



# TEST REPORT

N°: 133829-668754A

**Subject** Radio spectrum Matters (ERM) tests according to standards:  
47CFR Part 15.407

**Test Site FCC registration number** 888863

**Issued to** Eblink  
3 rue marcel Pagnol  
ZI du Clos Auchin  
F-91800 Boussy-Saint-Antoine  
France

**Apparatus under test**

↳ Product	Front Link (FL58-45) equipment
↳ Trade mark	EBlink
↳ Manufacturer	EBlink
↳ Model under test	FL58R2HDBW45-CEN
↳ Serial number	0006
↳ FCC ID	2ACLSFL58-45

**Test date** March 09th, 2015 to March 23th, 2015

**Test location** Ecuelles Fontenay Aux Roses

**Test performed by** Laurent Deneux & Arnaud Fayette

**Composition of document** 97 pages

**Document issued on** April 29th, 2015

**Written by :**  
**Arnaud Fayette**  
**Tests operator**



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**1. TEST PROGRAM****References**

- 47 CFR Part 15C
- ANSI C63.10

**Radio requirement:**

Standard Section	Test Description	TEST RESULT - Comments
CFR 47 § 15.407(a)(3)	Maximum Conducted Output Power	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL <input type="checkbox"/> NA <input type="checkbox"/> NP (Limited Program)
CFR 47 § 15.407(a)(3)	Power Spectral Density	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL <input type="checkbox"/> NA <input type="checkbox"/> NP (Limited Program)
CFR 47 § 15.407(b)(4)	Undesirable Emission Limits	<input type="checkbox"/> PASS <input type="checkbox"/> FAIL <input checked="" type="checkbox"/> NA (The EUT complies with peak & average limit of 15.209. See FCC KDB 789033 D02 General UNII Test Procedures New Rules v01 § G 2.C) <input type="checkbox"/> NP (Limited Program)
CFR 47 § 15.407(e)	6dB bandwidth	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL <input type="checkbox"/> NA <input type="checkbox"/> NP (Limited Program)
CFR 47 § 15.407(b)(6) CFR 47 § 15.207	AC Power Line Conducted Emissions	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL <input type="checkbox"/> NA <input type="checkbox"/> NP (Limited Program)
CFR 47 § 15.407(b)(6) CFR 47 § 15.209 (a) CFR 47 § 15.205 (a)	Unwanted Emissions	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL <input type="checkbox"/> NA <input type="checkbox"/> NP (Limited Program)
CFR 47 § 15.407(g)	Frequency stability	<input checked="" type="checkbox"/> PASS (The Manufacturer declares the EUT emission is maintained within the band of operation under all conditions of normal operation as specified in the user manual) <input type="checkbox"/> FAIL <input type="checkbox"/> NA <input type="checkbox"/> NP (Limited Program)

This table is a summary of test report, see conclusion of each clause of this test report for detail.

PASS: EUT complies with standard's requirement

FAIL: EUT does not comply with standard's requirement

NA: Not Applicable

NP: Test Not Performed

DP: Declaration of provider

## 2. EQUIPMENT UNDER TEST: CONFIGURATION (DECLARED BY PROVIDER)

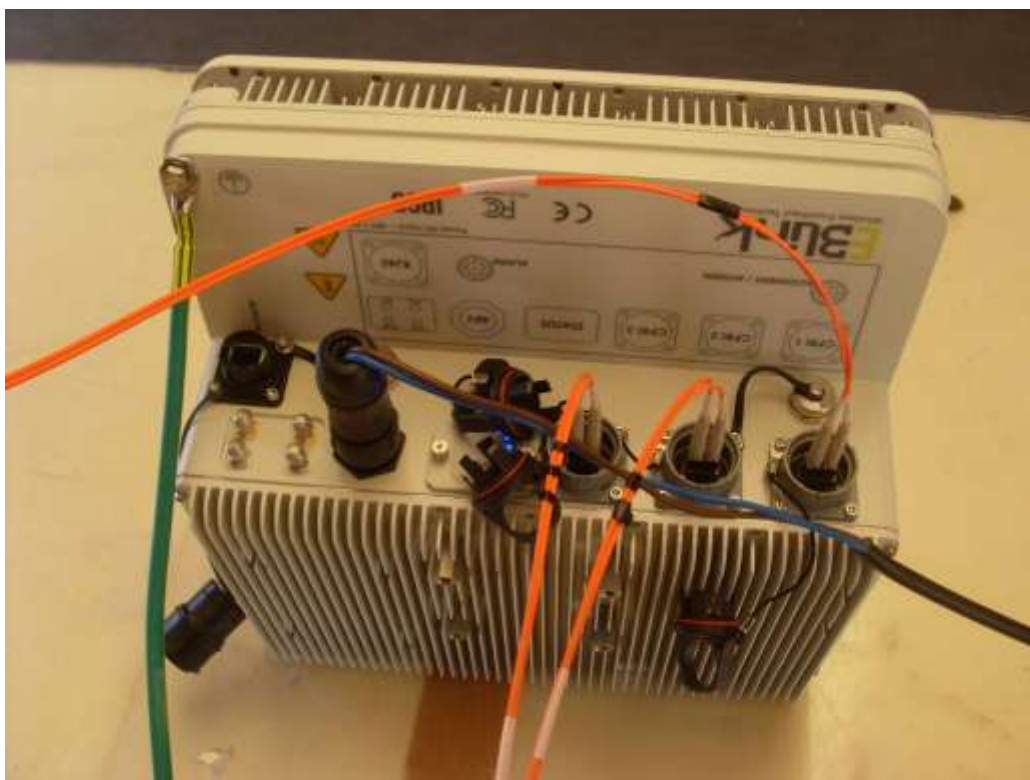
### 2.1. EQUIPMENT OF THE SAME FAMILY

None

### 2.2. HARDWARE IDENTIFICATION (EUT AND AUXILIARIES):

Equipment under test (EUT):  
FL58R2HDBW45-CEN

Serial Number: 0006



Equipment Under Test

**Inputs/outputs -**

Access	Type	Comments
Power supply	-	-
Ethernet	-	-
Optical fiber * 3	-	-

**Auxiliary equipment used during test:**

Type	Reference	Sn	Comments
Laptop	CEN	-	-
IQbox	Rodhe & scharwz	1409.5504K04	-
Optical coupleur	Eblink	-	-

**Equipment information:**

Type:			
Frequency band:	<input checked="" type="checkbox"/> 5725MHz-5850MHz		
Channel bandwidth:	<input checked="" type="checkbox"/> 5MHz	<input checked="" type="checkbox"/> 10MHz	<input checked="" type="checkbox"/> 20MHz
Antenna Type:	<input checked="" type="checkbox"/> Integral	<input type="checkbox"/> External	<input type="checkbox"/> Dedicated
Antenna connector:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Temporary for test
Transmit chains:	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	
	<input type="checkbox"/> Single antenna	<input checked="" type="checkbox"/> Symmetrical	<input type="checkbox"/> Asymmetrical
	Gain 1: 23dBi		Gain 2: 23dBi
Receiver chains	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	
Type of equipment:	<input checked="" type="checkbox"/> Stand-alone	<input type="checkbox"/> Plug-in	<input type="checkbox"/> Combined
Ad-Hoc mode:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Duty cycle:	<input type="checkbox"/> Continuous duty	<input type="checkbox"/> Intermittent duty	<input checked="" type="checkbox"/> 100% duty
Equipment type:	<input checked="" type="checkbox"/> Production model	<input type="checkbox"/> Pre-production model	
Operating temperature range:	Tnom:	20°C	
Type of power source:	<input type="checkbox"/> AC power supply	<input checked="" type="checkbox"/> DC power supply	<input type="checkbox"/> Battery (Select Type)
Operating voltage range:	Vnom:	<input type="checkbox"/> 207V/50Hz	<input checked="" type="checkbox"/> 48Vdc

**Channel Plan**

See "EBDIRTECH15-MEM025-10" Eblink document describing all configurations available for the product.

**2.3. RUNNING MODE**

The EUT is set in the following modes during tests:

- Permanent emission with modulation on a fixed channel in the data rate that produced the highest power

The specific test software "ETB V1.0.0-LCIE" are used to set the product.

Test	Configuration Tested	Remarks
Power limits	1-3-5-7-9-11-13-15-17-19-21-23-25-27-29-31-32-33-36-38-39-41-42	42 configurations are available on the product. Some configurations are equivalents. So a sampling of the configurations is performed to test the product in Low, Middle, High channel for each bandwidth of the product
Power spectral density	1-3-5-7-9-11-13-15-17-19-21-23-25-27-29-31-32-33-36-38-39-41-42	42 configurations are available on the product. Some configurations are equivalents. So a sampling of the configurations is performed to test the product in Low, Middle, High channel for each bandwidth of the product
6db bandwidth	1-3-5-7-9-11-13-15-17-19-21-23-25-27-29-31-32-33-36-38-39-41-42	42 configurations are available on the product. Some configurations are equivalents. So a sampling of the configurations is performed to test the product in Low, Middle, High channel for each bandwidth of the product
AC Power Line Conducted Emissions	1	The test is performed on the worst case configuration found during Power Limits test
Unwanted Emissions below 1GHz	1	The test is performed on the worst case configuration found during Power Limits test
Unwanted Emissions above 1GHz	1-3-7-9-13-15-19-21-25-27-31-32-38-39-42	42 configurations are available on the product. Some configurations are equivalents. So a sampling of configurations is performed to test the product in Low & High channel for each bandwidth

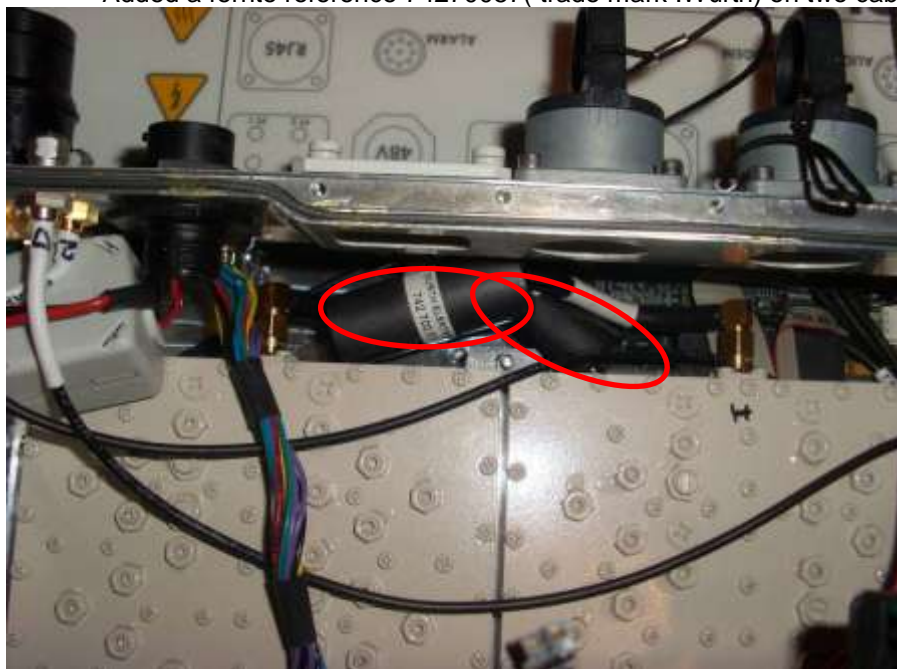
## 2.4. EQUIPMENT LABELLING



## 2.5. EQUIPMENT MODIFICATION

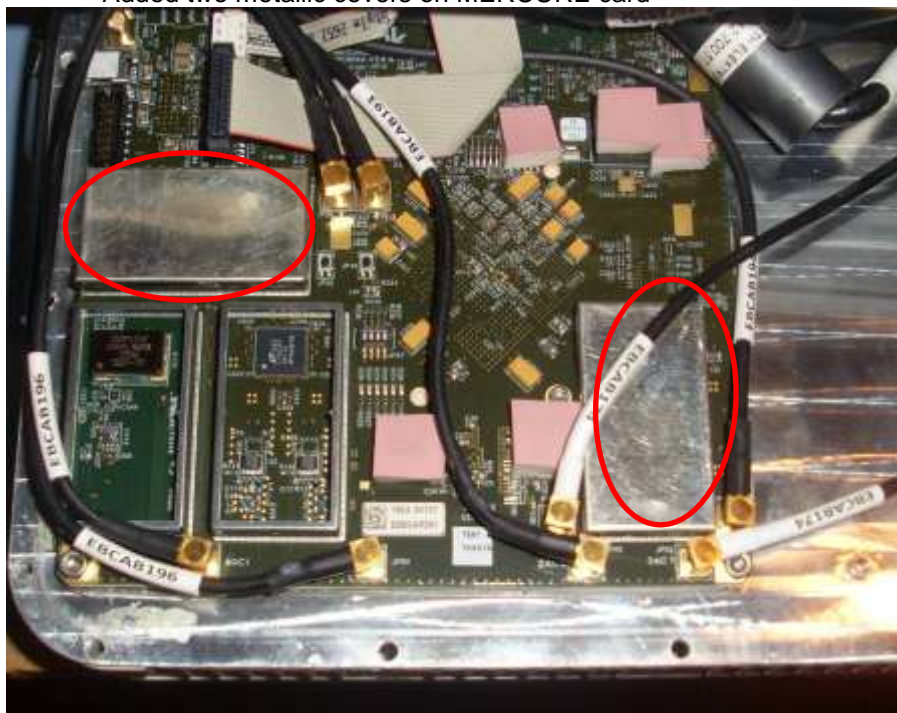
☐ None ☒ Modification:

- Added a ferrite reference 74270057( trade mark :Wurth) on two cable “DUPLEXER / ANTENNA”

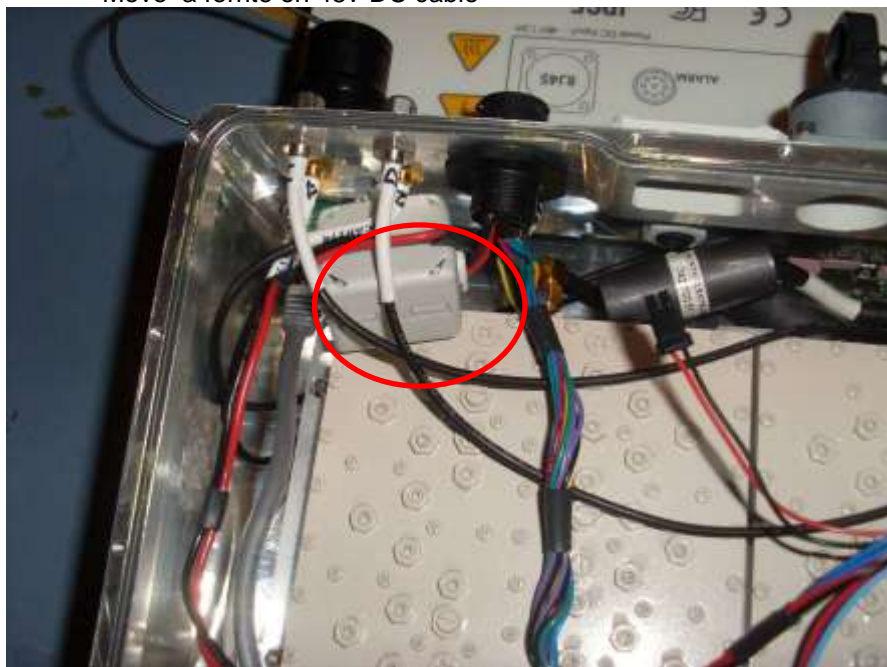




- Added two metallic covers on MERCURE card



- Move a ferrite on 48v-DC cable





### 3. MAXIMUM CONDUCTED OUTPUT POWER

#### 3.1. TEST CONDITIONS

Test performed by : Arnaud Fayette  
Date of test : 2015/03/09  
Ambient temperature : 25°C  
Relative humidity : 37%

#### 3.2. TEST SETUP

- The Equipment under Test is installed:

- ☐ In the climatic chamber
- ☒ On a table

-Measurement is performed with a spectrum analyzer

- ☒ On the EUT conducted access

The product has been tested according to :

- ☒ FCC KDB 789033 D02 General UNII Test Procedures New Rules v01 § E 3 a).
- ☒ FCC KDB 662911 D01 Multiple Transmitter Output v02r1.
- ☒ FCC KDB 662911 D02 MIMO with Cross-Polarized Antennas v01.



Photograph for Maximum Conducted Output Power



### 3.3. LIMIT

The RF output power shall not exceed 1W (30dBm)

### 3.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal date	Cal due
RF cable & Attenuator	Télédynne & MINI CIRCUITS	920-0202-024 & FW-20+	A5329661	2014/10	2015/10
RF cable & Attenuator	Télédynne & MINI CIRCUITS	920-0202-024 & FW-20+	A5329676	2014/10	2015/10
Power meter	HEWLETT PACKARD	437B	A1503001	2014/05	2015/05
Programmable AC/DC power supply	KIKUSUI	PCR500M	A7040079	2014/05	2015/05
Attenuator	-	SA 4016	A7122212	2014/09	2015/09
Attenuator	MINI CIRCUITS	BW-S3W2+	A7122209	2014/09	2015/09
Multi-meter	KEITHLEY	2000	A1241084	2014/02	2016/02
Thermometer	AOIP	TM 6630	B4041042	2014/12	2015/12

### 3.5. DIVERGENCE, ADDITION OR SUPPRESSION ON THE TEST SPECIFICATION

☒ None ☐ Divergence:

### 3.6. RESULTS

Thermocouple Power Sensor Offset : Cable Loss + Attenuator = 45,26dB

Configuration	Tx1 (dBm)	Tx2 (dBm)	Maximum Conducted Output Power (dBm)
1	-27,88	-28,76	19,97
3	-28,33	-30,86	18,85
5	-27,77	-30,28	19,42
7	-28,07	-29,36	19,60
9	-28,27	-31,1	18,81
11	-27,76	-30,64	19,30
13	-28,16	-29,65	19,42
15	-28,24	-30,95	18,88
17	-27,82	-30,52	19,30
18	-28,69	-29,27	19,29
21	-29,16	-30,9	18,32
23	-28,63	-30,53	18,79
25	-28,64	-29,23	19,34
27	-28,9	-30,54	18,62
29	-28,58	-30,06	19,01
31	-28,79	-29,81	19,00
32	-28,75	-30,13	18,88
33	-29,04	-29	19,25
36	-29,13	-30	18,72
38	-29,54	-30,48	18,28
39	-29,33	-29,52	18,84
41	-29,25	-29,93	18,69
42	-29,48	-30,29	18,40



### 3.7. CONCLUSION

Maximum Conducted Output Power measurement performed on the sample of the product FL58R2HDBW45-CEN, SN: 0006, in configuration and description presented in this test report, show levels **conform to** the FCC 15.407 limits.

## 4. POWER SPECTRAL DENSITY

### 4.1. TEST CONDITIONS

Test performed by : Arnaud Fayette  
Date of test : 2015/03/10  
Ambient temperature : 26°C  
Relative humidity : 43%

### 4.2. TEST SETUP

- The Equipment under Test is installed:

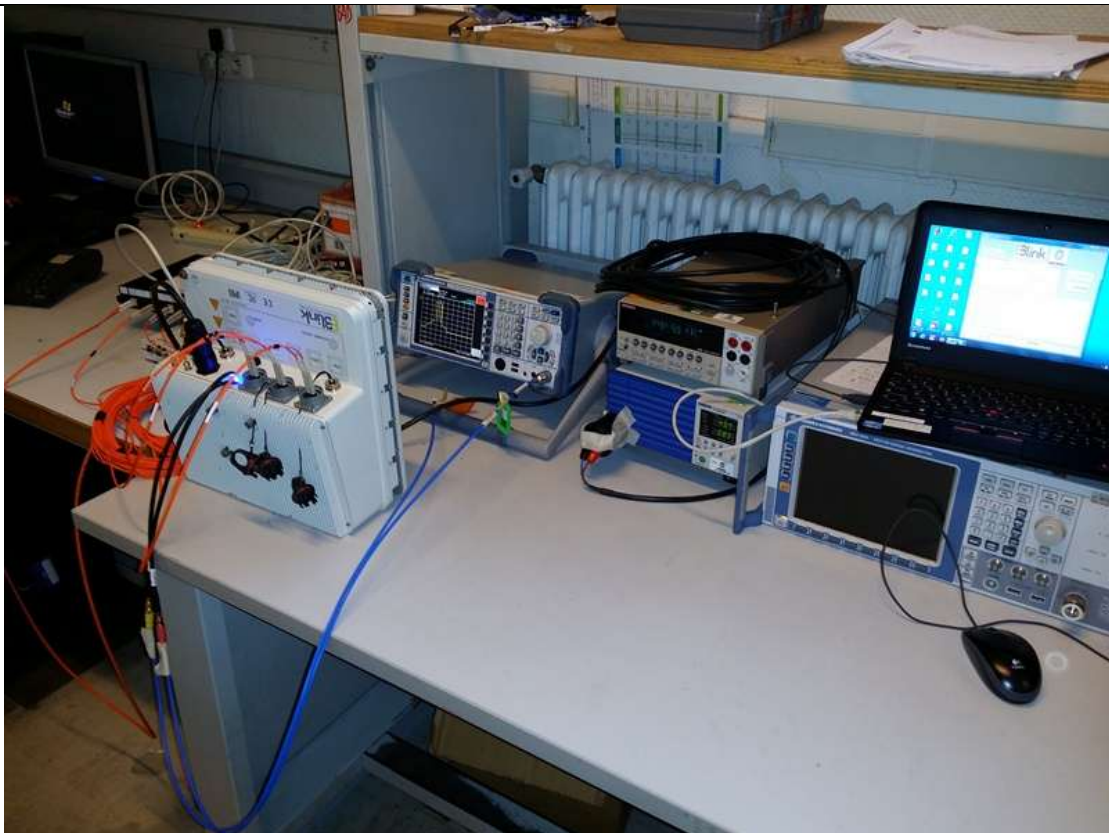
- ☐ In the climatic chamber
- ☒ On a table

-Measurement is performed with a spectrum analyzer

- ☒ On the EUT conducted access

The product has been tested according to :

- ☒ FCC KDB 789033 D02 General UNII Test Procedures New Rules v01 § F.
- ☒ FCC KDB 662911 D01 Multiple Transmitter Output v02r1 E 2) b).
- ☒ FCC KDB 662911 D02 MIMO with Cross-Polarized Antennas v01.



Photograph for Power Spectral Density



#### 4.3. LIMIT

The Spectral Density shall not exceed 30dBm/500kHz

#### 4.4. TEST EQUIPMENT LIST

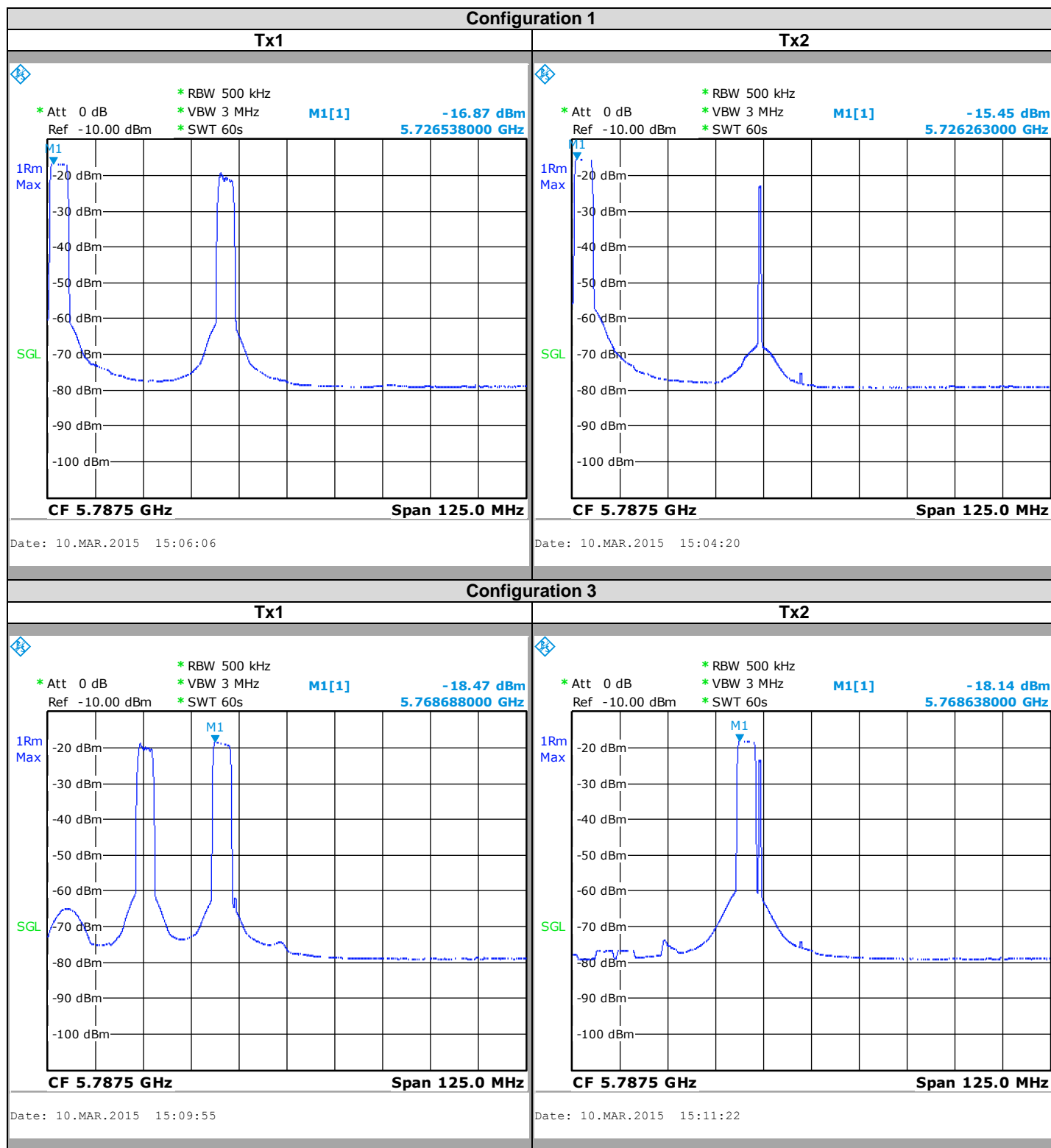
DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal date	Cal due
RF cable & Attenuator	Télédynne & MINI CIRCUITS	920-0202-024 & FW-20+	A5329661	2014/10	2015/10
RF cable & Attenuator	Télédynne & MINI CIRCUITS	920-0202-024 & FW-20+	A5329676	2014/10	2015/10
Receiver	ROHDE & SCHWARZ	FSL	A4060032	2014/03	2015/03
Programmable AC/DC power supply	KIKUSUI	PCR500M	A7040079	2014/05	2015/05
Multi-meter	KEITHLEY	2000	A1241084	2014/02	2016/02
Thermometer	AOIP	TM 6630	B4041042	2014/12	2015/12

#### 4.5. DIVERGENCE, ADDITION OR SUPPRESSION ON THE TEST SPECIFICATION

☒ None ☐ Divergence:



#### 4.6. GRAPHICS & RESULTS

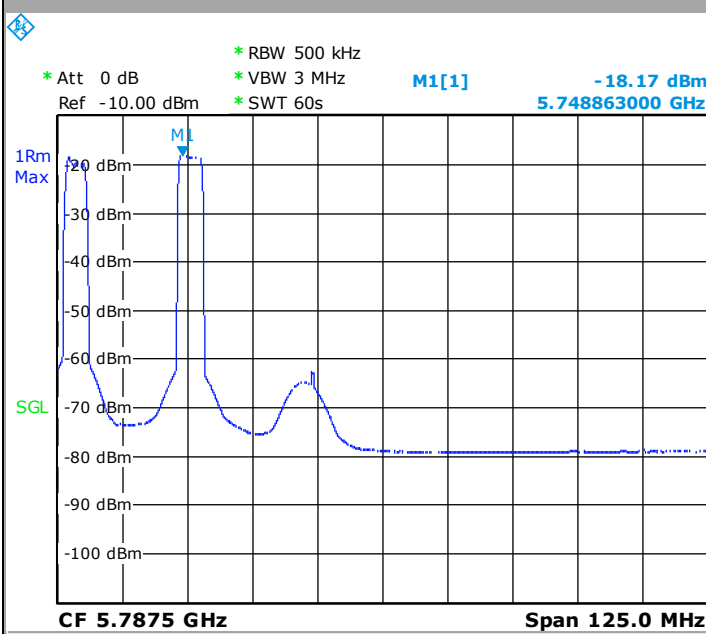






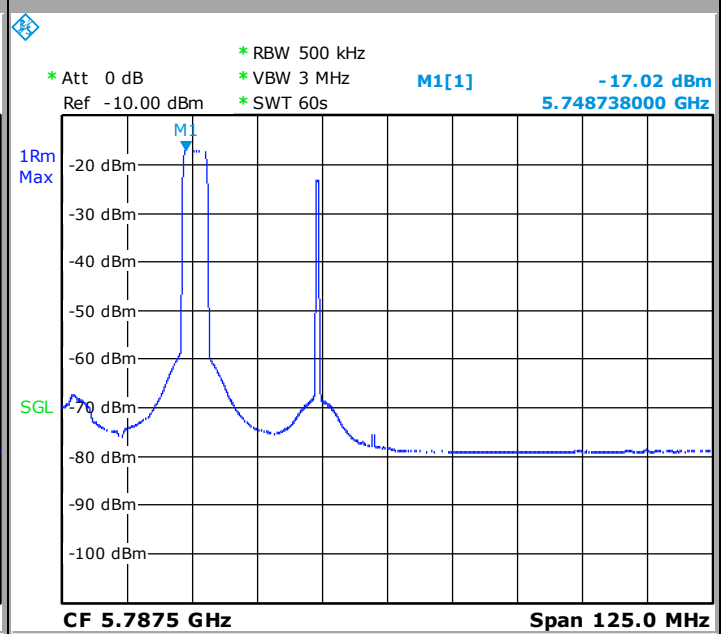
## Configuration 5

Tx1



Date: 10.MAR.2015 15:15:54

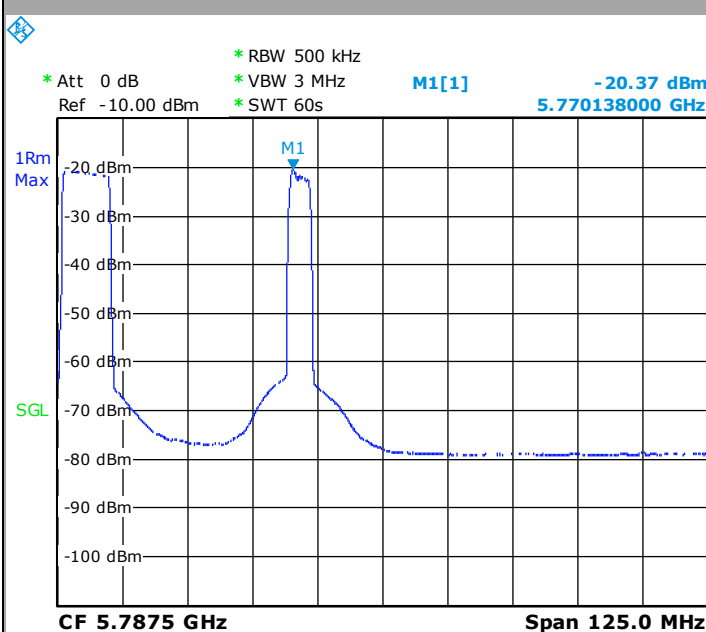
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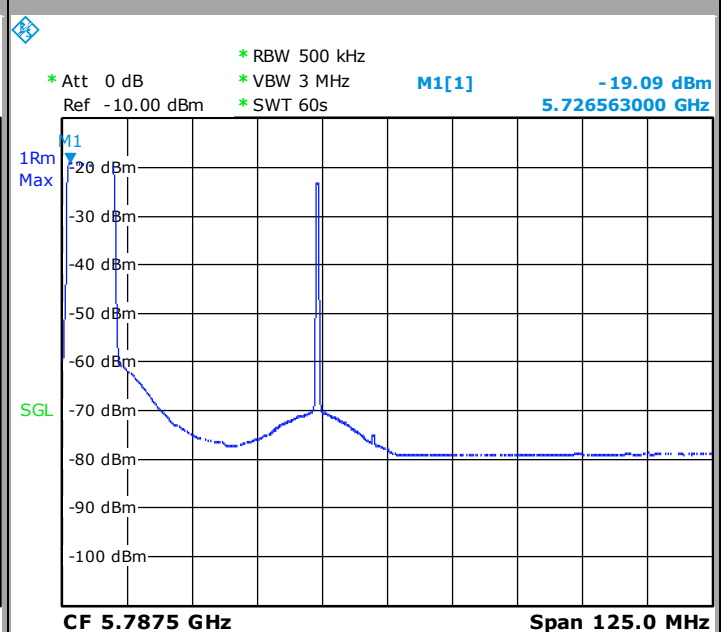
## Configuration 7

Tx1



Date: 10.MAR.2015 15:19:51

Tx2

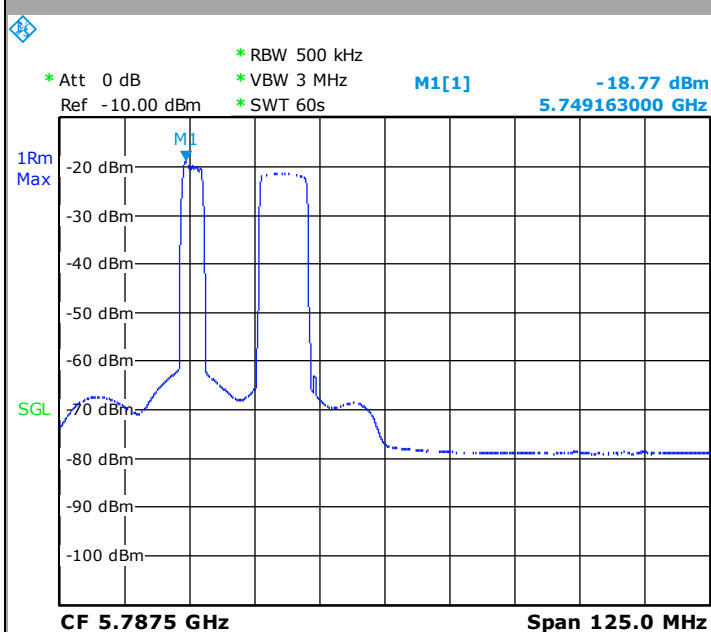


Date: 10.MAR.2015 15:23:59



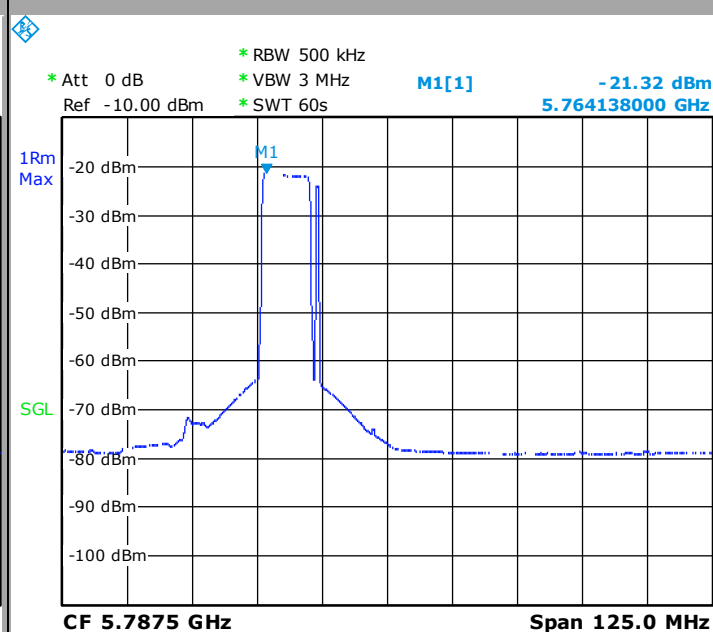
## Configuration 9

Tx1



Date: 10.MAR.2015 15:31:25

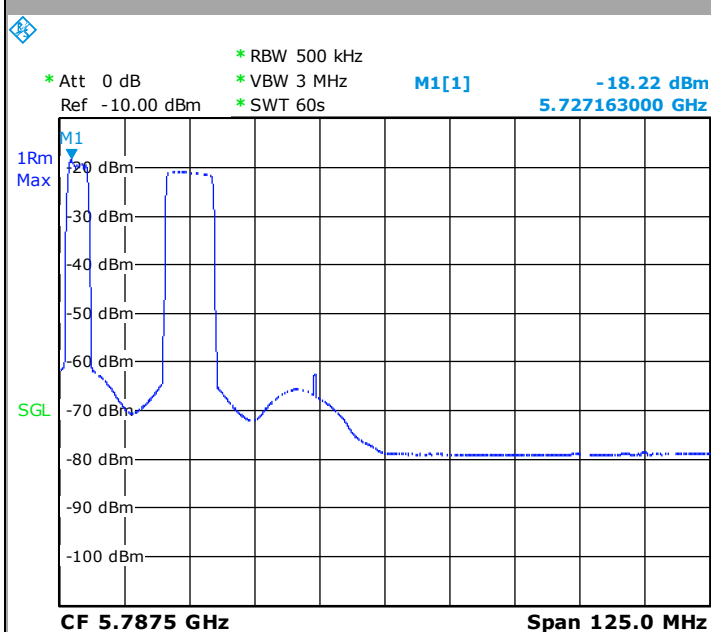
Tx2



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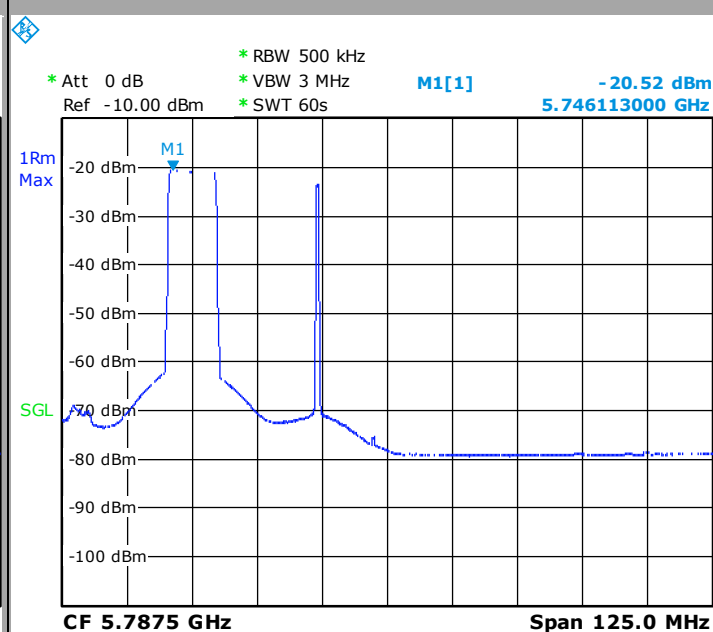
## Configuration 11

