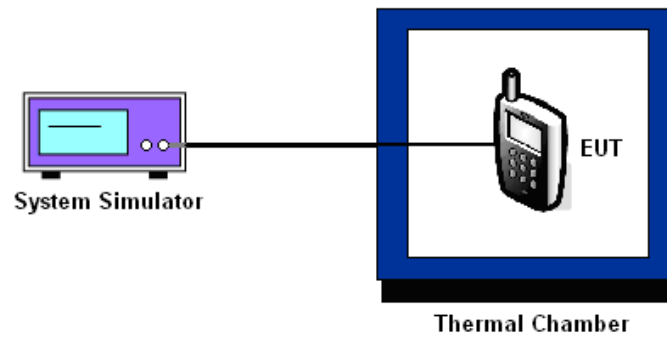


### 3.6.5 Test Setup



### 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°C ~70°C	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	-



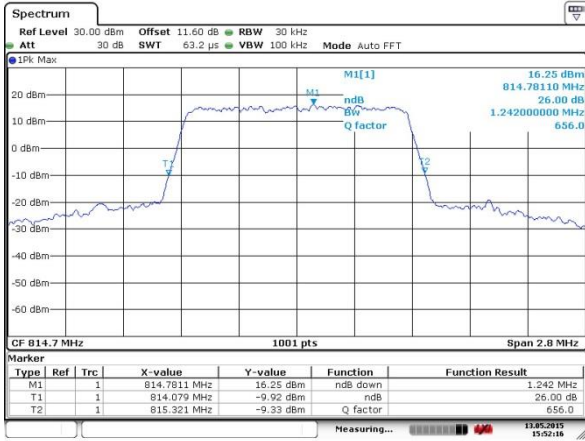
**26dB Bandwidth**

Mode	LTE Band 26 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
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	-	-	-	-	-	-

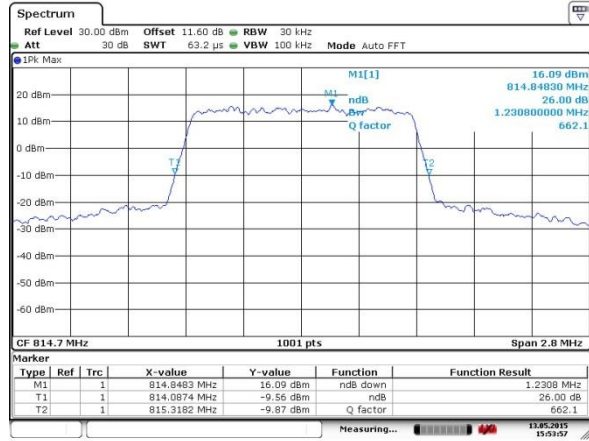


LTE Band 26

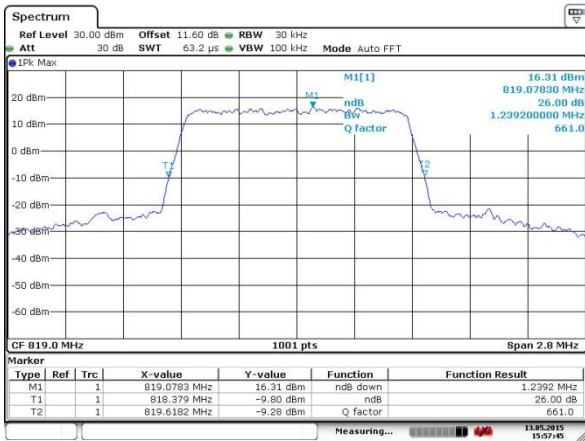
Lowest Channel / 1.4MHz / QPSK



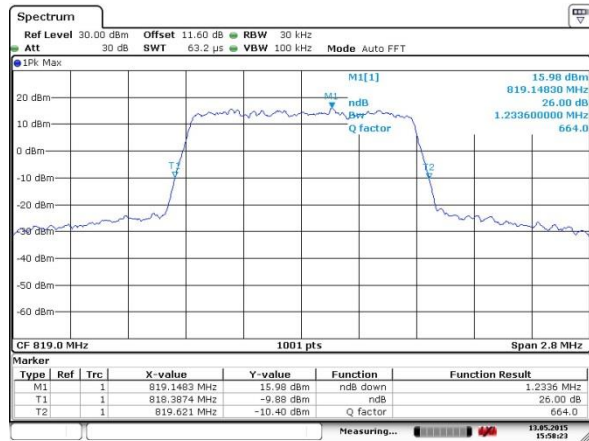
Lowest Channel / 1.4MHz / 16QAM



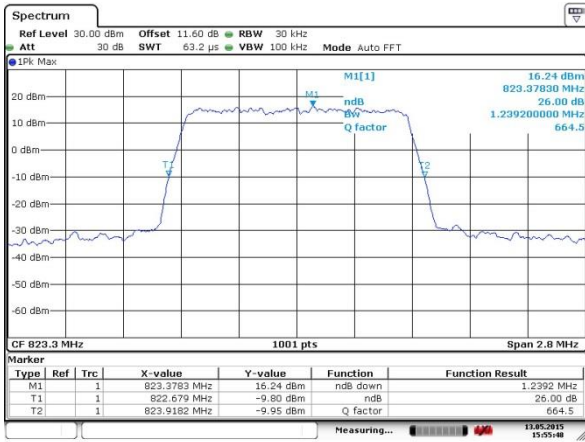
Middle Channel / 1.4MHz / QPSK



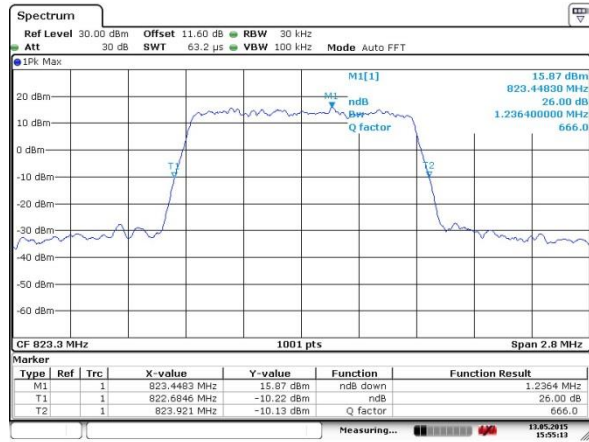
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



