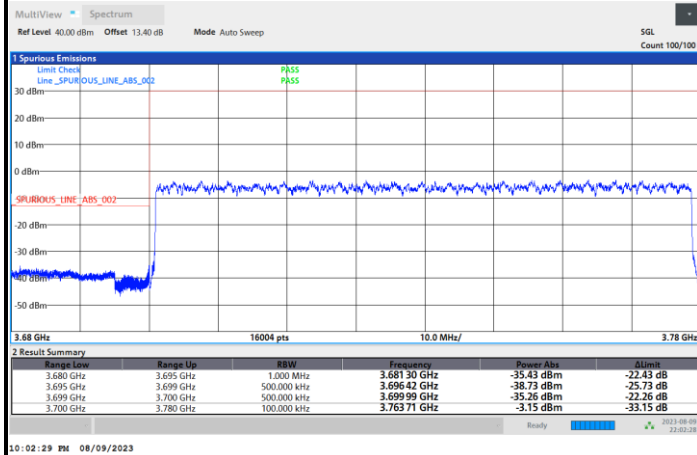


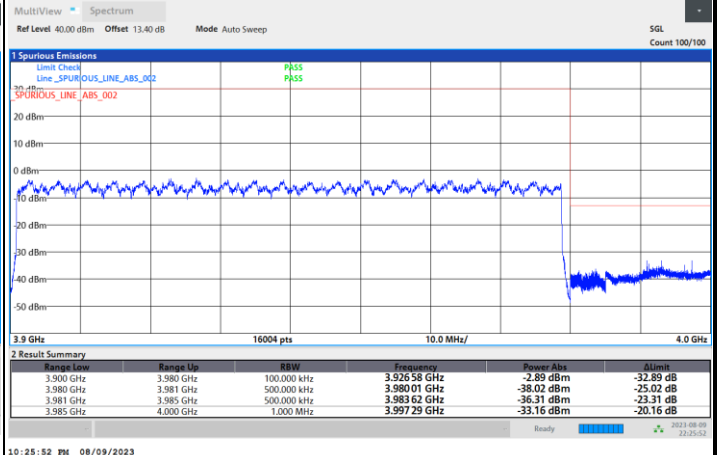


FR1 n77 / 80MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

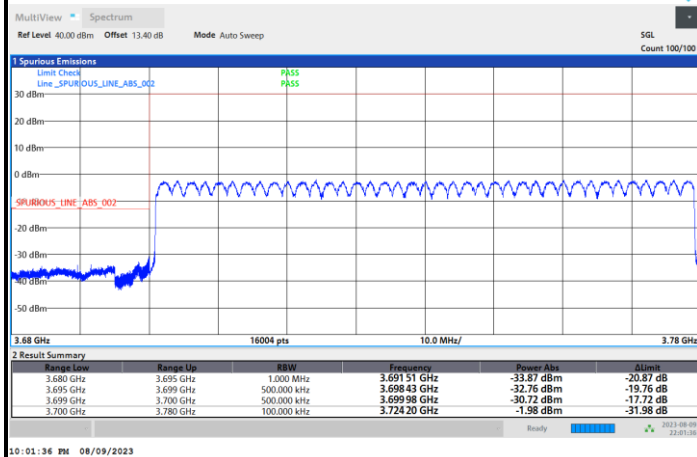


Highest Band Edge / Full RB

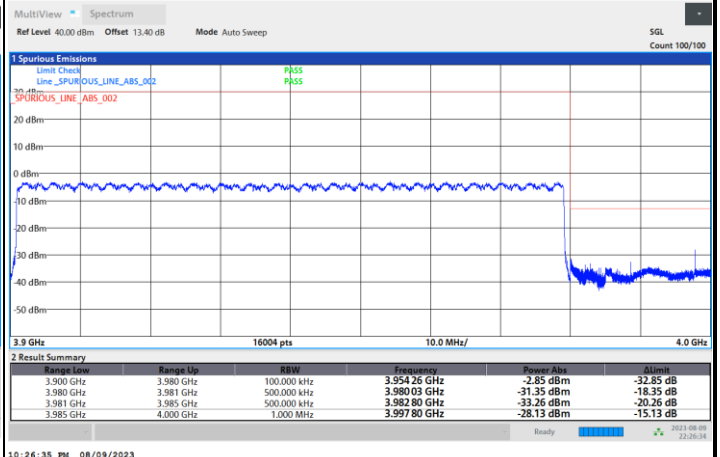


FR1 n77 / 80MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



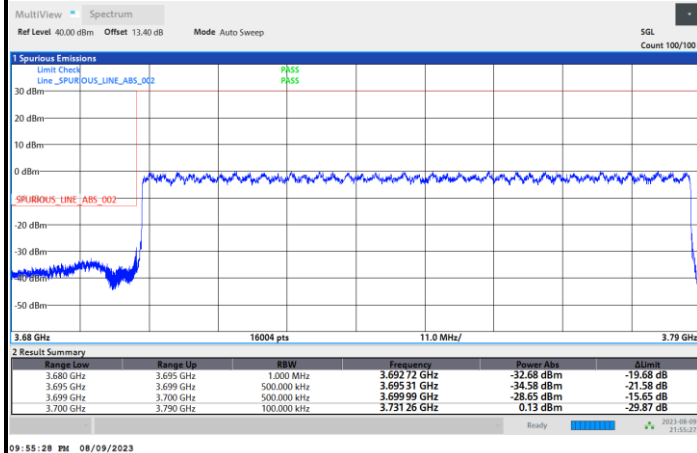
Highest Band Edge



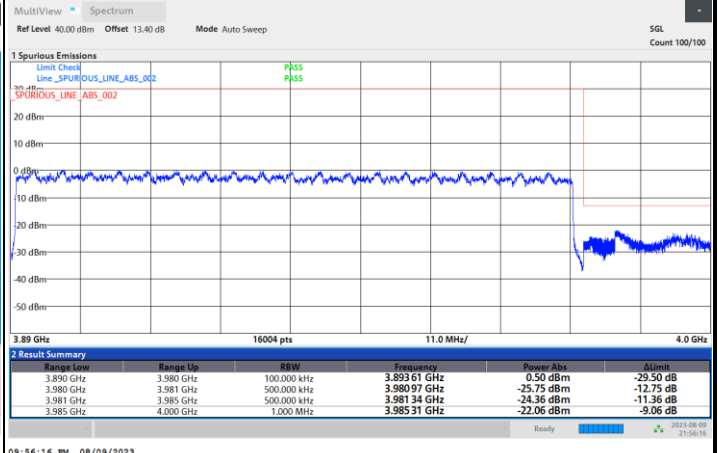


FR1 n77 / 90MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

