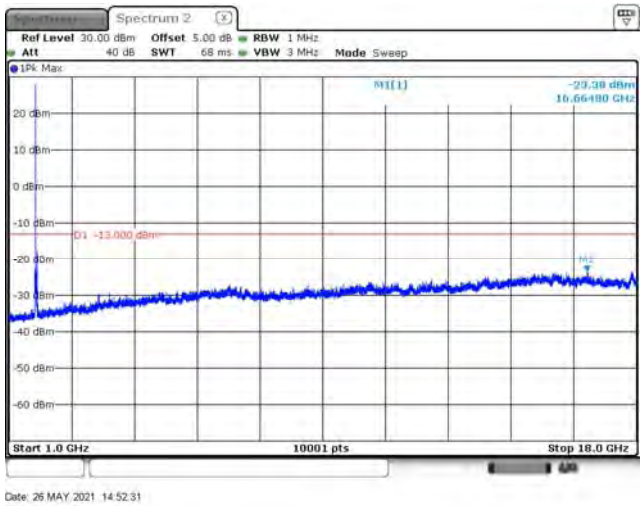
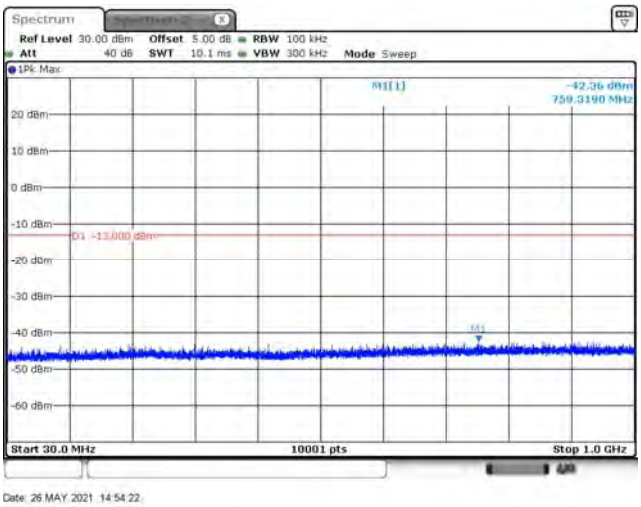
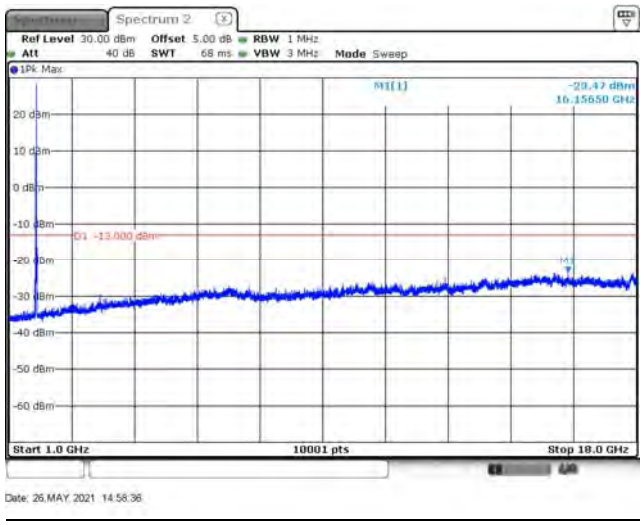
B4_CH20050_20M_1RB0__QPSK_Above 1G



B4_CH20050_20M_1RB0__QPSK_Below 1G



B4_CH20175_20M_1RB0__QPSK_Above 1G



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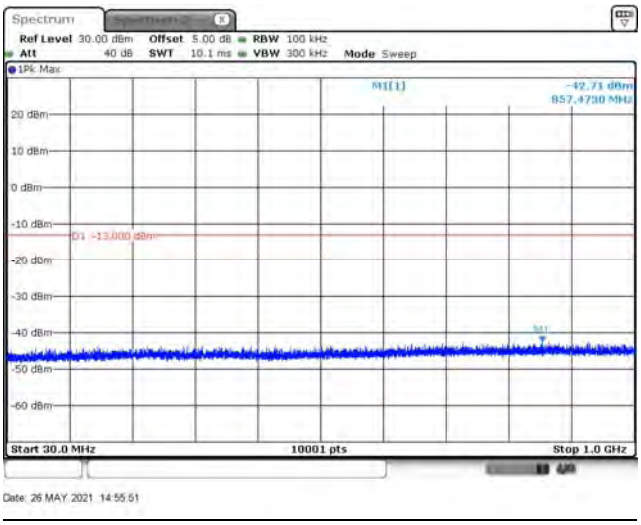
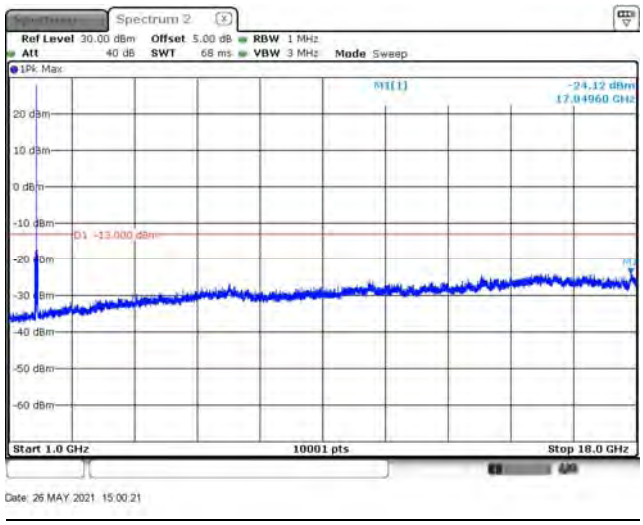
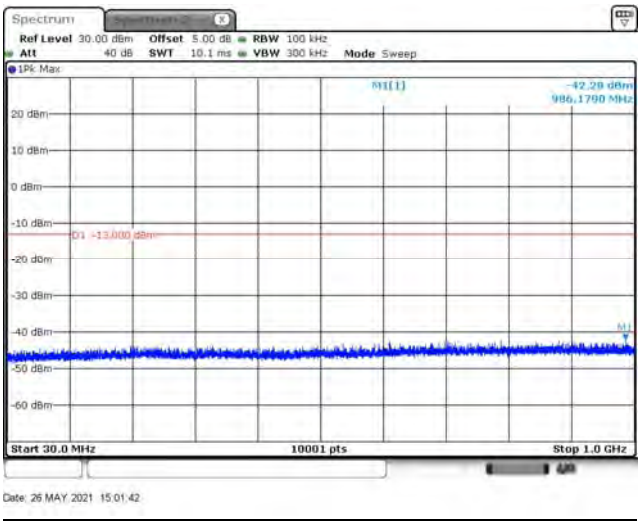


B4_CH20300_20M_1RB0__QPSK_Above 1G

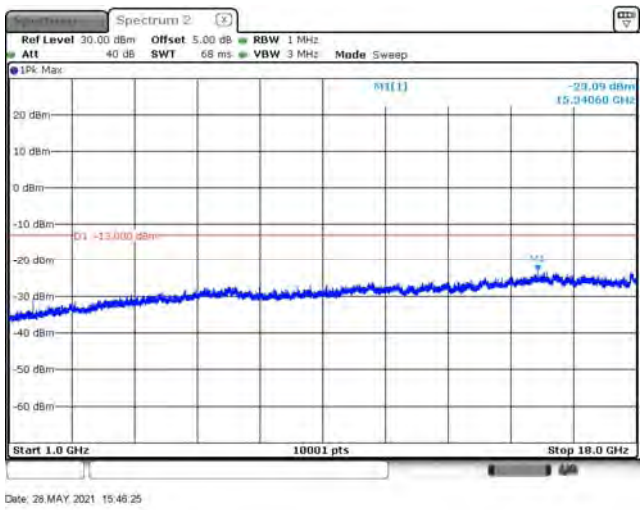


B4_CH20300_20M_1RB0__QPSK_Below 1G



Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 3: LTE Band 5		
Date of Test	2021/05/28	Test Site	SR10-H
Temperature(°C)	26.2	Humidity (%RH)	63

LTE_B5_CH20407_1.4M_1RB0__QPSK_Above 1G



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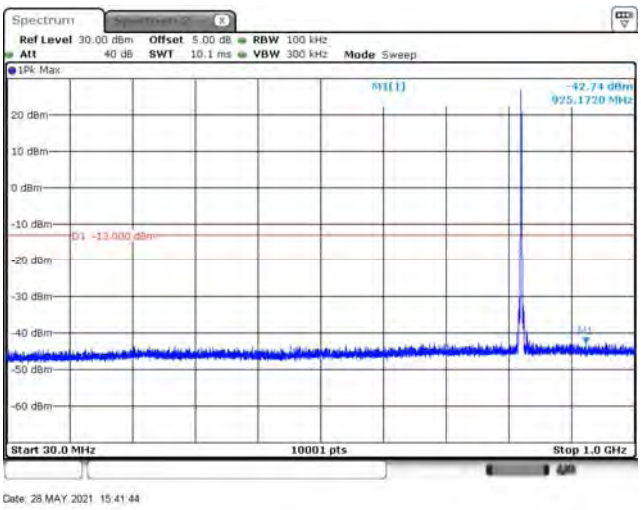

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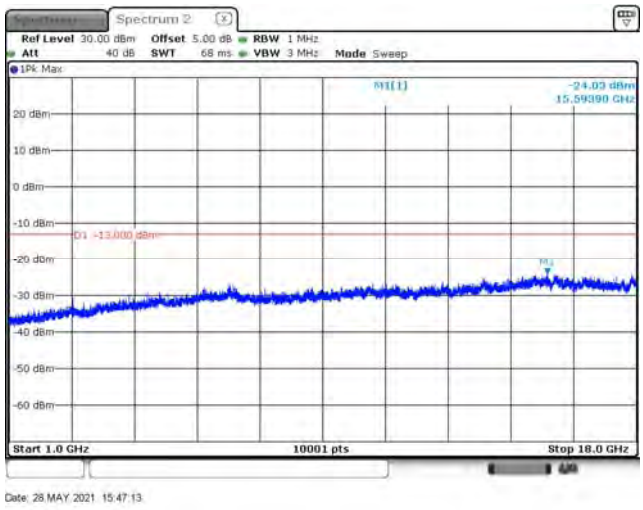
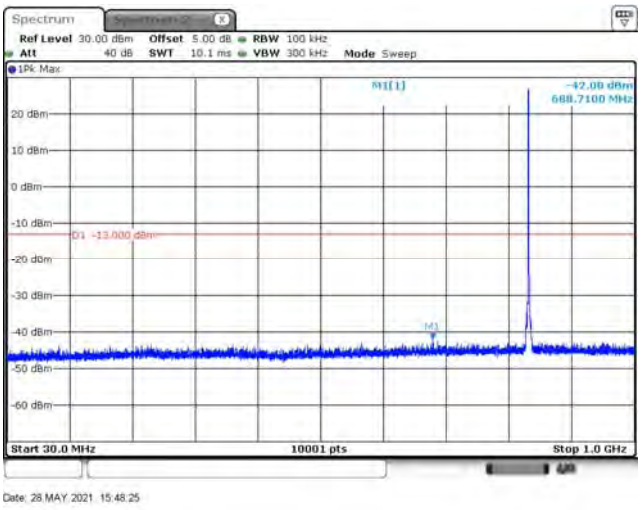
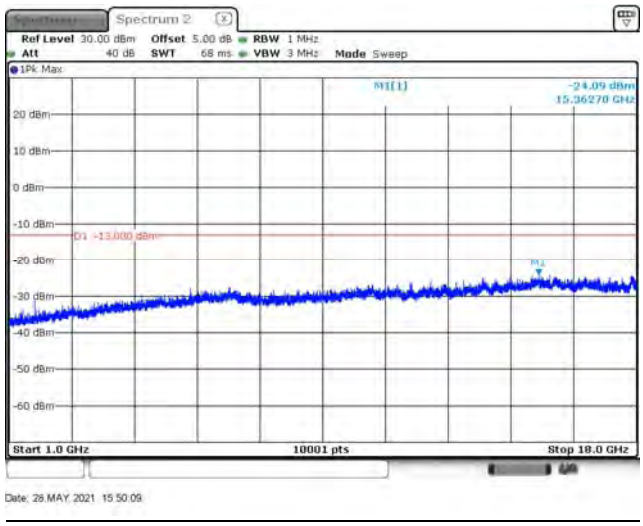
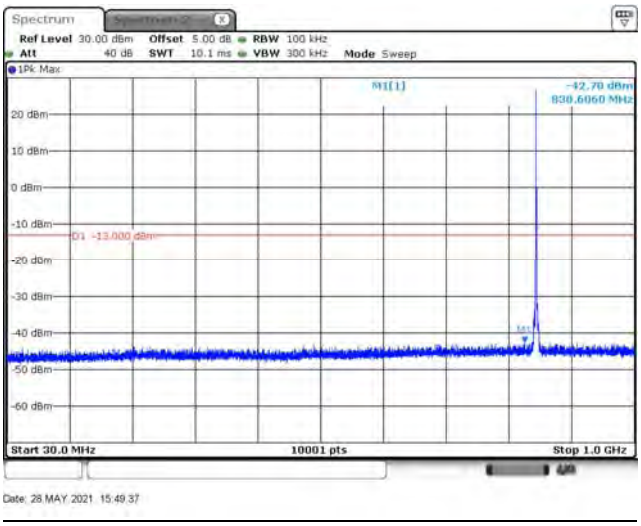
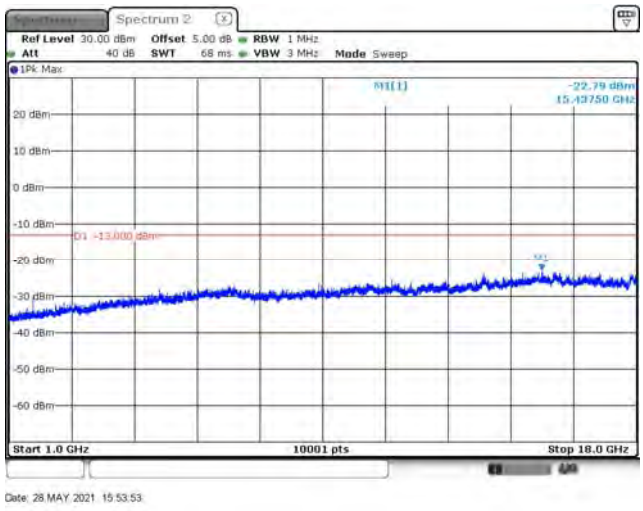


LTE_B5_CH20525_1.4M_1RB0__QPSK_Below 1G

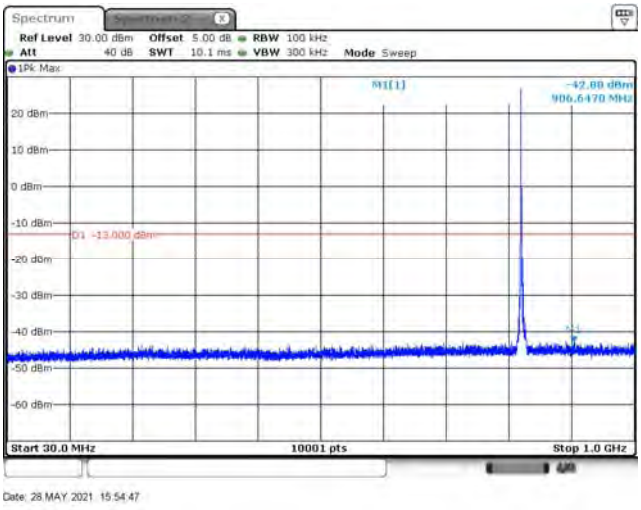


LTE_B5_CH20643_1.4M_1RB0__QPSK_Above 1G	LTE_B5_CH20643_1.4M_1RB0__QPSK_Below 1G
	

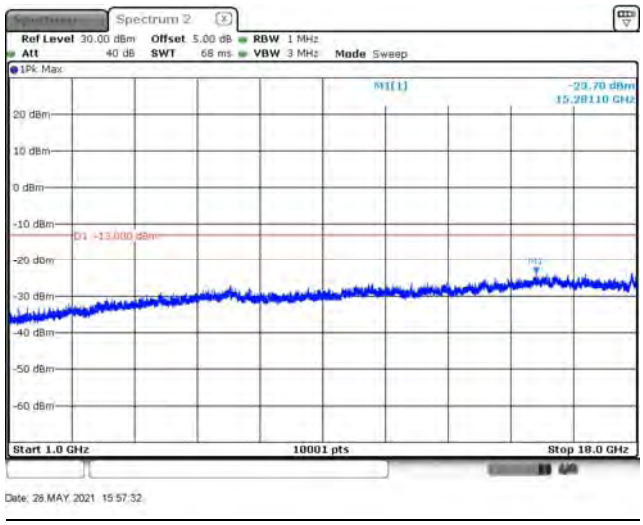
LTE_B5_CH20415_3M_1RB0__QPSK_Above 1G



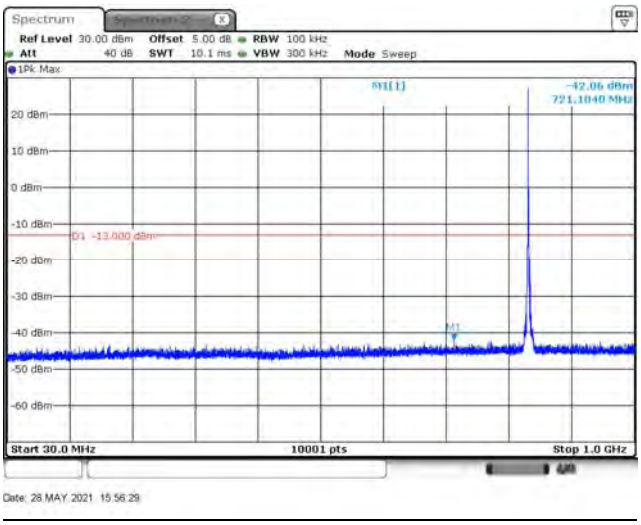
LTE_B5_CH20415_3M_1RB0__QPSK_Below 1G



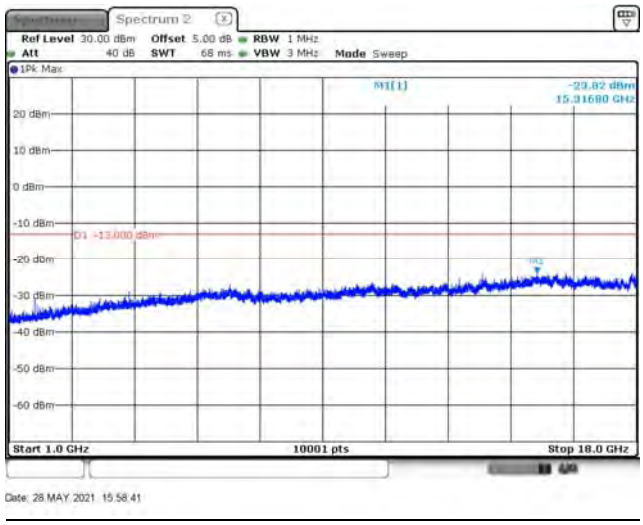
LTE_B5_CH20525_3M_1RB0__QPSK_Above 1G



LTE_B5_CH20525_3M_1RB0__QPSK_Below 1G



LTE_B5_CH20635_3M_1RB0__QPSK_Above 1G



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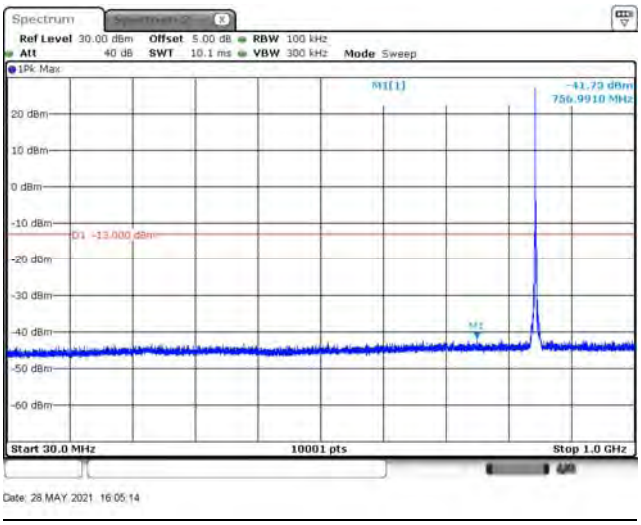
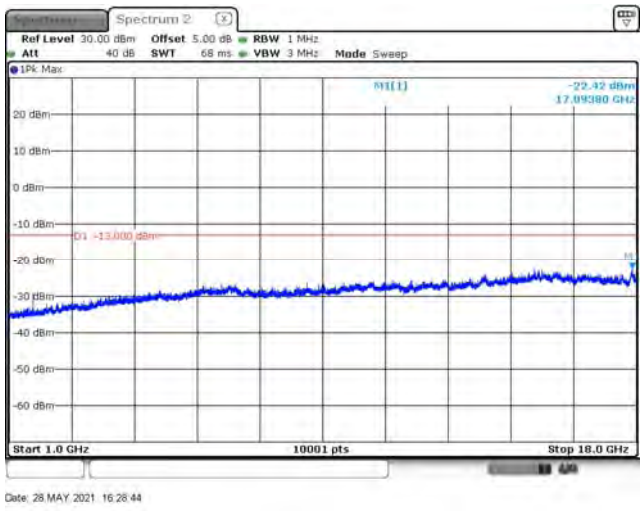
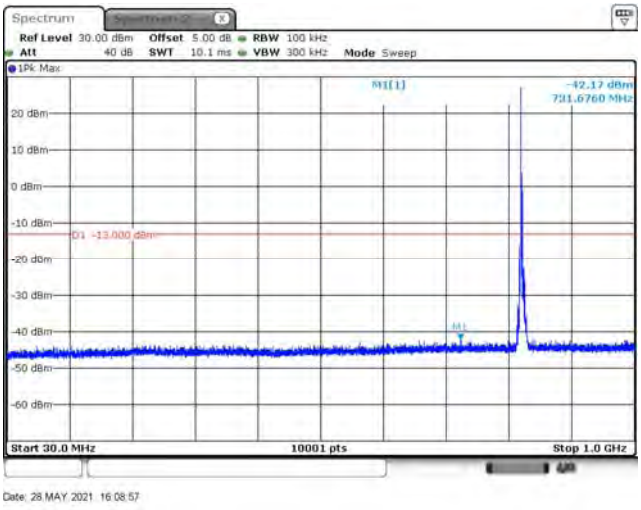


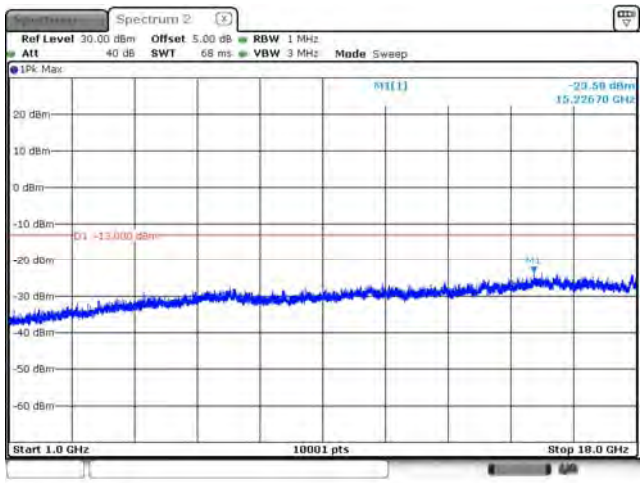
LTE_B5_CH20425_5M_1RB0__QPSK_Above 1G



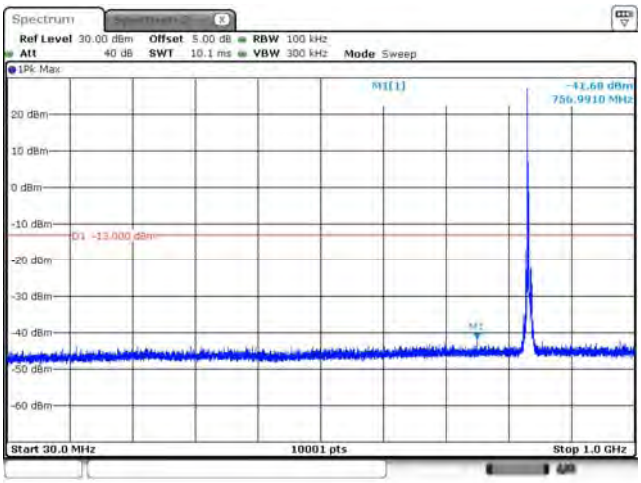
LTE_B5_CH20425_5M_1RB0__QPSK_Below 1G



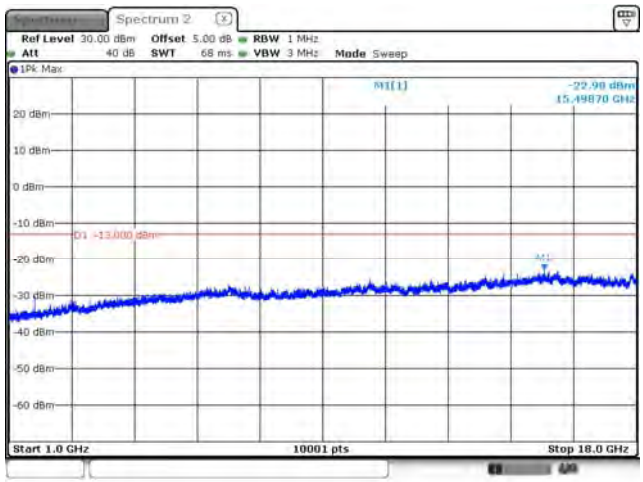
LTE_B5_CH20525_5M_1RB0__QPSK_Above 1G



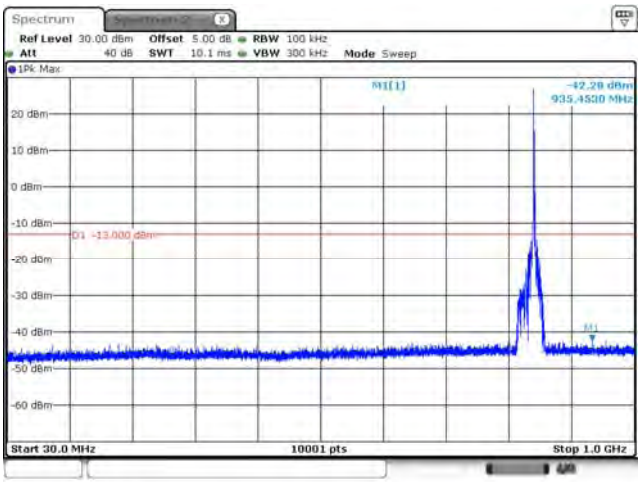
LTE_B5_CH20525_5M_1RB0__QPSK_Below 1G



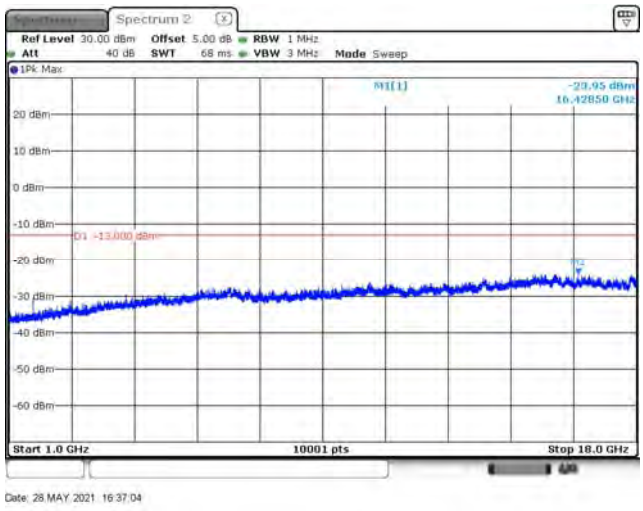
LTE_B5_CH20625_5M_1RB0__QPSK_Above 1G



LTE_B5_CH20625_5M_1RB0__QPSK_Below 1G



LTE_B5_CH20450_10M_1RB0__QPSK_Above 1G



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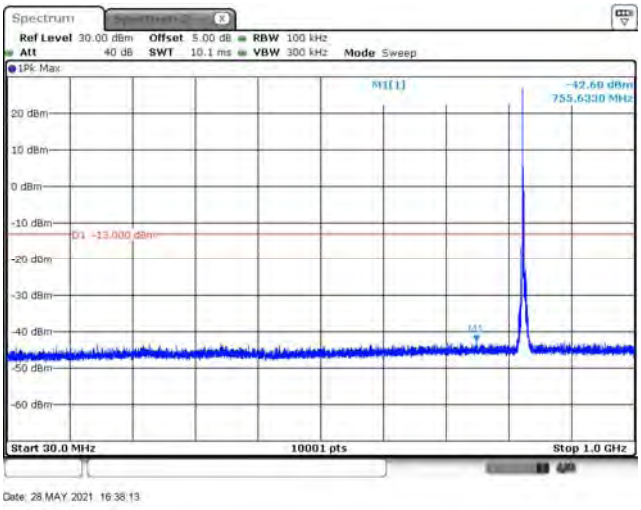

