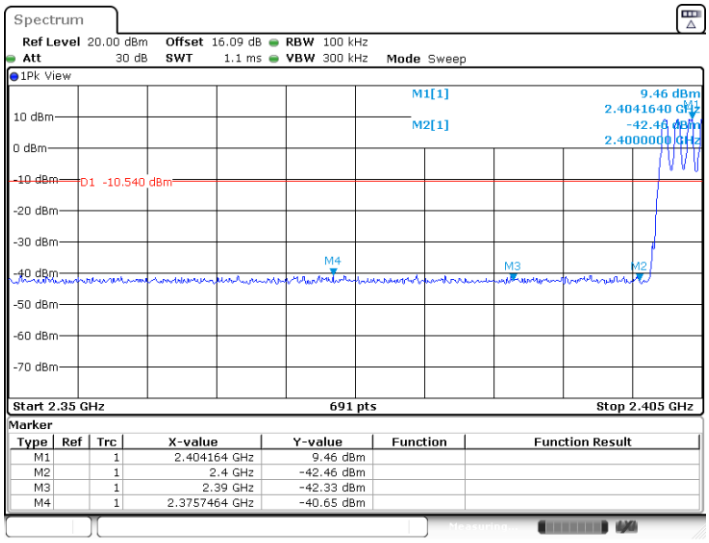
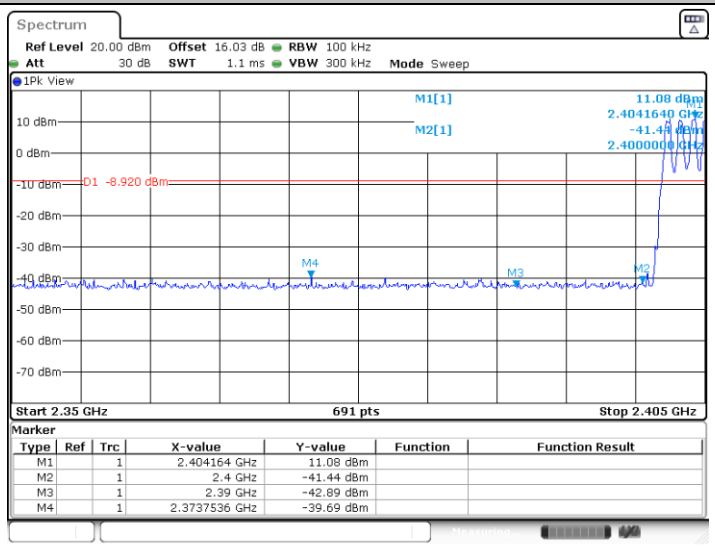
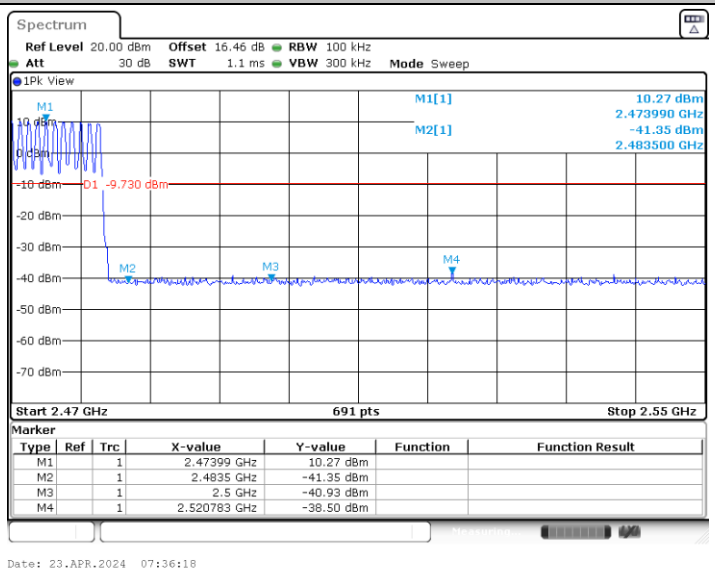
DH5_Ant9_Low_Hop_2402



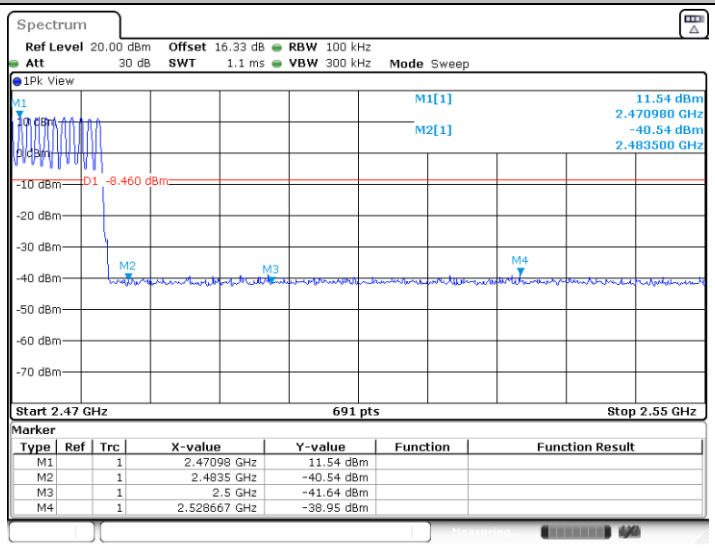
DH5_Ant10_Low_Hop_2402



DH5_Ant9_High_Hop_2480



DH5_Ant10_High_Hop_2480



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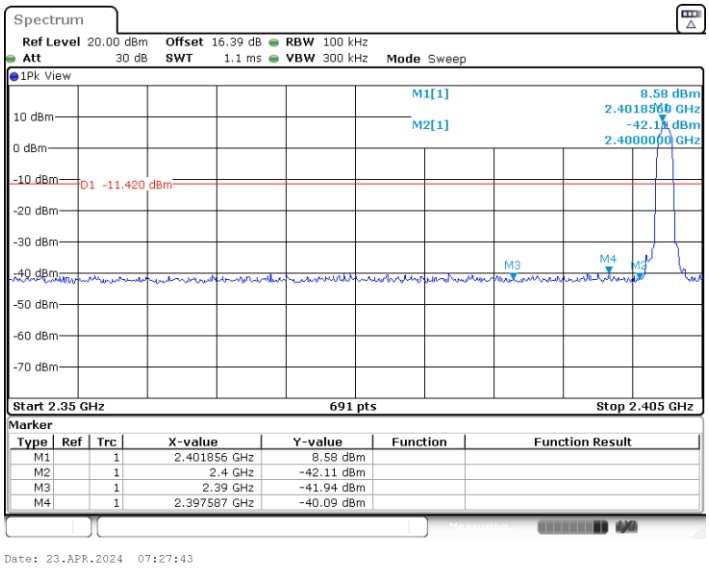

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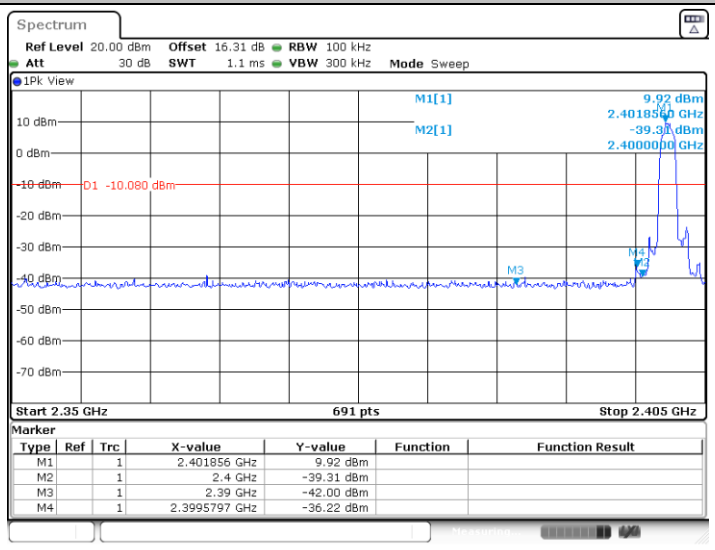
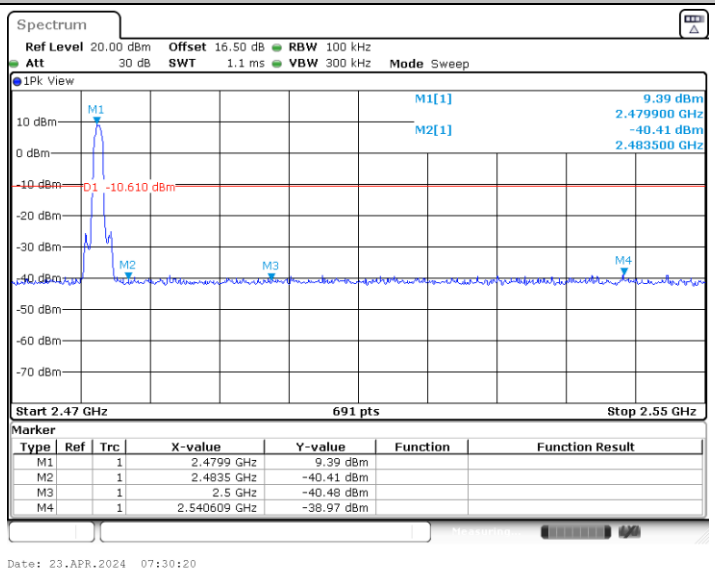
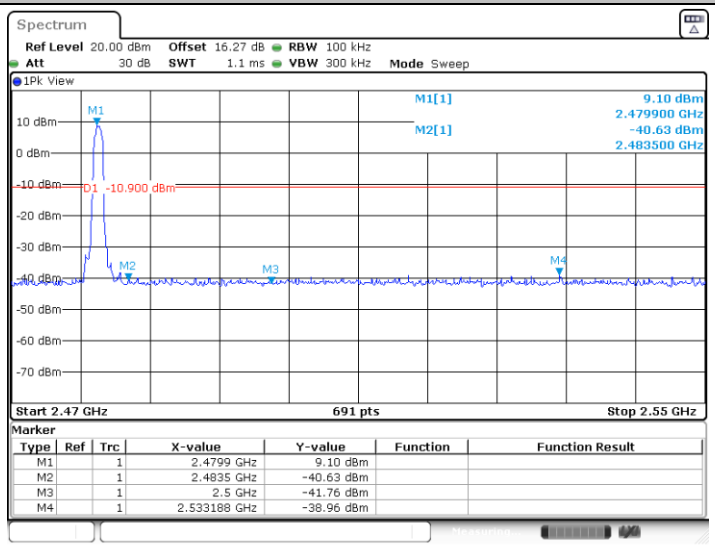


2DH1_Ant9_High_2480



2DH1_Ant10_High_2480



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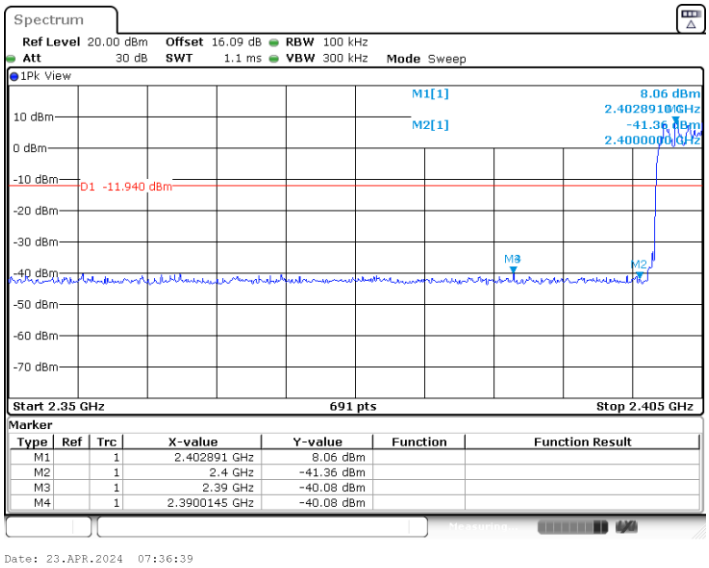

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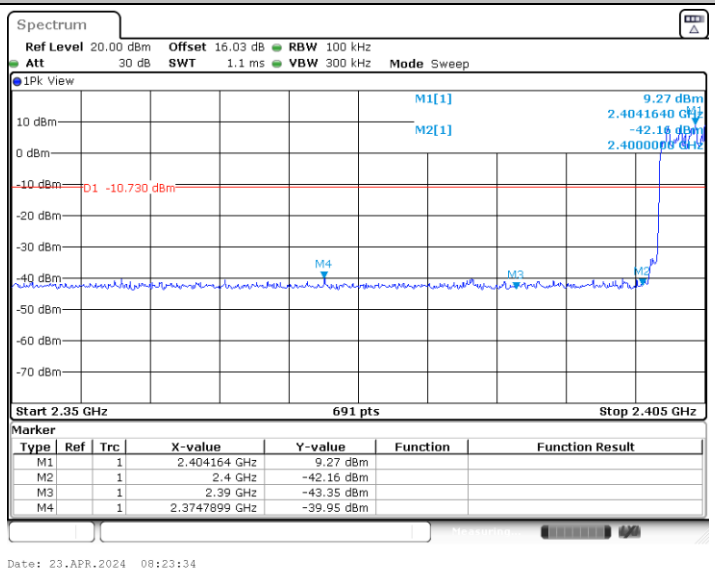

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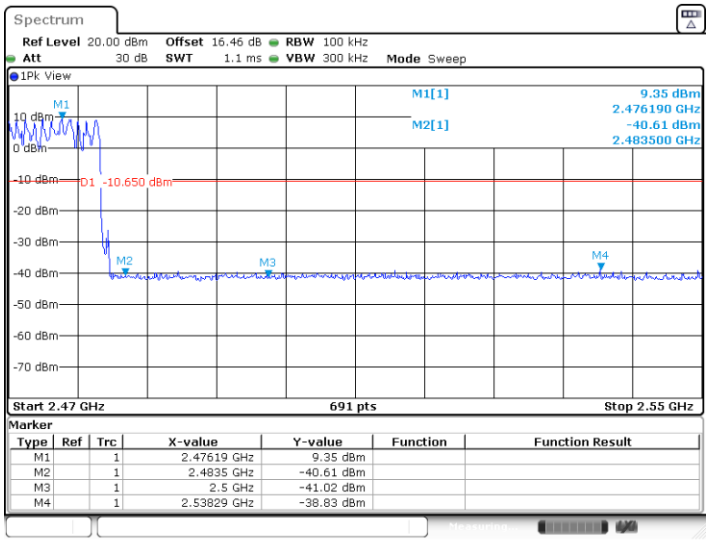

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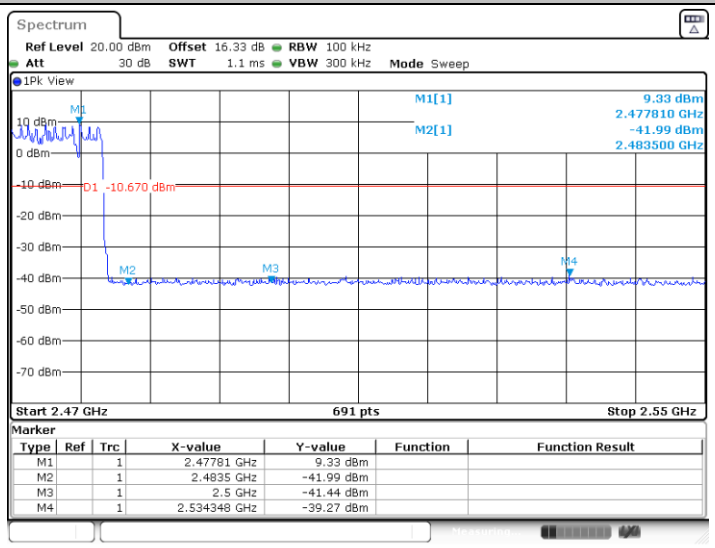

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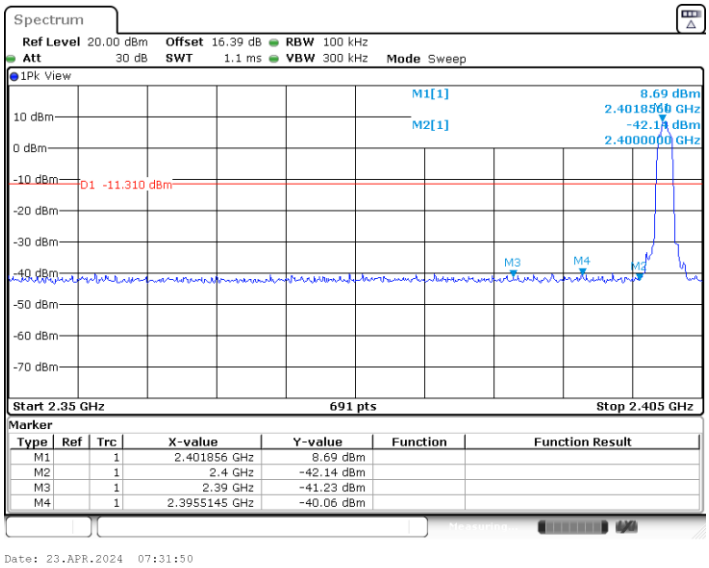

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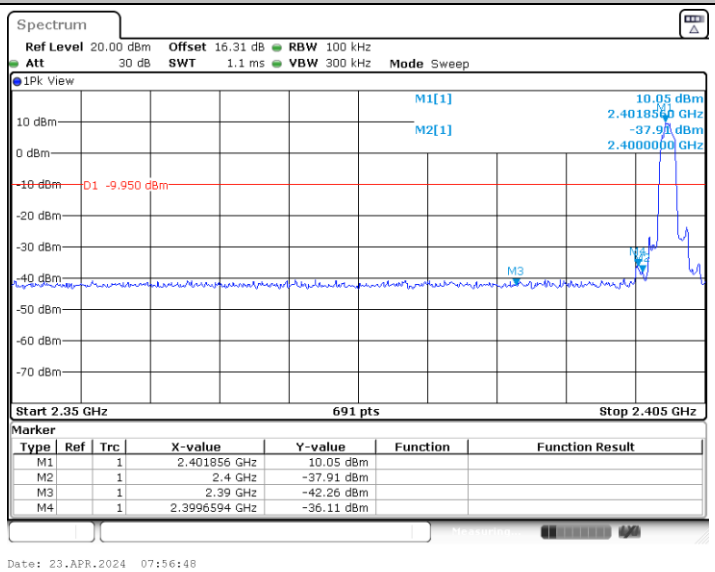

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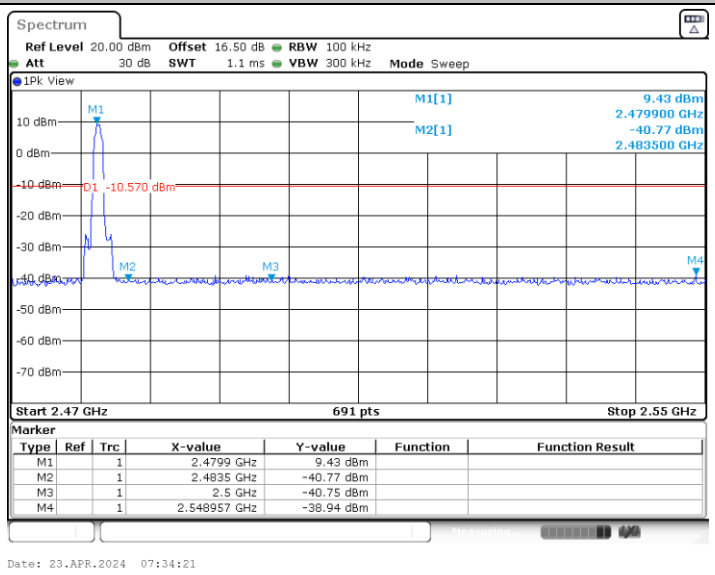

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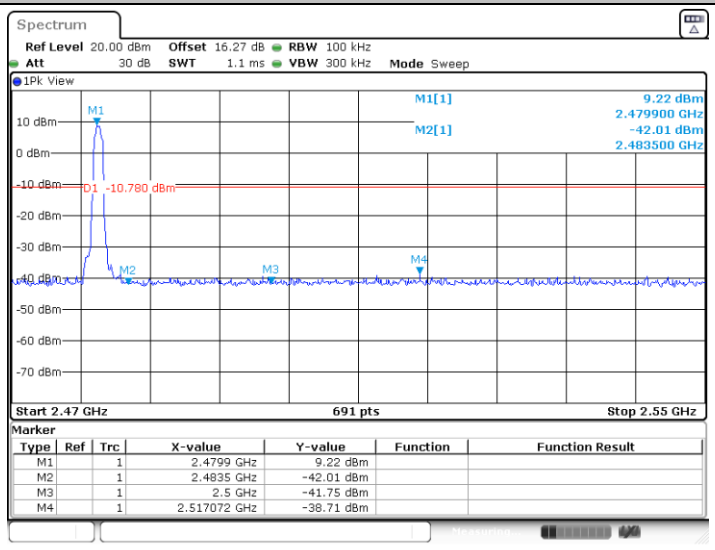

