

**NR n41- EIRP**
**Limits: ≤33dBm (2W)**

Mod.	Bandwidth	Frequency (MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)	P <sub>Ag</sub> (dB)	G <sub>a</sub> (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Ant.Pol
pi/2 BPSK	10MHz	2501.01	-25.13	3.58	45.65	6.10	23.04	33.00	9.96	H
	10MHz	2592.99	-23.09	3.69	44.93	6.27	24.42	33.00	8.58	H
	10MHz	2685.00	-23.27	3.73	44.98	6.43	24.41	33.00	8.59	H
	15MHz	2503.50	-25.21	3.58	45.65	6.11	22.97	33.00	10.03	H
	15MHz	2592.99	-23.06	3.69	44.93	6.27	24.45	33.00	8.55	H
	15MHz	2682.48	-23.05	3.73	44.98	6.43	24.63	33.00	8.37	H
	20MHz	2506.02	-25.22	3.59	45.15	6.11	22.45	33.00	10.55	H
	20MHz	2592.99	-23.24	3.69	44.93	6.27	24.27	33.00	8.73	H
	20MHz	2679.99	-23.26	3.73	44.97	6.42	24.40	33.00	8.60	H
	40MHz	2516.01	-25.37	3.59	45.23	6.13	22.40	33.00	10.60	H
	40MHz	2592.99	-23.34	3.69	44.93	6.27	24.17	33.00	8.83	H
	40MHz	2670.00	-23.28	3.78	44.97	6.41	24.32	33.00	8.68	H
	50MHz	2521.02	-25.79	3.60	45.12	6.14	21.87	33.00	11.13	H
	50MHz	2592.99	-23.39	3.69	44.93	6.27	24.12	33.00	8.88	H
	50MHz	2664.99	-23.29	3.72	44.96	6.40	24.35	33.00	8.65	H
	60MHz	2526.00	-25.01	3.61	45.01	6.15	22.54	33.00	10.46	H
	60MHz	2592.99	-23.58	3.69	44.93	6.27	23.93	33.00	9.07	H
	60MHz	2659.98	-23.59	3.70	44.96	6.39	24.06	33.00	8.94	H
	80MHz	2536.02	-24.22	3.63	44.87	6.16	23.18	33.00	9.82	H
	80MHz	2592.99	-23.24	3.69	44.93	6.27	24.27	33.00	8.73	H
80MHz	2649.99	-23.52	3.69	44.96	6.37	24.12	33.00	8.88	H	
90MHz	2541.00	-25.56	3.63	45.10	6.17	22.08	33.00	10.92	H	
90MHz	2592.99	-23.41	3.69	44.93	6.27	24.10	33.00	8.90	H	
90MHz	2644.98	-23.50	3.68	44.96	6.36	24.14	33.00	8.86	H	
100MHz	2546.01	-25.32	3.62	45.33	6.18	22.57	33.00	10.43	H	
100MHz	2592.99	-23.22	3.69	44.93	6.27	24.29	33.00	8.71	H	
100MHz	2640.00	-23.28	3.68	44.96	6.35	24.35	33.00	8.65	H	
QPSK	10MHz	2501.01	-26.14	3.58	45.65	6.10	22.03	33.00	10.97	H
	10MHz	2592.99	-24.11	3.69	44.93	6.27	23.40	33.00	9.60	H
	10MHz	2685.00	-23.90	3.73	44.98	6.43	23.78	33.00	9.22	H
	15MHz	2503.50	-26.56	3.58	45.65	6.11	21.62	33.00	11.38	H
	15MHz	2592.99	-24.96	3.69	44.93	6.27	22.55	33.00	10.45	H
	15MHz	2682.48	-24.24	3.73	44.98	6.43	23.44	33.00	9.56	H
	20MHz	2506.02	-25.98	3.59	45.15	6.11	21.69	33.00	11.31	H
	20MHz	2592.99	-24.50	3.69	44.93	6.27	23.01	33.00	9.99	H
	20MHz	2679.99	-24.62	3.73	44.97	6.42	23.04	33.00	9.96	H
	40MHz	2516.01	-26.63	3.59	45.23	6.13	21.14	33.00	11.86	H
	40MHz	2592.99	-24.50	3.69	44.93	6.27	23.01	33.00	9.99	H
	40MHz	2670.00	-24.74	3.78	44.97	6.41	22.86	33.00	10.14	H

	50MHz	2521.02	-25.84	3.60	45.12	6.14	21.82	33.00	11.18	H
	50MHz	2592.99	-24.25	3.69	44.93	6.27	23.26	33.00	9.74	H
	50MHz	2664.99	-24.38	3.72	44.96	6.40	23.26	33.00	9.74	H
	60MHz	2526.00	-25.15	3.61	45.01	6.15	22.40	33.00	10.60	H
	60MHz	2592.99	-24.48	3.69	44.93	6.27	23.03	33.00	9.97	H
	60MHz	2659.98	-24.44	3.70	44.96	6.39	23.21	33.00	9.79	H
	80MHz	2536.02	-24.82	3.63	44.87	6.16	22.58	33.00	10.42	H
	80MHz	2592.99	-23.63	3.69	44.93	6.27	23.88	33.00	9.12	H
	80MHz	2649.99	-23.71	3.69	44.96	6.37	23.93	33.00	9.07	H
	90MHz	2541.00	-23.67	3.63	45.10	6.17	23.97	33.00	9.03	H
	90MHz	2592.99	-23.73	3.69	44.93	6.27	23.78	33.00	9.22	H
	90MHz	2644.98	-24.15	3.68	44.96	6.36	23.49	33.00	9.51	H
	100MHz	2546.01	-23.38	3.62	45.33	6.18	24.51	33.00	8.49	H
	100MHz	2592.99	-23.78	3.69	44.93	6.27	23.73	33.00	9.27	H
	100MHz	2640.00	-24.07	3.68	44.96	6.35	23.56	33.00	9.44	H
16QAM	10MHz	2501.01	-27.48	3.58	45.65	6.10	20.69	33.00	12.31	H
	10MHz	2592.99	-25.24	3.69	44.93	6.27	22.27	33.00	10.73	H
	10MHz	2685.00	-24.31	3.73	44.98	6.43	23.37	33.00	9.63	H
	15MHz	2503.50	-27.79	3.58	45.65	6.11	20.39	33.00	12.61	H
	15MHz	2592.99	-25.28	3.69	44.93	6.27	22.23	33.00	10.77	H
	15MHz	2682.48	-25.55	3.73	44.98	6.43	22.13	33.00	10.87	H
	20MHz	2506.02	-27.37	3.59	45.15	6.11	20.30	33.00	12.70	H
	20MHz	2592.99	-25.14	3.69	44.93	6.27	22.37	33.00	10.63	H
	20MHz	2679.99	-25.88	3.73	44.97	6.42	21.78	33.00	11.22	H
	40MHz	2516.01	-27.02	3.59	45.23	6.13	20.75	33.00	12.25	H
	40MHz	2592.99	-25.14	3.69	44.93	6.27	22.37	33.00	10.63	H
	40MHz	2670.00	-26.00	3.78	44.97	6.41	21.60	33.00	11.40	H
	50MHz	2521.02	-26.09	3.60	45.12	6.14	21.57	33.00	11.43	H
	50MHz	2592.99	-25.26	3.69	44.93	6.27	22.25	33.00	10.75	H
	50MHz	2664.99	-26.45	3.72	44.96	6.40	21.19	33.00	11.81	H
	60MHz	2526.00	-26.39	3.61	45.01	6.15	21.16	33.00	11.84	H
	60MHz	2592.99	-25.25	3.69	44.93	6.27	22.26	33.00	10.74	H
	60MHz	2659.98	-26.50	3.70	44.96	6.39	21.15	33.00	11.85	H
	80MHz	2536.02	-26.28	3.63	44.87	6.16	21.12	33.00	11.88	H
	80MHz	2592.99	-24.63	3.69	44.93	6.27	22.88	33.00	10.12	H
	80MHz	2649.99	-26.66	3.69	44.96	6.37	20.98	33.00	12.02	H
	90MHz	2541.00	-27.07	3.63	45.10	6.17	20.57	33.00	12.43	H
	90MHz	2592.99	-25.80	3.69	44.93	6.27	21.71	33.00	11.29	H
	90MHz	2644.98	-26.74	3.68	44.96	6.36	20.90	33.00	12.10	H
100MHz	2546.01	-27.58	3.62	45.33	6.18	20.31	33.00	12.69	H	
100MHz	2592.99	-25.77	3.69	44.93	6.27	21.74	33.00	11.26	H	
100MHz	2640.00	-26.05	3.68	44.96	6.35	21.58	33.00	11.42	H	
64QAM	10MHz	2592.99	-27.50	3.69	44.93	6.27	20.01	33.00	12.99	H

	15MHz	2592.99	-27.54	3.69	44.93	6.27	19.97	33.00	13.03	H
	20MHz	2679.99	-27.52	3.73	44.97	6.42	20.14	33.00	12.86	H
	40MHz	2670.00	-27.14	3.78	44.97	6.41	20.46	33.00	12.54	H
	50MHz	2592.99	-25.56	3.69	44.93	6.27	21.95	33.00	11.05	H
	60MHz	2659.98	-27.11	3.70	44.96	6.39	20.54	33.00	12.46	H
	80MHz	2592.99	-25.48	3.69	44.93	6.27	22.03	33.00	10.97	H
	90MHz	2541.00	-28.37	3.63	45.10	6.17	19.27	33.00	13.73	H
	100MHz	2592.99	-27.03	3.69	44.93	6.27	20.48	33.00	12.52	H
256QAM	10MHz	2592.99	-28.14	3.69	44.93	6.27	19.37	33.00	13.63	H
	15MHz	2592.99	-28.82	3.69	44.93	6.27	18.69	33.00	14.31	H
	20MHz	2679.99	-28.31	3.73	44.97	6.42	19.35	33.00	13.65	H
	40MHz	2592.99	-28.27	3.69	44.93	6.27	19.24	33.00	13.76	H
	50MHz	2664.99	-28.86	3.72	44.96	6.40	18.78	33.00	14.22	H
	60MHz	2526.00	-28.58	3.61	45.01	6.15	18.97	33.00	14.03	H
	80MHz	2592.99	-28.22	3.69	44.93	6.27	19.29	33.00	13.71	H
	90MHz	2592.99	-29.09	3.69	44.93	6.27	18.42	33.00	14.58	H
	100MHz	2592.99	-28.89	3.69	44.93	6.27	18.62	33.00	14.38	H

**NR n48- EIRP**
**Limits:** ≤23dBm/10MHz

Mod.	Bandwidth	Frequency (MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)	P <sub>Ag</sub> (dB)	G <sub>a</sub> (dBi)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Ant.Pol
pi/2 BPSK	10MHz	3555.00	-33.60	4.31	43.78	8.23	21.10	23.00	1.90	H
	10MHz	3624.99	-32.51	4.37	43.59	8.26	21.98	23.00	1.02	H
	10MHz	3694.98	-33.45	4.45	44.06	8.30	21.46	23.00	1.54	H
	15MHz	3557.52	-33.60	4.32	43.59	8.23	20.90	23.00	2.10	H
	15MHz	3624.99	-32.52	4.37	43.59	8.26	21.97	23.00	1.03	H
	15MHz	3692.49	-32.70	4.46	43.25	8.30	21.39	23.00	1.61	H
	20MHz	3560.01	-33.62	4.32	43.48	8.23	20.77	23.00	2.23	H
	20MHz	3624.99	-32.32	4.37	43.59	8.26	22.17	23.00	0.83	H
	20MHz	3690.00	-33.45	4.47	43.89	8.30	21.27	23.00	1.73	H
	40MHz	3570.00	-33.81	4.34	43.79	8.24	20.88	23.00	2.12	H
	40MHz	3624.99	-32.32	4.37	43.59	8.26	22.17	23.00	0.83	H
	40MHz	3679.98	-33.16	4.46	43.62	8.29	21.29	23.00	1.71	H
	50MHz	3575.01	-33.11	4.35	43.10	8.24	20.88	23.00	2.12	H
	50MHz	3624.99	-32.46	4.37	43.59	8.26	22.03	23.00	0.97	H
	50MHz	3675.00	-34.65	4.46	44.88	8.29	21.06	23.00	1.94	H
	60MHz	3580.02	-34.29	4.35	44.16	8.24	20.76	23.00	2.24	H
	60MHz	3624.99	-32.50	4.37	43.59	8.26	21.99	23.00	1.01	H
	60MHz	3669.99	-33.82	4.45	43.81	8.29	20.82	23.00	2.18	H
	80MHz	3590.01	-33.11	4.37	43.52	8.25	21.29	23.00	1.71	H
	80MHz	3624.99	-32.67	4.37	43.59	8.26	21.82	23.00	1.18	H
80MHz	3660.00	-33.32	4.41	43.47	8.28	21.02	23.00	1.98	H	
90MHz	3595.02	-34.31	4.37	44.88	8.25	21.45	23.00	1.55	H	
90MHz	3624.99	-32.70	4.37	43.59	8.26	21.79	23.00	1.21	H	
90MHz	3654.99	-34.22	4.40	44.61	8.28	21.27	23.00	1.73	H	
100MHz	3600.00	-33.43	4.38	44.04	8.25	21.48	23.00	1.52	H	
100MHz	3624.99	-32.75	4.37	43.59	8.26	21.74	23.00	1.26	H	
100MHz	3649.98	-34.26	4.38	44.55	8.28	21.19	23.00	1.81	H	
QPSK	10MHz	3555.00	-34.55	4.31	44.61	8.23	20.97	23.00	2.03	H
	10MHz	3624.99	-33.01	4.37	44.07	8.26	21.95	23.00	1.05	H
	10MHz	3694.98	-33.31	4.45	43.97	8.30	21.51	23.00	1.49	H
	15MHz	3557.52	-34.47	4.32	44.49	8.23	20.93	23.00	2.07	H
	15MHz	3624.99	-32.98	4.37	44.07	8.26	21.98	23.00	1.02	H
	15MHz	3692.49	-33.07	4.46	43.63	8.30	21.39	23.00	1.61	H
	20MHz	3560.01	-33.96	4.32	43.76	8.23	20.71	23.00	2.29	H
	20MHz	3624.99	-33.00	4.37	44.07	8.26	21.96	23.00	1.04	H
	20MHz	3690.00	-33.82	4.47	44.21	8.30	21.22	23.00	1.78	H
	40MHz	3570.00	-33.92	4.34	43.85	8.24	20.82	23.00	2.18	H
	40MHz	3624.99	-33.00	4.37	44.07	8.26	21.96	23.00	1.04	H
40MHz	3679.98	-33.99	4.46	44.40	8.29	21.24	23.00	1.76	H	