Tx1



Date: 10.MAR.2015 15:35:23

Tx2

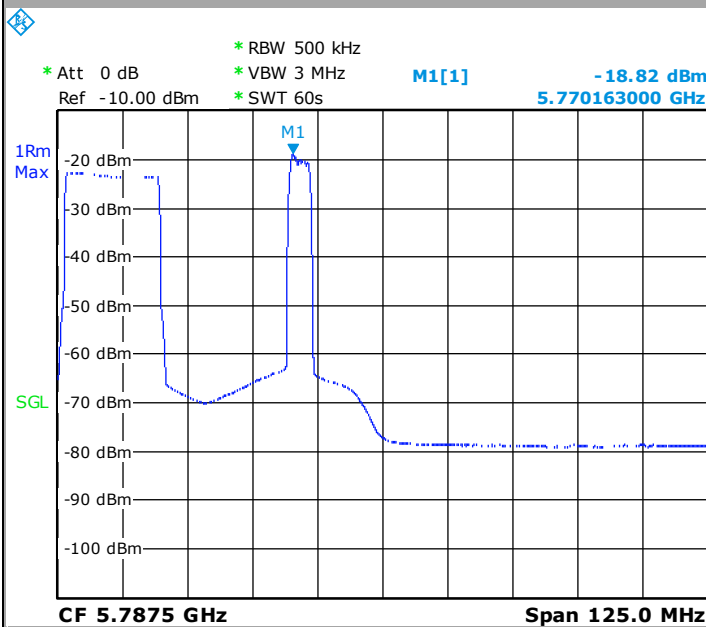


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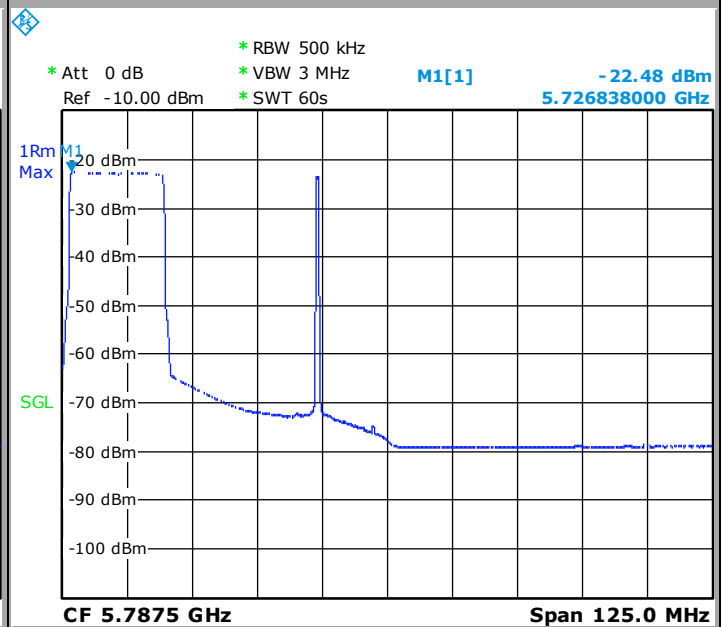
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Tx1



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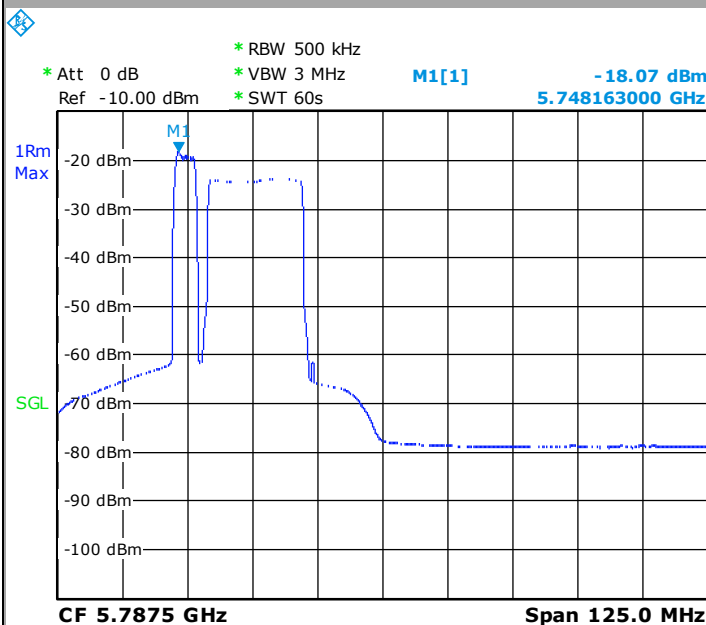
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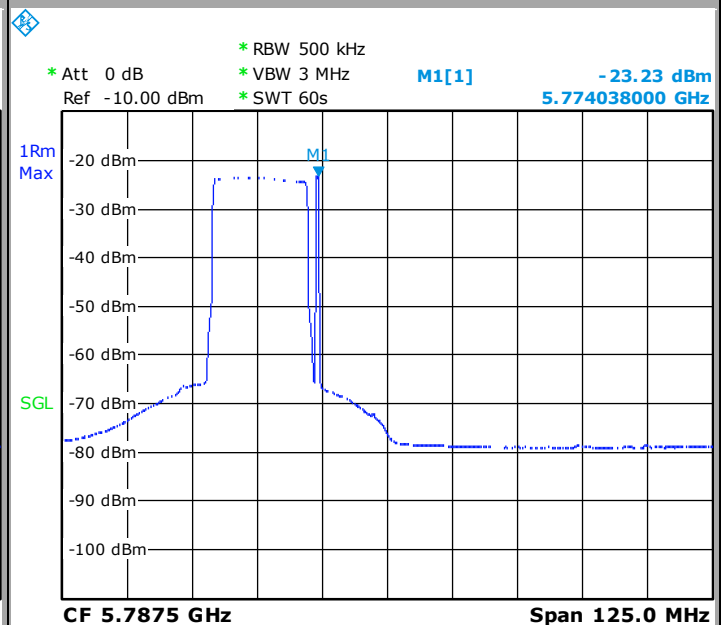
## Configuration 15

Tx1



Date: 10.MAR.2015 15:45:33

Tx2

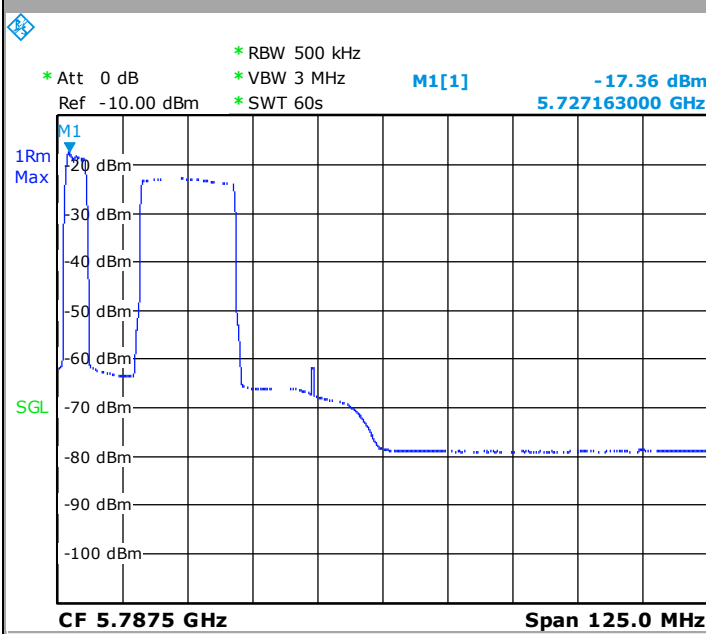


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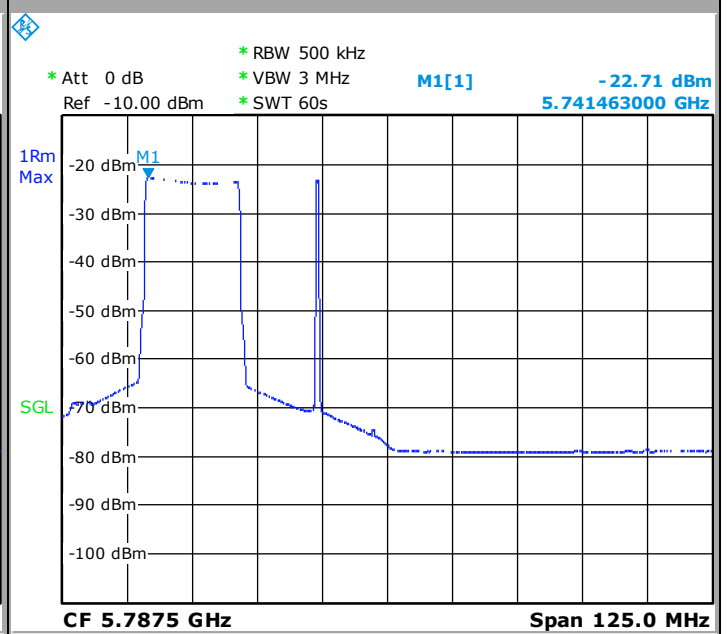
## Configuration 17

Tx1



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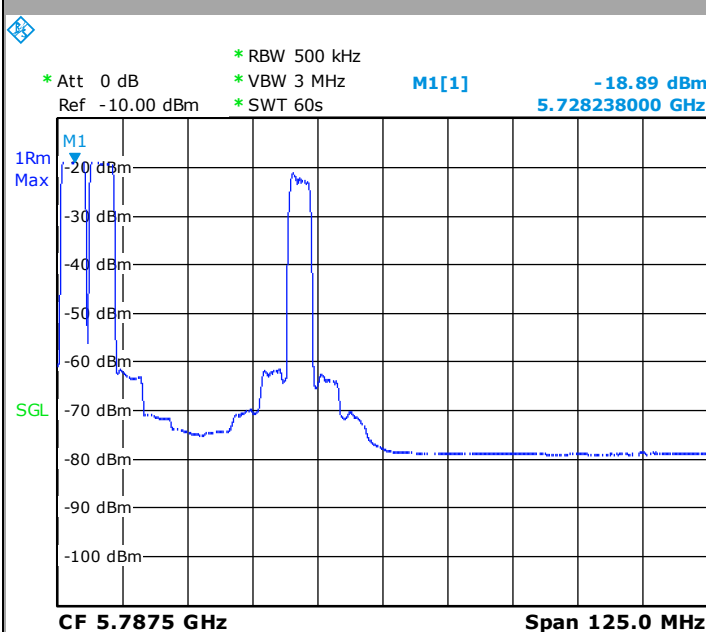
Tx2



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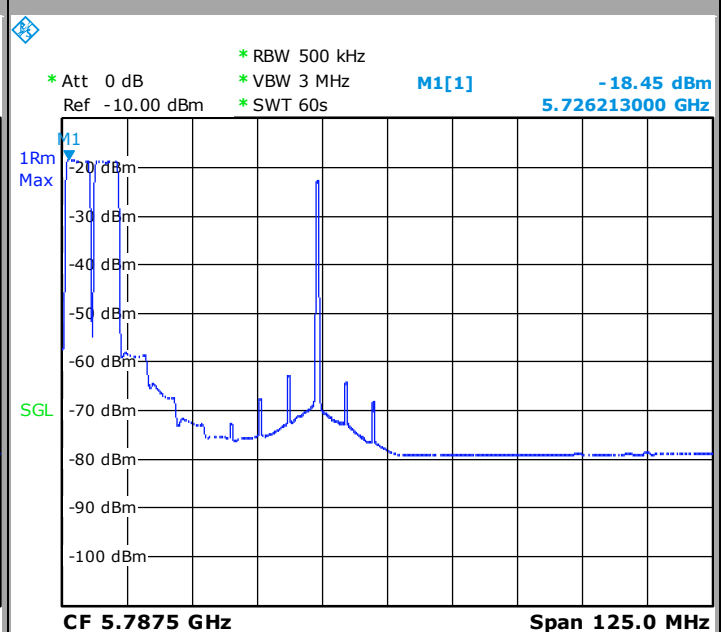
## Configuration 19

Tx1



Date: 10.MAR.2015 15:56:02

Tx2

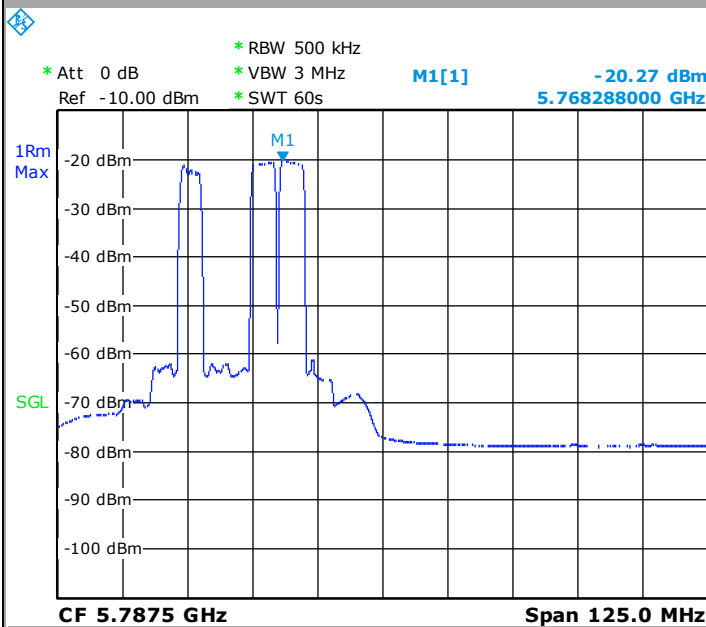


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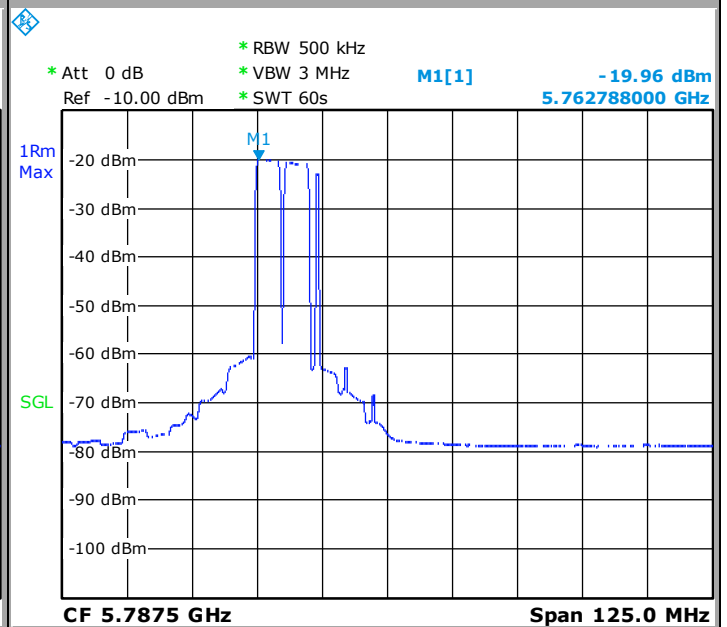
## Configuration 21

Tx1



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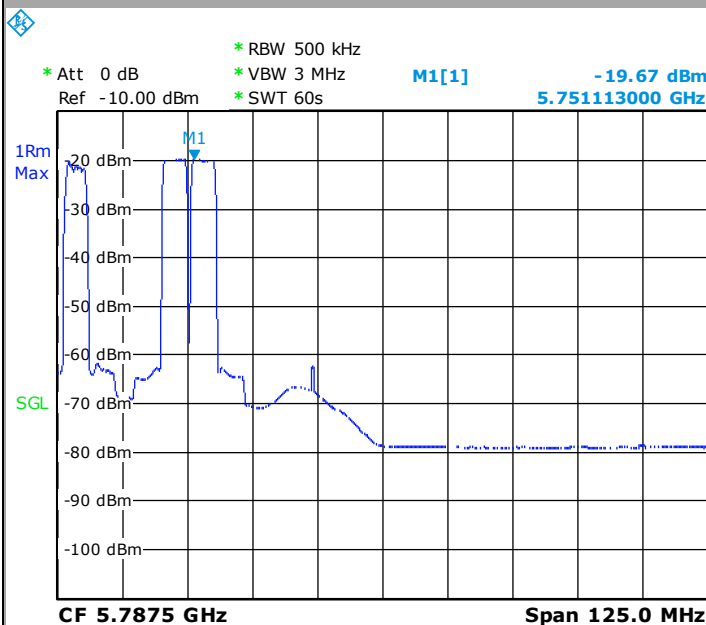
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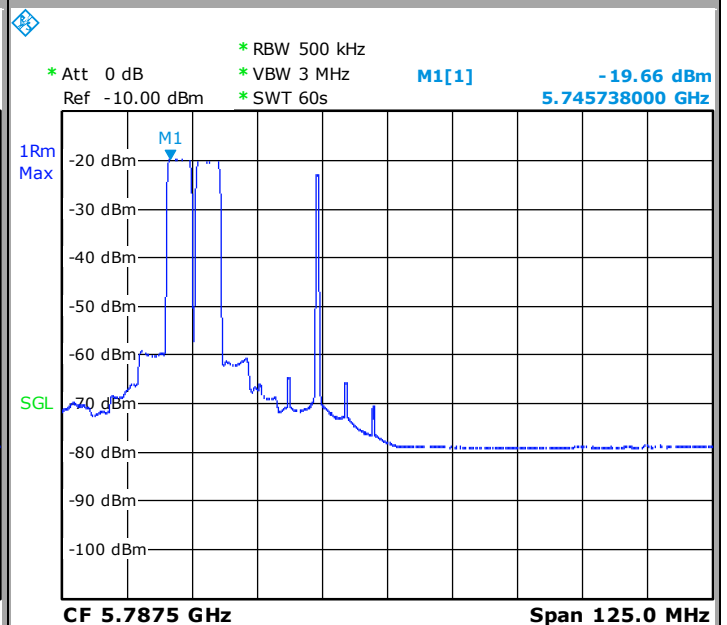
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Tx1



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Tx2

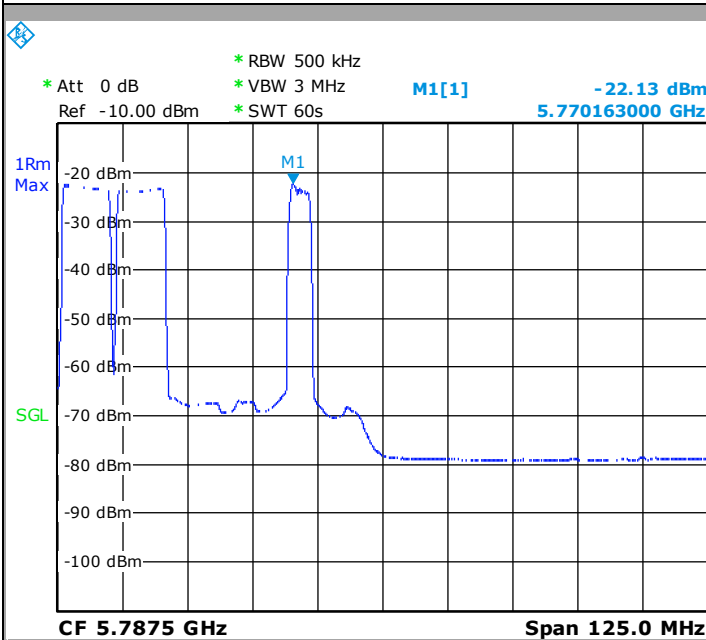


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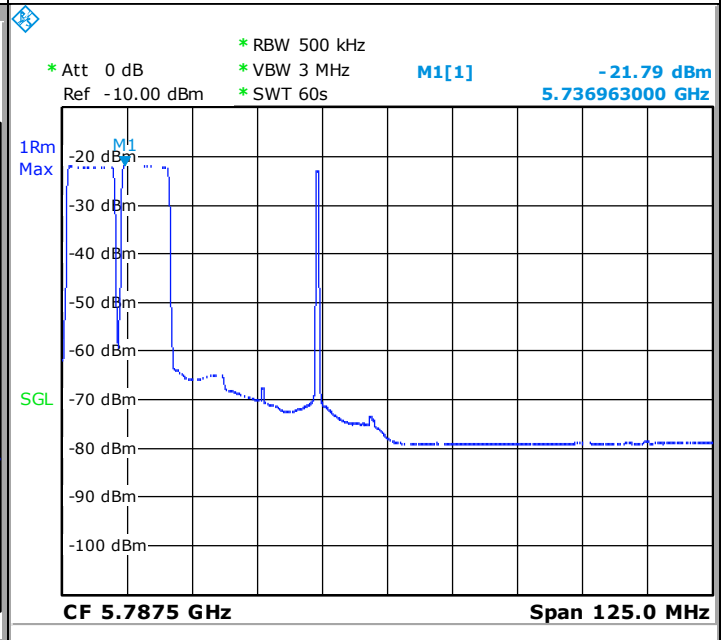
## Configuration 25

Tx1



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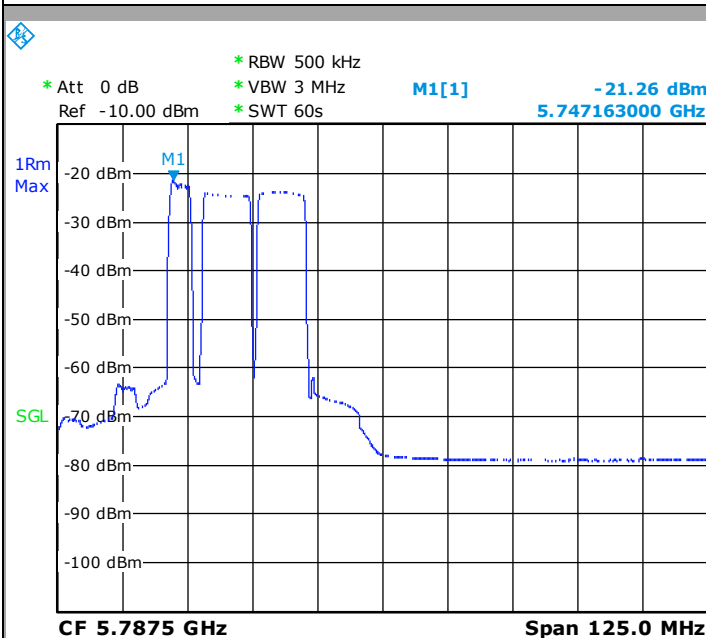
Tx2



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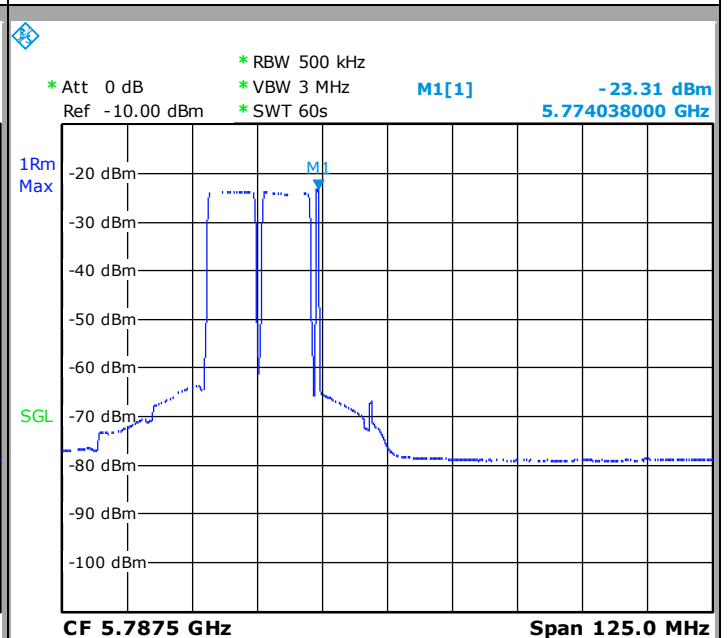
## Configuration 27

Tx1



Date: 10.MAR.2015 16:14:15

Tx2



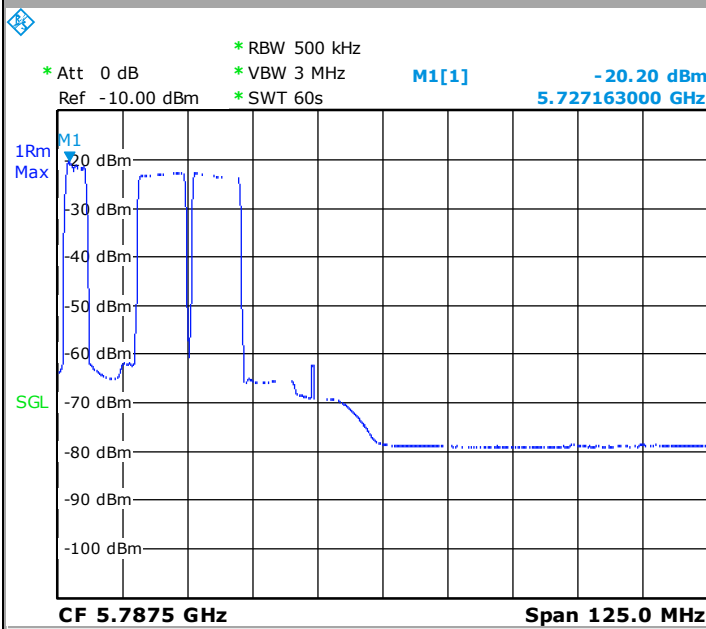
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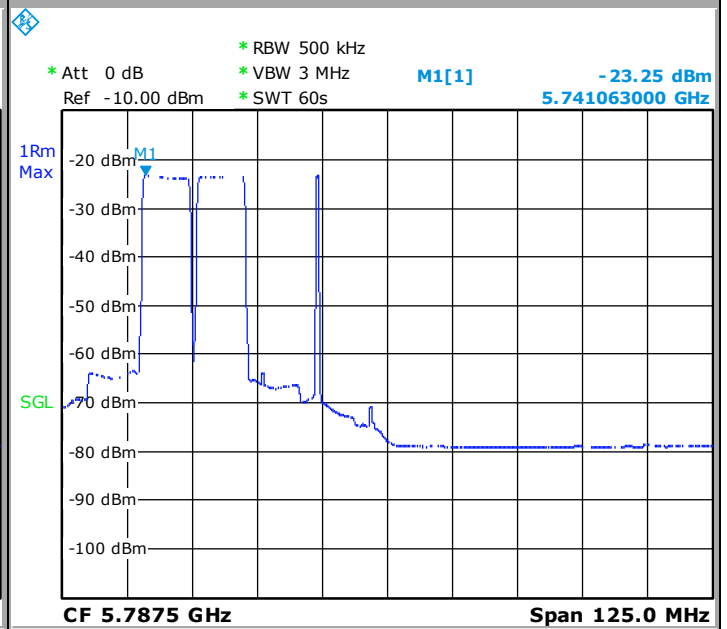
## Configuration 29

Tx1



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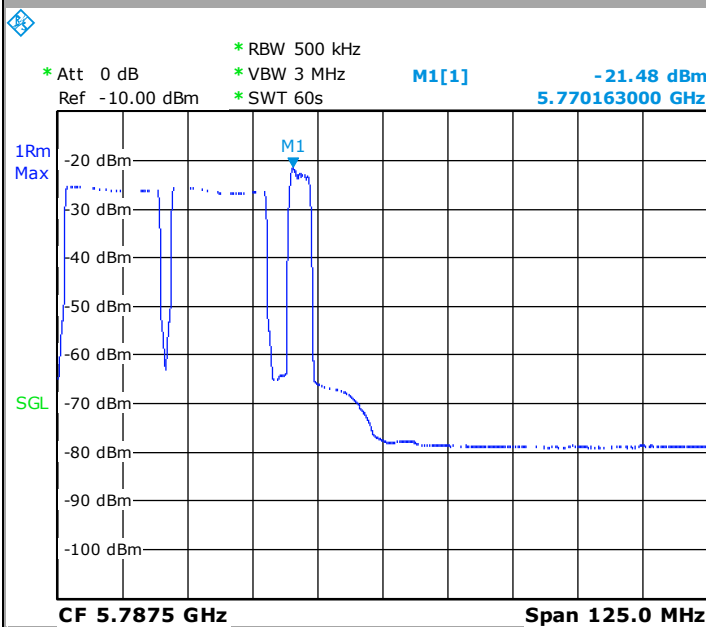
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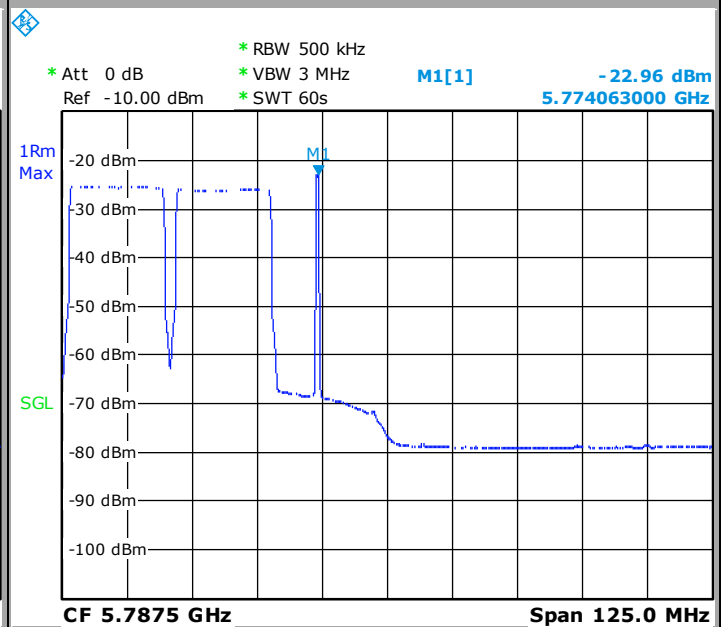
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Tx1



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Tx2

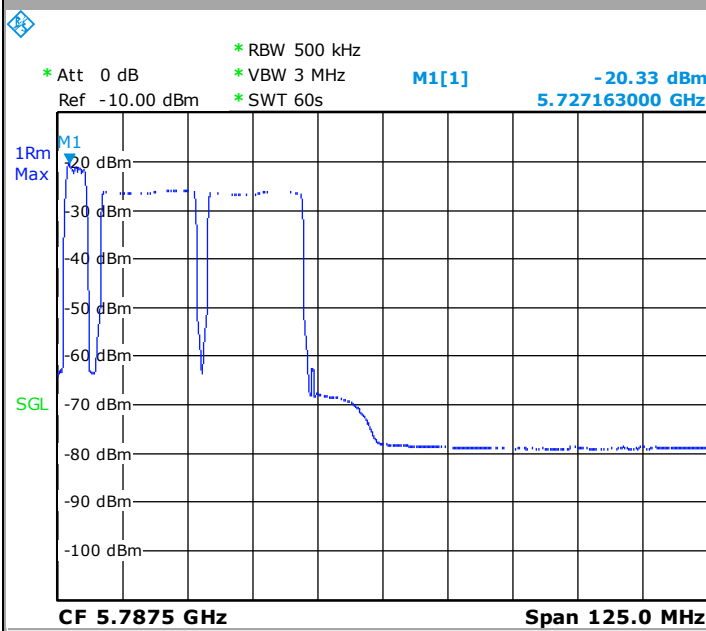


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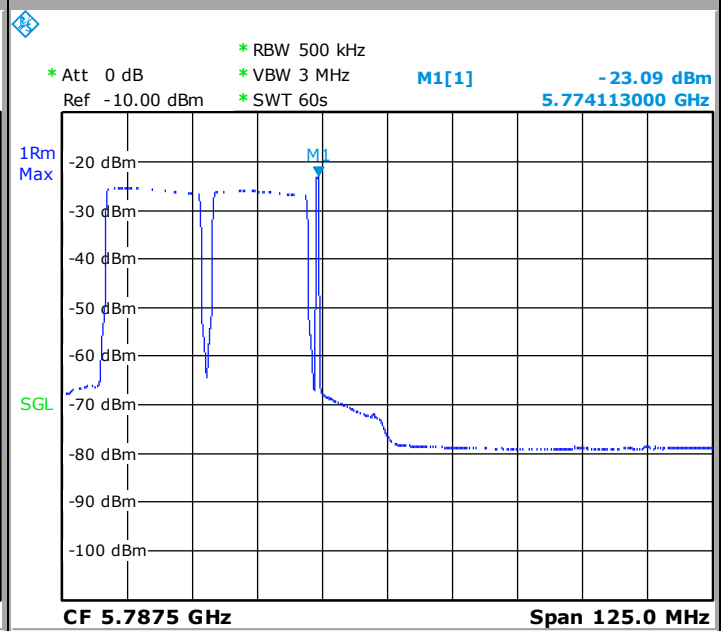
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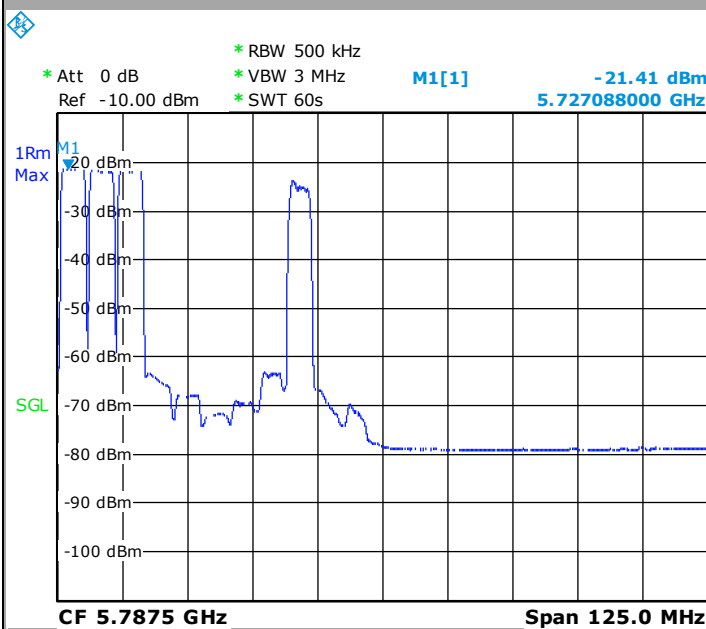
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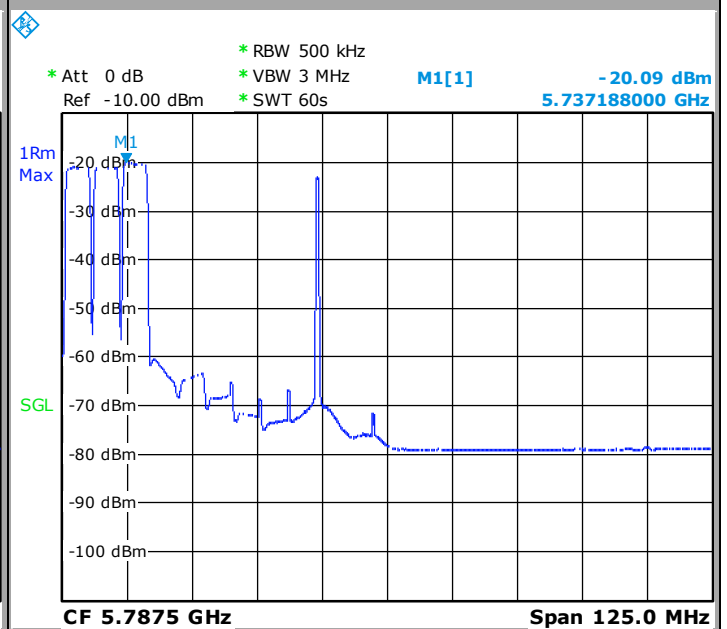
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Tx1