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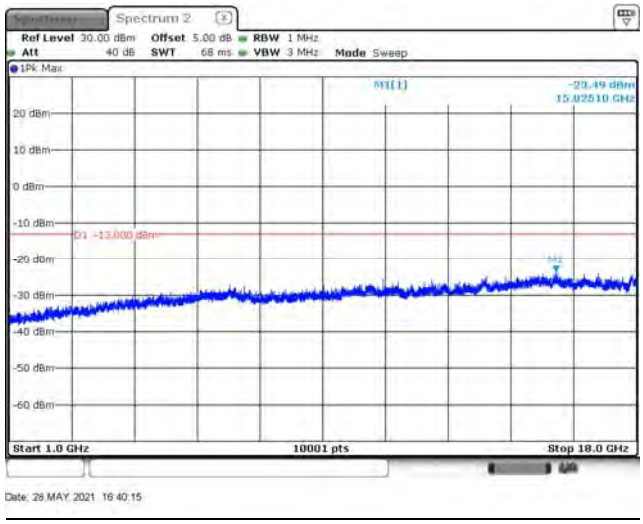

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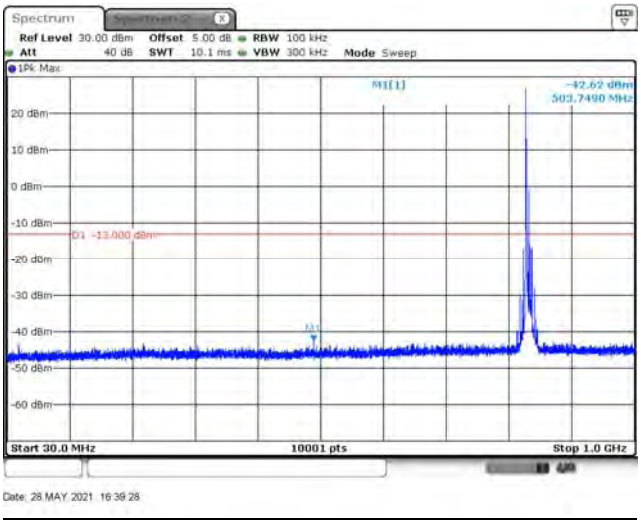
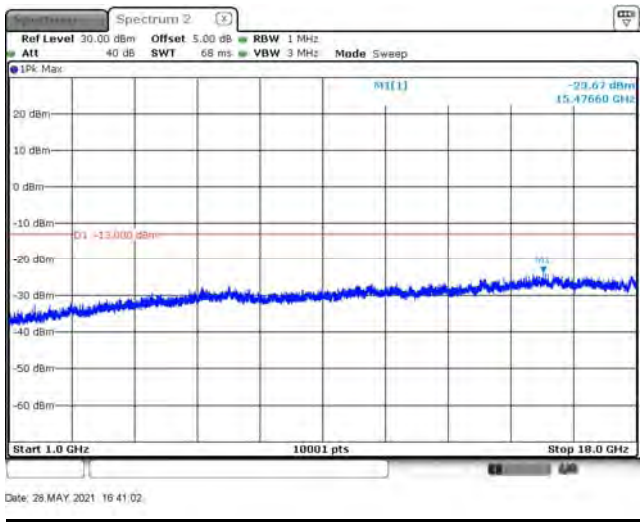


LTE_B5_CH20600_10M_1RB0__QPSK_Above 1G



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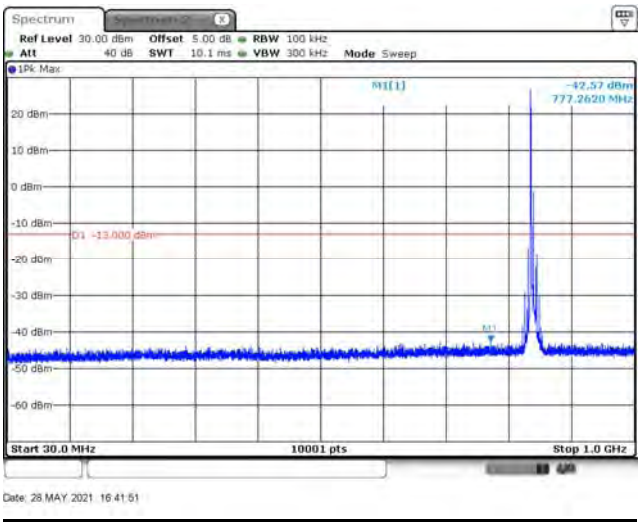
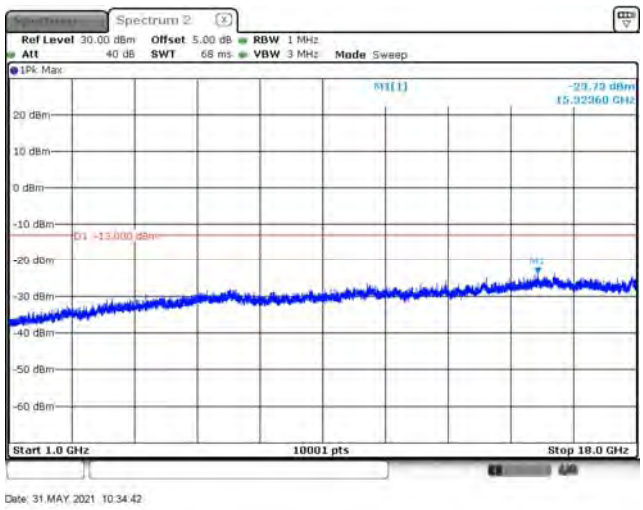
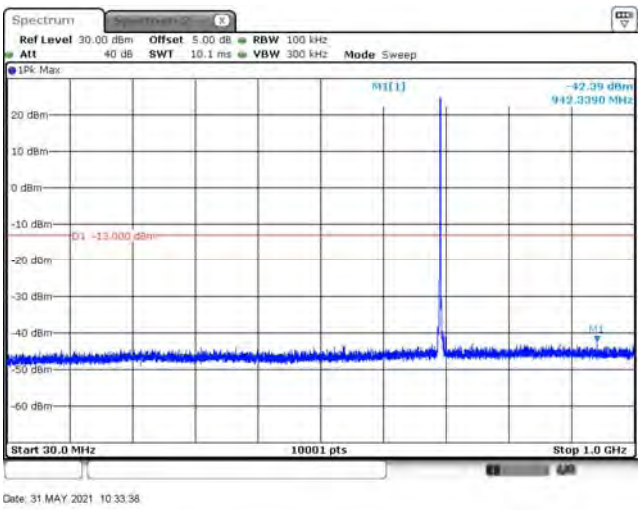


Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 4: LTE Band 12		
Date of Test	2021/05/31	Test Site	SR10-H
Temperature(°C)	25	Humidity (%RH)	58

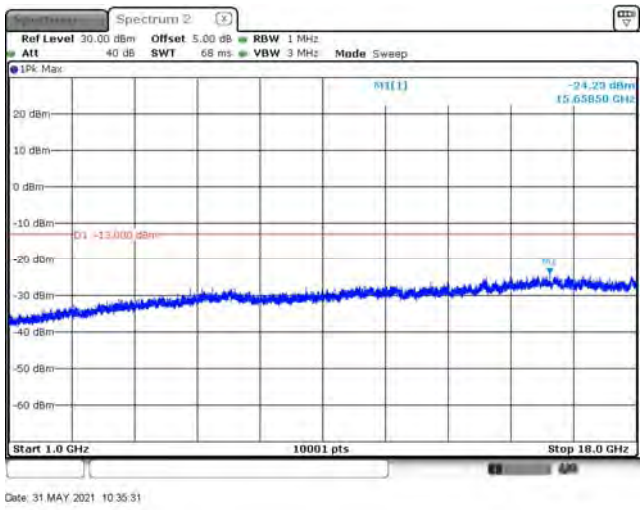
LTE_B12_CH23017_1.4M_1RB0__QPSK_Above 1G



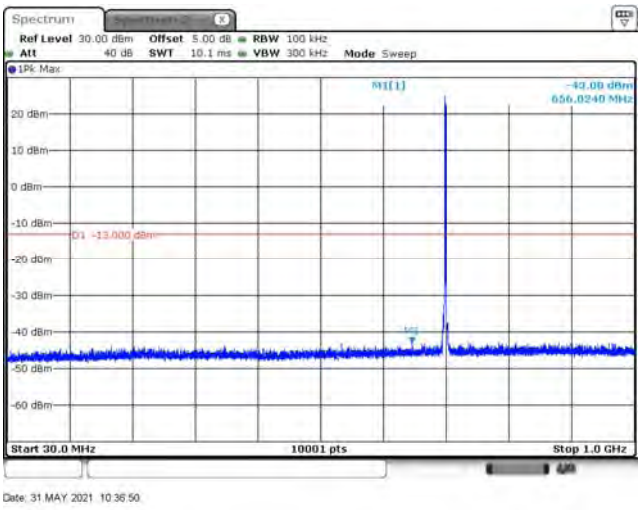
LTE_B12_CH23017_1.4M_1RB0__QPSK_Below 1G

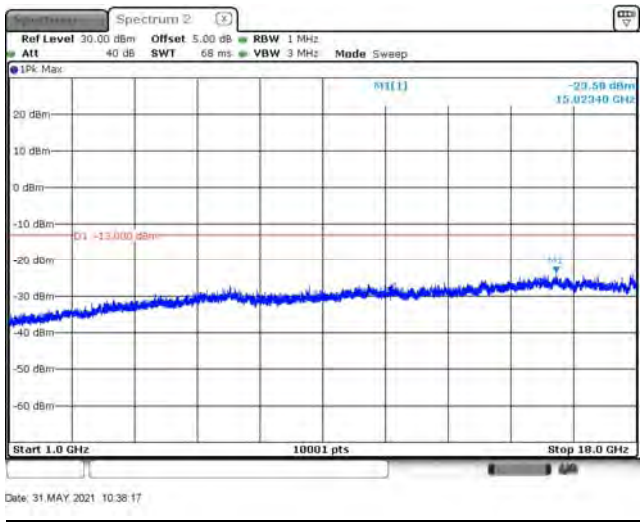
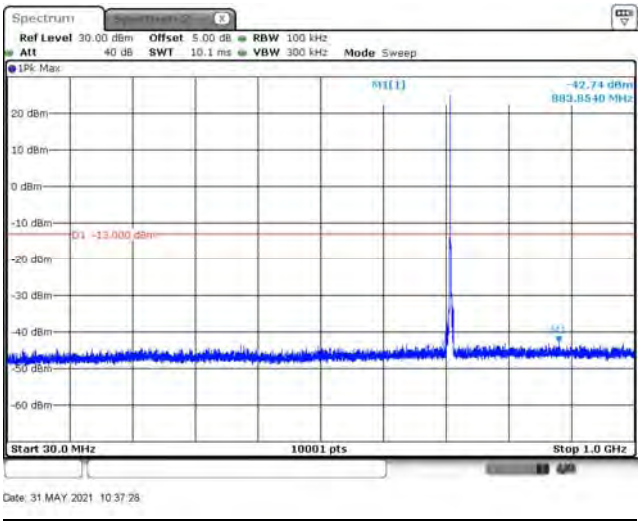


LTE_B12_CH23095_1.4M_1RB0__QPSK_Above 1G

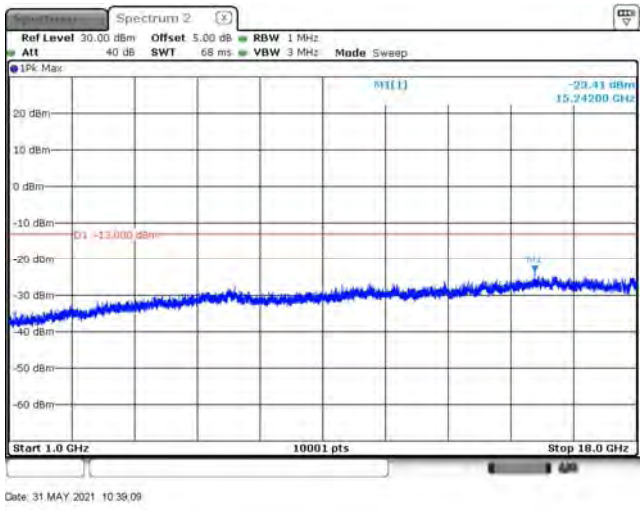


LTE_B12_CH23095_1.4M_1RB0__QPSK_Below 1G

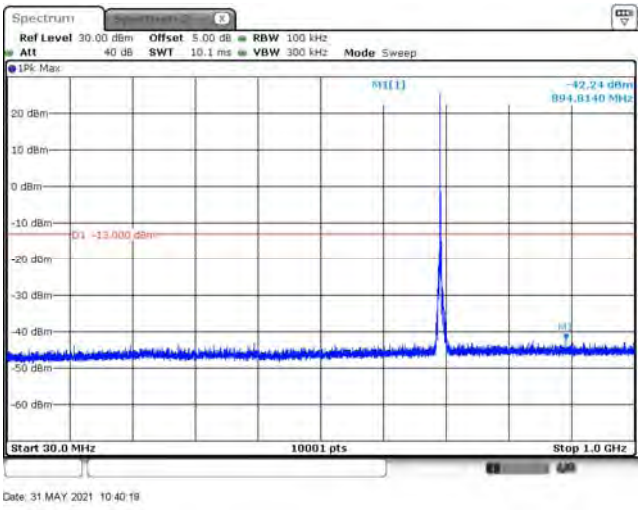


LTE_B12_CH23173_1.4M_1RB0__QPSK_Above 1G	LTE_B12_CH23173_1.4M_1RB0__QPSK_Below 1G
	

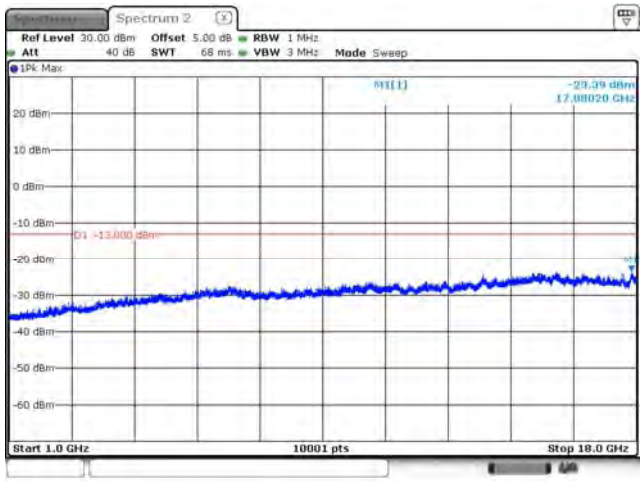
LTE_B12_CH23025_3M_1RB0__QPSK_Above 1G



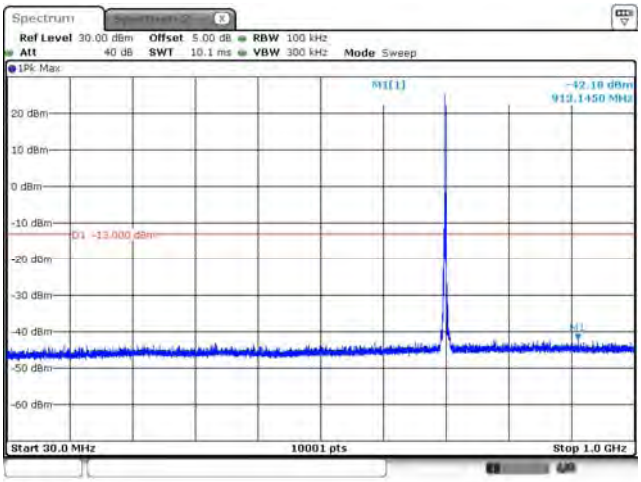
LTE_B12_CH23025_3M_1RB0__QPSK_Below 1G



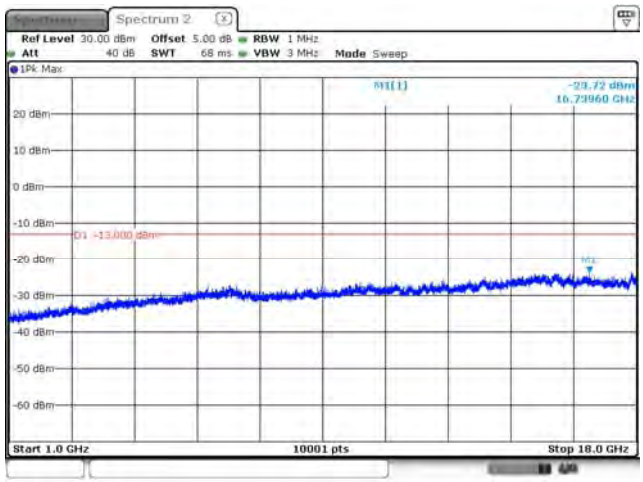
LTE_B12_CH23095_3M_1RB0__QPSK_Above 1G



LTE_B12_CH23095_3M_1RB0__QPSK_Below 1G



LTE_B12_CH23165_3M_1RB0__QPSK_Above 1G



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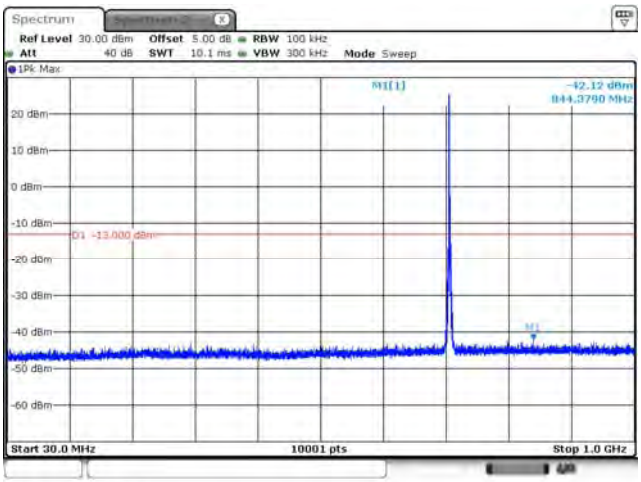
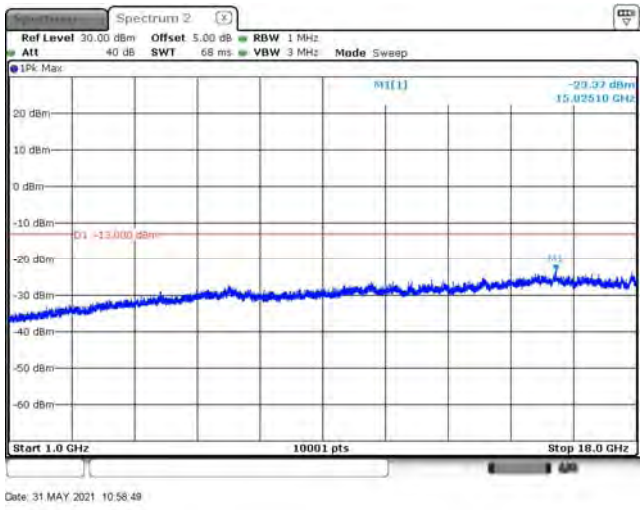
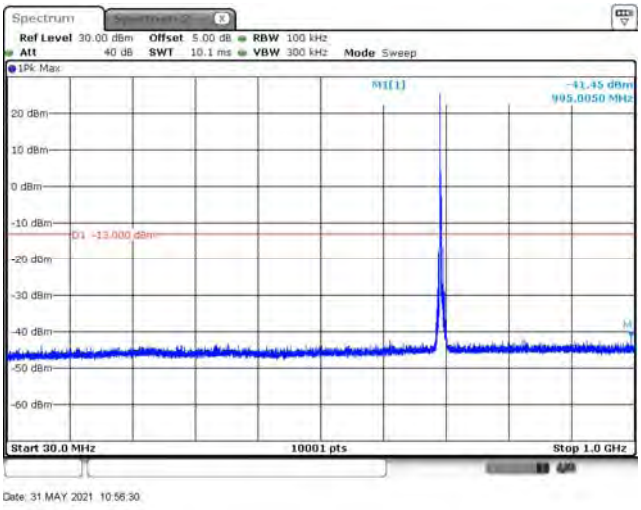


LTE_B12_CH23035_5M_1RB0__QPSK_Above 1G



LTE_B12_CH23035_5M_1RB0__QPSK_Below 1G



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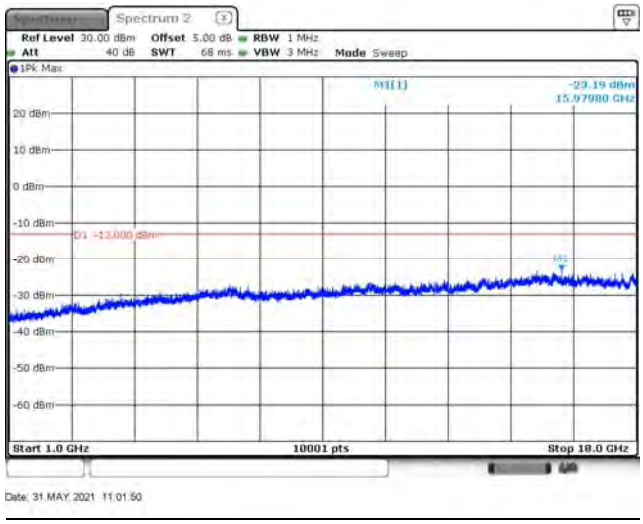
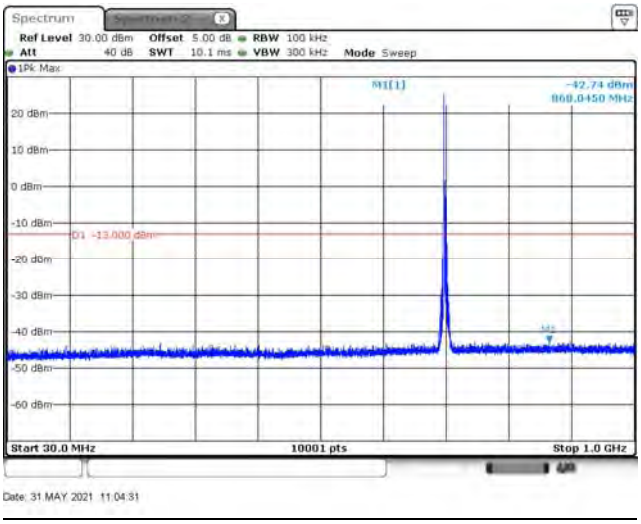
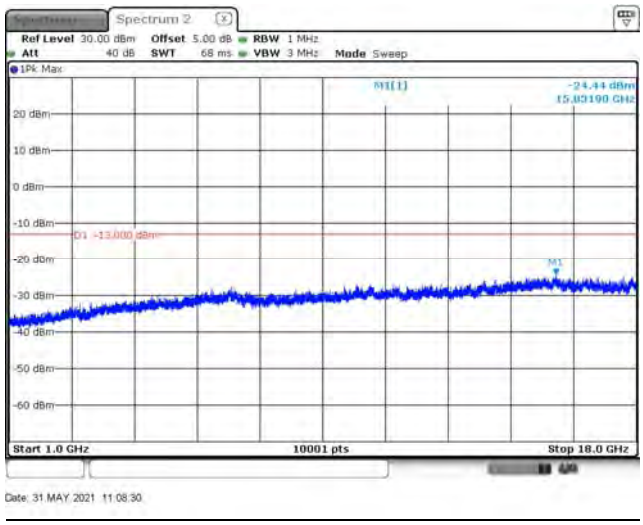