	50MHz	3575.01	-34.00	4.35	43.98	8.24	20.87	23.00	2.13	H
	50MHz	3624.99	-33.02	4.37	44.07	8.26	21.94	23.00	1.06	H
	50MHz	3675.00	-33.57	4.46	43.76	8.29	21.02	23.00	1.98	H
	60MHz	3580.02	-33.33	4.35	43.31	8.24	20.87	23.00	2.13	H
	60MHz	3624.99	-32.92	4.37	44.07	8.26	22.04	23.00	0.96	H
	60MHz	3669.99	-33.34	4.45	43.43	8.29	20.92	23.00	2.08	H
	80MHz	3590.01	-34.03	4.37	44.51	8.25	21.35	23.00	1.65	H
	80MHz	3624.99	-33.05	4.37	44.07	8.26	21.91	23.00	1.09	H
	80MHz	3660.00	-34.16	4.41	44.41	8.28	21.12	23.00	1.88	H
	90MHz	3595.02	-32.70	4.37	43.18	8.25	21.36	23.00	1.64	H
	90MHz	3624.99	-33.19	4.37	44.07	8.26	21.77	23.00	1.23	H
	90MHz	3654.99	-34.14	4.40	44.45	8.28	21.18	23.00	1.82	H
	100MHz	3600.00	-34.03	4.38	44.73	8.25	21.57	23.00	1.43	H
	100MHz	3624.99	-33.10	4.37	44.07	8.26	21.86	23.00	1.14	H
	100MHz	3649.98	-34.45	4.38	44.83	8.28	21.28	23.00	1.72	H
16QAM	10MHz	3555.00	-35.58	4.31	44.64	8.23	19.98	23.00	3.02	H
	10MHz	3624.99	-33.35	4.37	43.31	8.26	20.85	23.00	2.15	H
	10MHz	3694.98	-33.61	4.45	43.13	8.30	20.37	23.00	2.63	H
	15MHz	3557.52	-34.59	4.32	43.30	8.23	19.62	23.00	3.38	H
	15MHz	3624.99	-33.35	4.37	43.31	8.26	20.85	23.00	2.15	H
	15MHz	3692.49	-34.91	4.46	44.31	8.30	20.24	23.00	2.76	H
	20MHz	3560.01	-34.92	4.32	43.61	8.23	19.60	23.00	3.40	H
	20MHz	3624.99	-33.36	4.37	43.31	8.26	20.84	23.00	2.16	H
	20MHz	3690.00	-33.90	4.47	43.16	8.30	20.09	23.00	2.91	H
	40MHz	3570.00	-35.65	4.34	44.46	8.24	19.71	23.00	3.29	H
	40MHz	3624.99	-33.36	4.37	43.31	8.26	20.84	23.00	2.16	H
	40MHz	3679.98	-35.14	4.46	44.42	8.29	20.11	23.00	2.89	H
	50MHz	3575.01	-35.55	4.35	44.38	8.24	19.72	23.00	3.28	H
	50MHz	3624.99	-33.35	4.37	43.31	8.26	20.85	23.00	2.15	H
	50MHz	3675.00	-34.56	4.46	43.59	8.29	19.86	23.00	3.14	H
	60MHz	3580.02	-35.50	4.35	44.30	8.24	19.69	23.00	3.31	H
	60MHz	3624.99	-33.32	4.37	43.31	8.26	20.88	23.00	2.12	H
	60MHz	3669.99	-35.89	4.45	44.77	8.29	19.71	23.00	3.29	H
	80MHz	3590.01	-35.58	4.37	44.83	8.25	20.12	23.00	2.88	H
	80MHz	3624.99	-33.48	4.37	43.31	8.26	20.72	23.00	2.28	H
	80MHz	3660.00	-34.53	4.41	43.55	8.28	19.89	23.00	3.11	H
90MHz	3595.02	-34.66	4.37	44.04	8.25	20.25	23.00	2.75	H	
90MHz	3624.99	-33.52	4.37	43.31	8.26	20.68	23.00	2.32	H	
90MHz	3654.99	-35.46	4.40	44.70	8.28	20.12	23.00	2.88	H	
100MHz	3600.00	-33.89	4.38	43.37	8.25	20.35	23.00	2.65	H	
100MHz	3624.99	-33.59	4.37	43.31	8.26	20.61	23.00	2.39	H	
100MHz	3649.98	-34.98	4.38	44.22	8.28	20.14	23.00	2.86	H	
64QAM	10MHz	3624.99	-35.21	4.37	43.73	8.26	19.42	23.00	3.58	H

	15MHz	3624.99	-35.07	4.37	43.73	8.26	19.56	23.00	3.44	H
	20MHz	3624.99	-35.11	4.37	43.73	8.26	19.52	23.00	3.48	H
	40MHz	3624.99	-35.11	4.37	43.73	8.26	19.52	23.00	3.48	H
	50MHz	3624.99	-35.18	4.37	43.73	8.26	19.45	23.00	3.55	H
	60MHz	3624.99	-35.04	4.37	43.73	8.26	19.59	23.00	3.41	H
	80MHz	3624.99	-35.17	4.37	43.73	8.26	19.46	23.00	3.54	H
	90MHz	3624.99	-35.30	4.37	43.73	8.26	19.33	23.00	3.67	H
	100MHz	3624.99	-35.32	4.37	43.73	8.26	19.31	23.00	3.69	H
256QAM	10MHz	3624.99	-37.79	4.37	44.59	8.26	17.69	23.00	5.31	H
	15MHz	3624.99	-37.81	4.37	44.59	8.26	17.67	23.00	5.33	H
	20MHz	3624.99	-37.85	4.37	44.59	8.26	17.63	23.00	5.37	H
	40MHz	3624.99	-37.85	4.37	44.59	8.26	17.63	23.00	5.37	H
	50MHz	3624.99	-37.94	4.37	44.59	8.26	17.54	23.00	5.46	H
	60MHz	3624.99	-37.81	4.37	44.59	8.26	17.67	23.00	5.33	H
	80MHz	3624.99	-38.09	4.37	44.59	8.26	17.39	23.00	5.61	H
	90MHz	3624.99	-38.07	4.37	44.59	8.26	17.41	23.00	5.59	H
	100MHz	3624.99	-38.05	4.37	44.59	8.26	17.43	23.00	5.57	H

**NR n66- EIRP**
**Limits: ≤30dBm (1W)**

Mod.	Bandwidth	Frequency (MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)	P <sub>Ag</sub> (dB)	G <sub>a</sub> (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Ant.Pol
pi/2 BPSK	5MHz	1712.50	-30.67	3.66	44.10	5.12	22.21	30.00	7.79	H
	5MHz	1745.00	-29.83	3.68	44.16	5.06	23.07	30.00	6.93	H
	5MHz	1777.50	-27.89	3.04	44.04	5.01	24.20	30.00	5.80	H
	10MHz	1715.00	-30.77	3.56	44.10	5.11	22.00	30.00	8.00	H
	10MHz	1745.00	-30.12	3.68	44.16	5.06	22.78	30.00	7.22	H
	10MHz	1775.00	-28.55	3.05	44.05	5.01	23.56	30.00	6.44	H
	15MHz	1717.50	-23.69	3.47	44.11	5.11	22.06	30.00	7.94	H
	15MHz	1745.00	-22.50	3.68	44.16	5.06	23.04	30.00	6.96	H
	15MHz	1772.50	-22.30	3.05	44.06	5.01	23.72	30.00	6.28	H
	20MHz	1720.00	-23.64	3.37	44.11	5.10	22.20	30.00	7.80	H
	20MHz	1745.00	-22.58	3.68	44.16	5.06	22.96	30.00	7.04	H
	20MHz	1770.00	-22.69	3.05	44.07	5.01	23.35	30.00	6.65	H
	25MHz	1722.50	-23.36	3.66	44.33	5.09	22.40	30.00	7.60	H
	25MHz	1745.00	-22.60	3.68	44.16	5.06	22.94	30.00	7.06	H
	25MHz	1767.50	-22.68	3.14	44.25	5.01	23.44	30.00	6.56	H
	30MHz	1725.00	-23.95	2.96	44.46	5.09	22.64	30.00	7.36	H
	30MHz	1745.00	-22.56	3.68	44.16	5.06	22.98	30.00	7.02	H
	30MHz	1765.00	-23.05	3.27	44.67	5.02	23.38	30.00	6.62	H
40MHz	1730.00	-22.64	2.98	43.22	5.09	22.69	30.00	7.31	H	
40MHz	1745.00	-22.59	3.68	44.16	5.06	22.95	30.00	7.05	H	
40MHz	1760.00	-23.04	3.50	44.68	5.03	23.18	30.00	6.82	H	
QPSK	5MHz	1712.50	-30.69	3.66	44.10	5.12	22.19	30.00	7.81	H
	5MHz	1745.00	-29.92	3.68	44.16	5.06	22.98	30.00	7.02	H
	5MHz	1777.50	-27.93	3.04	44.04	5.01	24.16	30.00	5.84	H
	10MHz	1715.00	-30.82	3.56	44.10	5.11	21.95	30.00	8.05	H
	10MHz	1745.00	-30.11	3.68	44.16	5.06	22.79	30.00	7.21	H
	10MHz	1775.00	-28.59	3.05	44.05	5.01	23.52	30.00	6.48	H
	15MHz	1717.50	-23.71	3.47	44.11	5.11	22.04	30.00	7.96	H
	15MHz	1745.00	-22.59	3.68	44.16	5.06	22.95	30.00	7.05	H
	15MHz	1772.50	-22.29	3.05	44.06	5.01	23.73	30.00	6.27	H
	20MHz	1720.00	-23.71	3.37	44.11	5.10	22.13	30.00	7.87	H
	20MHz	1745.00	-22.59	3.68	44.16	5.06	22.95	30.00	7.05	H
	20MHz	1770.00	-22.71	3.05	44.07	5.01	23.33	30.00	6.67	H
	25MHz	1722.50	-23.33	3.66	44.33	5.09	22.43	30.00	7.57	H
	25MHz	1745.00	-22.64	3.68	44.16	5.06	22.90	30.00	7.10	H
	25MHz	1767.50	-22.67	3.14	44.25	5.01	23.45	30.00	6.55	H
30MHz	1725.00	-23.98	2.96	44.46	5.09	22.61	30.00	7.39	H	
30MHz	1745.00	-22.59	3.68	44.16	5.06	22.95	30.00	7.05	H	
30MHz	1765.00	-22.43	3.27	44.00	5.02	23.33	30.00	6.67	H	

	40MHz	1730.00	-22.71	2.98	43.22	5.09	22.62	30.00	7.38	H
	40MHz	1745.00	-22.61	3.68	44.16	5.06	22.93	30.00	7.07	H
	40MHz	1760.00	-22.38	3.50	44.00	5.03	23.15	30.00	6.85	H
16QAM	5MHz	1712.50	-31.63	3.66	44.10	5.12	21.25	30.00	8.75	H
	5MHz	1745.00	-30.72	3.68	44.16	5.06	22.18	30.00	7.82	H
	5MHz	1777.50	-28.85	3.04	44.04	5.01	23.24	30.00	6.76	H
	10MHz	1715.00	-31.77	3.56	44.10	5.11	21.00	30.00	9.00	H
	10MHz	1745.00	-31.13	3.68	44.16	5.06	21.77	30.00	8.23	H
	10MHz	1775.00	-29.51	3.05	44.05	5.01	22.60	30.00	7.40	H
	15MHz	1717.50	-24.65	3.47	44.11	5.11	21.10	30.00	8.90	H
	15MHz	1745.00	-23.47	3.68	44.16	5.06	22.07	30.00	7.93	H
	15MHz	1772.50	-23.24	3.05	44.06	5.01	22.78	30.00	7.22	H
	20MHz	1720.00	-24.63	3.37	44.11	5.10	21.21	30.00	8.79	H
	20MHz	1745.00	-23.57	3.68	44.16	5.06	21.97	30.00	8.03	H
	20MHz	1770.00	-23.67	3.05	44.07	5.01	22.37	30.00	7.63	H
	25MHz	1722.50	-24.31	3.66	44.33	5.09	21.45	30.00	8.55	H
	25MHz	1745.00	-23.49	3.68	44.16	5.06	22.05	30.00	7.95	H
	25MHz	1767.50	-23.60	3.14	44.25	5.01	22.52	30.00	7.48	H
	30MHz	1725.00	-24.94	2.96	44.46	5.09	21.65	30.00	8.35	H
	30MHz	1745.00	-23.56	3.68	44.16	5.06	21.98	30.00	8.02	H
	30MHz	1765.00	-22.48	3.27	43.13	5.02	22.41	30.00	7.59	H
40MHz	1730.00	-24.50	2.98	44.23	5.09	21.83	30.00	8.17	H	
40MHz	1745.00	-23.54	3.68	44.16	5.06	22.00	30.00	8.00	H	
40MHz	1760.00	-23.67	3.50	44.32	5.03	22.19	30.00	7.81	H	
64QAM	5MHz	1777.50	-30.16	3.04	44.04	5.01	21.93	30.00	8.07	H
	10MHz	1775.00	-30.80	3.05	44.05	5.01	21.31	30.00	8.69	H
	15MHz	1772.50	-24.51	3.05	44.06	5.01	21.51	30.00	8.49	H
	20MHz	1770.00	-24.99	3.05	44.07	5.01	21.05	30.00	8.95	H
	25MHz	1767.50	-24.91	3.14	44.25	5.01	21.21	30.00	8.79	H
	30MHz	1765.00	-24.15	3.27	43.50	5.02	21.10	30.00	8.90	H
	40MHz	1760.00	-24.61	3.50	43.96	5.03	20.88	30.00	9.12	H
256QAM	5MHz	1777.50	-32.20	3.04	44.04	5.01	19.89	30.00	10.11	H
	10MHz	1775.00	-32.81	3.05	44.05	5.01	19.30	30.00	10.70	H
	15MHz	1772.50	-26.61	3.05	44.06	5.01	19.41	30.00	10.59	H
	20MHz	1770.00	-26.97	3.05	44.07	5.01	19.07	30.00	10.93	H
	25MHz	1767.50	-27.00	3.14	44.25	5.01	19.12	30.00	10.88	H
	30MHz	1765.00	-25.85	3.27	43.14	5.02	19.04	30.00	10.96	H
	40MHz	1760.00	-26.53	3.50	43.86	5.03	18.86	30.00	11.14	H



