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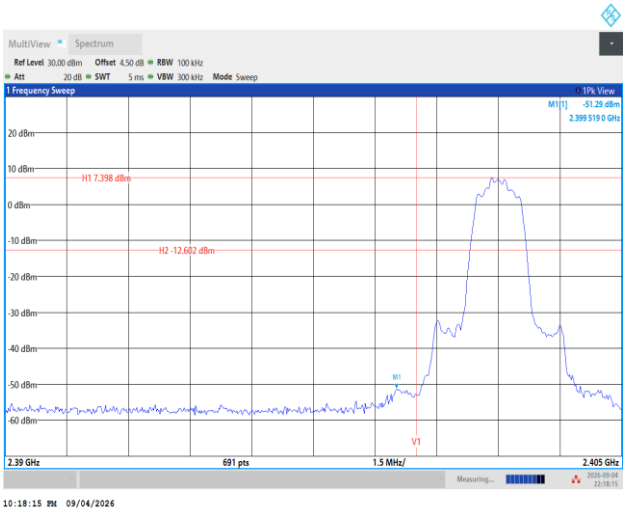
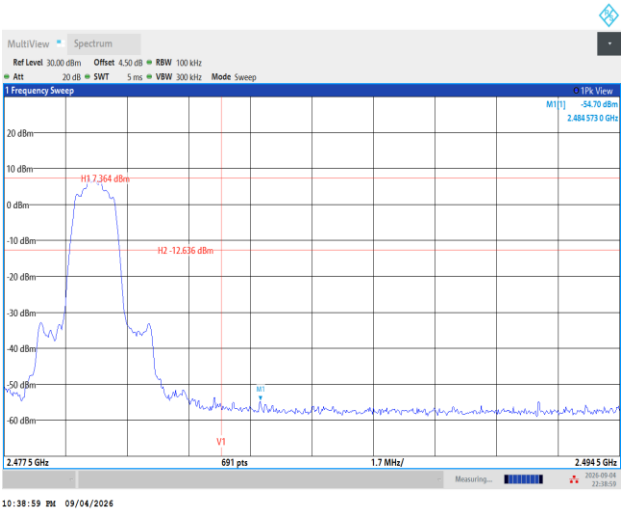
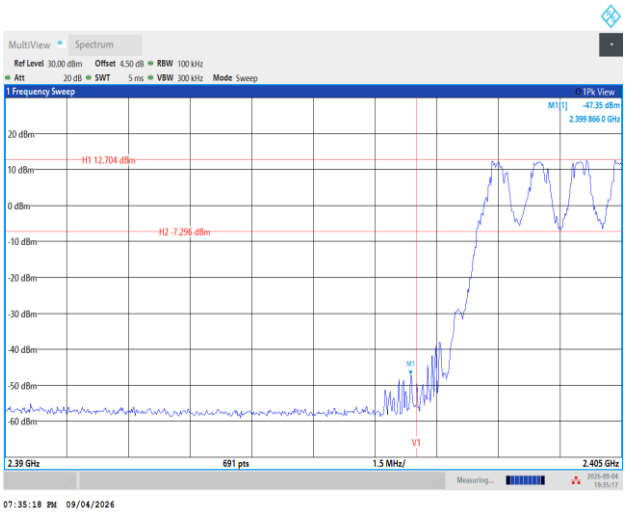
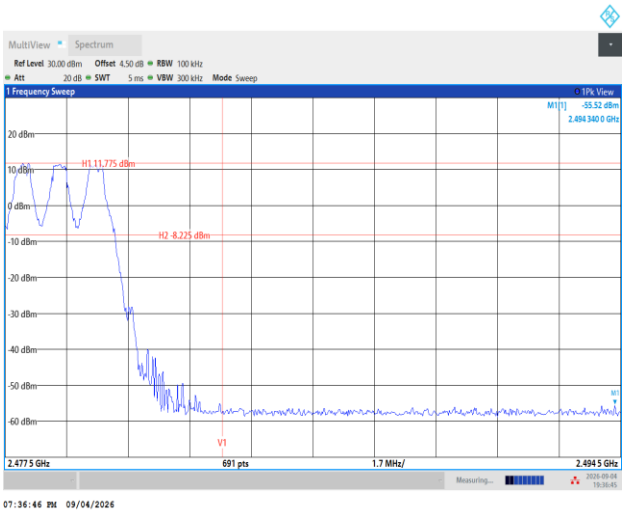
Band Edge Plot on Channel 00	Band Edge Plot on Channel 78
	

Hopping Mode Band Edges

<1Mbps>

Hopping Mode Band Edge Plot on Channel 00	Hopping Mode Band Edge Plot on Channel 78
	

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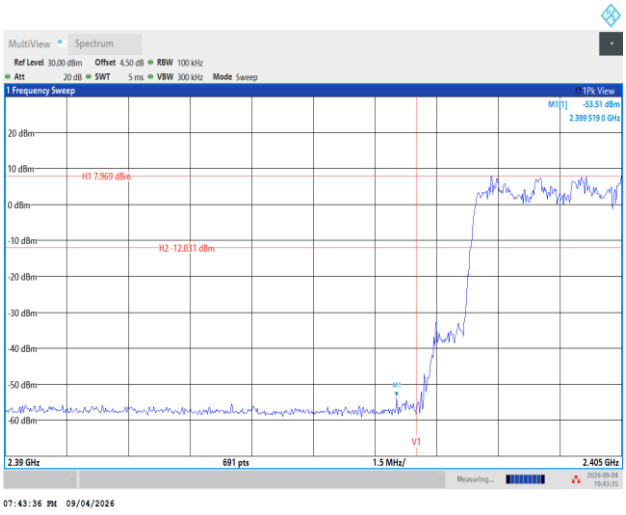
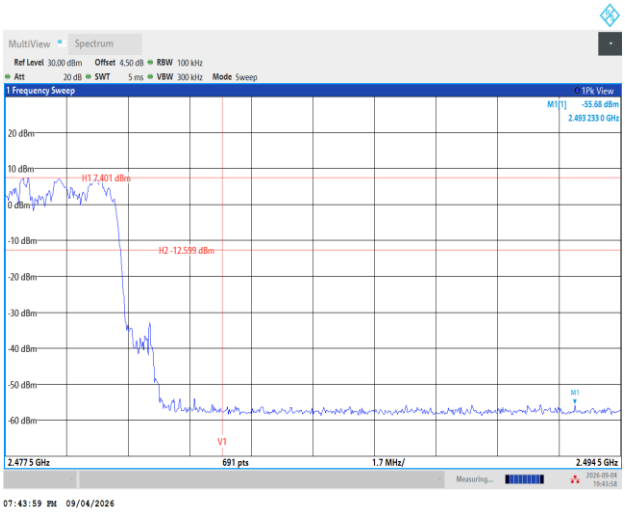
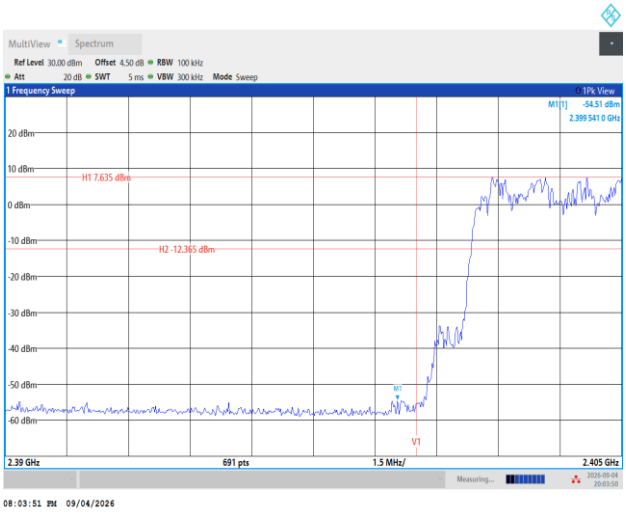
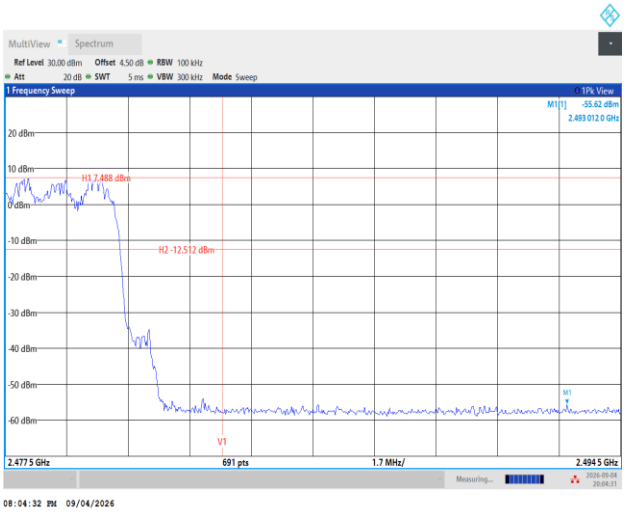
Hopping Mode Band Edge Plot on Channel 00	Hopping Mode Band Edge Plot on Channel 78
	

<3Mbps>

Hopping Mode Band Edge Plot on Channel 00	Hopping Mode Band Edge Plot on Channel 78
	

Conducted Spurious Emission

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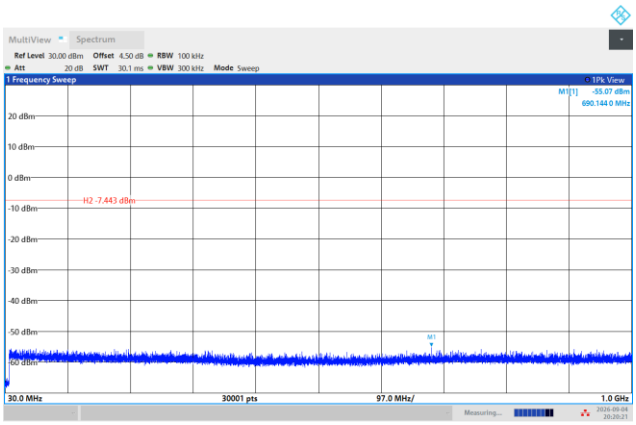
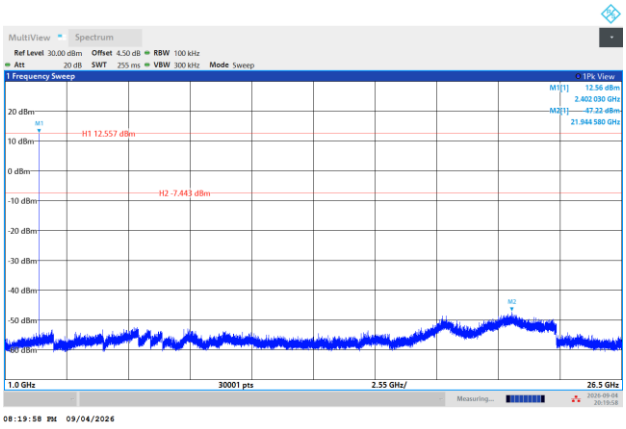
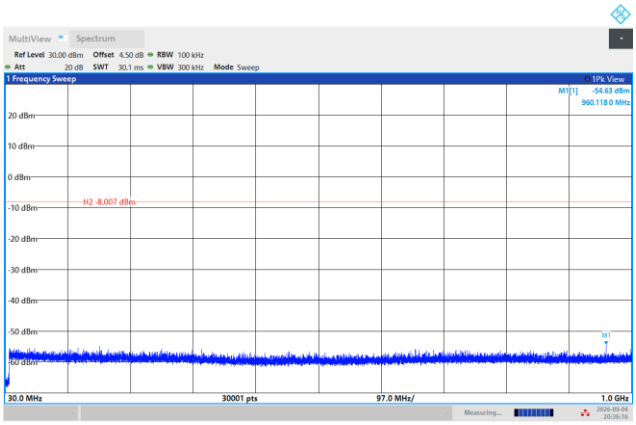
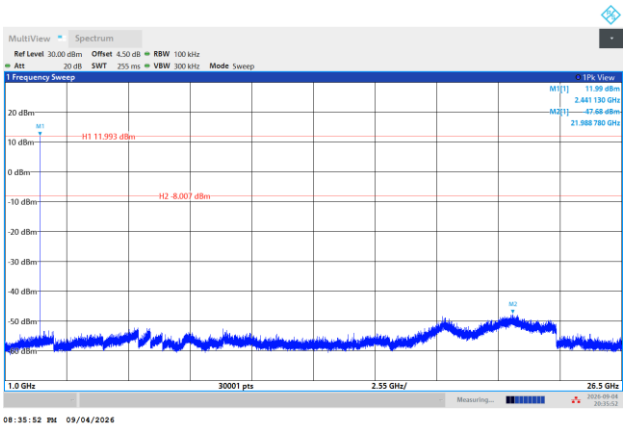
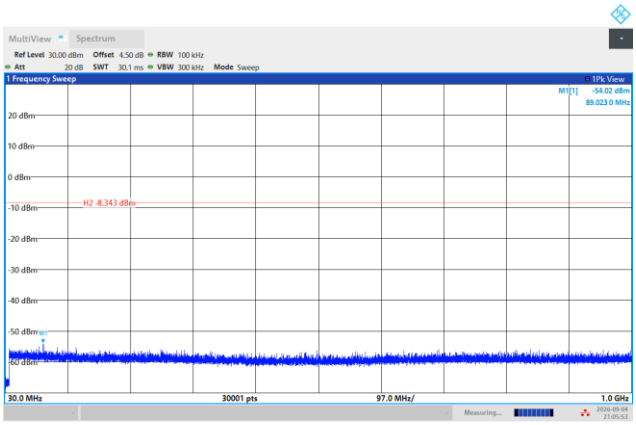
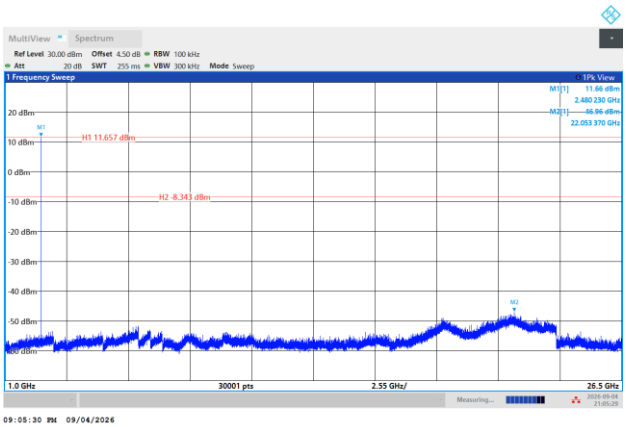
CSE Plot on Low Ch between 30MHz ~ 1 GHz	CSE Plot on Low Ch between 1GHz ~ 26.5GHz
	
CSE Plot on Mid. Ch between 30MHz ~ 1 GHz	**CSE Plot on Mid. Ch between 1GHz ~ 26.5GHz**
	
CSE Plot on High Ch between 30MHz ~ 1 GHz	**CSE Plot on High Ch between 1GHz ~ 26.5GHz**
	