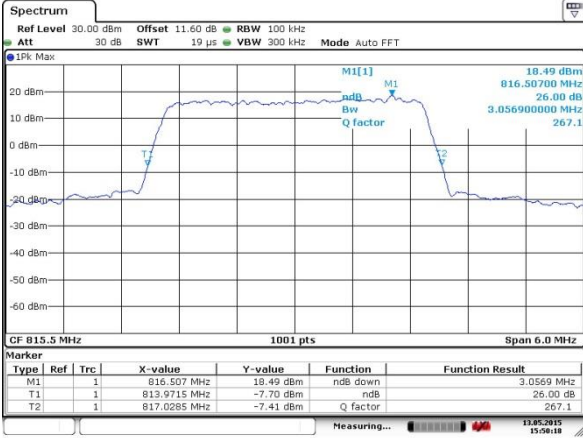
Highest Channel / 1.4MHz / 16QAM





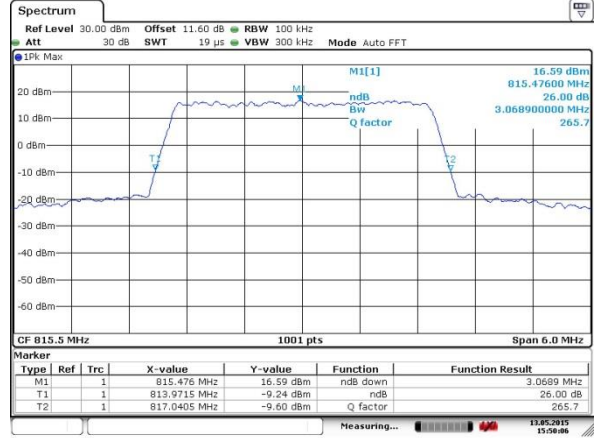
LTE Band 26

Lowest Channel / 3MHz / QPSK



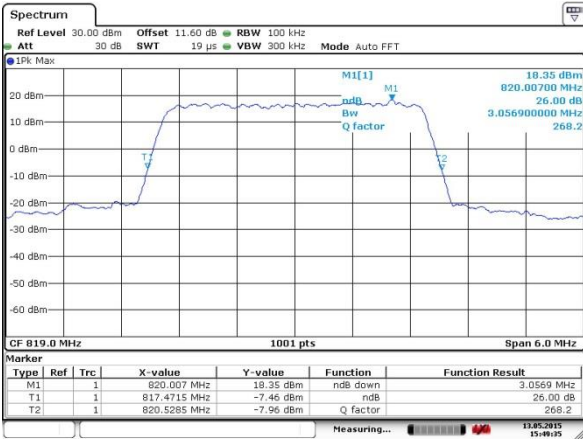
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Lowest Channel / 3MHz / 16QAM



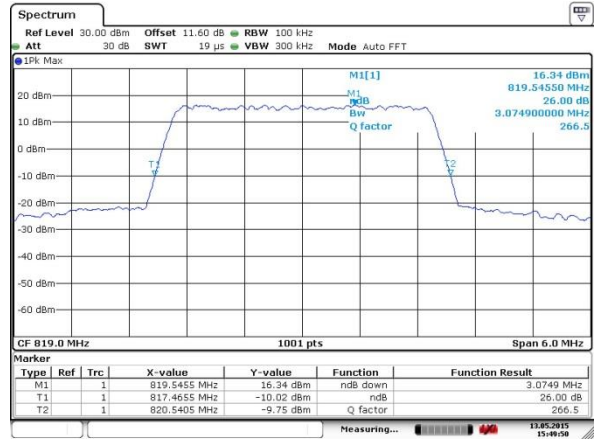
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Middle Channel / 3MHz / QPSK



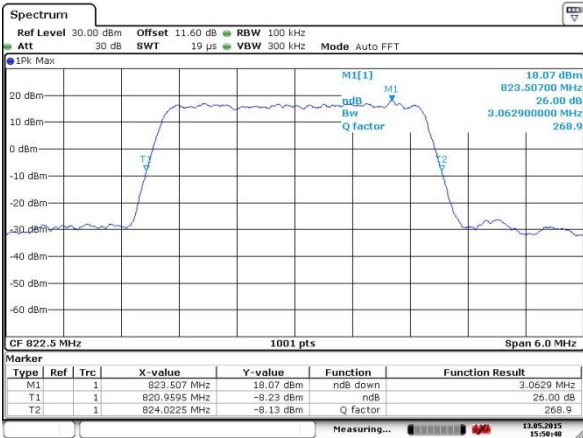
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Middle Channel / 3MHz / 16QAM



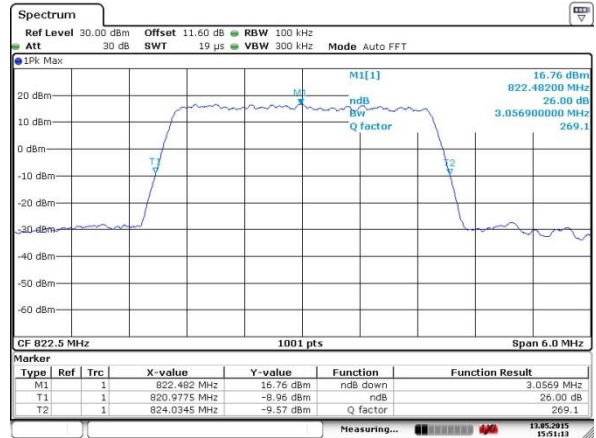
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Highest Channel / 3MHz / QPSK



