

RF Power Output and Effective Radiated Power

GSM 850		Burst-conducted power		
		Channel/Frenqucy(MHz)		
		128/824.2	190/836.6	251/848.8
GSM	CS	32.24	32.30	32.36
GPRS(GMSK)	1 Tx Slot	32.35	32.40	32.44
	2 Tx Slots	31.04	31.17	30.85
	3 Tx Slots	29.46	30.18	30.09
	4 Tx Slots	28.52	27.81	28.64
EGPRS (8PSK)	1 Tx Slot	26.33	26.38	26.40
	2 Tx Slots	25.62	25.82	25.78
	3 Tx Slots	24.05	24.22	24.14
	4 Tx Slots	22.94	23.07	22.98

LTE Band 5	Channel/ Frequency(MHz)	Index	RB# RBstart QPSK	RB# RBstart 16QAM	Conducted Power (dBm)	
					QPSK	16QAM
1.4MHz	20407/824.7	0	1#0	1#0	23.16	22.51
		0	6#0	5#0	21.16	21.05
	20525/836.5	0	1#0	1#0	23.10	22.69
		0	6#0	5#0	21.32	21.41
	20643/848.3	0	1#5	1#5	23.28	22.37
		0	6#0	5#0	20.98	21.16
3MHz	20415/825.5	0	1#0	1#0	23.40	22.42
		0	6#0	5#0	21.13	21.25
	20525/836.5	0	1#0	1#0	23.51	22.36
		0	6#0	5#0	21.22	21.23
	20635/847.5	1	1#5	1#5	23.29	22.27
		1	6#0	5#0	21.00	21.18
5MHz	20425/826.5	3	1#0	1#0	23.39	22.82
		0	6#0	5#0	22.19	21.41
	20525/836.5	0	1#0	1#0	23.55	23.42
		0	6#0	5#0	22.26	21.31
	20625/846.5	0	1#5	1#5	23.08	22.67
		3	6#0	5#0	22.06	21.29
10MHz	20450/829	3	1#0	1#0	23.30	22.90
		0	4#0	4#0	23.16	21.77
	20525/836.5	0	1#0	1#0	23.59	23.47
		0	4#0	4#0	23.28	22.22
	20600/844	4	1#5	1#5	23.16	23.17
		7	4#2	4#2	23.03	22.05

LTE Band 26	Channel/ Frequency(MHz)	Index	RB# RBstart QPSK	RB# RBstart 16QAM	Conducted Power (dBm)	
					QPSK	16QAM
1.4MHz	26797/824.7	0	1#0	1#0	23.43	22.43
		0	6#0	5#0	21.25	21.36
	26915/836.5	0	1#0	1#0	23.50	22.43
		0	6#0	5#0	21.13	21.29
	27033/848.3	0	1#5	1#5	23.00	22.01
		0	6#0	5#0	21.19	21.34
3MHz	26805/825.5	0	1#0	1#0	23.37	22.39
		0	6#0	5#0	21.23	21.33
	26915/836.5	0	1#0	1#0	23.48	22.35
		0	6#0	5#0	21.19	21.22
	27025/847.5	1	1#5	1#5	23.47	22.33
		1	6#0	5#0	21.19	21.31
5MHz	26815/826.5	3	1#0	1#0	23.34	22.89
		0	6#0	5#0	22.24	21.46
	26915/836.5	0	1#0	1#0	23.45	23.34
		0	6#0	5#0	22.23	21.38
	27015/846.5	0	1#5	1#5	23.15	22.79
		3	6#0	5#0	22.13	21.36
10MHz	26840/829	3	1#0	1#0	23.35	22.94
		0	4#0	4#0	23.15	21.81
	26915/836.5	0	1#0	1#0	23.51	23.44
		0	4#0	4#0	23.19	22.14
	26990/844	4	1#5	1#5	23.25	22.68
		7	4#2	4#2	23.13	21.79
15MHz	26865/831.5	3	1#0	1#0	23.39	22.79
		0	6#0	5#0	23.11	23.33
	26915/836.5	0	1#0	1#0	23.47	23.48
		0	6#0	5#0	23.16	23.23
	26965/841.5 26797/824.7	8	1#5	1#5	23.10	22.80
		11	6#0	5#0	23.19	23.27

Occupied Bandwidth

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
GSM 850 (GSM)	128	824.2	0.24311	0.2975
	190	836.6	0.24221	0.2945
	251	848.8	0.24534	0.2996
GPRS 850 (GMSK)	128	824.2	0.24367	0.331
	190	836.6	0.24506	0.309
	251	848.8	0.24678	0.314
EGPRS 850 (8-PSK)	128	824.2	0.25082	0.3082
	190	836.6	0.2438	0.3056
	251	848.8	0.24594	3072

Mode	Bandwidth	Modulation	Channel/ Frequency(MHz)	RB	Bandwidth(MHz)	
					99% Power	-26dBc
LTE Band 5	10MHz	QPSK	20525/836.5	6#0	1.1172	1.322
		16QAM	20525/836.5	6#0	0.9606	1.1380

Mode	Bandwidth	Modulation	Channel/ Frequency(MHz)	RB	Bandwidth(MHz)	
					99% Power	-26dBc
LTE Band 26	10MHz	QPSK	26915/836.5	6#0	1.1200	1.321
		16QAM	26915/836.5	6#0	0.9557	1.202