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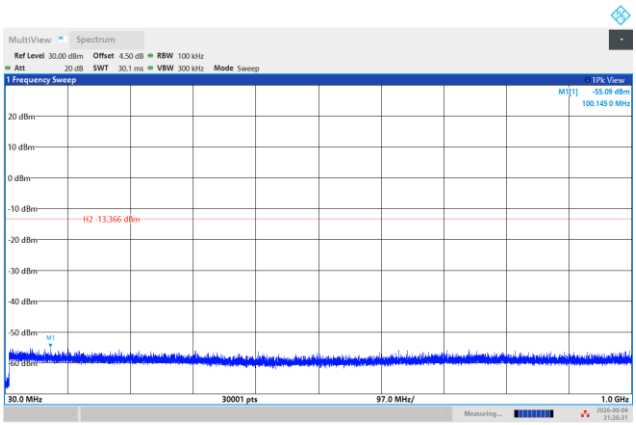
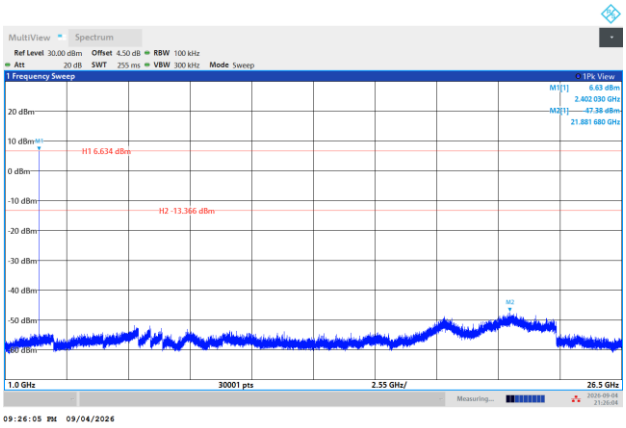
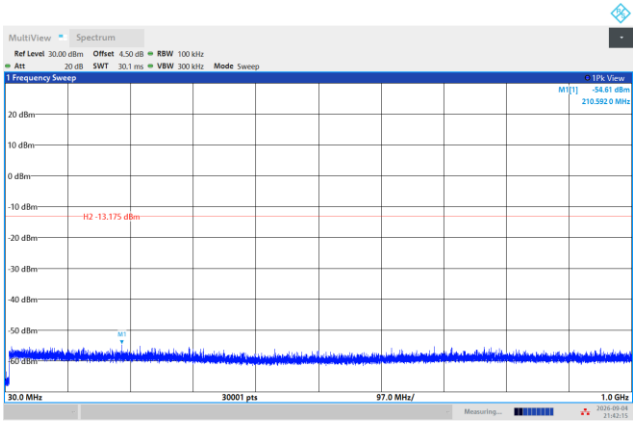
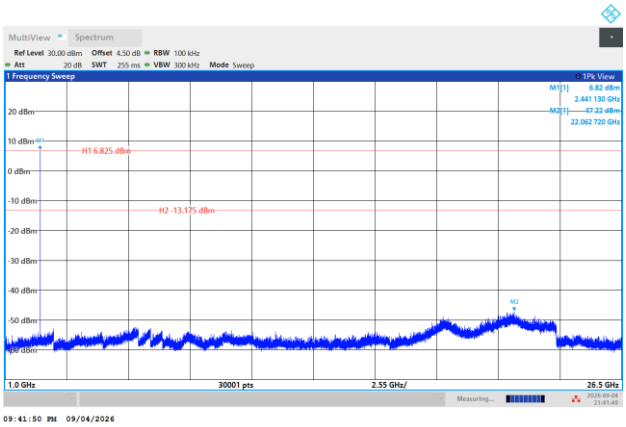
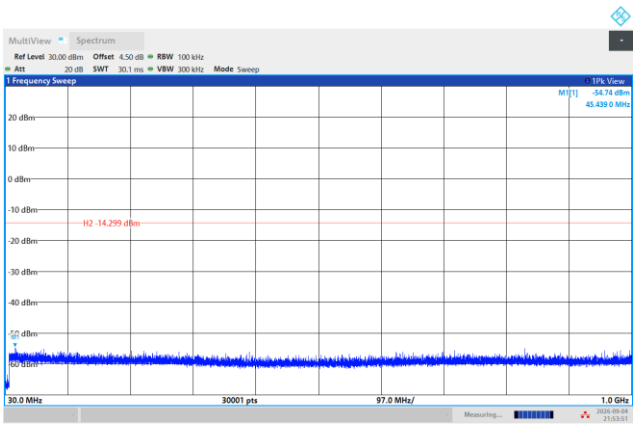
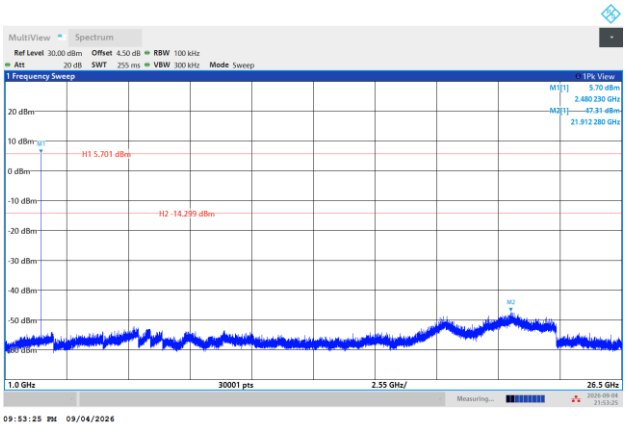
CSE Plot on Low Ch between 30MHz ~ 1 GHz	CSE Plot on Low Ch between 1GHz ~ 26.5GHz
	
CSE Plot on Mid. Ch between 30MHz ~ 1 GHz	**CSE Plot on Mid. Ch between 1GHz ~ 26.5GHz**
	
CSE Plot on High Ch between 30MHz ~ 1 GHz	**CSE Plot on High Ch between 1GHz ~ 26.5GHz**
	

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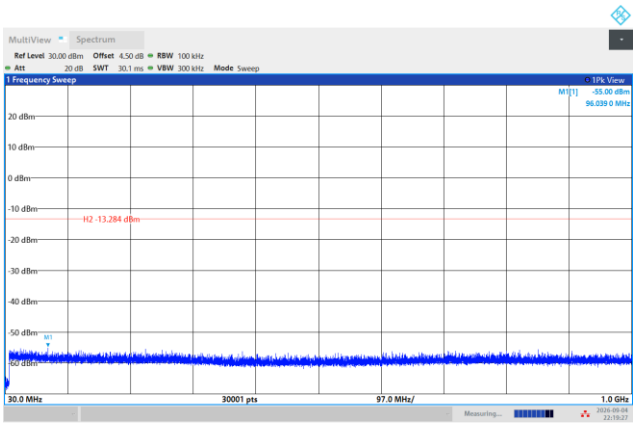
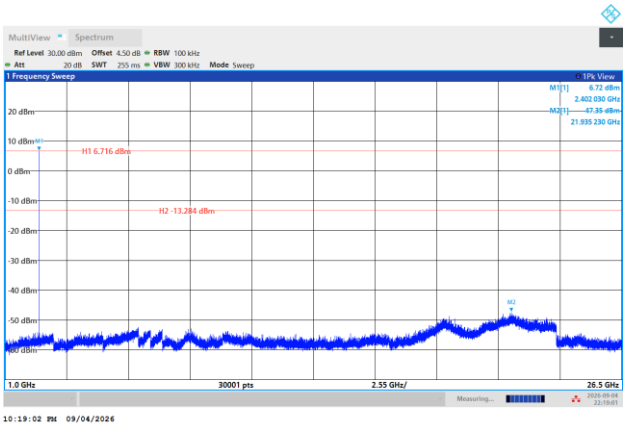
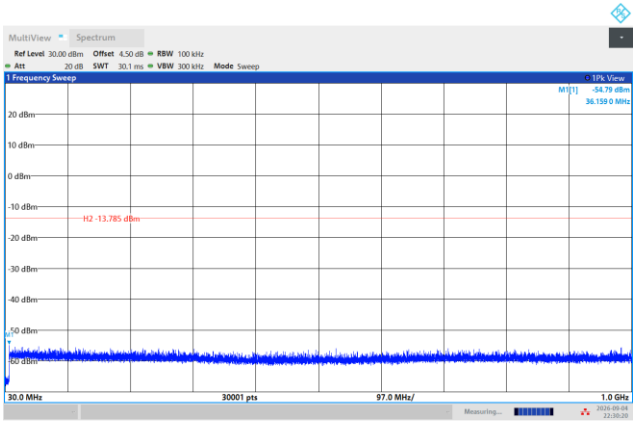
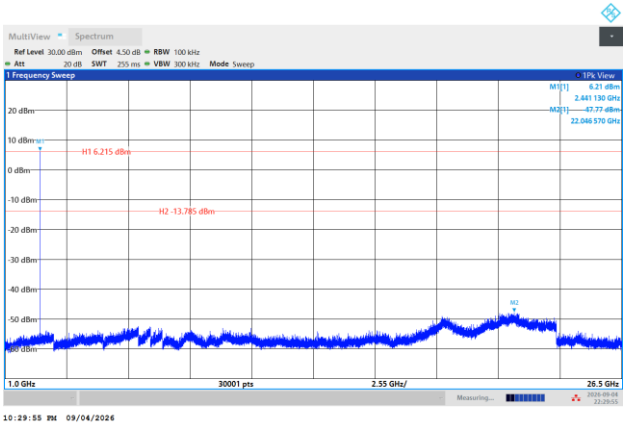
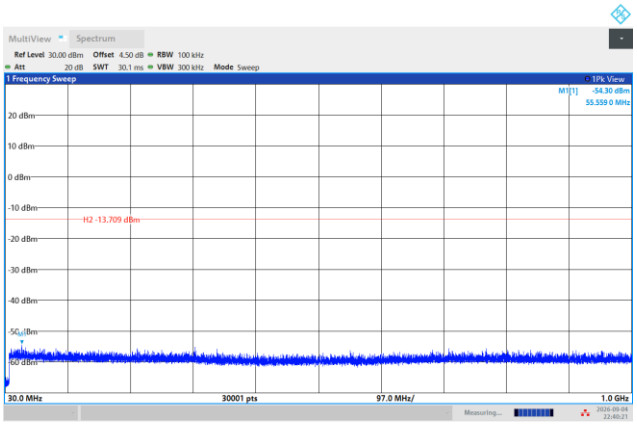
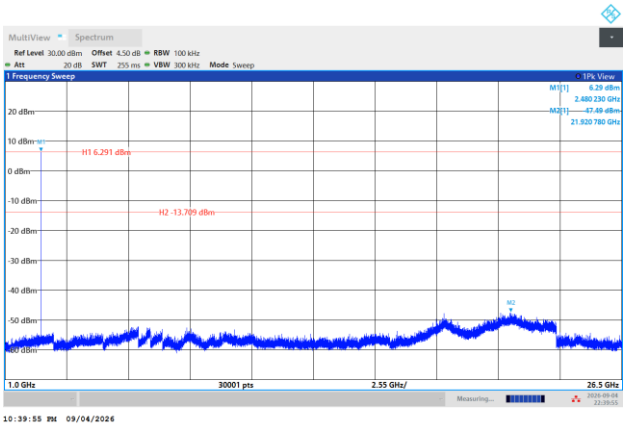
CSE Plot on Low Ch between 30MHz ~ 1 GHz	CSE Plot on Low Ch between 1GHz ~ 26.5GHz
	
CSE Plot on Mid. Ch between 30MHz ~ 1 GHz	**CSE Plot on Mid. Ch between 1GHz ~ 26.5GHz**
	
CSE Plot on High Ch between 30MHz ~ 1 GHz	**CSE Plot on High Ch between 1GHz ~ 26.5GHz**
	

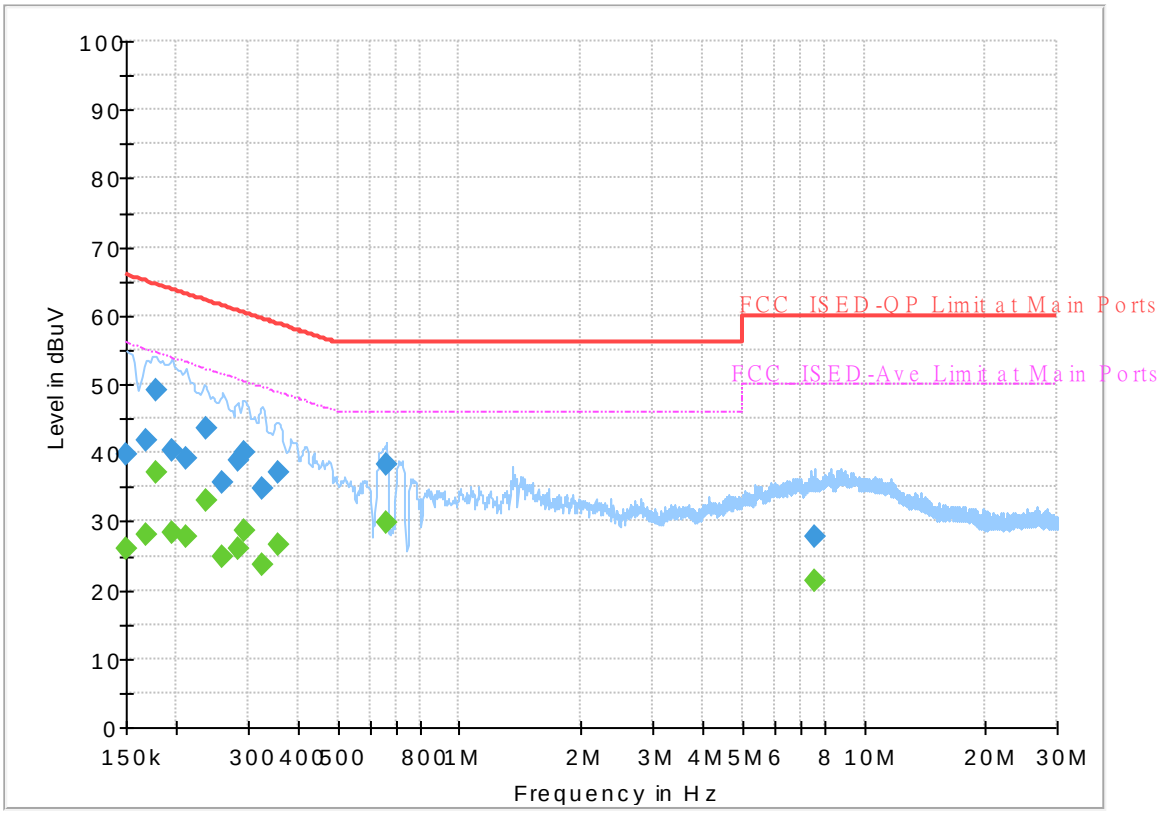
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Brian Chen	**Temperature :**	23~26℃
		Relative Humidity :	45~55%

EUT Information

Report NO :	672112
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

Full Spectrum



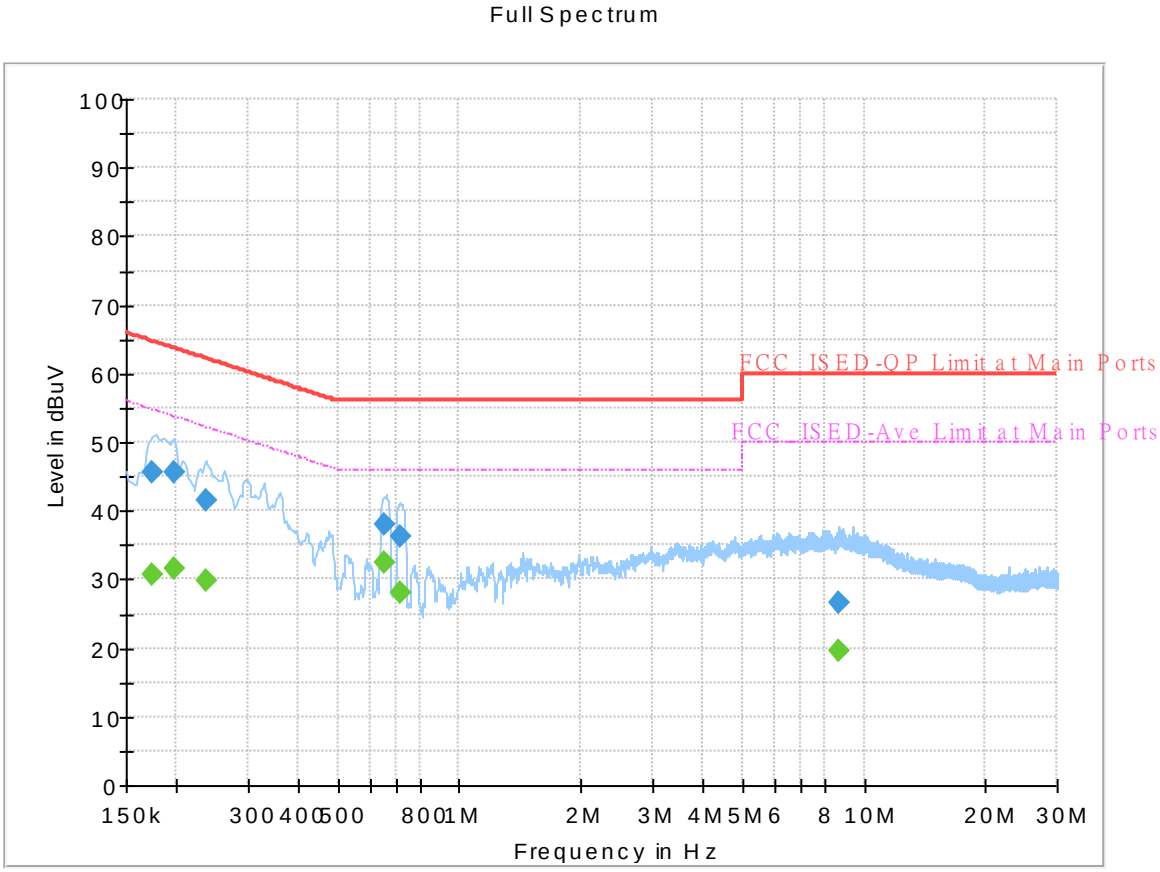
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	---	25.92	56.00	30.08	L1	OFF	19.9
0.150000	39.85	---	66.00	26.15	L1	OFF	19.9
0.168000	---	27.97	55.06	27.09	L1	OFF	19.9
0.168000	41.90	---	65.06	23.16	L1	OFF	19.9
0.177000	---	37.13	54.63	17.50	L1	OFF	19.9
0.177000	49.15	---	64.63	15.48	L1	OFF	19.9
0.195000	---	28.34	53.82	25.48	L1	OFF	19.9
0.195000	40.33	---	63.82	23.49	L1	OFF	19.9
0.210750	---	27.71	53.18	25.47	L1	OFF	19.9
0.210750	39.05	---	63.18	24.13	L1	OFF	19.9
0.235500	---	33.16	52.25	19.09	L1	OFF	19.9
0.235500	43.66	---	62.25	18.59	L1	OFF	19.9
0.260250	---	24.81	51.42	26.61	L1	OFF	19.9
0.260250	35.57	---	61.42	25.85	L1	OFF	19.9
0.282750	---	26.01	50.74	24.73	L1	OFF	19.9
0.282750	38.84	---	60.74	21.90	L1	OFF	19.9
0.294000	---	28.52	50.41	21.89	L1	OFF	19.9
0.294000	39.99	---	60.41	20.42	L1	OFF	19.9
0.325500	---	23.72	49.57	25.85	L1	OFF	19.9
0.325500	34.75	---	59.57	24.82	L1	OFF	19.9
0.357000	---	26.56	48.80	22.24	L1	OFF	19.9