Date: 13 MAY 2015 15:50:48

Highest Channel / 3MHz / 16QAM

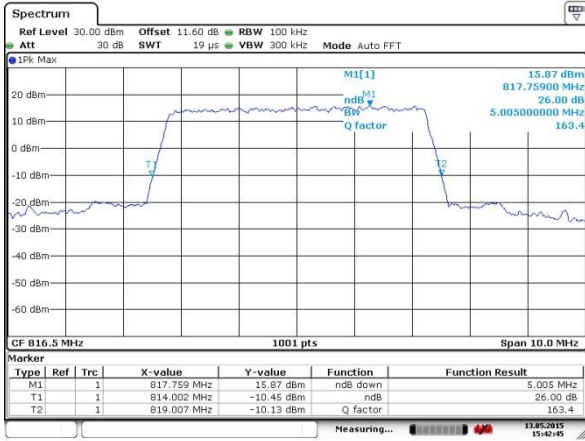


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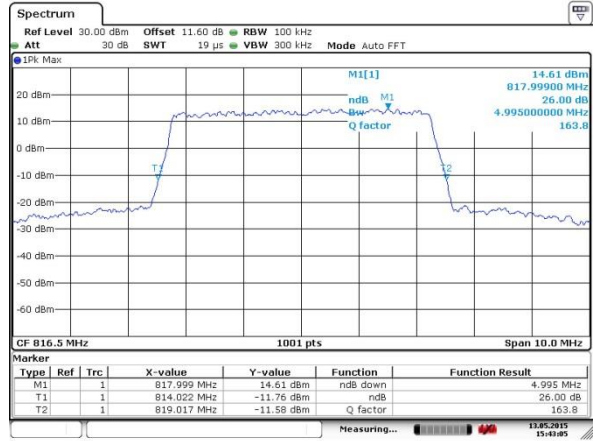
LTE Band 26

Lowest Channel / 5MHz / QPSK



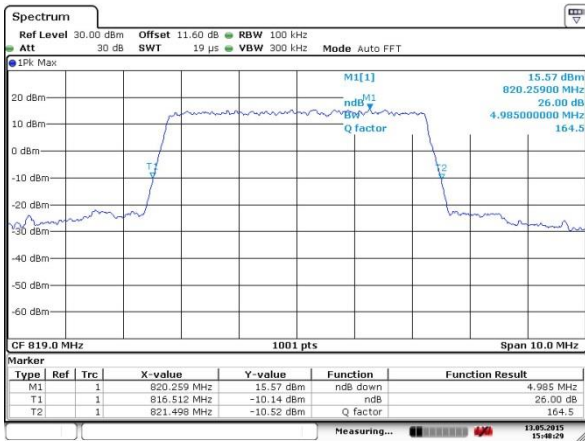
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Lowest Channel / 5MHz / 16QAM



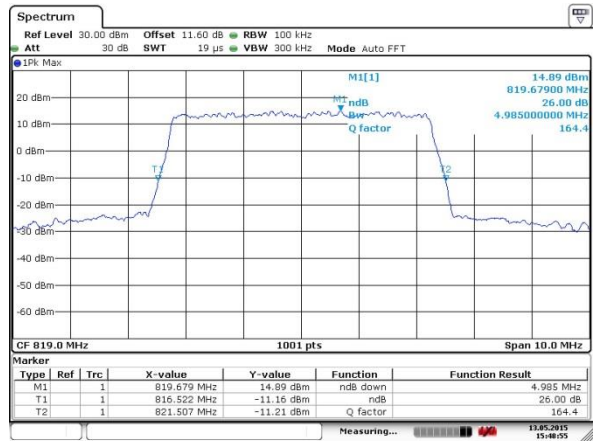
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Middle Channel / 5MHz / QPSK



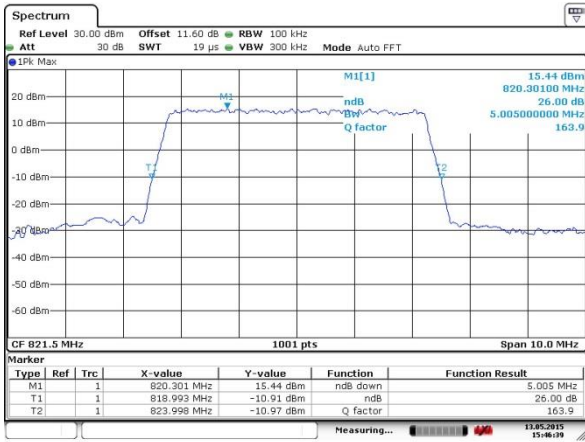
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Middle Channel / 5MHz / 16QAM



