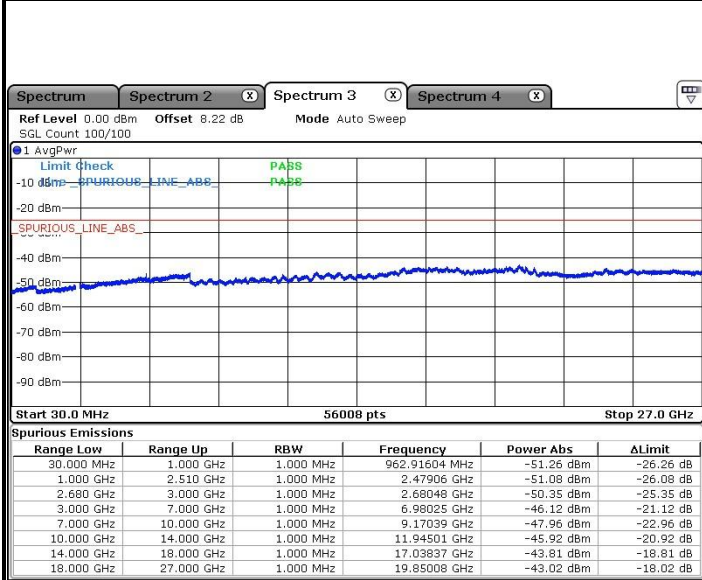




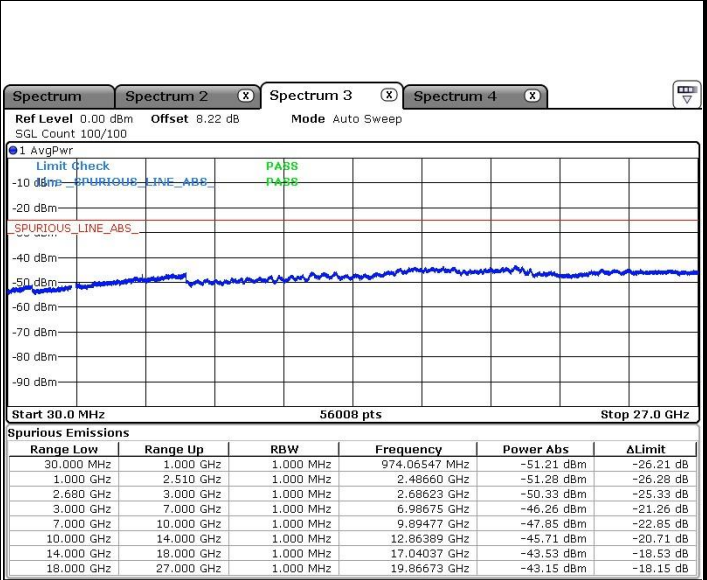
LTE Band 41 / 5MHz

Highest Channel / QPSK



Ready [Progress Bar] Date: 13.MAY.2020 19:16:25

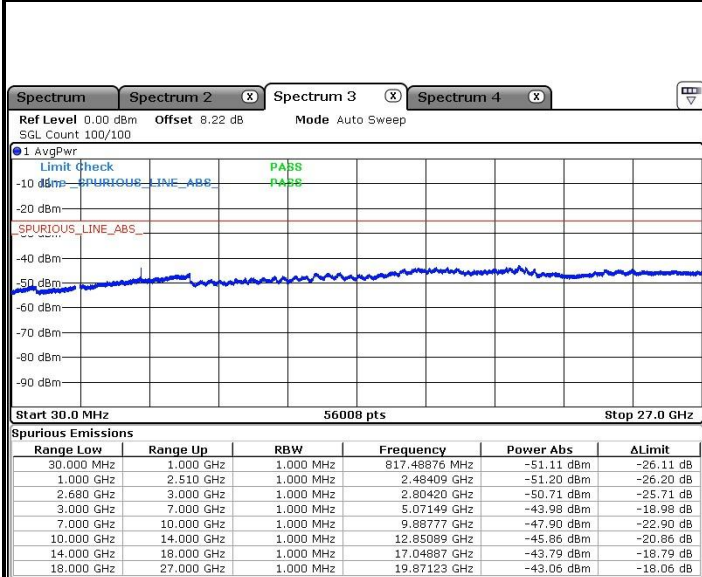
Highest Channel / 16QAM



Ready [Progress Bar] Date: 13.MAY.2020 19:14:58

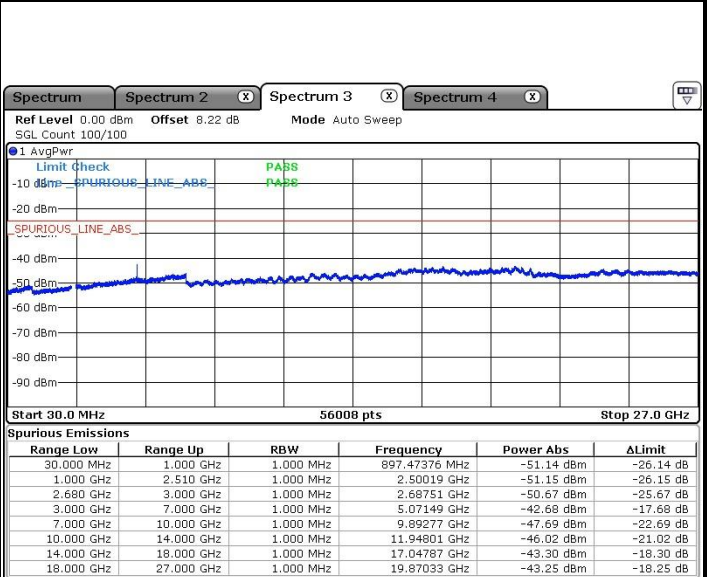
LTE Band 41 / 10MHz

Lowest Channel / QPSK



Ready [Progress Bar] Date: 13.MAY.2020 19:48:23

