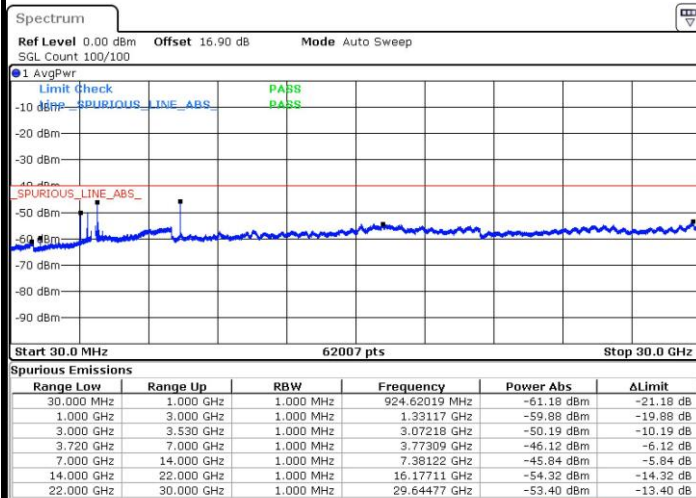




LTE Band 48 / 10MHz

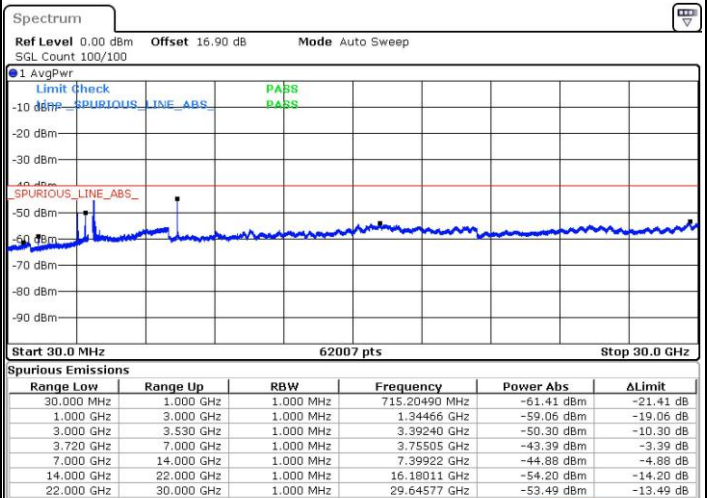
16QAM

Highest Channel / 1RB0



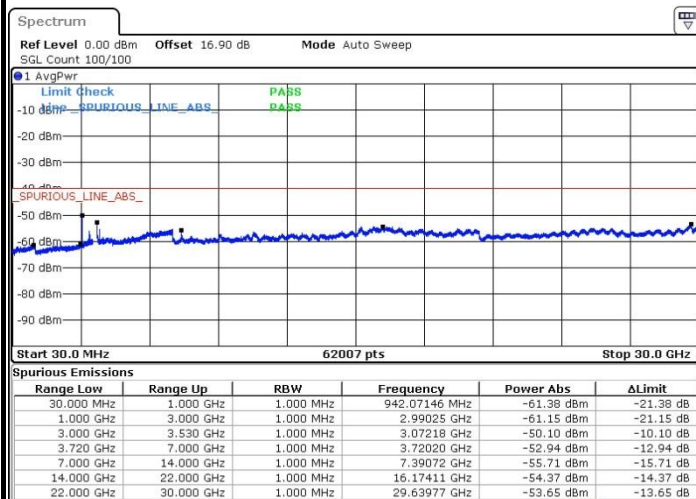
Date: 21.NOV.2018 18:41:31

Highest Channel / 1RBmax



Date: 21.NOV.2018 21:11:10

Highest Channel / FullIRB



Date: 21.NOV.2018 18:50:44

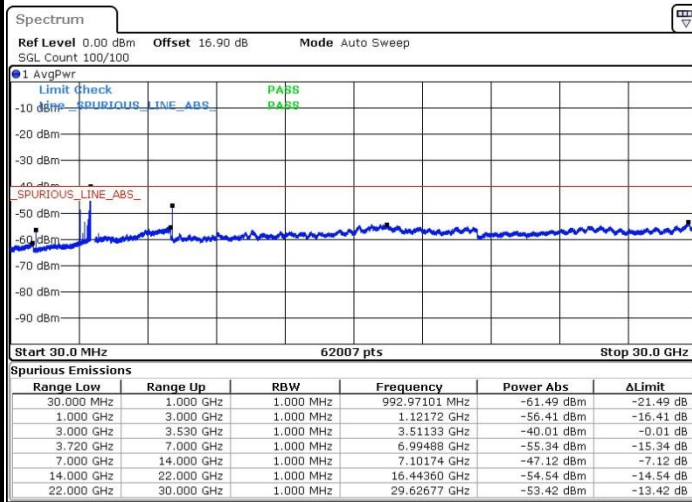
N/A



LTE Band 48 / 15MHz

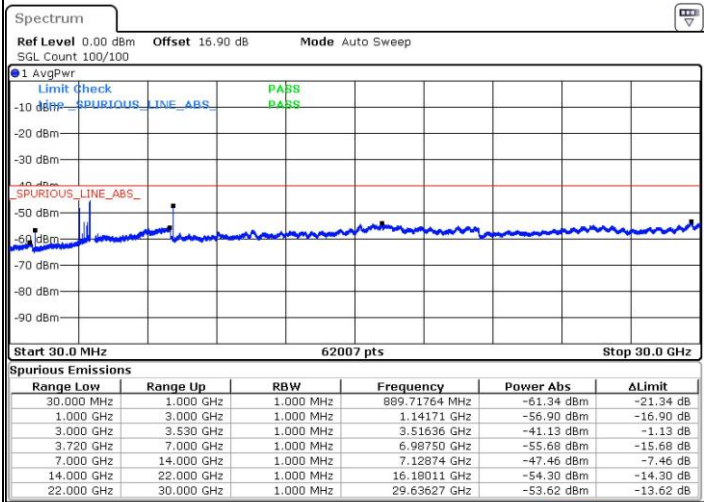
16QAM

Lowest Channel / 1RB0



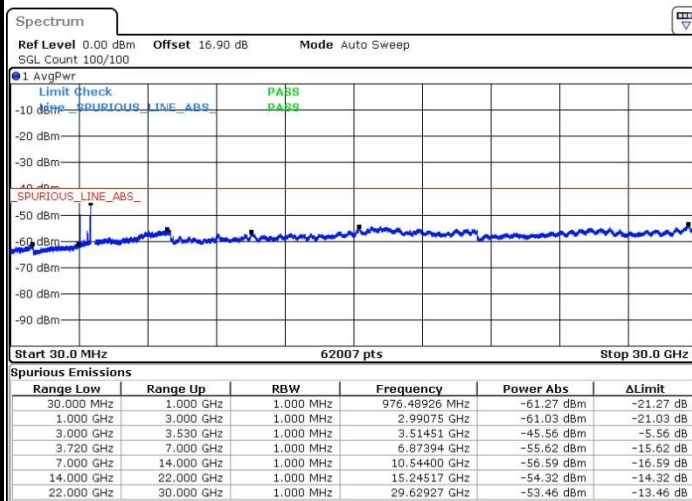
Date: 21.NOV.2018 21:17:45

Lowest Channel / 1RBmax



Date: 21.NOV.2018 19:23:15

Lowest Channel / FullIRB



Date: 21.NOV.2018 19:13:27

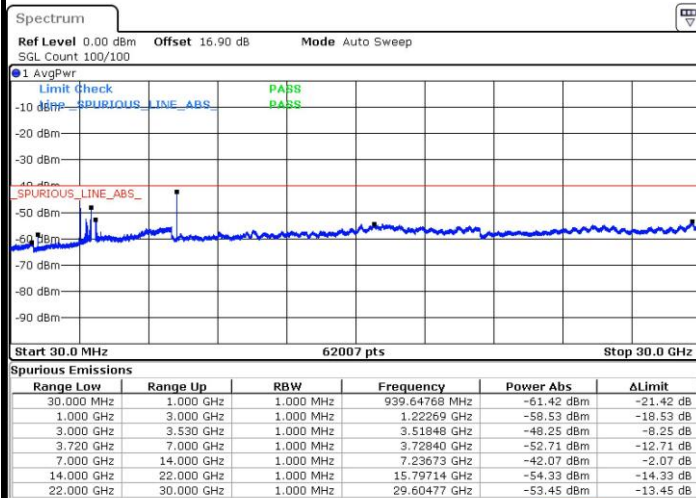
N/A



LTE Band 48 / 15MHz

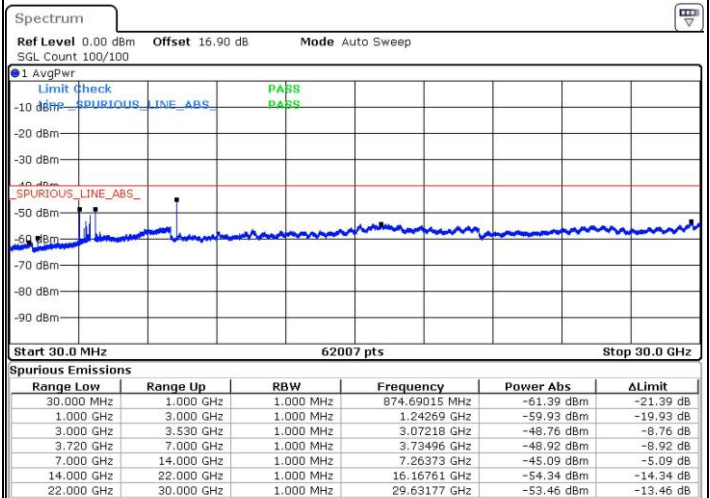
16QAM

Middle Channel / 1RB0



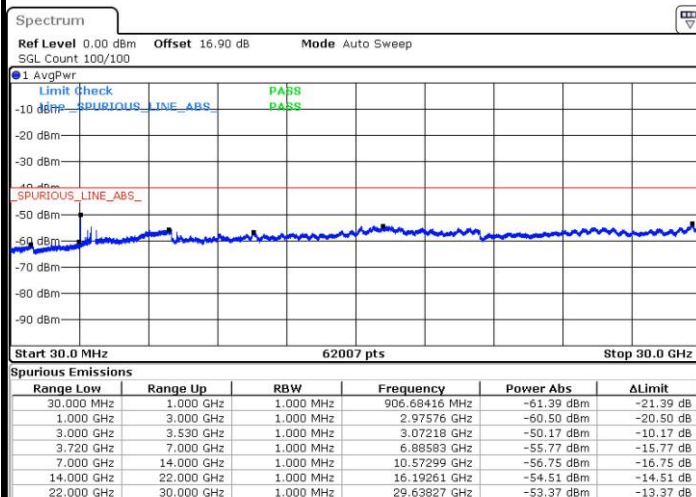
Date: 21 NOV 2018 19:07:07

Middle Channel / 1RBmax



Date: 21 NOV 2018 19:26:19

Middle Channel / FullIRB



Date: 21 NOV 2018 19:16:32

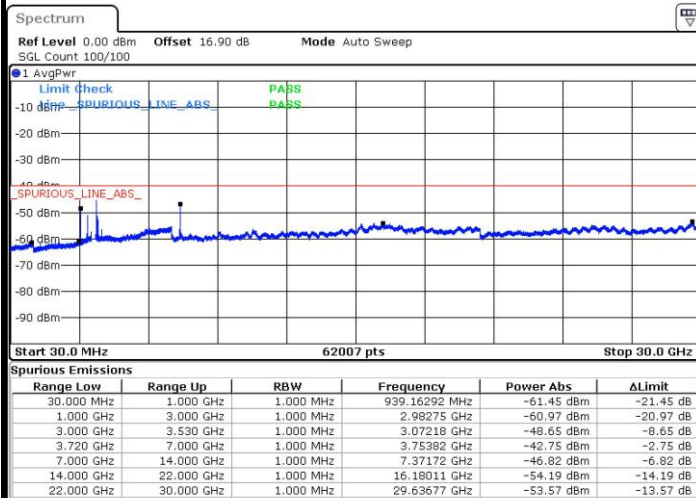
N/A



LTE Band 48 / 15MHz

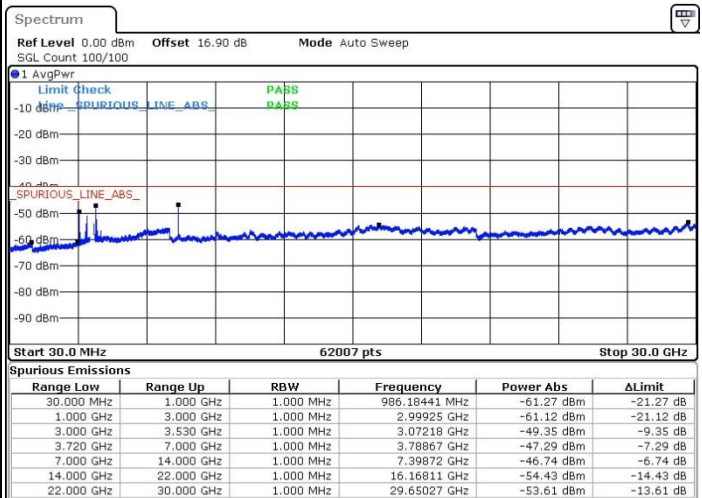
16QAM

Highest Channel / 1RB0



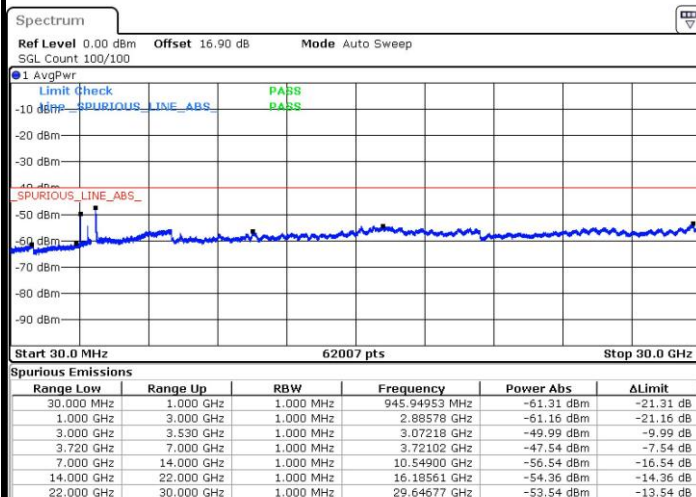
Date: 21.NOV.2018 19:10:19

Highest Channel / 1RBmax



Date: 21.NOV.2018 21:23:43

Highest Channel / FullIRB



Date: 21.NOV.2018 19:20:09