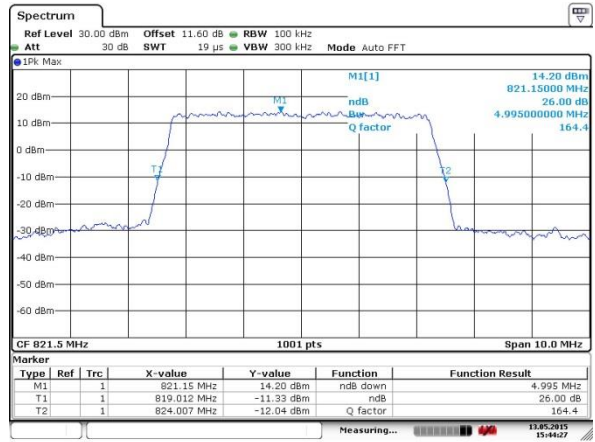
Date: 13 MAY 2015 15:48:56

Highest Channel / 5MHz / QPSK



Date: 13 MAY 2015 15:48:38

Highest Channel / 5MHz / 16QAM



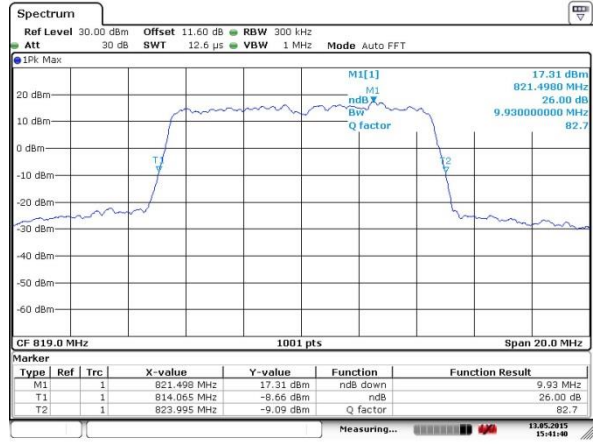
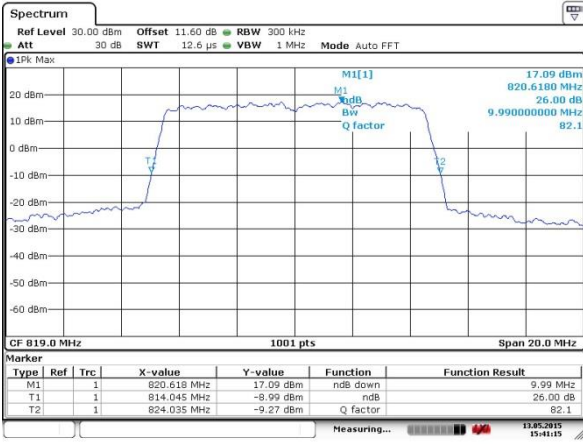
Date: 13 MAY 2015 15:44:27



LTE Band 26

Middle Channel / 10MHz / QPSK

Middle Channel / 10MHz / 16QAM





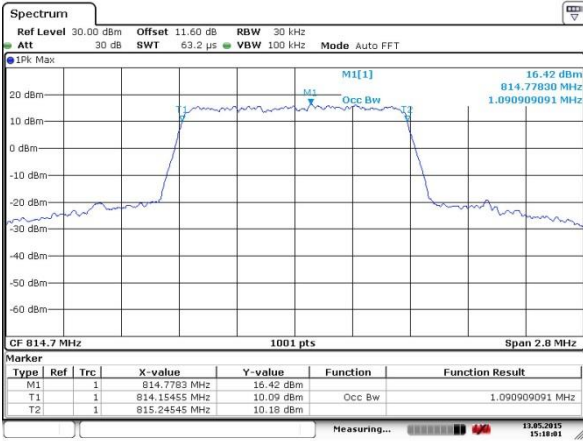
**Occupied Bandwidth**

Mode	LTE Band 26 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	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	-	-	-	-	-	-



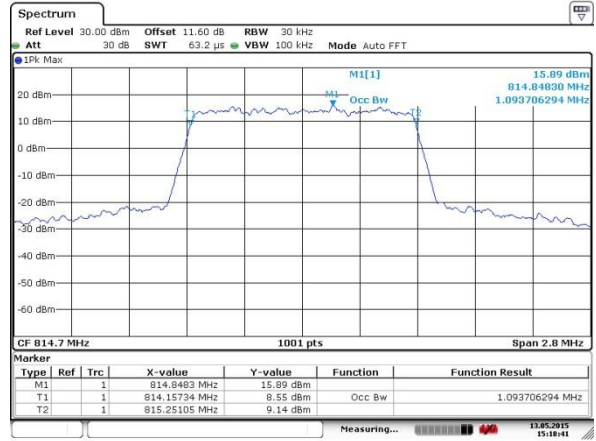
LTE Band 26

Lowest Channel / 1.4MHz / QPSK



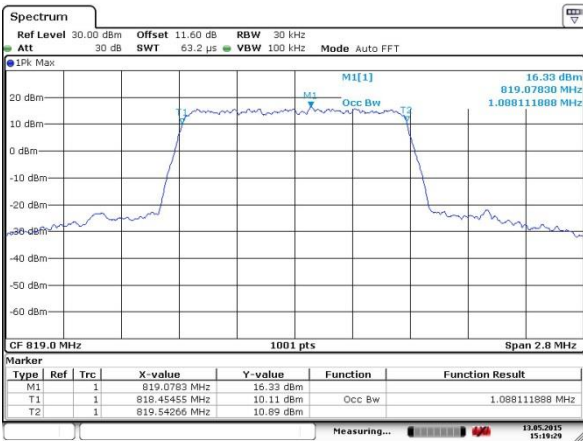
Date: 13 MAY 2015 15:18:01

Lowest Channel / 1.4MHz / 16QAM



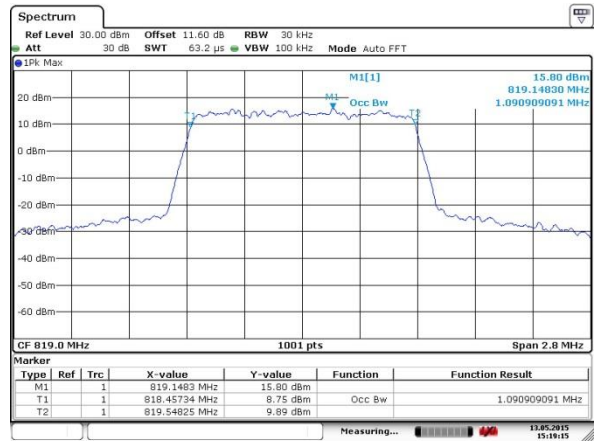
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Middle Channel / 1.4MHz / QPSK