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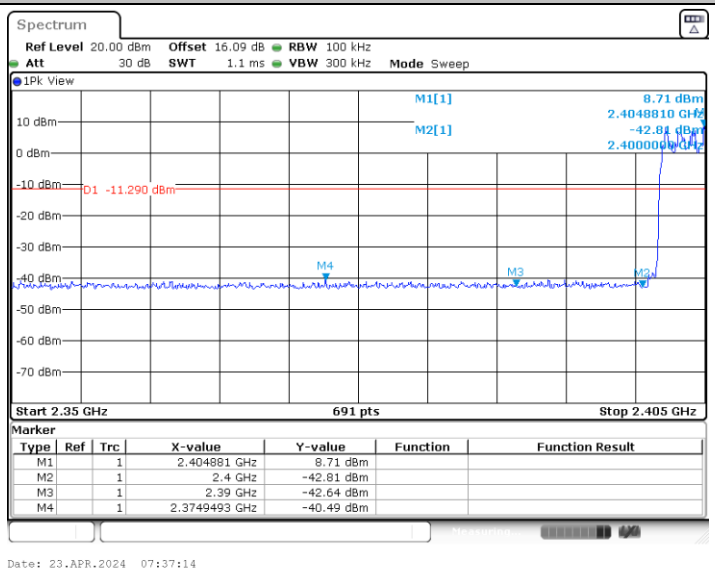

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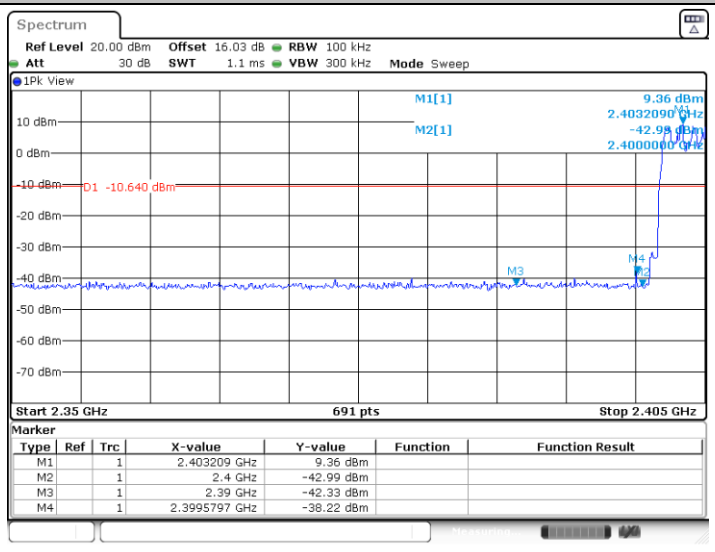

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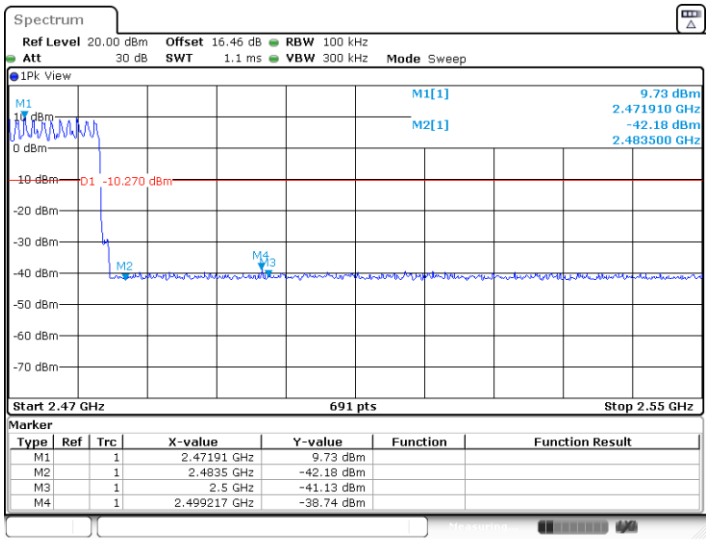

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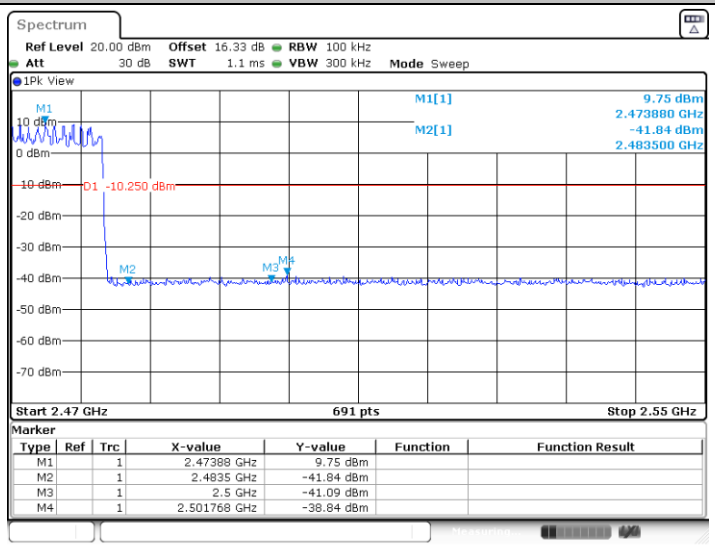


Conducted Spurious Emission

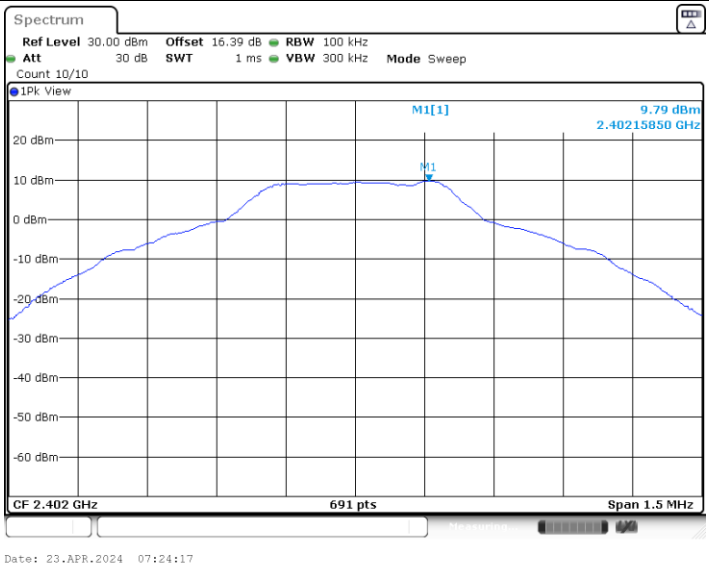
Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant9	2402	Reference	9.79	9.79	---	PASS
			30~1000	9.79	-40.46	≤-10.21	PASS
			1000~26500	9.79	-31.75	≤-10.21	PASS
	Ant10	2402	Reference	11.08	11.08	---	PASS
			30~1000	11.08	-40.9	≤-8.92	PASS
			1000~26500	11.08	-30.49	≤-8.92	PASS
	Ant9	2441	Reference	10.63	10.63	---	PASS
			30~1000	10.63	-41.03	≤-9.37	PASS
			1000~26500	10.63	-31.7	≤-9.37	PASS
	Ant10	2441	Reference	12.39	12.39	---	PASS
			30~1000	12.39	-40.43	≤-7.61	PASS
			1000~26500	12.39	-32.18	≤-7.61	PASS
	Ant9	2480	Reference	9.83	9.83	---	PASS
			30~1000	9.83	-40.74	≤-10.17	PASS
			1000~26500	9.83	-31.45	≤-10.17	PASS
	Ant10	2480	Reference	11.33	11.33	---	PASS
			30~1000	11.33	-41.44	≤-8.67	PASS
			1000~26500	11.33	-31.98	≤-8.67	PASS
2DH1	Ant9	2402	Reference	8.52	8.52	---	PASS
			30~1000	8.52	-40.93	≤-11.48	PASS
			1000~26500	8.52	-31.68	≤-11.48	PASS
	Ant10	2402	Reference	9.84	9.84	---	PASS
			30~1000	9.84	-40.95	≤-10.16	PASS
			1000~26500	9.84	-32.65	≤-10.16	PASS
	Ant9	2441	Reference	9.59	9.59	---	PASS
			30~1000	9.59	-41.1	≤-10.41	PASS
			1000~26500	9.59	-32	≤-10.41	PASS
	Ant10	2441	Reference	10.27	10.27	---	PASS
			30~1000	10.27	-40.69	≤-9.73	PASS
			1000~26500	10.27	-32.94	≤-9.73	PASS
	Ant9	2480	Reference	9.40	9.40	---	PASS
			30~1000	9.40	-41.24	≤-10.6	PASS
			1000~26500	9.40	-31.49	≤-10.6	PASS

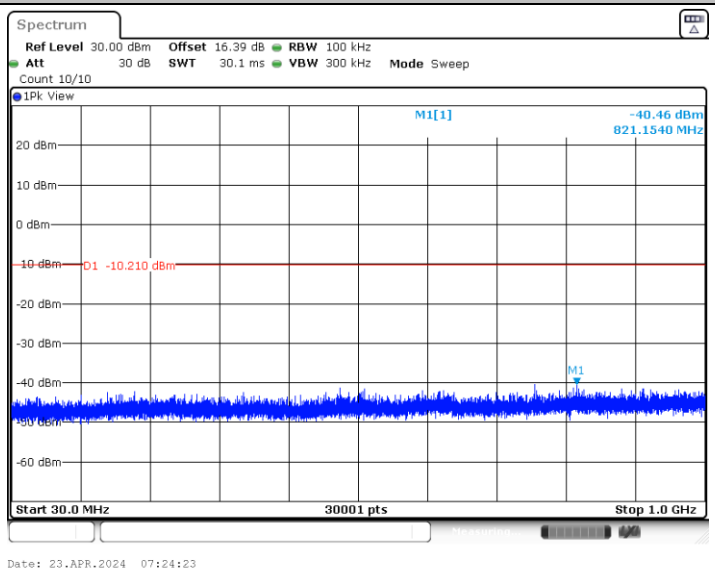
	Ant10	2480	Reference	9.11	9.11	---	PASS
			30~1000	9.11	-40.94	≤-10.89	PASS
			1000~26500	9.11	-32.47	≤-10.89	PASS
3DH1	Ant9	2402	Reference	8.69	8.69	---	PASS
			30~1000	8.69	-41.01	≤-11.31	PASS
			1000~26500	8.69	-31.52	≤-11.31	PASS
	Ant10	2402	Reference	10.01	10.01	---	PASS
			30~1000	10.01	-40.87	≤-9.99	PASS
			1000~26500	10.01	-31.83	≤-9.99	PASS
	Ant9	2441	Reference	9.73	9.73	---	PASS
			30~1000	9.73	-41.44	≤-10.27	PASS
			1000~26500	9.73	-32.72	≤-10.27	PASS
	Ant10	2441	Reference	10.43	10.43	---	PASS
			30~1000	10.43	-41.37	≤-9.57	PASS
			1000~26500	10.43	-31.71	≤-9.57	PASS
	Ant9	2480	Reference	9.53	9.53	---	PASS
			30~1000	9.53	-41.06	≤-10.47	PASS
			1000~26500	9.53	-32.26	≤-10.47	PASS
	Ant10	2480	Reference	9.31	9.31	---	PASS
			30~1000	9.31	-41.14	≤-10.69	PASS
			1000~26500	9.31	-32.25	≤-10.69	PASS

