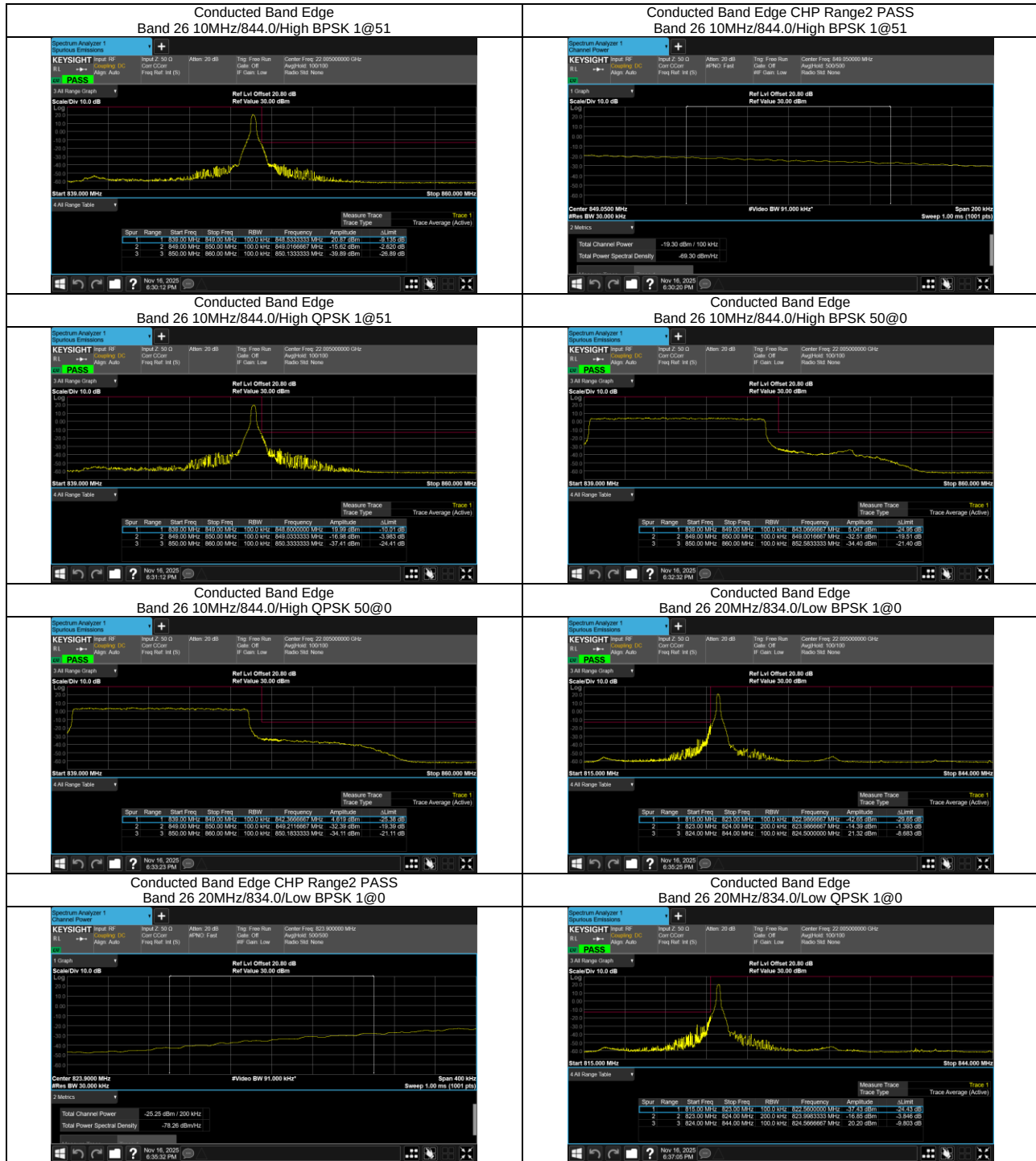
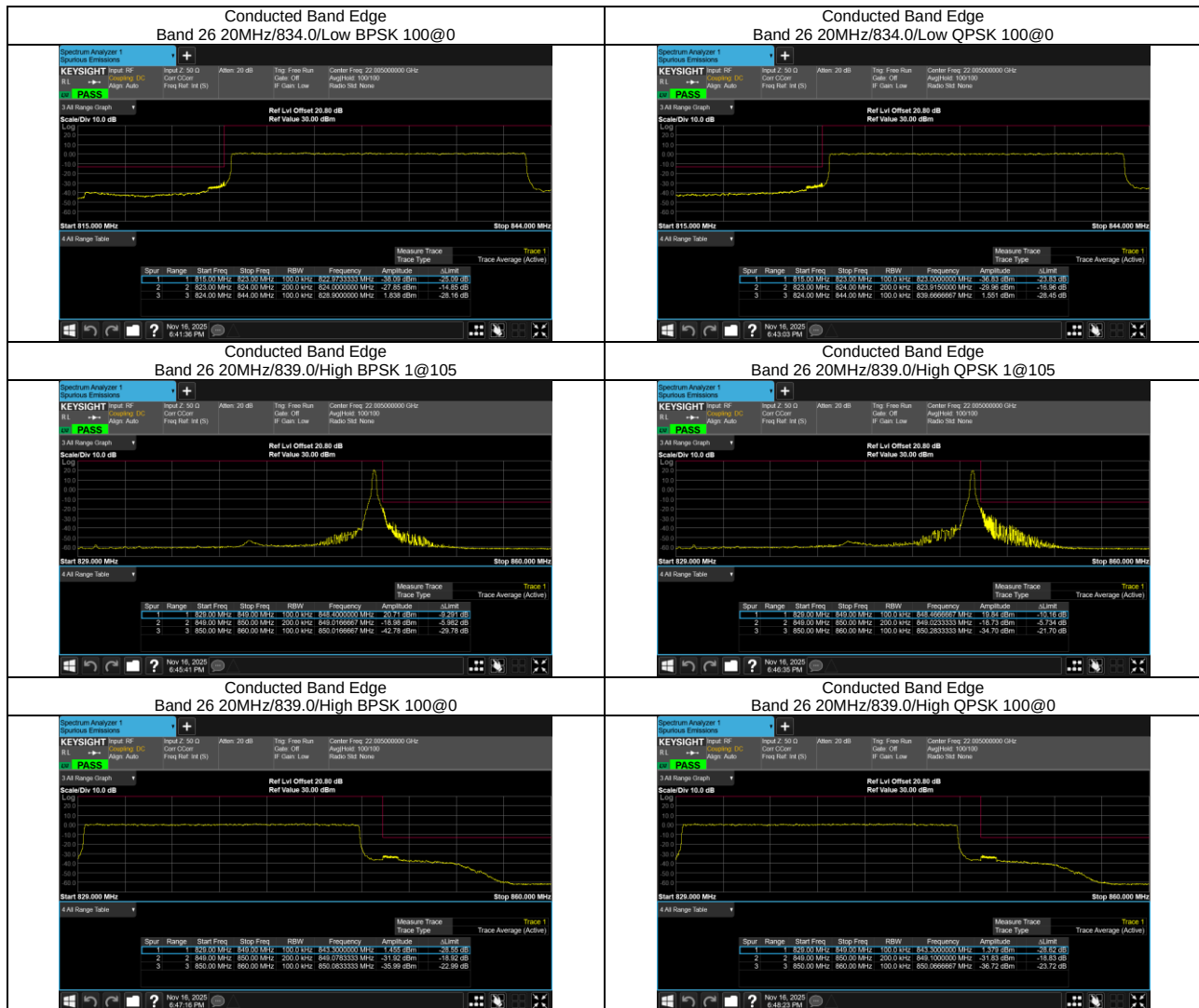