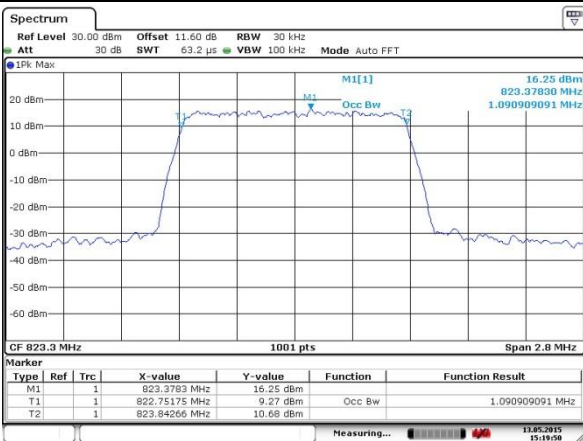
Date: 13 MAY 2015 15:19:29

Middle Channel / 1.4MHz / 16QAM



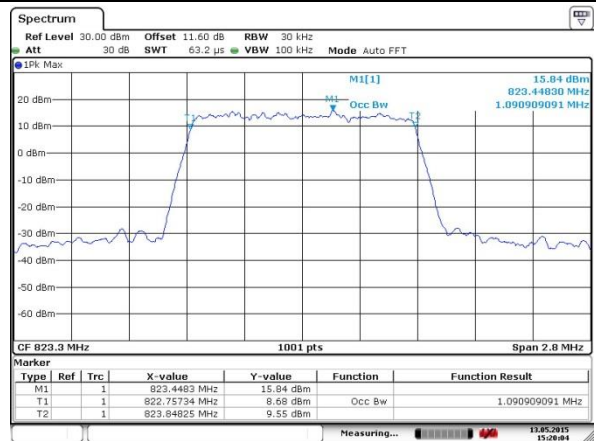
Date: 13 MAY 2015 15:19:15

Highest Channel / 1.4MHz / QPSK



Date: 13 MAY 2015 15:19:50

Highest Channel / 1.4MHz / 16QAM

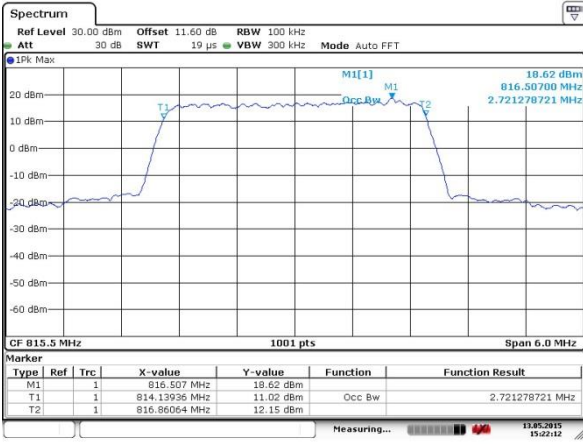


Date: 13 MAY 2015 15:20:04

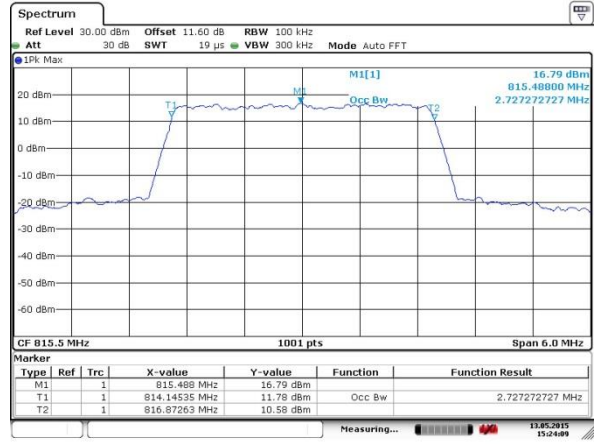


LTE Band 26

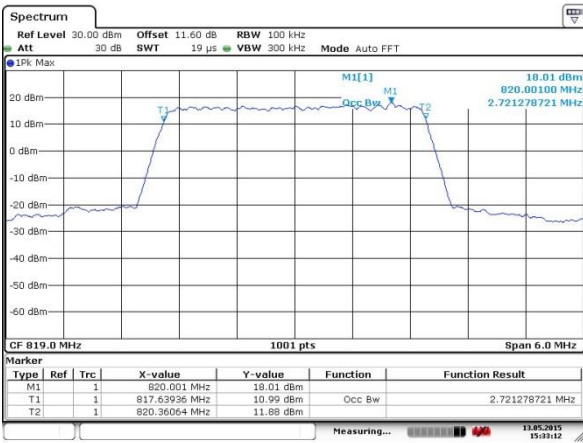
Lowest Channel / 3MHz / QPSK



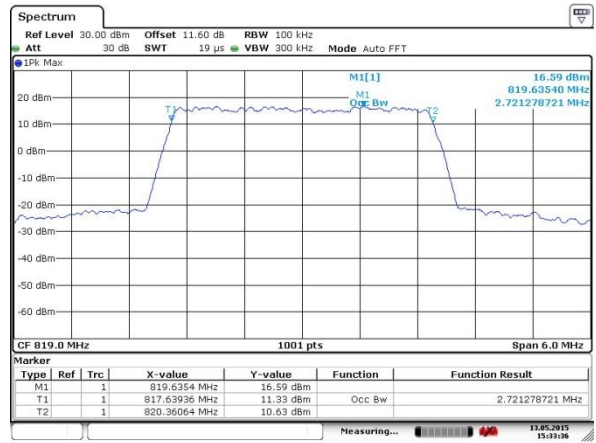
Lowest Channel / 3MHz / 16QAM



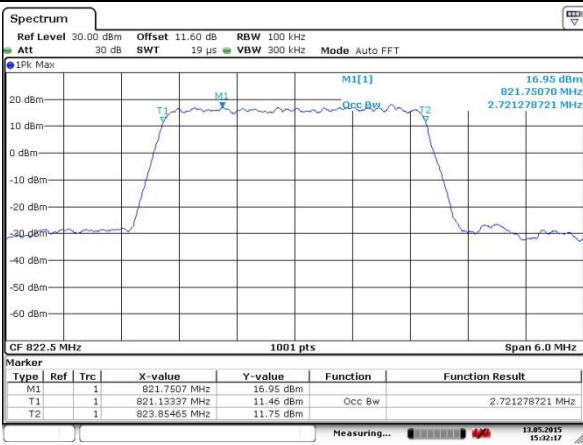
Middle Channel / 3MHz / QPSK



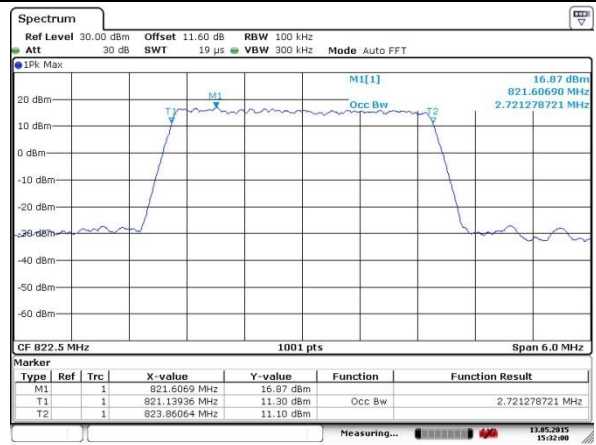
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



