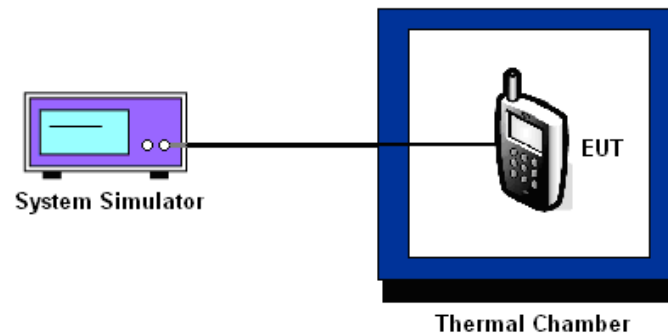


3.6.5 Test Setup



3.6.6 Test Result of Temperature Variation

Please refer to Appendix A.



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LTE Base Station	Anritsu	MT8820C	6201432821	GSM/GPRS /WCDMA/LTE	Oct. 27, 2014	May 12, 2015 ~ May 13, 2015	Oct. 26, 2015	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101397	10Hz~40GHz	Sep. 17, 2014	May 12, 2015 ~ May 13, 2015	Sep. 16, 2015	Conducted (TH02-HY)
Temperature Chamber	ESPEC	SH-641	92013720	-30℃~70℃	Dec. 04, 2014	May 12, 2015 ~ May 13, 2015	Dec. 03, 2015	Conducted (TH02-HY)
Bilog Antenna	Schaffner	CBL6111C	2726	30MHz ~ 1GHz	Sep. 27, 2014	May 19, 2015	Sep. 26, 2015	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Aug. 19, 2014	May 19, 2015	Aug. 18, 2015	Radiation (03CH07-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Nov. 05, 2014	May 19, 2015	Nov. 04, 2015	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1000MHz	Mar. 12, 2015	May 19, 2015	Mar. 11, 2016	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~ 26.5GHz	Oct. 21, 2014	May 19, 2015	Oct. 20, 2015	Radiation (03CH07-HY)
Signal Analyzer	Rohde & Schwarz	FSV 30	101749	10Hz~30GHz	Mar. 10, 2015	May 19, 2015	Mar. 09, 2016	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	May 19, 2015	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 degree	N/A	May 19, 2015	N/A	Radiation (03CH07-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	May 23, 2014	May 19, 2015	May 22, 2015	Radiation (03CH07-HY)



5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.50
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Appendix A. Test Results of Conducted Test

Conducted Output Power (Average power)

LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	22.47	22.49	22.46
1.4	1	2		22.52	22.52	22.54
1.4	1	5		22.48	22.37	22.42
1.4	3	0		22.29	22.23	22.23
1.4	3	1		22.39	22.50	22.43
1.4	3	2		22.33	22.28	22.36
1.4	6	0		21.36	21.34	21.21
1.4	1	0	16-QAM	21.67	21.76	21.66
1.4	1	2		21.92	21.87	21.75
1.4	1	5		21.79	21.80	21.63
1.4	3	0		21.46	21.41	21.45
1.4	3	1		21.39	21.45	21.35
1.4	3	2		21.33	21.32	21.27
1.4	6	0		20.44	20.45	20.29
3	1	0	QPSK	22.31	22.36	22.33
3	1	7		22.60	22.52	22.40
3	1	14		22.30	22.31	22.19
3	8	0		21.36	21.33	21.27
3	8	4		21.31	21.32	21.24
3	8	7		21.28	21.22	21.25
3	15	0		21.43	21.27	21.35
3	1	0	16-QAM	21.53	21.63	21.56
3	1	7		21.83	21.75	21.83
3	1	14		21.56	21.51	21.50
3	8	0		20.41	20.32	20.29
3	8	4		20.34	20.48	20.26
3	8	7		20.36	20.25	20.37
3	15	0		20.29	20.32	20.31



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.43	22.39	22.42
5	1	12		22.22	22.32	22.22
5	1	24		22.43	22.38	22.21
5	12	0		21.25	21.29	21.21
5	12	6		21.38	21.35	21.36
5	12	11		21.27	21.28	21.17
5	25	0		21.40	21.30	21.20
5	1	0	16-QAM	21.63	21.71	21.53
5	1	12		21.83	21.75	21.74
5	1	24		21.65	21.66	21.41
5	12	0		20.20	20.16	20.20
5	12	6		20.26	20.22	20.30
5	12	11		20.15	20.27	20.23
5	25	0		20.40	20.28	20.27
10	1	0	QPSK	-	22.61	-
10	1	24		-	22.41	-
10	1	49		-	22.23	-
10	25	0		-	21.41	-
10	25	12		-	21.36	-
10	25	24		-	21.29	-
10	50	0		-	21.36	-
10	1	0	16-QAM	-	21.73	-
10	1	24		-	21.86	-
10	1	49		-	21.68	-
10	25	0		-	20.35	-
10	25	12		-	20.41	-
10	25	24		-	20.22	-
10	50	0		-	20.43	-



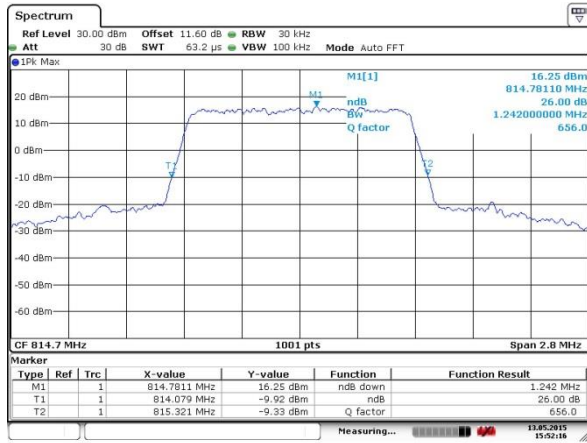
26dB Bandwidth

Mode	LTE Band 26 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.24	1.23	3.06	3.07	5.01	5.00	-	-	-	-	-	-
Middle CH	1.24	1.23	3.06	3.07	4.99	4.99	9.99	9.93	-	-	-	-
Highest CH	1.24	1.24	3.06	3.06	5.01	5.00	-	-	-	-	-	-