GSM 850 GSM CH-Low



GSM850 GPRS CH-Low



GSM 850 GSM CH-Middle



GSM 850 GPRS CH-Middle



GSM 850 GSM CH-High



GSM 850 GPRS CH-High



GSM850 EGPRS CH-Low



GSM 850 EGPRS CH-Middle



GSM 850 EGPRS CH-High



LTE Band 5 10MHz QPSK CH-Middle



LTE Band 5 10MHz 16QAM CH-Middle



LTE Band 26 5MHz QPSK CH-Middle

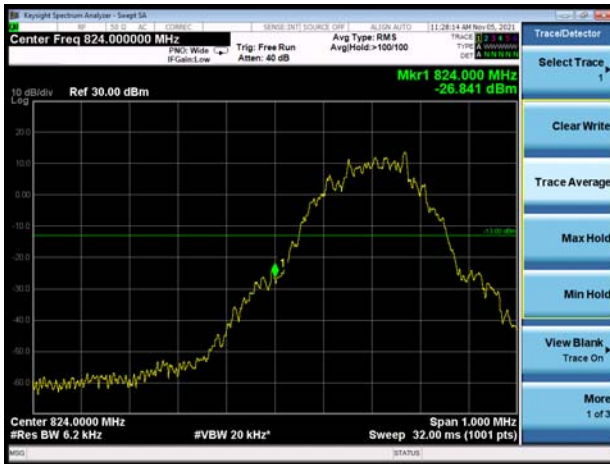


LTE Band 26 5MHz 16QAM CH-Middle

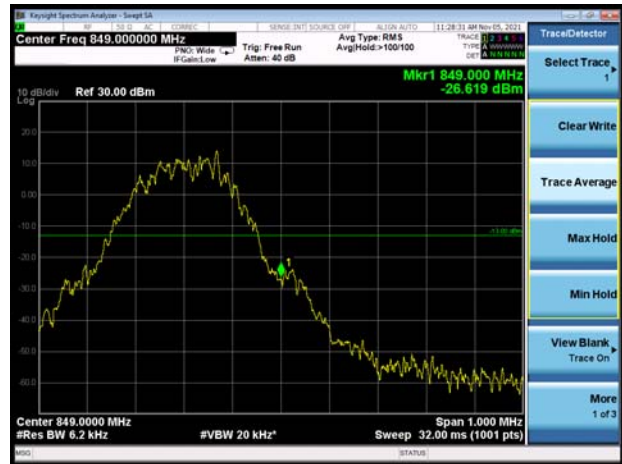


Band Edge Compliance

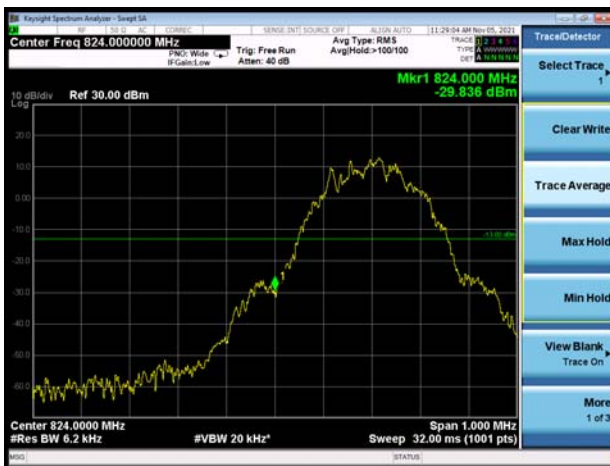
GSM850 GSM CH-Low



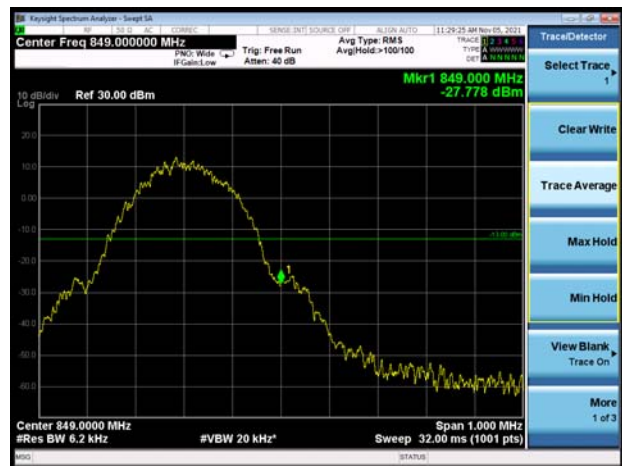
GSM 850 GSM CH-High



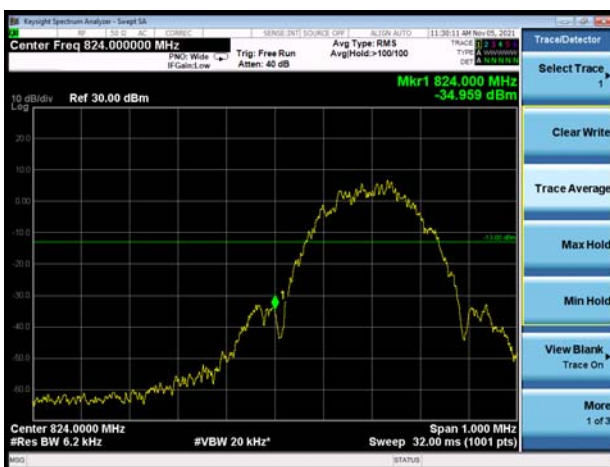
GSM850 GPRS CH-Low



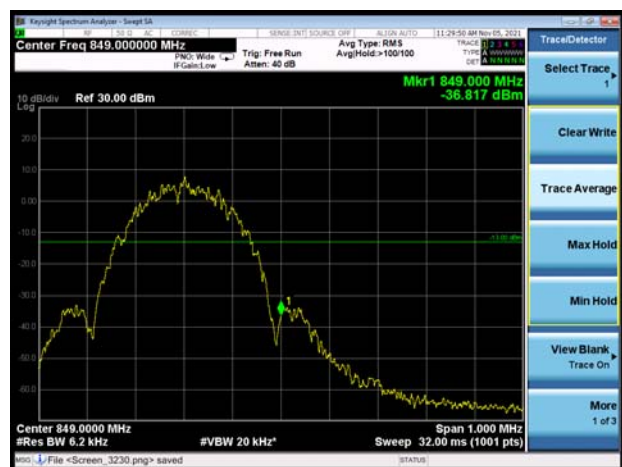
GSM 850 GPRS CH-High



GSM850 EGPRS CH-Low

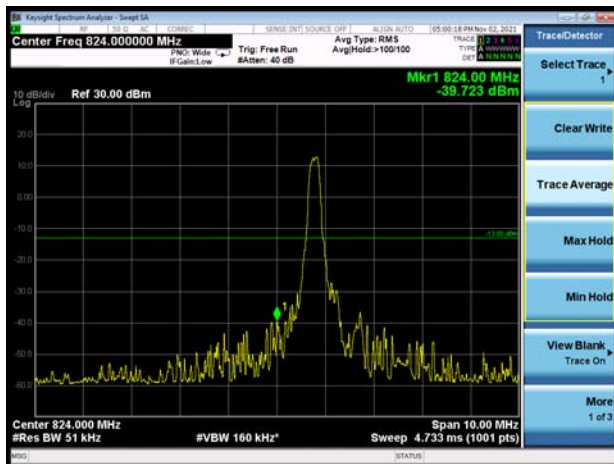


GSM 850 EGPRS CH-High

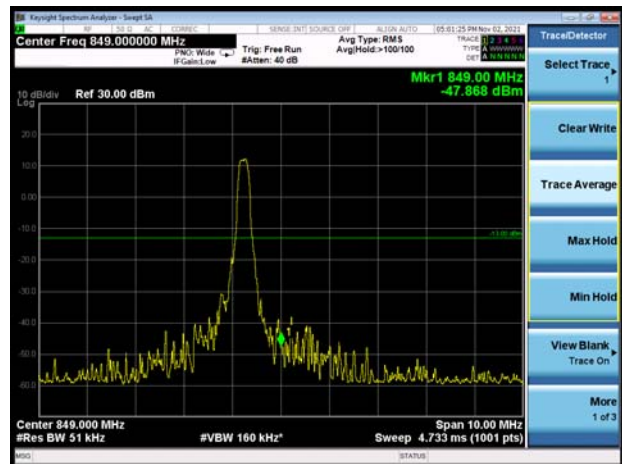




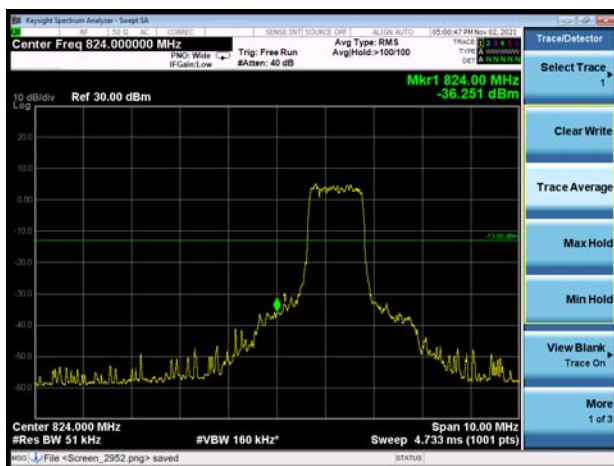
LTE Band 5 10MHz QPSK 1RB CH-Low



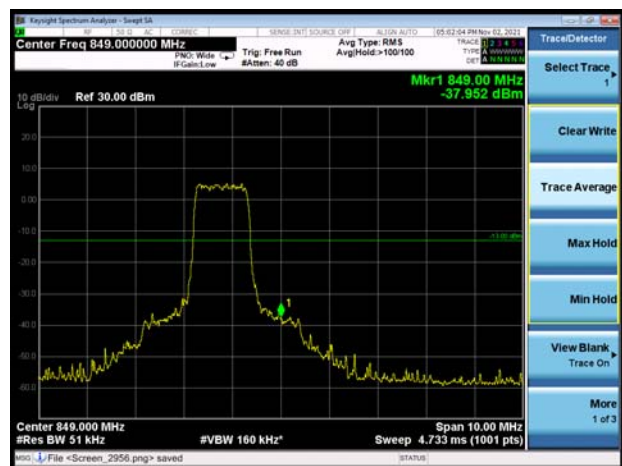
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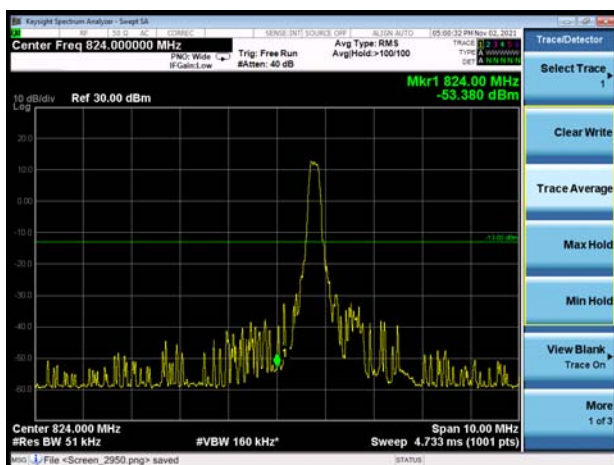
LTE Band 5 10MHz QPSK 100%RB CH-Low



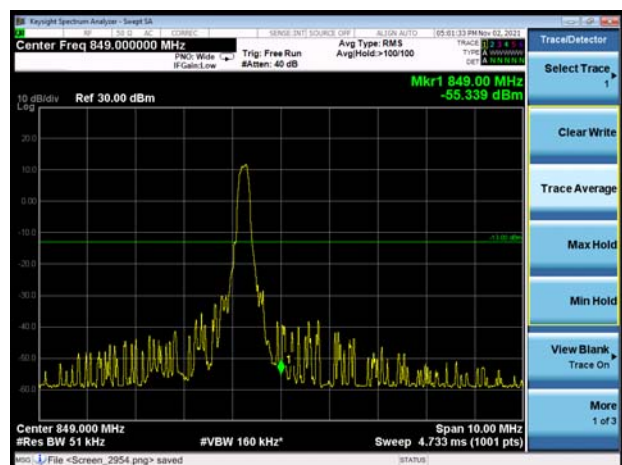
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LTE Band 5 10MHz 16QAM 1RB CH-Low