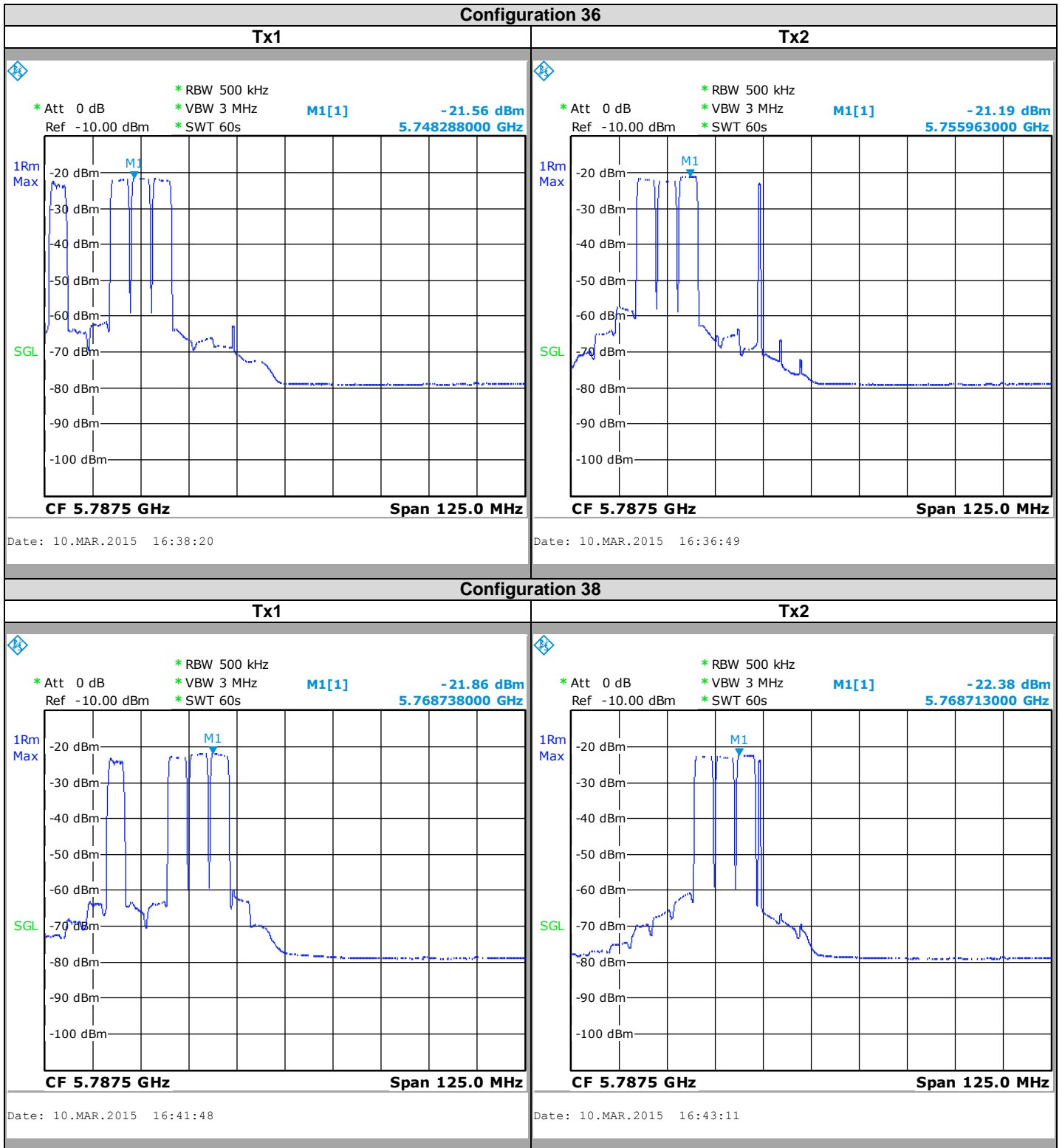


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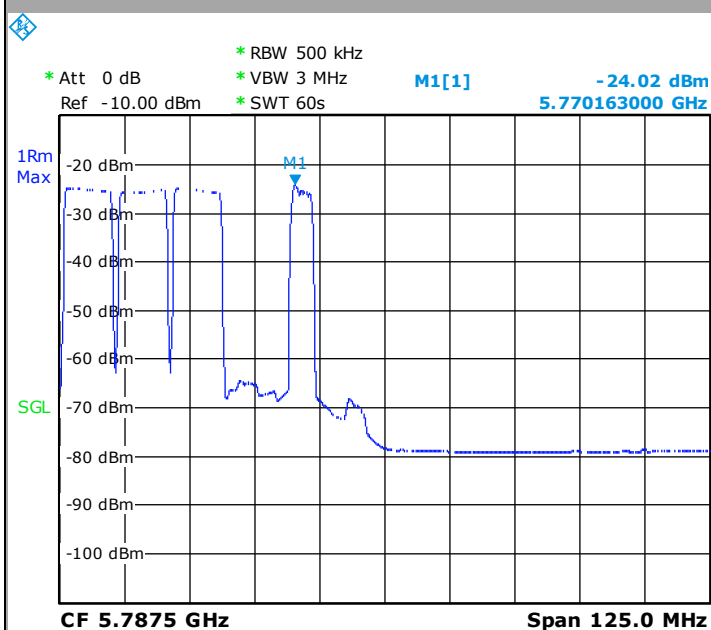
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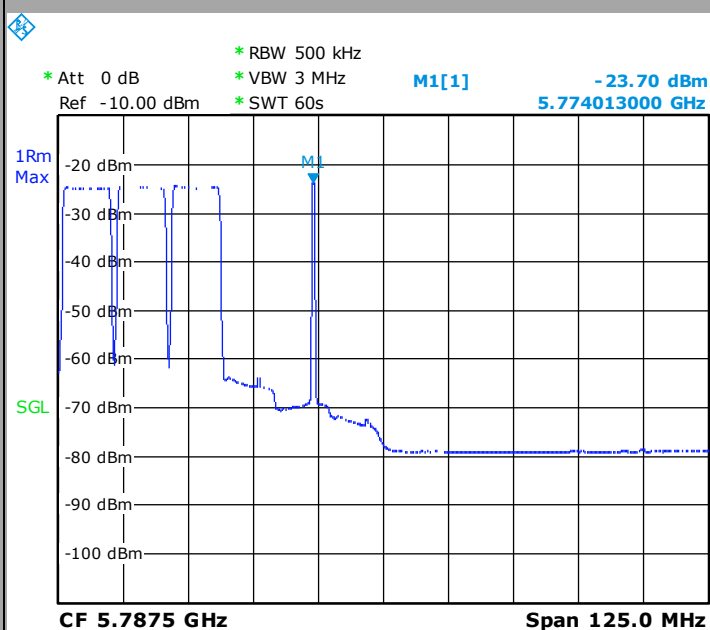
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Tx1



Date: 10.MAR.2015 16:47:31

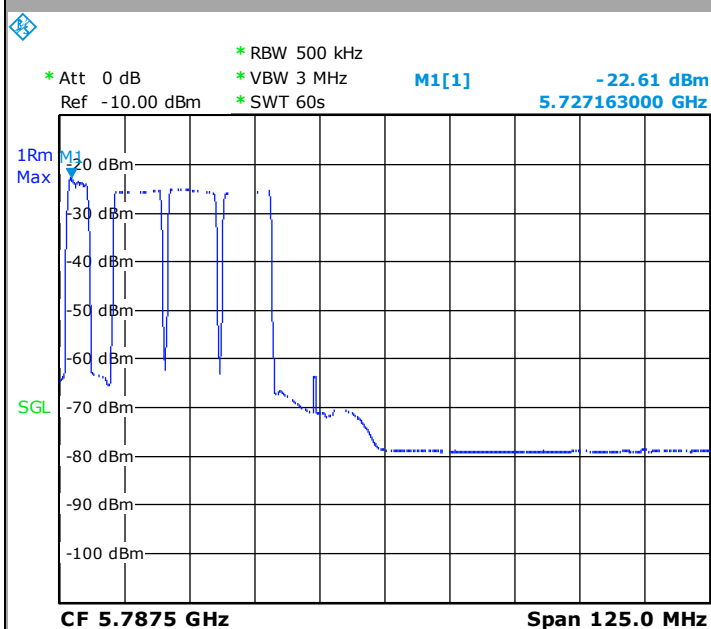
Tx2



Date: 10.MAR.2015 16:46:09

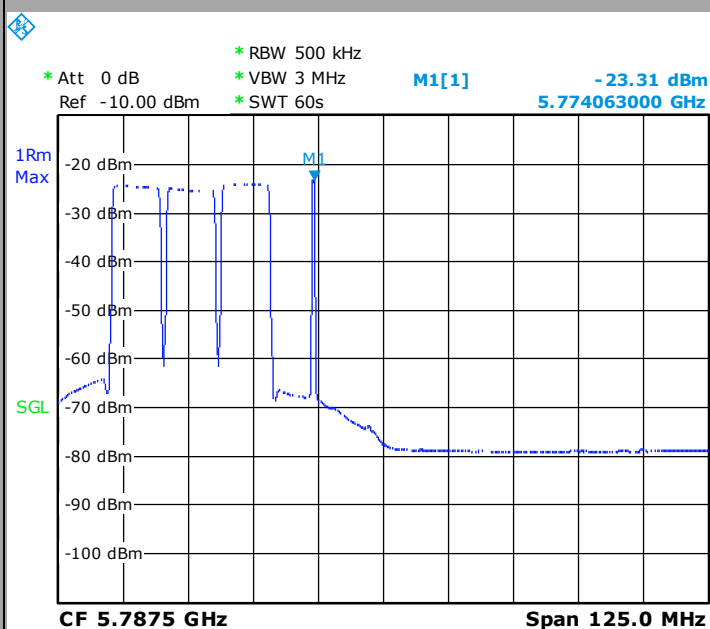
## Configuration 41

Tx1



Date: 10.MAR.2015 16:50:46

Tx2

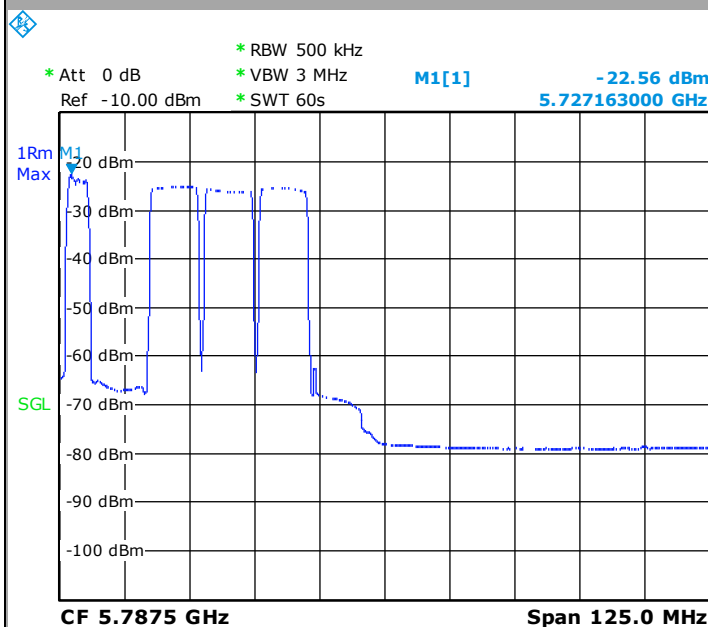


Date: 10.MAR.2015 16:52:12



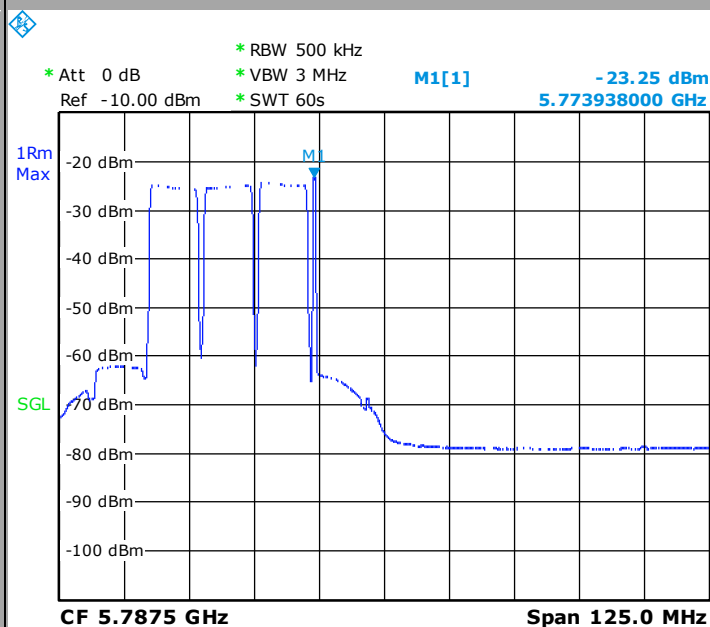
Configuration 42

Tx1



Date: 10.MAR.2015 16:56:31

Tx2



Date: 10.MAR.2015 16:55:04



Spectrum Analyzer Offset:

Cable Loss + Attenuator = 22.26dB

Configuration	Tx1 (dBm/500kHz)	Tx2 (dBm/500kHz)	Power Spectral Density (dBm/500kHz)
1	-16,87	-15,45	9,16
3	-18,47	-18,14	6,96
5	-18,17	-17,02	7,71
7	-20,37	-19,09	5,58
9	-18,77	-21,32	5,40
11	-18,22	-20,52	6,05
13	-18,82	-22,48	4,99
15	-18,07	-23,23	5,34
17	-17,36	-22,71	6,01
18	-18,89	-18,45	6,60
21	-20,27	-19,96	5,15
23	-19,67	-19,66	5,60
25	-22,13	-21,79	3,31
27	-21,26	-23,31	3,10
29	-20,2	-23,25	3,80
31	-21,48	-22,96	3,11
32	-20,33	-23,09	3,77
33	-21,41	-20,09	4,57
36	-21,56	-21,19	3,89
38	-21,86	-22,38	3,15
39	-24,02	-23,7	1,41
41	-22,61	-23,31	2,32
42	-22,56	-23,25	2,37

#### 4.7. CONCLUSION

Power Spectral density measurement performed on the sample of the product FL58R2HDBW45-CEN, SN: 0006, in configuration and description presented in this test report, show levels **conform to** the FCC 15.407 limits.



## 5. 6dB BANDWIDTH

### 5.1. TEST CONDITIONS

Test performed by : Arnaud Fayette  
Date of test : 2015/03/11  
Ambient temperature : 26°C  
Relative humidity : 41%

### 5.2. TEST SETUP

- The Equipment under Test is installed:

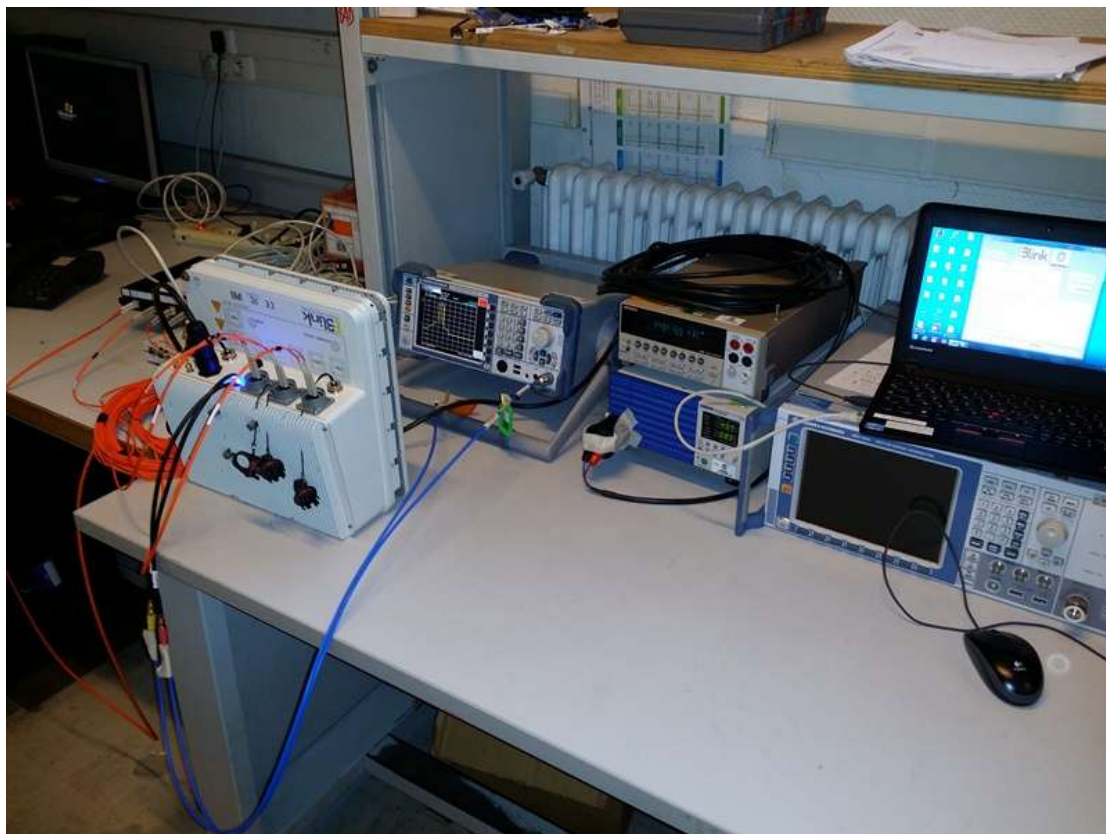
- ☐ In the climatic chamber
- ☒ On a table

-Measurement is performed with a spectrum analyzer

- ☒ On the EUT conducted access

The product has been tested according to :

- ☒ FCC KDB 789033 D02 General UNII Test Procedures New Rules v01 § F.
- ☒ FCC KDB 644545 D03 Guidance for IEE 802.11ac v01.



Photograph for 6dB Bandwidth

**5.3. LIMIT**

The 6dB Bandwidth shall be at least 500kHz.

**5.4. TEST EQUIPMENT LIST**

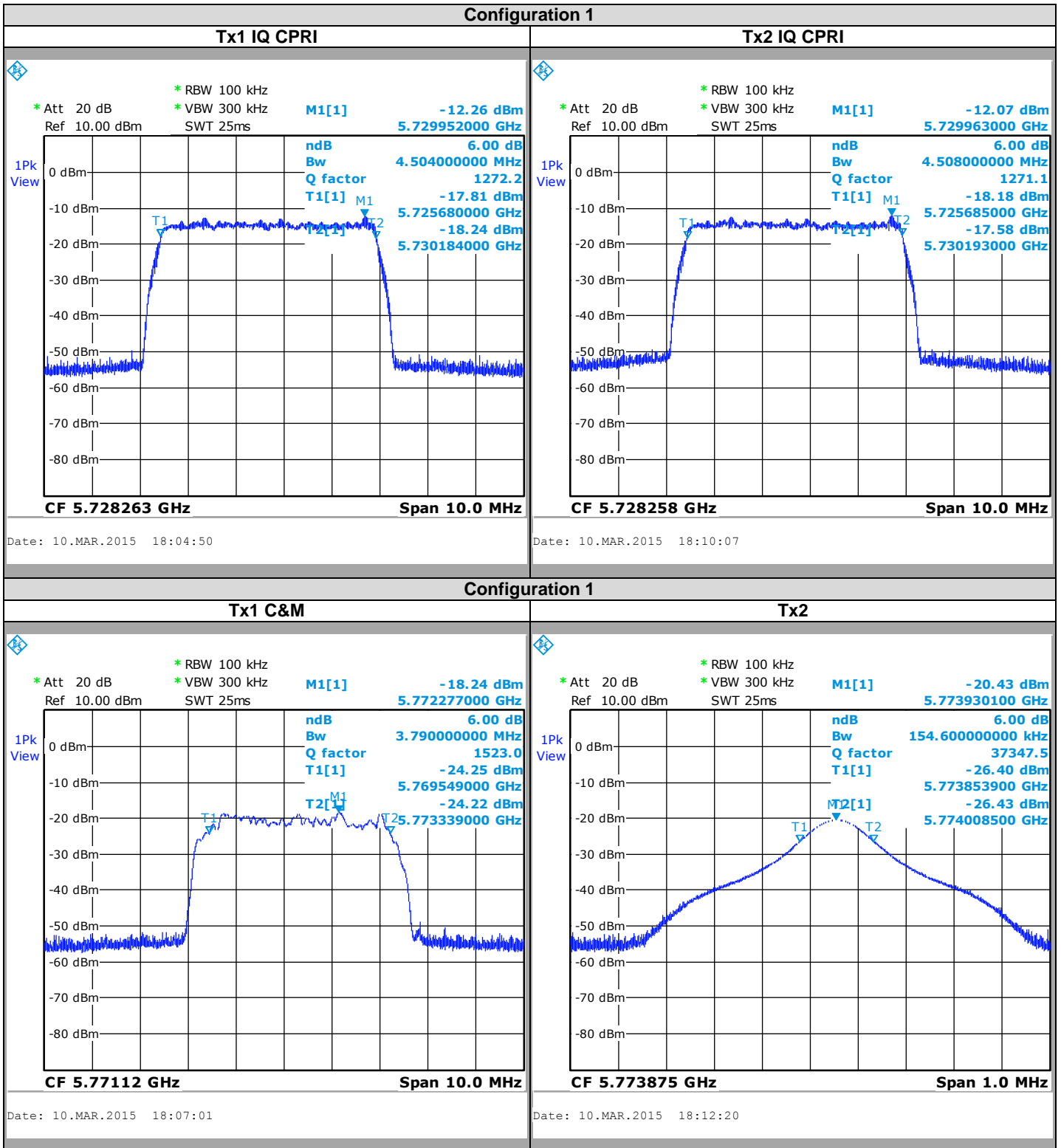
DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal date	Cal due
RF cable & Attenuator	Télédynne & MINI CIRCUITS	920-0202-024 & FW-20+	A5329661	2014/10	2015/10
RF cable & Attenuator	Télédynne & MINI CIRCUITS	920-0202-024 & FW-20+	A5329676	2014/10	2015/10
Receiver	ROHDE & SCHWARZ	FSL	A4060032	2014/03	2015/03
Programmable AC/DC power supply	KIKUSUI	PCR500M	A7040079	2014/05	2015/05
Multi-meter	KEITHLEY	2000	A1241084	2014/02	2016/02
Thermometer	AOIP	TM 6630	B4041042	2014/12	2015/12

**5.5. DIVERGENCE, ADDITION OR SUPPRESSION ON THE TEST SPECIFICATION**

☒ None      ☐ Divergence:



