

Bandwidth (MHz):	20
Frequency (MHz):	834
RB / Offset:	1 / 53
Mode:	Stand Alone

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1668.00	H	143	321	-74.22	-6.79	25.99	-69.27	-13.00	-56.27
2502.00	H	143	339	-56.72	-3.96	46.32	-48.94	-13.00	-35.94
3336.00	H	-	-	-77.00	-0.36	29.64	-65.61	-13.00	-52.61
4170.00	H	-	-	-77.66	1.28	30.62	-64.64	-13.00	-51.64
5004.00	H	-	-	-78.01	1.93	30.92	-64.34	-13.00	-51.34

**Table 7-24. Radiated Spurious Data (NR Band n5 – Low Channel) – CLOSE**

Bandwidth (MHz):	20
Frequency (MHz):	836.5
RB / Offset:	1 / 53
Mode:	Stand Alone

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1673.00	H	155	330	-75.13	-6.96	24.91	-70.35	-13.00	-57.35
2509.50	H	132	334	-56.08	-4.05	46.87	-48.39	-13.00	-35.39
3346.00	H	-	-	-76.94	-0.44	29.62	-65.64	-13.00	-52.64
4182.50	H	-	-	-77.18	1.09	30.91	-64.35	-13.00	-51.35
5019.00	H	-	-	-77.92	1.95	31.03	-64.22	-13.00	-51.22

**Table 7-25. Radiated Spurious Data (NR Band n5 – Mid Channel) – CLOSE**

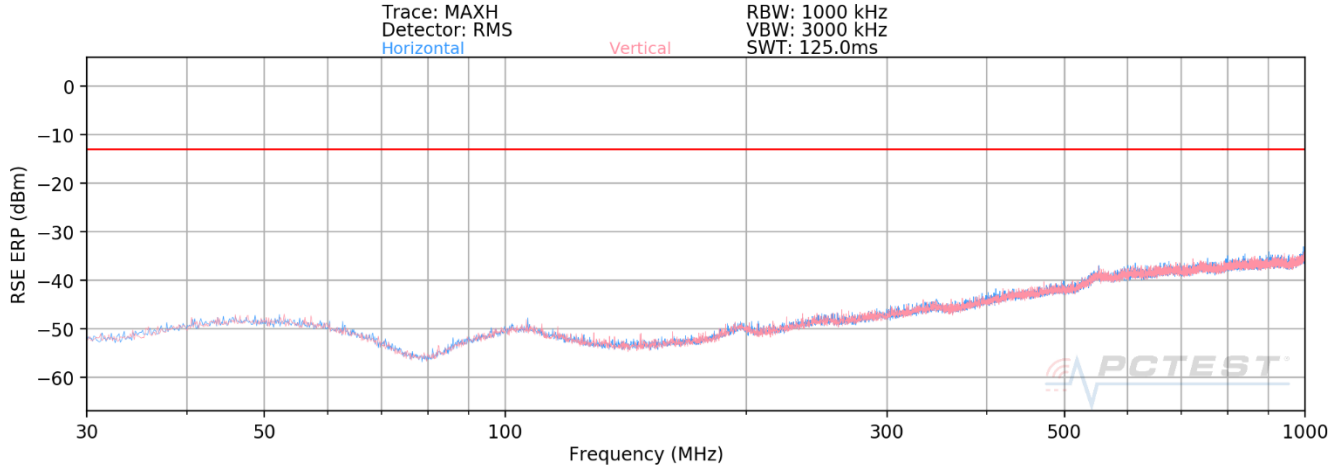
Bandwidth (MHz):	20
Frequency (MHz):	839
RB / Offset:	1 / 53
Mode:	Stand Alone

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1678.00	H	123	317	-74.97	-7.14	24.89	-70.37	-13.00	-57.37
2517.00	H	128	339	-55.56	-4.04	47.40	-47.85	-13.00	-34.85
3356.00	H	-	-	-77.06	-0.51	29.43	-65.83	-13.00	-52.83
4195.00	H	-	-	-77.15	1.12	30.97	-64.29	-13.00	-51.29
5034.00	H	-	-	-77.66	2.13	31.47	-63.79	-13.00	-50.79

**Table 7-26. Radiated Spurious Data (NR Band n5 – High Channel) – CLOSE**

FCC ID: A3LSMF936B	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2204110052-01.A3L	Test Dates: 04/05 – 06/07/2022	EUT Type: Portable Handset	Page 78 of 96

## NR Band n5 – B2

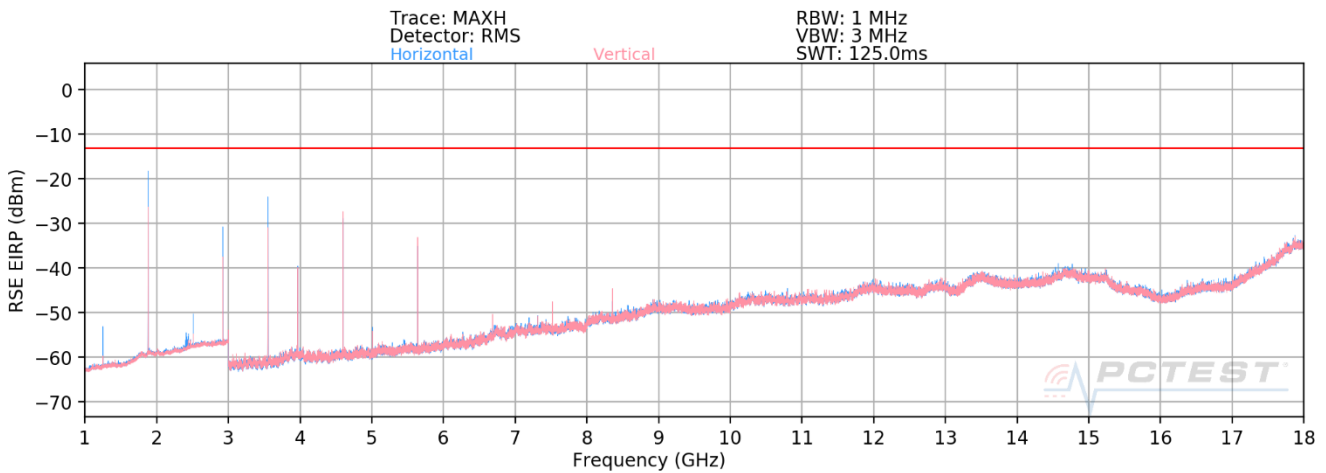


**Plot 7-94. Radiated Spurious Plot Below 1GHz (NR Band n5 – B2) – CLOSE**

Bandwidth (MHz):	20 / 20
Frequency (MHz):	836.5 / 1880
RB / Offset:	1 / 53 & 1 / 50
Mode:	EN-DC
Anchor Band:	2