Test Graphs

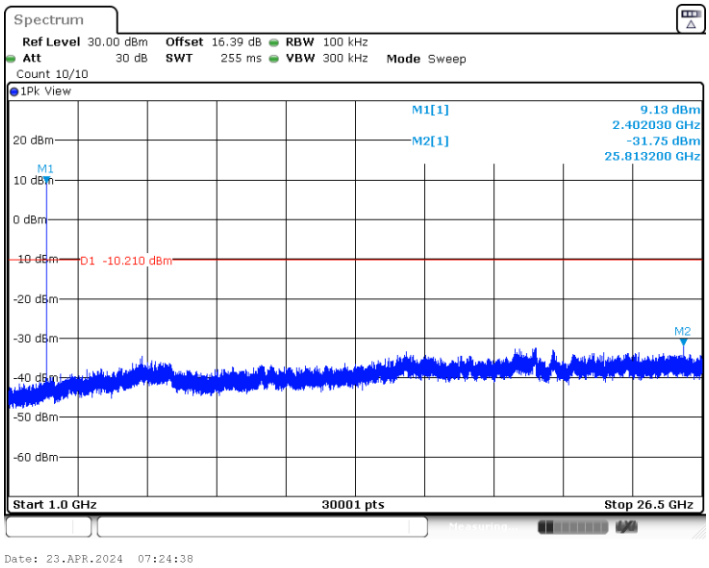
DH5_Ant9_2402_0~Reference



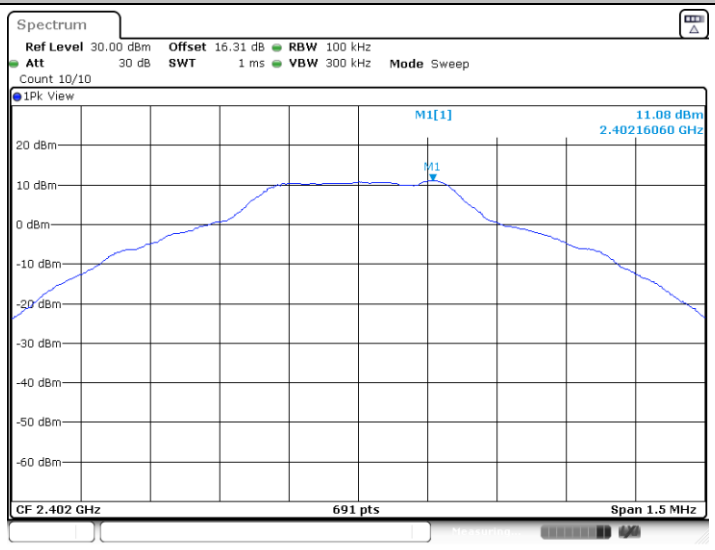
DH5_Ant9_2402_30~1000



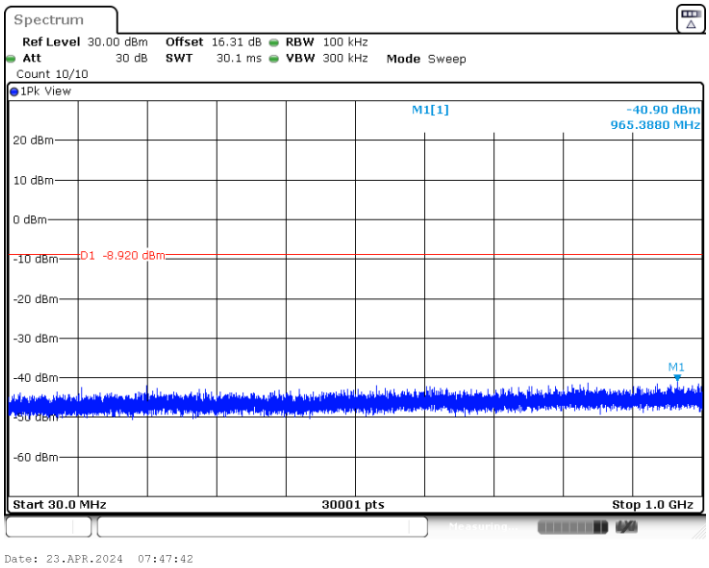
DH5_Ant9_2402_1000~26500



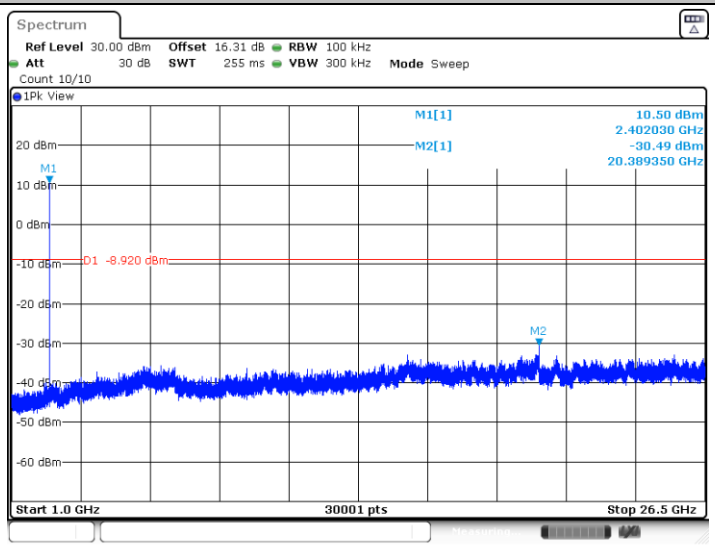
DH5_Ant10_2402_0~Reference



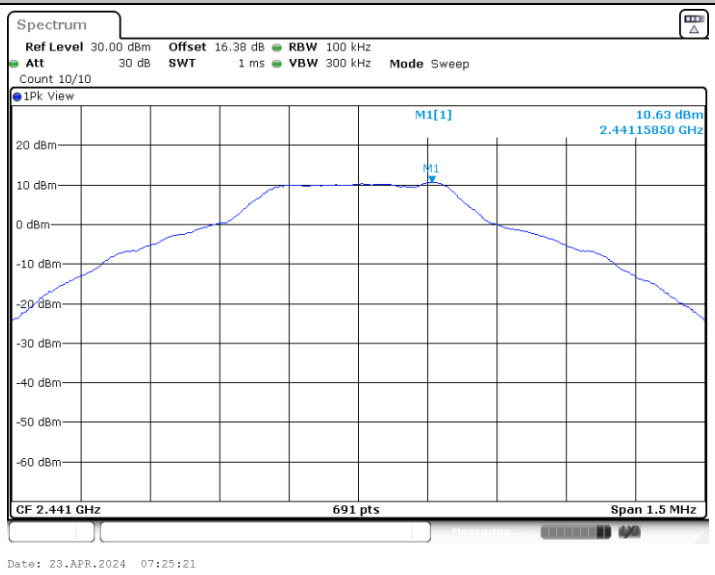
DH5_Ant10_2402_30~1000



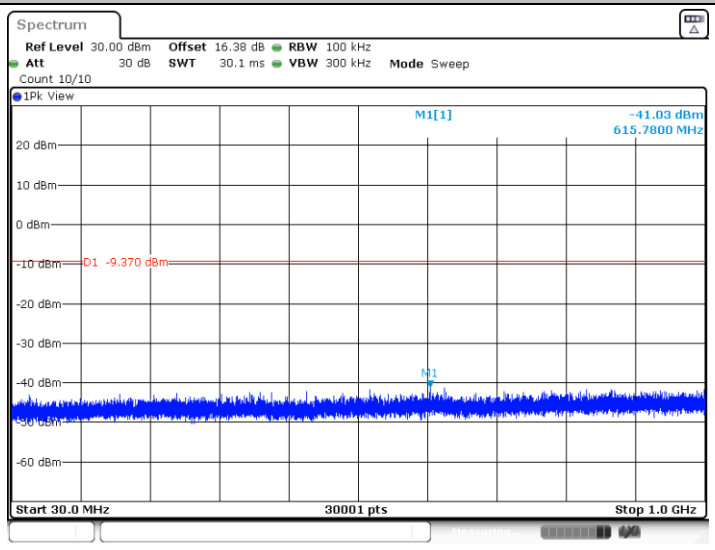
DH5_Ant10_2402_1000~26500



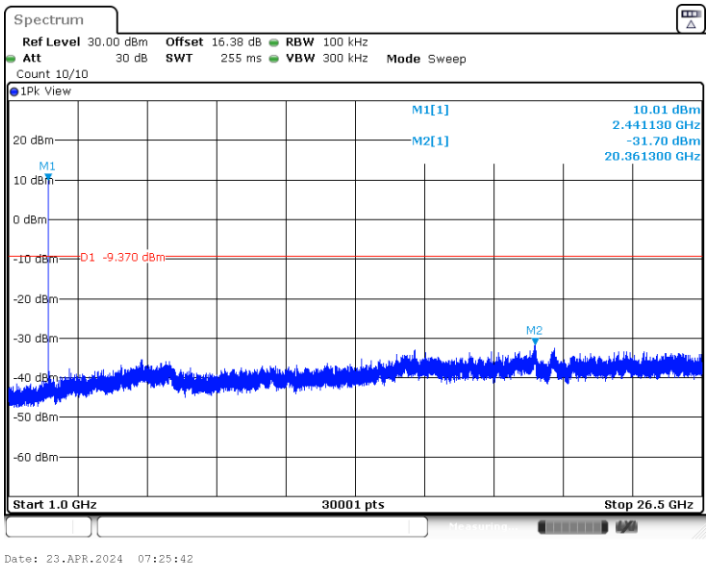
DH5_Ant9_2441_0~Reference



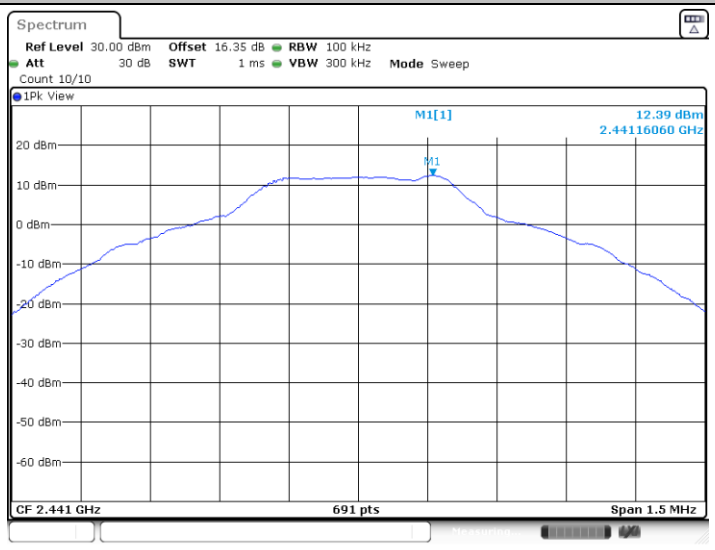
DH5_Ant9_2441_30~1000



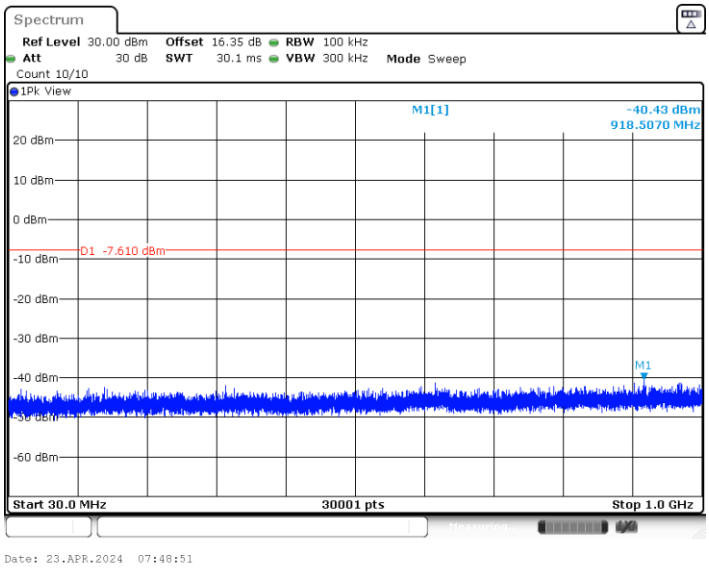
DH5_Ant9_2441_1000~26500



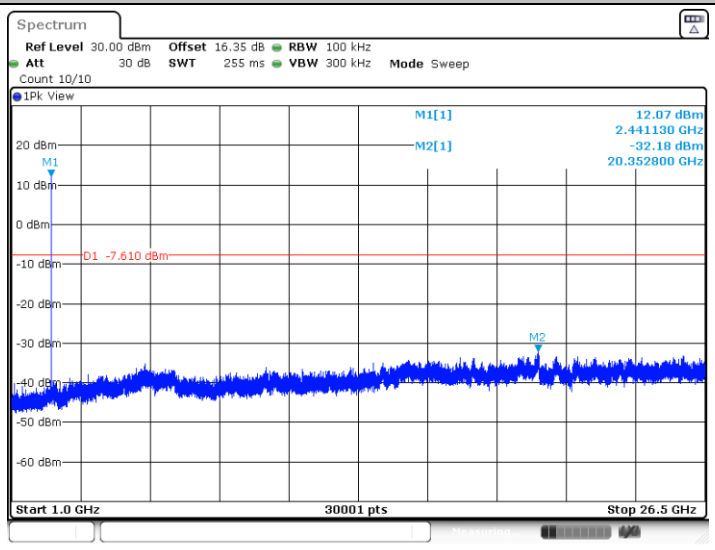
DH5_Ant10_2441_0~Reference



DH5_Ant10_2441_30~1000



DH5_Ant10_2441_1000~26500



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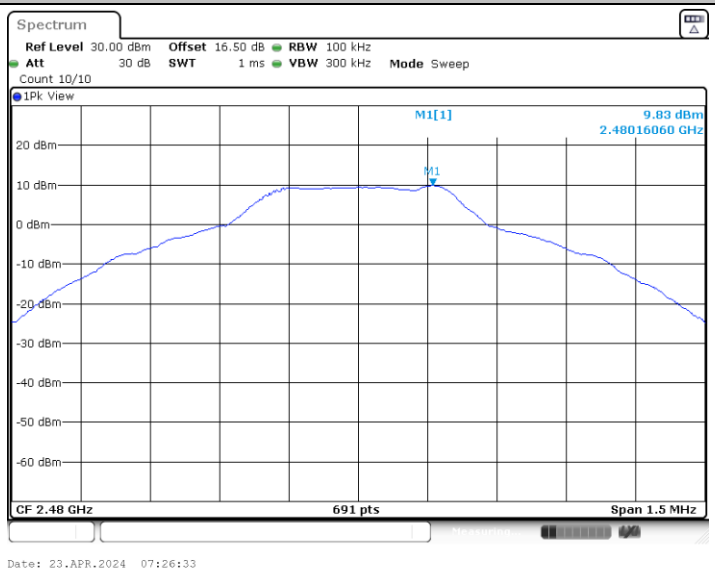
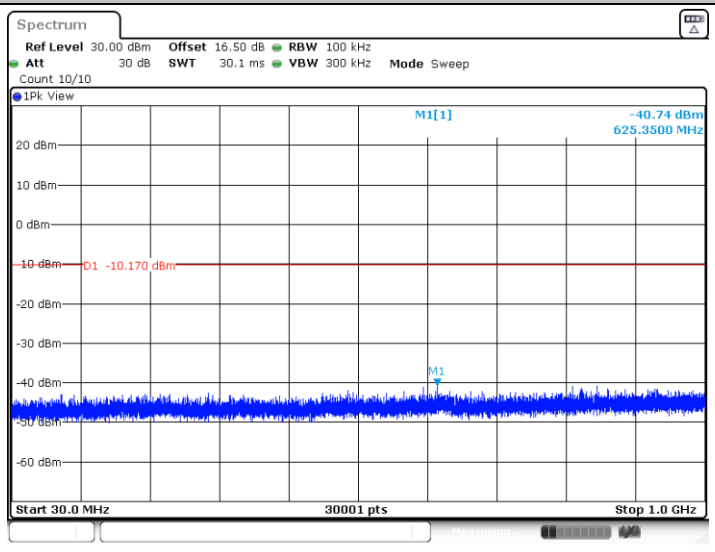
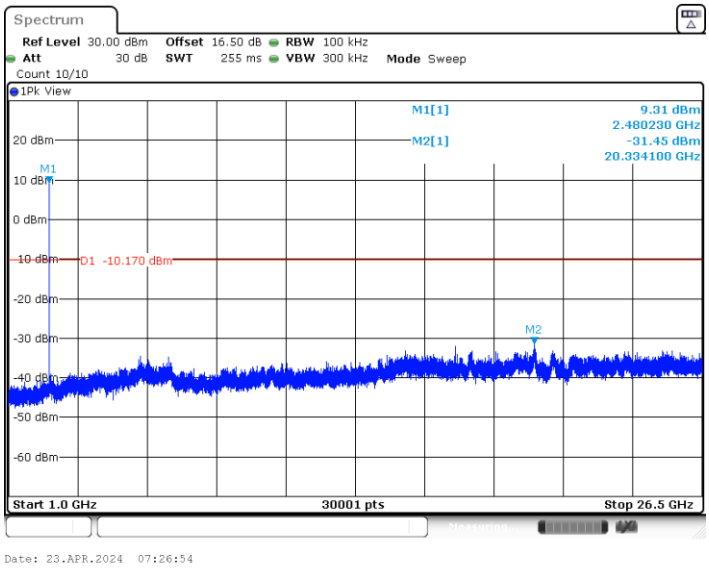
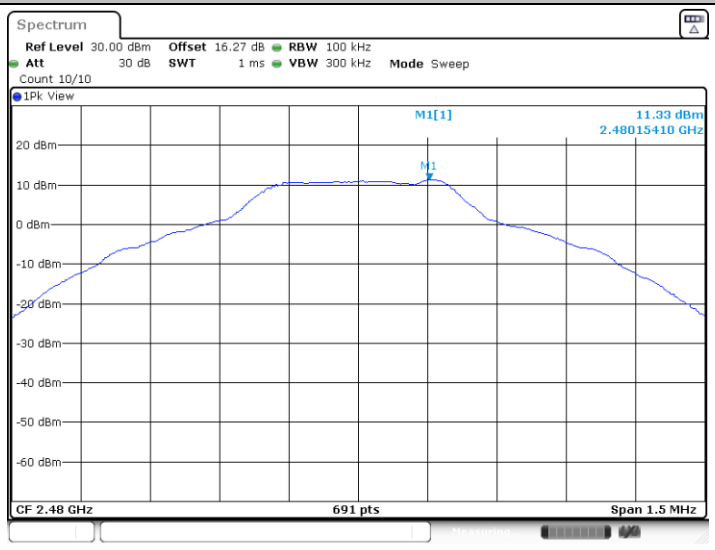


DH5_Ant9_2480_30~1000


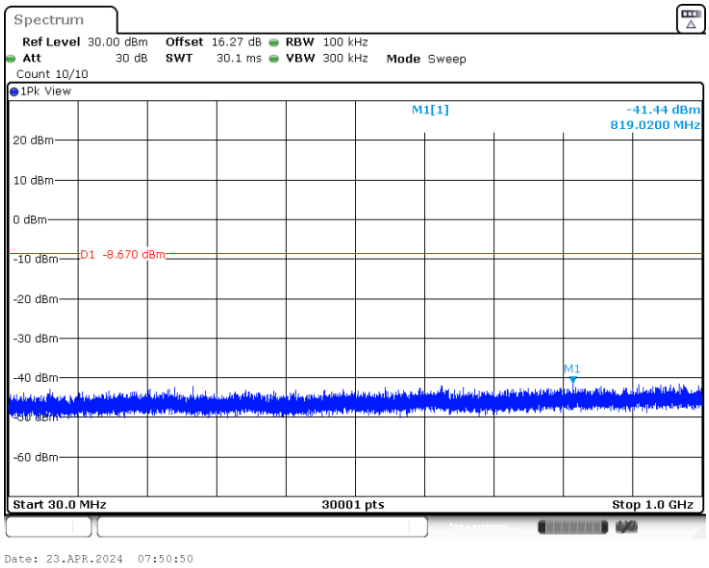
DH5_Ant9_2480_1000~26500



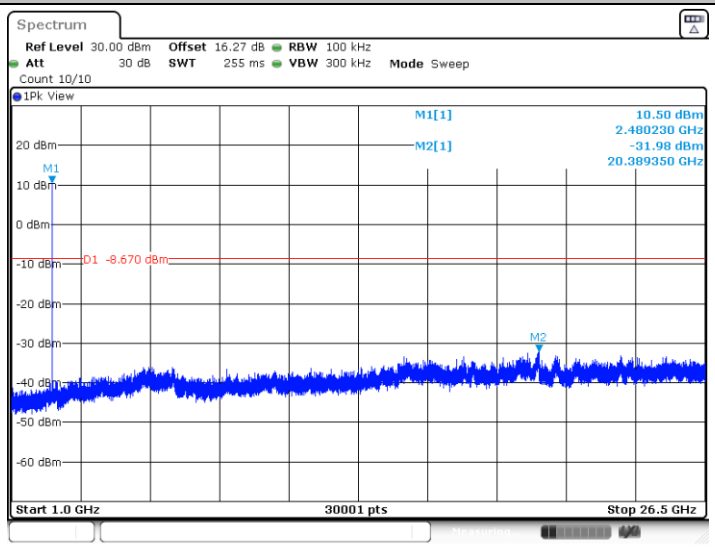
DH5_Ant10_2480_0~Reference



DH5_Ant10_2480_30~1000



DH5_Ant10_2480_1000~26500



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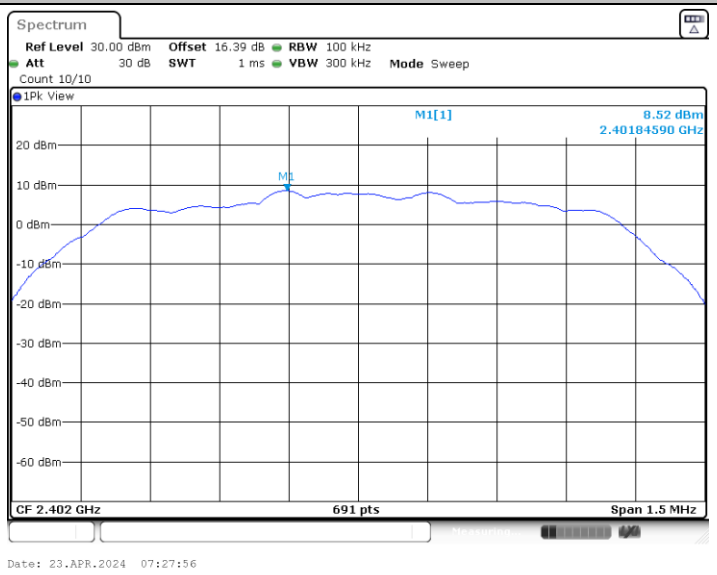
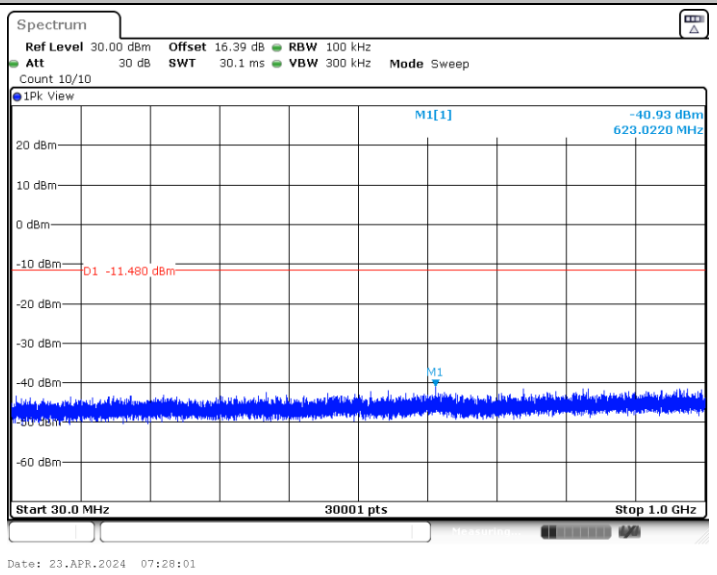
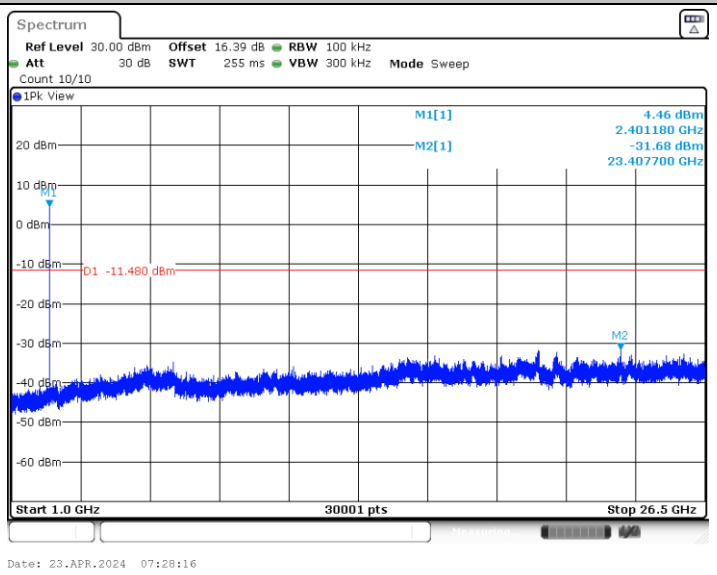
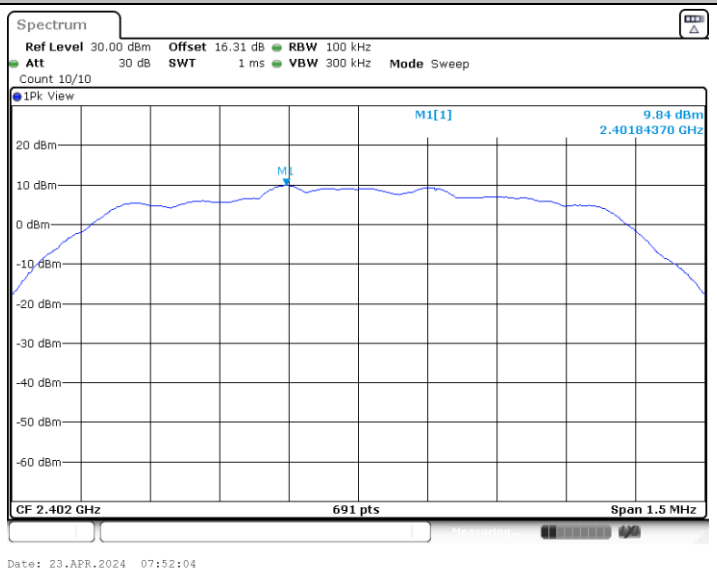
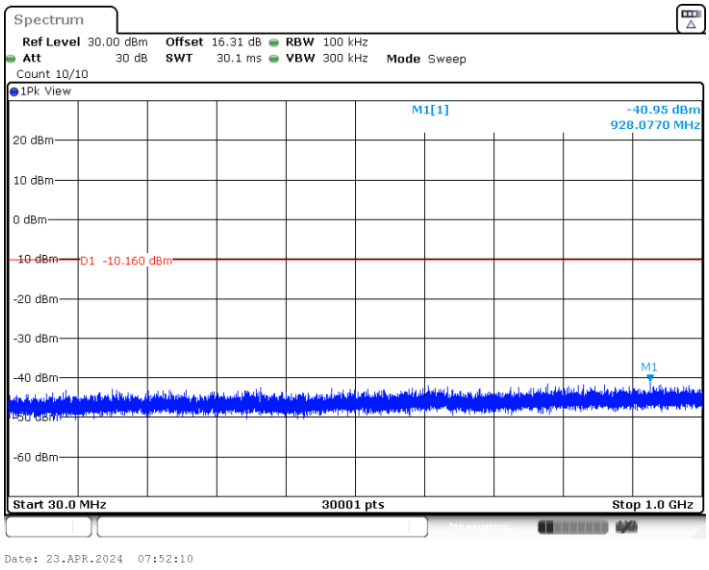


2DH1_Ant9_2402_30~1000


2DH1_Ant9_2402_1000~26500


2DH1_Ant10_2402_0~Reference


2DH1_Ant10_2402_30~1000


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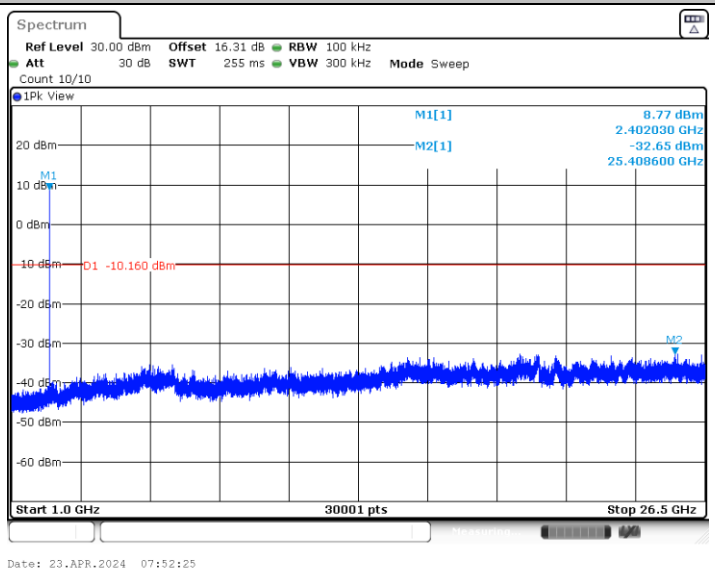
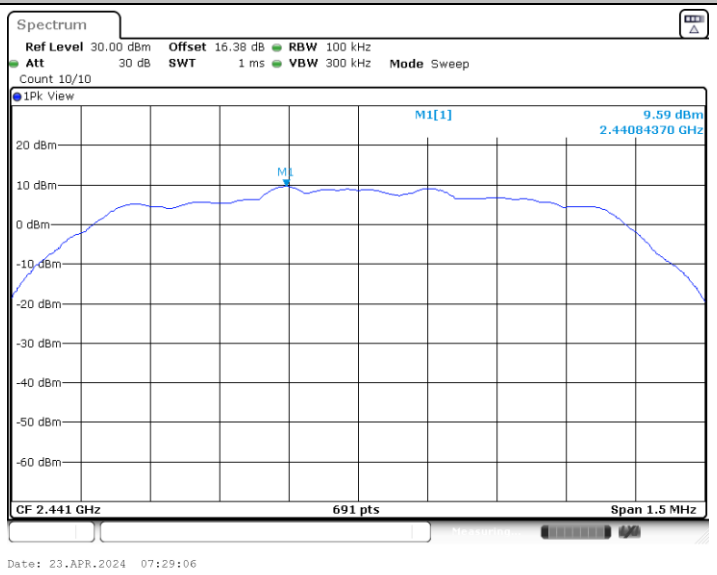


2DH1_Ant9_2441_0~Reference


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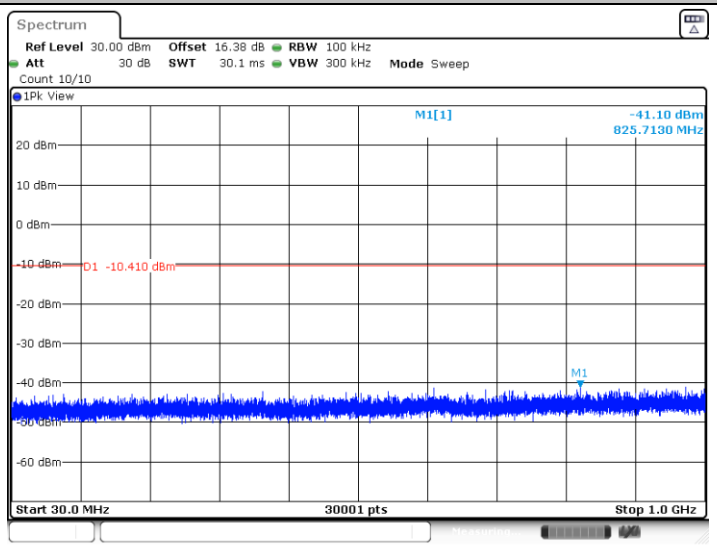