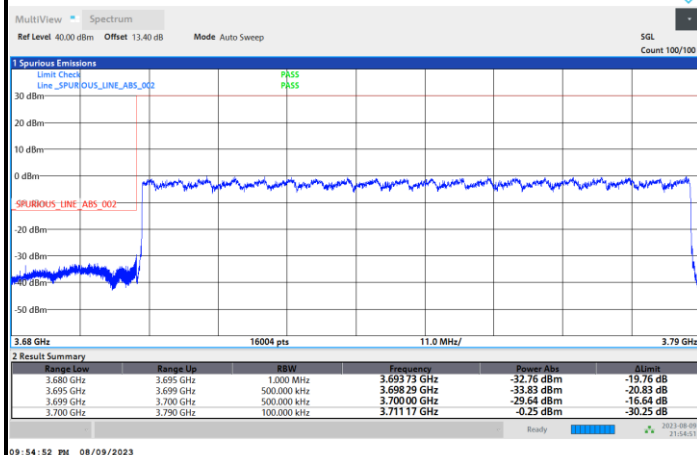


Highest Band Edge / Full RB

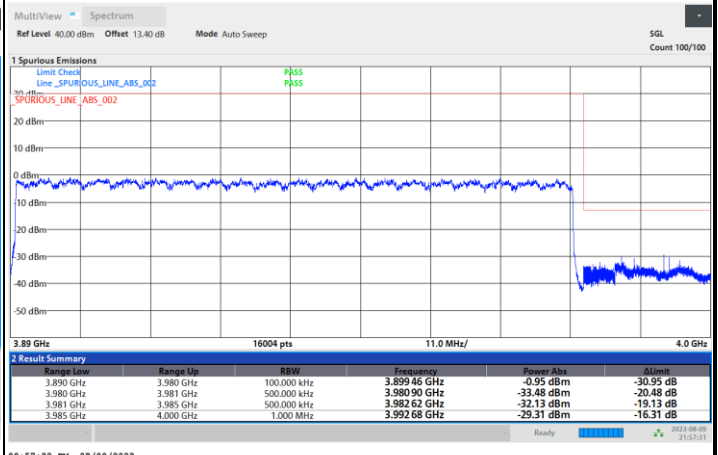


FR1 n77 / 90MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



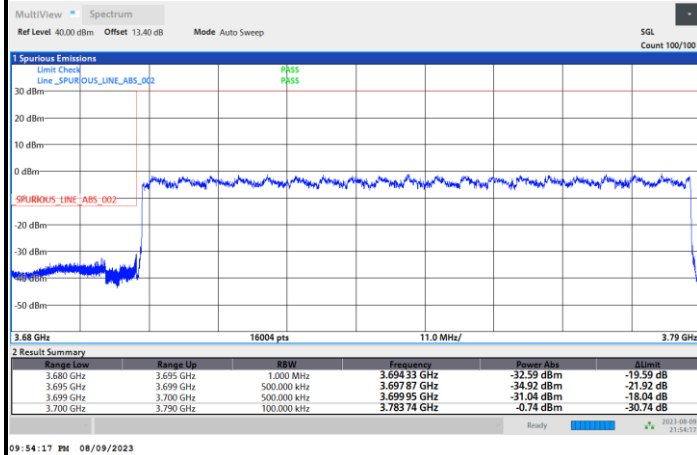
Highest Band Edge / Full RB



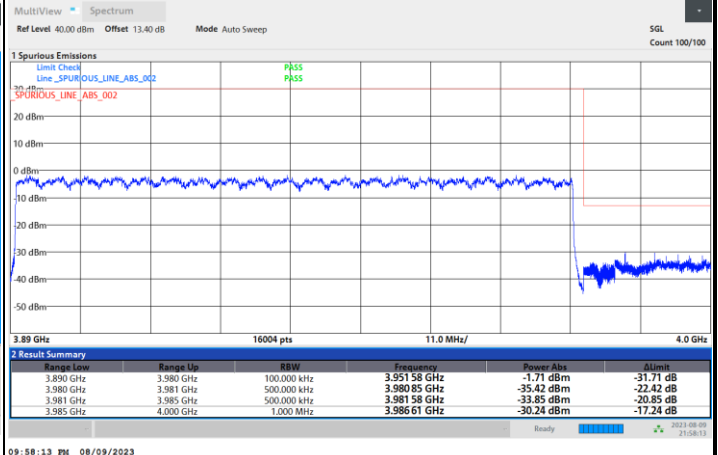


FR1 n77 / 90MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / Full RB

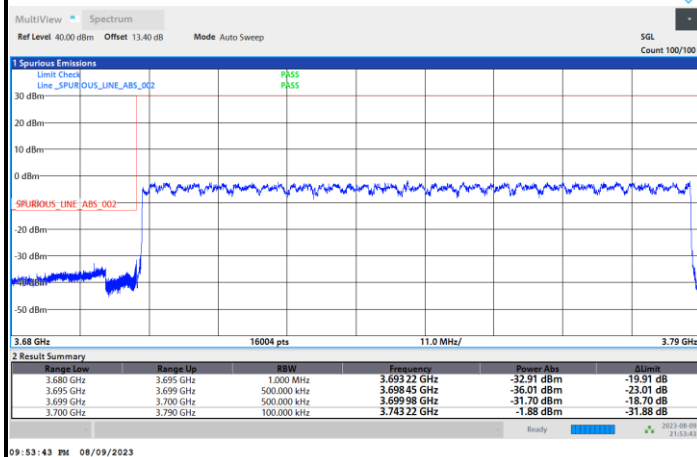


Highest Band Edge / Full RB