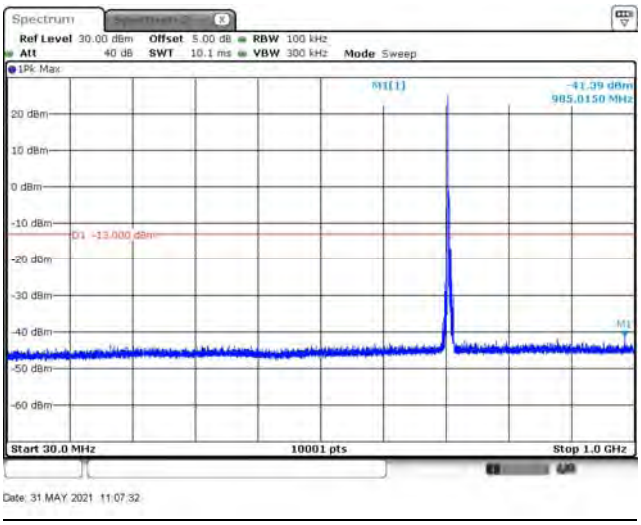
LTE_B12_CH23095_5M_1RB0__QPSK_Below 1G



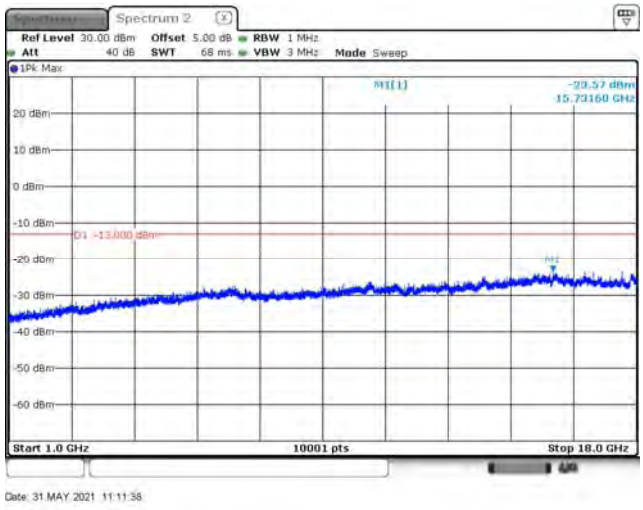
LTE_B12_CH23155_5M_1RB0__QPSK_Above 1G



LTE_B12_CH23155_5M_1RB0__QPSK_Below 1G



LTE_B12_CH23060_10M_1RB0__QPSK_Above 1G



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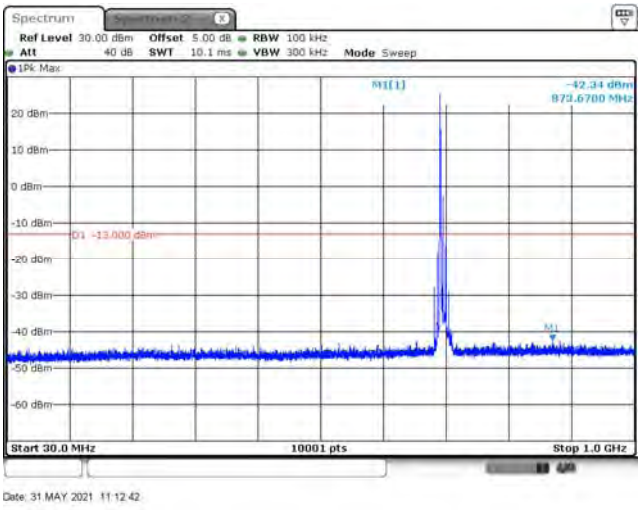
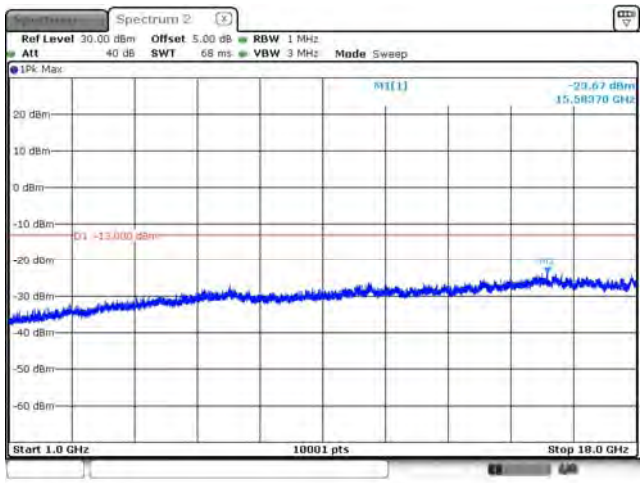
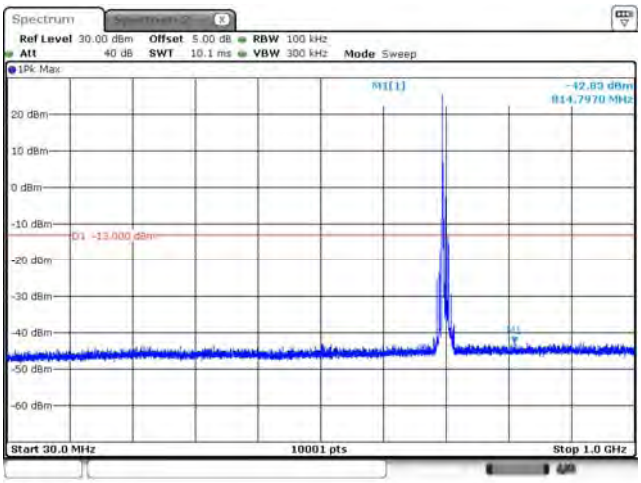


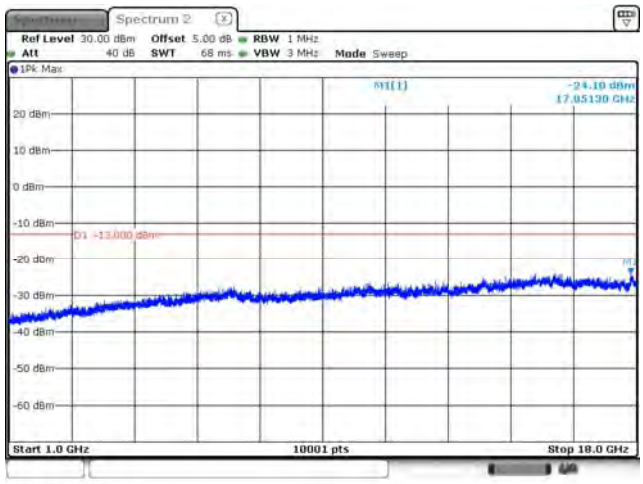
LTE_B12_CH23095_10M_1RB0__QPSK_Above 1G



LTE_B12_CH23095_10M_1RB0__QPSK_Below 1G



LTE_B12_CH23130_10M_1RB0__QPSK_Above 1G



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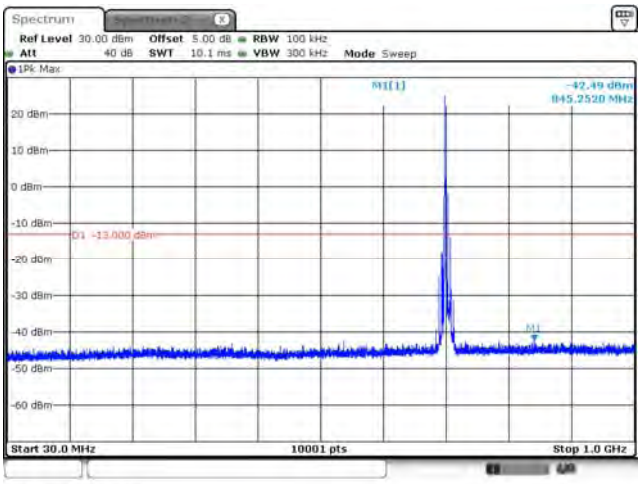
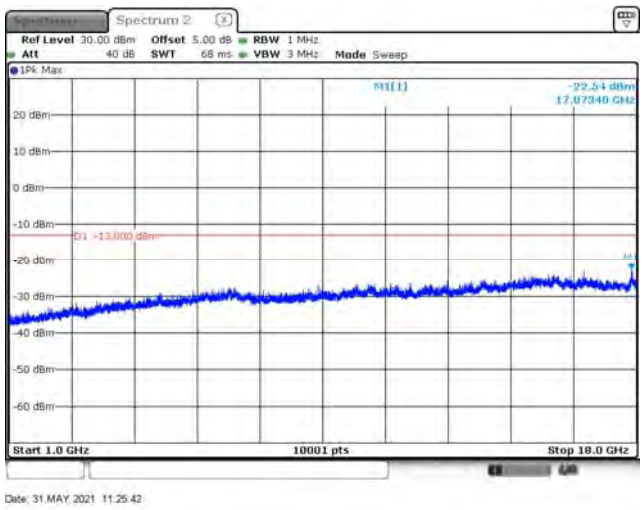


Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 5: LTE Band 14		
Date of Test	2021/05/31	Test Site	SR10-H
Temperature(°C)	25	Humidity (%RH)	58

B14_CH23305_5M_1RB0__QPSK_Above 1G



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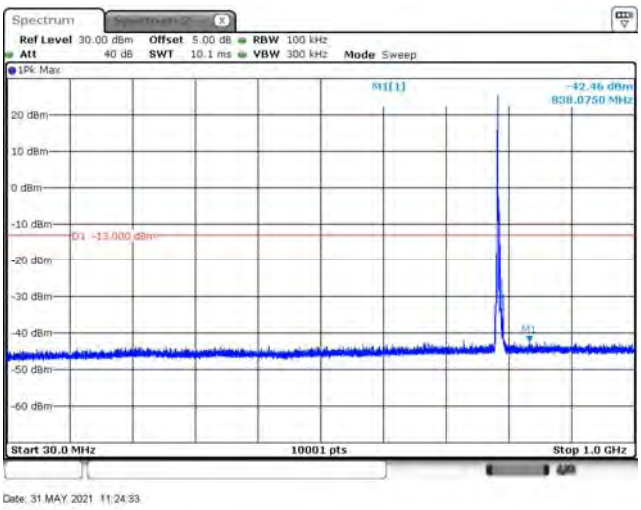
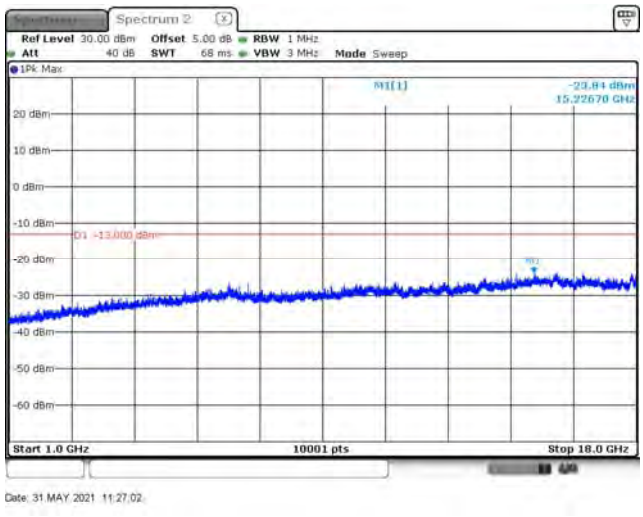


B14_CH23330_5M_1RB0__QPSK_Above 1G



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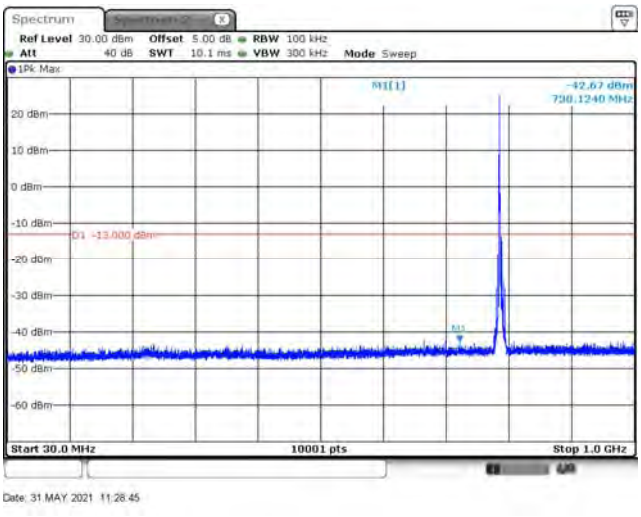
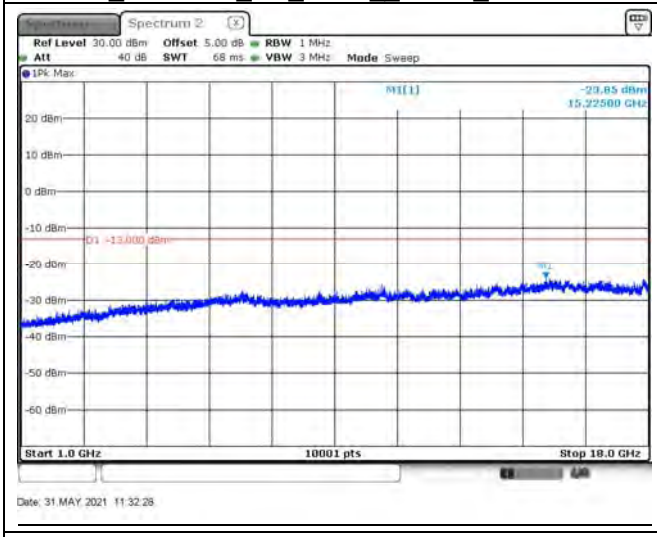


B14_CH23355_5M_1RB0__QPSK_Above 1G



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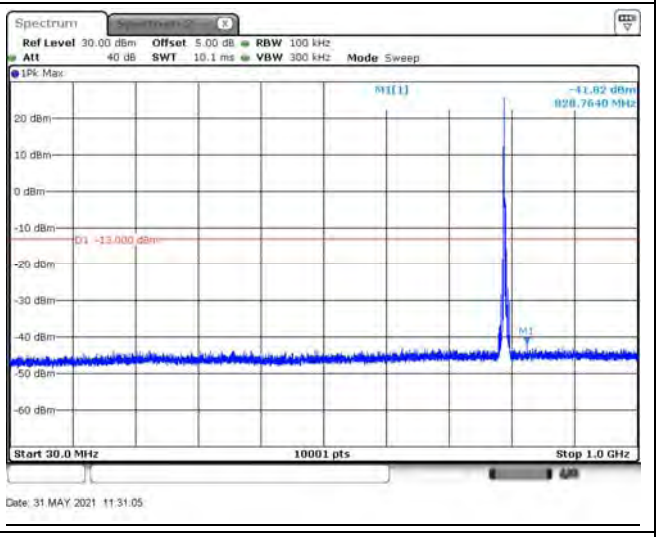
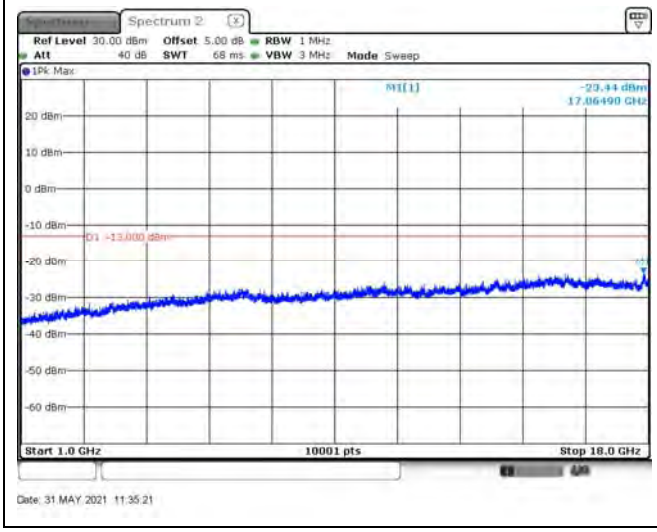
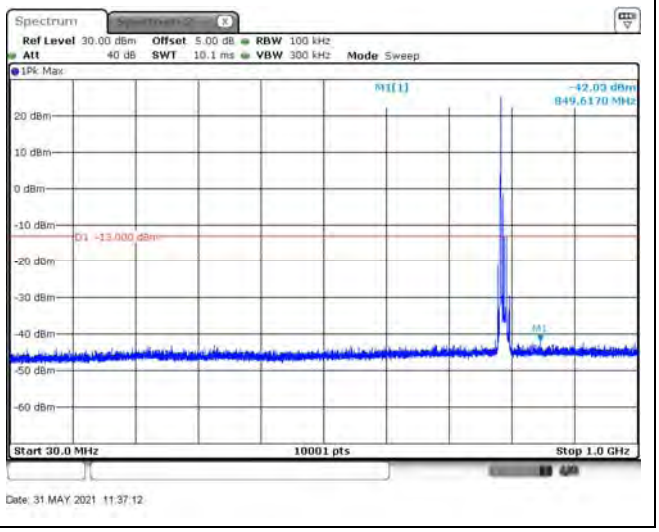


B14_CH23330_10M_1RB0__QPSK_Above 1G

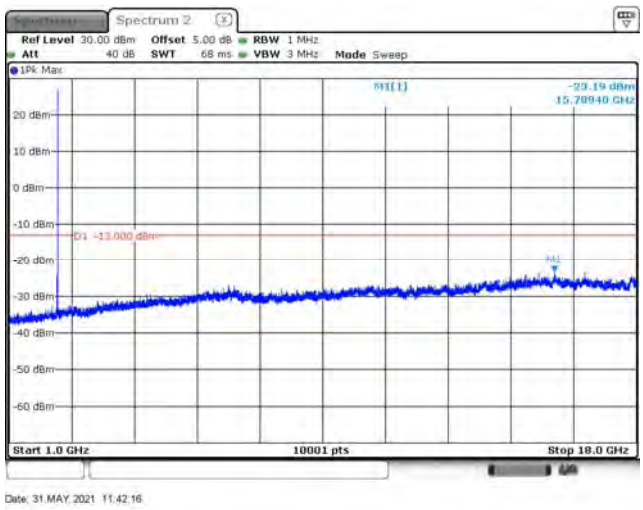


B14_CH23330_10M_1RB0__QPSK_Below 1G

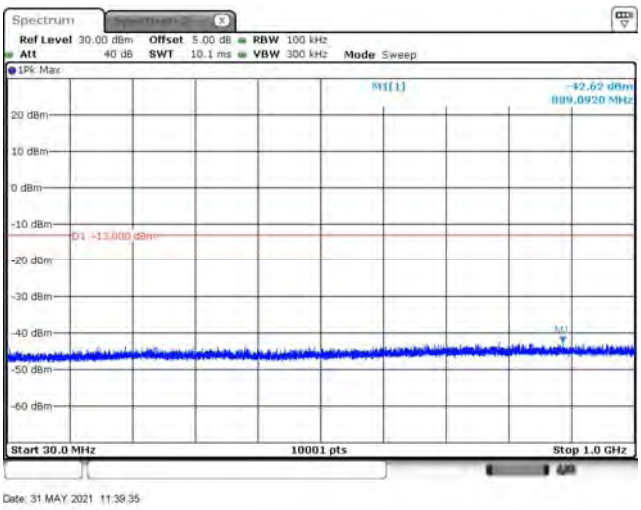


Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 6: LTE Band 30		
Date of Test	2021/05/31	Test Site	SR10-H
Temperature(°C)	25	Humidity (%RH)	58

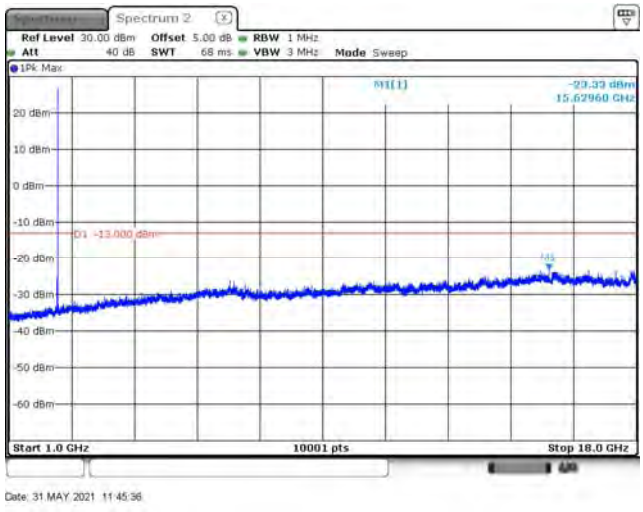
B30_CH27685_5M_1RB0__QPSK_Above 1G



B30_CH27685_5M_1RB0__QPSK_Below 1G



B30_CH27710_5M_1RB0__QPSK_Above 1G



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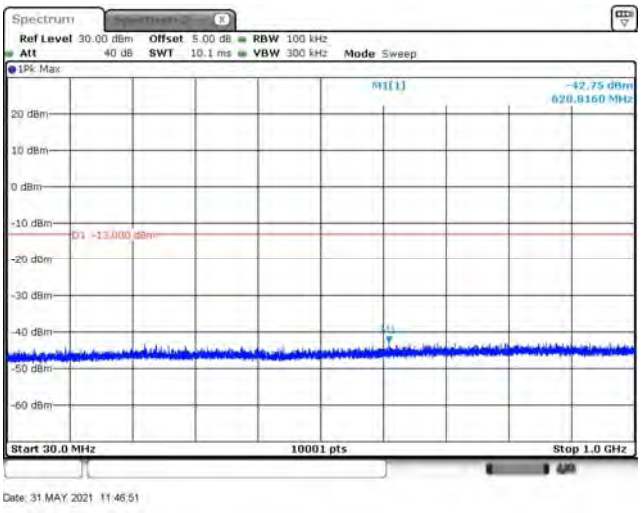
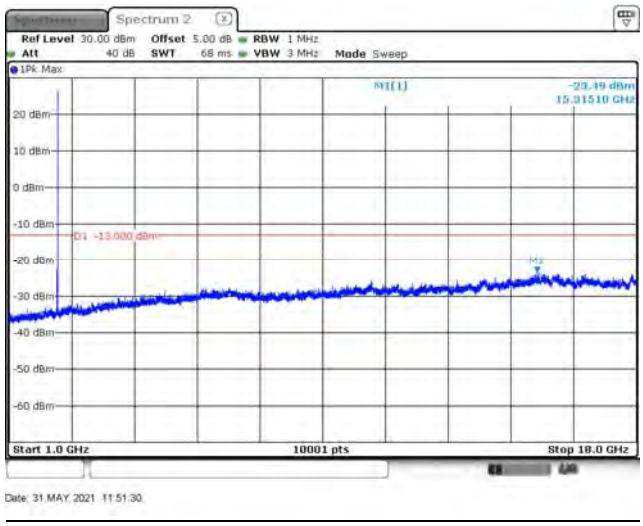


B30_CH27735_5M_1RB0__QPSK_Above 1G



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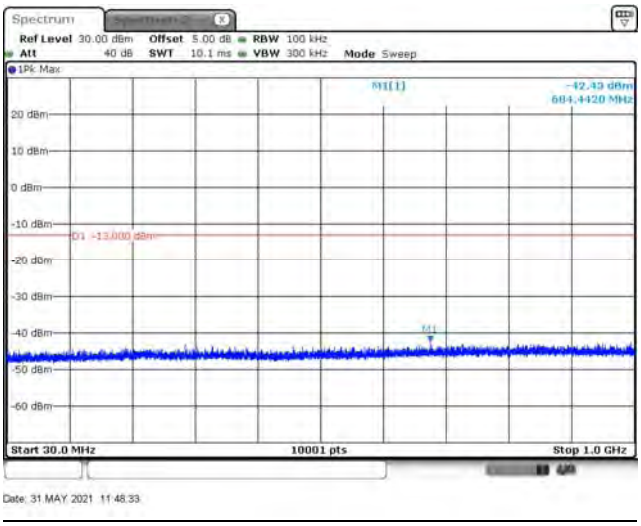
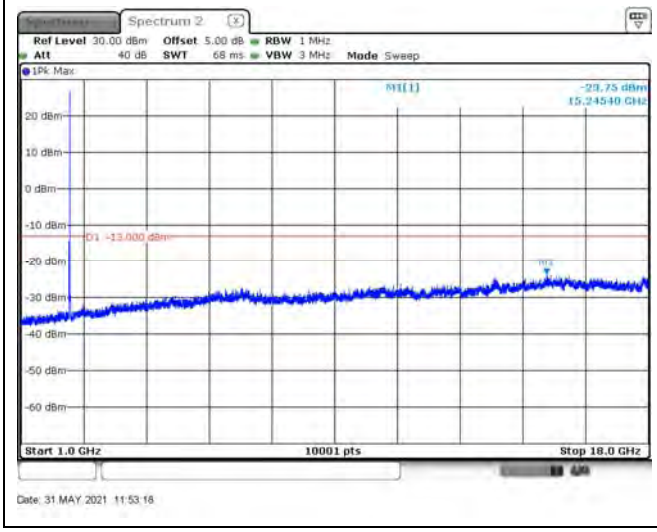


B30_CH27710_10M_1RB0__QPSK_Above 1G



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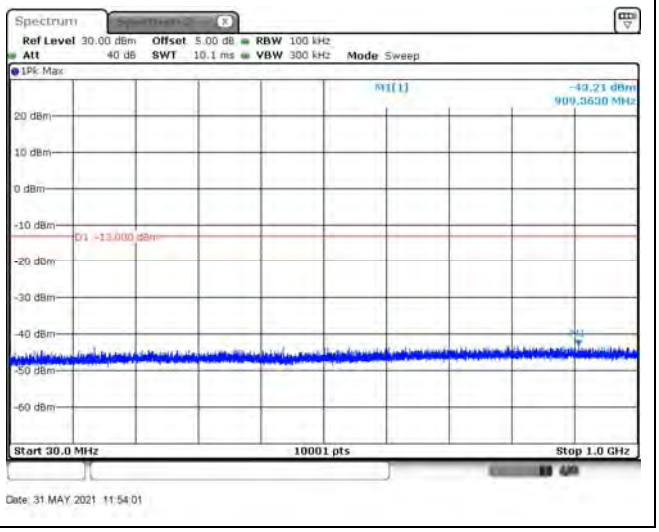


Radiated Spurious Emission

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2021/05/25	Test Site	CB2-H
Temperature(°C)	25.5	Humidity (%RH)	58

BW20M_Ch 18700_QPSK_LTE Band2

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	3720.000	-46.95	-13	-33.95	-55.04	12.61	4.52
	5580.000	-49.82	-13	-36.82	-57.26	13.12	5.68
	7440.000	-46.48	-13	-33.48	-51.16	11.28	6.61
V	3720.000	-48.83	-13	-35.83	-56.92	12.61	4.52
	5580.000	-43.99	-13	-30.99	-51.43	13.12	5.68
	7440.000	-41.45	-13	-28.45	-46.13	11.28	6.61

BW20M_Ch 18900_QPSK_LTE Band2

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	3760.000	-45.87	-13	-32.87	-53.94	12.60	4.54
	5640.000	-47.68	-13	-34.68	-55.08	13.10	5.70
	7520.000	-43.07	-13	-30.07	-47.69	11.24	6.61
V	3760.000	-51.26	-13	-38.26	-59.33	12.60	4.54
	5640.000	-43.78	-13	-30.78	-51.18	13.10	5.70
	7520.000	-40.54	-13	-27.54	-45.16	11.24	6.61

BW20M_Ch 19100_QPSK_LTE Band2

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	3800.000	-42.57	-13	-29.57	-50.62	12.60	4.56
	5700.000	-45.63	-13	-32.63	-53.00	13.08	5.72
	7600.000	-45.01	-13	-32.01	-49.65	11.24	6.60
V	3800.000	-48.29	-13	-35.29	-56.34	12.60	4.56
	5700.000	-45.13	-13	-32.13	-52.50	13.08	5.72
	7600.000	-39.39	-13	-26.39	-44.03	11.24	6.60

Note: Emission Level=SG(Signal Generator) Level+Antenna Gain-Cable Loss.

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 2: LTE Band 4		
Date of Test	2021/05/25	Test Site	CB2-H
Temperature(°C)	25.5	Humidity (%RH)	58

BW20M_Ch 20050_QPSK_LTE Band4

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	3440.000	-38.28	-13	-25.28	-46.39	12.48	4.37
	5160.000	-50.75	-13	-37.75	-58.15	12.81	5.41
	6880.000	-40.53	-13	-27.53	-45.92	11.79	6.40
V	3440.000	-40.32	-13	-27.32	-48.43	12.48	4.37
	5160.000	-51.04	-13	-38.04	-58.44	12.81	5.41
	6880.000	-38.18	-13	-25.18	-43.57	11.79	6.40
	8600.000	-37.87	-13	-24.87	-42.81	11.87	6.93

BW20M_Ch 20175_QPSK_LTE Band4

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	3465.000	-39.78	-13	-26.78	-47.93	12.53	4.38
	5197.500	-51.37	-13	-38.37	-58.78	12.84	5.43
	6930.000	-37.13	-13	-24.13	-42.40	11.73	6.46
V	3465.000	-44.56	-13	-31.56	-52.71	12.53	4.38
	5197.500	-50.44	-13	-37.44	-57.85	12.84	5.43
	6930.000	-40.63	-13	-27.63	-45.90	11.73	6.46
	8662.500	-38.34	-13	-25.34	-43.26	11.87	6.95

BW20M_Ch 20300_QPSK_LTE Band4

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	3490.000	-43.12	-13	-30.12	-51.31	12.59	4.40
	5235.000	-51.38	-13	-38.38	-58.80	12.88	5.46
	6980.000	-41.29	-13	-28.29	-46.45	11.67	6.51
V	3490.000	-47.88	-13	-34.88	-56.07	12.59	4.40
	5235.000	-50.54	-13	-37.54	-57.96	12.88	5.46
	6980.000	-42.74	-13	-29.74	-47.90	11.67	6.51

Note: Emission Level=SG(Signal Generator) Level+Antenna Gain-Cable Loss.

