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Appendix B.11

LTE Band 18(824-830)



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
Wireless Laboratory

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Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
18(824-830)	5MHz	QPSK	23965	1RB#0	23.20	22.16	38.45	PASS
18(824-830)	5MHz	16QAM	23965	1RB#0	22.17	21.13	38.45	PASS
18(824-830)	5MHz	QPSK	23965	1RB#12	22.82	21.78	38.45	PASS
18(824-830)	5MHz	16QAM	23965	1RB#12	22.13	21.09	38.45	PASS
18(824-830)	5MHz	QPSK	23965	1RB#24	22.63	21.59	38.45	PASS
18(824-830)	5MHz	16QAM	23965	1RB#24	21.79	20.75	38.45	PASS
18(824-830)	5MHz	QPSK	23965	25RB#0	21.71	20.67	38.45	PASS
18(824-830)	5MHz	16QAM	23965	25RB#0	20.72	19.68	38.45	PASS
18(824-830)	5MHz	QPSK	23970	1RB#0	22.72	21.68	38.45	PASS
18(824-830)	5MHz	16QAM	23970	1RB#0	21.69	20.65	38.45	PASS
18(824-830)	5MHz	QPSK	23970	1RB#12	22.79	21.75	38.45	PASS
18(824-830)	5MHz	16QAM	23970	1RB#12	21.79	20.75	38.45	PASS
18(824-830)	5MHz	QPSK	23970	1RB#24	22.64	21.60	38.45	PASS
18(824-830)	5MHz	16QAM	23970	1RB#24	21.64	20.60	38.45	PASS
18(824-830)	5MHz	QPSK	23970	25RB#0	21.71	20.67	38.45	PASS
18(824-830)	5MHz	16QAM	23970	25RB#0	20.76	19.72	38.45	PASS
18(824-830)	5MHz	QPSK	23975	1RB#0	22.61	21.57	38.45	PASS
18(824-830)	5MHz	16QAM	23975	1RB#0	21.58	20.54	38.45	PASS
18(824-830)	5MHz	QPSK	23975	1RB#12	22.76	21.72	38.45	PASS
18(824-830)	5MHz	16QAM	23975	1RB#12	21.74	20.70	38.45	PASS
18(824-830)	5MHz	QPSK	23975	1RB#24	22.57	21.53	38.45	PASS
18(824-830)	5MHz	16QAM	23975	1RB#24	21.58	20.54	38.45	PASS
18(824-830)	5MHz	QPSK	23975	25RB#0	21.71	20.67	38.45	PASS
18(824-830)	5MHz	16QAM	23975	25RB#0	20.71	19.67	38.45	PASS



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26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
18(824-830)	5MHz	QPSK	23965	25RB#0	4.514	5.06	PASS
18(824-830)	5MHz	16QAM	23965	25RB#0	4.51	5.20	PASS
18(824-830)	5MHz	QPSK	23970	25RB#0	4.514	5.01	PASS
18(824-830)	5MHz	16QAM	23970	25RB#0	4.504	5.10	PASS
18(824-830)	5MHz	QPSK	23975	25RB#0	4.517	5.06	PASS
18(824-830)	5MHz	16QAM	23975	25RB#0	4.507	5.12	PASS



