LTE Band 7

Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.84	5.48	5.97	6.49	
Middle CH	4.64	5.57	5.30	6.52	**PASS**
Highest CH	5.19	5.45	6.41	6.23	

LTE Band 7 / 20MHz / QPSK	
Lowest Channel / 1RB	**Lowest Channel / Full RB**

Date: 27.JUL.2015 11:31:22

Date: 27.JUL.2015 11:31:35

Middle Channel / 1RB	**Middle Channel / Full RB**
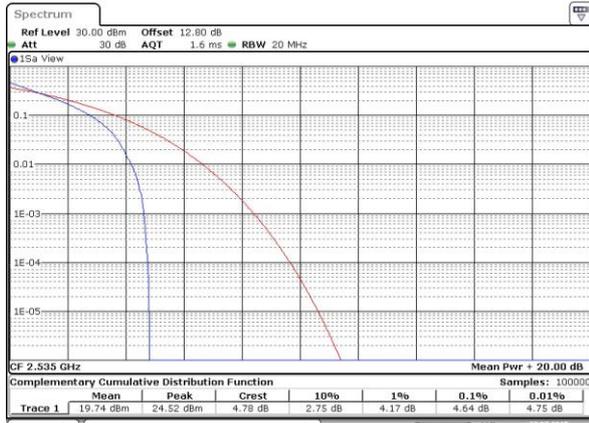
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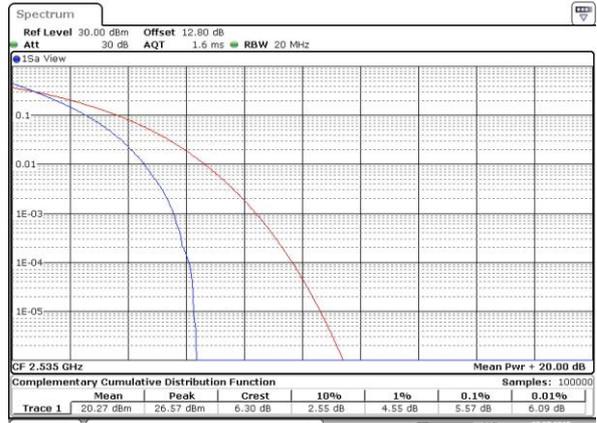
Date: 27.JUL.2015 11:32:28

Highest Channel / 1RB	**Highest Channel / Full RB**
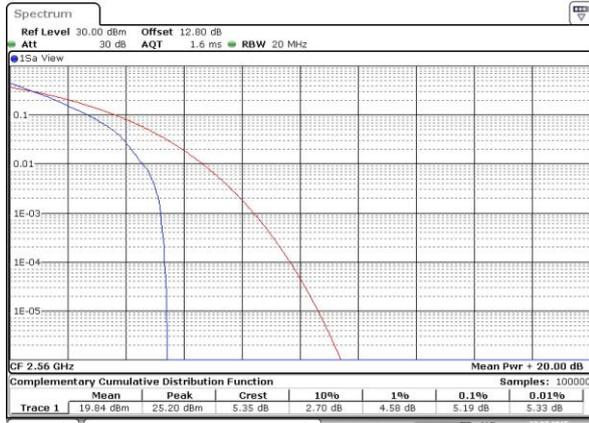
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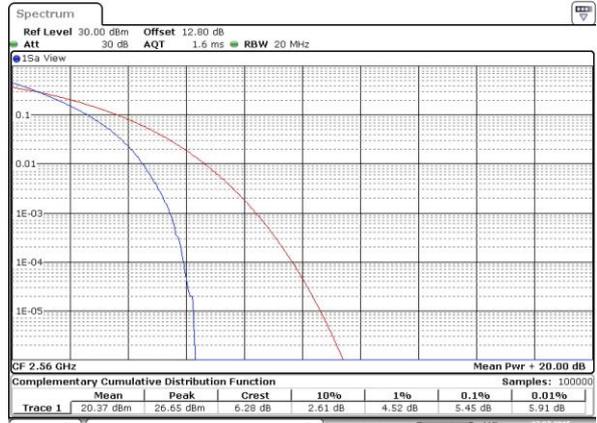
Date: 27.JUL.2015 11:33:07

LTE Band 7 / 20MHz / 16QAM	
Lowest Channel / 1RB	**Lowest Channel / Full RB**

Date: 27.JUL.2015 11:30:19

Date: 27.JUL.2015 11:30:31

Middle Channel / 1RB	**Middle Channel / Full RB**

Date: 27.JUL.2015 11:30:41

Date: 27.JUL.2015 11:30:51

Highest Channel / 1RB	**Highest Channel / Full RB**

Date: 27.JUL.2015 11:31:01

Date: 27.JUL.2015 11:31:12

26dB Bandwidth

Mode	LTE Band 7 : 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	-	-	-	-	4.95	5.02	10.55	10.17	14.54	14.21	20.02	20.10
Middle CH	-	-	-	-	4.97	5.05	10.61	9.71	14.72	15.29	20.30	20.86
Highest CH	-	-	-	-	5.00	4.94	9.97	9.75	14.72	14.36	20.66	21.10

LTE Band 7

Lowest Channel / 5MHz / QPSK	Lowest Channel / 5MHz / 16QAM
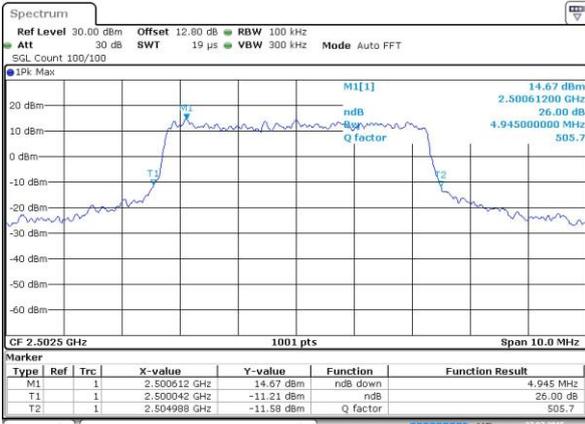
Date: 27.JUL.2015 10:12:55
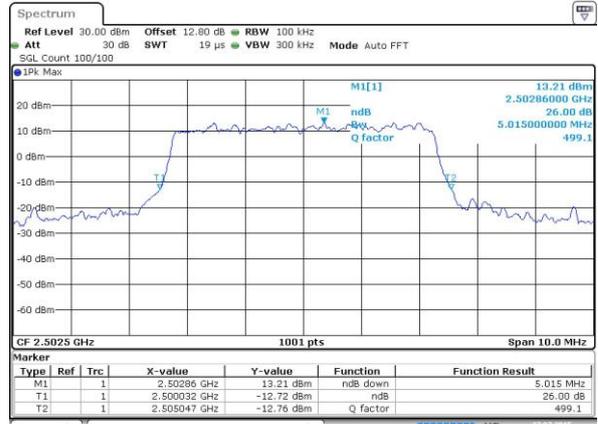
Date: 27.JUL.2015 10:13:06

