 **	3
216 ~ 960	200 **	3
Above 960	500	3

** Except as provided in 15.209(g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54 – 72 MHz, 76 – 88 MHz, 174 – 216 MHz or 470 – 806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g. 15.231 and 15.241.

According to § 15.205(a) and (b), only spurious emissions are permitted in any of
The frequency bands listed below:

MHz	MHz	MHz	GHz
0.009 ~ 0.110	16.42 ~ 16.423	399.90 ~ 410	4.5 ~ 5.15
0.495 ~ 0.505	16.69475 ~ 16.69525	608 ~ 614	5.35 ~ 5.46
2.1735 ~ 2.1905	16.80425 ~ 16.80475	960 ~ 1240	7.25 ~ 7.75
4.125 ~ 4.128	25.5 ~ 25.67	1300 ~ 1427	8.025 ~ 8.5
4.17725 ~ 4.17775	37.5 ~ 38.	1435 ~ 1626.5	9.0 ~ 9.2
4.20725 ~ 4.20775	25 73 ~ 74.6	1645.5 ~ 1646.5	9.3 ~ 9.5
4.17725 ~ 4.17775	74.8 ~ 75.2	1660 ~ 1710	10.6 ~ 12.7
6.215 ~ 6.218	108 ~ 121.94	1718.8 ~ 1722.2	13.25 ~ 13.4
6.26775 ~ 6.26825	149.9 ~ 150.05	2200 ~ 2300	14.47 ~ 14.5
6.31175 ~ 6.31225	156.52475 ~ 156.52525	2310 ~ 2390	15.35 ~ 16.2
8.291 ~ 8.294	156.7 ~ 156.9	2483.5 ~ 2500	17.7 ~ 21.4
8.362 ~ 8.366	162.0125 ~ 167.17	2690 ~ 2900	22.01 ~ 23.12
8.37625 ~ 8.38675	3345.8 ~ 3358	3260 ~ 3267	23.6 ~ 24.0
8.41425 ~ 8.41475	3600 ~ 4400	3332 ~ 3339	31.2 ~ 31.8
12.51975 ~ 12.52025	3345.8 ~ 3358	240 ~ 285	36.43 ~ 36.5
12.57675 ~ 12.57725	3600 ~ 4400	322 ~ 335.4	Above 38.6
13.36 ~ 13.41			

The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

11.3 Test Procedure for Radiated Spurious Emission

1. The EUT is placed on a non-conductive table. For emission measurements at or below 1 GHz, the table height is 80 cm. For emission measurements above 1 GHz, the table height is 1.5 m. The table was rotated 360 degrees to determine the position of the highest radiation.

2. During performing radiated emission below 1 GHz, the EUT was set 3 meters away from the interference receiving antenna, which was mounted on the top of a variable-height antenna tower. During performing radiated emission above 1 GHz, the EUT was set 3.75 meter away from the interference-receiving antenna.

3. For measurements above 1 GHz absorbers are placed on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1 GHz, the absorbers are removed.

4. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

5. For each suspected emission, the EUT was arranged to its worst case and then The antenna was tuned to heights from 1 meter to 4 meters and the table was turned from 0 degrees to 360 degrees to find the maximum reading.
   (The EUT was pre-tested with three axes (X, Y, Z) and the final test was performed at the worst case.)

6. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

7. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Measurement Instrument Setting

1. Frequency Range: Below 1 GHz
   RBW = 100 or 120 kHz, VBW = 3 x RBW, Detector = Peak or Quasi Peak

2. Frequency Range: Above 1 GHz
   Peak Measurement
   RBW = 1 MHz, VBW = 3 MHz, Detector = Peak, Sweep time = Auto,
   Trace mode = Max Hold until the trace stabilizes

   Average Measurement
   RBW = 1MHz, VBW ≥ 1/T, Detector = Peak, Sweep Time = Auto,
   Trace Mode = Max Hold until the trace stabilizes

11.4 Test Procedure for Conducted Spurious Emission

1. The transmitter output was connected to the spectrum analyzer.

2. The reference level of the fundamental frequency was measured with the spectrum analyzer using
   RBW = 100 kHz, VBW = 300 kHz.

3. The conducted spurious emission was tested each ranges were set as below.
   Frequency range: 30 MHz ~ 26.5 GHz
   RBW = 100 kHz, VBW = 300 kHz, Sweep Time = Auto, Detector = Peak,
   Trace = Max Hold

   LIMIT LINE = 20 dB below of the reference level of above measurement procedure Step 2. (RBW = 100 kHz, VBW = 300 kHz)

11.5 Test Result

9 kHz ~ 25 GHz Data (Modulation: GFSK (BT1))

- Low frequency

Frequency	Reading		Pol.	T.F (dB)	DCCF (dB)	Limits		Result		Margin	
	(dBuV/m)					(dBuV/m)		(dBuV/m)		(dB)	
(MHz)	AV / Peak					AV / Peak		AV / Peak		AV / Peak	
2 389.56	N/A	50.40	V	11.19	-24.73	54.0	74.0	36.9	61.6	17.1	12.4
4 803.79	N/A	50.13	V	-0.36	-24.73	54.0	74.0	25.0	49.8	29.0	24.2
7 206.41	N/A	47.11	V	9.74	-24.73	54.0	74.0	32.1	56.9	21.9	17.2
12 009.08	N/A	40.47	V	19.68	-24.73	54.0	74.0	35.4	60.2	18.6	13.9

- Middle frequency

Frequency	Reading		Pol.	T.F (dB)	DCCF (dB)	Limits		Result		Margin	
	(dBuV/m)					(dBuV/m)		(dBuV/m)		(dB)	
(MHz)	AV / Peak					AV / Peak		AV / Peak		AV / Peak	
4 882.05	N/A	49.87	V	-0.31	-24.73	54.0	74.0	24.8	49.6	29.2	24.4
7 323.47	N/A	47.00	V	9.75	-24.73	54.0	74.0	32.0	56.8	22.0	17.3
12 205.77	N/A	38.31	V	19.86	-24.73	54.0	74.0	33.4	58.2	20.6	15.8

- High frequency

Frequency	Reading		Pol.	T.F (dB)	DCCF (dB)	Limits		Result		Margin	
	(dBuV/m)					(dBuV/m)		(dBuV/m)		(dB)	
(MHz)	AV / Peak					AV / Peak		AV / Peak		AV / Peak	
2 487.98	N/A	55.82	V	10.93	-24.73	54.0	74.0	42.0	66.8	12.0	7.3
4 960.19	N/A	51.00	V	-0.37	-24.73	54.0	74.0	25.9	50.6	28.1	23.4
7 439.44	N/A	48.14	V	9.90	-24.73	54.0	74.0	33.3	58.0	20.7	16.0
12 400.68	N/A	40.18	V	19.20	-24.73	54.0	74.0	34.6	59.4	19.4	14.6

Note 1: The radiated emissions were inverstigated 9 kHz to 25 GHz. And no other spurious and harmonic emissions were found above listed frequencies.
Note 2: DCCF(Duty Cycle Correction Factor)
- Time to cycle through all channels = Δt = T [ms] X 20 minimum hopping channels, where T = pulse width = 2.900 ms
- 100 ms / Δt [ms] = H -> Round up to next highest integer, to account for worst case, H' = 100 / (2.900 X 20) = 1.72 ≒ 2
- The Worst Case Dwell Time = T [ms] x H' = 2.900 ms X 2 = 5.80 ms
- DCCF = 20 x log(The Worst Case Dwell Time / 100 ms) dB = 20 x log(5.80 / 100) = -24.73 dB

Note 3: Sample Calculation.
Margin = Limit – Result / Peak Result = Peak Reading + TF / Average Result = Peak Reading + TF + DCCF
TF = Ant factor + Cable Loss + Filter Loss - Amp Gain + Distance Factor
Distance Factor = 20log(applied distance/required distance) = 20log(3.75m/3m) = 1.94

9 kHz ~ 25 GHz Data (Modulation: 8DPSK (BT1))

- Low frequency

Frequency	Reading		Pol.	T.F	DCCF	Limits		Result		Margin	
	(dBuV/m)			(dB)	(dB)	(dBuV/m)		(dBuV/m)		(dB)	
(MHz)	AV / Peak					AV / Peak		AV / Peak		AV / Peak	
2 389.96	N/A	53.61	V	11.19	-24.72	54.0	74.0	40.1	64.8	13.9	9.2
4 804.18	N/A	43.79	V	-0.36	-24.72	54.0	74.0	18.7	43.4	35.3	30.6

- Middle frequency

Frequency	Reading		Pol.	T.F	DCCF	Limits		Result		Margin	
	(dBuV/m)			(dB)	(dB)	(dBuV/m)		(dBuV/m)		(dB)	
(MHz)	AV / Peak					AV / Peak		AV / Peak		AV / Peak	
4 882.62	N/A	44.98	V	-0.31	-24.72	54.0	74.0	20.0	44.7	34.0	29.3

- High frequency

Frequency	Reading		Pol.	T.F	DCCF	Limits		Result		Margin	
	(dBuV/m)			(dB)	(dB)	(dBuV/m)		(dBuV/m)		(dB)	
(MHz)	AV / Peak					AV / Peak		AV / Peak		AV / Peak	
2 483.77	N/A	60.57	V	10.93	-24.72	54.0	74.0	46.8	71.5	7.2	2.5
4 960.01	N/A	44.57	V	-0.37	-24.72	54.0	74.0	19.5	44.2	34.5	29.8

Note 1: The radiated emissions were inverstigated 9 kHz to 25 GHz.
Note 2: DCCF(Duty Cycle Correction Factor)
- Time to cycle through all channels = Δt = T [ms] X 20 minimum hopping channels, where T = pulse width = 2.905 ms
- 100 ms / Δt [ms] = H -> Round up to next highest integer, to account for worst case, H' = 100 / (2.905 X 20) = 1.72 ≒ 2
- The Worst Case Dwell Time = T [ms] x H' = 2.905 ms X 2 = 5.81 ms
- DCCF = 20 x log(The Worst Case Dwell Time / 100 ms) dB = 20 x log(5.81 / 100) = -24.72 dB

Note 3: Sample Calculation.
Margin = Limit – Result / Peak Result = Peak Reading + TF / Average Result = Peak Reading + TF + DCCF
TF = Ant factor + Cable Loss + Filter Loss - Amp Gain + Distance Factor
Distance Factor = 20log(applied distance/required distance) = 20log(3.75m/3m) = 1.94

9 kHz ~ 25 GHz Data (Modulation: GFSK (BT2))

- Low frequency

Frequency	Reading (dBuV/m)		Pol.	T.F (dB)	DCCF (dB)	Limits (dBuV/m)		Result (dBuV/m)		Margin (dB)	
(MHz)	AV / Peak					AV / Peak		AV / Peak		AV / Peak	
2 388.12	N/A	29.70	H	11.19	-24.75	54.0	74.0	16.1	40.9	37.9	33.1

- Middle frequency

Frequency	Reading (dBuV/m)		Pol.	T.F (dB)	DCCF (dB)	Limits (dBuV/m)		Result (dBuV/m)		Margin (dB)	
(MHz)	AV / Peak					AV / Peak		AV / Peak		AV / Peak	

- High frequency

Frequency	Reading (dBuV/m)		Pol.	T.F (dB)	DCCF (dB)	Limits (dBuV/m)		Result (dBuV/m)		Margin (dB)	
(MHz)	AV / Peak					AV / Peak		AV / Peak		AV / Peak	
2 485.45	N/A	28.17	H	10.93	-24.75	54.0	74.0	14.4	39.1	39.6	34.9

Note 1: The radiated emissions were inverstigated 9 kHz to 25 GHz. And no other spurious and harmonic emissions were found above listed frequencies.
Note 2: DCCF(Duty Cycle Correction Factor)
- Time to cycle through all channels = Δt = T [ms] X 20 minimum hopping channels, where T = pulse width = 2.895 ms
- 100 ms / Δt [ms] = H -> Round up to next highest integer, to account for worst case, H' = 100 / (2.895 X 20) = 1.73 ≒ 2
- The Worst Case Dwell Time = T [ms] x H' = 2.895 ms X 2 = 5.79 ms
- DCCF = 20 x log(The Worst Case Dwell Time / 100 ms) dB = 20 x log(5.79 / 100) = -24.75 dB

Note 3: Sample Calculation.
Margin = Limit – Result / Peak Result = Peak Reading + TF / Average Result = Peak Reading + TF + DCCF
TF = Ant factor + Cable Loss + Filter Loss - Amp Gain + Distance Factor
Distance Factor = 20log(applied distance/required distance) = 20log(3.75m/3m) = 1.94

9 kHz ~ 25 GHz Data (Modulation: 8DPSK (BT2))

- Low frequency

Frequency (MHz)	Reading (dBuV/m) AV	Reading (dBuV/m) Peak	Pol.	T.F (dB)	DCCF (dB)	Limits (dBuV/m) AV	Limits (dBuV/m) Peak	Result (dBuV/m) AV	Result (dBuV/m) Peak	Margin (dB) AV	Margin (dB) Peak
2 387.16	N/A	28.03	H	11.19	-24.75	54.0	74.0	14.5	39.2	39.5	34.8

- Middle frequency

Frequency (MHz)	Reading (dBuV/m) AV	Reading (dBuV/m) Peak	Pol.	T.F (dB)	DCCF (dB)	Limits (dBuV/m) AV	Limits (dBuV/m) Peak	Result (dBuV/m) AV	Result (dBuV/m) Peak	Margin (dB) AV	Margin (dB) Peak

- High frequency

Frequency (MHz)	Reading (dBuV/m) AV	Reading (dBuV/m) Peak	Pol.	T.F (dB)	DCCF (dB)	Limits (dBuV/m) AV	Limits (dBuV/m) Peak	Result (dBuV/m) AV	Result (dBuV/m) Peak	Margin (dB) AV	Margin (dB) Peak
2 494.16	N/A	29.14	H	10.93	-24.75	54.0	74.0	15.3	40.1	38.7	33.9

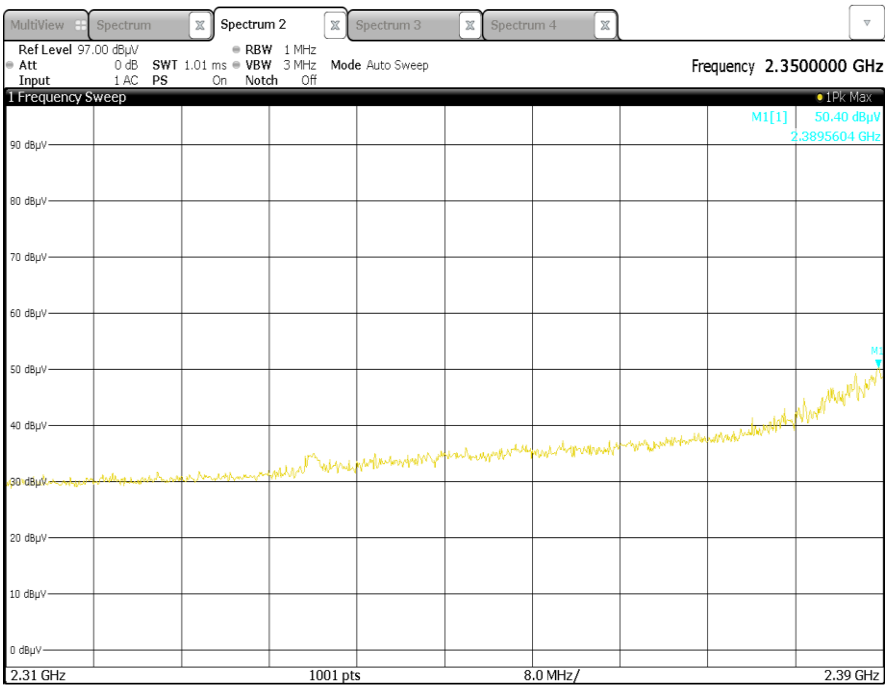
Note 1: The radiated emissions were inverstigated 9 kHz to 25 GHz.
Note 2: DCCF(Duty Cycle Correction Factor)
- Time to cycle through all channels = Δt = T [ms] X 20 minimum hopping channels, where T = pulse width = 2.895 ms
- 100 ms / Δt [ms] = H -> Round up to next highest integer, to account for worst case, H' = 100 / (2.895 X 20) = 1.73 ≒ 2
- The Worst Case Dwell Time = T [ms] x H' = 2.895 ms X 2 = 5.79 ms
- DCCF = 20 x log(The Worst Case Dwell Time / 100 ms) dB = 20 x log(5.79 / 100) = -24.75 dB

Note 3: Sample Calculation.
Margin = Limit – Result / Peak Result = Peak Reading + TF / Average Result = Peak Reading + TF + DCCF
TF = Ant factor + Cable Loss + Filter Loss - Amp Gain + Distance Factor
Distance Factor = 20log(applied distance/required distance) = 20log(3.75m/3m) = 1.94

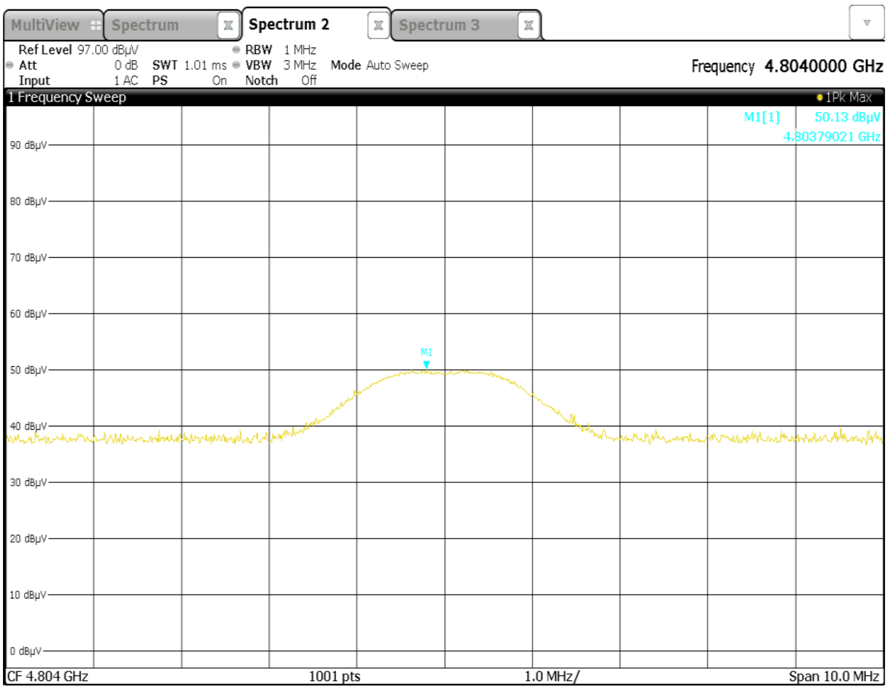
11.6 Test Plot for Radiated Spurious Emission

