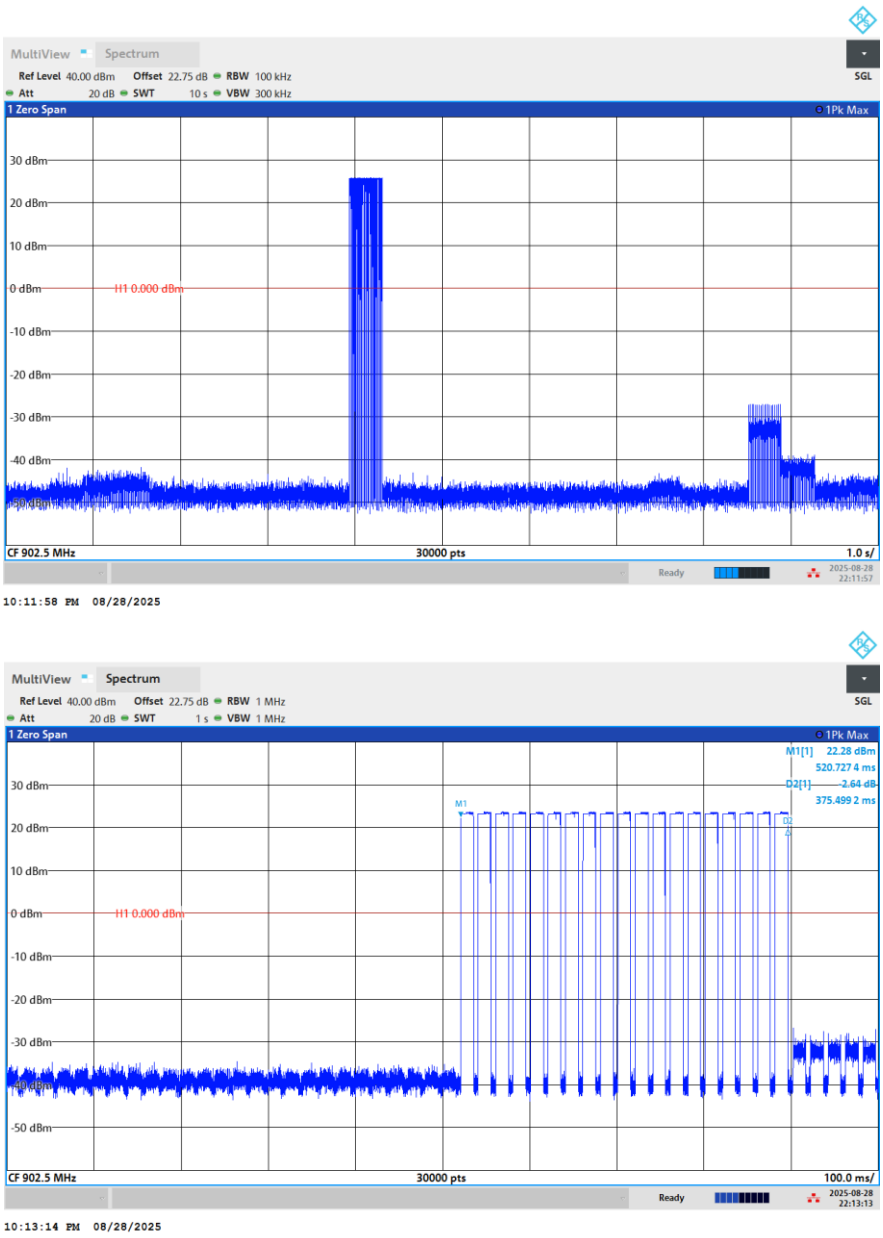
Dwell Time

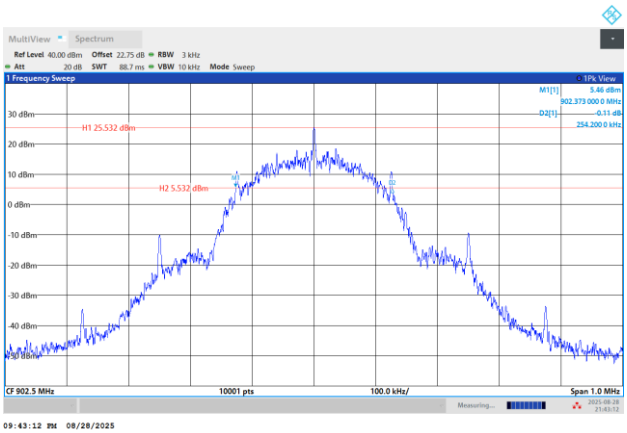
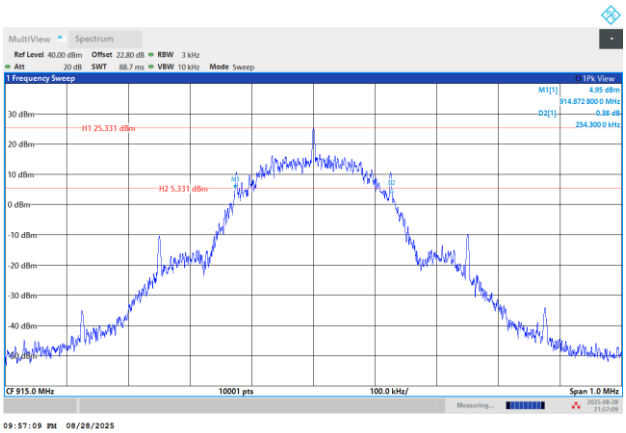
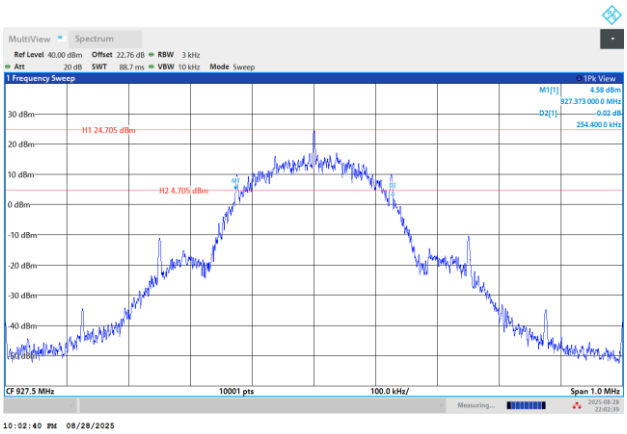
Package Transfer Time Plot



Remark: Dwell Time(s) = Hops Over Occupancy Time (hops) x Package Transfer Time

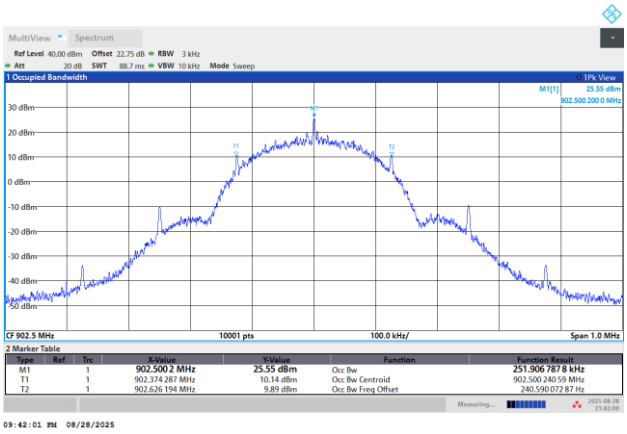
= 1 x0.3755s = 0.3755s

20dB Bandwidth

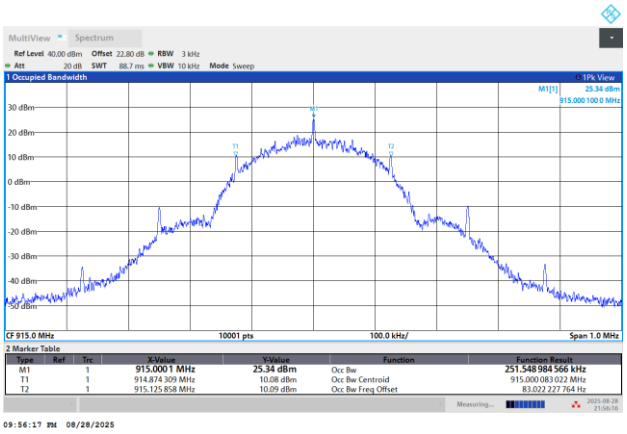
20 dB Bandwidth Plot in 902.5MHz	20 dB Bandwidth Plot in 915MHz
	
20 dB Bandwidth Plot in 927.5MHz	
	

99% Occupied Bandwidth

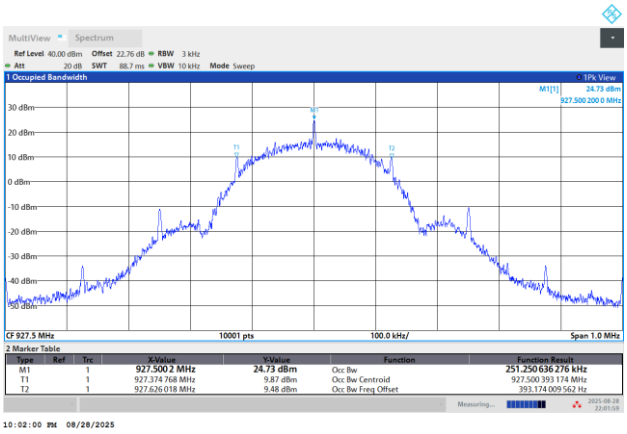
99% Occupied Bandwidth on 902.5MHz



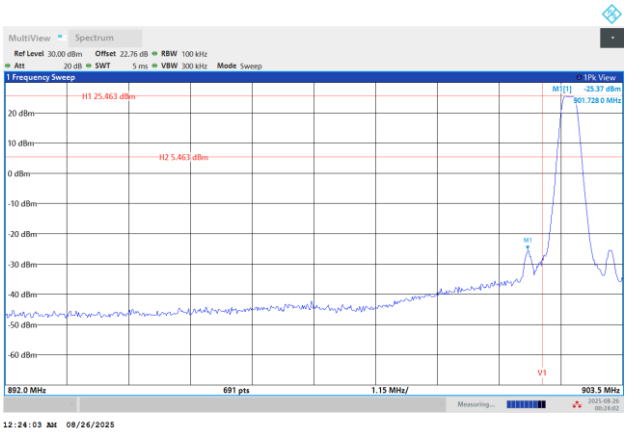
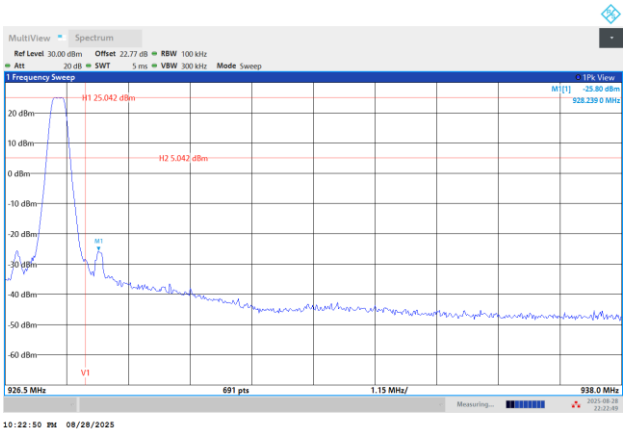
99% Occupied Bandwidth on 915MHz



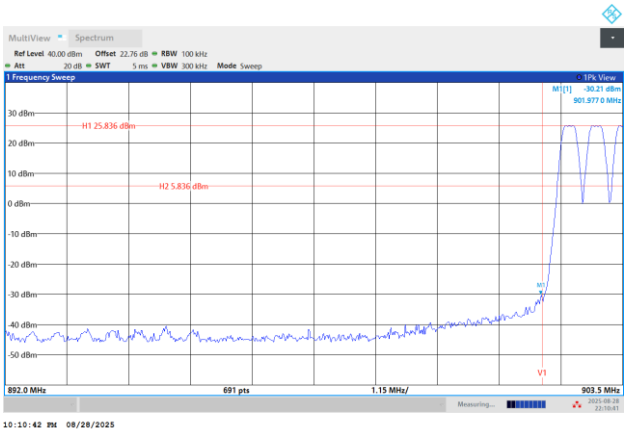
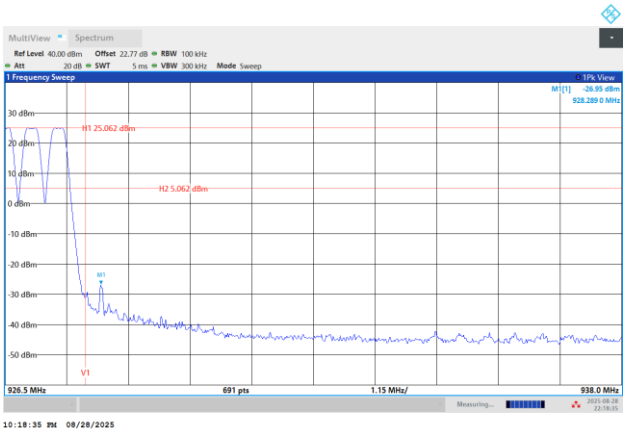
99% Occupied Bandwidth on 927.5MHz



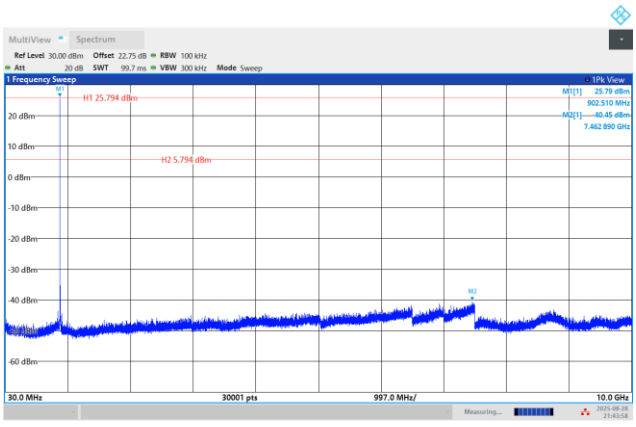
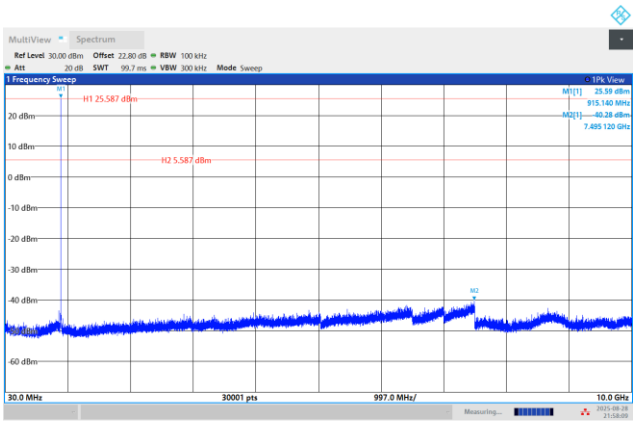
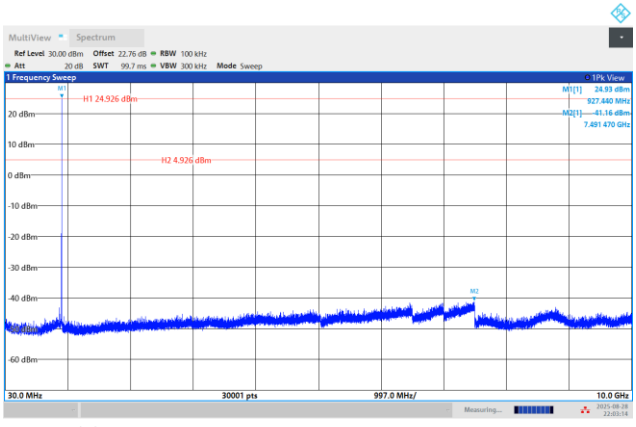
Band Edges