Middle Channel / 5MHz / QPSK	Middle Channel / 5MHz / 16QAM
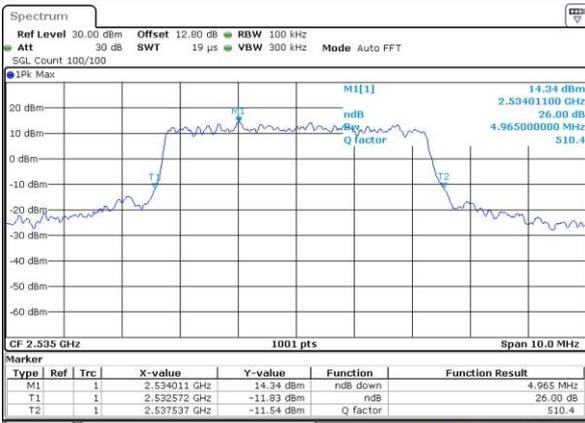
Date: 27.JUL.2015 10:20:05
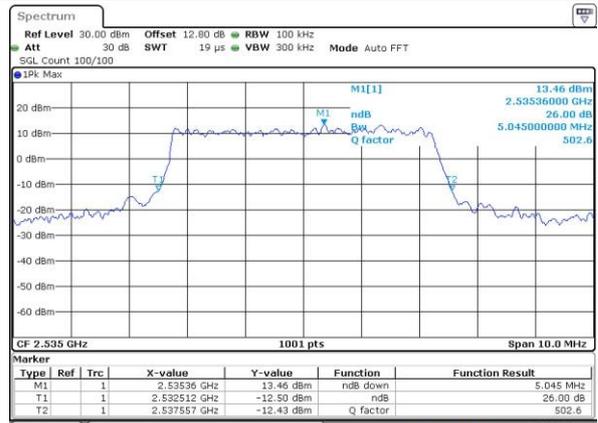
Date: 27.JUL.2015 10:20:16

Highest Channel / 5MHz / QPSK	Highest Channel / 5MHz / 16QAM
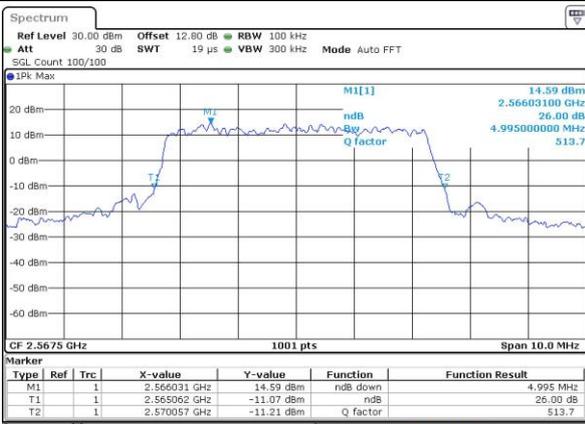
Date: 27.JUL.2015 10:22:36
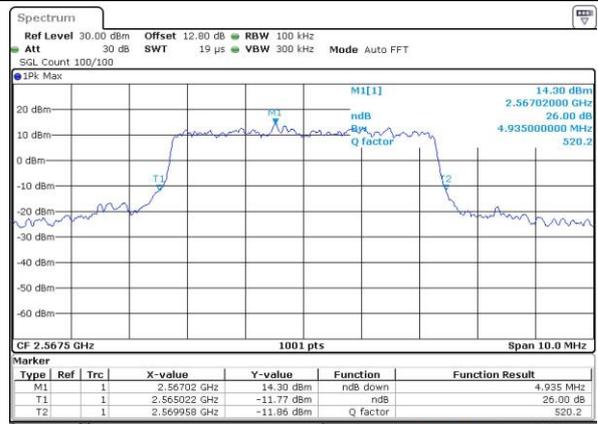
Date: 27.JUL.2015 10:22:47

LTE Band 7

Lowest Channel / 10MHz / QPSK	Lowest Channel / 10MHz / 16QAM
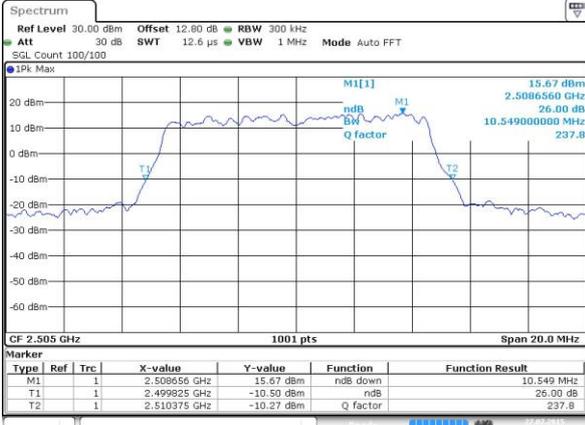
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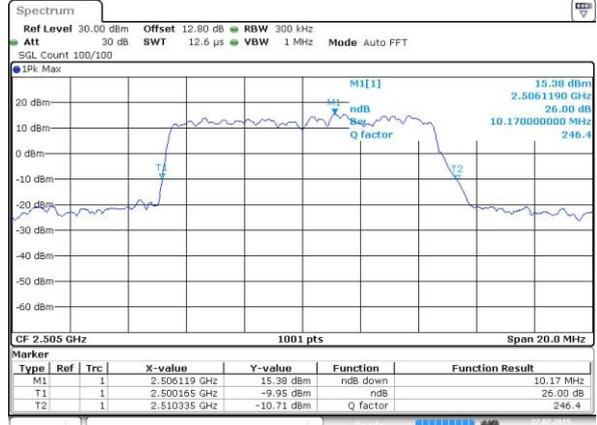
Date: 27.JUL.2015 10:29:58

Middle Channel / 10MHz / QPSK	Middle Channel / 10MHz / 16QAM

Date: 27.JUL.2015 10:36:57

Date: 27.JUL.2015 10:37:08

Highest Channel / 10MHz / QPSK	Highest Channel / 10MHz / 16QAM
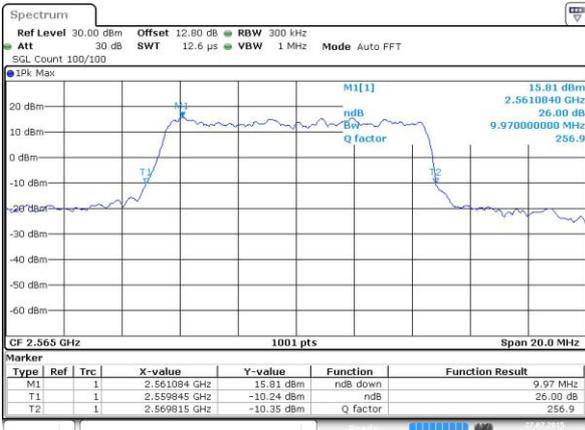
Date: 27.JUL.2015 10:39:27
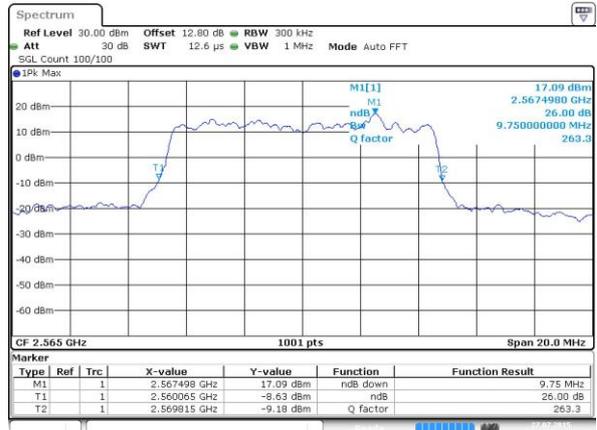
Date: 27.JUL.2015 10:39:38