**NR n71-ERP**
**Limits: ≤34.77dBm (3W)**

Mod.	Bandwidth	Frequency (MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)	P <sub>Ag</sub> (dB)	G <sub>a</sub> (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Ant.Pol
pi/2 BPSK	5MHz	665.50	-22.35	1.86	44.73	0.78	2.15	19.15	34.77	15.62	V
	5MHz	680.50	-20.99	1.88	44.72	0.78	2.15	20.47	34.77	14.30	V
	5MHz	695.50	-20.87	1.89	44.67	0.77	2.15	20.53	34.77	14.24	V
	10MHz	668.00	-22.42	1.87	44.75	0.78	2.15	19.10	34.77	15.67	V
	10MHz	680.50	-21.08	1.88	44.72	0.78	2.15	20.38	34.77	14.39	V
	10MHz	693.00	-20.94	1.89	44.67	0.77	2.15	20.46	34.77	14.31	V
	15MHz	670.50	-22.24	1.87	44.75	0.78	2.15	19.27	34.77	15.50	V
	15MHz	680.50	-20.95	1.88	44.72	0.78	2.15	20.51	34.77	14.26	V
	15MHz	690.50	-21.17	1.88	44.73	0.77	2.15	20.30	34.77	14.47	V
	20MHz	673.00	-21.73	1.87	44.71	0.78	2.15	19.74	34.77	15.03	V
	20MHz	680.50	-20.98	1.88	44.72	0.78	2.15	20.48	34.77	14.29	V
20MHz	688.00	-21.09	1.88	44.72	0.77	2.15	20.38	34.77	14.39	V	
QPSK	5MHz	665.50	-22.35	1.86	44.73	0.78	2.15	19.15	34.77	15.62	V
	5MHz	680.50	-20.98	1.88	44.72	0.78	2.15	20.48	34.77	14.29	V
	5MHz	695.50	-20.84	1.89	44.67	0.77	2.15	20.56	34.77	14.21	V
	10MHz	668.00	-22.42	1.87	44.75	0.78	2.15	19.10	34.77	15.67	V
	10MHz	680.50	-21.08	1.88	44.72	0.78	2.15	20.38	34.77	14.39	V
	10MHz	693.00	-20.94	1.89	44.67	0.77	2.15	20.46	34.77	14.31	V
	15MHz	670.50	-22.24	1.87	44.75	0.78	2.15	19.27	34.77	15.50	V
	15MHz	680.50	-20.95	1.88	44.72	0.78	2.15	20.51	34.77	14.26	V
	15MHz	690.50	-21.17	1.88	44.73	0.77	2.15	20.30	34.77	14.47	V
	20MHz	673.00	-21.73	1.87	44.71	0.78	2.15	19.74	34.77	15.03	V
	20MHz	680.50	-20.98	1.88	44.72	0.78	2.15	20.48	34.77	14.29	V
20MHz	688.00	-21.09	1.88	44.72	0.77	2.15	20.38	34.77	14.39	V	
16QAM	5MHz	665.50	-22.35	1.86	44.73	0.78	2.15	19.15	34.77	15.62	V
	5MHz	680.50	-23.29	1.88	44.72	0.78	2.15	18.17	34.77	16.60	V
	5MHz	695.50	-21.76	1.89	44.67	0.77	2.15	19.64	34.77	15.13	V
	10MHz	668.00	-23.40	1.87	44.75	0.78	2.15	18.12	34.77	16.65	V
	10MHz	680.50	-22.23	1.88	44.72	0.78	2.15	19.23	34.77	15.54	V
	10MHz	693.00	-22.07	1.89	44.67	0.77	2.15	19.33	34.77	15.44	V
	15MHz	670.50	-23.22	1.87	44.75	0.78	2.15	18.29	34.77	16.48	V
	15MHz	680.50	-21.95	1.88	44.72	0.78	2.15	19.51	34.77	15.26	V
	15MHz	690.50	-22.20	1.88	44.73	0.77	2.15	19.27	34.77	15.50	V
	20MHz	673.00	-22.75	1.87	44.71	0.78	2.15	18.72	34.77	16.05	V
	20MHz	680.50	-21.99	1.88	44.72	0.78	2.15	19.47	34.77	15.30	V
20MHz	688.00	-22.04	1.88	44.72	0.77	2.15	19.43	34.77	15.34	V	
64QAM	5MHz	695.50	-22.99	1.89	44.67	0.77	2.15	18.41	34.77	16.36	V
	10MHz	693.00	-23.32	1.89	44.67	0.77	2.15	18.08	34.77	16.69	V
	15MHz	680.50	-23.19	1.88	44.72	0.78	2.15	18.27	34.77	16.50	V



	20MHz	680.50	-23.19	1.88	44.72	0.78	2.15	18.27	34.77	16.50	V
256QAM	5MHz	695.50	-25.09	1.89	44.67	0.77	2.15	16.31	34.77	18.46	V
	10MHz	693.00	-25.23	1.89	44.67	0.77	2.15	16.17	34.77	18.60	V
	15MHz	680.50	-25.32	1.88	44.72	0.78	2.15	16.14	34.77	18.63	V
	20MHz	680.50	-25.32	1.88	44.72	0.78	2.15	16.14	34.77	18.63	V

**NR n77L(3450MHz~3550MHz)- EIRP**
**Limits: ≤30dBm (1W)**

Mod.	Bandwidth	Frequency (MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)	P <sub>Ag</sub> (dB)	G <sub>a</sub> (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Ant.Pol
pi/2 BPSK	10MHz	3455.01	-22.55	4.24	43.27	8.09	24.57	30.00	5.43	H
	10MHz	3500.01	-23.53	4.29	44.92	8.20	25.30	30.00	4.70	H
	10MHz	3544.98	-23.71	4.30	43.70	8.22	23.91	30.00	6.09	H
	15MHz	3457.50	-23.31	4.24	43.94	8.10	24.49	30.00	5.51	H
	15MHz	3500.01	-23.51	4.29	44.92	8.20	25.32	30.00	4.68	H
	15MHz	3542.49	-23.47	4.31	43.44	8.22	23.89	30.00	6.11	H
	20MHz	3460.02	-23.19	4.23	43.80	8.10	24.48	30.00	5.52	H
	20MHz	3500.01	-23.50	4.29	44.92	8.20	25.33	30.00	4.67	H
	20MHz	3540.00	-23.56	4.31	43.85	8.22	24.20	30.00	5.80	H
	40MHz	3470.01	-23.13	4.23	43.82	8.13	24.59	30.00	5.41	H
	40MHz	3500.01	-23.50	4.29	44.92	8.20	25.33	30.00	4.67	H
	40MHz	3529.98	-23.52	4.32	43.74	8.22	24.11	30.00	5.89	H
	50MHz	3475.02	-22.90	4.24	44.11	8.14	25.11	30.00	4.89	H
	50MHz	3500.01	-23.54	4.29	44.92	8.20	25.29	30.00	4.71	H
	50MHz	3525.00	-23.24	4.32	44.03	8.21	24.68	30.00	5.32	H
	60MHz	3480.00	-21.84	4.24	43.16	8.15	25.23	30.00	4.77	H
	60MHz	3500.01	-23.57	4.29	44.92	8.20	25.26	30.00	4.74	H
	60MHz	3519.99	-23.03	4.32	44.13	8.21	24.99	30.00	5.01	H
	80MHz	3490.02	-21.79	4.25	43.78	8.18	25.91	30.00	4.09	H
	80MHz	3500.01	-22.88	4.29	44.92	8.20	25.95	30.00	4.05	H
80MHz	3510.00	-21.64	4.33	43.41	8.21	25.65	30.00	4.35	H	
90MHz	3495.00	-21.81	4.27	43.69	8.19	25.80	30.00	4.20	H	
90MHz	3500.01	-23.12	4.29	44.92	8.20	25.71	30.00	4.29	H	
90MHz	3504.99	-23.27	4.31	44.84	8.20	25.46	30.00	4.54	H	
QPSK	10MHz	3455.01	-22.46	4.24	43.27	8.09	24.66	30.00	5.34	H
	10MHz	3500.01	-23.44	4.29	44.92	8.20	25.39	30.00	4.61	H
	10MHz	3544.98	-23.22	4.30	43.70	8.22	24.40	30.00	5.60	H
	15MHz	3457.50	-23.24	4.24	43.94	8.10	24.56	30.00	5.44	H
	15MHz	3500.01	-23.46	4.29	44.92	8.20	25.37	30.00	4.63	H
	15MHz	3542.49	-23.45	4.31	43.44	8.22	23.91	30.00	6.09	H
	20MHz	3460.02	-23.13	4.23	43.80	8.10	24.54	30.00	5.46	H
	20MHz	3500.01	-23.51	4.29	44.92	8.20	25.32	30.00	4.68	H
	20MHz	3540.00	-23.75	4.31	43.85	8.22	24.01	30.00	5.99	H
	40MHz	3470.01	-23.07	4.23	43.82	8.13	24.65	30.00	5.35	H
	40MHz	3500.01	-23.51	4.29	44.92	8.20	25.32	30.00	4.68	H
	40MHz	3529.98	-23.71	4.32	43.74	8.22	23.92	30.00	6.08	H
	50MHz	3475.02	-22.77	4.24	44.11	8.14	25.24	30.00	4.76	H
	50MHz	3500.01	-23.52	4.29	44.92	8.20	25.31	30.00	4.69	H
50MHz	3525.00	-23.17	4.32	44.03	8.21	24.75	30.00	5.25	H	

	60MHz	3480.00	-21.76	4.24	43.16	8.15	25.31	30.00	4.69	H
	60MHz	3500.01	-23.38	4.29	44.92	8.20	25.45	30.00	4.55	H
	60MHz	3519.99	-22.98	4.32	44.13	8.21	25.04	30.00	4.96	H
	80MHz	3490.02	-21.73	4.25	43.78	8.18	25.97	30.00	4.03	H
	80MHz	3500.01	-22.84	4.29	44.92	8.20	25.99	30.00	4.01	H
	80MHz	3510.00	-21.55	4.33	43.41	8.21	25.74	30.00	4.26	H
	90MHz	3495.00	-21.77	4.27	43.69	8.19	25.84	30.00	4.16	H
	90MHz	3500.01	-23.03	4.29	44.92	8.20	25.80	30.00	4.20	H
	90MHz	3504.99	-23.19	4.31	44.84	8.20	25.54	30.00	4.46	H
16QAM	10MHz	3455.01	-23.76	4.24	43.27	8.09	23.36	30.00	6.64	H
	10MHz	3500.01	-24.74	4.29	44.92	8.20	24.09	30.00	5.91	H
	10MHz	3544.98	-24.88	4.30	43.70	8.22	22.74	30.00	7.26	H
	15MHz	3457.50	-24.29	4.24	43.94	8.10	23.51	30.00	6.49	H
	15MHz	3500.01	-24.61	4.29	44.92	8.20	24.22	30.00	5.78	H
	15MHz	3542.49	-24.90	4.31	43.44	8.22	22.46	30.00	7.54	H
	20MHz	3460.02	-23.87	4.23	43.80	8.10	23.80	30.00	6.20	H
	20MHz	3500.01	-24.65	4.29	44.92	8.20	24.18	30.00	5.82	H
	20MHz	3540.00	-24.33	4.31	43.85	8.22	23.43	30.00	6.57	H
	40MHz	3470.01	-23.81	4.23	43.82	8.13	23.91	30.00	6.09	H
	40MHz	3500.01	-24.65	4.29	44.92	8.20	24.18	30.00	5.82	H
	40MHz	3529.98	-24.29	4.32	43.74	8.22	23.34	30.00	6.66	H
	50MHz	3475.02	-23.47	4.24	44.11	8.14	24.54	30.00	5.46	H
	50MHz	3500.01	-23.67	4.29	44.92	8.20	25.16	30.00	4.84	H
	50MHz	3525.00	-23.35	4.32	44.03	8.21	24.57	30.00	5.43	H
	60MHz	3480.00	-22.72	4.24	43.16	8.15	24.35	30.00	5.65	H
	60MHz	3500.01	-24.31	4.29	44.92	8.20	24.52	30.00	5.48	H
	60MHz	3519.99	-23.92	4.32	44.13	8.21	24.10	30.00	5.90	H
	80MHz	3490.02	-22.72	4.25	43.78	8.18	24.98	30.00	5.02	H
	80MHz	3500.01	-24.23	4.29	44.92	8.20	24.60	30.00	5.40	H
80MHz	3510.00	-22.89	4.33	43.41	8.21	24.40	30.00	5.60	H	
90MHz	3495.00	-22.87	4.27	43.69	8.19	24.74	30.00	5.26	H	
90MHz	3500.01	-24.08	4.29	44.92	8.20	24.75	30.00	5.25	H	
90MHz	3504.99	-24.03	4.31	44.84	8.20	24.70	30.00	5.30	H	
64QAM	10MHz	3500.01	-26.07	4.29	44.92	8.20	22.76	30.00	7.24	H
	15MHz	3500.01	-26.05	4.29	44.92	8.20	22.78	30.00	7.22	H
	20MHz	3500.01	-26.06	4.29	44.92	8.20	22.77	30.00	7.23	H
	40MHz	3500.01	-26.06	4.29	44.92	8.20	22.77	30.00	7.23	H
	50MHz	3500.01	-25.86	4.29	44.92	8.20	22.97	30.00	7.03	H
	60MHz	3500.01	-25.38	4.29	44.92	8.20	23.45	30.00	6.55	H
	80MHz	3500.01	-25.26	4.29	44.92	8.20	23.57	30.00	6.43	H
	90MHz	3500.01	-25.56	4.29	44.92	8.20	23.27	30.00	6.73	H
256QAM	10MHz	3500.01	-27.93	4.29	44.92	8.20	20.90	30.00	9.10	H
	15MHz	3500.01	-27.89	4.29	44.92	8.20	20.94	30.00	9.06	H