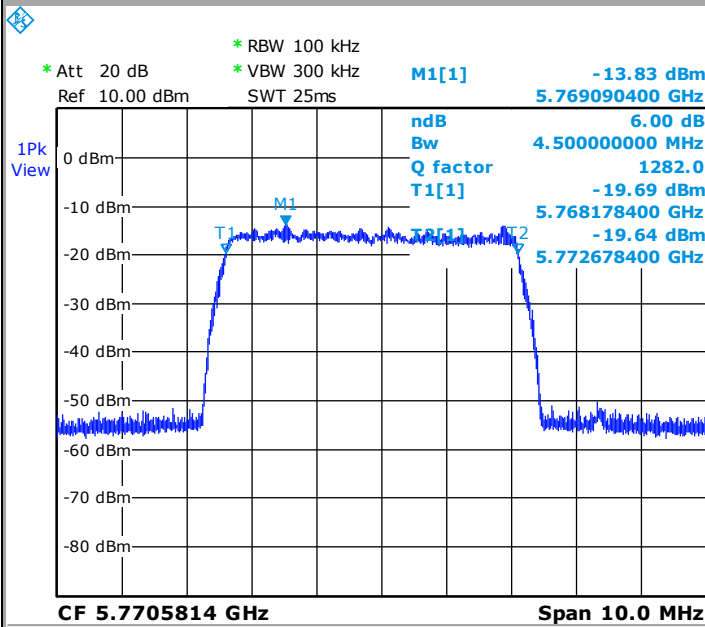
## 5.6. GRAPHICS &amp; RESULTS



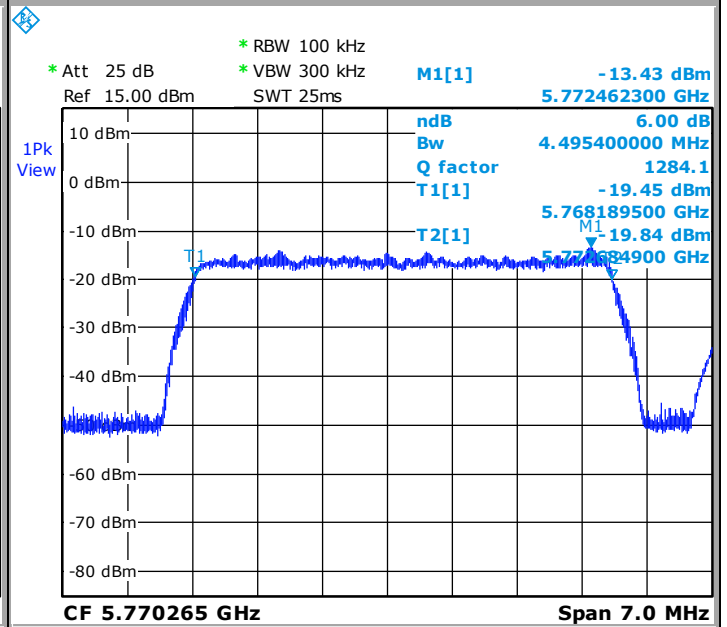


## Configuration 3

## Tx1 IQ CPRI

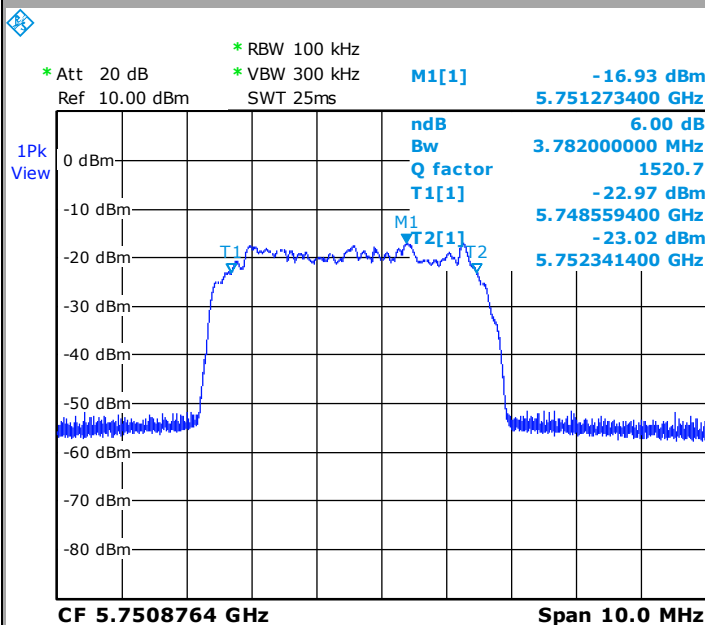


## Tx2 IQ CPRI

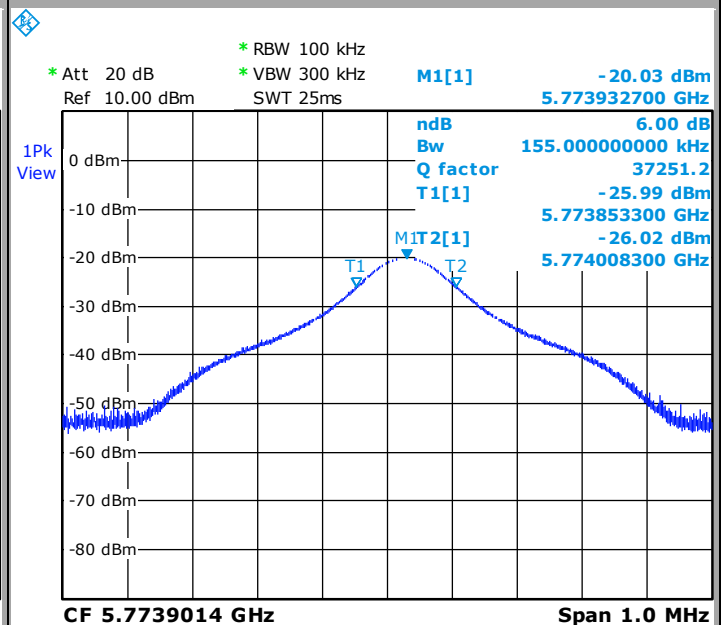


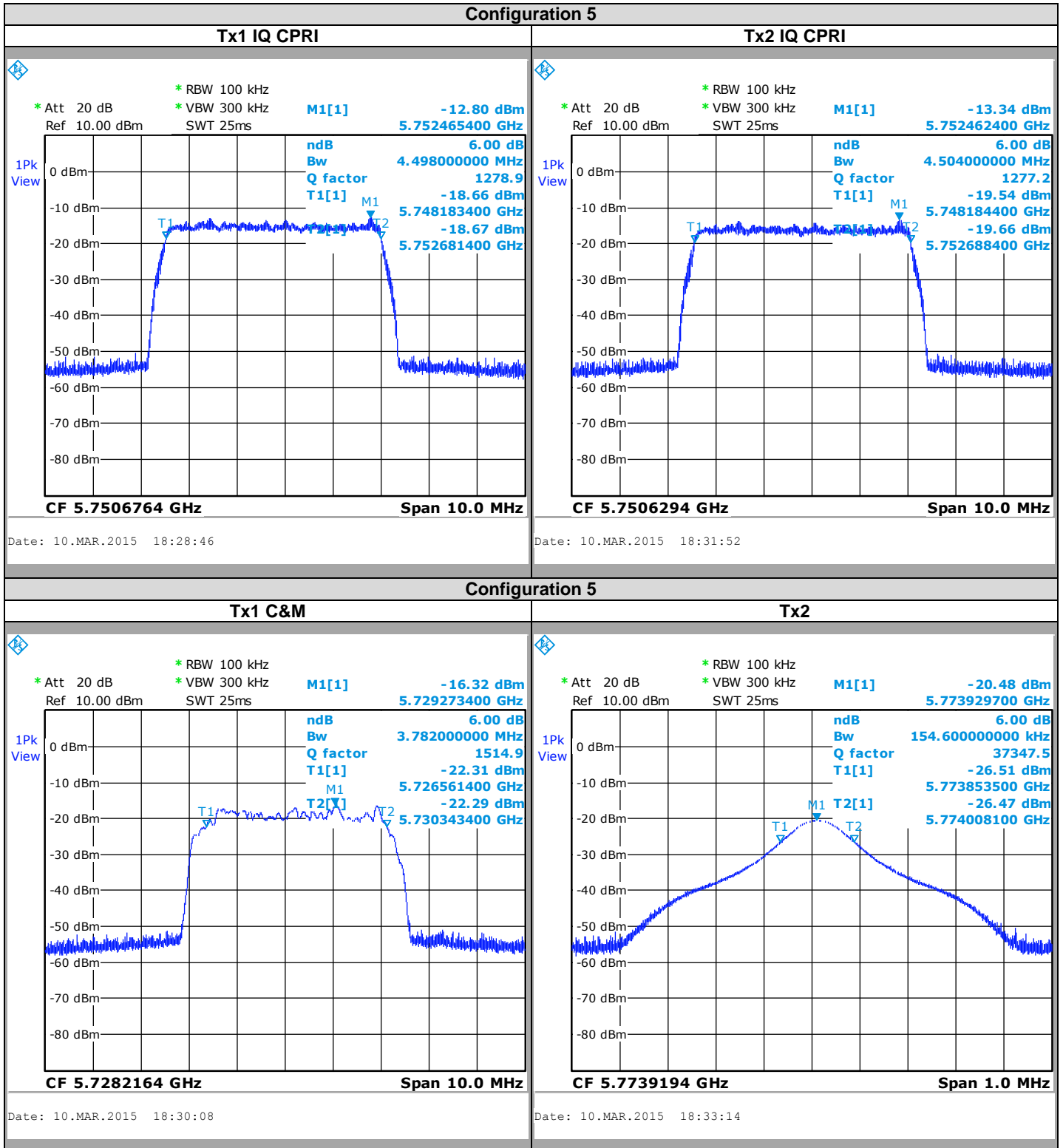
## Configuration 3

## Tx1 C&amp;M



## Tx2

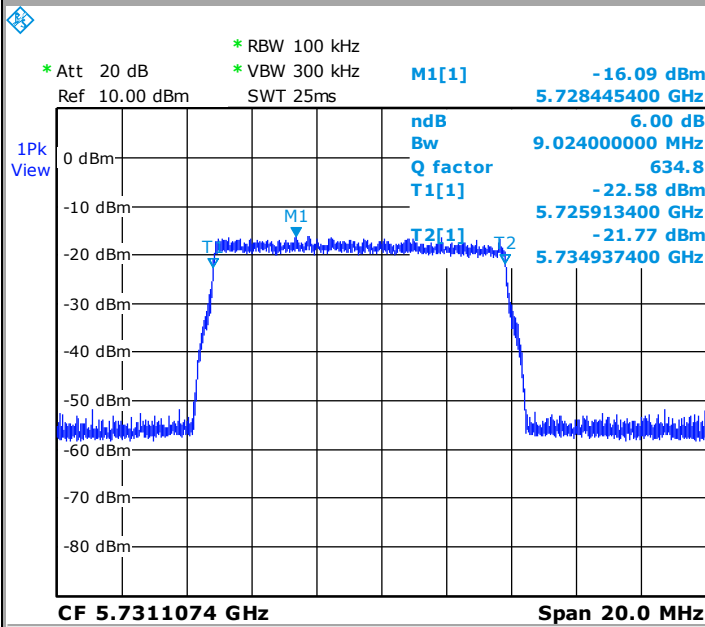






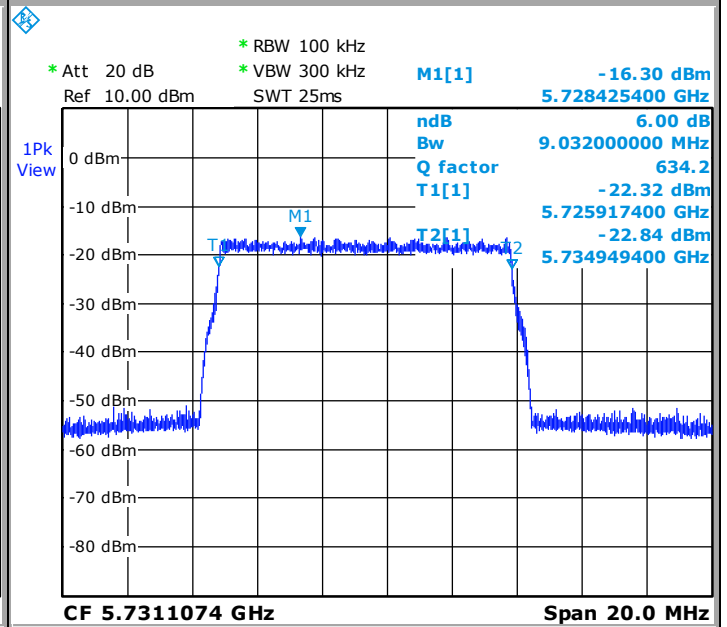
## Configuration 7

## Tx1 IQ CPRI



Date: 10.MAR.2015 18:39:51

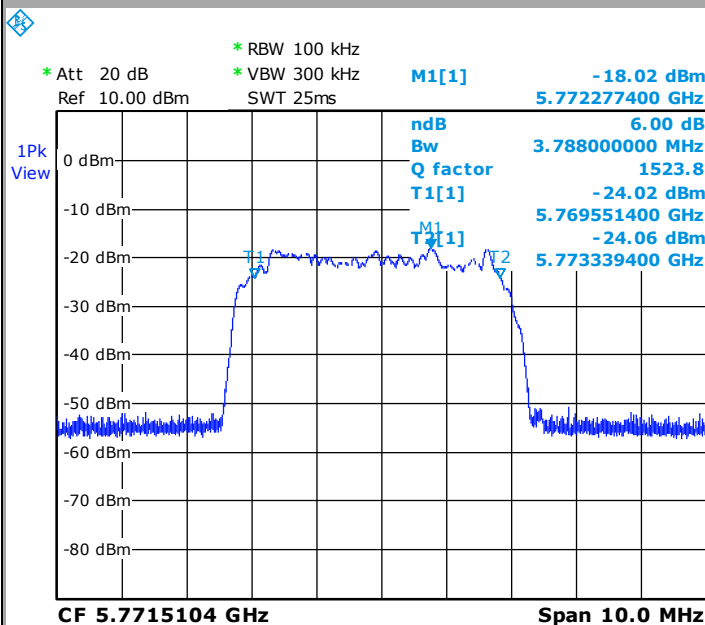
## Tx2 IQ CPRI



Date: 10.MAR.2015 18:38:30

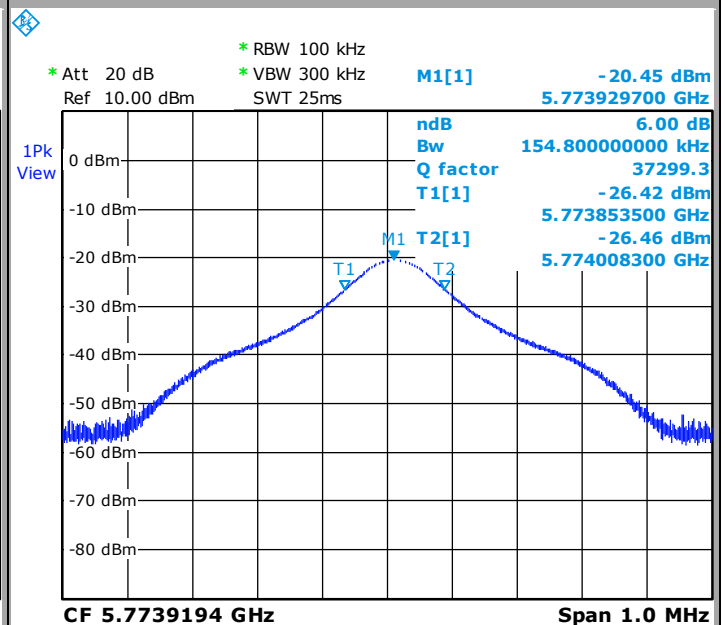
## Configuration 7

## Tx1 C&amp;M



Date: 10.MAR.2015 18:41:35

## Tx2



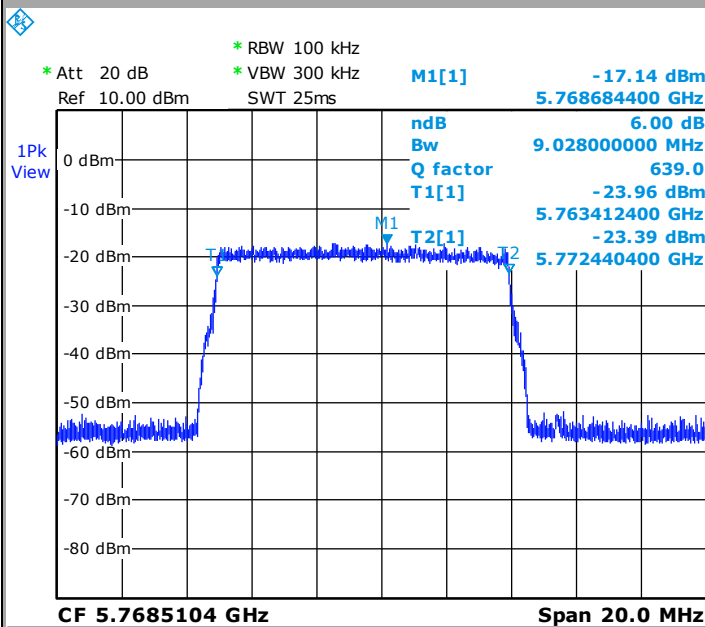
Date: 10.MAR.2015 18:36:47





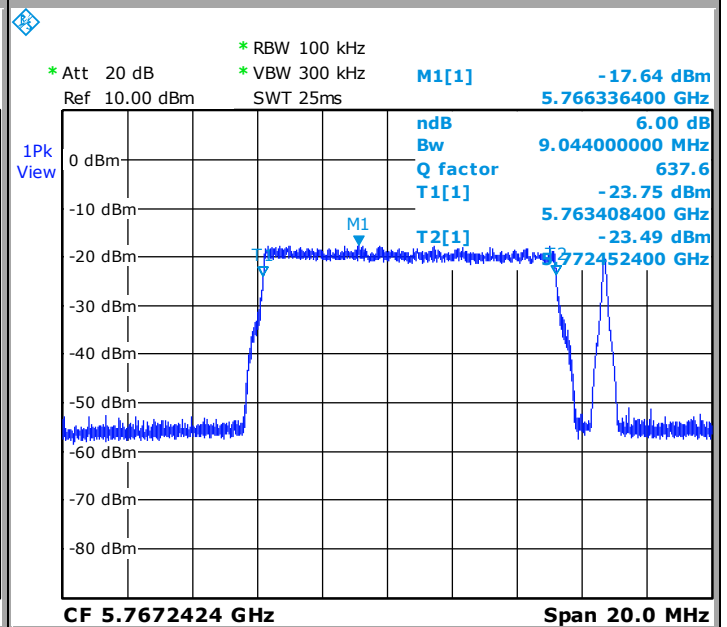
## Configuration 9

## Tx1 IQ CPRI



Date: 10.MAR.2015 18:44:17

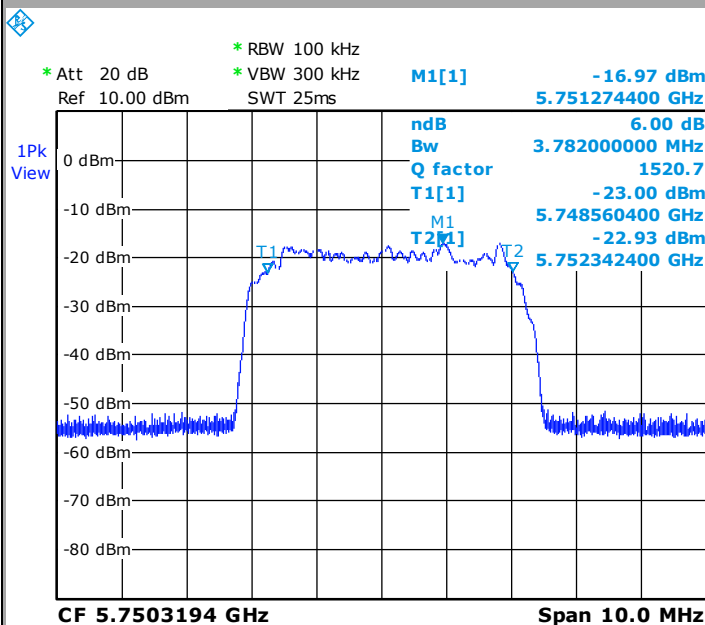
## Tx2 IQ CPRI



Date: 10.MAR.2015 18:48:15

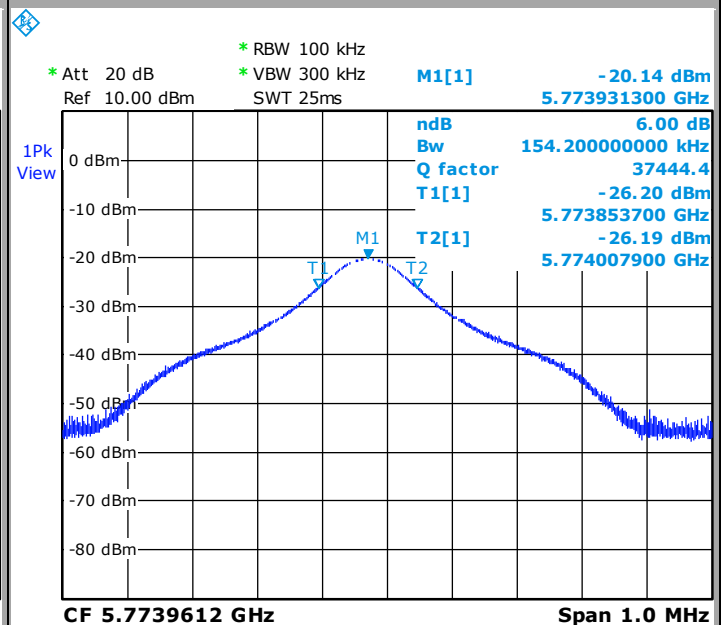
## Configuration 9

## Tx1 C&amp;M



Date: 10.MAR.2015 18:45:59

## Tx2

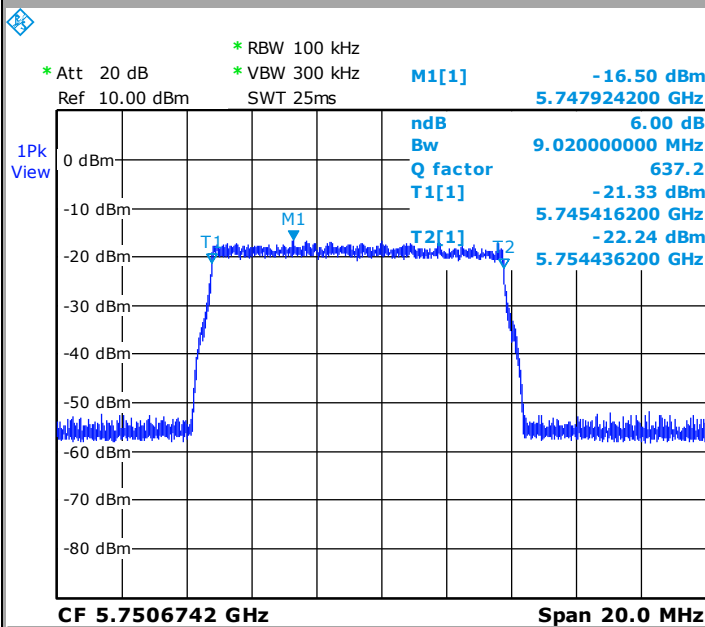


Date: 10.MAR.2015 18:49:19



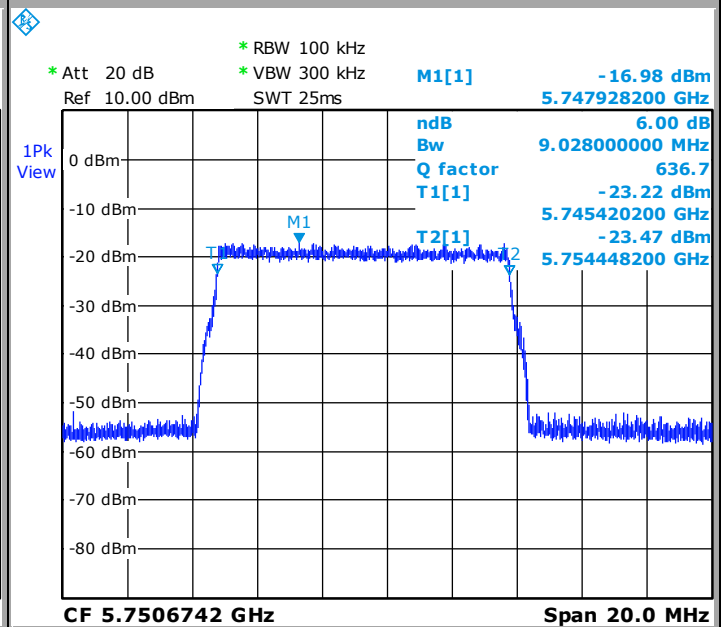
## Configuration 11

## Tx1 IQ CPRI



Date: 10.MAR.2015 18:56:23

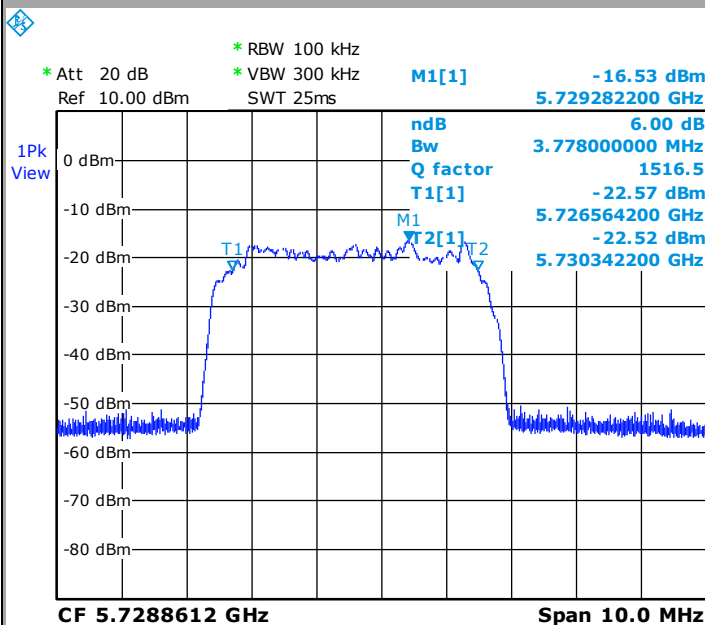
## Tx2 IQ CPRI



Date: 10.MAR.2015 18:55:01

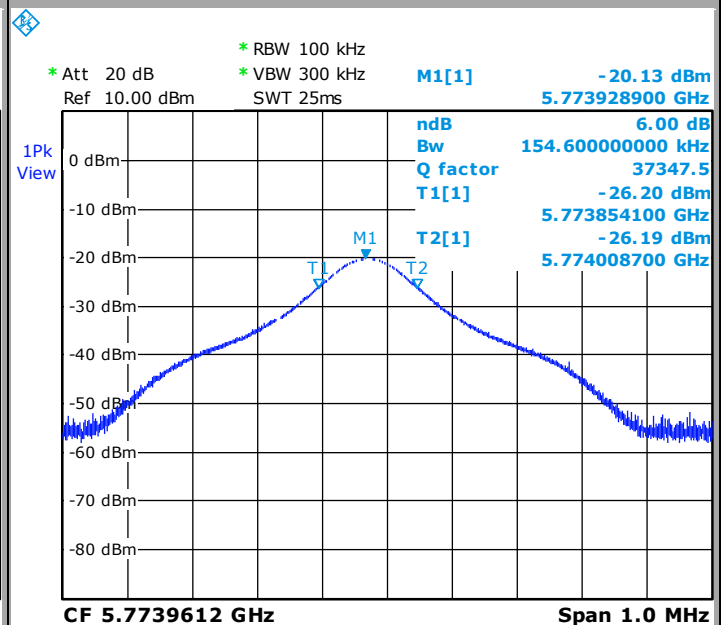
## Configuration 11

## Tx1 C&amp;M



Date: 10.MAR.2015 18:58:05

## Tx2

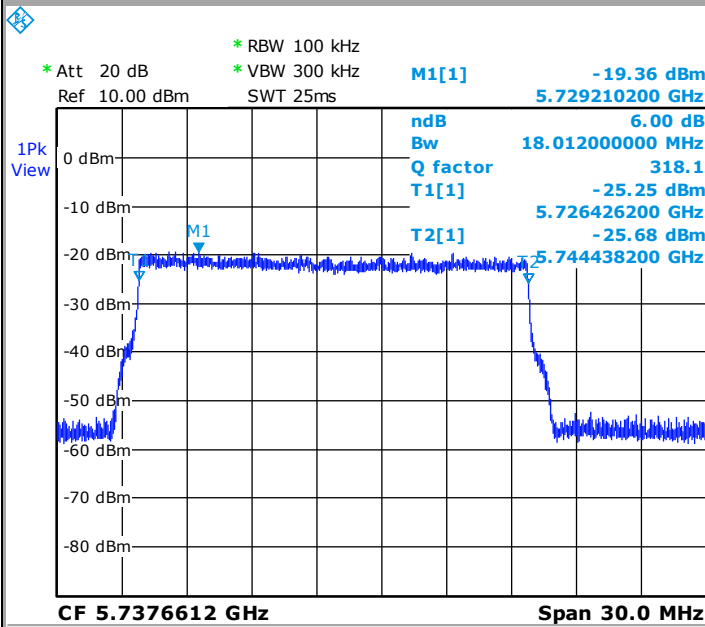


Date: 10.MAR.2015 18:53:50



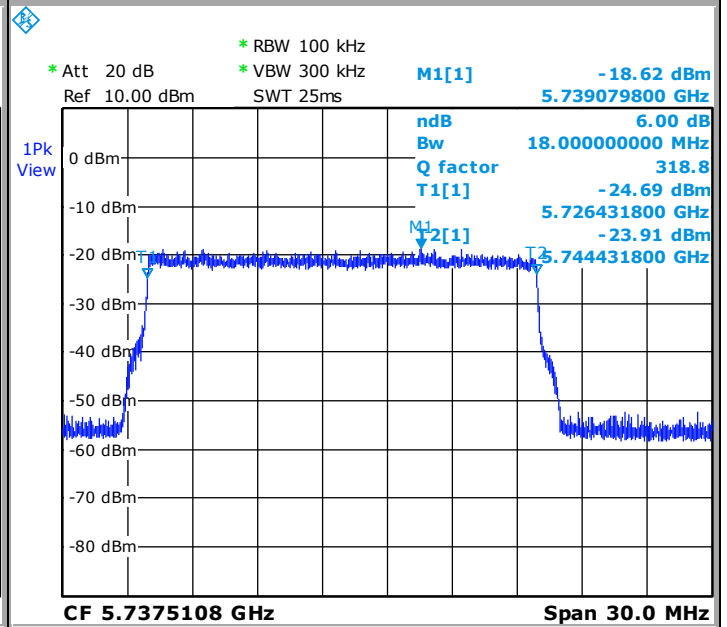
## Configuration 13

## Tx1 IQ CPRI



Date: 10.MAR.2015 19:01:40

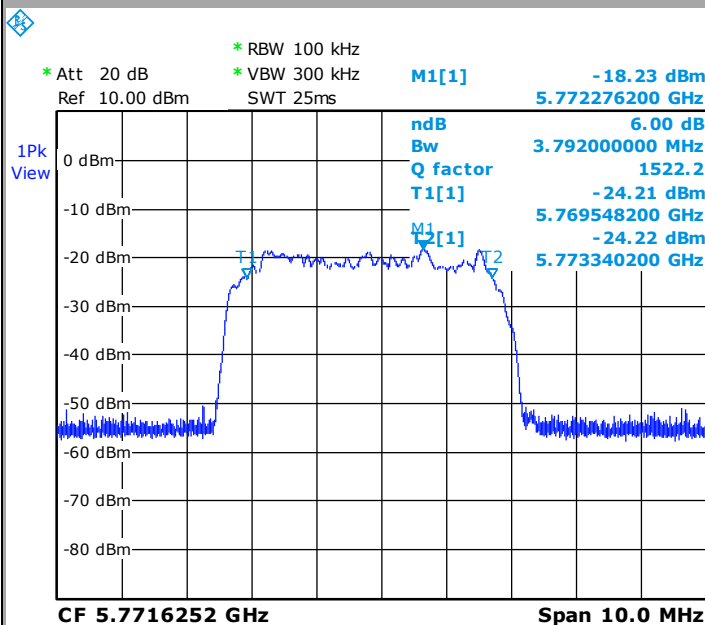
## Tx2 IQ CPRI



Date: 10.MAR.2015 19:06:03

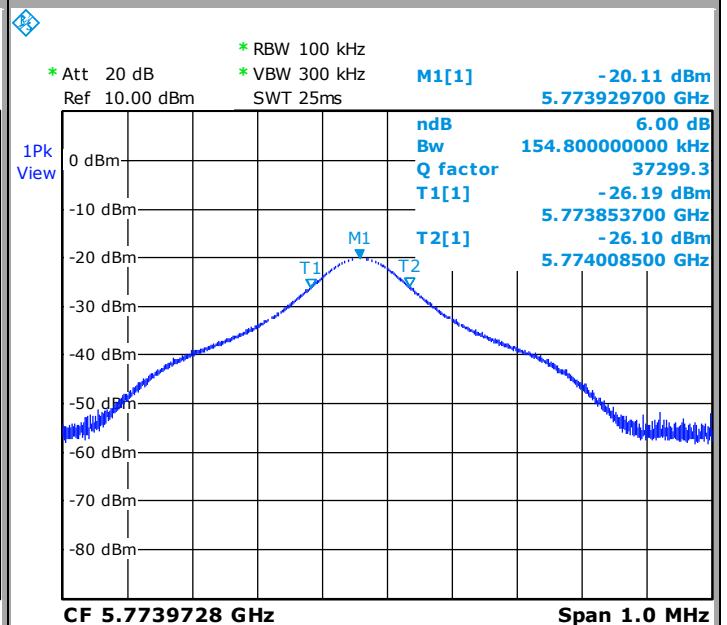