LTE Band 7	
Lowest Channel / 15MHz / QPSK	**Lowest Channel / 15MHz / 16QAM**
Middle Channel / 15MHz / QPSK	**Middle Channel / 15MHz / 16QAM**
Highest Channel / 15MHz / QPSK	**Highest Channel / 15MHz / 16QAM**
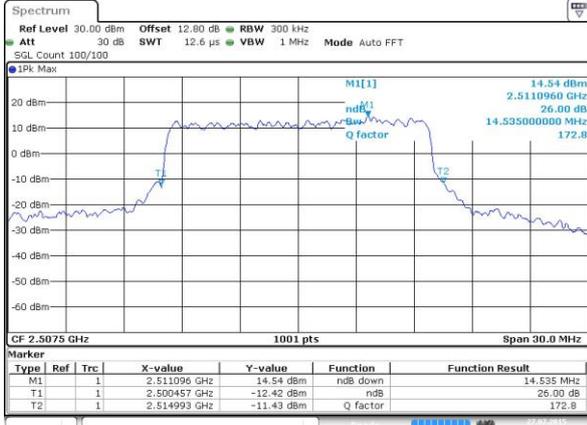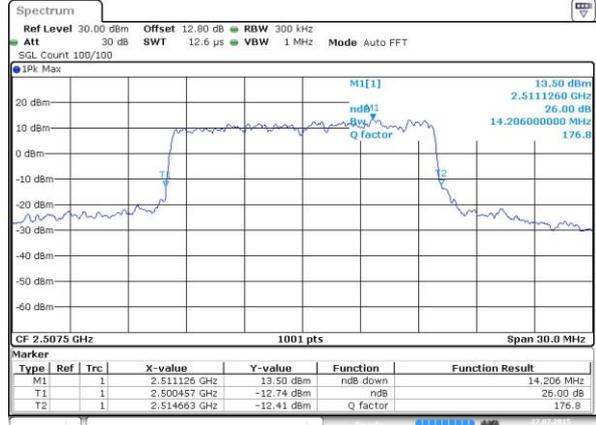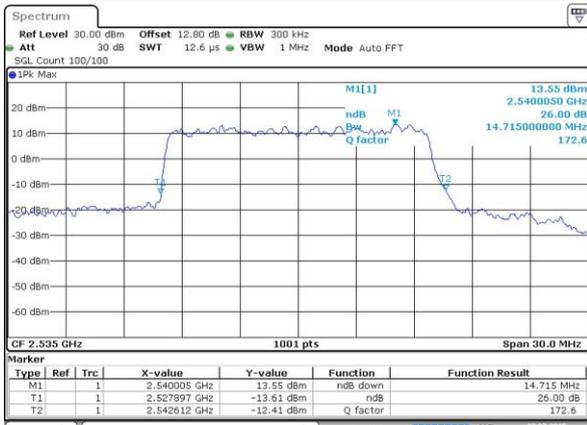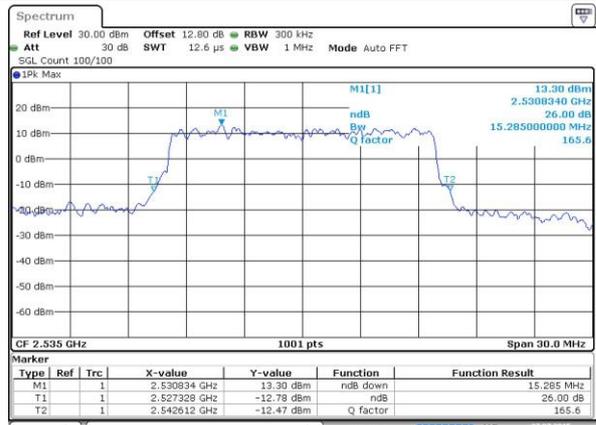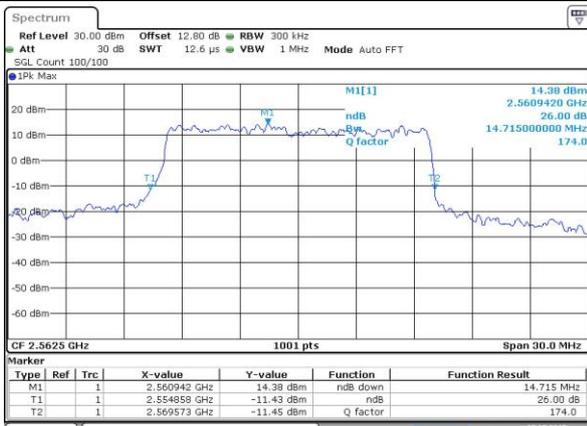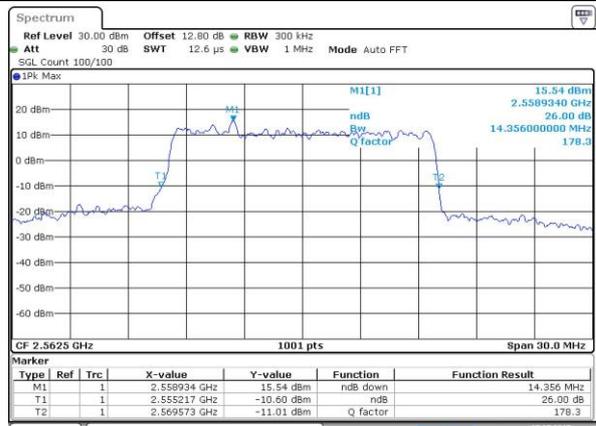
LTE Band 7

Lowest Channel / 20MHz / QPSK	Lowest Channel / 20MHz / 16QAM
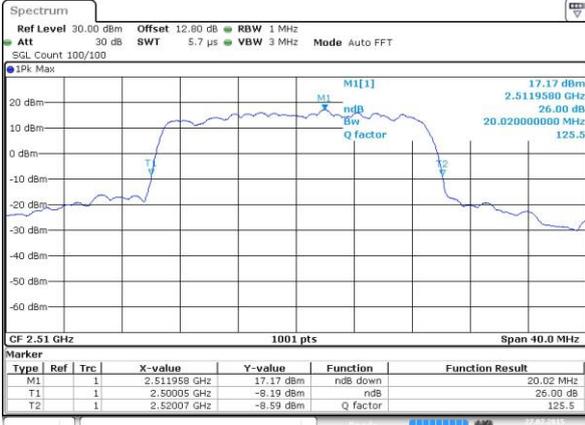
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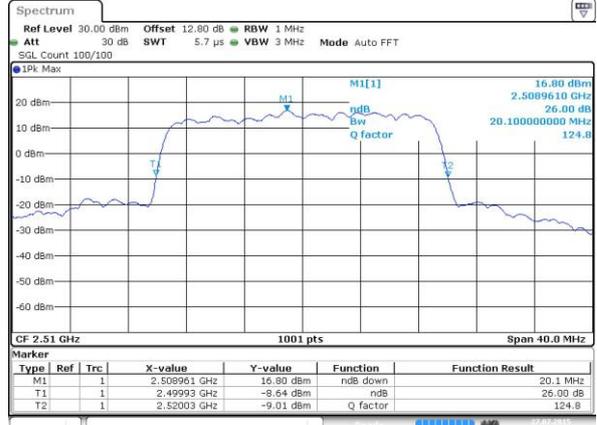
Date: 27.JUL.2015 11:03:39