0.357000	**37.19**	**---**	**58.80**	**21.61**	**L1**	**OFF**	**19.9**
0.660750	**---**	**29.74**	**46.00**	**16.26**	**L1**	**OFF**	**19.9**
0.660750	**38.32**	**---**	**56.00**	**17.68**	**L1**	**OFF**	**19.9**
7.570500	**---**	**21.38**	**50.00**	**28.62**	**L1**	**OFF**	**20.4**
7.570500	**27.76**	**---**	**60.00**	**32.24**	**L1**	**OFF**	**20.4**

EUT Information

Report NO :	672112
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.174750	---	30.70	54.73	24.03	N	OFF	19.9
0.174750	45.51	---	64.73	19.22	N	OFF	19.9
0.197250	---	31.67	53.73	22.06	N	OFF	19.9
0.197250	45.50	---	63.73	18.23	N	OFF	19.9
0.235500	---	29.95	52.25	22.30	N	OFF	19.9
0.235500	41.53	---	62.25	20.72	N	OFF	19.9
0.654000	---	32.35	46.00	13.65	N	OFF	19.9
0.654000	38.13	---	56.00	17.87	N	OFF	19.9
0.712500	---	28.02	46.00	17.98	N	OFF	19.9
0.712500	36.32	---	56.00	19.68	N	OFF	19.9
8.632500	---	19.57	50.00	30.43	N	OFF	20.5
8.632500	26.55	---	60.00	33.45	N	OFF	20.5

Appendix C. Radiated Spurious Emission Test Data

Test Engineer :	Jesse Wang, Stan Hsieh, Ken Wu	**Temperature :**	23.1~25.6°C
		Relative Humidity :	49.8~58.3%

Note symbol

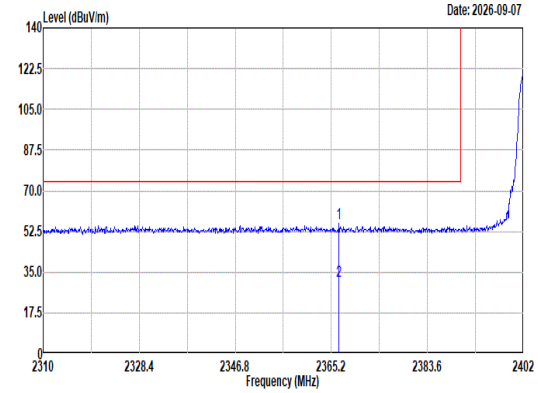
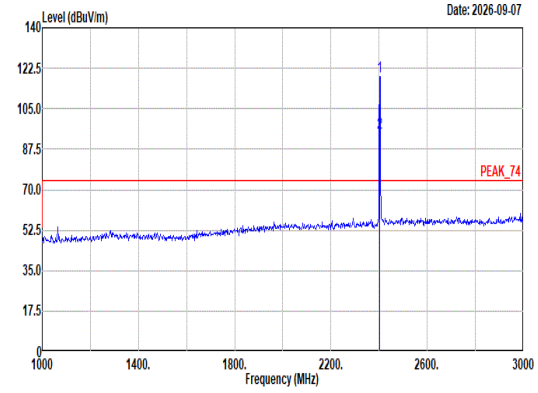
-L	**Low channel location**
-R	**High channel location**

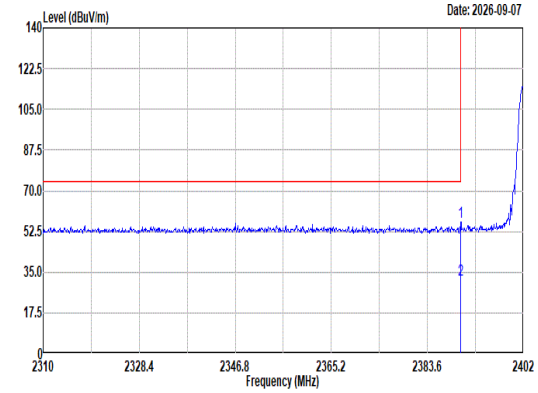
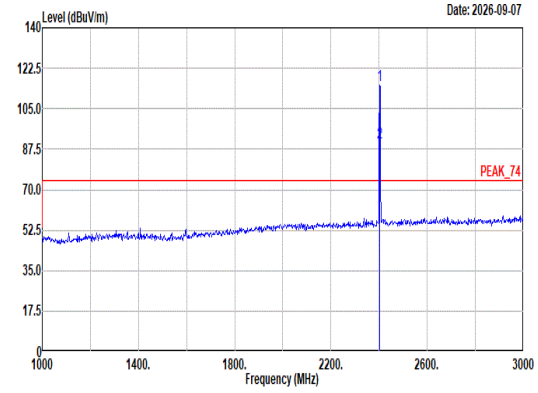
C1.Radiated Spurious Emission Test Modes

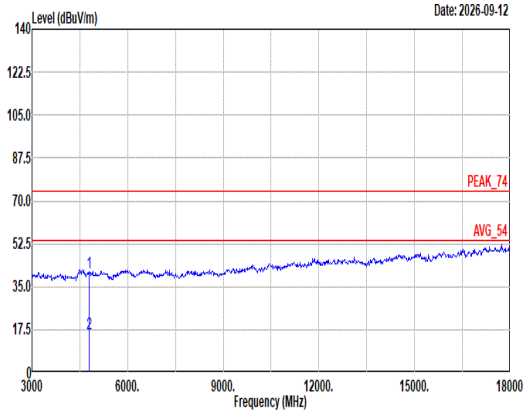
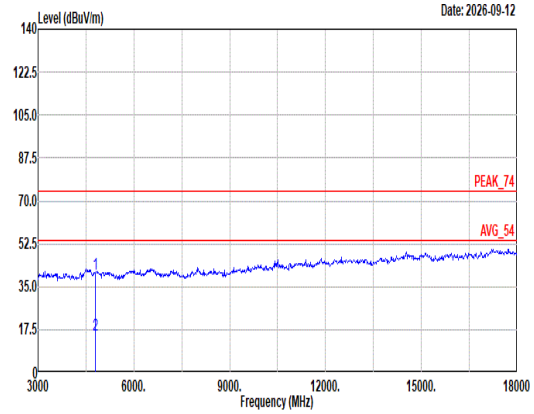
Mode	Band (MHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 1	2400-2483.5	5	Bluetooth BR_GFSK	00	2402	1Mbps	-	-
Mode 2	2400-2483.5	5	Bluetooth BR_GFSK	39	2441	1Mbps	-	-
Mode 3	2400-2483.5	5	Bluetooth BR_GFSK	78	2480	1Mbps	-	-
Mode 4	2400-2483.5	9	Bluetooth BR_GFSK	00	2402	1Mbps	-	-
Mode 5	2400-2483.5	9	Bluetooth BR_GFSK	39	2441	1Mbps	-	-
Mode 6	2400-2483.5	9	Bluetooth BR_GFSK	78	2480	1Mbps	-	-
Mode 7	2400-2483.5	5+9	Bluetooth BR_GFSK	00	2402	1Mbps	-	-
Mode 8	2400-2483.5	5+9	Bluetooth BR_GFSK	39	2441	1Mbps	-	-
Mode 9	2400-2483.5	5+9	Bluetooth BR_GFSK	78	2480	1Mbps	-	-
Mode 10	2400-2483.5	5	Bluetooth BR_GFSK	78	2480	1Mbps	-	LF
Mode 11	2400-2483.5	5	Bluetooth BR_GFSK	78	2480	1Mbps	-	SHF

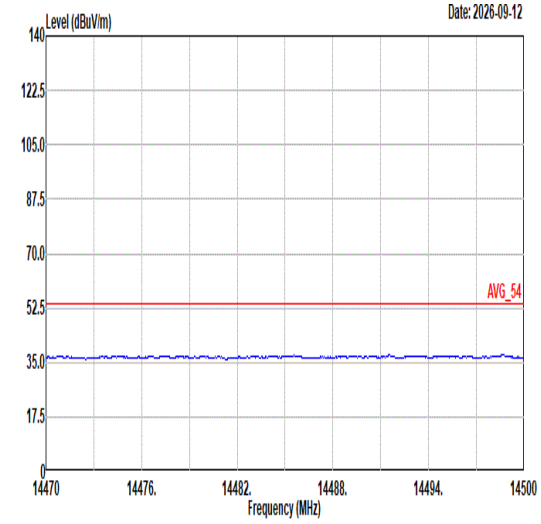
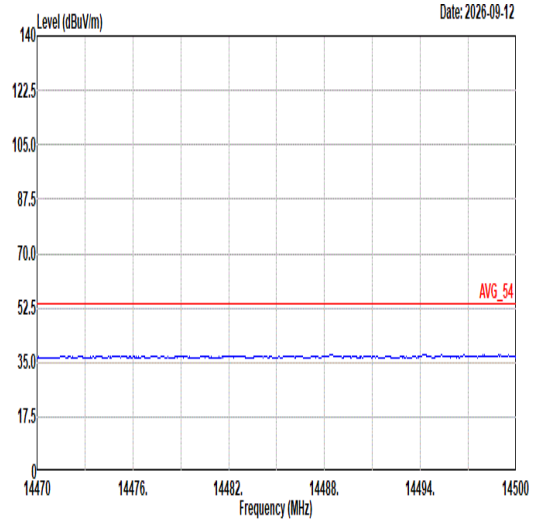
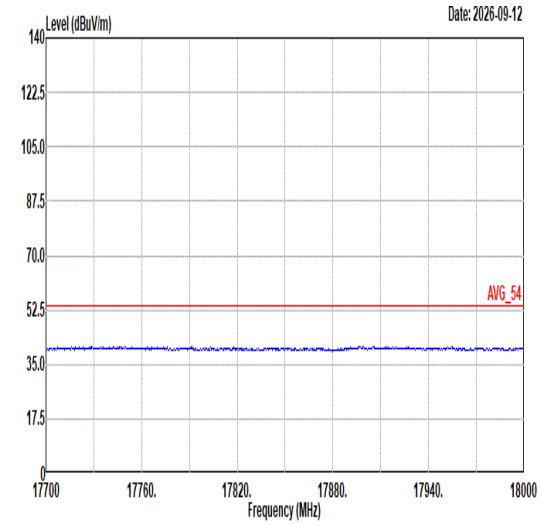
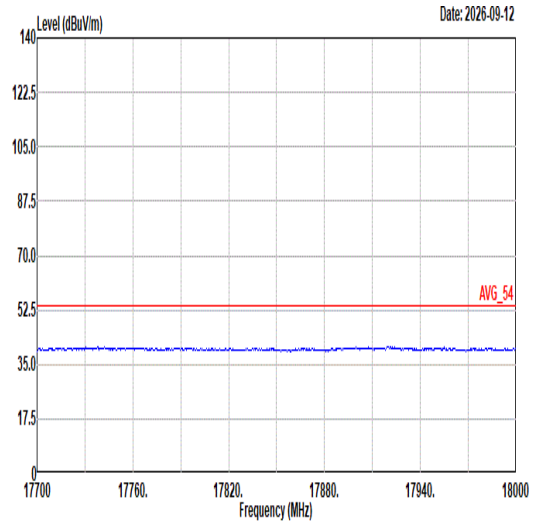
C2.Summary of each worse mode

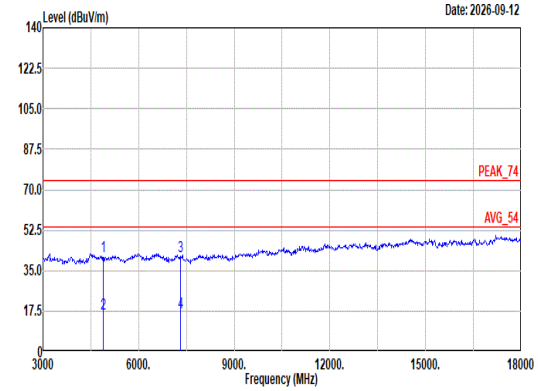
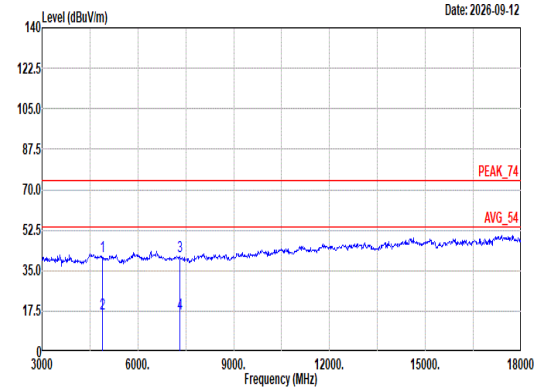
Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
1	Bluetooth BR_GFSK	00	2389.95	56.52	74.00	-17.48	V	Peak	Pass	-	Band Edge
1	Bluetooth BR_GFSK	00	4804.00	40.47	74.00	-33.53	H	Peak	Pass	-	Harmonic
2	Bluetooth BR_GFSK	39	-	-	-	-	-	-	-	-	Band Edge
2	Bluetooth BR_GFSK	39	7323.00	41.42	74.00	-32.58	H	Peak	Pass	-	Harmonic
3	Bluetooth BR_GFSK	78	2483.66	58.46	74.00	-15.54	H	Peak	Pass	-	Band Edge
3	Bluetooth BR_GFSK	78	4960.00	41.46	74.00	-32.54	V	Peak	Pass	-	Harmonic
4	Bluetooth BR_GFSK	00	2358.58	45.83	74.00	-28.17	V	Peak	Pass	-	Band Edge
4	Bluetooth BR_GFSK	00	4804.00	41.71	74.00	-32.29	V	Peak	Pass	-	Harmonic
5	Bluetooth BR_GFSK	39	-	-	-	-	-	-	-	-	Band Edge
5	Bluetooth BR_GFSK	39	7323.00	49.08	74.00	-24.92	V	Peak	Pass	-	Harmonic
6	Bluetooth BR_GFSK	78	2483.86	47.46	74.00	-26.54	H	Peak	Pass	-	Band Edge
6	Bluetooth BR_GFSK	78	4960.00	41.48	74.00	-32.52	H	Peak	Pass	-	Harmonic
7	Bluetooth BR_GFSK	00	2389.03	44.99	74.00	-29.01	H	Peak	Pass	-	Band Edge
7	Bluetooth BR_GFSK	00	4804.00	41.58	74.00	-32.42	H	Peak	Pass	-	Harmonic
8	Bluetooth BR_GFSK	39	-	-	-	-	-	-	-	-	Band Edge
8	Bluetooth BR_GFSK	39	7323.00	51.47	74.00	-22.53	V	Peak	Pass	-	Harmonic
9	Bluetooth BR_GFSK	78	2484.46	47.50	74.00	-26.50	H	Peak	Pass	-	Band Edge
9	Bluetooth BR_GFSK	78	7440.00	50.37	74.00	-23.63	V	Peak	Pass	-	Harmonic
10	LF	78	30.00	32.27	40.00	-7.73	V	Peak	Pass	-	LF
11	SHF	78	24351.89	38.00	74.00	-36.00	V	Peak	Pass	-	SHF