## Configuration 13

## Tx1 C&amp;M



Date: 10.MAR.2015 19:03:19

## Tx2

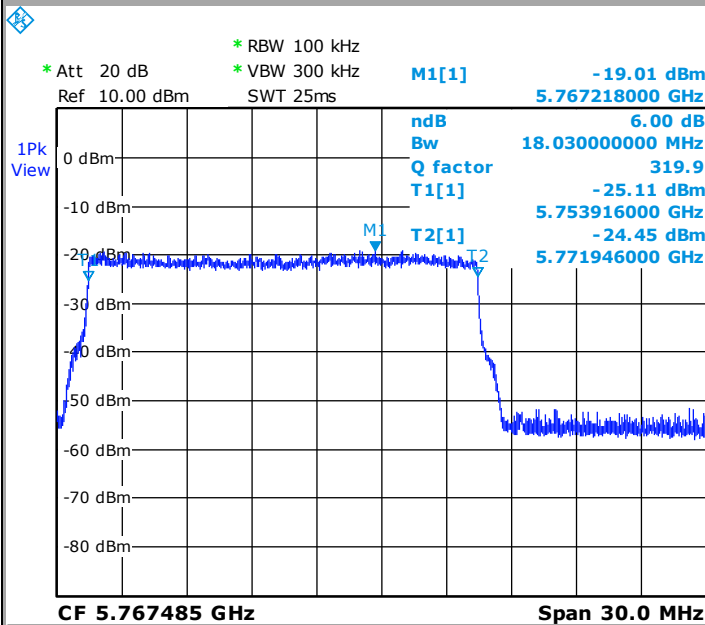


Date: 10.MAR.2015 19:05:02



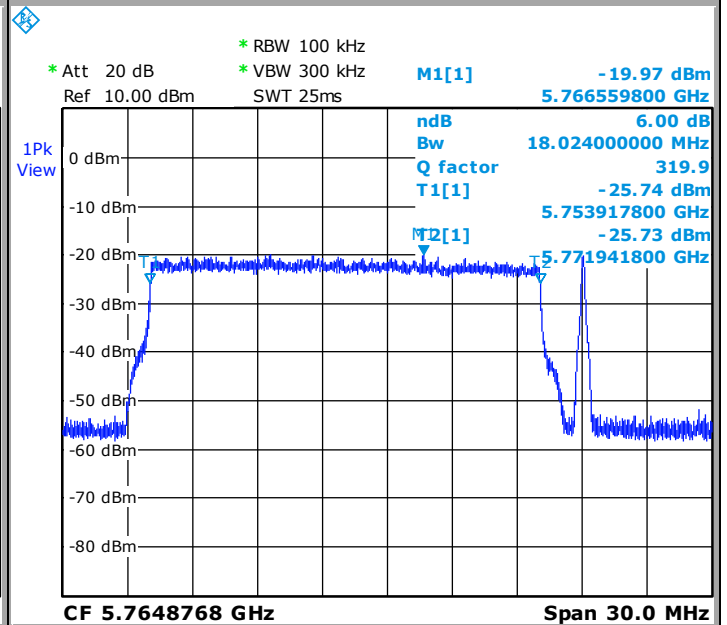
## Configuration 15

## Tx1 IQ CPRI



Date: 11.MAR.2015 15:18:24

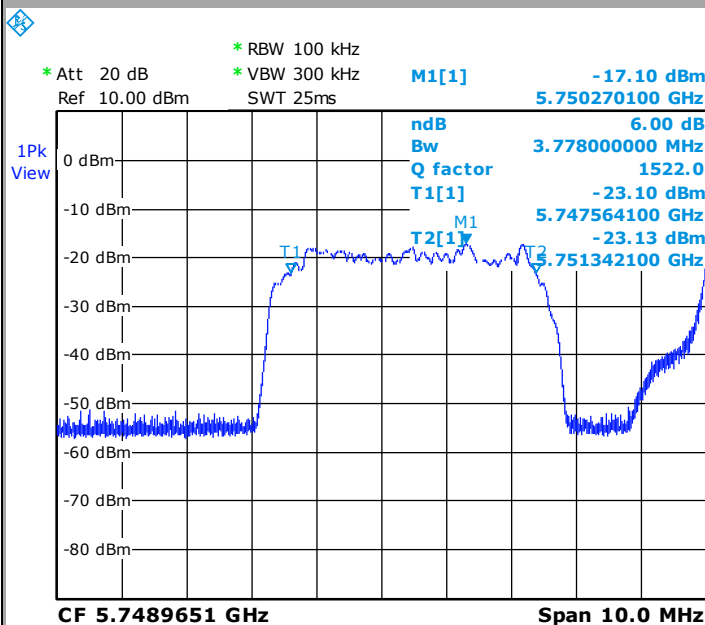
## Tx2 IQ CPRI



Date: 10.MAR.2015 19:09:35

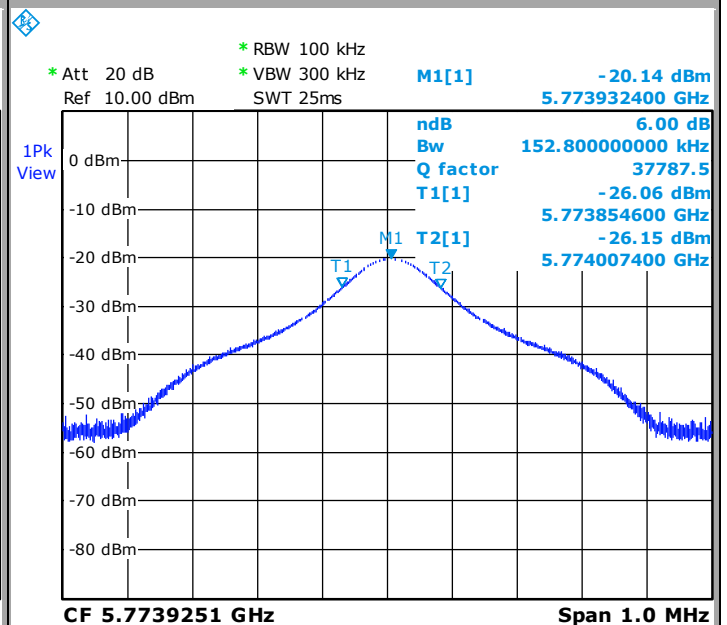
## Configuration 15

## Tx1 C&amp;M



Date: 10.MAR.2015 19:14:00

## Tx2

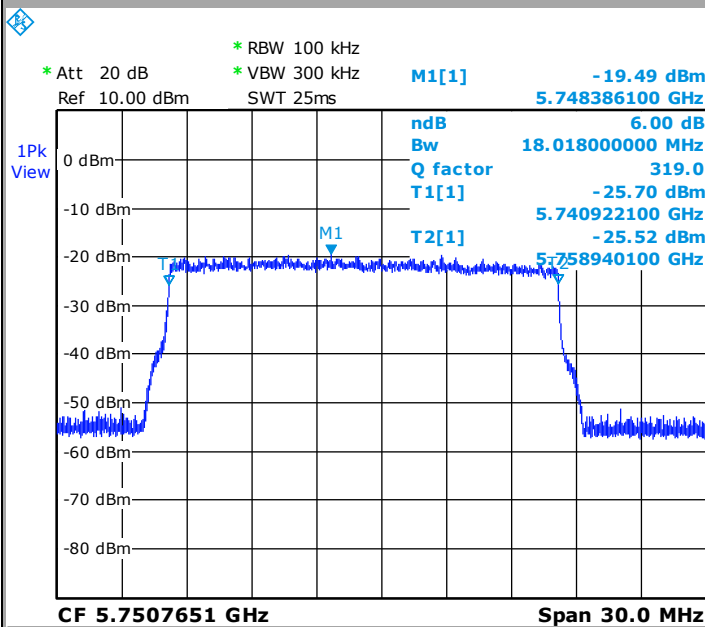


Date: 10.MAR.2015 19:10:54

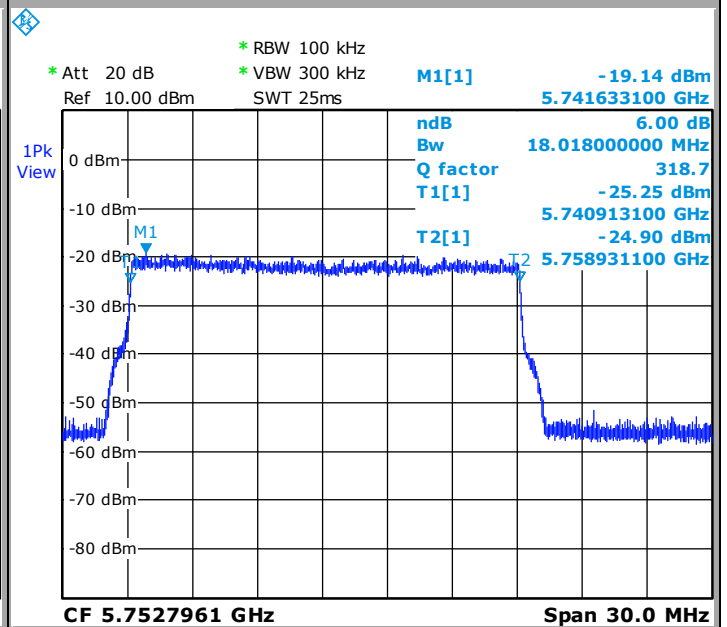


## Configuration 17

## Tx1 IQ CPRI

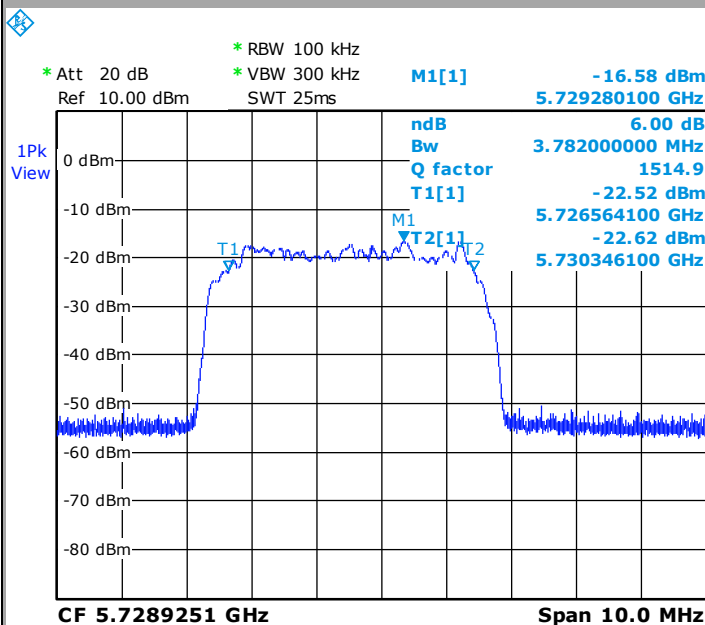


## Tx2 IQ CPRI

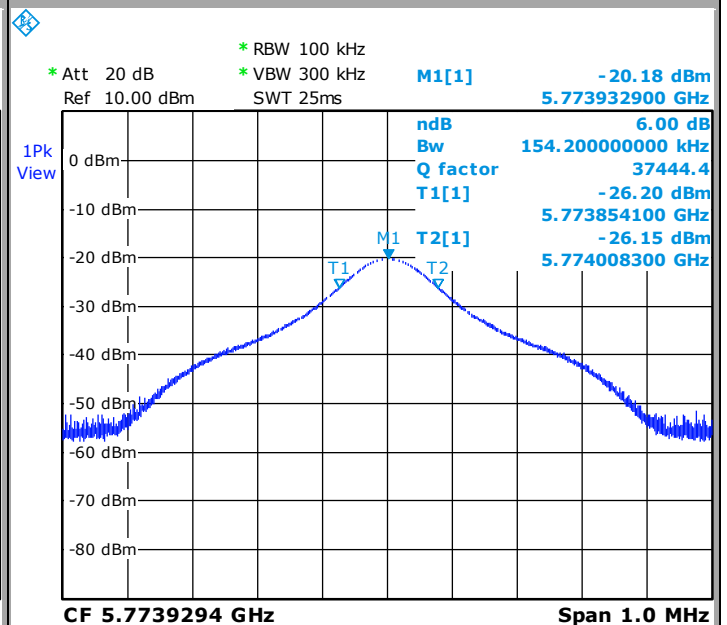


## Configuration 17

## Tx1 C&amp;M



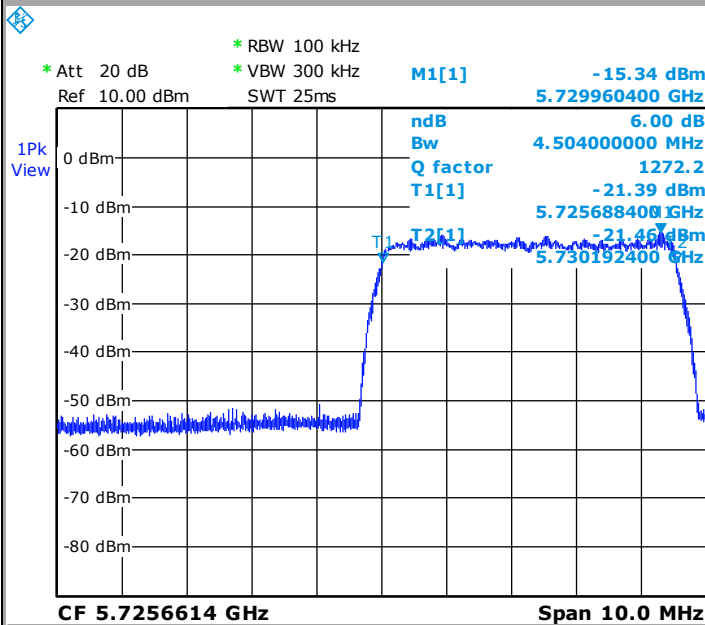
## Tx2





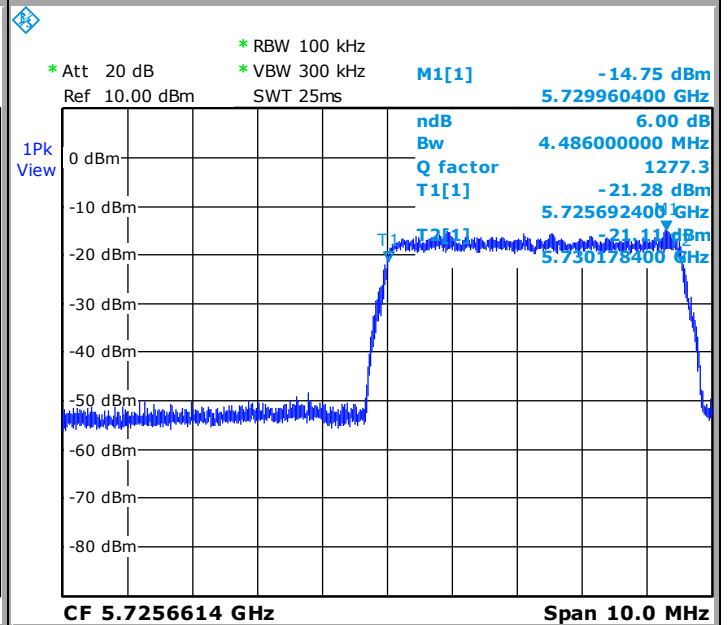
## Configuration 19

## Tx1 IQ CPRI 1



Date: 10.MAR.2015 19:43:55

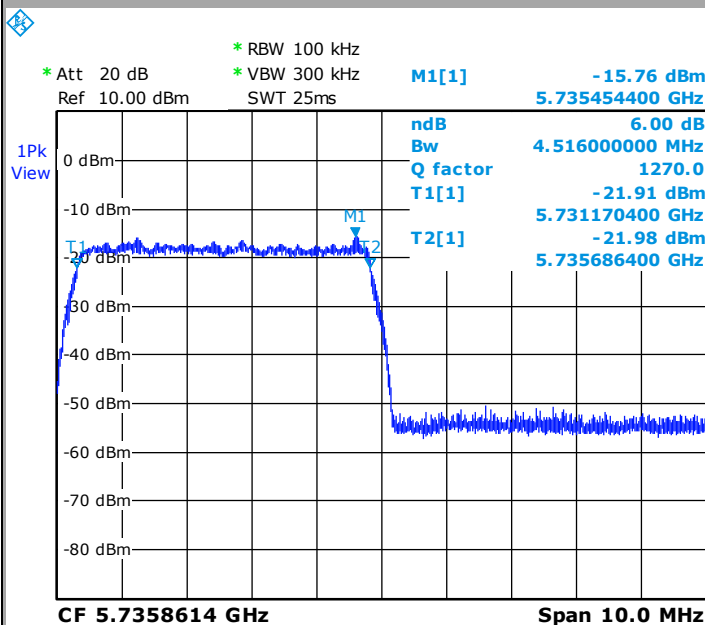
## Tx2 IQ CPRI 1



Date: 10.MAR.2015 19:40:38

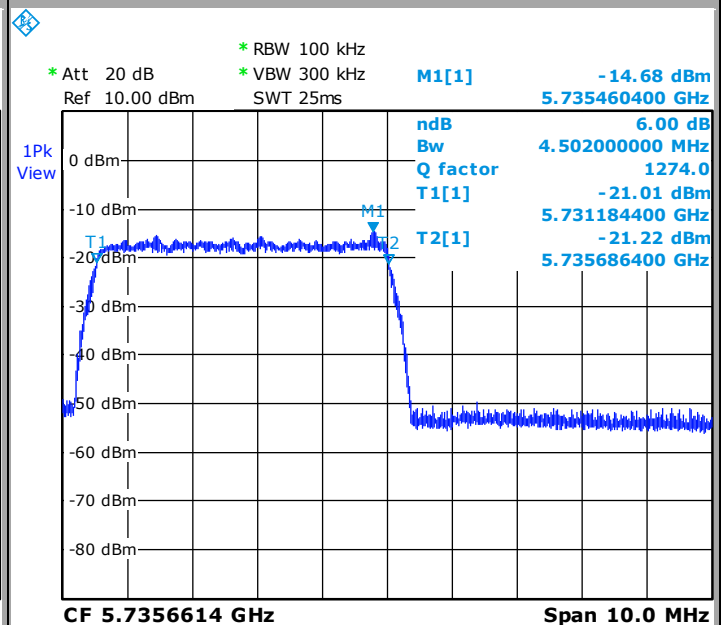
## Configuration 19

## Tx1 IQ CPRI 2



Date: 10.MAR.2015 19:46:00

## Tx2 IQ CPRI 2

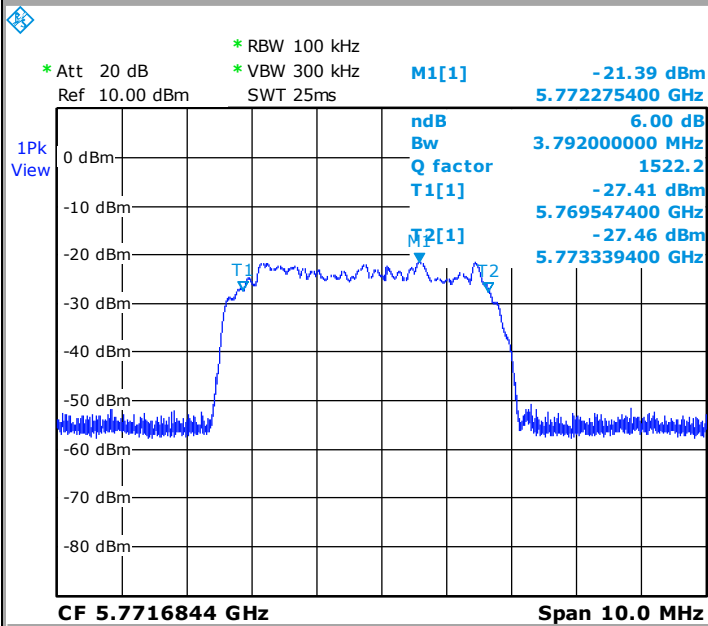


Date: 10.MAR.2015 19:38:06



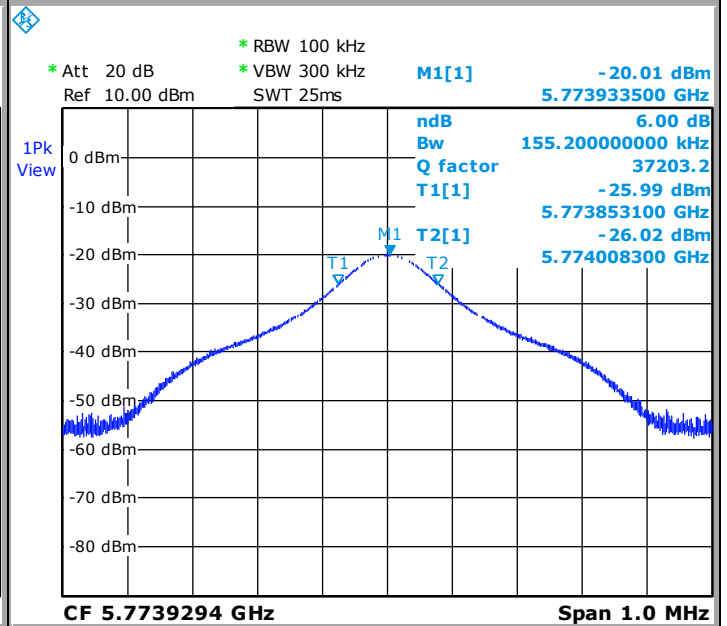
## Configuration 19

## Tx1 C&amp;M



Date: 10.MAR.2015 19:47:32

## Tx2

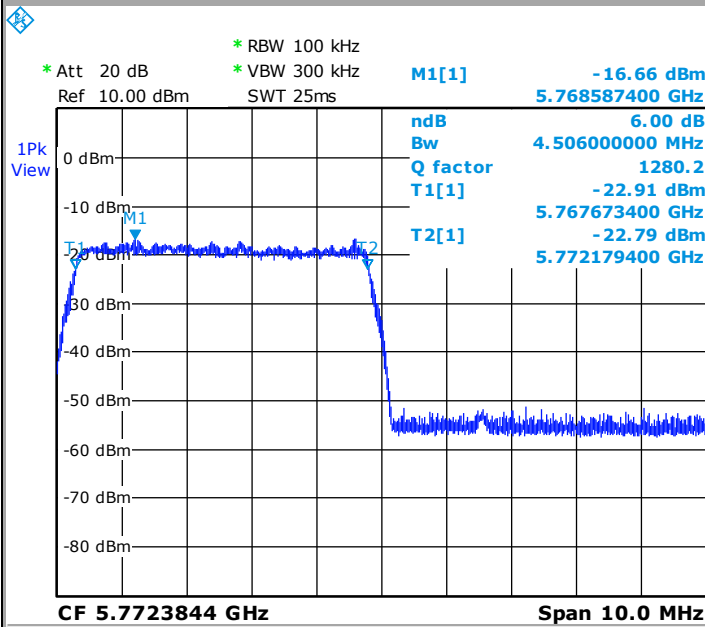


Date: 10.MAR.2015 19:34:36



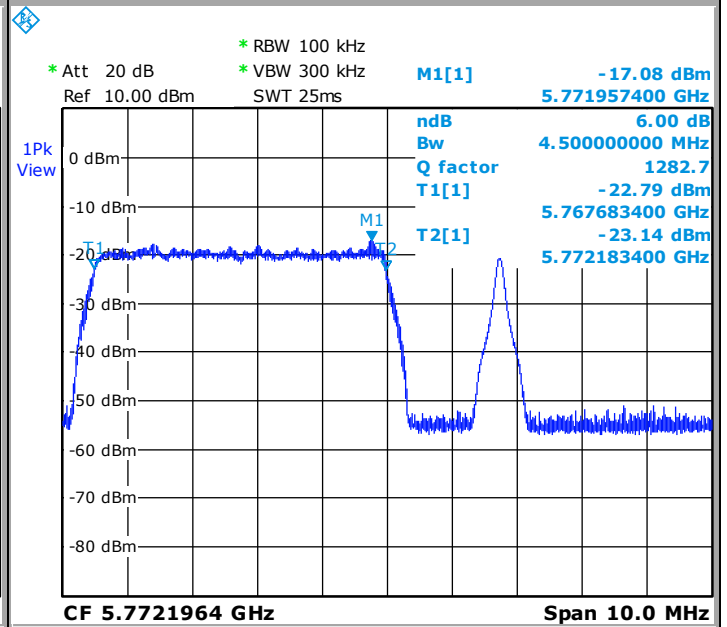
## Configuration 21

## Tx1 IQ CPRI 1



Date: 10.MAR.2015 19:52:45

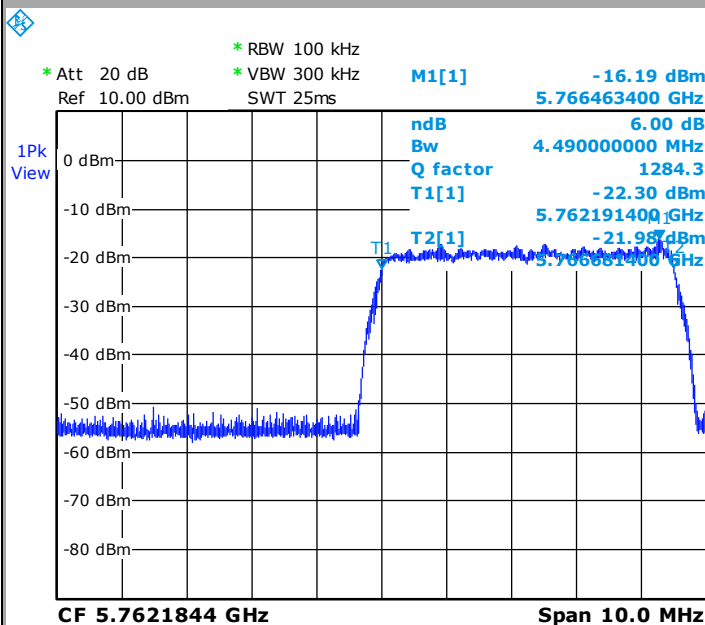
## Tx2 IQ CPRI 1



Date: 10.MAR.2015 20:02:10

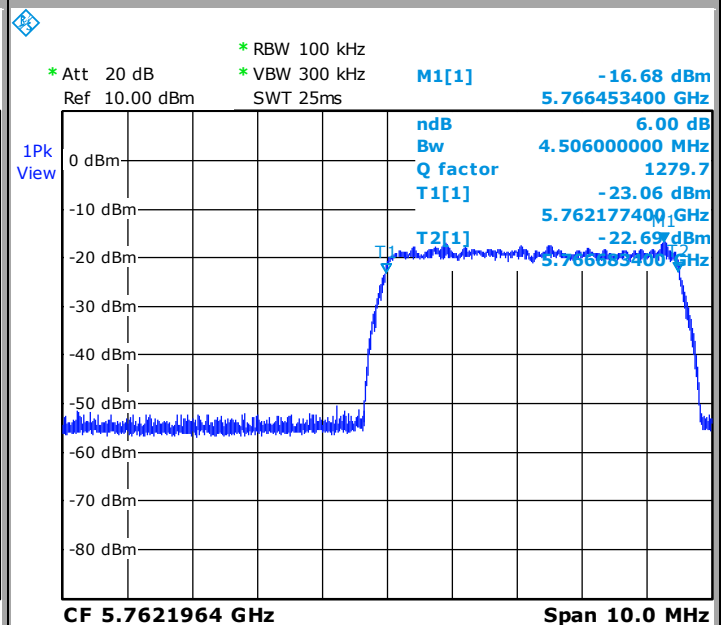
## Configuration 21

## Tx1 IQ CPRI 2



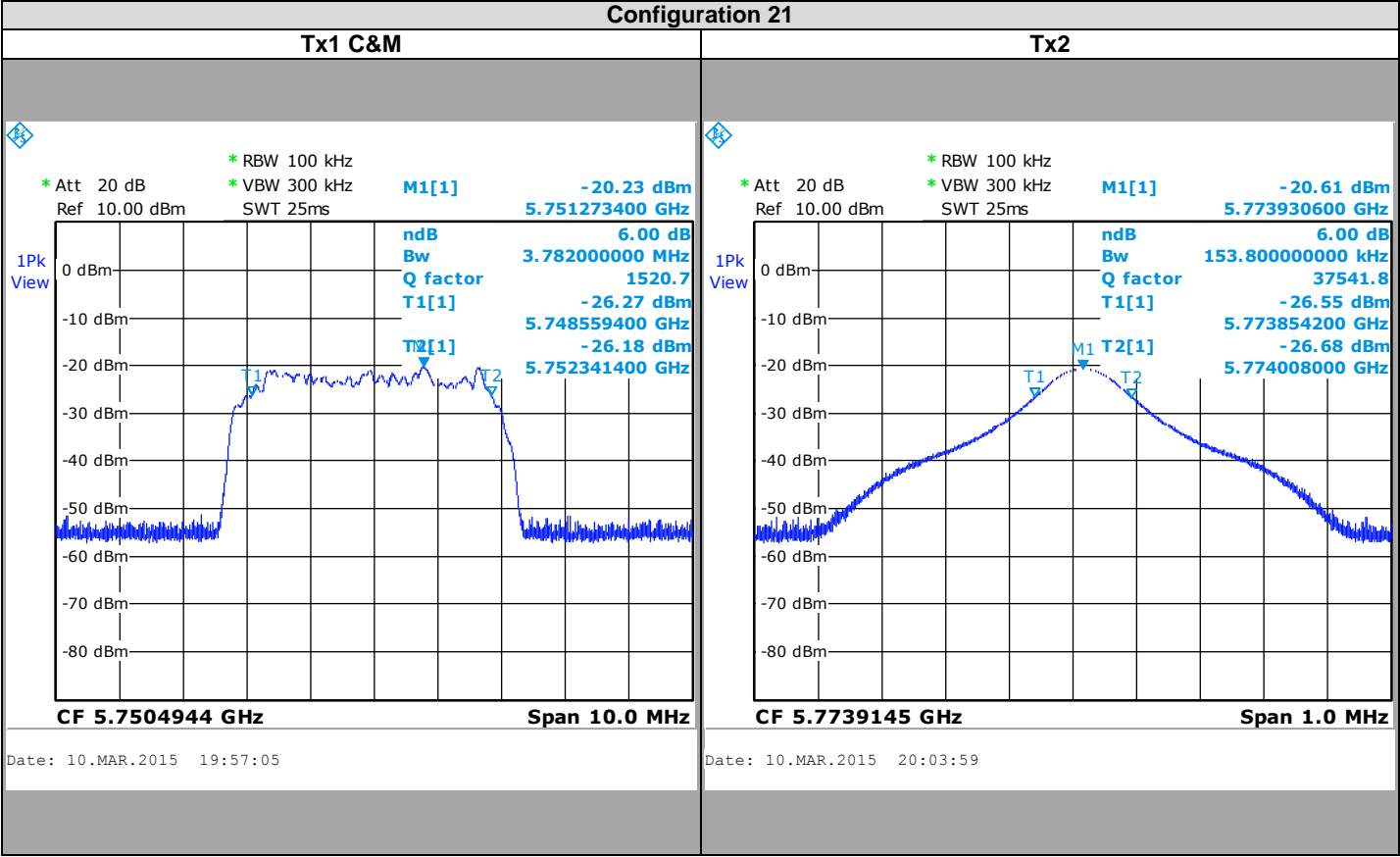
Date: 10.MAR.2015 19:54:24

## Tx2 IQ CPRI 2



Date: 10.MAR.2015 20:00:09