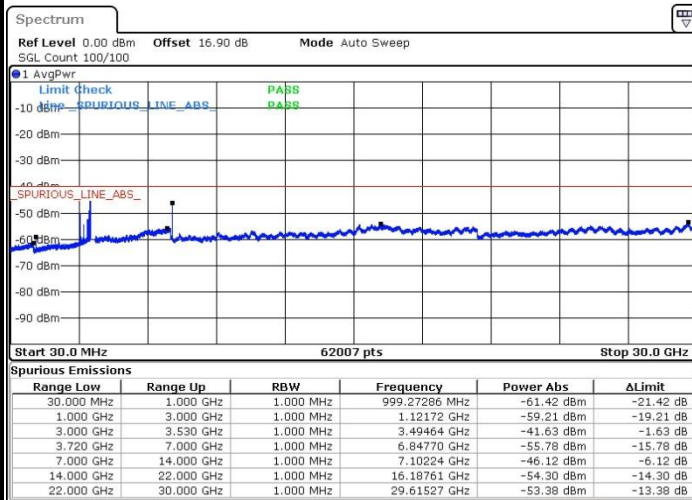
N/A



LTE Band 48 / 20MHz

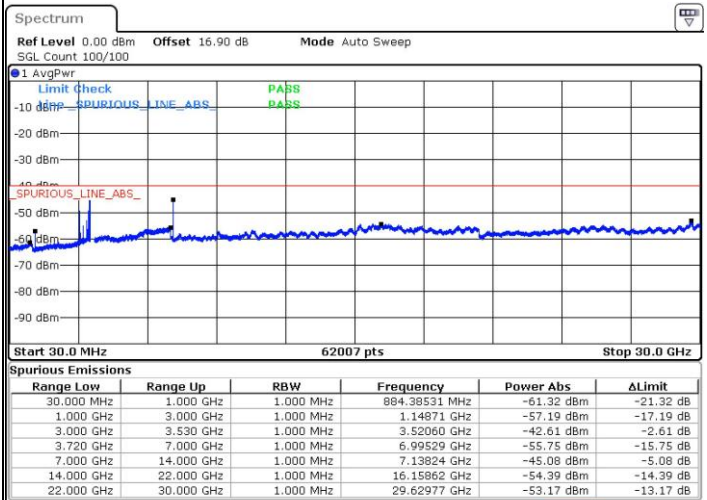
16QAM

Lowest Channel / 1RB0



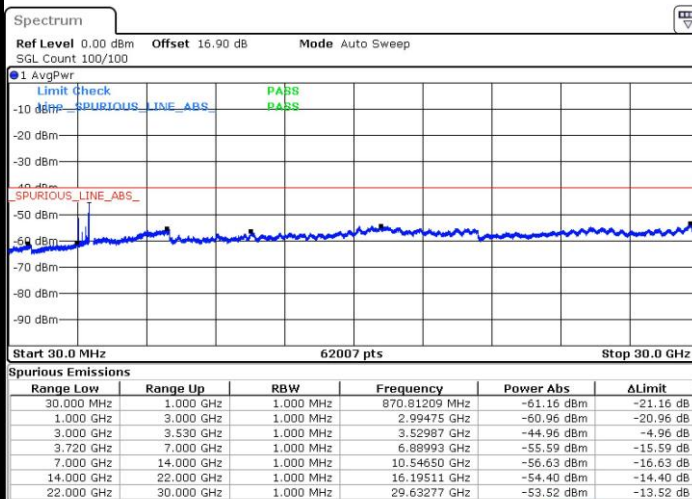
Date: 21.NOV.2018 21:28:20

Lowest Channel / 1RBmax



Date: 21.NOV.2018 19:52:50

Lowest Channel / FullIRB



Date: 21.NOV.2018 19:32:36

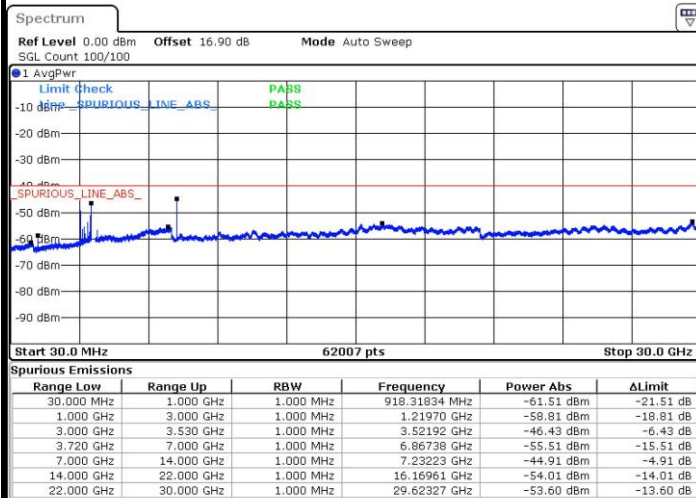
N/A



LTE Band 48 / 20MHz

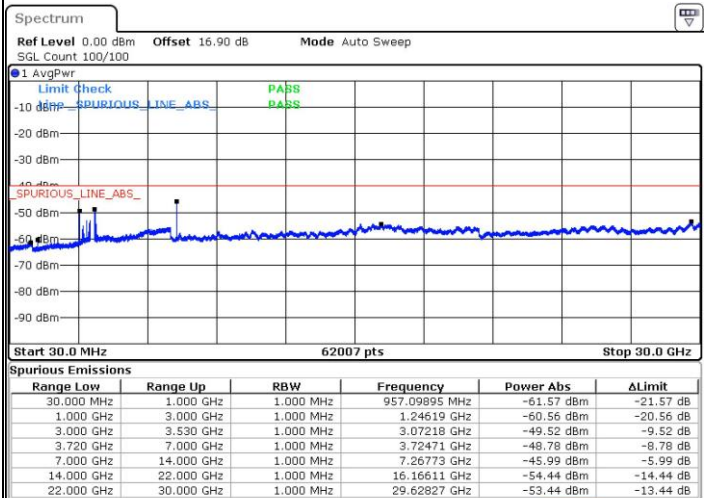
16QAM

Middle Channel / 1RB0



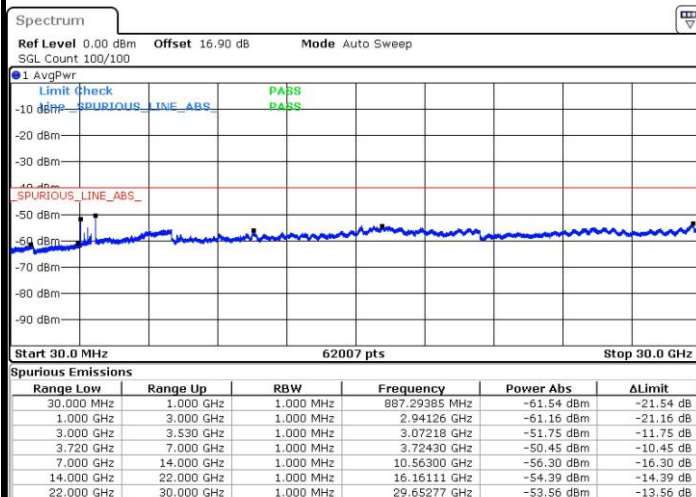
Date: 21.NOV.2018 19:46:31

Middle Channel / 1RBmax



Date: 21.NOV.2018 19:55:57

Middle Channel / FullIRB



Date: 21.NOV.2018 19:35:41

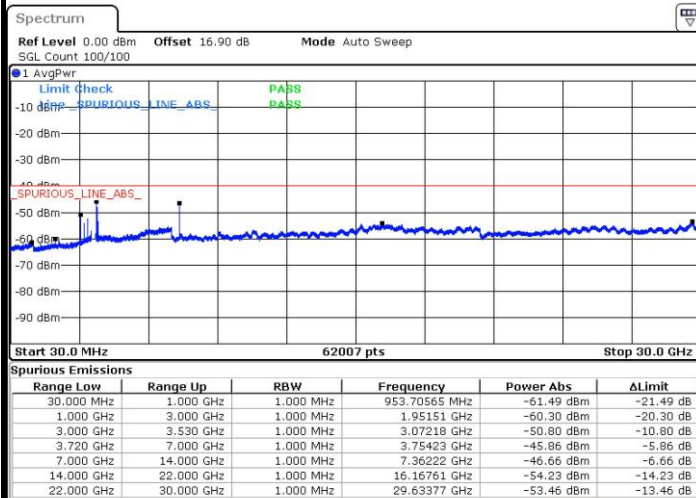
N/A



LTE Band 48 / 20MHz

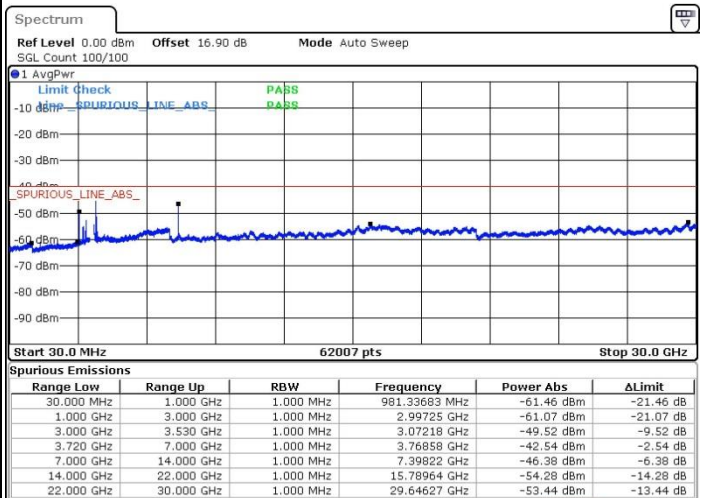
16QAM

Highest Channel / 1RB0



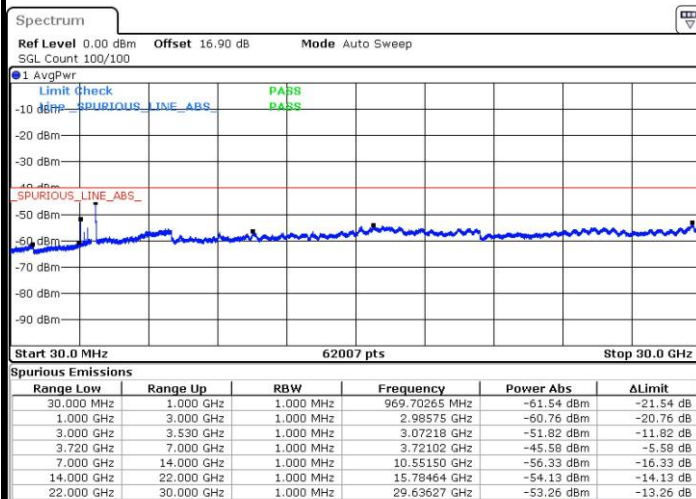
Date: 21 NOV 2018 19:49:35

Highest Channel / 1RBmax



Date: 21 NOV 2018 21:36:35

Highest Channel / FullIRB



Date: 21 NOV 2018 19:38:45

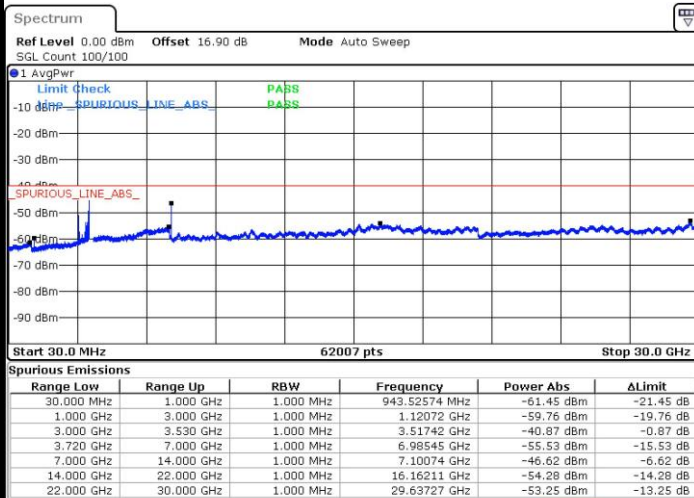
N/A



LTE Band 48 / 5MHz

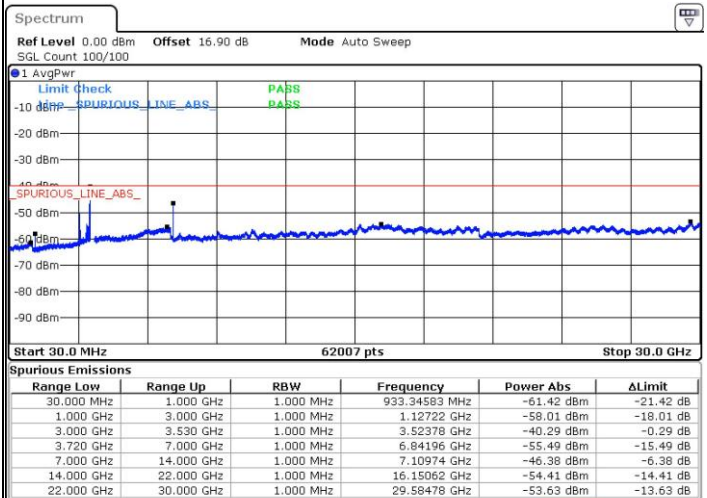
64QAM

Lowest Channel / 1RB0



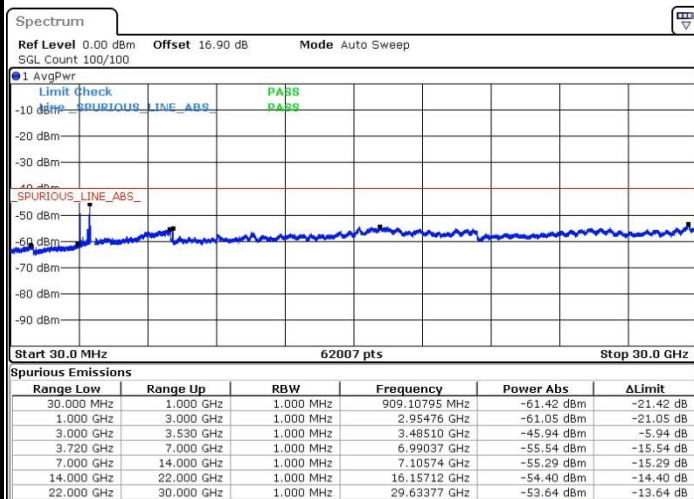
Date: 21.NOV.2018 18:08:04

Lowest Channel / 1RBmax



Date: 21.NOV.2018 20:14:17

Lowest Channel / FullIRB



