

**FCC RADIO TEST REPORT****Report No. : FG580522**

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
DC Power Supply	GW Instek	PSS-2005	EL890089	1V~20V 0.5A~5A	Feb. 07, 2025	Aug. 11, 2025~ Aug. 20, 2025	Feb. 06, 2026	Conducted (TH03-HY)
Signal Analyzer	Rohde & Schwarz	FSV3044	101049	10Hz~44GHz	Jul. 04, 2025	Aug. 11, 2025~ Aug. 20, 2025	Jul. 03, 2026	Conducted (TH03-HY)
Signal Analyzer	Rohde & Schwarz	FSV3044	101691	10Hz~44GHz	Oct. 02, 2024	Aug. 11, 2025~ Aug. 20, 2025	Oct. 01, 2025	Conducted (TH03-HY)
Temperature Chamber	ESPEC	LHU-113	101200586 0	-20°C ~85°C	Dec. 10, 2024	Aug. 11, 2025~ Aug. 20, 2025	Dec. 09, 2025	Conducted (TH03-HY)
Hygrometer	TECPEL	DTM-303B	TP200886	NA	Mar. 03, 2025	Aug. 11, 2025~ Aug. 20, 2025	Mar. 02, 2026	Conducted (TH03-HY)
Base Station (Measure)	Anritsu	MT8821C	626211672 5	LTE	Oct. 17, 2024	Aug. 11, 2025~ Aug. 20, 2025	Oct. 16, 2025	Conducted (TH03-HY)
Base Station (Measure)	Anritsu	MT8000A	626214827 5	FR1	Oct. 20, 2024	Aug. 11, 2025~ Aug. 20, 2025	Oct. 19, 2025	Conducted (TH03-HY)
Coupler	MVE	MVE-4816	A400014	N/A	Mar. 07, 2025	Aug. 11, 2025~ Aug. 20, 2025	Mar. 06, 2026	Conducted (TH03-HY)
Power divider	Anritsu	K241C	2143398	9KHz~40GHz	Jun. 13, 2025	Aug. 11, 2025~ Aug. 20, 2025	Jun. 12, 2026	Conducted (TH03-HY)
RF Cable	MVE	MCBL-LL403 P.50	E80002C	9KHz~40GHz	Aug. 01, 2025	Aug. 11, 2025~ Aug. 20, 2025	Jul. 31, 2026	Conducted (TH03-HY)
Software 1	Sporton	FCC 5GNR_FSV30 44_20231106	N/A	Conducted Test Item	N/A	Aug. 11, 2025~ Aug. 20, 2025	N/A	Conducted (TH03-HY)



6 Measurement Uncertainty

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.3 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 6 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.7 dB
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Uncertainty of Radiated Emission Measurement (6 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.1 dB
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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power and EIRP)

NR n48 Maximum Average Power [dBm] (GT - LC = -2.5 dB)														
BW	RB	RB	Mod	Antenna 3			Antenna 1			Combine			EIRP	EIRP
(MHz)	Size	Offset		Lowest	Middle	Highest	Lowest	Middle	Highest	Lowest	Middle	Highest	(dBm)	(W)
10	1	1	QPSK	19.38	19.25	19.30	18.59	18.61	18.79	22.01	21.95	22.06	19.67	0.0927
10	1	22		19.05	19.41	19.19	18.32	18.89	18.38	21.71	22.17	21.81		
10	12	6		19.06	19.07	19.10	18.50	18.79	18.60	21.80	21.94	21.87		
10	1	0		17.92	17.90	17.66	16.98	17.37	17.18	20.49	20.65	20.44		
10	1	23		17.55	17.83	17.59	16.90	17.34	16.94	20.25	20.60	20.29		
10	24	0		17.60	17.53	17.64	16.91	17.42	17.03	20.28	20.49	20.36		
10	1	1	16-QAM	18.59	18.51	18.40	18.02	18.39	18.05	21.32	21.46	21.24	18.96	0.0787
10	1	1	64-QAM	17.12	17.21	17.15	16.32	16.59	16.51	19.75	19.92	19.85		
10	1	1	256-QAM	14.01	14.15	14.21	13.37	13.65	13.63	16.71	16.92	16.94		
Limit	EIRP < 23dBm/10MHz			Result									Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = -2.5 dB)														
BW (MHz)	RB Size	RB Offset	Mod	Antenna 3			Antenna 1			Combine			EIRP (dBm)	EIRP (W)
				Lowest	Middle	Highest	Lowest	Middle	Highest	Lowest	Middle	Highest		
15	1	1	QPSK	15.02	19.19	19.27	14.16	18.73	18.79	17.62	21.98	22.05	19.63	0.0918
15	1	36		19.36	19.30	14.92	18.59	18.94	14.12	22.00	22.13	17.55		
15	19	9		19.07	19.04	19.16	18.59	18.80	18.70	21.85	21.93	21.95		
15	1	0		15.10	17.75	17.95	14.06	17.33	17.29	17.62	20.56	20.64		
15	1	37		17.65	17.84	14.92	17.16	17.41	14.14	20.42	20.64	17.56		
15	38	0		14.59	17.44	14.61	14.04	17.32	14.24	17.33	20.39	17.44		
15	1	1	16-QAM	14.61	18.71	18.58	14.28	18.54	18.47	17.46	21.64	21.54	19.14	0.0820
15	1	1	64-QAM	14.75	17.29	17.31	13.97	16.67	16.57	17.39	20.00	19.97		
15	1	1	256-QAM	14.33	14.26	14.18	13.51	13.74	13.75	16.95	17.02	16.98		
Limit	EIRP < 23dBm/10MHz			Result									Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = -2.5 dB)														
BW	RB	RB	Mod	Antenna 3			Antenna 1			Combine			EIRP	EIRP
(MHz)	Size	Offset		Lowest	Middle	Highest	Lowest	Middle	Highest	Lowest	Middle	Highest	(dBm)	(W)
20	1	1	QPSK	14.61	19.47	19.42	14.08	18.77	18.77	17.36	22.14	22.12	19.72	0.0938
20	1	49		19.44	19.53	14.69	18.69	18.86	14.11	22.09	22.22	17.42		
20	25	12		19.01	19.06	19.01	18.52	18.83	18.69	21.78	21.96	21.86		
20	1	0		15.04	17.81	17.73	14.11	17.31	17.24	17.61	20.58	20.50		
20	1	50		17.64	17.90	14.87	17.07	17.30	14.15	20.37	20.62	17.54		
20	51	0		14.64	17.62	14.52	14.02	17.28	14.16	17.35	20.46	17.35		
20	1	1	16-QAM	14.68	18.73	18.63	14.23	18.45	18.34	17.47	21.60	21.50	19.10	0.0813
20	1	1	64-QAM	14.86	17.38	17.31	13.93	16.80	16.58	17.43	20.11	19.97		
20	1	1	256-QAM	14.33	14.35	14.30	13.60	13.80	13.68	16.99	17.09	17.01		
Limit	EIRP < 23dBm/10MHz			Result									Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = -2.5 dB)														
BW	RB	RB	Mod	Antenna 3			Antenna 1			Combine			EIRP	EIRP
(MHz)	Size	Offset		Lowest	Middle	Highest	Lowest	Middle	Highest	Lowest	Middle	Highest	(dBm)	(W)
30	1	1	QPSK	9.38	17.13	9.57	8.69	16.47	8.94	12.06	19.82	12.28	19.55	0.0902
30	1	76		9.17	16.97	9.25	8.62	16.33	8.68	11.91	19.67	11.98		
30	39	19		9.05	19.15	9.18	8.62	18.92	8.82	11.85	22.05	12.01		
30	1	0		9.23	17.07	9.49	8.78	16.46	8.86	12.02	19.79	12.20		
30	1	77		9.28	16.96	9.28	8.69	16.41	8.59	12.01	19.70	11.96		
30	78	0		9.07	16.69	9.19	8.69	16.37	8.82	11.89	19.54	12.02		
30	1	1	16-QAM	9.40	17.23	9.57	8.81	16.54	9.12	12.13	19.91	12.36	17.41	0.0551
30	1	1	64-QAM	9.31	16.92	9.72	8.71	16.13	8.85	12.03	19.55	12.32		
30	1	1	256-QAM	9.31	14.49	9.55	8.57	13.88	8.77	11.97	17.21	12.19		
Limit	EIRP < 23dBm/10MHz			Result									Pass	