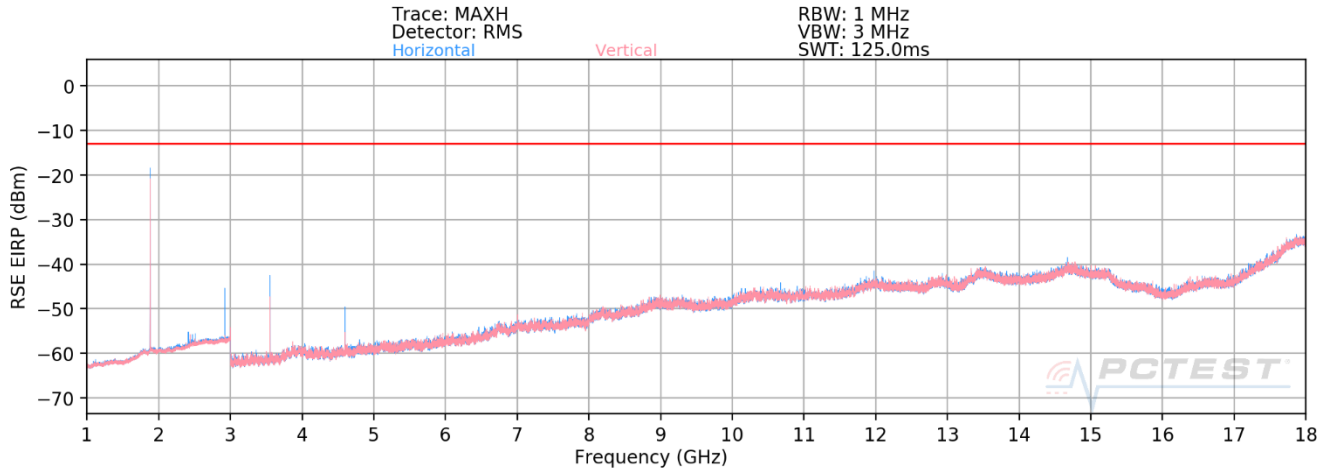
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
207.00	H	-	-	-82.03	11.97	36.94	-58.32	-13.00	-45.32

**Table 7-27. Radiated Spurious Data (NR Band n5 – B2) – CLOSE**



**Plot 7-95. Radiated Spurious Plot Above 1GHz (NR Band n5 – B2) – CLOSE**

FCC ID: A3LSMF936B	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2204110052-01.A3L	Test Dates: 04/05 – 06/07/2022	EUT Type: Portable Handset	Page 79 of 96



**Plot 7-96. Radiated Spurious Plot Above 1GHz (NR Band n5 – B2) – HALF OPEN**

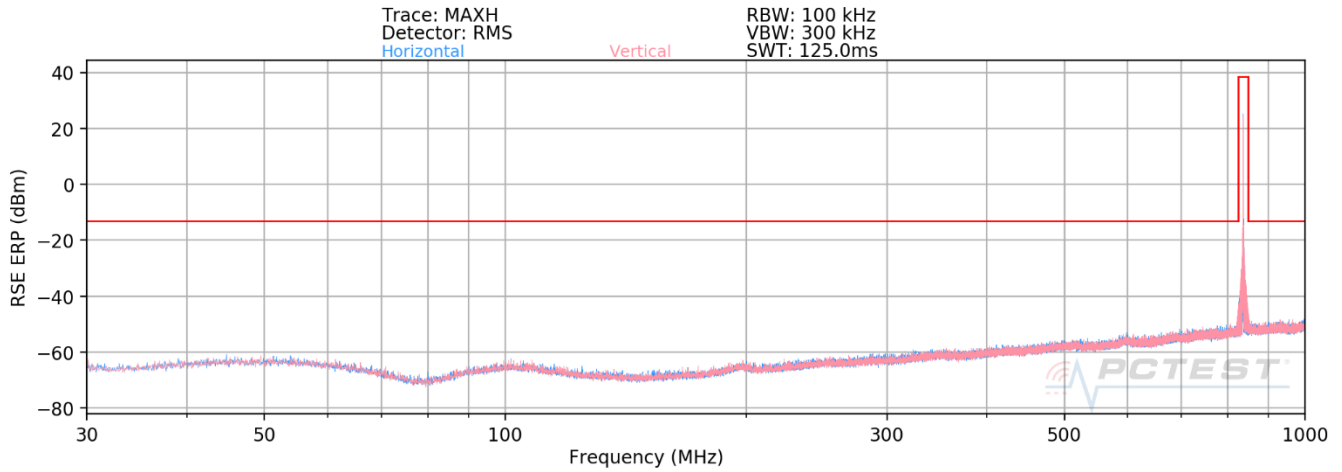
Bandwidth (MHz):	20 / 20
Frequency (MHz):	836.5 / 1880
RB / Offset:	1 / 53 & 1 / 50
Mode:	EN-DC
Anchor Band:	2

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
2923.50	H	129	174	-52.04	6.84	61.80	-33.46	-13.00	-20.46
3553.00	H	104	142	-41.24	0.30	66.06	-29.20	-13.00	-16.20
3967.00	H	102	166	-61.44	2.10	47.66	-47.60	-13.00	-34.60
4596.50	H	107	134	-45.22	1.71	63.49	-31.77	-13.00	-18.77
5640.00	H	110	121	-57.00	3.76	53.76	-41.49	-13.00	-28.49
8356.50	H	100	93	-75.43	10.41	41.98	-53.27	-13.00	-40.27

**Table 7-28. Radiated Spurious Data (NR Band n5 – B2) – CLOSE**

FCC ID: A3LSMF936B	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2204110052-01.A3L	Test Dates: 04/05 – 06/07/2022	EUT Type: Portable Handset	Page 80 of 96

