

Report No.: SEWM2307000288RG01

Rev.: 01

Page: 1 of 6

Appendix B.7

LTE-NB1 Band 25



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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)	EIRP (dBm)	limit (dBm)	Verdict
NB1 Band 25	BPSK	3.75	26041	1T0	23.34	26.44	33	PASS
NB1 Band 25	BPSK	3.75	26041	1T47	23.28	26.38	33	PASS
NB1 Band 25	BPSK	3.75	26365	1T0	23.4	26.5	33	PASS
NB1 Band 25	BPSK	3.75	26365	1T47	23.27	26.37	33	PASS
NB1 Band 25	BPSK	3.75	26689	1T0	23.39	26.49	33	PASS
NB1 Band 25	BPSK	3.75	26689	1T47	23.28	26.38	33	PASS
NB1 Band 25	QPSK	3.75	26041	1T0	23.25	26.35	33	PASS
NB1 Band 25	QPSK	3.75	26041	1T47	23.32	26.42	33	PASS
NB1 Band 25	QPSK	3.75	26365	1T0	23.36	26.46	33	PASS
NB1 Band 25	QPSK	3.75	26365	1T47	23.31	26.41	33	PASS
NB1 Band 25	QPSK	3.75	26689	1T0	23.24	26.34	33	PASS
NB1 Band 25	QPSK	3.75	26689	1T47	23.28	26.38	33	PASS



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Test Band	Test Mode	Sub-carrier Spacing (kHz)	Test channel	Number of T	Conducted Power (dBm)	EIRP (dBm)	limit (dBm)	Verdict
NB1 Band 25	BPSK	15	26041	1T0	23.37	26.47	33	PASS
NB1 Band 25	BPSK	15	26041	1T11	23.39	26.49	33	PASS
NB1 Band 25	BPSK	15	26365	1T0	23.59	26.69	33	PASS
NB1 Band 25	BPSK	15	26365	1T11	23.32	26.42	33	PASS
NB1 Band 25	BPSK	15	26689	1T0	23.38	26.48	33	PASS
NB1 Band 25	BPSK	15	26689	1T11	23.19	26.29	33	PASS
NB1 Band 25	QPSK	15	26041	1T0	23.24	26.34	33	PASS
NB1 Band 25	QPSK	15	26041	1T11	23.34	26.44	33	PASS
NB1 Band 25	QPSK	15	26041	12T0	21.5	24.6	33	PASS
NB1 Band 25	QPSK	15	26365	1T0	23.27	26.37	33	PASS
NB1 Band 25	QPSK	15	26365	1T11	23.57	26.67	33	PASS
NB1 Band 25	QPSK	15	26365	12T0	21.47	24.57	33	PASS
NB1 Band 25	QPSK	15	26689	1T0	23.45	26.55	33	PASS
NB1 Band 25	QPSK	15	26689	1T11	23.43	26.53	33	PASS
NB1 Band 25	QPSK	15	26689	12T0	21.53	24.63	33	PASS



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Field Strength of Spurious Radiation

Test Band = NB-IOT Band 25_ 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	3714.75	59.80	-45.66	30.33	-50.79	-13.00	37.79	265	142	Horizontal
2	5572.5	45.88	-43.87	33.35	-59.90	-13.00	46.90	284	142	Horizontal
3	7430.25	47.92	-41.87	36.52	-52.69	-13.00	39.69	142	347	Horizontal
4	9609	39.06	-38.05	37.78	-56.47	-13.00	43.47	263	32	Horizontal
5	11858.25	36.03	-35.16	38.40	-55.99	-13.00	42.99	228	205	Horizontal
6	14982.75	34.92	-33.99	40.10	-54.23	-13.00	41.23	225	270	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	3714.75	61.30	-45.66	30.33	-49.29	-13.00	36.29	102	44	Vertical
2	5572.5	49.02	-43.87	33.35	-56.76	-13.00	43.76	265	251	Vertical
3	7430.25	47.22	-41.87	36.52	-53.39	-13.00	40.39	284	328	Vertical
4	9579	38.79	-38.11	37.77	-56.81	-13.00	43.81	142	203	Vertical
5	12080.25	36.19	-35.22	38.50	-55.80	-13.00	42.80	263	108	Vertical
6	15003	34.93	-33.98	40.09	-54.22	-13.00	41.22	228	0	Vertical



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Test Band = NB-IOT Band 25_ 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	3759.75	60.87	-45.54	30.48	-49.45	-13.00	36.45	102	112	Horizontal
2	5640	45.61	-43.81	33.58	-59.89	-13.00	46.89	265	127	Horizontal
3	7519.5	42.89	-41.53	36.62	-57.28	-13.00	44.28	284	337	Horizontal
4	9579.75	38.98	-38.11	37.77	-56.62	-13.00	43.62	142	206	Horizontal
5	13041.75	35.67	-34.73	39.63	-54.69	-13.00	41.69	263	360	Horizontal
6	16212	34.61	-32.84	38.35	-55.14	-13.00	42.14	228	64	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	3759.75	59.32	-45.54	30.48	-51.00	-13.00	38.00	102	107	Vertical
2	5640	47.73	-43.81	33.58	-57.77	-13.00	44.77	265	269	Vertical
3	7519.5	43.51	-41.53	36.62	-56.66	-13.00	43.66	284	331	Vertical
4	9479.25	39.20	-38.15	37.74	-56.47	-13.00	43.47	254	315	Vertical
5	12761.25	35.78	-35.10	39.31	-55.27	-13.00	42.27	111	331	Vertical
6	15529.5	34.12	-34.08	39.09	-56.13	-13.00	43.13	155	331	Vertical



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Test Band = NB-IOT Band 25_ 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	3814.5	57.47	-45.44	30.67	-52.56	-13.00	39.56	102	111	Horizontal
2	5722.5	43.84	-43.67	33.86	-61.24	-13.00	48.24	265	335	Horizontal
3	7630.5	43.87	-41.28	36.73	-55.94	-13.00	42.94	284	63	Horizontal
4	11148.75	35.16	-35.18	38.40	-56.88	-13.00	43.88	142	209	Horizontal
5	13571.25	35.98	-34.45	40.00	-53.73	-13.00	40.73	263	256	Horizontal
6	16209.75	34.36	-32.84	38.35	-55.39	-13.00	42.39	228	95	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	3815.25	56.26	-45.44	30.67	-53.77	-13.00	40.77	102	106	Vertical
2	5722.5	45.51	-43.67	33.86	-59.57	-13.00	46.57	254	312	Vertical
3	7630.5	45.10	-41.28	36.73	-54.71	-13.00	41.71	142	13	Vertical
4	10784.25	35.88	-35.69	38.29	-56.78	-13.00	43.78	263	217	Vertical
5	13593	36.26	-34.69	40.02	-53.68	-13.00	40.68	228	168	Vertical
6	16379.25	34.27	-32.04	38.47	-54.56	-13.00	41.56	225	248	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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