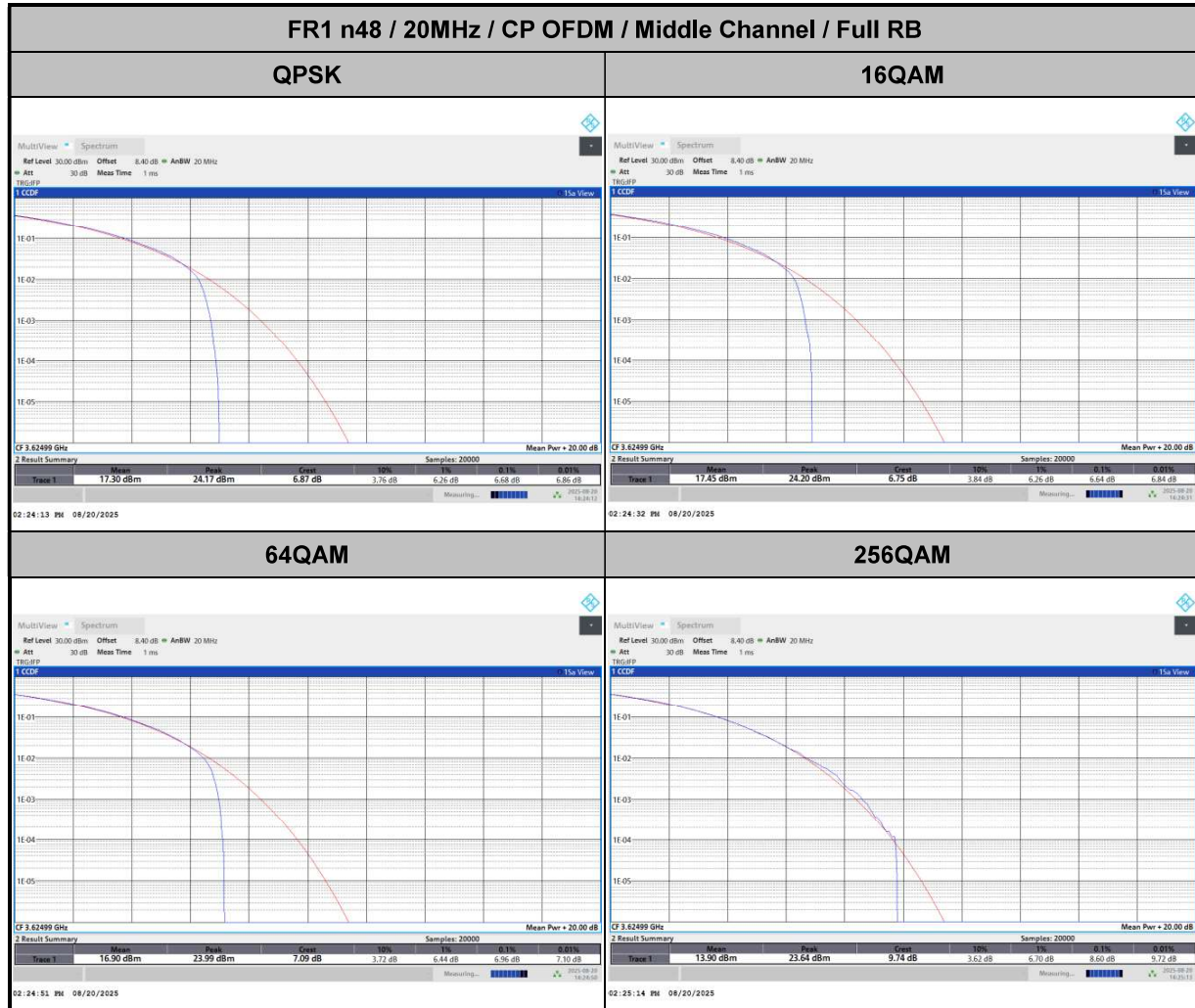
Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = -2.5 dB)														
BW	RB	RB	Mod	Antenna 3			Antenna 1			Combine			EIRP	EIRP
(MHz)	Size	Offset		Lowest	Middle	Highest	Lowest	Middle	Highest	Lowest	Middle	Highest	(dBm)	(W)
40	1	1	QPSK	9.37	17.18	9.54	8.72	16.46	8.73	12.07	19.85	12.16	19.50	0.0891
40	1	104		9.59	17.05	9.36	8.88	16.45	8.62	12.26	19.77	12.02		
40	53	26		9.08	19.15	9.24	8.75	18.83	8.82	11.93	22.00	12.05		
40	1	0		9.47	16.91	9.46	8.75	16.33	8.83	12.14	19.64	12.17		
40	1	105		9.48	16.91	9.36	8.93	16.31	8.73	12.22	19.63	12.07		
40	106	0		9.10	16.29	9.19	8.79	15.87	8.72	11.96	19.10	11.97		
40	1	1	16-QAM	9.22	16.96	9.42	8.90	16.42	8.96	12.07	19.71	12.21	17.21	0.0526
40	1	1	64-QAM	9.23	16.97	9.45	8.65	16.31	8.64	11.96	19.66	12.07		
40	1	1	256-QAM	9.36	14.54	9.47	8.68	13.76	8.68	12.04	17.18	12.10		
Limit	EIRP < 23dBm/10MHz			Result									Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

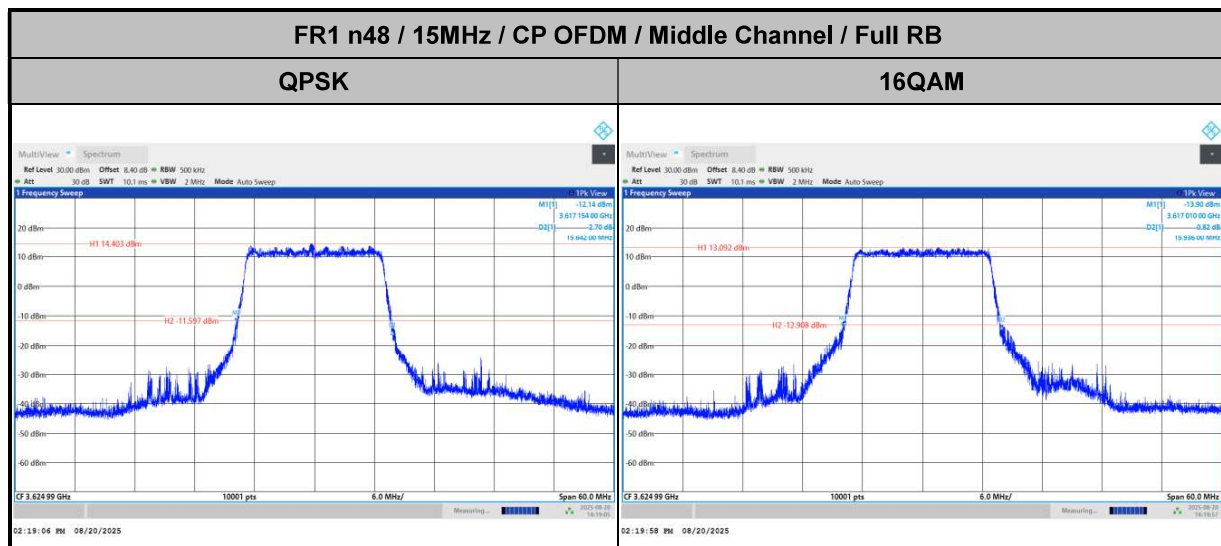
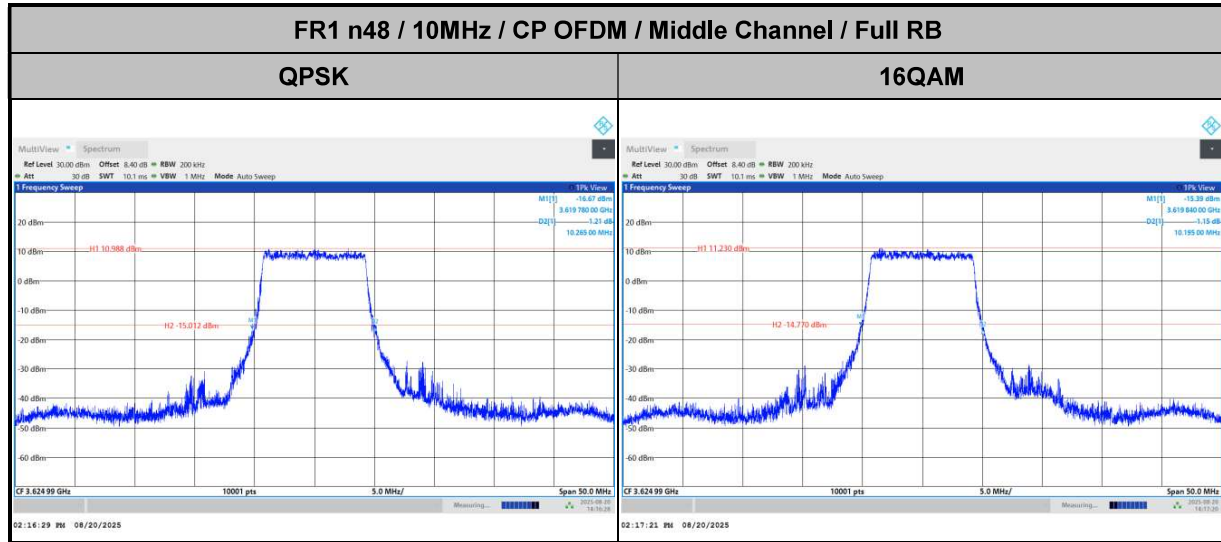
**FR1 n48****<MIMO Mode>****MIMO <Ant. 3+1> (Ant. 3)****Peak-to-Average Ratio**

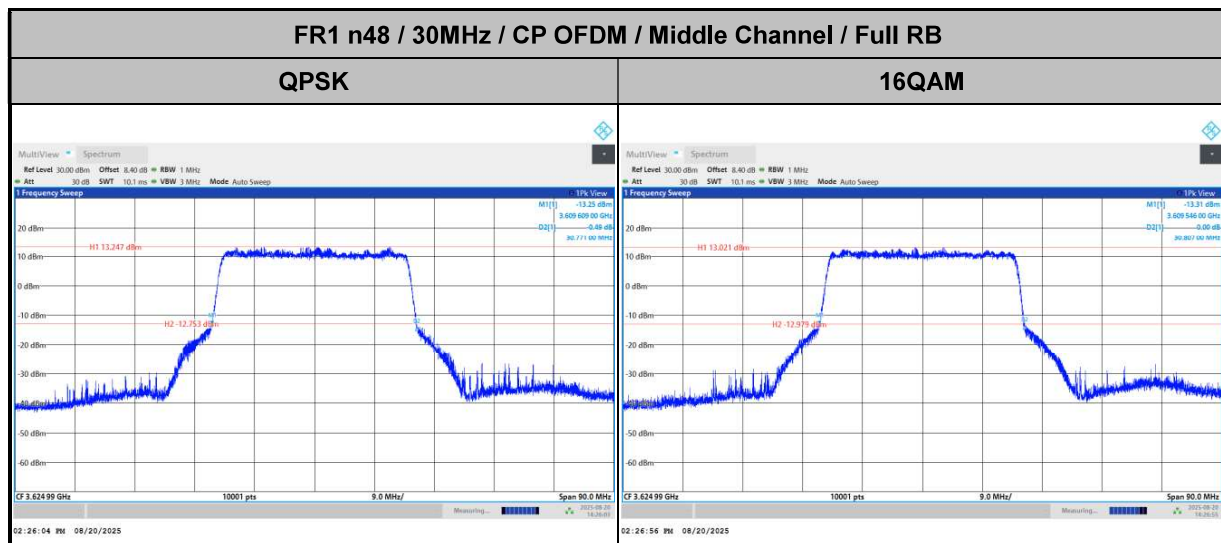
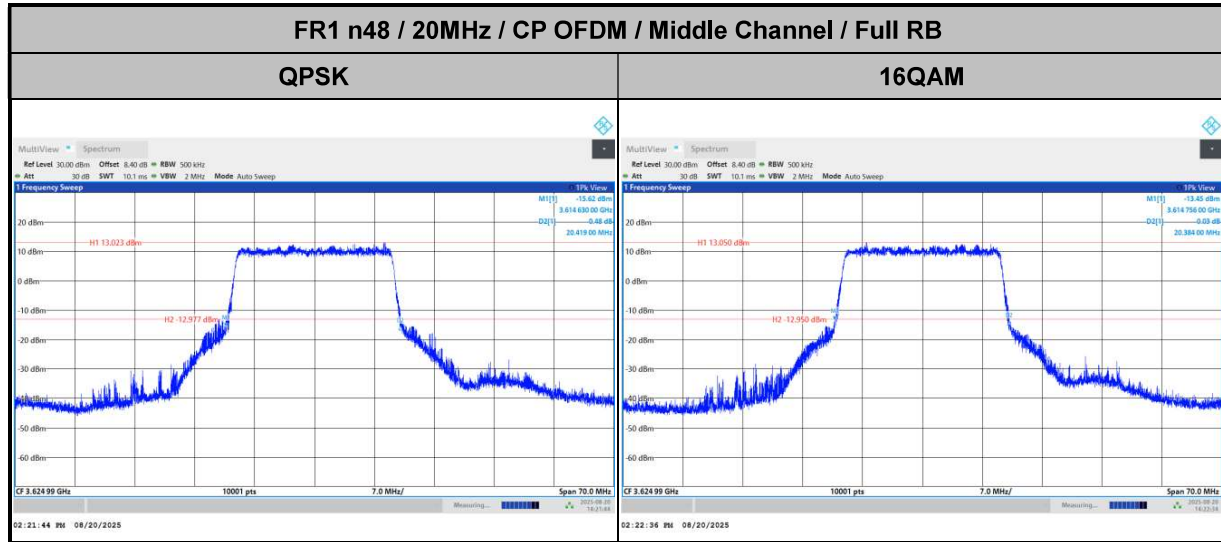
Mode	FR1 n48 / 20MHz / CP OFDM				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	6.68	6.64	6.96	8.60	PASS