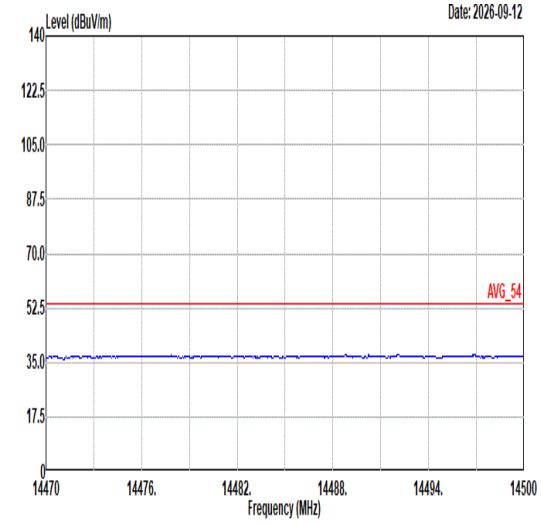
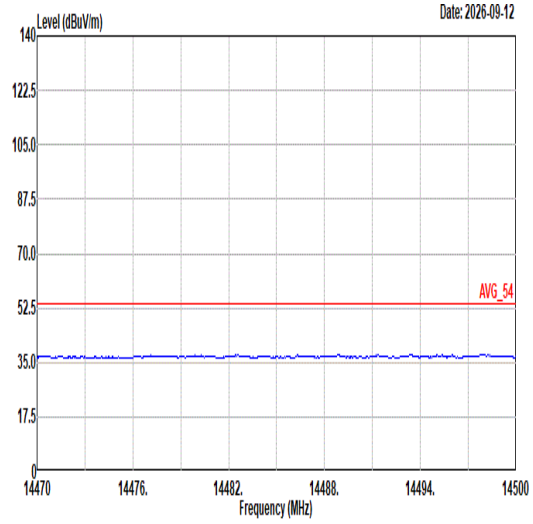
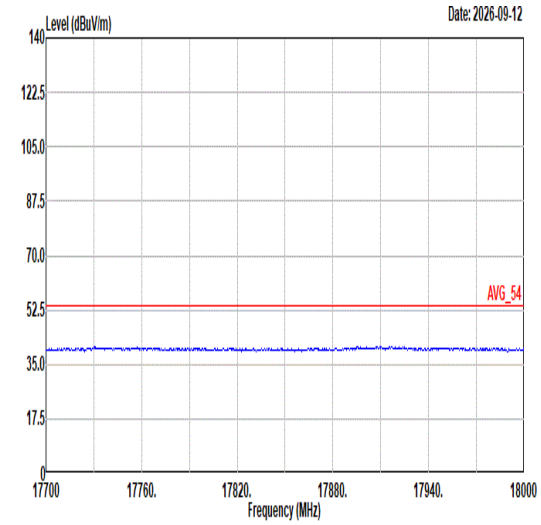
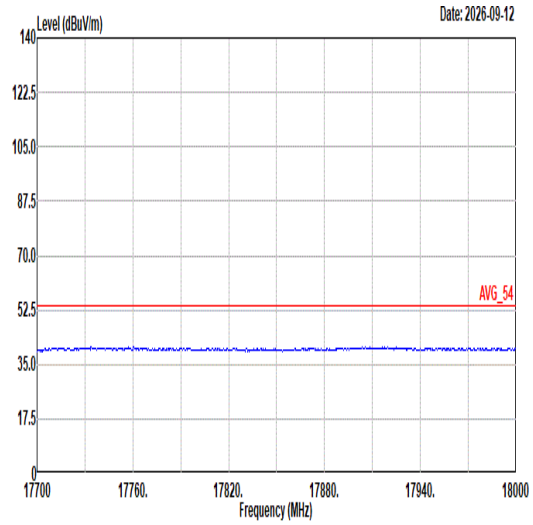
Mode	1	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	5	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2366.67 55.88 74.00 -18.12 39.66 32.13 8.63 34.57 10.03 340 64 Peak 2 2366.67 31.11 54.00 -22.89 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 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 2402.00 119.09 ------ ------ 102.84 32.12 8.69 34.60 10.04 340 64 Peak 2 2402.00 94.32 ------ ------ -- -- -- -- -- -- -- Average

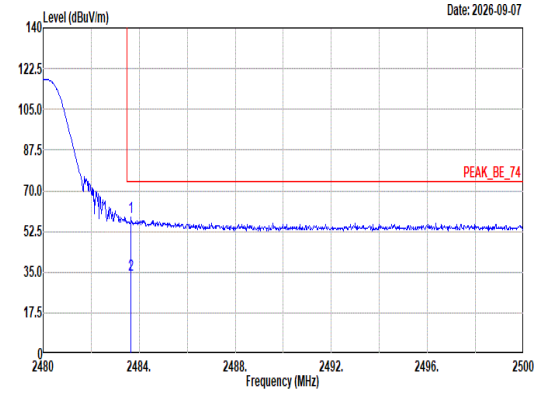
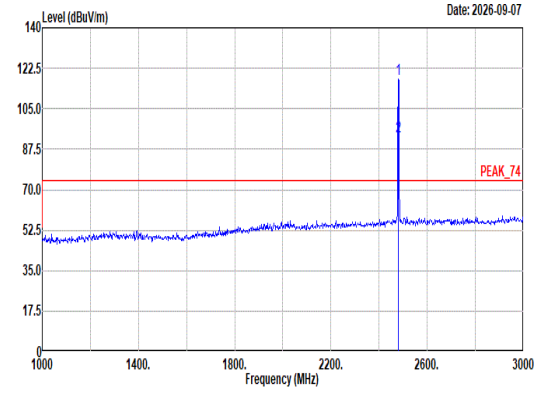
Mode	1	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	5	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2389.95 56.52 74.00 -17.48 40.30 32.10 8.67 34.59 10.04 357 343 Peak 2 2389.95 31.75 54.00 -22.25 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 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 2402.00 115.02 ------ ------ 98.77 32.12 8.69 34.60 10.04 357 343 Peak 2 2402.00 90.25 ------ ------ -- -- -- -- -- -- -- Average

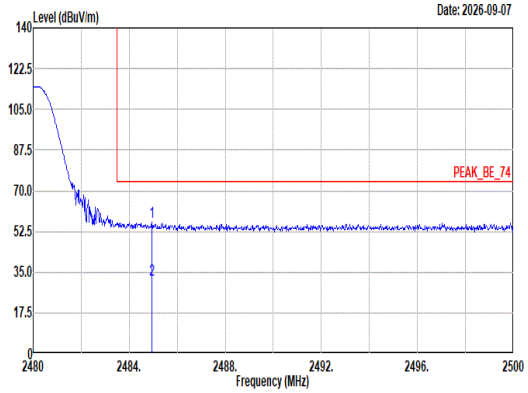
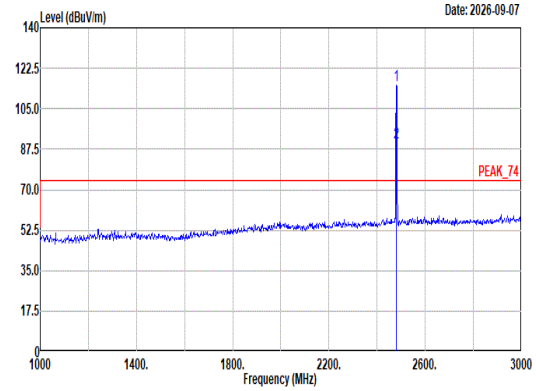
Mode	1	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	5	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4804.00 40.47 74.00 -33.53 50.86 34.50 12.31 58.10 0.90 -- -- Peak 2 4804.00 15.70 54.00 -38.30 -- -- -- -- -- -- -- Average	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL 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 40.31 74.00 -33.69 50.70 34.50 12.31 58.10 0.90 -- -- Peak 2 4804.00 15.54 54.00 -38.46 -- -- -- -- -- -- -- Average

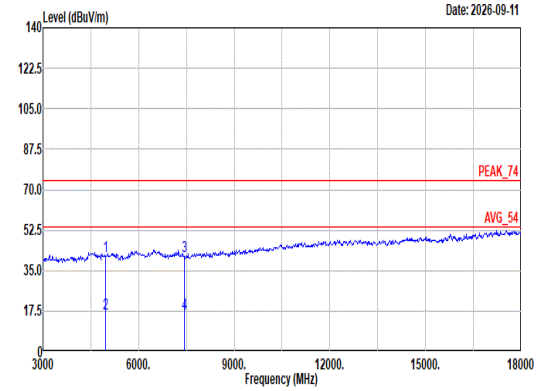
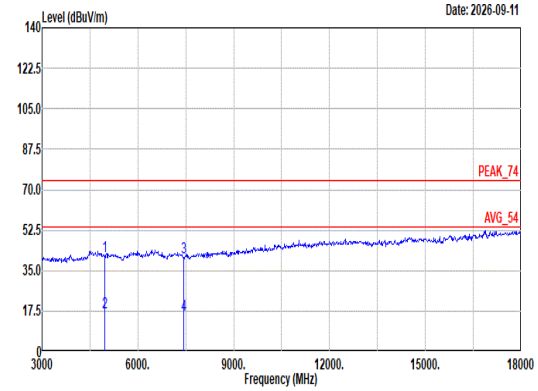
Mode	1	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	5	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

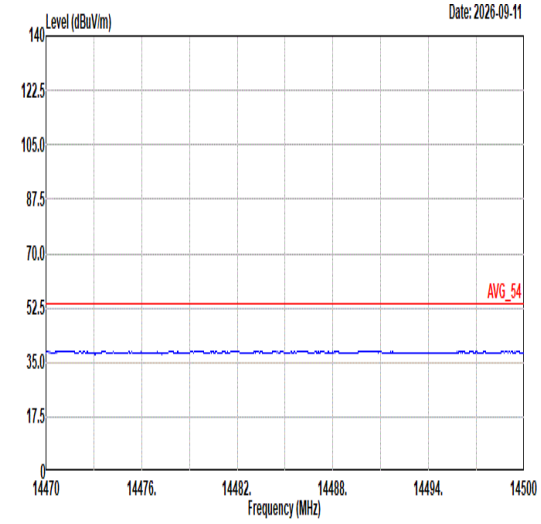
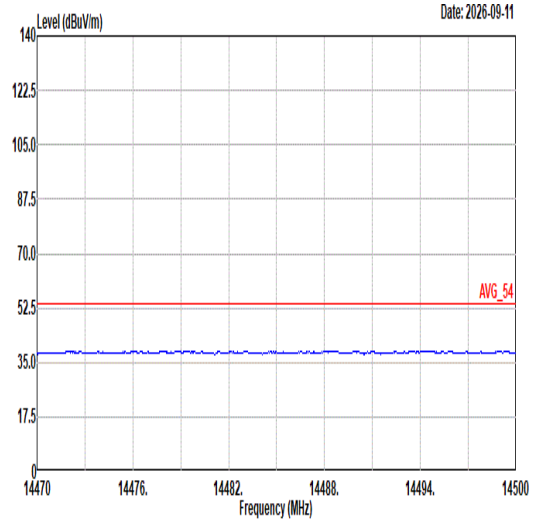
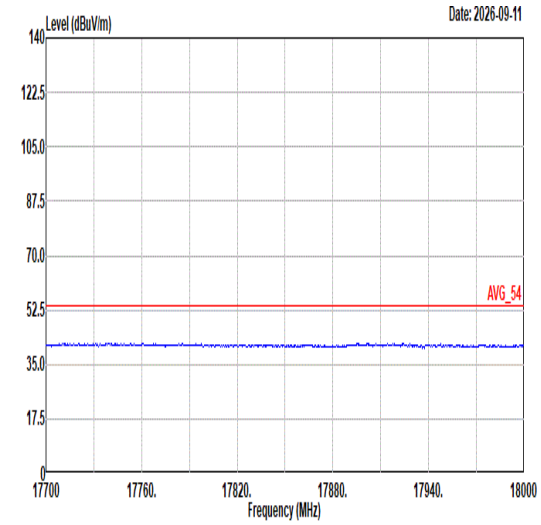
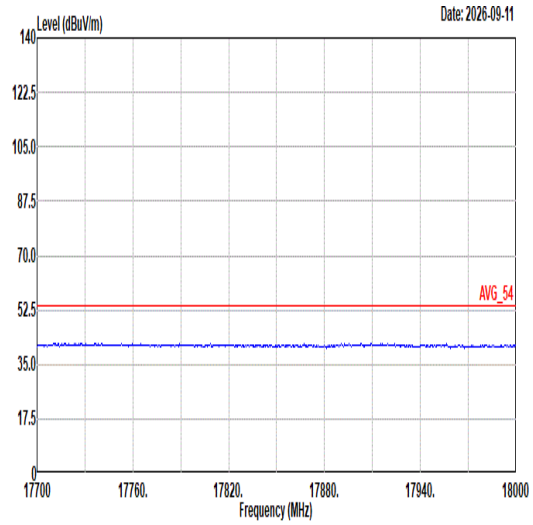
Mode	2	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz	
ANT	5	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4882.00 41.03 74.00 -32.97 51.28 34.44 12.41 57.99 0.89 -- -- Peak 2 4882.00 16.26 54.00 -37.74 -- -- -- -- -- -- -- Average 3 7323.00 41.42 74.00 -32.58 47.40 36.00 14.94 57.87 0.95 -- -- Peak 4 7323.00 16.65 54.00 -37.35 -- -- -- -- -- -- -- Average	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL 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 40.98 74.00 -33.02 51.23 34.44 12.41 57.99 0.89 -- -- Peak 2 4882.00 16.21 54.00 -37.79 -- -- -- -- -- -- -- Average 3 7323.00 41.27 74.00 -32.73 47.25 36.00 14.94 57.87 0.95 -- -- Peak 4 7323.00 16.50 54.00 -37.50 -- -- -- -- -- -- -- Average

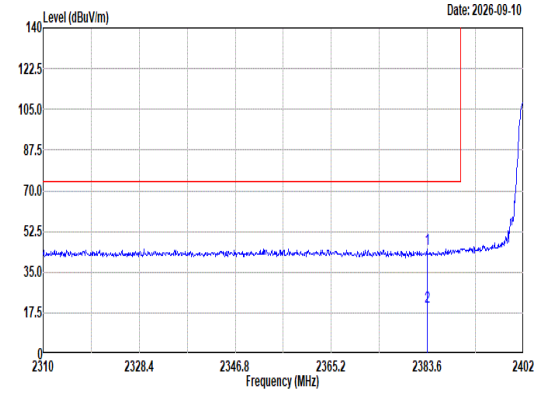
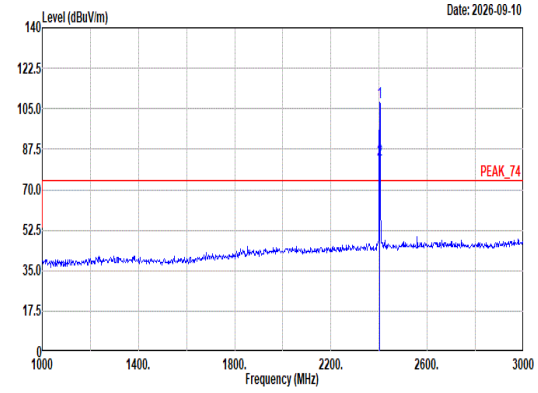
Mode	2	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz	
ANT	5	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