Low Band Edge Plot on 902.5MHz	High Band Edge Plot on 927.5MHz
	

Hopping Mode Band Edges

Hopping Mode Low Band Edge Plot	Hopping Mode High Band Edge Plot
	

Conducted Spurious Emission

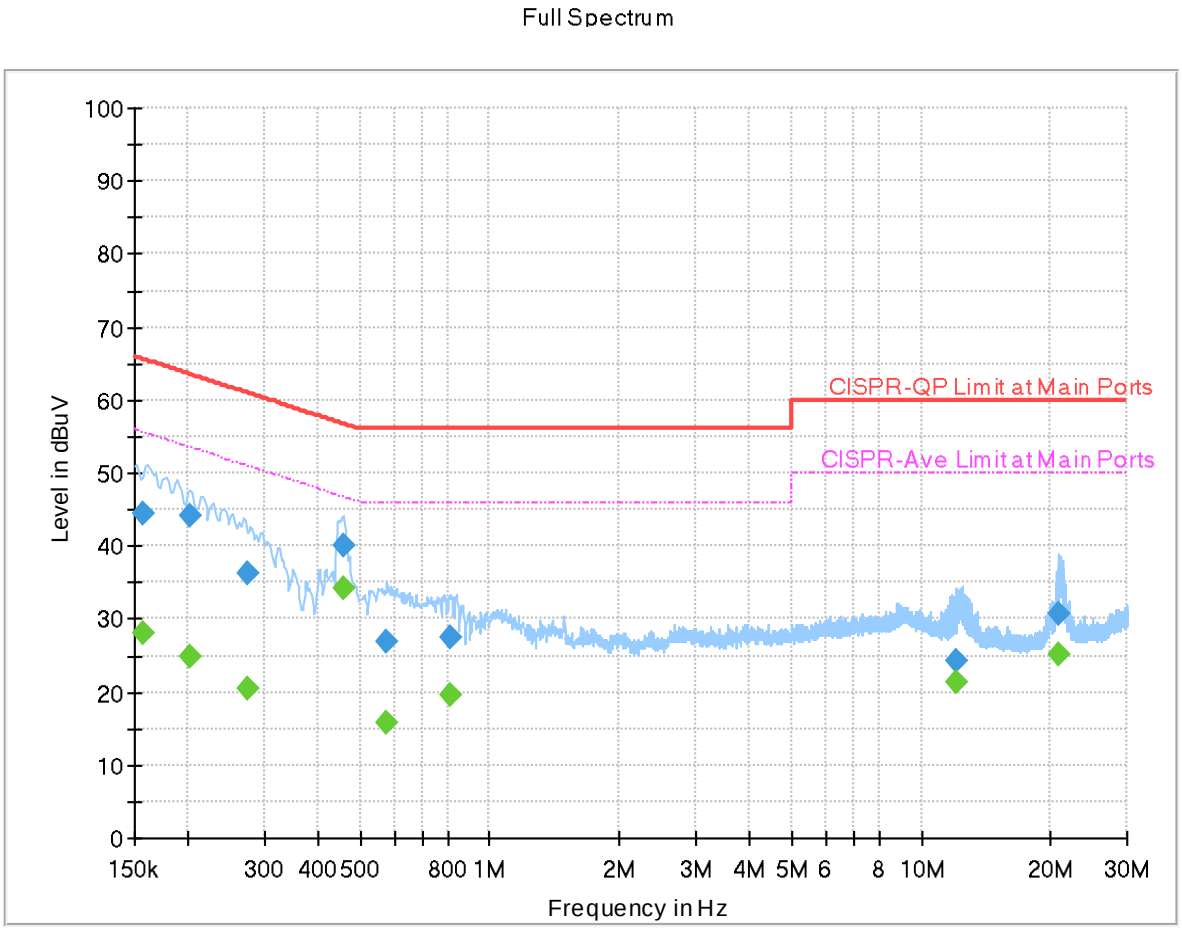
CSE Plot on Low Ch between 902.5MHz	CSE Plot on Mid Ch between 915MHz
	
CSE Plot on High Ch between 927.5MHz	
	

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Louis Chung	**Temperature :**	23.5 ~ 26.6℃
		Relative Humidity :	45.5 ~ 57.0%

EUT Information

Report NO :	561807-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

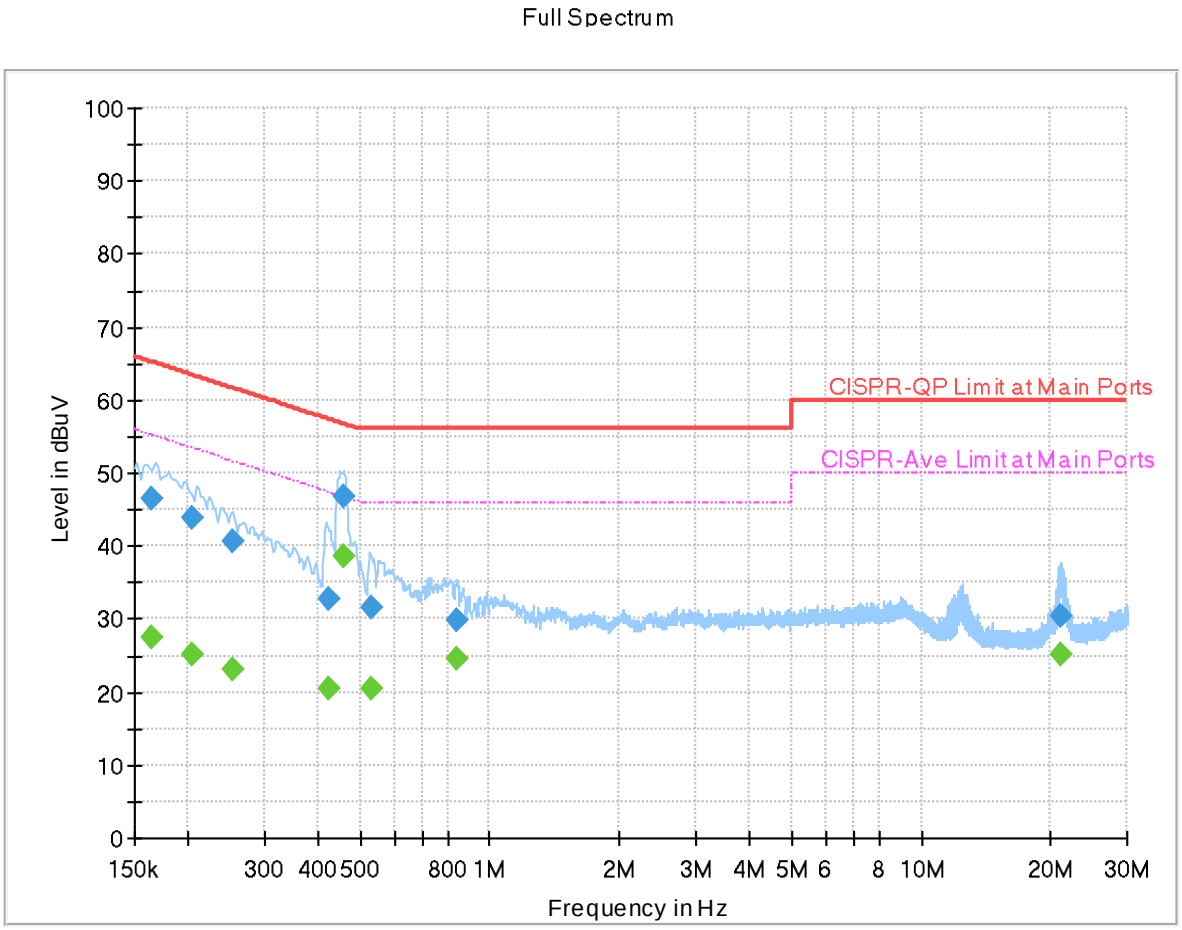


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	PE	Corr. (dB)
0.157020	---	28.00	55.62	27.62	L1	FLO	20.0
0.157020	44.55	---	65.62	21.07	L1	FLO	20.0
0.202560	---	24.92	53.51	28.59	L1	FLO	20.0
0.202560	44.29	---	63.51	19.22	L1	FLO	20.0
0.273750	---	20.50	51.00	30.50	L1	FLO	20.0
0.273750	36.33	---	61.00	24.67	L1	FLO	20.0
0.459870	---	34.18	46.70	12.52	L1	FLO	20.0
0.459870	40.17	---	56.70	16.53	L1	FLO	20.0
0.574350	---	15.90	46.00	30.10	L1	FLO	20.0
0.574350	26.90	---	56.00	29.10	L1	FLO	20.0
0.813750	---	19.68	46.00	26.32	L1	FLO	20.0
0.813750	27.56	---	56.00	28.44	L1	FLO	20.0
12.039630	---	21.33	50.00	28.67	L1	FLO	20.5
12.039630	24.40	---	60.00	35.60	L1	FLO	20.5
20.951250	---	25.09	50.00	24.91	L1	FLO	20.8
20.951250	30.82	---	60.00	29.18	L1	FLO	20.8

EUT Information

Report NO :	561807-01
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	PE	Corr. (dB)
0.163500	---	27.35	55.28	27.93	N	FLO	20.0
0.163500	46.48	---	65.28	18.80	N	FLO	20.0
0.204000	---	25.10	53.45	28.35	N	FLO	20.0
0.204000	43.92	---	63.45	19.53	N	FLO	20.0
0.253500	---	23.18	51.64	28.46	N	FLO	20.0
0.253500	40.71	---	61.64	20.93	N	FLO	20.0
0.424500	---	20.56	47.36	26.80	N	FLO	20.0
0.424500	32.67	---	57.36	24.69	N	FLO	20.0
0.458430	---	38.60	46.72	8.12	N	FLO	20.0
0.458430	46.83	---	56.72	9.89	N	FLO	20.0
0.532500	---	20.52	46.00	25.48	N	FLO	20.0
0.532500	31.49	---	56.00	24.51	N	FLO	20.0
0.837960	---	24.53	46.00	21.47	N	FLO	20.0
0.837960	29.77	---	56.00	26.23	N	FLO	20.0
21.153030	---	25.29	50.00	24.71	N	FLO	20.9
21.153030	30.31	---	60.00	29.69	N	FLO	20.9

Appendix C. Radiated Spurious Emission Test Data

Test Engineer :	Ken Kuo and York Huang	**Temperature :**	21.2 ~ 24.4°C
		Relative Humidity :	54.8 ~ 60.2%

Note symbol

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

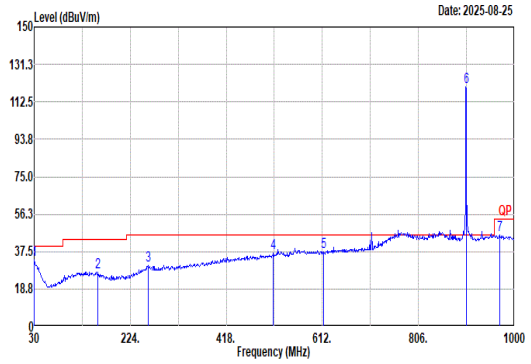
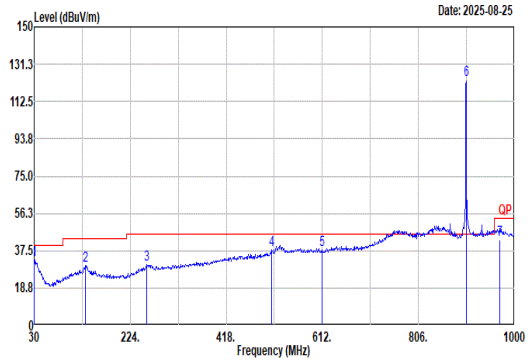
C1-1. Radiated Spurious Emission Test Modes

Mode	Band (MHz)	Antenna	Modulation	Channel	Frequency (MHz)	Data Rate	RU	Remark
Mode 16	902-928	0	Lora FHSS 125KHz	0	902.2	SF7	-	-
Mode 17	902-928	0	Lora FHSS 125KHz	64	915	SF7	-	-
Mode 18	902-928	0	Lora FHSS 125KHz	128	927.8	SF7	-	-
Mode 19	902-928	0	Lora FHSS 125KHz	0	902.2	SF8	-	-
Mode 20	902-928	0	Lora FHSS 125KHz	64	915	SF8	-	-
Mode 21	902-928	0	Lora FHSS 125KHz	128	927.8	SF8	-	-
Mode 22	902-928	0	Lora FHSS 125KHz	0	902.2	SF9	-	-
Mode 23	902-928	0	Lora FHSS 125KHz	64	915	SF9	-	-
Mode 24	902-928	0	Lora FHSS 125KHz	128	927.8	SF9	-	-

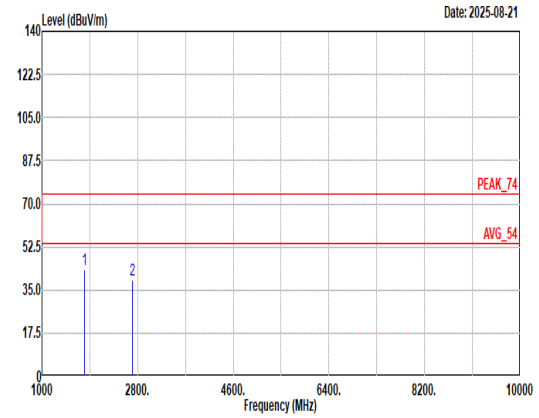
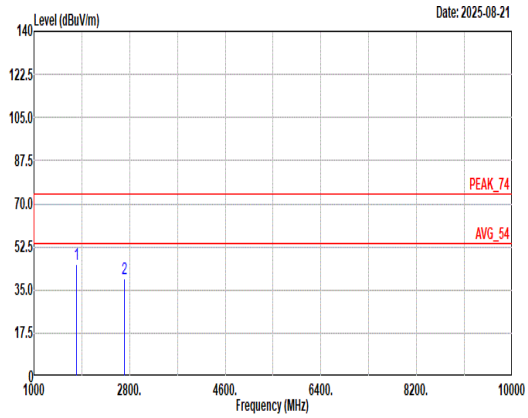
C1-2. Summary of each worse mode

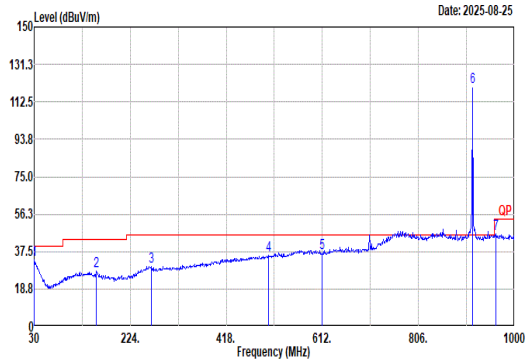
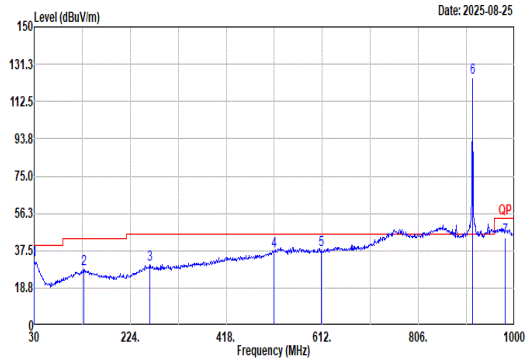
Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
16	Lora FHSS 125KHz	0	30.00	33.15	40.00	-6.85	H	Peak	Pass	-	LF
	Lora FHSS 125KHz	0	1804.40	45.31	74.00	-28.69	V	Peak	Pass	-	Harmonic
17	Lora FHSS 125KHz	64	30.00	33.36	40.00	-6.64	H	Peak	Pass	-	LF
	Lora FHSS 125KHz	64	1830.00	44.65	74.00	-29.35	H	Peak	Pass	-	Harmonic
18	Lora FHSS 125KHz	128	30.00	32.93	40.00	-7.07	H	Peak	Pass	-	LF
	Lora FHSS 125KHz	128	2783.40	40.45	54.00	-13.55	V	Avg.	Pass	-	Harmonic
19	Lora FHSS 125KHz	0	42.61	33.24	40.00	-6.76	V	Peak	Pass	-	LF
	Lora FHSS 125KHz	0	2706.60	46.73	54.00	-7.27	V	Avg.	Pass	-	Harmonic
20	Lora FHSS 125KHz	64	30.00	33.39	40.00	-6.61	H	Peak	Pass	-	LF
	Lora FHSS 125KHz	64	2745.00	41.18	54.00	-12.82	V	Avg.	Pass	-	Harmonic
21	Lora FHSS 125KHz	128	960.23	47.44	54.00	-6.56	V	QP	Pass	-	LF

Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
21	Lora FHSS 125KHz	128	1855.60	52.82	74.00	-21.18	V	Peak	Pass	-	Harmonic
22	Lora FHSS 125KHz	0	30.00	32.97	40.00	-7.03	H	Peak	Pass	-	LF
	Lora FHSS 125KHz	0	9022.00	44.59	54.00	-9.41	V	Avg.	Pass	-	Harmonic
23	Lora FHSS 125KHz	64	30.00	32.94	40.00	-7.06	H	Peak	Pass	-	LF
	Lora FHSS 125KHz	64	9150.00	45.53	54.00	-8.47	H	Avg.	Pass	-	Harmonic
24	Lora FHSS 125KHz	128	30.00	33.57	40.00	-6.43	V	Peak	Pass	-	LF
	Lora FHSS 125KHz	128	2783.40	41.32	54.00	-12.68	V	Avg.	Pass	-	Harmonic