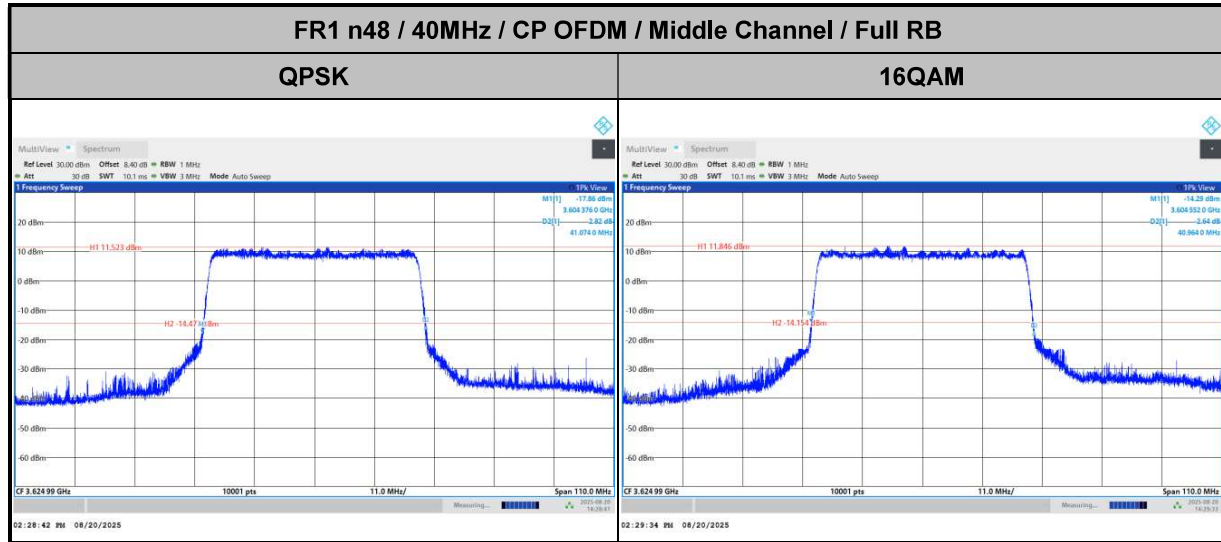


**26dB Bandwidth**

Mode	FR1 n48 : 26dB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	10.26	10.19	15.64	15.93	20.41	20.38	-	-
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	30.77	30.80	41.07	40.96	-	-	-	-
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	-	-	-	-

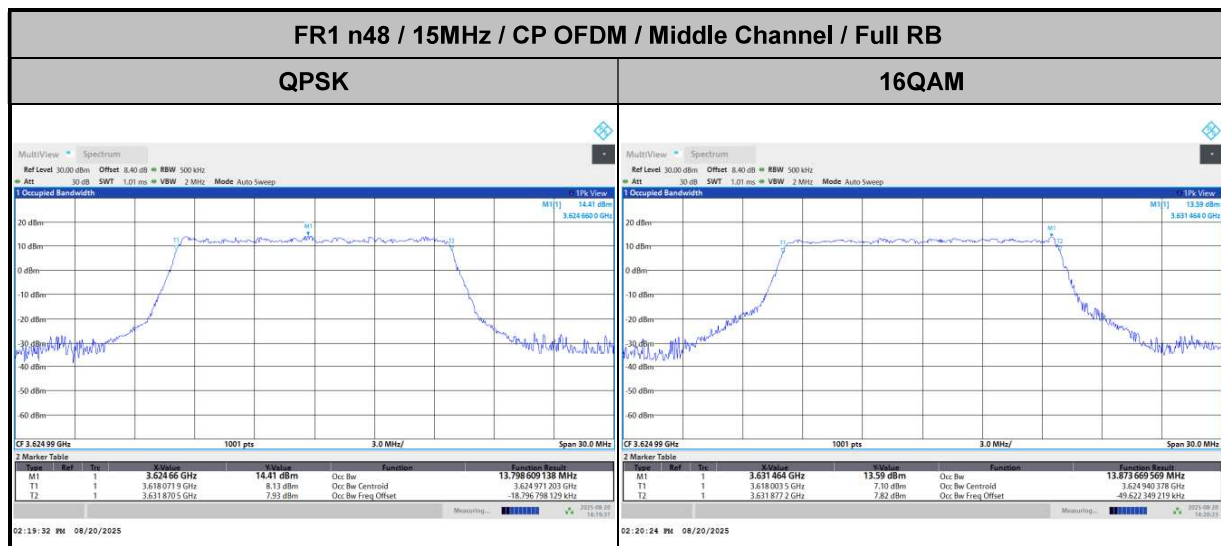
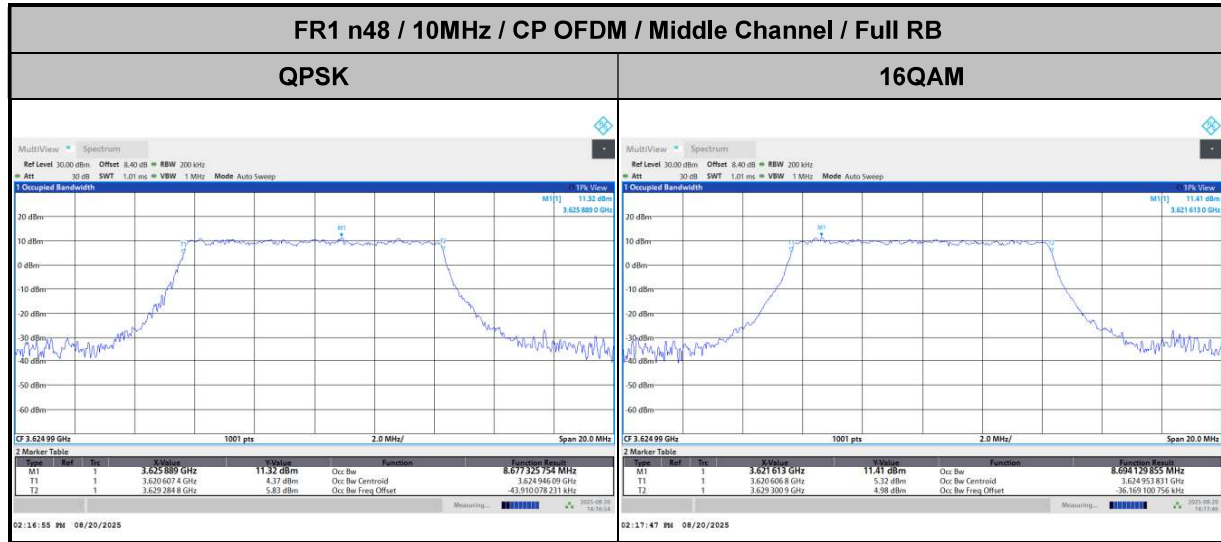