## GSM/GPRS Cell AntA + AntB

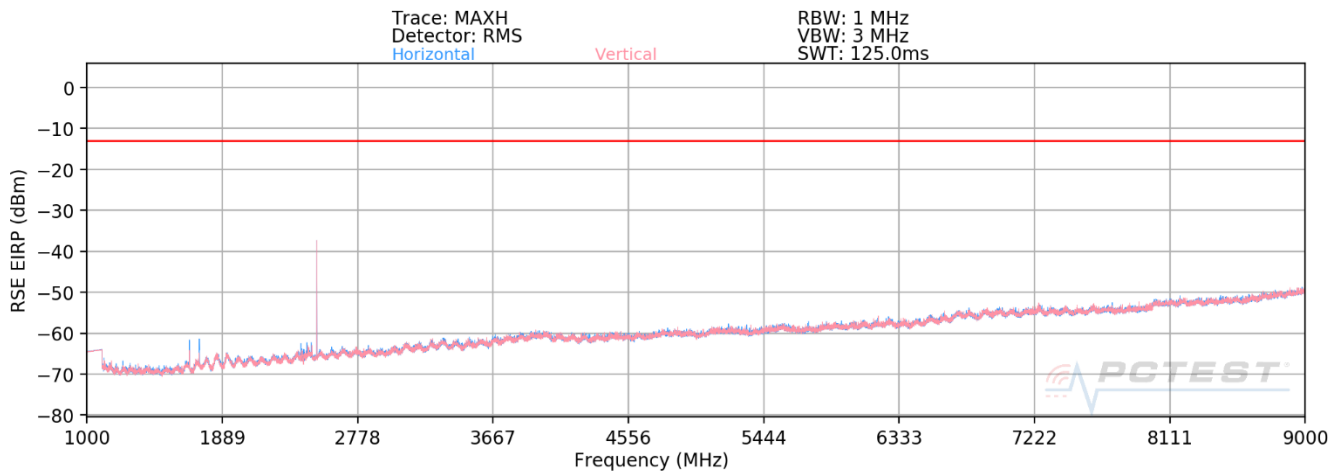


**Plot 7-97. Radiated Spurious Plot Below 1GHz (GPRS Cell) – HALF OPEN**

Mode:	GPRS 1 Tx Slot
Channel:	190
Frequency (MHz):	836.6

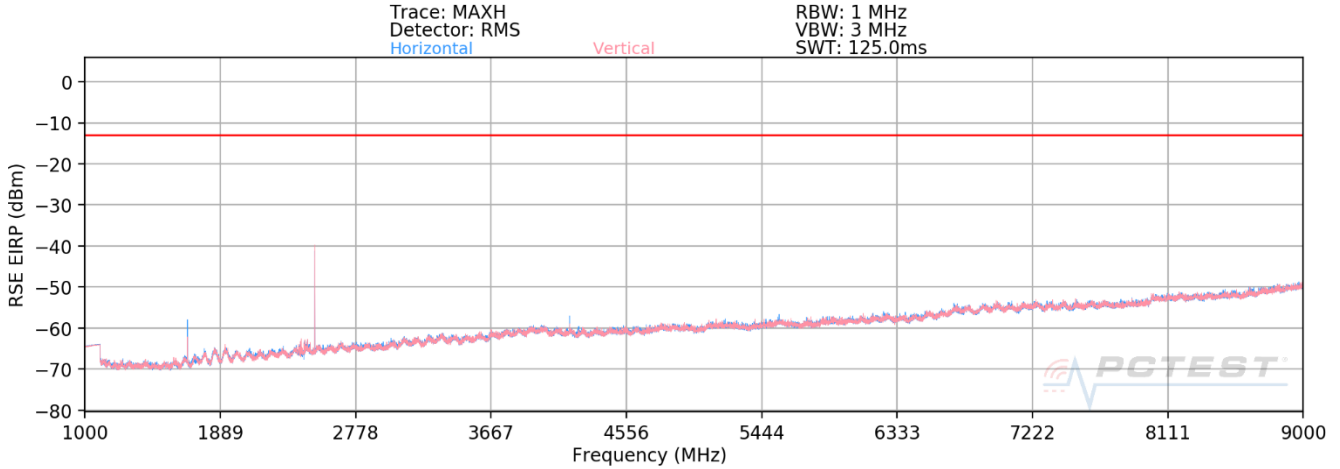
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
855.50	H	-	-	-67.47	24.43	63.96	-31.30	-13.00	-18.30

**Table 7-29. Radiated Spurious Data (GPRS Cell) – HALF OPEN**



**Plot 7-98. Radiated Spurious Plot Above 1GHz (GPRS Cell) – HALF OPEN**

FCC ID: A3LSMF936B	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2204110052-01.A3L	Test Dates: 04/05 – 06/07/2022	EUT Type: Portable Handset	Page 81 of 96



**Plot 7-99. Radiated Spurious Plot Above 1GHz (GPRS Cell) – CLOSE**

Mode:	GPRS 1 Tx Slot
Channel:	128
Frequency (MHz):	824.2

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1648.40	V	101	137	-63.51	-7.12	36.37	-58.89	-13.00	-45.89
2472.60	V	101	127	-49.31	-3.84	53.85	-41.41	-13.00	-28.41
3296.80	V	-	-	-67.59	-0.53	38.88	-56.38	-13.00	-43.38
4121.00	V	102	167	-67.83	1.47	40.64	-54.62	-13.00	-41.62
4945.20	V	-	-	-68.04	2.17	41.13	-54.13	-13.00	-41.13
5769.40	V	-	-	-69.00	4.20	42.20	-53.05	-13.00	-40.05

**Table 7-30. Radiated Spurious Data (GPRS Cell – Low Channel) – HALF OPEN**

Mode:	GPRS 1 Tx Slot
Channel:	190
Frequency (MHz):	836.6

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1673.20	V	100	124	-64.70	-6.97	35.33	-59.93	-13.00	-46.93
2509.80	V	117	123	-48.05	-4.05	54.90	-40.36	-13.00	-27.36
3346.40	V	-	-	-67.27	-0.44	39.29	-55.97	-13.00	-42.97
4183.00	V	-	-	-68.09	1.09	40.00	-55.26	-13.00	-42.26
5019.60	V	-	-	-68.46	1.96	40.50	-54.76	-13.00	-41.76
5856.20	V	-	-	-69.75	4.94	42.19	-53.07	-13.00	-40.07

**Table 7-31. Radiated Spurious Data (GPRS Cell – Mid Channel) – HALF OPEN**

FCC ID: A3LSMF936B	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2204110052-01.A3L	Test Dates: 04/05 – 06/07/2022	EUT Type: Portable Handset	Page 82 of 96