- GFSK (BT1) _ Low frequency

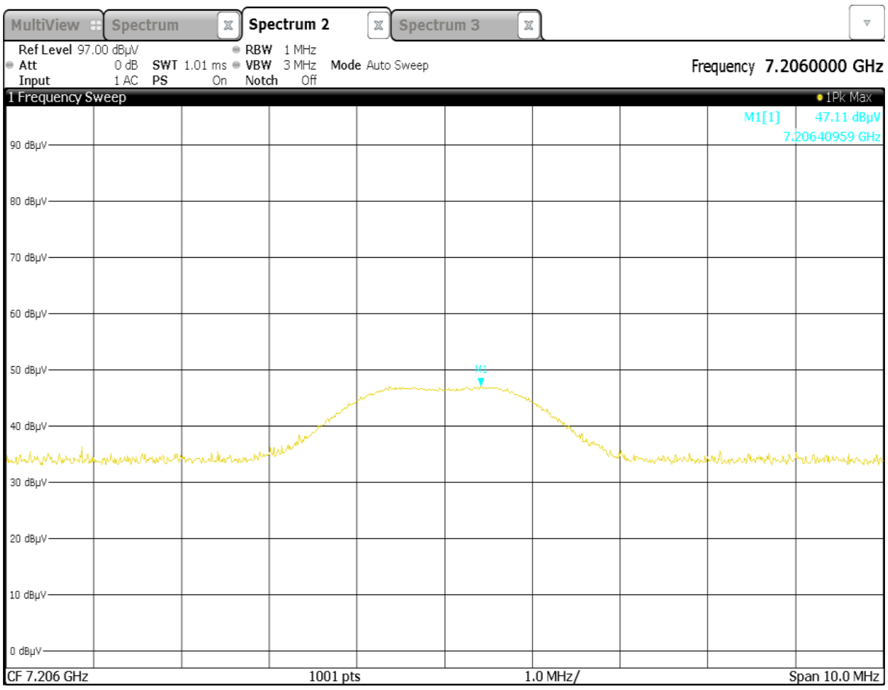
	Restricted Band – Peak



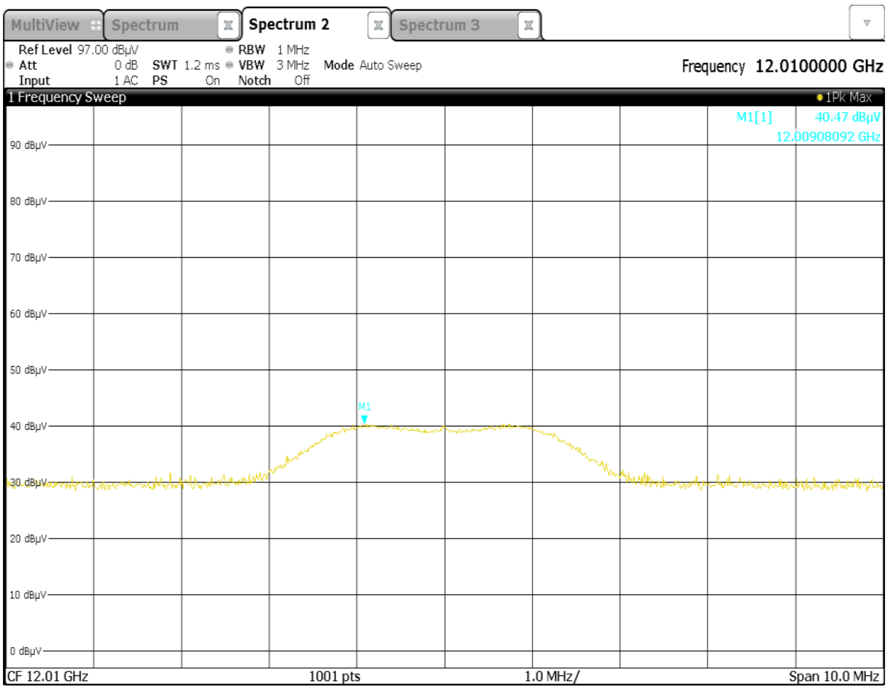
	Spurious – Peak



	Spurious – Peak

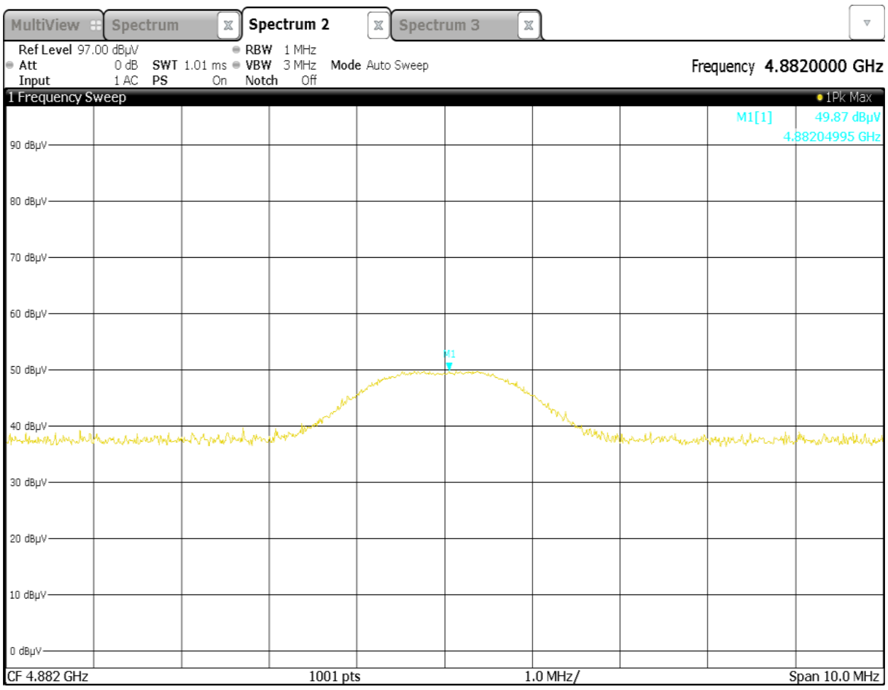


	Spurious – Peak

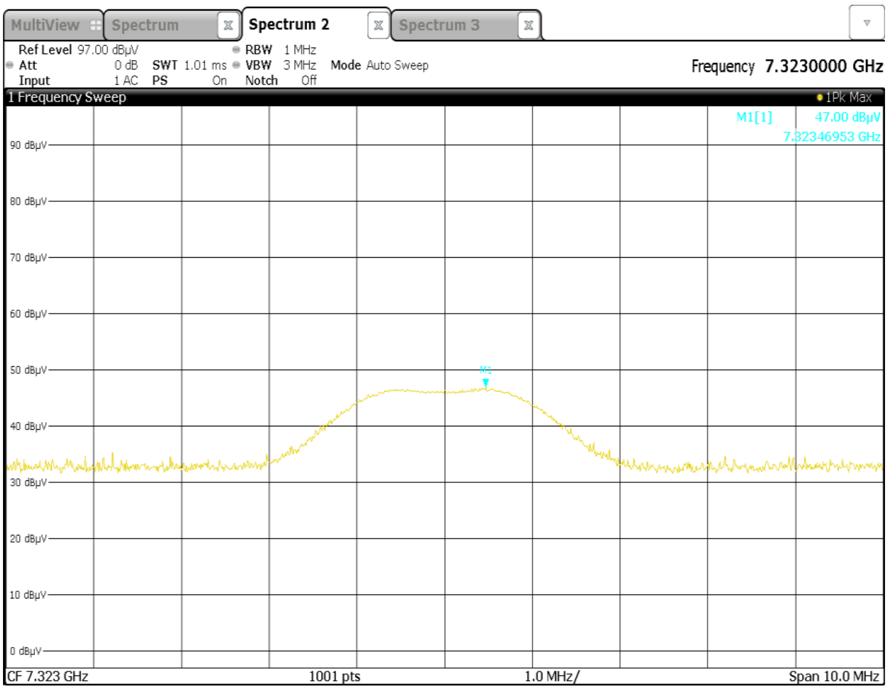


- GFSK (BT1) _ Middle frequency

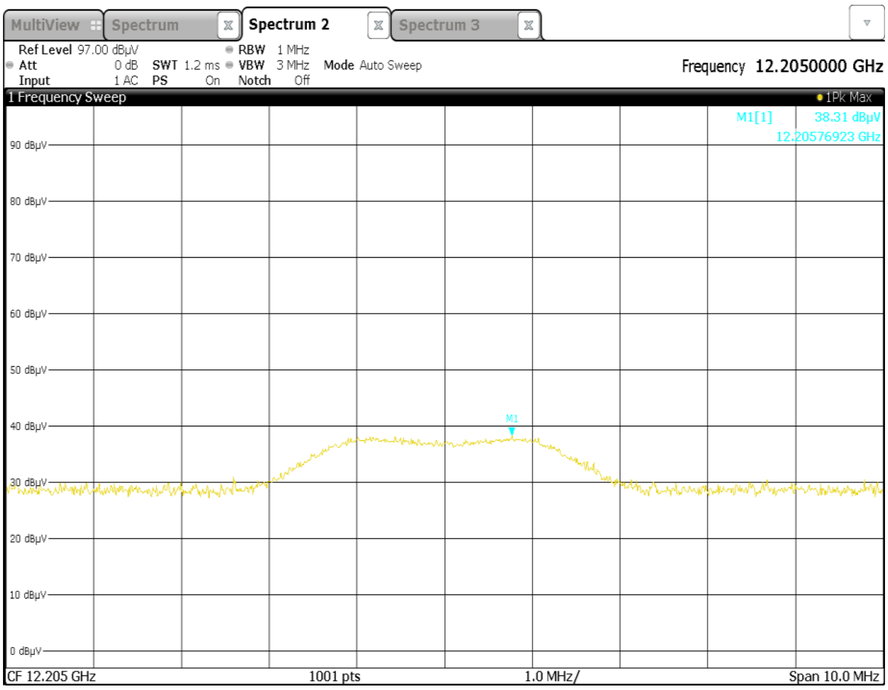
Spurious – Peak



Spurious – Peak

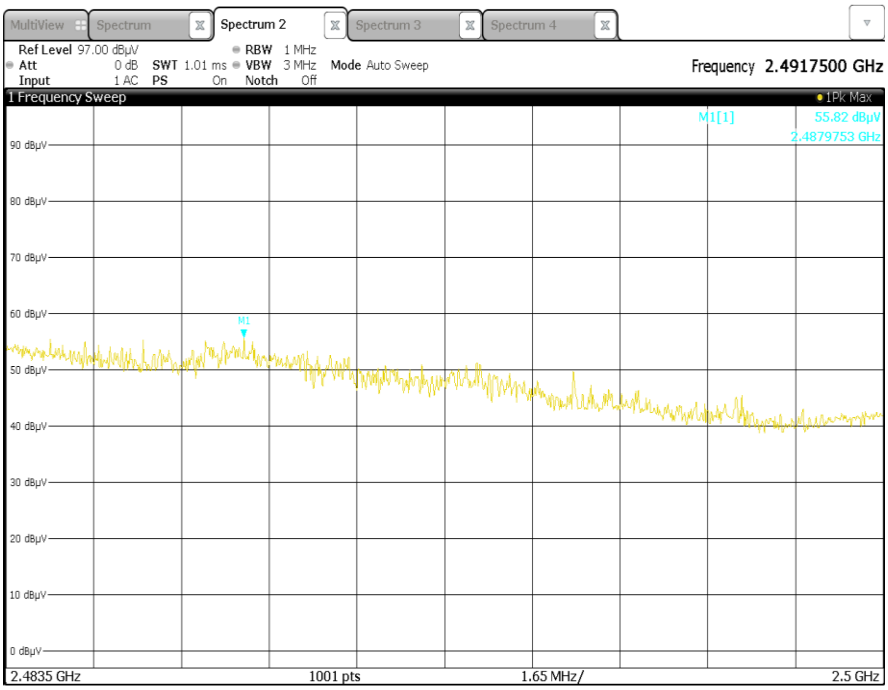


	Spurious – Peak

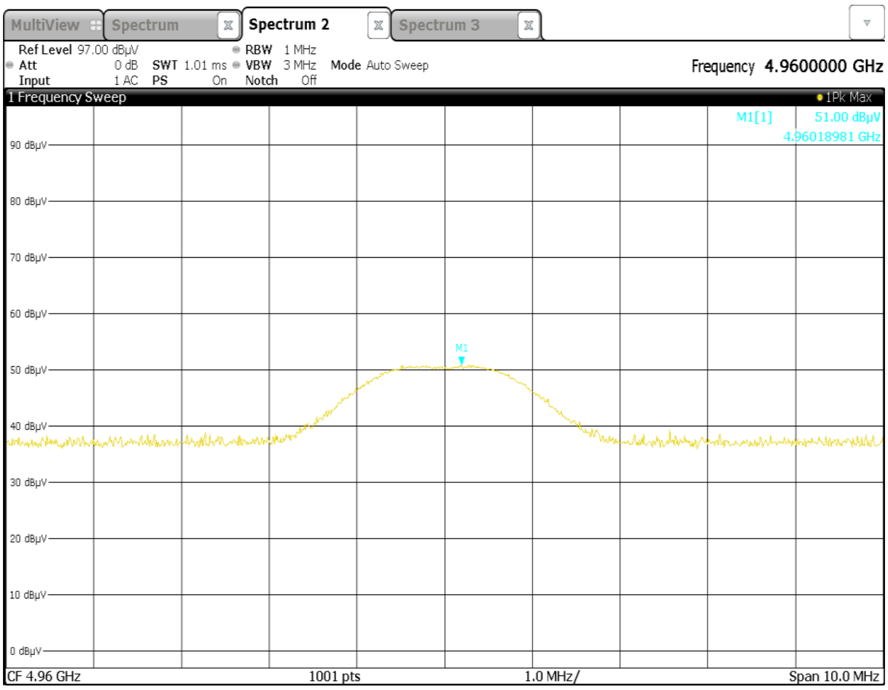


- GFSK (BT1) _ High frequency

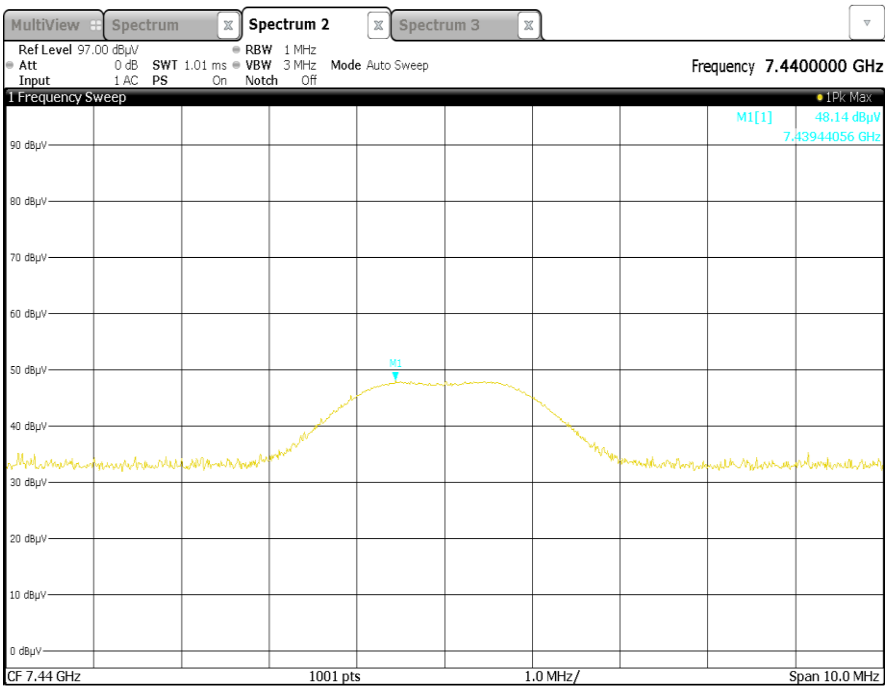
	Restricted Band – Peak



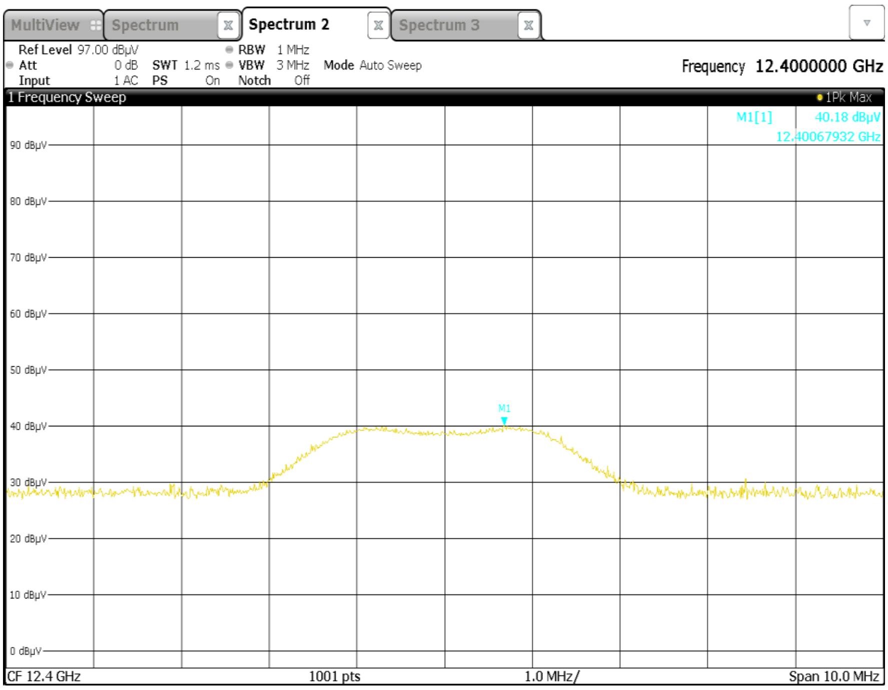
	Spurious – Peak



	Spurious – Peak