Date: 21.NOV.2018 20:36:16

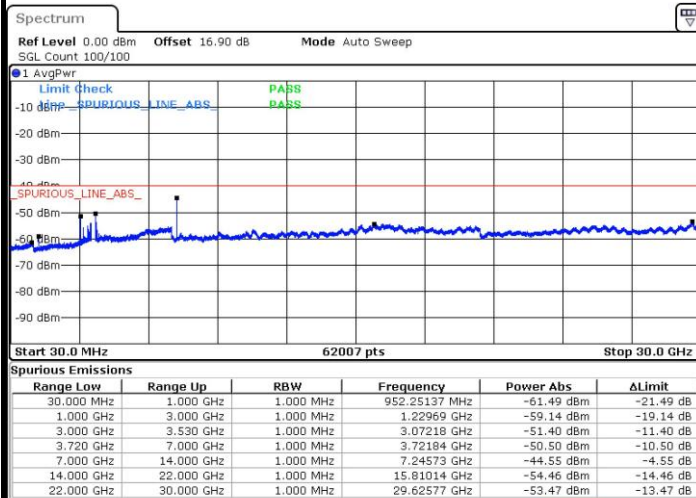
N/A



LTE Band 48 / 5MHz

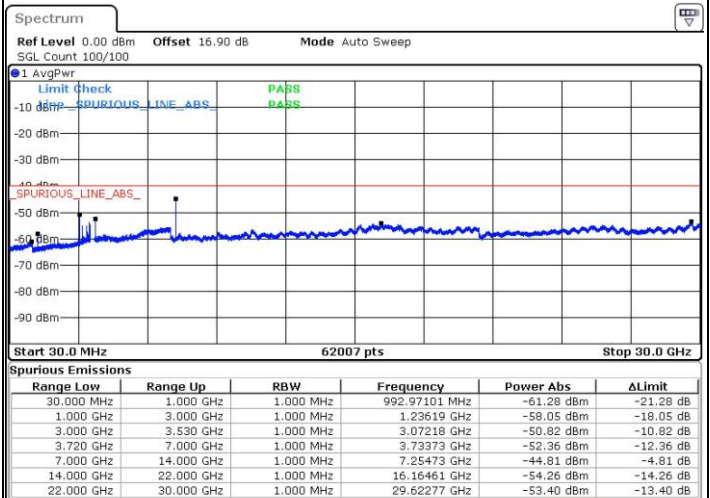
64QAM

Middle Channel / 1RB0



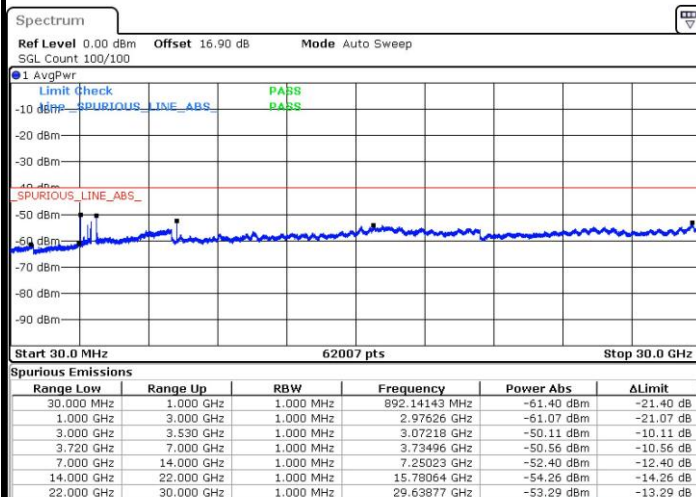
Date: 21.NOV.2018 18:09:05

Middle Channel / 1RBmax



Date: 21.NOV.2018 20:15:18

Middle Channel / FullIRB



Date: 21.NOV.2018 18:19:11

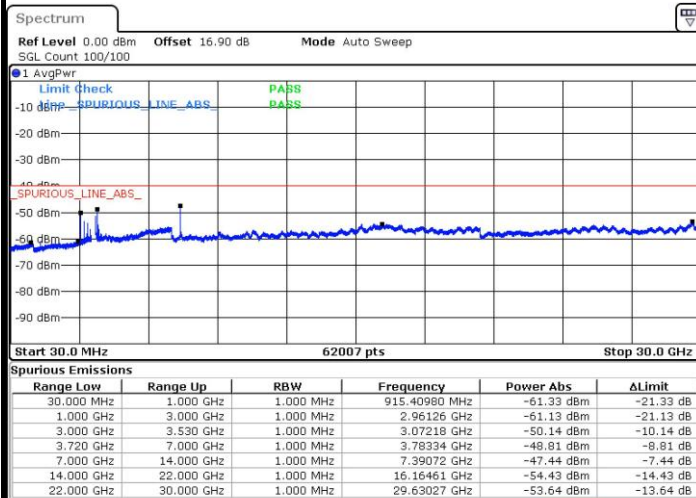
N/A



LTE Band 48 / 5MHz

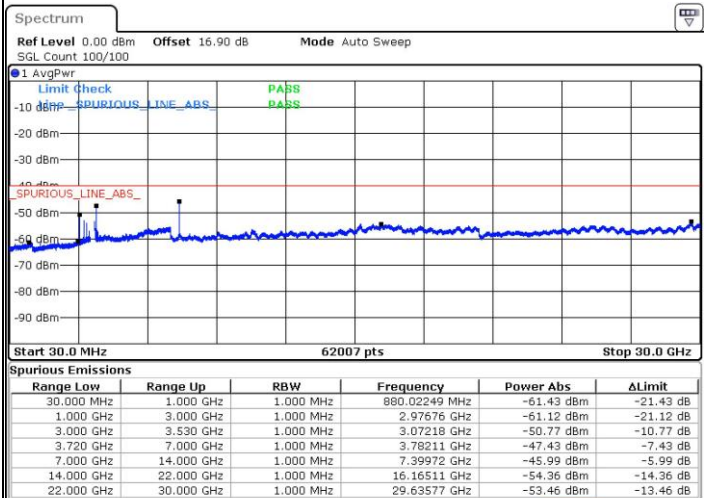
64QAM

Highest Channel / 1RB0



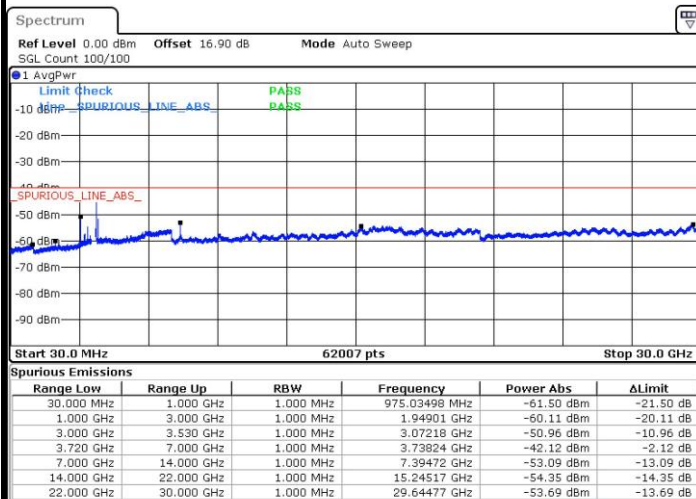
Date: 21.NOV.2018 18:14:16

Highest Channel / 1RBmax



Date: 21.NOV.2018 20:22:47

Highest Channel / FullIRB



Date: 21.NOV.2018 20:51:31

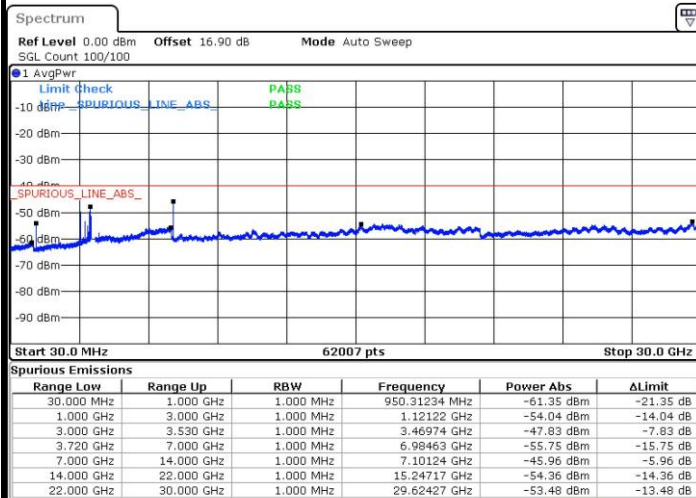
N/A



LTE Band 48 / 10MHz

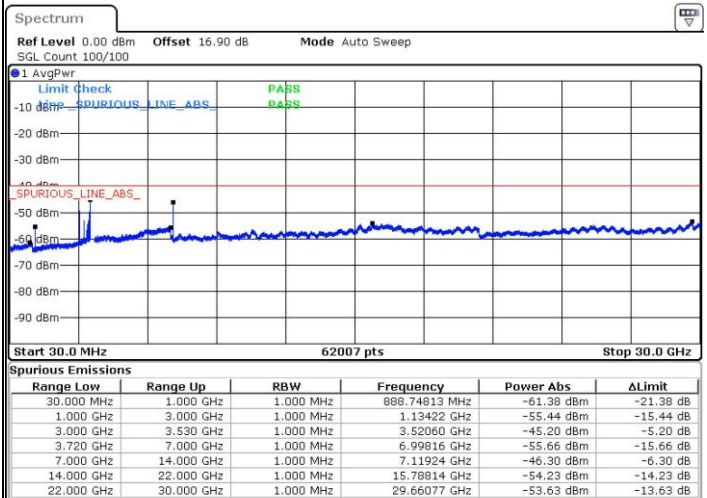
64QAM

Lowest Channel / 1RB0



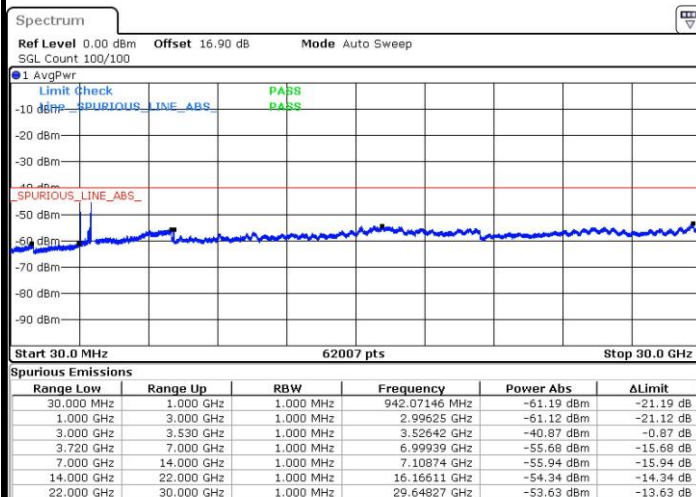
Date: 21 NOV 2018 20:57:50

Lowest Channel / 1RBmax



Date: 21 NOV 2018 18:52:48

Lowest Channel / FullIRB



Date: 21 NOV 2018 18:43:34

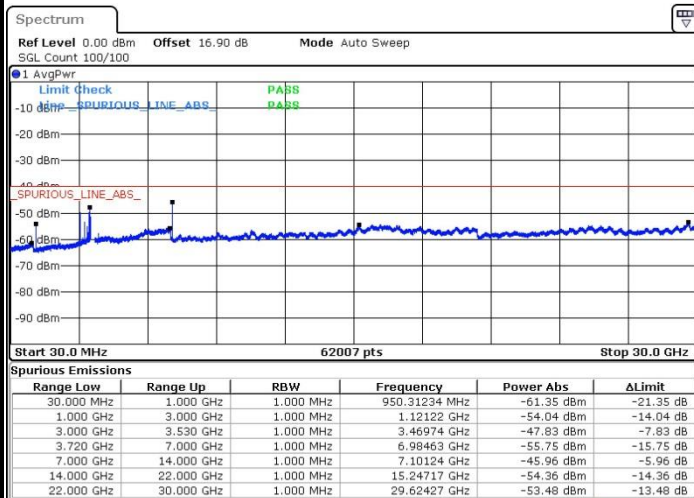
N/A



LTE Band 48 / 10MHz

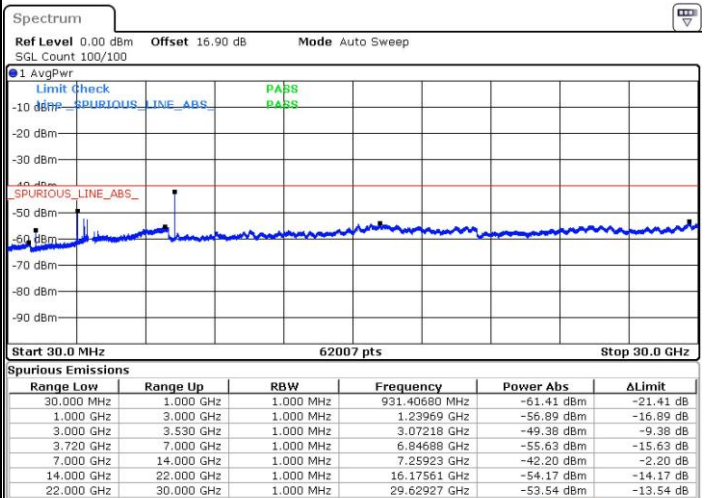
64QAM

MiddleChannel / 1RB0



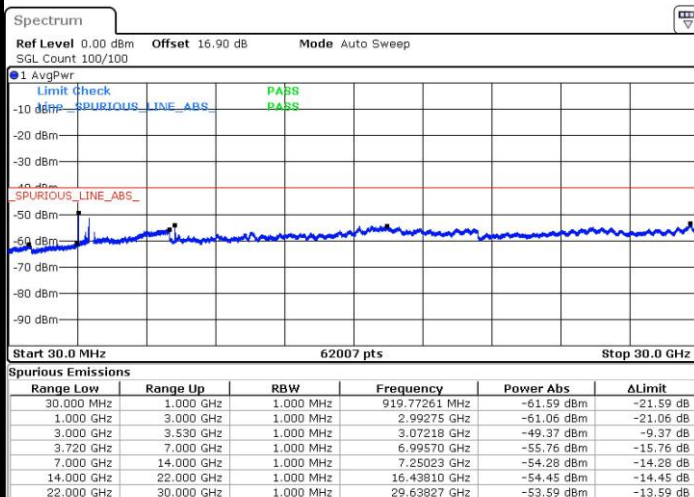
Date: 21.NOV.2018 20:57:50

Middle Channel / 1RBmax



Date: 21.NOV.2018 18:58:22

Middle Channel / FullRB