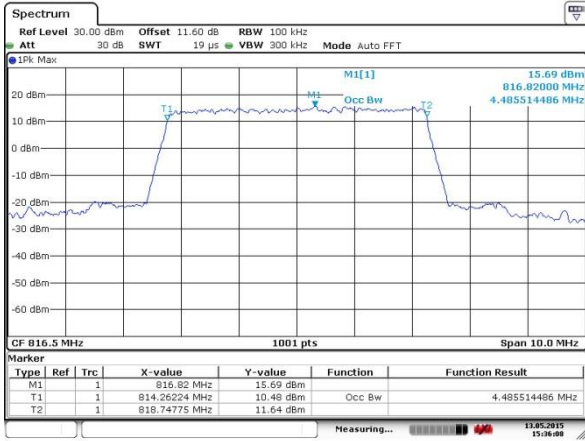
Highest Channel / 3MHz / 16QAM





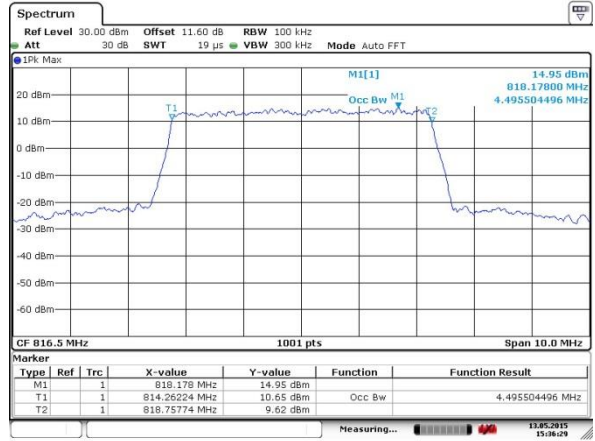
LTE Band 26

Lowest Channel / 5MHz / QPSK



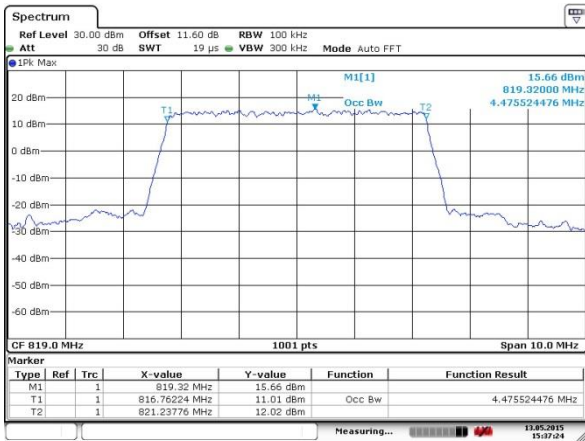
Date: 13 MAY 2015 15:36:08

Lowest Channel / 5MHz / 16QAM



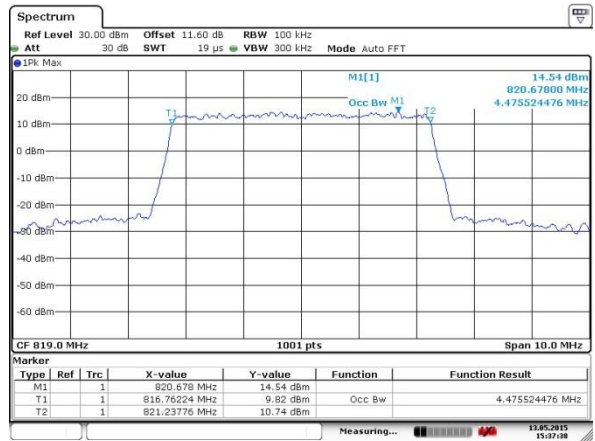
Date: 13 MAY 2015 15:36:29

Middle Channel / 5MHz / QPSK



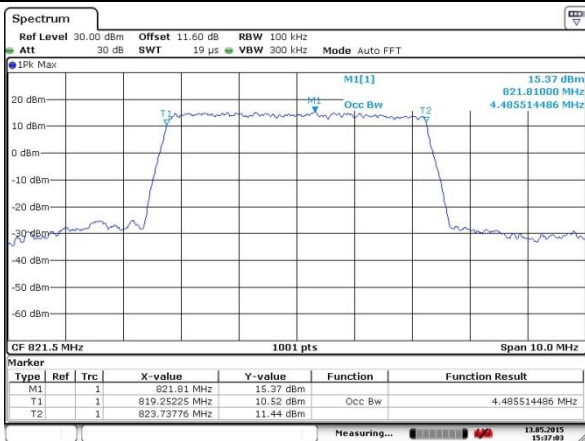
Date: 13 MAY 2015 15:37:24

Middle Channel / 5MHz / 16QAM



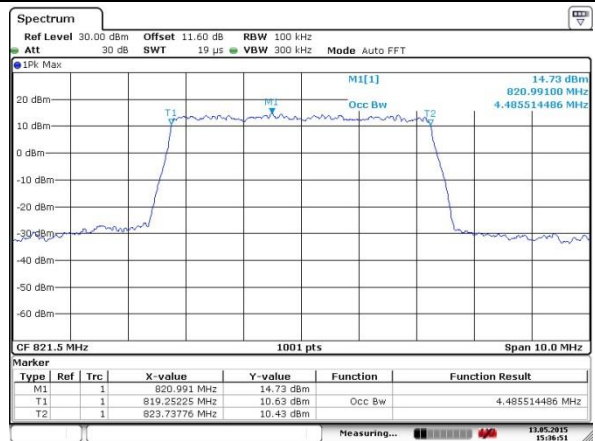
Date: 13 MAY 2015 15:37:38

Highest Channel / 5MHz / QPSK



Date: 13 MAY 2015 15:37:03

Highest Channel / 5MHz / 16QAM



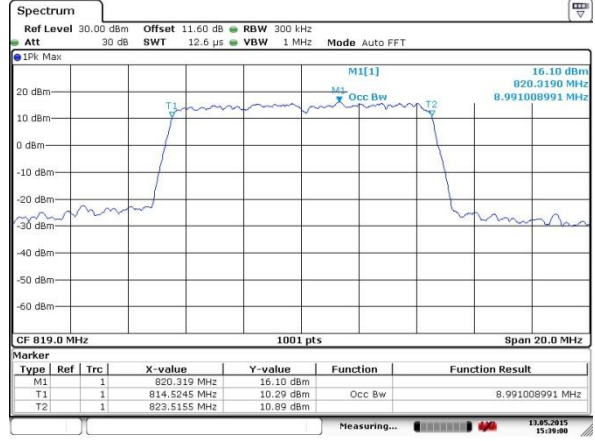
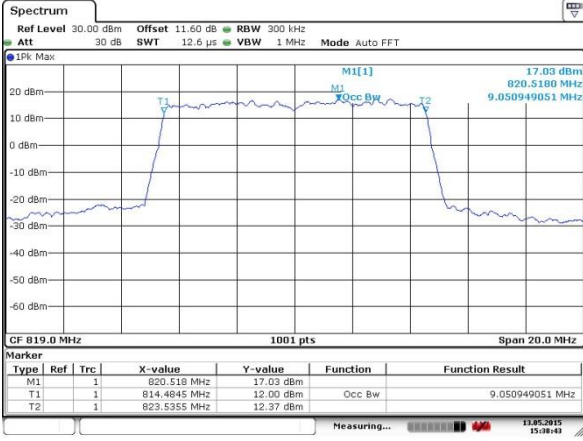
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LTE Band 26