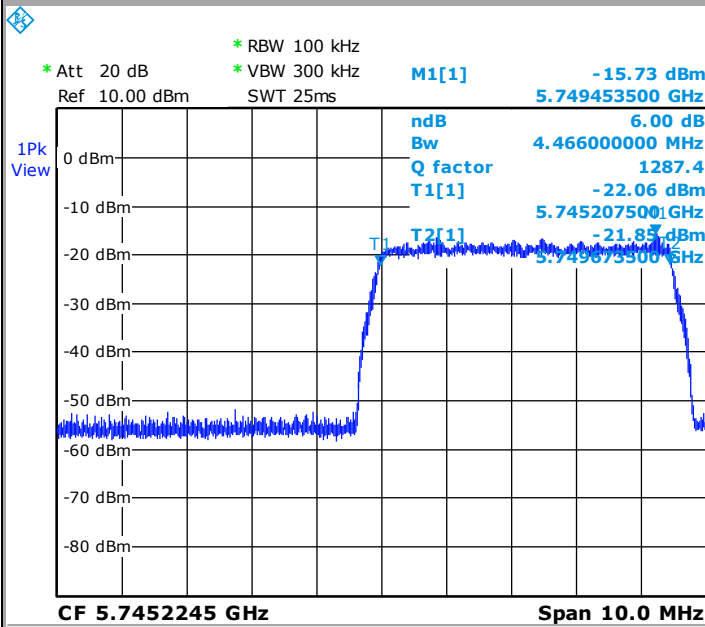




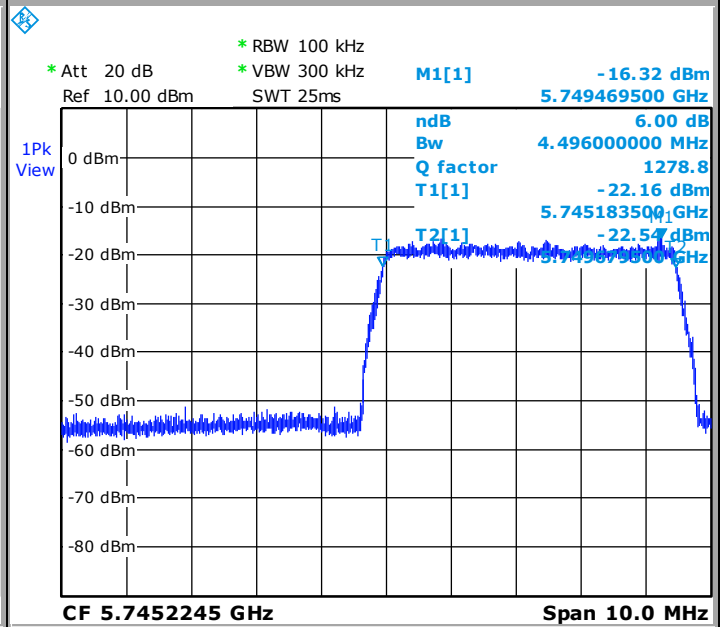


## Configuration 23

## Tx1 IQ CPRI 1

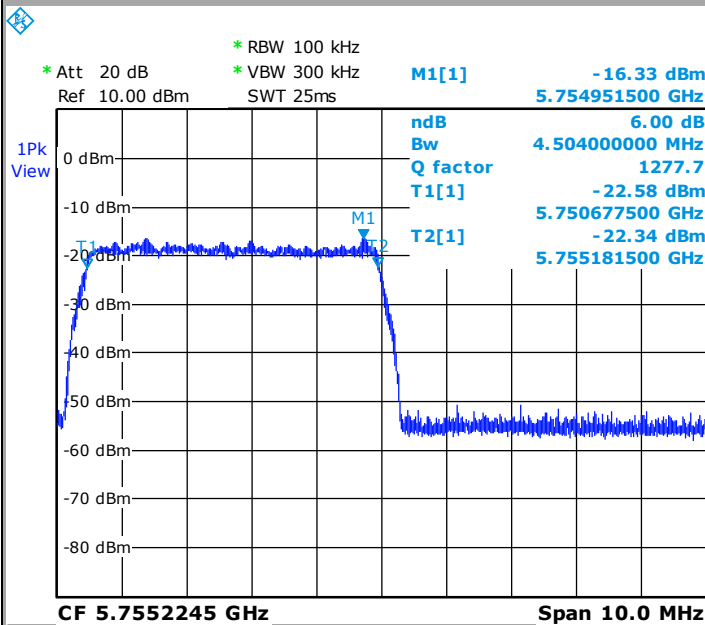


## Tx2 IQ CPRI 1

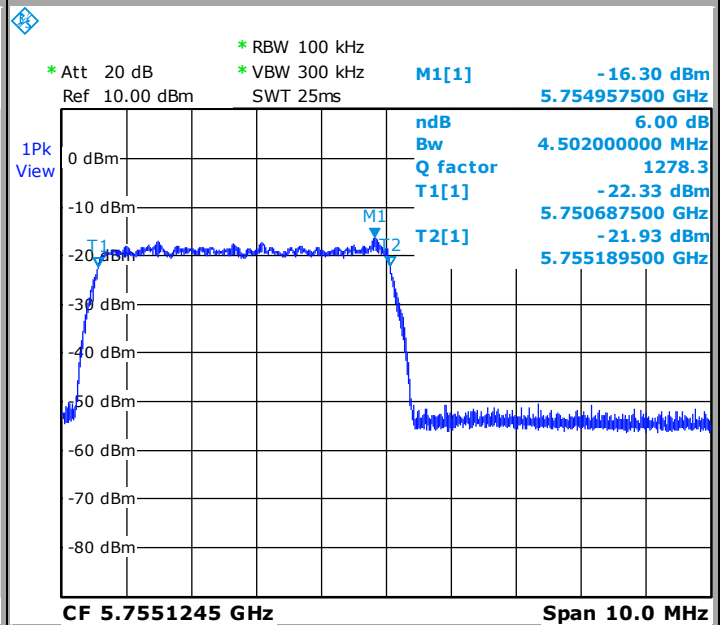


## Configuration 23

## Tx1 IQ CPRI 2



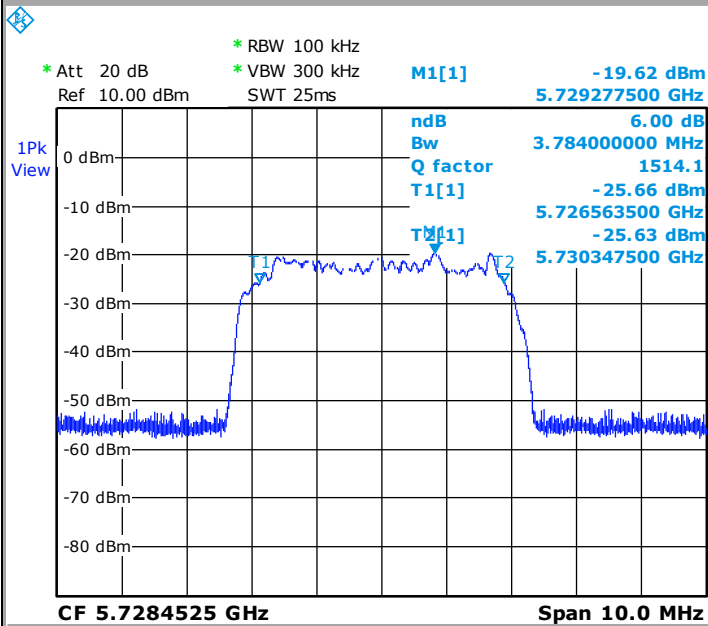
## Tx2 IQ CPRI 2





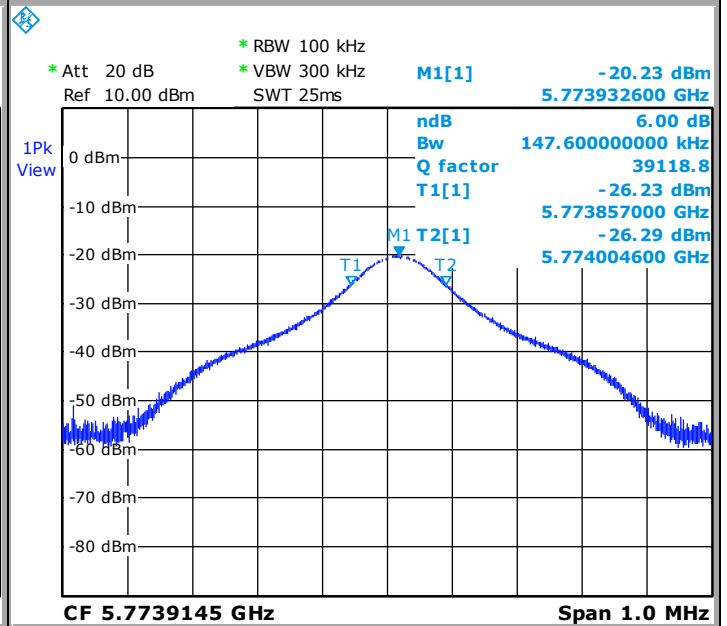
## Configuration 23

## Tx1 C&amp;M



Date: 10.MAR.2015 20:15:10

## Tx2

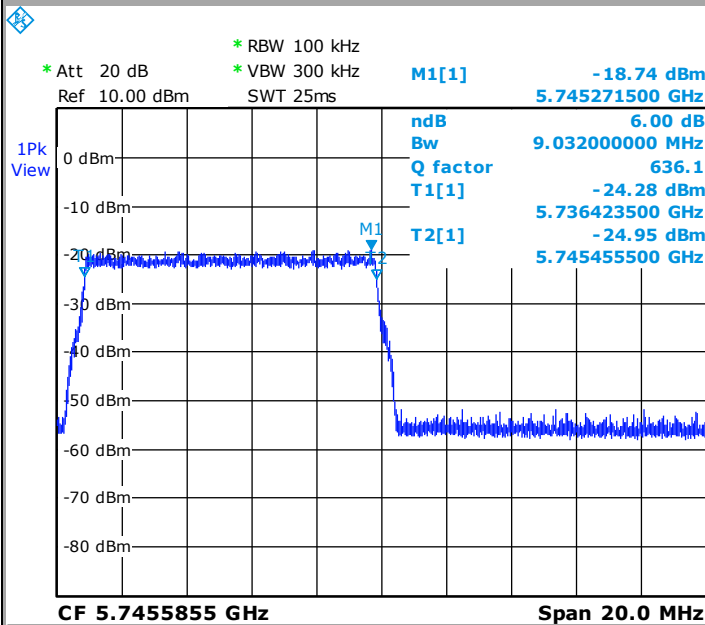


Date: 10.MAR.2015 20:06:29



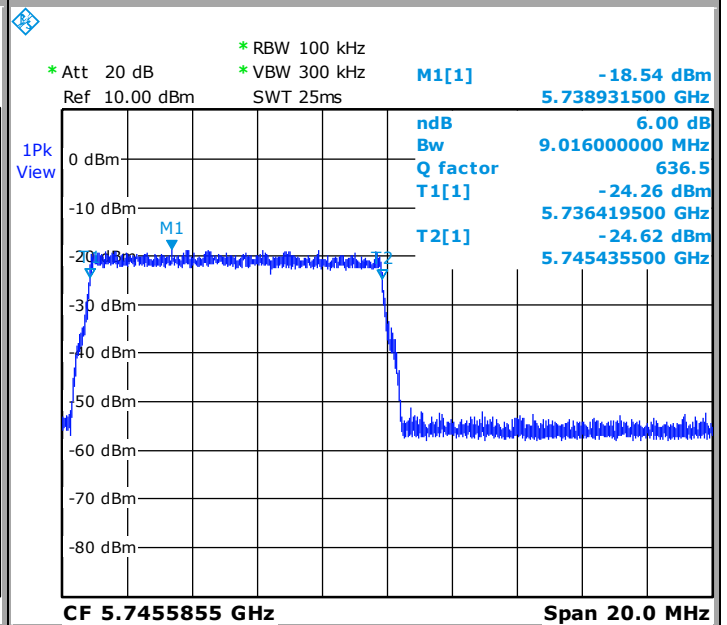
## Configuration 25

## Tx1 IQ CPRI 1



Date: 11.MAR.2015 15:25:29

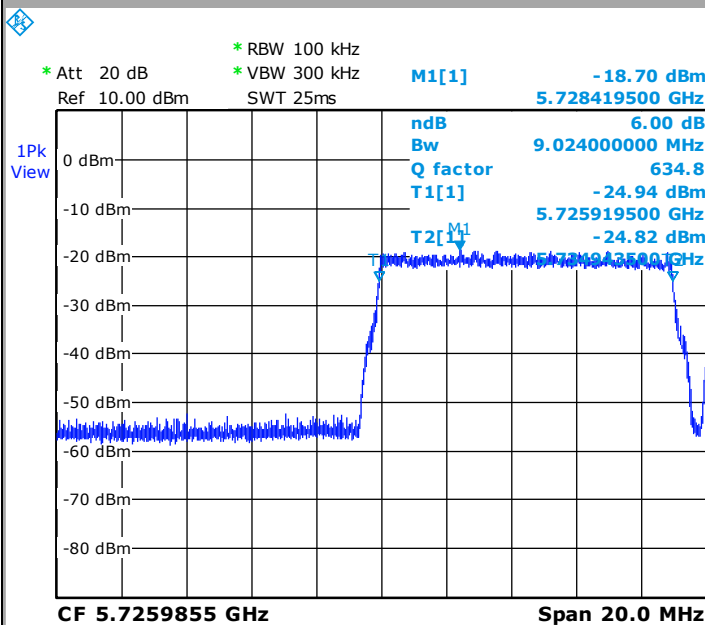
## Tx2 IQ CPRI 1



Date: 11.MAR.2015 15:29:35

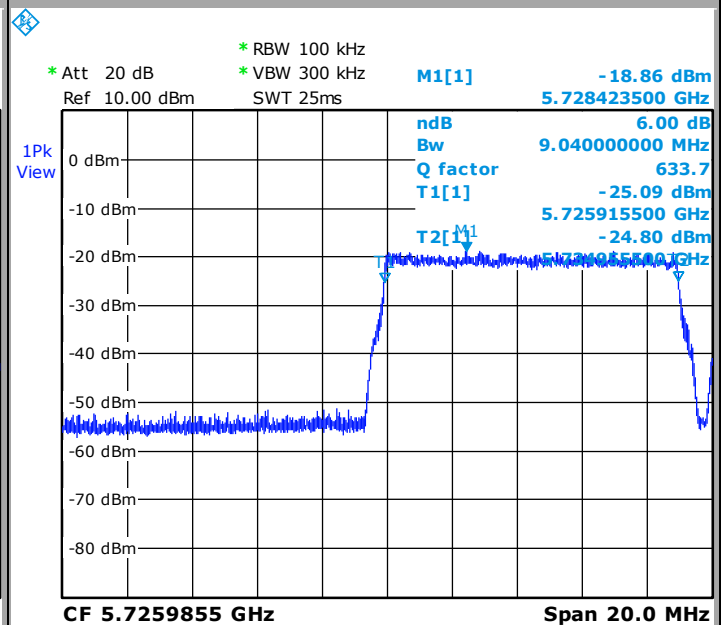
## Configuration 25

## Tx1 IQ CPRI 2

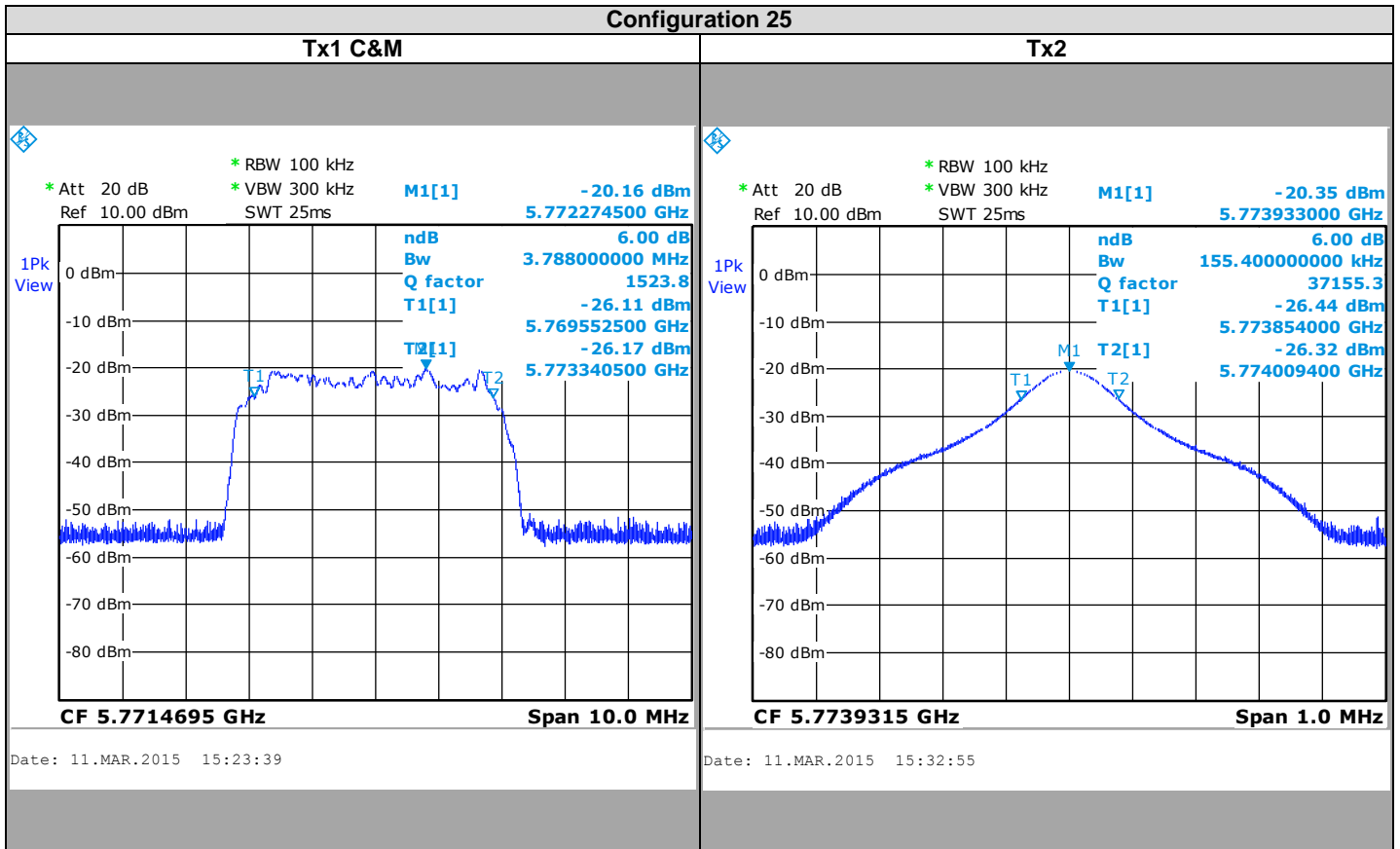


Date: 11.MAR.2015 15:26:48

## Tx2 IQ CPRI 2



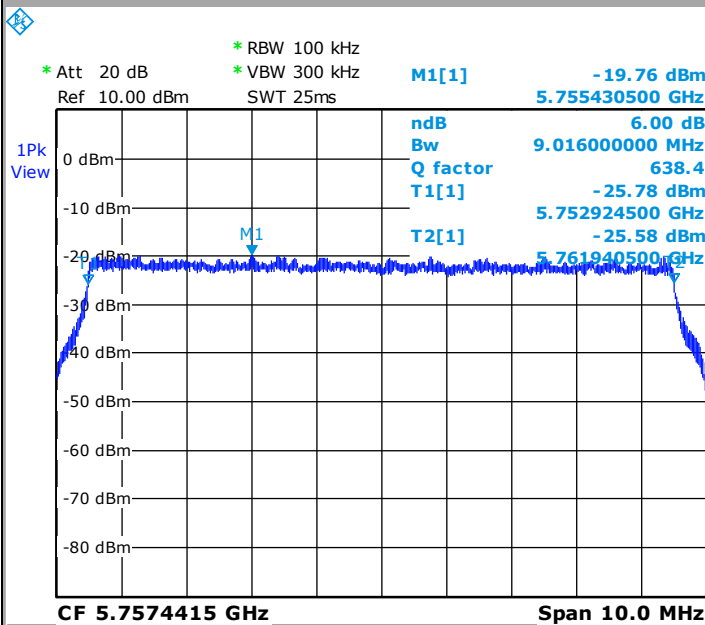
Date: 11.MAR.2015 15:28:37



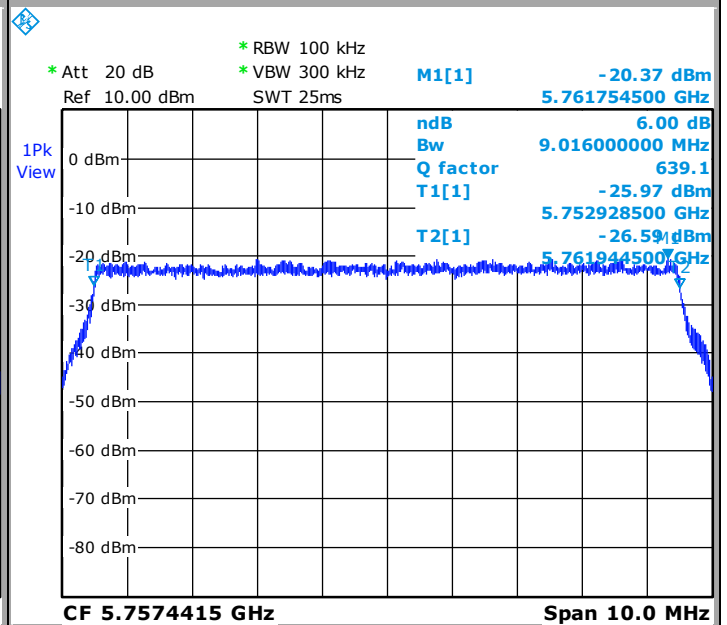


## Configuration 27

## Tx1 IQ CPRI 1

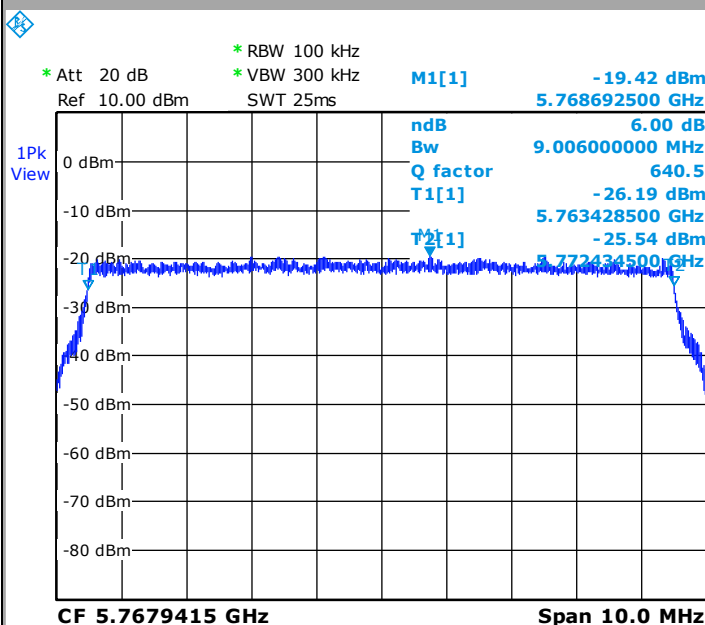


## Tx2 IQ CPRI 1

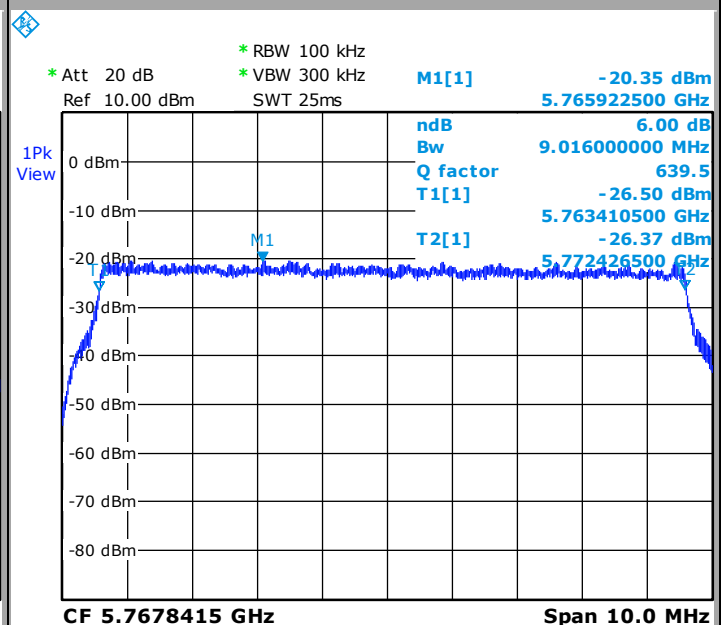


## Configuration 27

## Tx1 IQ CPRI 2



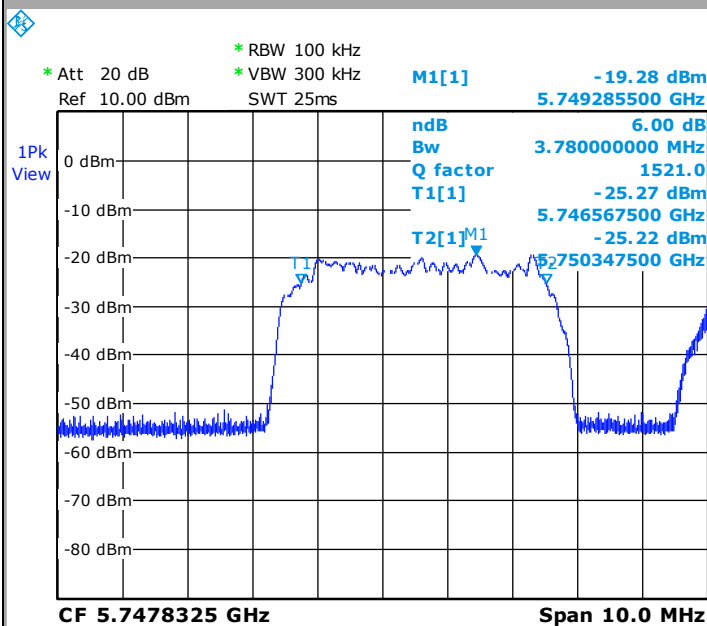
## Tx2 IQ CPRI 2





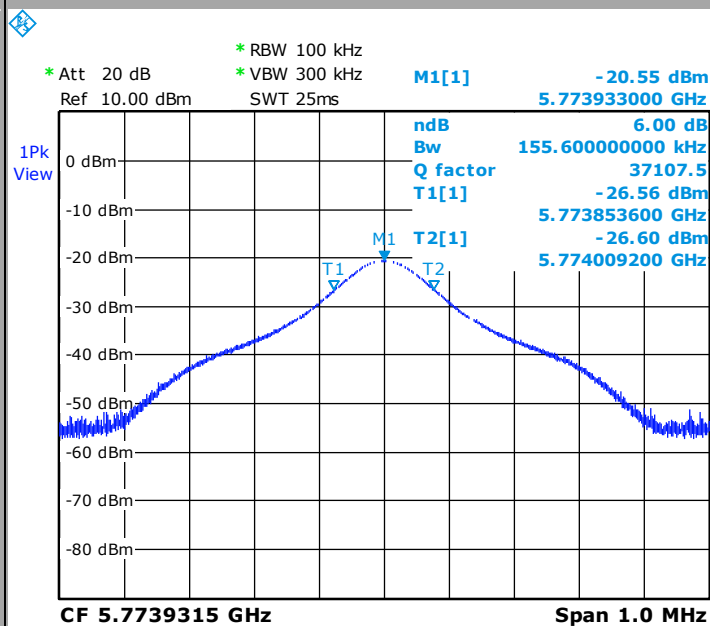
Configuration 27

Tx1 C&M



Date: 11.MAR.2015 15:45:10

Tx2

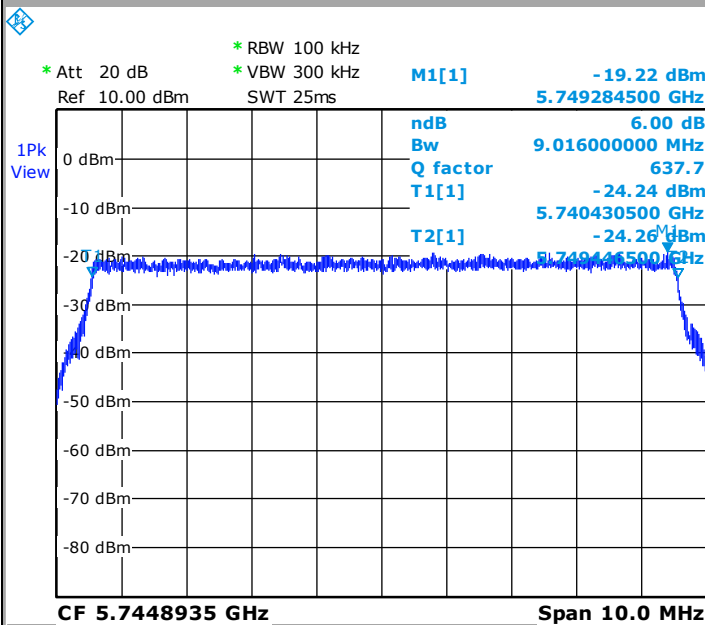


Date: 11.MAR.2015 15:37:03

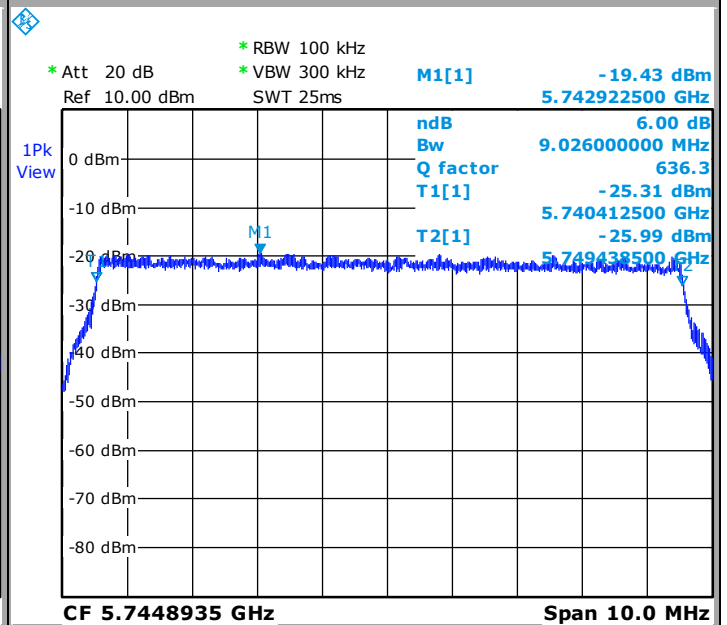


## Configuration 29

## Tx1 IQ CPRI 1

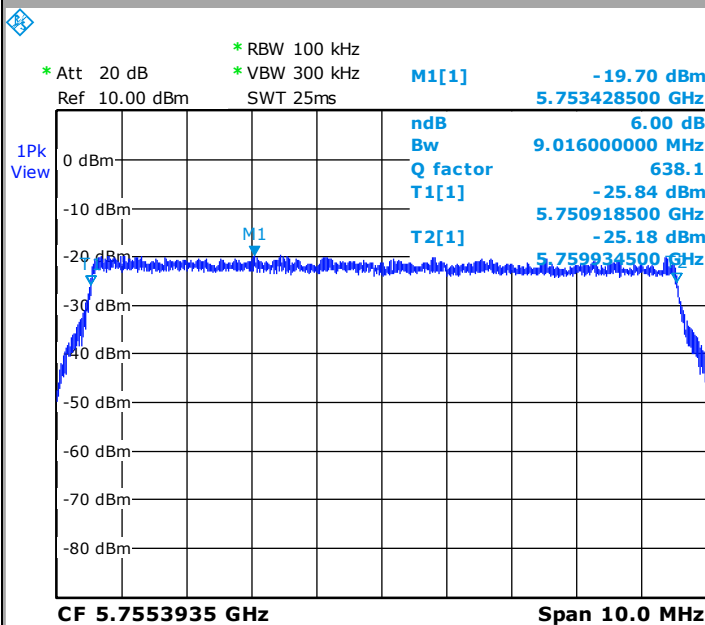


## Tx2 IQ CPRI 1

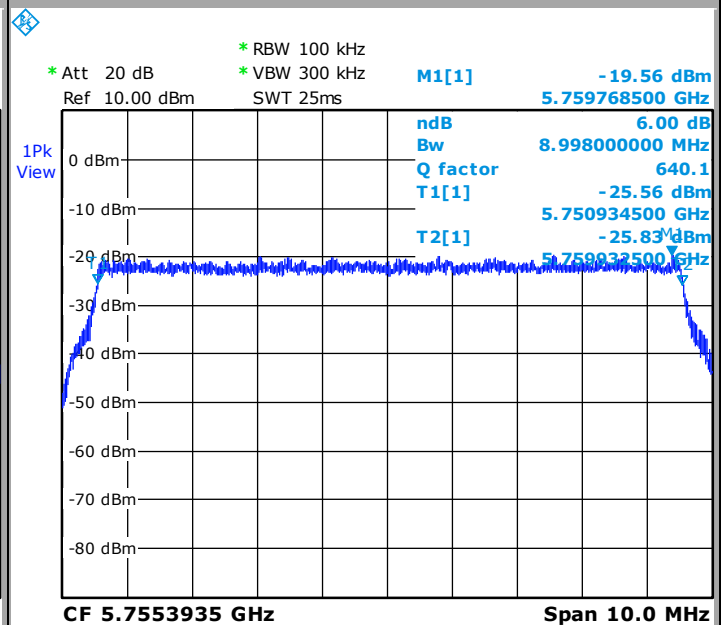


## Configuration 29

## Tx1 IQ CPRI 2



## Tx2 IQ CPRI 2

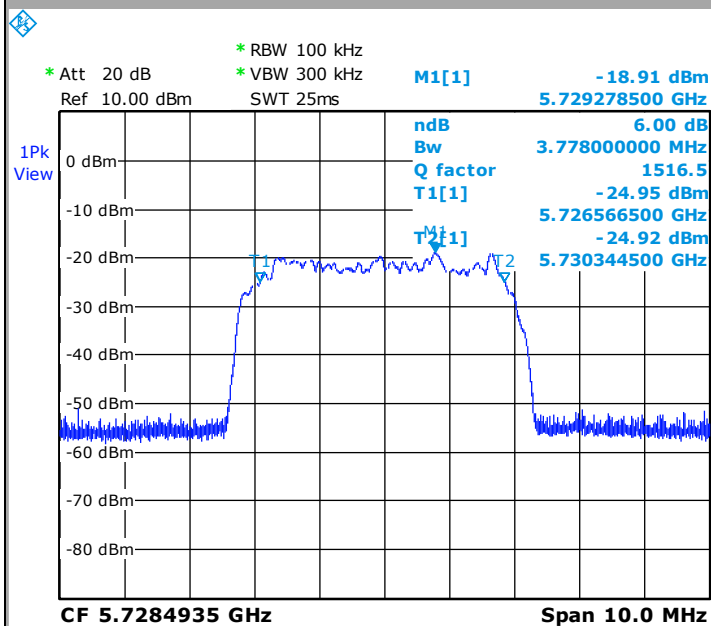






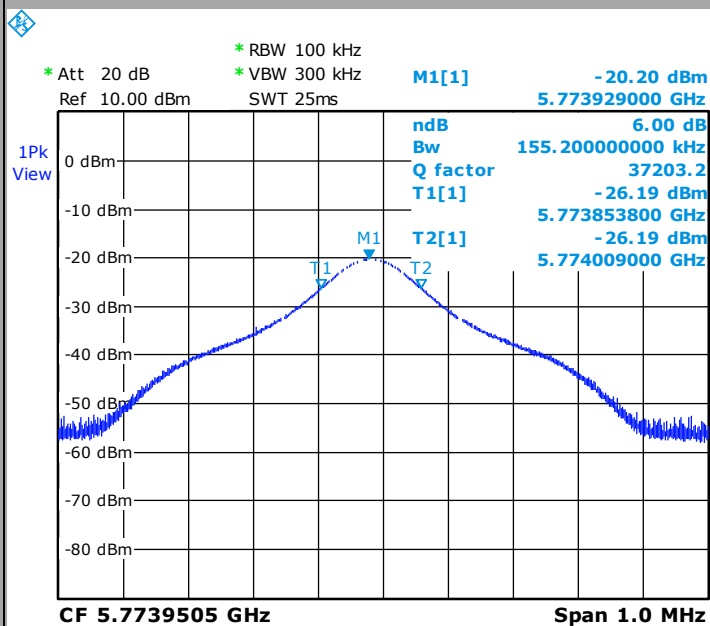
Configuration 29

Tx1 C&M