Date: 21.NOV.2018 18:48:41

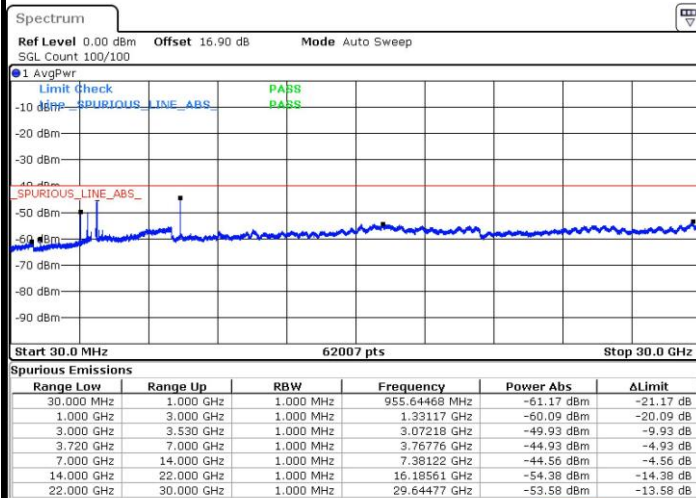
N/A



LTE Band 48 / 10MHz

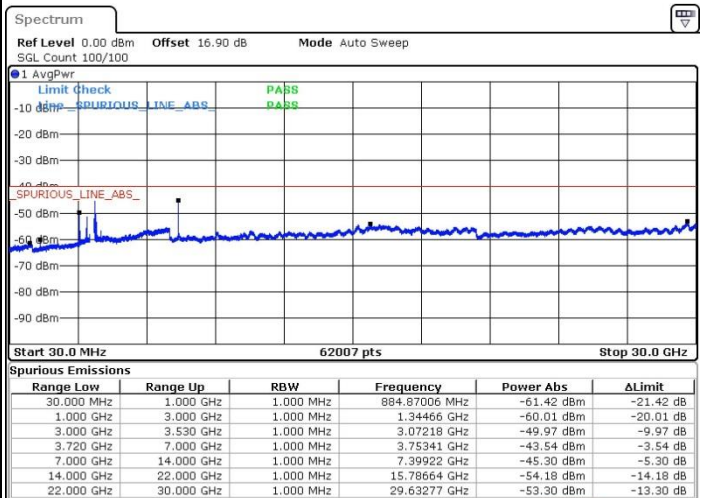
64QAM

Highest Channel / 1RB0



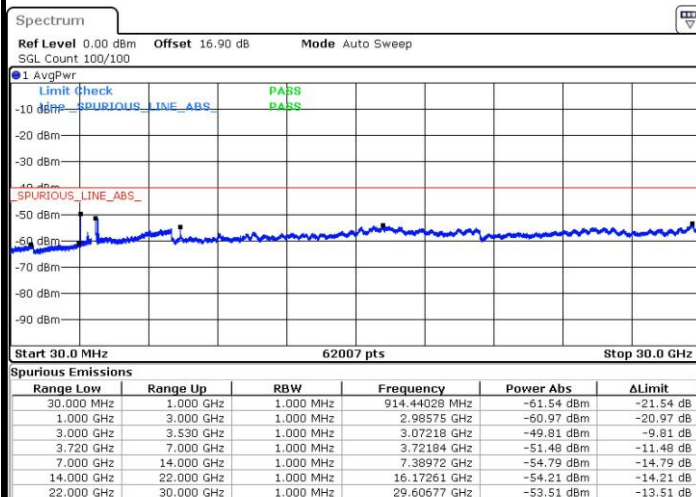
Date: 21.NOV.2018 18:40:29

Highest Channel / 1RBmax



Date: 21.NOV.2018 21:13:49

Highest Channel / FullIRB



Date: 21.NOV.2018 18:49:43

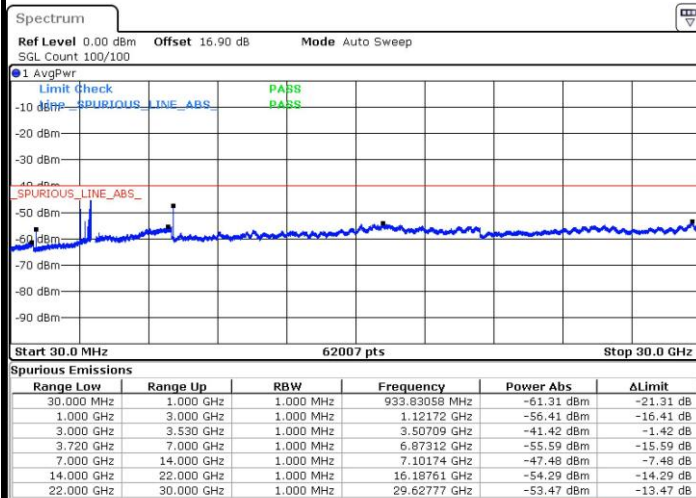
N/A



LTE Band 48 / 15MHz

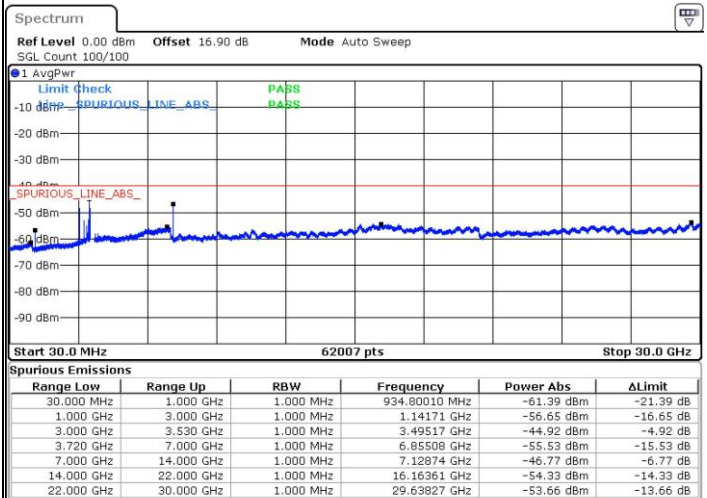
64QAM

Lowest Channel / 1RB0



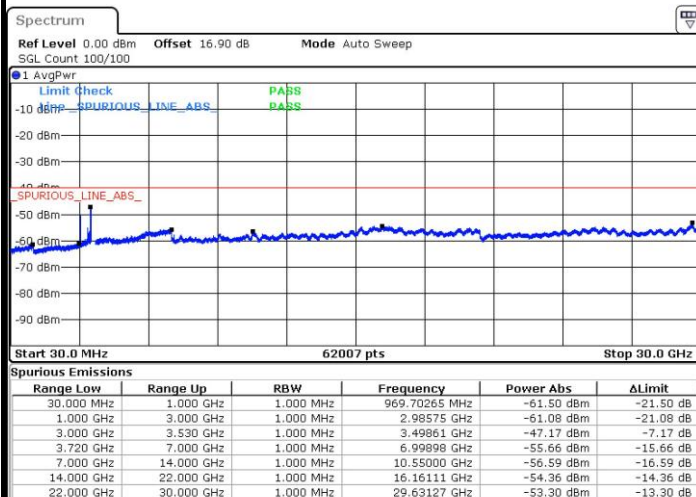
Date: 21.NOV.2018 19:05:05

Lowest Channel / 1RBmax



Date: 21.NOV.2018 19:24:16

Lowest Channel / FullIRB



Date: 21.NOV.2018 19:14:29

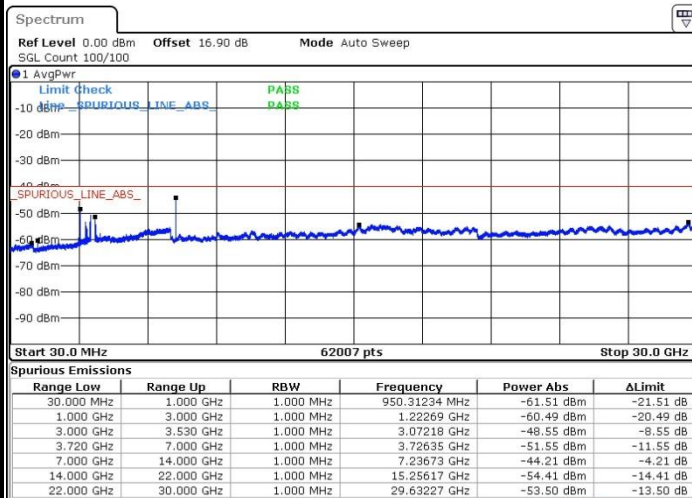
N/A



LTE Band 48 / 15MHz

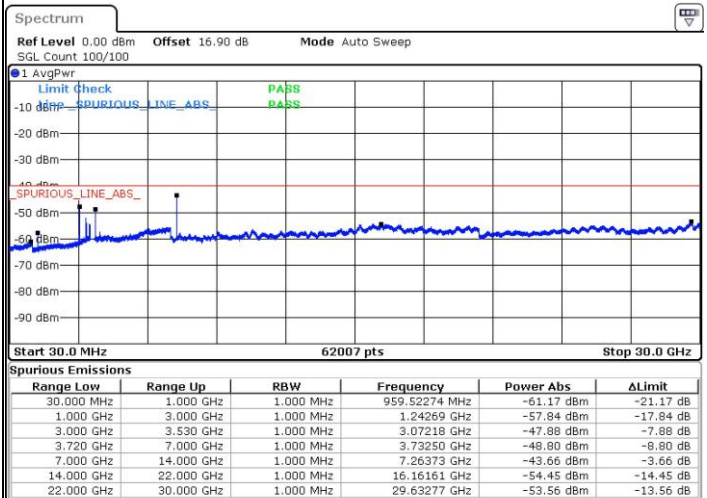
64QAM

Middle Channel / 1RB0



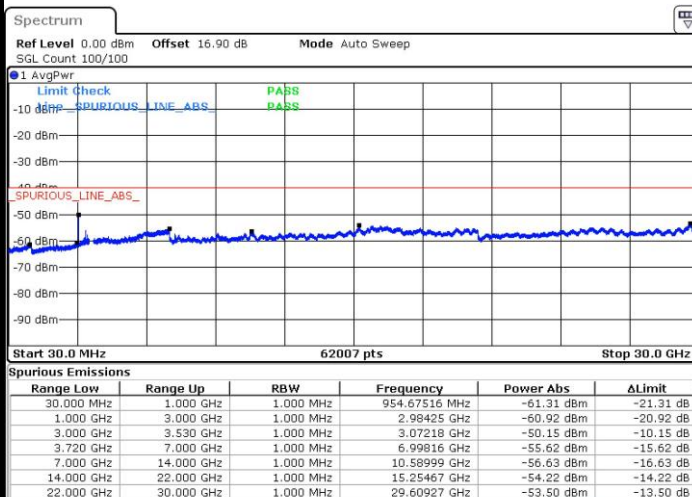
Date: 21.NOV.2018 19:06:06

Middle Channel / 1RBmax



Date: 21.NOV.2018 19:25:18

Middle Channel / FullRB



Date: 21.NOV.2018 19:15:31

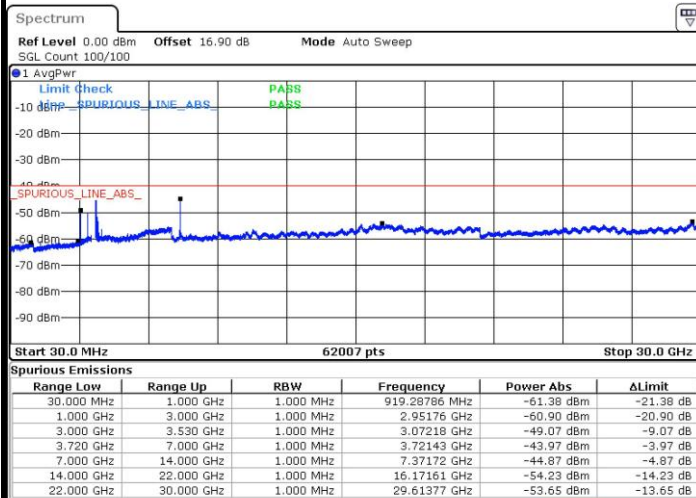
N/A



LTE Band 48 / 15MHz

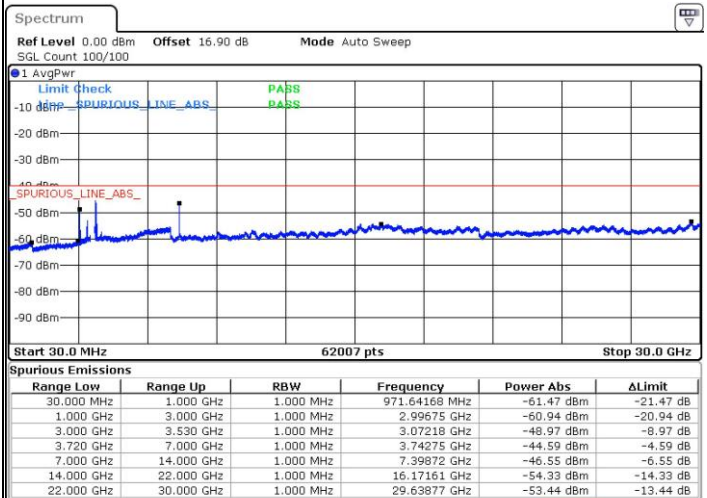
64QAM

Highest Channel / 1RB0



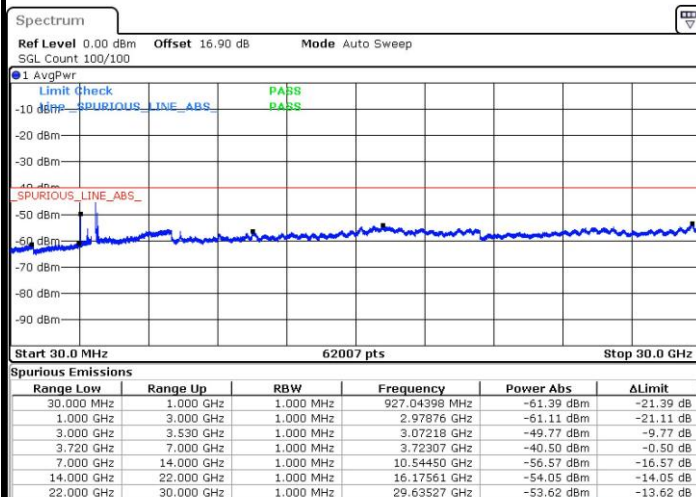
Date: 21.NOV.2018 19:11:21

Highest Channel / 1RBmax



Date: 21.NOV.2018 19:30:32

Highest Channel / FullIRB