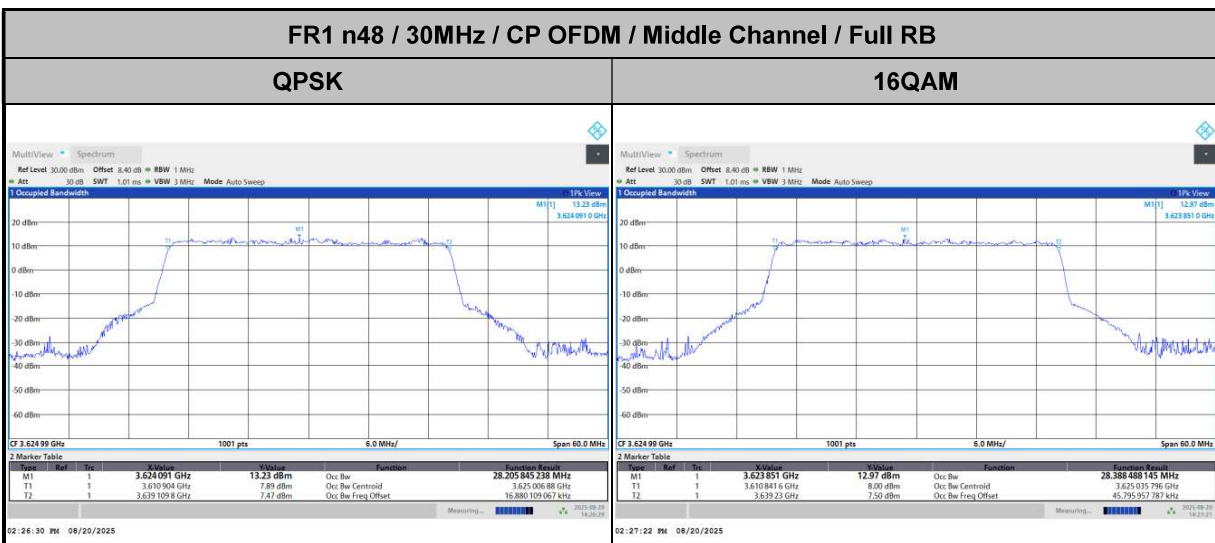
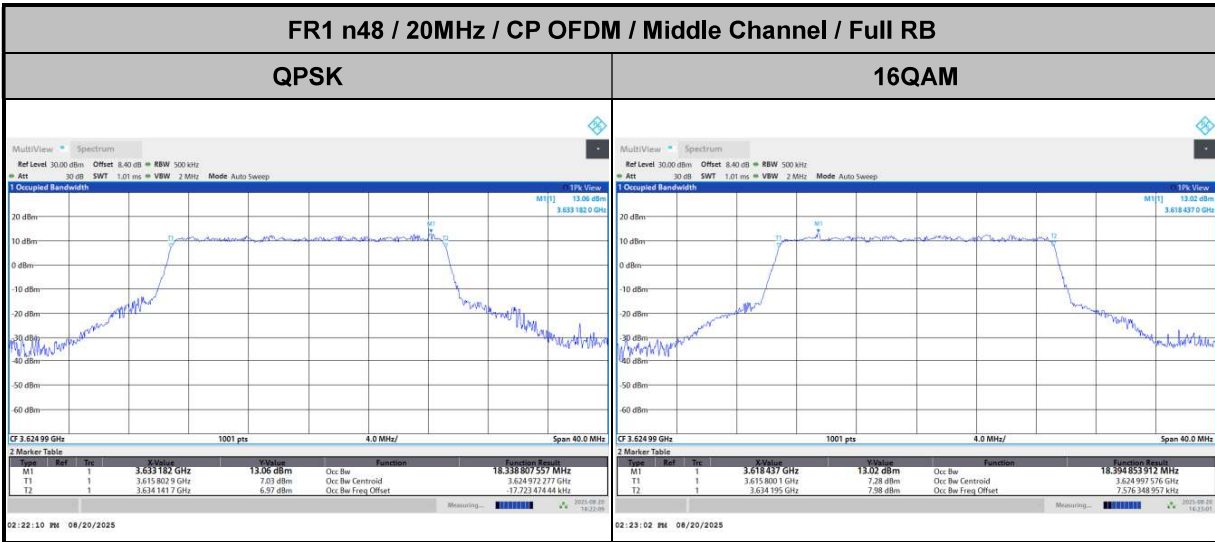


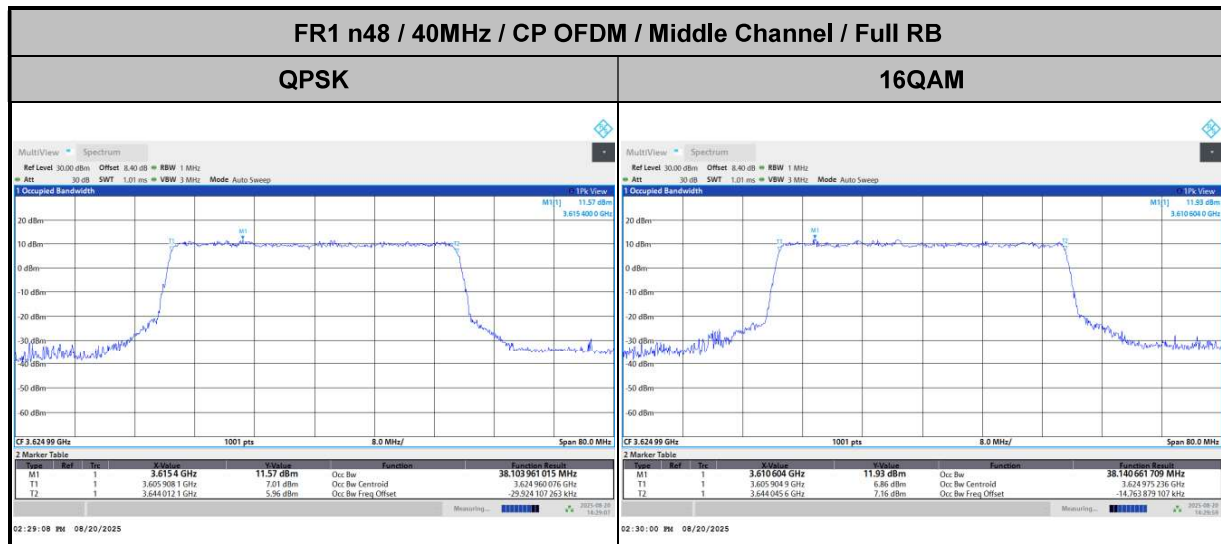


**Occupied Bandwidth**

Mode	FR1 n48 : OB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	8.67	8.69	13.79	13.87	18.33	18.39	-	-
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	28.20	28.38	38.10	38.14	-	-	-	-
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	-	-	-	-

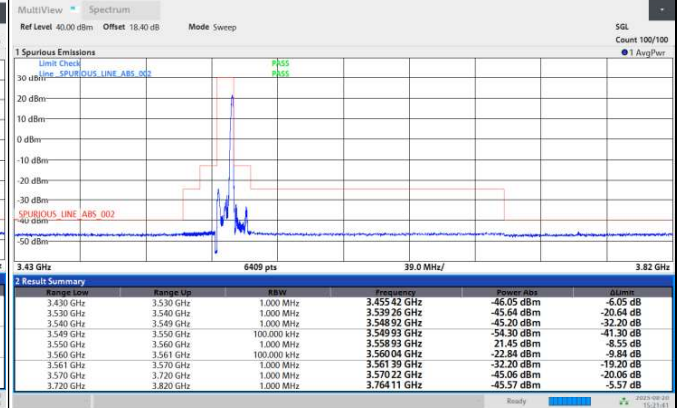
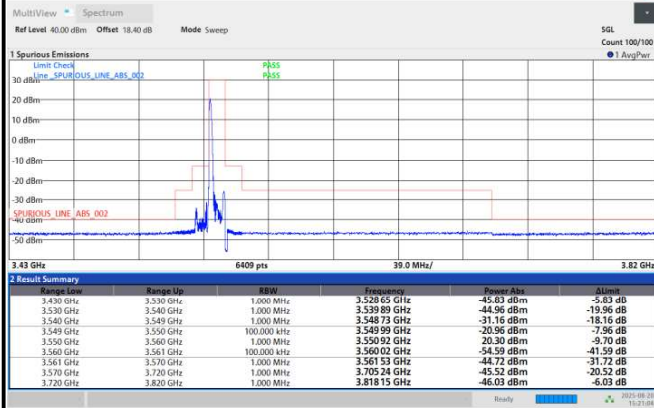
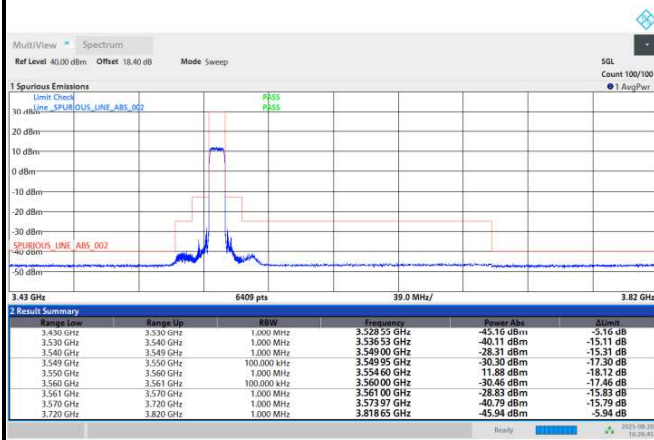