	20MHz	3500.01	-27.87	4.29	44.92	8.20	20.96	30.00	9.04	H
	40MHz	3500.01	-27.87	4.29	44.92	8.20	20.96	30.00	9.04	H
	50MHz	3500.01	-27.81	4.29	44.92	8.20	21.02	30.00	8.98	H
	60MHz	3500.01	-27.78	4.29	44.92	8.20	21.05	30.00	8.95	H
	80MHz	3500.01	-27.62	4.29	44.92	8.20	21.21	30.00	8.79	H
	90MHz	3500.01	-34.62	4.29	44.92	8.20	21.21	30.00	8.79	H

**NR n77H(3700MHz~3980MHz) - EIRP**
**Limits: ≤30dBm (1W)**

Mod.	Bandwidth	Frequency (MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)	P <sub>Ag</sub> (dB)	G <sub>a</sub> (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Ant.Pol
pi/2 BPSK	10MHz	3705.00	-22.76	4.42	43.47	8.30	24.60	30.00	5.40	H
	10MHz	3840.00	-22.33	4.55	43.44	8.37	24.94	30.00	5.06	H
	10MHz	3975.00	-23.87	4.62	44.62	8.44	24.58	30.00	5.42	H
	15MHz	3707.52	-23.79	4.41	44.60	8.31	24.70	30.00	5.30	H
	15MHz	3840.00	-22.48	4.55	43.44	8.37	24.79	30.00	5.21	H
	15MHz	3972.48	-23.92	4.63	44.95	8.44	24.84	30.00	5.16	H
	20MHz	3710.01	-23.06	4.41	43.69	8.31	24.53	30.00	5.47	H
	20MHz	3840.00	-22.35	4.55	43.44	8.37	24.92	30.00	5.08	H
	20MHz	3969.99	-22.71	4.63	43.87	8.44	24.97	30.00	5.03	H
	40MHz	3720.00	-24.12	4.42	44.62	8.31	24.39	30.00	5.61	H
	40MHz	3840.00	-22.35	4.55	43.44	8.37	24.92	30.00	5.08	H
	40MHz	3960.00	-23.78	4.58	44.74	8.43	24.81	30.00	5.19	H
	50MHz	3725.01	-23.91	4.42	44.76	8.31	24.75	30.00	5.25	H
	50MHz	3840.00	-22.13	4.55	43.44	8.37	25.14	33.00	7.86	H
	50MHz	3954.48	-22.09	4.56	43.19	8.43	24.97	33.00	8.03	H
	60MHz	3730.02	-23.16	4.43	44.14	8.32	24.87	30.00	5.13	H
	60MHz	3840.00	-22.15	4.55	43.44	8.37	25.12	30.00	4.88	H
	60MHz	3949.98	-23.41	4.53	44.47	8.43	24.96	30.00	5.04	H
	80MHz	3740.01	-23.10	4.48	43.45	8.32	24.19	30.00	5.81	H
	80MHz	3840.00	-21.85	4.55	43.44	8.37	25.42	30.00	4.58	H
	80MHz	3939.99	-22.96	4.51	44.18	8.42	25.13	30.00	4.87	H
90MHz	3745.02	-23.31	4.51	43.94	8.33	24.45	30.00	5.55	H	
90MHz	3840.00	-22.13	4.55	43.44	8.37	25.14	30.00	4.86	H	
90MHz	3934.98	-23.98	4.50	44.98	8.42	24.92	30.00	5.08	H	
100MHz	3750.00	-23.31	4.54	43.93	8.33	24.41	30.00	5.59	H	
100MHz	3840.00	-22.18	4.55	43.44	8.37	25.09	30.00	4.91	H	
100MHz	3930.00	-23.55	4.49	44.53	8.42	24.91	30.00	5.09	H	
QPSK	10MHz	3705.00	-22.63	4.42	43.47	8.30	24.73	30.00	5.27	H
	10MHz	3840.00	-22.44	4.55	43.44	8.37	24.83	30.00	5.17	H
	10MHz	3975.00	-23.85	4.62	44.62	8.44	24.60	30.00	5.40	H
	15MHz	3707.52	-23.84	4.41	44.60	8.31	24.65	30.00	5.35	H
	15MHz	3840.00	-22.42	4.55	43.44	8.37	24.85	30.00	5.15	H
	15MHz	3972.48	-24.16	4.63	44.95	8.44	24.60	30.00	5.40	H
	20MHz	3710.01	-22.93	4.41	43.69	8.31	24.66	30.00	5.34	H
	20MHz	3840.00	-22.33	4.55	43.44	8.37	24.94	30.00	5.06	H
	20MHz	3969.99	-22.82	4.63	43.87	8.44	24.86	30.00	5.14	H
	40MHz	3720.00	-23.99	4.42	44.62	8.31	24.52	30.00	5.48	H
	40MHz	3840.00	-22.33	4.55	43.44	8.37	24.94	30.00	5.06	H
	40MHz	3960.00	-23.89	4.58	44.74	8.43	24.70	30.00	5.30	H

	50MHz	3725.01	-23.97	4.42	44.76	8.31	24.69	30.00	5.31	H
	50MHz	3840.00	-22.19	4.55	43.44	8.37	25.08	33.00	7.92	H
	50MHz	3954.48	-22.24	4.56	43.19	8.43	24.82	33.00	8.18	H
	60MHz	3730.02	-23.32	4.43	44.14	8.32	24.71	30.00	5.29	H
	60MHz	3840.00	-22.19	4.55	43.44	8.37	25.08	30.00	4.92	H
	60MHz	3949.98	-23.48	4.53	44.47	8.43	24.89	30.00	5.11	H
	80MHz	3740.01	-23.15	4.48	43.45	8.32	24.14	30.00	5.86	H
	80MHz	3840.00	-22.10	4.55	43.44	8.37	25.17	30.00	4.83	H
	80MHz	3939.99	-23.19	4.51	44.18	8.42	24.90	30.00	5.10	H
	90MHz	3745.02	-24.27	4.51	43.94	8.33	23.49	30.00	6.51	H
	90MHz	3840.00	-22.08	4.55	43.44	8.37	25.19	30.00	4.81	H
	90MHz	3934.98	-24.17	4.50	44.98	8.42	24.73	30.00	5.27	H
	100MHz	3750.00	-23.34	4.54	43.93	8.33	24.38	30.00	5.62	H
	100MHz	3840.00	-23.27	4.55	43.44	8.37	24.00	30.00	6.00	H
	100MHz	3930.00	-24.82	4.49	44.53	8.42	23.64	30.00	6.36	H
16QAM	10MHz	3705.00	-23.44	4.42	43.47	8.30	23.92	30.00	6.08	H
	10MHz	3840.00	-23.61	4.55	43.44	8.37	23.66	30.00	6.34	H
	10MHz	3975.00	-25.05	4.62	44.62	8.44	23.40	30.00	6.60	H
	15MHz	3707.52	-24.37	4.41	44.60	8.31	24.12	30.00	5.88	H
	15MHz	3840.00	-23.01	4.55	43.44	8.37	24.26	30.00	5.74	H
	15MHz	3972.48	-24.89	4.63	44.95	8.44	23.87	30.00	6.13	H
	20MHz	3710.01	-23.68	4.41	43.69	8.31	23.91	30.00	6.09	H
	20MHz	3840.00	-23.11	4.55	43.44	8.37	24.16	30.00	5.84	H
	20MHz	3969.99	-23.89	4.63	43.87	8.44	23.79	30.00	6.21	H
	40MHz	3720.00	-24.74	4.42	44.62	8.31	23.77	30.00	6.23	H
	40MHz	3840.00	-23.11	4.55	43.44	8.37	24.16	30.00	5.84	H
	40MHz	3960.00	-24.96	4.58	44.74	8.43	23.63	30.00	6.37	H
	50MHz	3725.01	-24.91	4.42	44.76	8.31	23.75	30.00	6.25	H
	50MHz	3840.00	-23.15	4.55	43.44	8.37	24.12	33.00	8.88	H
	50MHz	3954.48	-23.18	4.56	43.19	8.43	23.88	33.00	9.12	H
	60MHz	3730.02	-24.24	4.43	44.14	8.32	23.79	30.00	6.21	H
	60MHz	3840.00	-23.03	4.55	43.44	8.37	24.24	30.00	5.76	H
	60MHz	3949.98	-24.50	4.53	44.47	8.43	23.87	30.00	6.13	H
	80MHz	3740.01	-24.08	4.48	43.45	8.32	23.21	30.00	6.79	H
	80MHz	3840.00	-22.86	4.55	43.44	8.37	24.41	30.00	5.59	H
	80MHz	3939.99	-24.01	4.51	44.18	8.42	24.08	30.00	5.92	H
	90MHz	3745.02	-24.28	4.51	43.94	8.33	23.48	30.00	6.52	H
	90MHz	3840.00	-22.53	4.55	43.44	8.37	24.74	30.00	5.26	H
	90MHz	3934.98	-25.21	4.50	44.98	8.42	23.69	30.00	6.31	H
100MHz	3750.00	-24.36	4.54	43.93	8.33	23.36	30.00	6.64	H	
100MHz	3840.00	-23.27	4.55	43.44	8.37	24.00	30.00	6.00	H	
100MHz	3930.00	-24.82	4.49	44.53	8.42	23.64	30.00	6.36	H	
64QAM	10MHz	3840.00	-24.63	4.55	43.44	8.37	22.64	30.00	7.36	H

	15MHz	3972.48	-26.21	4.63	44.95	8.44	22.55	30.00	7.45	H
	20MHz	3840.00	-24.53	4.55	43.44	8.37	22.74	30.00	7.26	H
	40MHz	3840.00	-24.53	4.55	43.44	8.37	22.74	30.00	7.26	H
	50MHz	3840.00	-24.46	4.55	43.44	8.37	22.81	33.00	10.19	H
	60MHz	3840.00	-24.57	4.55	43.44	8.37	22.70	30.00	7.30	H
	80MHz	3840.00	-24.37	4.55	43.44	8.37	22.90	30.00	7.10	H
	90MHz	3840.00	-24.71	4.55	43.44	8.37	22.56	30.00	7.44	H
	100MHz	3840.00	-26.42	4.55	43.44	8.37	20.85	30.00	9.15	H
256QAM	10MHz	3840.00	-26.65	4.55	43.44	8.37	20.62	30.00	9.38	H
	15MHz	3840.00	-26.71	4.55	43.44	8.37	20.56	30.00	9.44	H
	20MHz	3840.00	-26.73	4.55	43.44	8.37	20.54	30.00	9.46	H
	40MHz	3840.00	-26.73	4.55	43.44	8.37	20.54	30.00	9.46	H
	50MHz	3840.00	-24.46	4.55	43.44	8.37	22.81	33.00	10.19	H
	60MHz	3840.00	-26.62	4.55	43.44	8.37	20.65	30.00	9.35	H
	80MHz	3840.00	-26.57	4.55	43.44	8.37	20.70	30.00	9.30	H
	90MHz	3840.00	-26.37	4.55	43.44	8.37	20.90	30.00	9.10	H
	100MHz	3840.00	-26.42	4.55	43.44	8.37	20.85	30.00	9.15	H