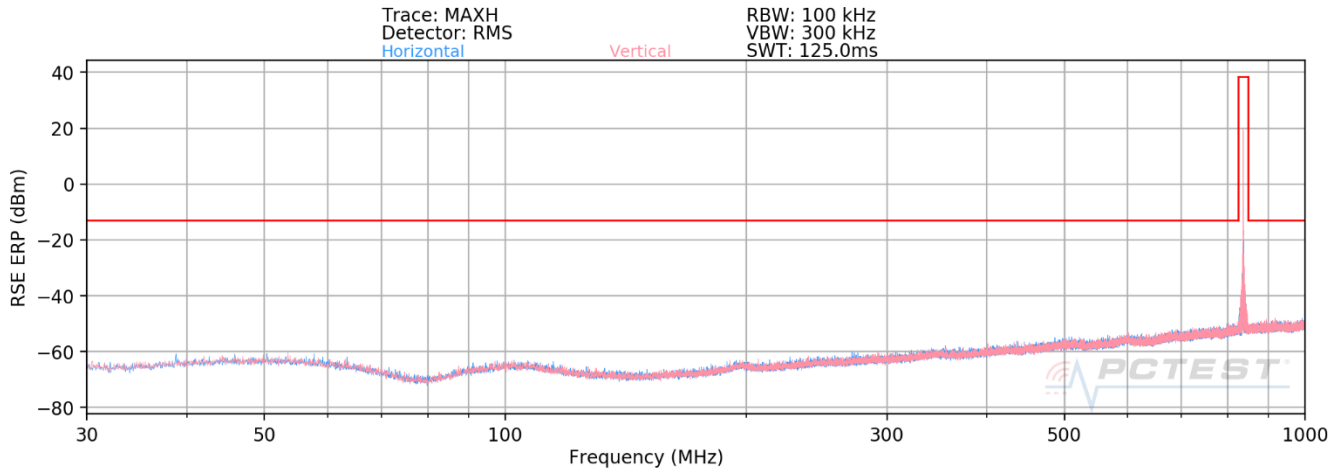
<b>Mode:</b>	GPRS 1 Tx Slot
<b>Channel:</b>	251
<b>Frequency (MHz):</b>	848.8

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1697.60	V	121	143	-64.04	-7.59	35.37	-59.89	-13.00	-46.89
2546.40	V	138	113	-47.79	-3.87	55.34	-39.92	-13.00	-26.92
3395.20	V	-	-	-67.85	-0.47	38.68	-56.58	-13.00	-43.58
4244.00	V	-	-	-68.08	0.85	39.77	-55.49	-13.00	-42.49
5092.80	V	-	-	-68.64	3.12	41.48	-53.78	-13.00	-40.78
5941.60	V	-	-	-69.52	4.86	42.34	-52.92	-13.00	-39.92

**Table 7-32. Radiated Spurious Data (GPRS Cell – High Channel) – HALF OPEN**

<b>FCC ID:</b> A3LSMF936B	<b>PART 22 MEASUREMENT REPORT</b>		<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1M2204110052-01.A3L	<b>Test Dates:</b> 04/05 – 06/07/2022	<b>EUT Type:</b> Portable Handset	Page 83 of 96

## GSM/GPRS Cell AntA

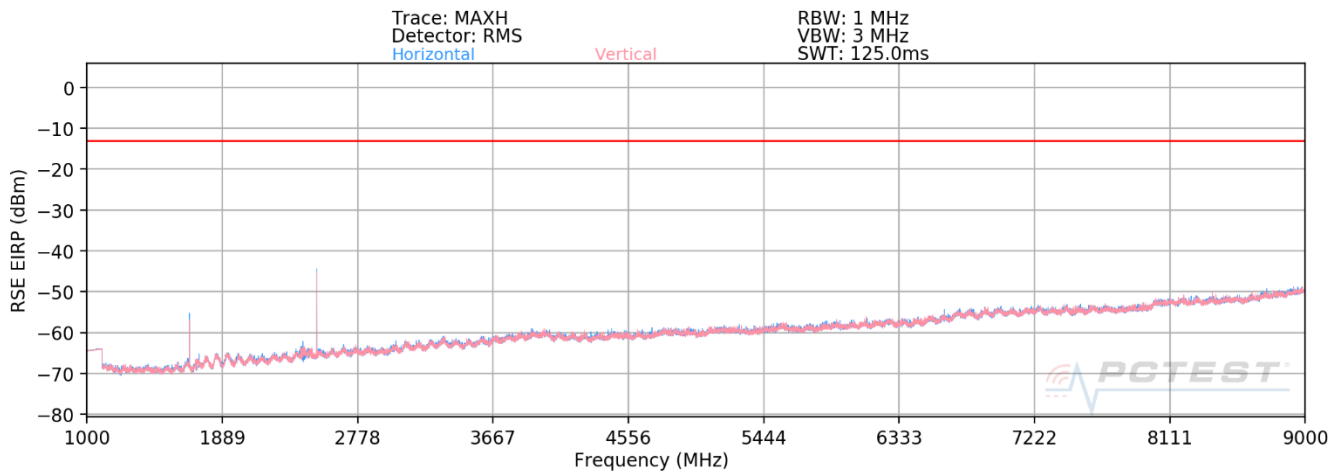


**Plot 7-100. Radiated Spurious Plot Below 1GHz (GPRS Cell) – CLOSE**

Mode:	GPRS 1 Tx Slot
Channel:	190
Frequency (MHz):	836.6

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
853.31	V	-	-	-67.76	24.57	63.81	-31.45	-13.00	-18.45

**Table 7-33. Radiated Spurious Data (GPRS Cell) – CLOSE**



**Plot 7-101. Radiated Spurious Plot Above 1GHz (GPRS Cell) – CLOSE**

FCC ID: A3LSMF936B	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2204110052-01.A3L	Test Dates: 04/05 – 06/07/2022	EUT Type: Portable Handset	Page 84 of 96

Mode:	GPRS 1 Tx Slot
Channel:	128
Frequency (MHz):	824.2

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1648.40	H	106	8	-60.12	-7.12	39.76	-55.50	-13.00	-42.50
2472.60	H	131	360	-49.80	-3.84	53.36	-41.90	-13.00	-28.90
3296.80	H	113	346	-68.31	-0.53	38.16	-57.10	-13.00	-44.10
4121.00	H	-	-	-68.76	1.47	39.71	-55.55	-13.00	-42.55
4945.20	H	-	-	-69.13	2.17	40.04	-55.22	-13.00	-42.22
5769.40	H	-	-	-70.11	4.20	41.09	-54.16	-13.00	-41.16

**Table 7-34. Radiated Spurious Data (GPRS Cell – Low Channel) – CLOSE**

Mode:	GPRS 1 Tx Slot
Channel:	190
Frequency (MHz):	836.6

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1673.20	H	146	256	-61.49	-6.97	38.54	-56.72	-13.00	-43.72
2509.80	H	150	352	-49.01	-4.05	53.94	-41.32	-13.00	-28.32
3346.40	H	116	329	-66.85	-0.44	39.71	-55.55	-13.00	-42.55
4183.00	H	108	341	-68.59	1.09	39.50	-55.76	-13.00	-42.76
5019.60	H	-	-	-69.38	1.96	39.58	-55.68	-13.00	-42.68
5856.20	H	-	-	-70.58	4.94	41.36	-53.90	-13.00	-40.90