Middle Channel / 20MHz / QPSK	Middle Channel / 20MHz / 16QAM
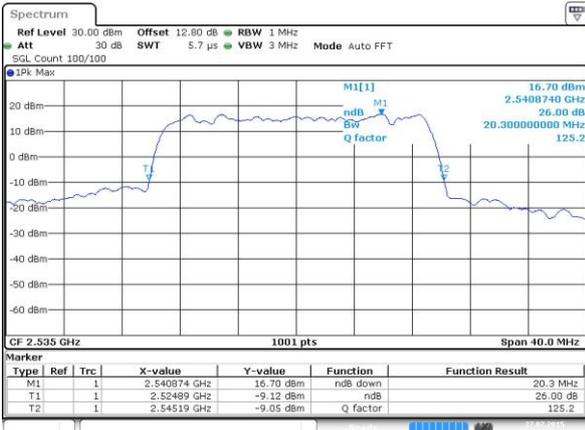
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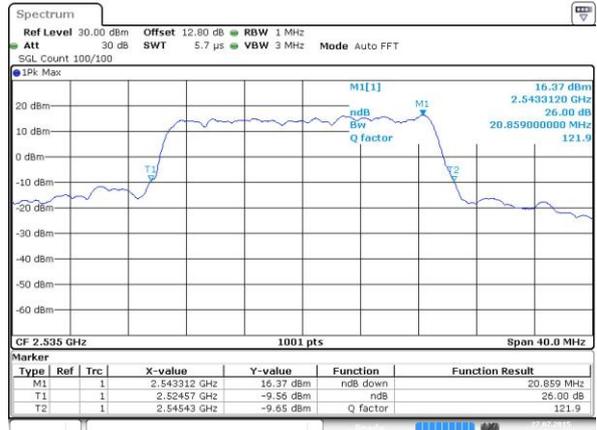
Date: 27.JUL.2015 11:10:48

Highest Channel / 20MHz / QPSK	Highest Channel / 20MHz / 16QAM
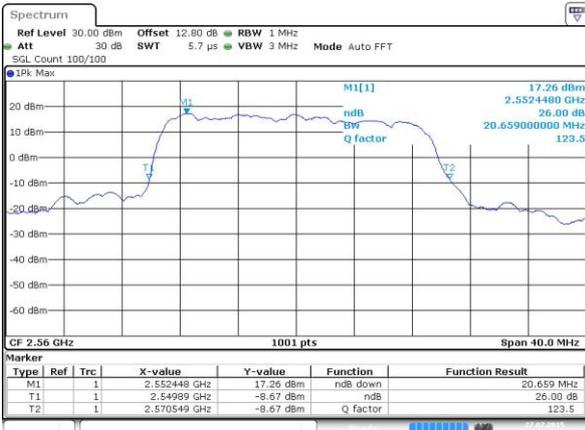
Date: 27.JUL.2015 11:13:09

Date: 27.JUL.2015 11:13:19

Occupied Bandwidth

Mode	LTE Band 7 : 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	-	-	-	-	4.50	4.46	9.03	8.97	13.49	13.43	18.30	18.38
Middle CH	-	-	-	-	4.51	4.49	9.03	9.05	13.52	13.64	18.42	18.50
Highest CH	-	-	-	-	4.50	4.48	9.07	9.07	13.46	13.49	18.58	18.46

LTE Band 7	
Lowest Channel / 5MHz / QPSK	**Lowest Channel / 5MHz / 16QAM**
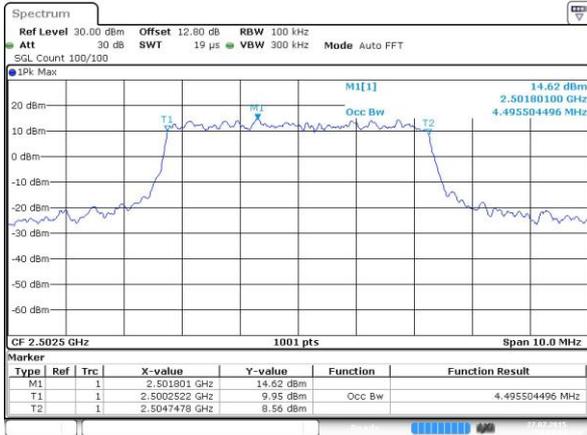
Date: 27.JUL.2015 10:12:34
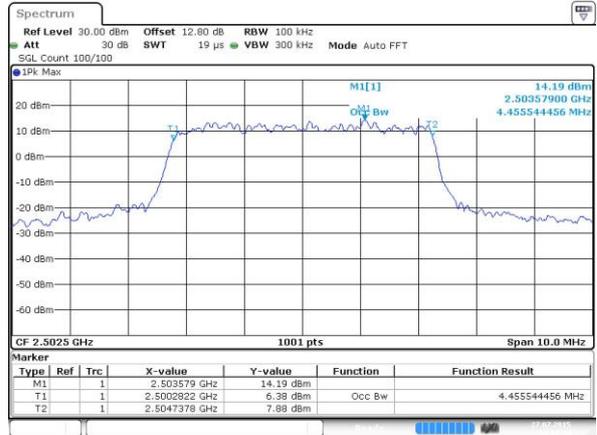
Date: 27.JUL.2015 10:12:44

Middle Channel / 5MHz / QPSK	**Middle Channel / 5MHz / 16QAM**
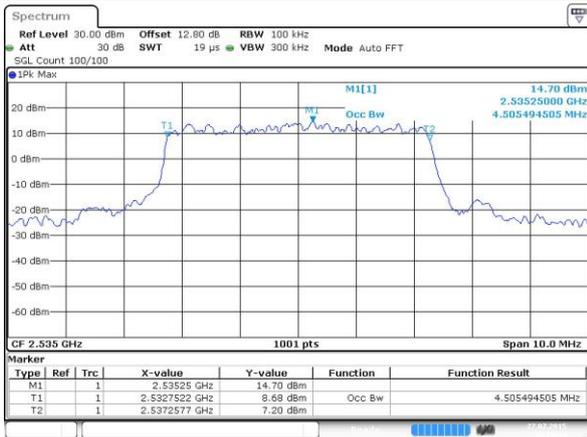
Date: 27.JUL.2015 10:19:44
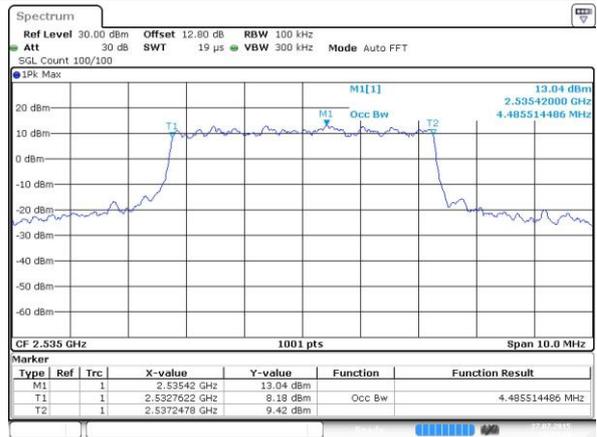
Date: 27.JUL.2015 10:19:55

