

Report No.: SEWM2307000288RG01

Rev.: 01

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Appendix B.9

LTE-NB1 Band 71



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Effective (Isotropic) Radiated Power Output Data

Test Result

Test Band	Test Mode	Sub-carrier Spacing (kHz)	Test channel	Number of T	Conducted Power (dBm)	ERP (dBm)	limit (dBm)	Verdict
NB1 Band 71	BPSK	3.75	133123	1T0	23.3	23.65	34.77	PASS
NB1 Band 71	BPSK	3.75	133123	1T47	23.08	23.43	34.77	PASS
NB1 Band 71	BPSK	3.75	133297	1T0	23.12	23.47	34.77	PASS
NB1 Band 71	BPSK	3.75	133297	1T47	23.3	23.65	34.77	PASS
NB1 Band 71	BPSK	3.75	133471	1T0	23.39	23.74	34.77	PASS
NB1 Band 71	BPSK	3.75	133471	1T47	23.32	23.67	34.77	PASS
NB1 Band 71	QPSK	3.75	133123	1T0	23.23	23.58	34.77	PASS
NB1 Band 71	QPSK	3.75	133123	1T47	23.26	23.61	34.77	PASS
NB1 Band 71	QPSK	3.75	133297	1T0	23.42	23.77	34.77	PASS
NB1 Band 71	QPSK	3.75	133297	1T47	23.23	23.58	34.77	PASS
NB1 Band 71	QPSK	3.75	133471	1T0	23.26	23.61	34.77	PASS
NB1 Band 71	QPSK	3.75	133471	1T47	23.36	23.71	34.77	PASS



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Test Band	Test Mode	Sub-carrier Spacing (kHz)	Test channel	Number of T	Conducted Power (dBm)	ERP (dBm)	limit (dBm)	Verdict
NB1 Band 71	BPSK	15	133123	1T0	23.46	23.81	34.77	PASS
NB1 Band 71	BPSK	15	133123	1T11	23.43	23.78	34.77	PASS
NB1 Band 71	BPSK	15	133297	1T0	23.13	23.48	34.77	PASS
NB1 Band 71	BPSK	15	133297	1T11	23.1	23.45	34.77	PASS
NB1 Band 71	BPSK	15	133471	1T0	23.09	23.44	34.77	PASS
NB1 Band 71	BPSK	15	133471	1T11	23.38	23.73	34.77	PASS
NB1 Band 71	QPSK	15	133123	1T0	23.26	23.61	34.77	PASS
NB1 Band 71	QPSK	15	133123	1T11	23.35	23.7	34.77	PASS
NB1 Band 71	QPSK	15	133123	12T0	21.51	21.86	34.77	PASS
NB1 Band 71	QPSK	15	133297	1T0	23.31	23.66	34.77	PASS
NB1 Band 71	QPSK	15	133297	1T11	23.16	23.51	34.77	PASS
NB1 Band 71	QPSK	15	133297	12T0	21.53	21.88	34.77	PASS
NB1 Band 71	QPSK	15	133471	1T0	23.36	23.71	34.77	PASS
NB1 Band 71	QPSK	15	133471	1T11	23.24	23.59	34.77	PASS
NB1 Band 71	QPSK	15	133471	12T0	21.48	21.83	34.77	PASS



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Field Strength of Spurious Radiation

Test Band = NB-IOT Band 71_ TM1

Test Channel = Low Channel

Final Data List										
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1331	73.16	-48.79	25.13	-45.75	-13.00	32.75	254	29	Horizontal
2	1996	63.12	-48.08	26.27	-53.96	-13.00	40.96	142	259	Horizontal
3	2661.5	54.47	-47.13	28.08	-59.84	-13.00	46.84	263	246	Horizontal
4	3930.5	44.22	-45.52	31.06	-65.50	-13.00	52.50	221	230	Horizontal
5	5105	42.85	-44.56	33.18	-63.79	-13.00	50.79	142	3	Horizontal
6	7573	40.21	-41.49	36.67	-59.87	-13.00	46.87	287	360	Horizontal