Date: 21.NOV.2018 21:25:15

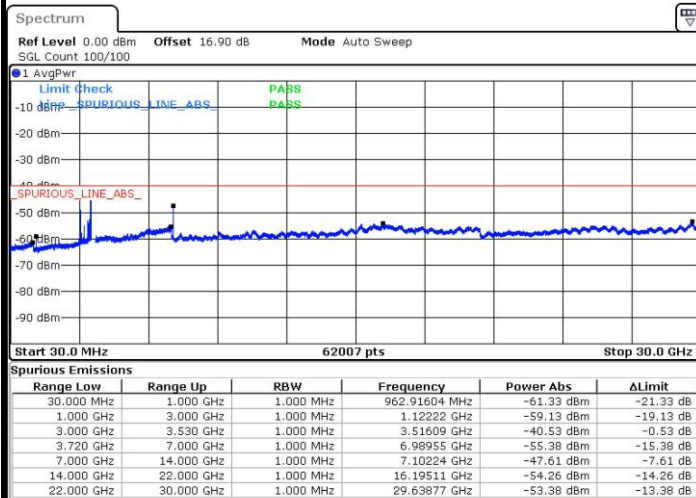
N/A



LTE Band 48 / 20MHz

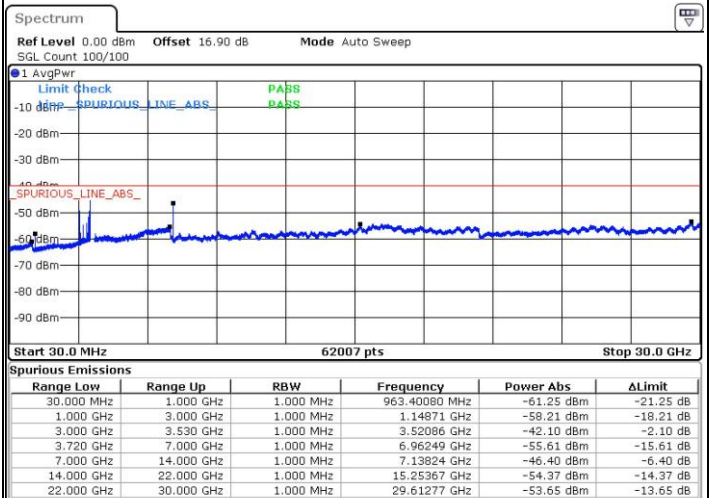
64QAM

Lowest Channel / 1RB0



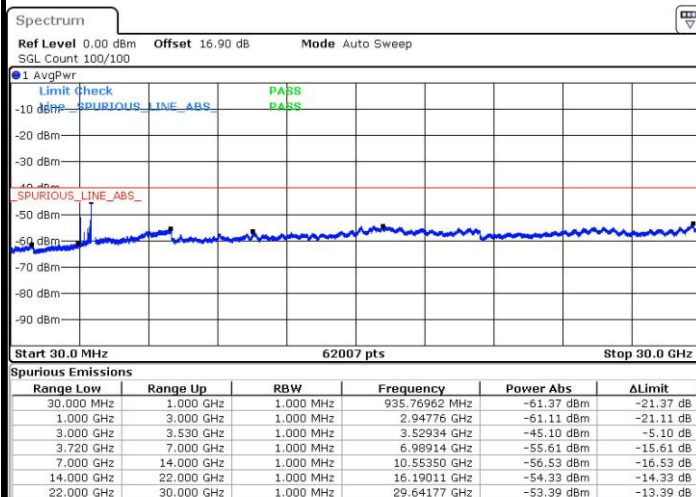
Date: 21.NOV.2018 21:29:46

Lowest Channel / 1RBmax



Date: 21.NOV.2018 19:51:48

Lowest Channel / FullIRB



Date: 21.NOV.2018 19:31:34

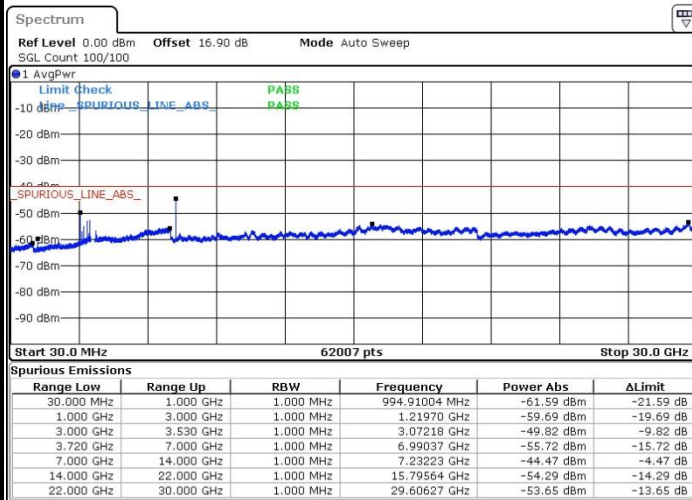
N/A



LTE Band 48 / 20MHz

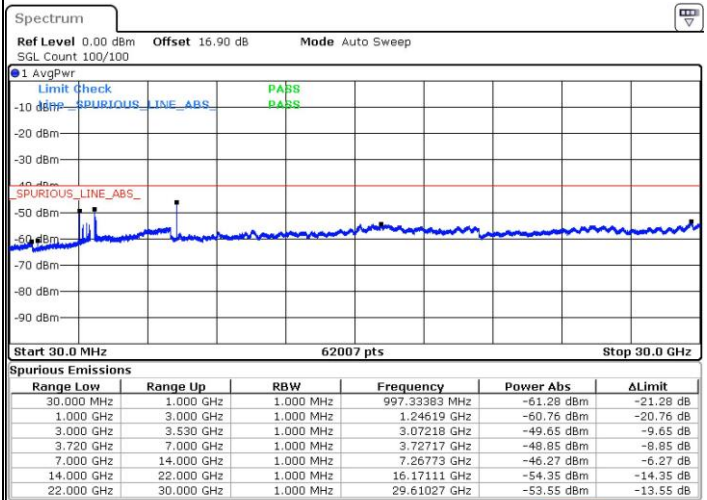
64QAM

Middle Channel / 1RB0



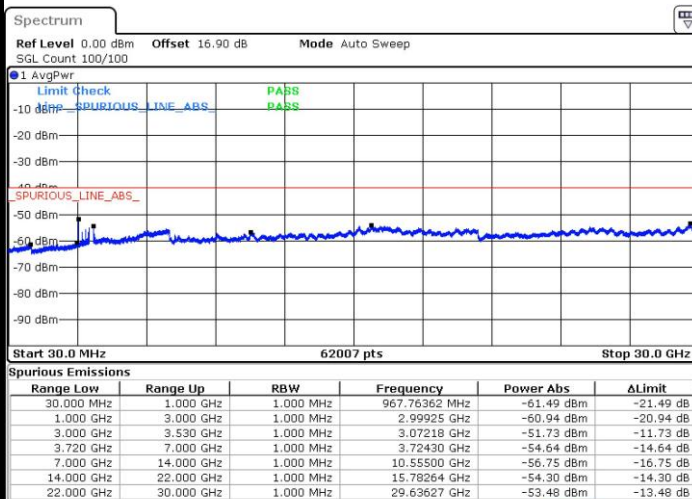
Date: 21.NOV.2018 19:47:32

Middle Channel / 1RBmax



Date: 21.NOV.2018 19:56:59

Middle Channel / FullIRB



Date: 21.NOV.2018 19:36:42

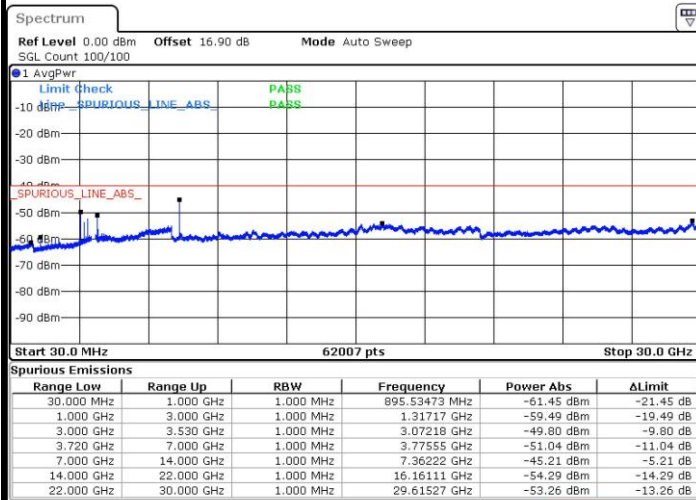
N/A



LTE Band 48 / 20MHz

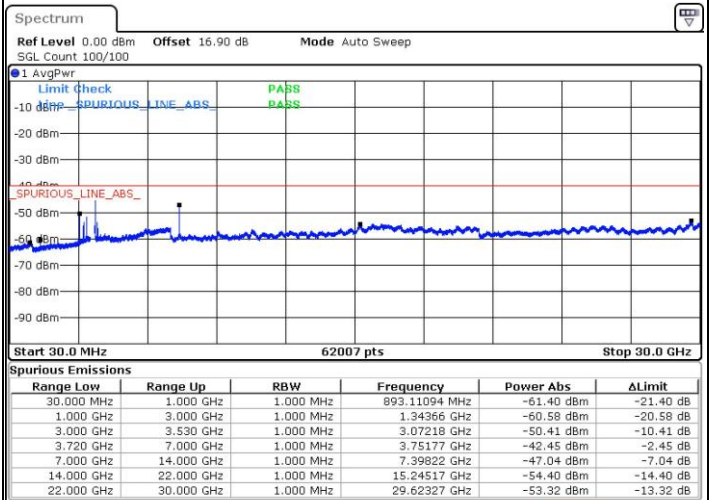
64QAM

Highest Channel / 1RB0



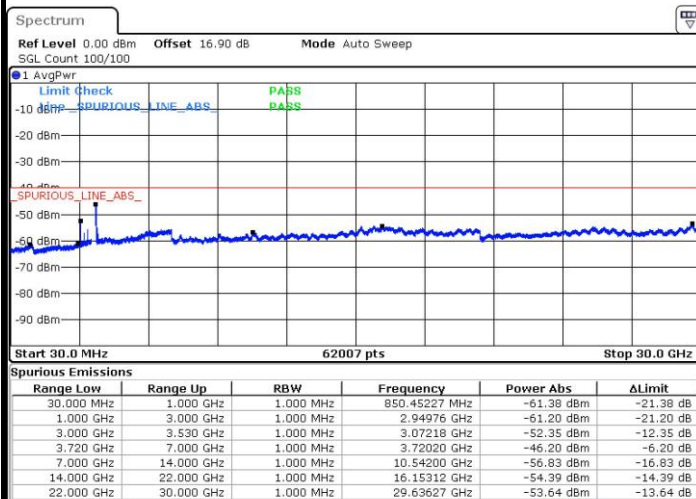
Date: 21.NOV.2018 19:48:34

Highest Channel / 1RBmax



Date: 21.NOV.2018 21:37:47

Highest Channel / FullIRB



Date: 21.NOV.2018 19:37:43

N/A

Frequency Stability

Test Conditions		LTE Band 48 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0063	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0002	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0002	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0063	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