Highest Channel / 5MHz / QPSK	**Highest Channel / 5MHz / 16QAM**
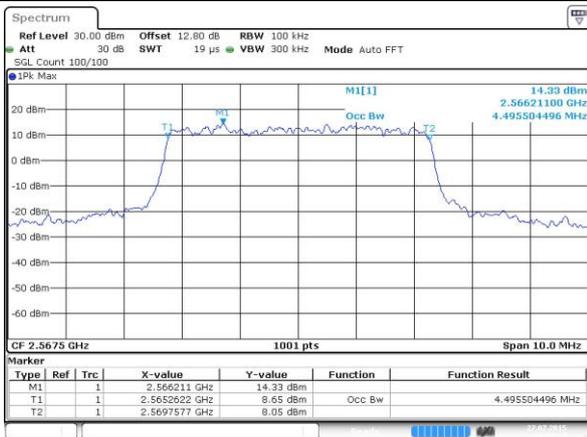
Date: 27.JUL.2015 10:22:15
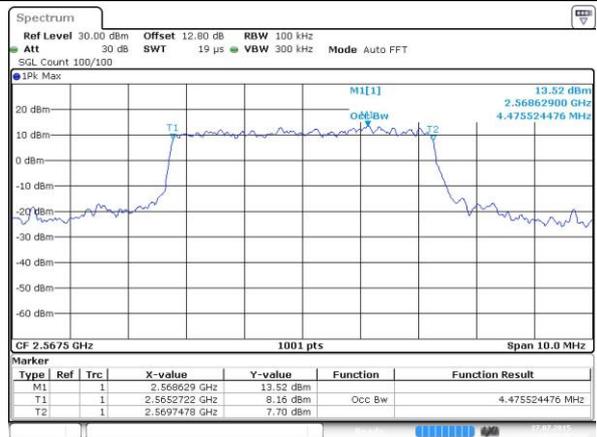
Date: 27.JUL.2015 10:22:26
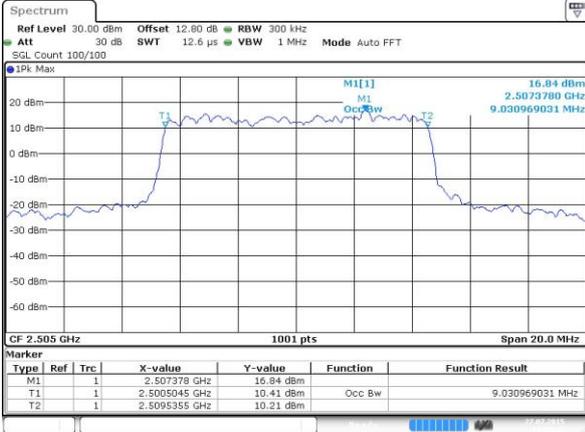
LTE Band 7	
Lowest Channel / 10MHz / QPSK	**Lowest Channel / 10MHz / 16QAM**
Date: 27.JUL.2015 10:29:26	Date: 27.JUL.2015 10:29:37
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
Date: 27.JUL.2015 10:36:36	Date: 27.JUL.2015 10:36:47
Highest Channel / 10MHz / QPSK	**Highest Channel / 10MHz / 16QAM**
Date: 27.JUL.2015 10:39:06	Date: 27.JUL.2015 10:39:17
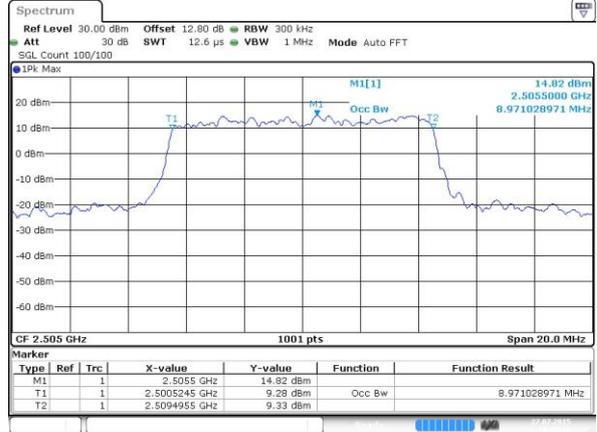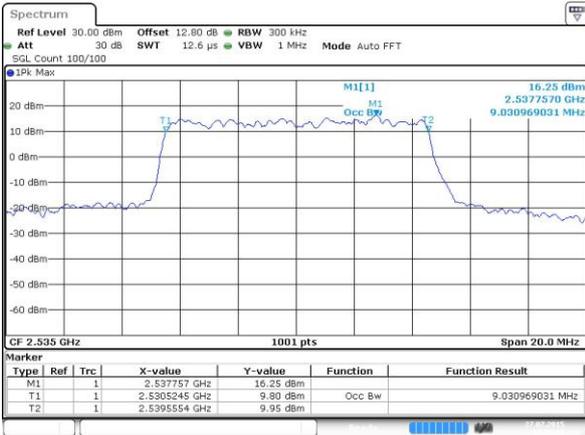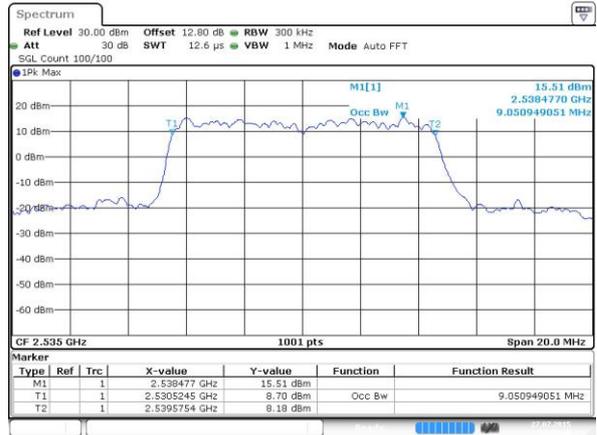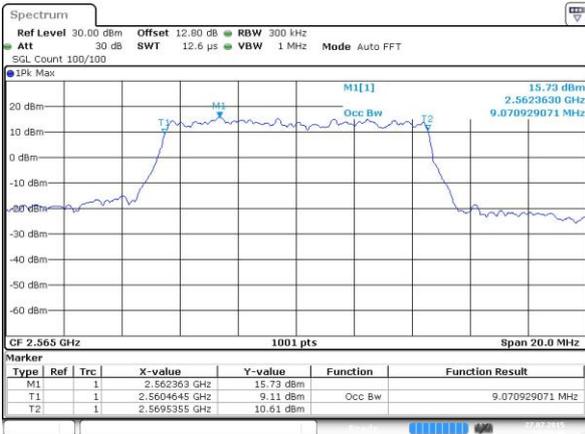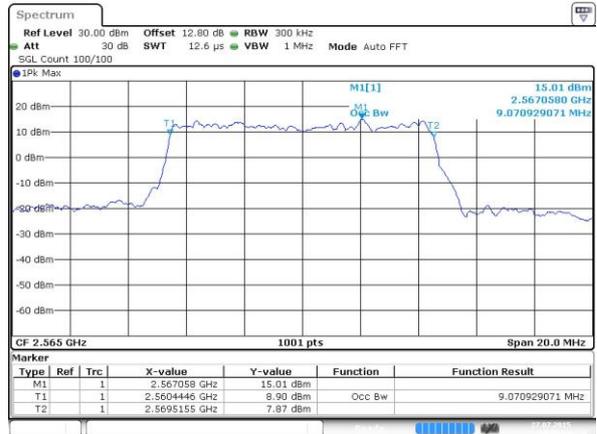
LTE Band 7
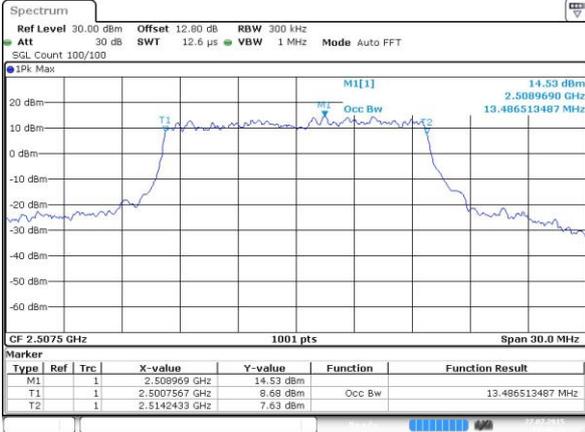
Lowest Channel / 15MHz / QPSK	Lowest Channel / 15MHz / 16QAM
Date: 27.JUL.2015 10:46:16	Date: 27.JUL.2015 10:46:27
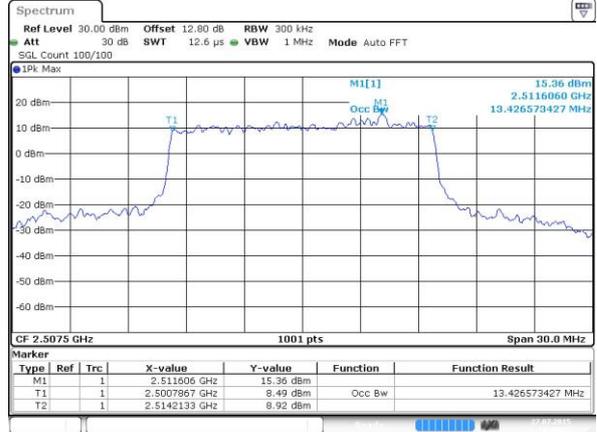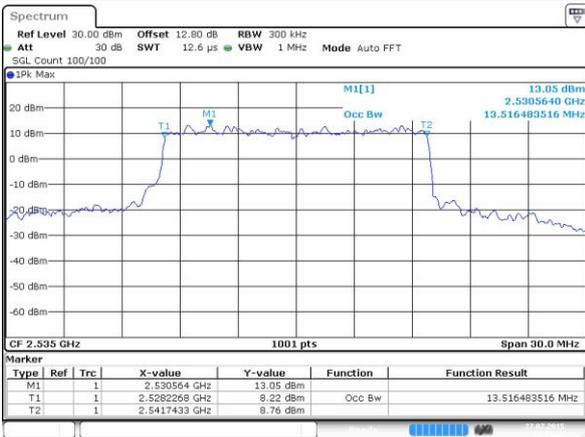
Middle Channel / 15MHz / QPSK	Middle Channel / 15MHz / 16QAM
Date: 27.JUL.2015 10:53:26	Date: 27.JUL.2015 10:53:37
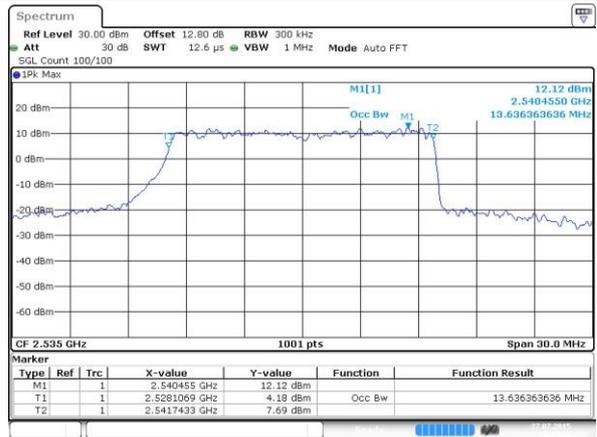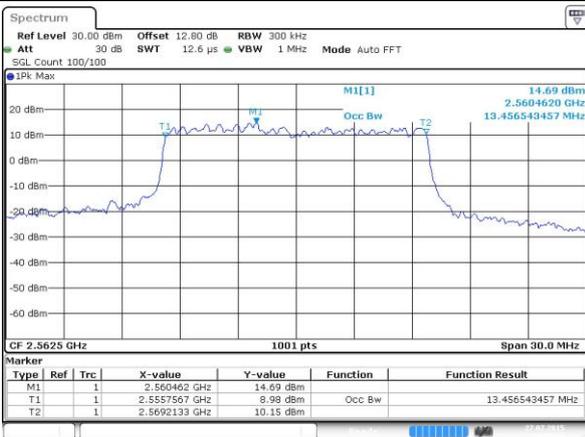
Highest Channel / 15MHz / QPSK	Highest Channel / 15MHz / 16QAM
Date: 27.JUL.2015 10:55:56	Date: 27.JUL.2015 10:56:07
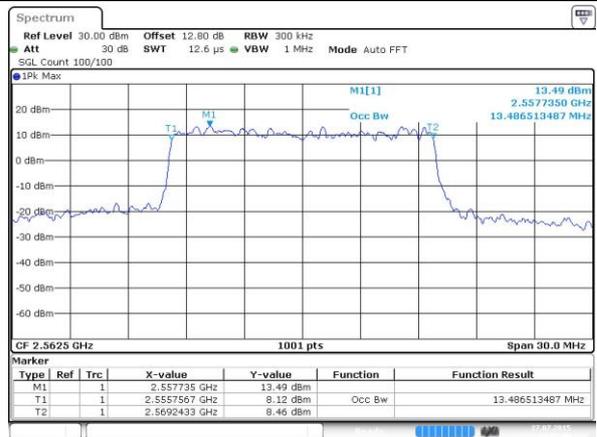
LTE Band 7	
Lowest Channel / 20MHz / QPSK	**Lowest Channel / 20MHz / 16QAM**
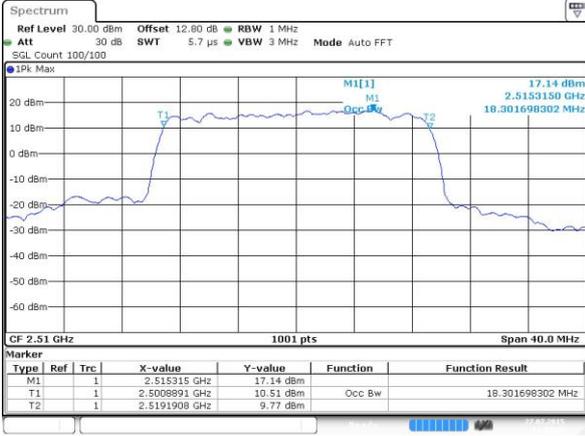
Date: 27.JUL.2015 11:03:08