Lowest Channel / 16QAM

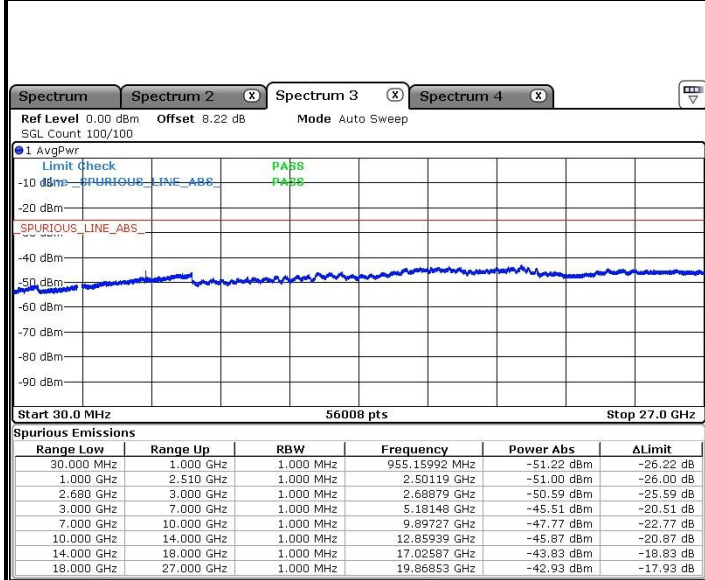


Ready [Progress Bar] Date: 13.MAY.2020 19:47:25



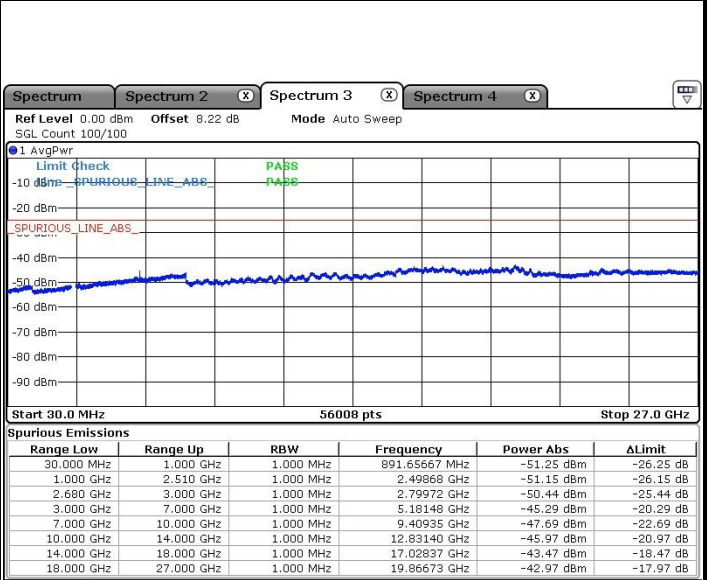
LTE Band 41 / 10MHz

Middle Channel / QPSK



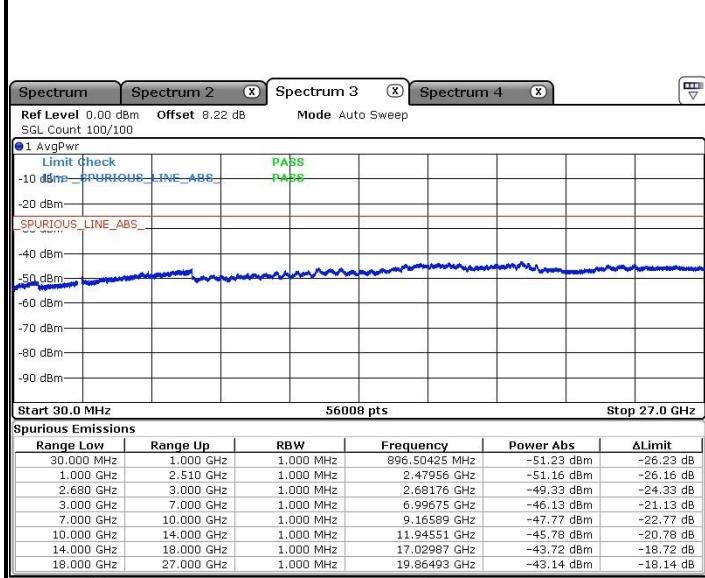
Ready [Progress Bar] Date: 13.MAY.2020 19:43:19

Middle Channel / 16QAM



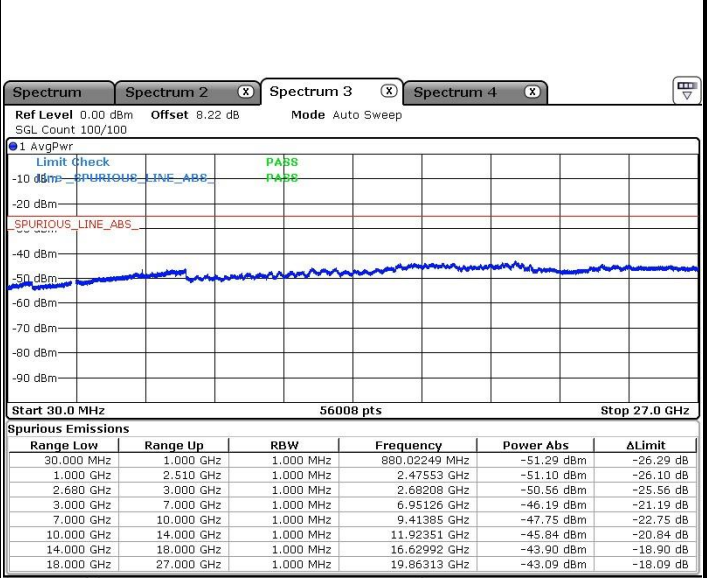
Ready [Progress Bar] Date: 13.MAY.2020 19:44:24