Note:

1. Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of EIRP and Radiated Test

EIRP

<Reporting Only>

LTE Band 48 / 5MHz (Average) (GT - LC = 0 dB)							
Channel	Mode	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	24	21.55	0.1429	21.55	0.1429
Middle		1	24	22.06	0.1607	22.06	0.1607
Highest		1	24	21.92	0.1556	21.92	0.1556
Lowest	16QAM	1	0	20.72	0.1180	20.72	0.1180
Middle		1	0	21.22	0.1324	21.22	0.1324
Highest		1	0	21.80	0.1514	21.80	0.1514
Lowest	64QAM	1	24	19.75	0.0944	19.75	0.0944
Middle		1	24	20.28	0.1067	20.28	0.1067
Highest		1	24	20.18	0.1042	20.18	0.1042

LTE Band 48 / 10MHz (Average) (GT - LC = 0 dB)							
Channel	Mode	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	49	22.13	0.1633	22.13	0.1633
Middle		1	49	22.59	0.1816	22.59	0.1816
Highest		1	49	22.48	0.1770	22.48	0.1770
Lowest	16QAM	1	49	21.50	0.1413	21.50	0.1413
Middle		1	49	21.96	0.1570	21.96	0.1570
Highest		1	49	21.94	0.1563	21.94	0.1563
Lowest	64QAM	1	49	20.40	0.1096	20.40	0.1096
Middle		1	49	20.78	0.1197	20.78	0.1197
Highest		1	49	20.73	0.1183	20.73	0.1183

LTE Band 48 / 15MHz (Average) (GT - LC = 0 dB)							
Channel	Mode	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.57	0.1435	21.57	0.1435