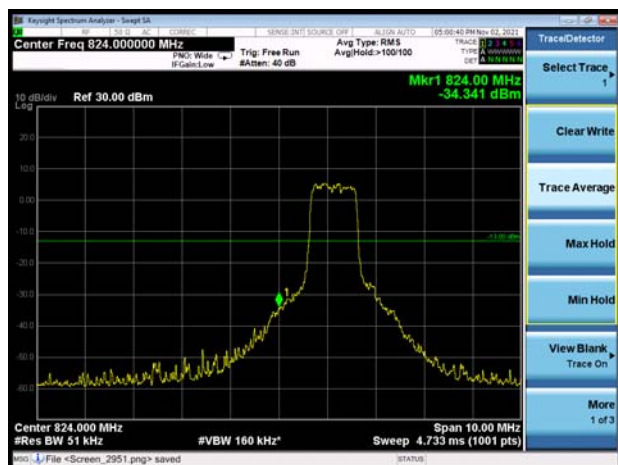


LTE Band 5 10MHz 16QAM 1RB CH-High

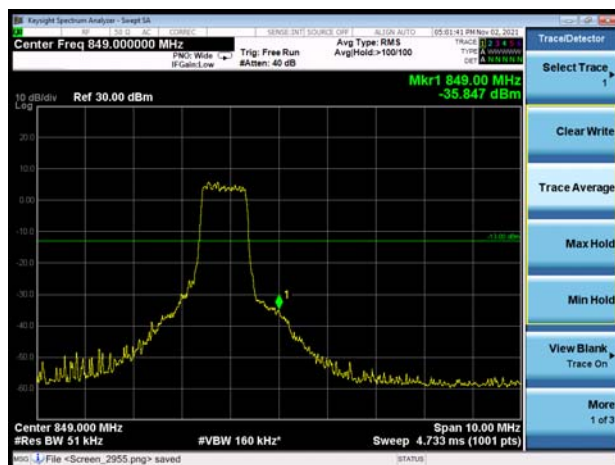




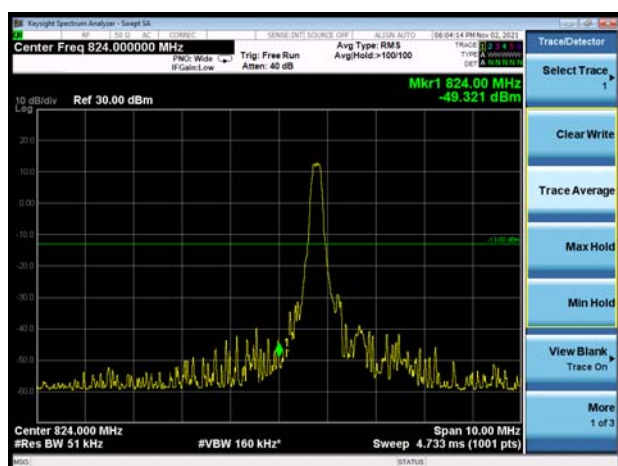
LTE Band 5 10MHz 16QAM 100%RB CH-Low



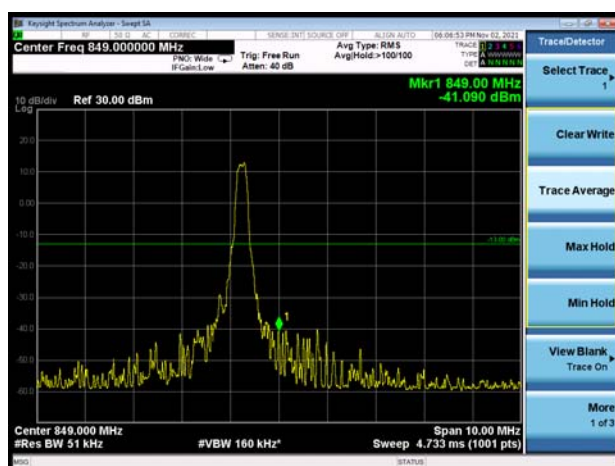
LTE Band 5 10MHz 16QAM 100%RB CH-High



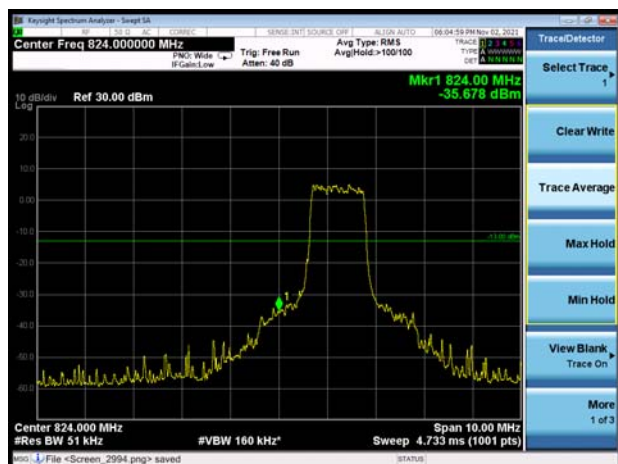
LTE Band 26 5MHz QPSK 1RB CH-Low



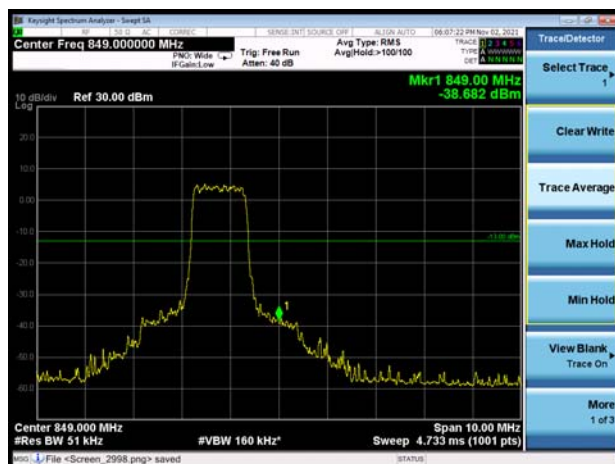
LTE Band 26 5MHz QPSK 1RB CH-High



LTE Band 26 5MHz QPSK 100%RB CH-Low

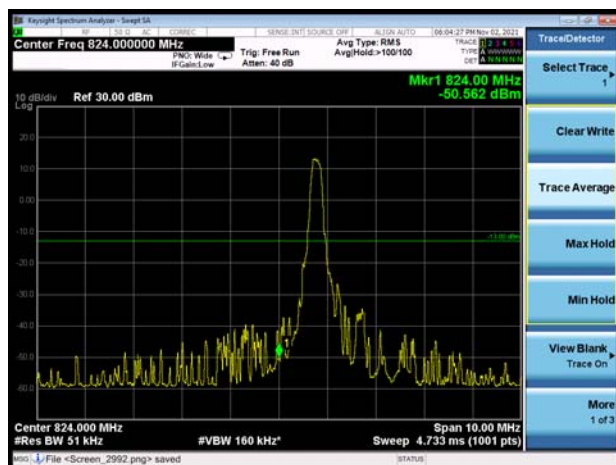


LTE Band 26 5MHz QPSK 100%RB CH-High

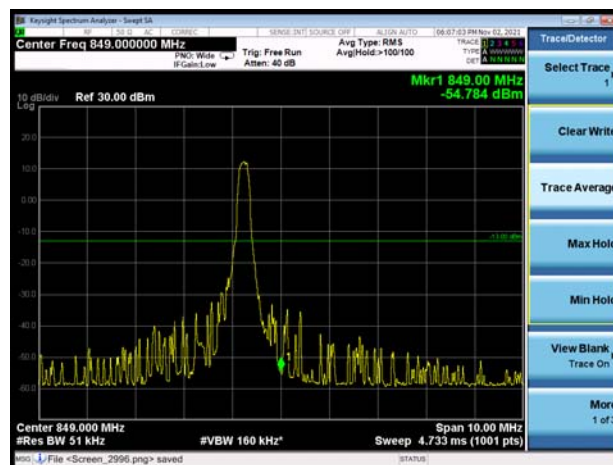




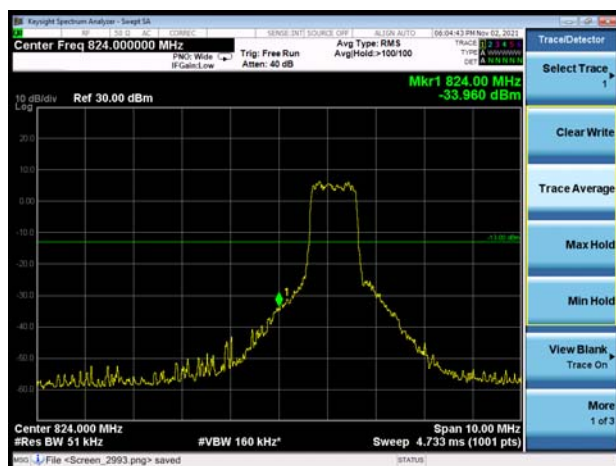
LTE Band 26 5MHz 16QAM 1RB CH-Low



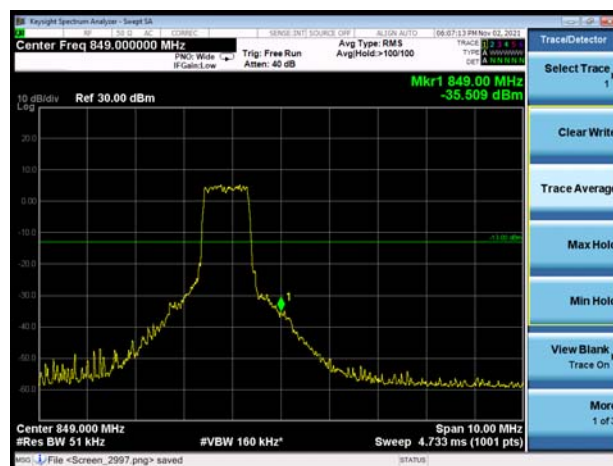
LTE Band 26 5MHz 16QAM 1RB CH-High



LTE Band 26 5MHz 16QAM 100%RB CH-Low



LTE Band 26 5MHz 16QAM 100%RB CH-High



Peak-to-Average Power Ratio (PAPR)

Mode	Channel	Frequency (MHz)	Peak(dBm)	Avg(dBm)	PAPR(dB)	Limit(dB)	Conclusion
GSM 850 (GMSK)	128	824.2	33.31	30.20	3.11	≤13	PASS
	190	836.6	33.43	30.29	3.14	≤13	PASS
	251	848.8	33.54	30.37	3.17	≤13	PASS
GPRS 850 (GMSK)	128	824.2	33.35	30.23	3.12	≤13	PASS
	190	836.6	33.48	30.33	3.15	≤13	PASS
	251	848.8	33.59	30.41	3.18	≤13	PASS
EGPRS 850 (8PSK)	128	824.2	30.10	24.31	5.79	≤13	PASS