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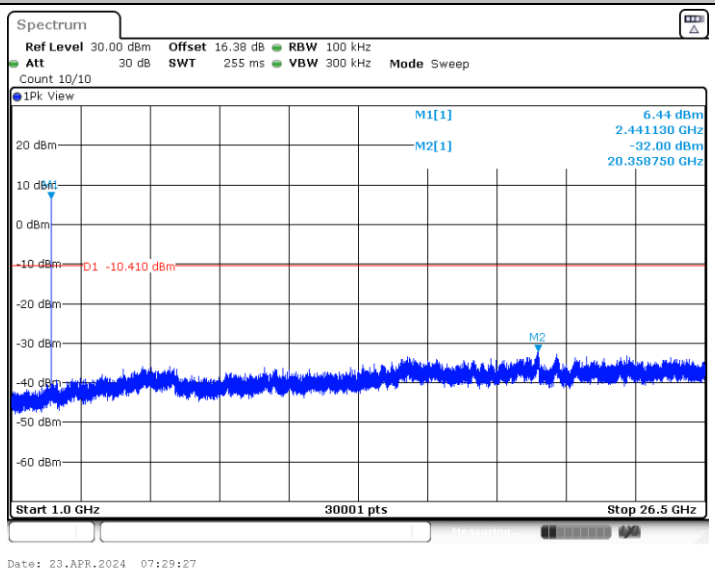

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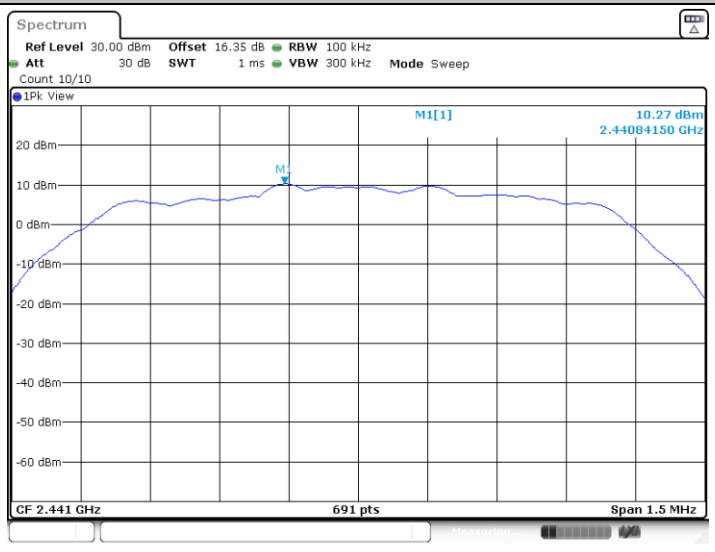

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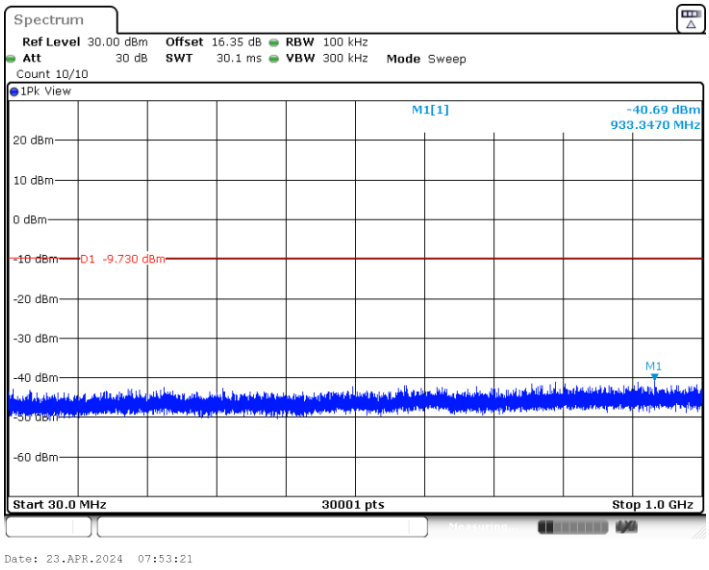

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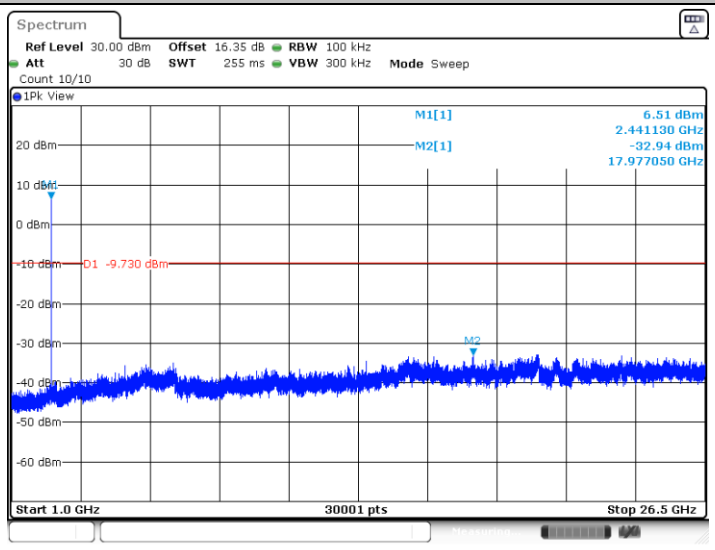

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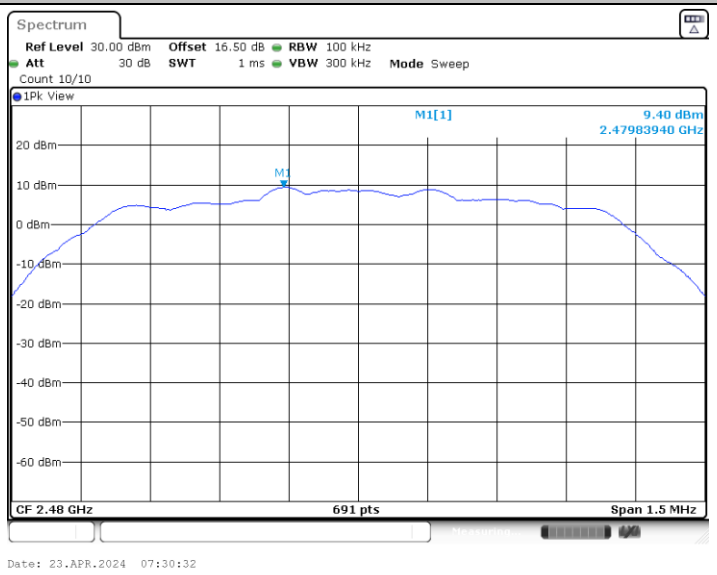

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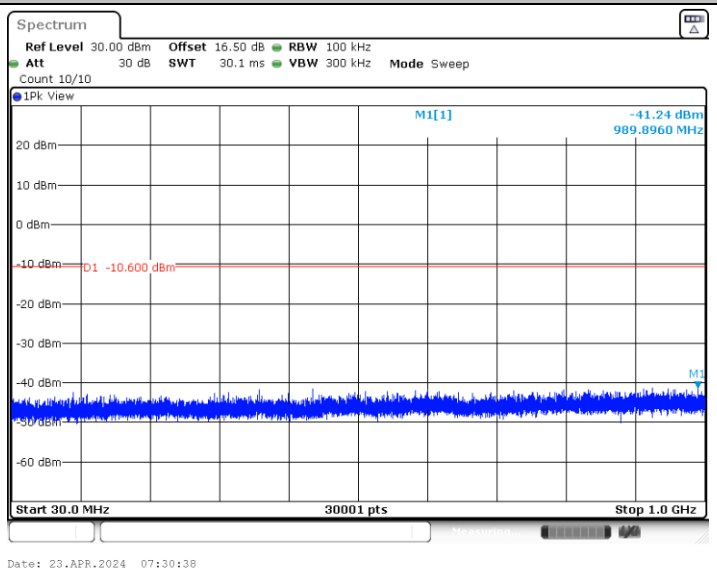

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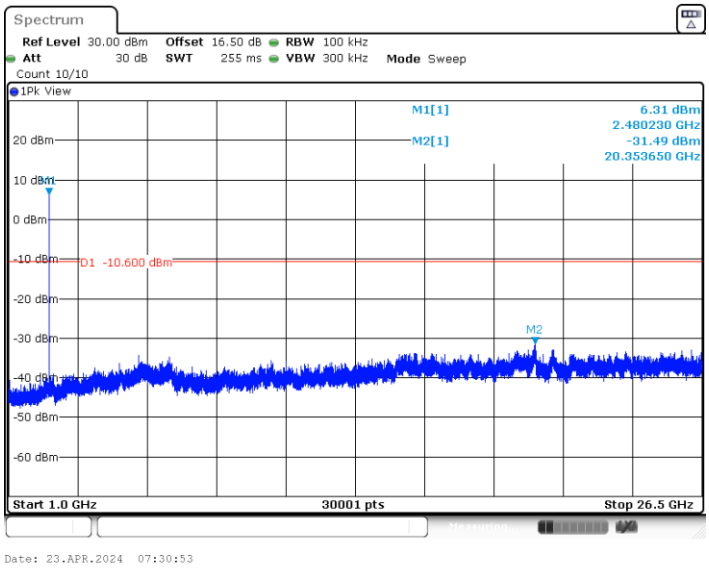

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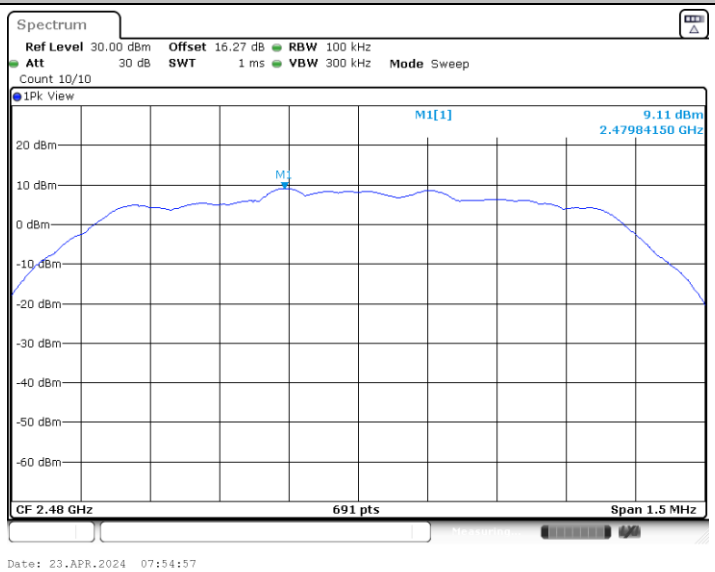

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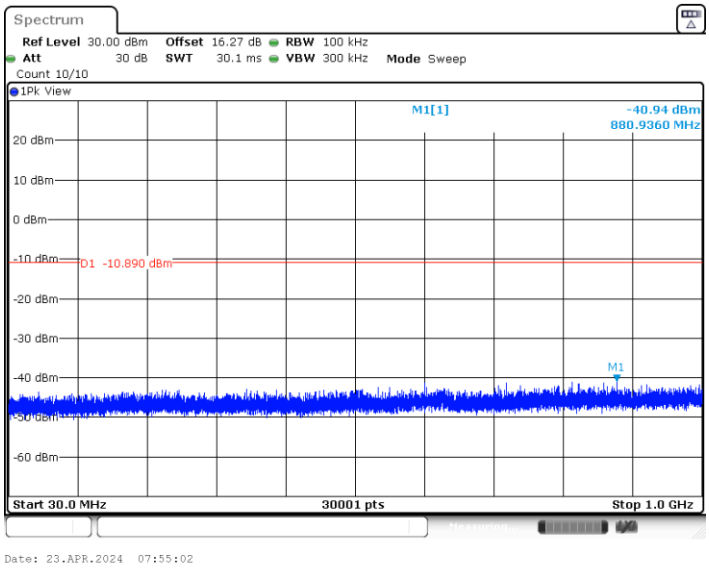

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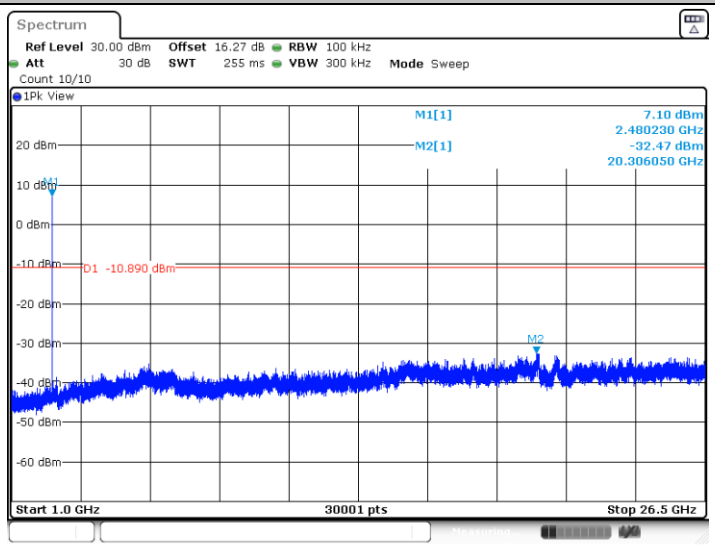

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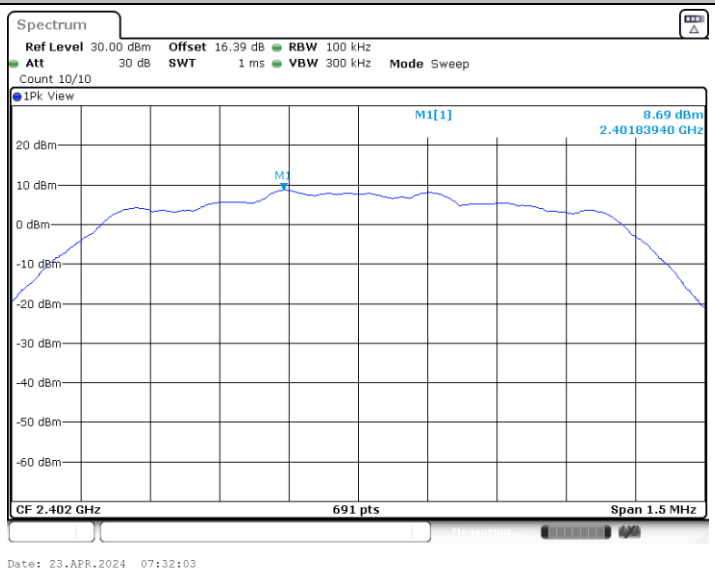

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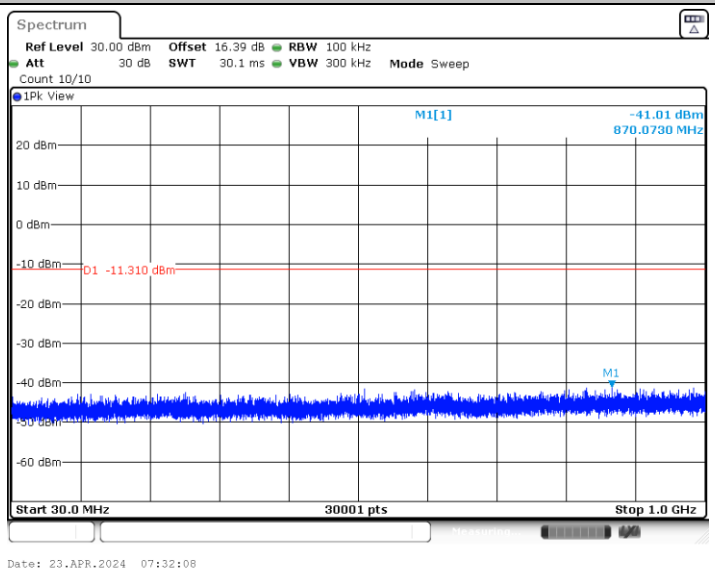

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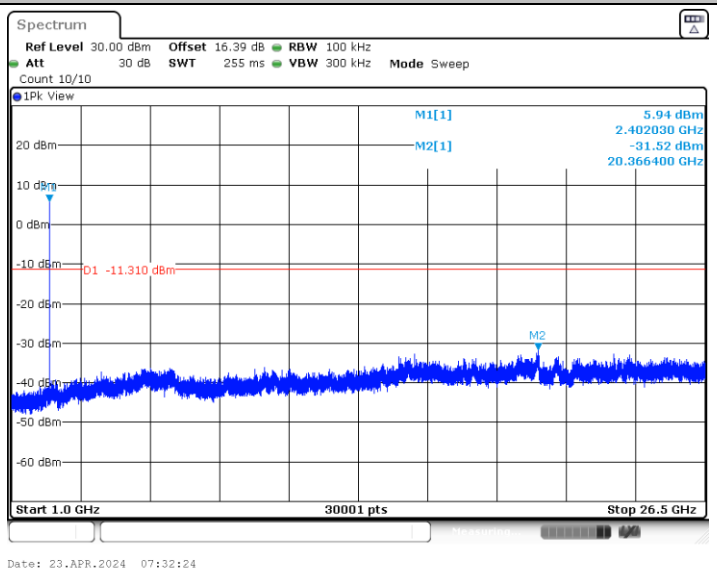

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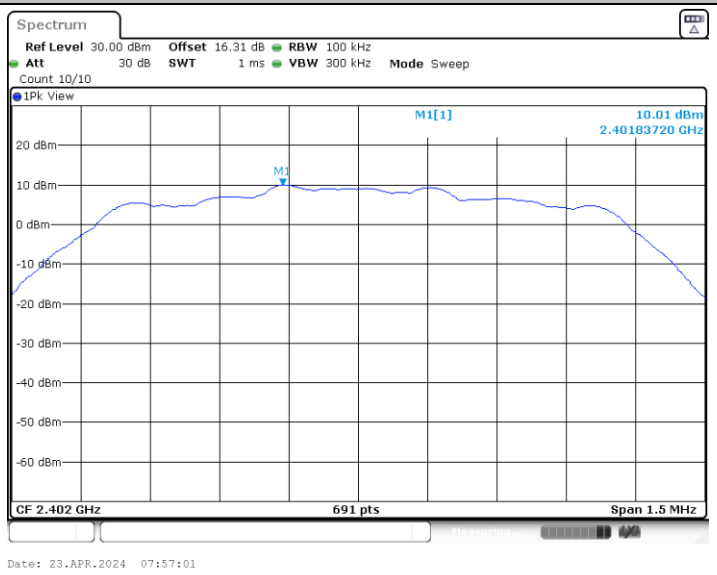

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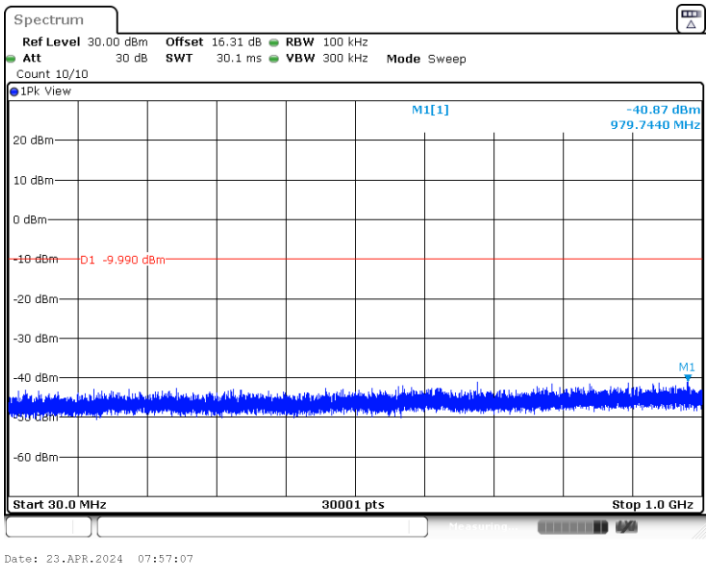

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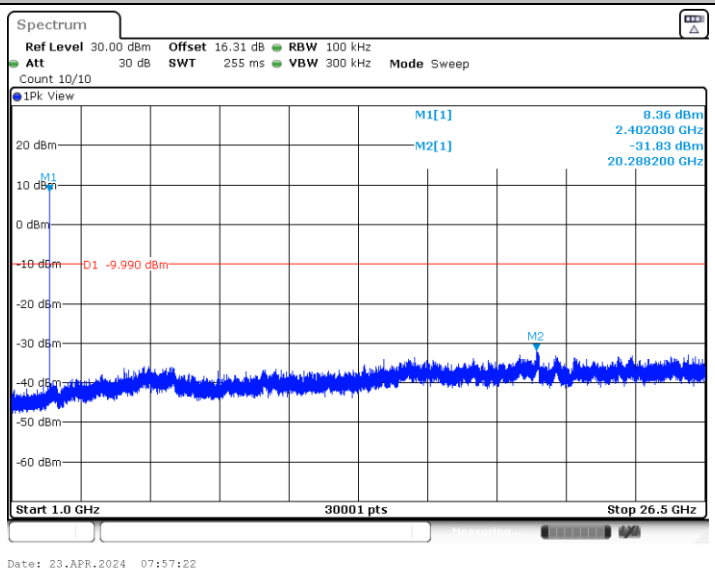