**NR n78L(3450MHz~3550MHz) - EIRP**
**Limits: ≤30dBm (1W)**

Mod.	Bandwidth	Frequency (MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)	P <sub>Ag</sub> (dB)	G <sub>a</sub> (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Ant.Pol
pi/2 BPSK	10MHz	3455.01	-25.61	4.24	43.27	8.09	21.51	30.00	8.49	H
	10MHz	3500.01	-26.28	4.29	44.92	8.20	22.55	30.00	7.45	H
	10MHz	3544.98	-29.30	4.30	43.70	8.22	18.32	30.00	11.68	H
	15MHz	3457.50	-26.30	4.24	43.94	8.10	21.50	30.00	8.50	H
	15MHz	3500.01	-26.26	4.29	44.92	8.20	22.57	30.00	7.43	H
	15MHz	3542.49	-26.03	4.31	43.44	8.22	21.33	30.00	8.67	H
	20MHz	3460.02	-26.11	4.23	43.80	8.10	21.56	30.00	8.44	H
	20MHz	3500.01	-26.24	4.29	44.92	8.20	22.59	30.00	7.41	H
	20MHz	3540.00	-26.30	4.31	43.85	8.22	21.46	30.00	8.54	H
	40MHz	3470.01	-26.05	4.23	43.82	8.13	21.67	30.00	8.33	H
	40MHz	3500.01	-26.24	4.29	44.92	8.20	22.59	30.00	7.41	H
	40MHz	3529.98	-26.26	4.32	43.74	8.22	21.37	30.00	8.63	H
	50MHz	3475.02	-25.67	4.24	44.11	8.14	22.34	30.00	7.66	H
	50MHz	3500.01	-25.97	4.29	44.92	8.20	22.86	30.00	7.14	H
	50MHz	3525.00	-25.45	4.32	44.03	8.21	22.47	30.00	7.53	H
	60MHz	3480.00	-24.43	4.24	43.16	8.15	22.64	30.00	7.36	H
	60MHz	3500.01	-25.95	4.29	44.92	8.20	22.88	30.00	7.12	H
	60MHz	3519.99	-25.39	4.32	44.13	8.21	22.63	30.00	7.37	H
	80MHz	3490.02	-24.46	4.25	43.78	8.18	23.24	30.00	6.76	H
	80MHz	3500.01	-25.43	4.29	44.92	8.20	23.40	30.00	6.60	H
80MHz	3510.00	-24.29	4.33	43.41	8.21	23.00	30.00	7.00	H	
90MHz	3495.00	-24.61	4.27	43.69	8.19	23.00	30.00	7.00	H	
90MHz	3500.01	-25.77	4.29	44.92	8.20	23.06	30.00	6.94	H	
90MHz	3504.99	-25.48	4.31	44.84	8.20	23.25	30.00	6.75	H	
QPSK	10MHz	3455.01	-25.74	4.24	43.27	8.09	21.38	30.00	8.62	H
	10MHz	3500.01	-26.36	4.29	44.92	8.20	22.47	30.00	7.53	H
	10MHz	3544.98	-26.47	4.30	43.70	8.22	21.15	30.00	8.85	H
	15MHz	3457.50	-26.37	4.24	43.94	8.10	21.43	30.00	8.57	H
	15MHz	3500.01	-26.30	4.29	44.92	8.20	22.53	30.00	7.47	H
	15MHz	3542.49	-26.21	4.31	43.44	8.22	21.15	30.00	8.85	H
	20MHz	3460.02	-26.18	4.23	43.80	8.10	21.49	30.00	8.51	H
	20MHz	3500.01	-26.30	4.29	44.92	8.20	22.53	30.00	7.47	H
	20MHz	3540.00	-26.43	4.31	43.85	8.22	21.33	30.00	8.67	H
	40MHz	3470.01	-26.12	4.23	43.82	8.13	21.60	30.00	8.40	H
	40MHz	3500.01	-26.30	4.29	44.92	8.20	22.53	30.00	7.47	H
	40MHz	3529.98	-26.39	4.32	43.74	8.22	21.24	30.00	8.76	H
	50MHz	3475.02	-25.75	4.24	44.11	8.14	22.26	30.00	7.74	H
	50MHz	3500.01	-25.98	4.29	44.92	8.20	22.85	30.00	7.15	H
50MHz	3525.00	-25.52	4.32	44.03	8.21	22.40	30.00	7.60	H	

	60MHz	3480.00	-24.59	4.24	43.16	8.15	22.48	30.00	7.52	H
	60MHz	3500.01	-26.03	4.29	44.92	8.20	22.80	30.00	7.20	H
	60MHz	3519.99	-25.50	4.32	44.13	8.21	22.52	30.00	7.48	H
	80MHz	3490.02	-24.64	4.25	43.78	8.18	23.06	30.00	6.94	H
	80MHz	3500.01	-25.68	4.29	44.92	8.20	23.15	30.00	6.85	H
	80MHz	3510.00	-24.16	4.33	43.41	8.21	23.13	30.00	6.87	H
	90MHz	3495.00	-24.75	4.27	43.69	8.19	22.86	30.00	7.14	H
	90MHz	3500.01	-25.84	4.29	44.92	8.20	22.99	30.00	7.01	H
	90MHz	3504.99	-25.72	4.31	44.84	8.20	23.01	30.00	6.99	H
16QAM	10MHz	3455.01	-26.78	4.24	43.27	8.09	20.34	30.00	9.66	H
	10MHz	3500.01	-27.52	4.29	44.92	8.20	21.31	30.00	8.69	H
	10MHz	3544.98	-27.25	4.30	43.70	8.22	20.37	30.00	9.63	H
	15MHz	3457.50	-27.30	4.24	43.94	8.10	20.50	30.00	9.50	H
	15MHz	3500.01	-27.26	4.29	44.92	8.20	21.57	30.00	8.43	H
	15MHz	3542.49	-27.20	4.31	43.44	8.22	20.16	30.00	9.84	H
	20MHz	3460.02	-27.14	4.23	43.80	8.10	20.53	30.00	9.47	H
	20MHz	3500.01	-27.31	4.29	44.92	8.20	21.52	30.00	8.48	H
	20MHz	3540.00	-27.17	4.31	43.85	8.22	20.59	30.00	9.41	H
	40MHz	3470.01	-27.08	4.23	43.82	8.13	20.64	30.00	9.36	H
	40MHz	3500.01	-27.31	4.29	44.92	8.20	21.52	30.00	8.48	H
	40MHz	3529.98	-27.13	4.32	43.74	8.22	20.50	30.00	9.50	H
	50MHz	3475.02	-26.70	4.24	44.11	8.14	21.31	30.00	8.69	H
	50MHz	3500.01	-27.02	4.29	44.92	8.20	21.81	30.00	8.19	H
	50MHz	3525.00	-26.29	4.32	44.03	8.21	21.63	30.00	8.37	H
	60MHz	3480.00	-25.48	4.24	43.16	8.15	21.59	30.00	8.41	H
	60MHz	3500.01	-26.97	4.29	44.92	8.20	21.86	30.00	8.14	H
	60MHz	3519.99	-26.10	4.32	44.13	8.21	21.92	30.00	8.08	H
	80MHz	3490.02	-25.71	4.25	43.78	8.18	21.99	30.00	8.01	H
	80MHz	3500.01	-26.64	4.29	44.92	8.20	22.19	30.00	7.81	H
80MHz	3510.00	-25.18	4.33	43.41	8.21	22.11	30.00	7.89	H	
90MHz	3495.00	-25.82	4.27	43.69	8.19	21.79	30.00	8.21	H	
90MHz	3500.01	-26.83	4.29	44.92	8.20	22.00	30.00	8.00	H	
90MHz	3504.99	-26.42	4.31	44.84	8.20	22.31	30.00	7.69	H	
64QAM	10MHz	3500.01	-28.91	4.29	44.92	8.20	19.92	30.00	10.08	H
	15MHz	3500.01	-28.52	4.29	44.92	8.20	20.31	30.00	9.69	H
	20MHz	3500.01	-28.61	4.29	44.92	8.20	20.22	30.00	9.78	H
	40MHz	3500.01	-28.61	4.29	44.92	8.20	20.22	30.00	9.78	H
	50MHz	3500.01	-28.33	4.29	44.92	8.20	20.50	30.00	9.50	H
	60MHz	3500.01	-28.16	4.29	44.92	8.20	20.67	30.00	9.33	H
	80MHz	3500.01	-28.26	4.29	44.92	8.20	20.57	30.00	9.43	H
	90MHz	3504.99	-28.34	4.31	44.84	8.20	20.39	30.00	9.61	H
256QAM	10MHz	3500.01	-30.60	4.29	44.92	8.20	18.23	30.00	11.77	H
	15MHz	3500.01	-30.64	4.29	44.92	8.20	18.19	30.00	11.81	H

	20MHz	3500.01	-30.58	4.29	44.92	8.20	18.25	30.00	11.75	H
	40MHz	3500.01	-30.58	4.29	44.92	8.20	18.25	30.00	11.75	H
	50MHz	3500.01	-30.25	4.29	44.92	8.20	18.58	30.00	11.42	H
	60MHz	3519.99	-29.55	4.32	44.13	8.21	18.47	30.00	11.53	H
	80MHz	3500.01	-30.19	4.29	44.92	8.20	18.64	30.00	11.36	H
	90MHz	3504.99	-29.96	4.31	44.84	8.20	18.77	30.00	11.23	H

Note: Expanded measurement uncertainty

Frequency range	Expanded measurement uncertainty
30MHz-1GHz	5.76dB, k=2
1GHz-18GHz	4.69dB, k=2
18GHz-40GHz	3.37dB, k=2

## A.2 Emission Limit

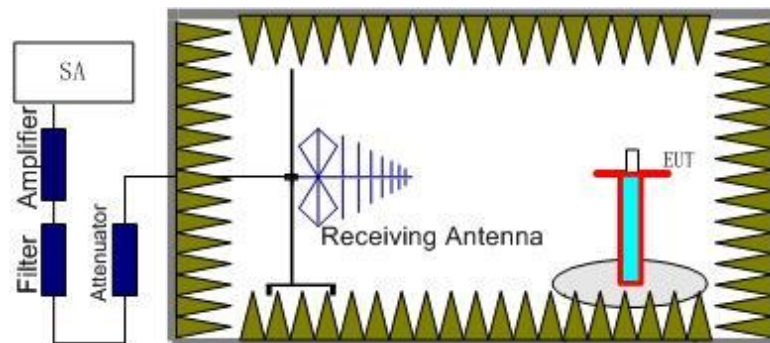
### **A.2.1 Measurement Method**

The measurements procedures in ANSI C63.26 are used. This measurement is carried out in fully-anechoic chamber.

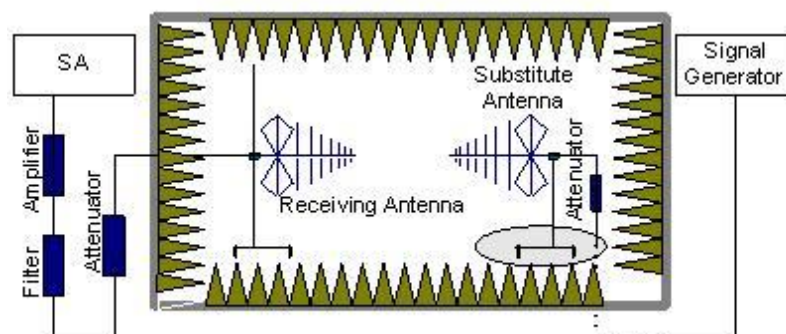
The spectrum was scanned from 9 kHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier. The resolution bandwidth is set 1MHz. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of each NR Band.

**The procedure of radiated spurious emissions is as follows:**

1. EUT was placed on a 0.8/1.5 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The receiving antenna shall be varied from 1 to 4m in height above the reference ground. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and the EUT is manipulated through all orthogonal planes representative of its typical use. The test is carried out with both vertical and horizontal polarization of the receiving antenna. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic were measured with peak detector.



2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (Pr).
3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.



In the chamber, a substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is

connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power ( $P_{Mea}$ ) is applied to the input of the substitution antenna. Adjust the level of the signal generator output until the value of the receiver reaches the previously recorded ( $P_r$ ). The power of signal source ( $P_{Mea}$ ) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

4. The Path loss ( $P_{pl}$ ) between the Signal Source with the Substitution Antenna and the Substitution Antenna Gain ( $G_a$ ) should be recorded after test.

An amplifier should be connected in for the test.

The Path loss ( $P_{pl}$ ) is the summation of the cable loss and the gain of the amplifier.

The measurement results are obtained as described below:

$$\text{Power (EIRP)} = P_{Mea} - P_{pl} + G_a$$

5. This value is EIRP since the measurement is calibrated using an antenna of known gain (unit: dBi) and known input power.
6. ERP can be calculated from EIRP by subtracting the gain of the dipole,  $ERP = EIRP - 2.15\text{dB}$ .

### A.2.2 Measurement Limit

**n5:** 22.917 specify that Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power ( $P$ ) by a factor of at least  $43 + 10 \log (P)$  dB.

**n2, n25:** 24.238 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power ( $P$ ) by a factor of at least  $43 + 10 \log (P)$  dB.

**n41:** 27.53(m) (4) specifies " For mobile digital stations, the attenuation factor shall be not less than  $40 + 10 \log (P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log (P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log (P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that  $43 + 10 \log (P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log (P)$  dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. "

**n66:** 27.53(h) specifies "AWS emission limits—(1) General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power ( $P$ ) in watts by at least  $43 + 10 \log_{10} (P)$  dB"

**n71:** 27.53(g) specifies "For operations in the 600 MHz band and the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power ( $P$ ) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log (P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution band-width of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution

bandwidth of at least 30 kHz may be employed. ”

**n77, n78:**

Part 27.53(n) states for mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/ MHz

Part 27.53(l) states for mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz

**A.2.3 Measurement Results**

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of each NR Band. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of each NR Band into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this.

For NR operation, all subcarrier spacing (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and worst case configuration results are reported in this section.

Spurious emissions shown in this section measured while operating in EN-DC mode with sub 6GHz NR carrier as well as an LTE (anchor). Spurious emission from the NR carrier device is subject to the rules under which the NR carrier operates. Spurious emissions caused by the LTE carrier must meet the requirement of the rules under which the LTE carrier operates.

The range of evaluated frequency is from 9 kHz to 10th harmonic of the fundamental frequency of the transmitter. Measurement value showed only up to 6 maximum emissions noted.