	190	836.6	30.11	24.29	5.82	≤13	PASS
	251	848.8	30.17	24.34	5.83	≤13	PASS

Mode	Bandwidth	Modulation	Channel/ Frequency(MHz)	Peak-to-Average Power Ratio (PAPR)			Limit(dB)	Conclusion
				Peak(dBm)	Avg(dBm)	PAPR(dB)		
LTE Band 5	1.4MHz	QPSK	20525/836.5	25.13	15.99	9.14	≤13	PASS
		16QAM	20525/836.5	25.87	15.92	9.95	≤13	PASS
	3MHz	QPSK	20525/836.5	25.07	14.46	10.61	≤13	PASS
		16QAM	20525/836.5	25.85	15.92	9.93	≤13	PASS
	5MHz	QPSK	20525/836.5	25.95	16.90	9.05	≤13	PASS
		16QAM	20525/836.5	25.91	15.30	10.61	≤13	PASS
	10MHz	QPSK	20525/836.5	25.94	16.80	9.14	≤13	PASS
		16QAM	20525/836.5	26.52	16.43	10.09	≤13	PASS

Mode	Bandwidth	Modulation	Channel/ Frequency(MHz)	Peak-to-Average Power Ratio (PAPR)			Limit(dB)	Conclusion
				Peak(dBm)	Avg(dBm)	PAPR(dB)		
LTE Band 26	1.4MHz	QPSK	26915/836.5	25.08	15.49	9.59	≤13	PASS
		16QAM	26915/836.5	25.74	15.60	10.14	≤13	PASS
	3MHz	QPSK	26915/836.5	25.07	15.33	9.74	≤13	PASS
		16QAM	26915/836.5	25.84	15.63	10.21	≤13	PASS
	5MHz	QPSK	26915/836.5	25.88	16.39	9.49	≤13	PASS
		16QAM	26915/836.5	25.87	15.42	10.45	≤13	PASS
	10MHz	QPSK	26915/836.5	25.85	16.40	9.45	≤13	PASS
		16QAM	26915/836.5	26.49	16.40	10.09	≤13	PASS
	15MHz	QPSK	26915/836.5	26.60	17.10	9.50	≤13	PASS
		16QAM	26915/836.5	27.02	17.70	9.32	≤13	PASS