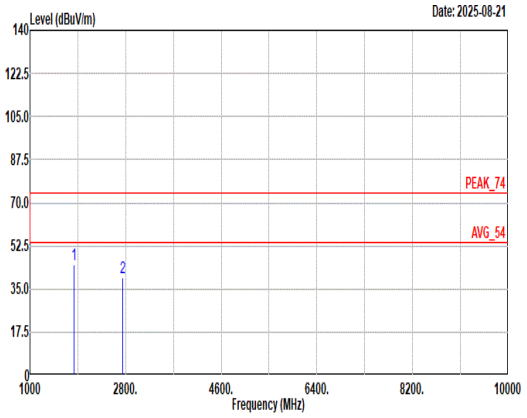
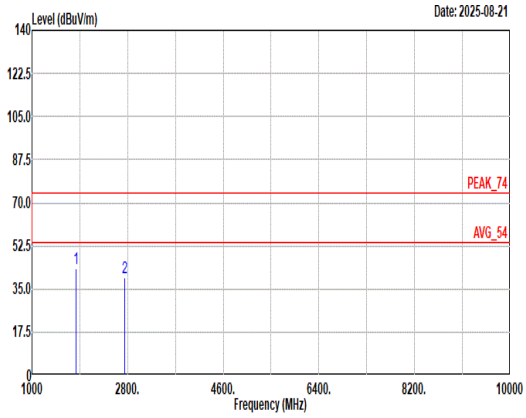
Mode	16	
	LF	
	902-928_Lora FHSS 125KHz_CH0_902.2MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 16 Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 30.00 33.15 40.00 -6.85 29.99 25.30 0.85 32.57 9.58 -- -- Peak 2 159.01 27.21 43.50 -16.29 31.57 16.50 2.11 32.57 9.60 -- -- Peak 3 259.89 30.32 46.00 -15.68 30.39 20.18 2.64 32.50 9.61 -- -- Peak 4 513.06 36.97 46.00 -9.03 32.13 24.16 3.70 32.66 9.64 -- -- Peak 5 613.94 37.47 46.00 -8.53 30.68 25.72 4.12 32.68 9.63 -- -- Peak 6 902.20 120.19 ------ ------ 108.11 29.20 4.95 31.70 9.63 100 119 Peak 7 969.93 45.58 54.00 -8.42 30.55 31.30 5.11 31.01 9.63 -- -- Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 16 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 33.02 40.00 -6.98 29.86 25.30 0.85 32.57 9.58 -- -- Peak 2 132.82 29.90 43.50 -13.60 33.56 17.40 1.87 32.52 9.59 -- -- Peak 3 257.95 30.71 46.00 -15.29 31.15 19.83 2.62 32.50 9.61 -- -- Peak 4 510.15 38.17 46.00 -7.83 33.39 24.10 3.70 32.66 9.64 -- -- Peak 5 612.00 37.84 46.00 -8.16 31.03 25.76 4.11 32.69 9.63 -- -- Peak 6 902.20 123.28 ------ ------ 111.20 29.20 4.95 31.70 9.63 111 230 Peak 7 969.93 42.97 54.00 -11.03 27.94 31.30 5.11 31.01 9.63 100 247 QP

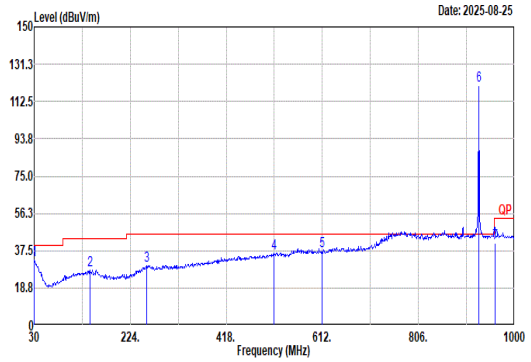
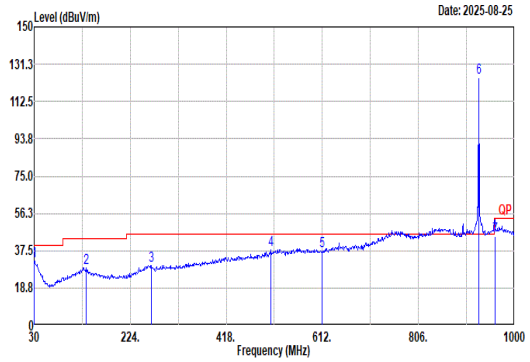
Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	16	
	Harmonic	
	902-928_Lora FHSS 125KHz_CH0_902.2MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1804.40 43.58 74.00 -30.42 43.00 24.74 6.99 32.17 0.29 349 354 Peak 2 2706.60 38.90 74.00 -35.10 34.63 27.50 8.42 32.69 0.55 -- -- Peak	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1804.40 45.31 74.00 -28.69 44.73 24.74 6.99 32.17 0.29 313 37 Peak 2 2706.60 39.64 74.00 -34.36 35.37 27.50 8.42 32.69 0.55 -- -- Peak

Mode	17	
	LF	
	902-928_Lora FHSS 125KHz_CH64_915MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 17 Freq Level / Limit Line / Margin / Read Level / Ant Factor / Cable Loss / Preamp Factor / Aux Factor / APos / TPos / Remark 1 30.00 33.36 40.00 -6.64 30.20 25.30 0.85 32.57 9.58 -- -- Peak 2 156.10 27.63 43.50 -15.87 31.92 16.59 2.08 32.56 9.60 -- -- Peak 3 266.68 30.11 46.00 -15.89 30.58 19.76 2.67 32.51 9.61 -- -- Peak 4 503.36 35.60 46.00 -10.40 30.91 24.03 3.68 32.66 9.64 -- -- Peak 5 612.00 36.96 46.00 -9.04 30.15 25.76 4.11 32.69 9.63 -- -- Peak 6 915.00 119.82 ------ ------ 107.38 29.40 4.98 31.57 9.63 100 117 Peak 7 963.14 46.46 54.00 -7.54 31.38 31.44 5.09 31.08 9.63 -- -- Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 17 Freq Level / Limit Line / Margin / Read Level / Ant Factor / Cable Loss / Preamp Factor / Aux Factor / APos / TPos / Remark 1 30.00 32.63 40.00 -7.37 29.47 25.30 0.85 32.57 9.58 -- -- Peak 2 129.91 28.24 43.50 -15.26 31.84 17.50 1.84 32.52 9.58 -- -- Peak 3 262.80 30.38 46.00 -15.62 30.49 20.14 2.65 32.51 9.61 -- -- Peak 4 515.00 37.22 46.00 -8.78 32.33 24.20 3.71 32.66 9.64 -- -- Peak 5 610.06 38.09 46.00 -7.91 31.24 25.80 4.11 32.69 9.63 -- -- Peak 6 915.00 124.27 ------ ------ 111.83 29.40 4.98 31.57 9.63 113 235 Peak 7 980.60 44.07 54.00 -9.93 29.31 30.89 5.14 30.91 9.64 100 295 QP

Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	17	
	Harmonic	
	902-928_Lora FHSS 125KHz_CH64_915MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1830.00 44.65 74.00 -29.35 43.77 25.00 7.04 32.19 0.32 276 348 Peak 2 2745.00 39.64 74.00 -34.36 35.33 27.50 8.48 32.69 0.54 -- -- Peak	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1830.00 43.45 74.00 -30.55 42.57 25.00 7.04 32.19 0.32 314 41 Peak 2 2745.00 39.78 74.00 -34.22 35.47 27.50 8.48 32.69 0.54 -- -- Peak

Mode	18	
	LF	
	902-928_Lora FHSS 125KHz_CH128_927.8MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak		

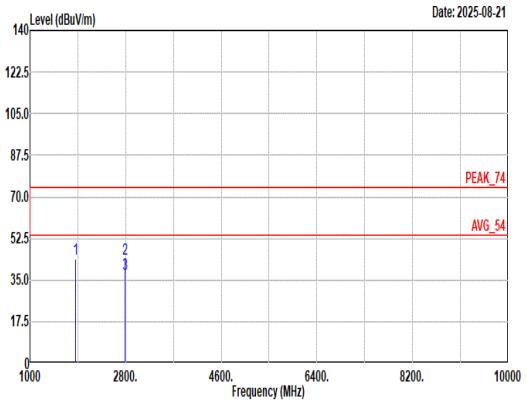
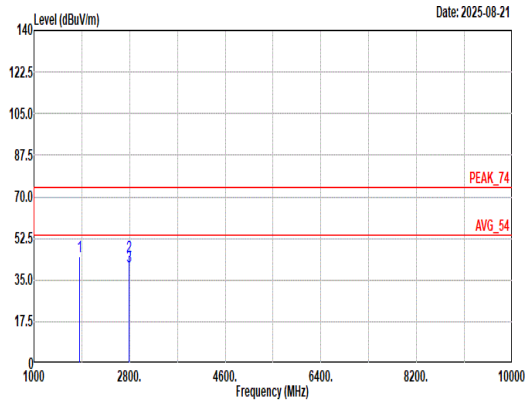
Site : 03CH22-HY
Condition: QP 3m Bilog_63304_241217 HORIZONTAL
Mode : 18

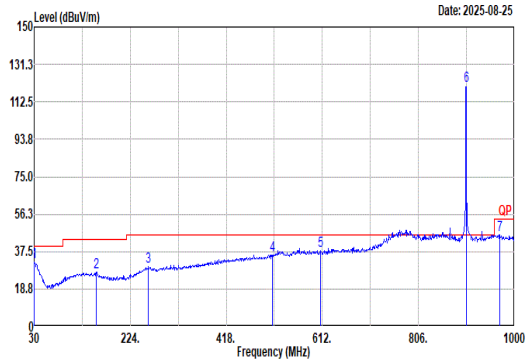
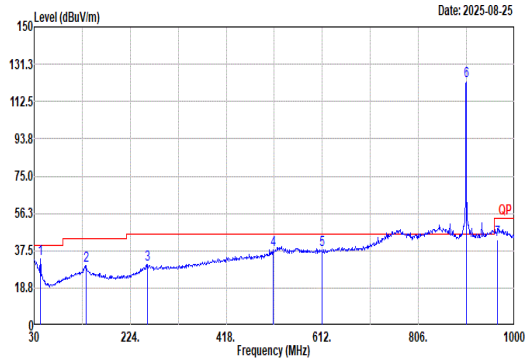
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	30.00	32.93	40.00	-7.07	29.77	25.30	0.85	32.57	9.58	--	--	Peak
2	143.49	27.93	43.50	-15.57	31.61	17.30	1.96	32.53	9.59	--	--	Peak
3	257.95	30.16	46.00	-15.84	30.60	19.83	2.62	32.50	9.61	--	--	Peak
4	514.03	36.19	46.00	-9.81	31.32	24.18	3.71	32.66	9.64	--	--	Peak
5	612.00	37.57	46.00	-8.43	30.76	25.76	4.11	32.69	9.63	--	--	Peak
6	927.80	120.45	------	------	107.39	29.86	5.01	31.44	9.63	154	114	Peak
7	960.23	41.12	54.00	-12.88	26.01	31.50	5.09	31.11	9.63	200	99	QP

Site : 03CH22-HY
Condition: QP 3m Bilog_63304_241217 VERTICAL
Mode : 18

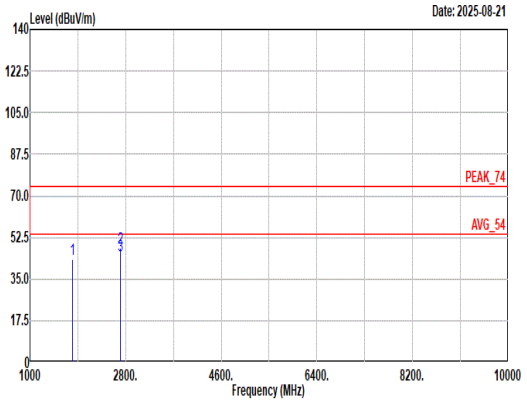
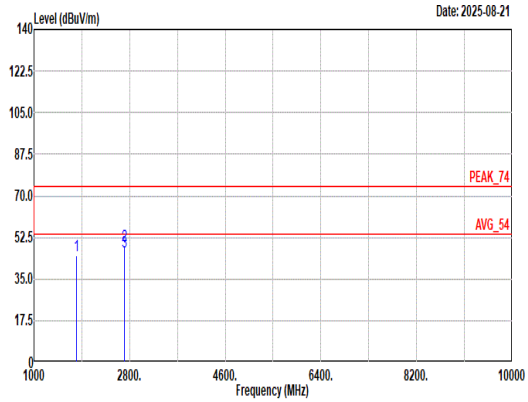
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	30.00	32.43	40.00	-7.57	29.27	25.30	0.85	32.57	9.58	--	--	Peak
2	134.76	28.89	43.50	-14.61	32.52	17.42	1.88	32.52	9.59	--	--	Peak
3	266.68	30.16	46.00	-15.84	30.63	19.76	2.67	32.51	9.61	--	--	Peak
4	508.21	37.82	46.00	-8.18	33.05	24.10	3.69	32.66	9.64	--	--	Peak
5	612.00	37.57	46.00	-8.43	30.76	25.76	4.11	32.69	9.63	--	--	Peak
6	927.80	124.30	------	------	111.24	29.86	5.01	31.44	9.63	108	238	Peak
7	960.23	44.70	54.00	-9.30	29.59	31.50	5.09	31.11	9.63	107	245	QP

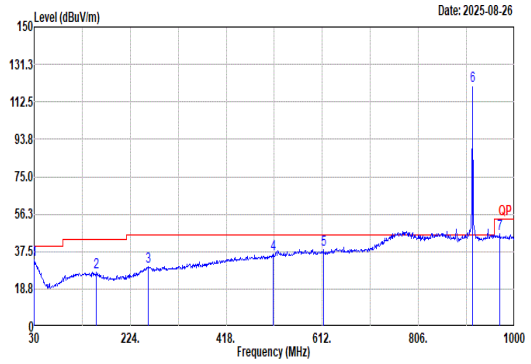
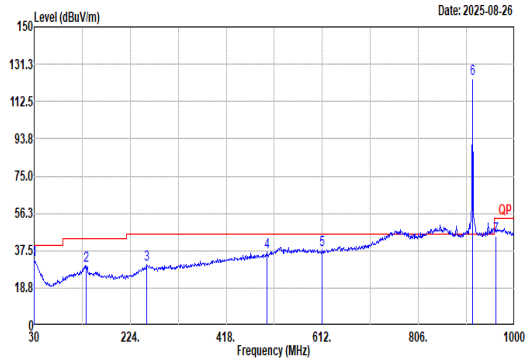
Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	18	
	Harmonic	
	902-928_Lora FHSS 125KHz_CH128_927.8MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1855.60 43.89 74.00 -30.11 42.90 25.06 7.10 32.21 0.35 233 0 Peak 2 2783.40 43.60 74.00 -30.40 39.17 27.60 8.54 32.70 0.52 220 164 Peak 3 2783.40 37.76 54.00 -16.24 33.33 27.60 8.54 32.70 0.52 220 164 Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1855.60 45.03 74.00 -28.97 44.04 25.06 7.10 32.21 0.35 265 0 Peak 2 2783.40 44.80 74.00 -29.20 40.37 27.60 8.54 32.70 0.52 219 189 Peak 3 2783.40 40.45 54.00 -13.55 36.02 27.60 8.54 32.70 0.52 219 189 Average

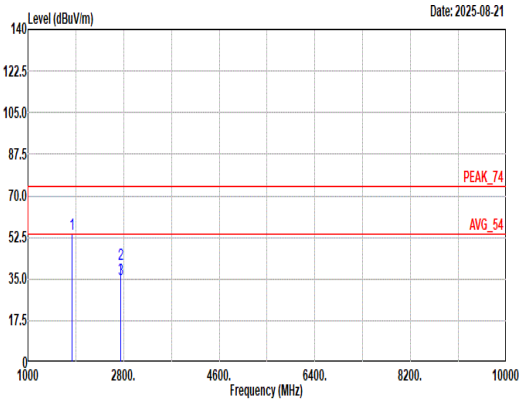
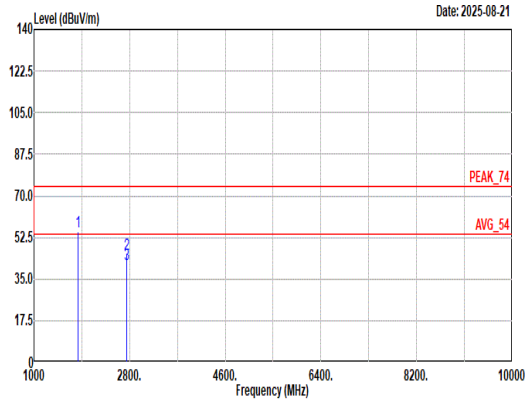
Mode	19	
	LF	
	902-928_Lora FHSS 125KHz_CH0_902.2MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 19 Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 30.00 32.37 40.00 -7.63 29.21 25.30 0.85 32.57 9.58 -- -- Peak 2 156.10 27.43 43.50 -16.07 31.72 16.59 2.08 32.56 9.60 -- -- Peak 3 260.86 29.96 46.00 -16.04 30.03 20.18 2.64 32.50 9.61 -- -- Peak 4 511.12 35.85 46.00 -10.15 31.05 24.12 3.70 32.66 9.64 -- -- Peak 5 608.12 37.69 46.00 -8.31 30.84 25.80 4.10 32.69 9.64 -- -- Peak 6 902.20 120.33 ------ ------ 108.25 29.20 4.95 31.70 9.63 101 117 Peak 7 970.90 45.66 54.00 -8.34 30.67 31.25 5.11 31.00 9.63 -- -- Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 19 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 42.61 33.24 40.00 -6.76 36.69 18.53 1.01 32.57 9.58 -- -- Peak 2 134.76 30.19 43.50 -13.31 33.82 17.42 1.88 32.52 9.59 -- -- Peak 3 258.92 30.64 46.00 -15.36 30.89 20.01 2.63 32.50 9.61 -- -- Peak 4 512.09 37.97 46.00 -8.03 33.15 24.14 3.70 32.66 9.64 -- -- Peak 5 611.03 37.81 46.00 -8.19 30.98 25.78 4.11 32.69 9.63 -- -- Peak 6 902.20 123.02 ------ ------ 110.94 29.20 4.95 31.70 9.63 113 227 Peak 7 966.05 42.96 54.00 -11.04 27.90 31.38 5.10 31.05 9.63 111 237 QP	