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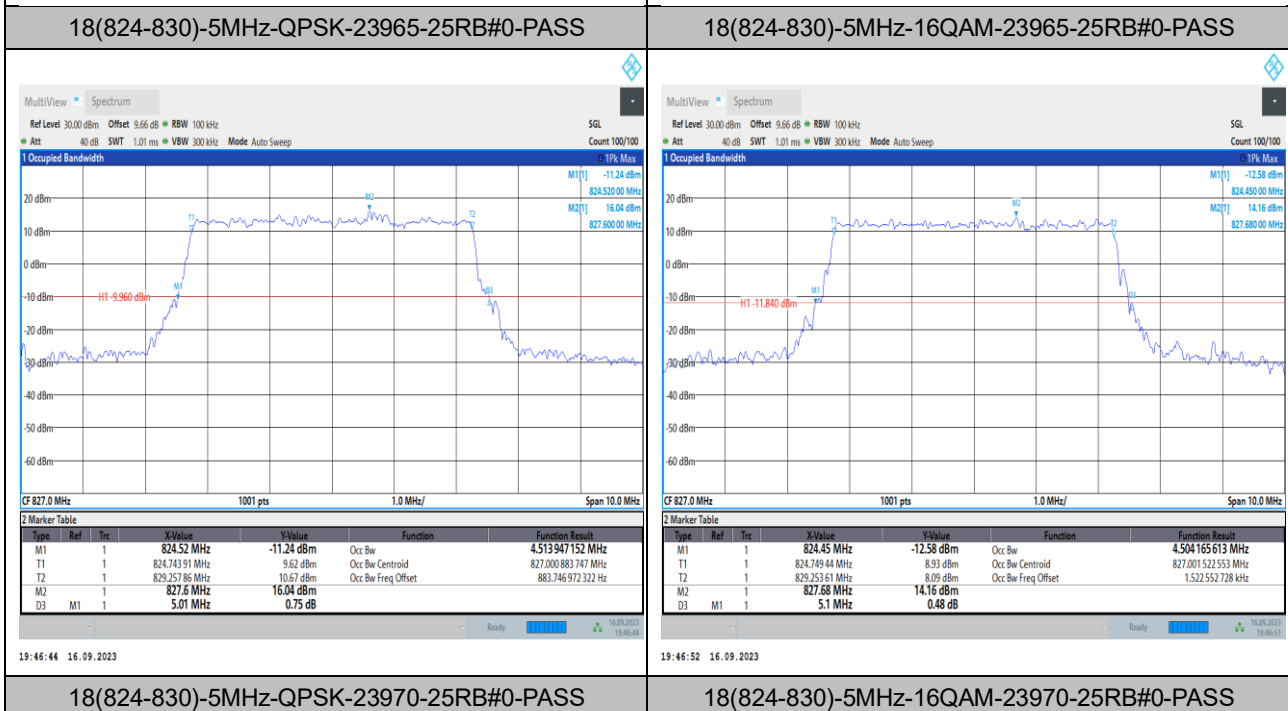
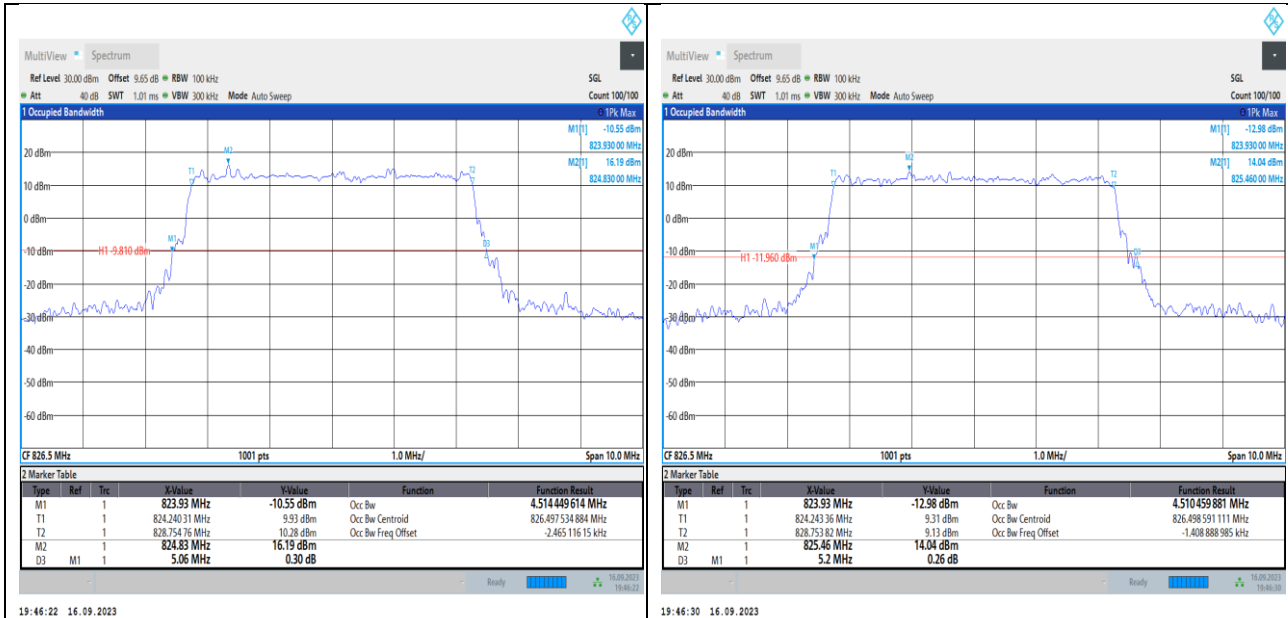
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Test Graphs