Frequency Stability

GSM850						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
Temperature	Voltage	GMSK	8PSK	GMSK	8PSK	
Normal (25℃)	Normal	17.39	16.25	0.00925	0.00864	PASS
Extreme (85℃)		8.02	6.59	0.00427	0.00350	PASS
Extreme (80℃)		17.05	2.15	0.00907	0.00114	PASS
Extreme (70℃)		17.73	2.66	0.00943	0.00142	PASS
Extreme (60℃)		3.30	16.73	0.00175	0.00890	PASS
Extreme (50℃)		15.98	5.29	0.00850	0.00281	PASS
Extreme (40℃)		15.69	12.28	0.00835	0.00653	PASS
Extreme (30℃)		3.93	15.90	0.00209	0.00846	PASS
Extreme (20℃)		4.32	10.93	0.00230	0.00581	PASS
Extreme (10℃)		14.63	8.25	0.00778	0.00439	PASS
Extreme (0℃)		15.94	14.62	0.00848	0.00777	PASS
Extreme (-10℃)		14.59	12.46	0.00776	0.00663	PASS
Extreme (-20℃)		13.80	10.56	0.00734	0.00562	PASS
Extreme (-30℃)		3.55	6.57	0.00189	0.00349	PASS
Extreme (-40℃)		5.63	9.09	0.00300	0.00484	PASS
25℃	LV	16.49	9.34	0.00877	0.00497	PASS
	HV	12.74	7.45	0.00678	0.00396	PASS

LTE Band 5						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	1.4MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	4.40	11.54	0.00526	0.01379	PASS
Extreme (85℃)		9.21	15.86	0.01101	0.01896	PASS
Extreme (80℃)		8.96	12.54	0.01071	0.01500	PASS
Extreme (70℃)		17.33	10.90	0.02071	0.01303	PASS
Extreme (60℃)		9.34	16.35	0.01117	0.01955	PASS
Extreme (50℃)		1.67	2.53	0.00199	0.00302	PASS
Extreme (40℃)		15.46	1.46	0.01849	0.00175	PASS
Extreme (30℃)		12.13	7.02	0.01450	0.00839	PASS
Extreme (20℃)		7.17	12.83	0.00857	0.01534	PASS
Extreme (10℃)		16.55	16.07	0.01979	0.01921	PASS
Extreme (0℃)		14.54	11.91	0.01738	0.01424	PASS
Extreme (-10℃)		16.48	4.84	0.01970	0.00579	PASS
Extreme (-20℃)		14.75	14.65	0.01764	0.01751	PASS
Extreme (-30℃)		9.65	10.35	0.01154	0.01237	PASS
Extreme (-40℃)		14.16	4.78	0.01693	0.00572	PASS
25℃	LV	11.18	15.06	0.01337	0.01800	PASS
	HV	10.57	17.54	0.01263	0.02096	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	3MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	9.27	2.01	0.01108	0.00240	PASS
Extreme (85℃)		15.40	9.78	0.01841	0.01169	PASS
Extreme (80℃)		6.33	5.53	0.00757	0.00662	PASS
Extreme (70℃)		15.11	3.32	0.01807	0.00397	PASS
Extreme (60℃)		13.93	6.89	0.01665	0.00823	PASS
Extreme (50℃)		14.54	10.69	0.01738	0.01279	PASS
Extreme (40℃)		15.84	5.23	0.01894	0.00625	PASS
Extreme (30℃)		2.50	10.16	0.00299	0.01214	PASS
Extreme (20℃)		1.44	13.59	0.00172	0.01625	PASS
Extreme (10℃)		13.94	17.63	0.01667	0.02107	PASS
Extreme (0℃)		16.59	15.30	0.01983	0.01829	PASS
Extreme (-10℃)		5.23	7.17	0.00625	0.00857	PASS
Extreme (-20℃)		17.67	17.63	0.02113	0.02108	PASS
Extreme (-30℃)		6.64	4.59	0.00794	0.00549	PASS
Extreme (-40℃)		17.98	10.38	0.02149	0.01240	PASS
25℃	LV	5.00	11.86	0.00597	0.01417	PASS



	HV	2.52	6.16	0.00302	0.00736	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	5MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	2.83	12.31	0.00338	0.01472	PASS
Extreme (85℃)		7.80	9.03	0.00932	0.01079	PASS
Extreme (80℃)		13.26	13.26	0.01585	0.01585	PASS
Extreme (70℃)		1.57	1.06	0.00188	0.00126	PASS
Extreme (60℃)		13.03	6.09	0.01557	0.00727	PASS
Extreme (50℃)		17.84	16.04	0.02133	0.01918	PASS
Extreme (40℃)		10.33	16.78	0.01234	0.02006	PASS
Extreme (30℃)		10.57	2.62	0.01264	0.00313	PASS
Extreme (20℃)		1.08	3.17	0.00129	0.00378	PASS
Extreme (10℃)		9.49	9.95	0.01135	0.01190	PASS
Extreme (0℃)		8.09	16.40	0.00968	0.01960	PASS
Extreme (-10℃)		6.20	5.94	0.00741	0.00710	PASS
Extreme (-20℃)		7.91	16.56	0.00946	0.01979	PASS
Extreme (-30℃)		2.11	5.69	0.00253	0.00680	PASS
Extreme (-40℃)		3.67	11.66	0.00439	0.01394	PASS
25℃	LV	5.31	12.96	0.00635	0.01549	PASS
	HV	13.68	4.05	0.01636	0.00485	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	10MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	15.46	14.97	0.01848	0.01790	PASS
Extreme (85℃)		5.03	5.49	0.00602	0.00656	PASS
Extreme (80℃)		16.65	5.68	0.01990	0.00679	PASS
Extreme (70℃)		3.29	15.92	0.00393	0.01903	PASS
Extreme (60℃)		6.75	10.46	0.00807	0.01250	PASS
Extreme (50℃)		2.74	11.26	0.00328	0.01347	PASS
Extreme (40℃)		7.11	14.83	0.00850	0.01772	PASS
Extreme (30℃)		11.78	7.84	0.01409	0.00937	PASS
Extreme (20℃)		15.01	7.31	0.01794	0.00874	PASS
Extreme (10℃)		13.82	13.55	0.01652	0.01620	PASS
Extreme (0℃)		6.89	17.93	0.00823	0.02143	PASS
Extreme (-10℃)		13.88	11.48	0.01660	0.01373	PASS
Extreme (-20℃)		7.17	15.64	0.00857	0.01870	PASS
Extreme (-30℃)		13.10	9.01	0.01566	0.01077	PASS
Extreme (-40℃)		17.81	15.64	0.02129	0.01870	PASS
25℃	LV	5.84	8.43	0.00699	0.01008	PASS

	HV	5.83	16.17	0.00697	0.01933	PASS
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LTE Band 26						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	1.4MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	16.81	13.79	0.02009	0.01648	PASS
Extreme (85℃)		17.50	6.74	0.02092	0.00806	PASS
Extreme (80℃)		10.25	13.41	0.01226	0.01603	PASS
Extreme (70℃)		15.87	15.02	0.01897	0.01796	PASS
Extreme (60℃)		5.09	9.72	0.00608	0.01162	PASS
Extreme (50℃)		9.15	5.06	0.01094	0.00605	PASS
Extreme (40℃)		5.62	16.79	0.00671	0.02007	PASS
Extreme (30℃)		11.46	10.38	0.01371	0.01241	PASS
Extreme (20℃)		3.05	1.46	0.00365	0.00175	PASS
Extreme (10℃)		11.46	9.44	0.01369	0.01129	PASS
Extreme (0℃)		3.74	3.84	0.00447	0.00459	PASS
Extreme (-10℃)		11.38	16.25	0.01360	0.01943	PASS
Extreme (-20℃)		14.01	3.77	0.01675	0.00450	PASS
Extreme (-30℃)		16.13	4.19	0.01928	0.00501	PASS
Extreme (-40℃)		14.56	14.82	0.01740	0.01771	PASS
25℃	LV	6.09	2.25	0.00728	0.00269	PASS
	HV	1.84	9.64	0.00220	0.01153	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	3MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	15.20	8.99	0.01817	0.01075	PASS
Extreme (85℃)		11.83	5.13	0.01415	0.00613	PASS
Extreme (80℃)		1.06	16.10	0.00126	0.01925	PASS
Extreme (70℃)		14.38	11.30	0.01720	0.01351	PASS
Extreme (60℃)		8.51	17.87	0.01018	0.02136	PASS
Extreme (50℃)		10.94	6.26	0.01308	0.00748	PASS
Extreme (40℃)		1.80	1.60	0.00216	0.00192	PASS
Extreme (30℃)		5.07	2.15	0.00606	0.00257	PASS
Extreme (20℃)		5.15	7.00	0.00616	0.00837	PASS
Extreme (10℃)		13.07	2.41	0.01562	0.00288	PASS
Extreme (0℃)		9.02	7.66	0.01079	0.00915	PASS
Extreme (-10℃)		11.36	5.12	0.01358	0.00612	PASS