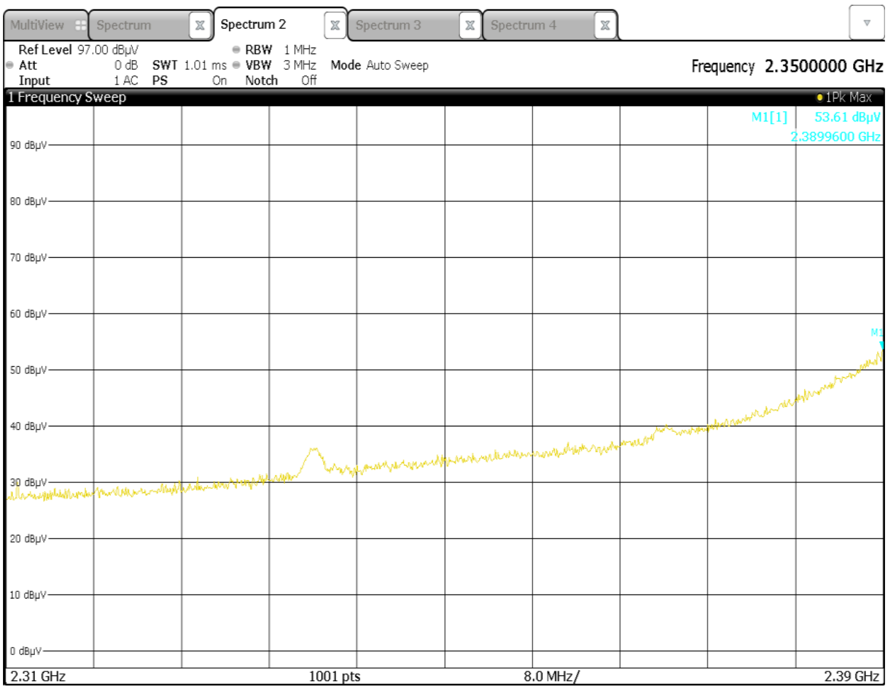


	Spurious – Peak

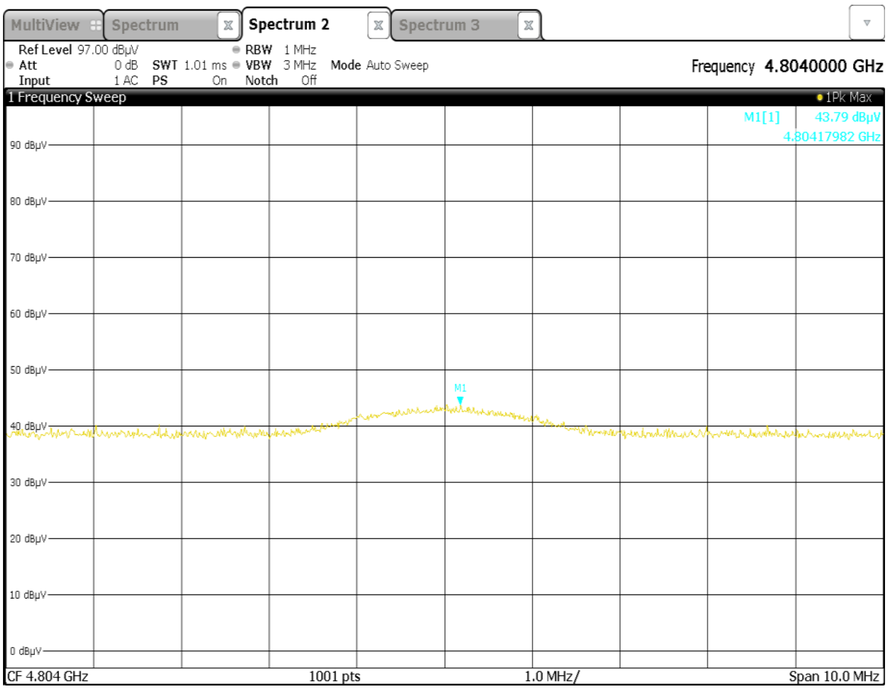


- 8DPSK (BT1) _ Low frequency

Restricted Band – Peak

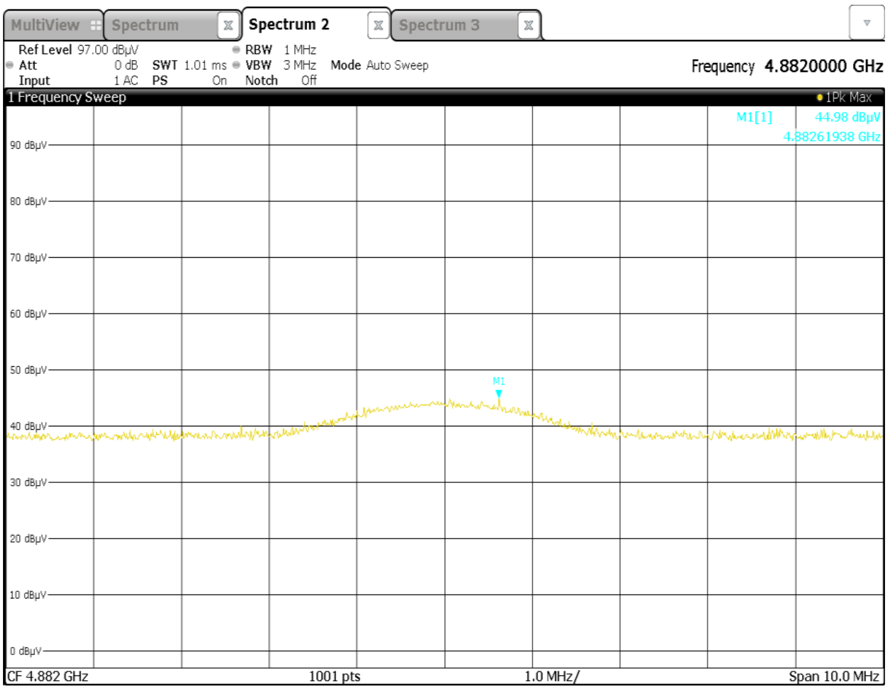


Spurious – Peak



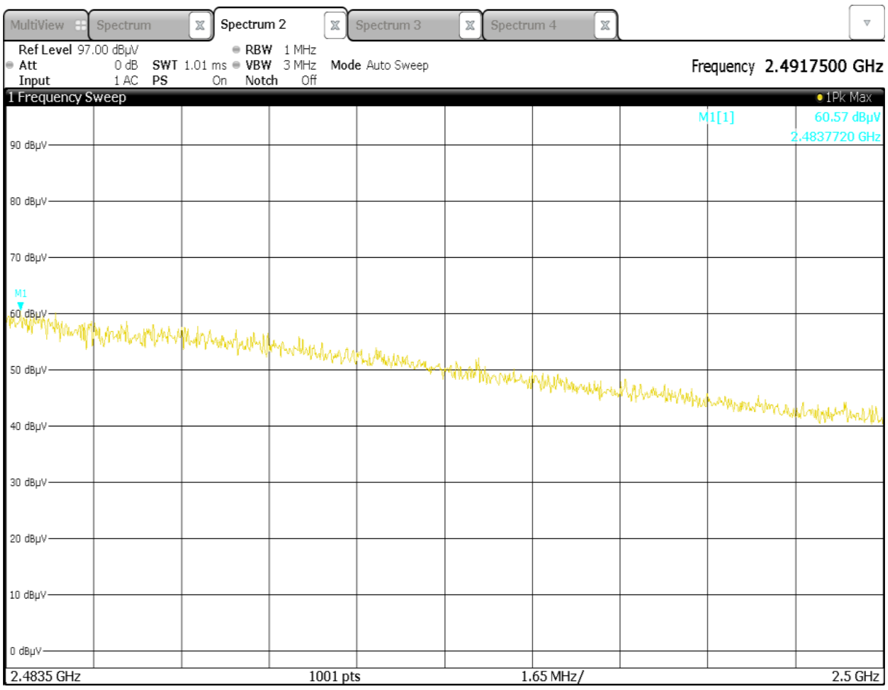
- 8DPSK (BT1) _ Middle frequency

	Spurious – Peak

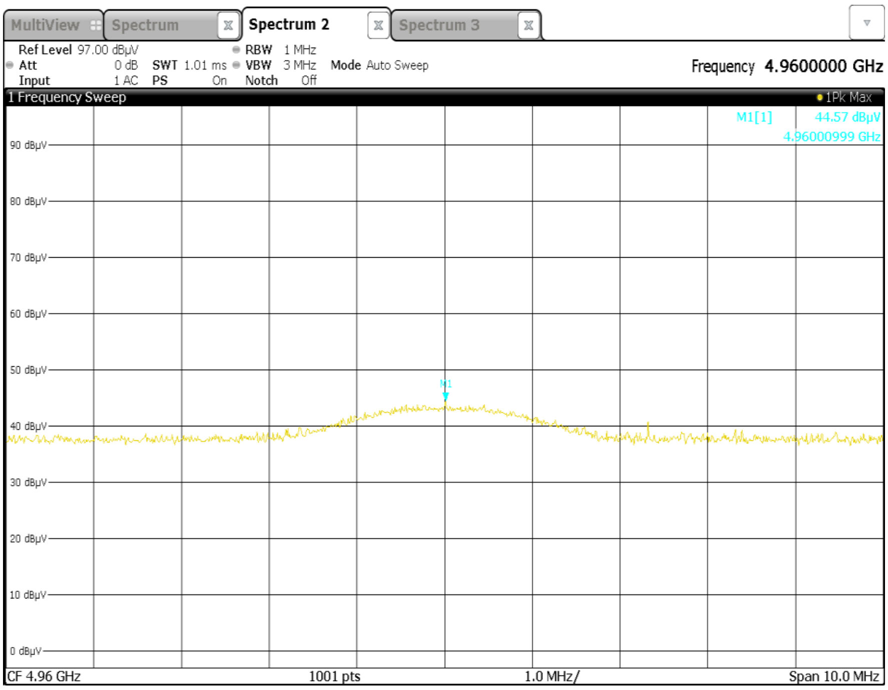


- 8DPSK (BT1) _ High frequency

Restricted Band – Peak

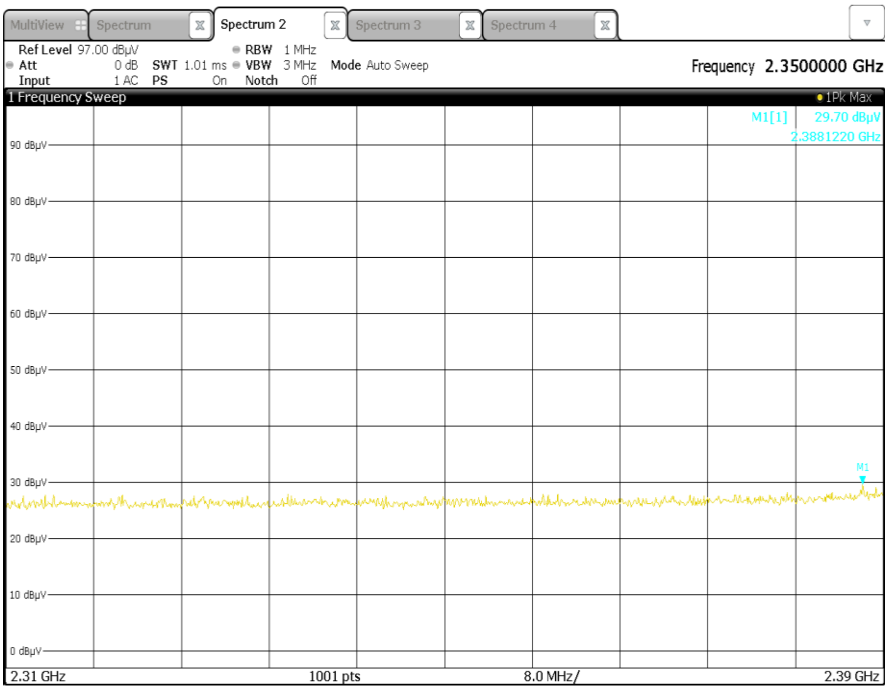


Spurious – Peak



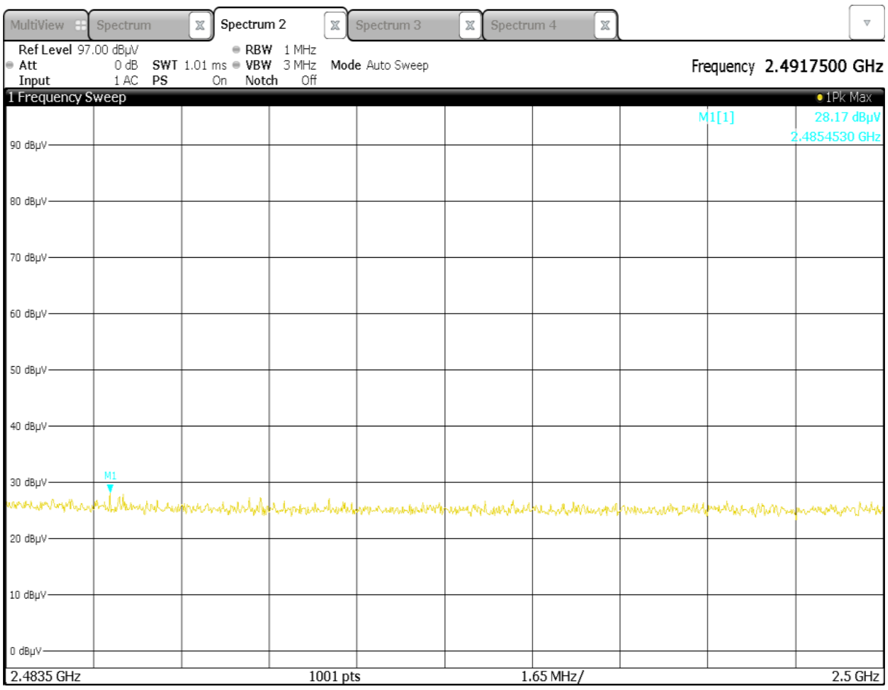
- GFSK (BT2) _ Low frequency

	Restricted Band – Peak



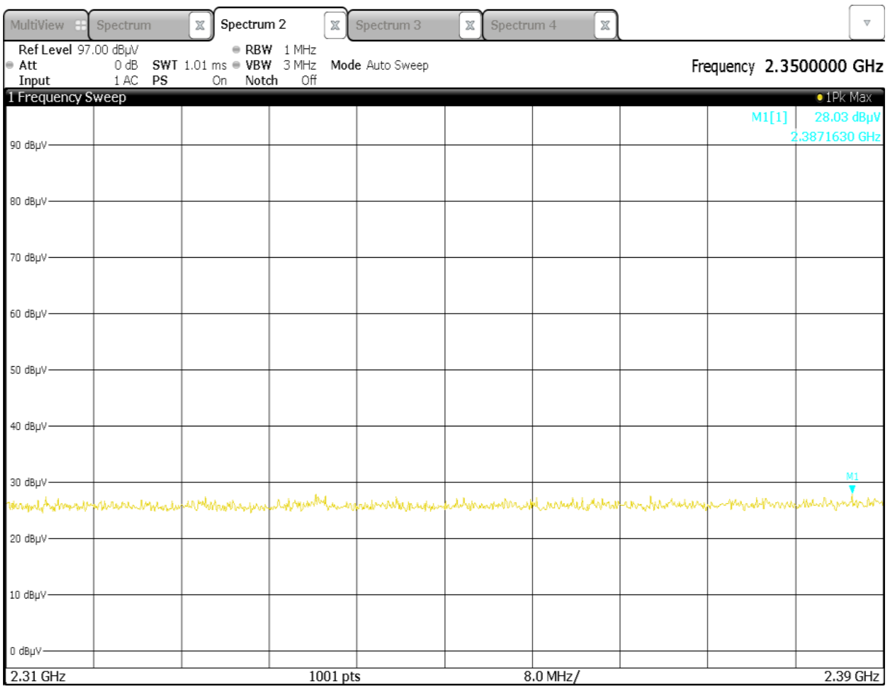
- GFSK (BT2) _ High frequency

	Restricted Band – Peak



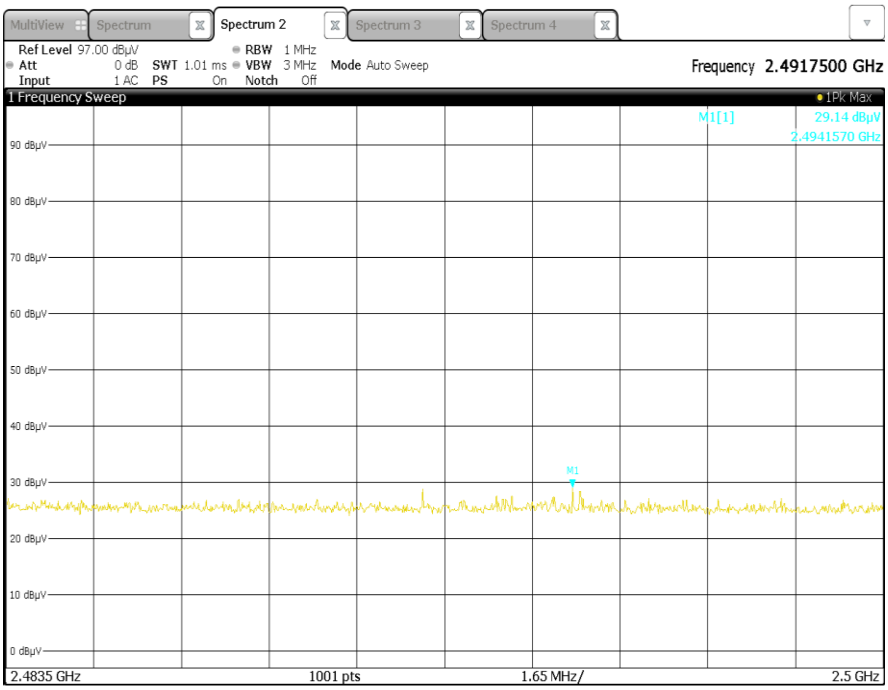
