

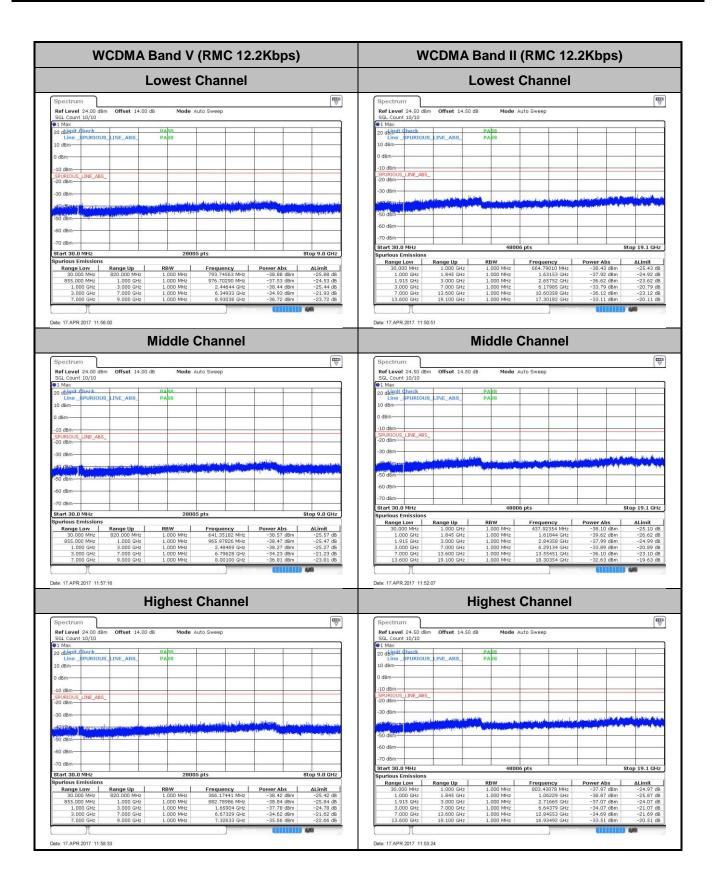
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Frequency Stability

Test Conditions	Middle Channel	GSM850 (GSM)	GSM850 (EDGE class 8)	Limit 2.5ppm
Temperature (°C)	Voltage (Volt)	Deviatio	n (ppm)	Result
50	Normal Voltage	0.0096	0.0072	
40	Normal Voltage	0.0024	0.0024	
30	Normal Voltage	0.0418	0.0275	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0442	0.0048	
0	Normal Voltage	0.0036	0.0335	
-10	Normal Voltage	0.0012	0.0143	PASS
-20	Normal Voltage	0.0048	0.0359	
-30	Normal Voltage	0.0359	0.0072	
20	Maximum Voltage	0.0072	0.0024	
20	Normal Voltage	0.0000	0.0000	
20	Battery End Point	0.0048	0.0299	

Note: Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.35 V

Test Conditions	Middle Channel	GSM1900 (GSM)	GSM1900 (EDGE class 8)	Limit
Temperature (°C)	Voltage (Volt)	Deviatio		Note 2. Result
50	Normal Voltage	0.0005	0.0005	
40	Normal Voltage	0.0005	0.0021	
30	Normal Voltage	0.0106	0.0218	
20(Ref.)	Normal Voltage	0.0000	0.0000	
10	Normal Voltage	0.0021	0.0255	
0	Normal Voltage	0.0005	0.0037	
-10	Normal Voltage	0.0133	0.0043	PASS
-20	Normal Voltage	0.0016	0.0245	
-30	Normal Voltage	0.0005	0.0016	
20	Maximum Voltage	0.0144	0.0032	
20	Normal Voltage	0.0000	0.0223	
20	Battery End Point	0.0011	0.0011	

Note:

- 1. Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.6 V.; Maximum Voltage =4.35 V
- 2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

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Test Conditions	onditions Middle Channel WCDMA Band V (RMC 12.2Kbps)			
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	2.5ppm Result	
50	Normal Voltage	0.0024		
40	Normal Voltage	0.0012		
30	Normal Voltage	0.0036		
20(Ref.)	Normal Voltage	0.0000		
10	Normal Voltage	0.0179		
0	Normal Voltage	0.0048		
-10	Normal Voltage	0.0096	PASS	
-20	Normal Voltage	0.0239		
-30	Normal Voltage	0.0048		
20	Maximum Voltage	0.0012		
20	Normal Voltage	0.0000		
20	Battery End Point	0.0215		

Note: Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.35 V

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Test Conditions	Middle Channel	WCDMA Band II (RMC 12.2Kbps)	Limit Note 2.
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Result
50	Normal Voltage	0.0021	
40	Normal Voltage	0.0037	
30	Normal Voltage	0.0245	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0213	
0	Normal Voltage	0.0043	
-10	Normal Voltage	0.0207	PASS
-20	Normal Voltage	0.0037	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0202	

Note:

- 1. Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.35 V
- 2. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

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Appendix B. Test Results of Radiated Test

ERP/EIRP

Channel	Mode	Horiz	ontal	Ver	tical	
Channel	Mode	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)	
Lowest	GSM850	27.67	0.5848	14.35	0.0272	
Middle	GSM	27.79	0.6012	13.95	0.0248	
Highest	GSIVI	28.02	0.6339	15.22	0.0333	
Lowest	0011070	23.08	0.2032	9.27	0.0085	
Middle	GSM850 EDGE class 8	22.73	0.1875	9.13	0.0082	
Highest	EDGE Class o	22.26	0.1683	9.50	0.0089	
Lowest	MCDMA Bond V	17.17	0.0521	4.33	0.0027	
Middle	WCDMA Band V	17.66	0.0583	4.36	0.0027	
Highest	RMC 12.2Kbps	18.41	0.0693	6.23	0.0042	
Limit	ERP < 7W	Re	sult	PASS		