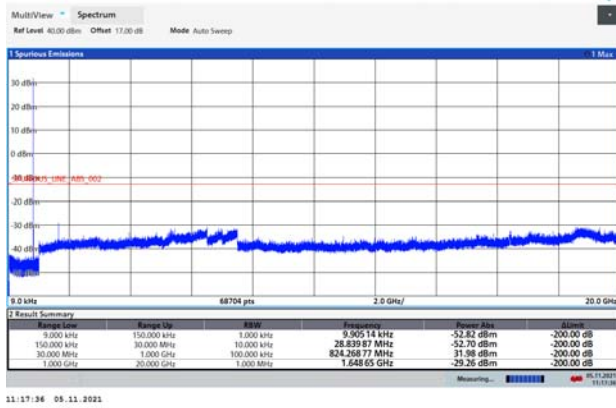
Extreme (-20℃)		1.98	10.36	0.00237	0.01238	PASS
Extreme (-30℃)		16.44	2.25	0.01966	0.00269	PASS
Extreme (-40℃)		6.68	13.34	0.00799	0.01595	PASS
25℃	LV	4.44	14.52	0.00531	0.01736	PASS
	HV	2.86	9.42	0.00342	0.01126	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	5MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	2.17	2.40	0.00259	0.00286	PASS
Extreme (85℃)		12.69	8.48	0.01517	0.01014	PASS
Extreme (80℃)		2.47	14.98	0.00295	0.01791	PASS
Extreme (70℃)		1.08	12.00	0.00129	0.01435	PASS
Extreme (60℃)		9.48	8.45	0.01134	0.01010	PASS
Extreme (50℃)		1.82	5.46	0.00218	0.00652	PASS
Extreme (40℃)		8.40	4.86	0.01005	0.00581	PASS
Extreme (30℃)		15.69	4.84	0.01876	0.00578	PASS
Extreme (20℃)		15.33	10.26	0.01832	0.01227	PASS
Extreme (10℃)		16.22	14.10	0.01939	0.01686	PASS
Extreme (0℃)		14.31	8.39	0.01711	0.01003	PASS
Extreme (-10℃)		3.70	8.21	0.00443	0.00981	PASS
Extreme (-20℃)		2.99	14.98	0.00357	0.01791	PASS
Extreme (-30℃)		15.85	9.72	0.01895	0.01161	PASS
Extreme (-40℃)		8.78	15.82	0.01050	0.01891	PASS
25℃	LV	7.87	6.58	0.00941	0.00787	PASS
	HV	13.29	13.37	0.01589	0.01599	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	10MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	11.39	11.52	0.01362	0.01377	PASS
Extreme (85℃)		8.62	2.62	0.01031	0.00313	PASS
Extreme (80℃)		8.89	15.18	0.01062	0.01815	PASS
Extreme (70℃)		10.57	13.87	0.01264	0.01658	PASS
Extreme (60℃)		12.80	12.80	0.01530	0.01531	PASS
Extreme (50℃)		13.00	5.40	0.01555	0.00646	PASS
Extreme (40℃)		9.84	13.09	0.01176	0.01565	PASS
Extreme (30℃)		8.17	2.54	0.00977	0.00304	PASS
Extreme (20℃)		14.65	17.12	0.01751	0.02047	PASS
Extreme (10℃)		2.92	17.23	0.00349	0.02060	PASS
Extreme (0℃)		5.98	8.50	0.00715	0.01016	PASS



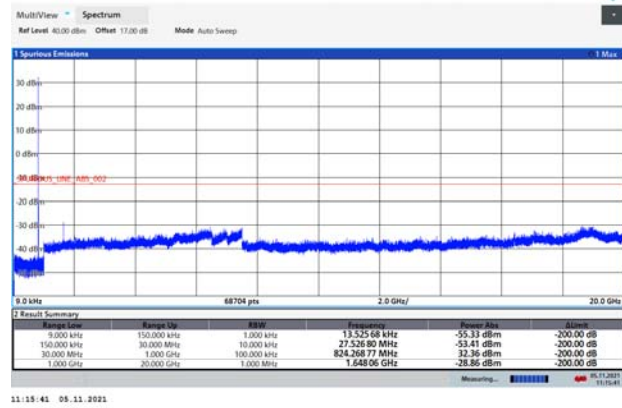
Extreme (-10℃)		11.08	10.31	0.01325	0.01232	PASS
Extreme (-20℃)		7.42	12.35	0.00888	0.01476	PASS
Extreme (-30℃)		5.62	8.49	0.00671	0.01015	PASS
Extreme (-40℃)		17.14	9.99	0.02049	0.01194	PASS
25℃	LV	2.60	2.48	0.00311	0.00296	PASS
	HV	9.10	10.64	0.01088	0.01272	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	15MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	11.66	10.19	0.01394	0.01219	PASS
Extreme (85℃)		7.12	3.49	0.00852	0.00417	PASS
Extreme (80℃)		7.66	6.24	0.00916	0.00746	PASS
Extreme (70℃)		7.54	2.56	0.00901	0.00306	PASS
Extreme (60℃)		5.39	5.94	0.00645	0.00710	PASS
Extreme (50℃)		8.16	16.65	0.00976	0.01990	PASS
Extreme (40℃)		14.59	16.44	0.01744	0.01965	PASS
Extreme (30℃)		6.63	12.82	0.00792	0.01532	PASS
Extreme (20℃)		9.44	17.29	0.01129	0.02067	PASS
Extreme (10℃)		9.24	3.91	0.01105	0.00467	PASS
Extreme (0℃)		4.03	16.24	0.00482	0.01941	PASS
Extreme (-10℃)		1.82	9.21	0.00217	0.01101	PASS
Extreme (-20℃)		8.03	3.12	0.00960	0.00373	PASS
Extreme (-30℃)		7.84	6.49	0.00937	0.00776	PASS
Extreme (-40℃)		11.87	6.77	0.01419	0.00809	PASS
25℃	LV	2.98	16.49	0.00356	0.01971	PASS
	HV	14.74	3.11	0.01762	0.00371	PASS