- 8DPSK (BT2) _ Low frequency

	Restricted Band – Peak



- 8DPSK (BT2) _ High frequency

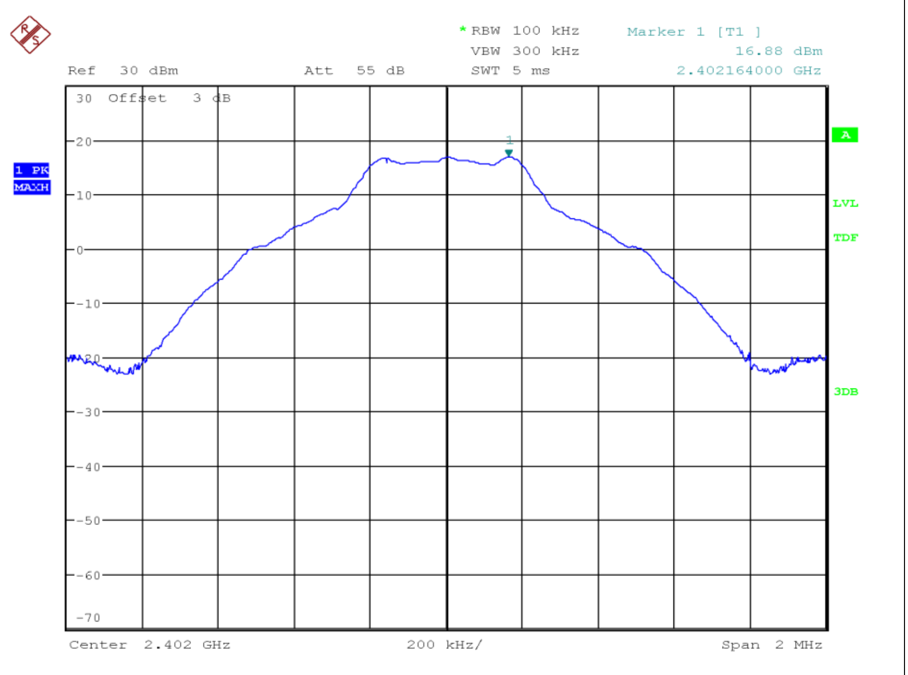
	Restricted Band – Peak



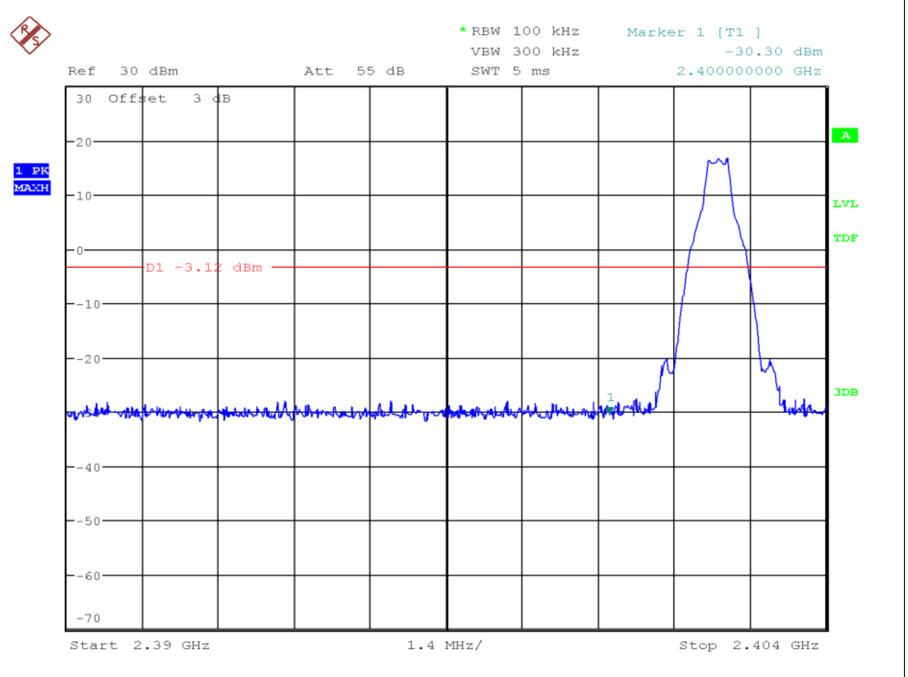
11.7 Test Plot for Conducted Spurious Emission

- GFSK (BT1) _ Low frequency

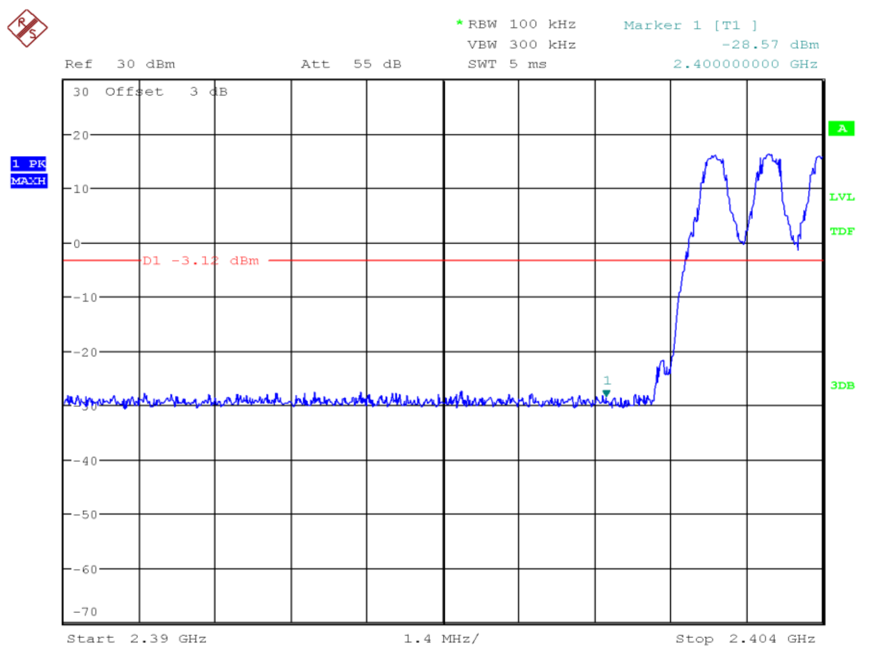
Reference



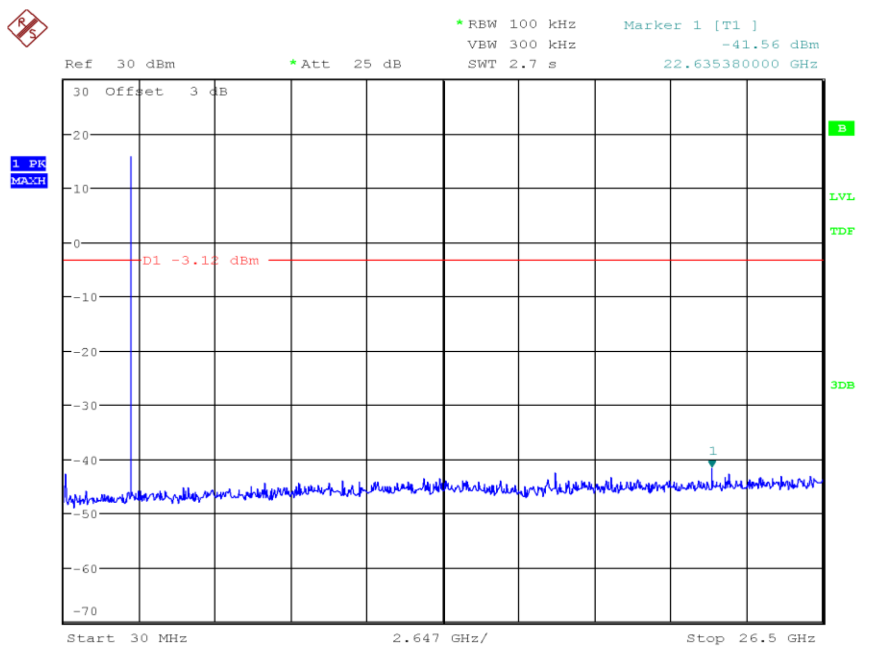
Bandedge _ Single



	Bandedge _ Hopping

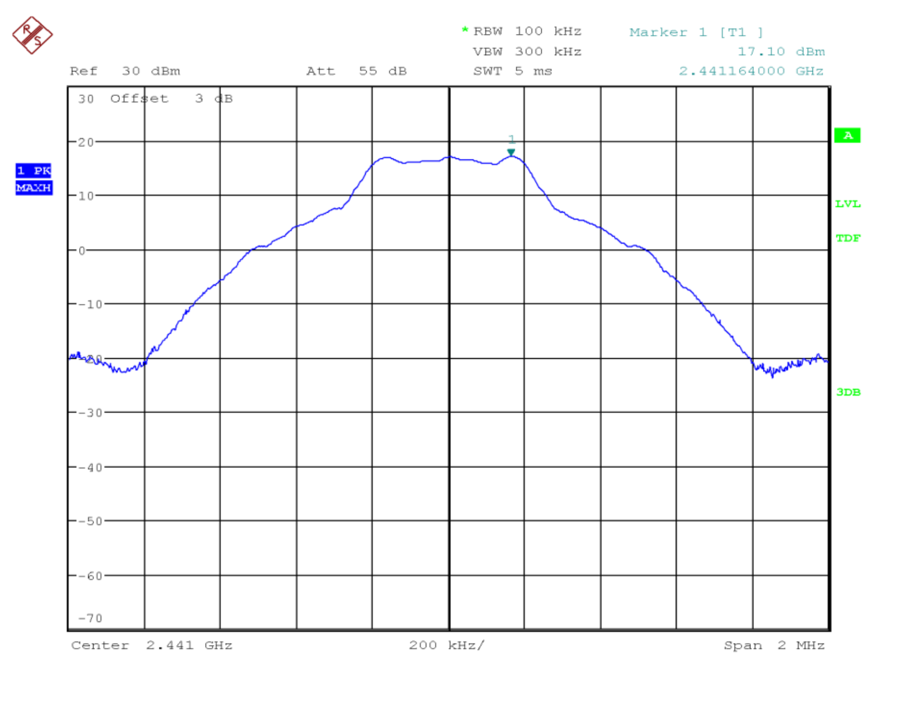


	Spurious



- GFSK (BT1) _ Middle frequency

	Reference



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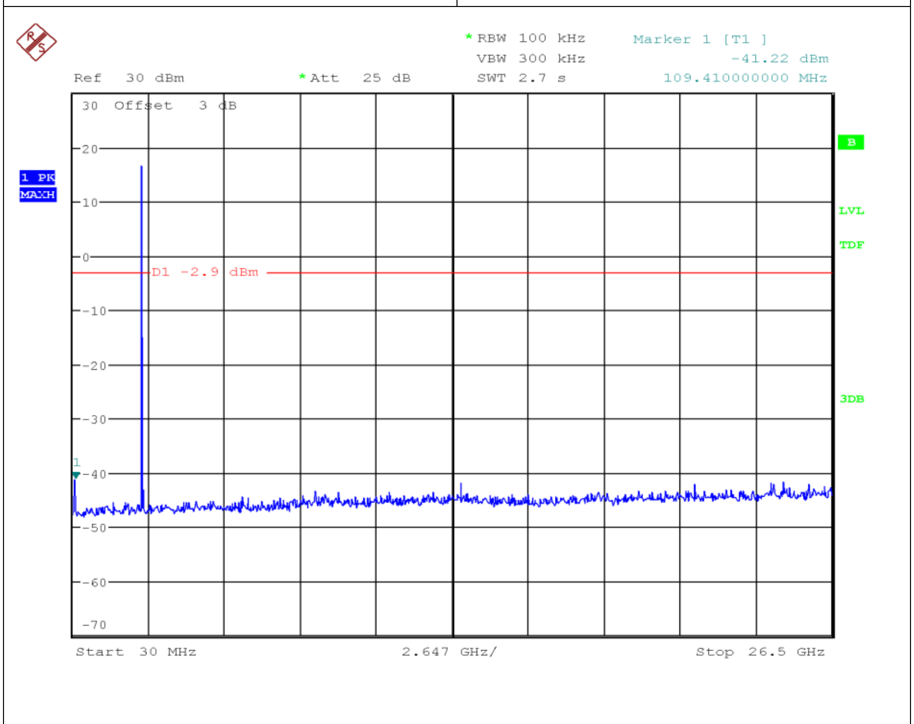
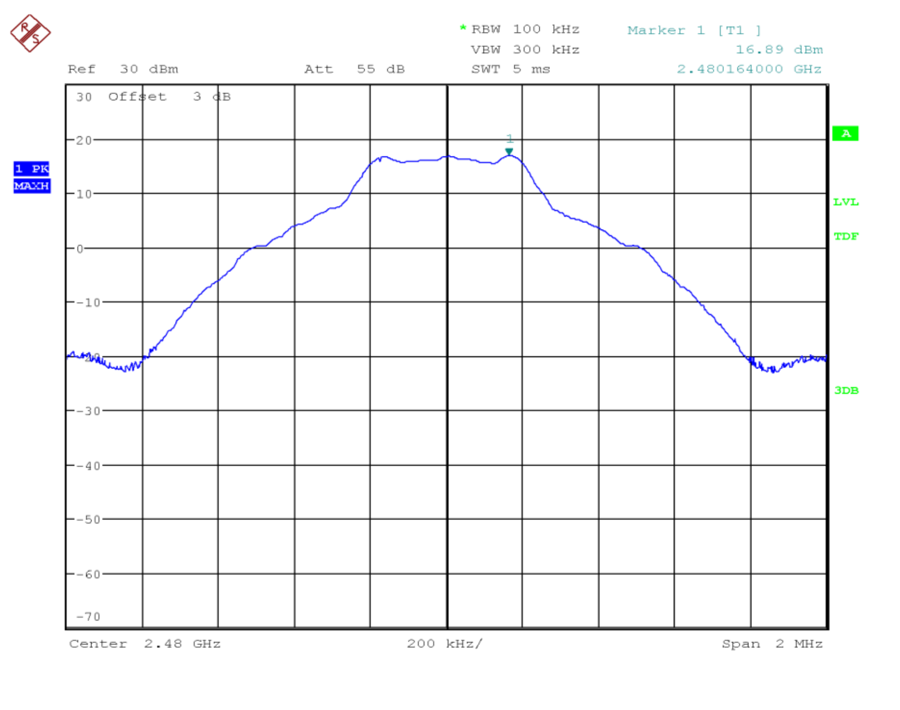
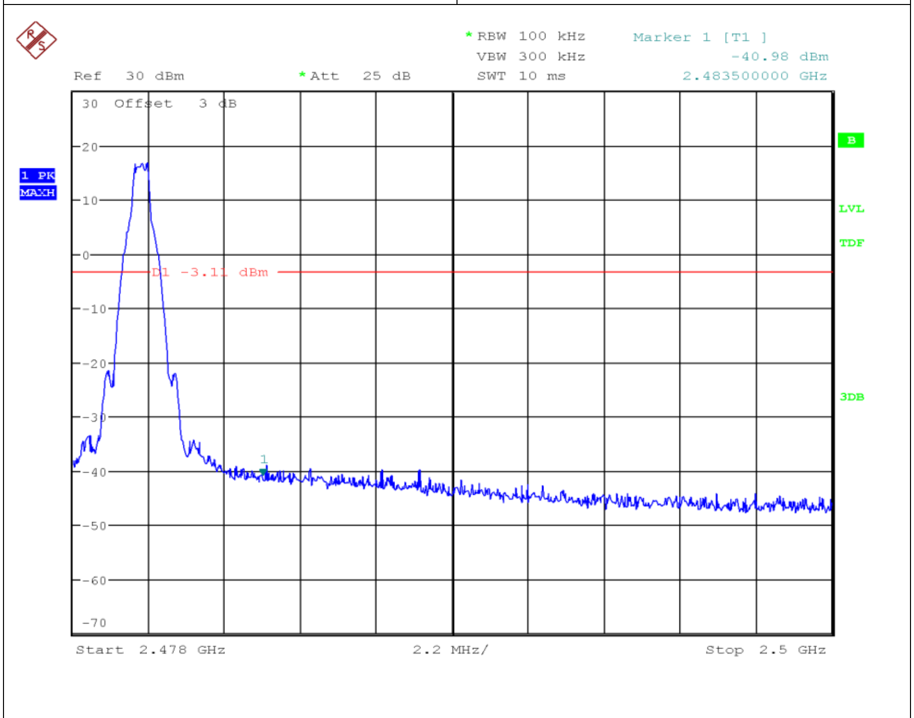