Highest Channel / QPSK



Ready [Progress Bar] Date: 13.MAY.2020 19:42:20

Highest Channel / 16QAM

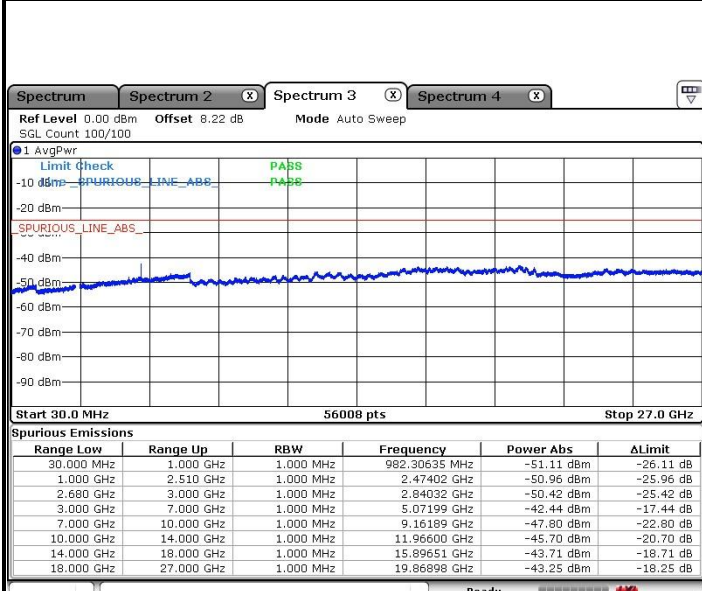


Ready [Progress Bar] Date: 13.MAY.2020 19:41:23



LTE Band 41 / 15MHz

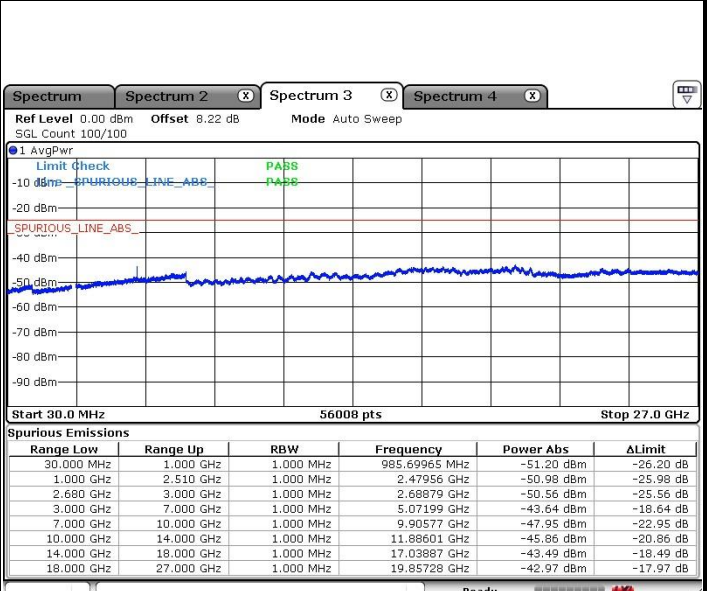
Lowest Channel / QPSK



Ready [Progress Bar] [Signal Icon]

Date: 13.MAY.2020 20:14:47

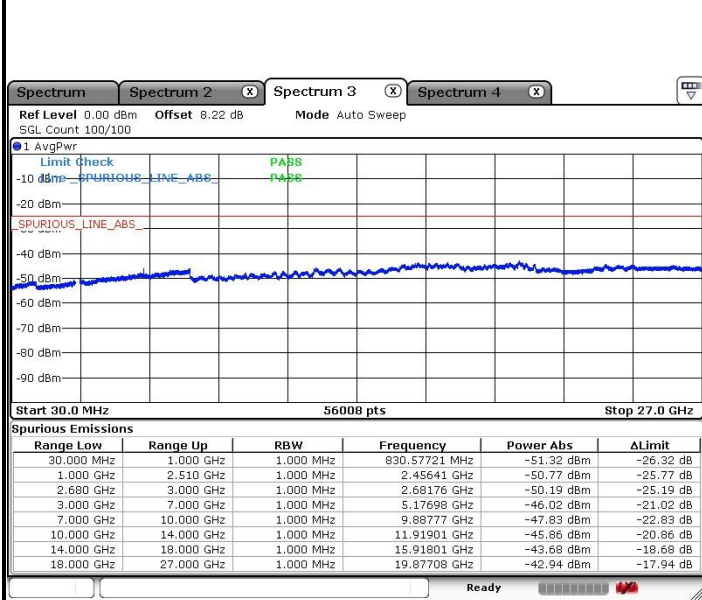
Lowest Channel / 16QAM



Ready [Progress Bar] [Signal Icon]

Date: 13.MAY.2020 20:10:50

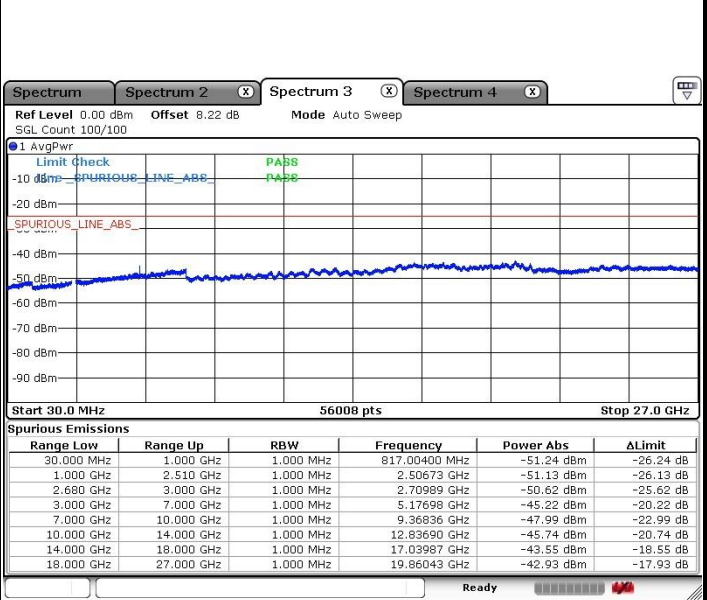
Middle Channel / QPSK



Ready [Progress Bar] [Signal Icon]