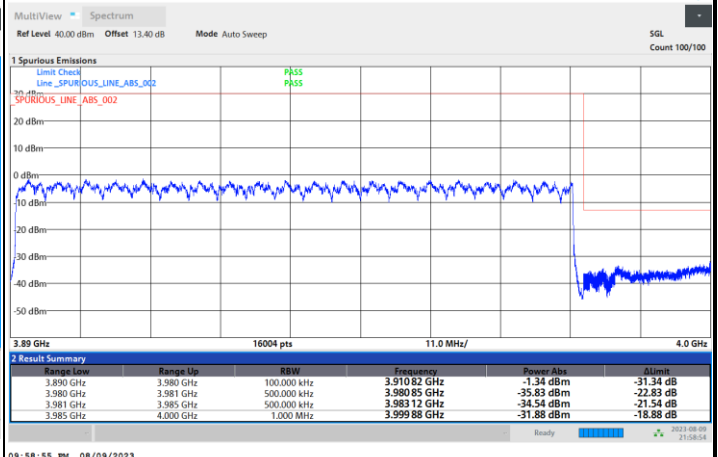


FR1 n77 / 90MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / Full RB



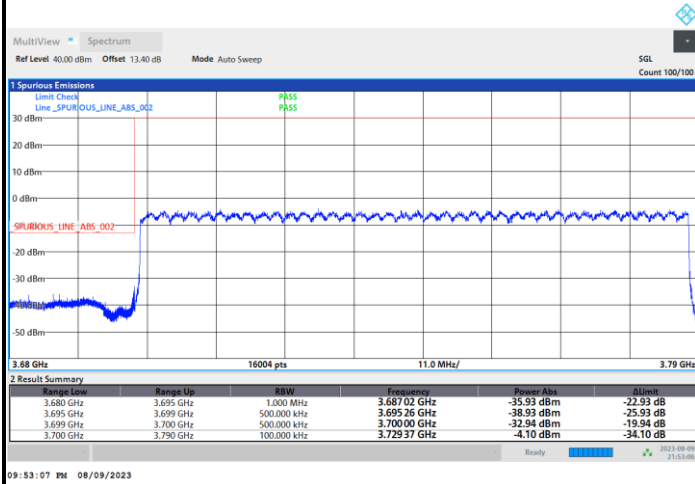
Highest Band Edge / Full RB



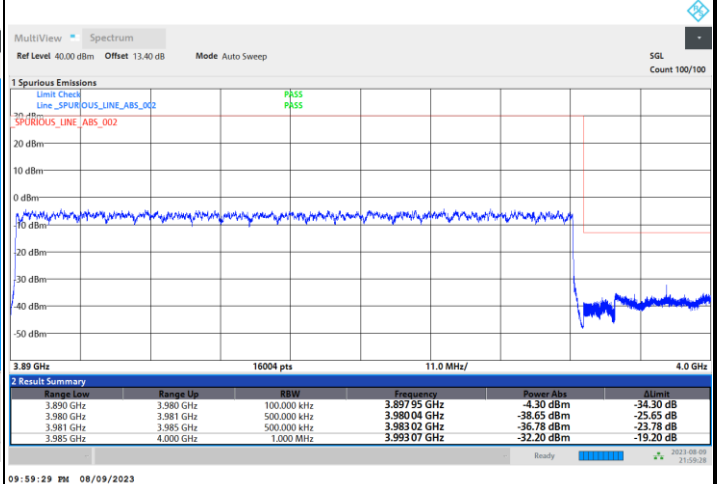


FR1 n77 / 90MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

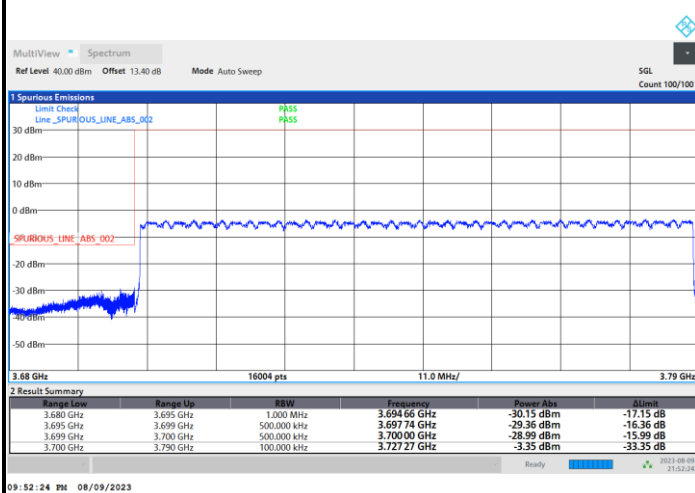


Highest Band Edge / Full RB

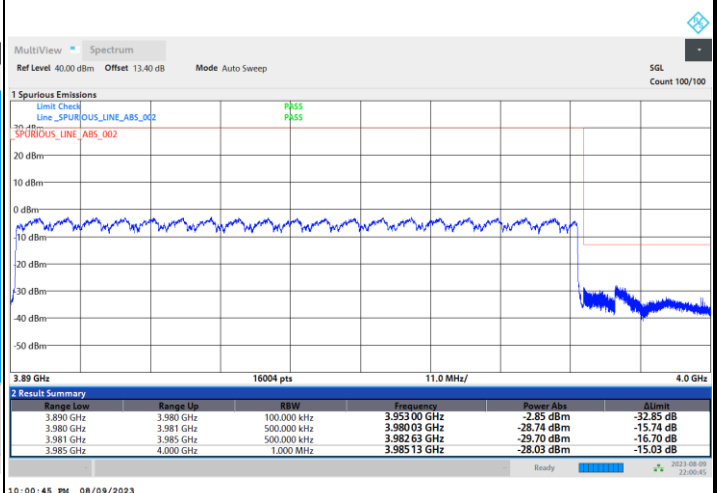


FR1 n77 / 90MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