**NR n2, 5MHz, Channel 370500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3705.01	-54.84	6.42	8.49	-52.77	-13.00	39.77	V
5558.01	-54.32	7.19	10.59	-50.92	-13.00	37.92	V
7406.01	-53.67	8.13	12.09	-49.71	-13.00	36.71	V
9284.01	-52.97	9.12	13.27	-48.82	-13.00	35.82	V
11099.00	-49.99	9.84	13.18	-46.65	-13.00	33.65	V
12964.00	-47.25	10.48	13.48	-44.25	-13.00	31.25	H

**NR n2, 5MHz, Channel 376000**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3760.01	-55.51	6.26	8.56	-53.21	-13.00	40.21	V
5640.01	-53.82	7.27	10.57	-50.52	-13.00	37.52	H
7508.01	-54.27	8.36	12.21	-50.42	-13.00	37.42	V
9371.01	-53.49	9.07	13.32	-49.24	-13.00	36.24	V
11278.00	-49.58	9.86	13.14	-46.30	-13.00	33.30	V
13152.00	-44.62	10.71	13.71	-41.62	-13.00	28.62	V

**NR n2, 5MHz, Channel 381500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3815.01	-56.79	6.09	8.64	-54.24	-13.00	41.24	H
5722.01	-55.38	7.30	10.56	-52.12	-13.00	39.12	H
7619.01	-54.34	8.06	12.30	-50.10	-13.00	37.10	V
9537.01	-53.33	9.41	13.36	-49.38	-13.00	36.38	H
11426.00	-48.81	10.00	13.11	-45.70	-13.00	32.70	V
13357.00	-43.78	10.57	14.00	-40.35	-13.00	27.35	V

**NR EN-DC B5-n2, Channel 370500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
1643.01	-51.70	3.56	5.24	-50.02	-13.00	37.02	H
2480.00	-38.03	4.60	6.04	-36.59	-13.00	23.59	V
3705.01	-56.89	6.42	8.49	-54.82	-13.00	41.82	V
4184.01	-49.31	6.17	9.08	-46.40	-13.00	33.40	V
5557.01	-59.24	7.19	10.59	-55.84	-13.00	42.84	H
7436.01	-52.62	8.22	12.12	-48.72	-13.00	35.72	V

**NR EN-DC B5-n2, Channel 376000**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
1656.01	-52.01	3.57	5.22	-50.36	-13.00	37.36	H
2519.00	-42.83	4.64	6.13	-41.34	-13.00	28.34	H
3760.01	-57.15	6.26	8.56	-54.85	-13.00	41.85	V
4183.01	-52.95	6.17	9.08	-50.04	-13.00	37.04	V
5634.01	-58.29	7.27	10.57	-54.99	-13.00	41.99	V
7511.01	-53.07	8.35	12.21	-49.21	-13.00	36.21	V

**NR EN-DC B5-n2, 5MHz, Channel 381500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
1661.01	-51.14	3.57	5.21	-49.50	-13.00	36.50	H
2527.00	-43.14	4.65	6.15	-41.64	-13.00	28.64	H
3815.01	-58.86	6.09	8.64	-56.31	-13.00	43.31	V
4184.01	-52.01	6.17	9.08	-49.10	-13.00	36.10	V
5702.01	-58.43	7.29	10.56	-55.16	-13.00	42.16	V
7606.01	-54.11	8.00	12.28	-49.83	-13.00	36.83	V



**NR n5, 5MHz, PI/2 BPSK, Channel 165300**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polorization
1662.01	-54.37	3.57	5.21	2.15	-54.88	-13.00	41.88	H
2479.50	-33.98	4.60	6.04	2.15	-34.69	-13.00	21.69	H
3312.02	-61.43	5.29	7.75	2.15	-61.12	-13.00	48.12	V
4132.41	-53.39	6.05	9.03	2.15	-52.56	-13.00	39.56	H
4952.11	-57.34	6.69	9.85	2.15	-56.33	-13.00	43.33	V
5785.73	-56.81	7.21	10.54	2.15	-55.63	-13.00	42.63	H

**NR n5, 5MHz, PI/2 BPSK, Channel 167300**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polorization
1673.01	-53.00	3.58	5.19	2.15	-53.54	-13.00	40.54	V
2509.50	-41.30	4.63	6.12	2.15	-41.96	-13.00	28.96	H
3360.07	-61.06	5.33	7.86	2.15	-60.68	-13.00	47.68	V
4182.55	-44.51	6.17	9.08	2.15	-43.75	-13.00	30.75	V
5009.21	-57.44	6.59	9.91	2.15	-56.27	-13.00	43.27	H
5856.76	-56.80	7.26	10.53	2.15	-55.68	-13.00	42.68	V

**NR n5, 5MHz, PI/2 BPSK, Channel 169300**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polorization
1693.01	-54.35	3.59	5.15	2.15	-54.94	-13.00	41.94	V
2539.50	-33.68	4.66	6.17	2.15	-34.32	-13.00	21.32	H
3374.70	-61.80	5.34	7.90	2.15	-61.39	-13.00	48.39	V
4232.70	-45.51	6.26	9.13	2.15	-44.79	-13.00	31.79	H
5092.09	-57.03	6.75	10.03	2.15	-55.90	-13.00	42.90	H
5936.16	-57.07	7.47	10.51	2.15	-56.18	-13.00	43.18	V

**NR EN-DC B7-n5, 5MHz, PI/2 BPSK, Channel 165300**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3785.59	-58.98	6.18	8.60	2.15	-58.71	-13.00	45.71	V
5070.50	-54.60	6.69	10.00	2.15	-53.44	-13.00	40.44	H
6336.60	-55.18	7.56	10.84	2.15	-54.05	-13.00	41.05	V
7605.49	-43.99	8.00	12.28	2.15	-41.86	-13.00	28.86	H
8876.47	-51.80	8.80	13.08	2.15	-49.67	-13.00	36.67	V
10141.18	-50.77	9.40	12.96	2.15	-49.36	-13.00	36.36	V

**NR EN-DC B7-n5, 5MHz, PI/2 BPSK, Channel 167300**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polorization
1683.51	-55.08	3.59	5.17	2.15	-55.65	-13.00	42.65	V
2509.50	-44.31	4.63	6.12	2.15	-44.97	-13.00	31.97	H
3358.68	-60.25	5.33	7.86	2.15	-59.87	-13.00	46.87	V
5068.41	-56.40	6.68	10.00	2.15	-55.23	-13.00	42.23	V
7605.49	-42.06	8.00	12.28	2.15	-39.93	-13.00	26.93	H
10125.17	-50.92	9.42	12.95	2.15	-49.54	-13.00	36.54	H

**NR EN-DC B7-n5, 5MHz, PI/2 BPSK, Channel 169300**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3808.57	-59.71	6.11	8.63	2.15	-59.34	-13.00	46.34	V
5070.50	-56.45	6.69	10.00	2.15	-55.29	-13.00	42.29	H
6333.82	-54.83	7.56	10.83	2.15	-53.71	-13.00	40.71	V
7605.49	-48.73	8.00	12.28	2.15	-46.60	-13.00	33.60	H
8870.90	-52.17	8.79	13.07	2.15	-50.04	-13.00	37.04	V
10140.49	-50.98	9.40	12.96	2.15	-49.57	-13.00	36.57	V

**NR n25, 5MHz, Channel 370500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3705.01	-54.48	6.42	8.49	-52.41	-13.00	39.41	V
5559.01	-57.31	7.19	10.59	-53.91	-13.00	40.91	H
7422.01	-53.00	8.18	12.11	-49.07	-13.00	36.07	V
9252.01	-51.78	9.04	13.25	-47.57	-13.00	34.57	V
11144.00	-50.04	9.64	13.17	-46.51	-13.00	33.51	H
12992.00	-48.07	10.47	13.50	-45.04	-13.00	32.04	H

**NR n25, 5MHz, Channel 376500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3765.01	-54.55	6.25	8.57	-52.23	-13.00	39.23	V
5647.01	-54.72	7.27	10.57	-51.42	-13.00	38.42	H
7514.01	-54.00	8.34	12.21	-50.13	-13.00	37.13	V
9386.01	-53.25	9.05	13.33	-48.97	-13.00	35.97	V
11276.00	-49.84	9.85	13.14	-46.55	-13.00	33.55	V
13150.00	-44.30	10.72	13.71	-41.31	-13.00	28.31	H

**NR n25, 5MHz, Channel 382500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3825.01	-54.67	6.06	8.66	-52.07	-13.00	39.07	H
5737.01	-57.63	7.28	10.55	-54.36	-13.00	41.36	H
7621.01	-55.15	8.07	12.30	-50.92	-13.00	37.92	V
9585.01	-53.56	9.23	13.31	-49.48	-13.00	36.48	V
11471.00	-48.34	9.89	13.11	-45.12	-13.00	32.12	V
13406.00	-42.93	10.57	14.07	-39.43	-13.00	26.43	H

**NR EN-DC B12\_n25, 5MHz, Channel 370500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3705.01	-57.76	6.42	8.49	-55.69	-13.00	42.69	V
5566.01	-59.45	7.20	10.59	-56.06	-13.00	43.06	V
7430.01	-53.23	8.20	12.12	-49.31	-13.00	36.31	V
9276.01	-51.34	9.10	13.27	-47.17	-13.00	34.17	V
11099.00	-50.49	9.84	13.18	-47.15	-13.00	34.15	V
12981.00	-48.46	10.47	13.49	-45.44	-13.00	32.44	V

**NR EN-DC B12\_n25, 5MHz, Channel 376500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3765.01	-56.11	6.25	8.57	-53.79	-13.00	40.79	V
4473.01	-56.42	6.54	9.37	-53.59	-13.00	40.59	H
5648.01	-54.99	7.27	10.57	-51.69	-13.00	38.69	H
7574.01	-54.62	8.08	12.26	-50.44	-13.00	37.44	V
9421.01	-54.13	9.14	13.35	-49.92	-13.00	36.92	V
11313.00	-50.05	10.00	13.14	-46.91	-13.00	33.91	V

**NR EN-DC B12\_n25, 5MHz, Channel 382500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3825.01	-58.85	6.06	8.66	-56.25	-13.00	43.25	V
5703.01	-58.98	7.29	10.56	-55.71	-13.00	42.71	V
7614.01	-54.05	8.04	12.29	-49.80	-13.00	36.80	V
9561.01	-54.10	9.32	13.34	-50.08	-13.00	37.08	V
11479.00	-49.00	9.87	13.10	-45.77	-13.00	32.77	V
13404.00	-43.99	10.57	14.07	-40.49	-13.00	27.49	V

**NR n41, 20MHz, PI/2 BPSK, Channel 501204**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
5024.01	-59.00	6.56	9.93	-55.63	-25.00	30.63	H
7521.01	-33.61	8.31	12.22	-29.70	-25.00	4.70	H
10037.01	-52.70	9.28	12.91	-49.07	-25.00	24.07	V
12556.00	-47.99	10.34	13.23	-45.10	-25.00	20.10	V
15019.00	-43.16	11.24	13.99	-40.41	-25.00	15.41	H
17550.00	-38.08	12.92	14.97	-36.03	-25.00	11.03	H

**NR n41, 20MHz, PI/2 BPSK, Channel 518598**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
5214.01	-59.90	6.98	10.20	-56.68	-25.00	31.68	V
7779.01	-54.91	8.32	12.42	-50.81	-25.00	25.81	V
10401.01	-49.98	9.80	13.06	-46.72	-25.00	21.72	V
12935.00	-47.49	10.49	13.46	-44.52	-25.00	19.52	H
15552.00	-44.08	11.51	13.70	-41.89	-25.00	16.89	H
16880.00	-40.11	12.02	13.75	-38.38	-25.00	13.38	H

**NR n41, 20MHz, PI/2 BPSK, Channel 535998**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
5343.01	-60.05	6.95	10.38	-56.62	-25.00	31.62	H
8044.01	-49.92	8.32	12.64	-45.60	-25.00	20.60	V
10734.00	-50.58	9.39	13.15	-46.82	-25.00	21.82	V
13421.00	-43.35	10.58	14.09	-39.84	-25.00	14.84	H
16058.00	-42.92	11.84	13.69	-41.07	-25.00	16.07	H
17425.00	-38.63	12.56	14.74	-36.45	-25.00	11.45	H

**NR EN-DC B25-n41, 20MHz, PI/2 BPSK, Channel 501204**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
4984.01	-60.02	6.63	9.88	-56.77	-25.00	31.77	V
7523.01	-52.50	8.30	12.22	-48.58	-25.00	23.58	V
10045.01	-53.24	9.31	12.92	-49.63	-25.00	24.63	H
12541.00	-48.23	10.29	13.22	-45.30	-25.00	20.30	V
15036.00	-42.93	11.26	13.98	-40.21	-25.00	15.21	V
17563.00	-39.33	12.97	14.99	-37.31	-25.00	12.31	H

**NR EN-DC B25-n41, 20MHz, PI/2 BPSK, Channel 518598**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
2593.00	19.00	4.70	6.27	20.57	-25.00	-45.57	V
6463.01	-56.99	7.54	10.96	-53.57	-25.00	28.57	V
7770.01	-54.80	8.33	12.42	-50.71	-25.00	25.71	V
9097.01	-53.71	8.94	13.16	-49.49	-25.00	24.49	V
10379.01	-51.57	9.77	13.05	-48.29	-25.00	23.29	V
11665.00	-50.04	9.68	13.07	-46.65	-25.00	21.65	H

**NR EN-DC B25-n41, 20MHz, PI/2 BPSK, Channel 535998**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
5376.01	-60.81	6.88	10.43	-57.26	-25.00	32.26	V
8062.01	-54.25	8.32	12.65	-49.92	-25.00	24.92	V
10737.00	-50.79	9.40	13.15	-47.04	-25.00	22.04	H
13410.00	-43.32	10.57	14.07	-39.82	-25.00	14.82	V
16042.00	-42.76	11.84	13.69	-40.91	-25.00	15.91	H
17394.00	-39.00	12.49	14.67	-36.82	-25.00	11.82	H