Date: 13.MAY.2020 20:06:42

Middle Channel / 16QAM



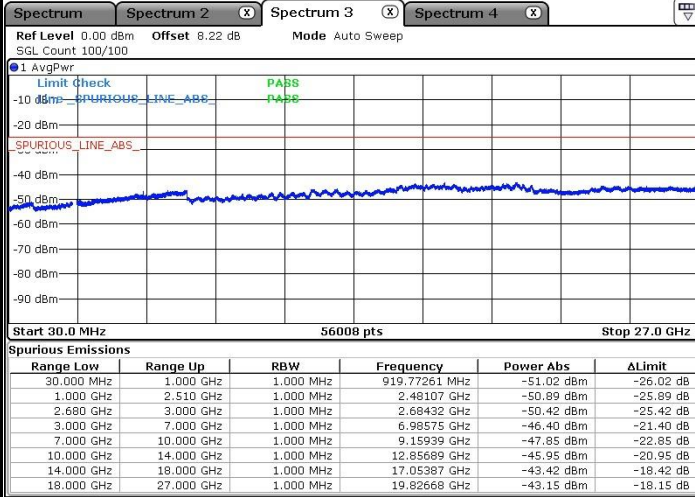
Ready [Progress Bar] [Signal Icon]

Date: 13.MAY.2020 20:07:40



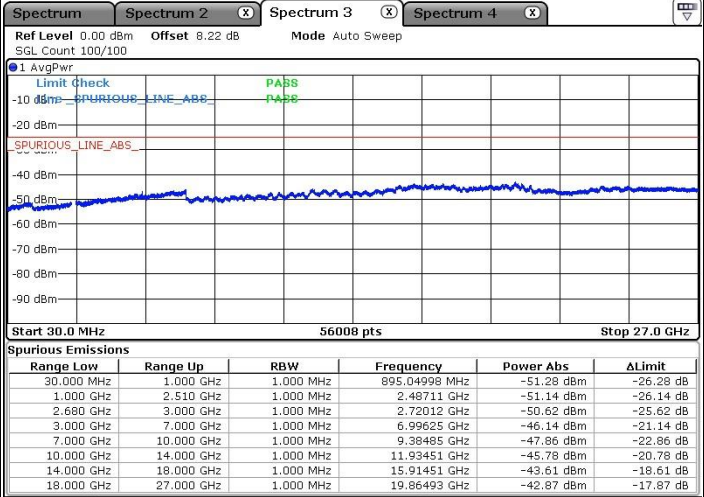
LTE Band 41 / 15MHz

Highest Channel / QPSK



Date: 13.MAY.2020 20:05:35

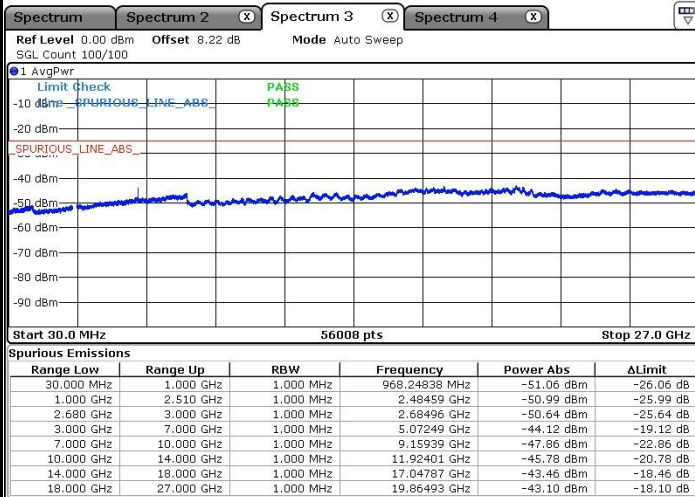
Highest Channel / 16QAM



Date: 13.MAY.2020 20:04:33

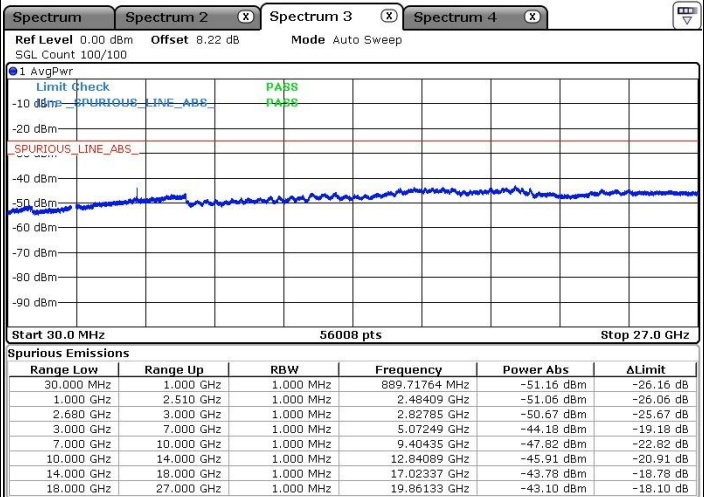
LTE Band 41 / 20MHz

Lowest Channel / QPSK



Date: 13.MAY.2020 20:55:32

Lowest Channel / 16QAM