- GFSK (BT1) _ High frequency

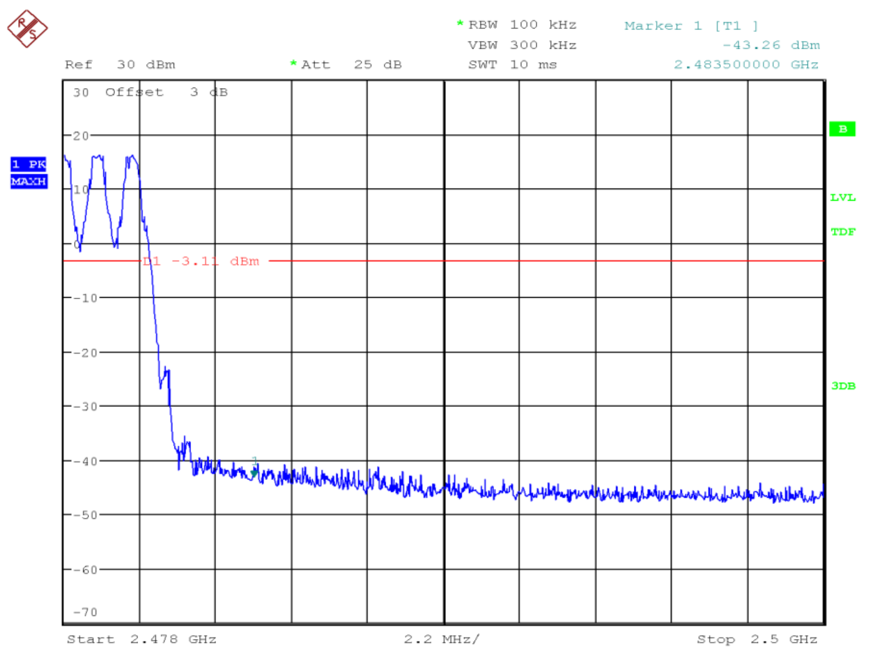
Reference



Bandedge _ Single



	Bandedge _ Hopping



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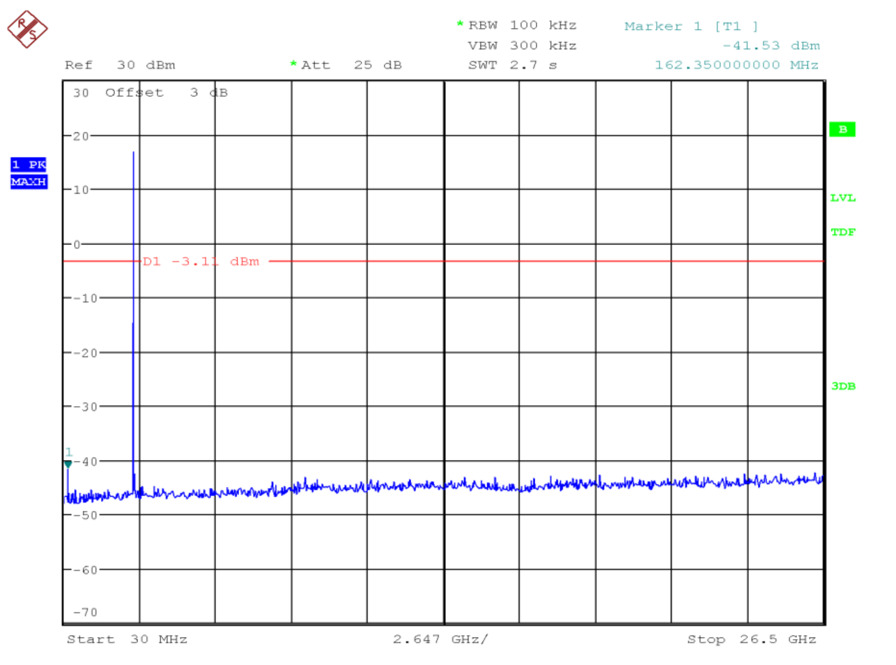
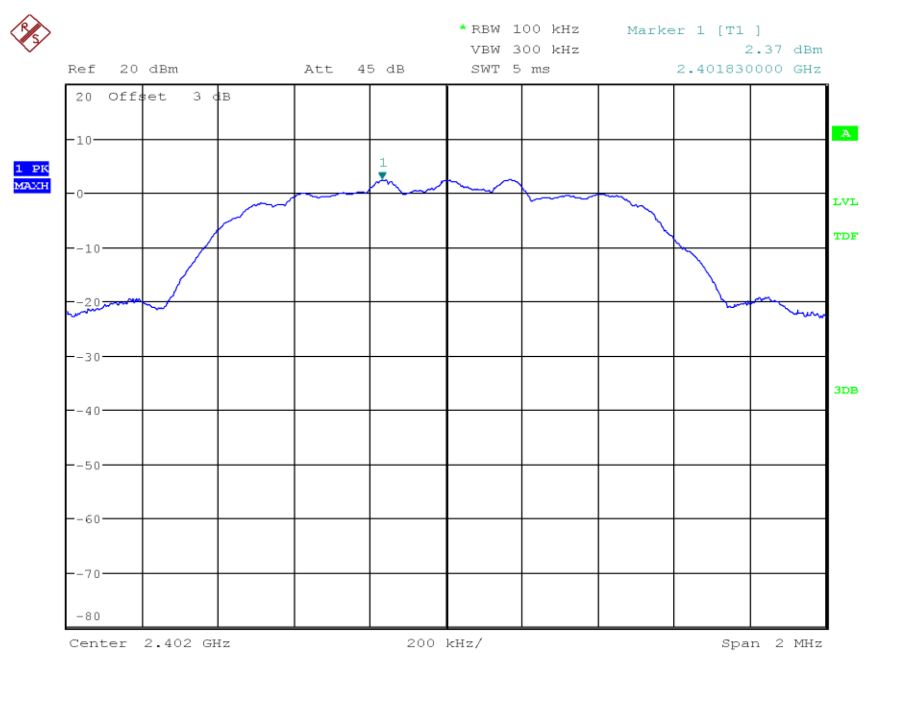


- 8DPSK (BT1) _ Low frequency

	Reference



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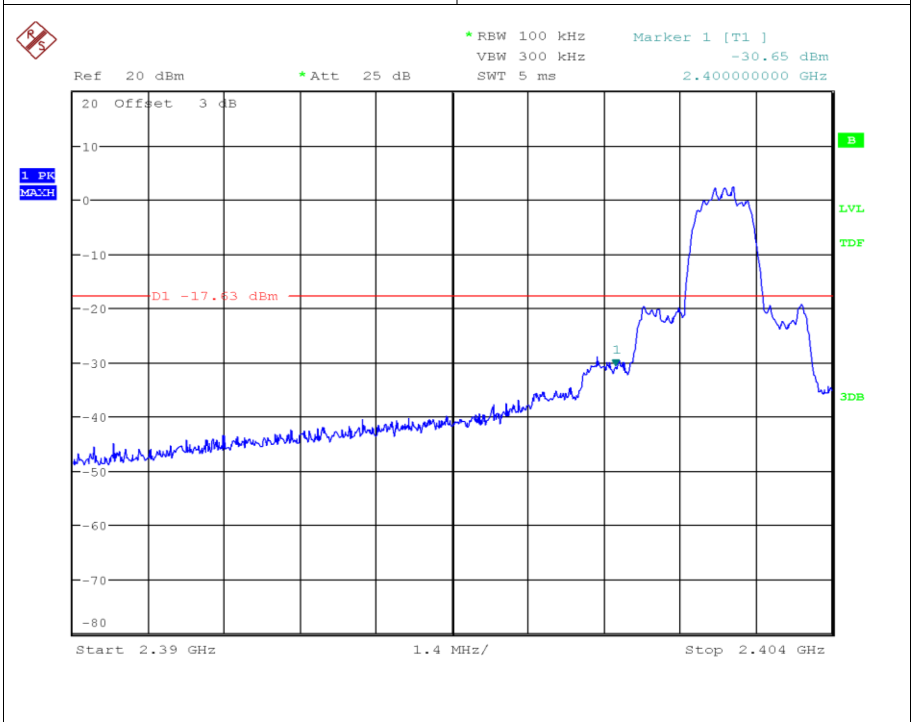

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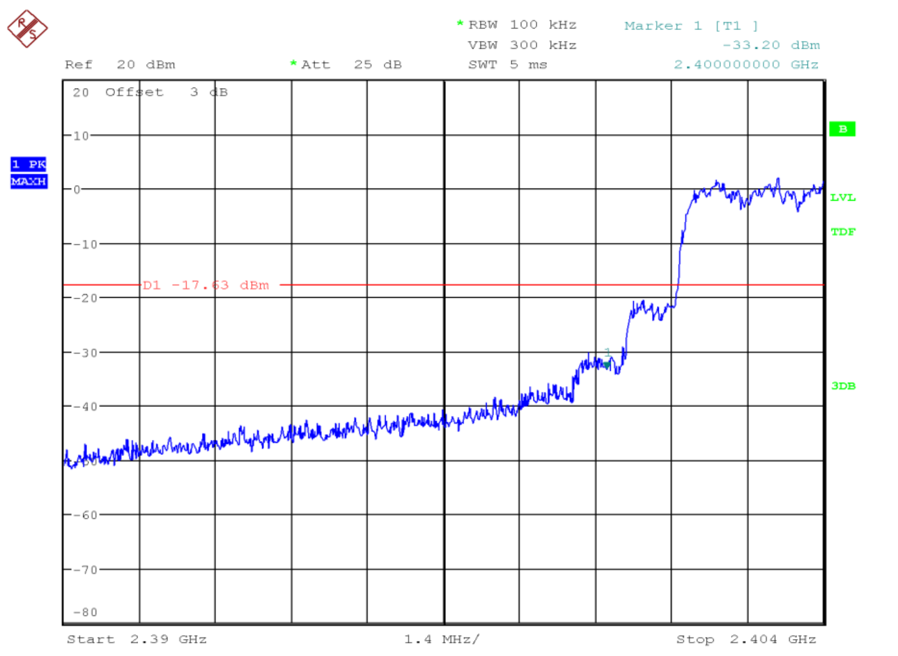

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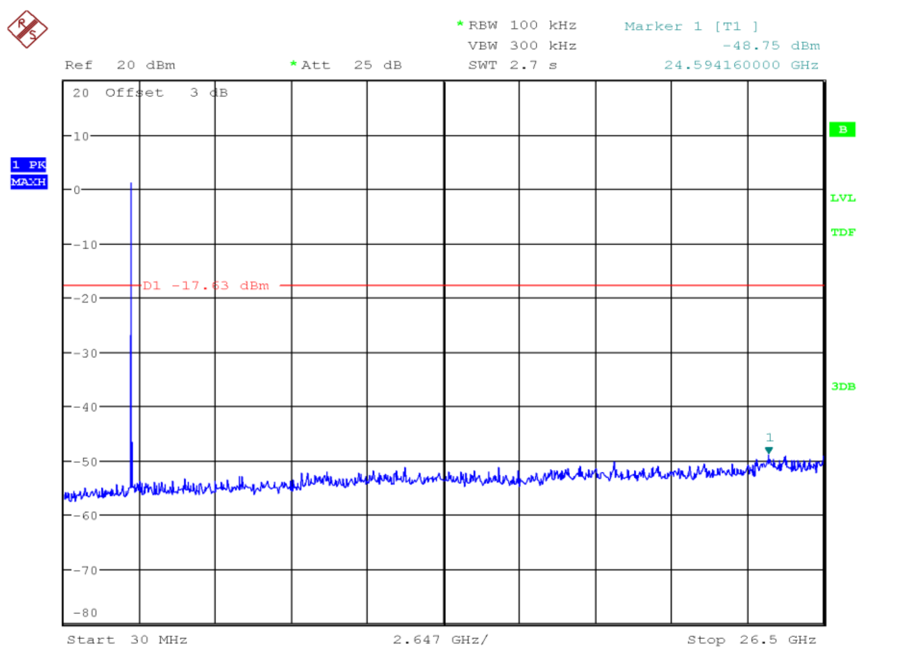
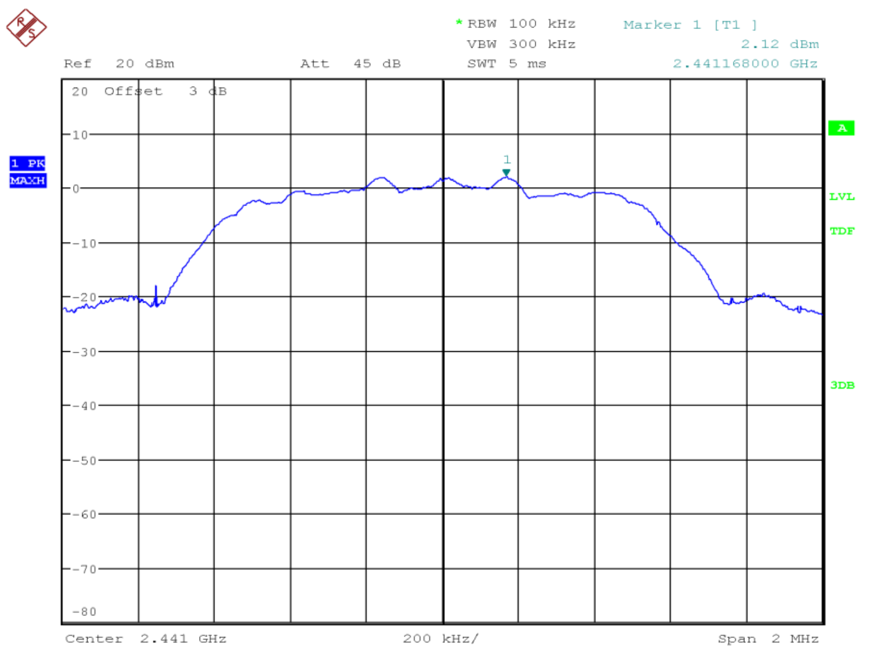


- 8DPSK (BT1) _ Middle frequency

	Reference



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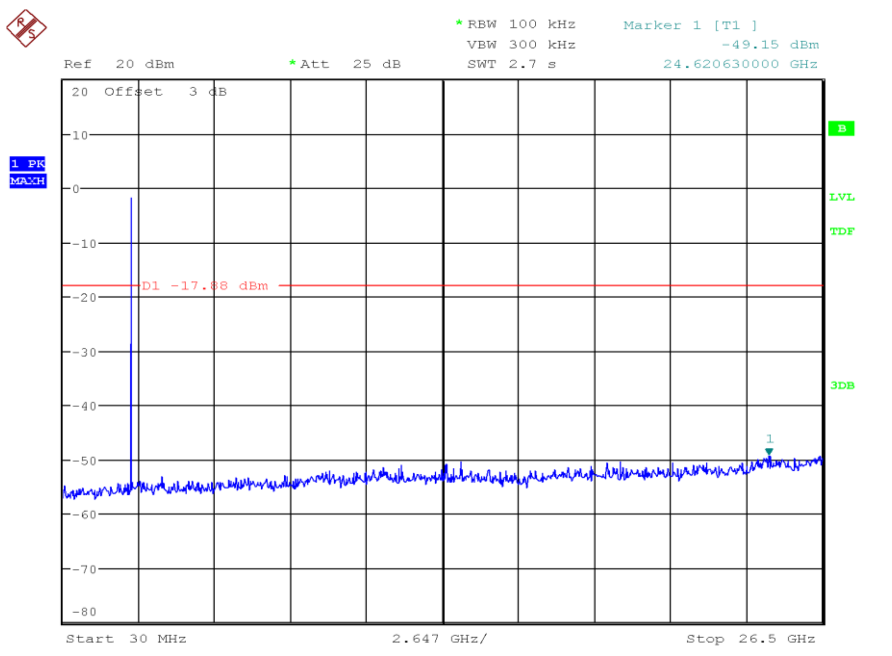

- 8DPSK (BT1) _ High frequency

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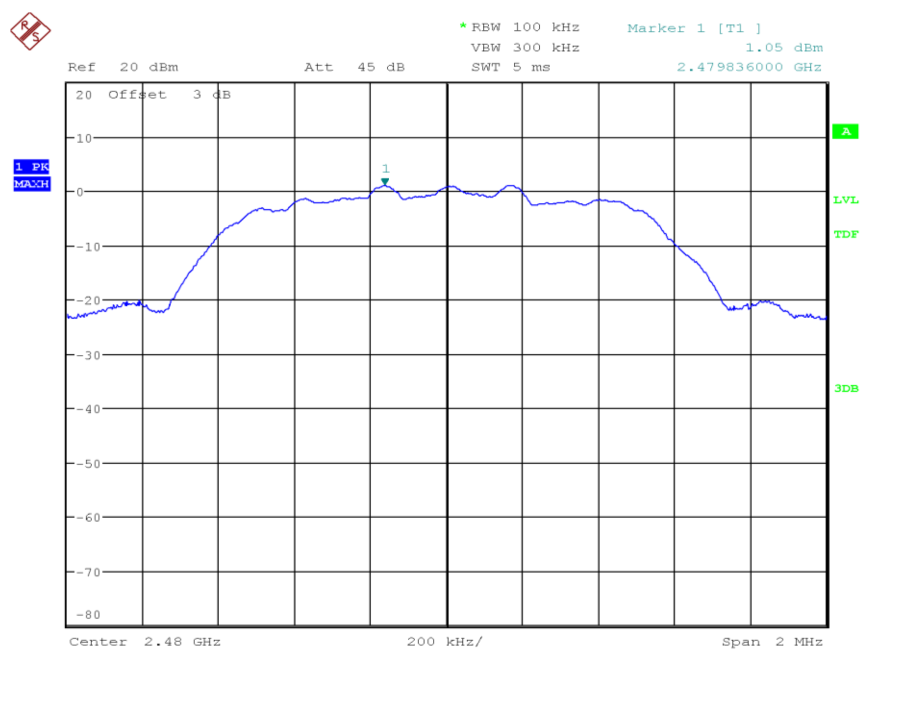

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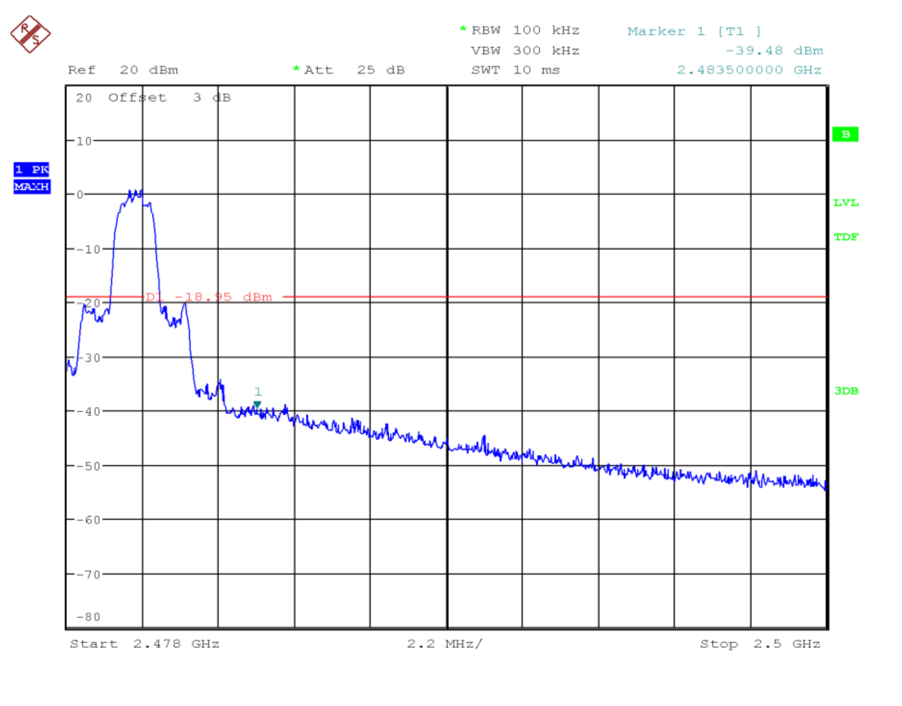