**FR1 N71_ANT0****Transmitter Conducted Output Power And ERP, (G_T - L_C)=-6.7dB**

NR Band	SCS	Band Width	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power (dBm)	ERP (dBm)	ERP(W)
71	15	5	133100	665.5	DFT-s-OFDM PI/2 BPSK	1@1	23.46	14.61	0.0289
71	15	5	133100	665.5	DFT-s-OFDM QPSK	1@1	23.64	14.79	0.0301
71	15	5	133100	665.5	DFT-s-OFDM 16 QAM	1@1	22.61	13.76	0.0238
71	15	5	136100	680.5	DFT-s-OFDM PI/2 BPSK	1@1	23.64	14.79	0.0301
71	15	5	136100	680.5	DFT-s-OFDM QPSK	1@1	23.56	14.71	0.0296
71	15	5	136100	680.5	DFT-s-OFDM 16 QAM	1@1	22.76	13.91	0.0246
71	15	5	139100	695.5	DFT-s-OFDM PI/2 BPSK	1@1	23.40	14.55	0.0285
71	15	5	139100	695.5	DFT-s-OFDM QPSK	1@1	23.45	14.60	0.0288
71	15	5	139100	695.5	DFT-s-OFDM 16 QAM	1@1	22.59	13.74	0.0237
71	15	10	133600	668	DFT-s-OFDM PI/2 BPSK	1@1	23.64	14.79	0.0301
71	15	10	133600	668	DFT-s-OFDM QPSK	1@1	23.58	14.73	0.0297
71	15	10	133600	668	DFT-s-OFDM 16 QAM	1@1	22.71	13.86	0.0243
71	15	10	136100	680.5	DFT-s-OFDM PI/2 BPSK	1@1	23.60	14.75	0.0299
71	15	10	136100	680.5	DFT-s-OFDM QPSK	1@1	23.51	14.66	0.0292
71	15	10	136100	680.5	DFT-s-OFDM 16 QAM	1@1	22.68	13.83	0.0242
71	15	10	138600	693	DFT-s-OFDM PI/2 BPSK	1@1	23.58	14.73	0.0297
71	15	10	138600	693	DFT-s-OFDM QPSK	1@1	23.42	14.57	0.0286
71	15	10	138600	693	DFT-s-OFDM 16 QAM	1@1	22.61	13.76	0.0238
71	15	15	134100	670.5	DFT-s-OFDM PI/2 BPSK	1@1	23.57	14.72	0.0296
71	15	15	134100	670.5	DFT-s-OFDM QPSK	1@1	23.61	14.76	0.0299
71	15	15	134100	670.5	DFT-s-OFDM 16 QAM	1@1	22.67	13.82	0.0241
71	15	15	136100	680.5	DFT-s-OFDM PI/2 BPSK	1@1	23.71	14.86	0.0306
71	15	15	136100	680.5	DFT-s-OFDM QPSK	1@1	23.60	14.75	0.0299
71	15	15	136100	680.5	DFT-s-OFDM 16 QAM	1@1	22.72	13.87	0.0244
71	15	15	138100	690.5	DFT-s-OFDM PI/2 BPSK	1@1	23.53	14.68	0.0294
71	15	15	138100	690.5	DFT-s-OFDM QPSK	1@1	23.58	14.73	0.0297
71	15	15	138100	690.5	DFT-s-OFDM 16 QAM	1@1	22.69	13.84	0.0242
71	15	20	134600	673	DFT-s-OFDM PI/2 BPSK	1@1	23.46	14.61	0.0289
71	15	20	134600	673	DFT-s-OFDM QPSK	1@1	23.62	14.77	0.0300
71	15	20	134600	673	DFT-s-OFDM 16 QAM	1@1	22.68	13.83	0.0242
71	15	20	136100	680.5	DFT-s-OFDM PI/2 BPSK	1@1	23.64	14.79	0.0301
71	15	20	136100	680.5	DFT-s-OFDM QPSK	1@1	23.55	14.70	0.0295
71	15	20	136100	680.5	DFT-s-OFDM 16 QAM	1@1	22.80	13.95	0.0248
71	15	20	137600	688	DFT-s-OFDM PI/2 BPSK	1@1	23.58	14.73	0.0297
71	15	20	137600	688	DFT-s-OFDM QPSK	1@1	23.66	14.81	0.0303
71	15	20	137600	688	DFT-s-OFDM 16 QAM	1@1	22.67	13.82	0.0241