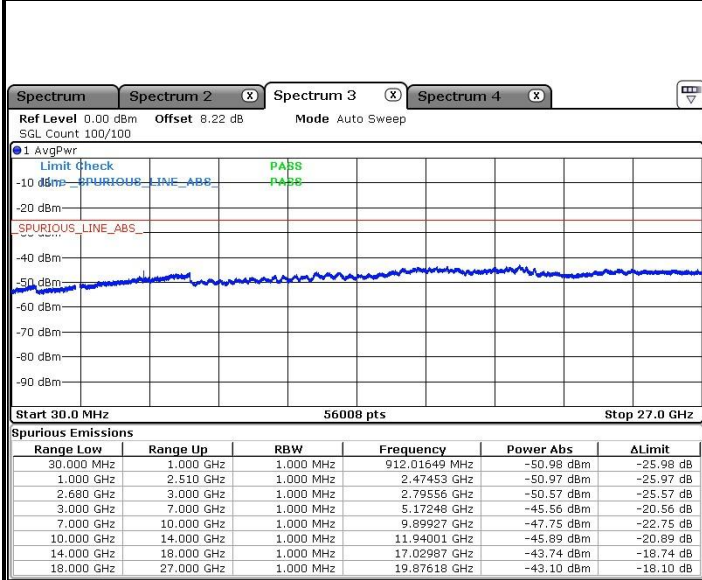


Date: 13.MAY.2020 20:54:33



LTE Band 41 / 20MHz

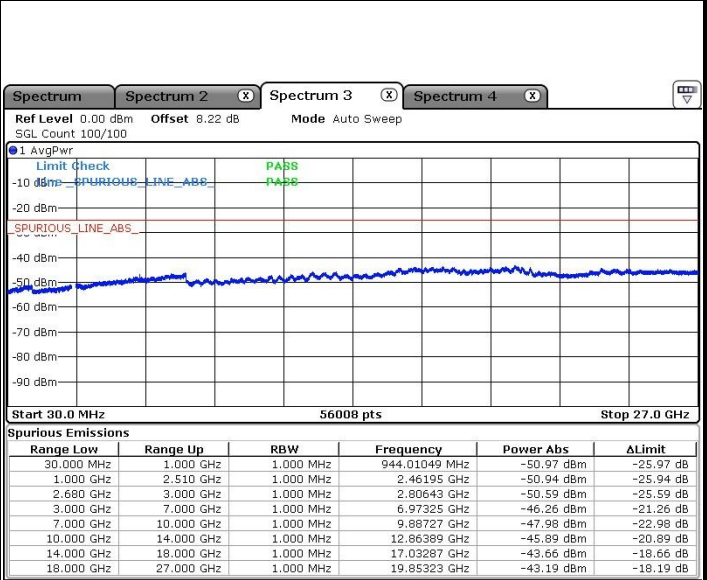
Middle Channel / QPSK



Ready [Progress Bar] [Signal Icon]

Date: 13.MAY.2020 20:50:35

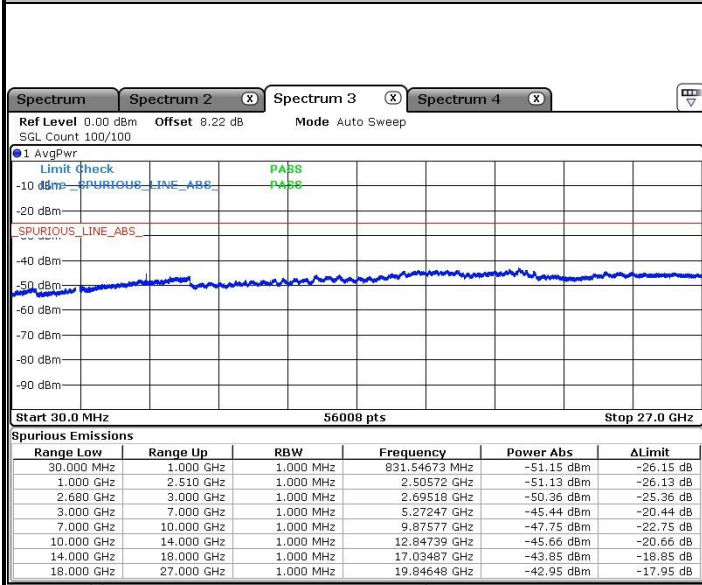
Middle Channel / 16QAM



Ready [Progress Bar] [Signal Icon]

Date: 13.MAY.2020 20:51:30

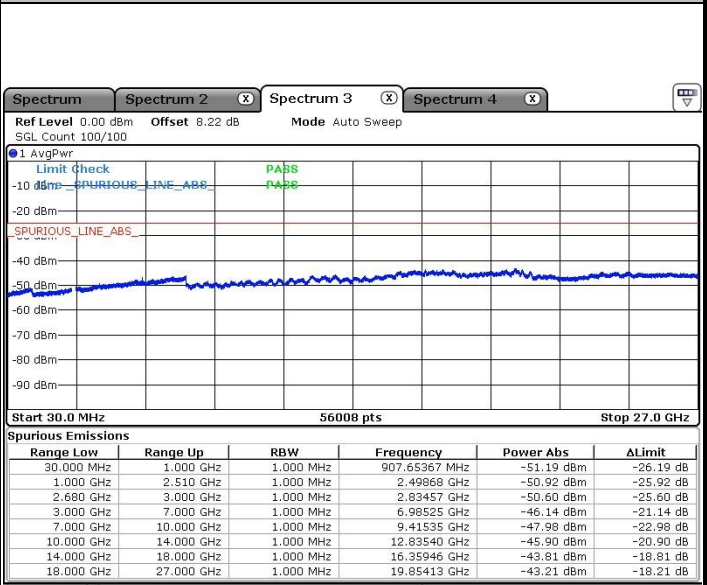
Highest Channel / QPSK



Ready [Progress Bar] [Signal Icon]

Date: 13.MAY.2020 20:49:37

Highest Channel / 16QAM



Ready [Progress Bar] [Signal Icon]