Date: 27.JUL.2015 11:03:18

Middle Channel / 20MHz / QPSK	**Middle Channel / 20MHz / 16QAM**
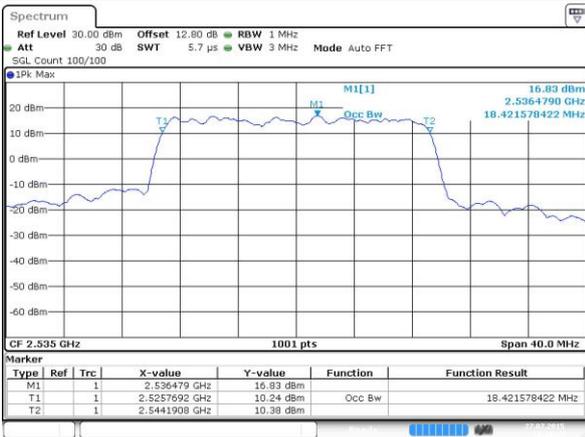
Date: 27.JUL.2015 11:10:17
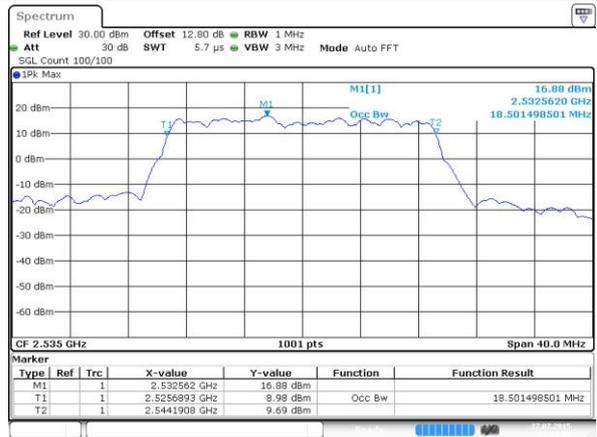
Date: 27.JUL.2015 11:10:27