NR Band	SCS	Band Width	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power (dBm)	ERP (dBm)	ERP(W)
71	15	25	135100	675.5	DFT-s-OFDM PI/2 BPSK	1@1	23.52	14.67	0.0293
71	15	25	135100	675.5	DFT-s-OFDM QPSK	1@1	23.63	14.78	0.0301
71	15	25	135100	675.5	DFT-s-OFDM 16 QAM	1@1	22.72	13.87	0.0244
71	15	25	136100	680.5	DFT-s-OFDM PI/2 BPSK	1@1	23.73	14.88	0.0308
71	15	25	136100	680.5	DFT-s-OFDM QPSK	1@1	23.65	14.80	0.0302
71	15	25	136100	680.5	DFT-s-OFDM 16 QAM	1@1	22.80	13.95	0.0248
71	15	25	137100	685.5	DFT-s-OFDM PI/2 BPSK	1@1	23.76	14.91	0.0310
71	15	25	137100	685.5	DFT-s-OFDM QPSK	1@1	23.69	14.84	0.0305
71	15	25	137100	685.5	DFT-s-OFDM 16 QAM	1@1	22.67	13.82	0.0241
71	15	30	135600	678	DFT-s-OFDM PI/2 BPSK	1@1	23.44	14.59	0.0288
71	15	30	135600	678	DFT-s-OFDM QPSK	1@1	23.58	14.73	0.0297
71	15	30	135600	678	DFT-s-OFDM 16 QAM	1@1	22.69	13.84	0.0242
71	15	30	136100	680.5	DFT-s-OFDM PI/2 BPSK	1@1	23.68	14.83	0.0304
71	15	30	136100	680.5	DFT-s-OFDM QPSK	1@1	23.58	14.73	0.0297
71	15	30	136100	680.5	DFT-s-OFDM 16 QAM	1@1	22.61	13.76	0.0238
71	15	30	136600	683	DFT-s-OFDM PI/2 BPSK	1@1	23.62	14.77	0.0300
71	15	30	136600	683	DFT-s-OFDM QPSK	1@1	23.61	14.76	0.0299
71	15	30	136600	683	DFT-s-OFDM 16 QAM	1@1	22.69	13.84	0.0242
71	15	35	136100	680.5	DFT-s-OFDM PI/2 BPSK	1@1	23.46	14.61	0.0289
71	15	35	136100	680.5	DFT-s-OFDM PI/2 BPSK	1@0	22.91	14.06	0.0255
71	15	35	136100	680.5	DFT-s-OFDM PI/2 BPSK	1@186	23.34	14.49	0.0281
71	15	35	136100	680.5	DFT-s-OFDM PI/2 BPSK	2@0	23.04	14.19	0.0262
71	15	35	136100	680.5	DFT-s-OFDM PI/2 BPSK	90@45	23.62	14.77	0.0300
71	15	35	136100	680.5	DFT-s-OFDM PI/2 BPSK	2@186	22.83	13.98	0.0250
71	15	35	136100	680.5	DFT-s-OFDM PI/2 BPSK	180@0	23.12	14.27	0.0267
71	15	35	136100	680.5	DFT-s-OFDM QPSK	1@1	23.55	14.70	0.0295
71	15	35	136100	680.5	DFT-s-OFDM QPSK	1@0	22.49	13.64	0.0231
71	15	35	136100	680.5	DFT-s-OFDM QPSK	1@186	23.35	14.50	0.0282
71	15	35	136100	680.5	DFT-s-OFDM QPSK	2@0	22.54	13.69	0.0234
71	15	35	136100	680.5	DFT-s-OFDM QPSK	90@45	23.65	14.80	0.0302
71	15	35	136100	680.5	DFT-s-OFDM QPSK	2@186	22.37	13.52	0.0225
71	15	35	136100	680.5	DFT-s-OFDM QPSK	180@0	22.60	13.75	0.0237
71	15	35	136100	680.5	DFT-s-OFDM 16 QAM	1@1	22.68	13.83	0.0242
71	15	35	136100	680.5	DFT-s-OFDM 64 QAM	1@1	21.09	12.24	0.0167
71	15	35	136100	680.5	DFT-s-OFDM 256 QAM	1@1	18.64	9.79	0.0095
71	15	35	136100	680.5	DFT-s-OFDM QPSK	180@0	22.57	13.72	0.0236
71	15	35	136100	680.5	DFT-s-OFDM 16 QAM	180@0	21.61	12.76	0.0189
71	15	35	136100	680.5	DFT-s-OFDM 64 QAM	180@0	21.05	12.20	0.0166
71	15	35	136100	680.5	DFT-s-OFDM 256 QAM	180@0	19.09	10.24	0.0106



Frequency Stability

Test Result

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0085	PASS	NV
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0041	PASS	LV
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0036	PASS	HV
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0064	PASS	-30℃
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0049	PASS	-20℃
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0058	PASS	-10℃
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0029	PASS	0℃
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0028	PASS	10℃
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0034	PASS	20℃
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0042	PASS	30℃
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0058	PASS	40℃
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	0.0034	PASS	50℃

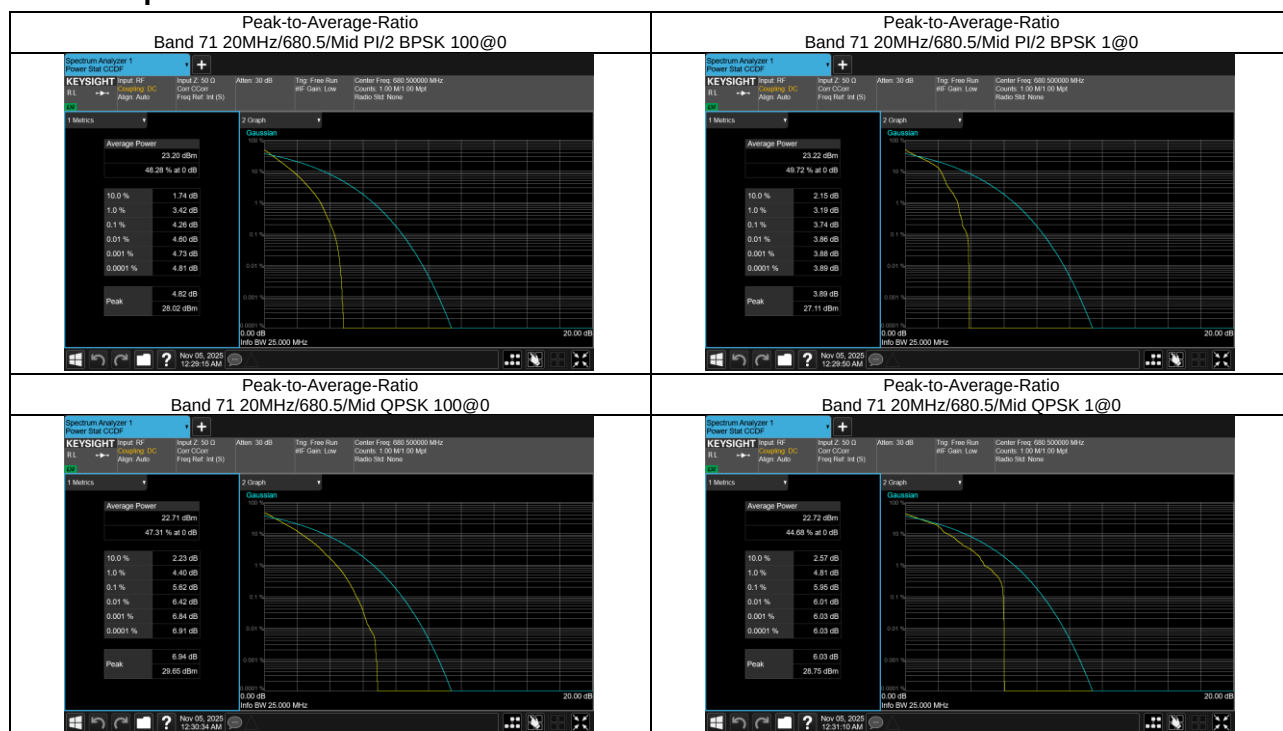


Peak to Average Ratio

Test Result

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Result	Verdict
71	15	20	136100	680.5	DFT-s-OFDM PI/2 BPSK	100@0	4.26	13
71	15	20	136100	680.5	DFT-s-OFDM PI/2 BPSK	1@0	3.74	13
71	15	20	136100	680.5	DFT-s-OFDM QPSK	100@0	5.62	13
71	15	20	136100	680.5	DFT-s-OFDM QPSK	1@0	5.95	13