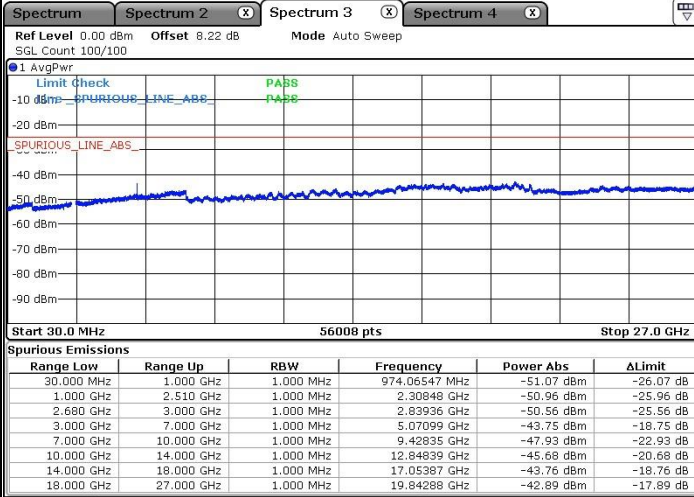
Date: 13.MAY.2020 20:48:39



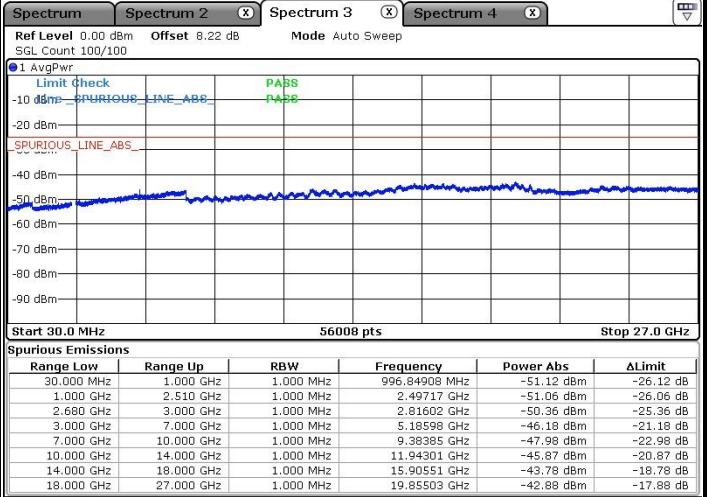
LTE Band 41 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

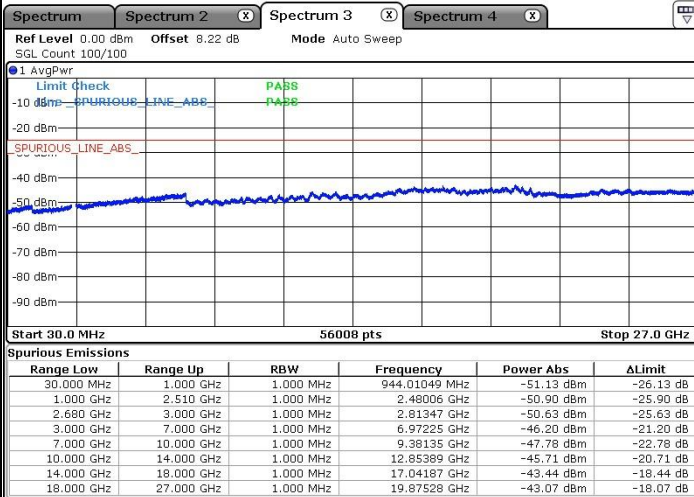


Date: 13.MAY.2020 19:20:25



Date: 13.MAY.2020 19:19:22

Highest Channel / 64QAM



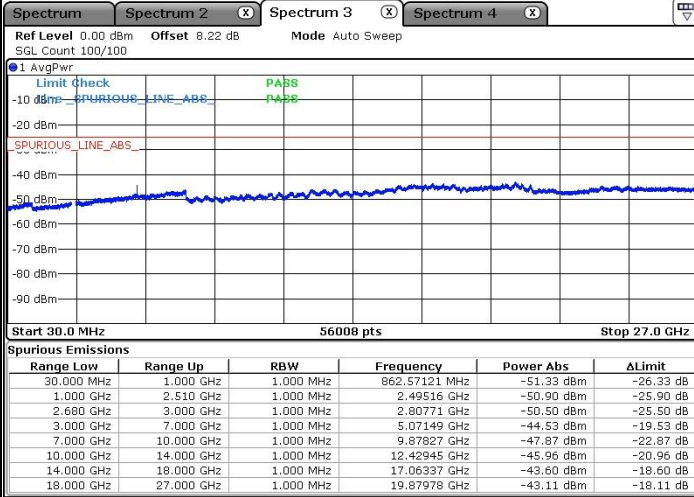
Date: 13.MAY.2020 18:43:05



LTE Band 41 / 10MHz

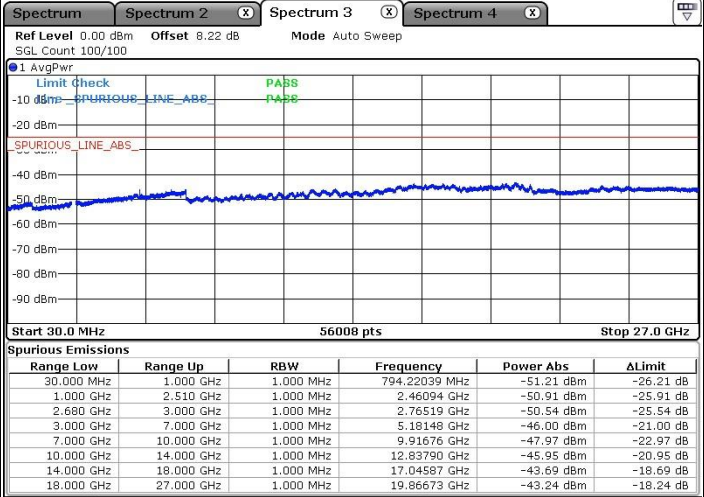
Lowest Channel / 64QAM

Middle Channel / 64QAM



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	862.57121 MHz	-51.33 dBm	-26.33 dB
1.000 GHz	2.510 GHz	1.000 MHz	2.49516 GHz	-50.90 dBm	-25.90 dB
2.680 GHz	3.000 GHz	1.000 MHz	2.80771 GHz	-50.50 dBm	-25.50 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.07149 GHz	-44.53 dBm	-19.53 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.87827 GHz	-47.87 dBm	-22.87 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.42945 GHz	-45.96 dBm	-20.96 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.06337 GHz	-43.60 dBm	-18.60 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.87978 GHz	-43.11 dBm	-18.11 dB