Spurious Emissions at Antenna Terminals

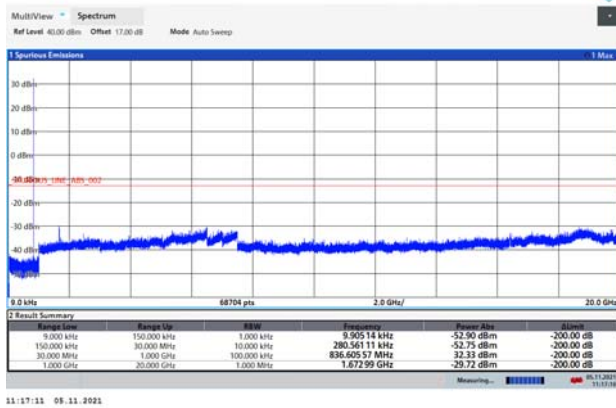
GSM 850 CH-Low 9kHz ~ 20GHz



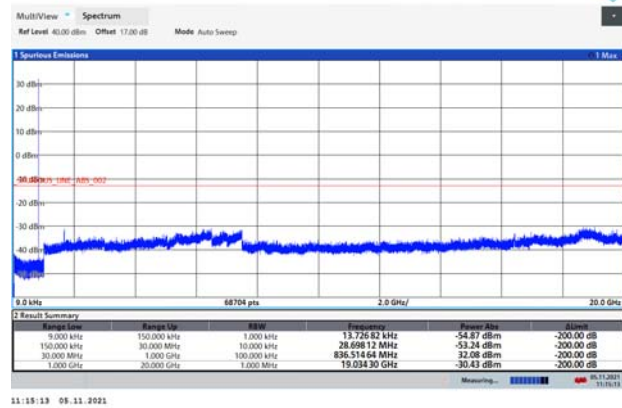
GPRS 850 CH-Low 9kHz ~ 20GHz



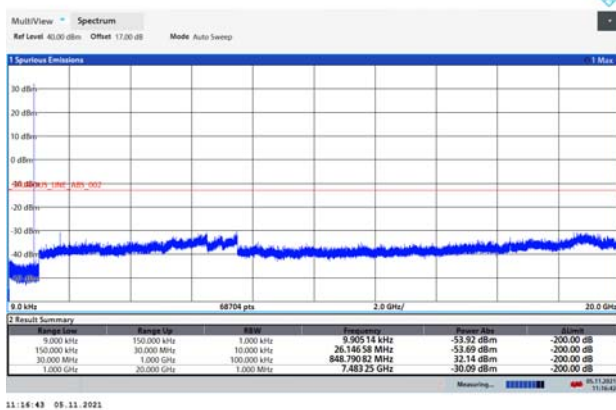
GSM 850 CH- Middle 9kHz ~ 20GHz



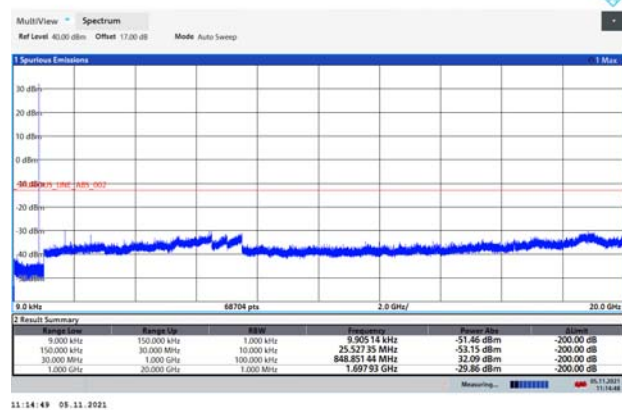
GPRS 850 CH- Middle 9kHz ~ 20GHz



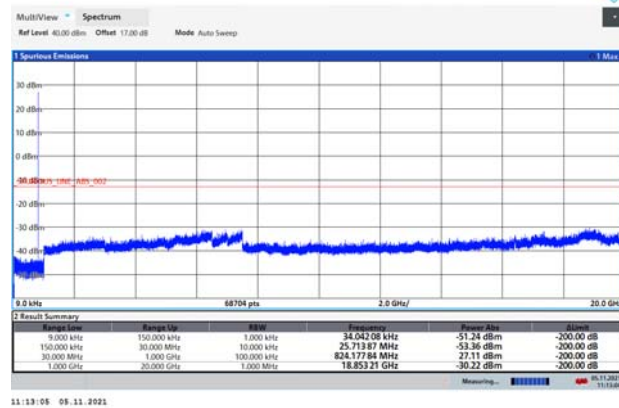
GSM 850 CH-High 9kHz ~ 20GHz



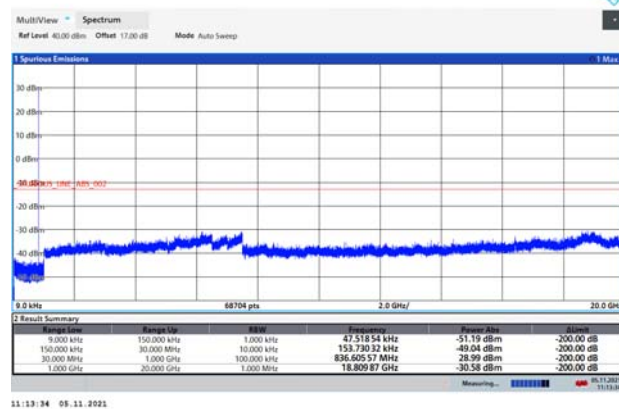
GPRS 850 CH-High 9kHz ~ 20GHz



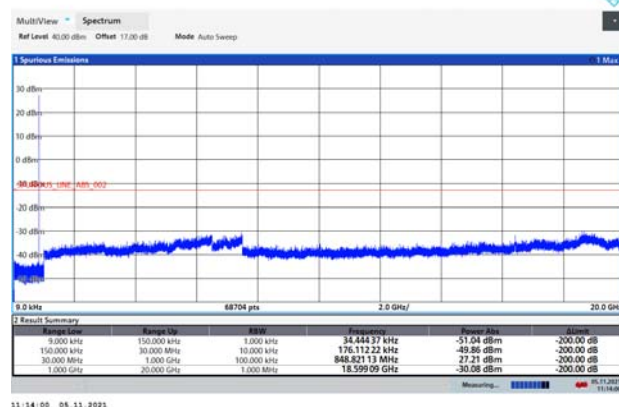
EGPRS 850 CH-Low 9kHz ~ 20GHz



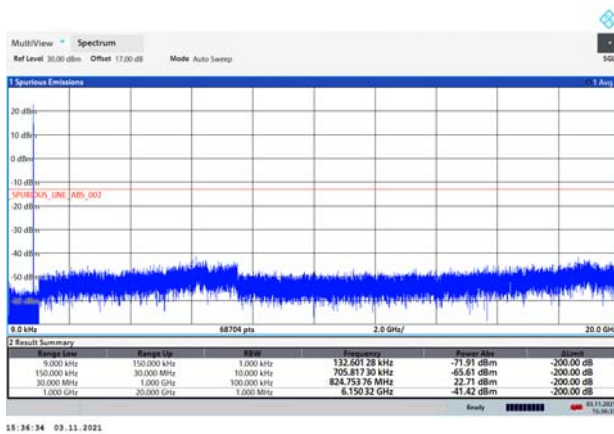
EGPRS 850 CH- Middle 9kHz ~ 20GHz



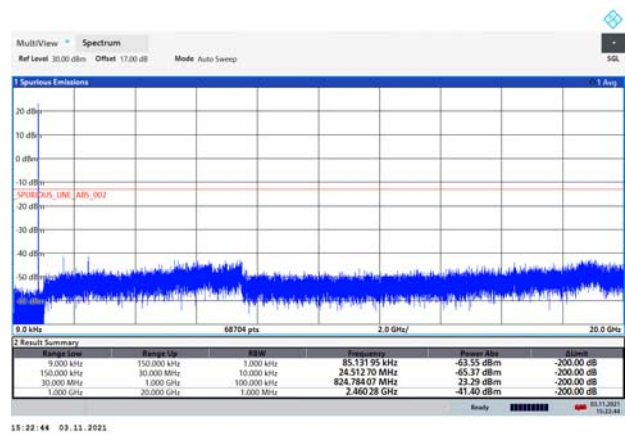
EGPRS 850 CH-High 9kHz ~ 20GHz



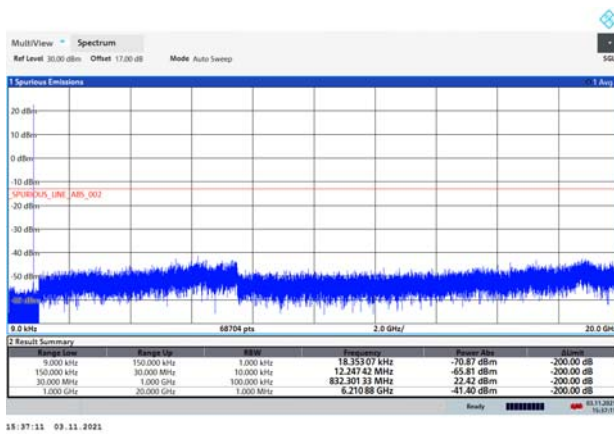
LTE Band 5 10MHz CH-Low 9kHz~20GHz



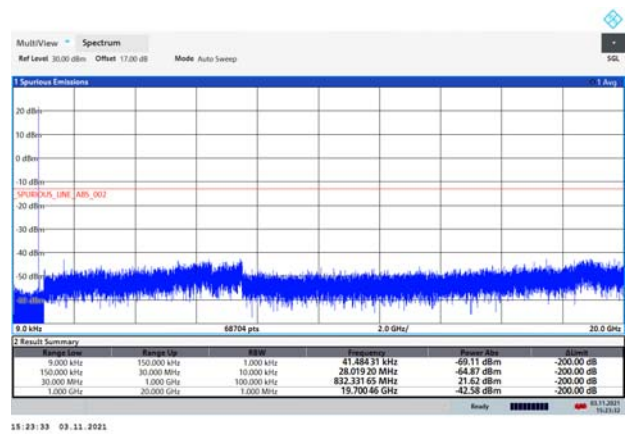
LTE Band 26 10MHz CH-Low 9kHz~20GHz



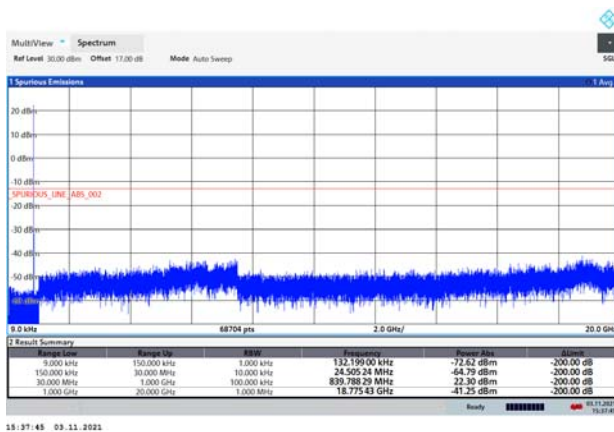
LTE Band 5 10MHz CH-Middle 9kHz~20GHz



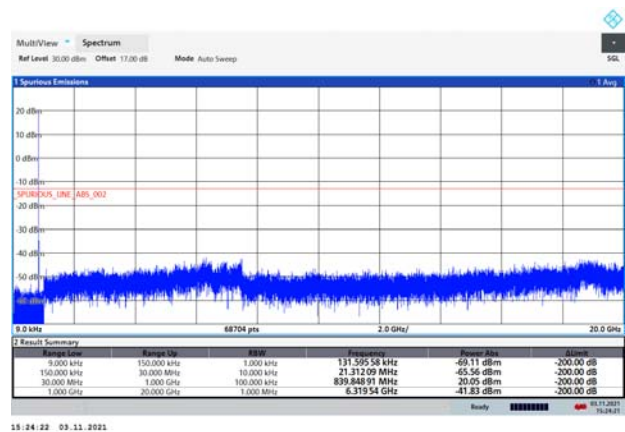
LTE Band 26 10MHz CH-Middle 9kHz~20GHz



LTE Band 5 10MHz CH-High 9kHz~20GHz



LTE Band 26 10MHz CH-High 9kHz~20GHz



Radiates Spurious Emission

GSM 850 CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.2	-63.99	2.00	10.75	Horizontal	-57.39	-13.0	46.08	225
3	2509.8	-65.00	2.51	11.05	Horizontal	-58.61	-13.0	43.54	45
4	3346.4	-58.57	4.20	11.15	Horizontal	-53.77	-13.0	44.39	135
5	4183.0	-60.57	5.20	11.15	Horizontal	-56.77	-13.0	45.61	225
6	5019.6	-57.31	5.50	11.95	Horizontal	-53.01	-13.0	40.77	45
7	5856.2	-55.80	5.70	13.55	Horizontal	-50.10	-13.0	43.77	90
8	6692.8	-55.15	6.30	13.75	Horizontal	-49.85	-13.0	40.01	180
9	7529.4	-62.29	6.80	13.85	Horizontal	-57.39	-13.0	37.10	180
10	8366.0	-63.81	6.90	14.25	Horizontal	-58.61	-13.0	36.85	0
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2.The worst emission was found in the antenna is Horizontal position.									

LTE Band 5 5MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1664.4	-62.34	2.00	10.75	Horizontal	-55.74	-13.00	42.74	45