**Table 7-35. Radiated Spurious Data (GPRS Cell – Mid Channel) – CLOSE**

Mode:	GPRS 1 Tx Slot
Channel:	251
Frequency (MHz):	848.8

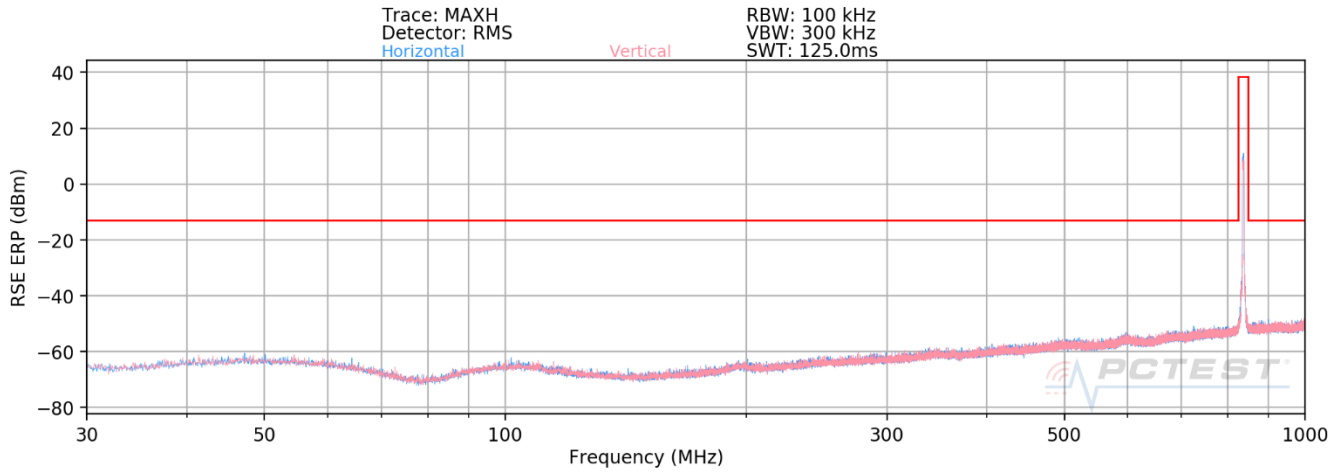
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1697.60	H	138	6	-57.96	-7.59	41.45	-53.81	-13.00	-40.81
2546.40	H	168	360	-53.42	-3.87	49.71	-45.55	-13.00	-32.55
3395.20	H	109	337	-67.46	-0.47	39.07	-56.19	-13.00	-43.19
4244.00	H	-	-	-69.42	0.85	38.43	-56.83	-13.00	-43.83
5092.80	H	-	-	-69.94	3.12	40.18	-55.08	-13.00	-42.08
5941.60	H	-	-	-70.57	4.86	41.29	-53.97	-13.00	-40.97

**Table 7-36. Radiated Spurious Data (GPRS Cell – High Channel) – CLOSE**

FCC ID: A3LSMF936B	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2204110052-01.A3L	Test Dates: 04/05 – 06/07/2022	EUT Type: Portable Handset	Page 85 of 96



### WCDMA Cell AntA + AntB

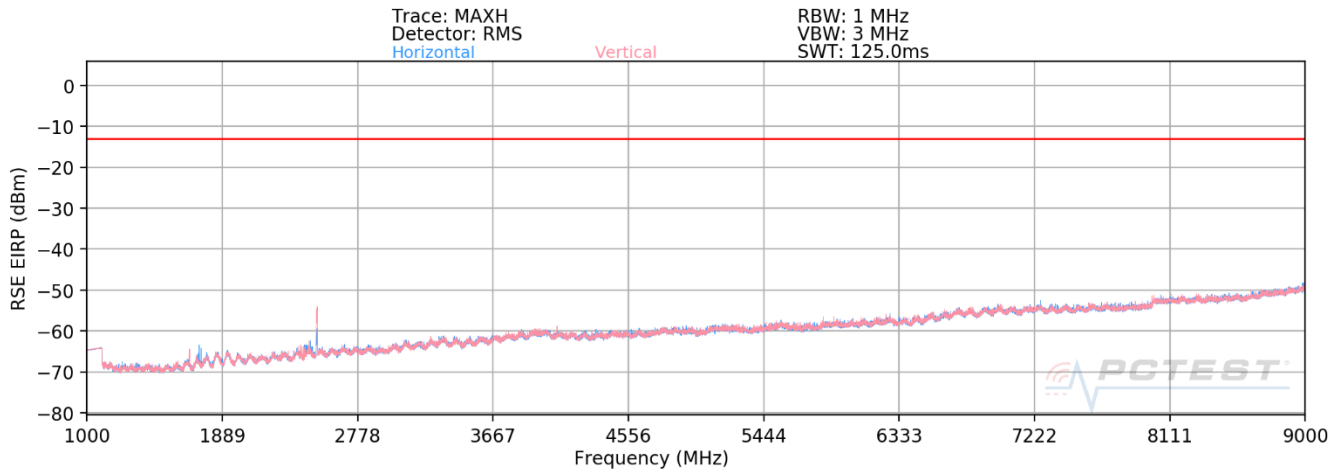


**Plot 7-102. Radiated Spurious Plot Below 1GHz (WCDMA Cell) – HALF OPEN**

Mode:	WCDMA RMC
Channel:	4183
Frequency (MHz):	836.6

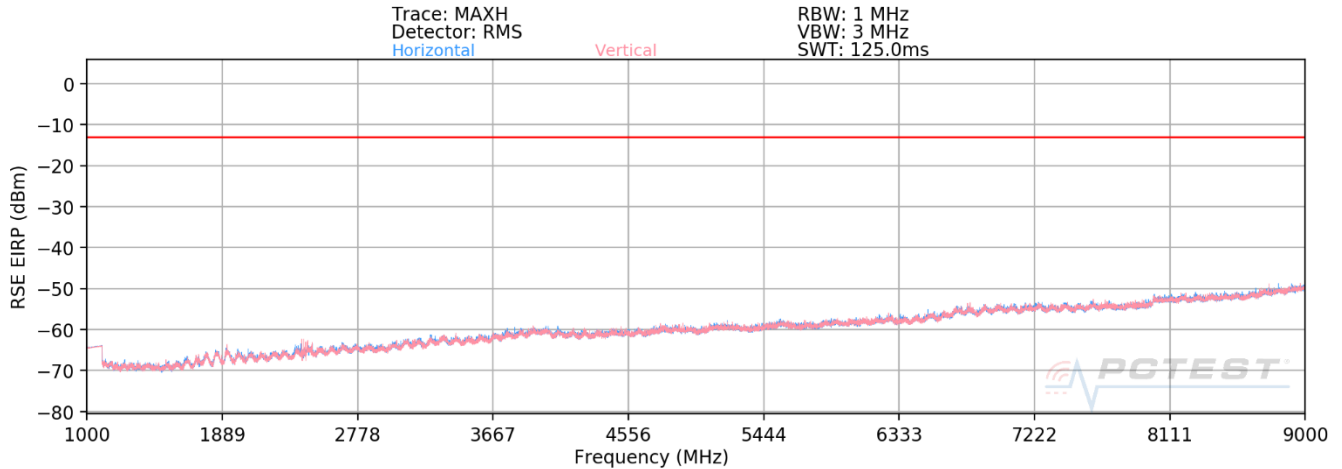
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
850.15	H	-	-	-72.54	24.43	58.89	-36.36	-13.00	-23.36