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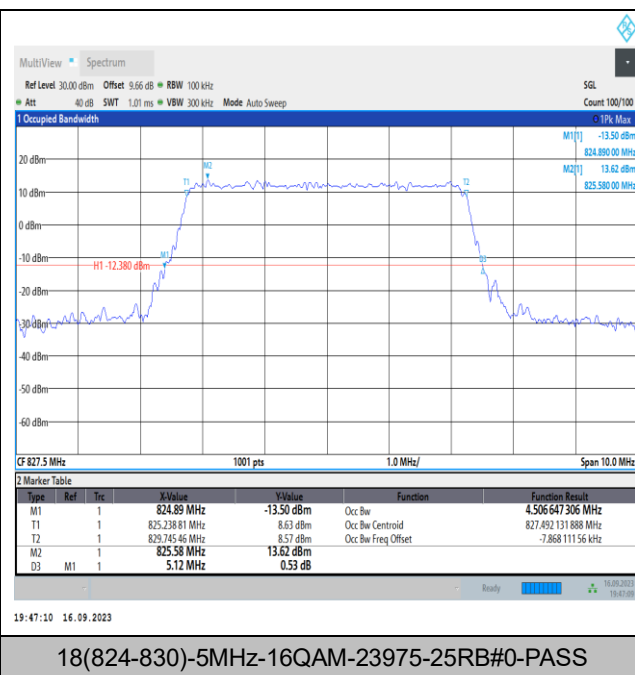
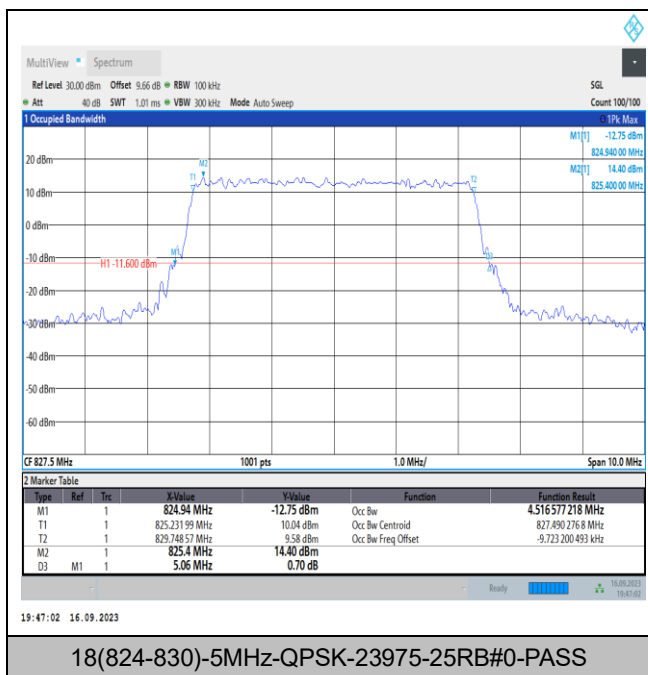
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Field Strength of Spurious Radiation