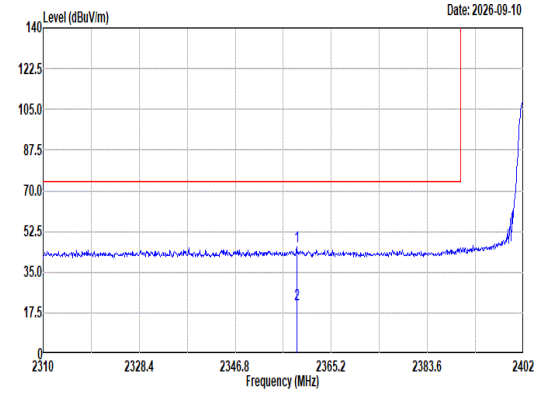
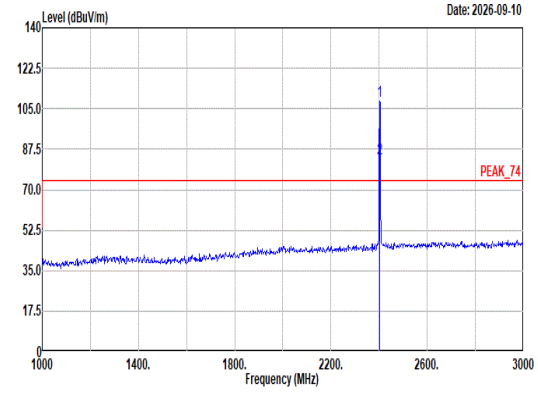
Mode	3	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	5	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2483.66 58.46 74.00 -15.54 41.56 32.74 8.84 34.65 9.97 100 242 Peak 2 2483.66 33.69 54.00 -20.31 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 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 2480.00 117.93 ------ ------ 101.06 32.70 8.84 34.65 9.98 100 242 Peak 2 2480.00 93.16 ------ ------ -- -- -- -- -- -- -- Average

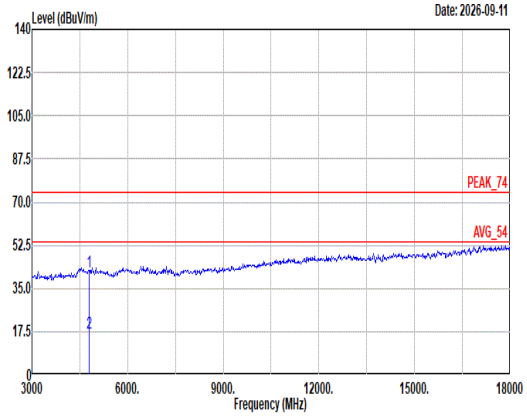
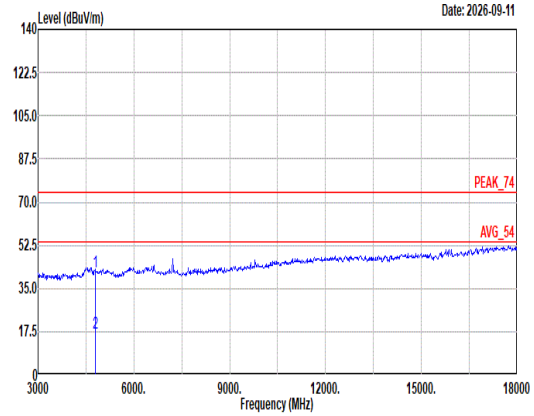
Mode	3	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	5	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2484.94 56.39 74.00 -17.61 39.47 32.75 8.85 34.65 9.97 300 334 Peak 2 2484.94 31.62 54.00 -22.38 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 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 2480.00 115.12 ------ ------ 98.25 32.70 8.84 34.65 9.98 300 334 Peak 2 2480.00 90.35 ------ ------ -- -- -- -- -- -- -- Average

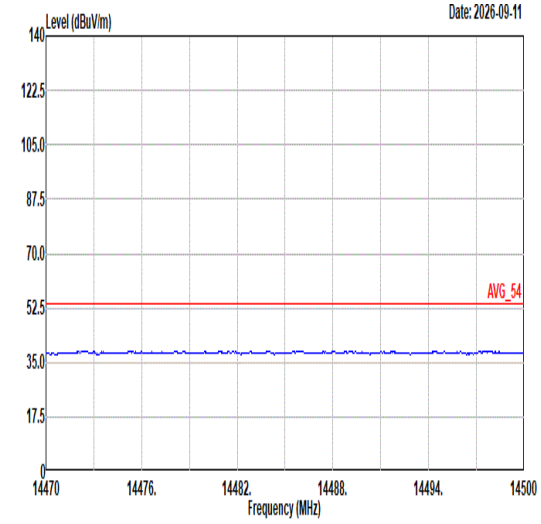
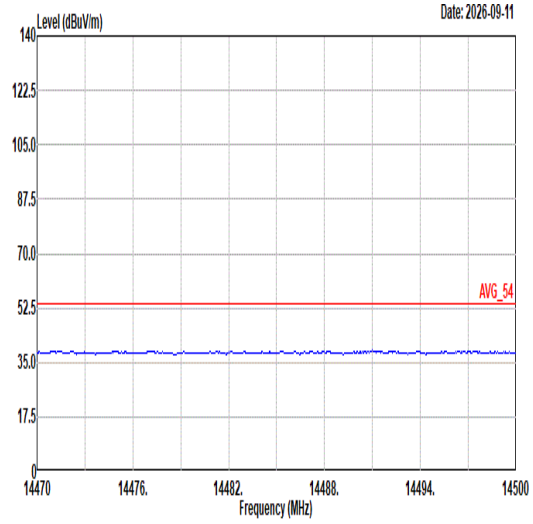
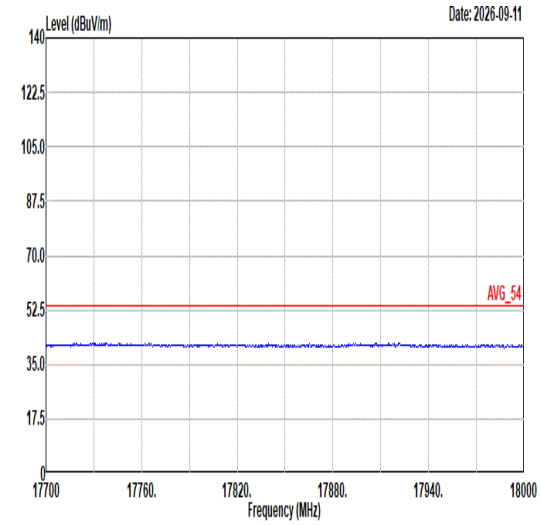
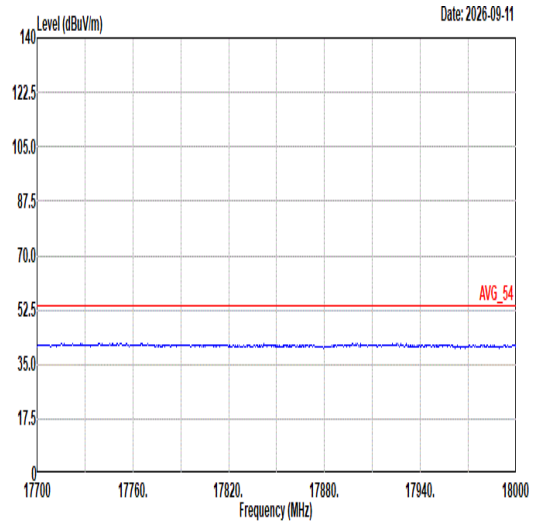
Mode	3	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	5	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4960.00 41.03 74.00 -32.97 50.99 34.54 12.50 57.88 0.88 -- -- Peak 2 4960.00 16.26 54.00 -37.74 -- -- -- -- -- -- -- Average 3 7440.00 41.22 74.00 -32.78 47.34 36.00 15.03 58.07 0.92 -- -- Peak 4 7440.00 16.45 54.00 -37.55 -- -- -- -- -- -- -- Average	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL 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 41.46 74.00 -32.54 51.42 34.54 12.50 57.88 0.88 -- -- Peak 2 4960.00 16.69 54.00 -37.31 -- -- -- -- -- -- -- Average 3 7440.00 40.78 74.00 -33.22 46.90 36.00 15.03 58.07 0.92 -- -- Peak 4 7440.00 16.01 54.00 -37.99 -- -- -- -- -- -- -- Average

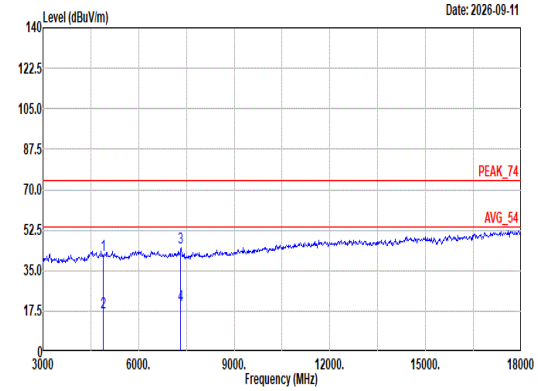
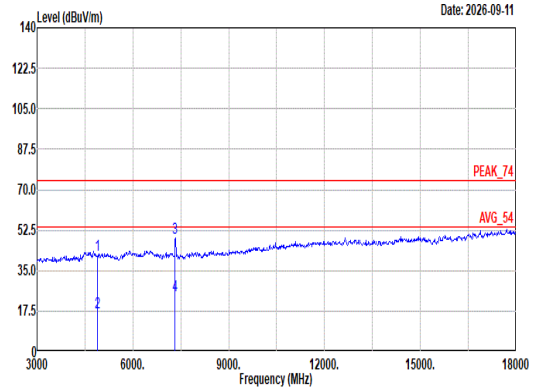
Mode	3	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	5	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

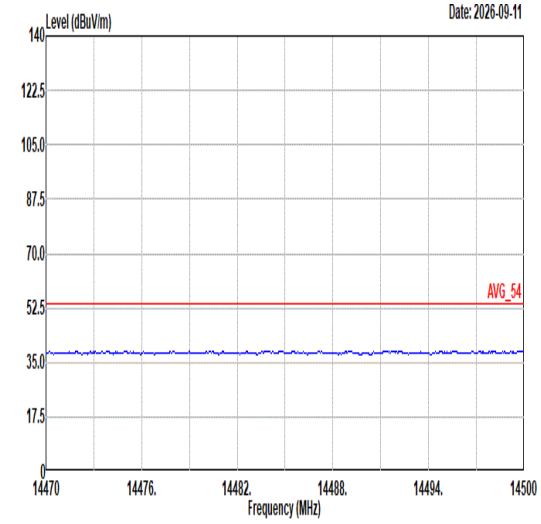
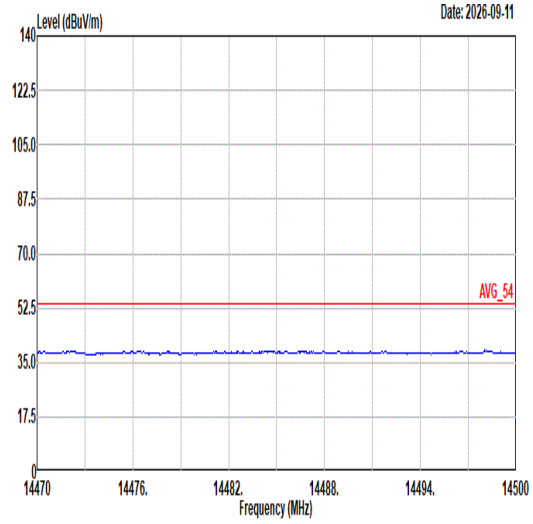
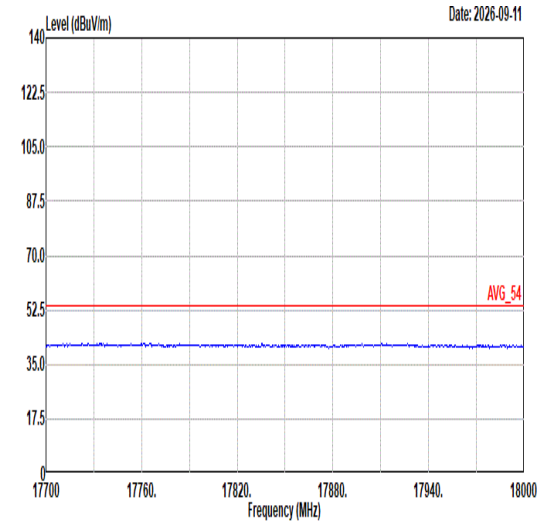
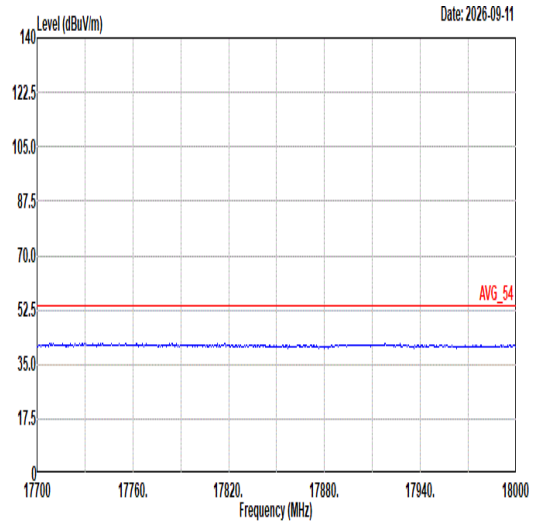
Mode	4	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	9	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2383.51 44.98 74.00 -29.02 38.81 32.10 8.66 34.59 0.00 100 148 Peak 2 2383.51 20.22 54.00 -33.78 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 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 2402.00 107.77 ------ ------ 101.56 32.12 8.69 34.60 0.00 100 148 Peak 2 2402.00 83.01 ------ ------ -- -- -- -- -- -- -- Average

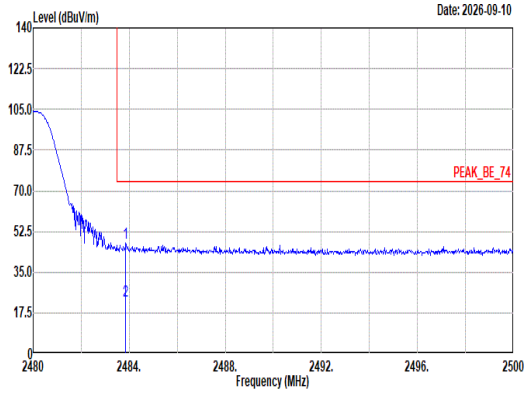
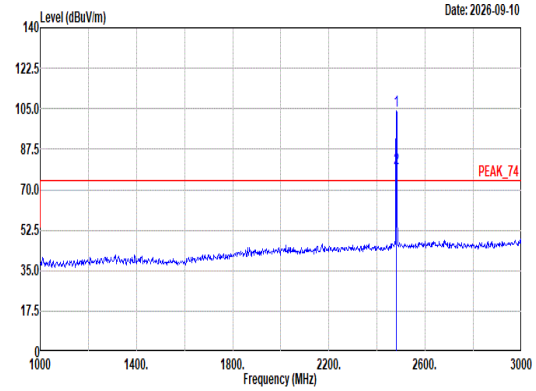
Mode	4	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	9	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2358.58 45.83 74.00 -28.17 39.59 32.19 8.62 34.57 0.00 400 310 Peak 2 2358.58 21.07 54.00 -32.93 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 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 2402.00 108.37 ------ ------ 102.16 32.12 8.69 34.60 0.00 400 310 Peak 2 2402.00 83.61 ------ ------ -- -- -- -- -- -- -- Average

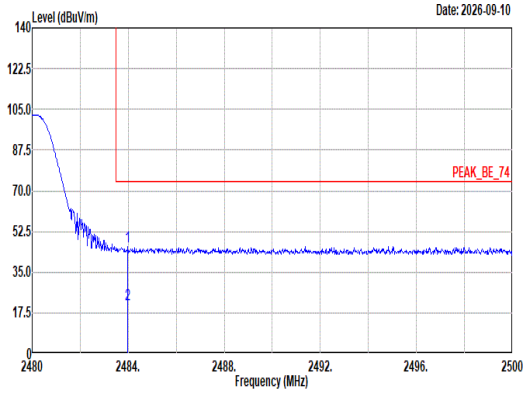
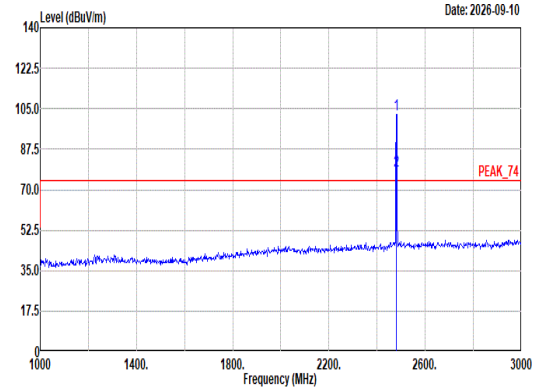
Mode	4	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	9	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4804.00 41.63 74.00 -32.37 52.02 34.50 12.31 58.10 0.90 -- -- Peak 2 4804.00 16.87 54.00 -37.13 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL 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 41.71 74.00 -32.29 52.10 34.50 12.31 58.10 0.90 -- -- Peak 2 4804.00 16.95 54.00 -37.05 -- -- -- -- -- -- -- AVERAGE