**Table 7-37. Radiated Spurious Data (WCDMA Cell) – HALF OPEN**



**Plot 7-103. Radiated Spurious Plot Above 1GHz (WCDMA Cell) – HALF OPEN**

FCC ID: A3LSMF936B	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2204110052-01.A3L	Test Dates: 04/05 – 06/07/2022	EUT Type: Portable Handset	Page 86 of 96



**Plot 7-104. Radiated Spurious Plot Above 1GHz (WCDMA Cell) – OPEN**

Mode:	WCDMA RMC
Channel:	4132
Frequency (MHz):	826.4

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1652.80	H	120	277	-75.41	-7.02	24.57	-70.68	-13.00	-57.68
2479.20	H	151	261	-65.53	-3.83	37.64	-57.62	-13.00	-44.62
3305.60	H	-	-	-78.15	-0.39	28.46	-66.80	-13.00	-53.80
4132.00	H	-	-	-78.21	1.52	30.31	-64.94	-13.00	-51.94
4958.40	H	-	-	-78.03	2.06	31.03	-64.23	-13.00	-51.23

**Table 7-38. Radiated Spurious Data (WCDMA Cell – Low Channel) – HALF OPEN**

Mode:	WCDMA RMC
Channel:	4183
Frequency (MHz):	836.6

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1673.20	H	121	275	-75.76	-6.97	24.27	-70.99	-13.00	-57.99
2509.80	H	150	245	-66.75	-4.05	36.20	-59.06	-13.00	-46.06
3346.40	H	-	-	-76.85	-0.44	29.71	-65.55	-13.00	-52.55
4183.00	H	-	-	-77.36	1.09	30.73	-64.53	-13.00	-51.53
5019.60	H	-	-	-78.06	1.96	30.90	-64.36	-13.00	-51.36

**Table 7-39. Radiated Spurious Data (WCDMA Cell – Mid Channel) – HALF OPEN**

FCC ID: A3LSMF936B	PART 22 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2204110052-01.A3L	Test Dates: 04/05 – 06/07/2022	EUT Type: Portable Handset	Page 87 of 96

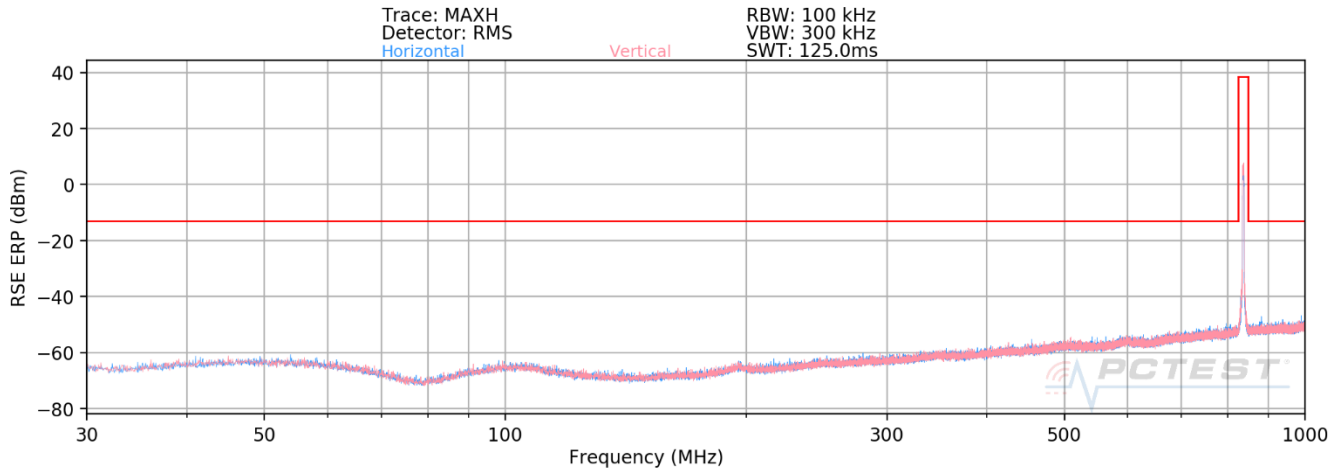
<b>Mode:</b>	WCDMA RMC
<b>Channel:</b>	4233
<b>Frequency (MHz):</b>	846.6

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1693.20	H	129	273	-76.10	-7.51	23.39	-71.87	-13.00	-58.87
2539.80	H	151	255	-63.83	-3.92	39.25	-56.01	-13.00	-43.01
3386.40	H	-	-	-77.94	-0.43	28.63	-66.63	-13.00	-53.63
4233.00	H	-	-	-77.91	0.82	29.91	-65.35	-13.00	-52.35
5079.60	H	-	-	-78.24	2.59	31.35	-63.91	-13.00	-50.91

**Table 7-40. Radiated Spurious Data (WCDMA Cell – High Channel) – HALF OPEN**

<b>FCC ID:</b> A3LSMF936B	<b>PART 22 MEASUREMENT REPORT</b>		<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1M2204110052-01.A3L	<b>Test Dates:</b> 04/05 – 06/07/2022	<b>EUT Type:</b> Portable Handset	Page 88 of 96