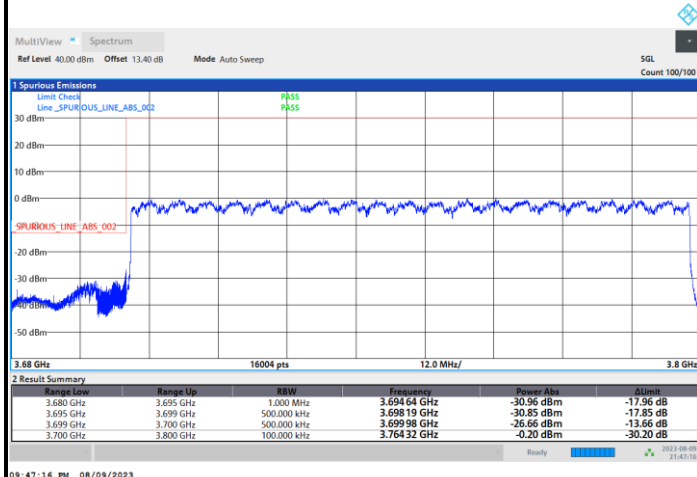
Highest Band Edge



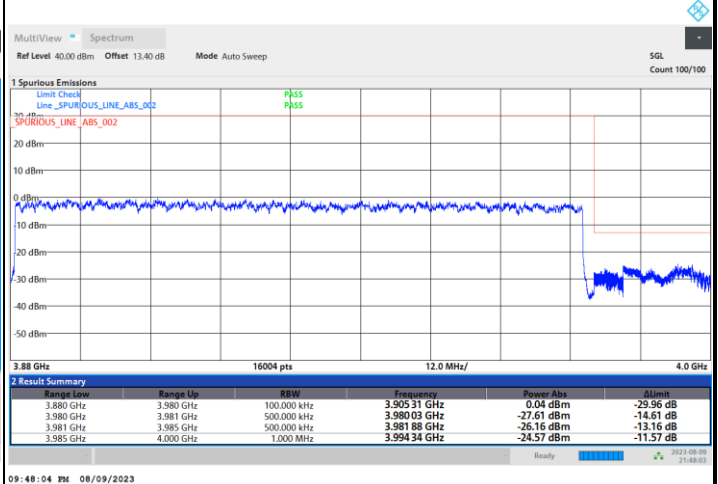


FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

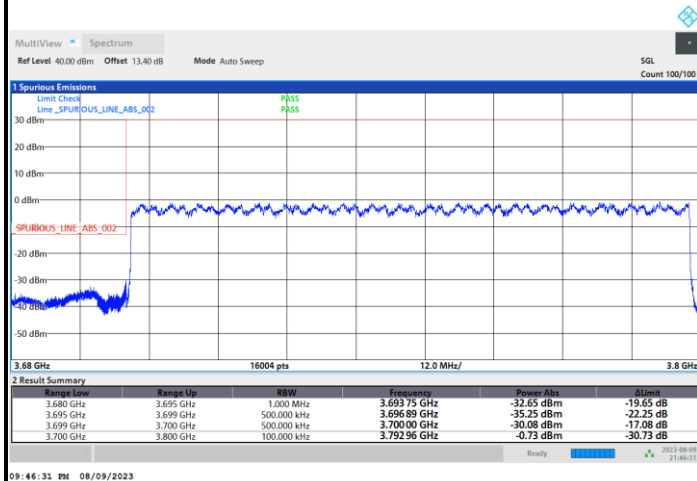


Highest Band Edge / Full RB

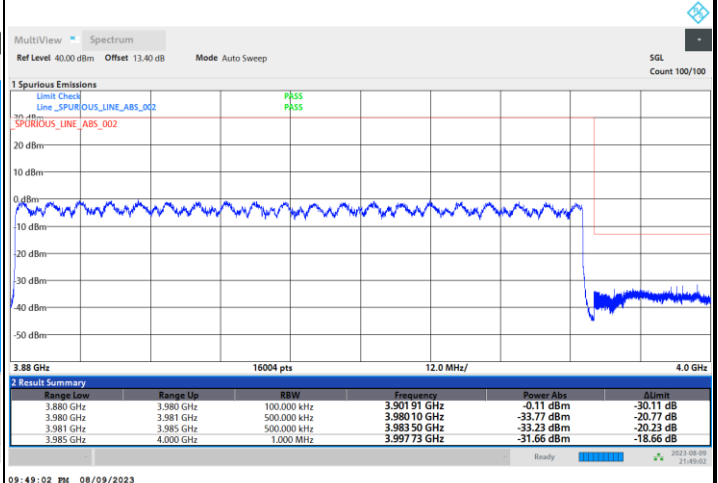


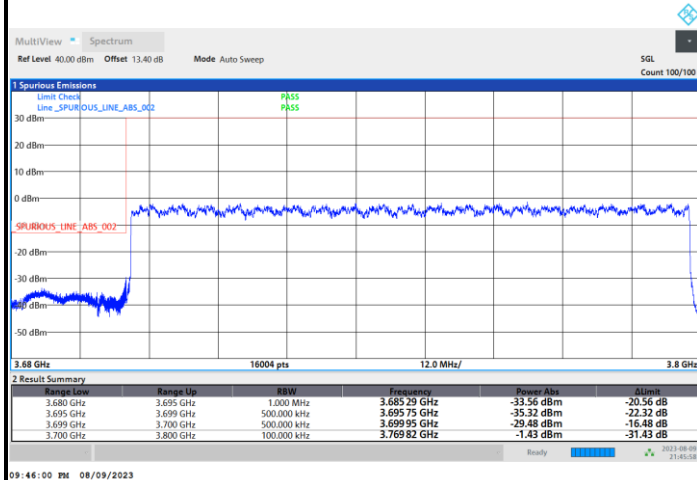
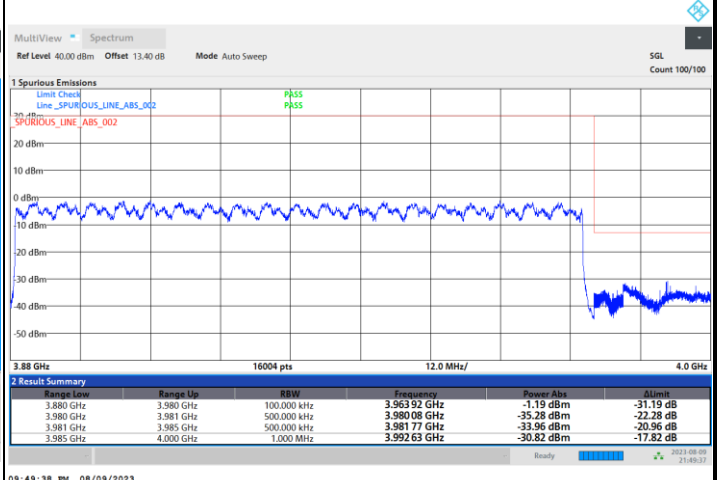
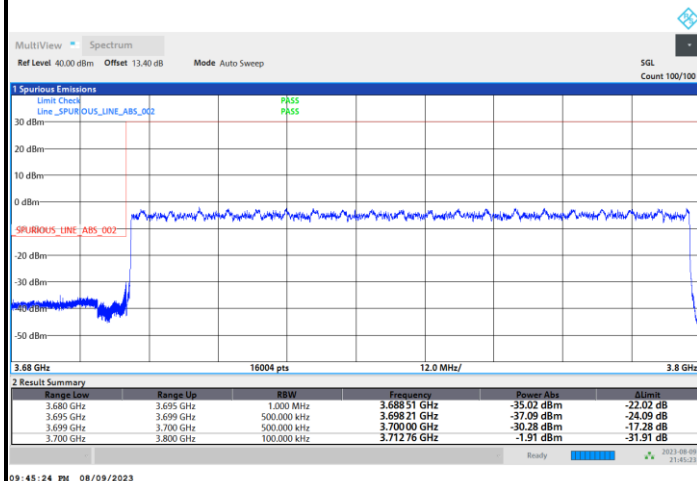
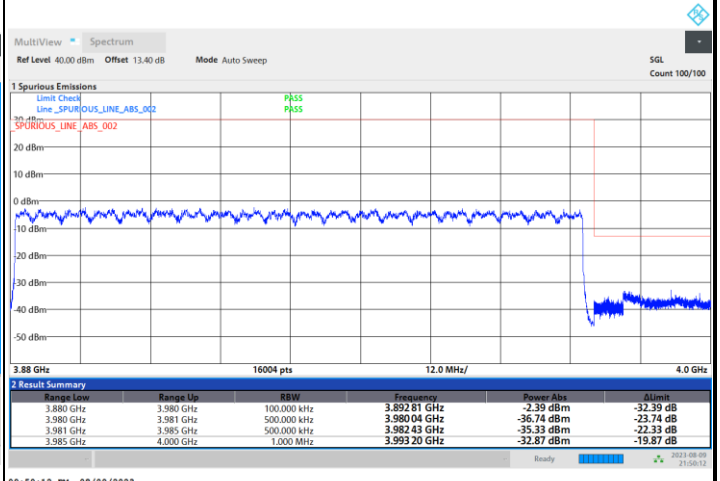
FR1 n77 / 100MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