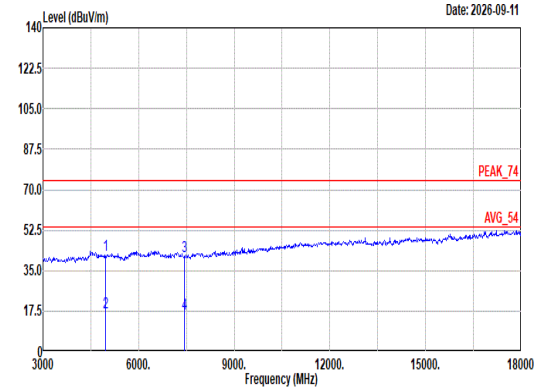
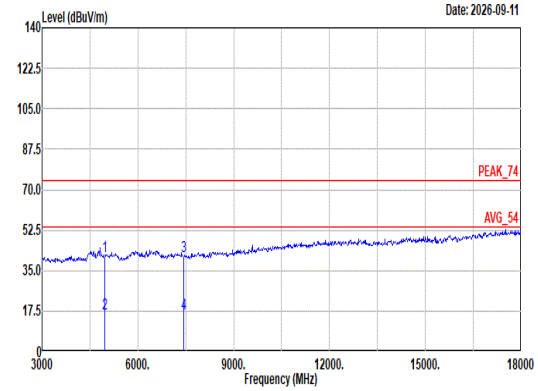
Mode	4	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	9	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

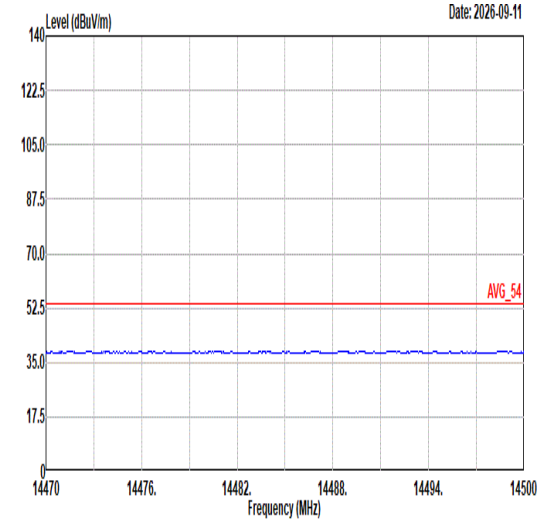
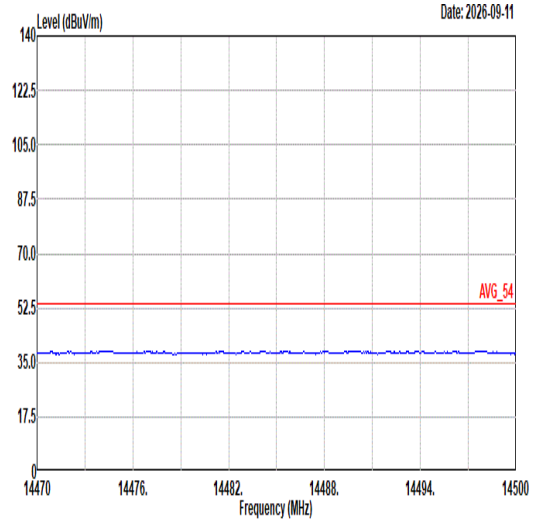
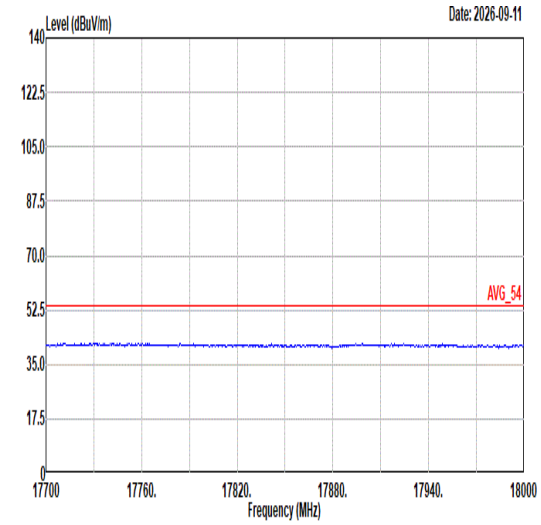
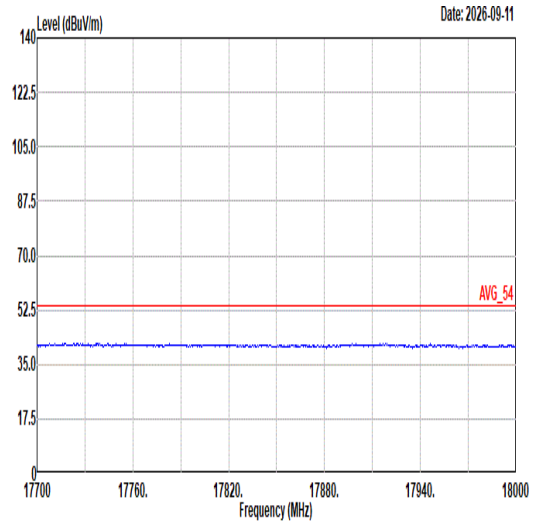
Mode	5	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz	
ANT	9	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4882.00 41.87 74.00 -32.13 52.12 34.44 12.41 57.99 0.89 -- -- Peak 2 4882.00 17.11 54.00 -36.89 -- -- -- -- -- -- -- Average 3 7323.00 44.82 74.00 -29.18 50.80 36.00 14.94 57.87 0.95 -- -- Peak 4 7323.00 20.06 54.00 -33.94 -- -- -- -- -- -- -- Average	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL 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 41.89 74.00 -32.11 52.14 34.44 12.41 57.99 0.89 -- -- Peak 2 4882.00 17.13 54.00 -36.87 -- -- -- -- -- -- -- Average 3 7323.00 49.08 74.00 -24.92 55.06 36.00 14.94 57.87 0.95 -- -- Peak 4 7323.00 24.32 54.00 -29.68 -- -- -- -- -- -- -- Average

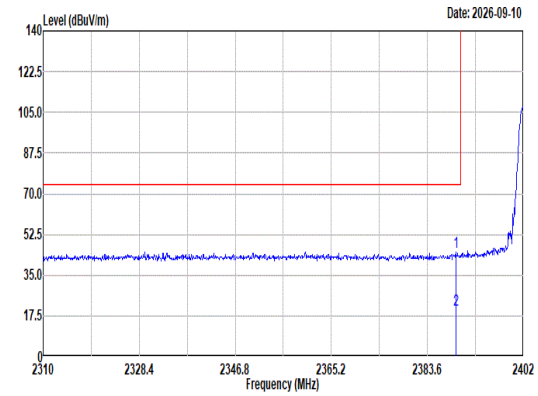
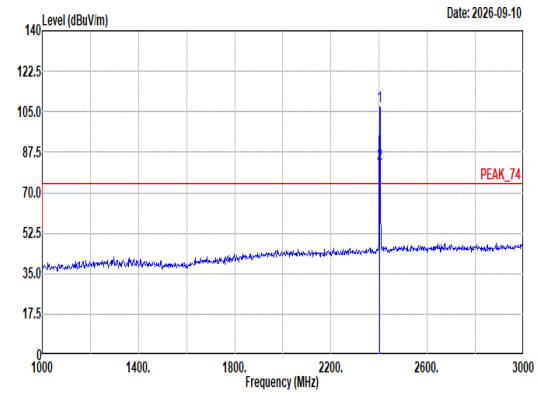
Mode	5	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz	
ANT	9	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

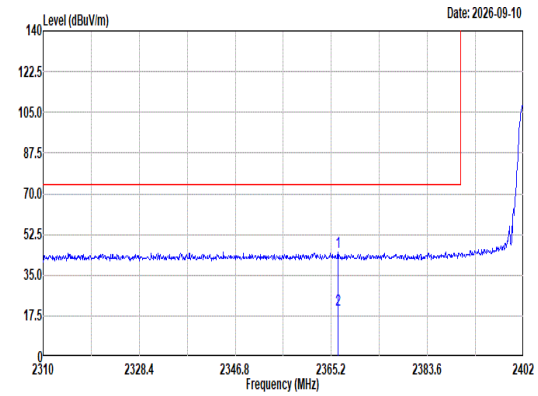
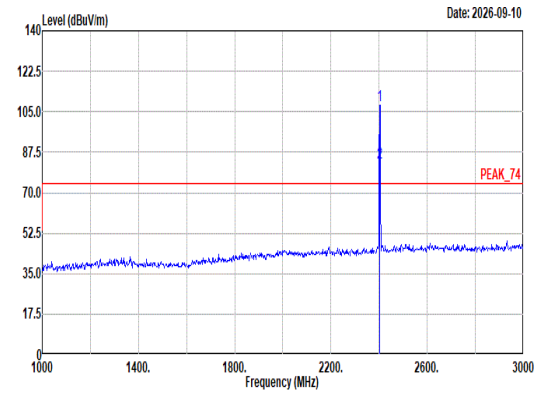
Mode	6	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	9	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2483.86 47.46 74.00 -26.54 40.52 32.74 8.85 34.65 0.00 100 189 Peak 2 2483.86 22.70 54.00 -31.30 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 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 2480.00 104.05 ------ ------ 97.16 32.70 8.84 34.65 0.00 100 189 Peak 2 2480.00 79.29 ------ ------ -- -- -- -- -- -- -- Average

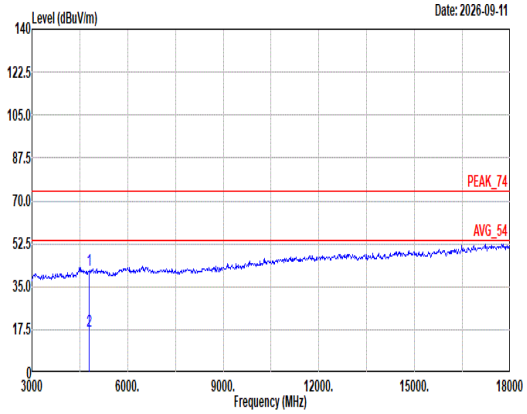
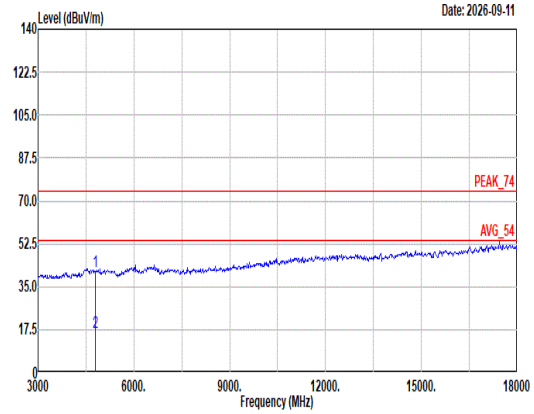
Mode	6	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	9	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2483.98 46.06 74.00 -27.94 39.12 32.74 8.85 34.65 0.00 333 296 Peak 2 2483.98 21.30 54.00 -32.70 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 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 2480.00 102.73 ------ ------ 95.84 32.70 8.84 34.65 0.00 333 296 Peak 2 2480.00 77.97 ------ ------ -- -- -- -- -- -- -- Average

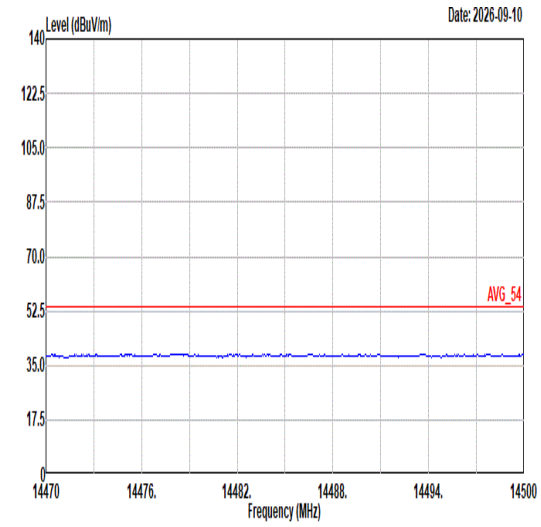
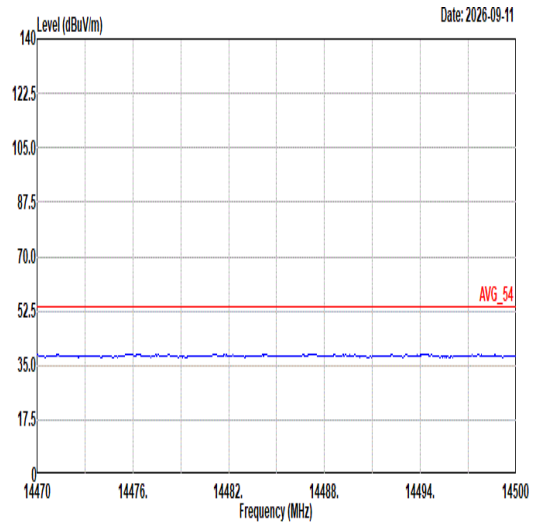
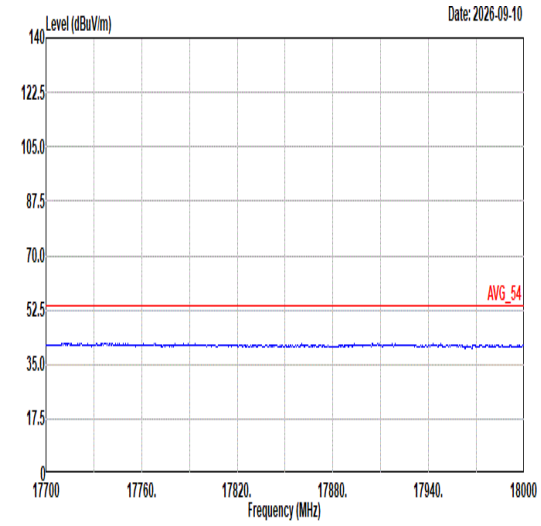
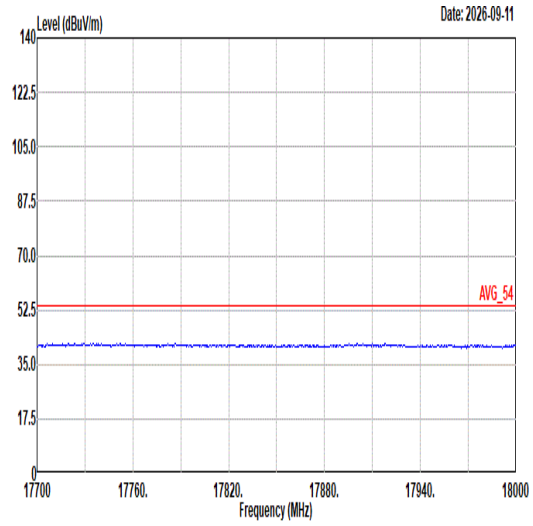
Mode	6	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	9	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4960.00 41.48 74.00 -32.52 51.44 34.54 12.50 57.88 0.88 -- -- Peak 2 4960.00 16.72 54.00 -37.28 -- -- -- -- -- -- -- Average 3 7440.00 41.19 74.00 -32.81 47.31 36.00 15.03 58.07 0.92 -- -- Peak 4 7440.00 16.43 54.00 -37.57 -- -- -- -- -- -- -- Average	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL 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 41.11 74.00 -32.89 51.07 34.54 12.50 57.88 0.88 -- -- Peak 2 4960.00 16.35 54.00 -37.65 -- -- -- -- -- -- -- Average 3 7440.00 41.01 74.00 -32.99 47.13 36.00 15.03 58.07 0.92 -- -- Peak 4 7440.00 16.25 54.00 -37.75 -- -- -- -- -- -- -- Average