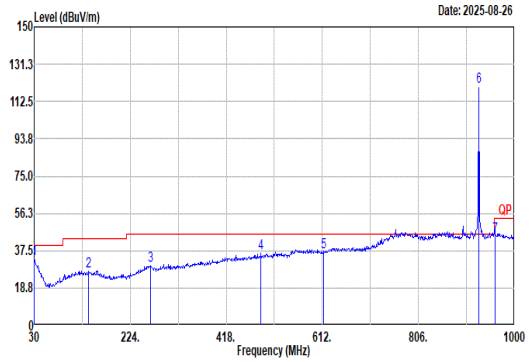
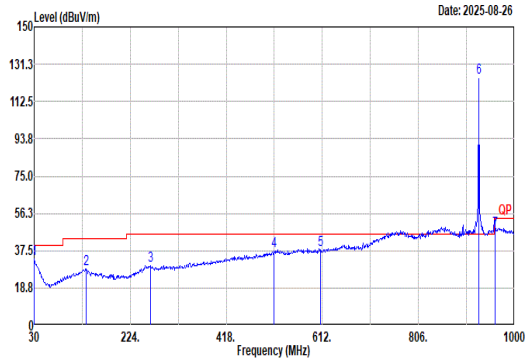
Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	19	
	Harmonic	
	902-928_Lora FHSS 125KHz_CH0_902.2MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1804.40 43.27 74.00 -30.73 42.69 24.74 6.99 32.17 0.29 127 0 Peak 2 2706.60 48.31 74.00 -25.69 44.04 27.50 8.42 32.69 0.55 201 153 Peak 3 2706.60 45.11 54.00 -8.89 40.84 27.50 8.42 32.69 0.55 201 153 Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1804.40 44.75 74.00 -29.25 44.17 24.74 6.99 32.17 0.29 288 40 Peak 2 2706.60 49.29 74.00 -24.71 45.02 27.50 8.42 32.69 0.55 304 164 Peak 3 2706.60 46.73 54.00 -7.27 42.46 27.50 8.42 32.69 0.55 304 164 Average

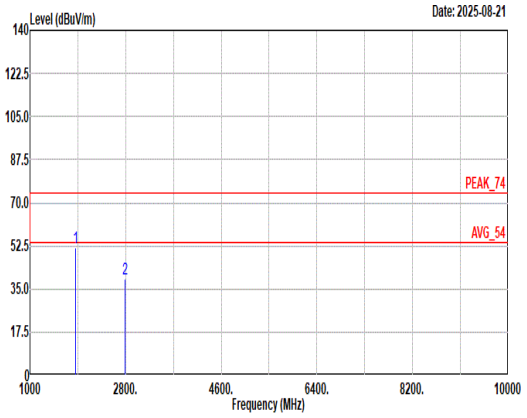
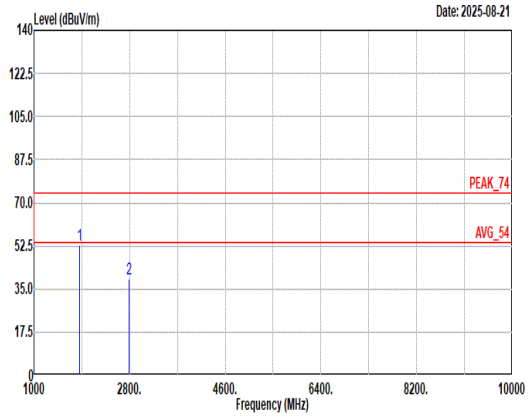
Mode	20	
	LF	
	902-928_Lora FHSS 125KHz_CH64_915MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 20 Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 30.00 33.39 40.00 -6.61 30.23 25.30 0.85 32.57 9.58 -- -- Peak 2 156.10 27.19 43.50 -16.31 31.48 16.59 2.08 32.56 9.60 -- -- Peak 3 260.86 29.74 46.00 -16.26 29.81 20.18 2.64 32.50 9.61 -- -- Peak 4 513.06 36.47 46.00 -9.53 31.63 24.16 3.70 32.66 9.64 -- -- Peak 5 613.94 38.60 46.00 -7.40 31.81 25.72 4.12 32.68 9.63 -- -- Peak 6 915.00 120.31 ------ ------ 107.87 29.40 4.98 31.57 9.63 158 115 Peak 7 969.93 46.65 54.00 -7.35 31.62 31.30 5.11 31.01 9.63 -- -- Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 20 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 32.85 40.00 -7.15 29.69 25.30 0.85 32.57 9.58 -- -- Peak 2 135.73 29.86 43.50 -13.64 33.50 17.40 1.89 32.52 9.59 -- -- Peak 3 256.98 30.37 46.00 -15.63 30.98 19.66 2.62 32.50 9.61 -- -- Peak 4 499.48 36.96 46.00 -9.04 32.41 23.90 3.67 32.66 9.64 -- -- Peak 5 612.00 37.71 46.00 -8.29 30.90 25.76 4.11 32.69 9.63 -- -- Peak 6 915.00 124.02 ------ ------ 111.58 29.40 4.98 31.57 9.63 111 227 Peak 7 962.17 44.51 54.00 -9.49 29.42 31.46 5.09 31.09 9.63 100 256 QP

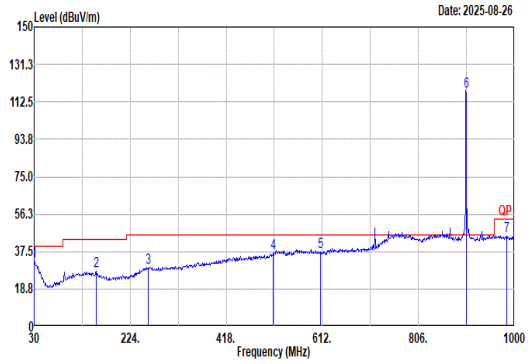
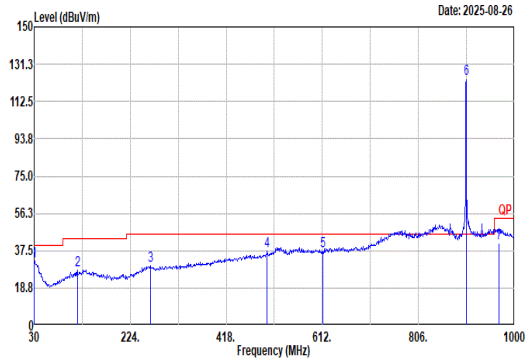
Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	20	
	Harmonic	
	902-928_Lora FHSS 125KHz_CH64_915MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 HORIZONTAL 1 1830.00 53.98 74.00 -20.02 53.10 25.00 7.04 32.19 0.32 197 45 Peak 2 2745.00 41.43 74.00 -32.57 37.12 27.50 8.48 32.69 0.54 176 163 Peak 3 2745.00 35.10 54.00 -18.90 30.79 27.50 8.48 32.69 0.54 176 163 Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 VERTICAL 1 1830.00 54.71 74.00 -19.29 53.83 25.00 7.04 32.19 0.32 105 39 Peak 2 2745.00 45.23 74.00 -28.77 40.92 27.50 8.48 32.69 0.54 180 161 Peak 3 2745.00 41.18 54.00 -12.82 36.87 27.50 8.48 32.69 0.54 180 161 Average

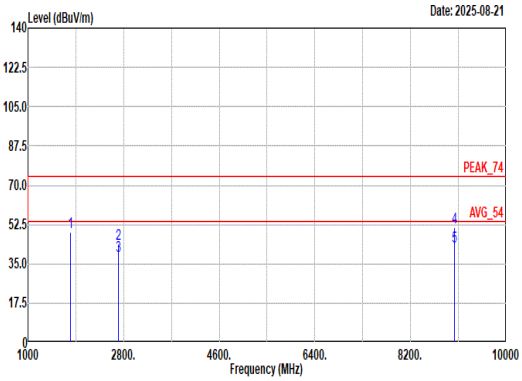
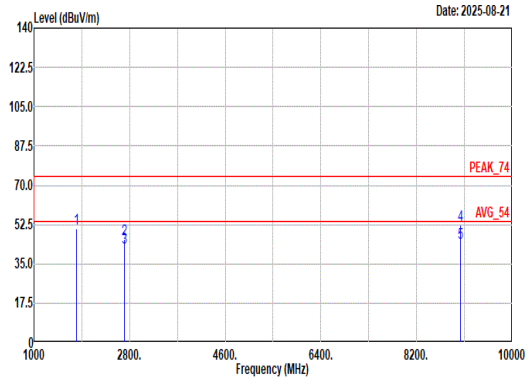
Mode	21	
	LF	
	902-928_Lora FHSS 125KHz_CH128_927.8MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 21 Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 30.00 33.14 40.00 -6.86 29.98 25.30 0.85 32.57 9.58 -- -- Peak 2 139.61 27.37 43.50 -16.13 30.99 17.38 1.93 32.52 9.59 -- -- Peak 3 264.74 29.88 46.00 -16.12 30.01 20.11 2.66 32.51 9.61 -- -- Peak 4 487.84 36.34 46.00 -9.66 31.94 23.76 3.65 32.65 9.64 -- -- Peak 5 613.94 36.74 46.00 -9.26 29.95 25.72 4.12 32.68 9.63 -- -- Peak 6 927.80 120.22 ------ ------ 107.16 29.86 5.01 31.44 9.63 168 114 Peak 7 960.23 44.78 54.00 -9.22 29.67 31.50 5.09 31.11 9.63 200 97 QP	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 21 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 33.27 40.00 -6.73 30.11 25.30 0.85 32.57 9.58 -- -- Peak 2 134.76 28.36 43.50 -15.14 31.99 17.42 1.88 32.52 9.59 -- -- Peak 3 264.74 30.14 46.00 -15.86 30.27 20.11 2.66 32.51 9.61 -- -- Peak 4 515.00 37.11 46.00 -8.89 32.22 24.20 3.71 32.66 9.64 -- -- Peak 5 608.12 38.00 46.00 -8.00 31.15 25.80 4.10 32.69 9.64 -- -- Peak 6 927.80 124.51 ------ ------ 111.45 29.86 5.01 31.44 9.63 112 238 Peak 7 960.23 47.44 54.00 -6.56 32.33 31.50 5.09 31.11 9.63 100 244 QP

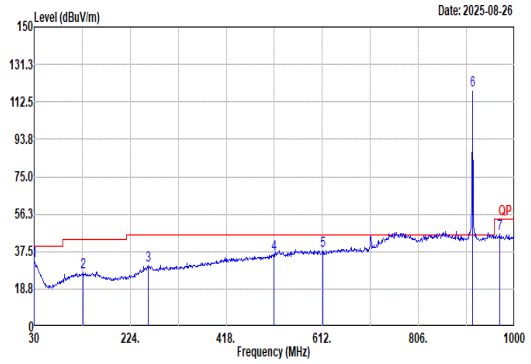
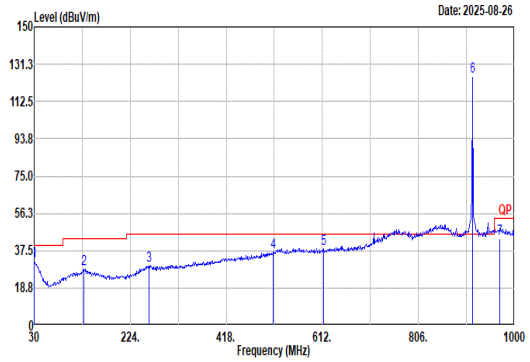
Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	21	
	Harmonic	
	902-928_Lora FHSS 125KHz_CH128_927.8MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1855.60 51.89 74.00 -22.11 50.90 25.06 7.10 32.21 0.35 106 108 Peak 2 2783.40 38.98 74.00 -35.02 34.55 27.60 8.54 32.70 0.52 -- -- Peak	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1855.60 52.82 74.00 -21.18 51.83 25.06 7.10 32.21 0.35 100 42 Peak 2 2783.40 38.91 74.00 -35.09 34.48 27.60 8.54 32.70 0.52 -- -- Peak

Mode	22	
	LF	
	902-928_Lora FHSS 125KHz_CH0_902.2MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 22 Freq Level / Limit Line / Margin / Read Level / Ant Factor / Cable Loss / Preamp Factor / Aux Factor / APos / TPos / Remark 1 30.00 32.97 40.00 -7.03 29.81 25.30 0.85 32.57 9.58 -- -- Peak 2 155.13 27.92 43.50 -15.58 32.04 16.77 2.07 32.56 9.60 -- -- Peak 3 260.86 29.68 46.00 -16.32 29.75 20.18 2.64 32.50 9.61 -- -- Peak 4 513.06 36.83 46.00 -9.17 31.99 24.16 3.70 32.66 9.64 -- -- Peak 5 608.12 37.57 46.00 -8.43 30.72 25.80 4.10 32.69 9.64 -- -- Peak 6 902.20 118.00 ------ ------ 105.92 29.20 4.95 31.70 9.63 101 125 Peak 7 984.48 45.34 54.00 -8.66 30.61 30.81 5.15 30.87 9.64 -- -- Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 22 Freq Level / Limit Line / Margin / Read Level / Ant Factor / Cable Loss / Preamp Factor / Aux Factor / APos / TPos / Remark 1 30.00 32.51 40.00 -7.49 29.35 25.30 0.85 32.57 9.58 -- -- Peak 2 117.30 27.61 43.50 -15.89 31.51 17.30 1.74 32.52 9.58 -- -- Peak 3 264.74 29.87 46.00 -16.13 30.00 20.11 2.66 32.51 9.61 -- -- Peak 4 500.45 37.18 46.00 -8.82 32.61 23.92 3.67 32.66 9.64 -- -- Peak 5 612.97 37.14 46.00 -8.86 30.33 25.74 4.12 32.68 9.63 -- -- Peak 6 902.20 124.13 ------ ------ 112.05 29.20 4.95 31.70 9.63 112 232 Peak 7 967.99 41.59 54.00 -12.41 26.54 31.34 5.11 31.03 9.63 115 265 QP

Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	22	
	Harmonic	
	902-928_Lora FHSS 125KHz_CH0_902.2MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1804.40 49.36 74.00 -24.64 48.78 24.74 6.99 32.17 0.29 144 121 Peak 2 2706.60 43.71 74.00 -30.29 39.44 27.50 8.42 32.69 0.55 318 188 Peak 3 2706.60 38.72 54.00 -15.28 34.45 27.50 8.42 32.69 0.55 318 188 Average 4 9022.00 51.26 74.00 -22.74 34.63 37.34 15.96 38.13 0.96 400 156 Peak 5 9022.00 42.88 54.00 -11.12 26.25 37.34 15.96 38.13 0.96 400 156 Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1804.40 50.69 74.00 -23.31 50.11 24.74 6.99 32.17 0.29 144 37 Peak 2 2706.60 46.20 74.00 -27.80 41.93 27.50 8.42 32.69 0.55 217 171 Peak 3 2706.60 42.24 54.00 -11.76 37.97 27.50 8.42 32.69 0.55 217 171 Average 4 9022.00 52.34 74.00 -21.66 35.71 37.34 15.96 38.13 0.96 171 178 Peak 5 9022.00 44.59 54.00 -9.41 27.96 37.34 15.96 38.13 0.96 171 178 Average

Mode	23	
	LF	
	902-928_Lora FHSS 125KHz_CH64_915MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak		

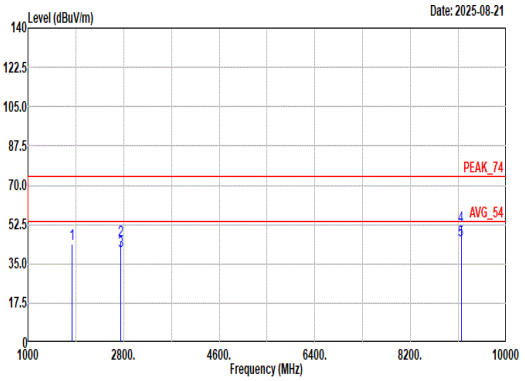
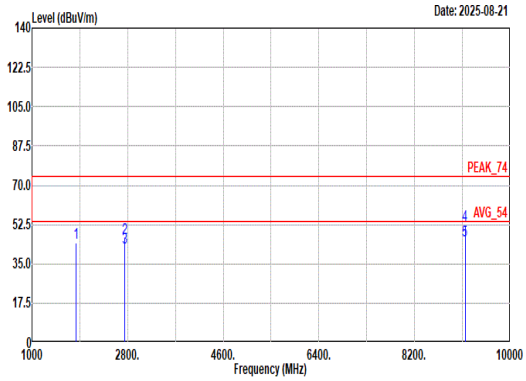
Site : 03CH22-HY
Condition: QP 3m Bilog_63304_241217 HORIZONTAL
Mode : 23