Middle		1	0	21.98	0.1578	21.98	0.1578
Highest		1	0	22.05	0.1603	22.05	0.1603
Lowest	16QAM	1	0	20.90	0.1230	20.90	0.1230
Middle		1	0	21.38	0.1374	21.38	0.1374
Highest		1	0	21.42	0.1387	21.42	0.1387
Lowest	64QAM	1	0	19.71	0.0935	19.71	0.0935
Middle		1	0	20.16	0.1038	20.16	0.1038
Highest		1	0	20.23	0.1054	20.23	0.1054



LTE Band 48 / 20MHz (Average) (GT - LC = 0 dB)							
Channel	Mode	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.60	0.1445	21.60	0.1445
Middle		1	0	21.96	0.1570	21.96	0.1570
Highest		1	0	22.16	0.1644	22.16	0.1644
Lowest	16QAM	1	0	20.97	0.1250	20.97	0.1250
Middle		1	0	21.34	0.1361	21.34	0.1361
Highest		1	0	21.50	0.1413	21.50	0.1413
Lowest	64QAM	1	0	19.78	0.0951	19.78	0.0951
Middle		1	0	20.16	0.1038	20.16	0.1038
Highest		1	0	20.30	0.1072	20.30	0.1072

**Radiated Spurious Emission****LTE Band 48**

LTE Band 48 / 20MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	7099	-58.89	-40	-18.89	-61.86	-68.86	1.77	11.74	H
	10652	-58.87	-40	-18.87	-66.12	-67.30	2.47	10.90	H
	14205	-57.11	-40	-17.11	-68.45	-65.95	2.87	11.71	H
	21308	-49.65	-40	-9.65	-75.55	-66.37	1.98	18.70	H
	28411	-48.47	-40	-8.47	-76.98	-65.72	2.32	19.56	H
									H
	7099	-60.16	-40	-20.16	-62.74	-70.13	1.77	11.74	V
	10652	-59.15	-40	-19.15	-66.14	-67.58	2.47	10.90	V