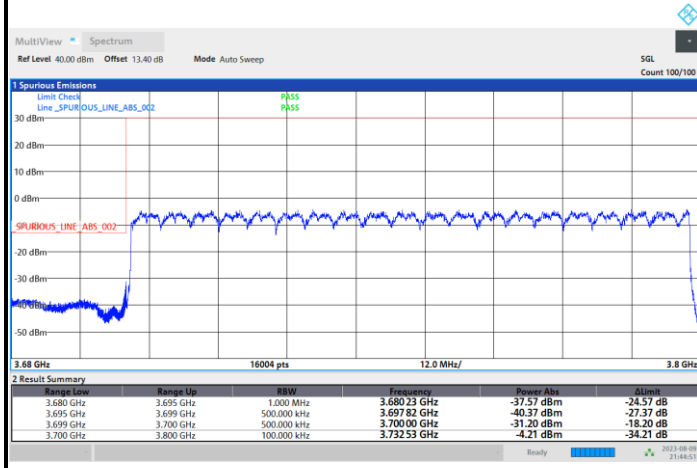


**FR1 n77 / 100MHz / DFT-S OFDM / 16QAM****Lowest Band Edge / Full RB****Highest Band Edge / Full RB****FR1 n77 / 100MHz / DFT-S OFDM / 64QAM****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