**Unwanted Emission (MASK)**

FR1 n48 / 10MHz / CP OFDM / QPSK

Lowest Channel**1RB0****1RBmax****Full RB**

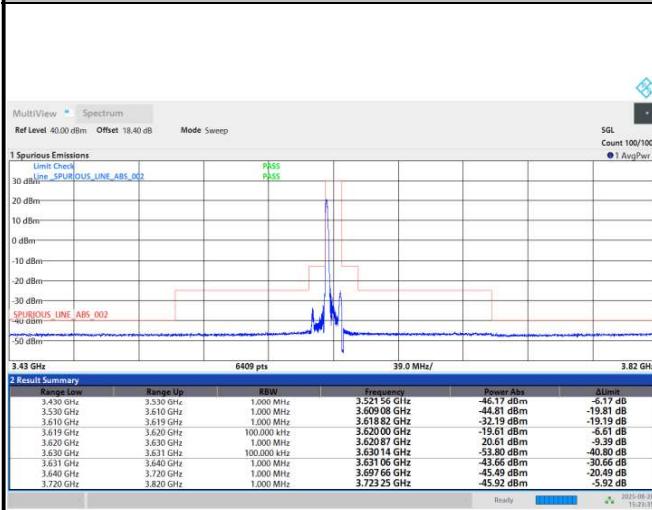


FR1 n48 / 10MHz / CP OFDM / QPSK

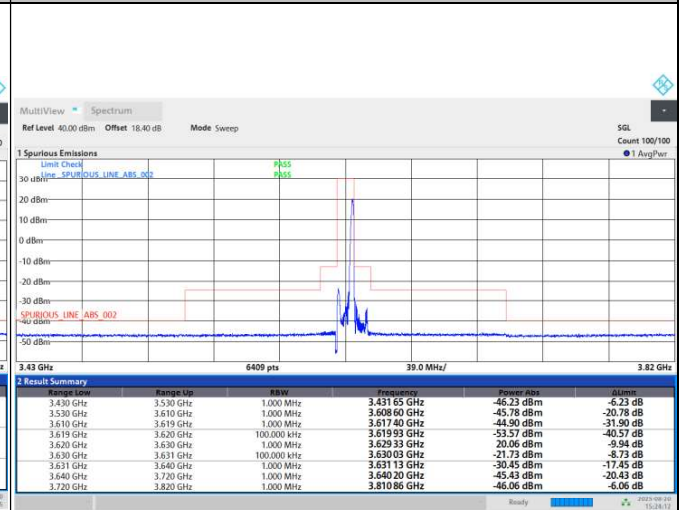
Middle Channel

1RB0

1RBmax

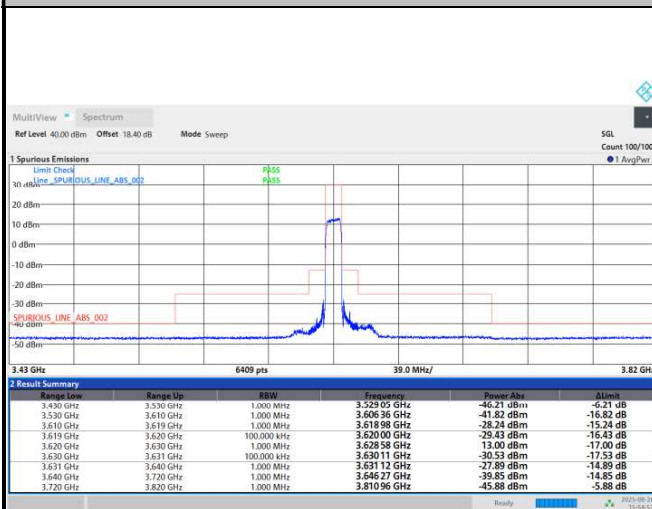


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03:24:13 PM 08/20/2025

Full RB



03:54:58 PM 08/20/2025

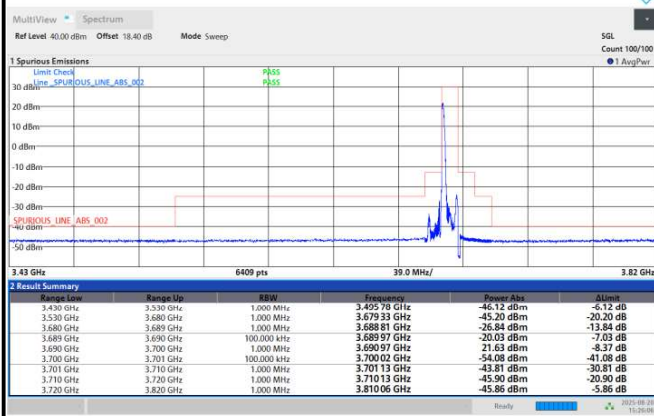


FR1 n48 / 10MHz / CP OFDM / QPSK

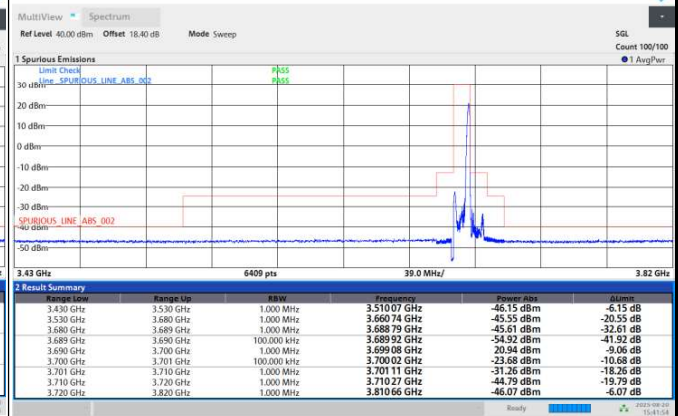
Highest Channel

1RB0

1RBmax

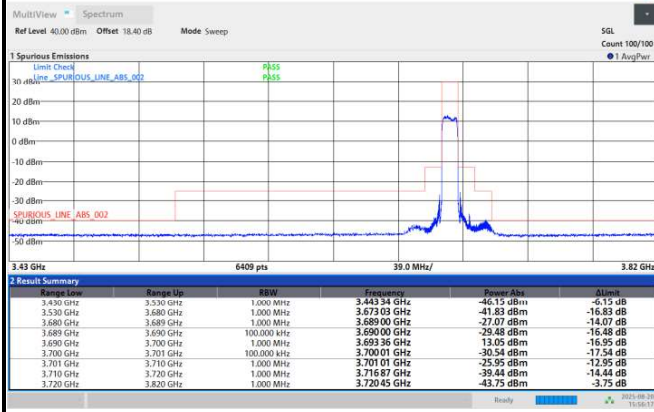


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03:41:55 PM 08/20/2025

Full RB



03:56:17 PM 08/20/2025

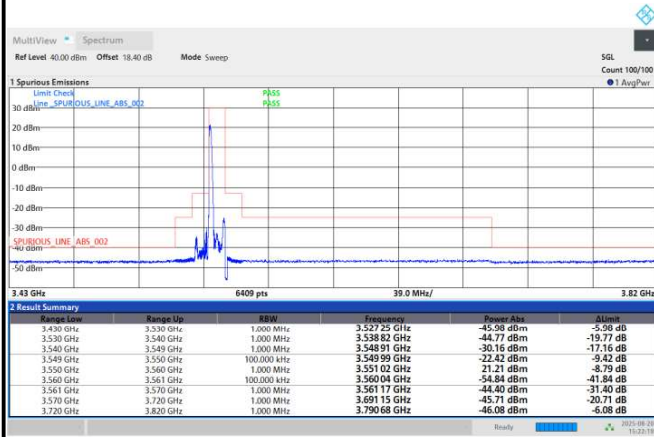


FR1 n48 / 10MHz / CP OFDM / 16QAM

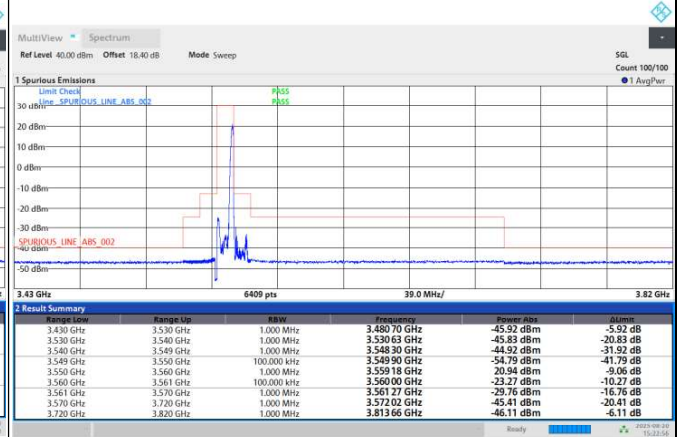
Lowest Channel

1RB0

1RBmax