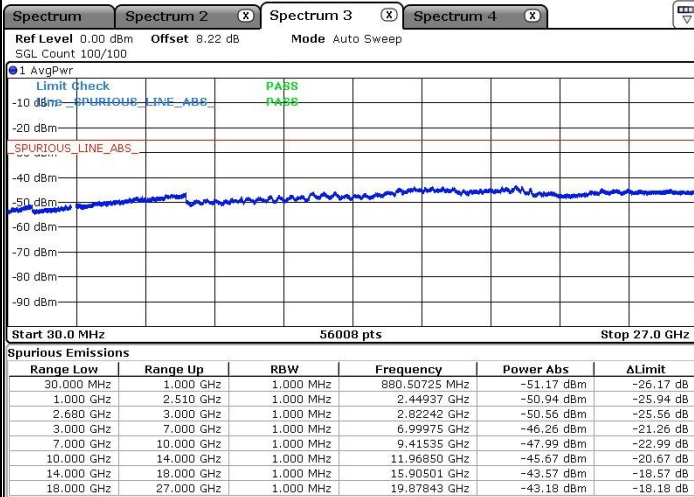
Date: 13.MAY.2020 19:46:30



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	794.22039 MHz	-51.21 dBm	-26.21 dB
1.000 GHz	2.510 GHz	1.000 MHz	2.46094 GHz	-50.91 dBm	-25.91 dB
2.680 GHz	3.000 GHz	1.000 MHz	2.76519 GHz	-50.54 dBm	-25.54 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.18148 GHz	-46.00 dBm	-21.00 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.91676 GHz	-47.97 dBm	-22.97 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.83790 GHz	-45.95 dBm	-20.95 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.04587 GHz	-43.69 dBm	-18.69 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.86673 GHz	-43.24 dBm	-18.24 dB

Date: 13.MAY.2020 19:45:19

Highest Channel / 64QAM



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	880.50725 MHz	-51.17 dBm	-26.17 dB
1.000 GHz	2.510 GHz	1.000 MHz	2.44937 GHz	-50.94 dBm	-25.94 dB
2.680 GHz	3.000 GHz	1.000 MHz	2.82242 GHz	-50.56 dBm	-25.56 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99975 GHz	-46.26 dBm	-21.26 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.41535 GHz	-47.99 dBm	-22.99 dB
10.000 GHz	14.000 GHz	1.000 MHz	11.96850 GHz	-45.67 dBm	-20.67 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.90501 GHz	-43.57 dBm	-18.57 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.87843 GHz	-43.18 dBm	-18.18 dB

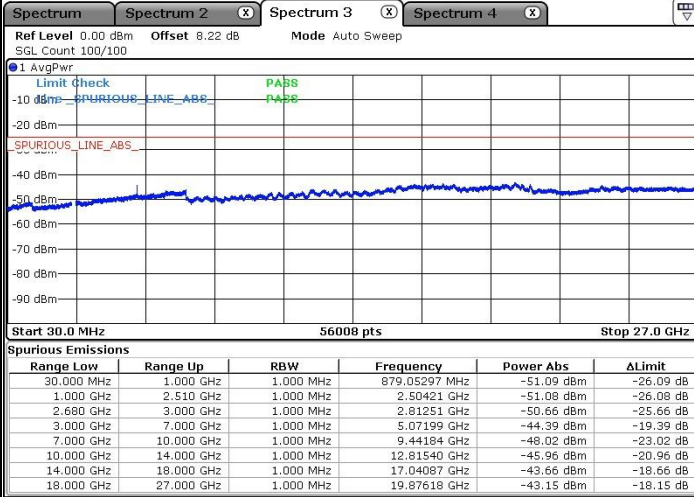
Date: 13.MAY.2020 19:40:13



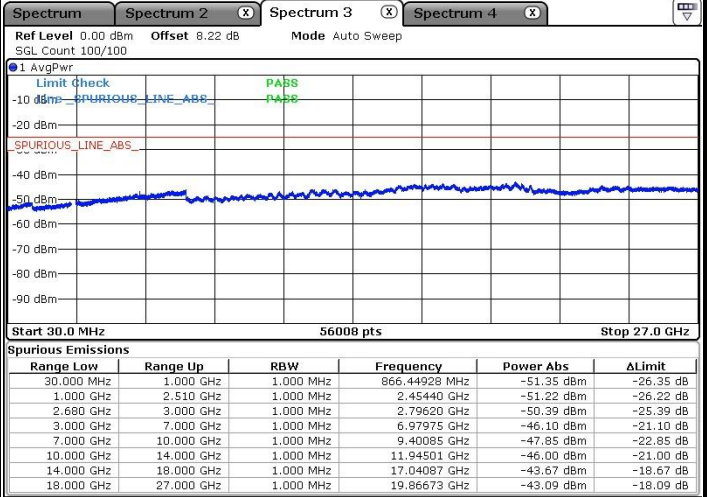
LTE Band 41 / 15MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