Date: 11.MAR.2015 15:49:49

Tx2

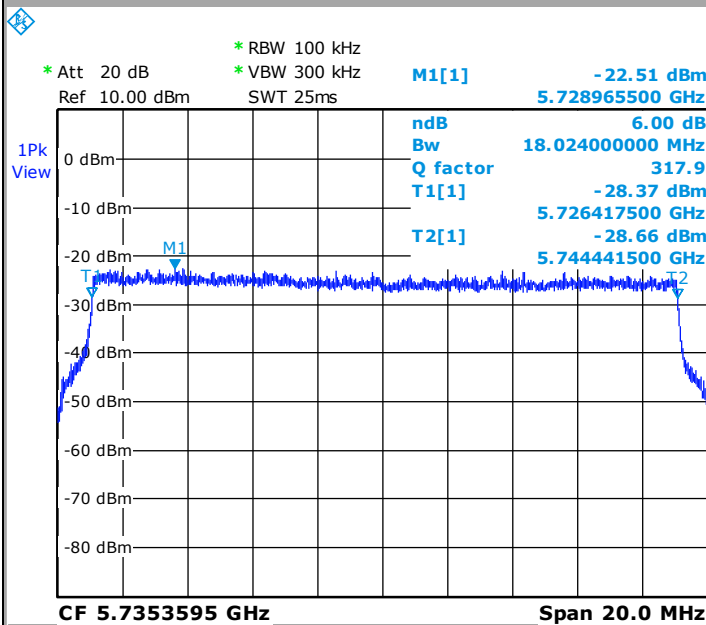


Date: 11.MAR.2015 15:56:15



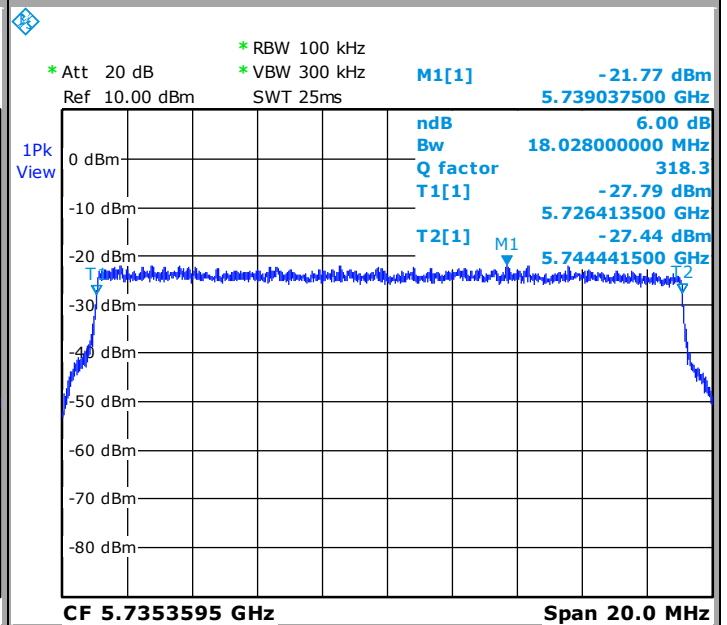
## Configuration 31

## Tx1 IQ CPRI 1



Date: 11.MAR.2015 16:07:17

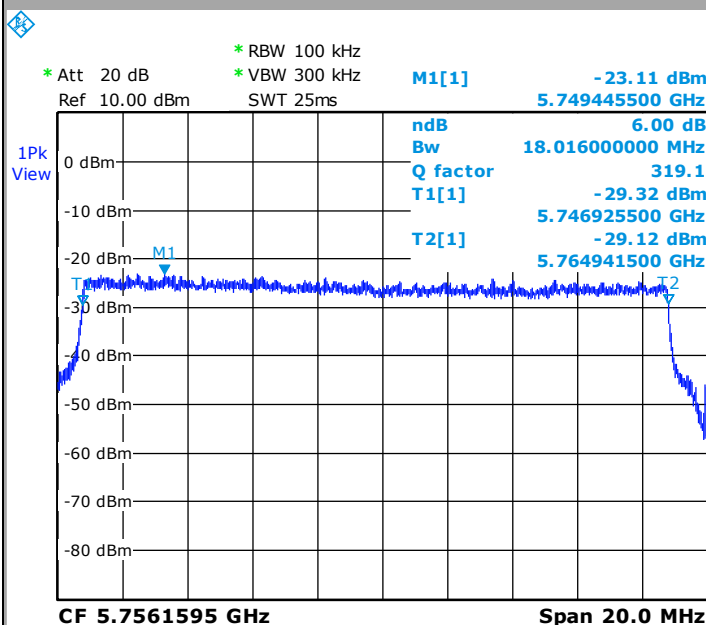
## Tx2 IQ CPRI 1



Date: 11.MAR.2015 16:02:39

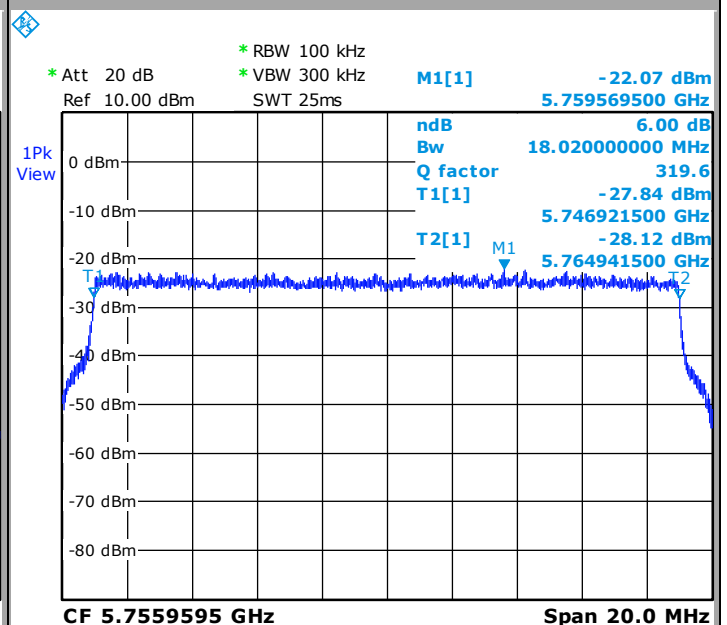
## Configuration 31

## Tx1 IQ CPRI 2



Date: 11.MAR.2015 16:05:37

## Tx2 IQ CPRI 2

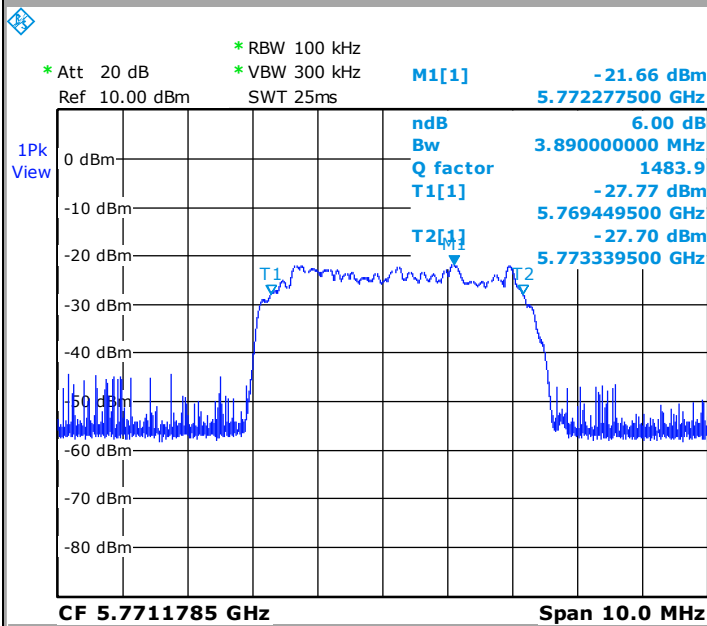


Date: 11.MAR.2015 16:00:55



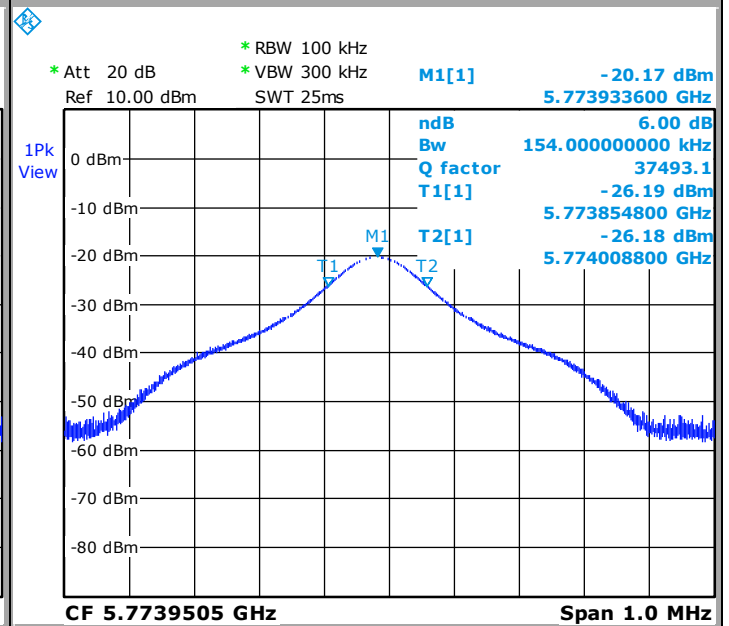
## Configuration 31

## Tx1 C&amp;M



Date: 11.MAR.2015 16:08:49

## Tx2

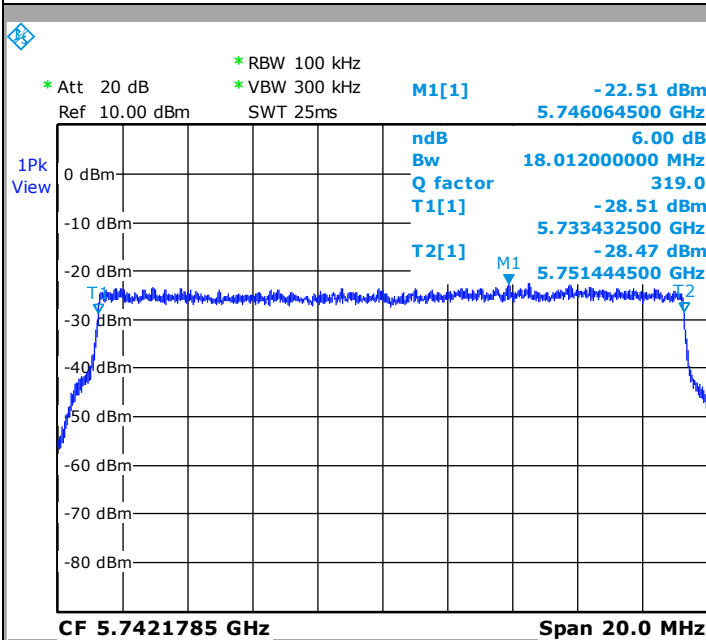


Date: 11.MAR.2015 15:59:20

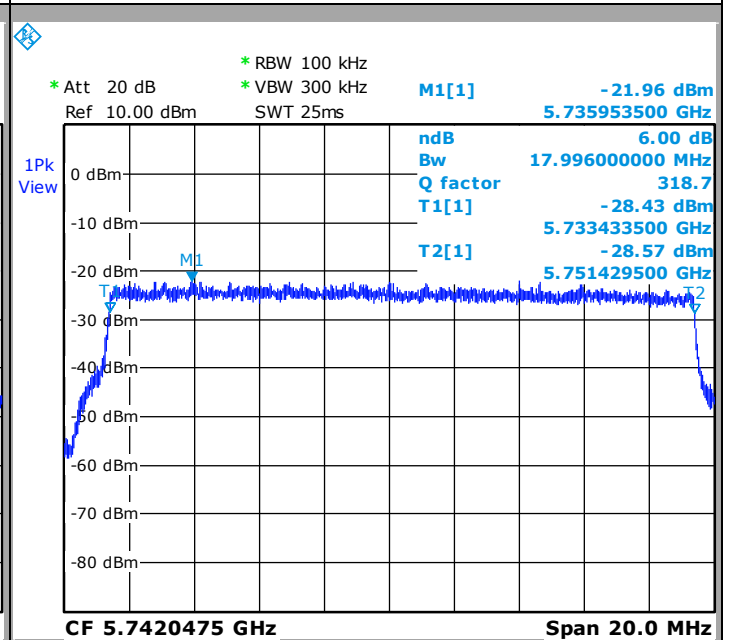


## Configuration 32

## Tx1 IQ CPRI 1

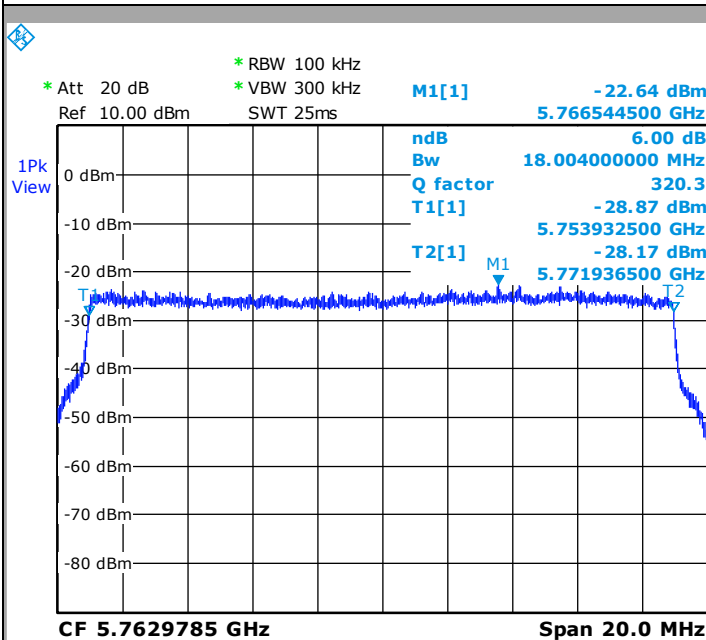


## Tx2 IQ CPRI 1

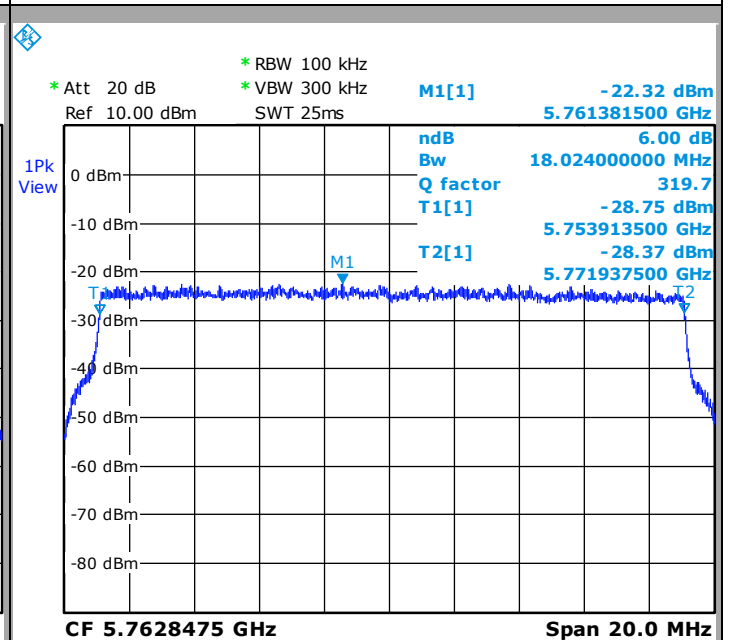


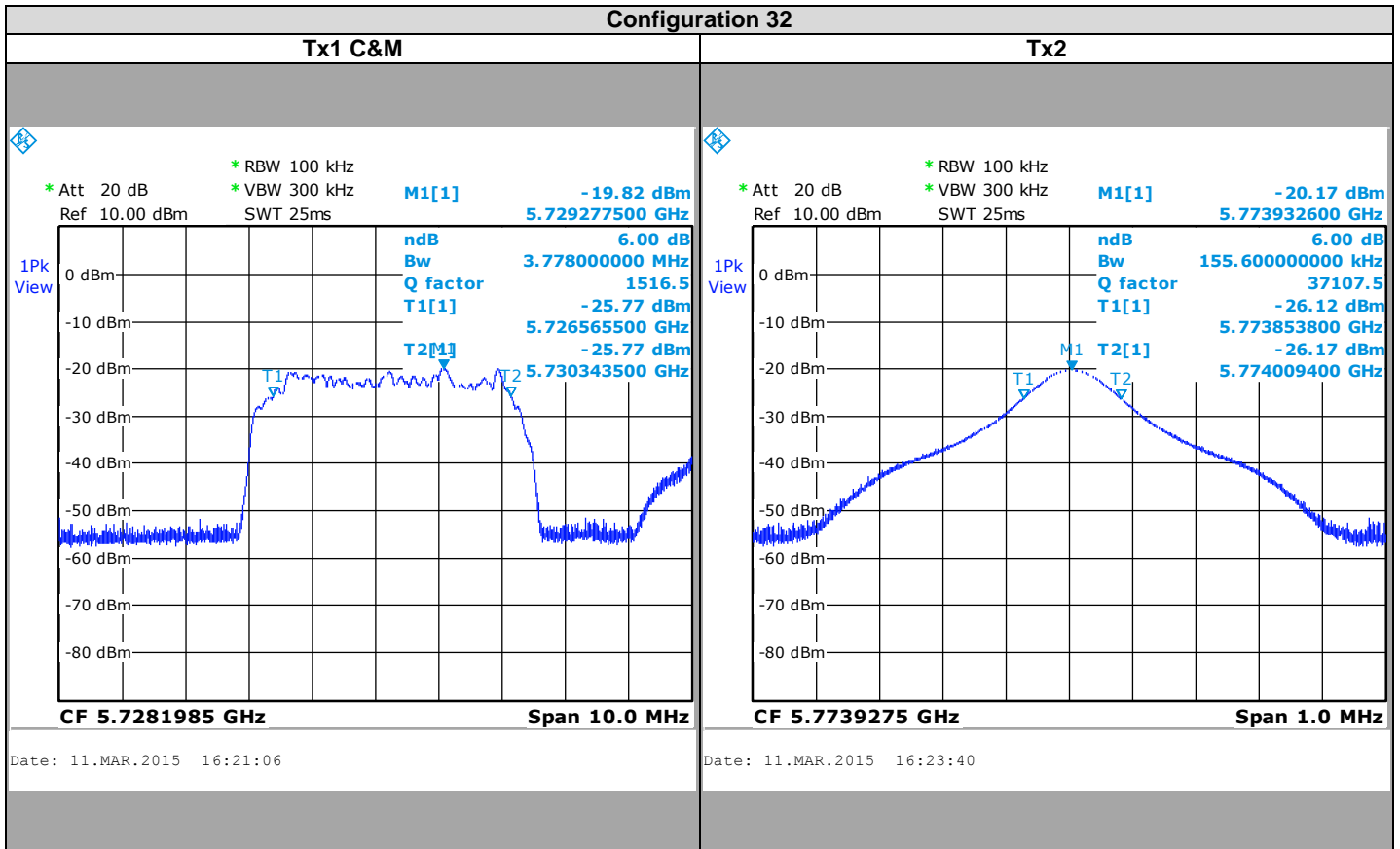
## Configuration 32

## Tx1 IQ CPRI 2



## Tx2 IQ CPRI 2

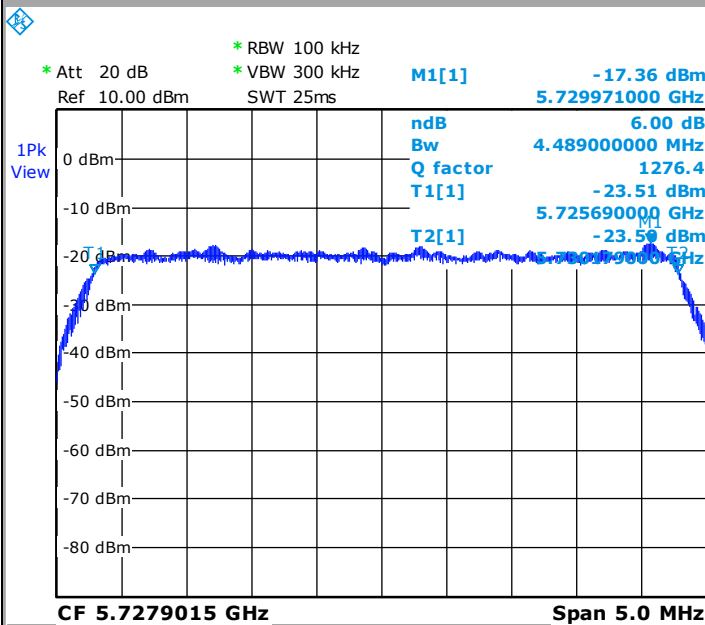






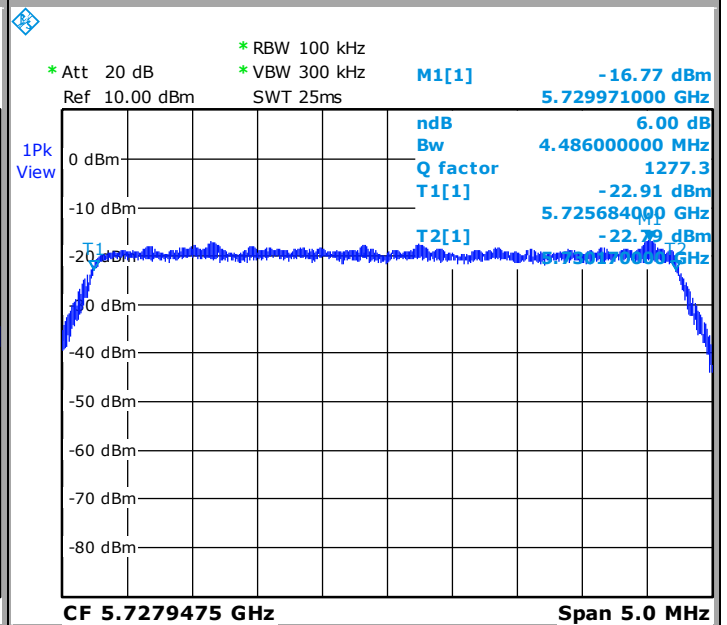
## Configuration 33

## Tx1 IQ CPRI 1



Date: 11.MAR.2015 16:44:13

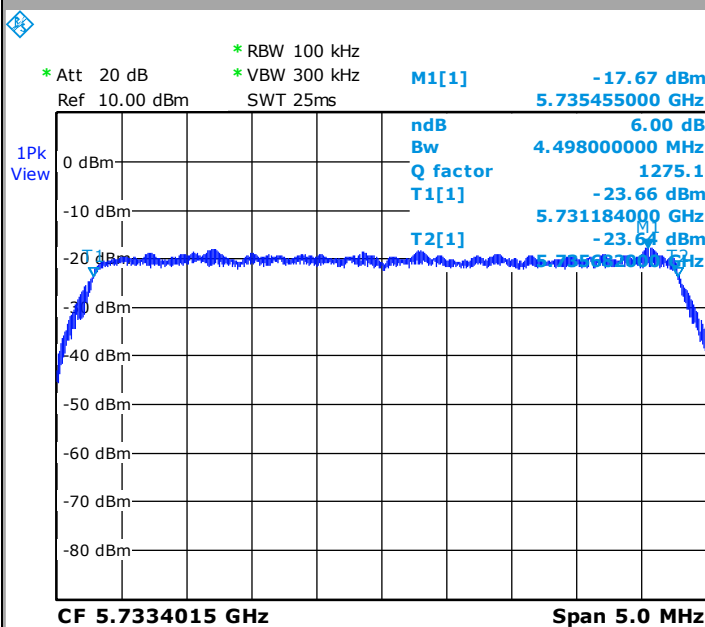
## Tx2 IQ CPRI 1



Date: 11.MAR.2015 16:34:40

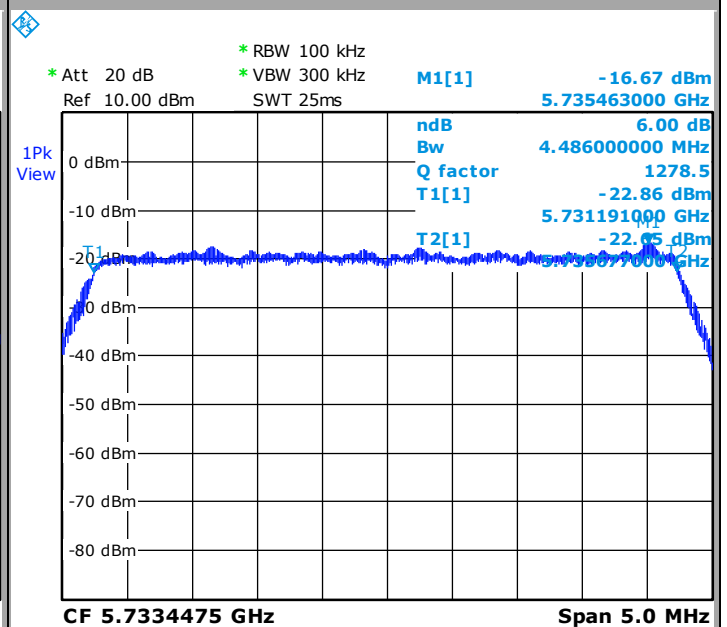
## Configuration 33

## Tx1 IQ CPRI 2



Date: 11.MAR.2015 16:42:23

## Tx2 IQ CPRI 2

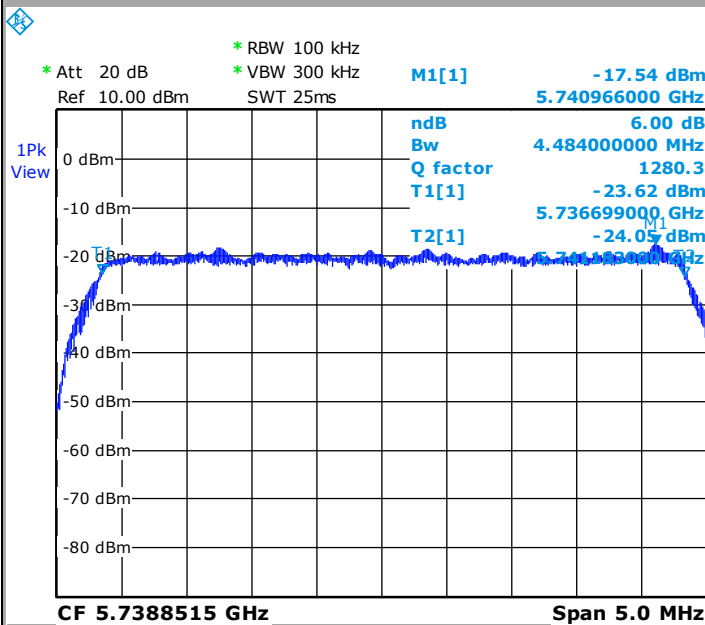


Date: 11.MAR.2015 16:33:34



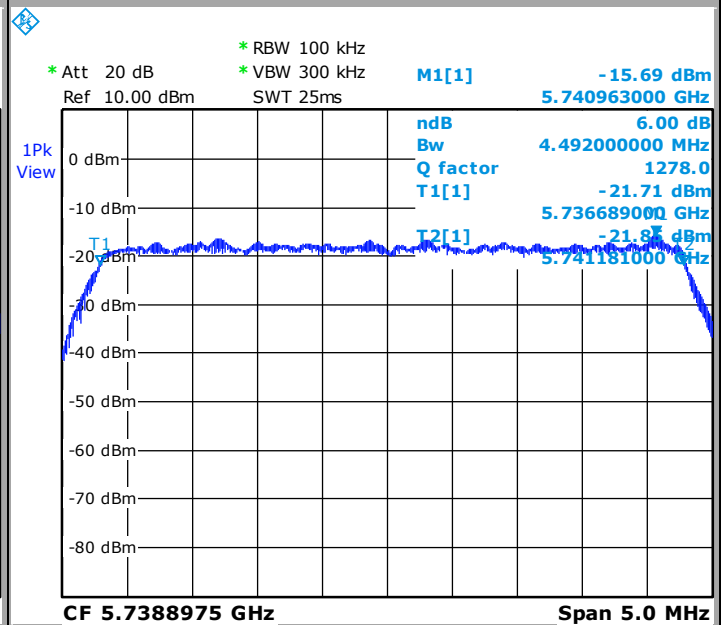
## Configuration 33

## Tx1 IQ CPRI 3



Date: 11.MAR.2015 16:40:50

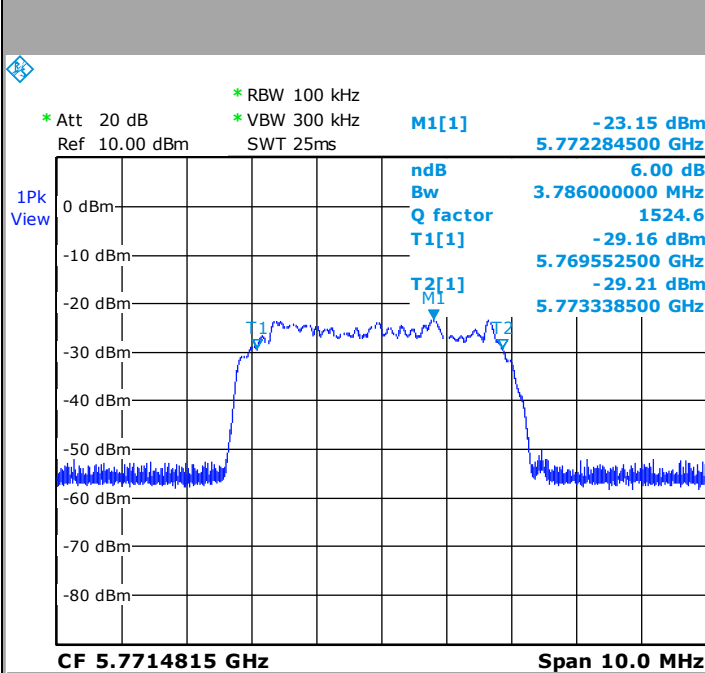
## Tx2 IQ CPRI 3



Date: 11.MAR.2015 16:32:03

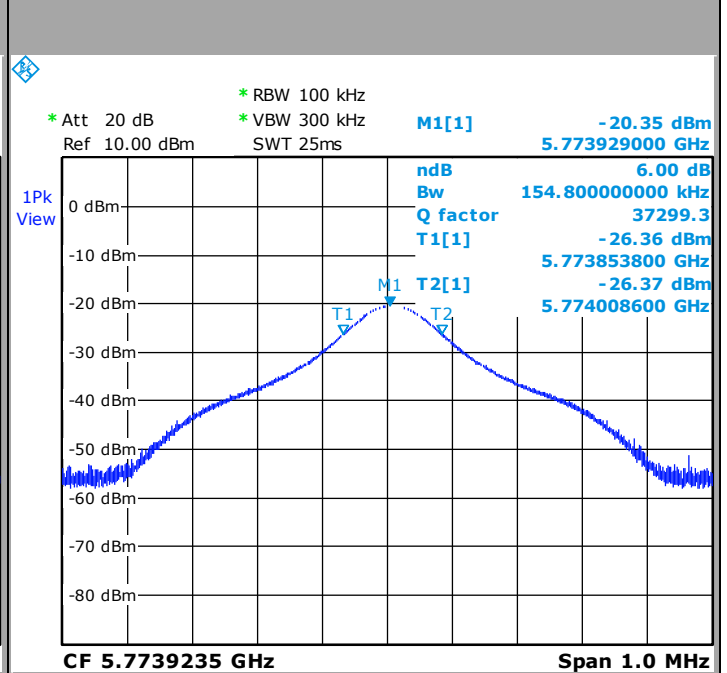
## Configuration 33

## Tx1 C&amp;M

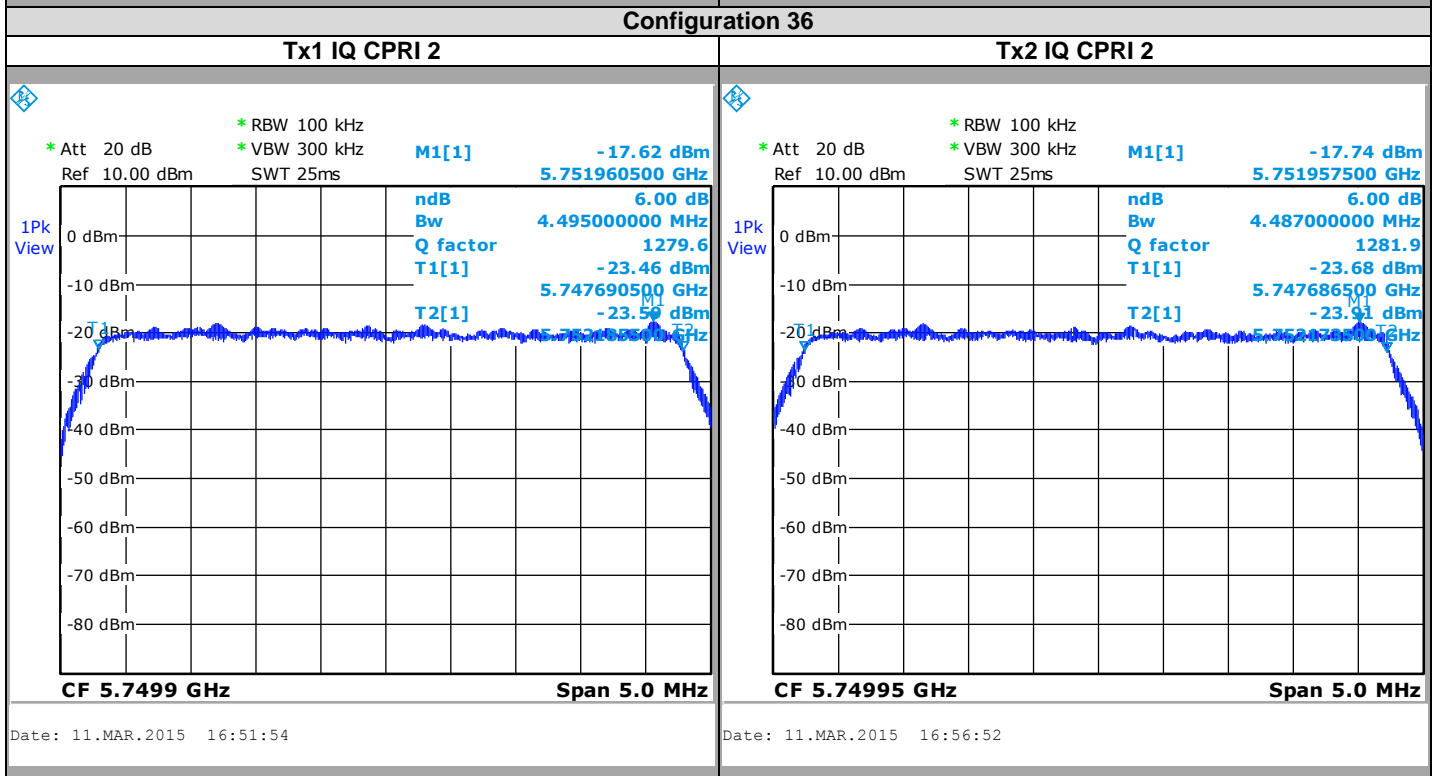
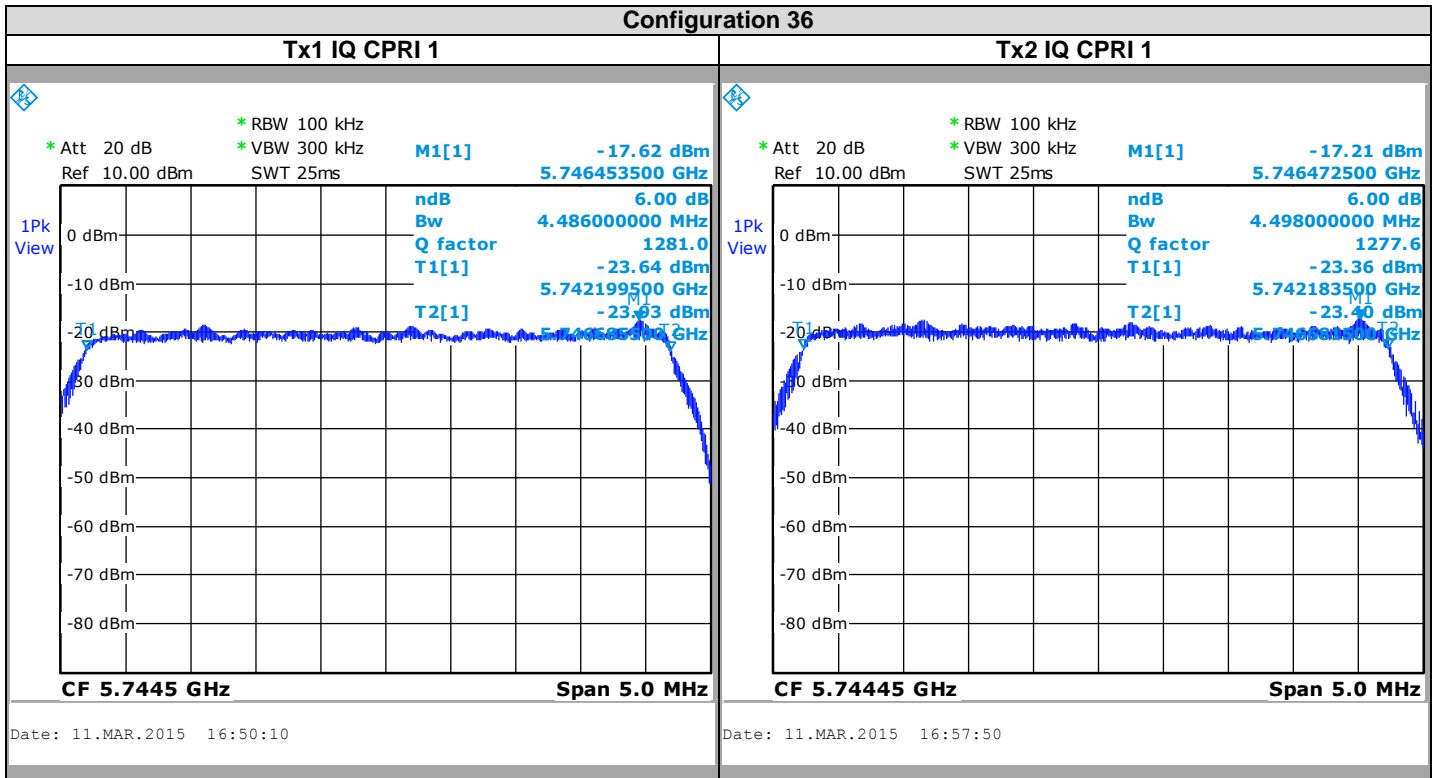