	14205	-57.37	-40	-17.37	-68.43	-66.21	2.87	11.71	V
	21308	-56.20	-40	-16.20	-74.99	-72.92	1.98	18.70	V
	28411	-51.23	-40	-11.23	-76.53	-68.48	2.32	19.56	V
									V
Middle	7231	-59.87	-40	-19.87	-63.06	-69.56	1.84	11.53	H
	10850	-58.75	-40	-18.75	-66.28	-67.08	2.57	10.90	H
	14460	-57.31	-40	-17.31	-68.61	-65.55	2.85	11.10	H
	28928	-48.38	-40	-8.38	-76.86	-65.11	2.36	19.09	H
									H
									H
									H
	7231	-60.09	-40	-20.09	-63.02	-69.78	1.84	11.53	V
	10850	-58.83	-40	-18.83	-66.16	-67.16	2.57	10.90	V
	14460	-57.88	-40	-17.88	-68.36	-66.12	2.85	11.10	V
	28928	-51.17	-40	-11.17	-77.22	-67.90	2.36	19.09	V
									V
									V
									V



Highest	7363	-59.66	-40	-19.66	-62.79	-69.06	1.92	11.32	H
	11048	-58.43	-40	-18.43	-66.31	-66.76	2.63	10.96	H
	14722	-55.65	-40	-15.65	-68.17	-64.45	2.91	11.71	H
	22086	-52.28	-40	-12.28	-76.65	-69.07	2.08	18.87	H
	29448	-47.73	-40	-7.73	-77.65	-64.84	2.15	19.27	H
									H
									H
	7363	-59.87	-40	-19.87	-62.82	-69.27	1.92	11.32	V
	11048	-58.70	-40	-18.70	-66.41	-67.03	2.63	10.96	V
	14722	-57.23	-40	-17.23	-68.11	-66.03	2.91	11.71	V
	22086	-57.94	-40	-17.94	-76.05	-74.73	2.08	18.87	V
	29448	-49.83	-40	-9.83	-77.29	-66.94	2.15	19.27	V
									V
									V

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

—————THE END—————