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 3: LTE Band 5		
Date of Test	2021/05/26	Test Site	CB2-H
Temperature(°C)	25.5	Humidity (%RH)	58

BW10M_Ch 20450_QPSK_LTE Band5

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	1658.000	-36.46	-13	-23.46	-42.78	9.32	3.00
	2487.000	-43.00	-13	-30.00	-49.90	10.59	3.69
	3316.000	-52.98	-13	-39.98	-60.91	12.21	4.28
V	1658.000	-38.24	-13	-25.24	-44.56	9.32	3.00
	2487.000	-51.94	-13	-38.94	-58.84	10.59	3.69
	3316.000	-54.04	-13	-41.04	-61.97	12.21	4.28

BW10M_Ch 20525_QPSK_LTE Band5

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	1673.000	-33.74	-13	-20.74	-40.09	9.36	3.01
	2509.500	-44.88	-13	-31.88	-51.79	10.62	3.71
	3346.000	-54.39	-13	-41.39	-62.37	12.27	4.30
V	1673.000	-32.80	-13	-19.80	-39.15	9.36	3.01
	2509.500	-48.60	-13	-35.60	-55.51	10.62	3.71
	3346.000	-54.60	-13	-41.60	-62.58	12.27	4.30

BW10M_Ch 20600_QPSK_LTE Band5

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	1688.000	-36.38	-13	-23.38	-42.76	9.41	3.02
	2532.000	-46.95	-13	-33.95	-53.88	10.66	3.73
	3376.000	-54.14	-13	-41.14	-62.16	12.34	4.32
V	1688.000	-36.13	-13	-23.13	-42.51	9.41	3.02
	2532.000	-50.38	-13	-37.38	-57.31	10.66	3.73
	3376.000	-54.35	-13	-41.35	-62.37	12.34	4.32

Note: Emission Level=SG(Signal Generator) Level+Antenna Gain-Cable Loss.

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 4: LTE Band 12		
Date of Test	2021/05/26	Test Site	CB2-H
Temperature(°C)	25.5	Humidity (%RH)	58

BW10M_Ch 23060_QPSK_LTE Band12

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	1408.000	-51.18	-13	-38.18	-56.74	8.31	2.75
	2112.000	-57.37	-13	-44.37	-64.37	10.41	3.41
	2816.000	-54.87	-13	-41.87	-62.13	11.18	3.92
V	1408.000	-55.83	-13	-42.83	-61.39	8.31	2.75
	2112.000	-57.41	-13	-44.41	-64.41	10.41	3.41
	2816.000	-54.54	-13	-41.54	-61.80	11.18	3.92

BW10M_Ch 23095_QPSK_LTE Band12

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	1415.000	-50.03	-13	-37.03	-55.63	8.35	2.75
	2122.500	-57.14	-13	-44.14	-64.13	10.41	3.42
	2830.000	-55.20	-13	-42.20	-62.48	11.21	3.93
V	1415.000	-53.59	-13	-40.59	-59.19	8.35	2.75
	2122.500	-57.09	-13	-44.09	-64.08	10.41	3.42
	2830.000	-54.72	-13	-41.72	-62.00	11.21	3.93

BW10M_Ch 23130_QPSK_LTE Band12

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	1422.000	-51.16	-13	-38.16	-56.79	8.39	2.76
	2133.000	-57.46	-13	-44.46	-64.45	10.42	3.42
	2844.000	-54.85	-13	-41.85	-62.15	11.23	3.94
V	1422.000	-56.71	-13	-43.71	-62.34	8.39	2.76
	2133.000	-57.15	-13	-44.15	-64.14	10.42	3.42
	2844.000	-54.85	-13	-41.85	-62.15	11.23	3.94

Note: Emission Level=SG(Signal Generator) Level+Antenna Gain-Cable Loss.

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 5: LTE Band 14		
Date of Test	2021/05/26	Test Site	CB2-H
Temperature(°C)	25.5	Humidity (%RH)	58

BW10M_Ch 23330_QPSK_LTE Band14

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	1586.000	-47.37	-40	-7.37	-53.54	9.10	2.93
	2379.000	-56.87	-13	-43.87	-63.80	10.54	3.61
	3172.000	-54.62	-13	-41.62	-62.35	11.89	4.17
V	1586.000	-51.55	-40	-11.55	-57.72	9.10	2.93
	2379.000	-56.32	-13	-43.32	-63.25	10.54	3.61
	3172.000	-54.64	-13	-41.64	-62.37	11.89	4.17

Note: Emission Level=SG(Signal Generator) Level+Antenna Gain-Cable Loss.

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 6: LTE Band 30		
Date of Test	2021/05/26	Test Site	CB2-H
Temperature(°C)	25.5	Humidity (%RH)	58

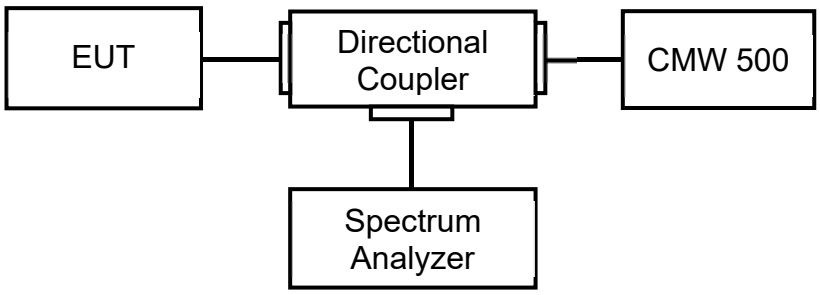
BW10M_Ch 27710_QPSK_LTE Band30

Antenna Polarity	Frequency (MHz)	Emission Level (dBm)	Limit (dBm)	Margin (dB)	SG Level (dBm)	Antenna Gain (dBi)	Cable Loss (dB)
H	4620.000	-41.10	-40	-1.10	-48.69	12.66	5.07
	6930.000	-46.86	-40	-6.86	-52.13	11.73	6.46
	9240.000	-43.71	-40	-3.71	-48.34	11.83	7.20
V	4620.000	-46.11	-40	-6.11	-53.70	12.66	5.07
	6930.000	-42.14	-40	-2.14	-47.41	11.73	6.46
	9240.000	-43.77	-40	-3.77	-48.40	11.83	7.20

Note: Emission Level=SG(Signal Generator) Level+Antenna Gain-Cable Loss.

7. Spurious Emissions at Antenna Terminals

7.1. Test Setup



7.2. Test Procedure

a) Place the EUT on a bench and set it in transmitting mode.

b) Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMW500 by a Directional Couple.

c) EUT Communicate with CMW500, then select a channel for testing.

d) Add a correction factor to the display of spectrum, and then test.

e) The resolution bandwidth of the spectrum analyzer was set at 1 MHz, sufficient scans were taken to show the out of band Emission if any up to 10th harmonic.

7.3. Test Method

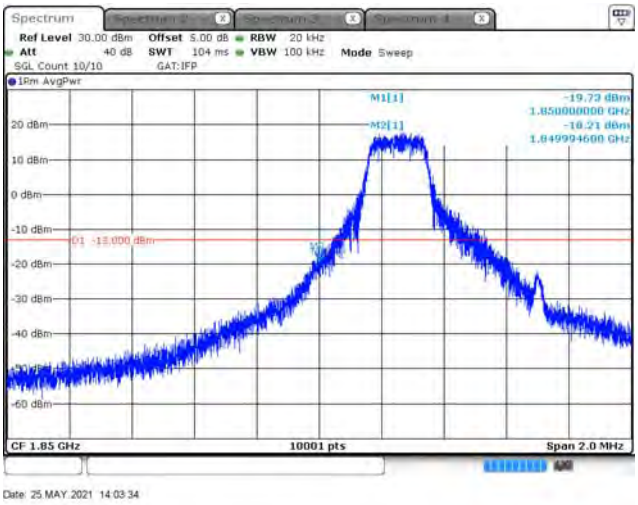
KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause 6.1

ANSI C63.26: 2015 Sub-clause 5.7

7.4. Test Result

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2021/05/25	Test Site	SR10-H
Temperature(°C)	25	Humidity (%RH)	59

LTE_B2_CH18607_1.4M__QPSK_1RB0



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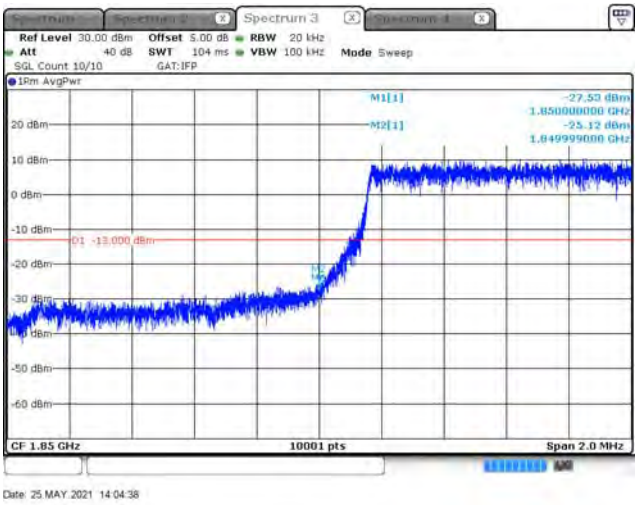

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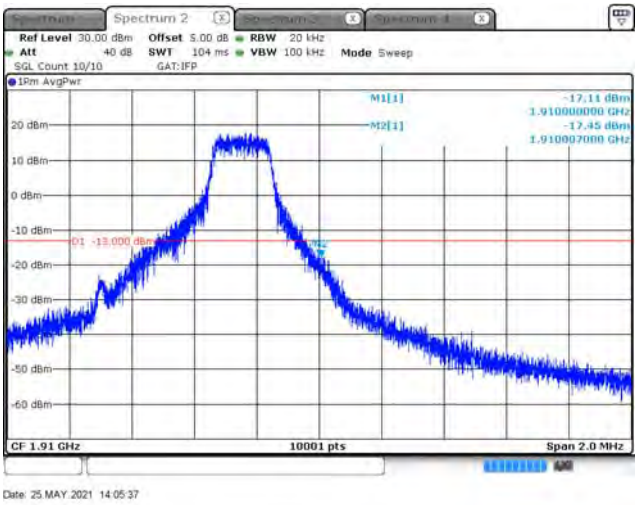

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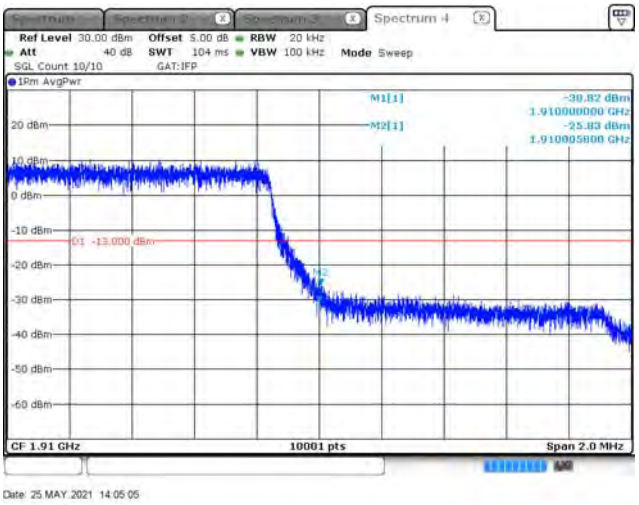

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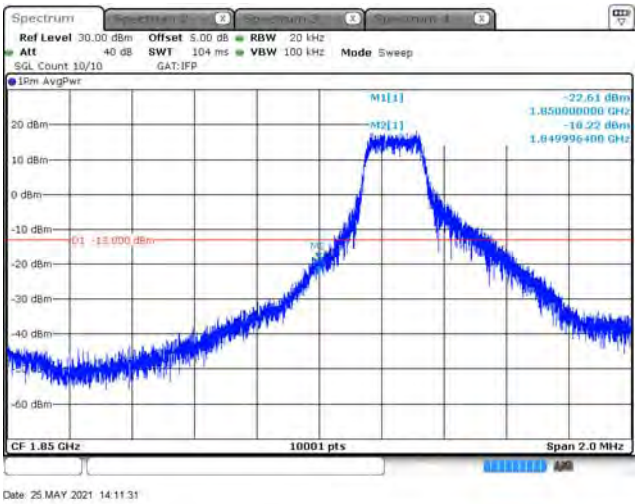

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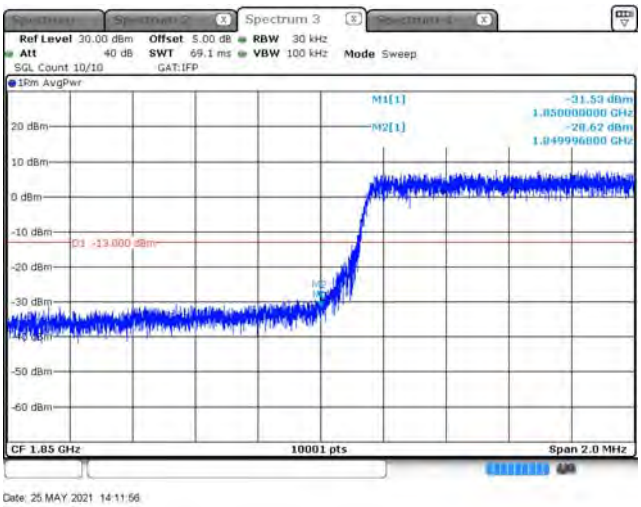

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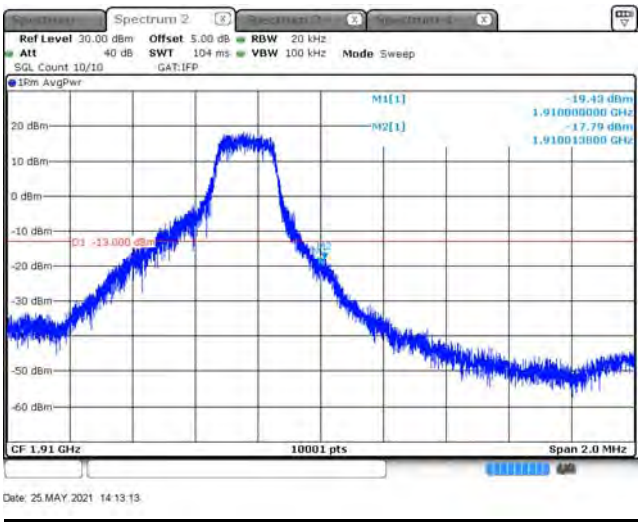

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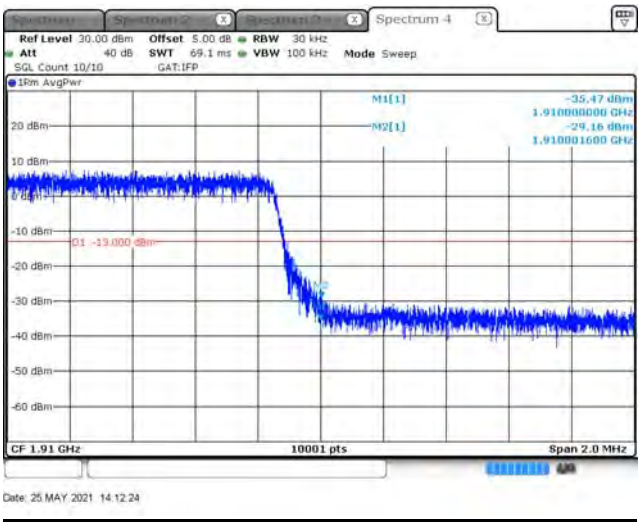

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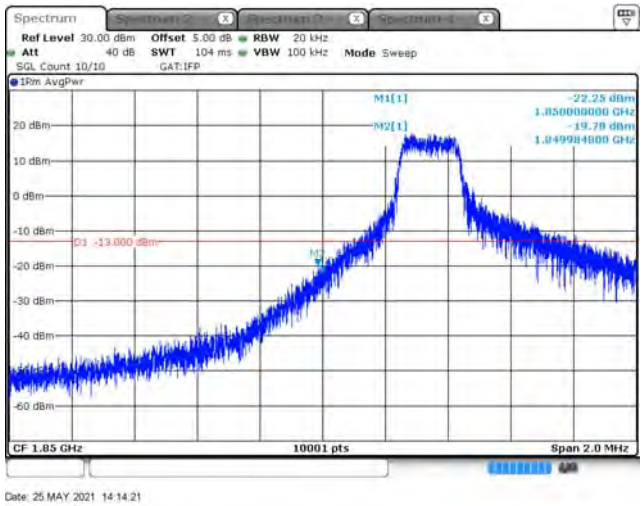

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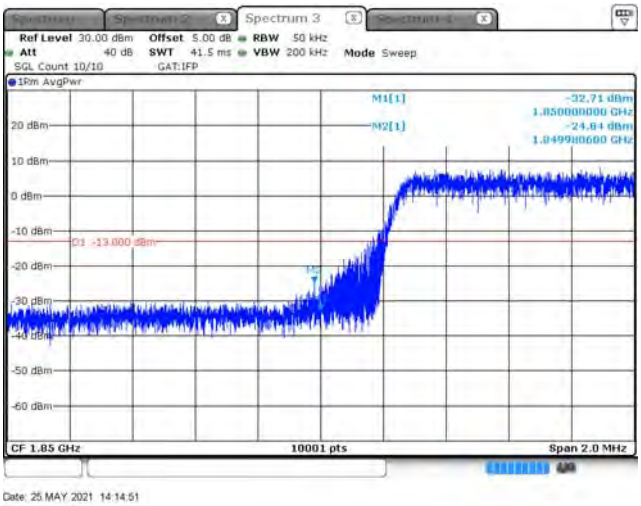

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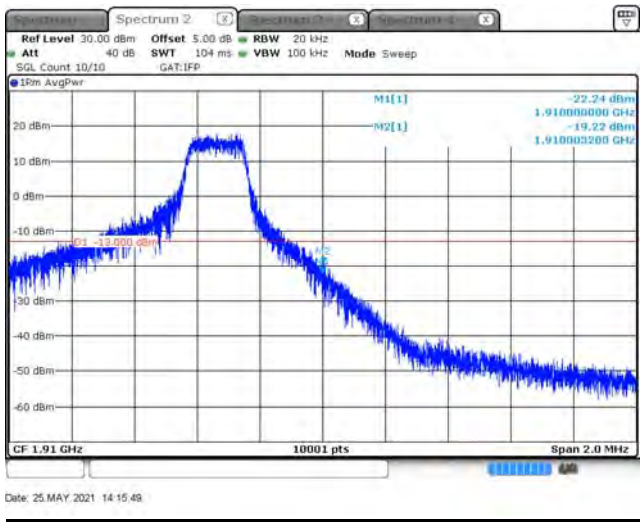

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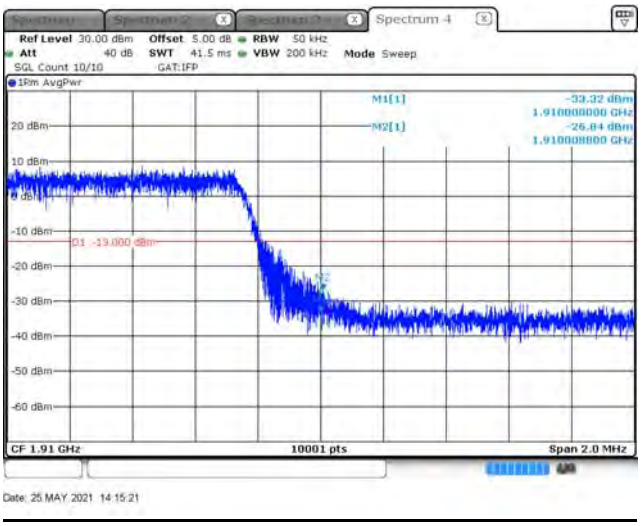

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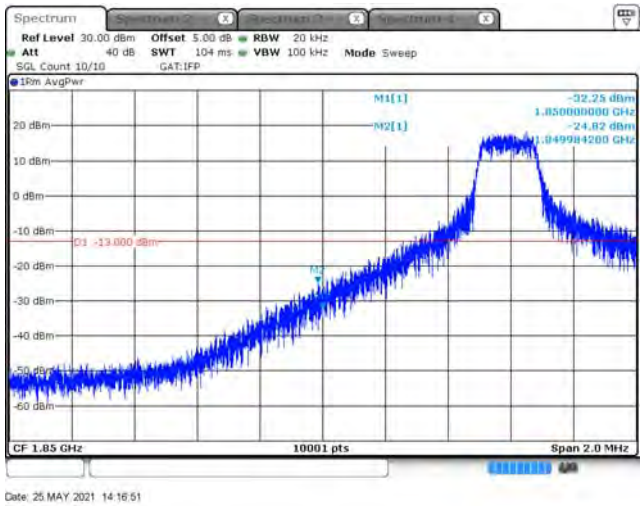

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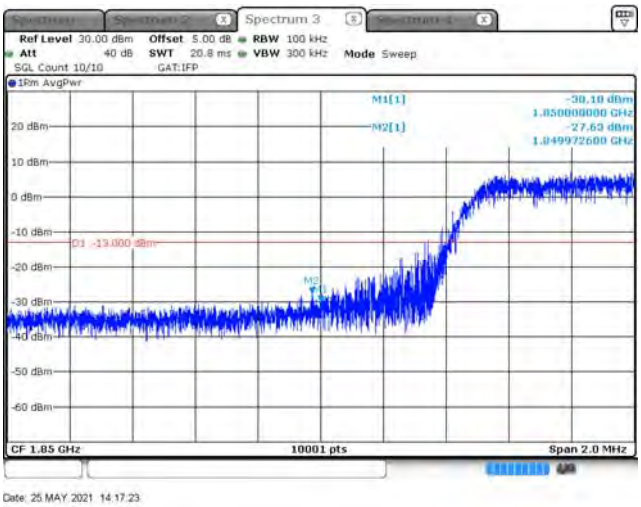

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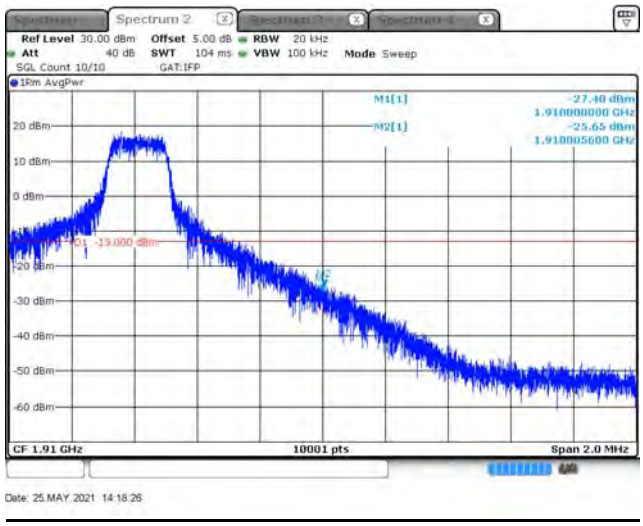

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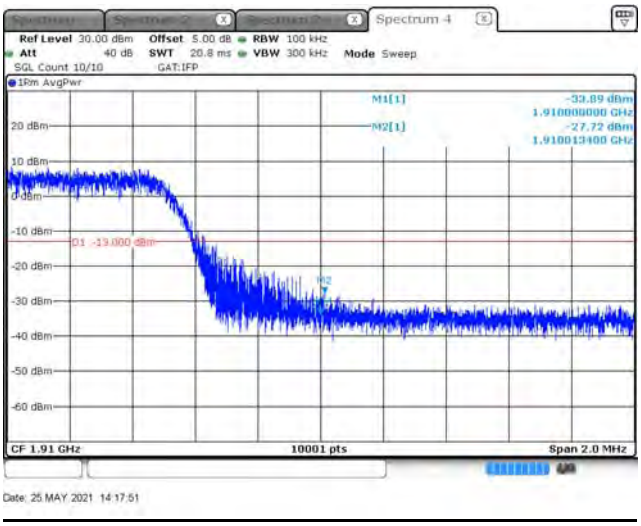

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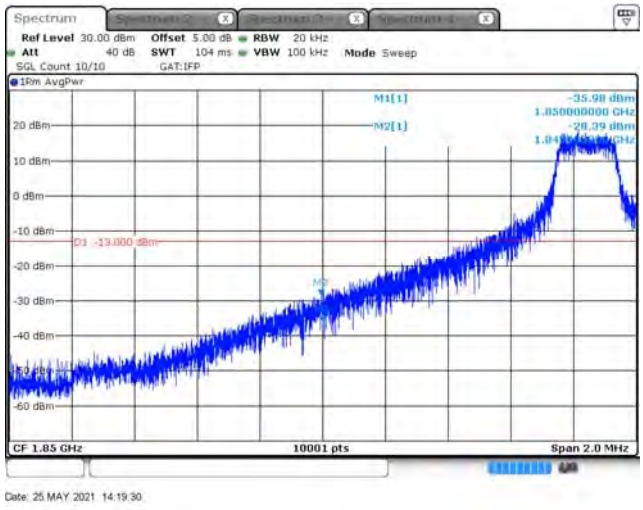

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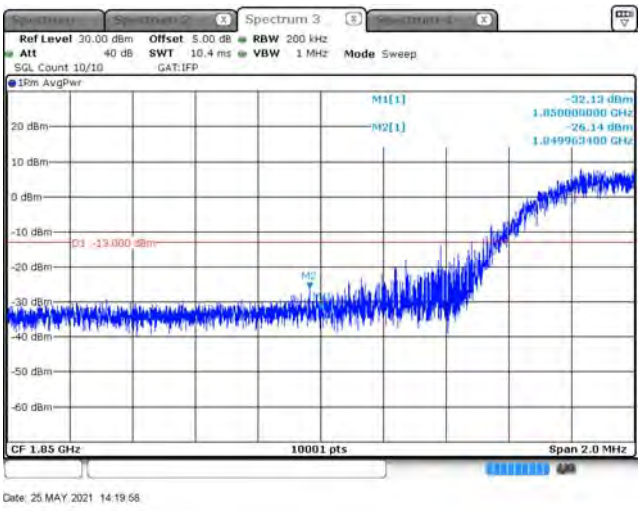

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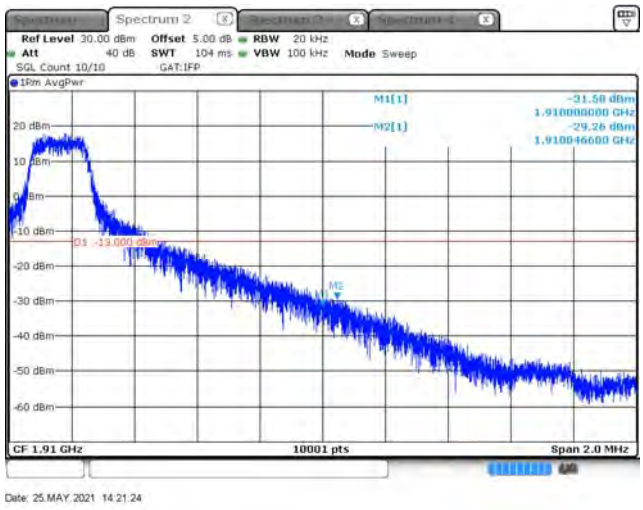