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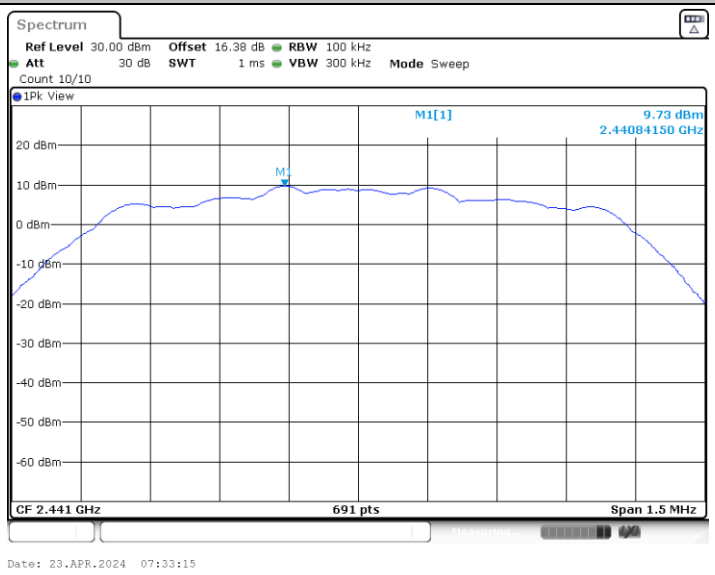

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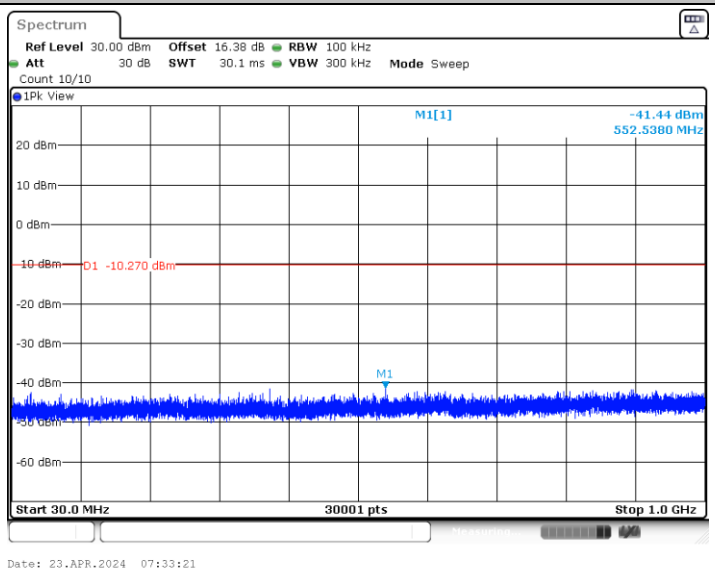

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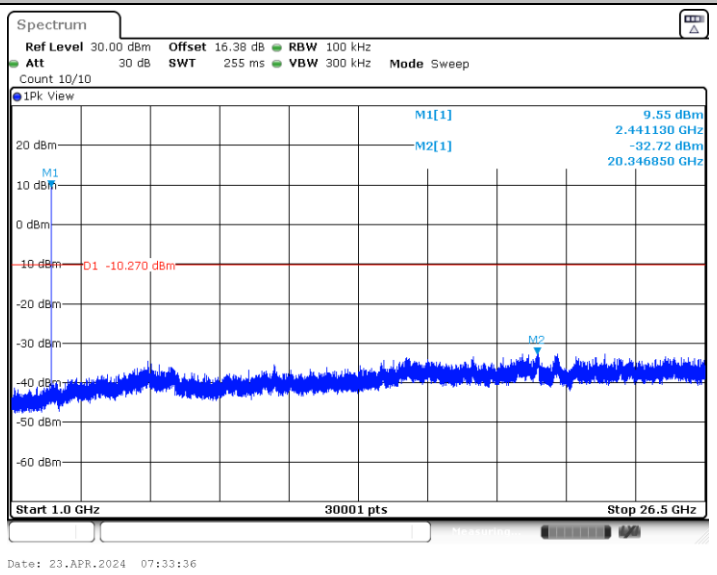

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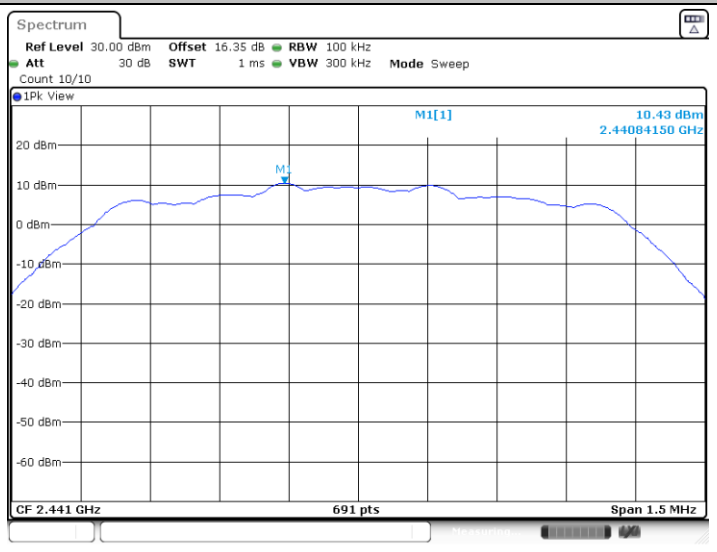

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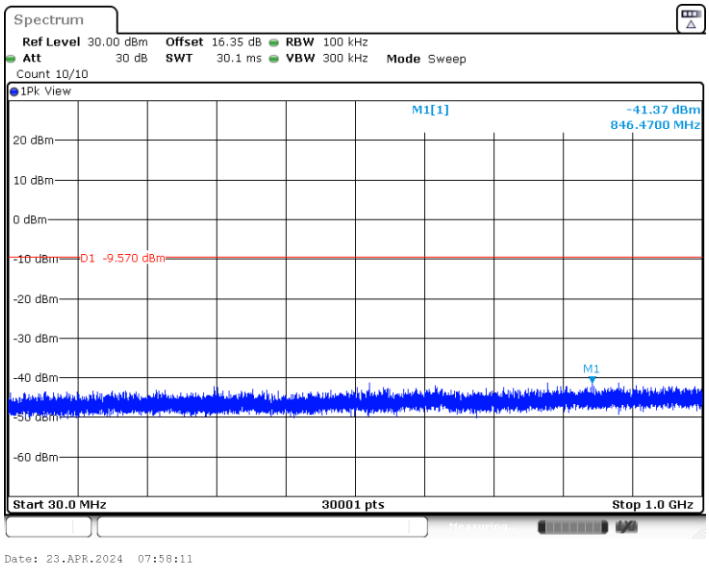

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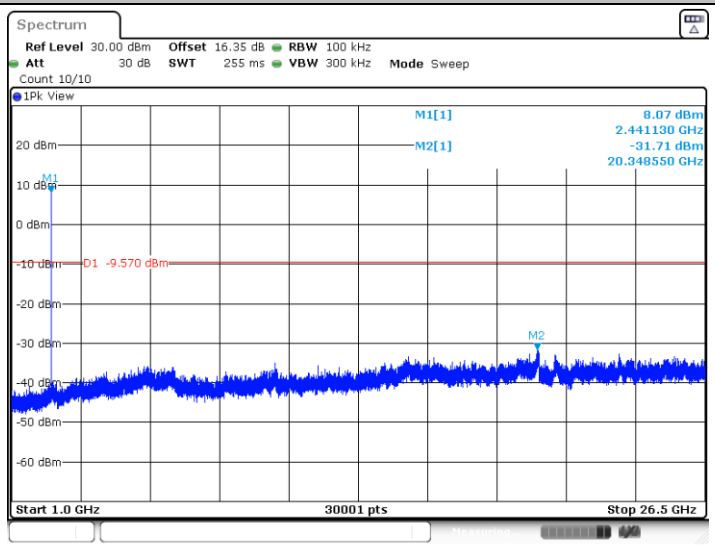

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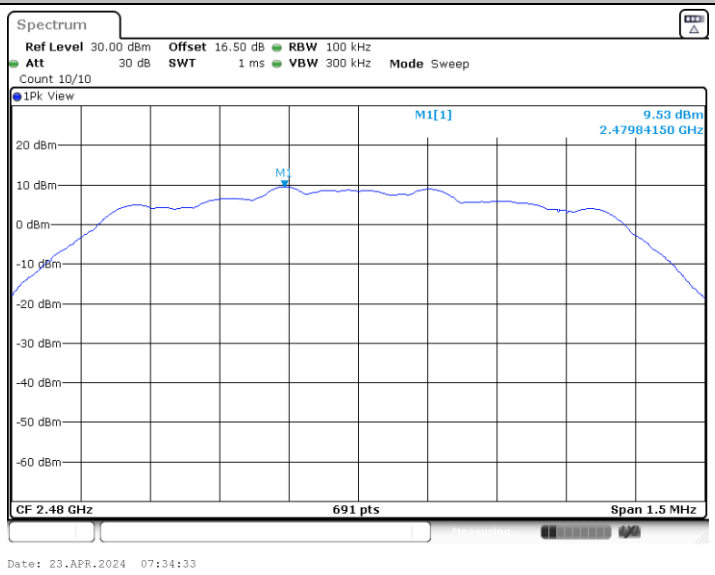

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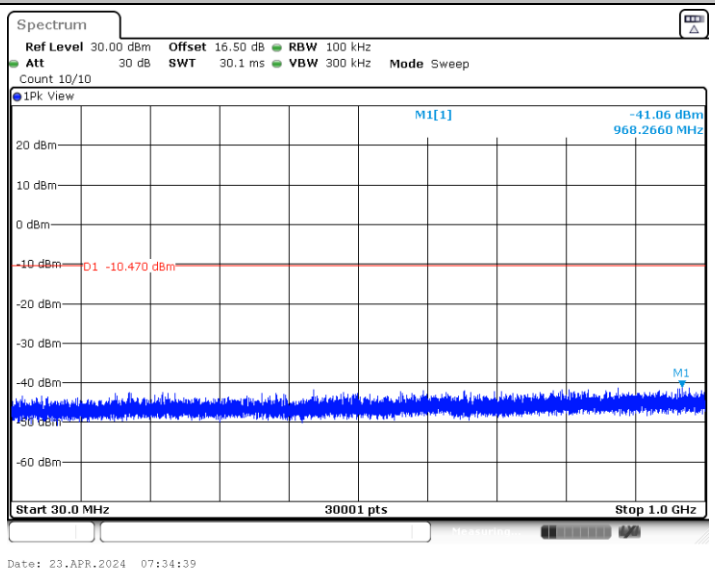

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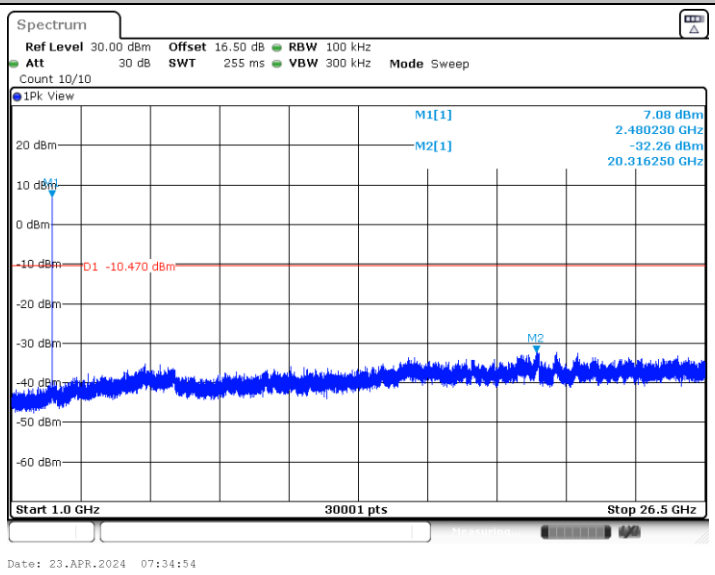

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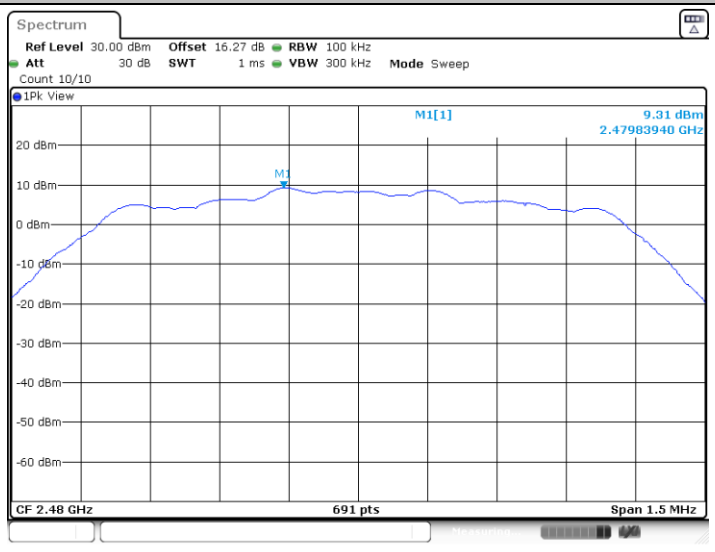

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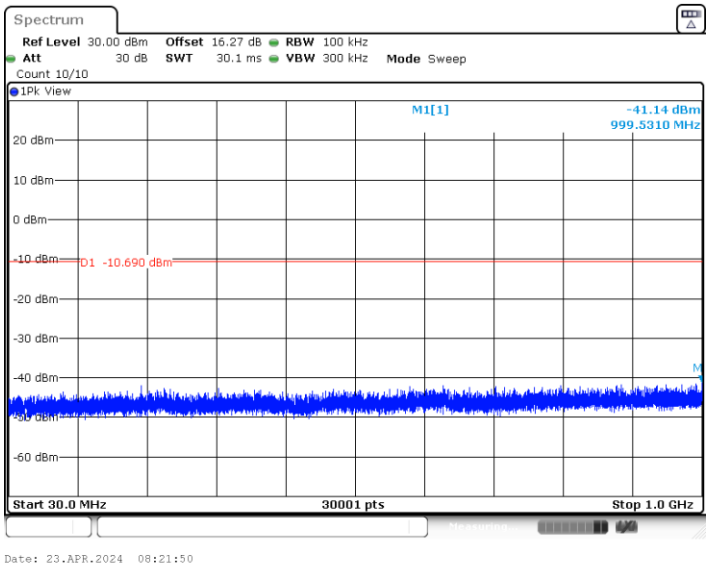

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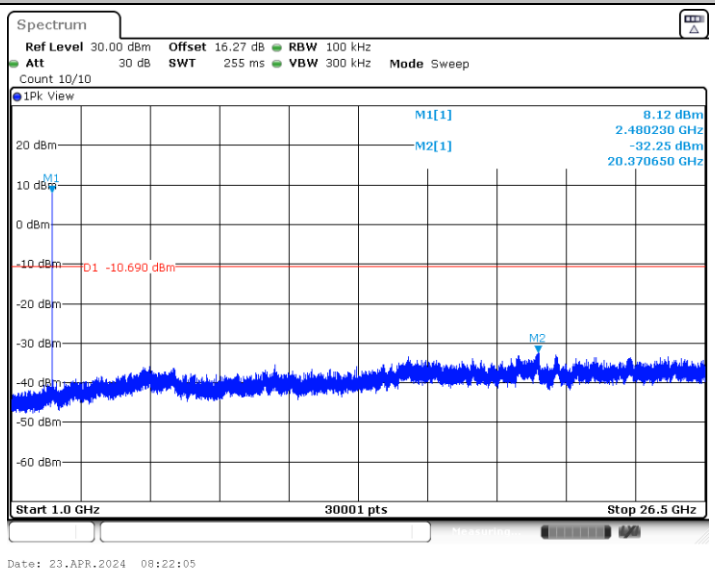
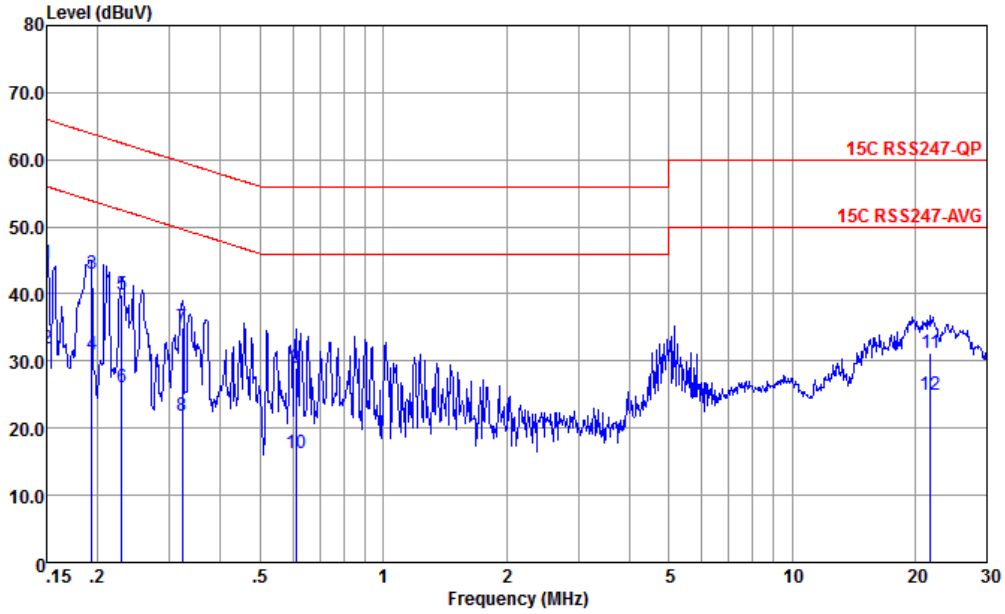


Appendix B. AC Conducted Emission Test Results

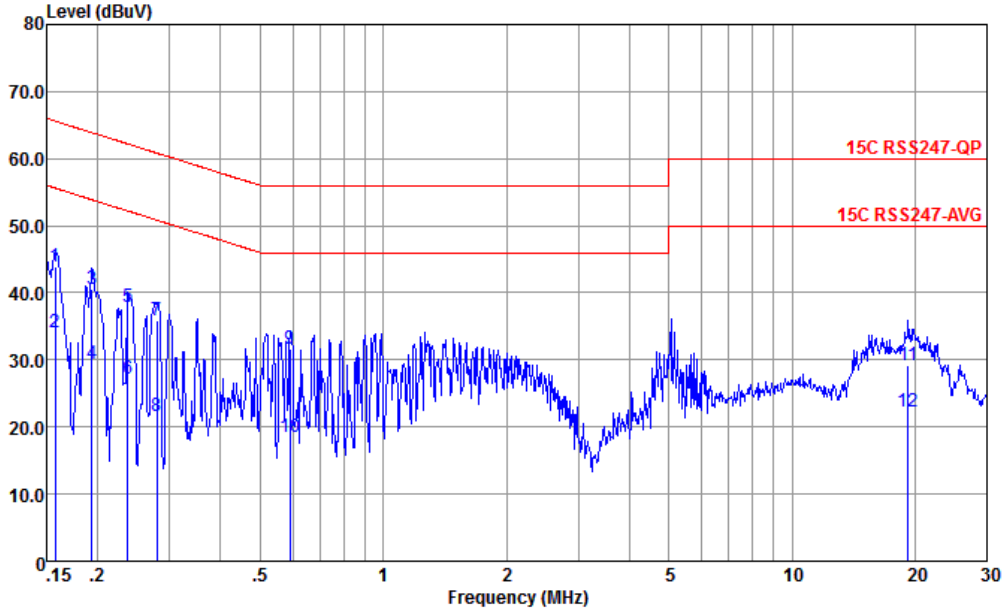
Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : 15C RSS247-QP LISN-060105-L 2023 LINE

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.150	44.67	-21.33	66.00	34.20	0.05	10.42	QP
2		0.150	31.77	-24.23	56.00	21.30	0.05	10.42	Average
3	*	0.193	42.94	-20.95	63.89	32.50	0.03	10.41	QP
4		0.193	31.04	-22.85	53.89	20.60	0.03	10.41	Average
5		0.229	39.92	-22.56	62.48	29.51	0.03	10.38	QP
6		0.229	26.02	-26.46	52.48	15.61	0.03	10.38	Average
7		0.322	34.95	-24.71	59.66	24.60	0.03	10.32	QP
8		0.322	21.85	-27.81	49.66	11.50	0.03	10.32	Average
9		0.611	28.92	-27.08	56.00	18.80	-0.05	10.17	QP
10		0.611	16.32	-29.68	46.00	6.20	-0.05	10.17	Average
11		21.830	31.28	-28.72	60.00	20.19	-0.33	11.42	QP
12		21.830	24.98	-25.02	50.00	13.89	-0.33	11.42	Average

Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : 15C RSS247-QP LISN-060105-N 2023 NEUTRAL