Test Graphs





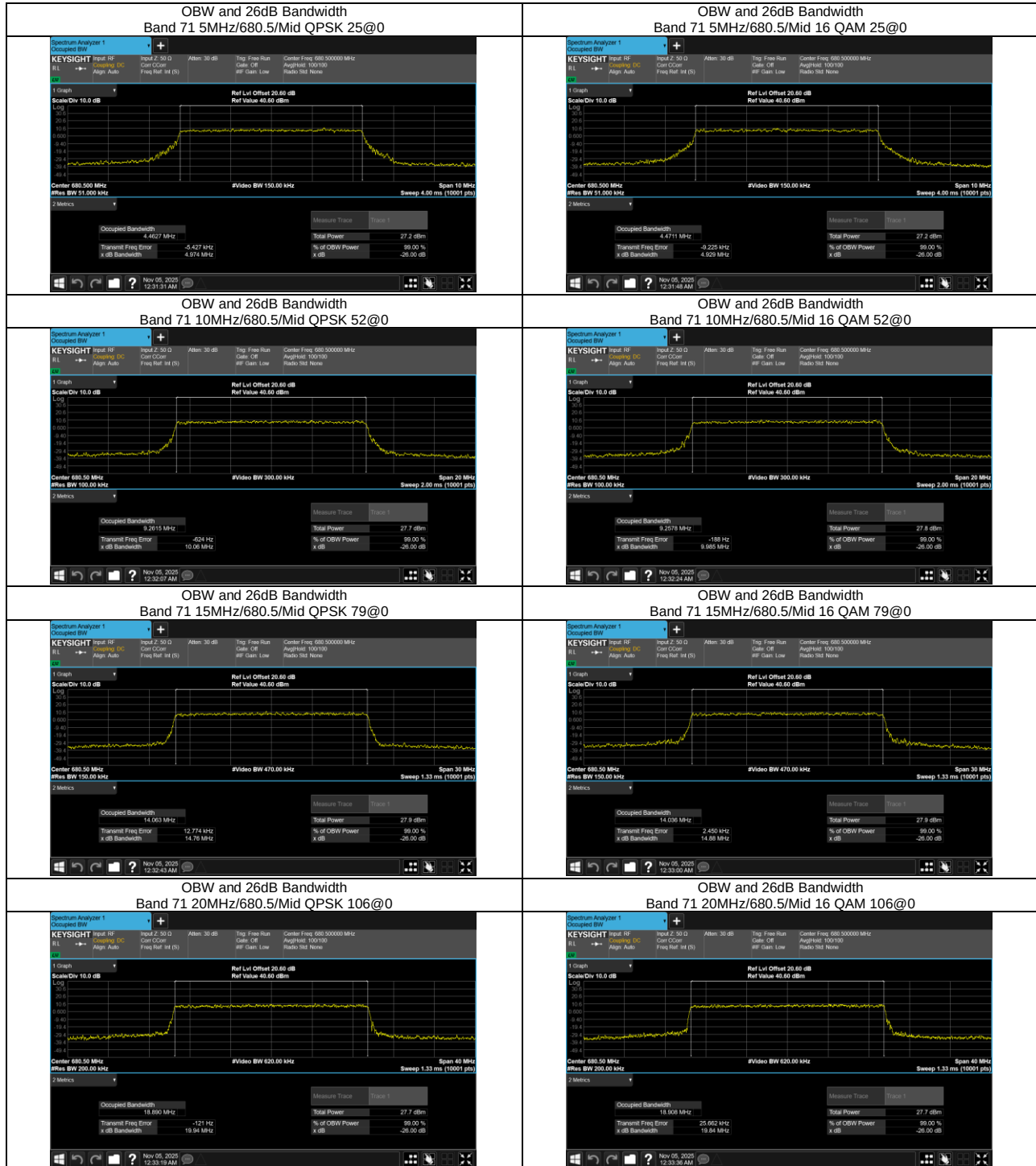
Occupied Bandwidth

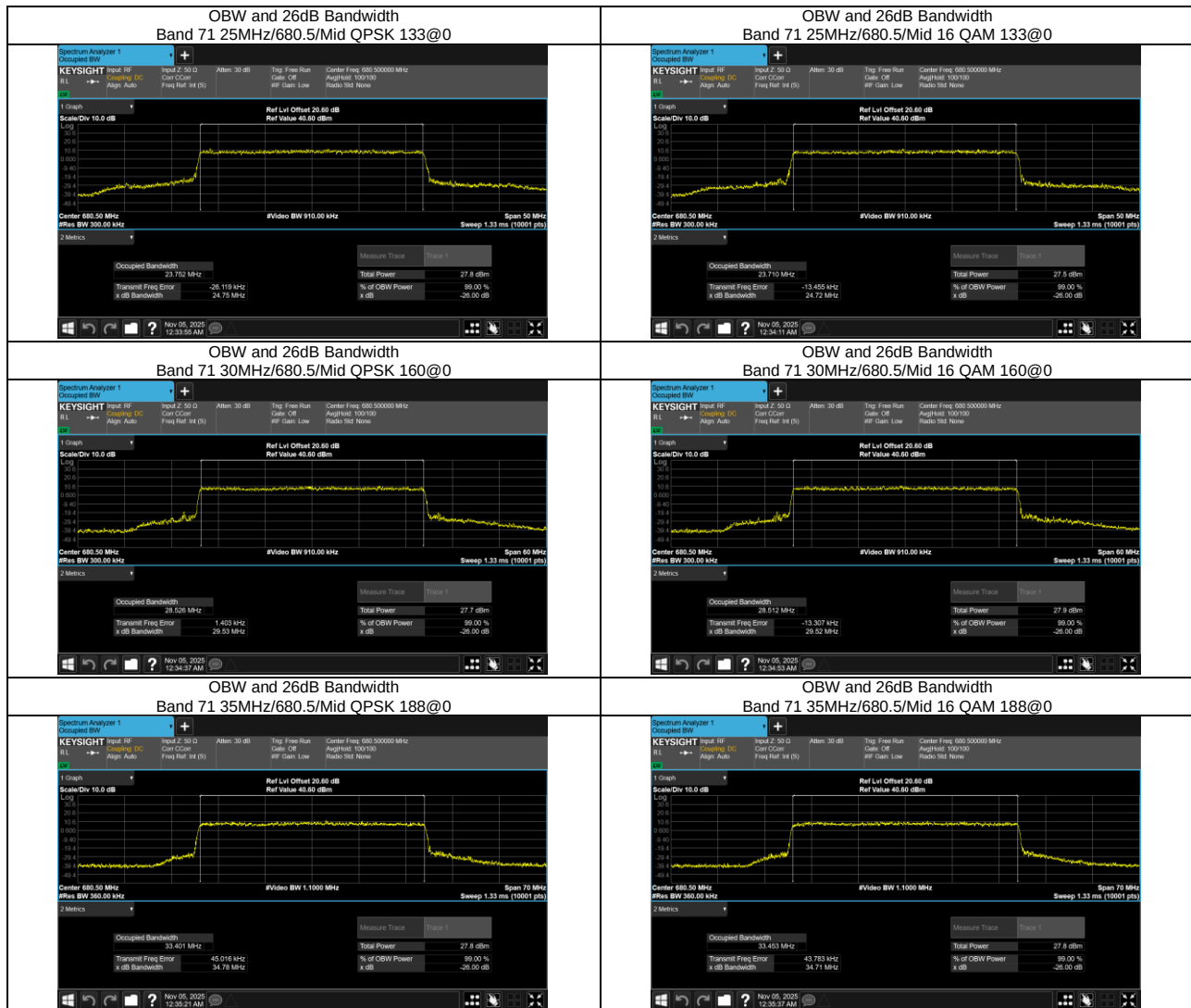
Test Result

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	OBW(MHz)	26dB OBW(MHz)
71	15	5	136100	680.5	CP-OFDM QPSK	25@0	4.46	4.974
71	15	5	136100	680.5	CP-OFDM 16 QAM	25@0	4.47	4.929
71	15	10	136100	680.5	CP-OFDM QPSK	52@0	9.26	10.06
71	15	10	136100	680.5	CP-OFDM 16 QAM	52@0	9.26	9.985
71	15	15	136100	680.5	CP-OFDM QPSK	79@0	14.06	14.76
71	15	15	136100	680.5	CP-OFDM 16 QAM	79@0	14.04	14.88
71	15	20	136100	680.5	CP-OFDM QPSK	106@0	18.89	19.94
71	15	20	136100	680.5	CP-OFDM 16 QAM	106@0	18.91	19.84
71	15	25	136100	680.5	CP-OFDM QPSK	133@0	23.75	24.75
71	15	25	136100	680.5	CP-OFDM 16 QAM	133@0	23.71	24.72
71	15	30	136100	680.5	CP-OFDM QPSK	160@0	28.53	29.53
71	15	30	136100	680.5	CP-OFDM 16 QAM	160@0	28.51	29.52
71	15	35	136100	680.5	CP-OFDM QPSK	188@0	33.4	34.78
71	15	35	136100	680.5	CP-OFDM 16 QAM	188@0	33.45	34.71