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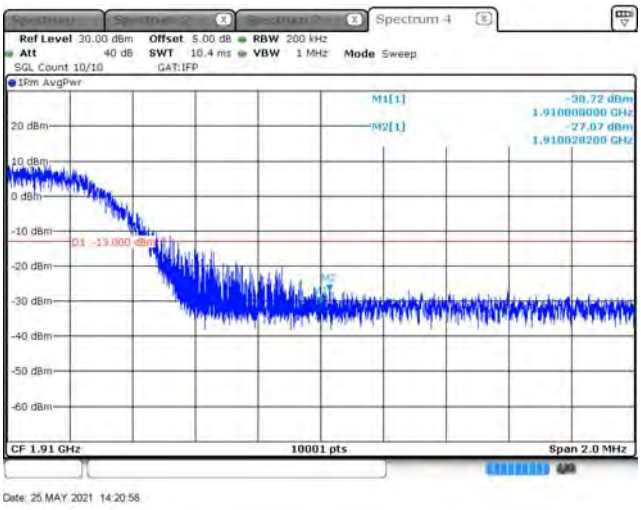

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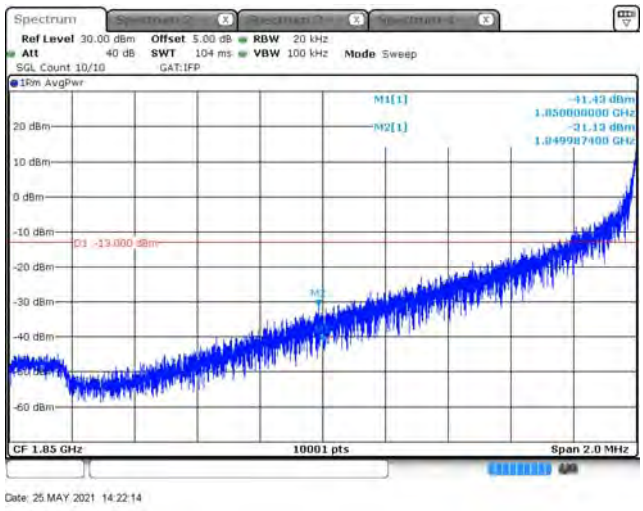

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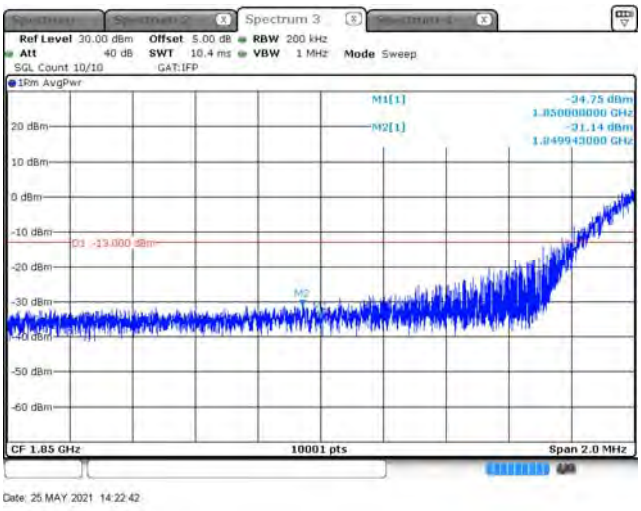

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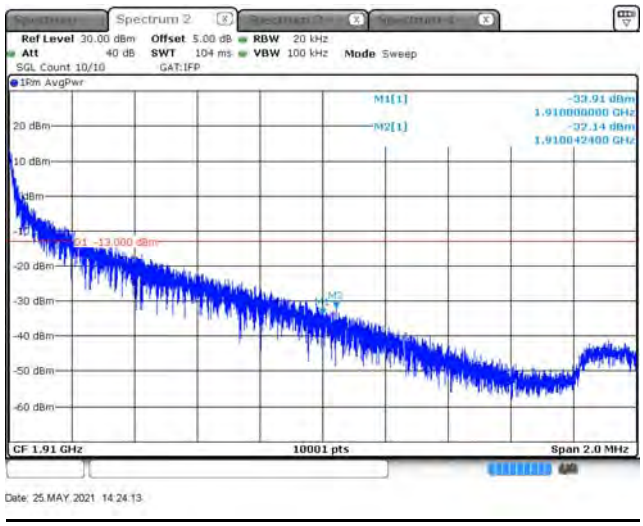

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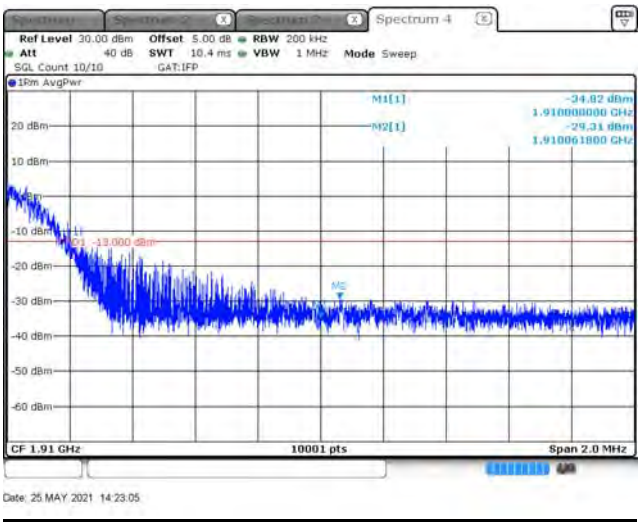
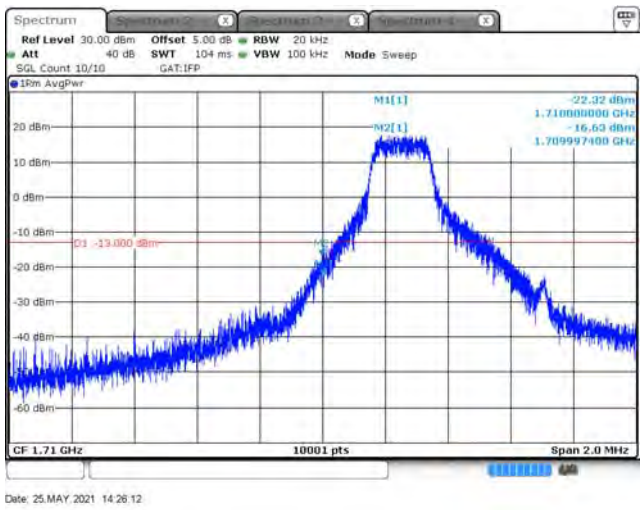


Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 2: LTE Band 4		
Date of Test	2021/05/25	Test Site	SR10-H
Temperature(°C)	25	Humidity (%RH)	59

B4_CH19957_1.4M__QPSK_1RB0



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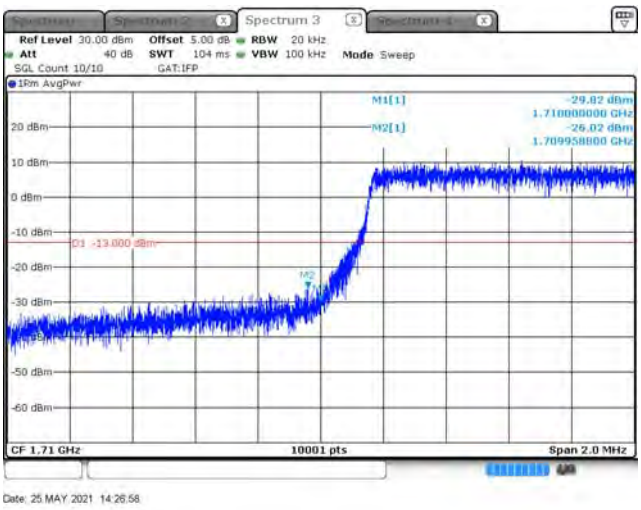

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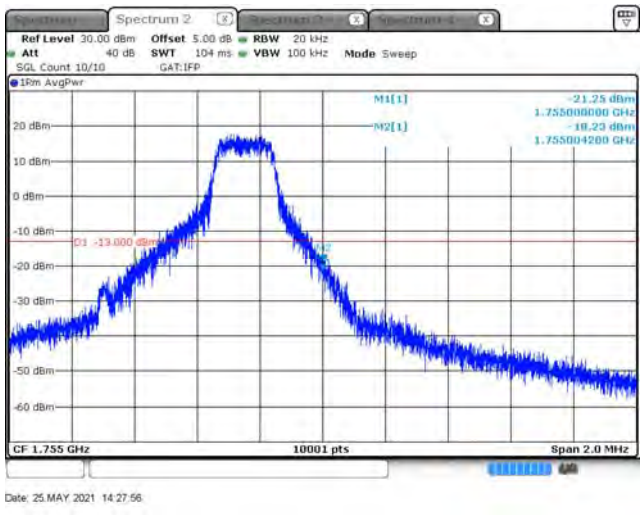

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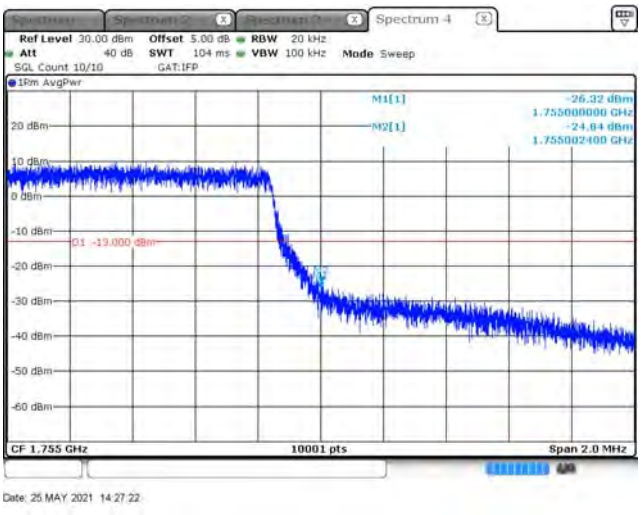

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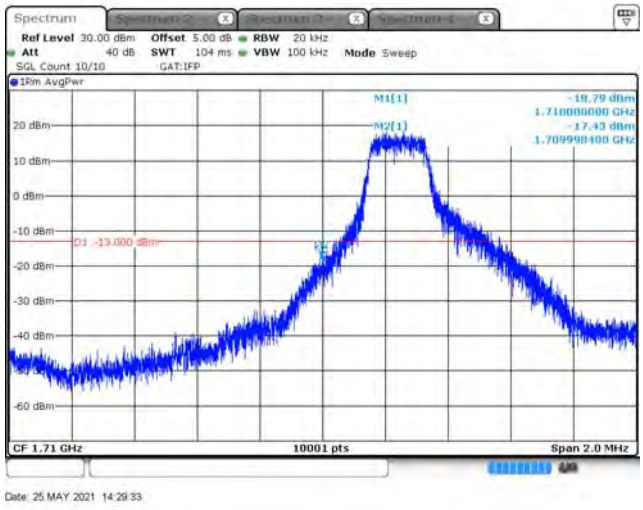

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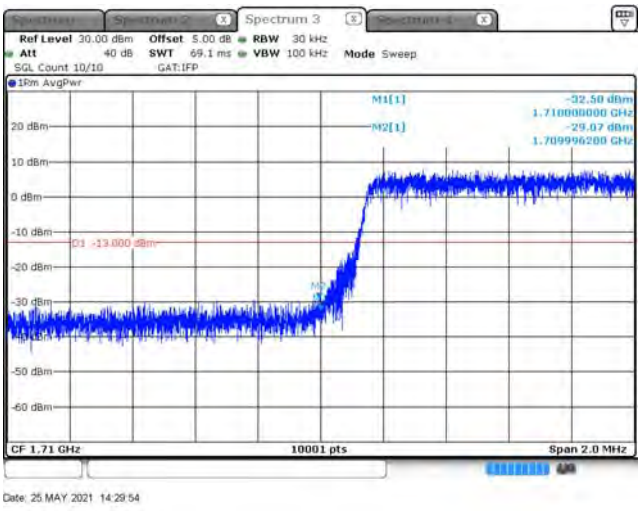

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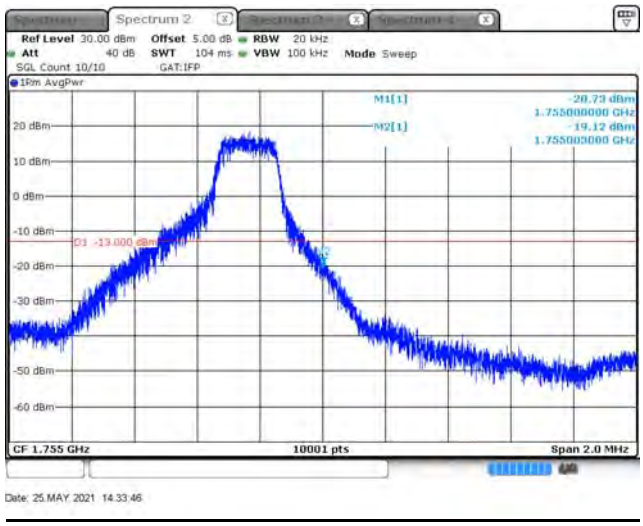

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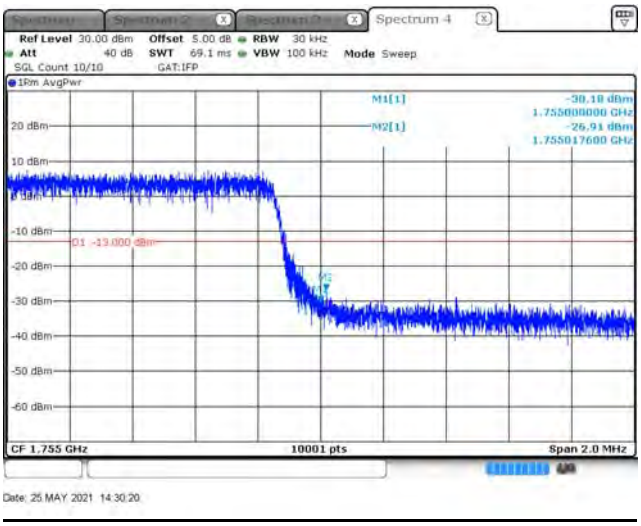

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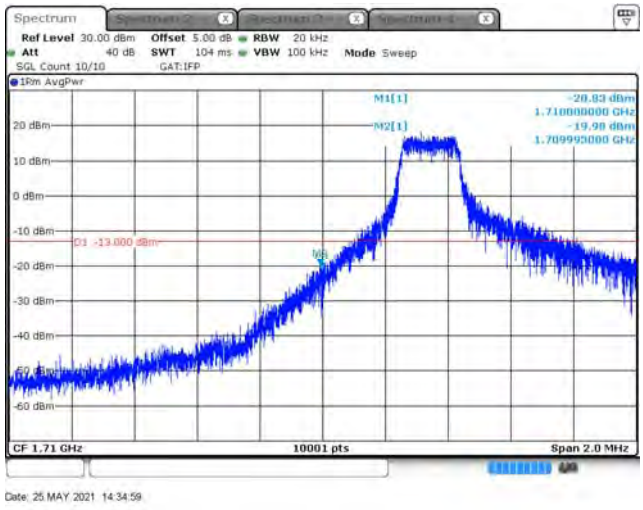

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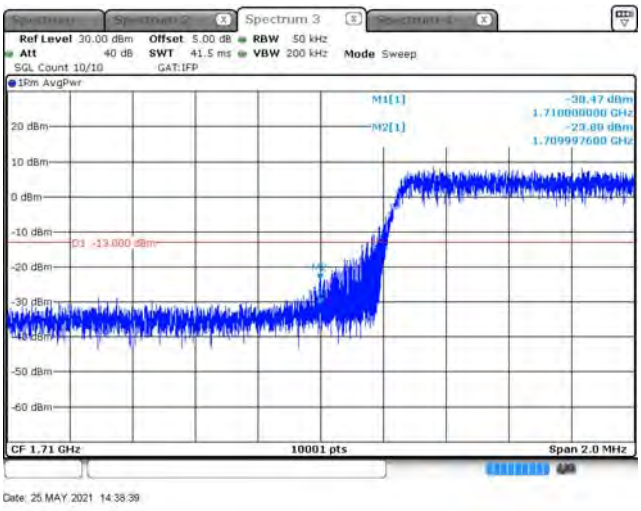

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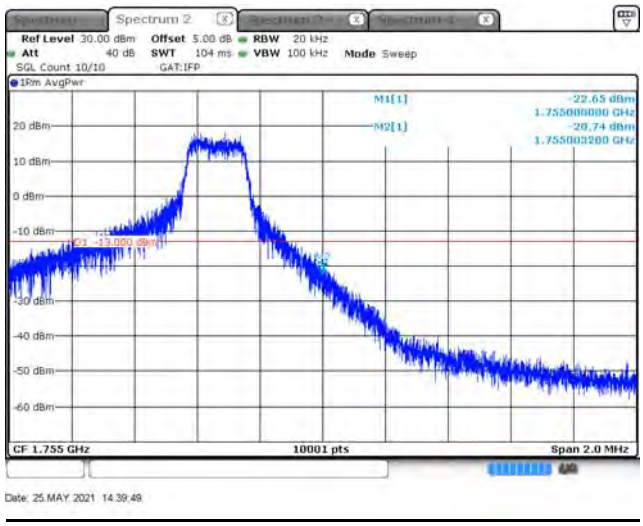

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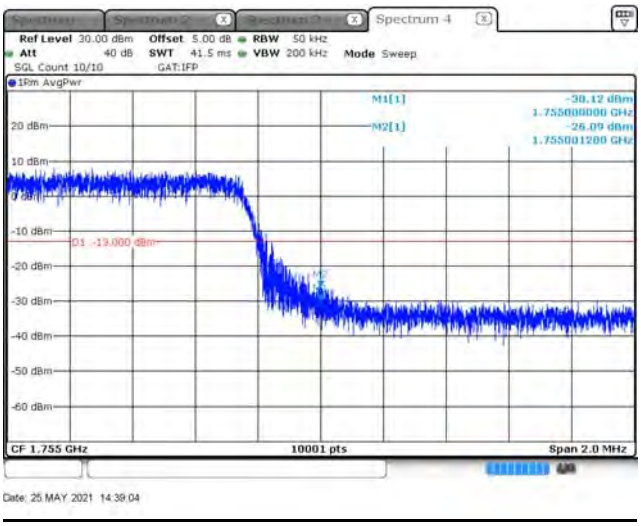

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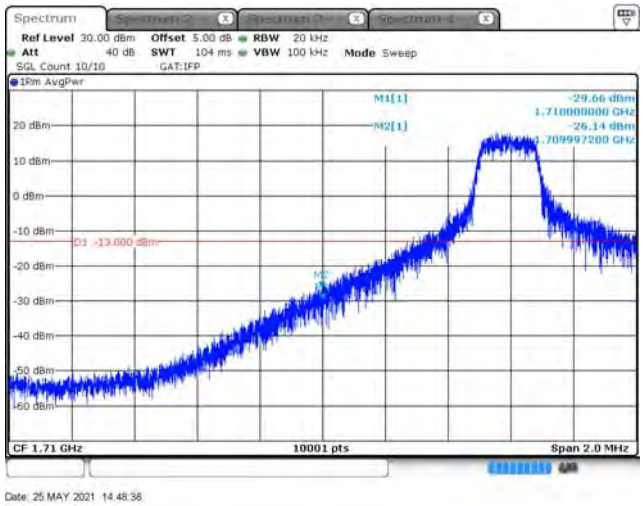

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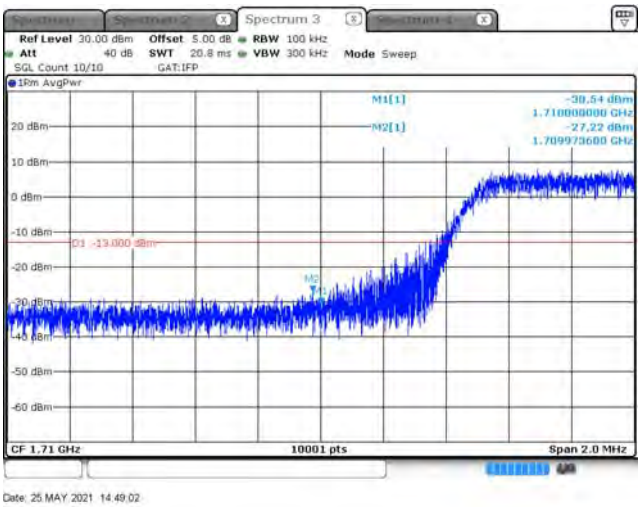

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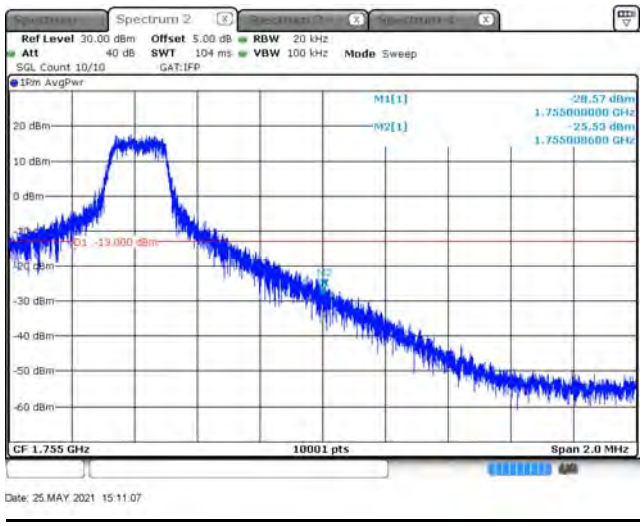

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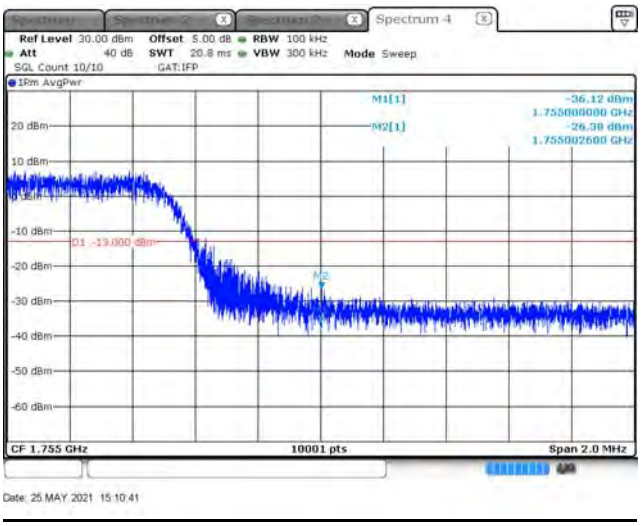

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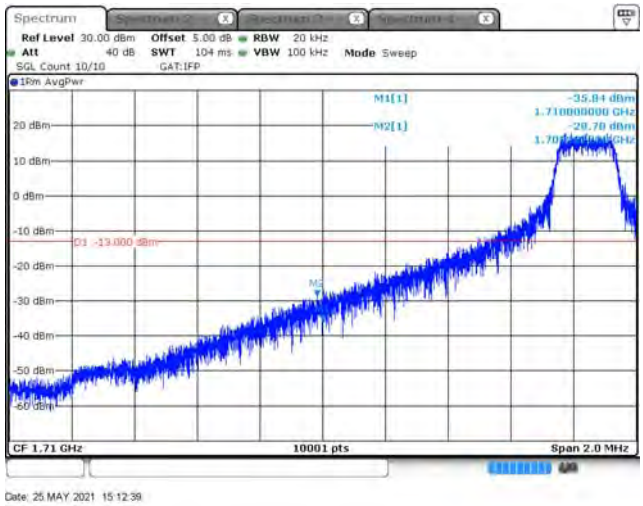

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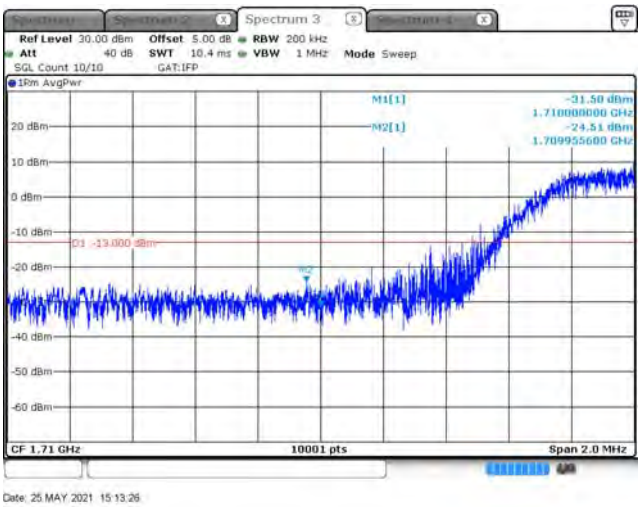

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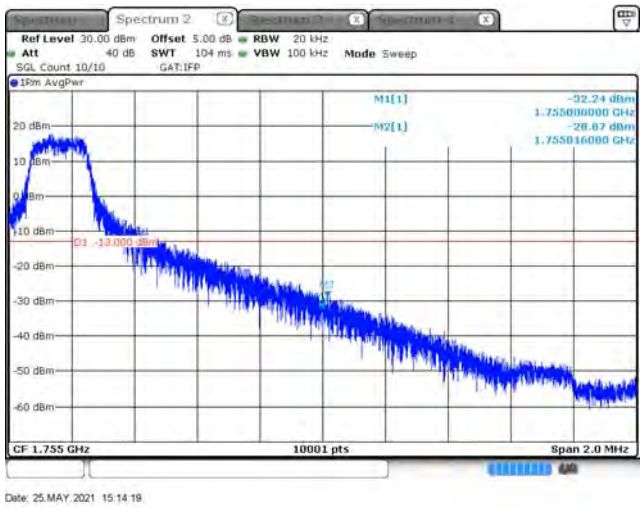

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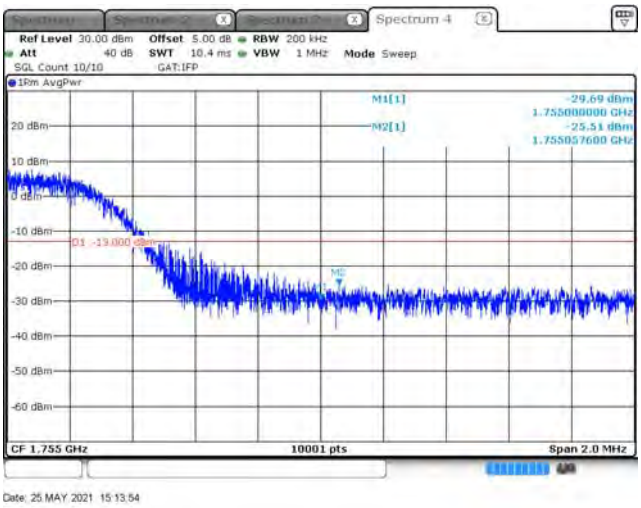