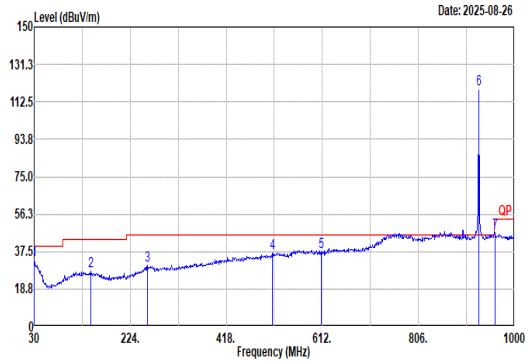
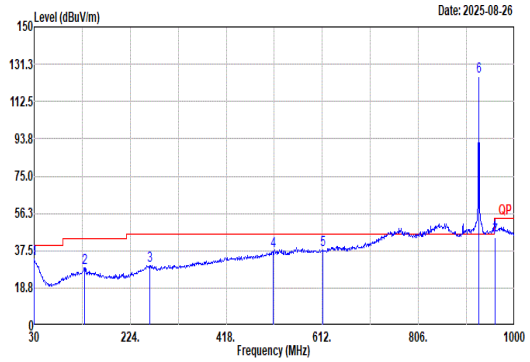
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	30.00	32.94	40.00	-7.06	29.78	25.30	0.85	32.57	9.58	--	--	Peak
2	128.94	27.40	43.50	-16.10	31.02	17.49	1.83	32.52	9.58	--	--	Peak
3	259.89	30.35	46.00	-15.65	30.42	20.18	2.64	32.50	9.61	--	--	Peak
4	514.03	36.13	46.00	-9.87	31.26	24.18	3.71	32.66	9.64	--	--	Peak
5	612.97	37.71	46.00	-8.29	30.90	25.74	4.12	32.68	9.63	--	--	Peak
6	915.00	118.19	------	------	105.76	29.39	4.98	31.57	9.63	100	170	Peak
7	970.90	46.42	54.00	-7.58	31.43	31.25	5.11	31.00	9.63	--	--	Peak

Site : 03CH22-HY
Condition: QP 3m Bilog_63304_241217 VERTICAL
Mode : 23

	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	32.36	40.00	-7.64	29.20	25.30	0.85	32.57	9.58	--	--	Peak
2	130.88	28.18	43.50	-15.32	31.76	17.50	1.85	32.52	9.59	--	--	Peak
3	261.83	29.81	46.00	-16.19	29.89	20.16	2.65	32.50	9.61	--	--	Peak
4	513.06	37.01	46.00	-8.99	32.17	24.16	3.70	32.66	9.64	--	--	Peak
5	613.94	38.23	46.00	-7.77	31.44	25.72	4.12	32.68	9.63	--	--	Peak
6	915.00	124.92	------	------	112.51	29.38	4.97	31.57	9.63	112	240	Peak
7	969.93	43.55	54.00	-10.45	28.52	31.30	5.11	31.01	9.63	100	269	QP

Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	23	
	Harmonic	
	902-928_Lora FHSS 125KHz_CH64_915MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1830.00 44.04 74.00 -29.96 43.16 25.00 7.04 32.19 0.32 334 360 Peak 2 2745.00 45.64 74.00 -28.36 41.33 27.50 8.48 32.69 0.54 267 164 Peak 3 2745.00 40.77 54.00 -13.23 36.46 27.50 8.48 32.69 0.54 267 164 Average 4 9150.00 51.76 74.00 -22.24 35.31 37.30 16.01 38.35 0.98 400 162 Peak 5 9150.00 45.53 54.00 -8.47 29.08 37.30 16.01 38.35 0.98 400 162 Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1830.00 44.55 74.00 -29.45 43.67 25.00 7.04 32.19 0.32 294 360 Peak 2 2745.00 46.32 74.00 -27.68 42.01 27.50 8.48 32.69 0.54 241 192 Peak 3 2745.00 42.42 54.00 -11.58 38.11 27.50 8.48 32.69 0.54 241 192 Average 4 9150.00 52.57 74.00 -21.43 36.12 37.30 16.01 38.35 0.98 286 326 Peak 5 9150.00 45.36 54.00 -8.64 28.91 37.30 16.01 38.35 0.98 286 326 Average

Mode	24	
	LF	
	902-928_Lora FHSS 125KHz_CH128_927.8MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak		

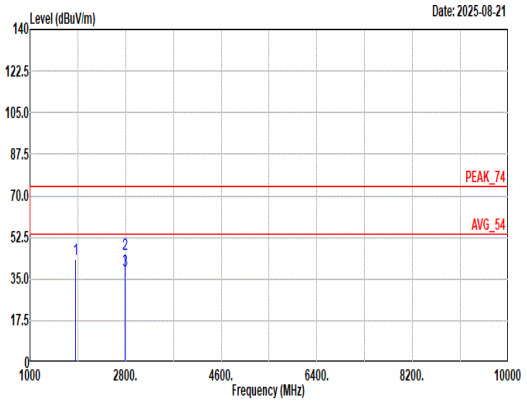
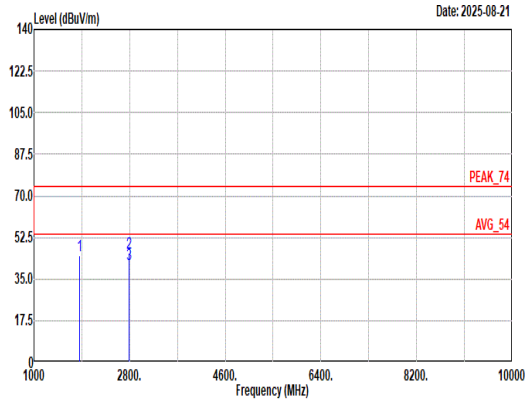
Site : 03CH22-HY
Condition: QP 3m Bilog_63304_241217 HORIZONTAL
Mode : 24

	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	33.15	40.00	-6.85	29.99	25.30	0.85	32.57	9.58	--	--	Peak
2	144.46	27.50	43.50	-16.00	31.22	17.25	1.97	32.53	9.59	--	--	Peak
3	258.92	30.47	46.00	-15.53	30.72	20.01	2.63	32.50	9.61	--	--	Peak
4	511.12	36.79	46.00	-9.21	31.99	24.12	3.70	32.66	9.64	--	--	Peak
5	610.06	37.58	46.00	-8.42	30.73	25.80	4.11	32.69	9.63	--	--	Peak
6	927.80	118.64	------	------	105.58	29.86	5.01	31.44	9.63	148	168	Peak
7	960.23	47.10	54.00	-6.90	31.99	31.50	5.09	31.11	9.63	--	--	Peak

Site : 03CH22-HY
Condition: QP 3m Bilog_63304_241217 VERTICAL
Mode : 24

	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	33.57	40.00	-6.43	30.41	25.30	0.85	32.57	9.58	--	--	Peak
2	131.85	28.92	43.50	-14.58	32.58	17.41	1.86	32.52	9.59	--	--	Peak
3	262.80	30.11	46.00	-15.89	30.22	20.14	2.65	32.51	9.61	--	--	Peak
4	512.09	37.11	46.00	-8.89	32.29	24.14	3.70	32.66	9.64	--	--	Peak
5	612.97	37.87	46.00	-8.13	31.06	25.74	4.12	32.68	9.63	--	--	Peak
6	927.80	125.33	------	------	112.27	29.86	5.01	31.44	9.63	112	240	Peak
7	960.23	44.32	54.00	-9.68	29.21	31.50	5.09	31.11	9.63	100	210	QP

Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

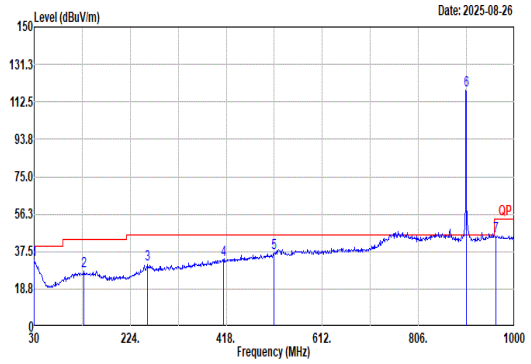
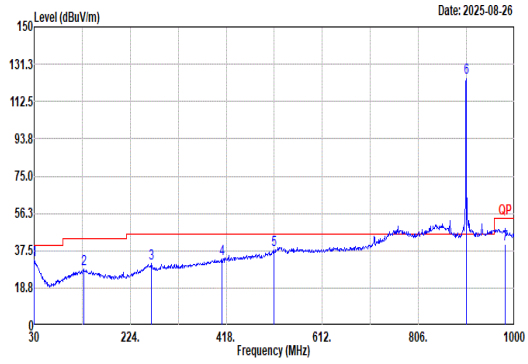
Mode	24	
	Harmonic	
	902-928_Lora FHSS 125KHz_CH128_927.8MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 HORIZONTAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark 1 1855.60 43.39 74.00 -30.61 42.40 25.06 7.10 32.21 0.35 383 360 Peak 2 2783.40 45.40 74.00 -28.60 40.97 27.60 8.54 32.70 0.52 210 134 Peak 3 2783.40 38.59 54.00 -15.41 34.16 27.60 8.54 32.70 0.52 210 134 Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 VERTICAL Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark 1 1855.60 45.17 74.00 -28.83 44.18 25.06 7.10 32.21 0.35 265 345 Peak 2 2783.40 46.13 74.00 -27.87 41.70 27.60 8.54 32.70 0.52 200 152 Peak 3 2783.40 41.32 54.00 -12.68 36.89 27.60 8.54 32.70 0.52 200 152 Average

C2-0. Radiated Spurious Emission Test Modes

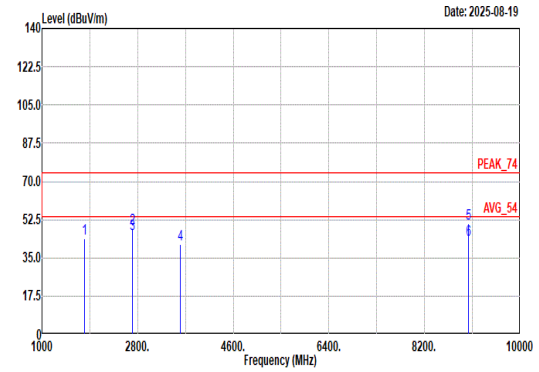
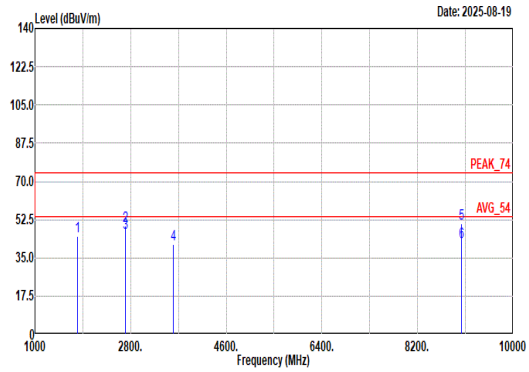
Mode	Band (MHz)	Antenna	Modulation	Channel	Frequency (MHz)	Data Rate	RU	Remark
Mode 25	902~928	0	Lora FSK	0	902.2	50 Kbps	-	-
Mode 26	902~928	0	Lora FSK	64	915	50 Kbps	-	-
Mode 27	902~928	0	Lora FSK	128	927.8	50 Kbps	-	-

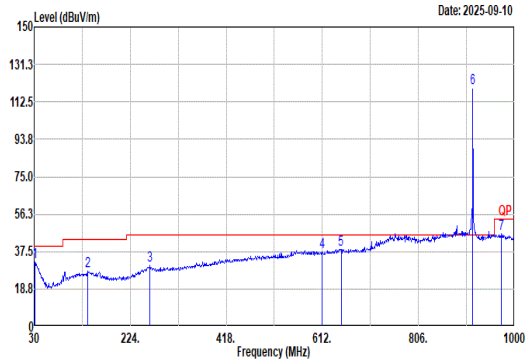
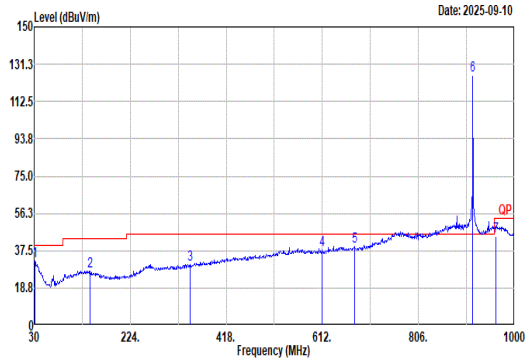
C2-2. Summary of each worse mode

Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
25	Lora FSK	0	30.00	33.62	40.00	-6.38	H	Peak	Pass	-	LF
	Lora FSK	0	2706.60	46.53	54.00	-7.47	V	Avg.	Pass	-	Harmonic
26	Lora FSK	64	676.99	39.76	46.00	-6.24	V	Peak	Pass	-	LF
	Lora FSK	64	2745.00	45.03	54.00	-8.97	H	Avg.	Pass	-	Harmonic
27	Lora FSK	128	960.23	47.23	54.00	-6.77	H	Peak	Pass	-	LF
	Lora FSK	128	8350.20	40.40	54.00	-13.60	V	Avg.	Pass	-	Harmonic

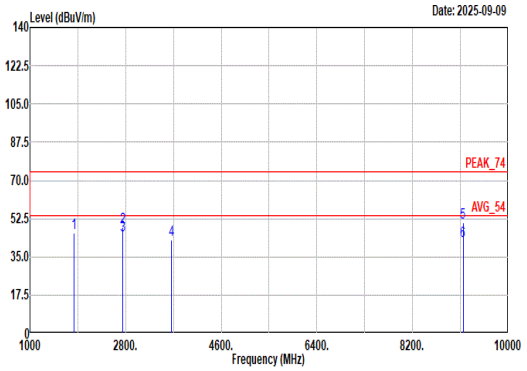
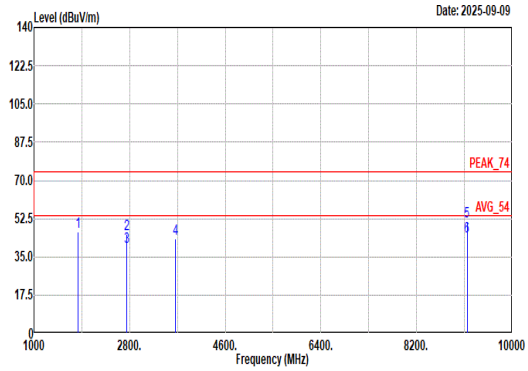
Mode	25	
	LF	
	902~928_Lora FSK 50 Kbps_CH0_902.2MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 25 Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 30.00 33.62 40.00 -6.38 30.46 25.30 0.85 32.57 9.58 -- -- Peak 2 130.88 27.64 43.50 -15.86 31.22 17.50 1.85 32.52 9.59 -- -- Peak 3 258.92 31.09 46.00 -14.91 31.34 20.01 2.63 32.50 9.61 -- -- Peak 4 412.18 33.60 46.00 -12.40 30.77 22.33 3.43 32.57 9.64 -- -- Peak 5 515.00 36.81 46.00 -9.19 31.92 24.20 3.71 32.66 9.64 -- -- Peak 6 902.20 118.32 ------ ------ 106.24 29.20 4.95 31.70 9.63 100 291 Peak 7 963.14 45.38 54.00 -8.62 30.30 31.44 5.09 31.08 9.63 -- -- Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 25 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 33.05 40.00 -6.95 29.89 25.30 0.85 32.57 9.58 -- -- Peak 2 130.88 28.16 43.50 -15.34 31.74 17.50 1.85 32.52 9.59 -- -- Peak 3 266.68 31.23 46.00 -14.77 31.70 19.76 2.67 32.51 9.61 -- -- Peak 4 409.27 33.16 46.00 -12.84 30.50 22.17 3.42 32.57 9.64 -- -- Peak 5 515.00 37.87 46.00 -8.13 32.98 24.20 3.71 32.66 9.64 -- -- Peak 6 902.20 124.28 ------ ------ 112.20 29.20 4.95 31.70 9.63 113 233 Peak 7 980.60 40.96 54.00 -13.04 26.20 30.89 5.14 30.91 9.64 100 179 QP