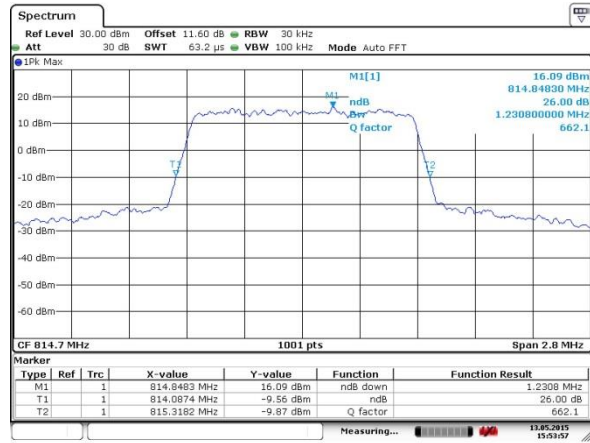
LTE Band 26

Lowest Channel / 1.4MHz / QPSK



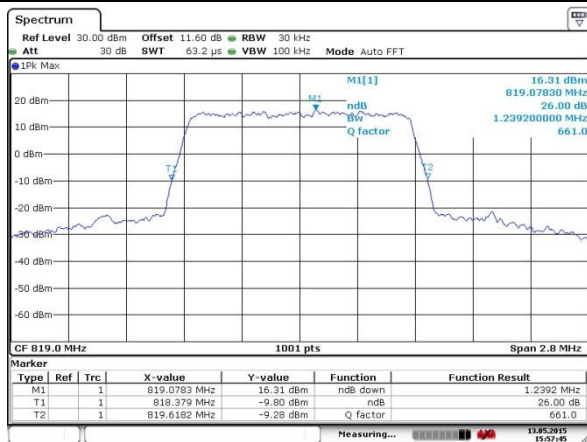
Date: 13 MAY 2015 15:52:16

Lowest Channel / 1.4MHz / 16QAM



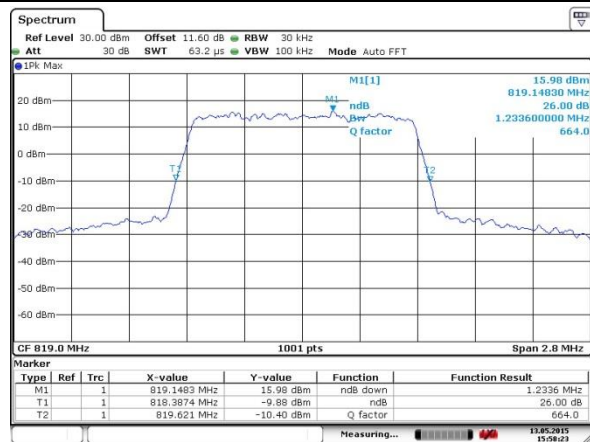
Date: 13 MAY 2015 15:53:56

Middle Channel / 1.4MHz / QPSK



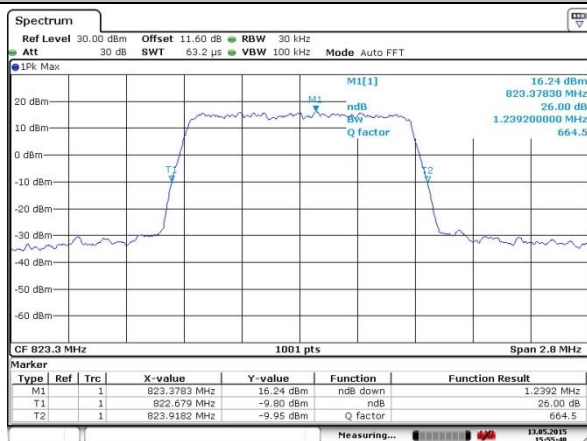
Date: 13 MAY 2015 15:57:45

Middle Channel / 1.4MHz / 16QAM



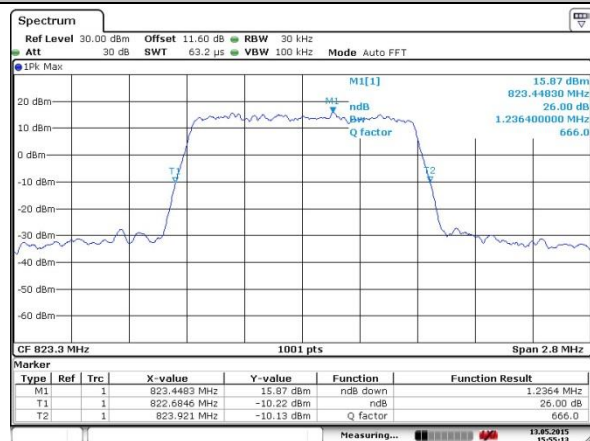
Date: 13 MAY 2015 15:58:23

Highest Channel / 1.4MHz / QPSK



Date: 13 MAY 2015 15:55:48

Highest Channel / 1.4MHz / 16QAM

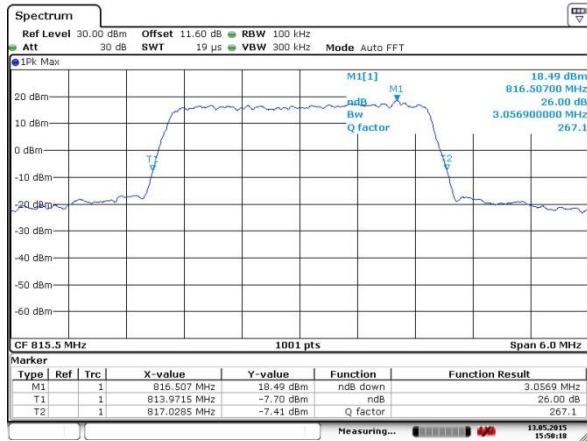


Date: 13 MAY 2015 15:55:13



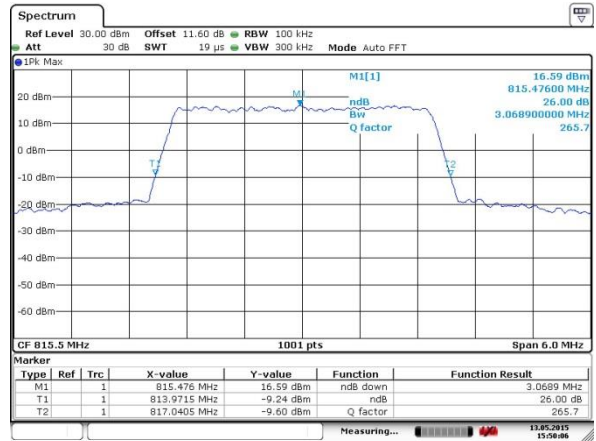
LTE Band 26

Lowest Channel / 3MHz / QPSK



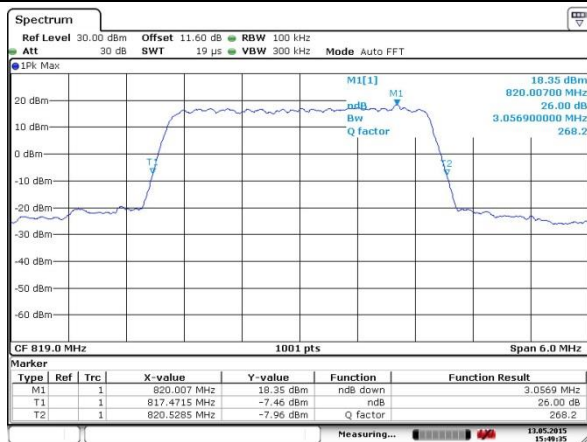
Date: 13 MAY 2015 15:50:17