**NR n48, 20MHz, PI/2 BPSK, Channel 637334**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7145.00	-54.07	8.17	11.77	-50.47	-40.00	10.47	V
8924.00	-53.19	8.93	13.08	-49.04	-40.00	9.04	H
10680.00	-52.08	9.30	13.14	-48.24	-40.00	8.24	H
12436.00	-51.27	10.34	13.17	-48.44	-40.00	8.44	H
14254.00	-49.67	10.93	14.45	-46.15	-40.00	6.15	H
16041.00	-46.85	11.84	13.69	-45.00	-40.00	5.00	H

**NR n48, 20MHz, PI/2 BPSK, Channel 641666**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7270.00	-53.38	8.13	11.92	-49.59	-40.00	9.59	H
9035.00	-52.97	9.11	13.12	-48.96	-40.00	8.96	H
10875.00	-52.28	9.61	13.18	-48.71	-40.00	8.71	H
12714.00	-51.41	10.36	13.33	-48.44	-40.00	8.44	H
14508.00	-49.05	10.95	14.39	-45.61	-40.00	5.61	V
16338.00	-45.57	11.81	13.63	-43.75	-40.00	3.75	V

**NR n48, 20MHz, PI/2 BPSK, Channel 646000**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7377.00	-54.51	8.11	12.05	-50.57	-40.00	10.57	V
9224.00	-53.74	8.98	13.23	-49.49	-40.00	9.49	H
11070.00	-51.62	9.89	13.19	-48.32	-40.00	8.32	H
12897.00	-50.43	10.51	13.44	-47.50	-40.00	7.50	V
14758.00	-48.87	11.16	14.19	-45.84	-40.00	5.84	H
16609.00	-46.99	12.00	14.64	-44.35	-40.00	4.35	H

**NR EN-DC B66-n48, 20MHz, PI/2 BPSK, Channel 637334**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
5236.80	-53.66	7.00	10.23	-50.43	-40.00	10.43	V
7006.00	-52.61	8.29	11.61	-49.29	-40.00	9.29	V
10493.00	-51.26	9.66	13.10	-47.82	-40.00	7.82	V
13938.00	-48.48	10.82	14.46	-44.84	-40.00	4.84	V
15736.00	-46.99	11.63	13.70	-44.92	-40.00	4.92	H
17479.00	-46.73	12.68	14.85	-44.56	-40.00	4.56	V

**NR EN-DC B66-n48, 20MHz, PI/2 BPSK, Channel 641666**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
5237.40	-52.72	7.00	10.23	-49.49	-40.00	9.49	V
7115.00	-51.49	8.16	11.74	-47.91	-40.00	7.91	V
10213.00	-52.59	9.35	12.99	-48.95	-40.00	8.95	H
10665.00	-51.19	9.30	13.13	-47.36	-40.00	7.36	H
14235.00	-47.18	10.91	14.45	-43.64	-40.00	3.64	V
17767.00	-45.85	12.55	15.27	-43.13	-40.00	3.13	V

**NR EN-DC B66-n48, 20MHz, PI/2 BPSK, Channel 646000**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
5237.00	-53.44	7.00	10.23	-50.21	-40.00	10.21	V
7181.00	-52.25	8.19	11.82	-48.62	-40.00	8.62	V
11070.00	-51.33	9.89	13.19	-48.03	-40.00	8.03	H
12893.00	-49.81	10.53	13.44	-46.90	-40.00	6.90	H
14766.00	-47.25	11.15	14.19	-44.21	-40.00	4.21	H
16603.00	-45.95	12.01	13.64	-44.32	-40.00	4.32	H



**NR n66, 5MHz, Channel 342500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3430.01	-60.15	5.39	8.03	-57.51	-13.00	44.51	V
5145.01	-68.85	6.87	10.10	-65.62	-13.00	52.62	H
6863.01	-64.66	7.81	11.44	-61.03	-13.00	48.03	V
8591.01	-63.90	8.51	13.02	-59.39	-13.00	46.39	V
10309.01	-61.49	9.66	13.02	-58.13	-13.00	45.13	V
12013.00	-58.39	10.09	13.01	-55.47	-13.00	42.47	V

**NR n66, 5MHz, Channel 349000**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3490.01	-60.88	5.50	8.18	-58.20	-13.00	45.20	V
5236.01	-68.93	7.00	10.23	-65.70	-13.00	52.70	H
6984.01	-63.95	8.17	11.58	-60.54	-13.00	47.54	V
8740.01	-63.73	8.48	13.05	-59.16	-13.00	46.16	V
10450.01	-60.72	9.73	13.08	-57.37	-13.00	44.37	V
12225.00	-58.83	10.04	13.09	-55.78	-13.00	42.78	V

**NR n66, 5MHz, Channel 355500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3555.01	-59.18	5.87	8.28	-56.77	-13.00	43.77	V
5334.01	-69.67	6.97	10.37	-66.27	-13.00	53.27	V
7115.01	-65.93	8.16	11.74	-62.35	-13.00	49.35	V
8881.01	-64.20	8.81	13.08	-59.93	-13.00	46.93	V
10645.00	-61.35	9.29	13.13	-57.51	-13.00	44.51	V
12431.00	-58.93	10.36	13.17	-56.12	-13.00	43.12	V

**NR EN-DC B 5–n66, 5MHz, Channel 342500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3430.01	-62.21	5.39	8.03	-59.57	-13.00	46.57	V
5145.01	-69.41	6.87	10.10	-66.18	-13.00	53.18	H
6865.01	-64.52	7.80	11.44	-60.88	-13.00	47.88	V
8583.01	-63.83	8.52	13.02	-59.33	-13.00	46.33	V
10306.01	-61.15	9.65	13.02	-57.78	-13.00	44.78	V
12000.00	-58.31	10.05	13.00	-55.36	-13.00	42.36	V

**NR EN-DC B5–n66, 5MHz, Channel 349000**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3490.01	-65.22	5.50	8.18	-62.54	-13.00	49.54	V
5236.01	-69.18	7.00	10.23	-65.95	-13.00	52.95	H
6984.01	-63.95	8.17	11.58	-60.54	-13.00	47.54	V
8744.01	-63.69	8.49	13.05	-59.13	-13.00	46.13	V
10450.01	-60.56	9.73	13.08	-57.21	-13.00	44.21	V
12221.00	-58.62	10.05	13.09	-55.58	-13.00	42.58	V

**NR EN-DC B5–n66, 5MHz, Channel 355500**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
3550.01	-64.59	5.82	8.27	-62.14	-13.00	49.14	V
5325.01	-70.34	6.99	10.36	-66.97	-13.00	53.97	V
7080.01	-65.73	8.18	11.70	-62.21	-13.00	49.21	V
8877.01	-64.25	8.80	13.08	-59.97	-13.00	46.97	V
10649.00	-61.13	9.29	13.13	-57.29	-13.00	44.29	V
12406.00	-58.27	10.42	13.16	-55.53	-13.00	42.53	V

**NR n71, 5MHz, Channel 133100**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polorization
1331.01	-53.25	3.15	4.62	2.15	-53.93	-13.00	40.93	H
1996.51	-43.53	4.04	4.61	2.15	-45.11	-13.00	32.11	H
2666.50	-45.24	4.76	6.40	2.15	-45.75	-13.00	32.75	H
3326.64	-61.31	5.30	7.78	2.15	-60.98	-13.00	47.98	V
4004.96	-58.70	6.06	8.90	2.15	-58.01	-13.00	45.01	V
4671.45	-58.49	6.48	9.57	2.15	-57.55	-13.00	44.55	V

**NR n71, 5MHz, Channel 136100**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polorization
1361.51	-54.84	3.19	4.78	2.15	-55.40	-13.00	42.40	H
2042.00	-45.64	4.14	4.73	2.15	-47.20	-13.00	34.20	H
2720.00	-44.81	4.80	6.50	2.15	-45.26	-13.00	32.26	H
3408.82	-60.44	5.37	7.98	2.15	-59.98	-13.00	46.98	V
4083.66	-55.83	6.04	8.98	2.15	-55.04	-13.00	42.04	V
4748.75	-58.35	6.57	9.65	2.15	-57.42	-13.00	44.42	V

**NR n71, 5MHz, Channel 139100**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polorization
1391.01	-54.34	3.22	4.93	2.15	-54.78	-13.00	41.78	V
2087.00	-48.32	4.18	4.86	2.15	-49.79	-13.00	36.79	V
2791.00	-45.25	4.90	6.62	2.15	-45.68	-13.00	32.68	V
3484.04	-59.96	5.49	8.16	2.15	-59.44	-13.00	46.44	H
4175.59	-56.75	6.15	9.08	2.15	-55.97	-13.00	42.97	V
4875.50	-56.59	6.72	9.78	2.15	-55.68	-13.00	42.68	V

**NR EN-DC B66 -n71, 5MHz, Channel 133100**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polorization
1327.51	-55.26	3.15	4.60	2.15	-55.96	-13.00	42.96	H
1997.01	-49.83	4.04	4.61	2.15	-51.41	-13.00	38.41	H
2671.50	-44.73	4.76	6.41	2.15	-45.23	-13.00	32.23	H
3327.34	-61.43	5.30	7.79	2.15	-61.09	-13.00	48.09	H
3980.59	-58.72	6.08	8.87	2.15	-58.08	-13.00	45.08	V
4670.05	-58.96	6.48	9.57	2.15	-58.02	-13.00	45.02	V

**NR EN-DC B66 -n71, 5MHz, Channel 136100**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polorization
1354.01	-43.94	3.18	4.74	2.15	-44.53	-13.00	31.53	H
2041.50	-41.85	4.14	4.72	2.15	-43.42	-13.00	30.42	H
2720.00	-45.33	4.80	6.50	2.15	-45.78	-13.00	32.78	H
3402.55	-58.18	5.36	7.97	2.15	-57.72	-13.00	44.72	H
4079.48	-57.06	6.04	8.98	2.15	-56.27	-13.00	43.27	V
4753.62	-58.41	6.58	9.65	2.15	-57.49	-13.00	44.49	V

**NR EN-DC B66 -n71, 5MHz, Channel 139100**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polorization
1391.01	-55.27	3.22	4.93	2.15	-55.71	-13.00	42.71	V
2086.50	-47.42	4.18	4.86	2.15	-48.89	-13.00	35.89	H
2783.00	-46.09	4.89	6.61	2.15	-46.52	-13.00	33.52	V
3477.77	-58.70	5.48	8.15	2.15	-58.18	-13.00	45.18	H
4158.87	-57.24	6.11	9.06	2.15	-56.44	-13.00	43.44	V
4865.05	-57.07	6.72	9.77	2.15	-56.17	-13.00	43.17	V

**NR n77L, 20MHz, PI/2 BPSK, Channel 630668**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
6920.00	-54.83	7.73	11.50	-51.06	-13.00	38.06	H
8676.00	-54.23	8.39	13.04	-49.58	-13.00	36.58	H
10365.00	-52.61	9.75	13.05	-49.31	-13.00	36.31	V
12119.00	-49.06	10.29	13.05	-46.30	-13.00	33.30	H
13841.00	-44.93	10.69	14.40	-41.22	-13.00	28.22	H
15560.00	-44.92	11.50	13.70	-42.72	-13.00	29.72	H

**NR n77L, 20MHz, PI/2 BPSK, Channel 633334**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7019.00	-53.90	8.27	11.62	-50.55	-13.00	37.55	V
8725.00	-54.28	8.43	13.05	-49.66	-13.00	36.66	V
10472.00	-52.53	9.69	13.09	-49.13	-13.00	36.13	H
12231.00	-50.00	10.04	13.09	-46.95	-13.00	33.95	V
13977.00	-44.56	10.84	14.49	-40.91	-13.00	27.91	H
15764.00	-42.78	11.64	13.70	-40.72	-13.00	27.72	H

**NR n77L, 20MHz, PI/2 BPSK, Channel 636000**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7066.00	-55.70	8.20	11.68	-52.22	-13.00	39.22	H
8867.00	-54.04	8.78	13.07	-49.75	-13.00	36.75	H
10627.00	-52.05	9.29	13.13	-48.21	-13.00	35.21	V
12406.00	-48.93	10.42	13.16	-46.19	-13.00	33.19	H
14134.00	-44.12	11.01	14.47	-40.66	-13.00	27.66	V
15918.00	-44.04	11.65	13.70	-41.99	-13.00	28.99	V

**NR EN-DC B5 -n77L, 20MHz, PI/2 BPSK, Channel 630668**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
6942.00	-55.00	7.85	11.53	-51.32	-13.00	38.32	H
10360.00	-52.60	9.74	13.04	-49.30	-13.00	36.30	V
12112.00	-49.76	10.31	13.04	-47.03	-13.00	34.03	H
13864.00	-44.64	10.73	14.42	-40.95	-13.00	27.95	V
15598.00	-44.12	11.48	13.70	-41.90	-13.00	28.90	H
17279.00	-39.54	12.37	14.41	-37.50	-13.00	24.50	H

**NR EN-DC B 5-n77L, 20MHz, PI/2 BPSK, Channel 633334**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7012.00	-55.13	8.28	11.61	-51.80	-13.00	38.80	V
10527.00	-52.90	9.55	13.11	-49.34	-13.00	36.34	V
12228.00	-50.18	10.04	13.09	-47.13	-13.00	34.13	H
14019.00	-44.26	10.89	14.50	-40.65	-13.00	27.65	V
15736.00	-43.69	11.63	13.70	-41.62	-13.00	28.62	V
17486.00	-40.26	12.69	14.87	-38.08	-13.00	25.08	H