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.157	43.96	-21.64	65.60	33.50	0.04	10.42	QP
2	*	0.157	34.06	-21.54	55.60	23.60	0.04	10.42	Average
3		0.193	40.66	-23.23	63.89	30.20	0.05	10.41	QP
4		0.193	29.36	-24.53	53.89	18.90	0.05	10.41	Average
5		0.237	37.99	-24.23	62.22	27.60	0.01	10.38	QP
6		0.237	27.19	-25.03	52.22	16.80	0.01	10.38	Average
7		0.279	35.82	-25.03	60.85	25.49	-0.02	10.35	QP
8		0.279	21.62	-29.23	50.85	11.29	-0.02	10.35	Average
9		0.592	31.61	-24.39	56.00	21.50	-0.07	10.18	QP
10		0.592	18.41	-27.59	46.00	8.30	-0.07	10.18	Average
11		19.224	29.28	-30.72	60.00	18.21	-0.25	11.32	QP
12		19.224	22.38	-27.62	50.00	11.31	-0.25	11.32	Average

Note:

1. Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
2. Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)

Appendix C. Radiated Spurious Emission Test Data

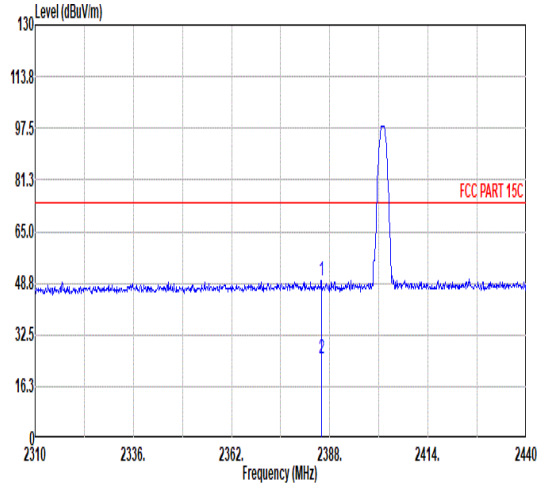
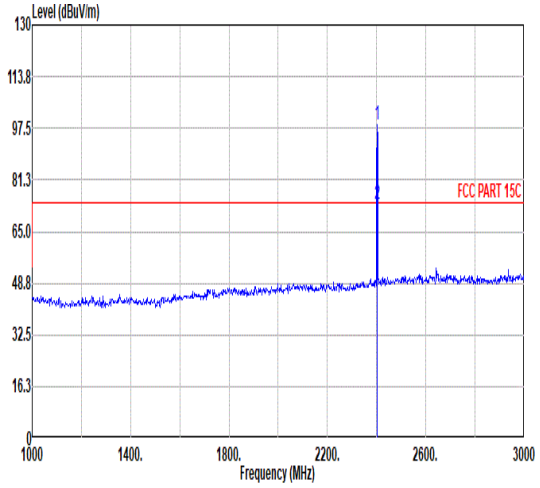
Test Engineer:	Carl Ni	**Relative Humidity :**	22 ~ 23℃
		Temperature :	41 ~ 42%

Radiated Spurious Emission Test Modes

Mode	Band (MHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 1	2400-2483.5	9	Bluetooth BR_GFSK	00	2402	3Mbps	-	-
Mode 2	2400-2483.5	9	Bluetooth BR_GFSK	39	2441	3Mbps	-	-
Mode 3	2400-2483.5	9	Bluetooth BR_GFSK	78	2480	3Mbps	-	-
Mode 4	2400-2483.5	10	Bluetooth BR_GFSK	00	2402	3Mbps	-	-
Mode 5	2400-2483.5	10	Bluetooth BR_GFSK	39	2441	3Mbps	-	-
Mode 6	2400-2483.5	10	Bluetooth BR_GFSK	78	2480	3Mbps	-	-
Mode 7	2400-2483.5	BF 9+10	Bluetooth BR_GFSK	00	2402	3Mbps	-	-
Mode 8	2400-2483.5	BF 9+10	Bluetooth BR_GFSK	39	2441	3Mbps	-	-
Mode 9	2400-2483.5	BF 9+10	Bluetooth BR_GFSK	78	2480	3Mbps	-	-

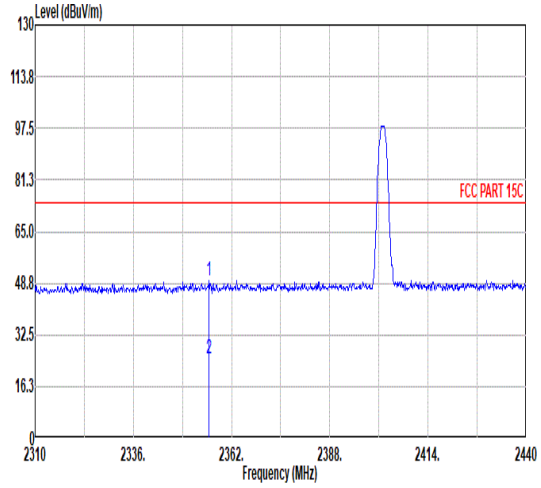
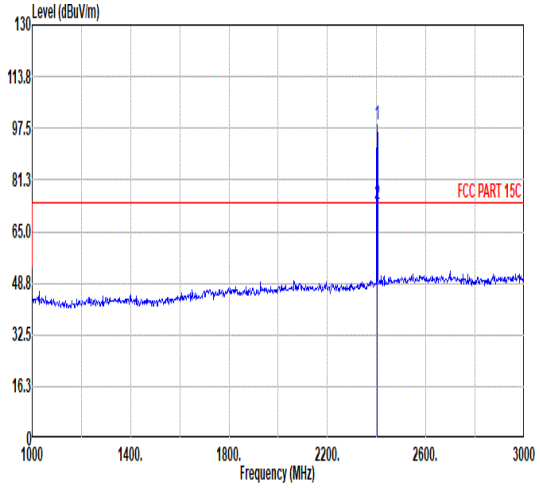
Summary of each worse mode

Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	Remark
1	Bluetooth BR_GFSK	00	2385.79	49.78	74.00	-24.22	H	PEAK	Pass	Band Edge
1	Bluetooth BR_GFSK	00	4804.00	41.08	74.00	-32.92	V	PEAK	Pass	Harmonic
2	Bluetooth BR_GFSK	39	-	-	-	-	-	-	-	Band Edge
2	Bluetooth BR_GFSK	39	7323.00	43.48	74.00	-30.52	V	PEAK	Pass	Harmonic
3	Bluetooth BR_GFSK	78	2492.57	50.58	74.00	-23.42	V	PEAK	Pass	Band Edge
3	Bluetooth BR_GFSK	78	7440.00	42.84	74.00	-31.16	V	PEAK	Pass	Harmonic
4	Bluetooth BR_GFSK	00	2371.23	49.28	74.00	-24.72	V	PEAK	Pass	Band Edge
4	Bluetooth BR_GFSK	00	4804.00	41.72	74.00	-32.28	V	PEAK	Pass	Harmonic
5	Bluetooth BR_GFSK	39	-	-	-	-	-	-	-	Band Edge
5	Bluetooth BR_GFSK	39	7323.00	42.79	74.00	-31.21	V	PEAK	Pass	Harmonic
6	Bluetooth BR_GFSK	78	2498.23	50.85	74.00	-23.15	V	PEAK	Pass	Band Edge
6	Bluetooth BR_GFSK	78	7440.00	43.40	74.00	-30.60	H	PEAK	Pass	Harmonic
7	Bluetooth BR_GFSK	00	2389.30	49.74	74.00	-24.26	V	PEAK	Pass	Band Edge
7	Bluetooth BR_GFSK	00	4804.00	40.13	74.00	-33.87	H	PEAK	Pass	Harmonic
8	Bluetooth BR_GFSK	39	-	-	-	-	-	-	-	Band Edge
8	Bluetooth BR_GFSK	39	7323.00	43.36	74.00	-30.64	V	PEAK	Pass	Harmonic
9	Bluetooth BR_GFSK	78	2499.00	50.73	74.00	-23.27	H	PEAK	Pass	Band Edge
9	Bluetooth BR_GFSK	78	7440.00	42.97	74.00	-31.03	V	PEAK	Pass	Harmonic

Mode	1	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	9	
Pol.	Horizontal	Fundamental
Peak		

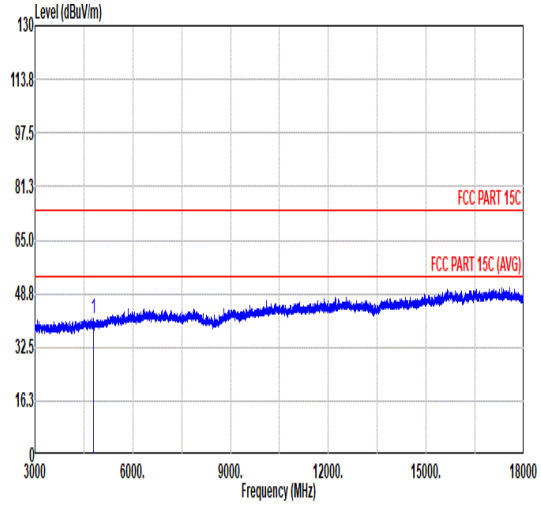
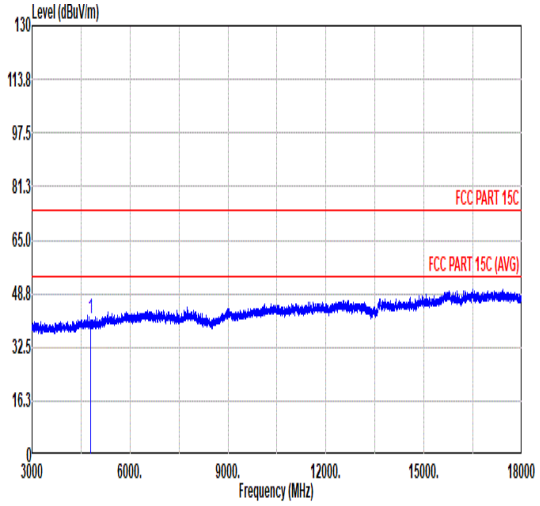
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2385.79	49.78	74.00	-24.22	41.43	32.30	7.10	37.05	6.00	105	261	PEAK
2	2385.79	24.99	54.00	-29.01	16.64	32.30	7.10	37.05	6.00	105	261	AVERAGE

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2402.00	98.51	------	------	90.02	32.41	7.12	37.04	6.00	105	261	PEAK
2	2402.00	73.72	------	------	65.23	32.41	7.12	37.04	6.00	105	261	AVERAGE

Mode	1	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	9	
Pol.	Vertical	Fundamental
Peak		

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2356.02	49.73	74.00	-24.27	41.65	32.09	7.05	37.06	6.00	295	189	PEAK
2	2356.02	24.94	54.00	-29.06	16.86	32.09	7.05	37.06	6.00	295	189	AVERAGE

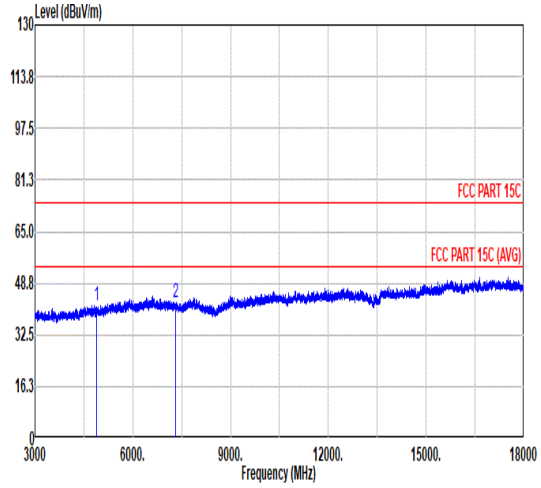
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2402.00	98.48	------	------	89.99	32.41	7.12	37.04	6.00	295	189	PEAK
2	2402.00	73.69	------	------	65.20	32.41	7.12	37.04	6.00	295	189	AVERAGE

Mode	1	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	9	
Pol.	Horizontal	Vertical
Peak Avg	 Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4804.00 41.07 74.00 -32.93 61.95 34.40 10.20 65.48 0.00 -- -- PEAK	 Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4804.00 41.08 74.00 -32.92 61.96 34.40 10.20 65.48 0.00 -- -- PEAK

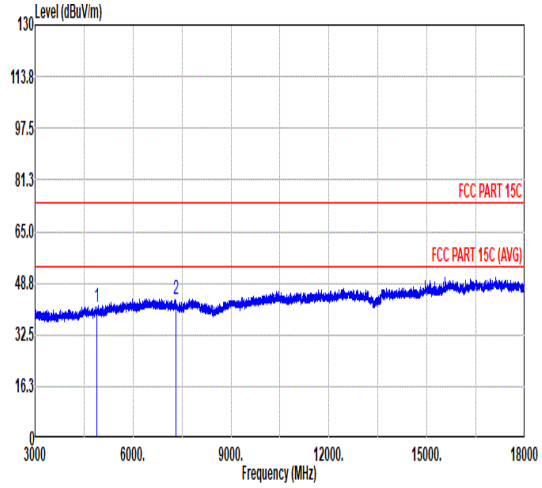
Mode	2	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz	
ANT	9	
Pol.	Horizontal	Vertical

Peak

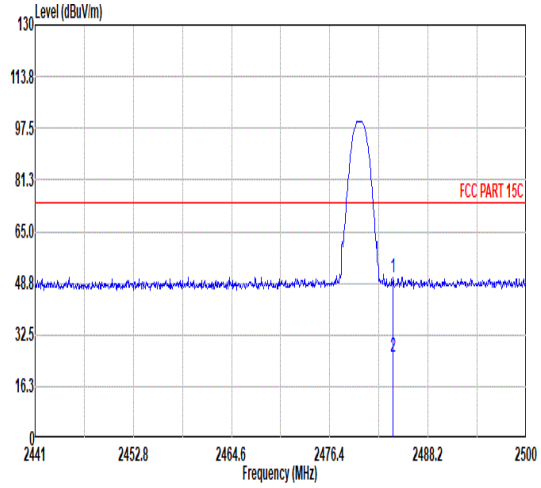
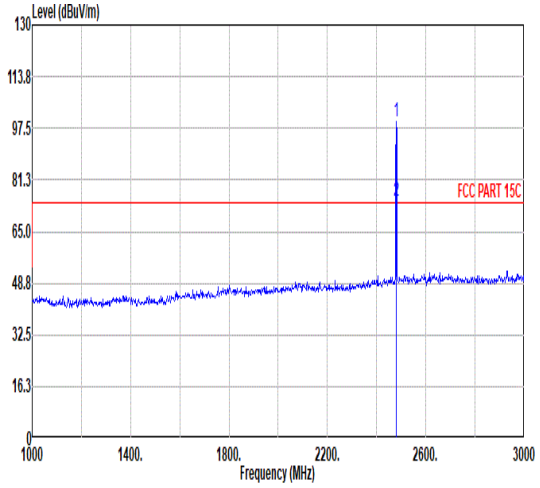
Avg



	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4882.00	41.71	74.00	-32.29	62.62	34.32	10.30	65.53	0.00	--	--	PEAK
2	7323.00	42.91	74.00	-31.09	60.54	35.98	12.72	66.33	0.00	--	--	PEAK

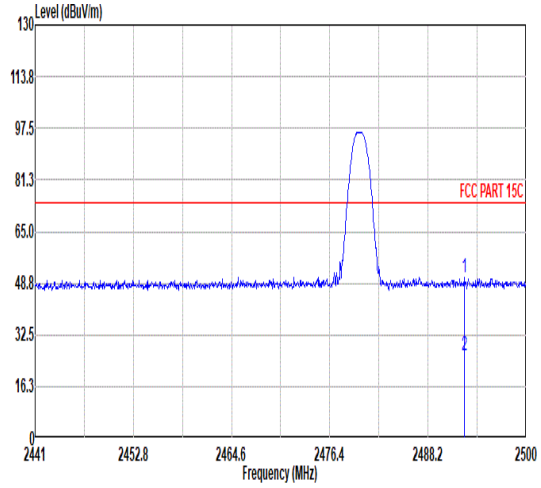
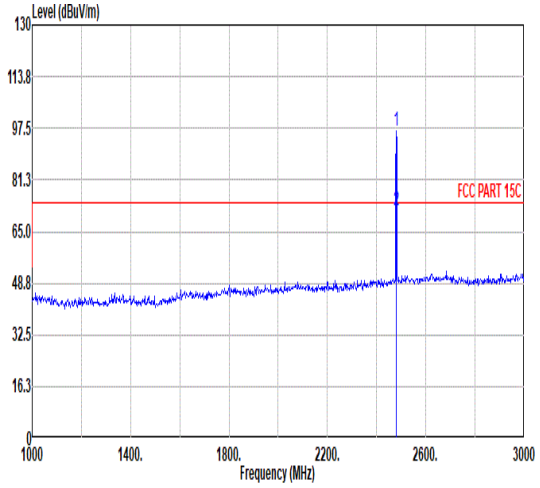


	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4882.00	41.13	74.00	-32.87	62.04	34.32	10.30	65.53	0.00	--	--	PEAK
2	7323.00	43.48	74.00	-30.52	61.11	35.98	12.72	66.33	0.00	--	--	PEAK

Mode	3	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	9	
Pol.	Horizontal	Fundamental
Peak		

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2484.01	50.45	74.00	-23.55	41.05	32.99	7.26	36.85	6.00	144	177	PEAK
2	2484.01	25.66	54.00	-28.34	16.26	32.99	7.26	36.85	6.00	144	177	AVERAGE

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2480.00	99.47	------	------	90.12	32.96	7.25	36.86	6.00	144	177	PEAK
2	2480.00	74.68	------	------	65.33	32.96	7.25	36.86	6.00	144	177	AVERAGE

Mode	3	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	9	
Pol.	Vertical	Fundamental
Peak		

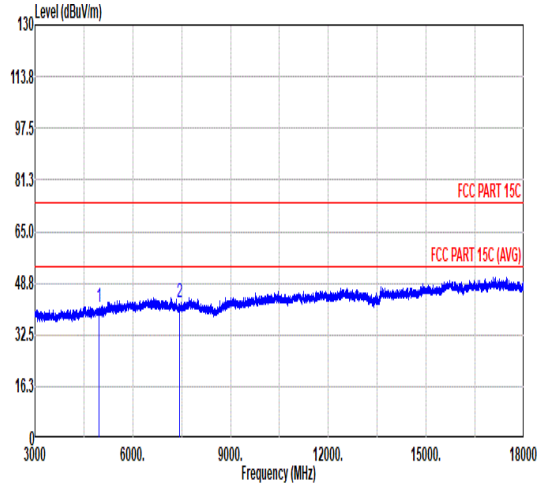
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2492.57	50.58	74.00	-23.42	41.09	33.05	7.27	36.83	6.00	317	234	PEAK
2	2492.57	25.79	54.00	-28.21	16.30	33.05	7.27	36.83	6.00	317	234	AVERAGE

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2480.00	96.49	------	------	87.14	32.96	7.25	36.86	6.00	317	234	PEAK
2	2480.00	71.70	------	------	62.35	32.96	7.25	36.86	6.00	317	234	AVERAGE

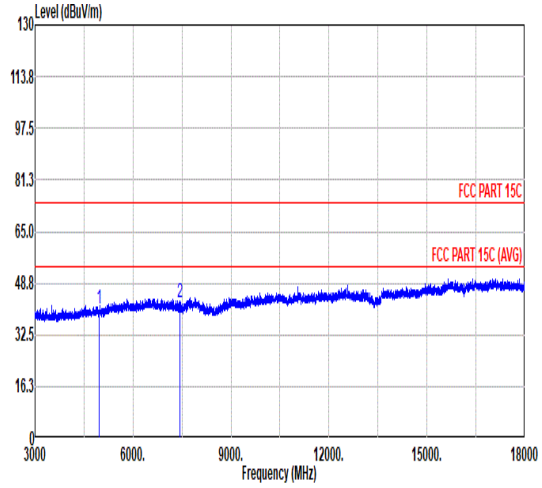
Mode	3	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	9	
Pol.	Horizontal	Vertical

Peak

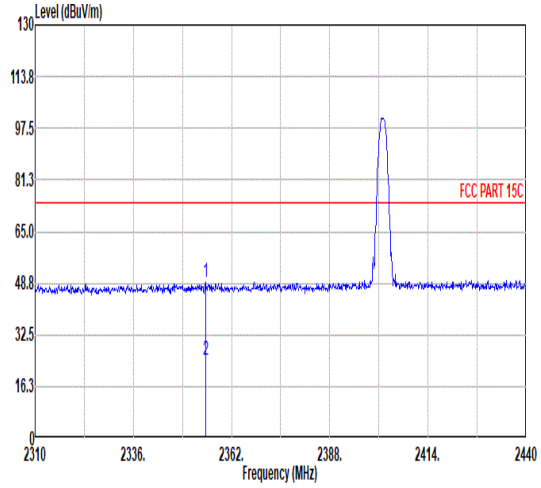
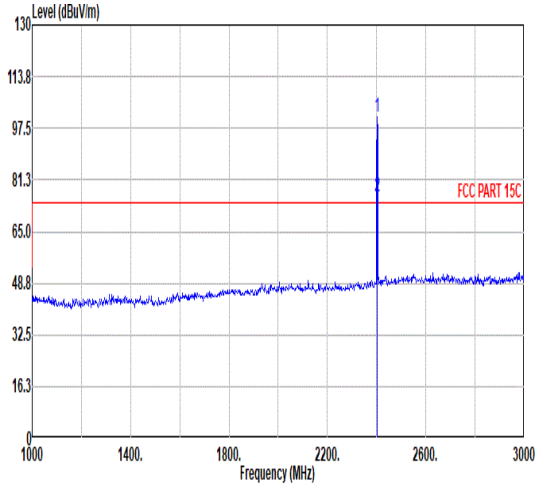
Avg