Lowest Channel / 3MHz / 16QAM



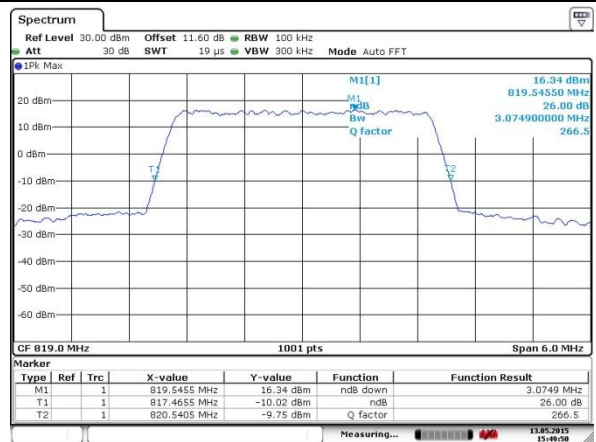
Date: 13 MAY 2015 15:50:06

Middle Channel / 3MHz / QPSK



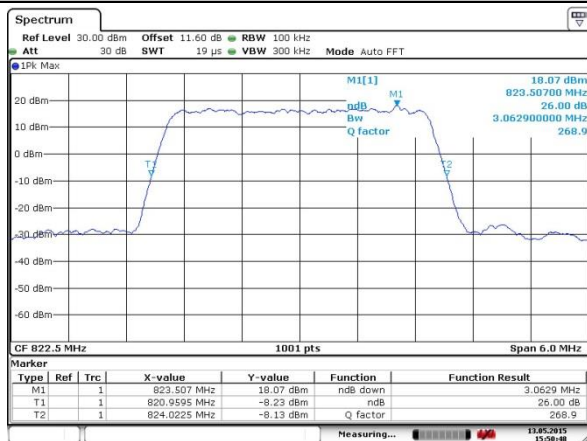
Date: 13 MAY 2015 15:49:35

Middle Channel / 3MHz / 16QAM



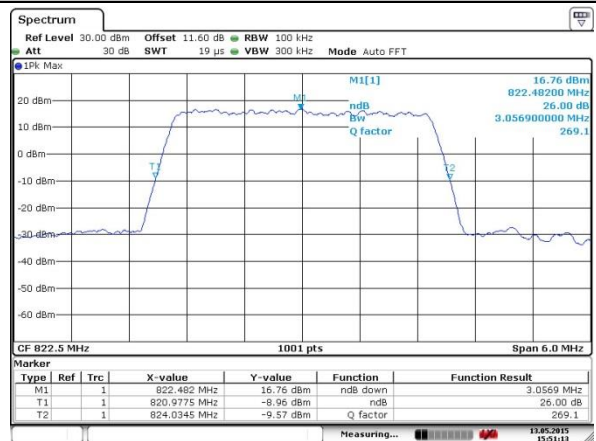
Date: 13 MAY 2015 15:49:50

Highest Channel / 3MHz / QPSK



Date: 13 MAY 2015 15:50:48

Highest Channel / 3MHz / 16QAM

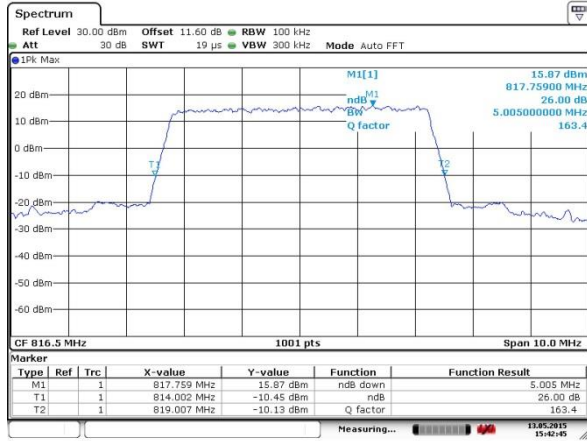


Date: 13 MAY 2015 15:51:13



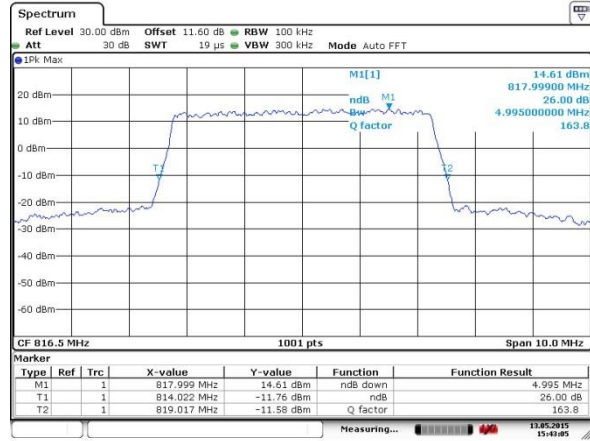
LTE Band 26

Lowest Channel / 5MHz / QPSK



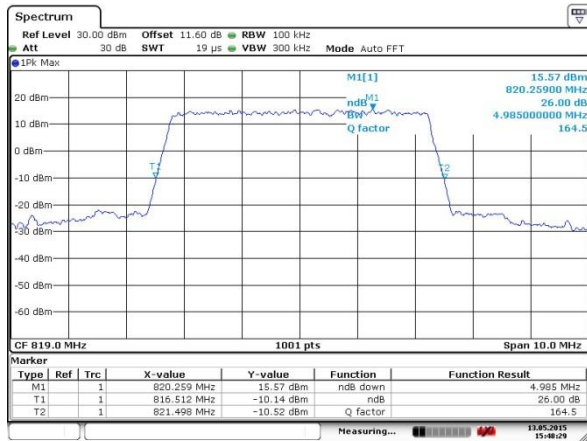
Date: 13 MAY 2015 15:42:45

Lowest Channel / 5MHz / 16QAM



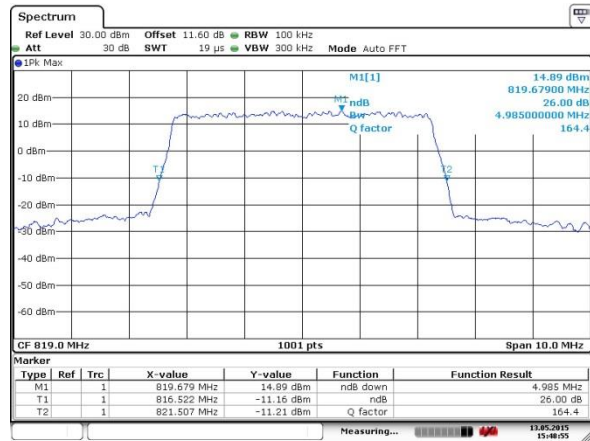
Date: 13 MAY 2015 15:43:05

Middle Channel / 5MHz / QPSK



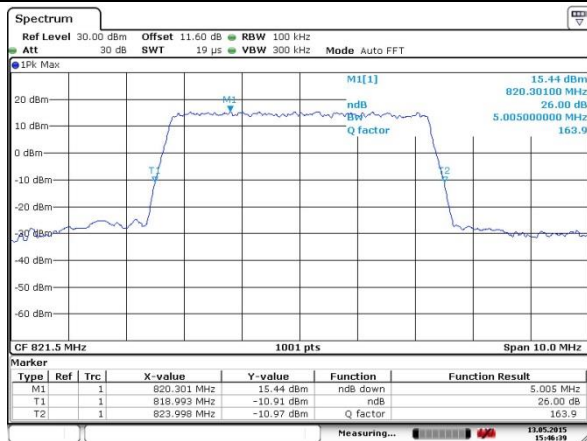