## WCDMA Cell AntA

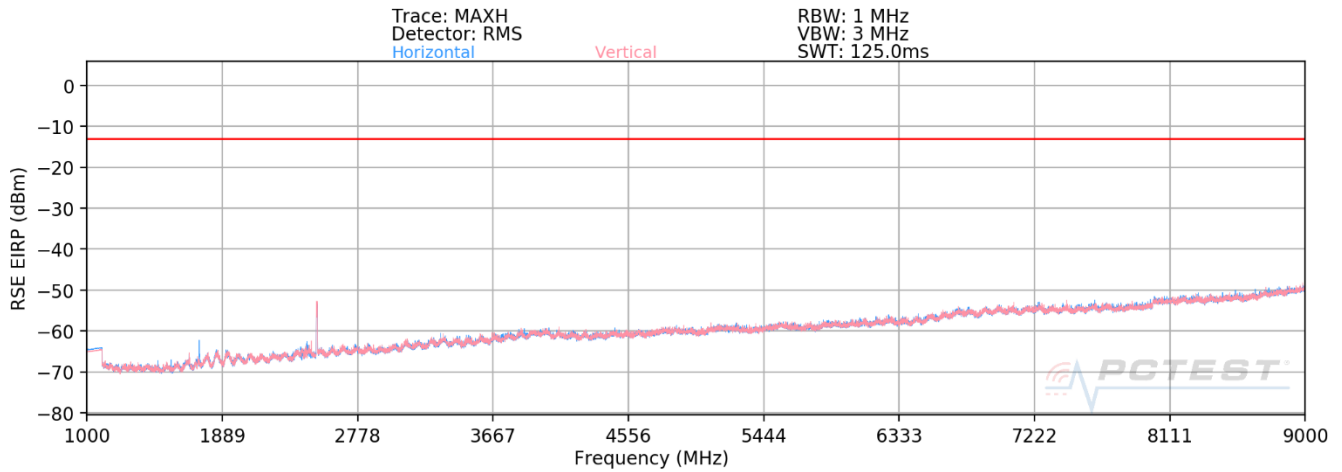


**Plot 7-105. Radiated Spurious Plot Below 1GHz (WCDMA Cell) – CLOSE**

Mode:	WCDMA RMC
Channel:	4183
Frequency (MHz):	836.6

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
850.14	V	-	-	-79.34	24.43	52.09	-43.16	-13.00	-30.16

**Table 7-41. Radiated Spurious Data (WCDMA Cell) – CLOSE**



**Plot 7-106. Radiated Spurious Plot Above 1GHz (WCDMA Cell) – CLOSE**

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Mode:	WCDMA RMC
Channel:	4132
Frequency (MHz):	826.4

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1652.80	H	132	332	-71.08	-7.02	28.90	-66.35	-13.00	-53.35
2479.20	H	102	336	-65.11	-3.83	38.06	-57.20	-13.00	-44.20
3305.60	H	-	-	-78.00	-0.39	28.61	-66.65	-13.00	-53.65
4132.00	H	-	-	-77.87	1.52	30.65	-64.60	-13.00	-51.60
4958.40	H	-	-	-77.99	2.06	31.07	-64.19	-13.00	-51.19

**Table 7-42. Radiated Spurious Data (WCDMA Cell – Low Channel) – CLOSE**

Mode:	WCDMA RMC
Channel:	4183
Frequency (MHz):	836.6

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1673.20	H	167	329	-72.13	-6.97	27.90	-67.36	-13.00	-54.36
2509.80	H	124	338	-61.33	-4.05	41.62	-53.64	-13.00	-40.64
3346.40	H	-	-	-76.85	-0.44	29.71	-65.55	-13.00	-52.55
4183.00	H	-	-	-77.25	1.09	30.84	-64.42	-13.00	-51.42
5019.60	H	-	-	-78.11	1.96	30.85	-64.41	-13.00	-51.41

**Table 7-43. Radiated Spurious Data (WCDMA Cell – Mid Channel) – CLOSE**

Mode:	WCDMA RMC
Channel:	4233
Frequency (MHz):	846.6

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1693.20	H	171	331	-72.87	-7.51	26.62	-68.64	-13.00	-55.64
2539.80	H	142	358	-62.40	-3.92	40.68	-54.58	-13.00	-41.58
3386.40	H	-	-	-78.11	-0.43	28.46	-66.80	-13.00	-53.80
4233.00	H	-	-	-77.92	0.82	29.90	-65.36	-13.00	-52.36
5079.60	H	-	-	-78.30	2.59	31.29	-63.97	-13.00	-50.97

**Table 7-44. Radiated Spurious Data (WCDMA Cell – High Channel) – CLOSE**

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## 7.9 Frequency Stability / Temperature Variation

### Test Overview and Limit

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26-2015. The frequency stability of the transmitter is measured by:

- a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

***For Part 22 and RSS-132, the frequency stability of the transmitter shall be maintained within  $\pm 0.00025\%$  ( $\pm 2.5$  ppm) of the center frequency.***

### Test Procedure Used

ANSI C63.26-2015 – Section 5.6

### Test Settings

1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
2. The equipment is turned on in a “standby” condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

### Test Setup

The EUT was connected via an RF cable to a spectrum analyzer with the EUT placed inside an environmental chamber.

### Test Notes

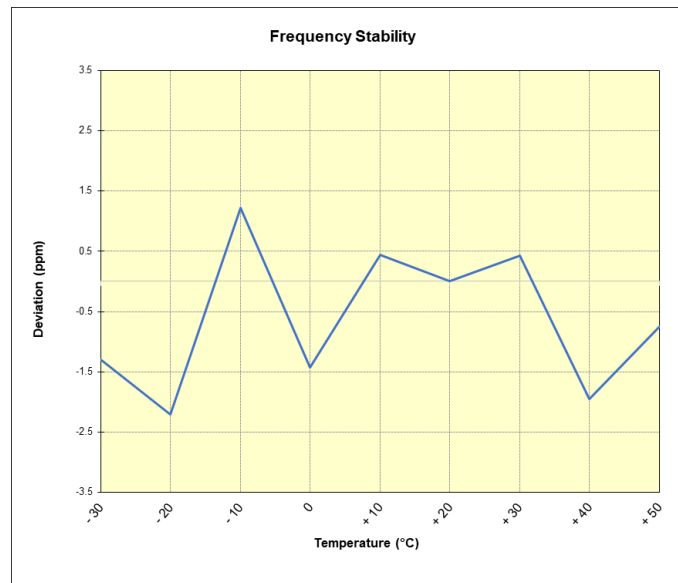
None.

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## LTE Band 26/5

LTE Band 26/5					
Operating Frequency (Hz):		836,500,000			
Ref. Voltage (VDC):		4.35			
Deviation Limit:		± 0.00025% or 2.5 ppm			
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.35	- 30	836,497,662	-1,091	-0.0001304
		- 20	836,496,908	-1,846	-0.0002206
		- 10	836,499,772	1,019	0.0001218
		0	836,497,561	-1,192	-0.0001425
		+ 10	836,499,126	373	0.0000446
		+ 20 (Ref)	836,498,753	0	0.0000000
		+ 30	836,499,111	358	0.0000428
		+ 40	836,497,125	-1,628	-0.0001946
		+ 50	836,498,125	-628	-0.0000751
Battery Endpoint	3.69	+ 20	836,499,357	604	0.0000722