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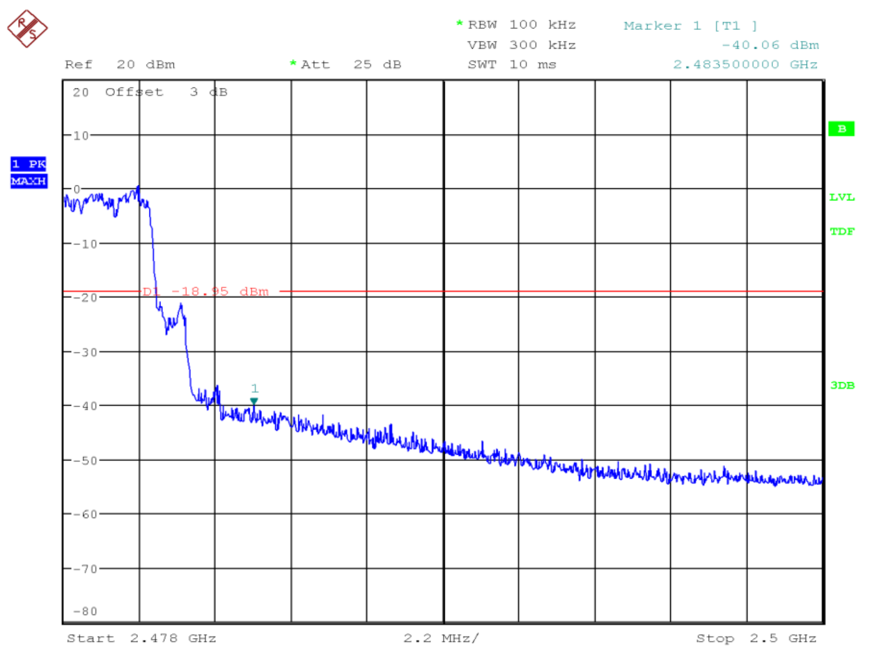

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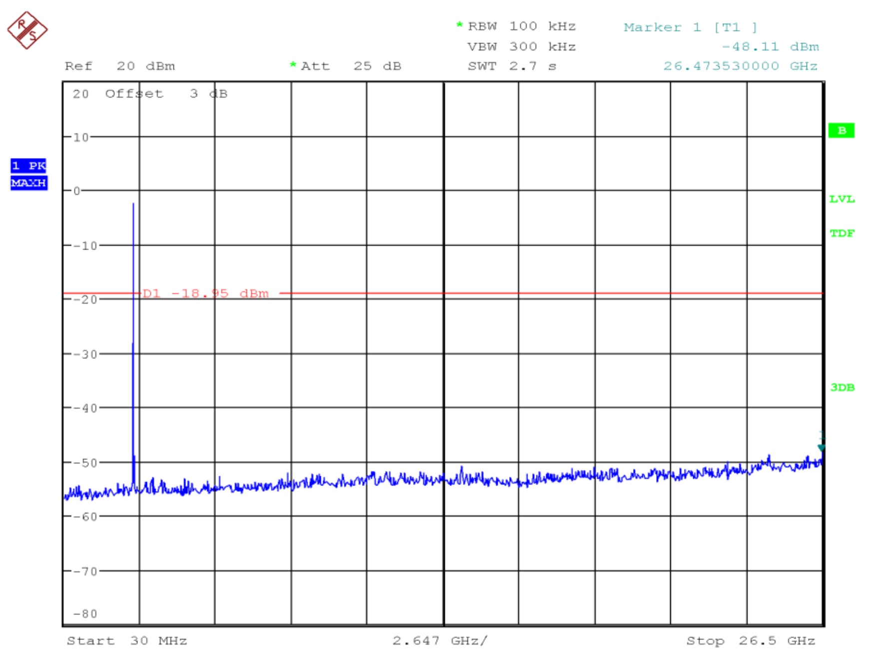
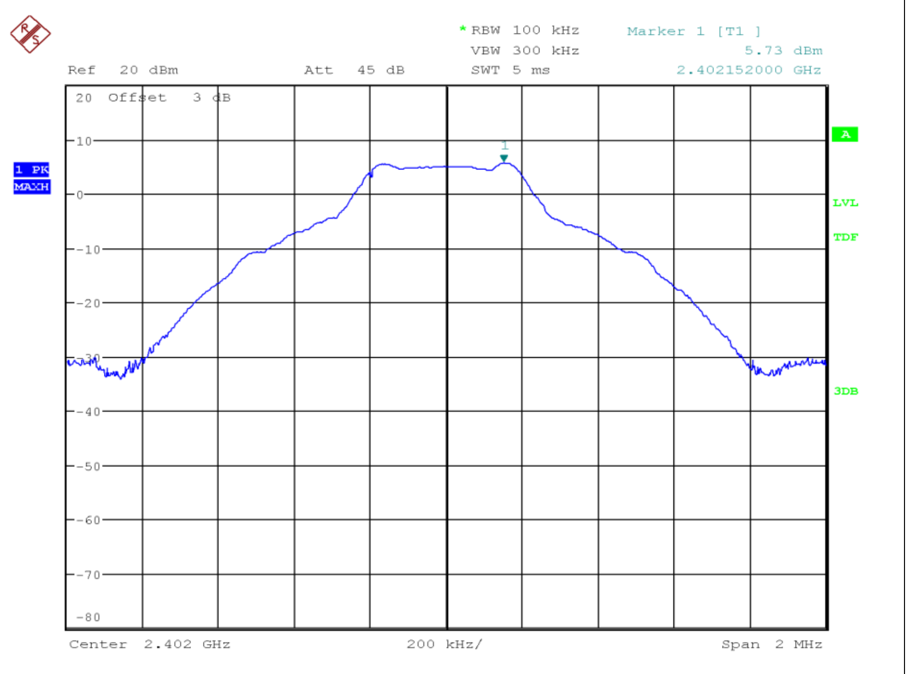


- GFSK (BT2) _ Low frequency

	Reference



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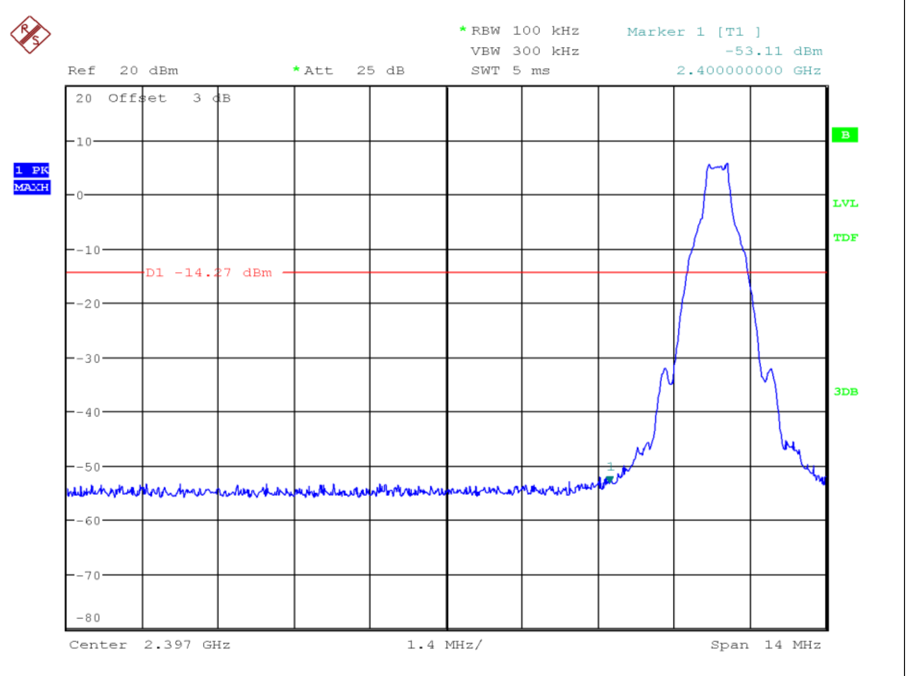

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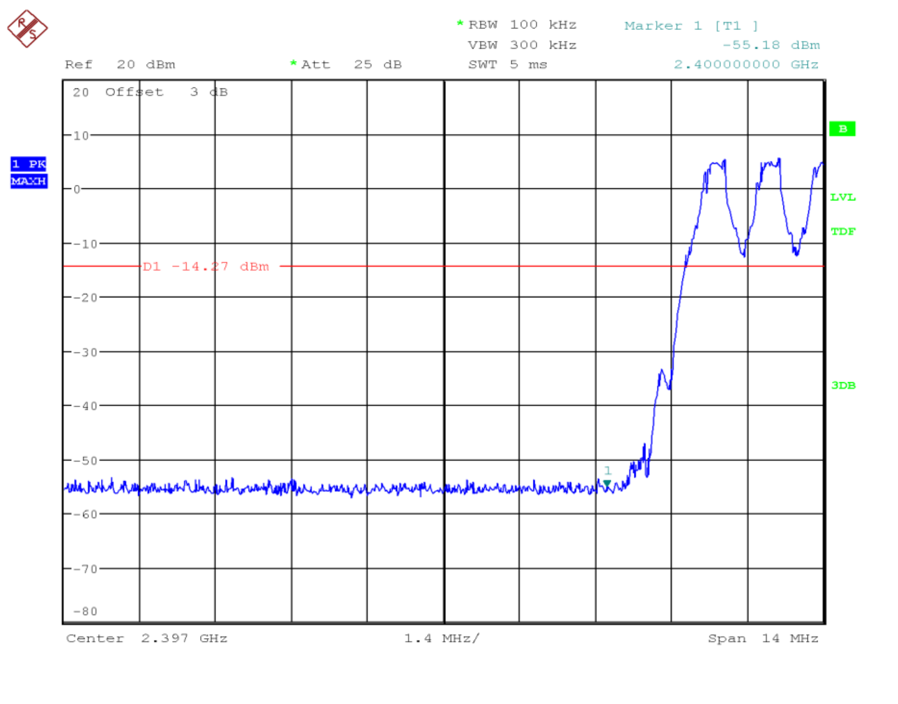

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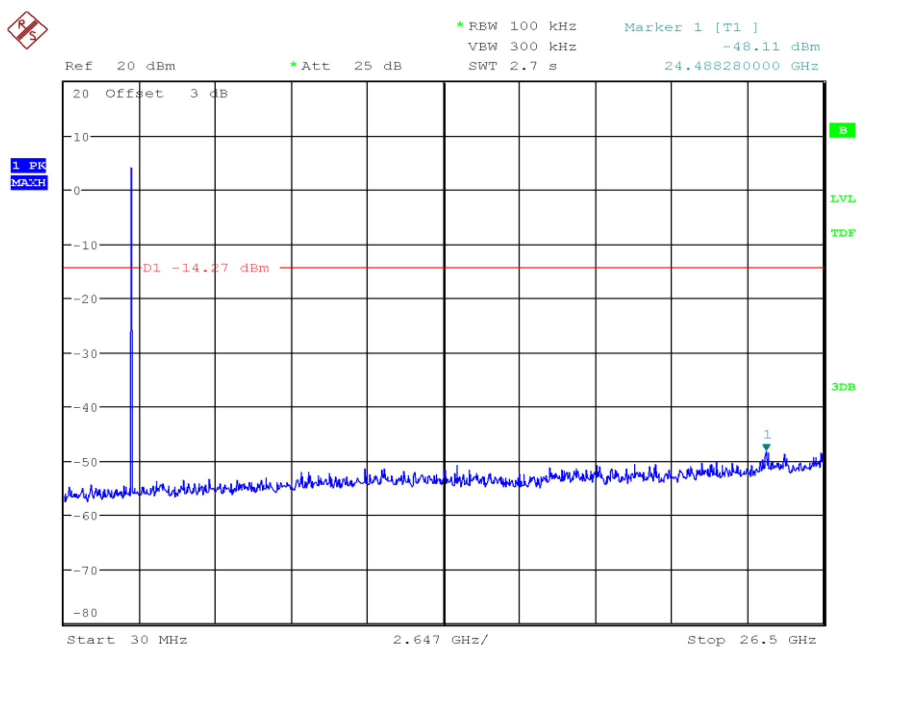
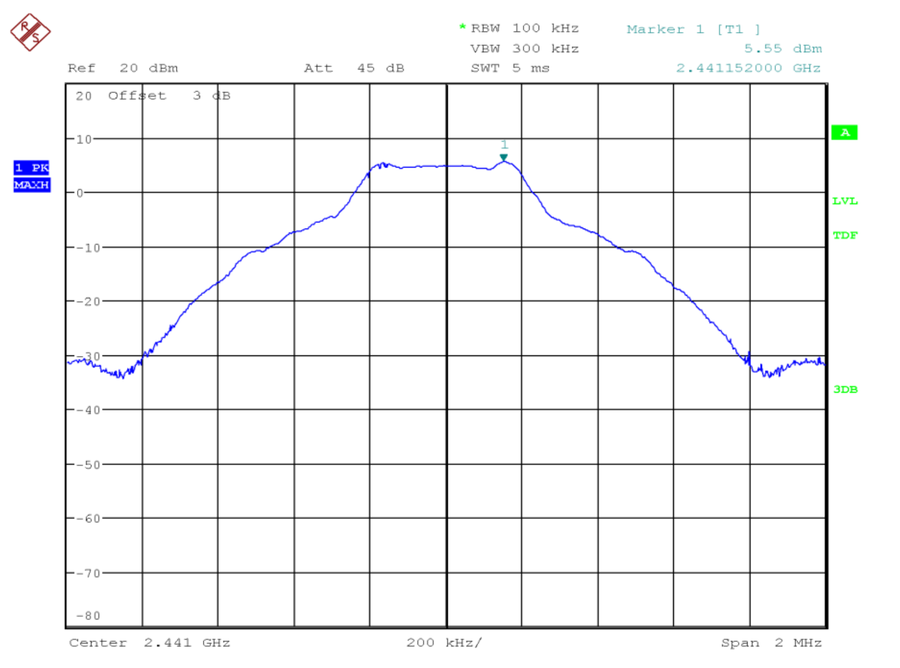


- GFSK (BT2) _ Middle frequency

	Reference



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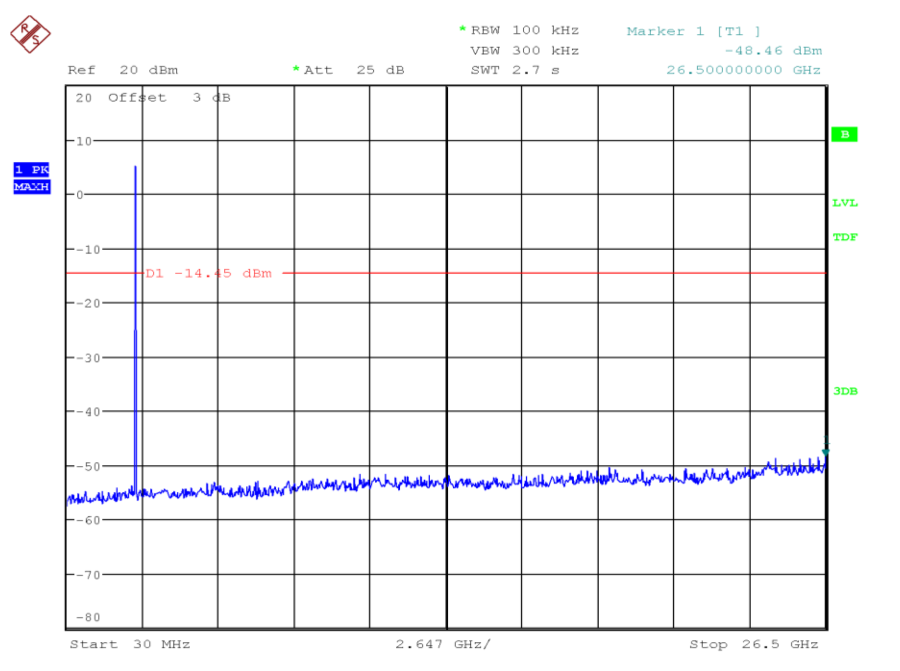

- GFSK (BT2) _ High frequency

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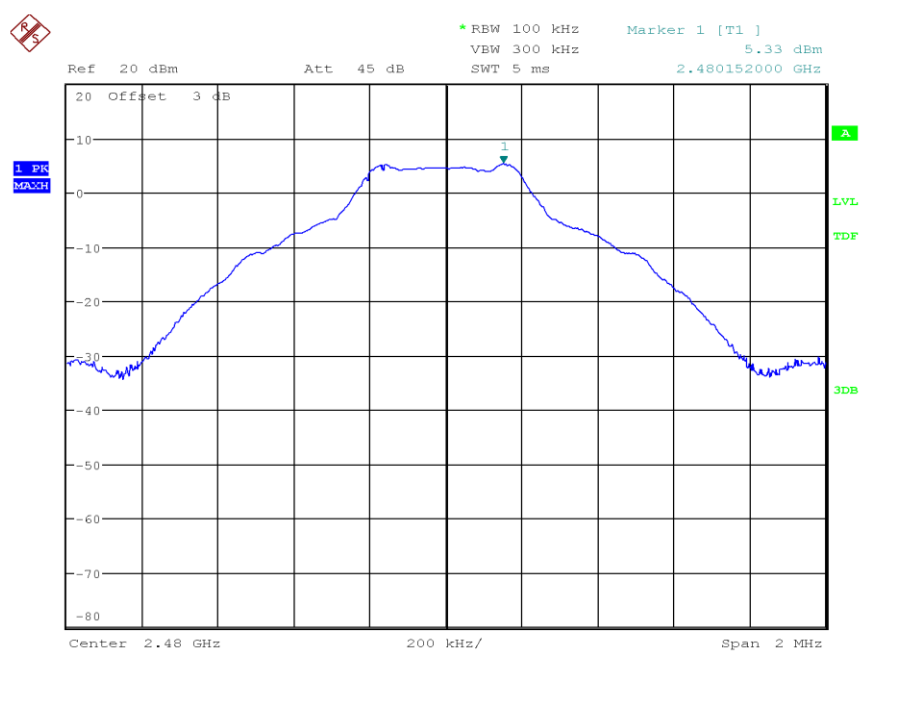