Date: 13 MAY 2015 15:48:29

Middle Channel / 5MHz / 16QAM



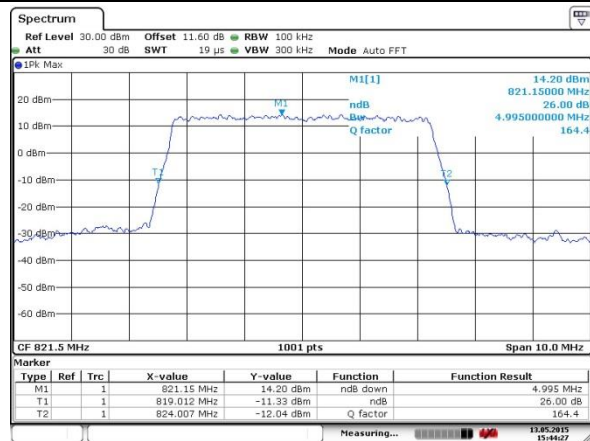
Date: 13 MAY 2015 15:48:56

Highest Channel / 5MHz / QPSK



Date: 13 MAY 2015 15:48:38

Highest Channel / 5MHz / 16QAM

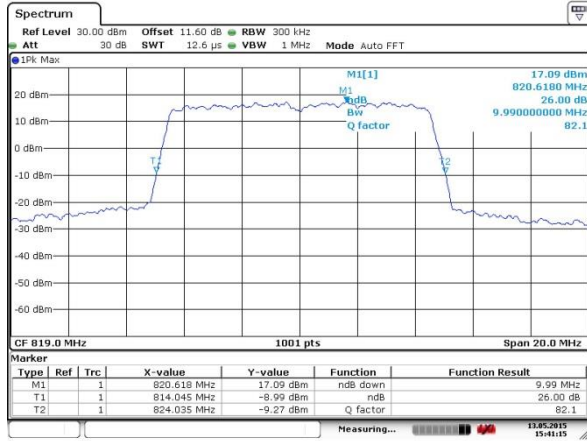


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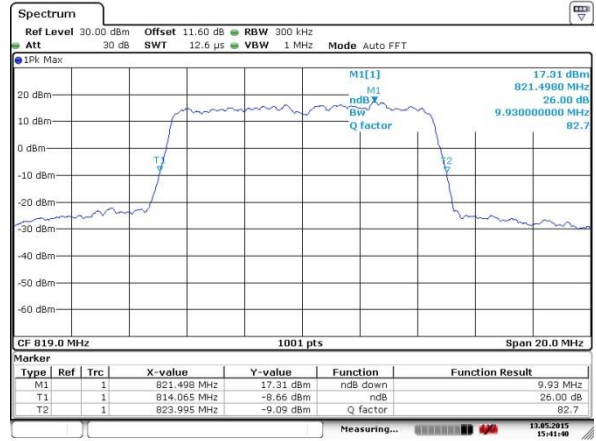
LTE Band 26

Middle Channel / 10MHz / QPSK



Date: 13 MAY 2015 15:41:16

Middle Channel / 10MHz / 16QAM



Date: 13 MAY 2015 15:41:41

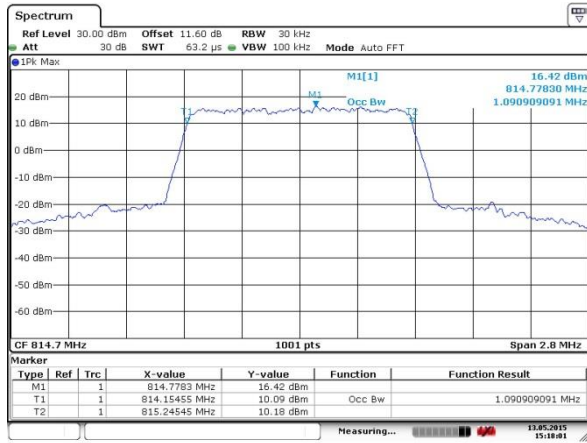
**Occupied Bandwidth**

Mode	LTE Band 26 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.09	2.72	2.73	4.49	4.50	-	-	-	-	-	-
Middle CH	1.09	1.09	2.72	2.72	4.48	4.48	9.05	8.99	-	-	-	-
Highest CH	1.09	1.09	2.72	2.72	4.49	4.49	-	-	-	-	-	-