Highest Channel / 20MHz / QPSK	**Highest Channel / 20MHz / 16QAM**
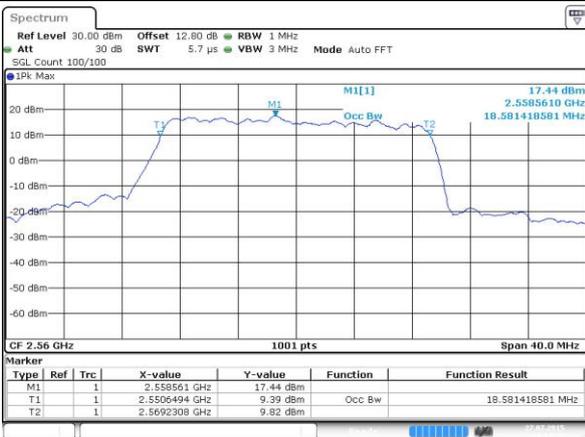
Date: 27.JUL.2015 11:12:47
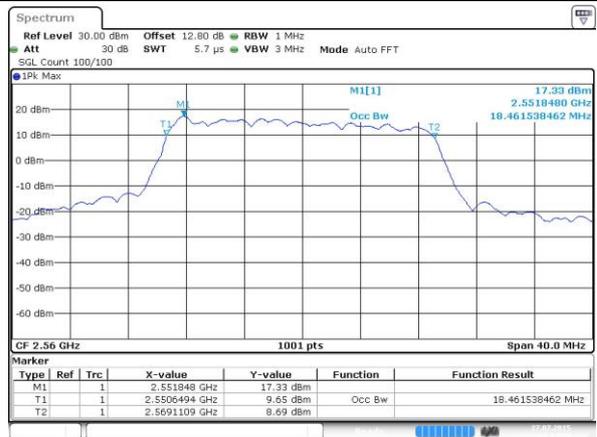
Date: 27.JUL.2015 11:12:58

Conducted Band Edge

LTE Band 7 / 5MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**

Lowest Band Edge / 1 RB

Spectrum

Ref Level 30.00 dBm Offset 12.80 dB Mode Auto Sweep
SGL Count 100/100
●1 AvgPwr
Limit Check   PASS
Line SPURIOUS_LINE_ABS   PASS

Start 2.475 GHz   8004 pts   Stop 2.505 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49045 GHz	−44.99 dBm	−19.99 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49167 GHz	−37.48 dBm	−24.48 dB
2.495 GHz	2.496 GHz	50.000 kHz	2.49599 GHz	−38.95 dBm	−25.95 dB
2.496 GHz	2.505 GHz	100.000 kHz	2.50032 GHz	20.32 dBm	−9.68 dB

Date: 27.JUL.2015 10:14:15

Highest Band Edge / 1 RB

Spectrum

Ref Level 30.00 dBm Offset 12.80 dB Mode Auto Sweep
SGL Count 100/100
●1 AvgPwr
SPURIOUS_LINE_ABS
Limit Check   PASS
Line SPURIOUS_LINE_ABS   PASS

Start 2.565 GHz   10005 pts   Stop 2.595 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56964 GHz	20.58 dBm	−9.42 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	−11.08 dBm	−1.08 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57108 GHz	−17.48 dBm	−7.48 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57500 GHz	−36.61 dBm	−23.61 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57831 GHz	−36.73 dBm	−11.73 dB

Date: 27.JUL.2015 10:23:56

Lowest Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 12.80 dB Mode Auto Sweep
SGL Count 100/100
●1 AvgPwr
Limit Check   PASS
Line SPURIOUS_LINE_ABS   PASS

SPURIOUS_LINE_ABS

Start 2.475 GHz   8004 pts   Stop 2.505 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48988 GHz	−39.47 dBm	−14.47 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49496 GHz	−29.45 dBm	−16.45 dB
2.495 GHz	2.496 GHz	50.000 kHz	2.49590 GHz	−38.09 dBm	−25.09 dB
2.496 GHz	2.505 GHz	100.000 kHz	2.50247 GHz	6.46 dBm	−23.54 dB

Date: 27.JUL.2015 10:16:35

Highest Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 12.80 dB Mode Auto Sweep
SGL Count 100/100
●1 AvgPwr
SPURIOUS_LINE_ABS
Limit Check   PASS
Line SPURIOUS_LINE_ABS   PASS

Start 2.565 GHz   10005 pts   Stop 2.595 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56744 GHz	6.88 dBm	−23.12 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57001 GHz	−23.93 dBm	−13.93 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	−18.72 dBm	−8.72 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57505 GHz	−26.10 dBm	−13.10 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57619 GHz	−30.05 dBm	−5.05 dB

Date: 27.JUL.2015 10:26:16

LTE Band 7 / 5MHz / 16QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**

Lowest Band Edge / 1 RB

Spectrum

Ref Level 30.00 dBm Offset 12.80 dB Mode Auto Sweep
SGL Count 100/100
● 1 AvgPwr
Limit Check   PASS
Line SPURIOUS_LINE_ABS   PASS

Start 2.475 GHz   8004 pts   Stop 2.505 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48970 GHz	-45.27 dBm	-20.27 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49189 GHz	-37.40 dBm	-24.40 dB
2.495 GHz	2.496 GHz	50.000 kHz	2.49598 GHz	-39.14 dBm	-26.14 dB
2.496 GHz	2.505 GHz	100.000 kHz	2.50033 GHz	19.51 dBm	-10.49 dB

Date: 27.JUL.2015 10:15:25

Highest Band Edge / 1 RB

Spectrum

Ref Level 30.00 dBm Offset 12.80 dB Mode Auto Sweep
SGL Count 100/100
● 1 AvgPwr
SPURIOUS_LINE_ABS
Limit Check   PASS
Line SPURIOUS_LINE_ABS   PASS

Start 2.565 GHz   10005 pts   Stop 2.595 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56968 GHz	19.70 dBm	-10.30 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-11.33 dBm	-1.33 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57104 GHz	-16.81 dBm	-6.81 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57515 GHz	-31.50 dBm	-18.50 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57824 GHz	-35.85 dBm	-10.85 dB

Date: 27.JUL.2015 10:25:06

Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**

Lowest Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 12.80 dB Mode Auto Sweep
SGL Count 100/100
● 1 AvgPwr
Limit Check   PASS
Line SPURIOUS_LINE_ABS   PASS

SPURIOUS_LINE_ABS

Start 2.475 GHz   8004 pts   Stop 2.505 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49040 GHz	-40.40 dBm	-15.40 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49497 GHz	-31.25 dBm	-18.25 dB
2.495 GHz	2.496 GHz	50.000 kHz	2.49597 GHz	-42.13 dBm	-29.13 dB
2.496 GHz	2.505 GHz	100.000 kHz	2.50407 GHz	5.56 dBm	-24.44 dB