	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4960.00	41.43	74.00	-32.57	62.38	34.24	10.40	65.59	0.00	--	--	PEAK
2	7440.00	42.80	74.00	-31.20	60.71	35.94	12.78	66.63	0.00	--	--	PEAK

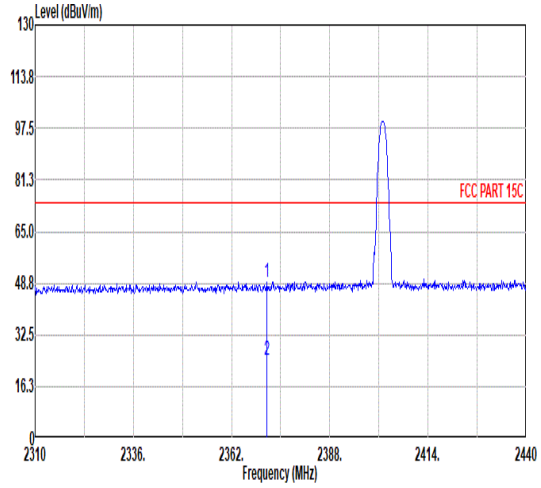
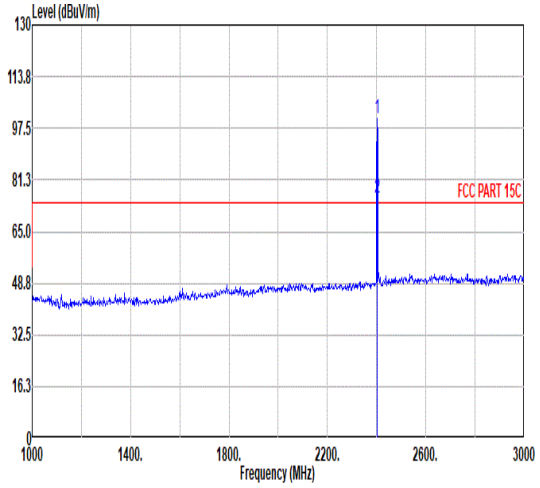


	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4960.00	40.78	74.00	-33.22	61.73	34.24	10.40	65.59	0.00	--	--	PEAK
2	7440.00	42.84	74.00	-31.16	60.75	35.94	12.78	66.63	0.00	--	--	PEAK

Mode	4	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	10	
Pol.	Horizontal	Fundamental
Peak		

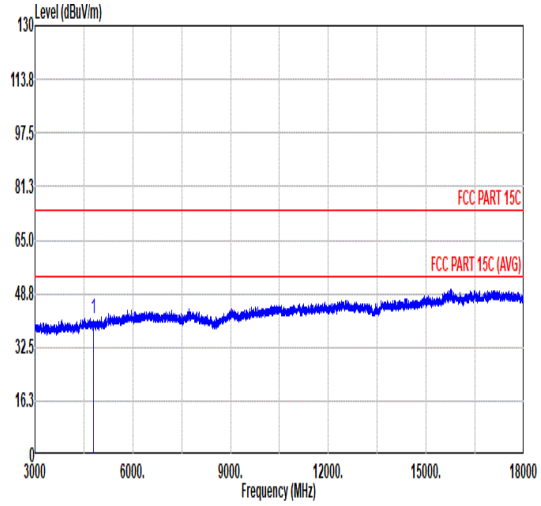
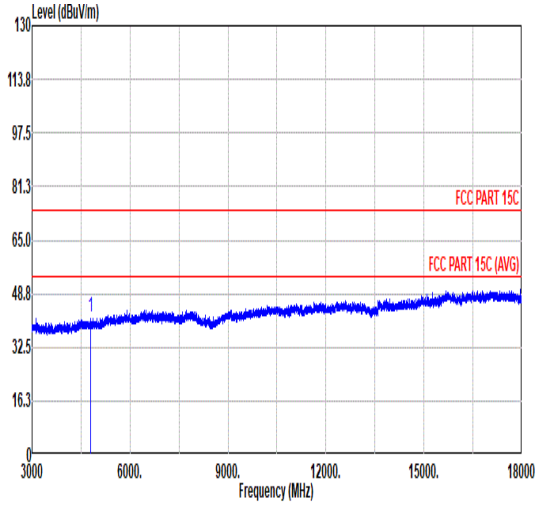
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2355.11	49.16	74.00	-24.84	41.08	32.09	7.05	37.06	6.00	300	9	PEAK
2	2355.11	24.37	54.00	-29.63	16.29	32.09	7.05	37.06	6.00	300	9	AVERAGE

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2402.00	100.82	------	------	92.33	32.41	7.12	37.04	6.00	300	9	PEAK
2	2402.00	76.03	------	------	67.54	32.41	7.12	37.04	6.00	300	9	AVERAGE

Mode	4	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	10	
Pol.	Vertical	Fundamental
Peak		

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2371.23	49.28	74.00	-24.72	41.05	32.20	7.08	37.05	6.00	380	265	PEAK
2	2371.23	24.49	54.00	-29.51	16.26	32.20	7.08	37.05	6.00	380	265	AVERAGE

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2402.00	100.50	------	------	92.01	32.41	7.12	37.04	6.00	380	265	PEAK
2	2402.00	75.71	------	------	67.22	32.41	7.12	37.04	6.00	380	265	AVERAGE

Mode	4	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	10	
Pol.	Horizontal	Vertical
Peak Avg		

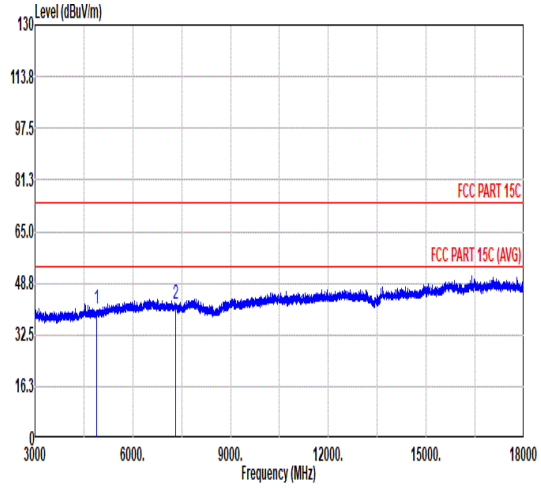
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4804.00	41.08	74.00	-32.92	61.96	34.40	10.20	65.48	0.00	--	--	PEAK

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4804.00	41.72	74.00	-32.28	62.60	34.40	10.20	65.48	0.00	--	--	PEAK

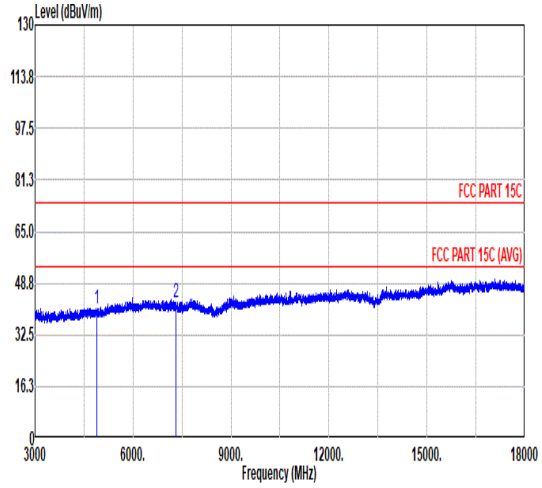
Mode	5
	Harmonic
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz
ANT	10

Pol.	Horizontal	Vertical

Peak



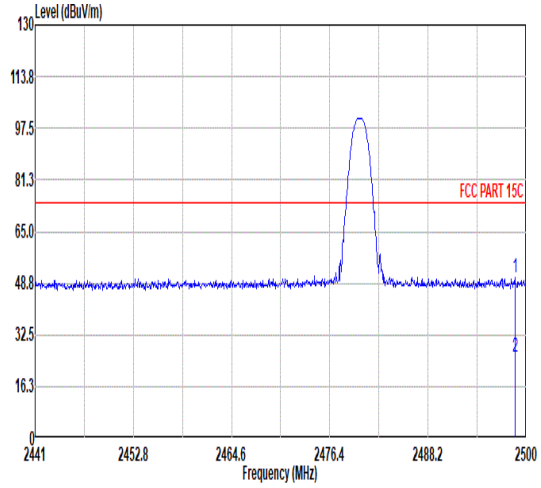
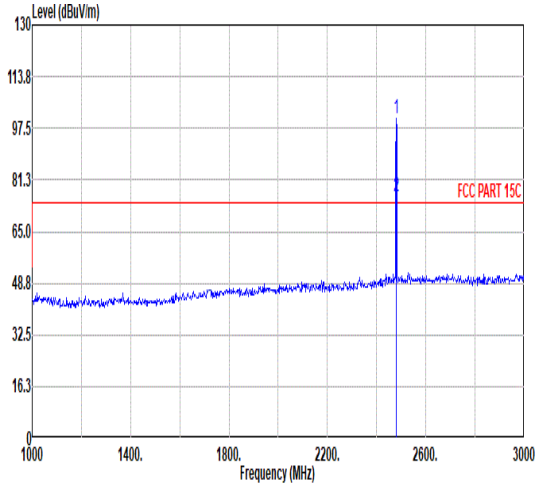
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4882.00	40.90	74.00	-33.10	61.81	34.32	10.30	65.53	0.00	--	--	PEAK
2	7323.00	42.26	74.00	-31.74	59.89	35.98	12.72	66.33	0.00	--	--	PEAK



	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4882.00	40.85	74.00	-33.15	61.76	34.32	10.30	65.53	0.00	--	--	PEAK
2	7323.00	42.79	74.00	-31.21	60.42	35.98	12.72	66.33	0.00	--	--	PEAK

Avg

Mode	6
	Band Edge
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz
ANT	10

Pol.	Horizontal	Fundamental
Peak		

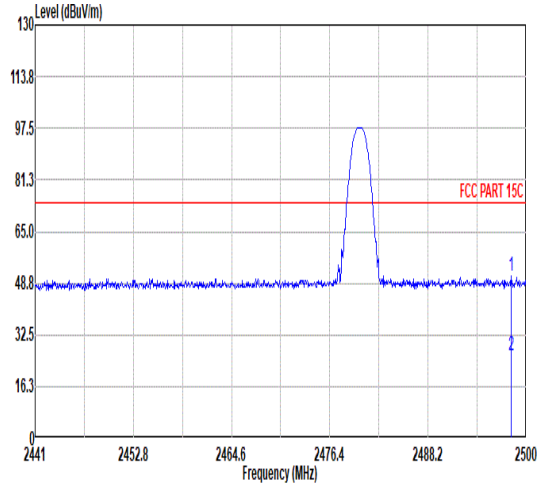
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2498.64	50.45	74.00	-23.55	40.89	33.09	7.28	36.81	6.00	282	0	PEAK
2	2498.64	25.66	54.00	-28.34	16.10	33.09	7.28	36.81	6.00	282	0	AVERAGE

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2480.00	100.74	------	------	91.39	32.96	7.25	36.86	6.00	282	0	PEAK
2	2480.00	75.94	------	------	66.59	32.96	7.25	36.86	6.00	282	0	AVERAGE

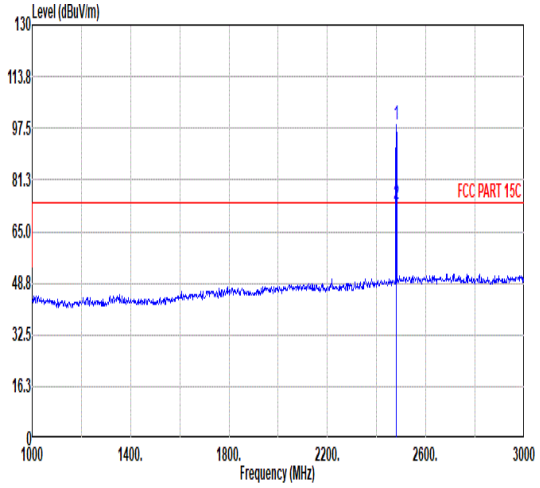
Mode	6
	Band Edge
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz
ANT	10

Pol.	Vertical	Fundamental

Peak



	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2498.23	50.85	74.00	-23.15	41.30	33.09	7.28	36.82	6.00	311	238	PEAK
2	2498.23	26.06	54.00	-27.94	16.51	33.09	7.28	36.82	6.00	311	238	AVERAGE



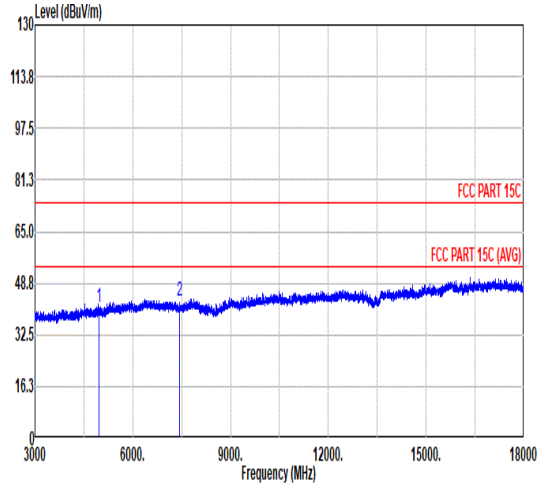
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2480.00	98.40	------	------	89.05	32.96	7.25	36.86	6.00	311	238	PEAK
2	2480.00	73.61	------	------	64.26	32.96	7.25	36.86	6.00	311	238	AVERAGE

Mode	6
	Harmonic
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz
ANT	10

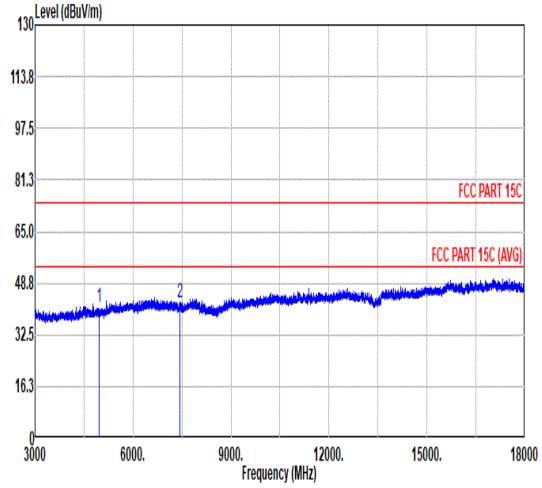
Pol.	Horizontal	Vertical

Peak

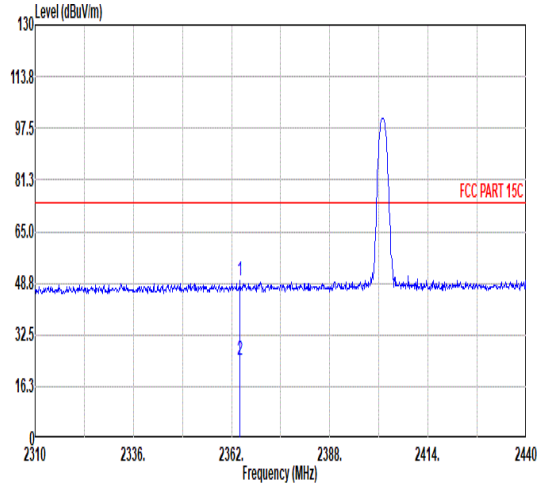
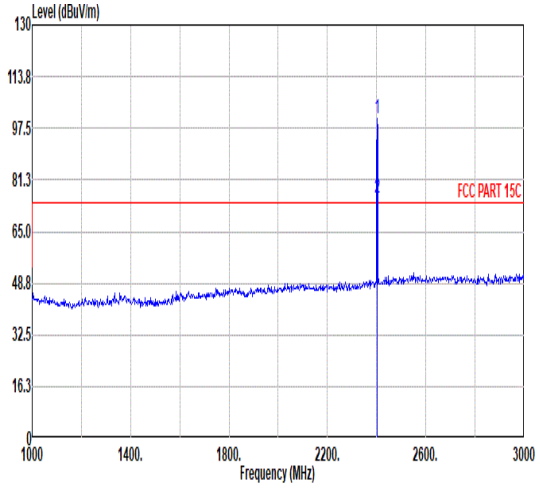
Avg



	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4960.00	41.08	74.00	-32.92	62.03	34.24	10.40	65.59	0.00	--	--	PEAK
2	7440.00	43.40	74.00	-30.60	61.31	35.94	12.78	66.63	0.00	--	--	PEAK

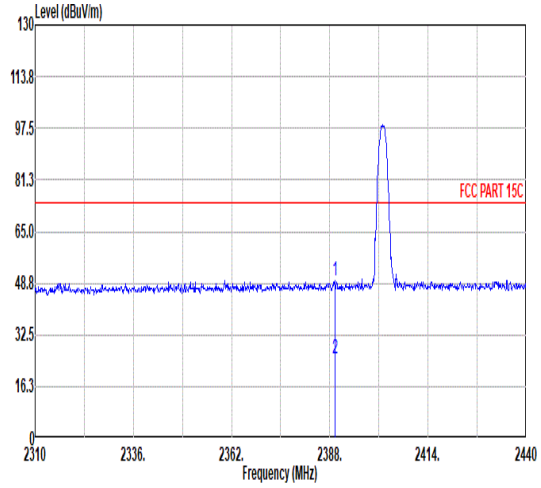
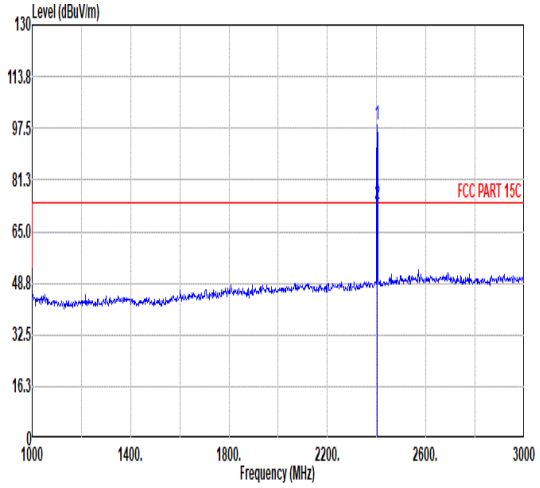


	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4960.00	41.21	74.00	-32.79	62.16	34.24	10.40	65.59	0.00	--	--	PEAK
2	7440.00	42.90	74.00	-31.10	60.81	35.94	12.78	66.63	0.00	--	--	PEAK

Mode	7	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	BF 9+10	
Pol.	Horizontal	Fundamental
Peak		

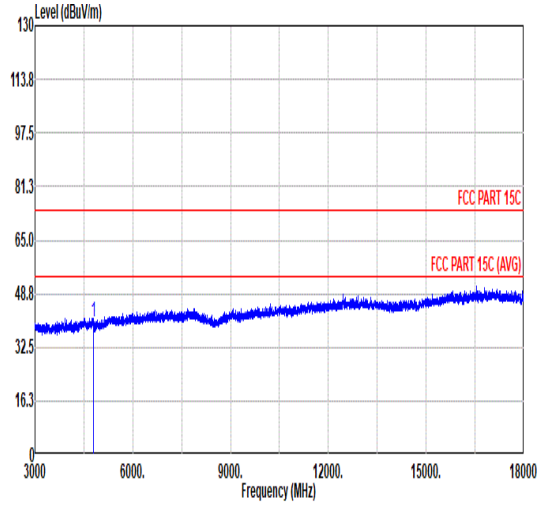
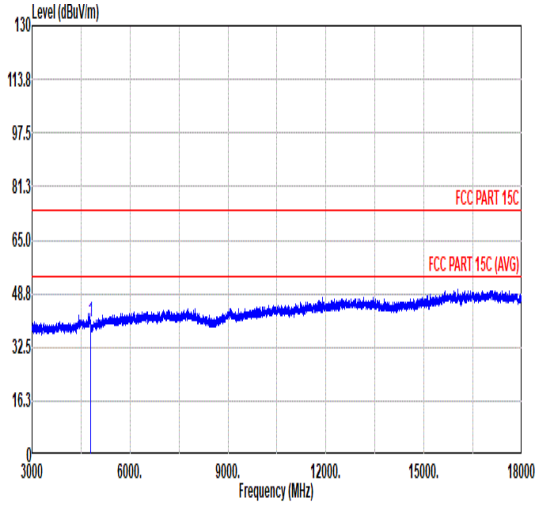
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2364.21	49.31	74.00	-24.69	41.15	32.15	7.07	37.06	6.00	291	10	PEAK
2	2364.21	24.52	54.00	-29.48	16.36	32.15	7.07	37.06	6.00	291	10	AVERAGE

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2402.00	100.56	------	------	92.07	32.41	7.12	37.04	6.00	291	10	PEAK
2	2402.00	75.77	------	------	67.28	32.41	7.12	37.04	6.00	291	10	AVERAGE

Mode	7	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	BF 9+10	
Pol.	Vertical	Fundamental
Peak		