Middle Channel / 10MHz / QPSK

Middle Channel / 10MHz / 16QAM

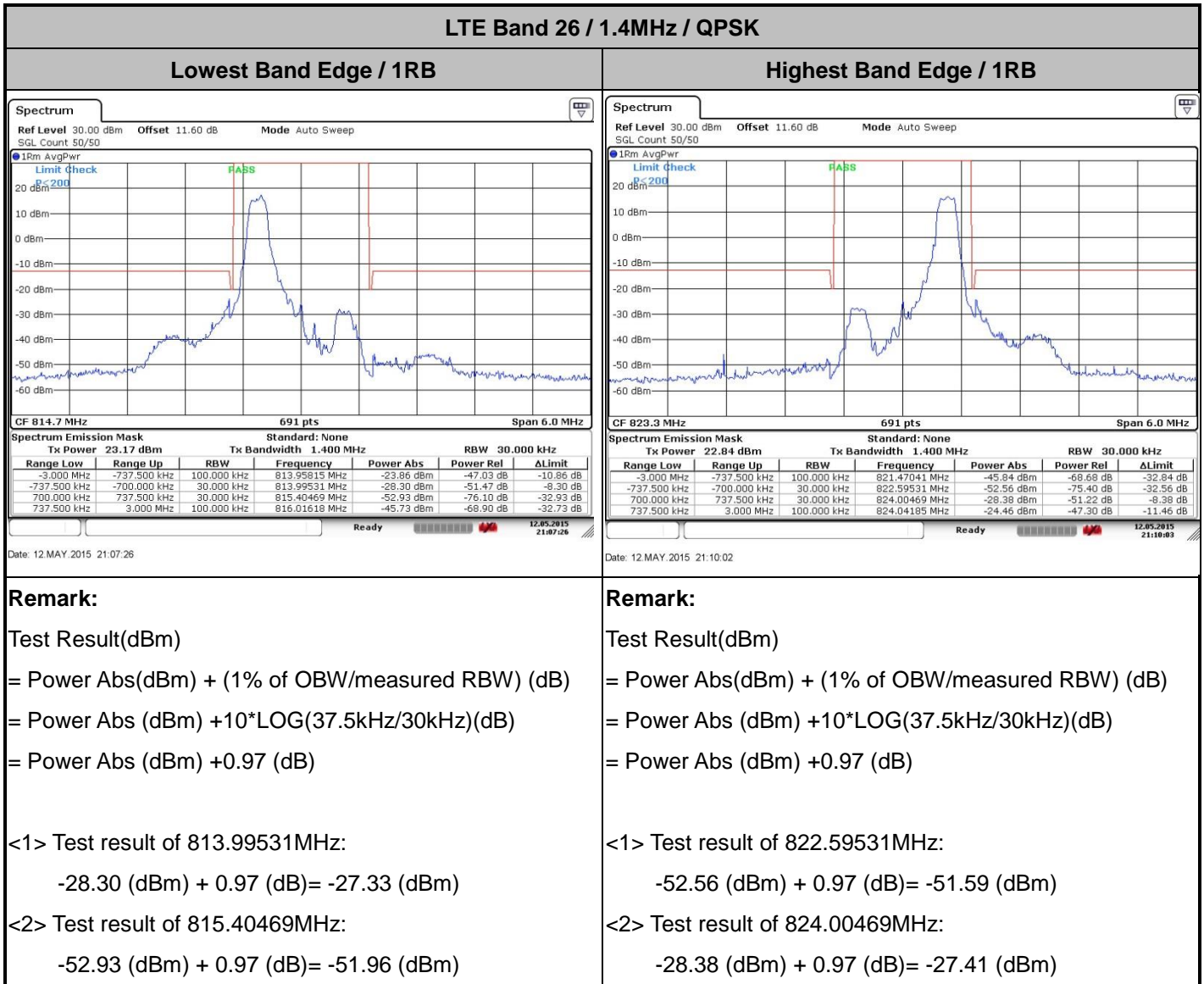


Date: 13 MAY 2015 15:38:43

Date: 13 MAY 2015 15:39:00



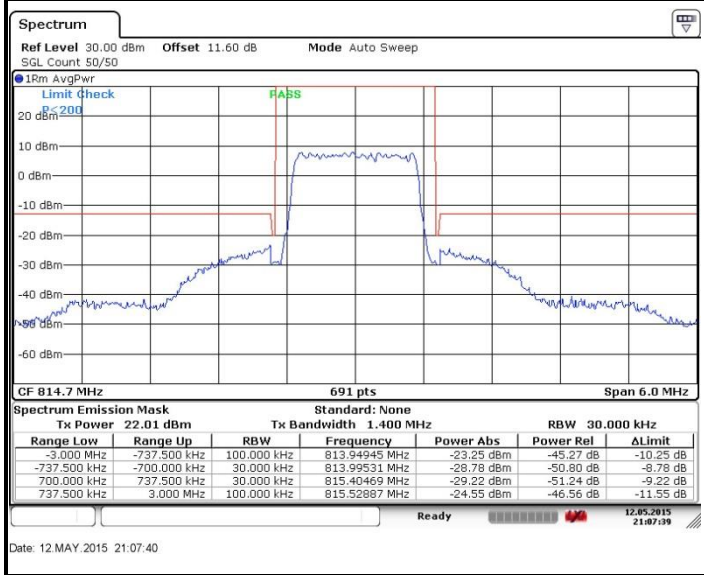
**Emissions Mask**





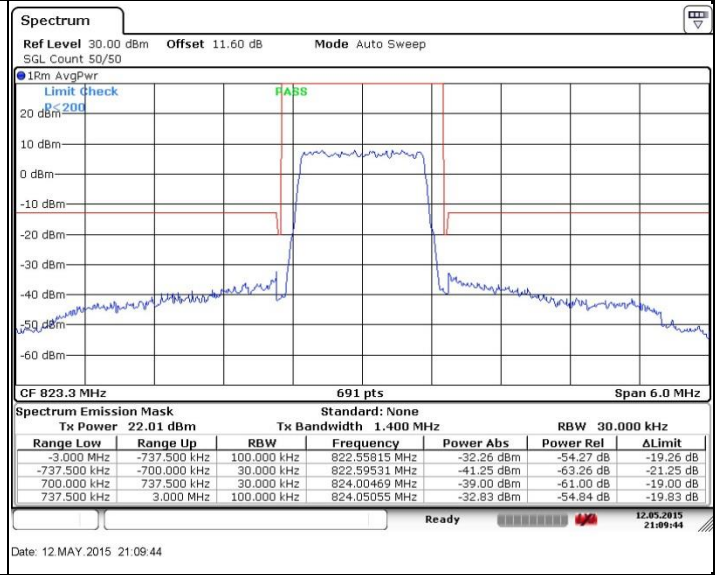
**LTE Band 26 / 1.4MHz / QPSK**

**Lowest Band Edge / Full RB**



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

**Highest Band Edge / Full RB**



Date: 12.MAY.2015 21:08:44

**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 813.99531MHz:  
 -28.78 (dBm) + 0.97 (dB)=-27.81 (dBm)  