Date: 27.JUL.2015 10:17:45

Highest Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 12.80 dB Mode Auto Sweep
SGL Count 100/100
● 1 AvgPwr
SPURIOUS_LINE_ABS
Limit Check   PASS
Line SPURIOUS_LINE_ABS   PASS

Start 2.565 GHz   10005 pts   Stop 2.595 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56852 GHz	5.61 dBm	-24.39 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57001 GHz	-24.19 dBm	-14.19 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57104 GHz	-18.60 dBm	-8.60 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57502 GHz	-27.88 dBm	-14.88 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57626 GHz	-30.82 dBm	-5.82 dB

Date: 27.JUL.2015 10:27:26

LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Spectrum

Ref Level 30.00 dBm Offset 12.80 dB Mode Auto Sweep
SGL Count 100/100

● 1 AvgPwr
Limit Check PASS
Line SPURIOUS_LINE_ABS PASS

Start 2.475 GHz 8004 pts Stop 2.51 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48279 GHz	-38.65 dBm	-13.65 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49167 GHz	-31.48 dBm	-18.48 dB
2.495 GHz	2.496 GHz	100.000 kHz	2.49591 GHz	-36.79 dBm	-23.79 dB
2.496 GHz	2.510 GHz	100.000 kHz	2.50061 GHz	20.53 dBm	-9.47 dB

Date: 27.JUL.2015 10:31:07

Highest Band Edge / 1 RB

Spectrum

Ref Level 30.00 dBm Offset 12.80 dB Mode Auto Sweep
SGL Count 100/100

● 1 AvgPwr
SPURIOUS_LINE_ABS
Limit Check PASS
Line SPURIOUS_LINE_ABS PASS

Start 2.56 GHz 10005 pts Stop 2.595 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56940 GHz	20.03 dBm	-9.97 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57000 GHz	-10.72 dBm	-0.72 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57105 GHz	-18.45 dBm	-8.45 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57810 GHz	-32.29 dBm	-19.29 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58689 GHz	-40.40 dBm	-15.40 dB

Date: 27.JUL.2015 11:38:02

Lowest Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 12.80 dB Mode Auto Sweep
SGL Count 100/100

● 1 AvgPwr
Limit Check PASS
Line SPURIOUS_LINE_ABS PASS

Start 2.475 GHz 8004 pts Stop 2.51 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49031 GHz	-33.24 dBm	-8.24 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49498 GHz	-25.61 dBm	-12.61 dB
2.495 GHz	2.496 GHz	100.000 kHz	2.49585 GHz	-34.24 dBm	-21.24 dB
2.496 GHz	2.510 GHz	100.000 kHz	2.50872 GHz	3.90 dBm	-26.10 dB

Date: 27.JUL.2015 10:33:27

Highest Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 12.80 dB Mode Auto Sweep
SGL Count 100/100

● 1 AvgPwr
SPURIOUS_LINE_ABS
Limit Check PASS
Line SPURIOUS_LINE_ABS PASS

Start 2.56 GHz 10005 pts Stop 2.595 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56115 GHz	3.40 dBm	-26.60 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57004 GHz	-23.42 dBm	-13.42 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57156 GHz	-21.84 dBm	-11.84 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57501 GHz	-25.28 dBm	-12.28 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58020 GHz	-31.78 dBm	-6.78 dB

Date: 27.JUL.2015 10:43:07

LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB	Highest Band Edge / 1 RB

Lowest Band Edge / 1 RB

Spectrum

Ref Level 30.00 dBm   Offset 12.80 dB   Mode Auto Sweep
SGL Count 100/100
● 1 AvgPwr
Limit Check   PASS
Line SPURIOUS_LINE_ABS   PASS

Start 2.475 GHz   8004 pts   Stop 2.51 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48531 GHz	−28.86 dBm	−3.86 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49188 GHz	−21.63 dBm	−8.63 dB
2.495 GHz	2.496 GHz	100.000 kHz	2.49588 GHz	−37.09 dBm	−24.09 dB
2.496 GHz	2.510 GHz	100.000 kHz	2.50057 GHz	19.43 dBm	−10.57 dB

Date: 27.JUL.2015 10:32:17

Highest Band Edge / 1 RB

Spectrum

Ref Level 30.00 dBm   Offset 12.80 dB   Mode Auto Sweep
SGL Count 100/100
● 1 AvgPwr
SPURIOUS_LINE_ABS
Limit Check   PASS
Line SPURIOUS_LINE_ABS   PASS

Start 2.56 GHz   10005 pts   Stop 2.595 GHz

Spurious Emissions

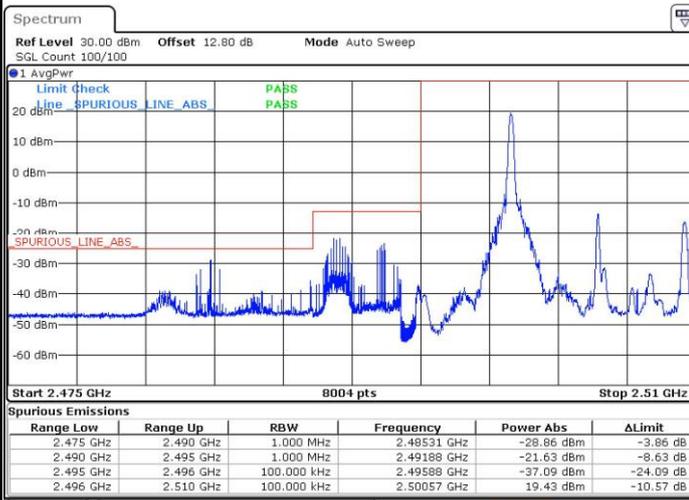| Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56941 GHz	19.18 dBm	−10.82 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57001 GHz	−10.71 dBm	−0.71 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57101 GHz	−19.53 dBm	−9.53 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57863 GHz	−23.02 dBm	−10.02 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58464 GHz	−31.27 dBm	−6.27 dB

Date: 27.JUL.2015 10:41:57

Lowest Band Edge / Full RB	Highest Band Edge / Full RB

Lowest Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm   Offset 12.80 dB   Mode Auto Sweep
SGL Count 100/100
● 1 AvgPwr
Limit Check   PASS
Line SPURIOUS_LINE_ABS   PASS

Start 2.475 GHz   8004 pts   Stop 2.51 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49048 GHz	−34.66 dBm	−9.66 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49489 GHz	−26.07 dBm	−13.07 dB
2.495 GHz	2.496 GHz	100.000 kHz	2.49583 GHz	−33.86 dBm	−20.86 dB
2.496 GHz	2.510 GHz	100.000 kHz	2.50809 GHz	2.88 dBm	−27.12 dB

Date: 27.JUL.2015 10:34:37

Highest Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm   Offset 12.80 dB   Mode Auto Sweep
SGL Count 100/100
● 1 AvgPwr
SPURIOUS_LINE_ABS
Limit Check   PASS
Line SPURIOUS_LINE_ABS   PASS

Start 2.56 GHz   10005 pts   Stop 2.595 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56265 GHz	2.27 dBm	−27.73 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57006 GHz	−24.51 dBm	−14.51 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57130 GHz	−21.57 dBm	−11.57 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57506 GHz	−24.91 dBm	−11.91 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58018 GHz	−32.72 dBm	−7.72 dB

Date: 27.JUL.2015 10:44:17