**Table 7-45. LTE Band 26/5 Frequency Stability Data**



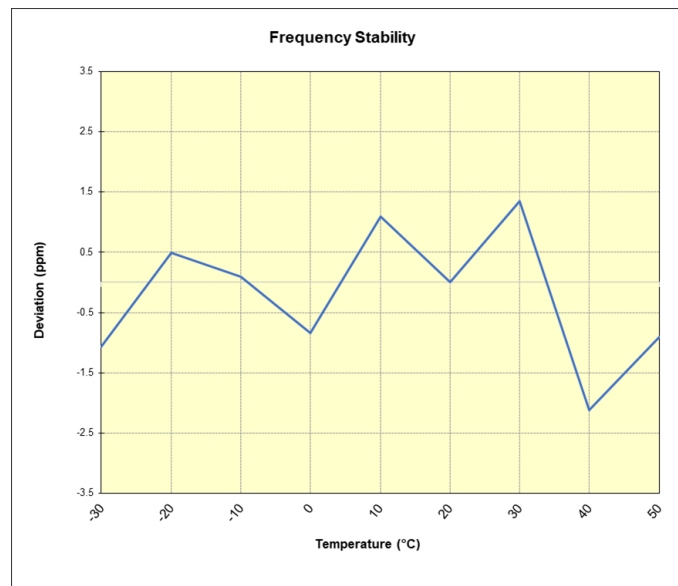
**Plot 7-107. LTE Band 26/5 Frequency Stability Chart**

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## NR Band n5

NR Band n5					
Operating Frequency (Hz):		836,500,000			
Ref. Voltage (VDC):		4.35			
Deviation Limit:		± 0.00025% or 2.5 ppm			
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.35	- 30	836,466,854	-895	-0.0001070
		- 20	836,468,161	412	0.0000493
		- 10	836,467,834	85	0.0000102
		0	836,467,050	-699	-0.0000836
		+ 10	836,468,664	915	0.0001094
		+ 20 (Ref)	836,467,749	0	0.0000000
		+ 30	836,468,882	1,133	0.0001355
		+ 40	836,465,975	-1,774	-0.0002121
Battery Endpoint	3.69	+ 20	836,466,977	-772	-0.0000923

**Table 7-46. NR Band n5 Frequency Stability Data**



**Plot 7-108. NR Band n5 Frequency Stability Chart**

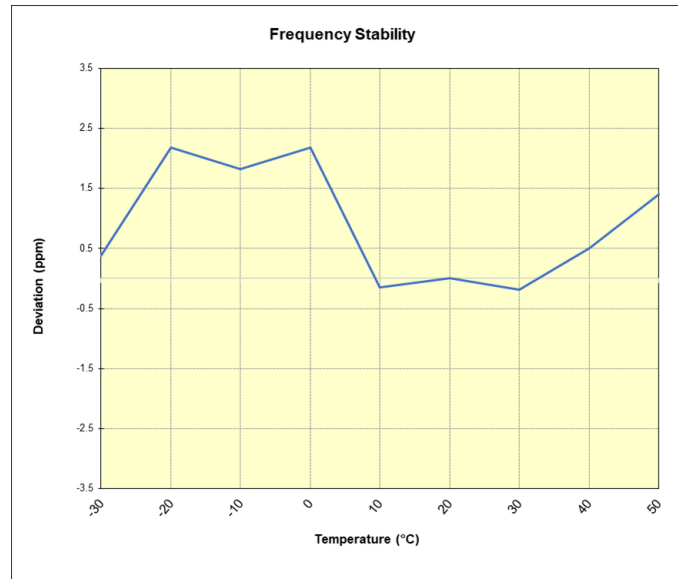
<b>FCC ID:</b> A3LSMF936B	<b>PART 22 MEASUREMENT REPORT</b>		<b>Approved by:</b> Technical Manager
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## GSM/GPRS Cell

GSM/GPRS Cellular					
Operating Frequency (Hz):		836,600,000			
Ref. Voltage (VDC):		4.35			
Deviation Limit:		± 0.00025% or 2.5 ppm			
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.35	- 30	836,600,101	311	0.0000372
		- 20	836,601,617	1,827	0.0002184
		- 10	836,601,311	1,521	0.0001818
		0	836,601,609	1,819	0.0002174
		+ 10	836,599,662	-128	-0.0000153
		+ 20 (Ref)	836,599,790	0	0.0000000
		+ 30	836,599,631	-159	-0.0000190
		+ 40	836,600,213	423	0.0000506
		+ 50	836,600,961	1,171	0.0001399
Battery Endpoint	3.69	+ 20	836,600,216	426	0.0000509

Table 7-47. GSM/GPRS Cell Frequency Stability Data



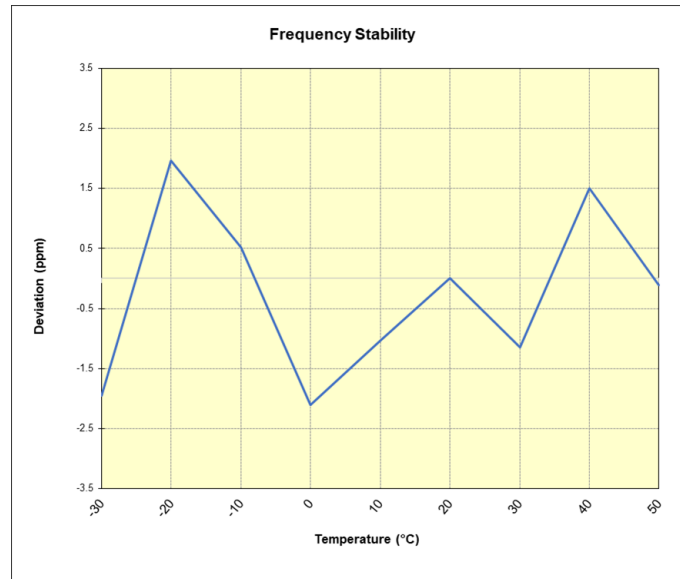
Plot 7-109. GSM/GPRS Cell Frequency Stability Chart

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## WCDMA Cell

WCDMA Cellular					
Operating Frequency (Hz):		836,600,000			
Ref. Voltage (VDC):		4.35			
Deviation Limit:		± 0.00025% or 2.5 ppm			
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.35	- 30	836,598,124	-1,632	-0.0001951
		- 20	836,601,401	1,645	0.0001966
		- 10	836,600,187	431	0.0000515
		0	836,597,992	-1,764	-0.0002109
		+ 10	836,598,897	-859	-0.0001027
		+ 20 (Ref)	836,599,756	0	0.0000000
		+ 30	836,598,799	-957	-0.0001144
		+ 40	836,601,011	1,255	0.0001500
		+ 50	836,599,661	-96	-0.0000114
Battery Endpoint	3.69	+ 20	836,600,175	419	0.0000501

**Table 7-48. WCDMA Cell Frequency Stability Data**



**Plot 7-110. WCDMA Cell Frequency Stability Chart**

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## 8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMF936B** complies with all the requirements of Part 22 of the FCC rules.

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