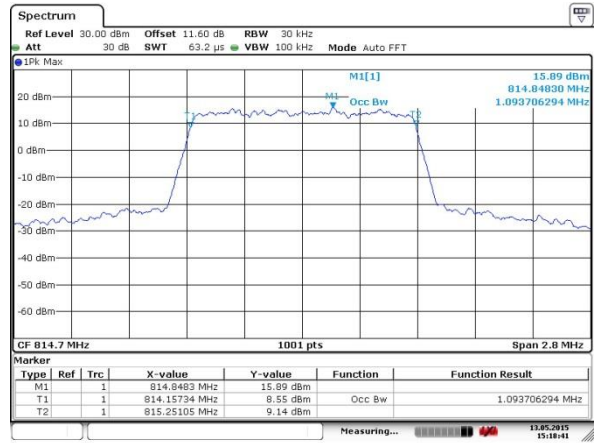
LTE Band 26

Lowest Channel / 1.4MHz / QPSK



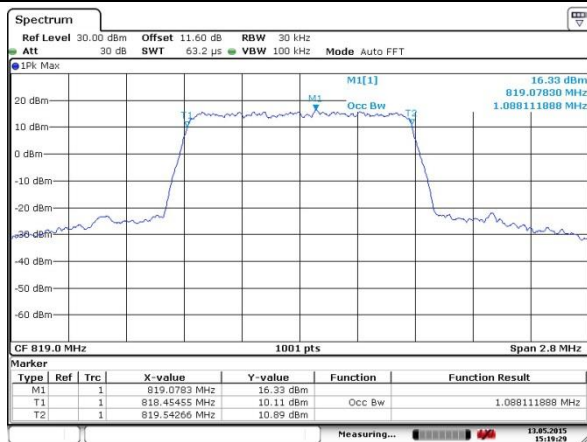
Date: 13 MAY 2015 15:18:01

Lowest Channel / 1.4MHz / 16QAM



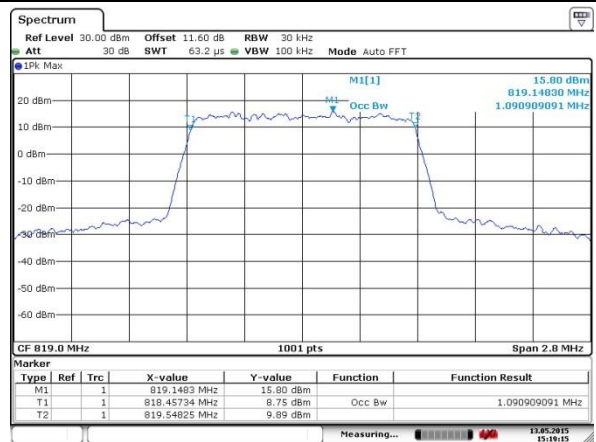
Date: 13 MAY 2015 15:18:42

Middle Channel / 1.4MHz / QPSK



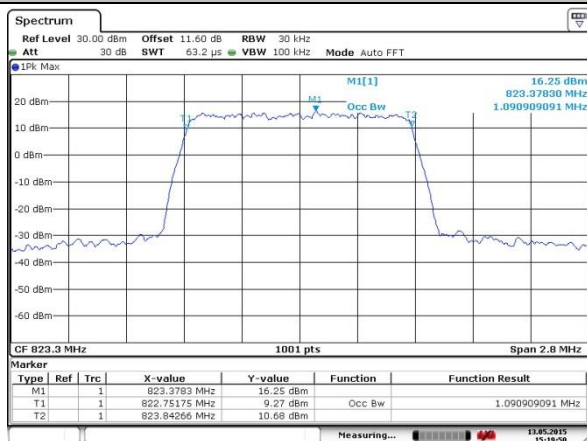
Date: 13 MAY 2015 15:19:29

Middle Channel / 1.4MHz / 16QAM



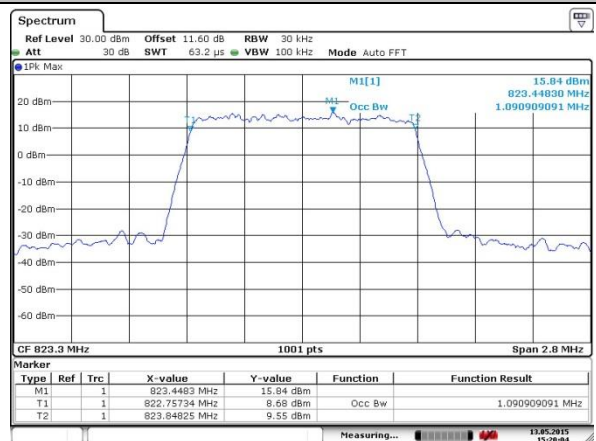
Date: 13 MAY 2015 15:19:15

Highest Channel / 1.4MHz / QPSK



Date: 13 MAY 2015 15:19:50

Highest Channel / 1.4MHz / 16QAM

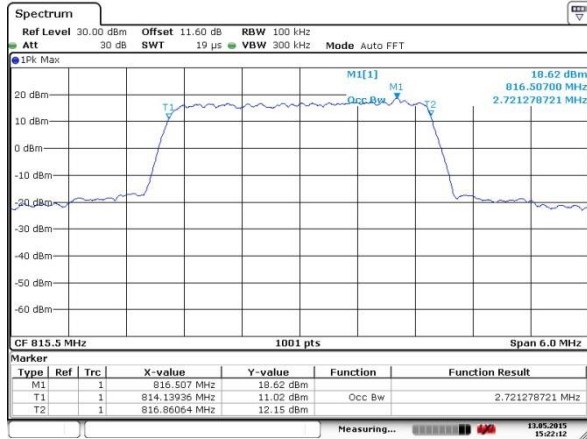


Date: 13 MAY 2015 15:20:04



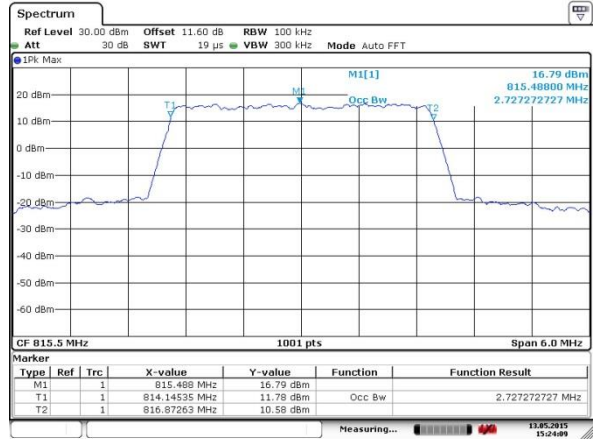
LTE Band 26

Lowest Channel / 3MHz / QPSK



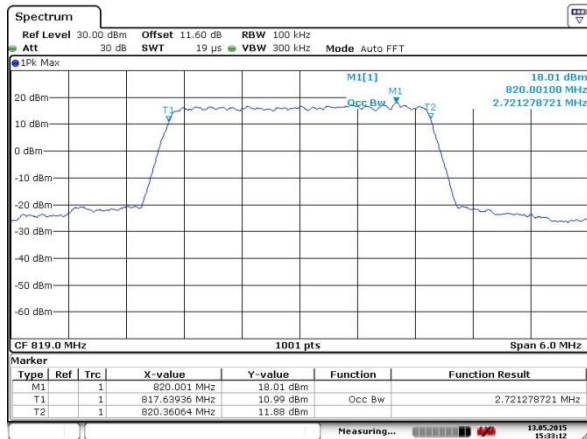
Date: 13 MAY 2015 15:22:12

Lowest Channel / 3MHz / 16QAM



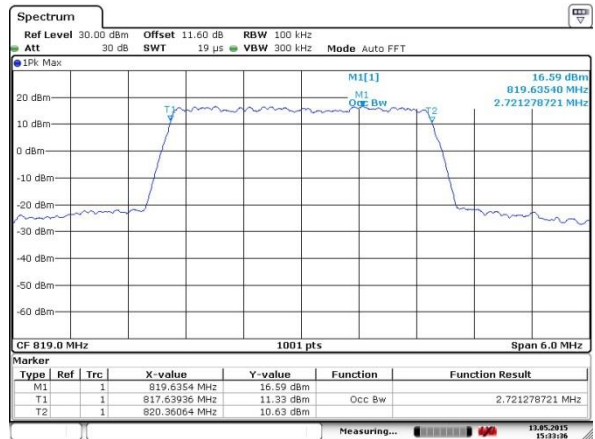
Date: 13 MAY 2015 15:24:09

Middle Channel / 3MHz / QPSK



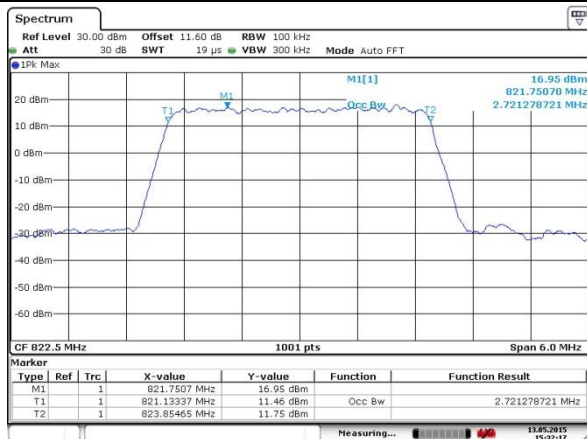