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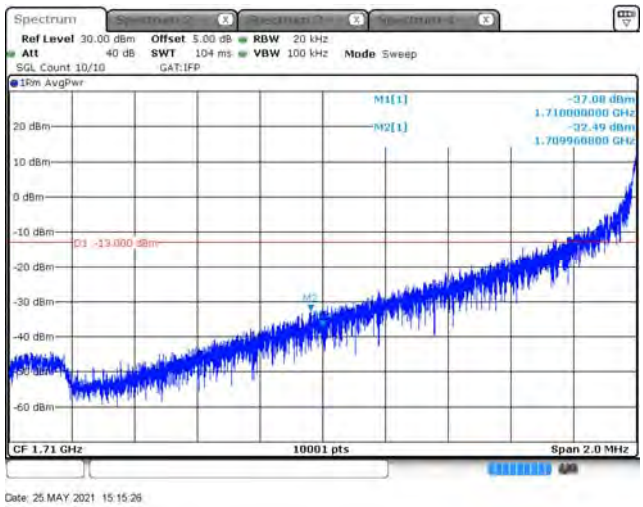
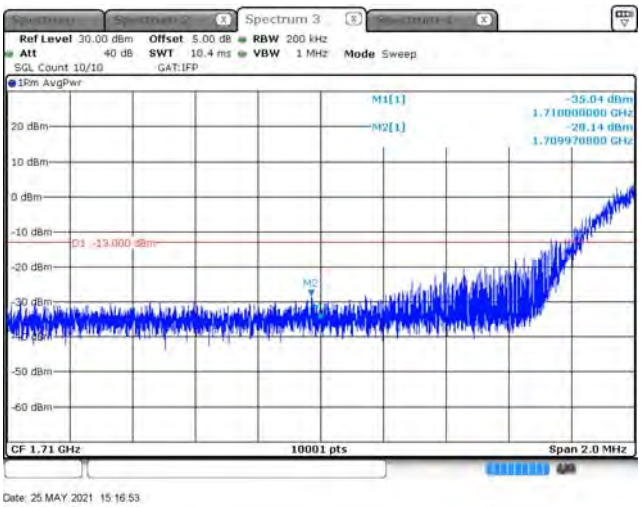
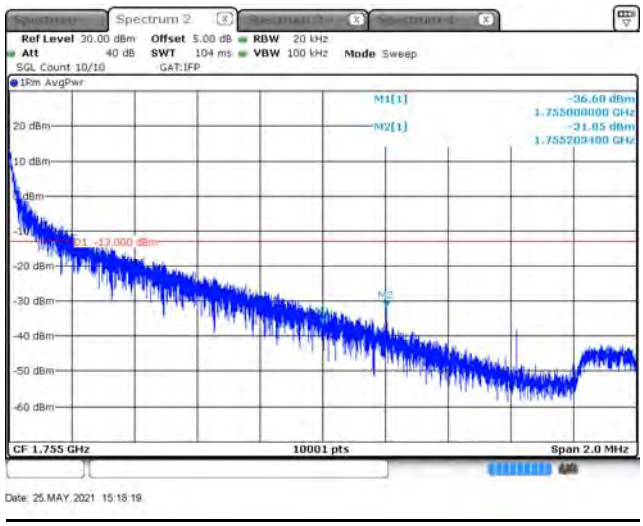


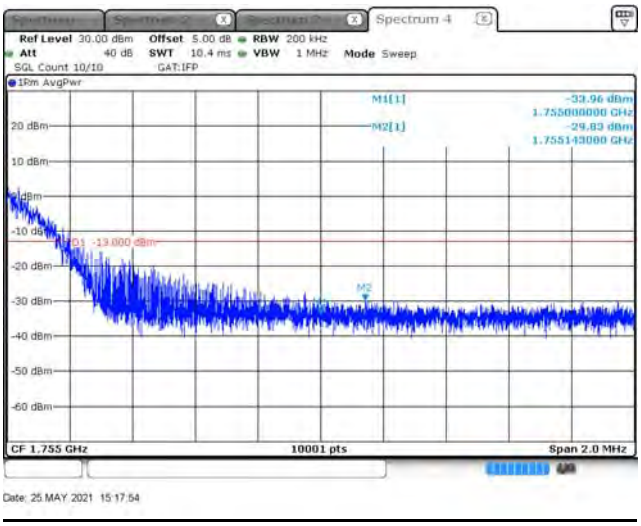
B4_CH20050_20M__QPSK_100RB0



B4_CH20300_20M__QPSK_1RB99

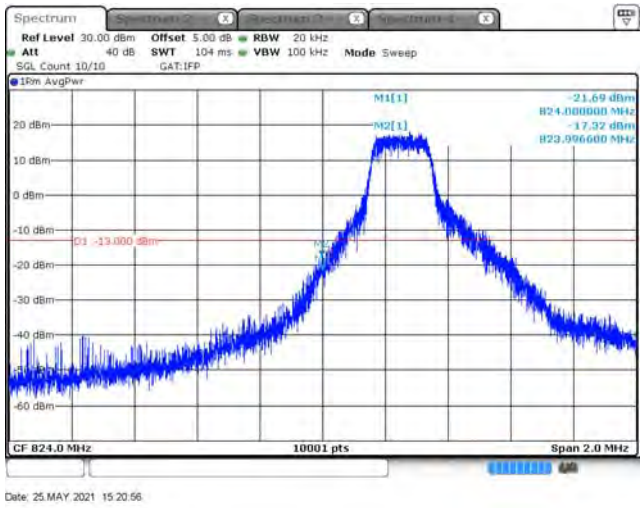


B4_CH20300_20M__QPSK_100RB0

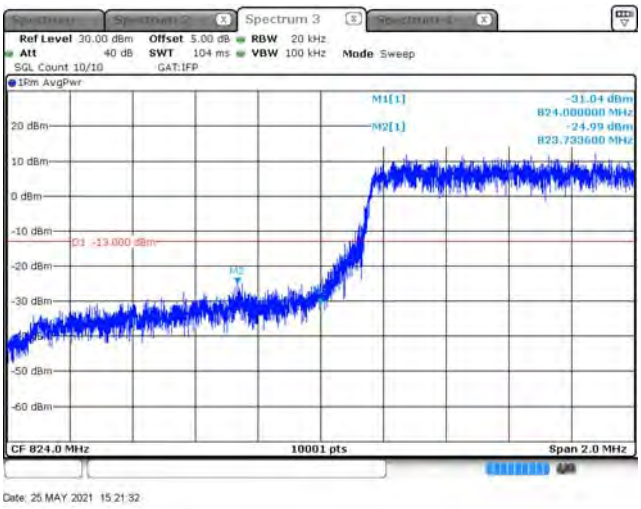


Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 3: LTE Band 5		
Date of Test	2021/05/25	Test Site	SR10-H
Temperature(°C)	25	Humidity (%RH)	59

LTE_B5_CH20407_1.4M__QPSK_1RB0



LTE_B5_CH20407_1.4M__QPSK_6RB0



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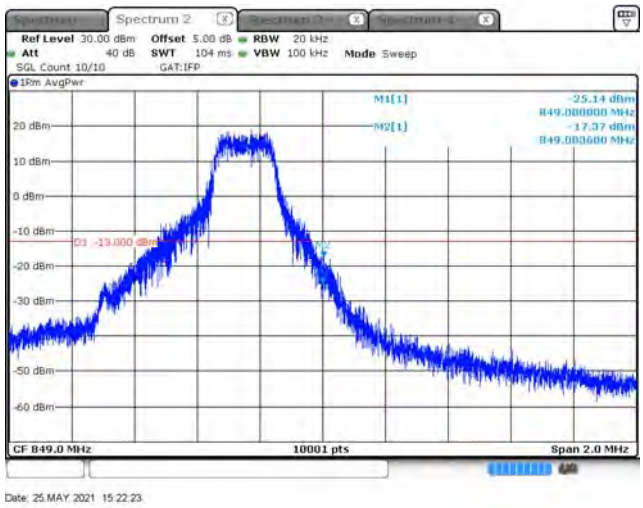

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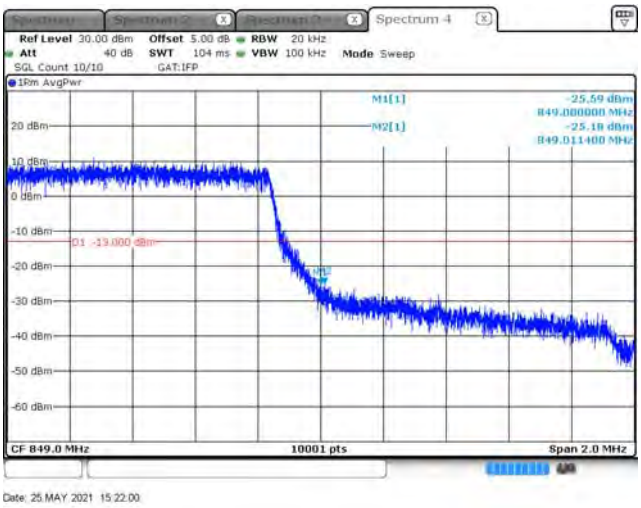
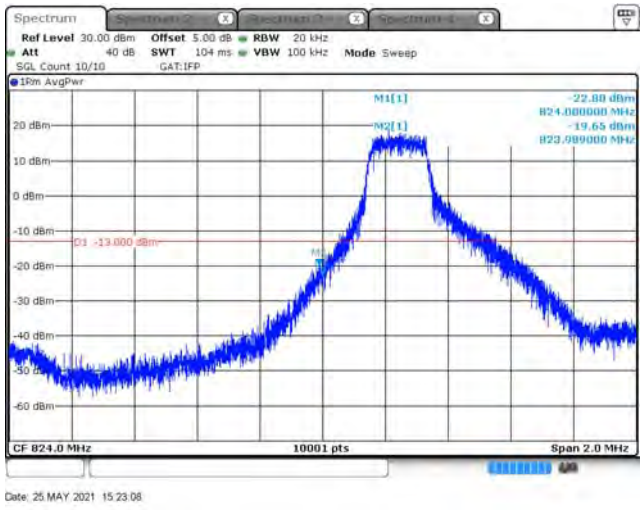
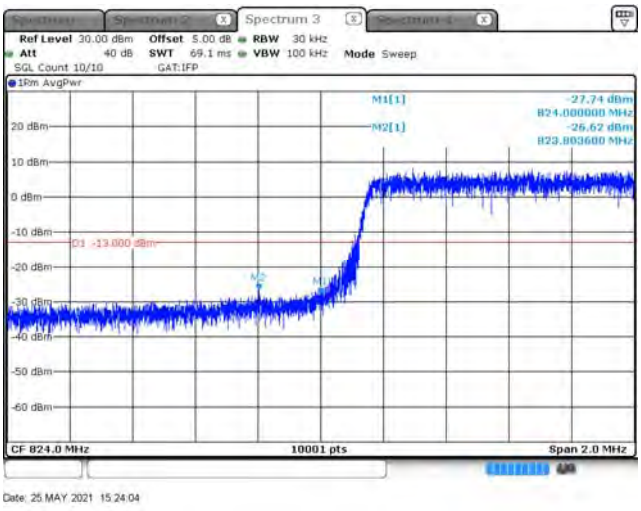


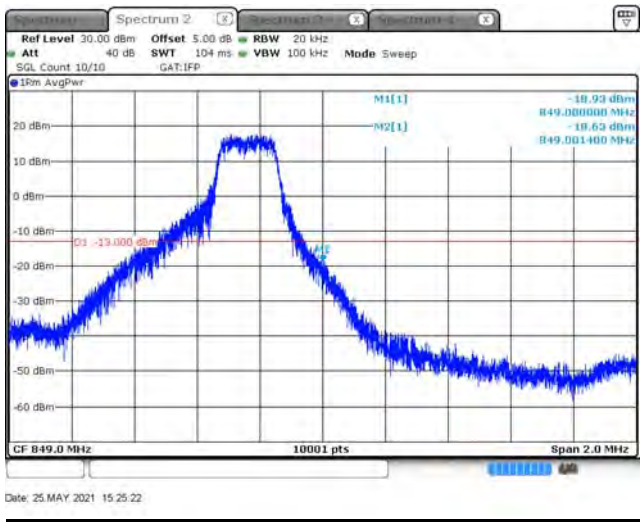
LTE_B5_CH20415_3M__QPSK_1RB0



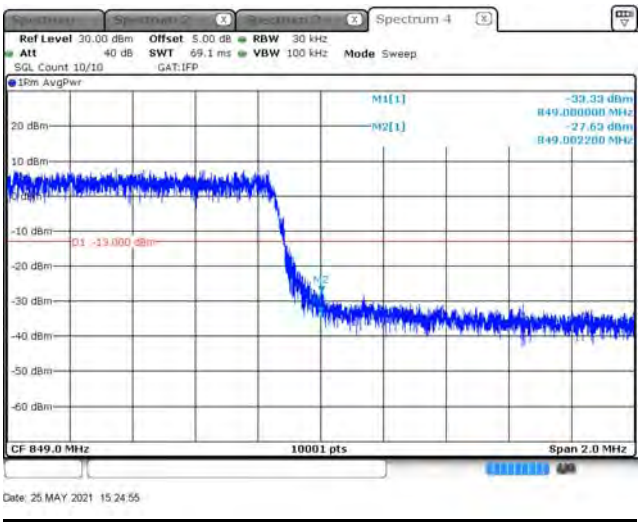
LTE_B5_CH20415_3M__QPSK_15RB0



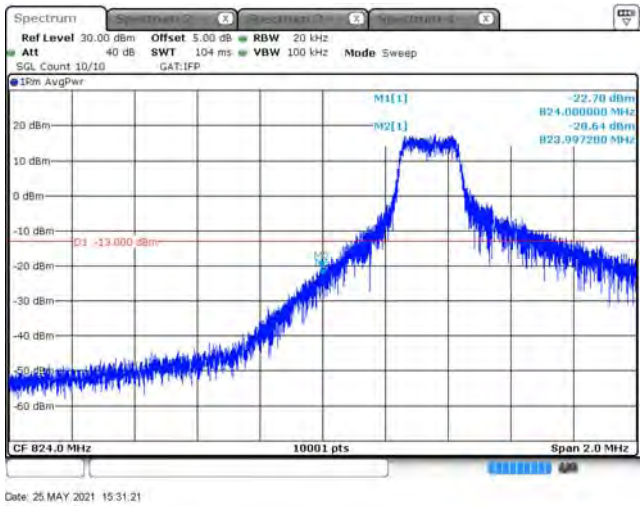
LTE_B5_CH20635_3M__QPSK_1RB14



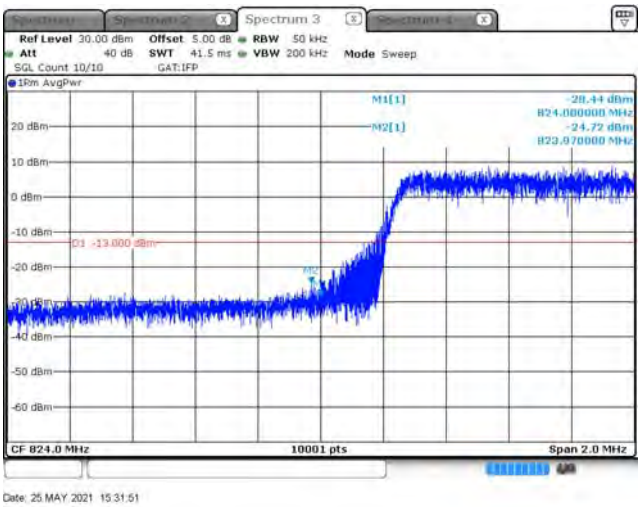
LTE_B5_CH20635_3M__QPSK_15RB0



LTE_B5_CH20425_5M__QPSK_1RB0



LTE_B5_CH20425_5M__QPSK_25RB0



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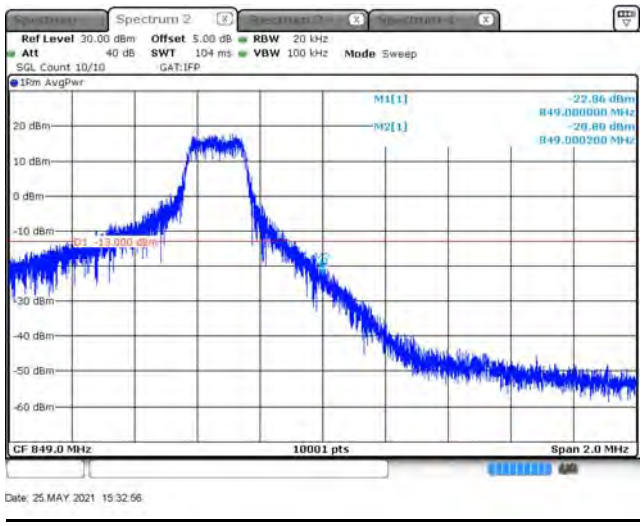
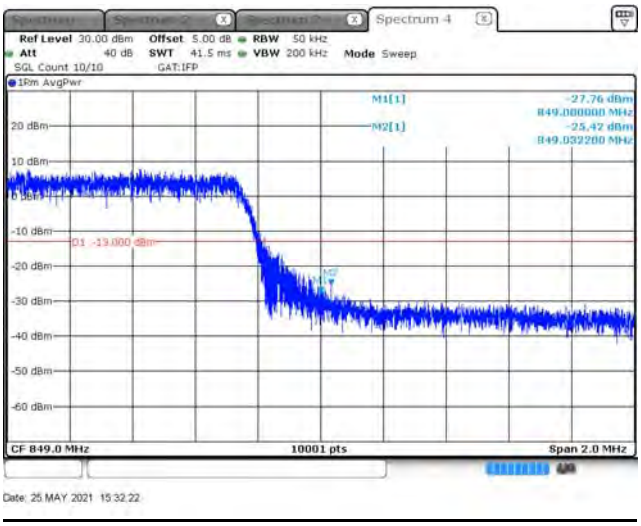
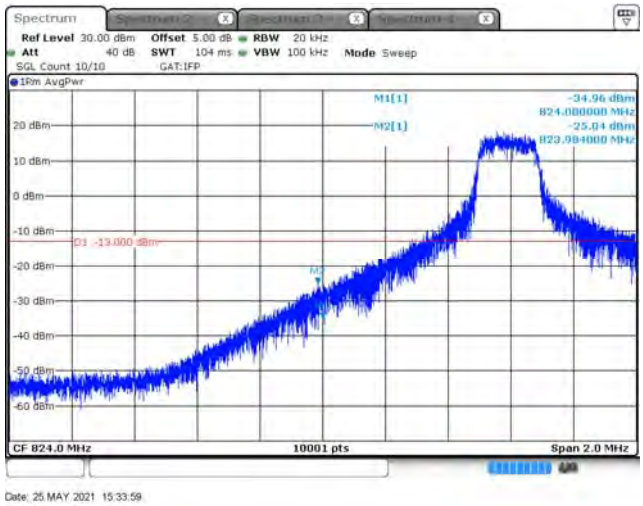


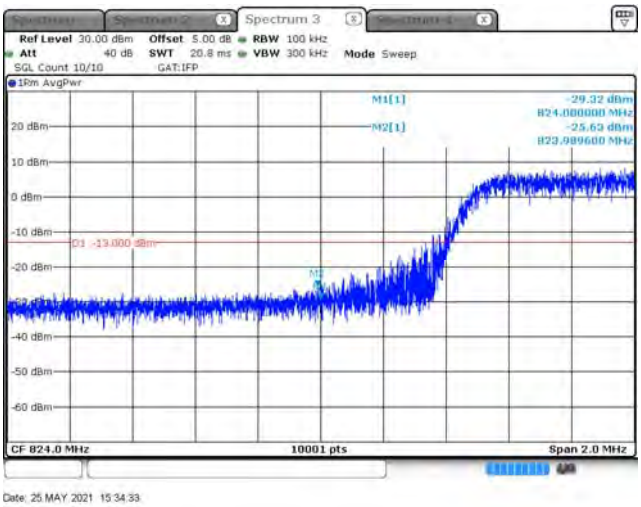
LTE_B5_CH20625_5M__QPSK_25RB0



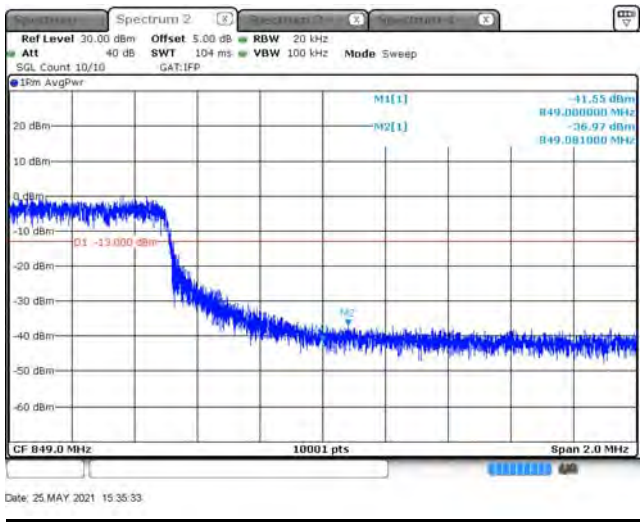
LTE_B5_CH20450_10M__QPSK_1RB0



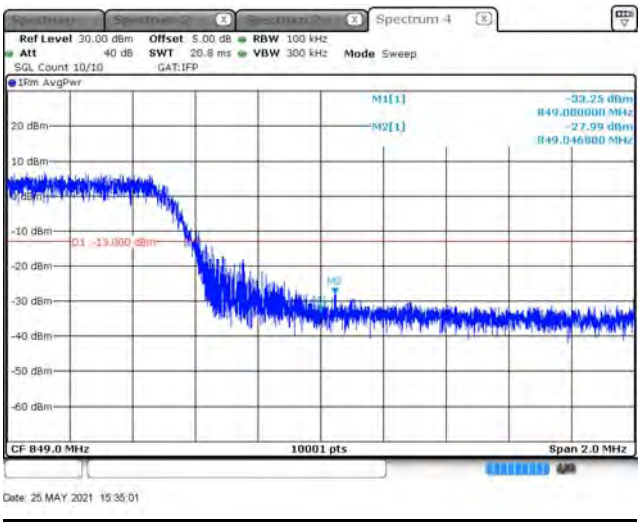
LTE_B5_CH20450_10M__QPSK_50RB0



LTE_B5_CH20600_10M__QPSK_1RB49

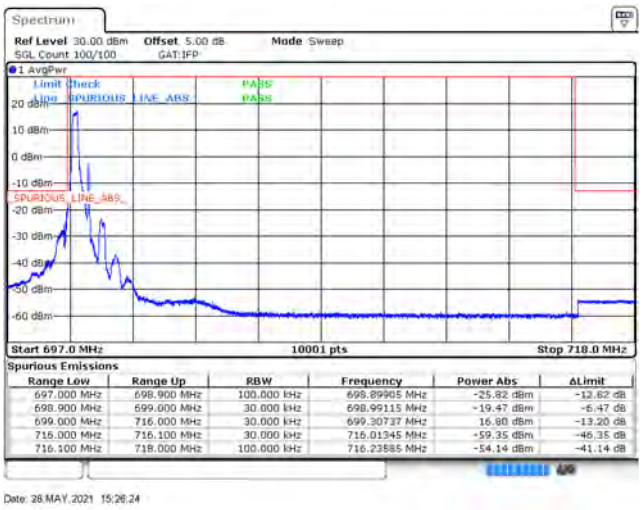


LTE_B5_CH20600_10M__QPSK_50RB0

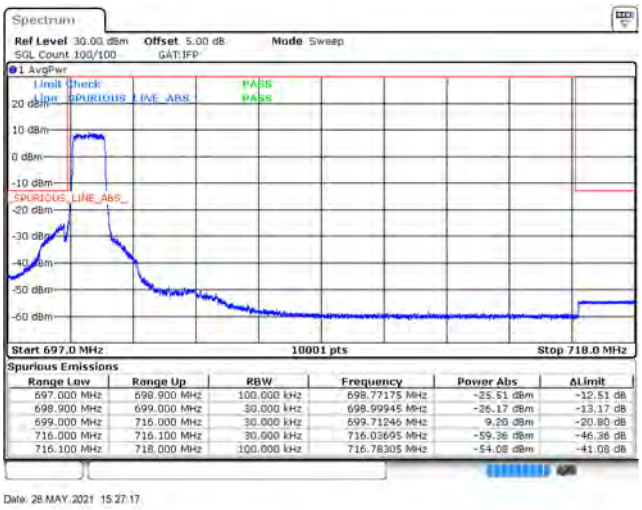


Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 4: LTE Band 12		
Date of Test	2021/05/28~2121/06/07	Test Site	SR10-H
Temperature(°C)	25.7~26.9	Humidity (%RH)	60~75

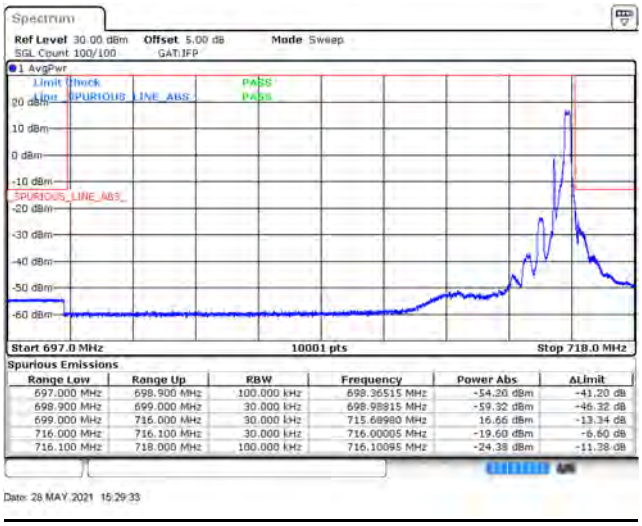
LTE_B12_CH23017_1.4M__QPSK_1RB0



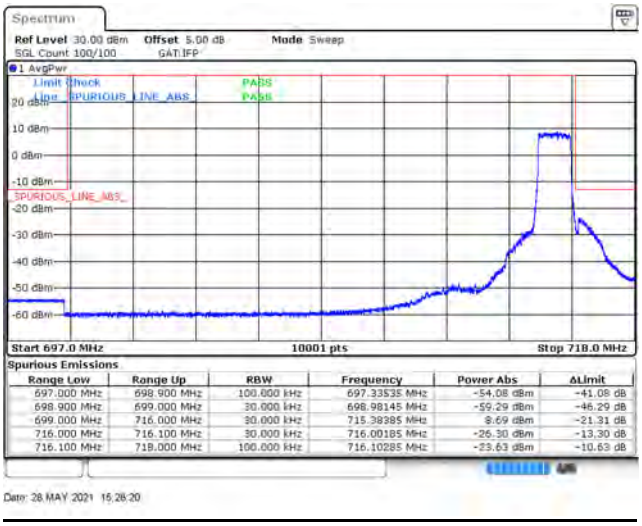
LTE_B12_CH23017_1.4M__QPSK_6RB0



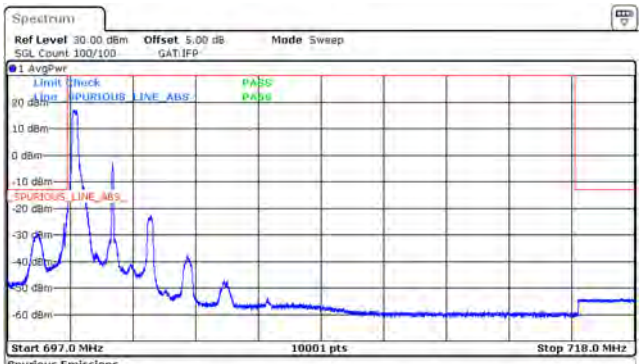
LTE_B12_CH23173_1.4M__QPSK_1RB5



LTE_B12_CH23173_1.4M__QPSK_6RB0



LTE_B12_CH23025_3M__QPSK_1RB0

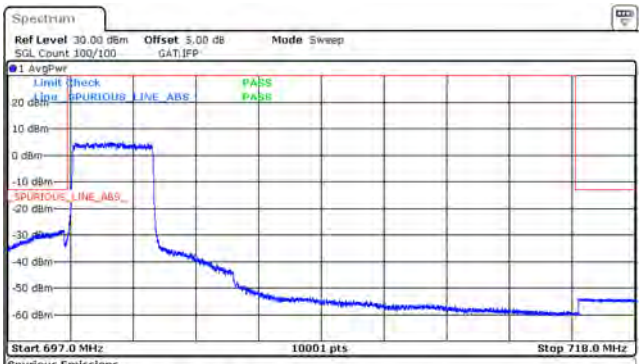


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
697.000 MHz	698.900 MHz	100.000 kHz	698.89715 MHz	-25.41 dBm	-12.41 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99945 MHz	-20.06 dBm	-7.06 dB
699.000 MHz	716.000 MHz	30.000 kHz	699.30737 MHz	16.95 dBm	-13.05 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.01665 MHz	-59.26 dBm	-46.26 dB
716.100 MHz	718.000 MHz	100.000 kHz	717.12315 MHz	-54.08 dBm	-41.08 dB