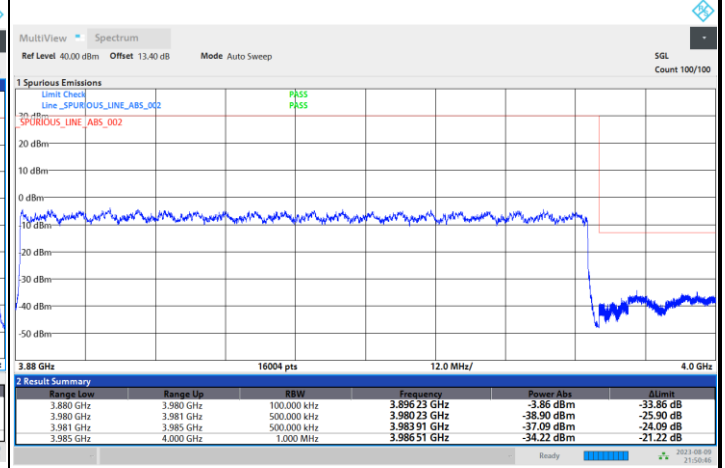


FR1 n77 / 100MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

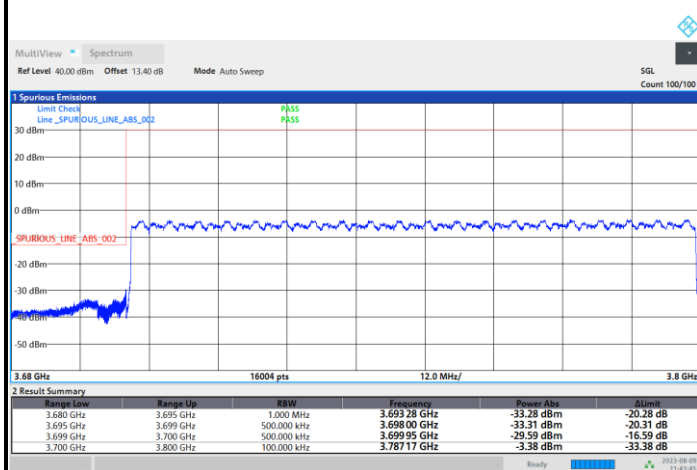


Highest Band Edge / Full RB

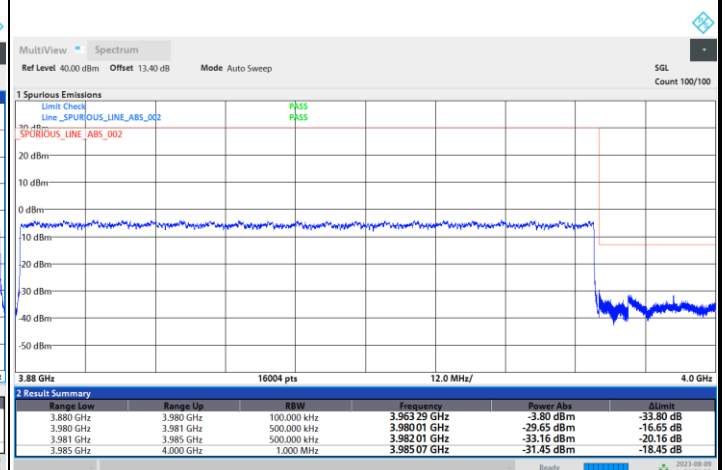


FR1 n77 / 100MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



Highest Band Edge

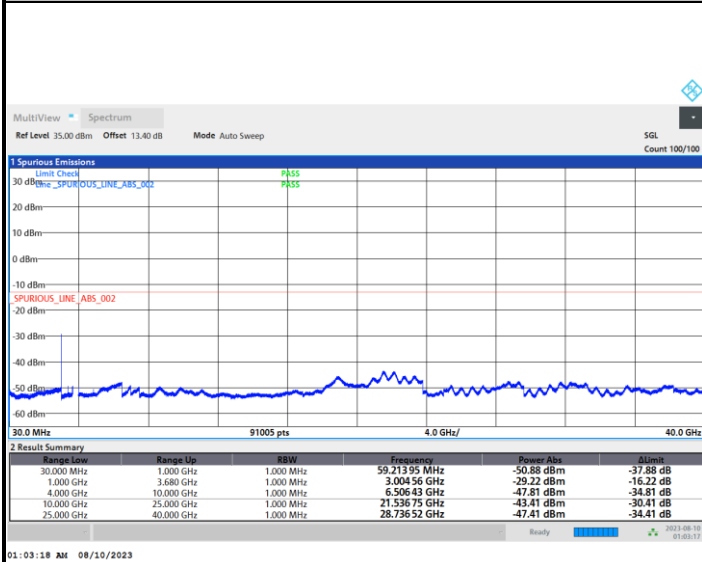




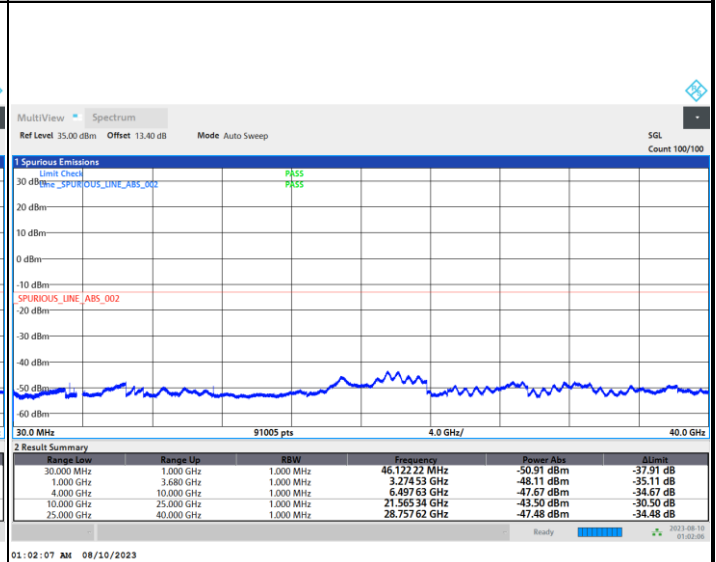
Conducted Spurious Emission

FR1 n77 / 10MHz / DFT-S OFDM / QPSK / 1RB1

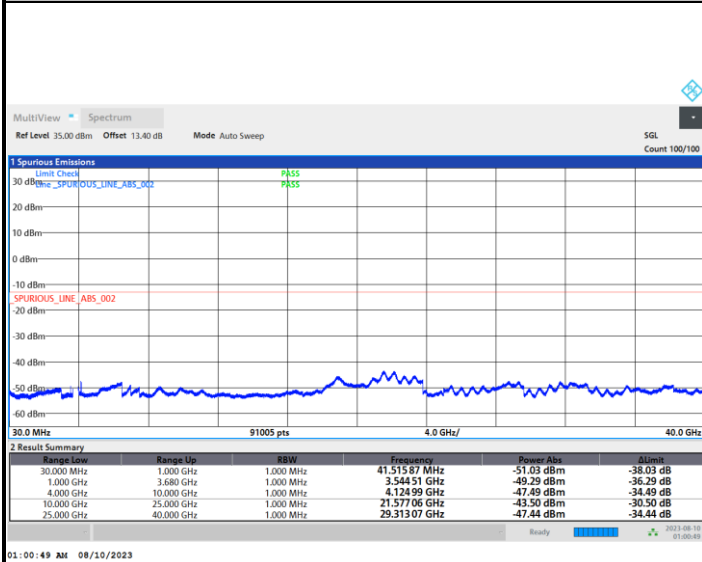
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n77 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0026	PASS
40	Normal Voltage	0.0000	
30	Normal Voltage	0.0029	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0029	
0	Normal Voltage	0.0028	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0019	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0028	

Note:

1. Normal Voltage = 3.3 V. ; Battery End Point (BEP) = 3.135 V. ; Maximum Voltage = 3.63 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

MIMO <Ant. 0+1>

5G NR n77 (HPUE)

5G NR n77 (HPUE) / 100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	7402	-46.62	-13	-33.62	-71.68	-54.04	1.34	10.91	H
	11103	-41.40	-13	-28.40	-72.63	-49.86	1.63	12.24	H
	14805	-36.19	-13	-23.19	-70.92	-45.49	1.94	13.39	H
	18506	-70.75	-13	-57.75	-76.09	-84.45	2.35	18.20	H
	22207	-70.13	-13	-57.13	-77.68	-84.67	2.23	18.92	H
	25908	-67.41	-13	-54.41	-78.56	-82.27	2.45	19.46	H
									H
	7402	-45.56	-13	-32.56	-71.49	-52.98	1.34	10.91	V
	11103	-42.39	-13	-29.39	-72.75	-50.85	1.63	12.24	V
	14805	-36.19	-13	-23.19	-71.08	-45.49	1.94	13.39	V
	18506	-70.91	-13	-57.91	-76.34	-84.61	2.35	18.20	V
	22207	-69.97	-13	-56.97	-76.34	-84.51	2.23	18.92	V
	25908	-67.08	-13	-54.08	-78.04	-81.94	2.45	19.46	V
									V