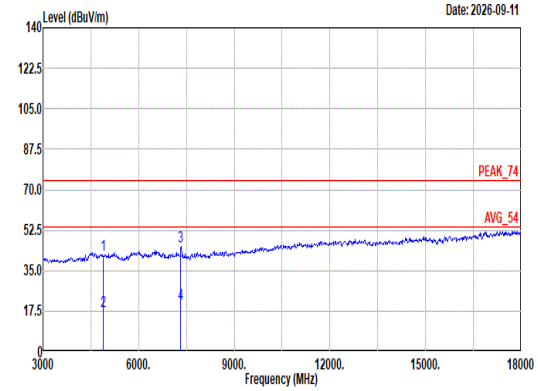
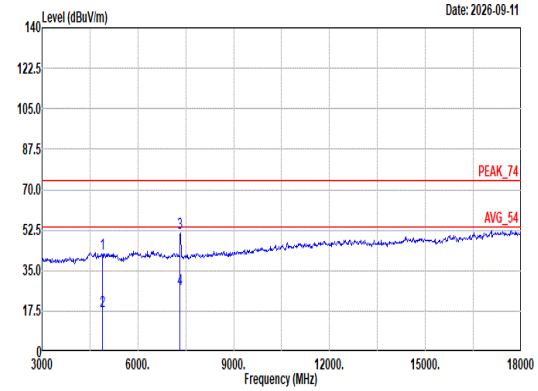
Mode	6	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	9	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

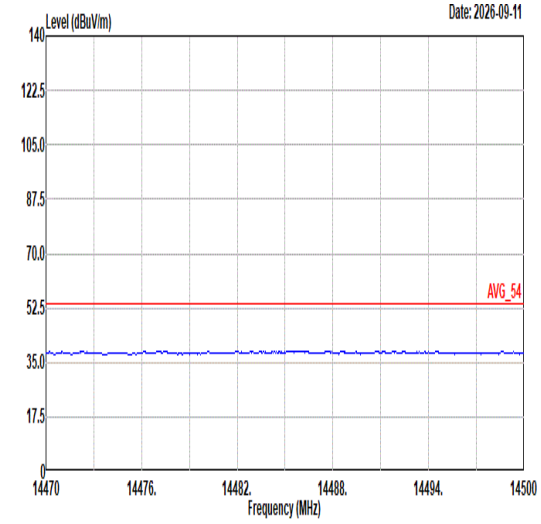
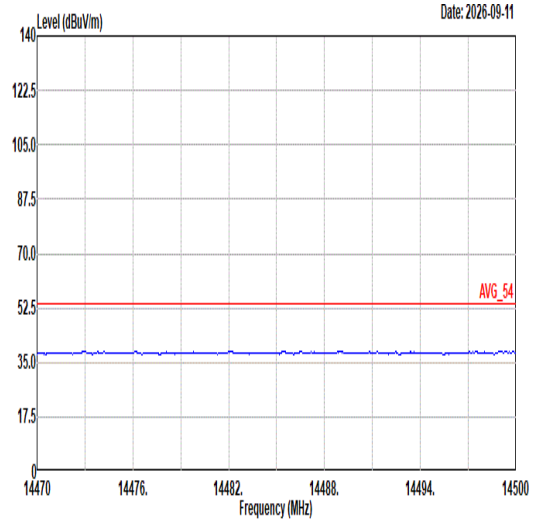
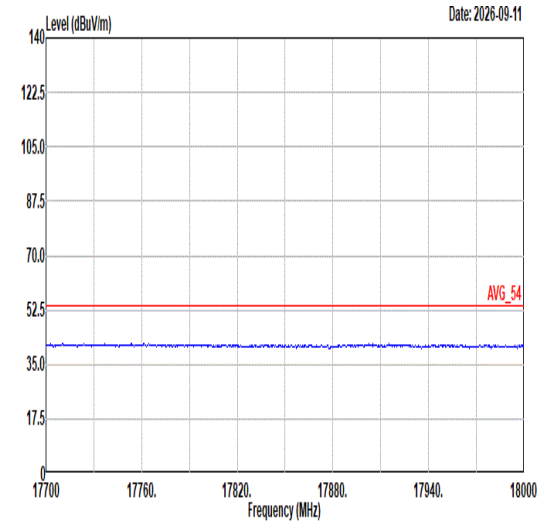
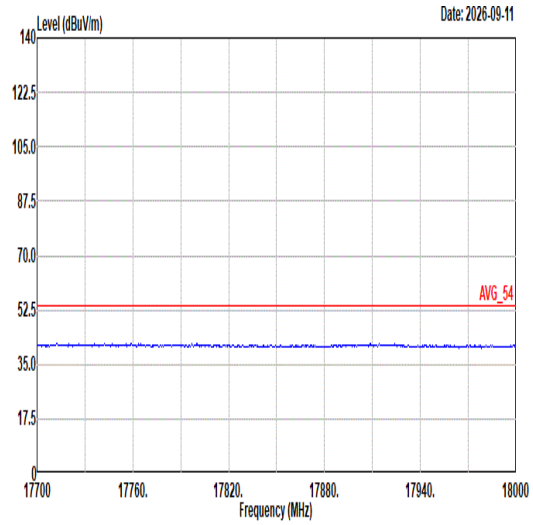
Mode	7	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	5+9	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2389.03 44.99 74.00 -29.01 38.81 32.10 8.67 34.59 0.00 100 242 Peak 2 2389.03 20.22 54.00 -33.78 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 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 2402.00 107.20 ------ ------ 100.99 32.12 8.69 34.60 0.00 100 242 Peak 2 2402.00 82.43 ------ ------ -- -- -- -- -- -- -- Average

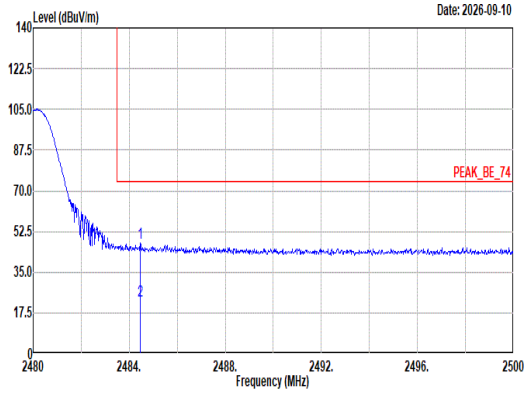
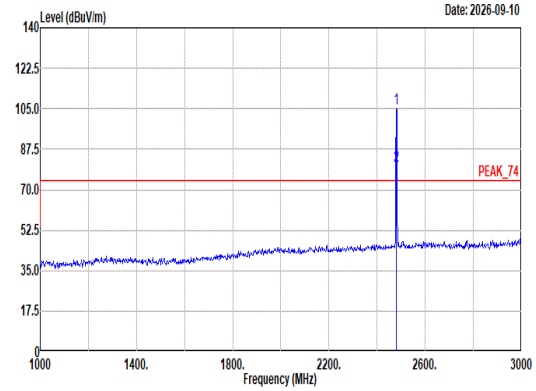
Mode	7	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	5+9	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2366.49 44.93 74.00 -29.07 38.73 32.14 8.63 34.57 0.00 400 313 Peak 2 2366.49 20.16 54.00 -33.84 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 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 2402.00 107.96 ------ ------ 101.75 32.12 8.69 34.60 0.00 400 313 Peak 2 2402.00 83.19 ------ ------ -- -- -- -- -- -- -- Average

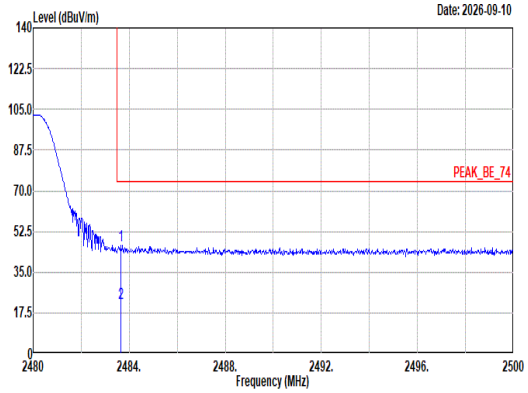
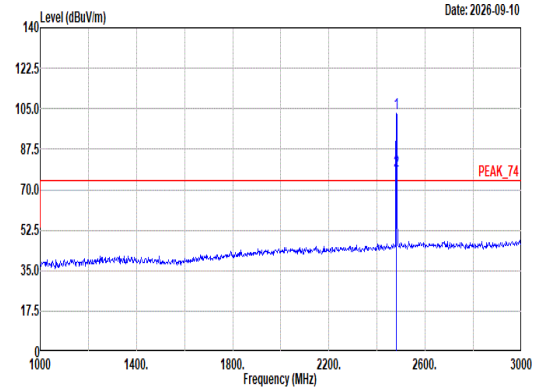
Mode	7	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	5+9	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4804.00 41.58 74.00 -32.42 51.97 34.50 12.31 58.10 0.90 -- -- Peak 2 4804.00 16.81 54.00 -37.19 -- -- -- -- -- -- -- Average	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL 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 51.47 34.50 12.31 58.10 0.90 -- -- Peak 2 4804.00 16.31 54.00 -37.69 -- -- -- -- -- -- -- Average

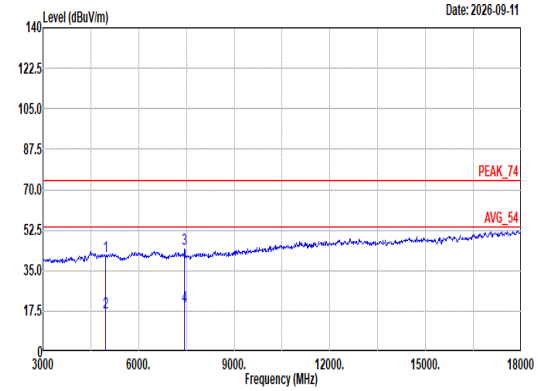
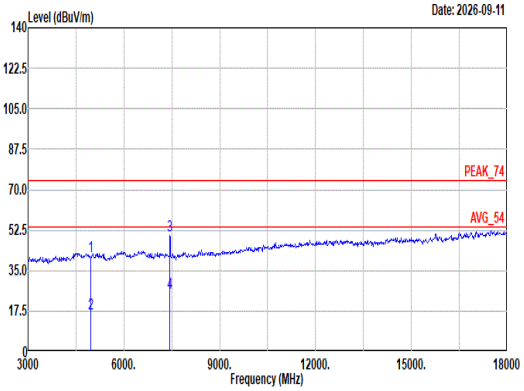
Mode	7	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH00_2402MHz	
ANT	5+9	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

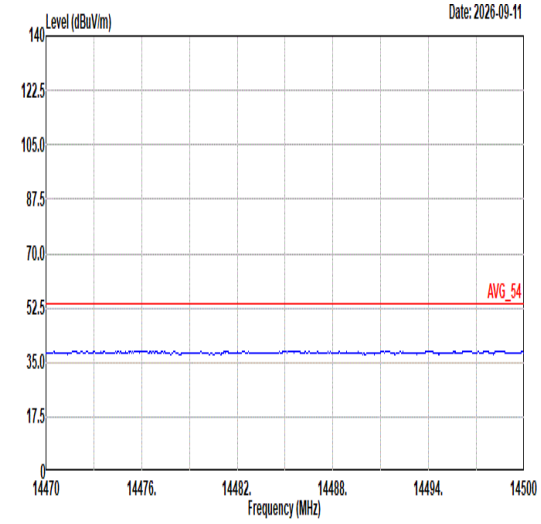
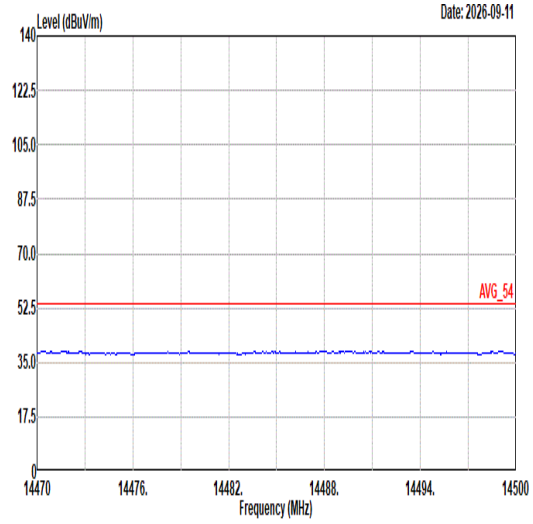
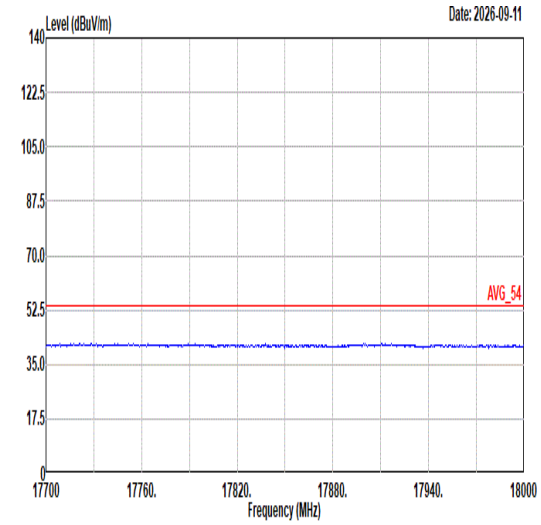
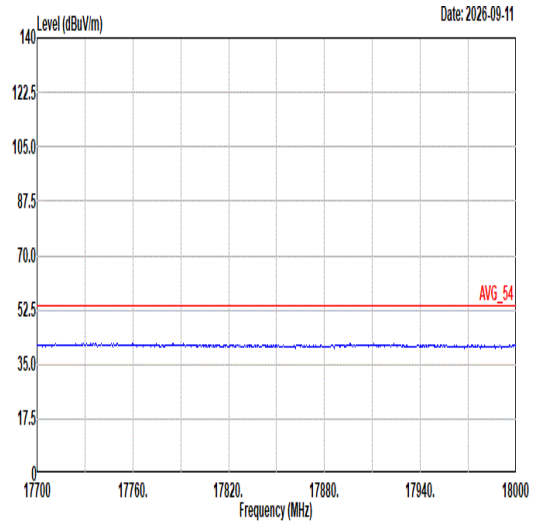
Mode	8	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz	
ANT	5+9	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4882.00 41.96 74.00 -32.04 52.21 34.44 12.41 57.99 0.89 -- -- Peak 2 4882.00 17.19 54.00 -36.81 -- -- -- -- -- -- -- Average 3 7323.00 45.22 74.00 -28.78 51.20 36.00 14.94 57.87 0.95 -- -- Peak 4 7323.00 20.45 54.00 -33.55 -- -- -- -- -- -- -- Average	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL 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 42.07 74.00 -31.93 52.32 34.44 12.41 57.99 0.89 -- -- Peak 2 4882.00 17.30 54.00 -36.70 -- -- -- -- -- -- -- Average 3 7323.00 51.47 74.00 -22.53 57.45 36.00 14.94 57.87 0.95 -- -- Peak 4 7323.00 26.70 54.00 -27.30 -- -- -- -- -- -- -- Average

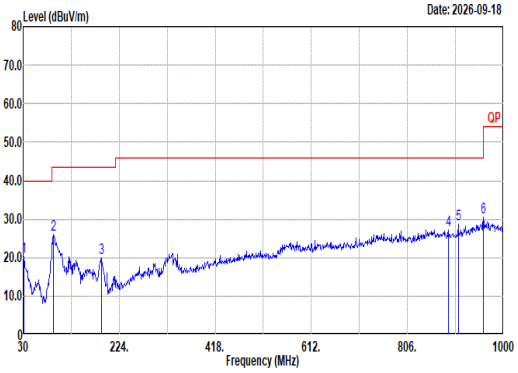
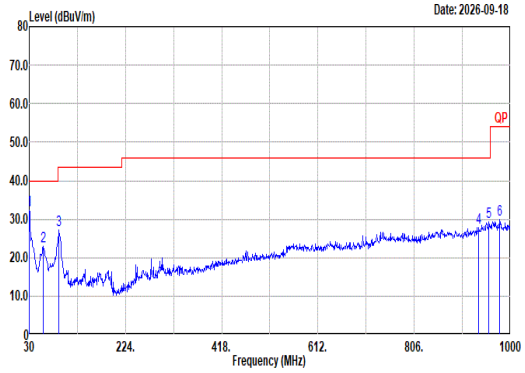
Mode	8	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH39_2441MHz	
ANT	5+9	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