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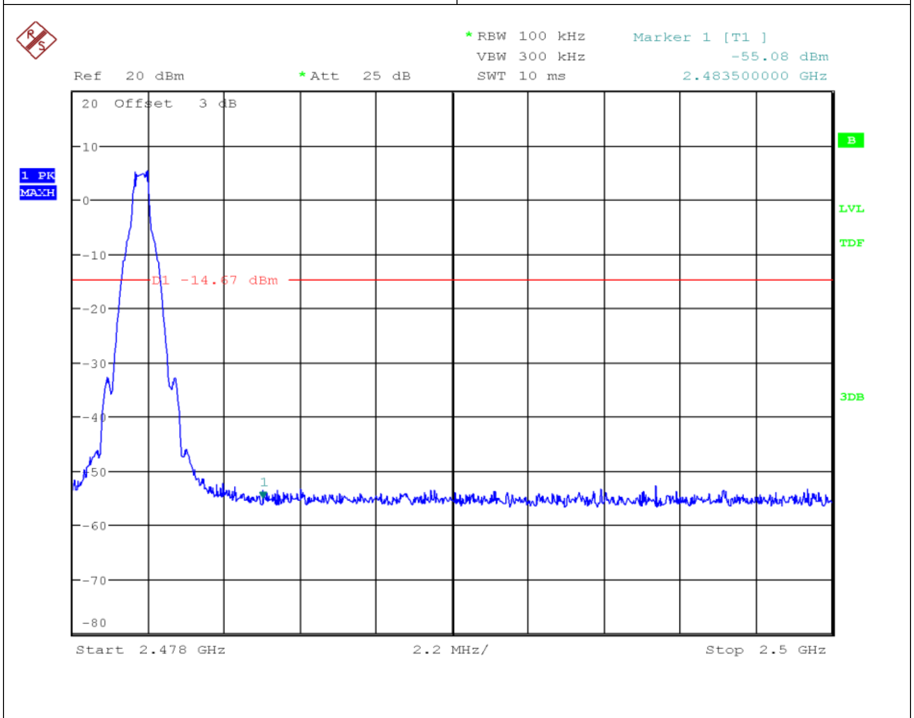

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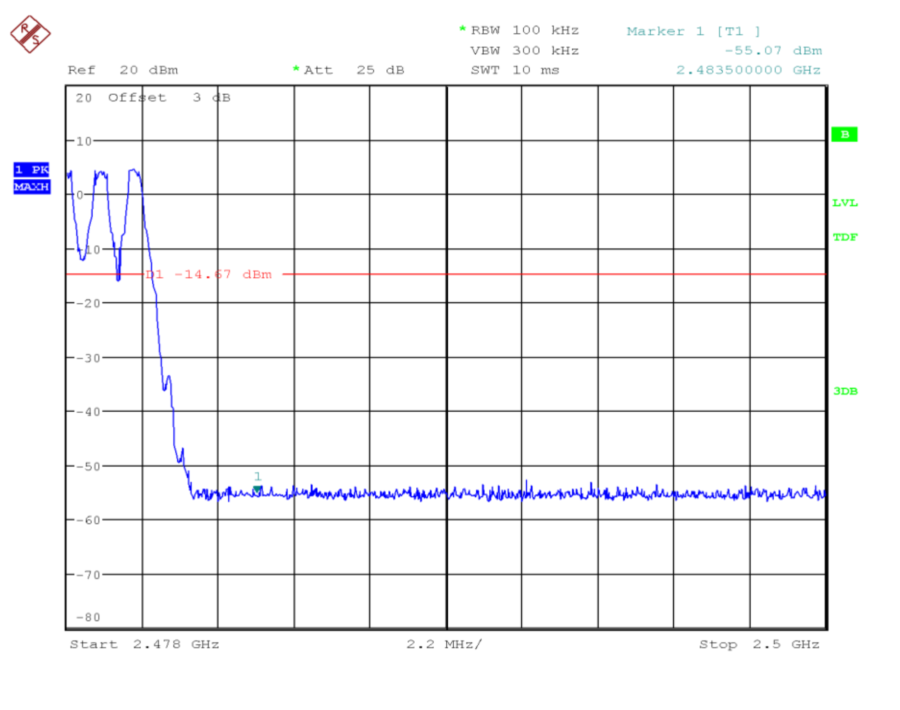

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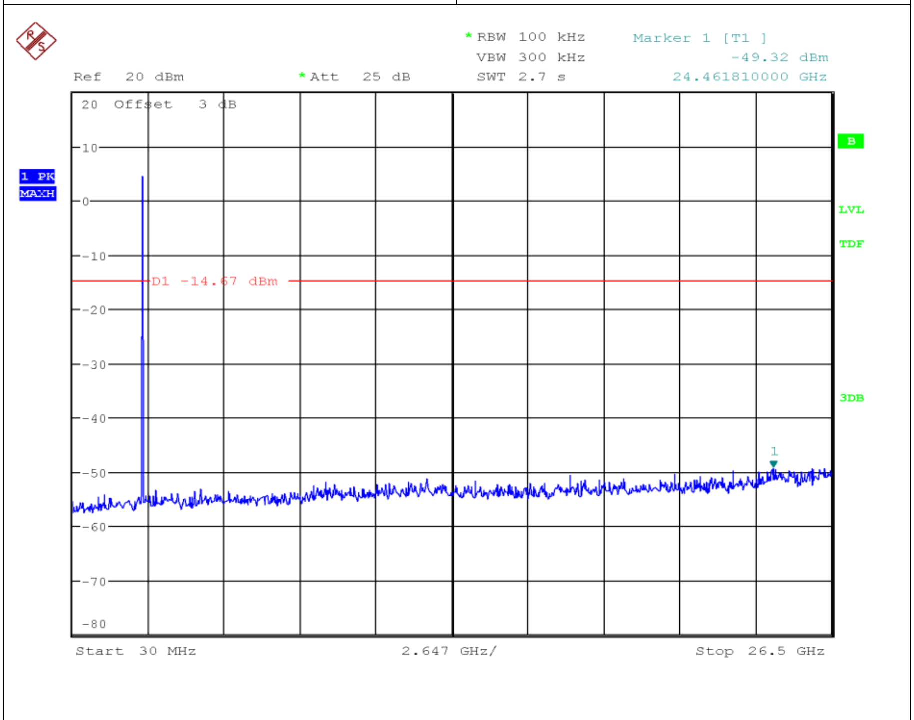

- 8DPSK (BT2) _ Low frequency

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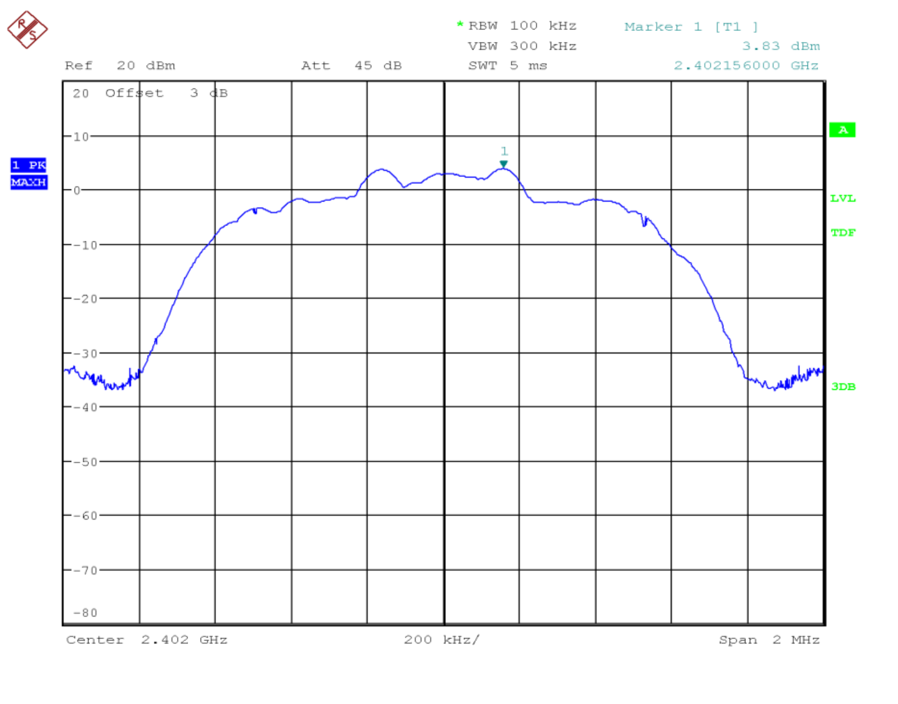

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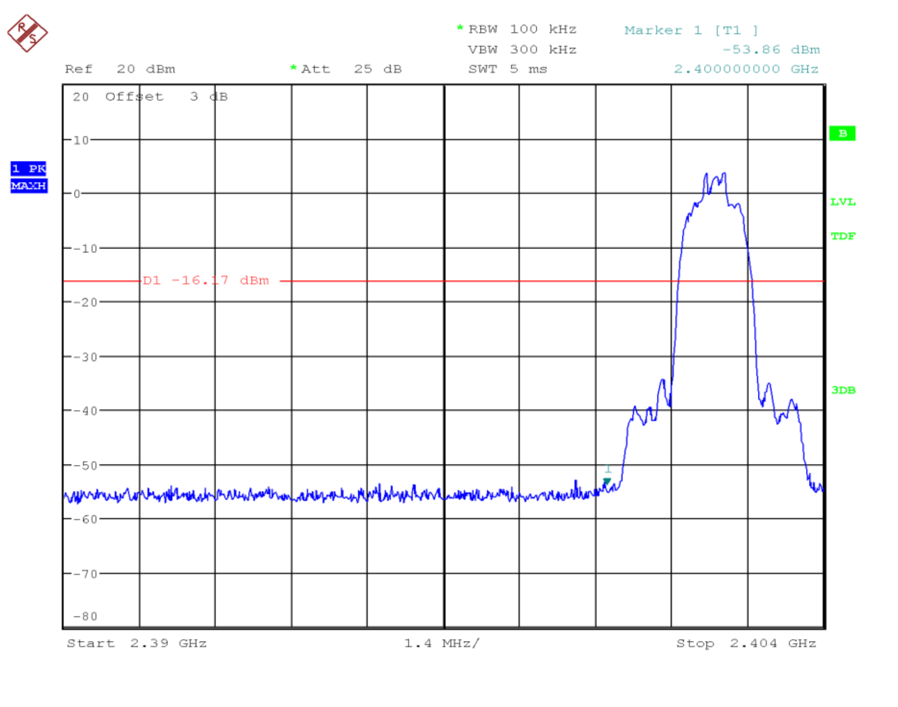

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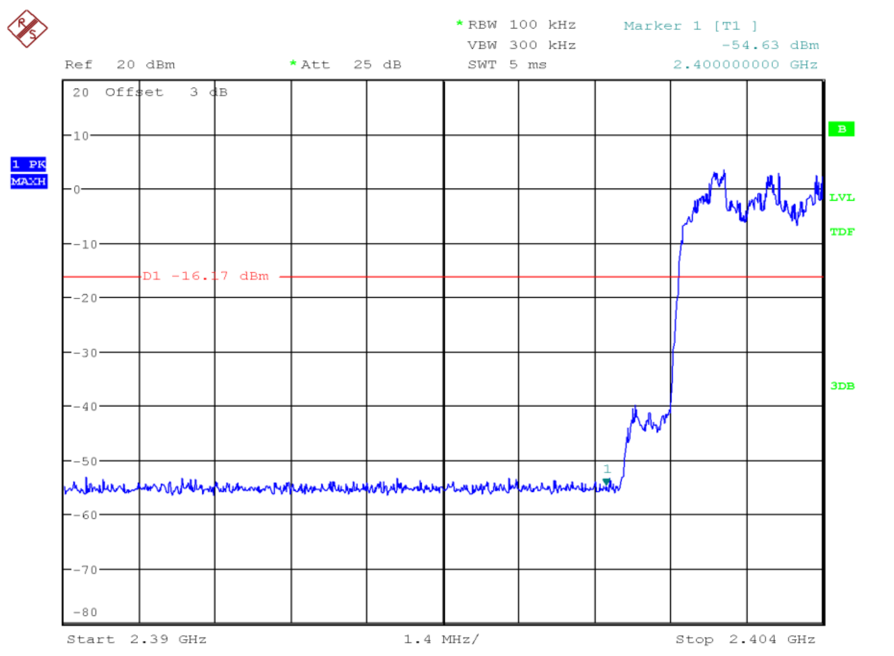

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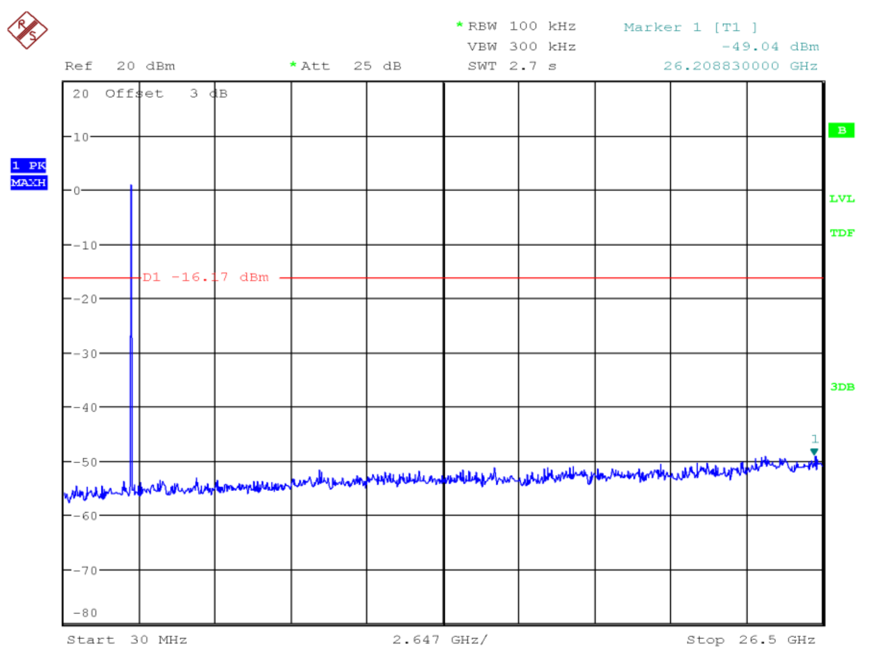
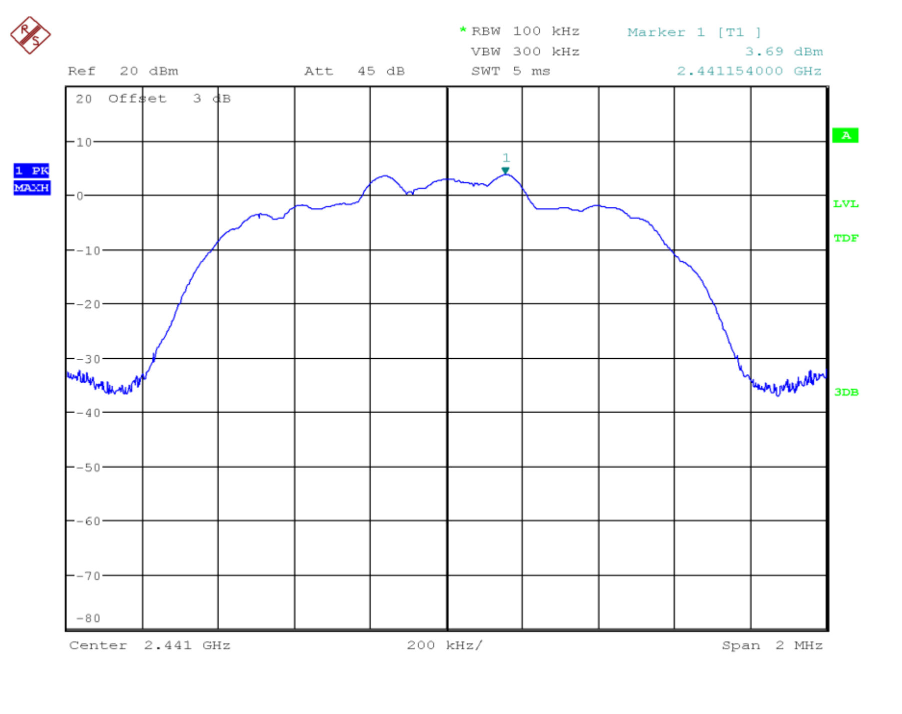


- 8DPSK (BT2) _ Middle frequency

Reference



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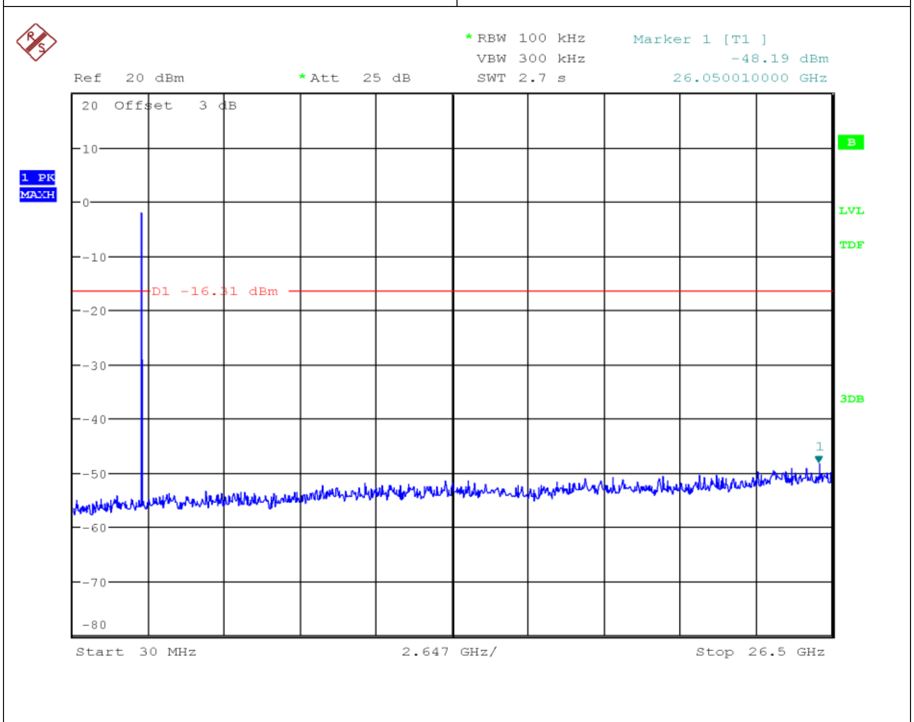