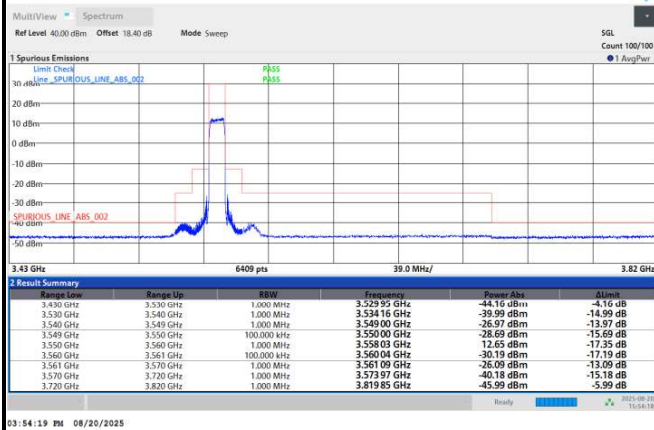


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03:22:57 PM 08/20/2025

Full RB



03:54:19 PM 08/20/2025

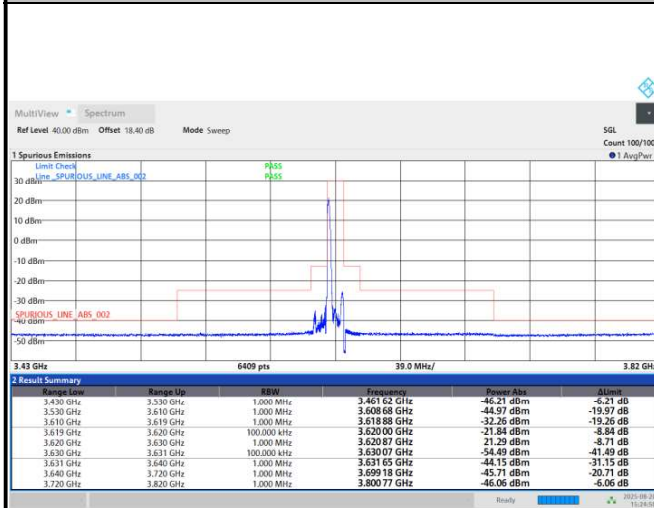


FR1 n48 / 10MHz / CP OFDM / 16QAM

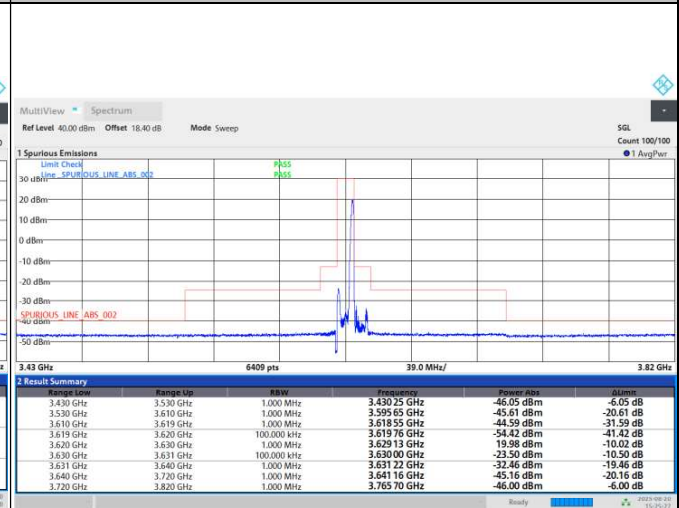
Middle Channel

1RB0

1RBmax

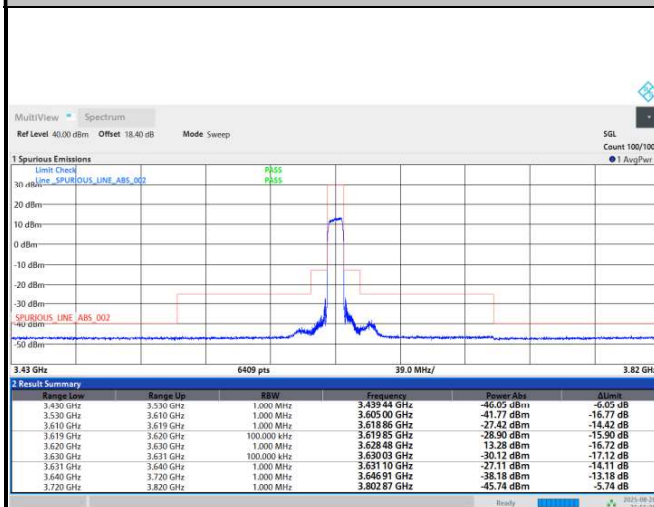


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03:25:28 PM 08/20/2025

Full RB



03:55:37 PM 08/20/2025

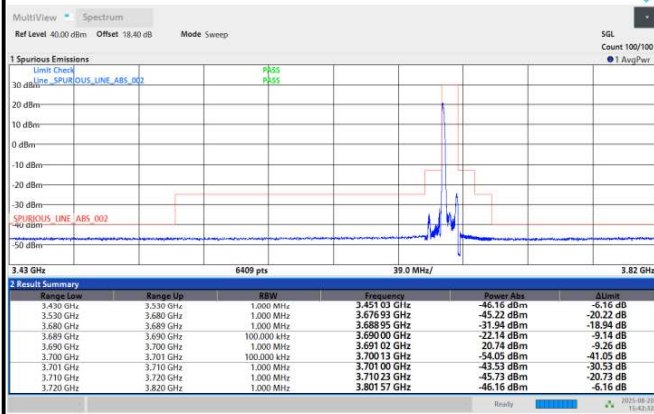


FR1 n48 / 10MHz / CP OFDM / 16QAM

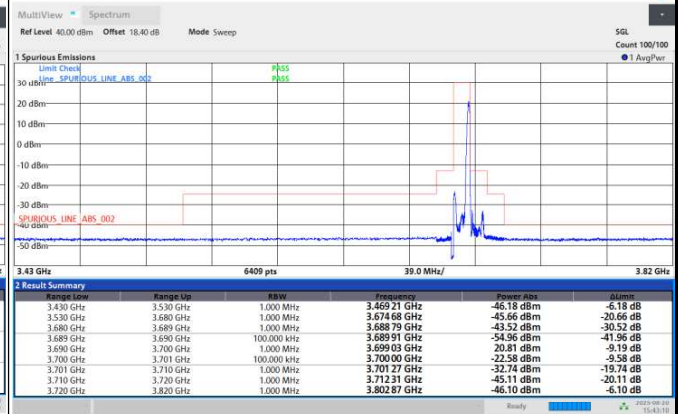
Highest Channel

1RB0

1RBmax

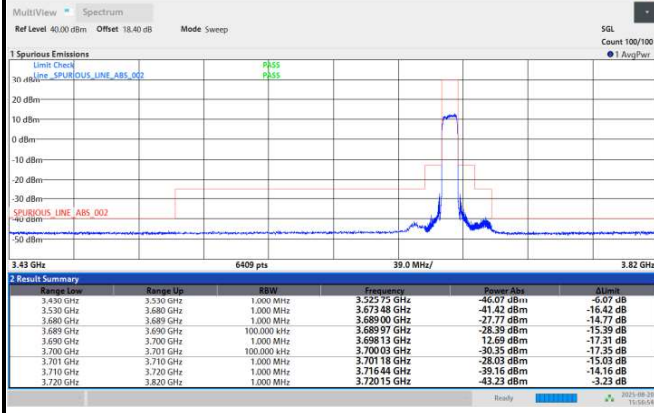


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03:43:11 PM 08/20/2025

Full RB



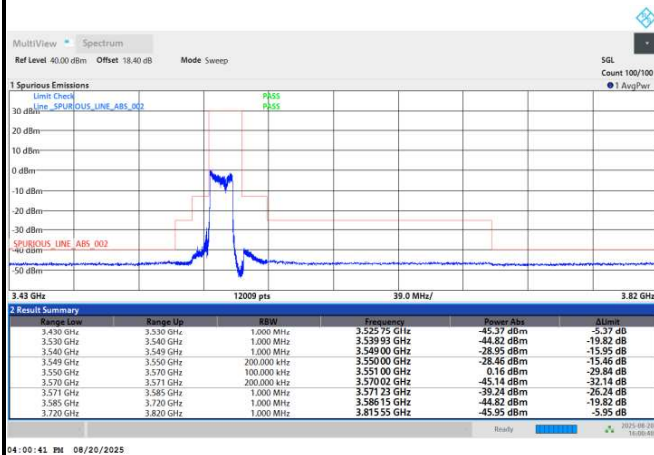
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FR1 n48 / 15MHz / CP OFDM / QPSK