Final Data List										
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1331	64.34	-48.79	25.13	-54.57	-13.00	41.57	126	86	Vertical
2	1996.5	58.26	-48.08	26.27	-58.81	-13.00	45.81	285	260	Vertical
3	2661.5	53.29	-47.13	28.08	-61.02	-13.00	48.02	142	202	Vertical
4	3922	44.21	-45.52	31.03	-65.54	-13.00	52.54	263	173	Vertical
5	5171	42.71	-44.12	33.17	-63.51	-13.00	50.51	225	8	Vertical
6	6655.5	44.79	-42.90	35.86	-57.51	-13.00	44.51	148	346	Vertical



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Test Band = NB-IOT Band 71_ TM1

Test Channel = Mid Channel

Final Data List										
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1351	65.43	-48.77	25.12	-53.47	-13.00	40.47	142	187	Horizontal
2	2026.5	65.51	-48.03	26.36	-51.42	-13.00	38.42	265	144	Horizontal
3	2701.5	50.92	-47.05	28.25	-63.15	-13.00	50.15	284	260	Horizontal
4	3954.5	43.30	-45.51	31.15	-66.33	-13.00	53.33	142	144	Horizontal
5	5223.5	42.25	-43.99	33.16	-63.85	-13.00	50.85	263	344	Horizontal
6	7468.5	41.28	-41.89	36.56	-59.31	-13.00	46.31	228	3	Horizontal

Final Data List										
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1351	59.77	-48.77	25.12	-59.13	-13.00	46.13	102	288	Vertical
2	1711.5	62.36	-48.25	24.60	-56.55	-13.00	43.55	265	0	Vertical
3	2026	60.23	-48.03	26.36	-56.70	-13.00	43.70	284	273	Vertical
4	2701.5	49.79	-47.05	28.25	-64.28	-13.00	51.28	142	187	Vertical
5	4591.5	43.04	-44.65	32.30	-64.56	-13.00	51.56	263	70	Vertical
6	6755.5	43.27	-42.81	35.90	-58.89	-13.00	45.89	228	0	Vertical



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Test Band = NB-IOT Band 71_ TM1

Test Channel = High Channel

Final Data List										
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1391	74.39	-48.74	25.10	-44.50	-13.00	31.50	185	3	Horizontal
2	2086.5	81.01	-47.91	26.49	-35.67	-13.00	22.67	263	272	Horizontal
3	2781.5	60.14	-46.75	28.58	-53.29	-13.00	40.29	254	114	Horizontal
4	3992.5	43.24	-45.50	31.27	-66.25	-13.00	53.25	142	3	Horizontal
5	6259	42.03	-43.01	35.32	-60.92	-13.00	47.92	263	71	Horizontal
6	8555.5	39.53	-39.78	37.38	-58.13	-13.00	45.13	228	356	Horizontal

Final Data List										
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1391	67.17	-48.74	25.10	-51.72	-13.00	38.72	265	219	Vertical
2	2086	68.44	-47.91	26.49	-48.24	-13.00	35.24	284	118	Vertical
3	2781.5	48.43	-46.75	28.58	-65.00	-13.00	52.00	142	18	Vertical
4	3801.5	42.82	-45.63	30.63	-67.44	-13.00	54.44	263	4	Vertical
5	5812.5	41.17	-43.47	34.16	-63.40	-13.00	50.40	228	357	Vertical
6	7370.5	40.56	-41.85	36.44	-60.11	-13.00	47.11	225	18	Vertical

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & AMP. The basic equation with a sample calculation is as follows:

AF = Antenna Factor(dB/m)

Factor = Cable Factor(dB) - Preamplifier (dB)

Level = Reading Level + AF + Factor -95.26

Margin = Limit – Level

---End of Attachment---



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