

# Appendix B.10

## LTE-NB1 Band 85



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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 85	BPSK	3.75	134003	1T0	23.43	23.78	34.77	PASS
NB1 Band 85	BPSK	3.75	134003	1T47	23.37	23.72	34.77	PASS
NB1 Band 85	BPSK	3.75	134092	1T0	23.29	23.64	34.77	PASS
NB1 Band 85	BPSK	3.75	134092	1T47	23.39	23.74	34.77	PASS
NB1 Band 85	BPSK	3.75	134181	1T0	23.23	23.58	34.77	PASS
NB1 Band 85	BPSK	3.75	134181	1T47	23.23	23.58	34.77	PASS
NB1 Band 85	QPSK	3.75	134003	1T0	23.14	23.49	34.77	PASS
NB1 Band 85	QPSK	3.75	134003	1T47	23.16	23.51	34.77	PASS
NB1 Band 85	QPSK	3.75	134092	1T0	23.41	23.76	34.77	PASS
NB1 Band 85	QPSK	3.75	134092	1T47	23.33	23.68	34.77	PASS
NB1 Band 85	QPSK	3.75	134181	1T0	23.45	23.8	34.77	PASS
NB1 Band 85	QPSK	3.75	134181	1T47	23.23	23.58	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 85	BPSK	15	134003	1T0	23.36	23.71	34.77	PASS
NB1 Band 85	BPSK	15	134003	1T11	23.19	23.54	34.77	PASS
NB1 Band 85	BPSK	15	134092	1T0	23.48	23.83	34.77	PASS
NB1 Band 85	BPSK	15	134092	1T11	23.34	23.69	34.77	PASS
NB1 Band 85	BPSK	15	134181	1T0	23.31	23.66	34.77	PASS
NB1 Band 85	BPSK	15	134181	1T11	23.49	23.84	34.77	PASS
NB1 Band 85	QPSK	15	134003	1T0	23.3	23.65	34.77	PASS
NB1 Band 85	QPSK	15	134003	1T11	23.31	23.66	34.77	PASS
NB1 Band 85	QPSK	15	134003	12T0	21.53	21.88	34.77	PASS
NB1 Band 85	QPSK	15	134092	1T0	23.25	23.6	34.77	PASS
NB1 Band 85	QPSK	15	134092	1T11	23.44	23.79	34.77	PASS
NB1 Band 85	QPSK	15	134092	12T0	21.58	21.93	34.77	PASS
NB1 Band 85	QPSK	15	134181	1T0	23.21	23.56	34.77	PASS
NB1 Band 85	QPSK	15	134181	1T11	23.39	23.74	34.77	PASS
NB1 Band 85	QPSK	15	134181	12T0	21.47	21.82	34.77	PASS



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## Field Strength of Spurious Radiation

Test Band = NB-IOT Band 85\_ 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	1401	72.75	-48.73	25.10	-46.14	-13.00	33.14	254	359	Horizontal
2	2101	77.35	-47.88	26.52	-39.27	-13.00	26.27	142	271	Horizontal
3	2802	57.82	-46.68	28.67	-55.45	-13.00	42.45	263	113	Horizontal
4	3562.5	43.40	-45.98	29.81	-68.03	-13.00	55.03	285	351	Horizontal
5	4864	42.42	-44.96	32.90	-64.89	-13.00	51.89	201	3	Horizontal
6	6957	41.89	-42.63	35.98	-60.02	-13.00	47.02	185	199	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	1401	67.03	-48.73	25.10	-51.86	-13.00	38.86	325	276	Vertical
2	2101	65.66	-47.88	26.52	-50.96	-13.00	37.96	254	104	Vertical
3	2801.5	45.37	-46.68	28.67	-67.91	-13.00	54.91	142	45	Vertical
4	3761.5	43.14	-45.72	30.49	-67.35	-13.00	54.35	255	118	Vertical
5	5253.5	42.58	-44.07	33.15	-63.60	-13.00	50.60	296	118	Vertical
6	7828.5	40.36	-40.80	36.93	-58.77	-13.00	45.77	336	147	Vertical



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**Test Band = NB-IOT Band 85\_ 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	1414	72.37	-48.70	25.07	-46.52	-13.00	33.52	165	360	Horizontal
2	2121	77.74	-47.85	26.57	-38.80	-13.00	25.80	125	71	Horizontal
3	2827.5	54.41	-46.71	28.78	-58.79	-13.00	45.79	132	142	Horizontal
4	4201	42.42	-45.11	31.62	-66.33	-13.00	53.33	114	301	Horizontal
5	5959.5	41.46	-43.41	34.66	-62.55	-13.00	49.55	163	343	Horizontal
6	7600	40.24	-41.34	36.70	-59.66	-13.00	46.66	169	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	1414	66.83	-48.70	25.07	-52.06	-13.00	39.06	132	346	Vertical
2	2120.5	63.83	-47.85	26.57	-52.72	-13.00	39.72	111	186	Vertical
3	2828	47.40	-46.71	28.78	-65.80	-13.00	52.80	125	229	Vertical
4	4435.5	43.01	-44.76	32.00	-65.02	-13.00	52.02	136	272	Vertical
5	6235	42.09	-43.04	35.27	-60.94	-13.00	47.94	196	131	Vertical
6	8404.5	40.19	-40.25	37.30	-58.01	-13.00	45.01	104	186	Vertical



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**Test Band = NB-IOT Band 85\_ 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	1427	72.53	-48.67	25.03	-46.36	-13.00	33.36	205	3	Horizontal
2	2140.5	77.82	-47.82	26.61	-38.65	-13.00	25.65	254	86	Horizontal
3	2853.5	50.21	-46.74	28.88	-62.91	-13.00	49.91	142	316	Horizontal
4	3887	43.72	-45.54	30.92	-66.17	-13.00	53.17	263	316	Horizontal
5	5605.5	42.13	-43.67	33.46	-63.34	-13.00	50.34	228	259	Horizontal
6	7810.5	40.13	-40.72	36.91	-58.94	-13.00	45.94	224	129	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	1427	66.84	-48.67	25.03	-52.05	-13.00	39.05	102	1	Vertical
2	2140.5	65.29	-47.82	26.61	-51.18	-13.00	38.18	265	333	Vertical
3	2853.5	47.80	-46.74	28.88	-65.32	-13.00	52.32	284	132	Vertical
4	4036	43.39	-45.47	31.36	-65.98	-13.00	52.98	142	291	Vertical
5	5435.5	42.94	-43.84	33.11	-63.05	-13.00	50.05	263	220	Vertical
6	6420.5	44.62	-42.82	35.64	-57.82	-13.00	44.82	228	318	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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