Lowest Channel

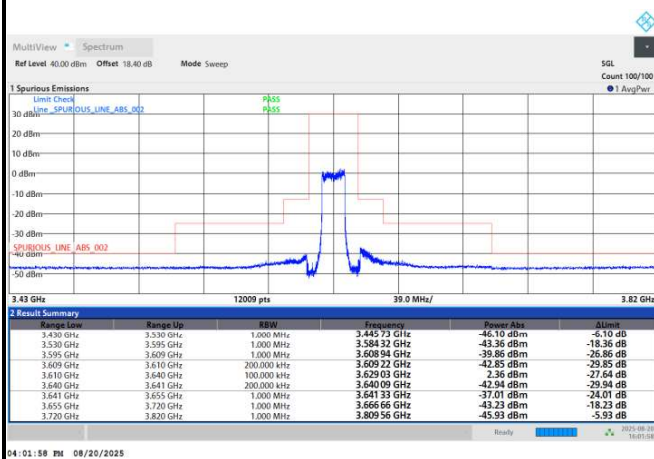
Full RB



FR1 n48 / 15MHz / CP OFDM / QPSK

Middle Channel

Full RB

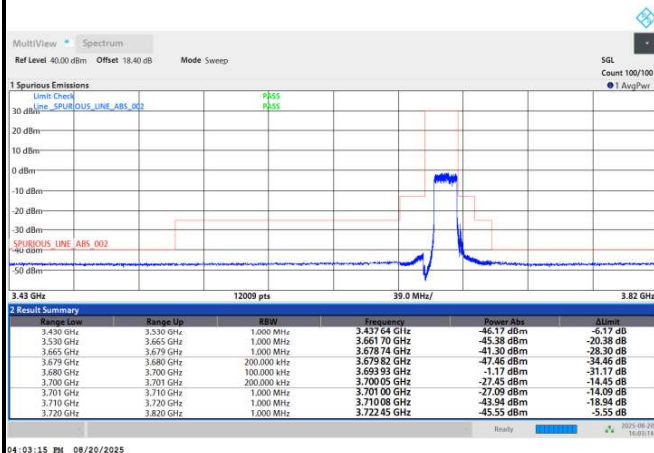




FR1 n48 / 15MHz / CP OFDM / QPSK

Highest Channel

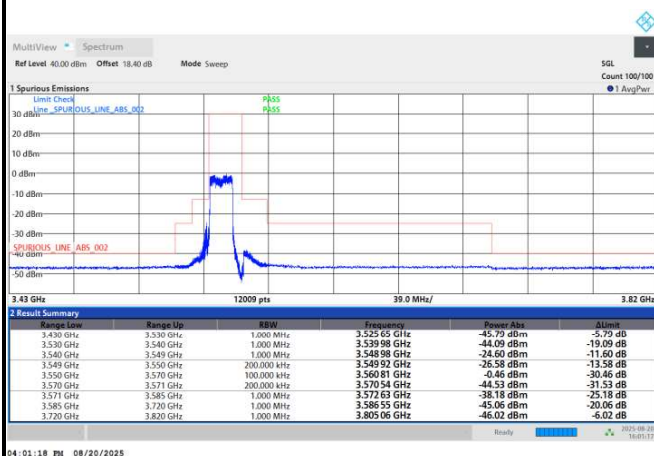
Full RB



FR1 n48 / 15MHz / CP OFDM / 16QAM

Lowest Channel

Full RB

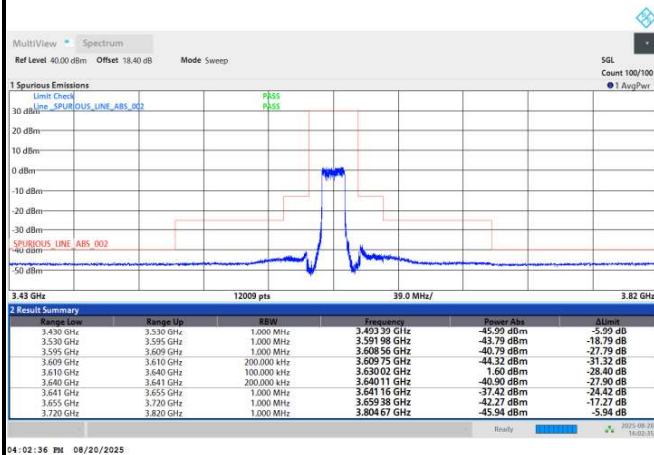




FR1 n48 / 15MHz / CP OFDM / 16QAM

Middle Channel

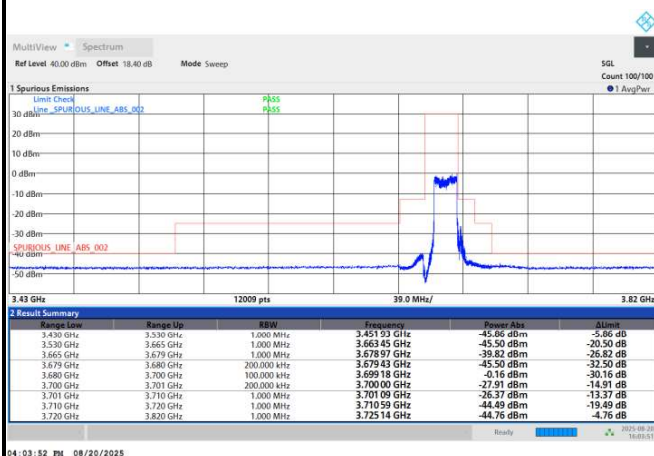
Full RB



FR1 n48 / 15MHz / CP OFDM / 16QAM

Highest Channel

Full RB

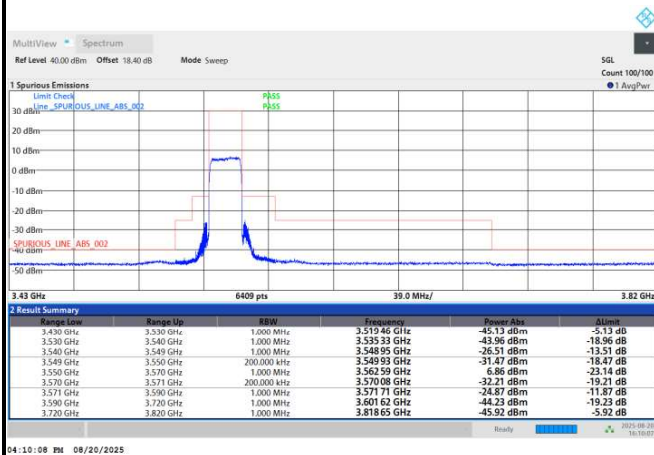




FR1 n48 / 20MHz / CP OFDM / QPSK

Lowest Channel

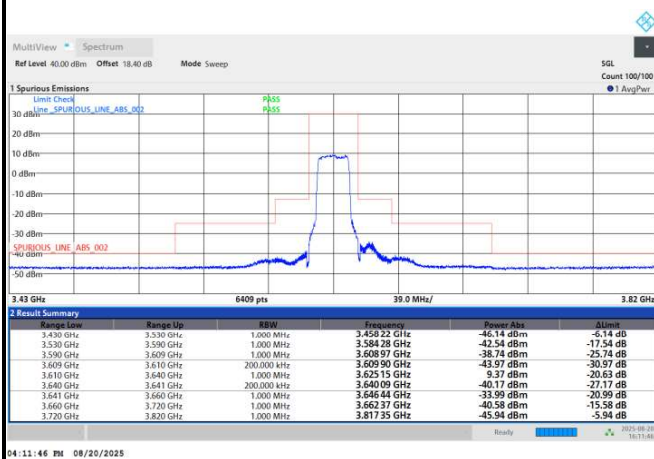
Full RB



FR1 n48 / 20MHz / CP OFDM / QPSK

Middle Channel

Full RB

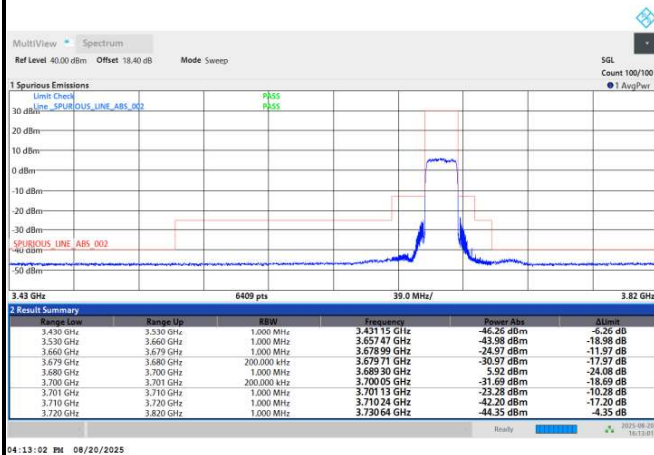




FR1 n48 / 20MHz / CP OFDM / QPSK

Highest Channel

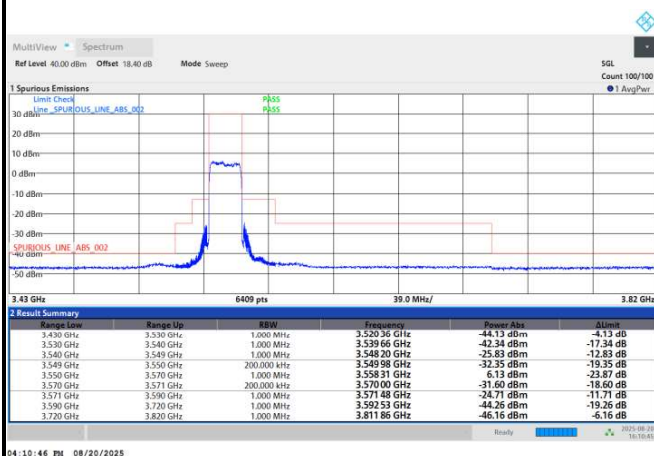
Full RB



FR1 n48 / 20MHz / CP OFDM / 16QAM

Lowest Channel

Full RB

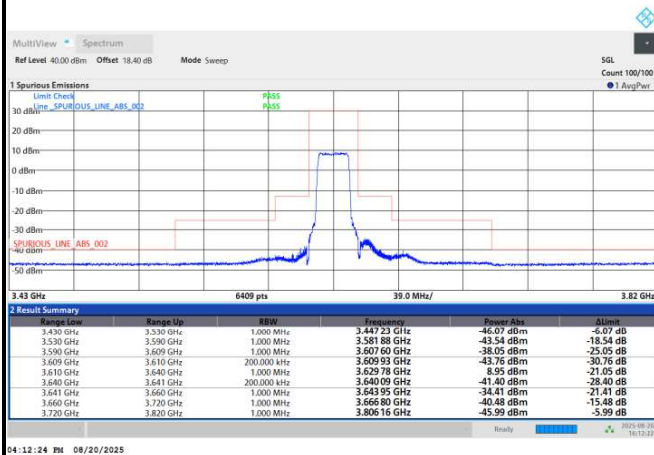




FR1 n48 / 20MHz / CP OFDM / 16QAM

Middle Channel

Full RB



FR1 n48 / 20MHz / CP OFDM / 16QAM

Highest Channel

Full RB

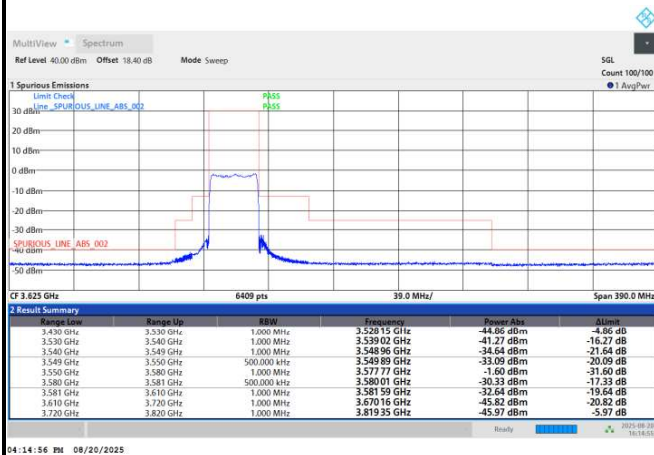




FR1 n48 / 30MHz / CP OFDM / QPSK

Lowest Channel

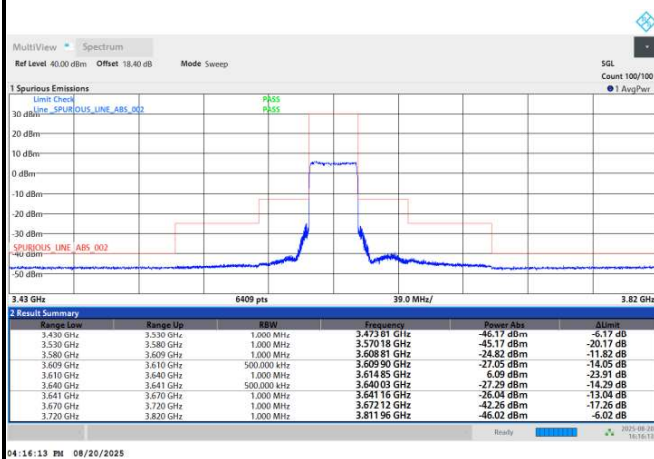
Full RB