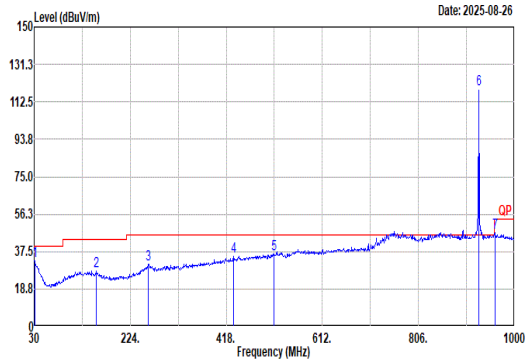
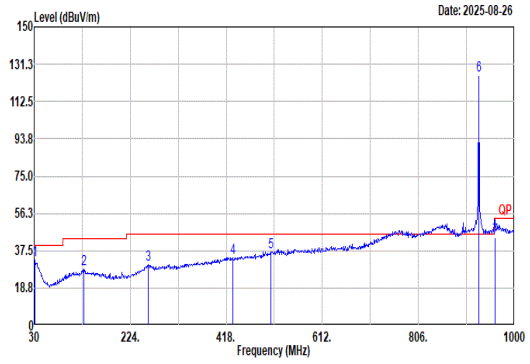
Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	25	
	Harmonic	
	902~928_Lora FSK 50 Kbps_CH0_902.2MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 HORIZONTAL 1 1804.40 43.90 74.00 -30.10 43.32 24.74 6.99 32.17 0.29 123 360 Peak 2 2706.60 48.61 74.00 -25.39 44.34 27.50 8.42 32.69 0.55 222 161 Peak 3 2706.60 46.04 54.00 -7.96 41.77 27.50 8.42 32.69 0.55 222 161 Average 4 3608.80 41.08 74.00 -32.92 33.91 29.24 9.99 33.36 0.82 -- -- Peak 5 9022.00 50.68 74.00 -23.32 34.05 37.34 15.96 38.13 0.96 236 291 Peak 6 9022.00 43.52 54.00 -10.48 26.89 37.34 15.96 38.13 0.96 236 291 Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 VERTICAL 1 1804.40 44.67 74.00 -29.33 44.09 24.74 6.99 32.17 0.29 305 34 Peak 2 2706.60 49.57 74.00 -24.43 45.30 27.50 8.42 32.69 0.55 269 159 Peak 3 2706.60 46.53 54.00 -7.47 42.26 27.50 8.42 32.69 0.55 269 159 Average 4 3608.80 41.44 74.00 -32.56 34.27 29.24 9.99 33.36 0.82 -- -- Peak 5 9022.00 50.64 74.00 -23.36 34.01 37.34 15.96 38.13 0.96 300 141 Peak 6 9022.00 42.24 54.00 -11.76 25.61 37.34 15.96 38.13 0.96 300 141 Average

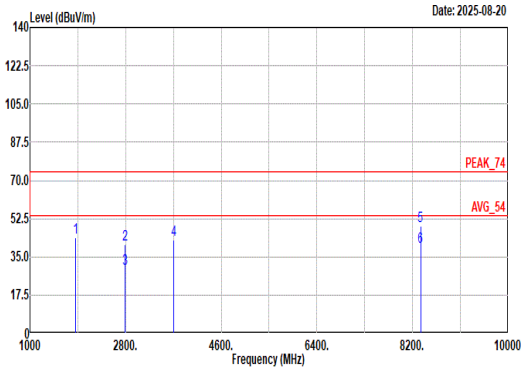
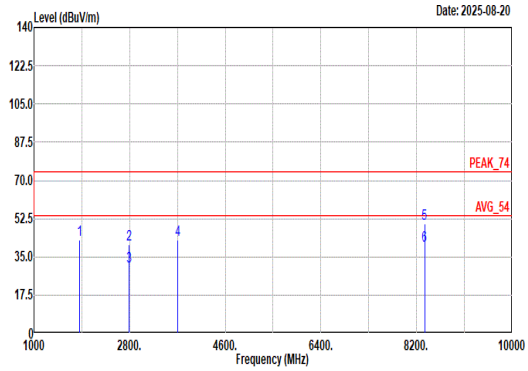
Mode	26	
	LF	
	902~928_Lora FSK 50 Kbps_CH64_915MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 26 Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 30.97 32.44 40.00 -7.56 30.14 24.43 0.86 32.57 9.58 -- -- Peak 2 137.67 27.46 43.50 -16.04 31.11 17.37 1.91 32.52 9.59 -- -- Peak 3 263.77 30.49 46.00 -15.51 30.61 20.12 2.66 32.51 9.61 -- -- Peak 4 612.00 37.35 46.00 -8.65 30.54 25.76 4.11 32.69 9.63 -- -- Peak 5 649.83 38.76 46.00 -7.24 30.97 26.60 4.25 32.67 9.61 -- -- Peak 6 915.00 119.21 ------ ------ 106.75 29.41 4.98 31.56 9.63 218 86 Peak 7 972.84 46.22 54.00 -7.78 31.32 31.13 5.12 30.98 9.63 -- -- Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 26 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 32.39 40.00 -7.61 30.09 24.43 0.86 32.57 9.58 -- -- Peak 2 143.49 27.39 43.50 -16.11 31.07 17.30 1.96 32.53 9.59 -- -- Peak 3 344.28 30.84 46.00 -15.16 30.45 20.27 3.04 32.54 9.62 -- -- Peak 4 612.00 38.05 46.00 -7.95 31.24 25.76 4.11 32.69 9.63 -- -- Peak 5 676.99 39.76 46.00 -6.24 31.91 26.56 4.33 32.66 9.62 -- -- Peak 6 915.00 125.78 ------ ------ 113.32 29.41 4.98 31.56 9.63 110 336 Peak 7 963.14 44.91 54.00 -9.09 29.83 31.44 5.09 31.08 9.63 100 336 QP

Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	26	
	Harmonic	
	902~928_Lora FSK 50 Kbps_CH64_915MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 HORIZONTAL 1 1830.00 46.19 74.00 -27.81 45.31 25.00 7.04 32.19 0.32 161 115 Peak 2 2745.00 48.56 74.00 -25.44 44.25 27.50 8.48 32.69 0.54 200 161 Peak 3 2745.00 45.03 54.00 -8.97 40.72 27.50 8.48 32.69 0.54 200 161 Average 4 3660.00 42.89 74.00 -31.11 35.58 29.44 10.05 33.38 0.77 -- -- Peak 5 9150.00 50.98 74.00 -23.02 34.53 37.30 16.01 38.35 0.98 100 314 Peak 6 9150.00 42.16 54.00 -11.84 25.71 37.30 16.01 38.35 0.98 100 314 Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 VERTICAL 1 1830.00 46.36 74.00 -27.64 45.48 25.00 7.04 32.19 0.32 215 88 Peak 2 2745.00 45.25 74.00 -28.75 40.94 27.50 8.48 32.69 0.54 300 148 Peak 3 2745.00 39.78 54.00 -14.22 35.47 27.50 8.48 32.69 0.54 300 148 Average 4 3660.00 43.09 74.00 -30.91 35.78 29.44 10.05 33.38 0.77 -- -- Peak 5 9150.00 51.48 74.00 -22.52 35.03 37.30 16.01 38.35 0.98 185 360 Peak 6 9150.00 44.23 54.00 -9.77 27.78 37.30 16.01 38.35 0.98 185 360 Average

Mode	27	
	LF	
	902~928_Lora FSK 50 Kbps_CH128_927.8MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 27 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 32.97 40.00 -7.03 30.67 24.43 0.86 32.57 9.58 -- -- Peak 2 156.10 27.85 43.50 -15.65 32.14 16.59 2.08 32.56 9.60 -- -- Peak 3 260.86 31.38 46.00 -14.62 31.45 20.18 2.64 32.50 9.61 -- -- Peak 4 432.55 35.07 46.00 -10.93 31.71 22.80 3.52 32.59 9.63 -- -- Peak 5 514.03 36.48 46.00 -9.52 31.61 24.18 3.71 32.66 9.64 -- -- Peak 6 927.80 118.82 ------ ------ 105.76 29.86 5.01 31.44 9.63 100 167 Peak 7 960.23 47.23 54.00 -6.77 32.12 31.50 5.09 31.11 9.63 -- -- Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 27 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 32.96 40.00 -7.04 30.66 24.43 0.86 32.57 9.58 -- -- Peak 2 129.91 28.51 43.50 -14.99 32.11 17.50 1.84 32.52 9.58 -- -- Peak 3 259.89 30.62 46.00 -15.38 30.69 20.18 2.64 32.50 9.61 -- -- Peak 4 431.58 34.05 46.00 -11.95 30.73 22.76 3.52 32.59 9.63 -- -- Peak 5 507.24 36.99 46.00 -9.01 32.22 24.10 3.69 32.66 9.64 -- -- Peak 6 927.80 125.54 ------ ------ 112.48 29.86 5.01 31.44 9.63 112 241 Peak 7 960.23 43.90 54.00 -10.10 28.79 31.50 5.09 31.11 9.63 100 289 QP

Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

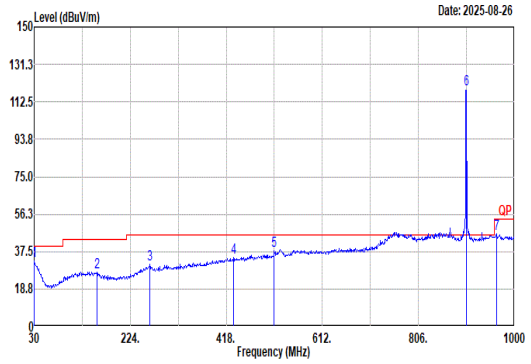
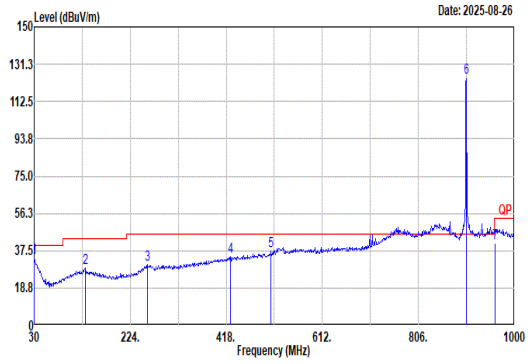
Mode	27	
	Harmonic	
	902~928_Lora FSK 50 Kbps_CH128_927.8MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 HORIZONTAL 1 1855.60 44.04 74.00 -29.96 43.05 25.06 7.10 32.21 0.35 196 360 Peak 2 2783.40 40.53 74.00 -33.47 36.10 27.60 8.54 32.70 0.52 221 162 Peak 3 2783.40 29.68 54.00 -24.32 25.25 27.60 8.54 32.70 0.52 221 162 Average 4 3711.20 42.79 74.00 -31.21 35.32 29.67 10.10 33.39 0.71 -- -- Peak 5 8350.20 49.18 74.00 -24.82 32.77 37.10 15.21 37.26 0.92 -- -- Peak 6 8350.20 39.63 54.00 -14.37 23.22 37.10 15.21 37.26 0.92 -- -- Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 VERTICAL 1 1855.60 42.90 74.00 -31.10 41.91 25.06 7.10 32.21 0.35 285 8 Peak 2 2783.40 40.58 74.00 -33.42 36.15 27.60 8.54 32.70 0.52 208 160 Peak 3 2783.40 30.88 54.00 -23.12 26.45 27.60 8.54 32.70 0.52 208 160 Average 4 3711.20 42.96 74.00 -31.04 35.49 29.67 10.10 33.39 0.71 -- -- Peak 5 8350.20 50.26 74.00 -23.74 33.85 37.10 15.21 37.26 0.92 -- -- Peak 6 8350.20 40.40 54.00 -13.60 23.99 37.10 15.21 37.26 0.92 -- -- Average

C3-1. Radiated Spurious Emission Test Modes

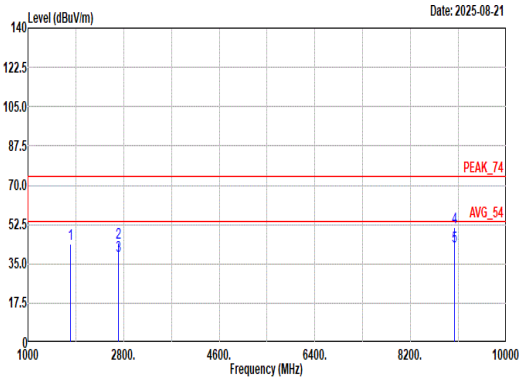
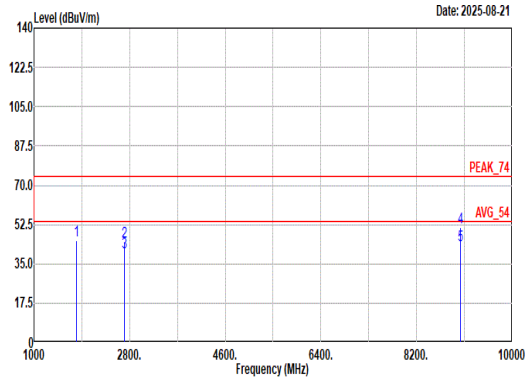
Mode	Band (MHz)	Antenna	Modulation	Channel	Frequency (MHz)	Data Rate	RU	Remark
Mode 28	902-928	0	Lora FSK	0	902.4	150 Kbps	-	-
Mode 29	902-928	0	Lora FSK	32	915.2	150 Kbps	-	-
Mode 30	902-928	0	Lora FSK	63	927.6	150 Kbps	-	-

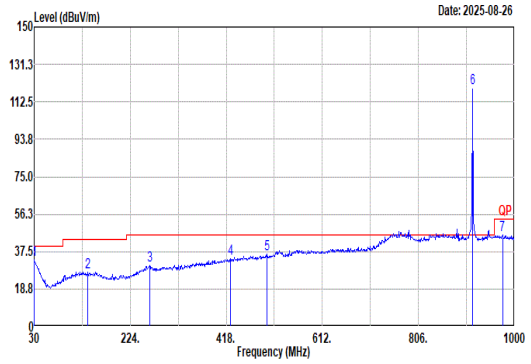
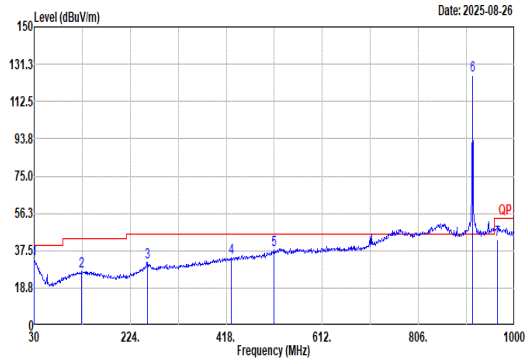
C3-2. Summary of each worse mode

Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
28	Lora FSK	0	30.00	33.77	40.00	-6.23	V	Peak	Pass	-	LF
	Lora FSK	0	9024.00	43.38	54.00	-10.62	V	Avg.	Pass	-	Harmonic
29	Lora FSK	32	30.00	33.36	40.00	-6.64	V	Peak	Pass	-	LF
	Lora FSK	32	9152.00	45.23	54.00	-8.77	H	Avg.	Pass	-	Harmonic
30	Lora FSK	63	965.08	47.06	54.00	-6.94	H	Peak	Pass	-	LF
	Lora FSK	63	2782.80	50.56	54.00	-3.44	V	Avg.	Pass	-	Harmonic

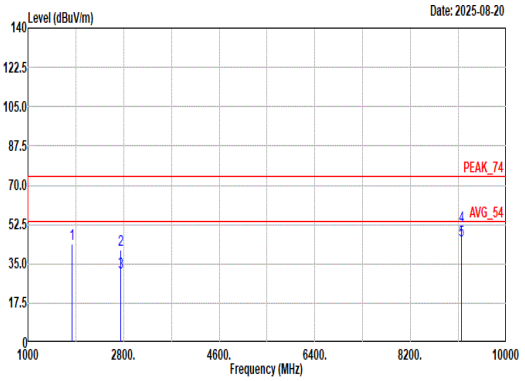
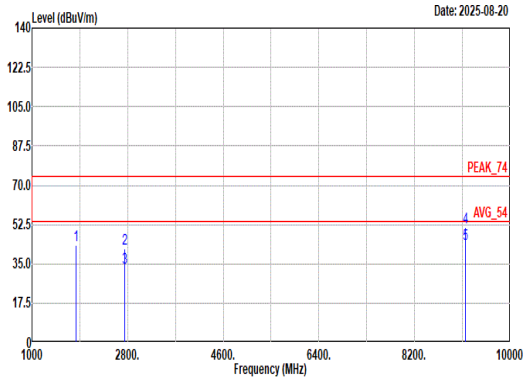
Mode	28	
	LF	
	902-928_Lora FSK _CH0_902.4MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 28 Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 30.00 32.71 40.00 -7.29 29.55 25.30 0.85 32.57 9.58 -- -- Peak 2 157.07 27.24 43.50 -16.26 31.61 16.50 2.09 32.56 9.60 -- -- Peak 3 263.77 31.22 46.00 -14.78 31.34 20.12 2.66 32.51 9.61 -- -- Peak 4 432.55 34.30 46.00 -11.70 30.94 22.80 3.52 32.59 9.63 -- -- Peak 5 515.00 37.66 46.00 -8.34 32.77 24.20 3.71 32.66 9.64 -- -- Peak 6 902.40 118.63 ------ ------ 106.55 29.20 4.95 31.70 9.63 100 291 Peak 7 964.11 46.34 54.00 -7.66 31.26 31.42 5.10 31.07 9.63 -- -- Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 28 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 33.77 40.00 -6.23 30.61 25.30 0.85 32.57 9.58 -- -- Peak 2 132.82 28.73 43.50 -14.77 32.39 17.40 1.87 32.52 9.59 -- -- Peak 3 258.92 30.29 46.00 -15.71 30.54 20.01 2.63 32.50 9.61 -- -- Peak 4 425.76 34.46 46.00 -11.54 31.23 22.70 3.49 32.59 9.63 -- -- Peak 5 508.21 37.36 46.00 -8.64 32.59 24.10 3.69 32.66 9.64 -- -- Peak 6 902.40 124.55 ------ ------ 112.47 29.20 4.95 31.70 9.63 112 236 Peak 7 960.23 41.16 54.00 -12.84 26.05 31.50 5.09 31.11 9.63 100 143 QP

