

Report No.: SEWM2307000288RG01

Rev.: 01

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Appendix B.6

LTE-NB1 Band 17



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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 17	BPSK	3.75	23731	1T0	23.25	23.6	34.77	PASS
NB1 Band 17	BPSK	3.75	23731	1T47	23.11	23.46	34.77	PASS
NB1 Band 17	BPSK	3.75	23790	1T0	23.37	23.72	34.77	PASS
NB1 Band 17	BPSK	3.75	23790	1T47	23.41	23.76	34.77	PASS
NB1 Band 17	BPSK	3.75	23849	1T0	23.29	23.64	34.77	PASS
NB1 Band 17	BPSK	3.75	23849	1T47	23.17	23.52	34.77	PASS
NB1 Band 17	QPSK	3.75	23731	1T0	23.34	23.69	34.77	PASS
NB1 Band 17	QPSK	3.75	23731	1T47	23.24	23.59	34.77	PASS
NB1 Band 17	QPSK	3.75	23790	1T0	23.35	23.7	34.77	PASS
NB1 Band 17	QPSK	3.75	23790	1T47	23.47	23.82	34.77	PASS
NB1 Band 17	QPSK	3.75	23849	1T0	23.42	23.77	34.77	PASS
NB1 Band 17	QPSK	3.75	23849	1T47	23.26	23.61	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 17	BPSK	15	23731	1T0	23.25	23.6	34.77	PASS
NB1 Band 17	BPSK	15	23731	1T11	23.27	23.62	34.77	PASS
NB1 Band 17	BPSK	15	23790	1T0	23.28	23.63	34.77	PASS
NB1 Band 17	BPSK	15	23790	1T11	23.39	23.74	34.77	PASS
NB1 Band 17	BPSK	15	23849	1T0	23.23	23.58	34.77	PASS
NB1 Band 17	BPSK	15	23849	1T11	23.52	23.87	34.77	PASS
NB1 Band 17	QPSK	15	23731	1T0	23.57	23.92	34.77	PASS
NB1 Band 17	QPSK	15	23731	1T11	23.26	23.61	34.77	PASS
NB1 Band 17	QPSK	15	23731	12T0	21.29	21.64	34.77	PASS
NB1 Band 17	QPSK	15	23790	1T0	23.38	23.73	34.77	PASS
NB1 Band 17	QPSK	15	23790	1T11	23.33	23.68	34.77	PASS
NB1 Band 17	QPSK	15	23790	12T0	21.31	21.66	34.77	PASS
NB1 Band 17	QPSK	15	23849	1T0	23.49	23.84	34.77	PASS
NB1 Band 17	QPSK	15	23849	1T11	23.26	23.61	34.77	PASS
NB1 Band 17	QPSK	15	23849	12T0	21.33	21.68	34.77	PASS



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Field Strength of Spurious Radiation

Test Band = NB-IOT Band 17_ 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	1412.8889	78.41	-48.70	25.07	-40.48	-13.00	27.48	271	225	Horizontal
2	2119.1111	80.28	-47.85	26.56	-36.27	-13.00	23.27	156	271	Horizontal
3	2825.7778	60.13	-46.71	28.77	-53.07	-13.00	40.07	235	285	Horizontal
4	4568	43.44	-44.69	32.25	-64.26	-13.00	51.26	144	301	Horizontal
5	6152	42.49	-42.98	35.10	-60.65	-13.00	47.65	186	150	Horizontal
6	7917.7778	41.28	-41.12	37.02	-58.08	-13.00	45.08	203	2	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	1053.3333	49.83	-48.06	25.35	-68.14	-13.00	55.14	224	105	Vertical
2	1412.8889	70.28	-48.70	25.07	-48.61	-13.00	35.61	175	105	Vertical
3	2119.1111	72.09	-47.85	26.56	-44.46	-13.00	31.46	238	15	Vertical
4	2825.7778	53.41	-46.71	28.77	-59.79	-13.00	46.79	289	335	Vertical
5	4498.6667	43.19	-44.82	32.10	-64.79	-13.00	51.79	256	136	Vertical
6	6357.7778	42.91	-42.83	35.52	-59.66	-13.00	46.66	142	273	Vertical



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Test Band = NB-IOT Band 17_ 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	1054.2222	58.36	-48.07	25.35	-59.62	-13.00	46.62	284	0	Horizontal
2	1420	78.56	-48.68	25.05	-40.33	-13.00	27.33	196	225	Horizontal
3	2129.7778	81.11	-47.84	26.59	-35.40	-13.00	22.40	223	272	Horizontal
4	2839.5556	58.92	-46.73	28.83	-54.24	-13.00	41.24	162	272	Horizontal
5	4691.5556	42.99	-44.56	32.52	-64.31	-13.00	51.31	274	14	Horizontal
6	6231.1111	42.98	-43.05	35.26	-60.07	-13.00	47.07	108	2	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	1420	68.63	-48.68	25.05	-50.26	-13.00	37.26	185	105	Vertical
2	2129.7778	72.82	-47.84	26.59	-43.69	-13.00	30.69	166	3	Vertical
3	2839.5556	53.71	-46.73	28.83	-59.45	-13.00	46.45	298	3	Vertical
4	4148	43.36	-45.27	31.54	-65.63	-13.00	52.63	153	209	Vertical
5	5175.1111	42.71	-44.09	33.16	-63.48	-13.00	50.48	241	360	Vertical
6	6116.8889	42.38	-42.90	35.03	-60.75	-13.00	47.75	160	60	Vertical



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Test Band = NB-IOT Band 17_ 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	1426.6667	78.95	-48.67	25.03	-39.94	-13.00	26.94	194	209	Horizontal
2	2140	79.72	-47.82	26.61	-36.76	-13.00	23.76	286	254	Horizontal
3	2853.7778	58.01	-46.74	28.89	-55.11	-13.00	42.11	224	270	Horizontal
4	3949.7778	43.61	-45.52	31.13	-66.04	-13.00	53.04	183	254	Horizontal
5	5205.3333	42.58	-43.94	33.16	-63.46	-13.00	50.46	206	0	Horizontal
6	6112.8889	42.80	-42.89	35.03	-60.33	-13.00	47.33	279	131	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	1054.2222	48.83	-48.07	25.35	-69.15	-13.00	56.15	226	123	Vertical
2	1426.6667	67.13	-48.67	25.03	-51.76	-13.00	38.76	175	45	Vertical
3	2140	72.65	-47.82	26.61	-43.83	-13.00	30.83	298	76	Vertical
4	2853.7778	54.16	-46.74	28.89	-58.96	-13.00	45.96	178	358	Vertical
5	4601.3333	43.24	-44.63	32.32	-64.33	-13.00	51.33	245	303	Vertical
6	6309.3333	42.68	-42.92	35.42	-60.08	-13.00	47.08	172	347	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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