Date: 13 MAY 2015 15:33:13

Middle Channel / 3MHz / 16QAM



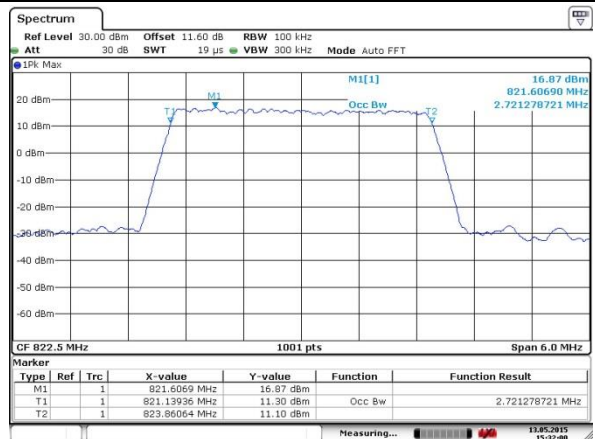
Date: 13 MAY 2015 15:33:36

Highest Channel / 3MHz / QPSK



Date: 13 MAY 2015 15:32:17

Highest Channel / 3MHz / 16QAM

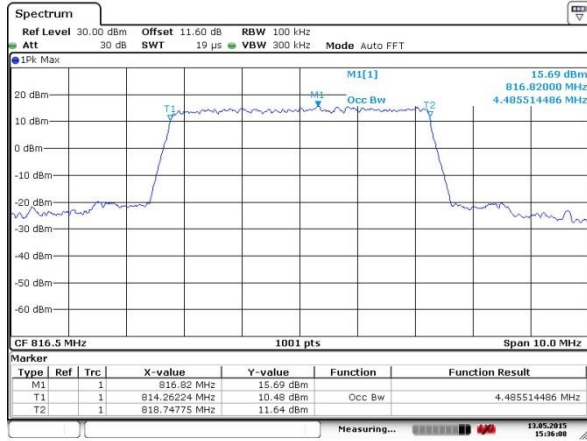


Date: 13 MAY 2015 15:32:01



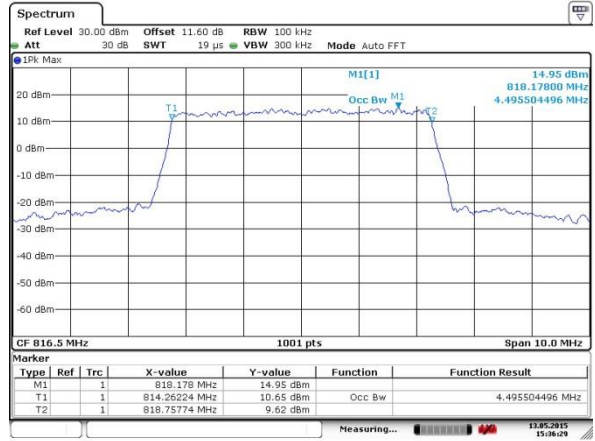
LTE Band 26

Lowest Channel / 5MHz / QPSK



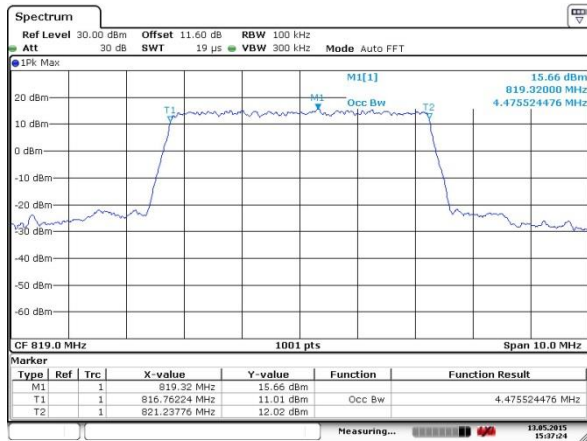
Date: 13 MAY 2015 15:36:08

Lowest Channel / 5MHz / 16QAM



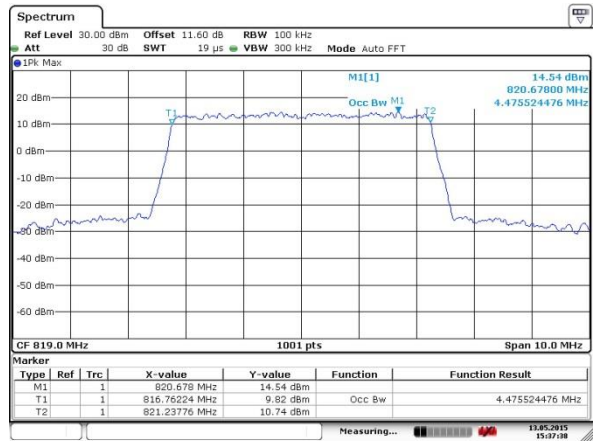
Date: 13 MAY 2015 15:36:29

Middle Channel / 5MHz / QPSK



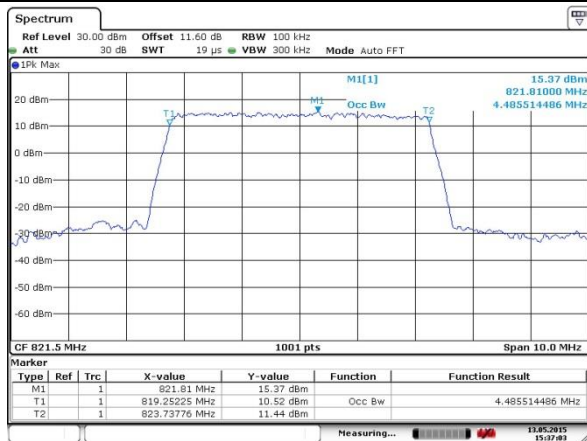
Date: 13 MAY 2015 15:37:24

Middle Channel / 5MHz / 16QAM



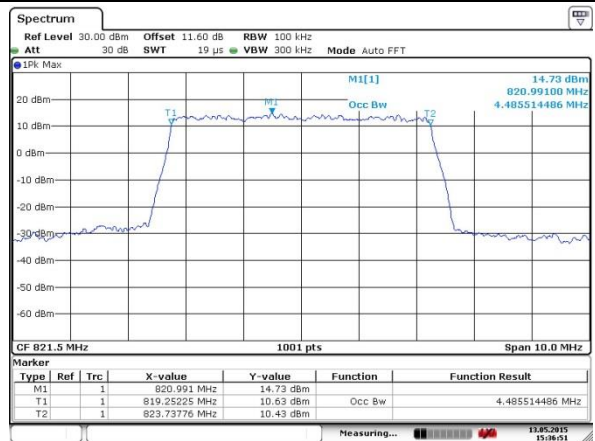
Date: 13 MAY 2015 15:37:38

Highest Channel / 5MHz / QPSK



Date: 13 MAY 2015 15:37:03

Highest Channel / 5MHz / 16QAM

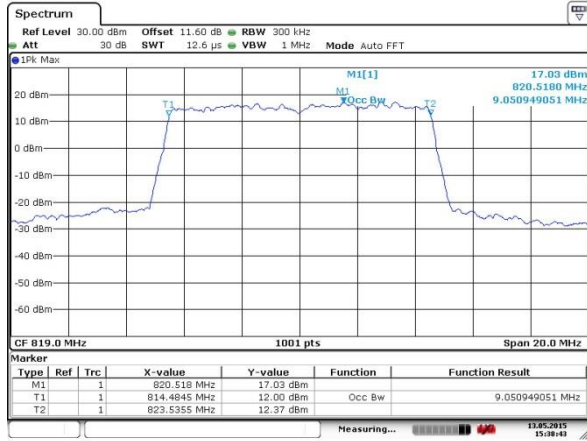


Date: 13 MAY 2015 15:36:52

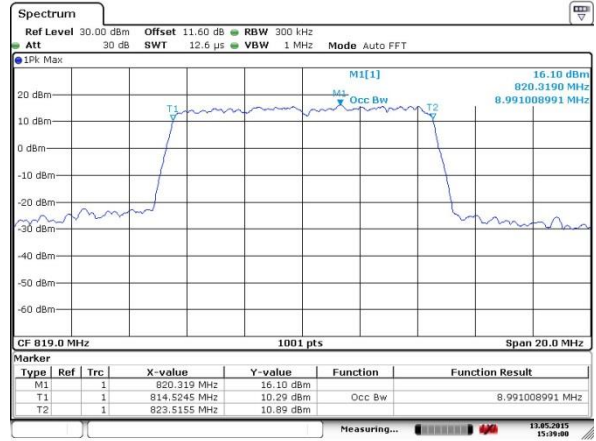