Date: 28.MAY.2021 15:30:43

LTE_B12_CH23025_3M__QPSK_15RB0

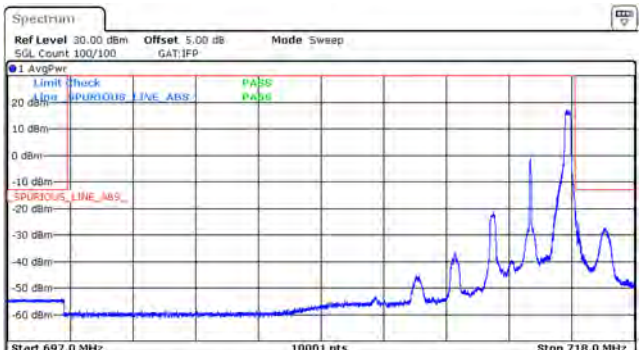


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
697.000 MHz	698.900 MHz	100.000 kHz	698.89145 MHz	-28.22 dBm	-15.22 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99965 MHz	-30.34 dBm	-17.34 dB
699.000 MHz	716.000 MHz	30.000 kHz	700.43201 MHz	4.88 dBm	-25.12 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.02515 MHz	-59.08 dBm	-46.08 dB
716.100 MHz	718.000 MHz	100.000 kHz	717.14595 MHz	-53.83 dBm	-40.83 dB

Date: 28.MAY.2021 15:31:38

LTE_B12_CH23165_3M__QPSK_1RB14

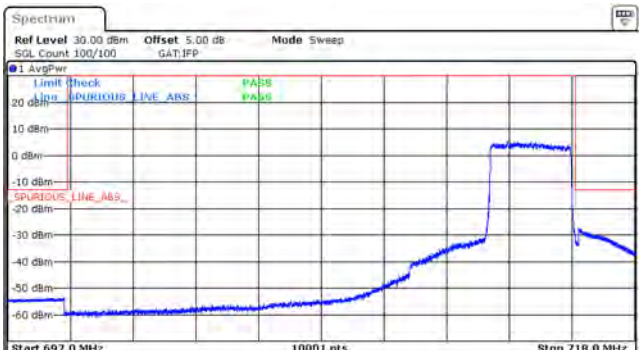


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
697.000 MHz	698.900 MHz	100.000 kHz	698.52285 MHz	-54.12 dBm	-41.12 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.94385 MHz	-59.34 dBm	-46.34 dB
699.000 MHz	716.000 MHz	30.000 kHz	715.74929 MHz	17.05 dBm	-12.95 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.01045 MHz	-19.65 dBm	-6.65 dB
716.100 MHz	718.000 MHz	100.000 kHz	716.10285 MHz	-25.15 dBm	-12.15 dB

Date: 28.MAY.2021 15:32:56

LTE_B12_CH23165_3M__QPSK_15RB0

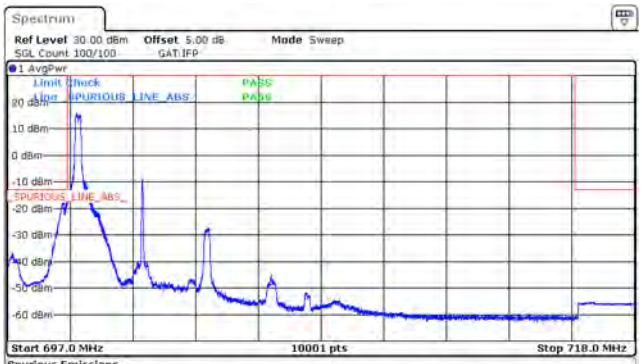


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
697.000 MHz	698.900 MHz	100.000 kHz	698.34045 MHz	-53.63 dBm	-40.63 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.97995 MHz	-59.00 dBm	-46.00 dB
699.000 MHz	716.000 MHz	30.000 kHz	713.72946 MHz	5.26 dBm	-24.74 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00065 MHz	-31.32 dBm	-18.32 dB
716.100 MHz	718.000 MHz	100.000 kHz	716.10665 MHz	-27.68 dBm	-14.68 dB

Date: 28.MAY.2021 15:32:16

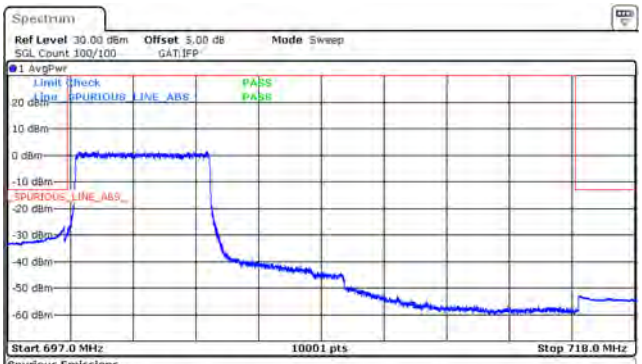
LTE_B12_CH23035_5M__QPSK_1RB0



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
697.000 MHz	698.900 MHz	100.000 kHz	698.88670 MHz	-15.97 dBm	-2.97 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99610 MHz	-16.06 dBm	-3.06 dB
699.000 MHz	716.000 MHz	30.000 kHz	699.30915 MHz	15.77 dBm	-14.23 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.06190 MHz	-60.69 dBm	-47.69 dB
716.100 MHz	718.000 MHz	100.000 kHz	716.51990 MHz	-55.16 dBm	-42.16 dB

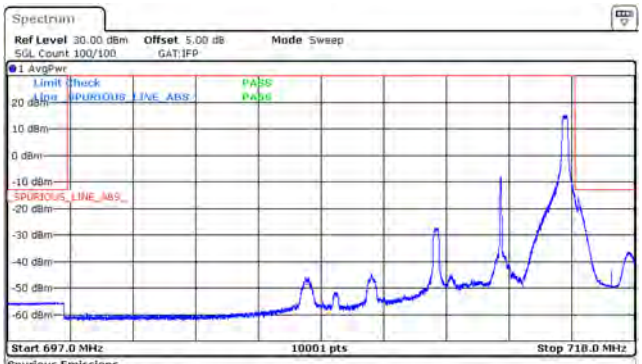
LTE_B12_CH23035_5M__QPSK_25RB0



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
697.000 MHz	698.900 MHz	100.000 kHz	698.89050 MHz	-26.53 dBm	-13.53 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99870 MHz	-28.65 dBm	-15.65 dB
699.000 MHz	716.000 MHz	30.000 kHz	699.89133 MHz	1.39 dBm	-28.61 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.03690 MHz	-57.95 dBm	-44.95 dB
716.100 MHz	718.000 MHz	100.000 kHz	716.13990 MHz	-53.01 dBm	-40.01 dB

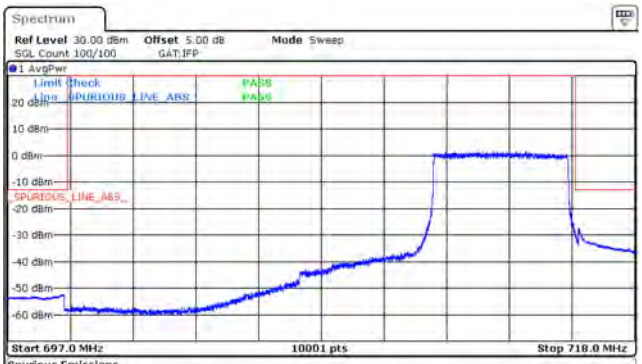
LTE_B12_CH23155_5M__QPSK_1RB24



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
697.000 MHz	698.900 MHz	100.000 kHz	698.57510 MHz	-55.25 dBm	-42.25 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.96910 MHz	-60.64 dBm	-47.64 dB
699.000 MHz	716.000 MHz	30.000 kHz	715.69723 MHz	15.16 dBm	-14.84 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00530 MHz	-16.23 dBm	-3.23 dB
716.100 MHz	718.000 MHz	100.000 kHz	716.11330 MHz	-15.87 dBm	-2.87 dB

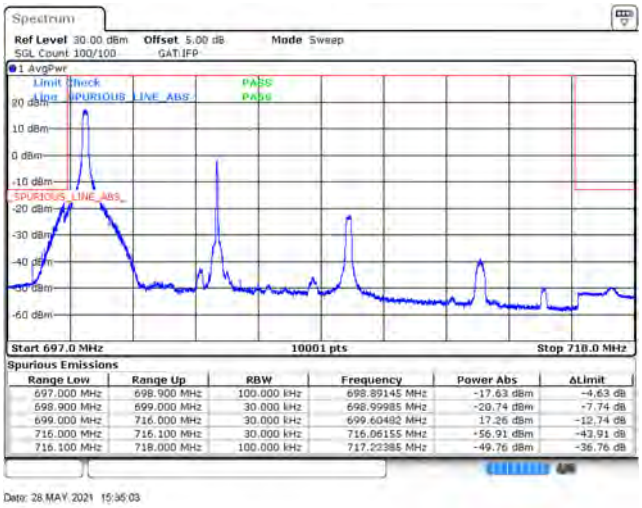
LTE_B12_CH23155_5M__QPSK_25RB0



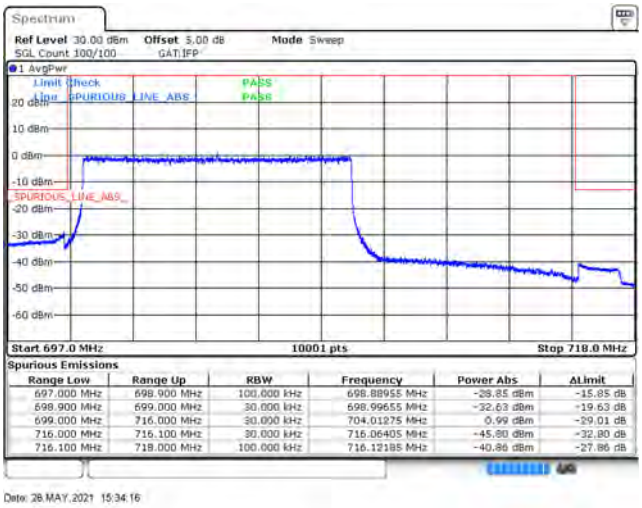
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
697.000 MHz	698.900 MHz	100.000 kHz	698.82210 MHz	-52.47 dBm	-39.47 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.94330 MHz	-57.62 dBm	-44.62 dB
699.000 MHz	716.000 MHz	30.000 kHz	714.36714 MHz	1.65 dBm	-28.35 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00270 MHz	-29.34 dBm	-16.34 dB
716.100 MHz	718.000 MHz	100.000 kHz	716.10950 MHz	-27.42 dBm	-14.42 dB

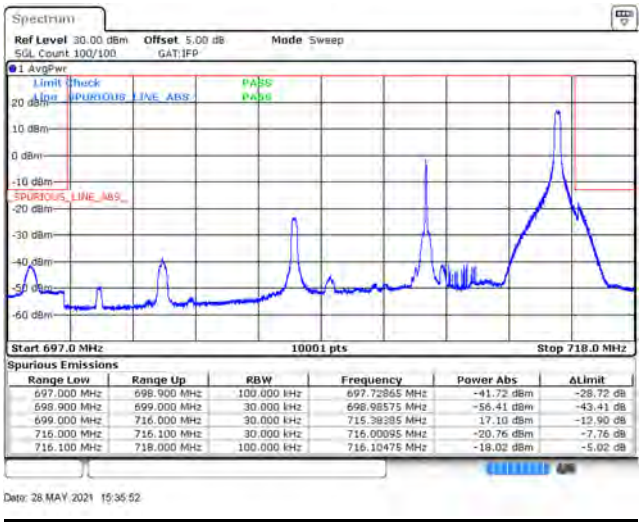
LTE_B12_CH23060_10M__QPSK_1RB0



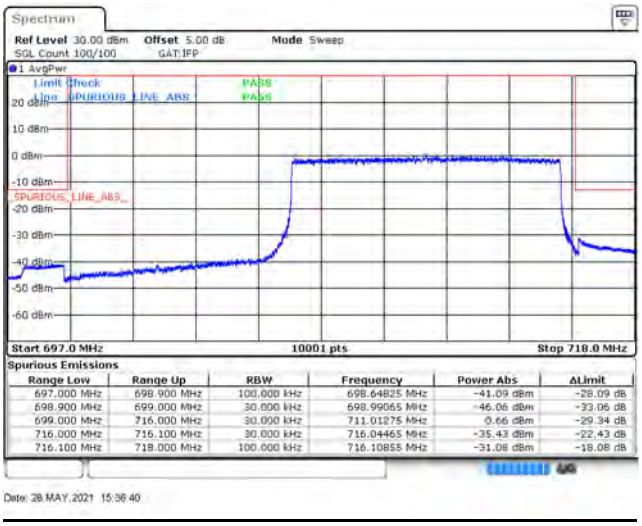
LTE_B12_CH23060_10M__QPSK_50RB0



LTE_B12_CH23130_10M__QPSK_1RB49

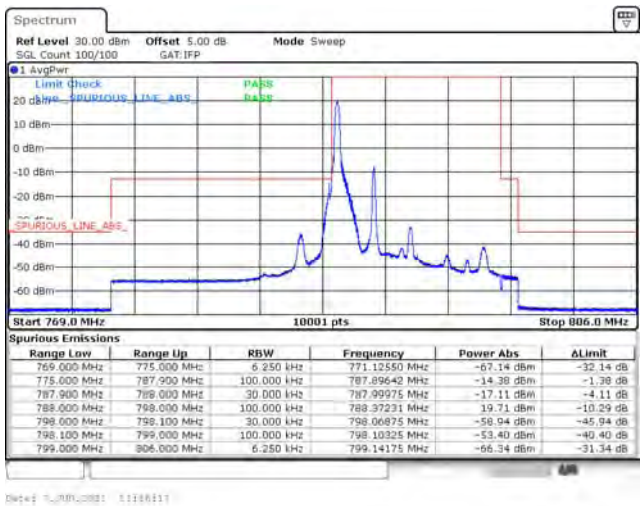


LTE_B12_CH23130_10M__QPSK_50RB0

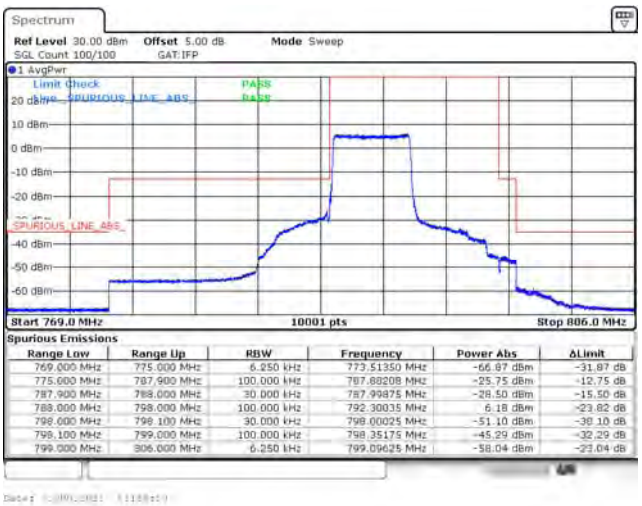


Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 5: LTE Band 14		
Date of Test	2121/06/07	Test Site	SR10-H
Temperature(°C)	25.7	Humidity (%RH)	74

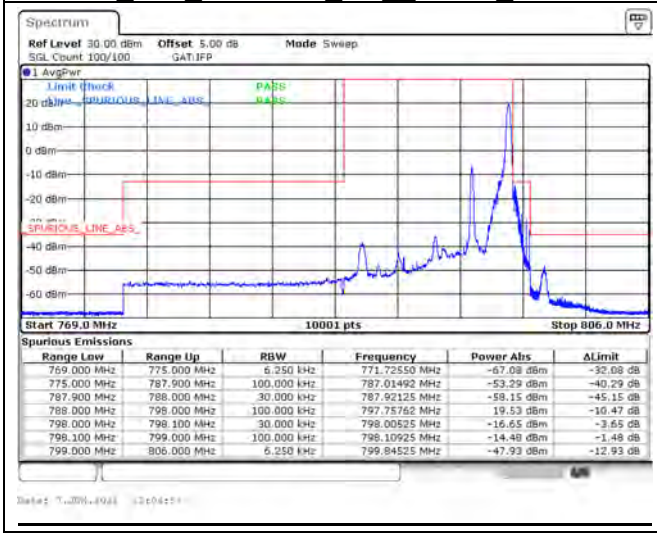
LTE_B14_CH23305_5M__QPSK_1RB0



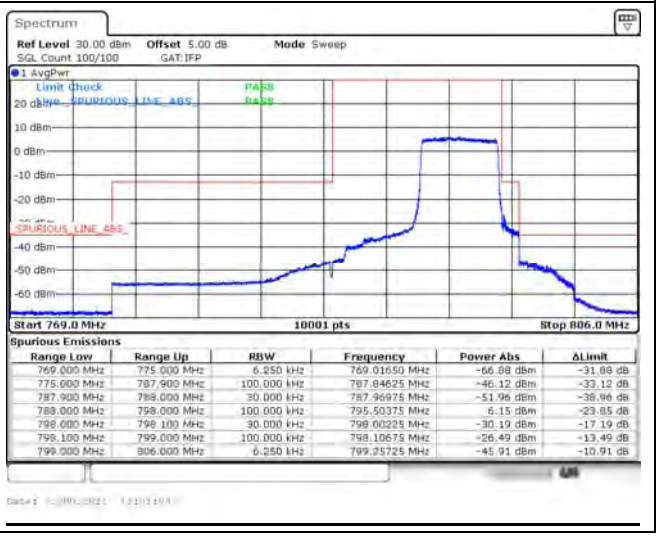
LTE_B14_CH23305_5M__QPSK_25RB0



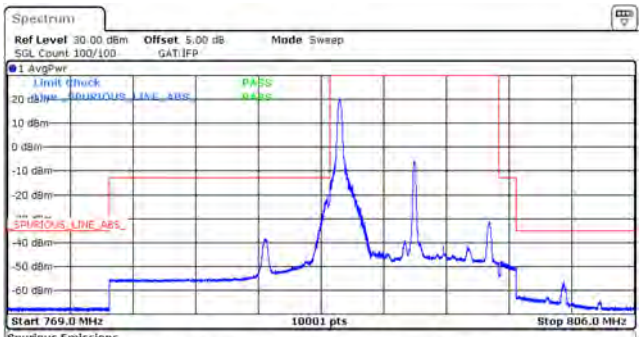
LTE_B14_CH23355_5M__QPSK_1RB24



LTE_B14_CH23355_5M__QPSK_25RB0



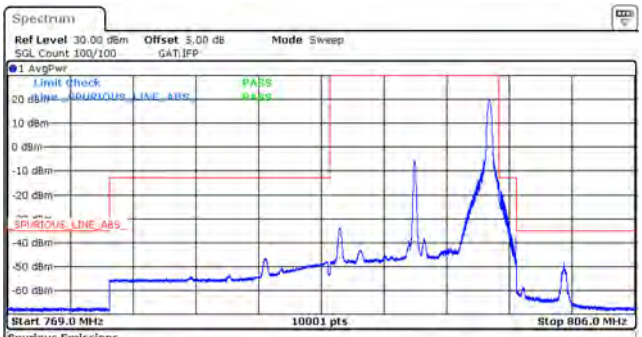
LTE_B14_CH23330_10M__QPSK__1RB0



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
769.000 MHz	775.000 MHz	6.250 kHz	773.26750 MHz	-66.96 dBm	-31.96 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.87492 MHz	-19.77 dBm	-6.77 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.99725 MHz	-22.69 dBm	-9.69 dB
788.000 MHz	798.000 MHz	100.000 kHz	788.58721 MHz	19.95 dBm	-10.05 dB
798.000 MHz	798.100 MHz	30.000 kHz	798.00725 MHz	-53.66 dBm	-40.66 dB
798.100 MHz	799.000 MHz	100.000 kHz	798.16425 MHz	-48.21 dBm	-35.21 dB
799.000 MHz	806.000 MHz	6.250 kHz	801.81575 MHz	-56.14 dBm	-21.14 dB

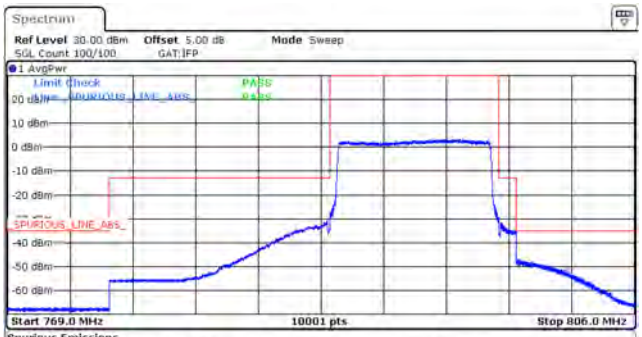
LTE_B14_CH23330_10M__QPSK__1RB49



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
769.000 MHz	775.000 MHz	6.250 kHz	773.17750 MHz	-66.86 dBm	-31.86 dB
775.000 MHz	787.900 MHz	100.000 kHz	784.18408 MHz	-46.65 dBm	-33.65 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.99775 MHz	-53.01 dBm	-40.01 dB
788.000 MHz	798.000 MHz	100.000 kHz	797.39280 MHz	19.85 dBm	-10.15 dB
798.000 MHz	798.100 MHz	30.000 kHz	798.00225 MHz	-22.72 dBm	-9.72 dB
798.100 MHz	799.000 MHz	100.000 kHz	798.10575 MHz	-18.61 dBm	-5.61 dB
799.000 MHz	806.000 MHz	6.250 kHz	801.84375 MHz	-48.51 dBm	-13.51 dB

LTE_B14_CH23330_10M__QPSK_50RB0



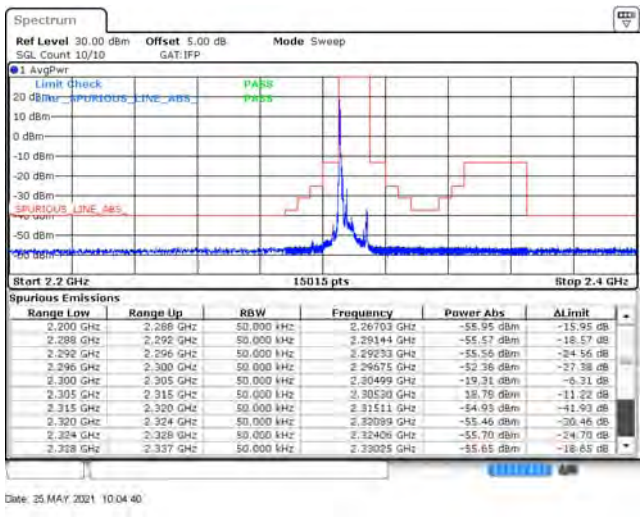
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
769.000 MHz	775.000 MHz	6.250 kHz	772.77250 MHz	-67.14 dBm	-32.14 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.68925 MHz	-30.10 dBm	-17.10 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.99975 MHz	-34.63 dBm	-21.63 dB
788.000 MHz	798.000 MHz	100.000 kHz	795.67366 MHz	3.40 dBm	-25.60 dB
798.000 MHz	798.100 MHz	30.000 kHz	798.00025 MHz	-36.15 dBm	-23.15 dB
798.100 MHz	799.000 MHz	100.000 kHz	798.16875 MHz	-31.69 dBm	-18.69 dB
799.000 MHz	806.000 MHz	6.250 kHz	799.20825 MHz	-47.02 dBm	-12.02 dB

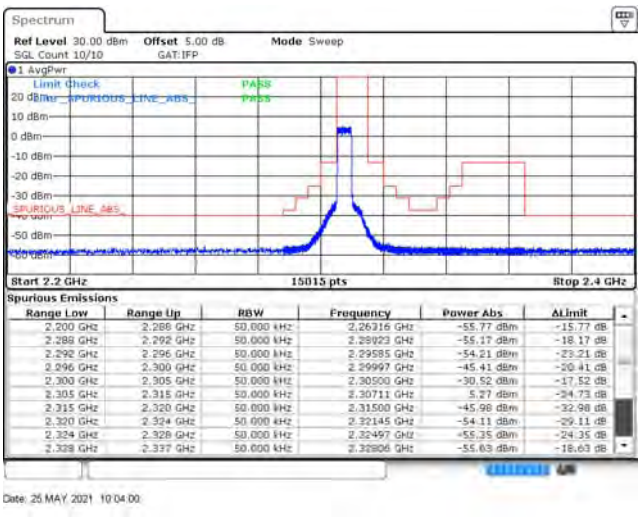
N/A

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 6: LTE Band 30		
Date of Test	2021/05/25	Test Site	SR10-H
Temperature(°C)	25	Humidity (%RH)	59