3	2496.6	-64.30	2.51	11.05	Horizontal	-57.91	-13.00	44.91	315
4	3346.0	-63.32	4.20	11.15	Horizontal	-58.52	-13.0	45.52	0
5	4182.5	-59.85	5.20	11.15	Horizontal	-56.05	-13.0	43.05	45
6	5019.0	-58.75	5.50	11.95	Horizontal	-54.45	-13.0	41.45	45
7	5855.5	-60.18	5.70	13.55	Horizontal	-54.48	-13.0	41.48	180
8	6692.0	-57.08	6.30	13.75	Horizontal	-51.78	-13.0	38.78	180
9	7528.5	-54.46	6.80	13.85	Horizontal	-49.56	-13.0	36.56	0
10	8365.0	-54.85	6.90	14.25	Horizontal	-49.65	-13.0	36.65	90

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2.The worst emission was found in the antenna is Horizontal position.

LTE Band 26 1.4MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.0	-52.42	2.00	10.75	Horizontal	-45.82	-13.00	32.82	45
3	2509.5	-59.67	2.51	11.05	Horizontal	-53.28	-13.00	40.28	0
4	3346.0	-62.10	4.20	11.15	Horizontal	-57.30	-13.00	44.30	0
5	4182.5	-60.31	5.20	11.15	Horizontal	-56.51	-13.00	43.51	135
6	5019.0	-58.50	5.50	11.95	Horizontal	-54.20	-13.00	41.20	225
7	5855.5	-60.94	5.70	13.55	Horizontal	-55.24	-13.00	42.24	315
8	6692.0	-59.90	6.30	13.75	Horizontal	-54.60	-13.00	41.60	225
9	7528.5	-54.10	6.80	13.85	Horizontal	-49.20	-13.00	36.20	225
10	8365.0	-54.44	6.90	14.25	Horizontal	-49.24	-13.00	36.24	45

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.

2.The worst emission was found in the antenna is Horizontal position.

Main Test Instruments

Date of Testing (variant): August 31, 2021 ~ November 5, 2021

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Base Station Simulator	R&S	CMW500	113824	2021-05-15	2022-05-14
Climate Chamber	Weiss	VT4002	58226119450010	2021-05-15	2022-05-14
Spectrum Analyzer	Key sight	N9020	MY52330084	2021-05-15	2022-05-14
Signal Analyzer	R&S	FSV3030	101411	2020-12-13	2021-12-12
Signal Analyzer	R&S	FSV30	100815	2020-12-13	2021-12-12
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	01111	2019--9-12	2022-09-11
Horn Antenna	Schwarzbeck	BBHA 9120D	1594	2020-12-17	2021-12-16