Test Graphs







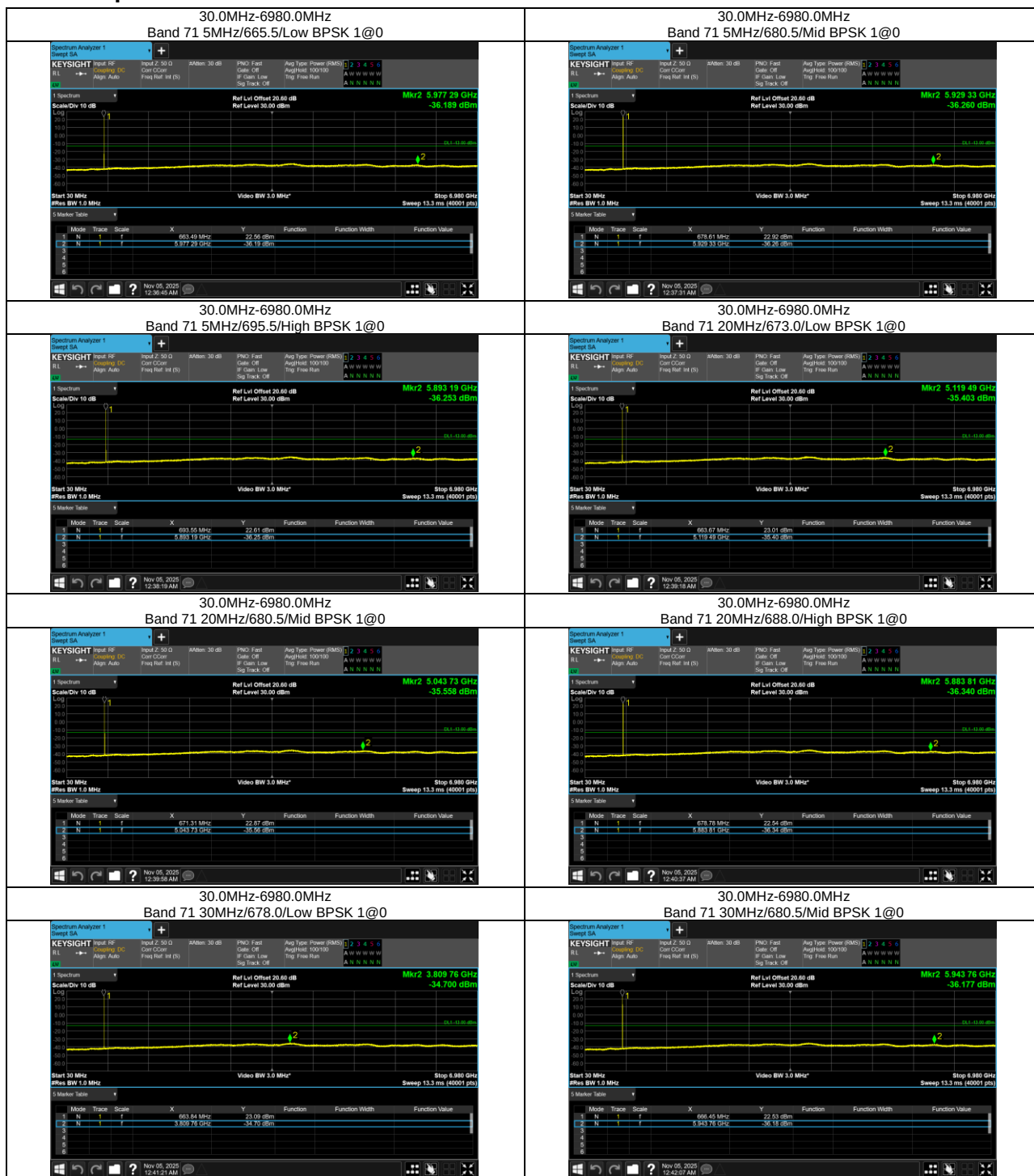
Conducted Spurious Emissions

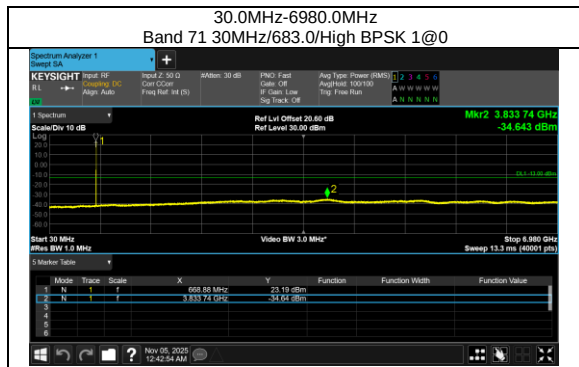
Test Result

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Result	Verdict
71	15	5	133100	665.5	DFT-s-OFDM BPSK	1@0	See graph	PASS
71	15	5	136100	680.5	DFT-s-OFDM BPSK	1@0	See graph	PASS
71	15	5	139100	695.5	DFT-s-OFDM BPSK	1@0	See graph	PASS
71	15	20	134600	673.0	DFT-s-OFDM BPSK	1@0	See graph	PASS
71	15	20	136100	680.5	DFT-s-OFDM BPSK	1@0	See graph	PASS
71	15	20	137600	688.0	DFT-s-OFDM BPSK	1@0	See graph	PASS
71	15	30	135600	678.0	DFT-s-OFDM BPSK	1@0	See graph	PASS
71	15	30	136100	680.5	DFT-s-OFDM BPSK	1@0	See graph	PASS
71	15	30	136600	683.0	DFT-s-OFDM BPSK	1@0	See graph	PASS