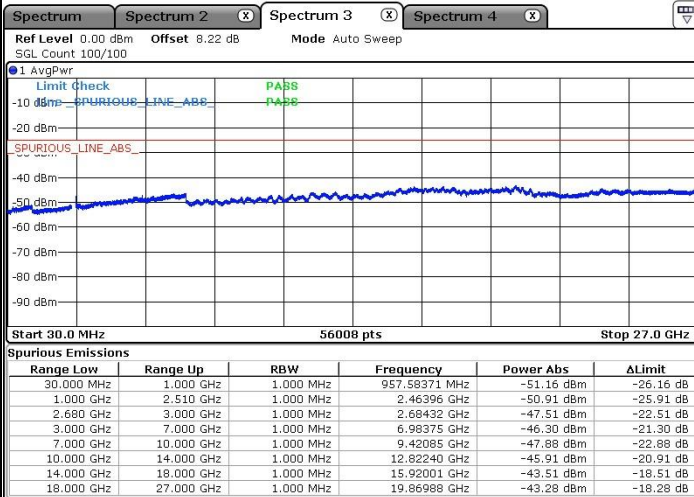


Date: 13.MAY.2020 20:09:49



Date: 13.MAY.2020 20:08:36

Highest Channel / 64QAM



Date: 13.MAY.2020 20:03:27

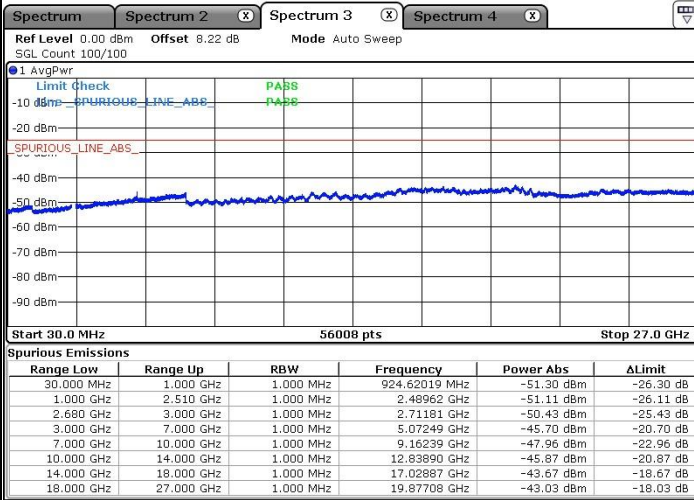




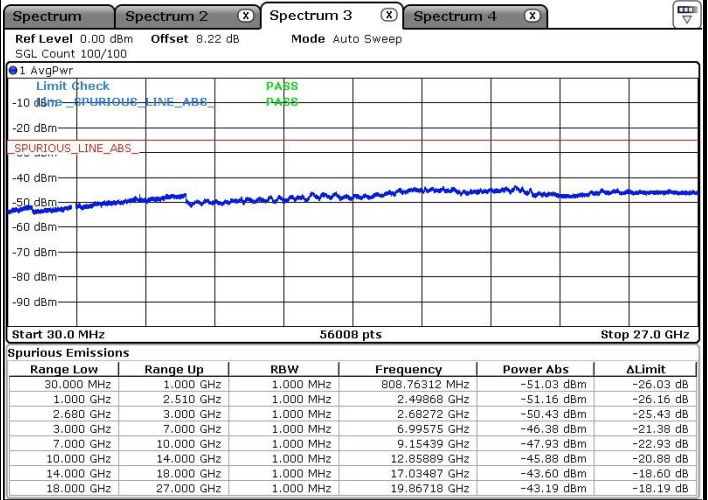
LTE Band 41 / 20MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

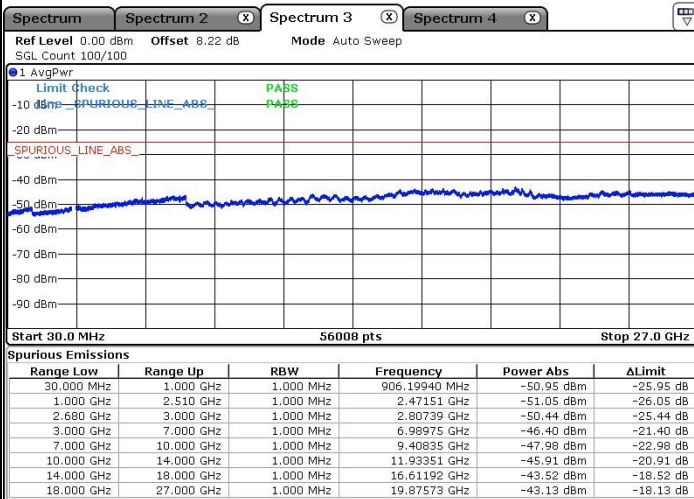


Date: 13.MAY.2020 20:53:32



Date: 13.MAY.2020 20:52:31

Highest Channel / 64QAM



Date: 13.MAY.2020 20:47:25



Frequency Stability

Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0025	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0022	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0020	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## Appendix C. Test Results of Radiated Test

### Radiated Spurious Emission

LTE Band 26 / 15MHz / QPSK								
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1660	-55.94	-13	-42.94	-62.91	1.58	10.70	H
	2490	-64.45	-13	-51.45	-72.70	2.102	12.50	H
	3318	-62.57	-13	-49.57	-71.46	2.856	13.90	H
	4152	-58.38	-13	-45.38	-66.84	2.689	13.30	H
	4980	-48.46	-13	-35.46	-56.22	3.093	13.00	H
	5808	-52.56	-13	-39.56	-61.33	3.178	14.10	H
	6636	-53.03	-13	-40.03	-60.27	3.306	12.70	H
	7470	-47.79	-13	-34.79	-55.38	3.406	13.15	H
	8298	-38.69	-13	-25.69	-45.66	1.58	10.70	H
	1660	-58.47	-13	-45.47	-65.44	1.58	10.70	V
	2490	-63.70	-13	-50.70	-71.95	2.10	12.50	V
	3318	-62.59	-13	-49.59	-71.48	2.86	13.90	V
	4152	-58.10	-13	-45.10	-66.56	2.69	13.30	V
	4980	-48.80	-13	-35.80	-56.56	3.09	13.00	V
	5808	-50.27	-13	-37.27	-59.04	3.18	14.10	V
	6636	-52.87	-13	-39.87	-60.11	3.31	12.70	V
7470	-49.45	-13	-36.45	-57.04	3.41	13.15	V	
8298	-42.99	-13	-29.99	-50.58	3.41	13.15	V	

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

LTE Band 41 / 15MHz / QPSK								
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5172	-46.48	-25	-21.48	-56.69	3.03	13.24	H
	7756	-34.03	-25	-9.03	-43.48	3.56	13.01	H
	10340	-55.16	-25	-30.16	-64.68	3.92	13.44	H
	12930	-50.47	-25	-25.47	-60.19	3.92	13.64	H
	5172	-49.44	-25	-24.44	-59.65	3.03	13.24	V
	7756	-40.82	-25	-15.82	-50.27	3.56	13.01	V
	10340	-54.09	-25	-29.09	-63.61	3.92	13.44	V
	12930	-52.61	-25	-27.61	-62.53	3.92	13.84	V

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



## **Appendix E. Reference Report**

Please refer to Sporton report number FG042102B which is issued separately.