Middle	7582	-46.50	-13	-33.50	-71.7	-54.45	1.36	11.46	H
	11373	-40.06	-13	-27.06	-71.47	-48.60	1.66	12.35	H
	15165	-36.40	-13	-23.40	-71.2	-46.55	1.92	14.23	H
	18956	-71.40	-13	-58.40	-77.4	-85.15	2.20	18.11	H
	22747	-69.86	-13	-56.86	-78.54	-84.30	2.26	18.85	H
	26538	-66.97	-13	-53.97	-78.78	-81.61	2.39	19.18	H
									H
	7582	-46.07	-13	-33.07	-71.89	-54.02	1.36	11.46	V
	11373	-41.64	-13	-28.64	-72.24	-50.18	1.66	12.35	V
	15165	-35.95	-13	-22.95	-70.99	-46.10	1.92	14.23	V
	18956	-70.80	-13	-57.80	-76.96	-84.55	2.20	18.11	V
	22747	-68.85	-13	-55.85	-78.08	-83.29	2.26	18.85	V
	26538	-66.65	-13	-53.65	-78.79	-81.29	2.39	19.18	V
									V
Highest	7762	-46.58	-13	-33.58	-71.96	-54.35	1.34	11.26	H
	11643	-39.72	-13	-26.72	-71.23	-48.36	1.70	12.49	H
	15525	-36.51	-13	-23.51	-70.74	-47.78	1.92	15.34	H
	19406	-71.44	-13	-58.44	-77.03	-85.40	2.31	18.42	H
	23287	-68.85	-13	-55.85	-77.89	-83.11	2.42	18.83	H
	27168	-66.85	-13	-53.85	-79.35	-81.14	2.66	19.10	H
									H
	7762	-45.36	-13	-32.36	-71.37	-53.13	1.34	11.26	V
	11643	-41.08	-13	-28.08	-71.81	-49.72	1.70	12.49	V
	15525	-35.85	-13	-22.85	-70.77	-47.12	1.92	15.34	V
	19406	-71.33	-13	-58.33	-77.1	-85.29	2.31	18.42	V
	23287	-68.45	-13	-55.45	-78.09	-82.71	2.42	18.83	V
	27168	-66.25	-13	-53.25	-78.98	-80.54	2.66	19.10	V
									V

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



MIMO <Ant. 0+2>

5G NR n77 (HPUE)

5G NR n77 (HPUE) / 100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	7402	-47.17	-13	-34.17	-72.24	-54.59	1.34	10.91	H
	11103	-41.94	-13	-28.94	-73.17	-50.40	1.63	12.24	H
	14805	-37.29	-13	-24.29	-72.02	-46.59	1.94	13.39	H
	18506	-71.26	-13	-58.26	-76.6	-84.96	2.35	18.20	H
	22207	-70.22	-13	-57.22	-77.77	-84.76	2.23	18.92	H
	25908	-67.41	-13	-54.41	-78.56	-82.27	2.45	19.46	H
									H
	7402	-46.08	-13	-33.08	-72.01	-53.50	1.34	10.91	V
	11103	-42.84	-13	-29.84	-73.19	-51.30	1.63	12.24	V
	14805	-36.14	-13	-23.14	-71.03	-45.44	1.94	13.39	V
	18506	-71.20	-13	-58.20	-76.63	-84.90	2.35	18.20	V
	22207	-69.57	-13	-56.57	-77.64	-84.11	2.23	18.92	V
	25908	-66.74	-13	-53.74	-78.29	-81.60	2.45	19.46	V
									V
Middle	7582	-47.38	-13	-34.38	-72.57	-55.33	1.36	11.46	H
	11373	-41.43	-13	-28.43	-72.84	-49.97	1.66	12.35	H
	15165	-36.78	-13	-23.78	-71.58	-46.93	1.92	14.23	H
	18956	-70.74	-13	-57.74	-76.74	-84.49	2.20	18.11	H
	22747	-69.23	-13	-56.23	-77.91	-83.67	2.26	18.85	H
	26538	-66.83	-13	-53.83	-78.64	-81.47	2.39	19.18	H
									H
	7582	-46.49	-13	-33.49	-72.31	-54.44	1.36	11.46	V
	11373	-42.00	-13	-29.00	-72.59	-50.54	1.66	12.35	V
	15165	-36.31	-13	-23.31	-71.35	-46.46	1.92	14.23	V
	18956	-70.84	-13	-57.84	-77	-84.59	2.20	18.11	V
	22747	-68.77	-13	-55.77	-78	-83.21	2.26	18.85	V
	26538	-66.54	-13	-53.54	-78.68	-81.18	2.39	19.18	V
									V



Highest	7762	-46.77	-13	-33.77	-72.15	-54.54	1.34	11.26	H
	11643	-40.28	-13	-27.28	-71.79	-48.92	1.70	12.49	H
	15525	-36.82	-13	-23.82	-71.05	-48.09	1.92	15.34	H
	19406	-70.79	-13	-57.79	-76.38	-84.75	2.31	18.42	H
	23287	-68.72	-13	-55.72	-77.76	-82.98	2.42	18.83	H
	27168	-66.90	-13	-53.90	-79.4	-81.19	2.66	19.10	H
									H
	7762	-46.02	-13	-33.02	-72.02	-53.79	1.34	11.26	V
	11643	-41.51	-13	-28.51	-72.24	-50.15	1.70	12.49	V
	15525	-35.93	-13	-22.93	-70.85	-47.20	1.92	15.34	V
	19406	-71.02	-13	-58.02	-76.79	-84.98	2.31	18.42	V
	23287	-68.10	-13	-55.10	-77.74	-82.36	2.42	18.83	V
	27168	-66.33	-13	-53.33	-79.06	-80.62	2.66	19.10	V
									V

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



MIMO <Ant. 1+3>

5G NR n77 (HPUE)