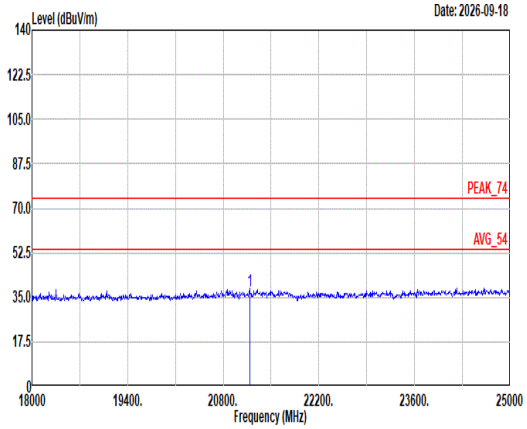
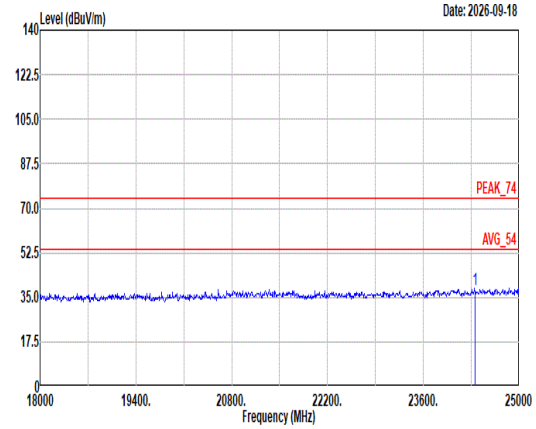
Mode	9	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	5+9	
Pol.	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2484.46 47.50 74.00 -26.50 40.56 32.74 8.85 34.65 0.00 144 244 Peak 2 2484.46 22.73 54.00 -31.27 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 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 2480.00 105.07 ------ ------ 98.18 32.70 8.84 34.65 0.00 144 244 Peak 2 2480.00 80.30 ------ ------ -- -- -- -- -- -- -- Average

Mode	9	
	Band Edge	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	5+9	
Pol.	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition: PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 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 2483.66 46.45 74.00 -27.55 39.52 32.74 8.84 34.65 0.00 341 315 Peak 2 2483.66 21.68 54.00 -32.32 -- -- -- -- -- -- -- AVERAGE	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto 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 2480.00 102.94 ------ ------ 96.05 32.70 8.84 34.65 0.00 341 315 Peak 2 2480.00 78.17 ------ ------ -- -- -- -- -- -- -- Average

Mode	9	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	5+9	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 HORIZONTAL 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 41.44 74.00 -32.56 51.40 34.54 12.50 57.88 0.88 -- -- Peak 2 4960.00 16.67 54.00 -37.33 -- -- -- -- -- -- -- Average 3 7440.00 44.17 74.00 -29.83 50.29 36.00 15.03 58.07 0.92 -- -- Peak 4 7440.00 19.40 54.00 -34.60 -- -- -- -- -- -- -- Average	 Site : 03CH07-HY Condition: PEAK_74 3m HF_ANT_00075962 VERTICAL 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 41.34 74.00 -32.66 51.30 34.54 12.50 57.88 0.88 -- -- Peak 2 4960.00 16.57 54.00 -37.43 -- -- -- -- -- -- -- Average 3 7440.00 50.37 74.00 -23.63 56.49 36.00 15.03 58.07 0.92 -- -- Peak 4 7440.00 25.60 54.00 -28.40 -- -- -- -- -- -- -- Average

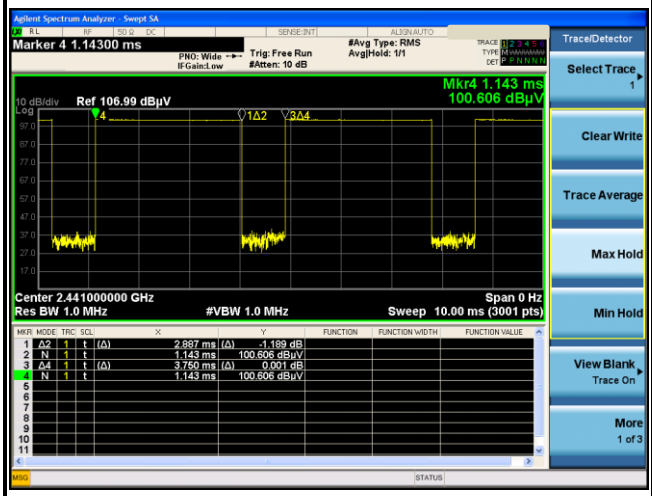
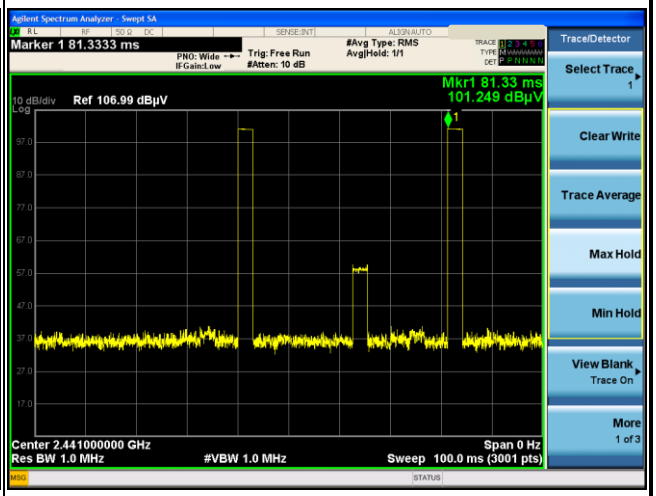
Mode	9	
	Harmonic	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	5+9	
Pol.	Horizontal	Vertical
14.47G ~14.5G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL
17.7G ~18G Avg	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition: AVG_54 3m HF_ANT_00075962 VERTICAL

Mode	10	
	LF	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	5	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH07-HY Condition: QP 3m Bilog_35419 HORIZONTAL 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 30.97 20.21 40.00 -19.79 25.49 23.74 0.97 29.99 0.00 -- -- Peak 2 91.11 25.88 43.50 -17.62 39.46 14.67 1.69 29.94 0.00 -- -- Peak 3 188.11 20.07 43.50 -23.43 32.92 14.66 2.42 29.93 0.00 -- -- Peak 4 888.45 27.30 46.00 -18.70 22.42 28.76 5.25 29.13 0.00 -- -- Peak 5 908.82 28.65 46.00 -17.35 23.55 28.83 5.31 29.04 0.00 -- -- Peak 6 959.26 30.49 46.00 -15.51 22.85 30.87 5.47 28.70 0.00 -- -- Peak	 Site : 03CH07-HY Condition: QP 3m Bilog_35419 VERTICAL 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 30.00 32.27 40.00 -7.73 37.37 23.93 0.96 29.99 0.00 -- -- Peak 2 58.13 22.94 40.00 -17.06 40.00 11.59 1.33 29.98 0.00 -- -- Peak 3 90.14 27.15 43.50 -16.35 40.76 14.64 1.69 29.94 0.00 -- -- Peak 4 935.98 27.81 46.00 -18.19 21.47 29.81 5.39 28.86 0.00 -- -- Peak 5 956.35 29.28 46.00 -16.72 21.79 30.75 5.46 28.72 0.00 -- -- Peak 6 977.69 29.96 54.00 -24.04 22.27 30.73 5.54 28.58 0.00 -- -- Peak

Mode	11	
	SHF	
	2400-2483.5_Bluetooth BR_GFSK_CH78_2480MHz	
ANT	5	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH07-HY Condition: PEAK_74 1m SHF-EHF_9170991 HORIZONTAL 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 21192.50 37.52 74.00 -36.48 51.41 38.20 17.41 59.96 -9.54 -- -- PEAK	 Site : 03CH07-HY Condition: PEAK_74 1m SHF-EHF_9170991 VERTICAL 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 24351.89 38.00 74.00 -36.00 47.54 39.10 18.73 57.83 -9.54 -- -- PEAK

Appendix D. Duty Cycle Plots

<ANT5>

DH5 on time (One Pulse) Plot on Channel 39	on time (Count Pulses) Plot on Channel 39
	

Note:

1. Worst case Duty cycle = on time/100 milliseconds = 2 * 2.887 / 100 = 5.774 %
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -24.77 dB
3. DH5 has the highest duty cycle worst case and is reported.

Duty Cycle Correction Factor Consideration for AFH mode:

Bluetooth normal hopping rate is 1600Hz and reduced to 800Hz in AFH mode; due to the reduced number of hopping frequencies, with the same packet configuration the dwell time in each channel frequency within 100msec period is longer in AFH mode than normal mode.

In AFH mode, the minimum hopping frequencies are 20, to get the longest dwell time DH5 packet is observed; the on time period to have DH5 packet completing one hopping sequence is

2.887 ms x 20 channels = 57.74 ms

There cannot be 2 complete hopping sequences within 100ms period, considering the random hopping behavior, maximum 2 hops can be possibly observed within the period. [100 ms / 57.6 ms] = 2 hops

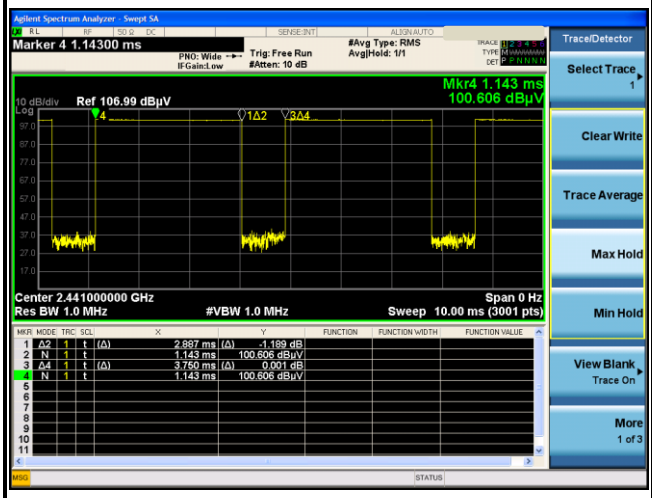
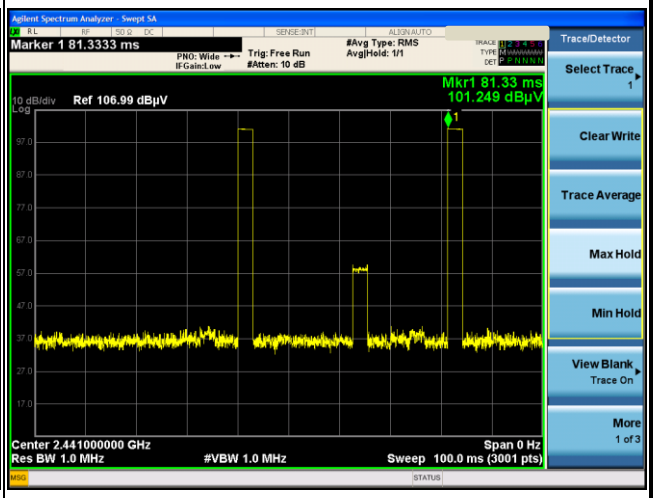
Thus, the maximum possible ON time:

2.887 ms x 2 = 5.774 ms

Worst case Duty Cycle Correction factor, which is derived from the maximum possible ON time,

20 x log(5.774 ms/100 ms) = -24.77 dB

<ANT9>

DH5 on time (One Pulse) Plot on Channel 39	on time (Count Pulses) Plot on Channel 39
	

Note:

1. Worst case Duty cycle = on time/100 milliseconds = 2 * 2.89 / 100 = 5.78 %
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -24.76 dB
3. DH5 has the highest duty cycle worst case and is reported.

Duty Cycle Correction Factor Consideration for AFH mode:

Bluetooth normal hopping rate is 1600Hz and reduced to 800Hz in AFH mode; due to the reduced number of hopping frequencies, with the same packet configuration the dwell time in each channel frequency within 100msec period is longer in AFH mode than normal mode.

In AFH mode, the minimum hopping frequencies are 20, to get the longest dwell time DH5 packet is observed; the on time period to have DH5 packet completing one hopping sequence is

2.89 ms x 20 channels = 57.8 ms

There cannot be 2 complete hopping sequences within 100ms period, considering the random hopping behavior, maximum 2 hops can be possibly observed within the period. [100 ms / 57.8 ms] = 2 hops

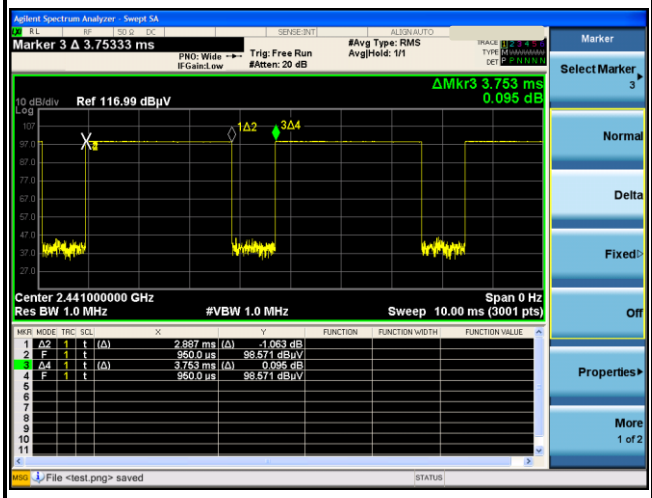
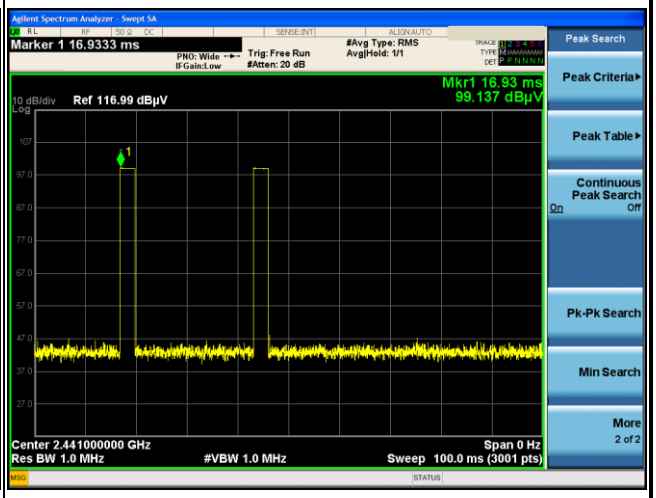
Thus, the maximum possible ON time:

2.89 ms x 2 = 5.78 ms

Worst case Duty Cycle Correction factor, which is derived from the maximum possible ON time,

20 x log(5.78 ms/100 ms) = -24.76 dB

<ANT5+9>

DH5 on time (One Pulse) Plot on Channel 39	on time (Count Pulses) Plot on Channel 39
	

Note:

1. Worst case Duty cycle = on time/100 milliseconds = 2 * 2.887 / 100 = 5.774 %
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -24.77 dB
3. DH5 has the highest duty cycle worst case and is reported.

Duty Cycle Correction Factor Consideration for AFH mode:

Bluetooth normal hopping rate is 1600Hz and reduced to 800Hz in AFH mode; due to the reduced number of hopping frequencies, with the same packet configuration the dwell time in each channel frequency within 100msec period is longer in AFH mode than normal mode.

In AFH mode, the minimum hopping frequencies are 20, to get the longest dwell time DH5 packet is observed; the on time period to have DH5 packet completing one hopping sequence is

2.887 ms x 20 channels = 57.74 ms

There cannot be 2 complete hopping sequences within 100ms period, considering the random hopping behavior, maximum 2 hops can be possibly observed within the period. [100 ms / 57.6 ms] = 2 hops

Thus, the maximum possible ON time:

2.887 ms x 2 = 5.774 ms

Worst case Duty Cycle Correction factor, which is derived from the maximum possible ON time,

20 x log(5.774 ms/100 ms) = -24.77 dB