**NR EN-DC B5 -n77L, 20MHz, PI/2 BPSK, Channel 636000**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7410.00	-53.77	8.14	12.09	-49.82	-13.00	36.82	V
9296.00	-54.07	9.14	13.28	-49.93	-13.00	36.93	H
11125.00	-50.89	9.73	13.18	-47.44	-13.00	34.44	H
13008.00	-46.26	10.50	13.51	-43.25	-13.00	30.25	H
14823.00	-44.44	11.14	14.14	-41.44	-13.00	28.44	H
16699.00	-40.83	11.73	13.68	-38.88	-13.00	25.88	V

**NR n77H, 20MHz, PI/2 BPSK, Channel 647334**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7406.00	-54.03	8.13	12.09	-50.07	-13.00	37.07	H
9271.00	-53.38	9.09	13.26	-49.21	-13.00	36.21	H
11130.00	-49.32	9.71	13.17	-45.86	-13.00	32.86	H
13004.00	-45.80	10.48	13.51	-42.77	-13.00	29.77	H
14870.00	-44.47	11.17	14.10	-41.54	-13.00	28.54	V
16701.00	-41.00	11.73	13.68	-39.05	-13.00	26.05	V

**NR n77H, 20MHz, PI/2 BPSK, Channel 656000**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7670.00	-54.02	8.29	12.34	-49.97	-13.00	36.97	H
9620.00	-53.58	9.11	13.28	-49.41	-13.00	36.41	V
11516.00	-49.94	9.81	13.10	-46.65	-13.00	33.65	V
13415.00	-43.14	10.58	14.08	-39.64	-13.00	26.64	V
15348.00	-43.42	11.33	13.79	-40.96	-13.00	27.96	V
17282.00	-38.61	12.37	14.42	-36.56	-13.00	23.56	V

**NR n77H, 20MHz, PI/2 BPSK, Channel 664666**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7964.00	-54.73	8.36	12.57	-50.52	-13.00	37.52	H
9918.00	-53.95	9.11	12.98	-50.08	-13.00	37.08	V
11913.00	-49.59	10.46	13.02	-47.03	-13.00	34.03	H
13898.00	-43.49	10.80	14.44	-39.85	-13.00	26.85	H
15891.00	-43.55	11.62	13.70	-41.47	-13.00	28.47	V
17846.00	-39.92	12.80	15.38	-37.34	-13.00	24.34	V

**NR EN-DC B5 -n77H, 20MHz, PI/2 BPSK, Channel 647334**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7410.00	-53.77	8.14	12.09	-49.82	-13.00	36.82	V
9296.00	-54.07	9.14	13.28	-49.93	-13.00	36.93	H
11125.00	-50.89	9.73	13.18	-47.44	-13.00	34.44	H
13008.00	-46.26	10.50	13.51	-43.25	-13.00	30.25	H
14823.00	-44.44	11.14	14.14	-41.44	-13.00	28.44	H
16699.00	-40.83	11.73	13.68	-38.88	-13.00	25.88	V

**NR EN-DC B 5-n77H, 20MHz, PI/2 BPSK, Channel 656000**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7710.00	-55.26	8.41	12.37	-51.30	-13.00	38.30	V
9621.00	-54.20	9.10	13.28	-50.02	-13.00	37.02	V
11530.00	-50.68	9.81	13.09	-47.40	-13.00	34.40	H
13412.00	-44.20	10.58	14.08	-40.70	-13.00	27.70	V
15385.00	-43.58	11.38	13.77	-41.19	-13.00	28.19	H
17268.00	-39.15	12.36	14.39	-37.12	-13.00	24.12	V

**NR EN-DC B 5-n77H, 20MHz, PI/2 BPSK, Channel 664666**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7965.00	-54.38	8.36	12.57	-50.17	-13.00	37.17	V
9940.00	-52.79	9.13	12.96	-48.96	-13.00	35.96	H
11886.00	-49.27	10.46	13.02	-46.71	-13.00	33.71	H
13907.00	-43.94	10.81	14.44	-40.31	-13.00	27.31	V
15859.00	-43.60	11.63	13.70	-41.53	-13.00	28.53	V
17863.00	-40.38	12.82	15.41	-37.79	-13.00	24.79	H



**NR n78L, 20MHz, PI/2 BPSK, Channel 630668**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
6920.00	-53.77	7.73	11.50	-50.00	-13.00	37.00	H
8621.00	-55.20	8.46	13.02	-50.64	-13.00	37.64	H
10383.00	-52.08	9.77	13.05	-48.80	-13.00	35.80	V
12131.00	-49.40	10.26	13.05	-46.61	-13.00	33.61	V
13824.00	-44.74	10.65	14.39	-41.00	-13.00	28.00	V
15596.00	-44.27	11.49	13.70	-42.06	-13.00	29.06	V

**NR n78L, 20MHz, PI/2 BPSK, Channel 633334**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
6999.00	-54.55	8.29	11.60	-51.24	-13.00	38.24	V
8766.00	-53.21	8.56	13.05	-48.72	-13.00	35.72	H
10521.00	-52.45	9.57	13.10	-48.92	-13.00	35.92	V
12262.00	-48.30	10.02	13.10	-45.22	-13.00	32.22	V
14018.00	-44.97	10.89	14.50	-41.36	-13.00	28.36	V
15752.00	-43.05	11.63	13.70	-40.98	-13.00	27.98	H

**NR n78L, 20MHz, PI/2 BPSK, Channel 636000**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7063.00	-55.26	8.21	11.68	-51.79	-13.00	38.79	H
8862.00	-54.09	8.78	13.07	-49.80	-13.00	36.80	H
10641.00	-52.19	9.29	13.13	-48.35	-13.00	35.35	V
12362.00	-49.14	10.27	13.14	-46.27	-13.00	33.27	V
14147.00	-44.34	10.98	14.47	-40.85	-13.00	27.85	V
15941.00	-43.49	11.70	13.70	-41.49	-13.00	28.49	H

**NR EN-DC B5-n78L, 20MHz, PI/2 BPSK, Channel 630668**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
6895.00	-55.37	7.76	11.47	-51.66	-13.00	38.66	V
8633.00	-54.70	8.45	13.03	-50.12	-13.00	37.12	V
10384.00	-52.88	9.78	13.05	-49.61	-13.00	36.61	H
12105.00	-48.84	10.33	13.04	-46.13	-13.00	33.13	H
13839.00	-44.52	10.68	14.40	-40.80	-13.00	27.80	V
15576.00	-44.37	11.50	13.70	-42.17	-13.00	29.17	H

**NR EN-DC B7-n78L, 20MHz, PI/2 BPSK, Channel 633334**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7005.00	-53.94	8.29	11.61	-50.62	-13.00	37.62	V
8757.00	-53.34	8.53	13.05	-48.82	-13.00	35.82	V
10512.00	-51.78	9.61	13.10	-48.29	-13.00	35.29	V
12273.00	-49.45	10.01	13.11	-46.35	-13.00	33.35	H
13979.00	-45.01	10.84	14.49	-41.36	-13.00	28.36	V
15776.00	-43.28	11.65	13.70	-41.23	-13.00	28.23	H

**NR EN-DC B7-n78L, 20MHz, PI/2 BPSK, Channel 636000**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polorization
7076.00	-55.13	8.19	11.69	-51.63	-13.00	38.63	H
8829.00	-53.16	8.71	13.07	-48.80	-13.00	35.80	V
10642.00	-51.97	9.29	13.13	-48.13	-13.00	35.13	H
12418.00	-48.58	10.39	13.17	-45.80	-13.00	32.80	H
14150.00	-44.29	10.97	14.47	-40.79	-13.00	27.79	V
15911.00	-43.28	11.64	13.70	-41.22	-13.00	28.22	V

Note: Expanded measurement uncertainty

Frequency range	Expanded measurement uncertainty
30MHz-1GHz	5.76dB, k=2
1GHz-18GHz	4.69dB, k=2
18GHz-40GHz	3.37dB, k=2

## **A.3 Frequency Stability**

### **A.3.1 Method of Measurement**

Frequency stability is a measure of the frequency drift due to temperature and supply voltage variations, with reference to the frequency measured at +20 °C and rated supply voltage. Two reference points are established at the applicable unwanted emissions limit using a RBW equal to the RBW required by the unwanted emissions specification of the applicable regulatory standard. These reference points measured using the lowest and highest channel of operation shall be identified as  $F_L$  and  $F_H$  respectively.

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a "call mode". This is accomplished with the use of MT8000A.

1. Measure the carrier frequency at room temperature.
2. Subject the EUT to overnight soak at -30°C.
3. With the EUT, powered via nominal voltage, connected to the MT8000A, and in a simulated call on middle channel for each NR band, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
4. Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
5. Re-measure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments re-measuring carrier frequency at each voltage. Pause at nominal voltage for 1.5 hours unpowered, to allow any self-heating to stabilize, before continuing.
6. Subject the EUT to overnight soak at +50°C.
7. With the EUT, powered via nominal voltage, connected to the MT8000A and in a simulated call on the center channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
8. Repeat the above measurements at 10 °C decrements from +50°C to -30°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
9. At all temperature levels hold the temperature to +/- 0.5°C during the measurement procedure.

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. As this transceiver is considered "Hand carried, battery powered equipment" Section 2.1055(d)(2) applies. This requires that the lower voltage for frequency stability testing be specified by the manufacturer. This transceiver is specified to operate with an input voltage of the lower, higher and nominal voltage. Operation above or below these voltage limits is prohibited by transceiver software in order to prevent improper operation as well as to protect components from overstress.

### A.3.2 Measurement results

n2

#### Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	1850.272	1908.640		
50				-4.50	0.0024
40				-6.00	0.0032
30				-5.40	0.0029
10				-8.30	0.0044
0				-8.00	0.0043
-10				-9.90	0.0053
-20				-3.90	0.0021
-30				-5.90	0.0031

#### Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	1850.272	1908.640	-10.40	0.0055
4.4				-10.50	0.0056

n5

#### Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	824.256	847.640		
50				-0.90	0.0011
40				-3.30	0.0039
30				-2.70	0.0032
10				-3.60	0.0043
0				-3.40	0.0041
-10				-1.10	0.0013
-20				-1.00	0.0012
-30				-1.20	0.0014

#### Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	824.256	847.640	-2.20	0.0026
4.4				-2.10	0.0025

**n25**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	1850.272	1913.640		
50				-2.40	0.0013
40				-3.50	0.0019
30				-6.60	0.0035
10				-6.00	0.0032
0				-5.00	0.0027
-10				-4.60	0.0024
-20				-7.20	0.0038
-30				-10.00	0.0053

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	1850.272	1913.640	-7.70	0.0041
4.4				-5.30	0.0028

**n41**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	2496.720	2688.160		
50				-1.00	0.0004
40				0.30	0.0001
30				-7.70	0.0030
10				3.40	0.0013
0				-11.70	0.0045
-10				1.40	0.0005
-20				-5.20	0.0020
-30				-4.20	0.0016

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	2496.720	2688.160	2.00	0.0008
4.4				-0.80	0.0003

**n48**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	3550.736	3698.160		
50				-23.40	0.0065
40				-18.50	0.0051
30				-5.20	0.0014
10				-20.30	0.0056
0				-7.20	0.0020
-10				-11.70	0.0032
-20				-12.40	0.0034
-30				-4.00	0.0011

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	3550.736	3698.160	-1.70	0.0005
4.4				-6.80	0.0019

**n66**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	1710.096	1779.920		
50				-0.10	0.0001
40				-5.00	0.0029
30				-2.70	0.0015
10				-2.10	0.0012
0				-5.30	0.0030
-10				-0.60	0.0003
-20				-1.80	0.0010
-30				-4.00	0.0023

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	1710.096	1779.920	-3.80	0.0022
4.4				-1.30	0.0007

**n71**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	663.432	696.480		
50				0.40	0.0006
40				0.60	0.0009
30				-0.60	0.0009
10				1.20	0.0018
0				2.00	0.0029
-10				-0.30	0.0004
-20				-0.70	0.0010
-30				-0.70	0.0010

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	663.432	696.480	-1.90	0.0028
4.4				-2.30	0.0034

**n77L**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	3450.720	3548.528		
50				-11.00	0.0031
40				-18.70	0.0053
30				-17.30	0.0049
10				-3.20	0.0009
0				0.30	0.0001
-10				-7.90	0.0023
-20				-3.80	0.0011
-30				-1.30	0.0004

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	3450.720	3548.528	-2.10	0.0006
4.4				-5.50	0.0016

**n77H**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	3700.368	3978.480		
50				-27.10	0.0071
40				-29.50	0.0077
30				-17.70	0.0046
10				-11.20	0.0029
0				-10.30	0.0027
-10				-7.30	0.0019
-20				-13.50	0.0035
-30				-4.60	0.0012

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	3700.368	3978.480	-12.10	0.0032
4.4				-9.40	0.0024

**n78L**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	3450.752	3548.496		
50				-17.20	0.0049
40				-7.00	0.0020
30				-12.00	0.0034
10				-13.70	0.0039
0				-8.10	0.0023
-10				-7.00	0.0020
-20				-12.80	0.0037
-30				-3.70	0.0011

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
3.5	20	3450.752	3548.496	-3.10	0.0009
4.4				-3.30	0.0009

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 0.047k$  Hz,  $k = 2$ .



#### **A.4 Occupied Bandwidth**

Occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the mid frequencies frequency. The table below lists the measured 99% BW. Spectrum analyzer plots are included on the following pages.

The measurement method is from ANSI C63.26:

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts.
- b) The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set  $\geq 3 \times$  RBW.
- c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation.
- d) Set the detection mode to peak, and the trace mode to max-hold.