5G NR n77 (HPUE) / 100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	7402	-47.15	-13	-34.15	-72.22	-54.57	1.34	10.91	H
	11103	-41.75	-13	-28.75	-72.98	-50.21	1.63	12.24	H
	14805	-37.16	-13	-24.16	-71.89	-46.46	1.94	13.39	H
	18506	-70.96	-13	-57.96	-76.3	-84.66	2.35	18.20	H
	22207	-69.75	-13	-56.75	-77.3	-84.29	2.23	18.92	H
	25908	-67.45	-13	-54.45	-78.6	-82.31	2.45	19.46	H
									H
	7402	-46.05	-13	-33.05	-71.98	-53.47	1.34	10.91	V
	11103	-42.64	-13	-29.64	-72.99	-51.10	1.63	12.24	V
	14805	-37.29	-13	-24.29	-72.18	-46.59	1.94	13.39	V
	18506	-70.36	-13	-57.36	-75.79	-84.06	2.35	18.20	V
	22207	-69.64	-13	-56.64	-77.71	-84.18	2.23	18.92	V
	25908	-67.02	-13	-54.02	-78.57	-81.88	2.45	19.46	V
									V
Middle	7582	-45.92	-13	-32.92	-71.11	-53.87	1.36	11.46	H
	11373	-41.31	-13	-28.31	-72.72	-49.85	1.66	12.35	H
	15165	-36.18	-13	-23.18	-70.98	-46.33	1.92	14.23	H
	18956	-70.92	-13	-57.92	-76.92	-84.67	2.20	18.11	H
	22747	-69.50	-13	-56.50	-78.18	-83.94	2.26	18.85	H
	26538	-66.79	-13	-53.79	-78.6	-81.43	2.39	19.18	H
									H
	7582	-43.28	-13	-30.28	-69.1	-51.23	1.36	11.46	V
	11373	-42.05	-13	-29.05	-72.64	-50.59	1.66	12.35	V
	15165	-36.55	-13	-23.55	-71.59	-46.70	1.92	14.23	V
	18956	-70.29	-13	-57.29	-76.45	-84.04	2.20	18.11	V
	22747	-68.88	-13	-55.88	-78.11	-83.32	2.26	18.85	V
	26538	-66.03	-13	-53.03	-78.17	-80.67	2.39	19.18	V
									V



Highest	7762	-46.82	-13	-33.82	-72.2	-54.59	1.34	11.26	H
	11643	-40.48	-13	-27.48	-71.99	-49.12	1.70	12.49	H
	15525	-36.95	-13	-23.95	-71.18	-48.22	1.92	15.34	H
	19406	-70.80	-13	-57.80	-76.39	-84.76	2.31	18.42	H
	23287	-68.80	-13	-55.80	-77.84	-83.06	2.42	18.83	H
	27168	-66.56	-13	-53.56	-79.06	-80.85	2.66	19.10	H
									H
	7762	-45.94	-13	-32.94	-71.94	-53.71	1.34	11.26	V
	11643	-40.98	-13	-27.98	-71.71	-49.62	1.70	12.49	V
	15525	-36.12	-13	-23.12	-71.04	-47.39	1.92	15.34	V
	19406	-70.83	-13	-57.83	-76.6	-84.79	2.31	18.42	V
	23287	-67.85	-13	-54.85	-77.49	-82.11	2.42	18.83	V
	27168	-66.29	-13	-53.29	-79.02	-80.58	2.66	19.10	V
									V

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



MIMO <Ant. 2+3>

5G NR n77(HPUE)

5G NR n77 (HPUE) / 100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	7403	-46.38	-13	-33.38	-71.44	-53.80	1.34	10.91	H
	11104	-41.55	-13	-28.55	-72.78	-50.01	1.63	12.24	H
	14805	-36.61	-13	-23.61	-71.34	-45.91	1.94	13.39	H
	18506	-70.78	-13	-57.78	-76.12	-84.48	2.35	18.20	H
	22207	-70.22	-13	-57.22	-77.77	-84.76	2.23	18.92	H
	25908	-67.14	-13	-54.14	-78.29	-82.00	2.45	19.46	H
									H
	7403	-45.63	-13	-32.63	-71.56	-53.05	1.34	10.91	V
	11104	-42.61	-13	-29.61	-72.97	-51.07	1.63	12.24	V
	14805	-36.59	-13	-23.59	-71.48	-45.89	1.94	13.39	V
	18506	-70.69	-13	-57.69	-76.12	-84.39	2.35	18.20	V
	22207	-69.84	-13	-56.84	-77.91	-84.38	2.23	18.92	V
	25908	-66.70	-13	-53.70	-78.25	-81.56	2.45	19.46	V
									V
Middle	7583	-42.87	-13	-29.87	-68.07	-50.82	1.36	11.47	H
	11374	-40.98	-13	-27.98	-72.39	-49.52	1.66	12.35	H
	15165	-36.34	-13	-23.34	-71.14	-46.49	1.92	14.23	H
	18956	-70.56	-13	-57.56	-76.56	-84.31	2.20	18.11	H
	22747	-69.42	-13	-56.42	-78.1	-83.86	2.26	18.85	H
	26538	-67.02	-13	-54.02	-78.83	-81.66	2.39	19.18	H
									H
	7583	-41.70	-13	-28.70	-67.52	-49.65	1.36	11.47	V
	11374	-41.59	-13	-28.59	-72.19	-50.13	1.66	12.35	V
	15165	-36.16	-13	-23.16	-71.2	-46.31	1.92	14.23	V
	18956	-70.42	-13	-57.42	-76.58	-84.17	2.20	18.11	V
	22747	-68.74	-13	-55.74	-77.97	-83.18	2.26	18.85	V
	26538	-66.44	-13	-53.44	-78.58	-81.08	2.39	19.18	V
									V



Highest	7762	-46.57	-13	-33.57	-71.95	-54.34	1.34	11.26	H
	11643	-40.27	-13	-27.27	-71.78	-48.91	1.70	12.49	H
	15525	-36.46	-13	-23.46	-70.69	-47.73	1.92	15.34	H
	19406	-70.94	-13	-57.94	-76.53	-84.90	2.31	18.42	H
	23287	-68.80	-13	-55.80	-77.84	-83.06	2.42	18.83	H
	27168	-66.40	-13	-53.40	-78.9	-80.69	2.66	19.10	H
									H
	7762	-45.67	-13	-32.67	-71.68	-53.44	1.34	11.26	V
	11643	-41.15	-13	-28.15	-71.88	-49.79	1.70	12.49	V
	15525	-35.45	-13	-22.45	-70.37	-46.72	1.92	15.34	V
	19406	-70.68	-13	-57.68	-76.45	-84.64	2.31	18.42	V
	23287	-68.20	-13	-55.20	-77.84	-82.46	2.42	18.83	V
	27168	-66.37	-13	-53.37	-79.1	-80.66	2.66	19.10	V
									V

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