- 8DPSK (BT2) _ High frequency

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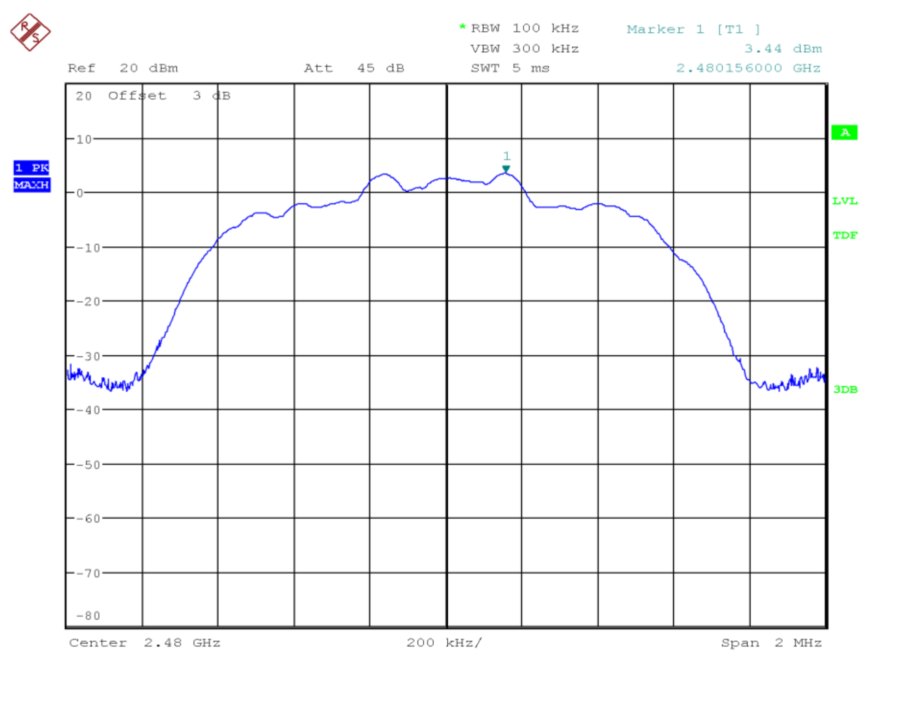

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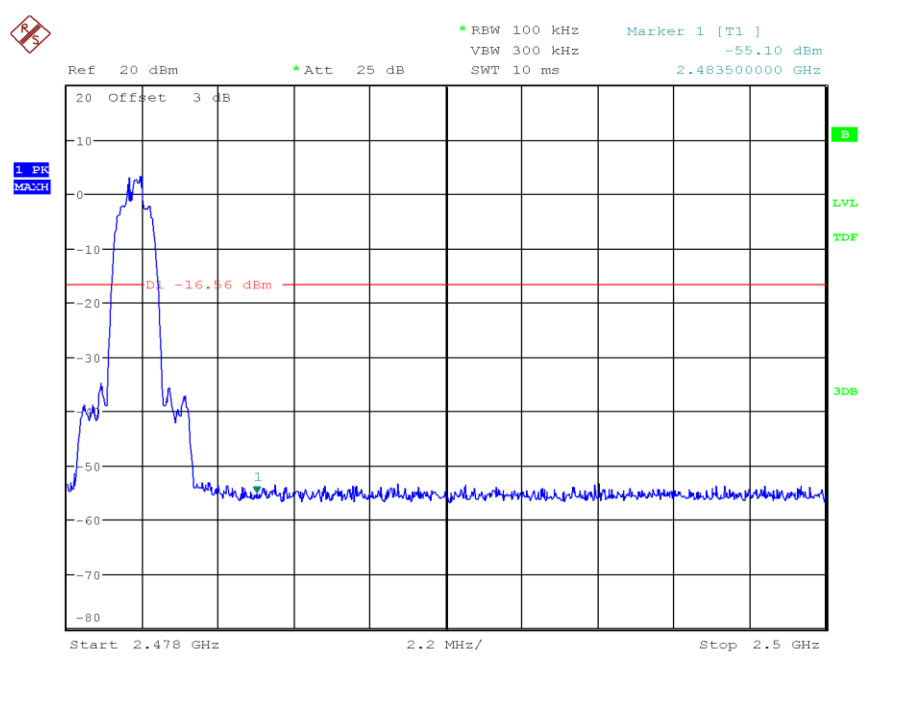
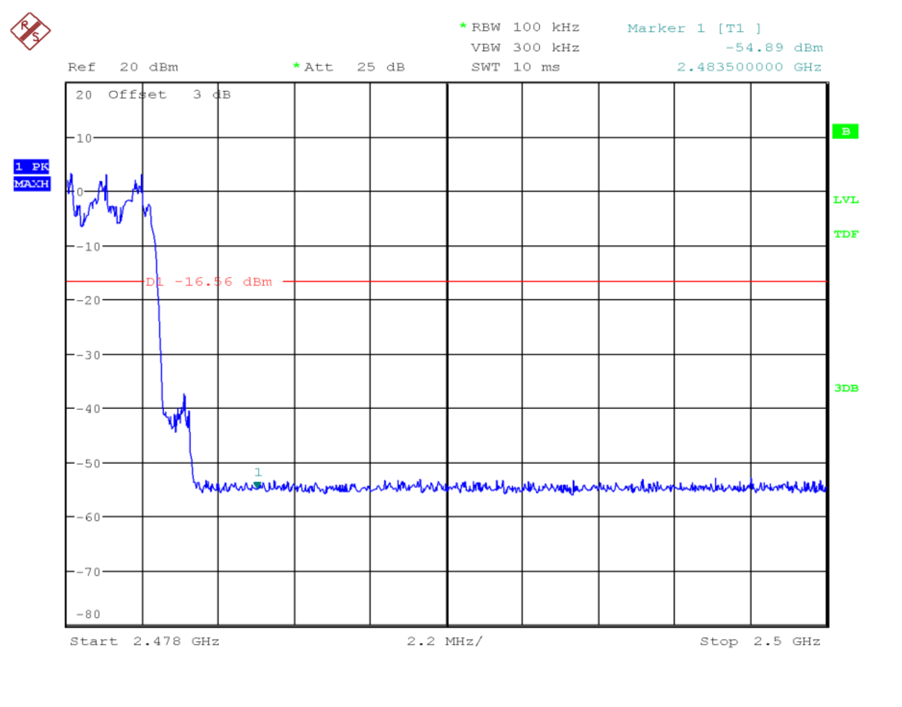


	Bandedge _ Hopping



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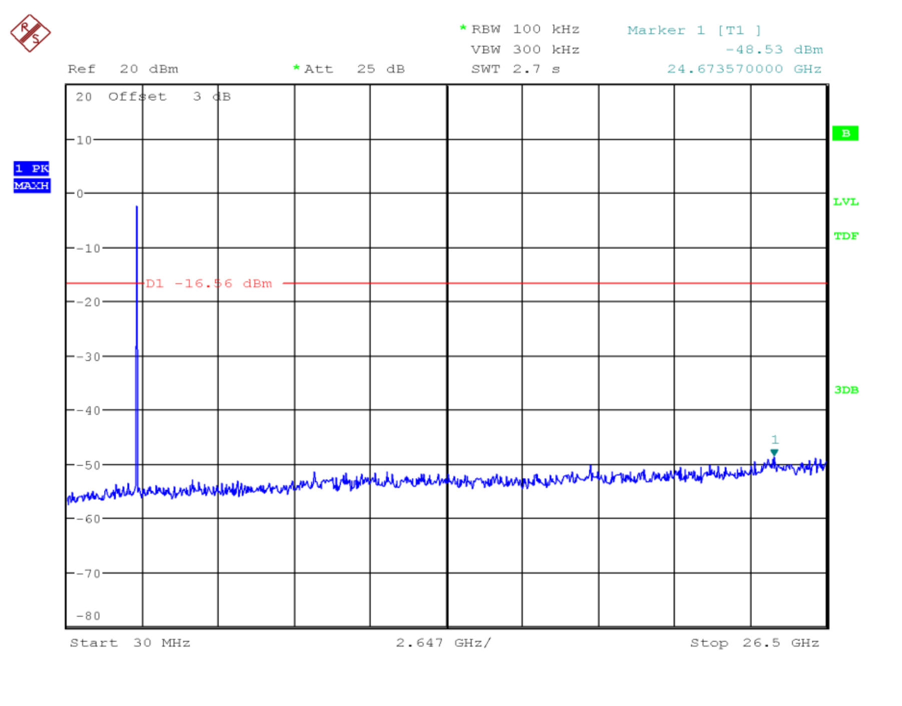


12. Conducted Emission

12.1 Test Setup

See test photographs for the actual connections between EUT and support equipment.

12.2 Limit

According to §15.207(a) for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 uH/50 ohm line impedance stabilization network (LISN).
Compliance with the provision of this paragraph shall on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower applies at the boundary between the frequency ranges.

Frequency Range (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 ~ 0.5	66 to 56 *	56 to 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

* Decreases with the logarithm of the frequency

12.3 Test Procedure

Conducted emissions from the EUT were measured according to the ANSI C63.10.

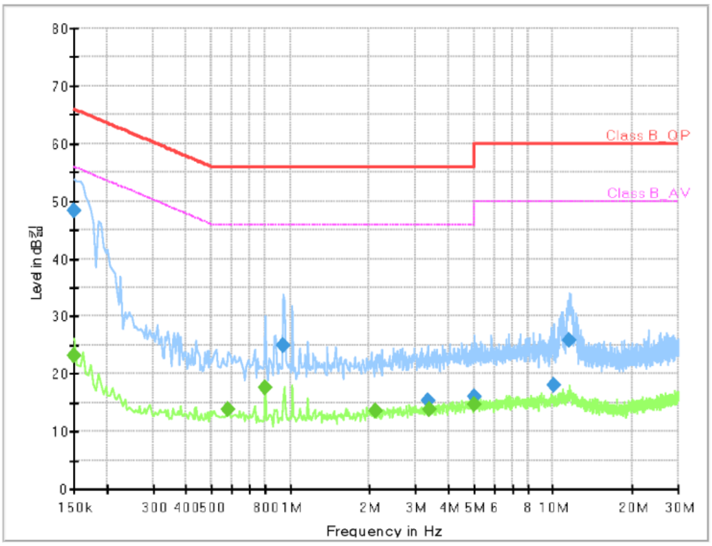
1. The test procedure is performed in a 6.5 m × 3.5 m × 3.5 m (L × W × H) shielded room. The EUT along with its peripherals were placed on a 1.0 m (W) × 1.5 m (L) and 0.8 m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane.
2. The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room.
3. All peripherals were connected to the second LISN and the chassis ground also bounded to the horizontal ground plane of shielded room.
4. The excess power cable between the EUT and the LISN was bundled. The power cables of peripherals were unbundled. All connecting cables of EUT and peripherals were moved to find the maximum emission.

12.4 Test Result

- AC Line Conducted Emission (Graph)

SRL3+_BT_L1

Power Interference

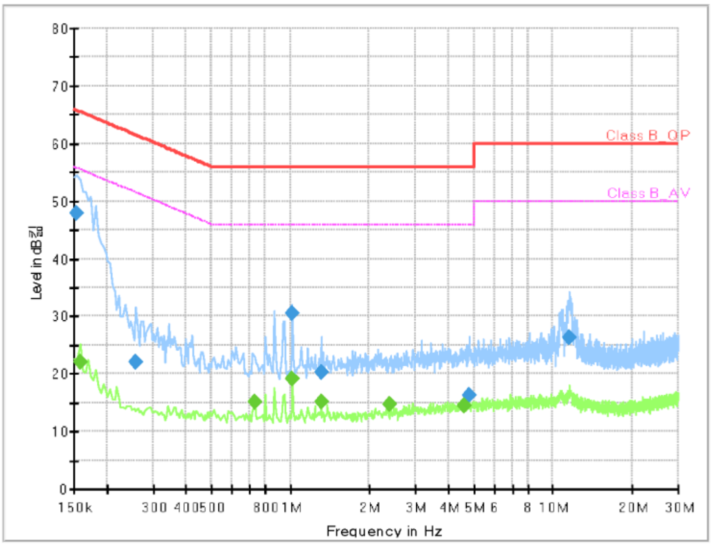


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Bandwidth (kHz)	Line	Filter
0.150	---	23.22	56.00	32.78	9	L1	ON
0.150	48.36	---	66.00	17.64	9	L1	ON
0.580	---	13.72	46.00	32.28	9	L1	ON
0.800	---	17.68	46.00	28.32	9	L1	ON
0.940	25.05	---	56.00	30.95	9	L1	ON
2.110	---	13.50	46.00	32.50	9	L1	ON
3.330	15.32	---	56.00	40.68	9	L1	ON
3.370	---	13.74	46.00	32.26	9	L1	ON
5.000	16.05	---	56.00	39.95	9	L1	ON
5.000	---	14.64	46.00	31.36	9	L1	ON
10.060	18.15	---	60.00	41.85	9	L1	ON
11.550	25.77	---	60.00	34.23	9	L1	ON

SRL3+ _BT_N

Power Interference



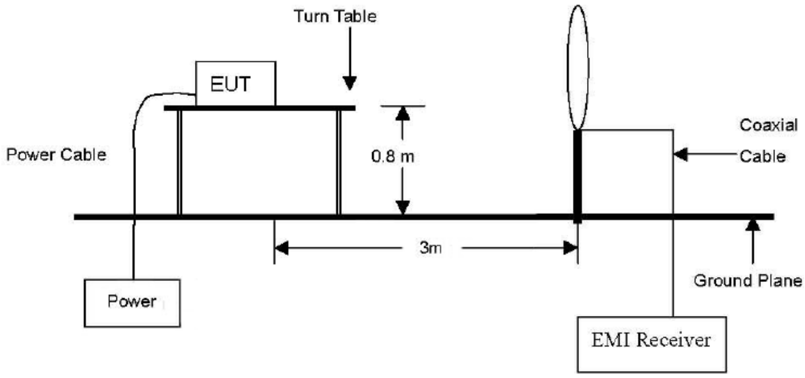
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Bandwidth (kHz)	Line	Filter
0.154	48.00	---	65.78	17.78	9	N	ON
0.158	---	22.11	55.57	33.46	9	N	ON
0.258	22.16	---	61.50	39.33	9	N	ON
0.730	---	15.17	46.00	30.83	9	N	ON
1.020	---	19.23	46.00	26.77	9	N	ON
1.020	30.46	---	56.00	25.54	9	N	ON
1.310	20.22	---	56.00	35.78	9	N	ON
1.310	---	15.05	46.00	30.95	9	N	ON
2.400	---	14.62	46.00	31.38	9	N	ON
4.580	---	14.59	46.00	31.41	9	N	ON
4.810	16.23	---	56.00	39.77	9	N	ON
11.590	26.34	---	60.00	33.66	9	N	ON

APPENDIX I

TEST SETUP

- Radiated Measurement

<table>
<tr><td>below 30 MHz</td><td>
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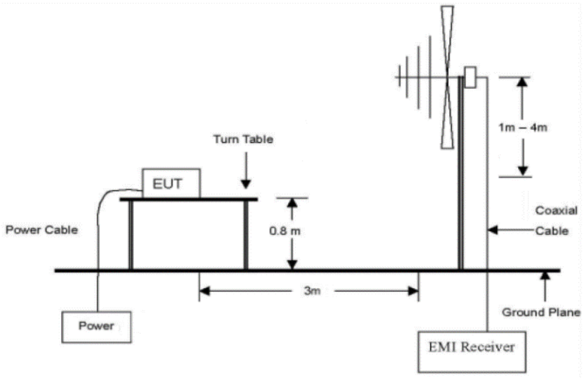
<tr><td>below 1 GHz</td><td>
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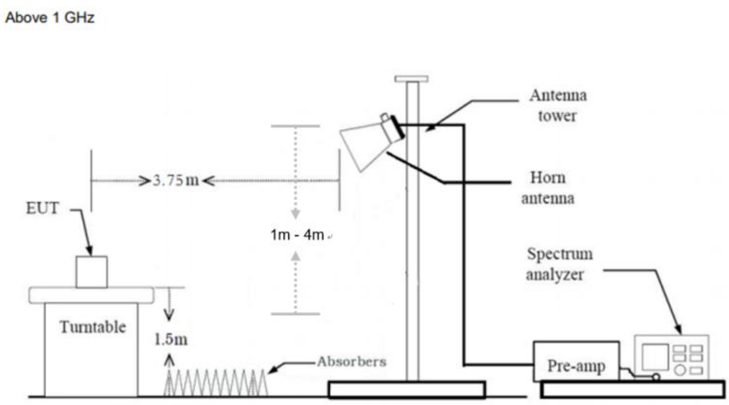
<tr><td>above 1 GHz</td><td>
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- Conducted Measurement

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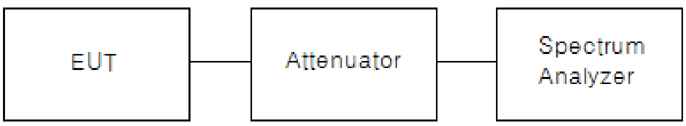
<tr><td>Conducted</td><td>
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APPENDIX II

UNCERTAINTY

Measurement Item	Expanded Uncertainty U = *k*Uc (*k*=2)
Conducted RF power	0.34 dB
Conducted Spurious Emissions	0.34 dB
Radiated Spurious Emissions	5.82 dB
Conducted Emissions	2.00 dB