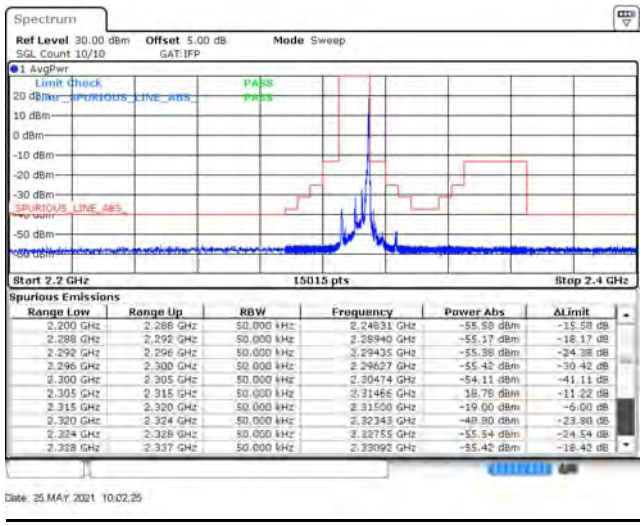
LTE_B30_CH27685_5M__QPSK_1RB0



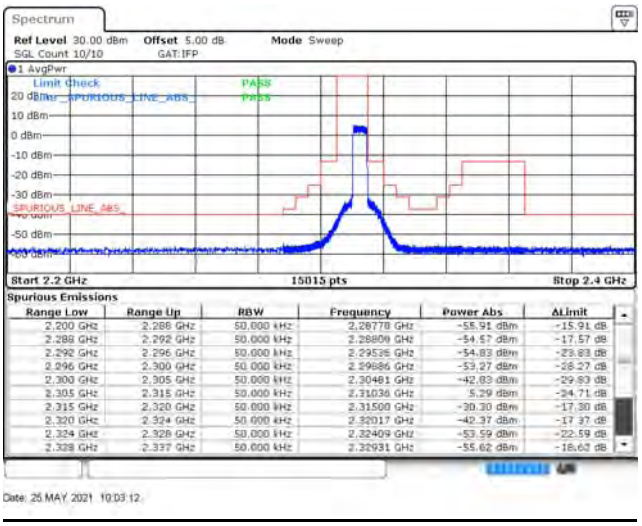
LTE_B30_CH27685_5M__QPSK_25RB0



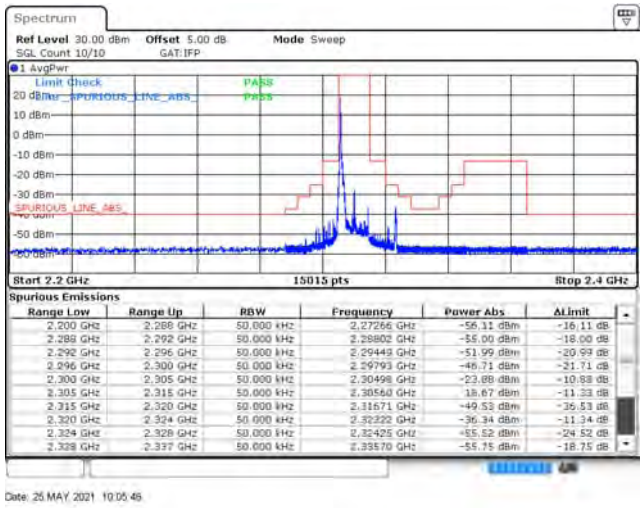
LTE_B30_CH27735_5M__QPSK_1RB24



LTE_B30_CH27735_5M__QPSK_25RB0

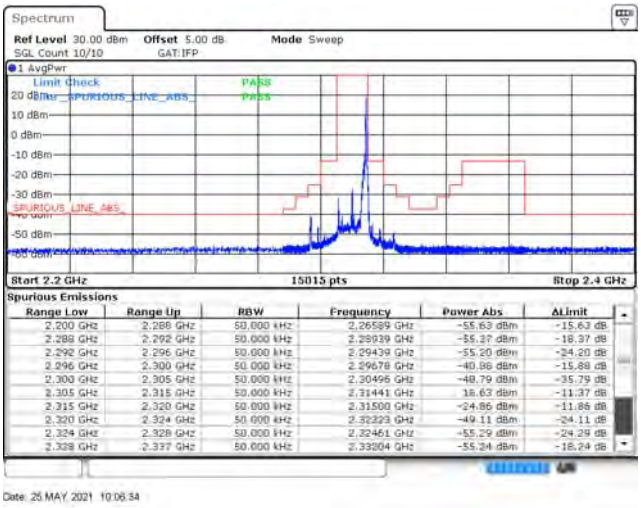


LTE_B30_CH27710_10M__QPSK__1RB0



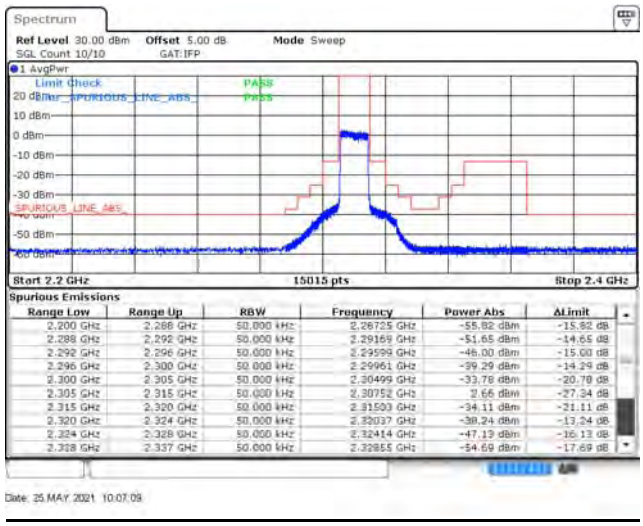
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.200 GHz	2.288 GHz	50.000 kHz	2.27266 GHz	-56.11 dBm	-16.11 dB
2.288 GHz	2.292 GHz	50.000 kHz	2.28802 GHz	-55.00 dBm	-18.00 dB
2.292 GHz	2.296 GHz	50.000 kHz	2.29448 GHz	-51.99 dBm	-20.99 dB
2.296 GHz	2.300 GHz	50.000 kHz	2.29793 GHz	-46.71 dBm	-21.71 dB
2.300 GHz	2.305 GHz	50.000 kHz	2.30498 GHz	-23.88 dBm	-10.88 dB
2.305 GHz	2.315 GHz	50.000 kHz	2.30560 GHz	18.67 dBm	-11.33 dB
2.315 GHz	2.320 GHz	50.000 kHz	2.31671 GHz	-49.53 dBm	-35.53 dB
2.320 GHz	2.324 GHz	50.000 kHz	2.32222 GHz	-36.34 dBm	-11.34 dB
2.324 GHz	2.328 GHz	50.000 kHz	2.32425 GHz	-55.52 dBm	-24.52 dB
2.328 GHz	2.337 GHz	50.000 kHz	2.33570 GHz	-55.75 dBm	-18.75 dB

LTE_B30_CH27710_10M__QPSK__1RB49



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.200 GHz	2.288 GHz	50.000 kHz	2.26589 GHz	-55.63 dBm	-15.63 dB
2.288 GHz	2.292 GHz	50.000 kHz	2.28939 GHz	-55.37 dBm	-18.37 dB
2.292 GHz	2.296 GHz	50.000 kHz	2.29439 GHz	-55.20 dBm	-24.20 dB
2.296 GHz	2.300 GHz	50.000 kHz	2.29678 GHz	-40.88 dBm	-15.88 dB
2.300 GHz	2.305 GHz	50.000 kHz	2.30495 GHz	-48.79 dBm	-35.79 dB
2.305 GHz	2.315 GHz	50.000 kHz	2.31441 GHz	18.63 dBm	-11.37 dB
2.315 GHz	2.320 GHz	50.000 kHz	2.31500 GHz	-24.86 dBm	-11.86 dB
2.320 GHz	2.324 GHz	50.000 kHz	2.32223 GHz	-49.11 dBm	-24.11 dB
2.324 GHz	2.328 GHz	50.000 kHz	2.32461 GHz	-55.29 dBm	-24.29 dB
2.328 GHz	2.337 GHz	50.000 kHz	2.33204 GHz	-55.24 dBm	-18.24 dB

LTE_B30_CH27710_10M__QPSK_50RB0

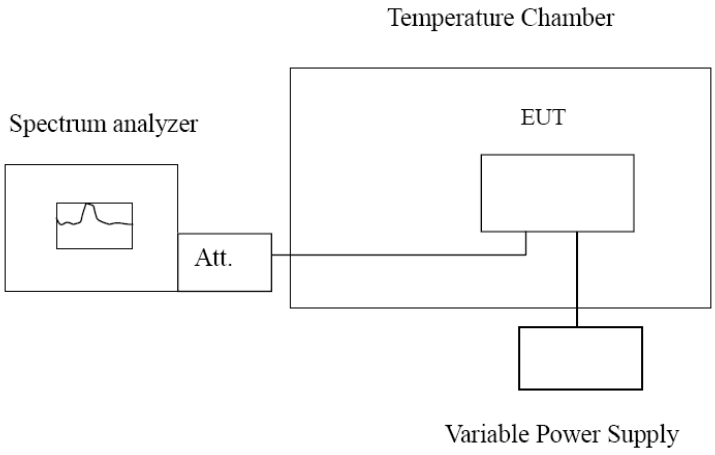


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.200 GHz	2.288 GHz	50.000 kHz	2.26725 GHz	-55.82 dBm	-15.82 dB
2.288 GHz	2.292 GHz	50.000 kHz	2.29169 GHz	-51.65 dBm	-14.65 dB
2.292 GHz	2.296 GHz	50.000 kHz	2.29598 GHz	-46.00 dBm	-15.00 dB
2.296 GHz	2.300 GHz	50.000 kHz	2.29961 GHz	-39.29 dBm	-14.29 dB
2.300 GHz	2.305 GHz	50.000 kHz	2.30499 GHz	-33.78 dBm	-20.78 dB
2.305 GHz	2.315 GHz	50.000 kHz	2.30752 GHz	2.66 dBm	-27.34 dB
2.315 GHz	2.320 GHz	50.000 kHz	2.31503 GHz	-34.11 dBm	-21.11 dB
2.320 GHz	2.324 GHz	50.000 kHz	2.32037 GHz	-38.24 dBm	-13.24 dB
2.324 GHz	2.328 GHz	50.000 kHz	2.32414 GHz	-47.13 dBm	-16.13 dB
2.328 GHz	2.337 GHz	50.000 kHz	2.32855 GHz	-54.69 dBm	-17.69 dB

N/A

8. Frequency Stability

8.1. Test Setup



8.2. Test Procedure

Frequency Stability Under Temperature Variations:

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20℃ operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30℃. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10℃ increased per stage until the highest temperature of +50℃ reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20℃. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.
Reduce the input voltage to specify extreme voltage variation (±15%) and endpoint, record the maximum frequency change.

8.3. Test Method

KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause 9
ANSI C63.26: 2015 Sub-clause 5.6

8.4. Test Result

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 1: LTE Band 2		
Date of Test	2021/06/03	Test Site	SR10-H
Temperature(°C)	22	Humidity (%RH)	70

LTE-Band 2 1850.70MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.55	0.0019
5.00	3.22	0.0017
4.25	1.79	0.0010

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.13	0.0017
-20	2.47	0.0013
-10	3.06	0.0017
0	2.53	0.0014
10	2.74	0.0015
20	2.81	0.0015
30	2.89	0.0016
40	3.17	0.0017
50	3.59	0.0019

LTE-Band 2 1909.30MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.26	0.0017
5.00	3.41	0.0018
4.25	3.01	0.0016

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.31	0.0012
-20	2.76	0.0014
-10	2.37	0.0012
0	3.37	0.0018
10	2.63	0.0014
20	2.33	0.0012
30	2.27	0.0012
40	2.33	0.0012
50	3.24	0.0017

LTE-Band 2 1851.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.45	0.0013
5.00	3.67	0.0020
4.25	2.30	0.0012

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.82	0.0015
-20	2.22	0.0012
-10	3.17	0.0017
0	3.45	0.0019
10	3.41	0.0018
20	2.93	0.0016
30	2.39	0.0013
40	3.03	0.0016
50	2.81	0.0015

LTE-Band 2 1908.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.92	0.0015
5.00	3.41	0.0018
4.25	2.46	0.0013

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.82	0.0015
-20	2.28	0.0012
-10	2.98	0.0016
0	4.14	0.0022
10	2.58	0.0014
20	3.13	0.0016
30	3.47	0.0018
40	2.09	0.0011
50	3.03	0.0016

LTE-Band 2 1852.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.72	0.0015
5.00	3.86	0.0021
4.25	3.80	0.0021

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	4.02	0.0022
-20	3.24	0.0017
-10	3.85	0.0021
0	4.33	0.0023
10	2.78	0.0015
20	2.65	0.0014
30	3.01	0.0016
40	3.76	0.0020
50	3.33	0.0018

LTE-Band 2 1907.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.97	0.0016
5.00	3.61	0.0019
4.25	3.70	0.0019

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.11	0.0016
-20	3.23	0.0017
-10	2.80	0.0015
0	2.07	0.0011
10	3.03	0.0016
20	3.13	0.0016
30	2.34	0.0012
40	2.69	0.0014
50	3.68	0.0019

LTE-Band 2 1855MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.23	0.0012
5.00	3.40	0.0018
4.25	2.81	0.0015

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.26	0.0012
-20	3.06	0.0016
-10	3.46	0.0019
0	2.78	0.0015
10	2.27	0.0012
20	2.05	0.0011
30	3.10	0.0017
40	2.44	0.0013
50	2.92	0.0016

LTE-Band 2 1905MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.65	0.0019
5.00	3.25	0.0017
4.25	3.03	0.0016

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.80	0.0015
-20	2.10	0.0011
-10	2.56	0.0013
0	1.89	0.0010
10	2.29	0.0012
20	1.89	0.0010
30	2.42	0.0013
40	3.73	0.0020
50	1.74	0.0009

LTE-Band 2 1857.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.85	0.0015
5.00	3.46	0.0019
4.25	2.35	0.0013

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.60	0.0019
-20	2.60	0.0014
-10	2.03	0.0011
0	2.33	0.0013
10	3.55	0.0019
20	2.91	0.0016
30	2.81	0.0015
40	2.72	0.0015
50	3.81	0.0021

LTE-Band 2 1902.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.20	0.0017
5.00	3.38	0.0018
4.25	2.83	0.0015

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.24	0.0012
-20	3.79	0.0020
-10	2.52	0.0013
0	3.03	0.0016
10	2.40	0.0013
20	2.96	0.0016
30	2.59	0.0014
40	3.14	0.0017
50	2.92	0.0015

LTE-Band 2 1860MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.66	0.0020
5.00	3.44	0.0018
4.25	3.84	0.0021

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.97	0.0016
-20	3.07	0.0017
-10	2.53	0.0014
0	3.63	0.0020
10	2.72	0.0015
20	3.89	0.0021
30	2.73	0.0015
40	2.73	0.0015
50	2.86	0.0015

LTE-Band 2 1900MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.43	0.0013
5.00	3.72	0.0020
4.25	3.34	0.0018

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.68	0.0014
-20	3.29	0.0017
-10	3.06	0.0016
0	2.75	0.0014
10	2.07	0.0011
20	3.35	0.0018
30	3.48	0.0018
40	3.50	0.0018
50	3.28	0.0017

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 2: LTE Band 4		
Date of Test	2021/06/03	Test Site	SR10-H
Temperature(°C)	22	Humidity (%RH)	70

LTE-Band 4 1710.7MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	1.99	0.0012
5.00	3.17	0.0019
4.25	2.59	0.0015

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.73	0.0016
-20	2.32	0.0014
-10	2.57	0.0015
0	2.49	0.0015
10	2.42	0.0014
20	2.68	0.0016
30	2.52	0.0015
40	2.73	0.0016
50	2.27	0.0013

LTE-Band 4 1754.3MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.23	0.0013
5.00	3.23	0.0018
4.25	2.76	0.0016

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.40	0.0019
-20	3.39	0.0019
-10	2.86	0.0016
0	2.85	0.0016
10	2.05	0.0012
20	2.65	0.0015
30	1.99	0.0011
40	2.21	0.0013
50	3.21	0.0018

LTE-Band 4 1711.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.44	0.0020
5.00	3.31	0.0019
4.25	2.68	0.0016

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.25	0.0019
-20	2.79	0.0016
-10	2.44	0.0014
0	2.13	0.0012
10	3.24	0.0019
20	2.88	0.0017
30	3.46	0.0020
40	2.56	0.0015
50	3.37	0.0020

LTE-Band 4 1753.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.72	0.0016
5.00	3.28	0.0019
4.25	2.78	0.0016

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.64	0.0015
-20	3.41	0.0019
-10	2.66	0.0015
0	2.83	0.0016
10	2.95	0.0017
20	2.81	0.0016
30	2.22	0.0013
40	3.41	0.0019
50	2.37	0.0014

LTE-Band 4 1712.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.19	0.0019
5.00	4.23	0.0025
4.25	3.81	0.0022

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.46	0.0020
-20	3.82	0.0022
-10	3.40	0.0020
0	3.28	0.0019
10	4.29	0.0025
20	4.21	0.0025
30	3.58	0.0021
40	3.91	0.0023
50	3.00	0.0018

LTE-Band 4 1752.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.03	0.0017
5.00	3.18	0.0018
4.25	3.08	0.0018

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.12	0.0012
-20	2.43	0.0014
-10	2.10	0.0012
0	2.47	0.0014
10	2.31	0.0013
20	2.03	0.0012
30	2.66	0.0015
40	2.56	0.0015
50	2.66	0.0015

LTE-Band 4 1715MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	4.31	0.0025
5.00	4.32	0.0025
4.25	4.28	0.0025

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	4.13	0.0024
-20	4.31	0.0025
-10	4.10	0.0024
0	2.79	0.0016
10	4.57	0.0027
20	3.23	0.0019
30	3.82	0.0022
40	4.12	0.0024
50	4.02	0.0023

LTE-Band 4 1750MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.96	0.0017
5.00	3.42	0.0020
4.25	3.53	0.0020

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.40	0.0019
-20	3.33	0.0019
-10	3.58	0.0020
0	2.51	0.0014
10	2.79	0.0016
20	2.83	0.0016
30	2.36	0.0013
40	3.06	0.0017
50	2.76	0.0016

LTE-Band 4 1717.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.61	0.0021
5.00	3.53	0.0021
4.25	3.07	0.0018

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.98	0.0017
-20	3.07	0.0018
-10	2.43	0.0014
0	2.81	0.0016
10	2.65	0.0015
20	3.16	0.0018
30	3.53	0.0021
40	2.50	0.0015
50	2.74	0.0016

LTE-Band 4 1747.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.73	0.0021
5.00	3.68	0.0021
4.25	2.90	0.0017

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.08	0.0018
-20	3.78	0.0022
-10	2.95	0.0017
0	3.05	0.0017
10	3.38	0.0019
20	3.06	0.0018
30	3.50	0.0020
40	3.55	0.0020
50	3.42	0.0020

LTE-Band 4 1720MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.87	0.0017
5.00	3.29	0.0019
4.25	3.01	0.0018

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.44	0.0020
-20	2.63	0.0015
-10	2.81	0.0016
0	2.30	0.0013
10	2.63	0.0015
20	2.84	0.0017
30	3.51	0.0020
40	1.98	0.0012
50	1.68	0.0010

LTE-Band 4 1745MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.57	0.0020
5.00	3.47	0.0020
4.25	4.10	0.0023

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.86	0.0016
-20	3.24	0.0019
-10	3.09	0.0018
0	2.06	0.0012
10	3.43	0.0020
20	2.43	0.0014
30	3.15	0.0018
40	2.94	0.0017
50	4.07	0.0023

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 3: LTE Band 5		
Date of Test	2021/06/03	Test Site	SR10-H
Temperature(°C)	22	Humidity (%RH)	70

LTE-Band 5 824.7MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.22	0.0039
5.00	3.65	0.0044
4.25	3.20	0.0039

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.43	0.0029
-20	3.12	0.0038
-10	2.84	0.0034
0	3.63	0.0044
10	3.73	0.0045
20	3.37	0.0041
30	2.98	0.0036
40	2.45	0.0030
50	3.08	0.0037

LTE-Band 5 848.3MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.34	0.0039
5.00	3.56	0.0042
4.25	2.79	0.0033

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.51	0.0030
-20	3.22	0.0038
-10	3.37	0.0040
0	3.16	0.0037
10	2.60	0.0031
20	2.55	0.0030
30	3.02	0.0036
40	3.70	0.0044
50	2.82	0.0033

LTE-Band 5 825.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	4.11	0.0050
5.00	4.10	0.0050
4.25	3.58	0.0043

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.66	0.0044
-20	3.81	0.0046
-10	3.84	0.0047
0	3.69	0.0045
10	2.73	0.0033
20	3.97	0.0048
30	2.52	0.0031
40	3.35	0.0041
50	3.94	0.0048

LTE-Band 5 847.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.30	0.0039
5.00	4.25	0.0050
4.25	3.73	0.0044

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.27	0.0039
-20	3.86	0.0046
-10	3.48	0.0041
0	3.52	0.0042
10	4.26	0.0050
20	3.34	0.0039
30	3.65	0.0043
40	4.05	0.0048
50	4.54	0.0054

LTE-Band 5 826.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	4.36	0.0053
5.00	4.66	0.0056
4.25	5.36	0.0065

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	4.84	0.0059
-20	4.89	0.0059
-10	5.29	0.0064
0	4.21	0.0051
10	3.80	0.0046
20	3.55	0.0043
30	3.73	0.0045
40	4.48	0.0054
50	3.74	0.0045

LTE-Band 5 846.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.88	0.0046
5.00	5.01	0.0059
4.25	4.36	0.0052

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	4.01	0.0047
-20	4.89	0.0058
-10	4.11	0.0049
0	4.11	0.0049
10	3.48	0.0041
20	5.12	0.0060
30	3.66	0.0043
40	4.29	0.0051
50	5.07	0.0060

LTE-Band 5 829MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.72	0.0033
5.00	3.72	0.0045
4.25	3.46	0.0042

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.38	0.0041
-20	3.19	0.0038
-10	3.99	0.0048
0	2.67	0.0032
10	2.57	0.0031
20	3.65	0.0044
30	3.13	0.0038
40	2.74	0.0033
50	3.56	0.0043

LTE-Band 5 844MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.62	0.0031
5.00	3.55	0.0042
4.25	3.04	0.0036

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.89	0.0034
-20	3.82	0.0045
-10	3.54	0.0042
0	2.86	0.0034
10	2.65	0.0031
20	2.33	0.0028
30	2.92	0.0035
40	3.11	0.0037
50	2.93	0.0035

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 4: LTE Band 12		
Date of Test	2021/06/03	Test Site	SR10-H
Temperature(°C)	22	Humidity (%RH)	70

LTE-Band 12 699.7MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.12	0.0045
5.00	3.33	0.0048
4.25	2.74	0.0039

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	1.92	0.0027
-20	2.57	0.0037
-10	3.35	0.0048
0	2.73	0.0039
10	2.75	0.0039
20	2.62	0.0037
30	3.39	0.0048
40	2.83	0.0040
50	3.09	0.0044

LTE-Band 12 715.3MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.13	0.0030
5.00	3.34	0.0047
4.25	2.41	0.0034

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.28	0.0032
-20	2.80	0.0039
-10	2.77	0.0039
0	2.88	0.0040
10	2.75	0.0038
20	2.76	0.0039
30	2.65	0.0037
40	1.66	0.0023
50	2.37	0.0033

LTE-Band 12 700.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.56	0.0051
5.00	4.23	0.0060
4.25	4.52	0.0065

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	4.08	0.0058
-20	3.41	0.0049
-10	3.75	0.0054
0	4.58	0.0065
10	3.59	0.0051
20	4.07	0.0058
30	3.87	0.0055
40	3.63	0.0052
50	3.72	0.0053

LTE-Band 12 714.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.62	0.0051
5.00	3.99	0.0056
4.25	2.81	0.0039

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.57	0.0050
-20	3.01	0.0042
-10	3.29	0.0046
0	3.32	0.0046
10	3.32	0.0046
20	3.68	0.0052
30	3.89	0.0054
40	3.11	0.0044
50	3.40	0.0048

LTE-Band 12 701.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.12	0.0030
5.00	2.99	0.0043
4.25	2.51	0.0036

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.86	0.0041
-20	3.18	0.0045
-10	2.92	0.0042
0	1.54	0.0022
10	3.62	0.0052
20	2.63	0.0037
30	3.03	0.0043
40	2.33	0.0033
50	2.02	0.0029

LTE-Band 12 713.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.36	0.0047
5.00	3.63	0.0051
4.25	3.26	0.0046

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.37	0.0047
-20	2.62	0.0037
-10	3.13	0.0044
0	3.24	0.0045
10	3.85	0.0054
20	2.51	0.0035
30	3.35	0.0047
40	3.44	0.0048
50	3.53	0.0049

LTE-Band 12 704MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.94	0.0042
5.00	3.82	0.0054
4.25	3.22	0.0046

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.23	0.0046
-20	3.01	0.0043
-10	3.29	0.0047
0	2.49	0.0035
10	3.19	0.0045
20	3.69	0.0052
30	2.57	0.0037
40	3.19	0.0045
50	3.73	0.0053

LTE-Band 12 711MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	3.37	0.0047
5.00	3.61	0.0051
4.25	3.63	0.0051

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	4.18	0.0059
-20	3.07	0.0043
-10	3.12	0.0044
0	2.73	0.0038
10	2.17	0.0031
20	2.72	0.0038
30	2.77	0.0039
40	3.35	0.0047
50	3.34	0.0047

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 5: LTE Band 14		
Date of Test	2021/06/03	Test Site	SR10-H
Temperature(°C)	22	Humidity (%RH)	70

LTE-Band 14 790.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.27	0.0029
5.00	2.59	0.0033
4.25	1.89	0.0024

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	1.28	0.0016
-20	2.88	0.0036
-10	1.77	0.0022
0	2.20	0.0028
10	1.39	0.0018
20	2.40	0.0030
30	2.09	0.0026
40	2.00	0.0025
50	1.99	0.0025

LTE-Band 14 795.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.10	0.0026
5.00	3.14	0.0039
4.25	2.40	0.0030

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.71	0.0034
-20	3.06	0.0038
-10	2.77	0.0035
0	2.82	0.0035
10	2.32	0.0029
20	2.08	0.0026
30	2.68	0.0034
40	2.03	0.0026
50	3.39	0.0043

LTE-Band 14 793MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.74	0.0035
5.00	3.33	0.0042
4.25	3.77	0.0048

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.63	0.0033
-20	2.93	0.0037
-10	3.12	0.0039
0	3.62	0.0046
10	2.91	0.0037
20	2.25	0.0028
30	3.34	0.0042
40	3.97	0.0050
50	2.17	0.0027

Product Name	WCDMA/LTE Mobile Phone		
Test Mode	Mode 6: LTE Band 30		
Date of Test	2021/06/03	Test Site	SR10-H
Temperature(°C)	22	Humidity (%RH)	70

LTE-Band 30 2307.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	2.24	0.0010
5.00	2.69	0.0012
4.25	0.93	0.0004

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.13	0.0009
-20	2.39	0.0010
-10	2.17	0.0009
0	2.21	0.0010
10	2.79	0.0012
20	1.99	0.0009
30	1.60	0.0007
40	2.64	0.0011
50	2.93	0.0013

LTE-Band 30 2312.5MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	1.56	0.0007
5.00	3.14	0.0014
4.25	1.74	0.0008

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	3.01	0.0013
-20	2.18	0.0009
-10	2.88	0.0012
0	2.71	0.0012
10	2.85	0.0012
20	2.12	0.0009
30	2.34	0.0010
40	3.48	0.0015
50	2.81	0.0012

LTE-Band 30 2310MHz

Voltage

Voltage (VDC)	Frequency Error (Hz)	Frequency Error (ppm)
5.50	1.46	0.0006
5.00	2.99	0.0013
4.25	1.91	0.0008

Temperature

Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	2.11	0.0009
-20	3.05	0.0013
-10	3.14	0.0014
0	1.34	0.0006
10	2.10	0.0009
20	3.13	0.0014
30	2.26	0.0010
40	2.51	0.0011
50	3.17	0.0014