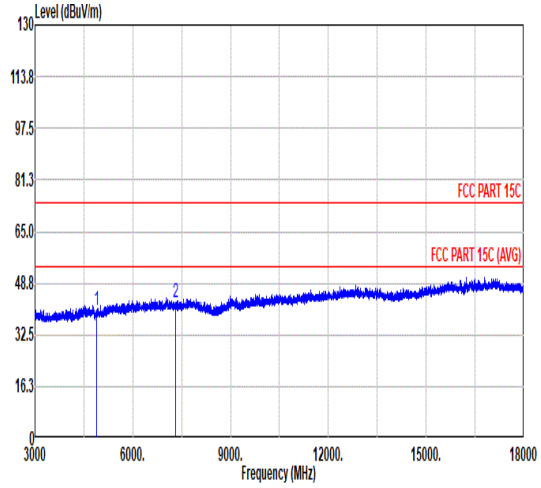
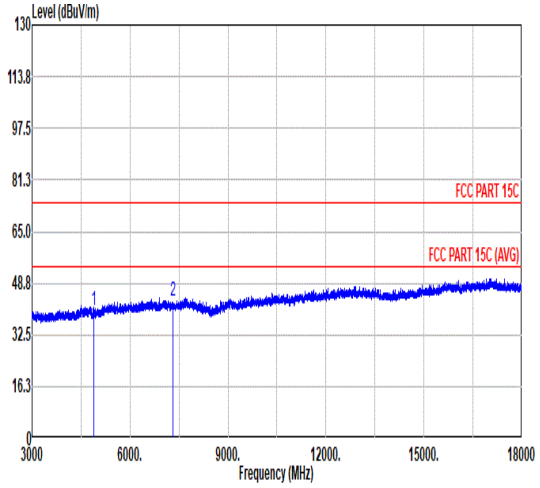
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2389.30	49.74	74.00	-24.26	41.36	32.33	7.10	37.05	6.00	332	266	PEAK
2	2389.30	24.95	54.00	-29.05	16.57	32.33	7.10	37.05	6.00	332	266	AVERAGE

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2402.00	98.50	------	------	90.01	32.41	7.12	37.04	6.00	332	266	PEAK
2	2402.00	73.71	------	------	65.22	32.41	7.12	37.04	6.00	332	266	AVERAGE

Mode	7	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	BF 9+10	
Pol.	Horizontal	Vertical
Peak Avg		

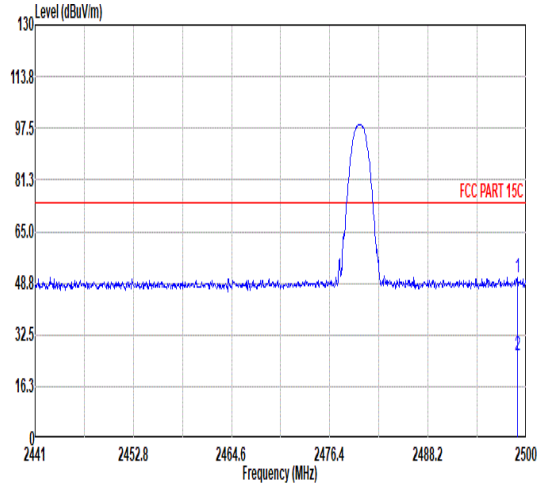
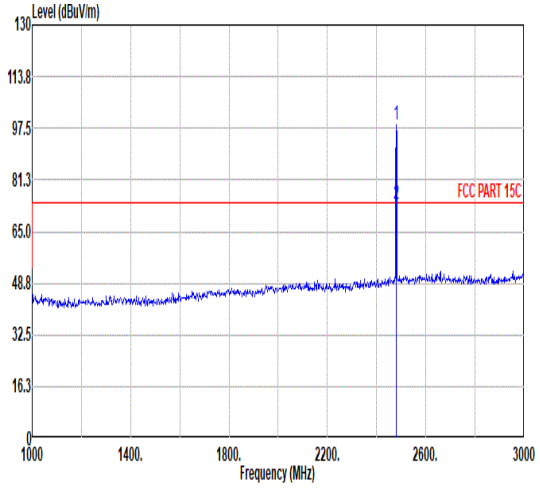
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4804.00	40.13	74.00	-33.87	61.01	34.40	10.20	65.48	0.00	--	--	PEAK

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4804.00	40.06	74.00	-33.94	60.94	34.40	10.20	65.48	0.00	--	--	PEAK

Mode	8	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz	
ANT	BF 9+10	
Pol.	Horizontal	Vertical
Peak Avg		

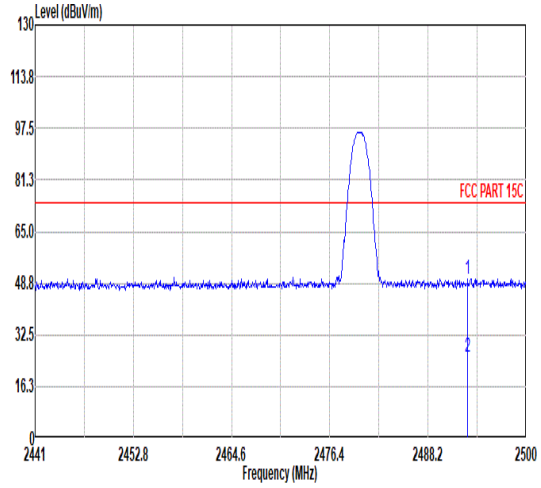
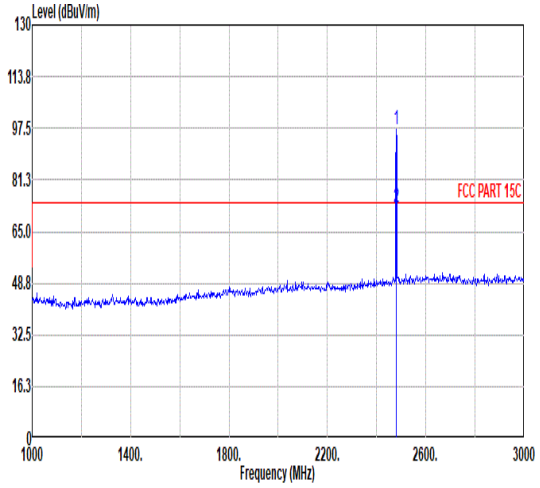
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4882.00	40.24	74.00	-33.76	61.15	34.32	10.30	65.53	0.00	--	--	PEAK
2	7323.00	42.90	74.00	-31.10	60.53	35.98	12.72	66.33	0.00	--	--	PEAK

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4882.00	40.19	74.00	-33.81	61.10	34.32	10.30	65.53	0.00	--	--	PEAK
2	7323.00	43.36	74.00	-30.64	60.99	35.98	12.72	66.33	0.00	--	--	PEAK

Mode	9	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	BF 9+10	
Pol.	Horizontal	Fundamental
Peak		

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2499.00	50.73	74.00	-23.27	41.17	33.09	7.28	36.81	6.00	100	176	PEAK
2	2499.00	25.94	54.00	-28.06	16.38	33.09	7.28	36.81	6.00	100	176	AVERAGE

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2480.00	98.58	------	------	89.23	32.96	7.25	36.86	6.00	100	176	PEAK
2	2480.00	73.79	------	------	64.44	32.96	7.25	36.86	6.00	100	176	AVERAGE

Mode	9	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	BF 9+10	
Pol.	Vertical	Fundamental
Peak		

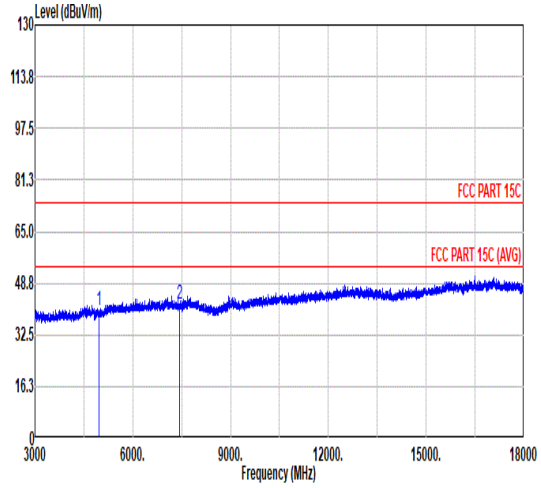
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2492.98	50.20	74.00	-23.80	40.71	33.05	7.27	36.83	6.00	319	232	PEAK
2	2492.98	25.41	54.00	-28.59	15.92	33.05	7.27	36.83	6.00	319	232	AVERAGE

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2480.00	97.26	------	------	87.91	32.96	7.25	36.86	6.00	319	232	PEAK
2	2480.00	72.47	------	------	63.12	32.96	7.25	36.86	6.00	319	232	AVERAGE

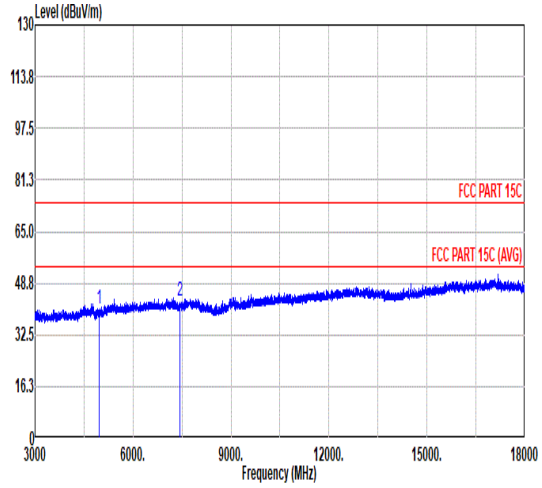
Mode	9	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	BF 9+10	
Pol.	Horizontal	Vertical

Peak

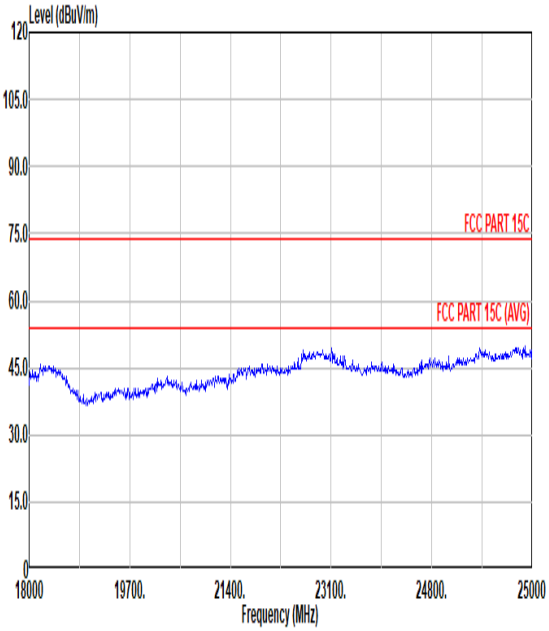
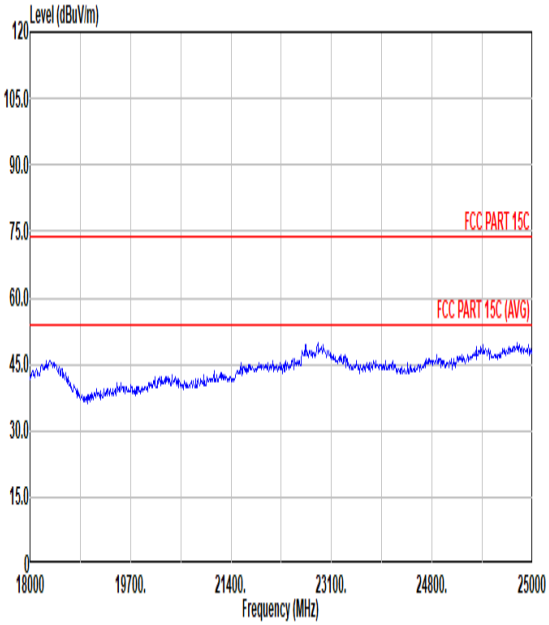
Avg

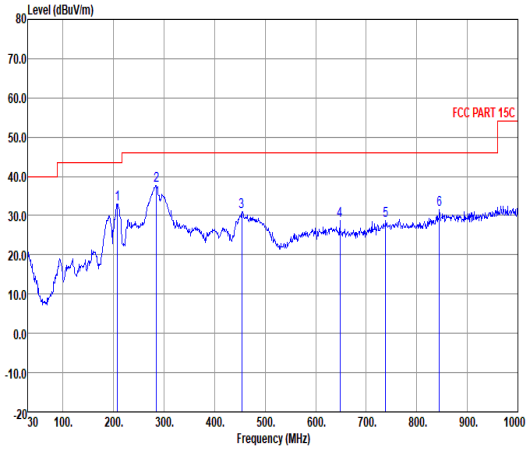
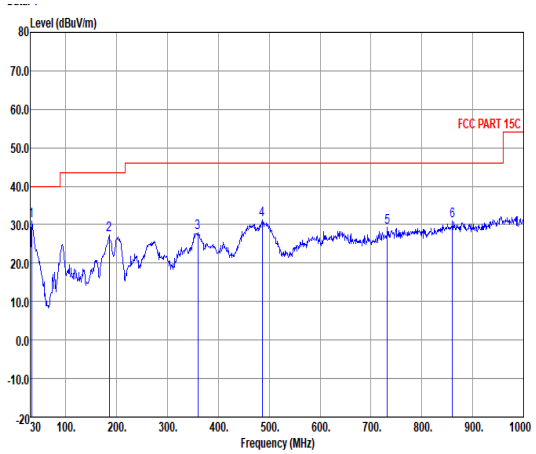


	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4960.00	40.10	74.00	-33.90	61.05	34.24	10.40	65.59	0.00	--	--	PEAK
2	7440.00	42.21	74.00	-31.79	60.12	35.94	12.78	66.63	0.00	--	--	PEAK



	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4960.00	40.68	74.00	-33.32	61.63	34.24	10.40	65.59	0.00	--	--	PEAK
2	7440.00	42.97	74.00	-31.03	60.88	35.94	12.78	66.63	0.00	--	--	PEAK

Mode	6	
	18G-25G	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	10	
Pol.	Horizontal	Vertical
Peak Avg		

Mode	6	
	30-1G	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	10	
Pol.	Horizontal	Vertical
QP		

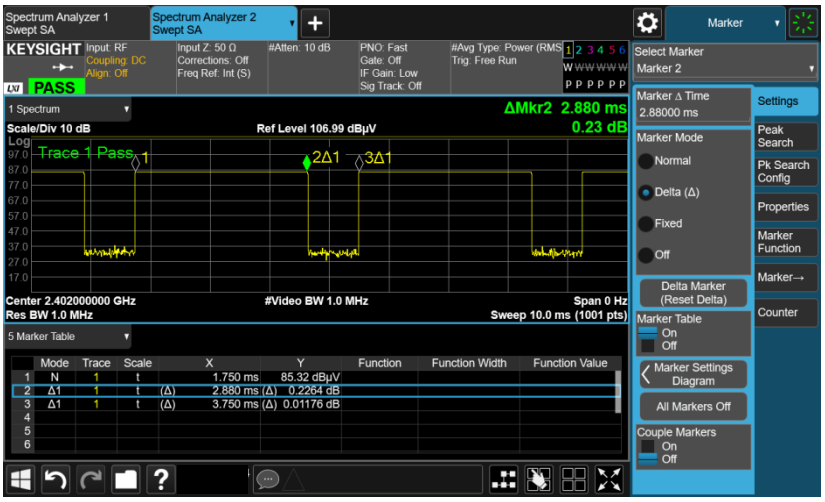
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	207.51	32.92	-10.58	43.50	48.02	14.90	2.11	32.11	---	---	Peak
2	285.11	37.71	-8.29	46.00	48.57	18.80	2.47	32.13	---	---	Peak
3	453.89	31.08	-14.92	46.00	37.38	22.82	3.10	32.22	---	---	Peak
4	647.89	28.79	-17.21	46.00	31.10	26.18	3.71	32.20	---	---	Peak
5	738.10	28.76	-17.24	46.00	29.56	27.52	3.96	32.28	---	---	Peak
6	844.80	31.50	-14.50	46.00	30.81	28.85	4.23	32.39	---	---	Peak

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	32.91	30.97	-9.03	40.00	39.19	23.44	0.54	32.20	---	---	Peak
2	185.20	27.36	-16.14	43.50	42.89	14.59	1.98	32.10	---	---	Peak
3	359.80	27.79	-18.21	46.00	36.70	20.54	2.77	32.22	---	---	Peak
4	485.90	31.24	-14.76	46.00	37.00	23.37	3.21	32.34	---	---	Peak
5	732.28	29.42	-16.58	46.00	30.37	27.36	3.95	32.26	---	---	Peak
6	860.32	31.04	-14.96	46.00	30.21	28.92	4.27	32.36	---	---	Peak

Appendix D. Duty Cycle Plots

<For SISO Ant.9>:

DH5 on time (One Pulse) Plot on Channel 39



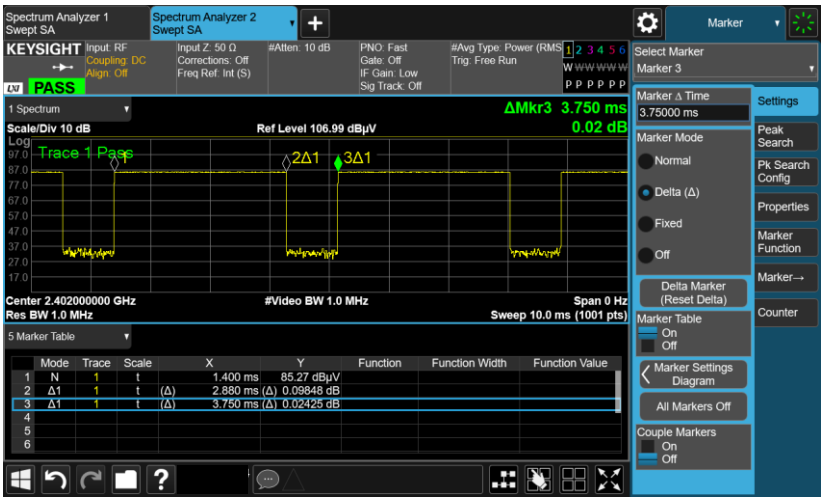
DH5 on time (Count Pulses) Plot on Channel 39

Note:

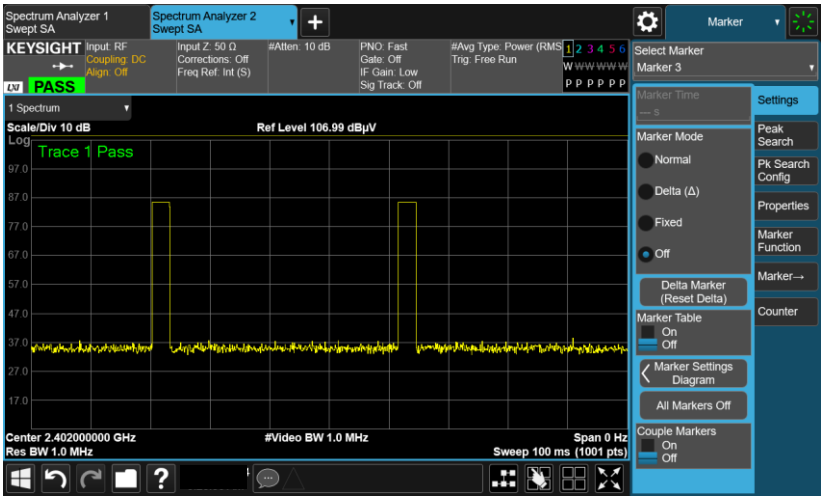
1. Worst case Duty cycle = on time/100 milliseconds = 2 * 2.88 / 100 = 5.76 %
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -24.79 dB
3. DH5 has the highest duty cycle worst case and is reported.

<For SISO Ant.10>:

DH5 on time (One Pulse) Plot on Channel 39



DH5 on time (Count Pulses) Plot on Channel 39

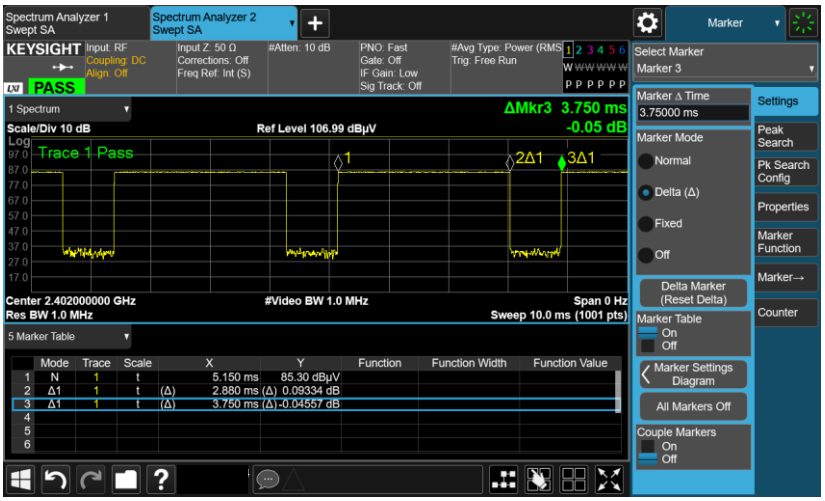


Note:

1. Worst case Duty cycle = on time/100 milliseconds = 2 * 2.88 / 100 = 5.76 %
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -24.79 dB
3. DH5 has the highest duty cycle worst case and is reported.

<For Beamforming Mode>:

DH5 on time (One Pulse) Plot on Channel 39



DH5 on time (Count Pulses) Plot on Channel 39

Note:

1. Worst case Duty cycle = on time/100 milliseconds = 2 * 2.88 / 100 = 5.76 %
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -24.79 dB
3. DH5 has the highest duty cycle worst case and is reported.