FR1 n48 / 30MHz / CP OFDM / QPSK

Middle Channel

Full RB

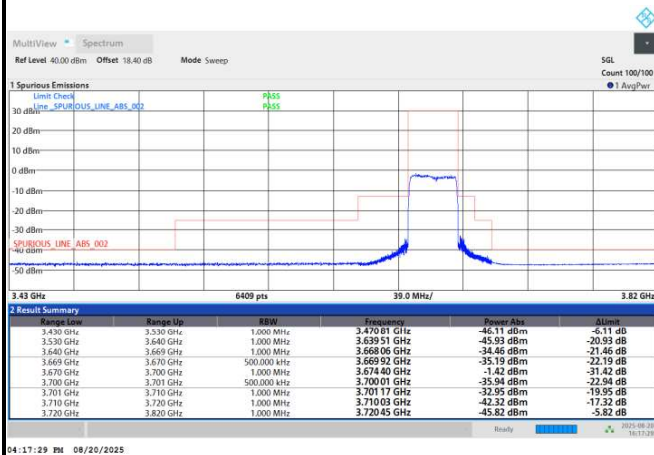




FR1 n48 / 30MHz / CP OFDM / QPSK

Highest Channel

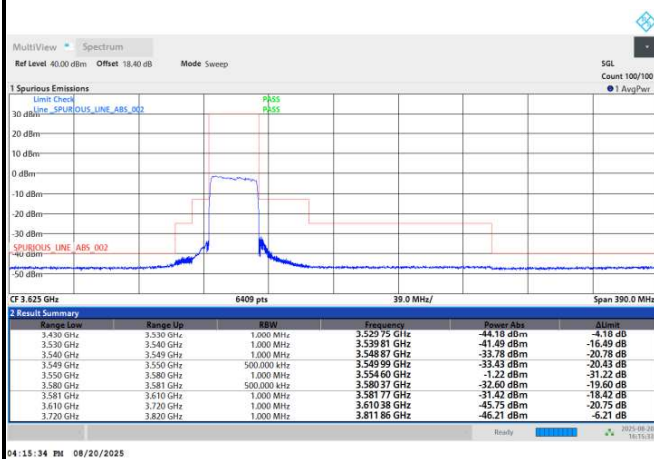
Full RB



FR1 n48 / 30MHz / CP OFDM / 16QAM

Lowest Channel

Full RB

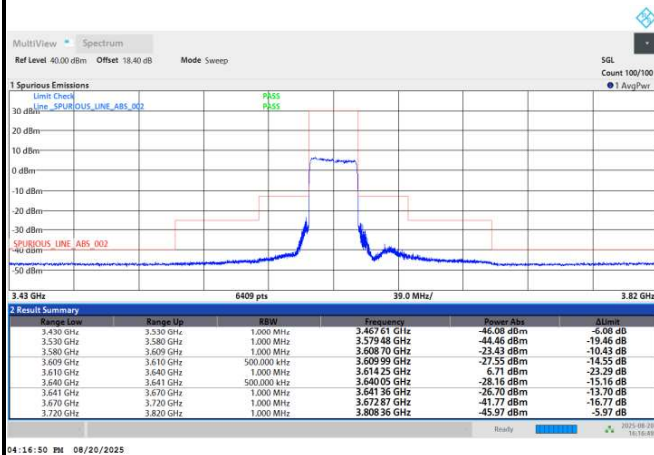




FR1 n48 / 30MHz / CP OFDM / 16QAM

Middle Channel

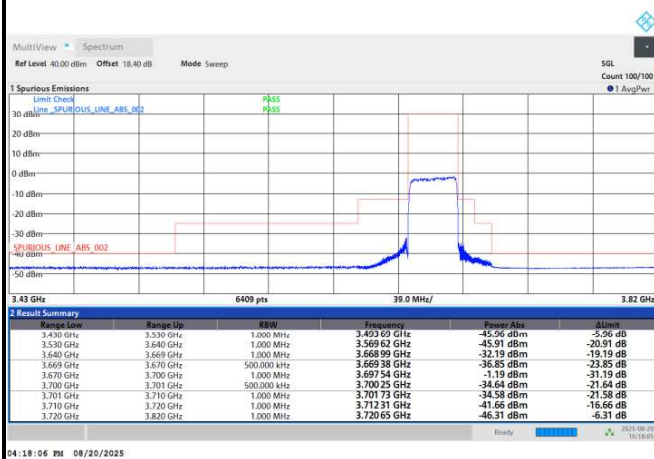
Full RB



FR1 n48 / 30MHz / CP OFDM / 16QAM

Highest Channel

Full RB



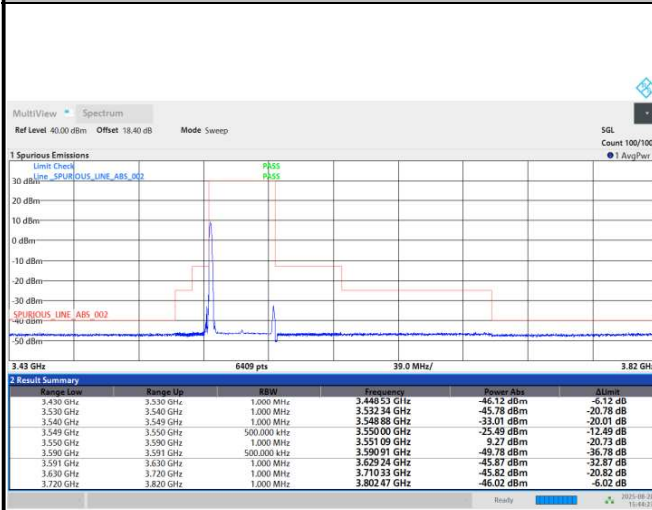


FR1 n48 / 40MHz / CP OFDM / QPSK

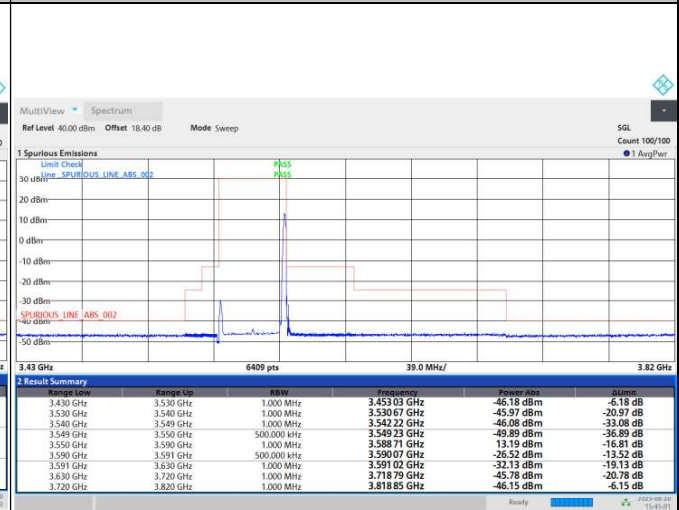
Lowest Channel

1RB0

1RBmax

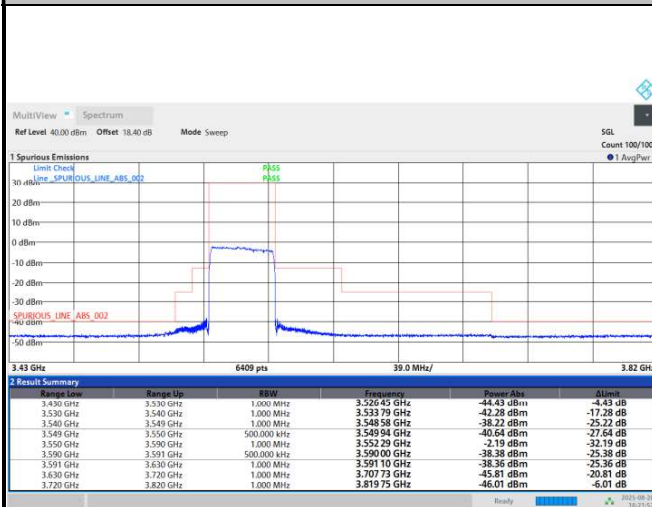


03:44:24 PM 08/20/2025



03:45:02 PM 08/20/2025

Full RB



04:21:54 PM 08/20/2025

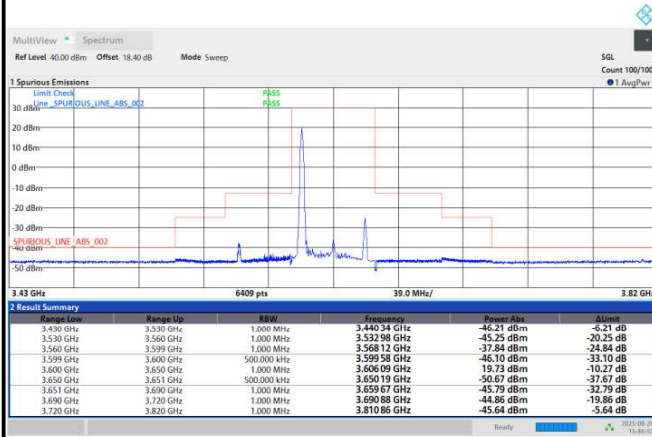


FR1 n48 / 40MHz / CP OFDM / QPSK

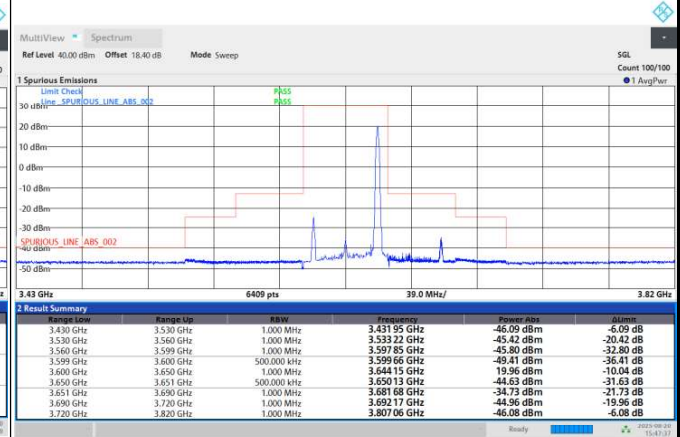
Middle Channel

1RB0

1RBmax

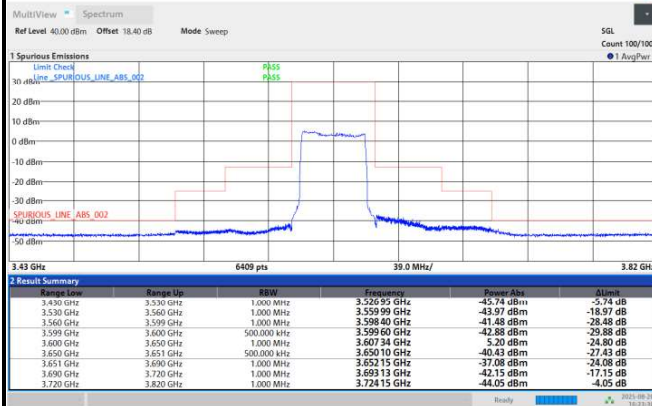


03:47:00 PM 08/20/2025



03:47:38 PM 08/20/2025

Full RB



04:23:31 PM 08/20/2025

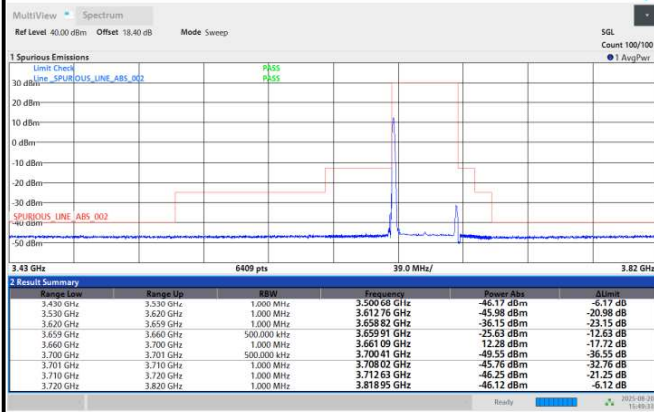


FR1 n48 / 40MHz / CP OFDM / QPSK

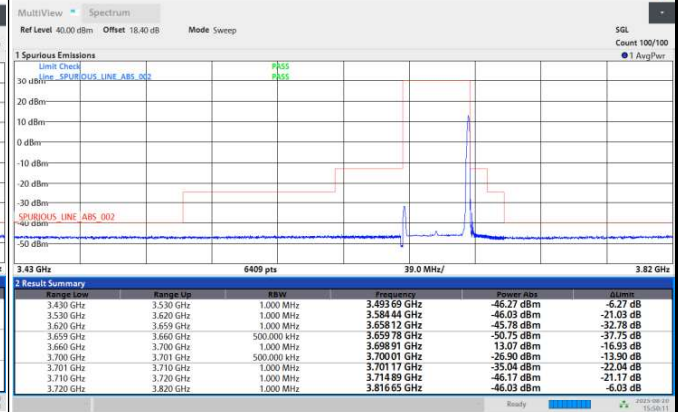
Highest Channel

1RB0

1RBmax

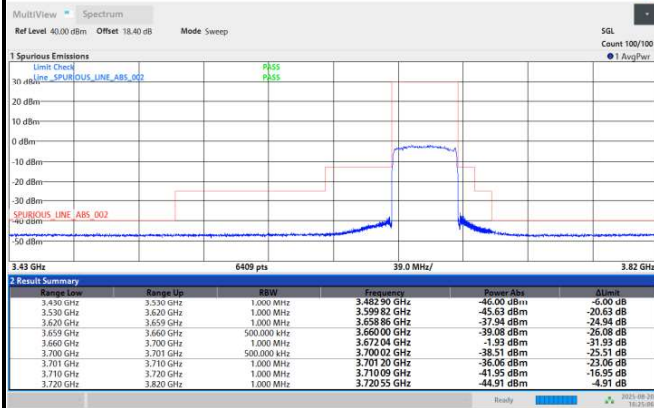


03:49:35 PM 08/20/2025



03:50:12 PM 08/20/2025

Full RB



04:25:07 PM 08/20/2025