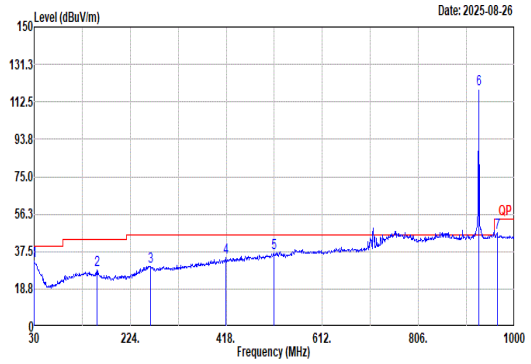
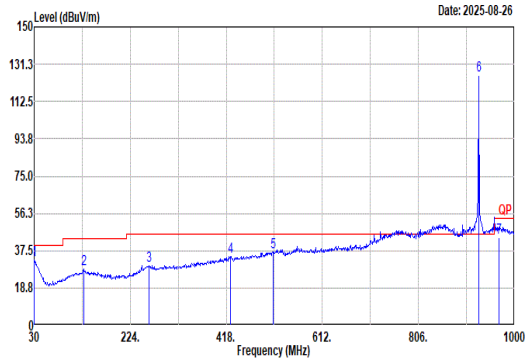
Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	28	
	Harmonic	
	902-928_Lora FSK _CH0_902.4MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1804.80 44.06 74.00 -29.94 43.46 24.75 6.99 32.17 0.30 400 35 Peak 2 2707.20 44.12 74.00 -29.88 39.84 27.50 8.43 32.69 0.55 400 181 Peak 3 2707.20 38.40 54.00 -15.60 34.12 27.50 8.43 32.69 0.55 400 181 Average 4 9024.00 51.24 74.00 -22.76 34.60 37.35 15.96 38.13 0.96 400 164 Peak 5 9024.00 42.89 54.00 -11.11 26.25 37.35 15.96 38.13 0.96 400 164 Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1804.80 45.70 74.00 -28.30 45.10 24.75 6.99 32.17 0.30 289 360 Peak 2 2707.20 44.88 74.00 -29.12 40.60 27.50 8.43 32.69 0.55 300 148 Peak 3 2707.20 39.90 54.00 -14.10 35.62 27.50 8.43 32.69 0.55 300 148 Average 4 9024.00 51.12 74.00 -22.88 34.48 37.35 15.96 38.13 0.96 308 327 Peak 5 9024.00 43.38 54.00 -10.62 26.74 37.35 15.96 38.13 0.96 308 327 Average

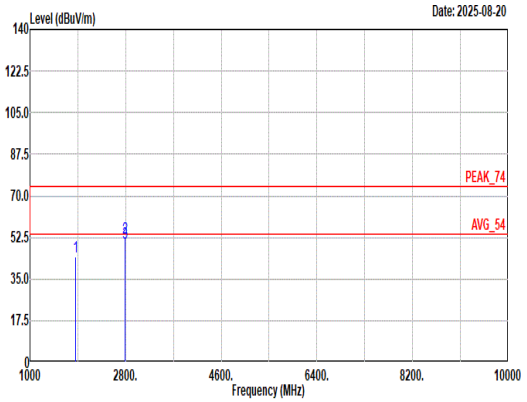
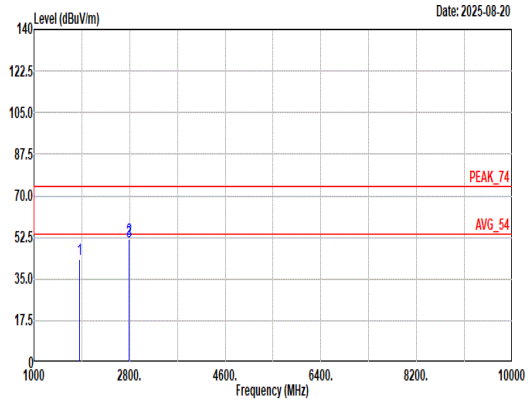
Mode	29	
	LF	
	902-928_Lora FSK _CH32_915.2MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 29 Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 30.00 33.24 40.00 -6.76 30.08 25.30 0.85 32.57 9.58 -- -- Peak 2 138.64 27.31 43.50 -16.19 30.86 17.46 1.92 32.52 9.59 -- -- Peak 3 262.80 30.41 46.00 -15.59 30.52 20.14 2.65 32.51 9.61 -- -- Peak 4 425.76 33.97 46.00 -12.03 30.74 22.70 3.49 32.59 9.63 -- -- Peak 5 499.48 36.25 46.00 -9.75 31.70 23.90 3.67 32.66 9.64 -- -- Peak 6 915.20 119.34 ------ ------ 106.90 29.40 4.98 31.57 9.63 100 172 Peak 7 975.75 45.85 54.00 -8.15 31.04 30.99 5.13 30.95 9.64 -- -- Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 29 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 33.36 40.00 -6.64 30.20 25.30 0.85 32.57 9.58 -- -- Peak 2 126.03 27.24 43.50 -16.26 30.98 17.40 1.80 32.52 9.58 -- -- Peak 3 258.92 31.95 46.00 -14.05 32.20 20.01 2.63 32.50 9.61 -- -- Peak 4 428.67 33.72 46.00 -12.28 30.47 22.70 3.51 32.59 9.63 -- -- Peak 5 514.03 37.85 46.00 -8.15 32.98 24.18 3.71 32.66 9.64 -- -- Peak 6 915.20 125.76 ------ ------ 113.32 29.40 4.98 31.57 9.63 113 239 Peak 7 965.08 42.95 54.00 -11.05 27.88 31.40 5.10 31.06 9.63 100 268 QP

Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	29	
	Harmonic	
	902-928_Lora FSK _CH32_915.2MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1830.40 43.88 74.00 -30.12 42.99 25.00 7.05 32.19 0.32 329 349 Peak 2 2745.60 41.05 74.00 -32.95 36.74 27.50 8.48 32.69 0.54 240 160 Peak 3 2745.60 31.09 54.00 -22.91 26.78 27.50 8.48 32.69 0.54 240 160 Average 4 9152.00 51.78 74.00 -22.22 35.33 37.30 16.01 38.36 0.98 230 296 Peak 5 9152.00 45.23 54.00 -8.77 28.78 37.30 16.01 38.36 0.98 230 296 Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1830.40 43.17 74.00 -30.83 42.28 25.00 7.05 32.19 0.32 332 14 Peak 2 2745.60 41.93 74.00 -32.07 37.62 27.50 8.48 32.69 0.54 240 165 Peak 3 2745.60 33.29 54.00 -20.71 28.98 27.50 8.48 32.69 0.54 240 165 Average 4 9152.00 51.07 74.00 -22.93 34.62 37.30 16.01 38.36 0.98 389 67 Peak 5 9152.00 43.67 54.00 -10.33 27.22 37.30 16.01 38.36 0.98 389 67 Average

Mode	30	
	LF	
	902-928_Lora FSK _CH63_927.6MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 30 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 32.74 40.00 -7.26 29.58 25.30 0.85 32.57 9.58 -- -- Peak 2 157.07 28.11 43.50 -15.39 32.48 16.50 2.09 32.56 9.60 -- -- Peak 3 264.74 30.22 46.00 -15.78 30.35 20.11 2.66 32.51 9.61 -- -- Peak 4 417.03 34.41 46.00 -11.59 31.37 22.54 3.45 32.58 9.63 -- -- Peak 5 514.03 36.60 46.00 -9.40 31.73 24.18 3.71 32.66 9.64 -- -- Peak 6 927.60 118.84 ------ ------ 105.79 29.85 5.01 31.44 9.63 150 165 Peak 7 965.08 47.06 54.00 -6.94 31.99 31.40 5.10 31.06 9.63 -- -- Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 30 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 33.00 40.00 -7.00 29.84 25.30 0.85 32.57 9.58 -- -- Peak 2 130.88 28.11 43.50 -15.39 31.69 17.50 1.85 32.52 9.59 -- -- Peak 3 261.83 30.02 46.00 -15.98 30.10 20.16 2.65 32.50 9.61 -- -- Peak 4 425.76 34.38 46.00 -11.62 31.15 22.70 3.49 32.59 9.63 -- -- Peak 5 512.09 36.90 46.00 -9.10 32.08 24.14 3.70 32.66 9.64 -- -- Peak 6 927.60 125.56 ------ ------ 112.51 29.85 5.01 31.44 9.63 113 242 Peak 7 967.99 44.29 54.00 -9.71 29.24 31.34 5.11 31.03 9.63 100 252 QP

Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	30	
	Harmonic	
	902-928_Lora FSK _CH63_927.6MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1855.20 44.12 74.00 -29.88 43.14 25.05 7.10 32.21 0.35 199 360 Peak 2 2782.80 52.25 74.00 -21.75 47.81 27.60 8.54 32.70 0.53 193 158 Peak 3 2782.80 50.44 54.00 -3.56 46.00 27.60 8.54 32.70 0.53 193 158 Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1855.20 43.10 74.00 -30.90 42.12 25.05 7.10 32.21 0.35 295 2 Peak 2 2782.80 52.04 74.00 -21.96 47.60 27.60 8.54 32.70 0.53 217 227 Peak 3 2782.80 50.56 54.00 -3.44 46.12 27.60 8.54 32.70 0.53 217 227 Average

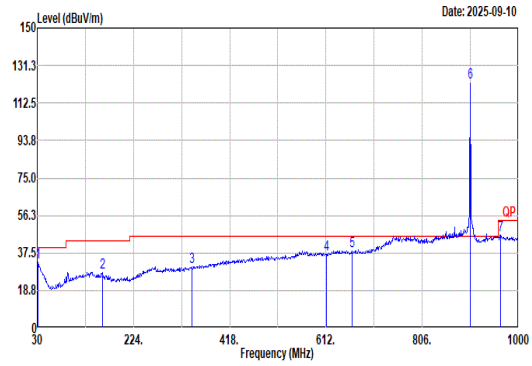
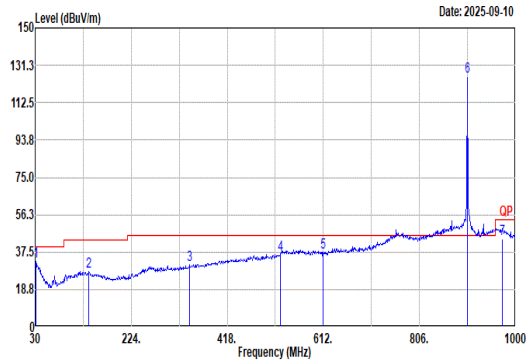
C4-0. Radiated Spurious Emission Test Modes

Mode	Band (MHz)	Antenna	Modulation	Channel	Frequency (MHz)	Data Rate	RU	Remark
Mode 31	902~928	0	Lora FSK	0	902.5	250 Kbps	-	-
Mode 32	902~928	0	Lora FSK	25	915	250 Kbps	-	-
Mode 33	902~928	0	Lora FSK	50	927.5	250 Kbps	-	-

C4-2. Summary of each worse mode

Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
31	Lora FSK	0	31.94	32.88	40.00	-7.12	V	Peak	Pass	-	LF
	Lora FSK	0	2707.50	43.97	54.00	-10.03	V	Avg.	Pass	-	Harmonic
32	Lora FSK	25	30.00	33.41	40.00	-6.59	H	Peak	Pass	-	LF
	Lora FSK	25	9150.00	45.95	54.00	-8.05	H	Avg.	Pass	-	Harmonic
33	Lora FSK	50	30.00	33.16	40.00	-6.84	H	Peak	Pass	-	LF

	Lora FSK	50	2782.50	49.75	54.00	-4.25	V	Avg.	Pass	-	Harmonic

Mode	**31**	
	LF	
	902~928_Lora FSK_CH0_902.5MHz	
ANT	**0**	
Pol.	**Horizontal**	**Vertical**
Peak		

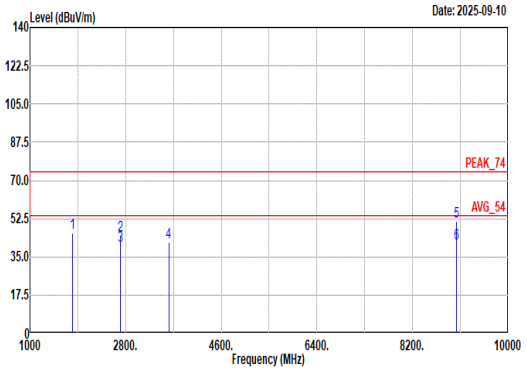
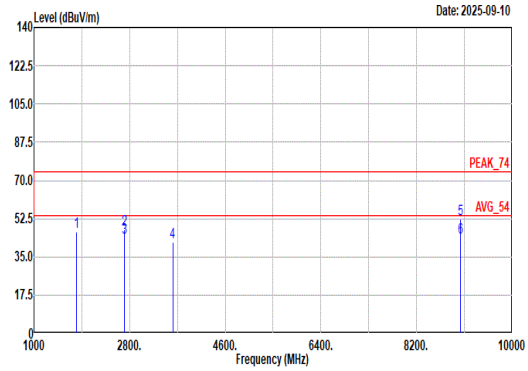
Site : 03CH22-HY
Condition: QP 3m Bilog_63304_241217 HORIZONTAL
Mode : 31

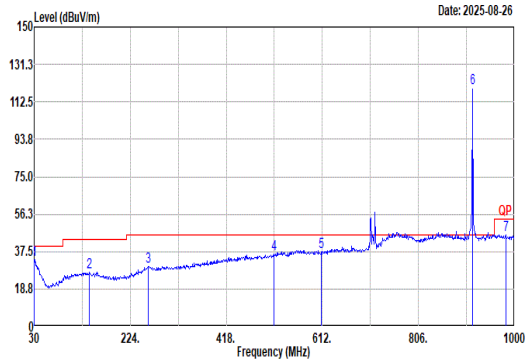
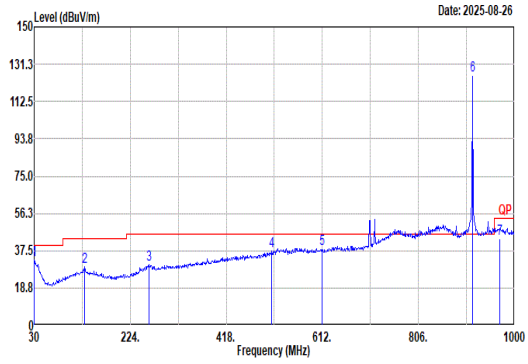
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	30.97	32.82	40.00	-7.18	30.52	24.43	0.86	32.57	9.58	--	--	Peak
2	160.95	28.01	43.50	-15.49	32.55	16.31	2.12	32.57	9.60	--	--	Peak
3	341.37	30.69	46.00	-15.31	30.43	20.15	3.03	32.54	9.62	--	--	Peak
4	612.97	36.89	46.00	-9.11	30.08	25.74	4.12	32.68	9.63	--	--	Peak
5	664.38	38.66	46.00	-7.34	31.02	26.39	4.29	32.66	9.62	--	--	Peak
6	902.50	122.77	------	------	110.68	29.20	4.95	31.69	9.63	153	252	Peak
7	964.11	46.57	54.00	-7.43	31.49	31.42	5.10	31.07	9.63	--	--	Peak

Site : 03CH22-HY
Condition: QP 3m Bilog_63304_241217 VERTICAL
Mode : 31

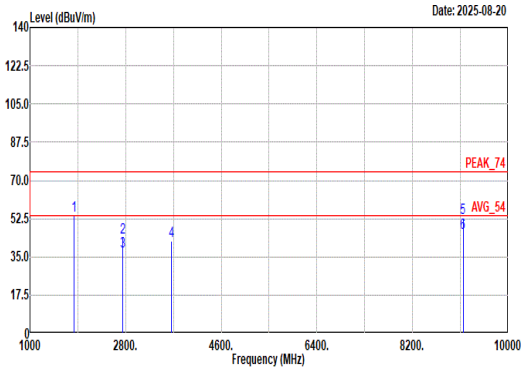
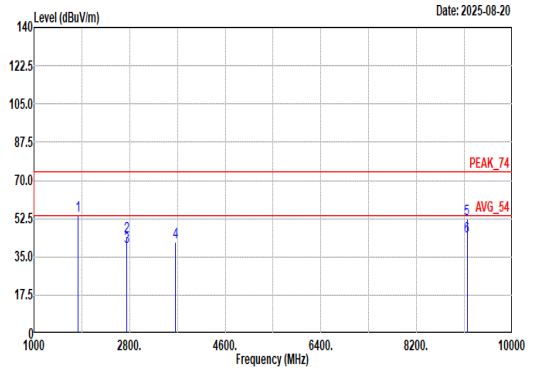
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	31.94	32.88	40.00	-7.12	30.98	24.02	0.87	32.57	9.58	--	--	Peak
2	138.64	27.69	43.50	-15.81	31.24	17.46	1.92	32.52	9.59	--	--	Peak
3	342.34	30.91	46.00	-15.09	30.61	20.19	3.03	32.54	9.62	--	--	Peak
4	524.70	36.44	46.00	-9.56	31.73	24.01	3.73	32.67	9.64	--	--	Peak
5	611.03	37.53	46.00	-8.47	30.70	25.78	4.11	32.69	9.63	--	--	Peak
6	902.50	125.92	------	------	113.83	29.20	4.95	31.69	9.63	108	332	Peak
7	973.81	44.13	54.00	-9.87	29.28	31.07	5.12	30.97	9.63	100	343	QP