Channel	Mode	Horiz	ontal	Vert	tical	
Channel	Wode	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)	
Lowest	GSM1900	28.51	0.7096	28.48	0.7047	
Middle	GSM GSM	28.06	0.6397	28.05	0.6383	
Highest	GSIVI	26.77	0.4753	26.95	0.4955	
Lowest	GSM1900	25.87	0.3864	26.01	0.3990	
Middle	EDGE class 8	24.81	0.3027	25.01	0.3170	
Highest	EDGE Class o	23.27	0.2123	23.82	0.2410	
Lowest	WCDMA Bond II	23.41	0.2193	23.43	0.2203	
Middle	WCDMA Band II RMC 12.2Kbps	22.64	0.1837	22.69	0.1858	
Highest		21.47 0.1403		21.70	0.1479	
Limit	EIRP < 2W	Re	sult	PASS		

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Radiated Spurious Emission

	GSM850 (GSM)											
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)			
	1672.8	-62.71	-13	-49.71	-68.27	-67.12	2.84	9.40	Н			
	2509.2	-58.17	-13	-45.17	-68.59	-62.92	3.7	10.60	Н			
	3345.6	-65.97	-13	-52.97	-80.73	-72.05	4.37	12.60	Н			
Middle	4182	-49.41	-13	-36.41	-66.98	-55.01	4.85	12.60	Н			
Middle	1672.8	-70.14	-13	-57.14	-74.85	-74.55	2.84	9.40	V			
	2509.2	-56.78	-13	-43.78	-66.61	-61.53	3.70	10.60	V			
	3345.6	-65.72	-13	-52.72	-79.29	-71.80	4.37	12.60	V			
	4182	-52.87	-13	-39.87	-70.58	-58.47	4.85	12.60	V			

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

	GSM850 (EDGE class 8)												
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	1672.8	-68.59	-13	-55.59	-74.15	-73.00	2.84	9.40	Н				
	2509.2	-67.91	-13	-54.91	-78.33	-72.66	3.7	10.60	Н				
Middle	3345.6	-66.06	-13	-53.06	-80.82	-72.14	4.37	12.60	Н				
Middle	1672.8	-72.23	-13	-59.23	-76.94	-76.64	2.84	9.40	V				
	2509.2	-68.39	-13	-55.39	-78.22	-73.14	3.70	10.60	V				
	3345.6	-67.37	-13	-54.37	-80.94	-73.45	4.37	12.60	V				

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

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	GSM1900 (GSM)											
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)			
	3760	-48.06	-13	-35.06	-67.67	-55.81	4.85	12.60	Н			
	5640	-39.12	-13	-26.12	-62.37	-46.64	5.58	13.10	Н			
	7520	-55.00	-13	-42.00	-78.52	-59.74	6.56	11.30	Н			
Middle	9400	-42.86	-13	-29.86	-70.90	-47.29	7.47	11.90	Н			
ivildale	3760	-59.33	-13	-46.33	-79.72	-67.08	4.85	12.6	V			
	5640	-42.95	-13	-29.95	-67	-50.47	5.58	13.1	V			
	7520	-56.74	-13	-43.74	-80.28	-61.48	6.56	11.3	V			
	9400	-44.15	-13	-31.15	-71.9	-48.58	7.47	11.9	V			

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

	GSM1900 (EDGE class 8)												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	3760	-56.89	-13	-43.89	-76.50	-64.64	4.85	12.60	Н				
	5640	-49.10	-13	-36.10	-72.55	-56.62	5.58	13.10	Н				
Middle	7520	-58.30	-13	-45.30	-81.82	-63.04	6.56	11.30	Н				
Middle	3760	-59.22	-13	-46.22	-79.61	-66.97	4.85	12.60	V				
	5640	-56.02	-13	-43.02	-80.07	-63.54	5.58	13.10	V				
	7520	-57.78	-13	-44.78	-81.32	-62.52	6.56	11.30	V				

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

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	WCDMA Band V(RMC 12.2Kbps)											
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)			
	1672.8	-71.17	-13	-58.17	-76.73	-75.58	2.84	9.40	Н			
	2509.2	-64.83	-13	-51.83	-75.25	-69.58	3.7	10.60	Н			
	3345.6	-63.57	-13	-50.57	-78.33	-69.65	4.37	12.60	Н			
Middle	4182	-62.94	-13	-49.94	-80.51	-68.54	4.85	12.60	Н			
Middle	1672.8	-71.22	-13	-58.22	-75.93	-75.63	2.84	9.40	V			
	2509.2	-61.93	-13	-48.93	-71.76	-66.68	3.70	10.60	V			
	3345.6	-63.42	-13	-50.42	-76.99	-69.50	4.37	12.60	V			
	4182	-64.17	-13	-51.17	-81.88	-69.77	4.85	12.60	V			

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

	WCDMA Band II(RMC 12.2Kbps)												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)				
	3760	-60.08	-13	-47.08	-79.69	-67.83	4.85	12.60	Н				
	5640	-58.03	-13	-45.03	-81.48	-65.55	5.58	13.10	Н				
Middle	7520	-57.62	-13	-44.62	-81.14	-62.36	6.56	11.30	Н				
Middle	3760	-58.70	-13	-45.70	-79.09	-66.45	4.85	12.60	V				
	5640	-57.35	-13	-44.35	-81.4	-64.87	5.58	13.10	V				
	7520	-58.25	-13	-45.25	-81.79	-62.99	6.56	11.30	V				

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

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