Test Band = LTE_18 (824-830)

Test Channel = LCH

Final Data List								
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1058.5	55.03	-47.24	24.13	-63.34	-13.00	50.34	Horizontal
2	1648.5	52.37	-47.52	25.49	-64.92	-13.00	51.92	Horizontal
3	2461	54.27	-46.66	27.64	-60.01	-13.00	47.01	Horizontal
4	3935	46.56	-44.25	29.84	-63.11	-13.00	50.11	Horizontal
5	5524.5	49.75	-41.87	32.30	-55.08	-13.00	42.08	Horizontal
6	7416	43.53	-38.35	36.73	-53.35	-13.00	40.35	Horizontal

Final Data List								
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1058.5	53.38	-47.24	24.13	-64.99	-13.00	51.99	Vertical
2	1648.5	49.44	-47.52	25.49	-67.85	-13.00	54.85	Vertical
3	2540.5	55.40	-46.48	27.80	-58.54	-13.00	45.54	Vertical
4	3907.5	46.73	-44.38	29.73	-63.18	-13.00	50.18	Vertical
5	5524.5	49.23	-41.87	32.30	-55.60	-13.00	42.60	Vertical
6	7411.5	43.47	-38.35	36.72	-53.42	-13.00	40.42	Vertical



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Test Band = LTE_18 (824-830)
Test Channel = MCH

Final Data List								
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1058.5	54.92	-47.24	24.13	-63.45	-13.00	50.45	Horizontal
2	1649.5	51.95	-47.52	25.50	-65.33	-13.00	52.33	Horizontal
3	2681.5	54.74	-46.18	27.96	-58.74	-13.00	45.74	Horizontal
4	5524.5	50.55	-41.87	32.30	-54.28	-13.00	41.28	Horizontal
5	7398	43.55	-38.36	36.69	-53.38	-13.00	40.38	Horizontal
6	9935	41.79	-35.43	38.64	-50.26	-13.00	37.26	Horizontal

Final Data List								
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1058.5	52.55	-47.24	24.13	-65.82	-13.00	52.82	Vertical
2	1649.5	50.12	-47.52	25.50	-67.16	-13.00	54.16	Vertical
3	1764.5	52.36	-47.37	25.12	-65.15	-13.00	52.15	Vertical
4	2540.5	55.13	-46.48	27.80	-58.81	-13.00	45.81	Vertical
5	3939	46.73	-44.23	29.86	-62.90	-13.00	49.90	Vertical
6	5524.5	49.52	-41.87	32.30	-55.31	-13.00	42.31	Vertical



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Test Band = LTE_18 (824-830)
Test Channel = HCH

Final Data List								
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1058.5	55.71	-47.24	24.13	-62.66	-13.00	49.66	Horizontal
2	1650.5	51.60	-47.52	25.50	-65.68	-13.00	52.68	Horizontal
3	2681.5	54.00	-46.18	27.96	-59.48	-13.00	46.48	Horizontal
4	3983.5	46.58	-44.03	29.83	-62.88	-13.00	49.88	Horizontal
5	5524.5	50.72	-41.87	32.30	-54.11	-13.00	41.11	Horizontal
6	8437	42.92	-36.77	36.43	-52.68	-13.00	39.68	Horizontal

Final Data List								
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1058.5	52.93	-47.24	24.13	-65.44	-13.00	52.44	Vertical
2	1650.5	49.04	-47.52	25.50	-68.24	-13.00	55.24	Vertical
3	1764.5	52.93	-47.37	25.12	-64.58	-13.00	51.58	Vertical
4	2540.5	55.27	-46.48	27.80	-58.67	-13.00	45.67	Vertical
5	5524.5	49.32	-41.87	32.30	-55.51	-13.00	42.51	Vertical
6	8471	42.58	-36.51	36.44	-52.75	-13.00	39.75	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---