Test Graphs







Conducted Band Edge

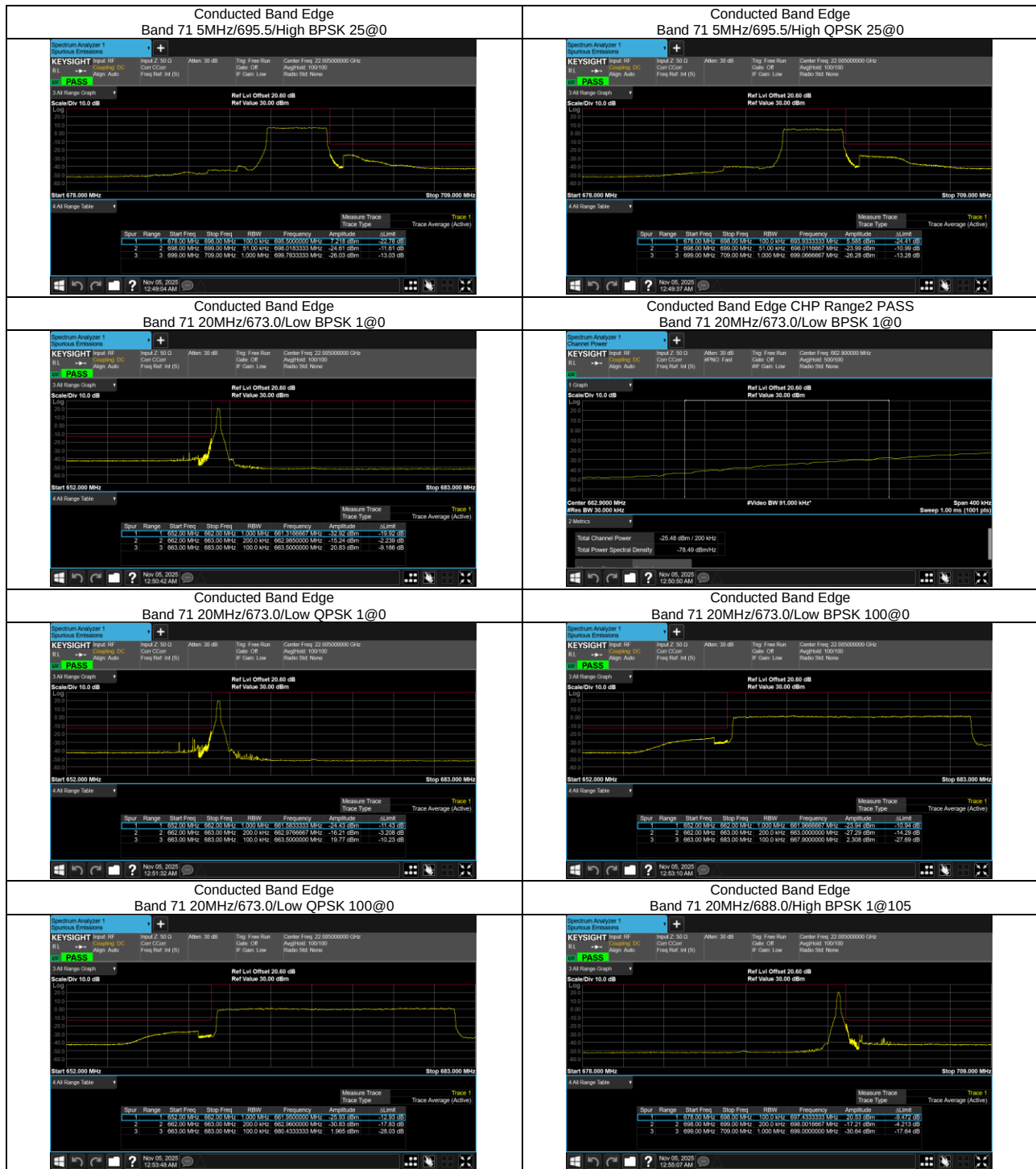
Test Result

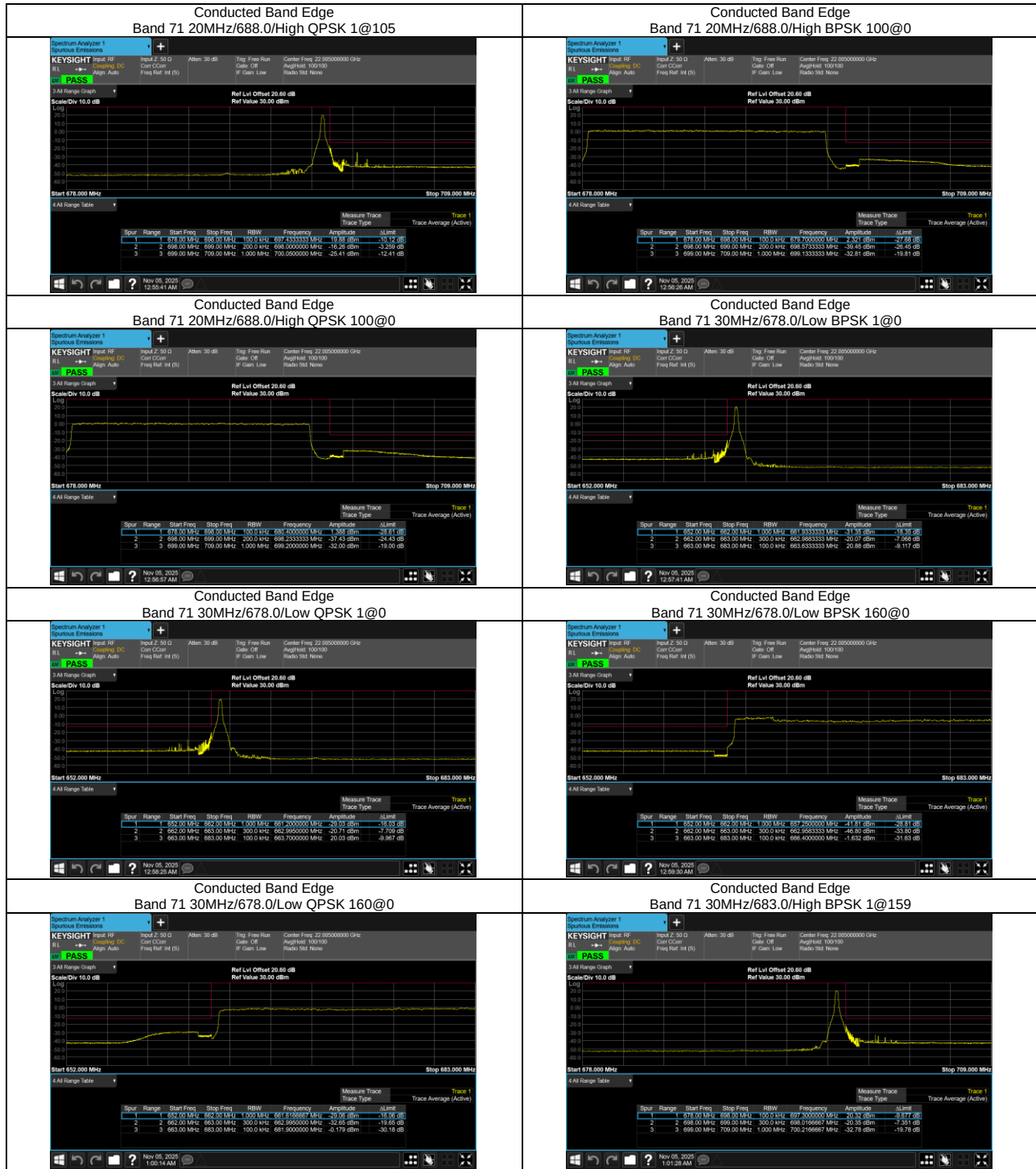
NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Result	Verdict
71	15	5	133100	665.5	DFT-s-OFDM BPSK	1@0	see graph	PASS
71	15	5	133100	665.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
71	15	5	133100	665.5	DFT-s-OFDM BPSK	25@0	see graph	PASS
71	15	5	133100	665.5	DFT-s-OFDM QPSK	25@0	see graph	PASS
71	15	5	139100	695.5	DFT-s-OFDM BPSK	1@24	see graph	PASS
71	15	5	139100	695.5	DFT-s-OFDM QPSK	1@24	see graph	PASS
71	15	5	139100	695.5	DFT-s-OFDM BPSK	25@0	see graph	PASS
71	15	5	139100	695.5	DFT-s-OFDM QPSK	25@0	see graph	PASS
71	15	20	134600	673.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
71	15	20	134600	673.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
71	15	20	134600	673.0	DFT-s-OFDM BPSK	100@0	see graph	PASS
71	15	20	134600	673.0	DFT-s-OFDM QPSK	100@0	see graph	PASS
71	15	20	137600	688.0	DFT-s-OFDM BPSK	1@105	see graph	PASS
71	15	20	137600	688.0	DFT-s-OFDM QPSK	1@105	see graph	PASS
71	15	20	137600	688.0	DFT-s-OFDM BPSK	100@0	see graph	PASS
71	15	20	137600	688.0	DFT-s-OFDM QPSK	100@0	see graph	PASS
71	15	30	135600	678.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
71	15	30	135600	678.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
71	15	30	135600	678.0	DFT-s-OFDM BPSK	160@0	see graph	PASS
71	15	30	135600	678.0	DFT-s-OFDM QPSK	160@0	see graph	PASS
71	15	30	136600	683.0	DFT-s-OFDM BPSK	1@159	see graph	PASS
71	15	30	136600	683.0	DFT-s-OFDM QPSK	1@159	see graph	PASS
71	15	30	136600	683.0	DFT-s-OFDM BPSK	160@0	see graph	PASS
71	15	30	136600	683.0	DFT-s-OFDM QPSK	160@0	see graph	PASS