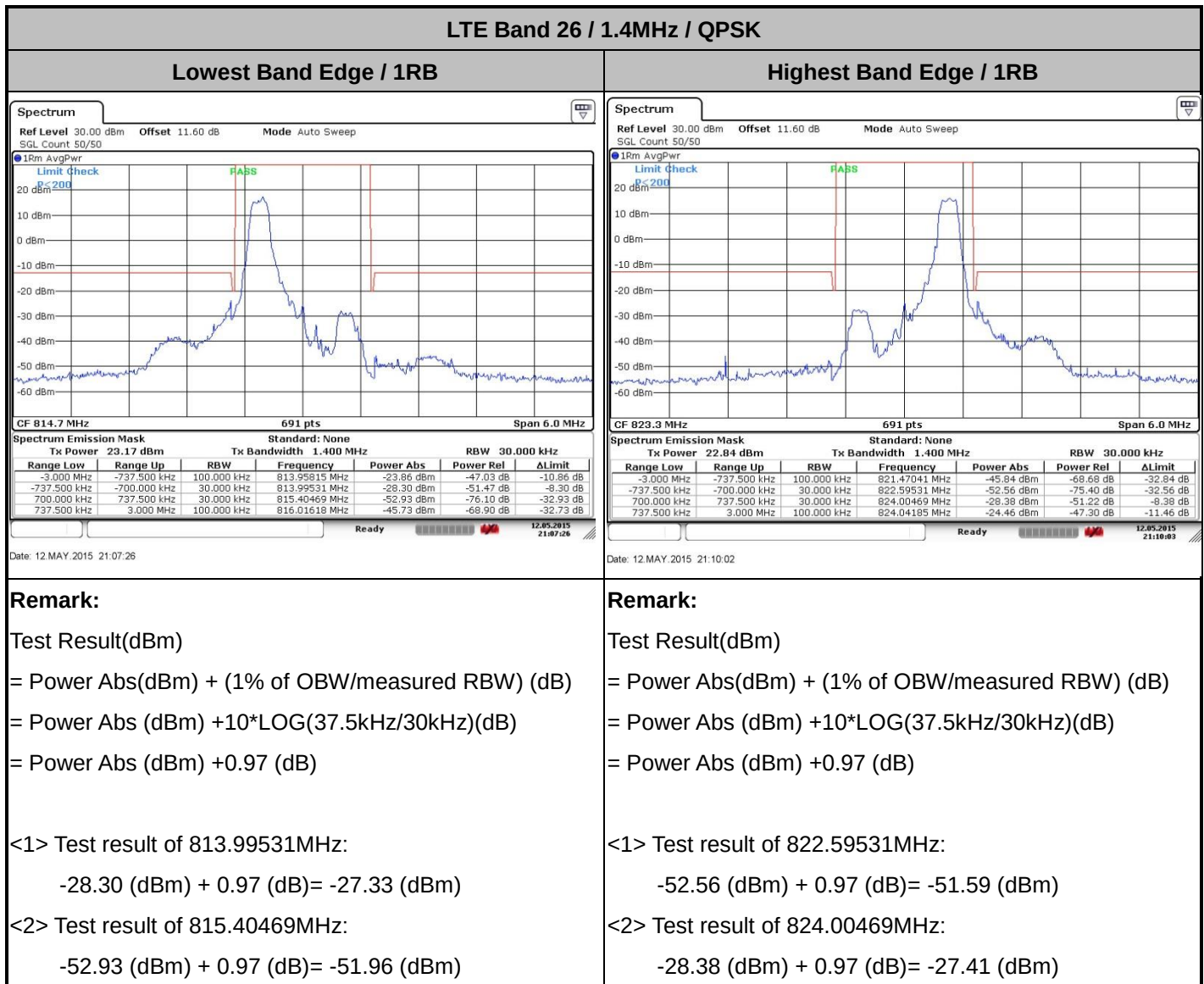
LTE Band 26

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

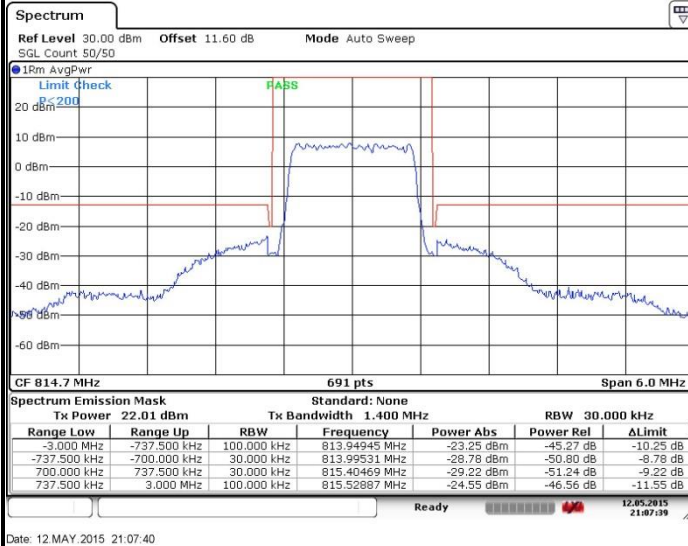


**Emissions Mask**



LTE Band 26 / 1.4MHz / QPSK

Lowest Band Edge / Full RB



Date: 12.MAY.2015 21:07:40

Remark:

Test Result(dBm)

= Power Abs(dBm) + (1% of OBW/measured RBW) (dB)
= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)
= Power Abs (dBm) +0.97 (dB)

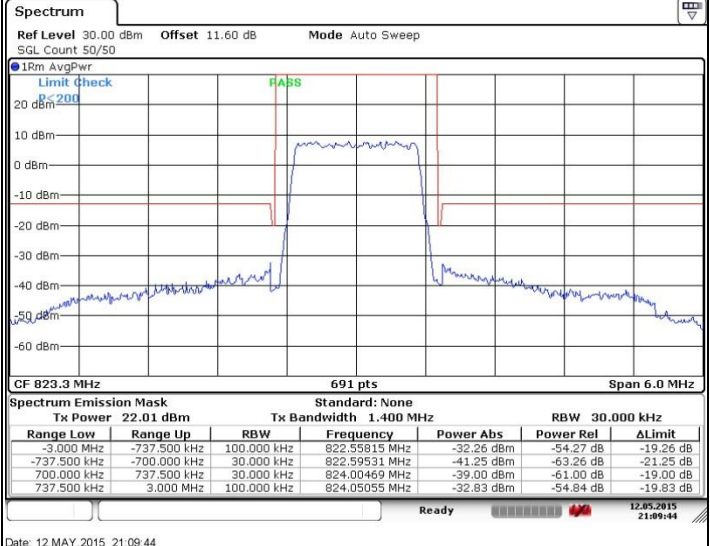
<1> Test result of 813.99531MHz:

 $-28.78 \text{ (dBm)} + 0.97 \text{ (dB)} = -27.81 \text{ (dBm)}$

<2> Test result of 815.40469MHz:

 $-29.22 \text{ (dBm)} + 0.97 \text{ (dB)} = -28.25 \text{ (dBm)}$

Highest Band Edge / Full RB



Date: 12.MAY.2015 21:09:44

Remark:

Test Result(dBm)

= Power Abs(dBm) + (1% of OBW/measured RBW) (dB)
= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)
= Power Abs (dBm) +0.97 (dB)

<1> Test result of 822.59531MHz:

 $-41.25 \text{ (dBm)} + 0.97 \text{ (dB)} = -40.28 \text{ (dBm)}$