 <2> Test result of 815.40469MHz:  
 -29.22 (dBm) + 0.97 (dB)=-28.25 (dBm)

**Remark:**

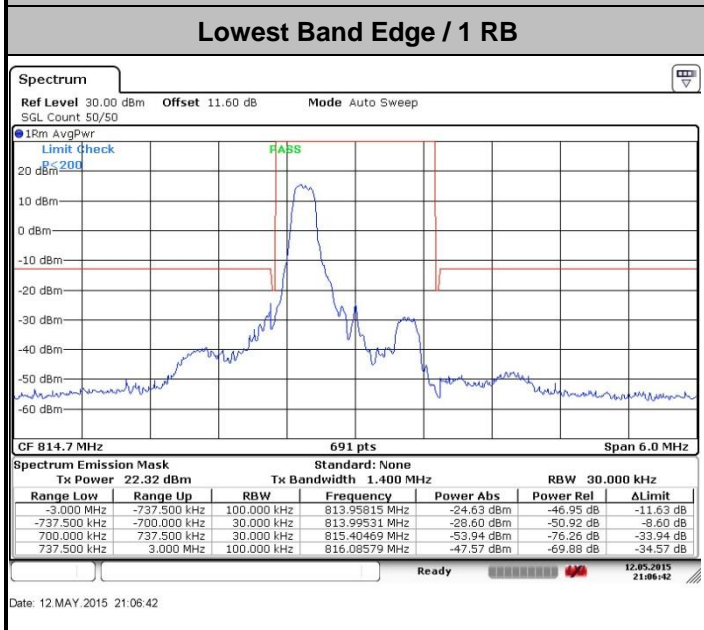
Test Result(dBm)

= 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:  
 -41.25 (dBm) + 0.97 (dB)=-40.28 (dBm)  
 <2> Test result of 824.00469MHz:  
 -39.00 (dBm) + 0.97 (dB)=-38.03 (dBm)



**LTE Band 26 / 1.4MHz / 16QAM**



**Remark:**

Test Result(dBm)

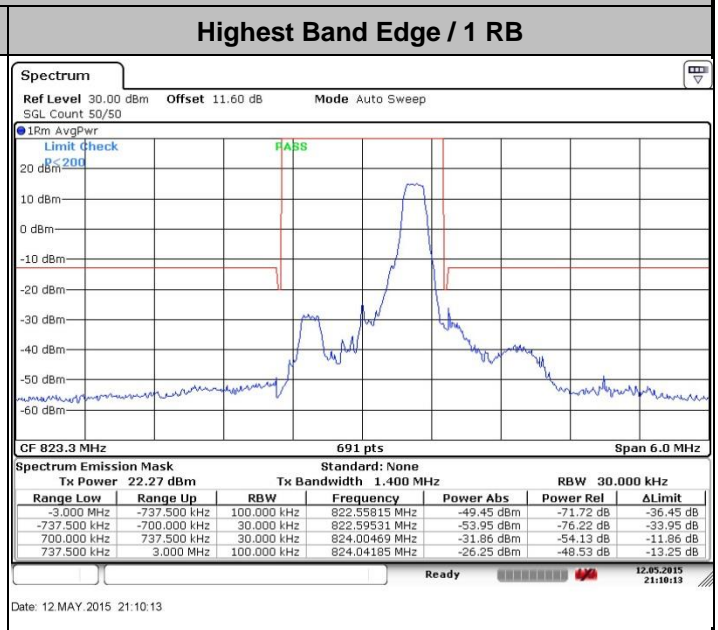
= Power Abs(dBm) + (1% of OBW/measured RBW) (dB)

= 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)