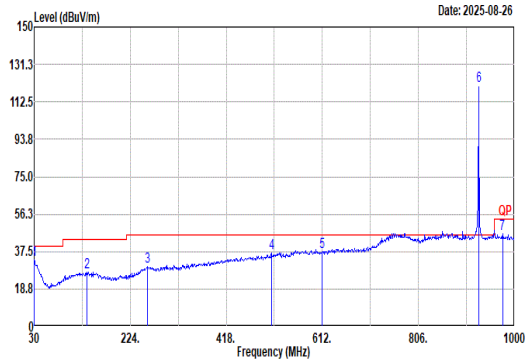
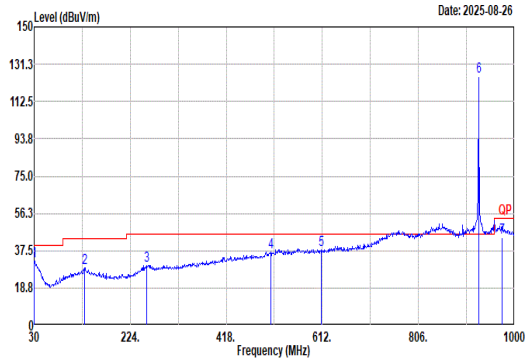
Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	31	
	Harmonic	
	902~928_Lora FSK_CH0_902.5MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 HORIZONTAL 1 1805.00 45.71 74.00 -28.29 45.11 24.75 6.99 32.17 0.30 310 110 Peak 2 2707.50 44.76 74.00 -29.24 40.48 27.50 8.43 32.69 0.55 224 224 Peak 3 2707.50 40.18 54.00 -13.82 35.90 27.50 8.43 32.69 0.55 224 224 Average 4 3610.00 41.55 74.00 -32.45 34.38 29.24 9.99 33.36 0.82 -- -- Peak 5 9025.00 51.24 74.00 -22.76 34.60 37.35 15.96 38.13 0.96 100 35 Peak 6 9025.00 41.29 54.00 -12.71 24.65 37.35 15.96 38.13 0.96 100 35 Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 VERTICAL 1 1805.00 46.69 74.00 -27.31 46.09 24.75 6.99 32.17 0.30 259 313 Peak 2 2707.50 47.32 74.00 -26.68 43.04 27.50 8.43 32.69 0.55 178 348 Peak 3 2707.50 43.97 54.00 -10.03 39.69 27.50 8.43 32.69 0.55 178 348 Average 4 3610.00 41.82 74.00 -32.18 34.65 29.24 9.99 33.36 0.82 -- -- Peak 5 9025.00 52.56 74.00 -21.44 35.92 37.35 15.96 38.13 0.96 192 360 Peak 6 9025.00 43.69 54.00 -10.31 27.05 37.35 15.96 38.13 0.96 192 360 Average

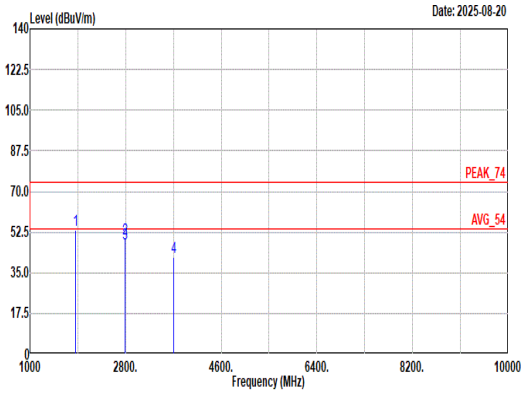
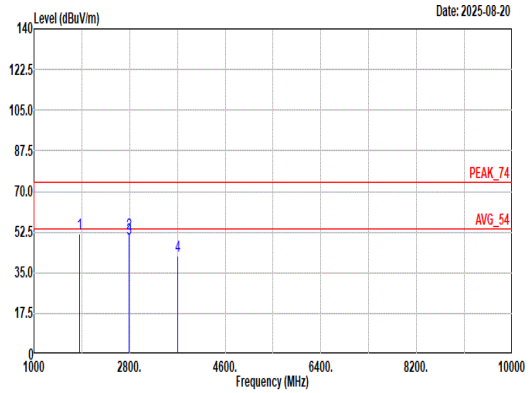
Mode	32	
	LF	
	902~928_Lora FSK_CH25_915MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 32 Freq Level Limit Line Margin Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 30.00 33.41 40.00 -6.59 30.25 25.30 0.85 32.57 9.58 -- -- Peak 2 141.55 27.40 43.50 -16.10 30.99 17.40 1.94 32.52 9.59 -- -- Peak 3 260.86 29.82 46.00 -16.18 29.89 20.18 2.64 32.50 9.61 -- -- Peak 4 515.00 36.08 46.00 -9.92 31.19 24.20 3.71 32.66 9.64 -- -- Peak 5 610.06 37.32 46.00 -8.68 30.47 25.80 4.11 32.69 9.63 -- -- Peak 6 915.20 119.34 ------ ------ 106.90 29.40 4.98 31.57 9.63 243 161 Peak 7 982.54 45.88 54.00 -8.12 31.14 30.85 5.14 30.89 9.64 -- -- Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 32 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 32.73 40.00 -7.27 29.57 25.30 0.85 32.57 9.58 -- -- Peak 2 131.85 29.17 43.50 -14.33 32.83 17.41 1.86 32.52 9.59 -- -- Peak 3 261.83 30.34 46.00 -15.66 30.42 20.16 2.65 32.50 9.61 -- -- Peak 4 510.15 37.57 46.00 -8.43 32.79 24.10 3.70 32.66 9.64 -- -- Peak 5 611.03 38.21 46.00 -7.79 31.38 25.78 4.11 32.69 9.63 -- -- Peak 6 915.20 125.45 ------ ------ 113.01 29.40 4.98 31.57 9.63 114 241 Peak 7 970.90 43.56 54.00 -10.44 28.57 31.25 5.11 31.00 9.63 100 263 QP

Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	32	
	Harmonic	
	902~928_Lora FSK_CH25_915MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1830.00 53.98 74.00 -20.02 53.10 25.00 7.04 32.19 0.32 356 29 Peak 2 2745.00 43.83 74.00 -30.17 39.52 27.50 8.48 32.69 0.54 282 182 Peak 3 2745.00 37.42 54.00 -16.58 33.11 27.50 8.48 32.69 0.54 282 182 Average 4 3660.00 42.31 74.00 -31.69 35.00 29.44 10.05 33.38 0.77 -- -- Peak 5 9150.00 52.57 74.00 -21.43 36.12 37.30 16.01 38.35 0.98 234 301 Peak 6 9150.00 45.95 54.00 -8.05 29.50 37.30 16.01 38.35 0.98 234 301 Average	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1830.00 53.86 74.00 -20.14 52.98 25.00 7.04 32.19 0.32 370 3 Peak 2 2745.00 44.59 74.00 -29.41 40.28 27.50 8.48 32.69 0.54 191 166 Peak 3 2745.00 39.45 54.00 -14.55 35.14 27.50 8.48 32.69 0.54 191 166 Average 4 3660.00 41.60 74.00 -32.40 34.29 29.44 10.05 33.38 0.77 -- -- Peak 5 9150.00 52.56 74.00 -21.44 36.11 37.30 16.01 38.35 0.98 301 325 Peak 6 9150.00 44.28 54.00 -9.72 27.83 37.30 16.01 38.35 0.98 301 325 Average

Mode	33	
	LF	
	902~928_Lora FSK_CH50_927.5MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 HORIZONTAL Mode : 33 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 33.16 40.00 -6.84 30.00 25.30 0.85 32.57 9.58 -- -- Peak 2 136.70 27.26 43.50 -16.24 30.96 17.33 1.90 32.52 9.59 -- -- Peak 3 258.92 30.02 46.00 -15.98 30.27 20.01 2.63 32.50 9.61 -- -- Peak 4 509.18 36.63 46.00 -9.37 31.86 24.10 3.69 32.66 9.64 -- -- Peak 5 611.03 37.47 46.00 -8.53 30.64 25.78 4.11 32.69 9.63 -- -- Peak 6 927.50 120.81 ------ ------ 107.76 29.85 5.01 31.44 9.63 144 282 Peak 7 975.75 46.51 54.00 -7.49 31.70 30.99 5.13 30.95 9.64 -- -- Peak	 Site : 03CH22-HY Condition: QP 3m Bilog_63304_241217 VERTICAL Mode : 33 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 32.47 40.00 -7.53 29.31 25.30 0.85 32.57 9.58 -- -- Peak 2 131.85 29.12 43.50 -14.38 32.78 17.41 1.86 32.52 9.59 -- -- Peak 3 256.98 30.03 46.00 -15.97 30.64 19.66 2.62 32.50 9.61 -- -- Peak 4 507.24 36.73 46.00 -9.27 31.96 24.10 3.69 32.66 9.64 -- -- Peak 5 610.06 38.13 46.00 -7.87 31.28 25.80 4.11 32.69 9.63 -- -- Peak 6 927.50 125.20 ------ ------ 112.15 29.85 5.01 31.44 9.63 112 238 Peak 7 974.78 43.89 54.00 -10.11 29.09 31.01 5.12 30.96 9.63 100 253 QP	

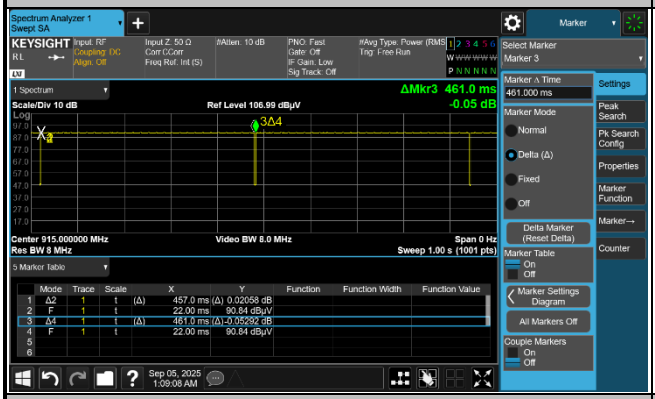
Remark: The unwanted signal falls within the non-restricted band and meet the requirements of 15.247 (d).

Mode	33	
	Harmonic	
	902~928_Lora FSK_CH50_927.5MHz	
ANT	0	
Pol.	Horizontal	Vertical
Peak Avg	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1855.00 53.55 74.00 -20.45 52.57 25.05 7.10 32.21 0.35 338 34 Peak 2 2782.50 49.85 74.00 -24.15 45.42 27.60 8.53 32.70 0.53 235 156 Peak 3 2782.50 47.78 54.00 -6.22 43.35 27.60 8.53 32.70 0.53 235 156 Average 4 3710.00 41.71 74.00 -32.29 34.24 29.66 10.10 33.39 0.71 -- -- Peak	 Site : 03CH22-HY Condition: PEAK_74 3m DRH18-E_LE2C04A18EN_250520 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 1855.00 51.88 74.00 -22.12 50.90 25.05 7.10 32.21 0.35 357 24 Peak 2 2782.50 51.68 74.00 -22.32 47.25 27.60 8.53 32.70 0.53 214 159 Peak 3 2782.50 49.75 54.00 -4.25 45.32 27.60 8.53 32.70 0.53 214 159 Average 4 3710.00 42.07 74.00 -31.93 34.60 29.66 10.10 33.39 0.71 -- -- Peak

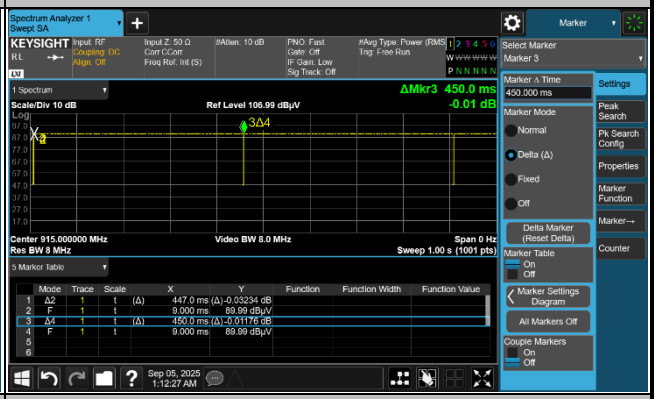
Appendix D. Duty Cycle Plots

Band	Duty Cycle (%)	T(us)	1/T(kHz)	VBW Setting
Lora FHSS 125K_SF7	99.13	-	-	10Hz
Lora FHSS 125K_SF8	99.33	-	-	10Hz
Lora FHSS 125K_SF9	99.53	-	-	10Hz
FSK 50Kbps FHSS	93.11	73000	0.01	11Hz
FSK 150Kbps FHSS	81.82	24300	0.04	43Hz
FSK 250Kbps FHSS	73.67	14630	0.07	75Hz

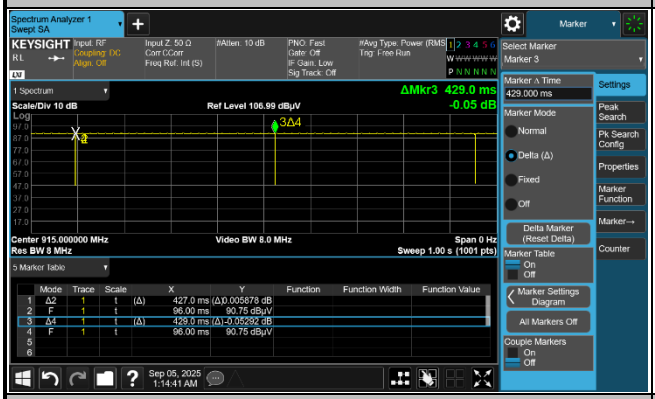
Lora FHSS 125K_SF7



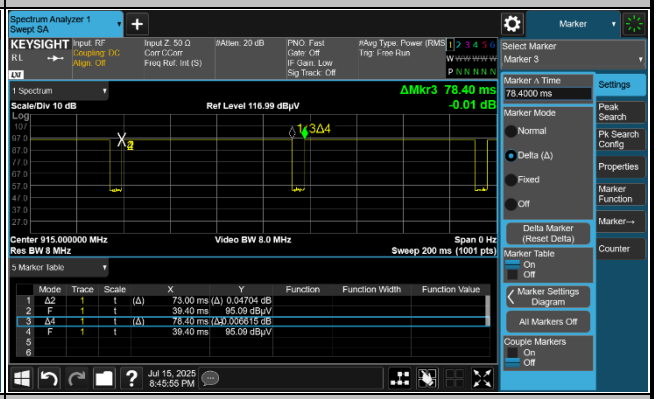
Lora FHSS 125K_SF8



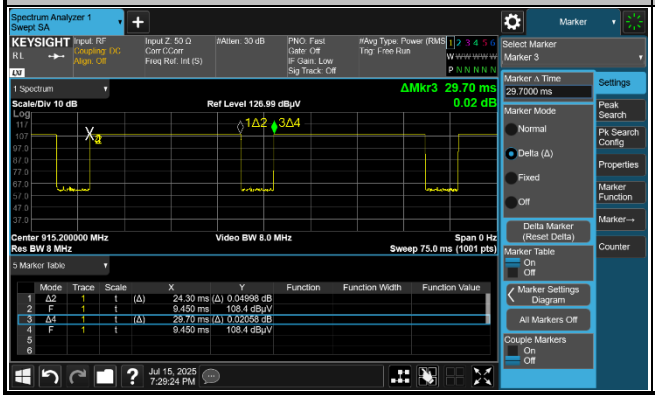
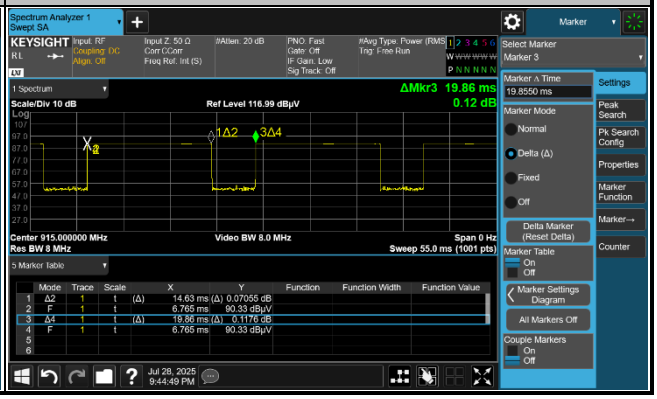
Lora FHSS 125K_SF9



FSK 50Kbps FHSS



FSK 150Kbps FHSS



FSK 250Kbps FHSS