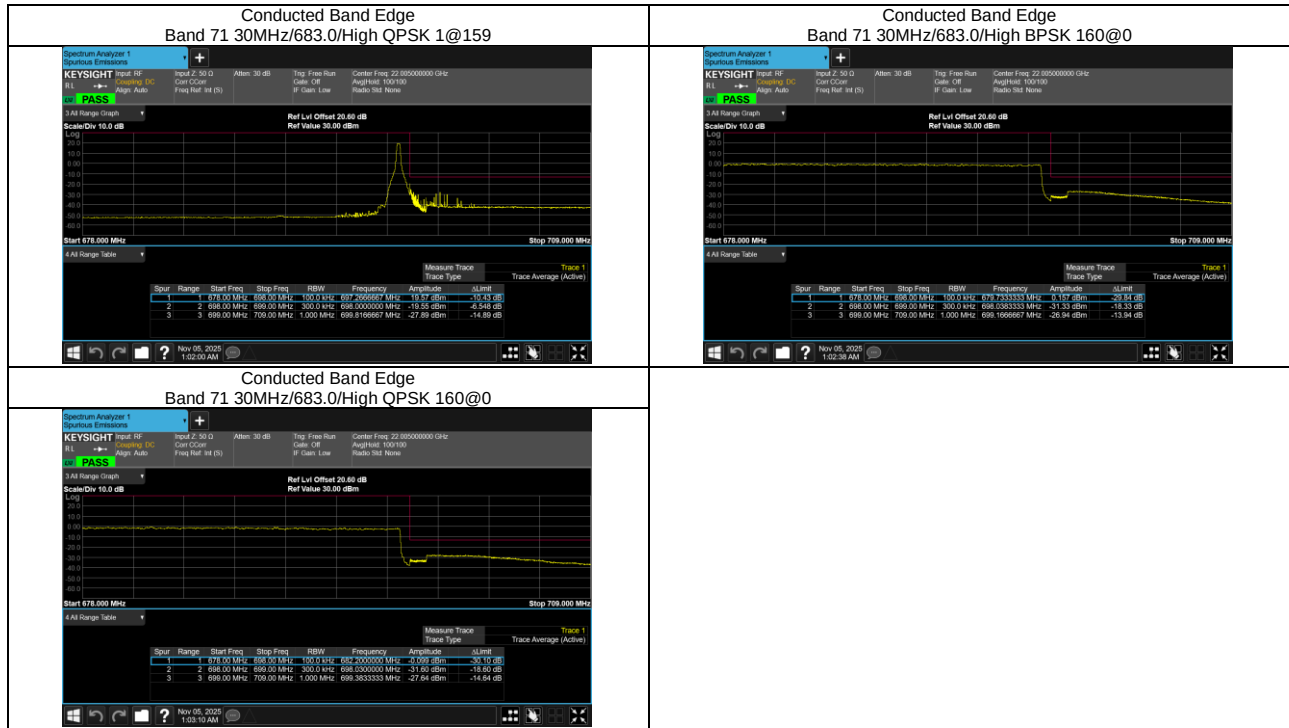


Test Graphs











FR1 N89_ANT0

Transmitter Conducted Output Power And ERP, ($G_T - L_C$)=-4.1dB

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				166800	167300	167800			
Frequency (MHz)				834	836.5	839	L	M	H
20	PI/2 BPSK	1	1	22.33	22.45	22.25	0.0406	0.0417	0.0398
20		1	53	22.29	22.36	22.13	0.0402	0.0408	0.0387
20		1	104	22.34	22.37	22.07	0.0406	0.0409	0.0382
20		50	0	21.67	21.75	21.59	0.0348	0.0355	0.0342
20		50	28	22.17	22.28	22.20	0.0391	0.0401	0.0394
20		50	56	21.83	21.66	21.76	0.0361	0.0348	0.0356
20		100	0	21.70	21.82	21.63	0.0351	0.0361	0.0345
20	QPSK	1	1	22.13	22.18	22.17	0.0387	0.0392	0.0391
20		1	53	22.32	22.30	22.45	0.0405	0.0403	0.0417
20		1	104	22.07	22.24	22.18	0.0382	0.0397	0.0392
20		50	0	21.40	21.39	21.27	0.0327	0.0327	0.0318
20		50	28	22.30	22.32	22.14	0.0403	0.0405	0.0388
20		50	56	21.40	21.44	21.22	0.0327	0.0330	0.0314
20		100	0	21.28	21.47	21.28	0.0318	0.0333	0.0318
20	16QAM	1	1	21.36	21.55	21.32	0.0324	0.0339	0.0321
20	64QAM	1	1	19.83	20.01	19.94	0.0228	0.0238	0.0234
20	256QAM	1	1	17.61	18.01	17.80	0.0137	0.0150	0.0143
Channel				166300	167300	168300	L	M	H
Frequency (MHz)				831.5	836.5	841.5			
15	PI/2 BPSK	1	1	22.25	22.27	22.31	0.0398	0.0400	0.0404
15	QPSK	1	1	22.15	22.11	22.23	0.0389	0.0385	0.0396
Channel				165800	167300	168800	L	M	H
Frequency (MHz)				829	836.5	844			
10	PI/2 BPSK	1	1	22.37	22.37	22.16	0.0409	0.0409	0.0390
10	QPSK	1	1	22.17	22.21	22.08	0.0391	0.0394	0.0383
Channel				165300	167300	169300	L	M	H
Frequency (MHz)				826.5	836.5	846.5			
5	PI/2 BPSK	1	1	22.31	22.40	22.19	0.0404	0.0412	0.0393
5	QPSK	1	1	22.11	22.27	22.12	0.0385	0.0400	0.0386



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Jake	Temperature :	21~25℃
		Relative Humidity :	51~53%

Note: Pre-scanned harmonic for the different antenna combinations, we choose the worst antenna mode to perform final test.

N26 SA / NR 20MHz / QPSK/ ANT0								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1656	-56.77	-13	-43.77	-63.74	1.58	10.70	H
	2480	-57.62	-13	-44.62	-65.87	2.102	12.50	H
	3312	-57.70	-13	-44.70	-66.59	2.856	13.90	H
	1656	-56.28	-13	-43.28	-63.25	1.58	10.70	V
	2480	-56.76	-13	-43.76	-65.01	2.10	12.50	V
	3312	-58.05	-13	-45.05	-66.94	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

N26 SA / NR 20MHz / QPSK/ ANT1 / PA Reference Designator								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1656	-56.98	-13	-43.98	-63.95	1.58	10.70	H
	2480	-57.78	-13	-44.78	-66.03	2.102	12.50	H
	3312	-57.33	-13	-44.33	-66.22	2.856	13.90	H
	1656	-56.11	-13	-43.11	-63.08	1.58	10.70	V
	2480	-56.76	-13	-43.76	-65.01	2.10	12.50	V
	3312	-57.33	-13	-44.33	-66.22	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



N71 SA / NR 20MHz / QPSK/ ANT0								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1328	-63.90	-13	-50.90	-65.65	1.02	4.92	H
	1992	-59.51	-13	-46.51	-61.48	1.27	5.39	H
	2656	-58.23	-13	-45.23	-61.16	1.49	6.57	H
	1328	-64.78	-13	-51.78	-66.53	1.02	4.92	V
	1992	-59.15	-13	-46.15	-61.12	1.27	5.39	V
	2656	-57.79	-13	-44.79	-60.72	1.49	6.57	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_48A_n71A / LTE 20MHz + NR 10MHz / QPSK (ANT5+1)								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1328	-65.17	-13	-52.17	-66.92	1.02	4.92	H
	1992	-58.76	-13	-45.76	-60.73	1.27	5.39	H
	2656	-57.43	-13	-44.43	-60.36	1.49	6.57	H
	1328	-64.87	-13	-51.87	-66.62	1.02	4.92	V
	1992	-57.59	-13	-44.59	-59.56	1.27	5.39	V
	2656	-57.78	-13	-44.78	-60.71	1.49	6.57	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.