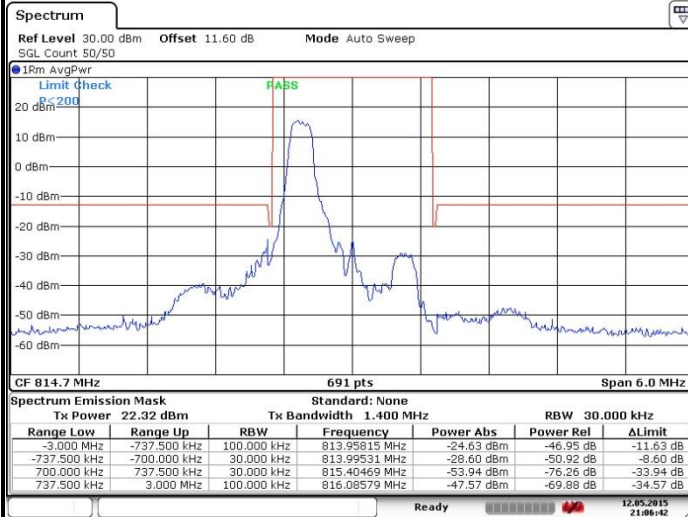
<2> Test result of 824.00469MHz:

 $-39.00 \text{ (dBm)} + 0.97 \text{ (dB)} = -38.03 \text{ (dBm)}$



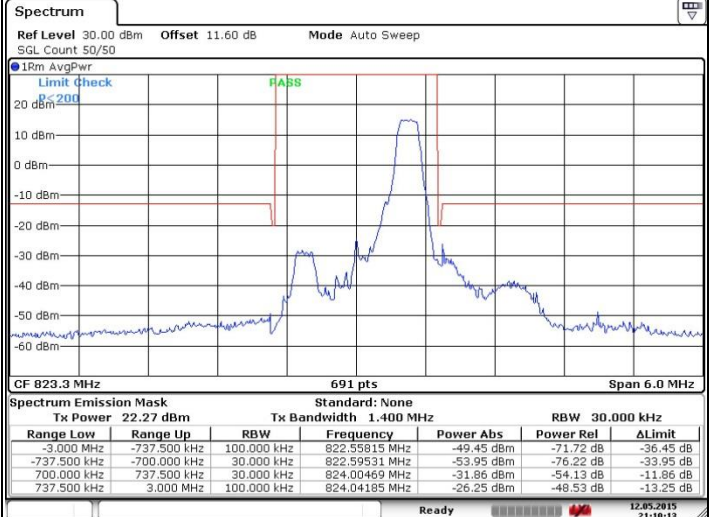
LTE Band 26 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 12.MAY.2015 21:06:42

Highest Band Edge / 1 RB



Date: 12.MAY.2015 21:10:13

Remark:

Test Result(dBm)

= Power Abs(dBm) + (1% of OBW/measured RBW) (dB)
= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)
= Power Abs (dBm) +0.97 (dB)

<1> Test result of 813.99531MHz:

-28.60 (dBm) + 0.97 (dB) = -27.63 (dBm)

<2> Test result of 815.40469MHz:

-53.94 (dBm) + 0.97 (dB) = -52.97 (dBm)

Remark:

Test Result(dBm)

= Power Abs(dBm) + (1% of OBW/measured RBW) (dB)
= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)
= Power Abs (dBm) +0.97 (dB)

<1> Test result of 822.59531MHz:

-53.95 (dBm) + 0.97 (dB) = -52.98 (dBm)

<2> Test result of 824.00469MHz:

-31.86 (dBm) + 0.97 (dB) = -30.89 (dBm)