Date: 11.MAR.2015 16:39:09

## Tx2



Date: 11.MAR.2015 16:36:45

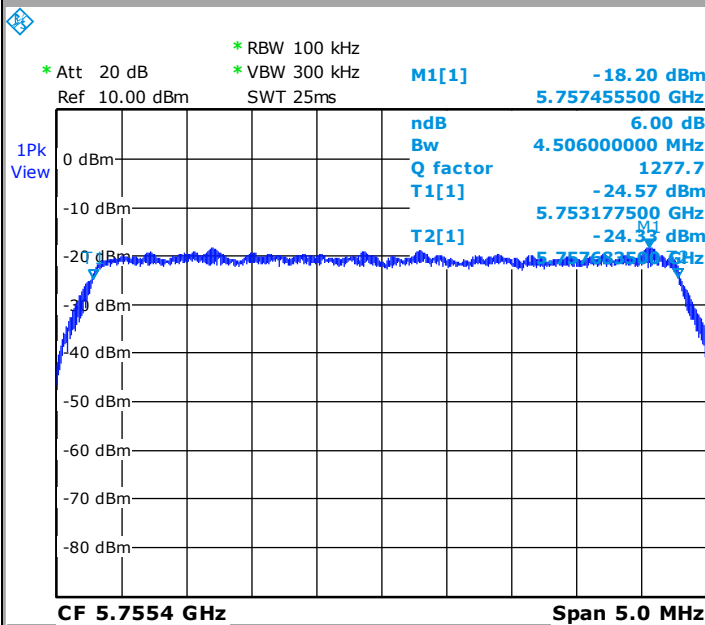






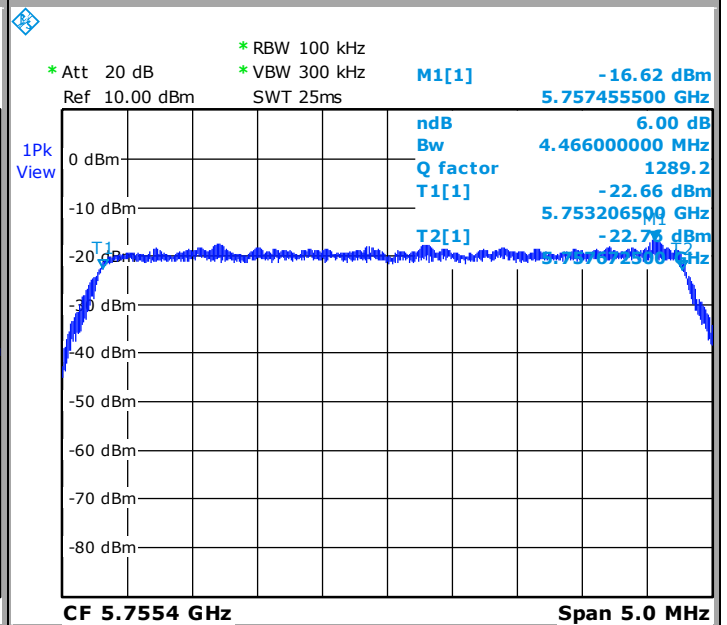
## Configuration 36

## Tx1 IQ CPRI 3



Date: 11.MAR.2015 16:53:34

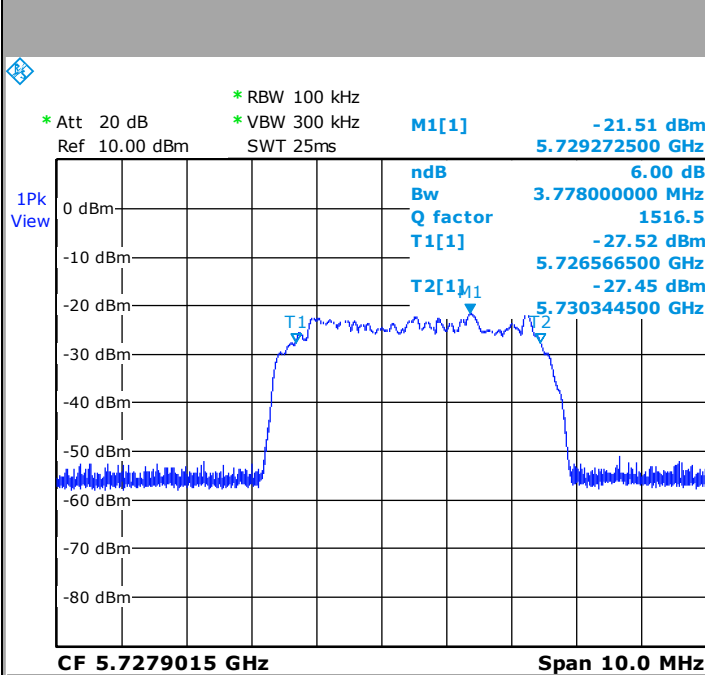
## Tx2 IQ CPRI 3



Date: 11.MAR.2015 16:55:06

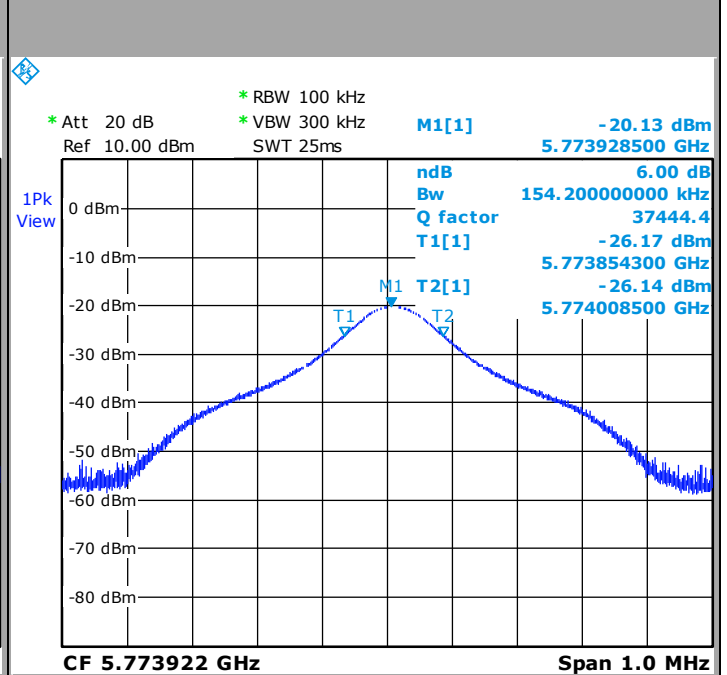
## Configuration 36

## Tx1 C&amp;M



Date: 11.MAR.2015 16:48:01

## Tx2

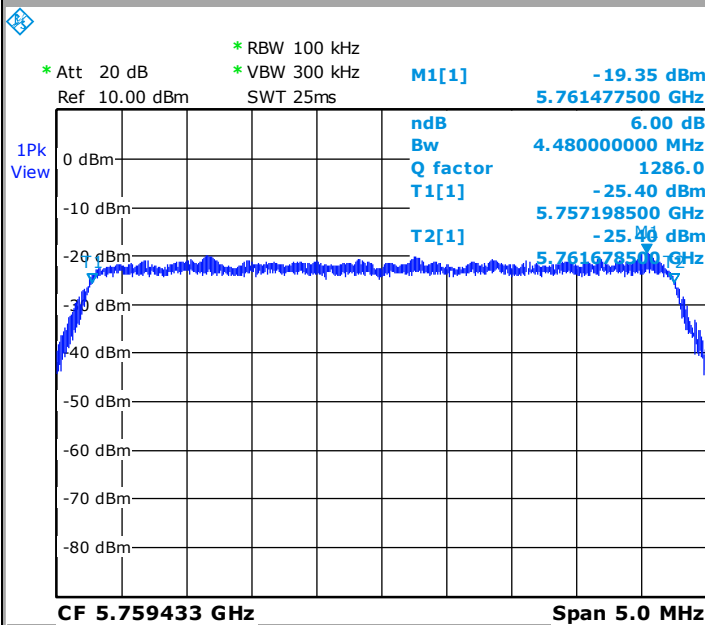


Date: 11.MAR.2015 16:59:09



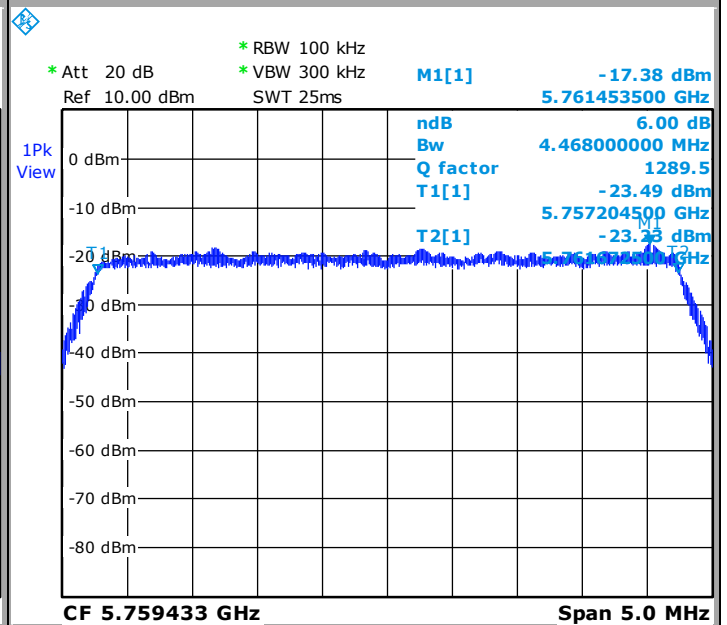
## Configuration 38

## Tx1 IQ CPRI 1



Date: 11.MAR.2015 17:08:00

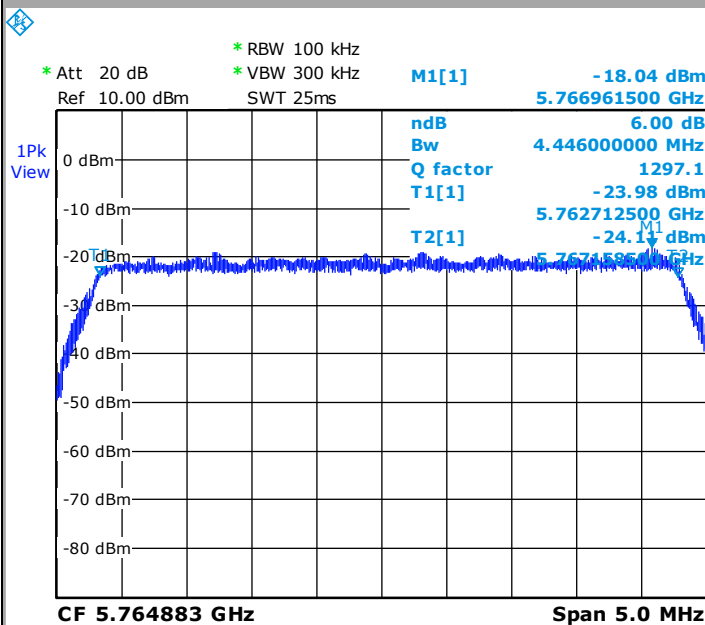
## Tx2 IQ CPRI 1



Date: 11.MAR.2015 17:05:28

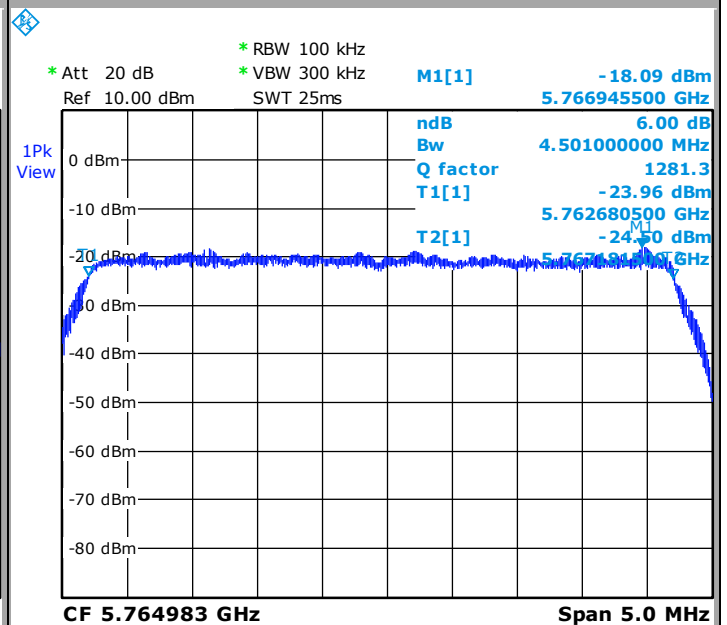
## Configuration 38

## Tx1 IQ CPRI 2



Date: 11.MAR.2015 17:07:09

## Tx2 IQ CPRI 2

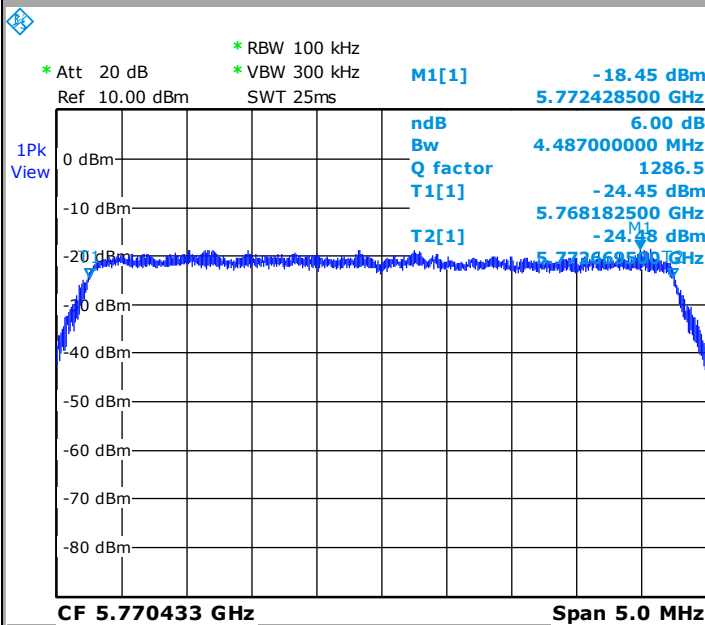


Date: 11.MAR.2015 17:04:36



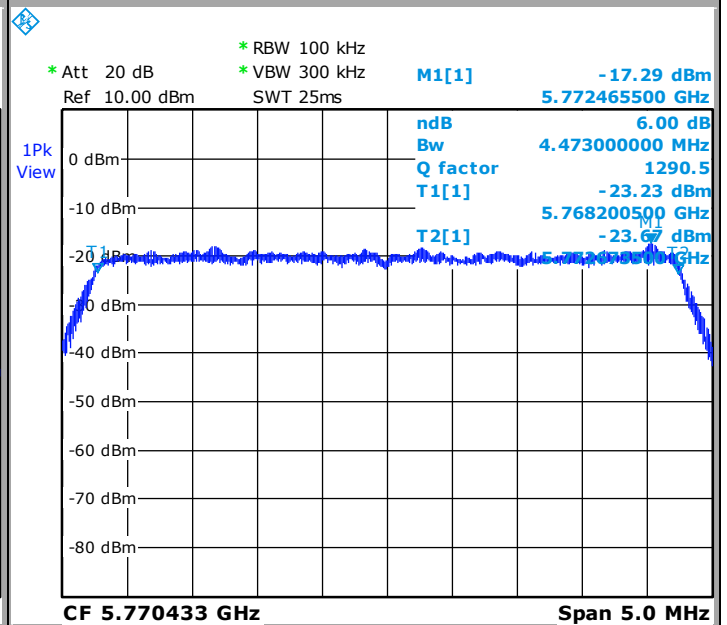
## Configuration 38

## Tx1 IQ CPRI 3



Date: 11.MAR.2015 17:09:10

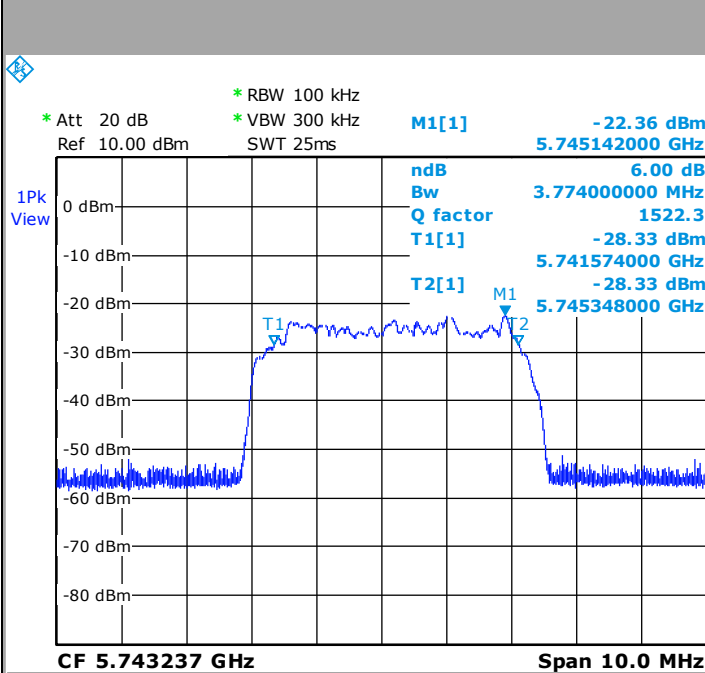
## Tx2 IQ CPRI 3



Date: 11.MAR.2015 17:03:30

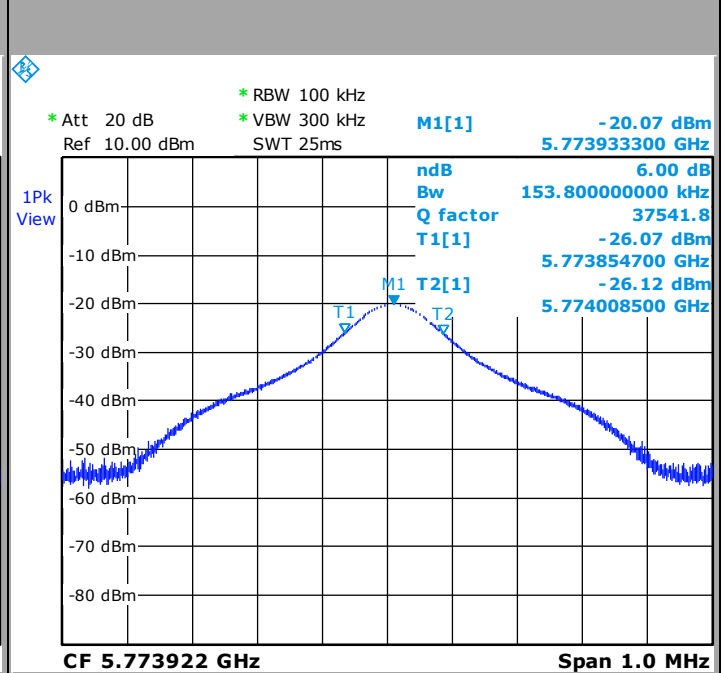
## Configuration 38

## Tx1 C&amp;M



Date: 11.MAR.2015 17:10:27

## Tx2

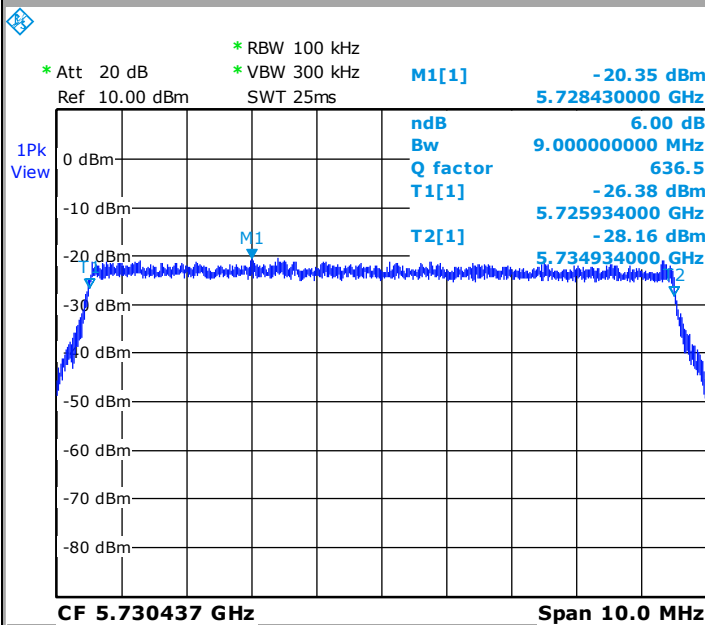


Date: 11.MAR.2015 17:01:51

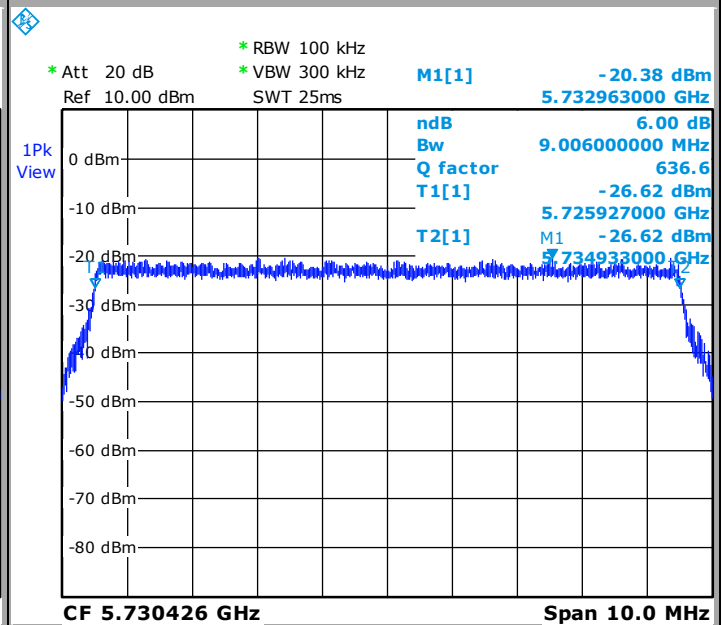


## Configuration 39

## Tx1 IQ CPRI 1

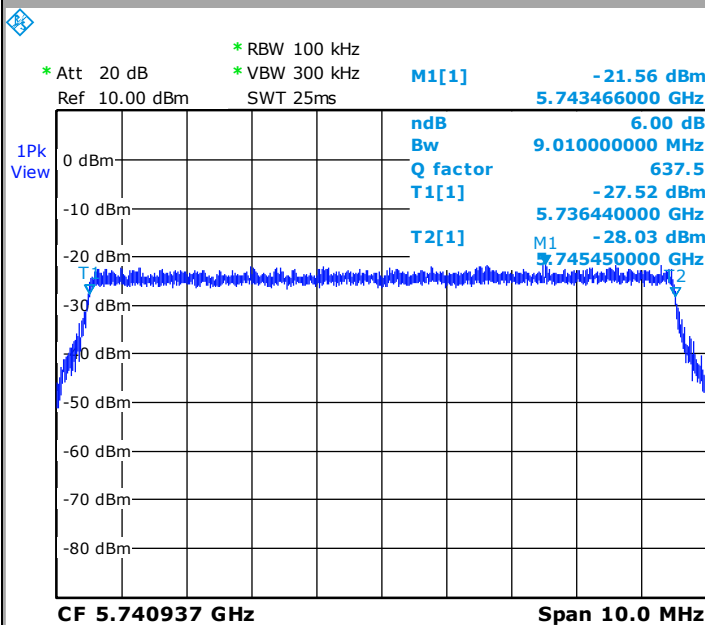


## Tx2 IQ CPRI 1

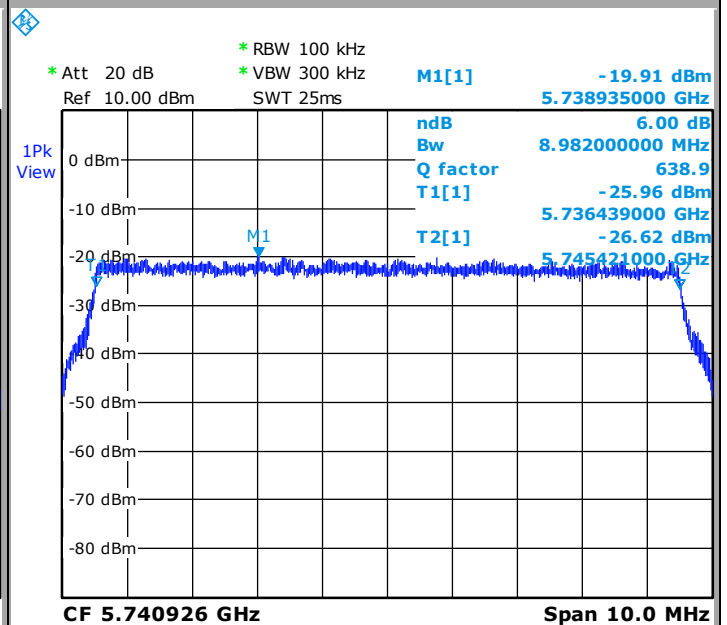


## Configuration 39

## Tx1 IQ CPRI 2



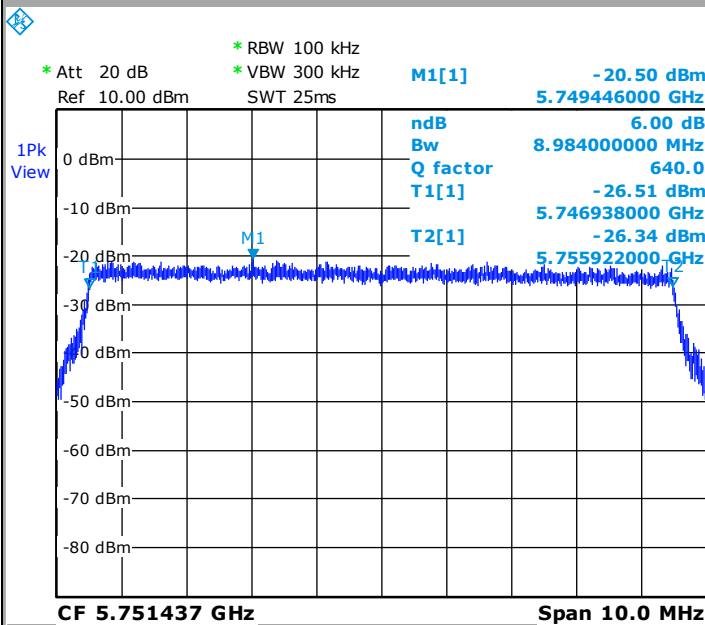
## Tx2 IQ CPRI 2



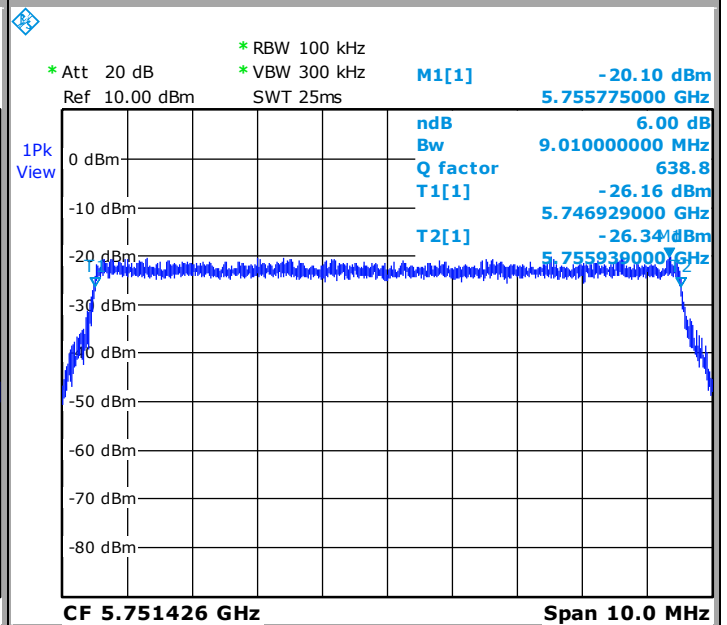


## Configuration 39

## Tx1 IQ CPRI 3

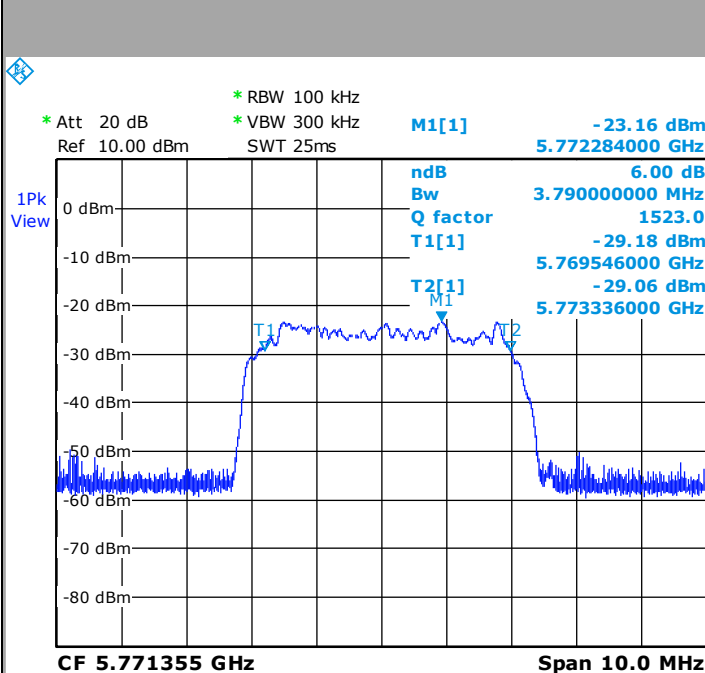


## Tx2 IQ CPRI 3

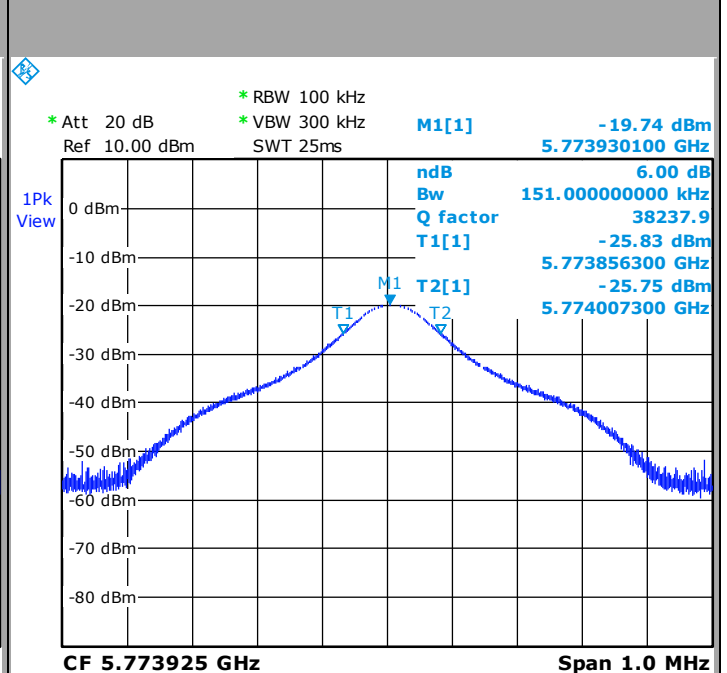


## Configuration 39

## Tx1 C&amp;M



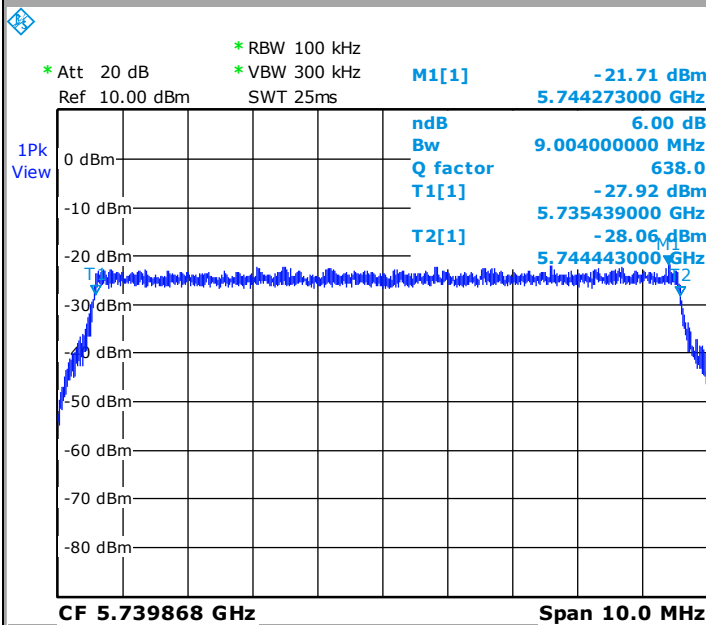
## Tx2



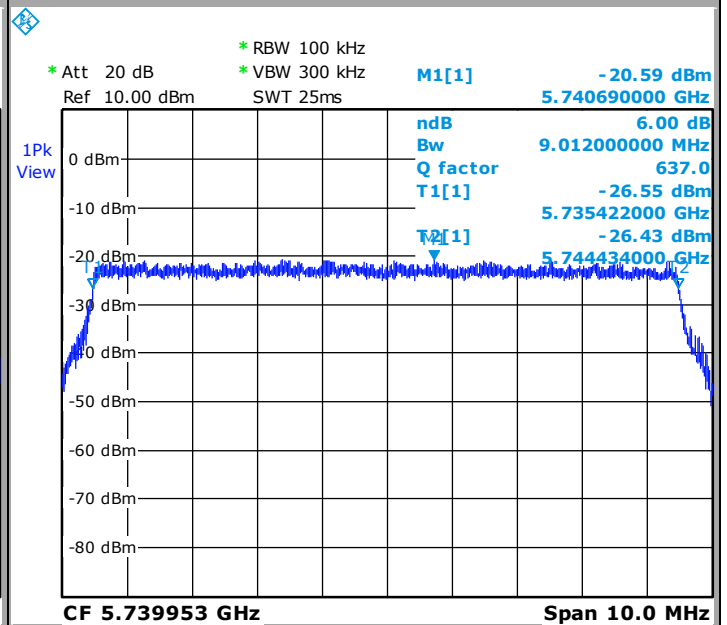


## Configuration 41

## Tx1 IQ CPRI 1

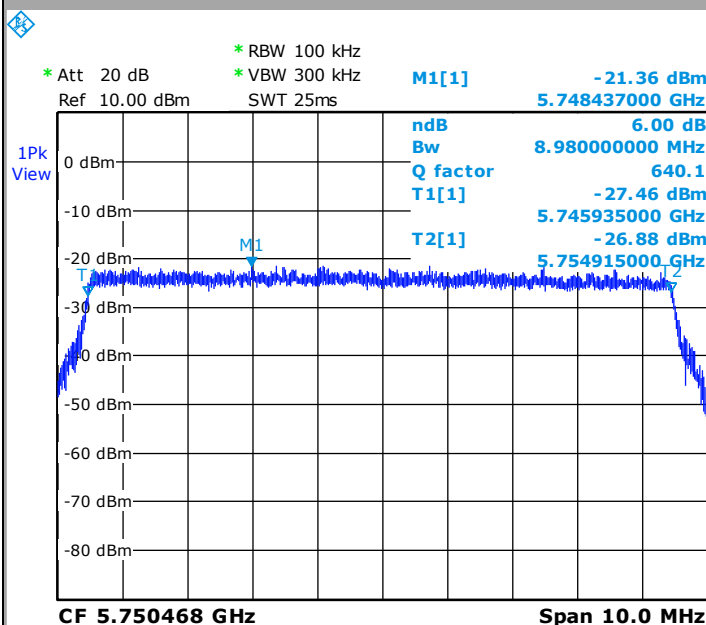


## Tx2 IQ CPRI 1

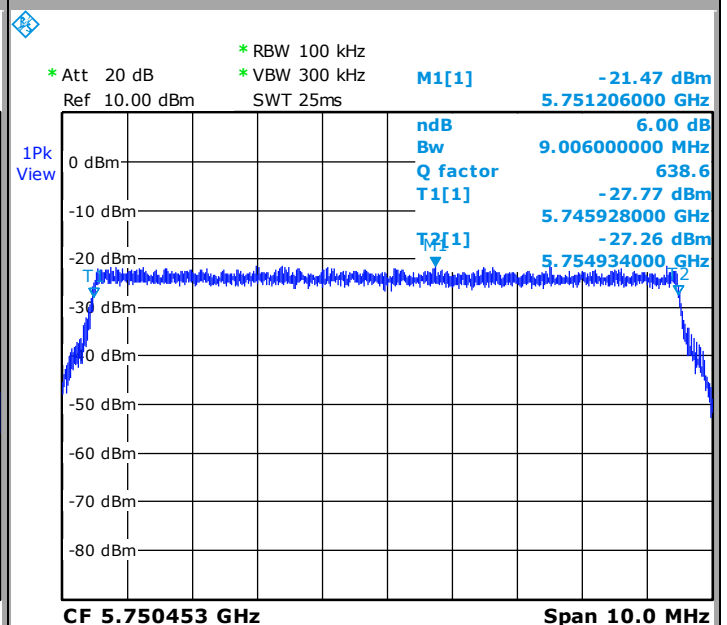


## Configuration 41

## Tx1 IQ CPRI 2



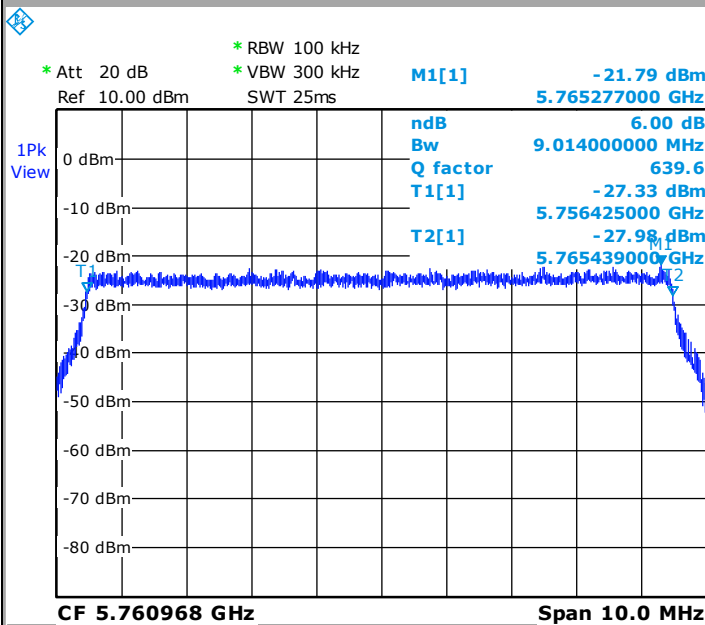
## Tx2 IQ CPRI 2





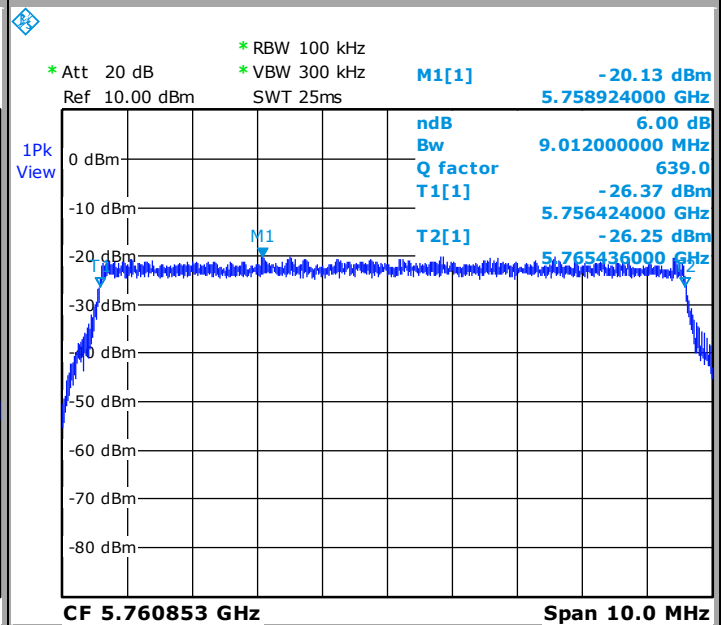
## Configuration 41

## Tx1 IQ CPRI 3



Date: 11.MAR.2015 17:54:38

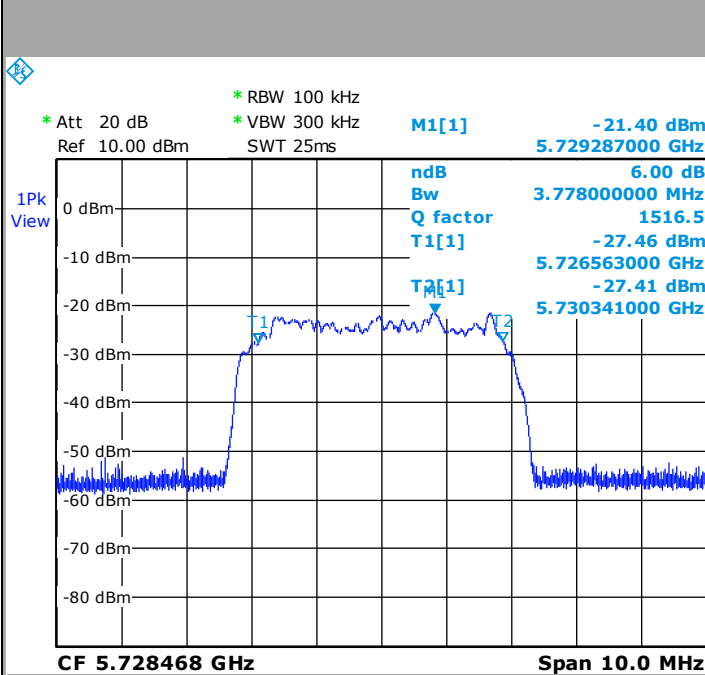
## Tx2 IQ CPRI 3



Date: 11.MAR.2015 17:49:48

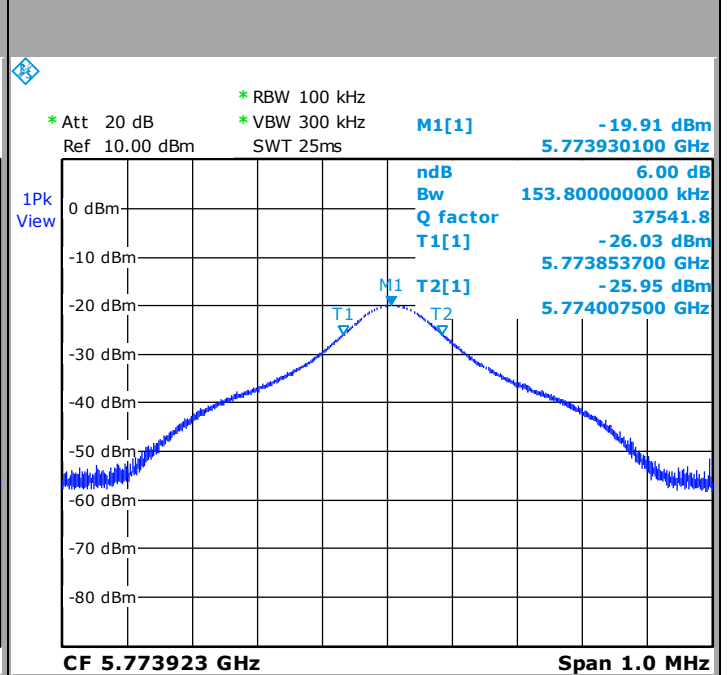
## Configuration 41

## Tx1 C&amp;M



Date: 11.MAR.2015 17:52:27

## Tx2

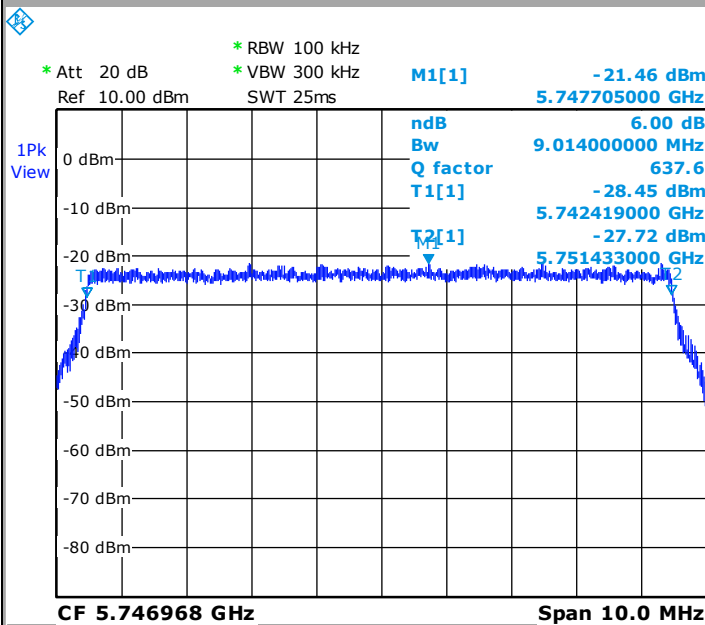


Date: 11.MAR.2015 17:50:42

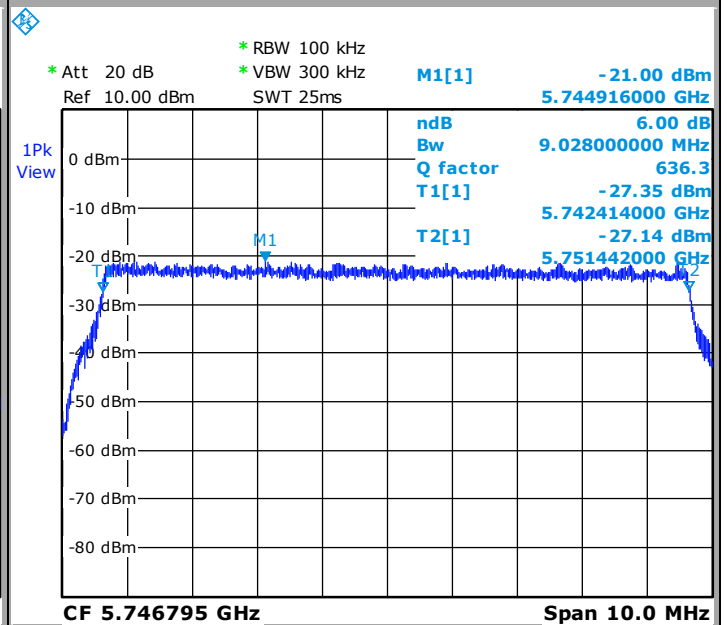


## Configuration 42

## Tx1 IQ CPRI 1

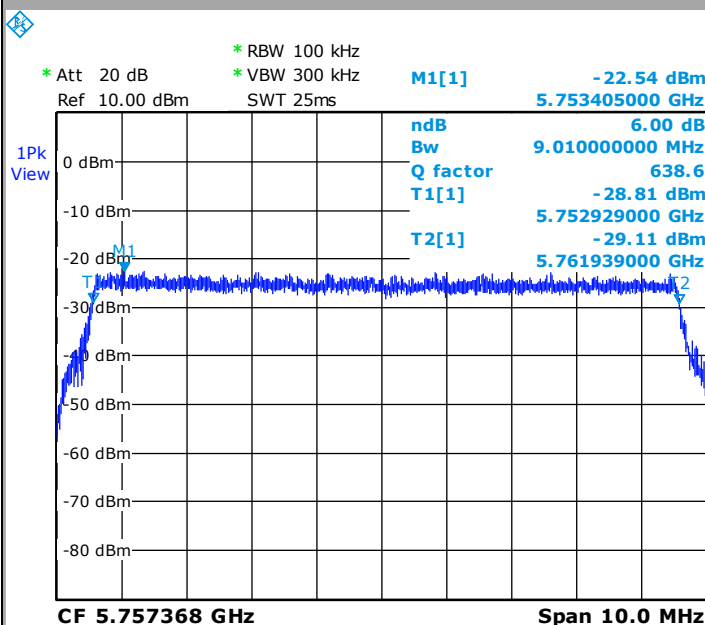


## Tx2 IQ CPRI 1

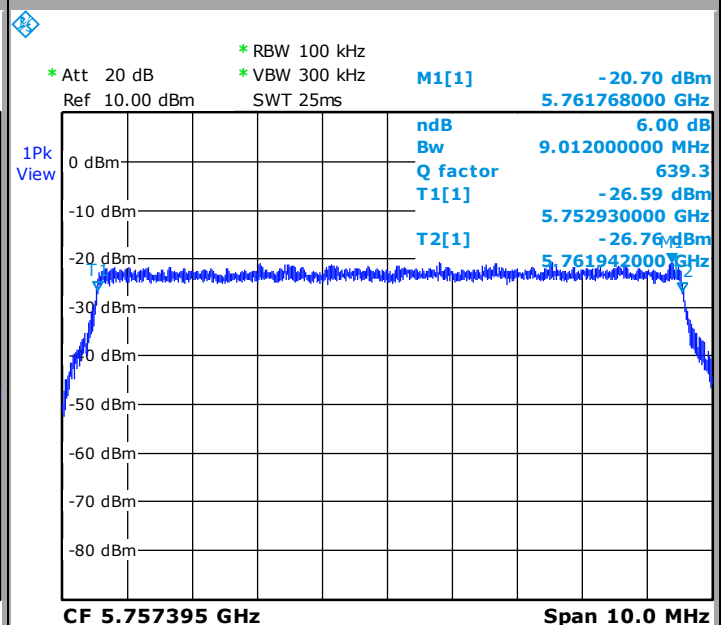


## Configuration 42

## Tx1 IQ CPRI 2



## Tx2 IQ CPRI 2

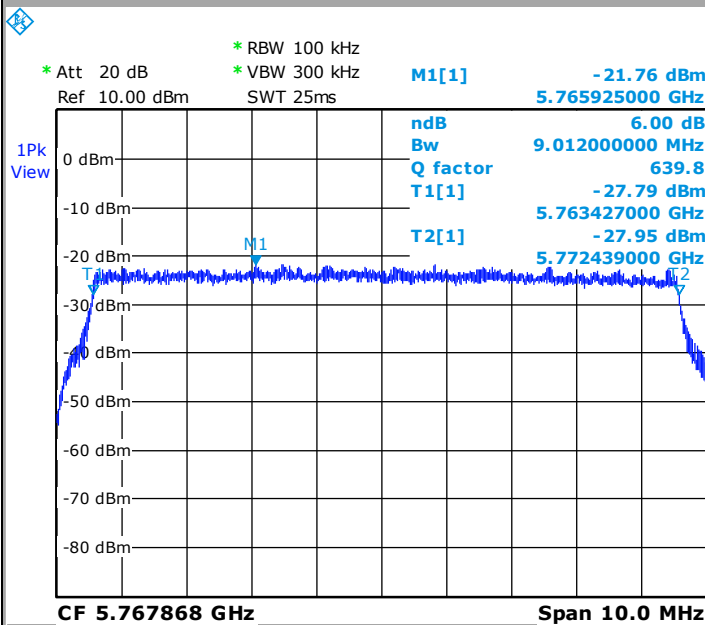




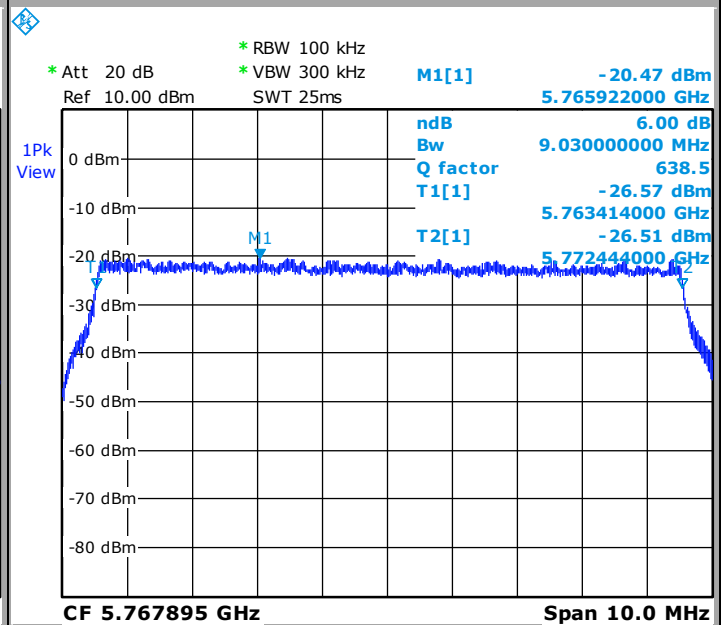


## Configuration 42

## Tx1 IQ CPRI 3

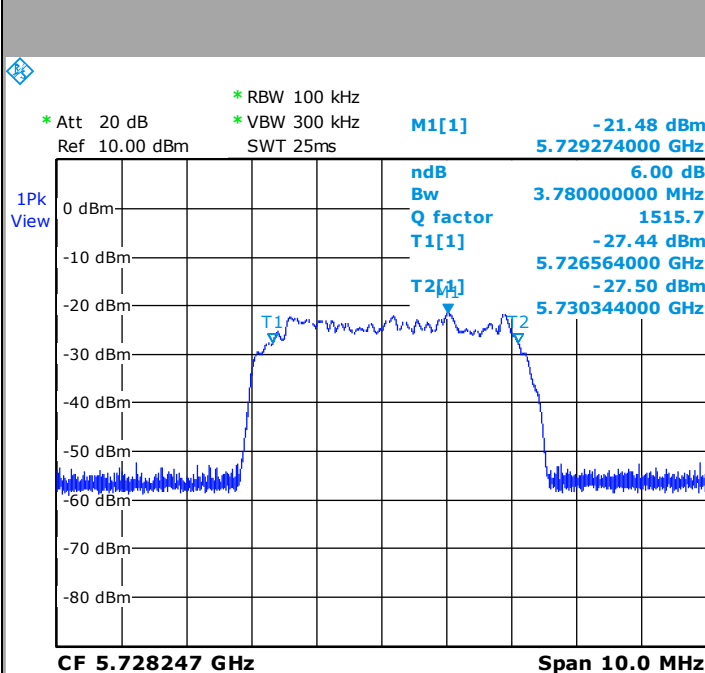


## Tx2 IQ CPRI 3

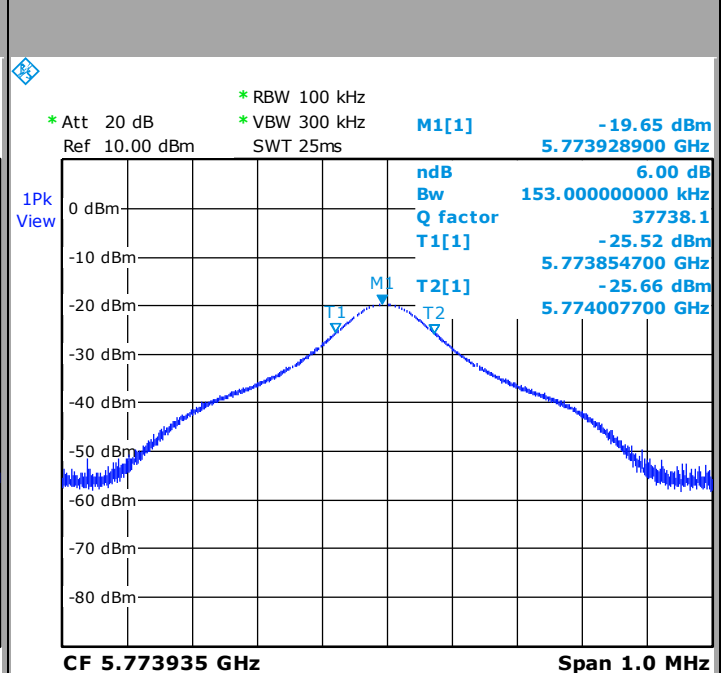


## Configuration 42

## Tx1 C&amp;M



## Tx2





Configuration	Tx1 (MHz)	Tx2 (MHz)	Minimum 6dB Bandwidth (MHz)
1	8,294	4,6626	4,6626
3	8,282	4,6504	4,6504
5	8,28	4,6586	4,6586
7	12,812	9,1868	9,1868
9	12,81	9,1982	9,1982
11	12,798	9,1826	9,1826
13	21,804	18,1548	18,1548
15	21,808	18,1768	18,1768
17	21,8	18,1722	18,1722
18	12,812	9,1432	9,1432
21	12,778	9,1598	9,1598
23	12,748	9,144	9,144
25	21,844	18,2114	18,2114
27	21,802	18,1876	18,1876
29	21,81	18,1792	18,1792
31	39,93	36,202	36,202
32	39,794	36,1756	36,1756
33	17,257	13,6188	13,6188
36	17,265	13,6052	13,6052
38	17,187	13,5958	13,5958
39	30,784	27,149	27,149
41	30,776	27,1838	27,1838
42	30,816	27,223	27,223

## 5.7. CONCLUSION

6dB Bandwidth measurement performed on the sample of the product FL58R2HDBW45-CEN, SN: 0006, in configuration and description presented in this test report, show levels **conform to** the FCC 15.407 limits.

## 6. AC POWER LINE CONDUCTED EMISSIONS

### 6.1. TEST CONDITIONS

Test performed by : Laurent Deneux  
Date of test : 2015/03/16  
Ambient temperature : 23°C  
Relative humidity : 44%

### 6.2. TEST SETUP

The product has been tested according to ANSI C63.10 (2009) method. The EUT is placed on the ground reference plane, at 80cm from the LISN. The distance between the EUT and the vertical ground plane is 40cm. Auxiliaries are powered by another LISN. The cable has been shorted to 1meter length. The EUT is powered through the LISN. Measurement is made with a receiver in peak mode. This was followed by a Quasi-Peak, i.e. CISPR measurement for any strong signal. If the average limit is met when using a Quasi-Peak detector, the EUT shall be deemed to meet both limits and measurement with the average detector is unnecessary. The LISN (measure) is  $50\Omega / 50\mu\text{H}$ . Interconnecting cables and equipment's were moved to position that maximized emission.



Photograph for AC Power Line Conducted Emissions (Front View)



Photograph for AC Power Line Conducted Emissions (Rear View)

**6.3. LIMIT**

AC Power Line Conducted Emissions shall not exceed value below:

**Quasi-Peak**

0,15kHz to 0,5MHz: 66dB $\mu$ V to 56dB $\mu$ V\*

0,5MHz to 5MHz: 56dB $\mu$ V

5MHz to 30MHz: 60dB $\mu$ V

**Average**

0,15kHz to 0,5MHz: 56dB $\mu$ V/m to 46dB $\mu$ V\*

0,5MHz to 5MHz: 46dB $\mu$ V

5MHz to 30MHz: 50dB $\mu$ V

\*Decreases with the logarithm of the frequency

**6.4. TEST EQUIPMENT LIST**

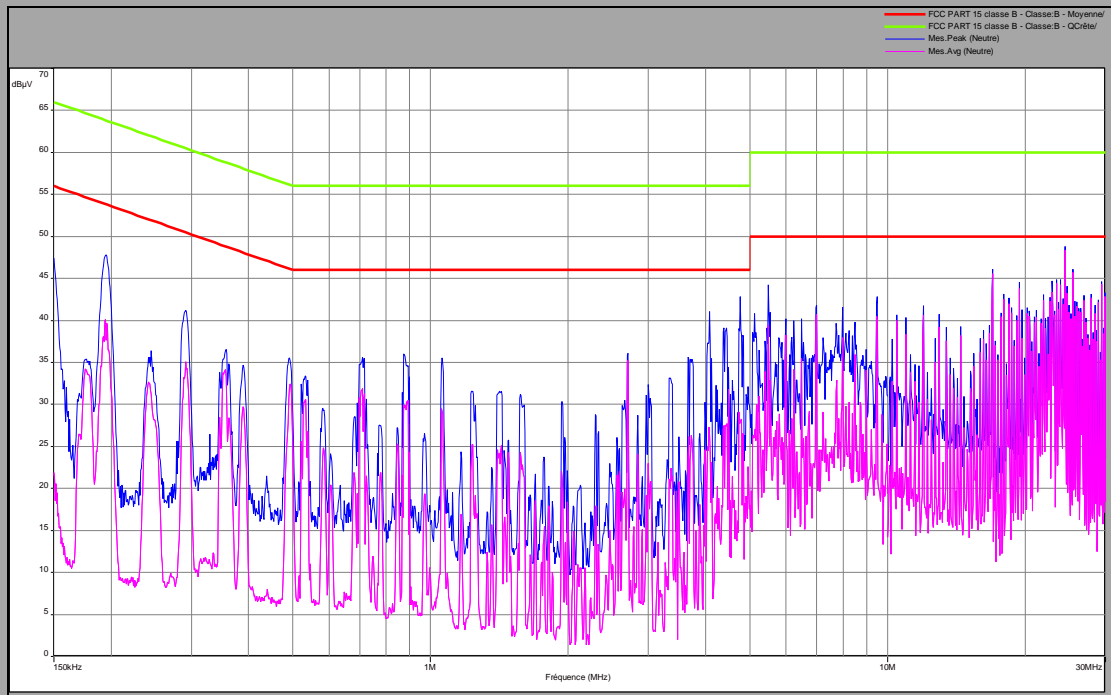
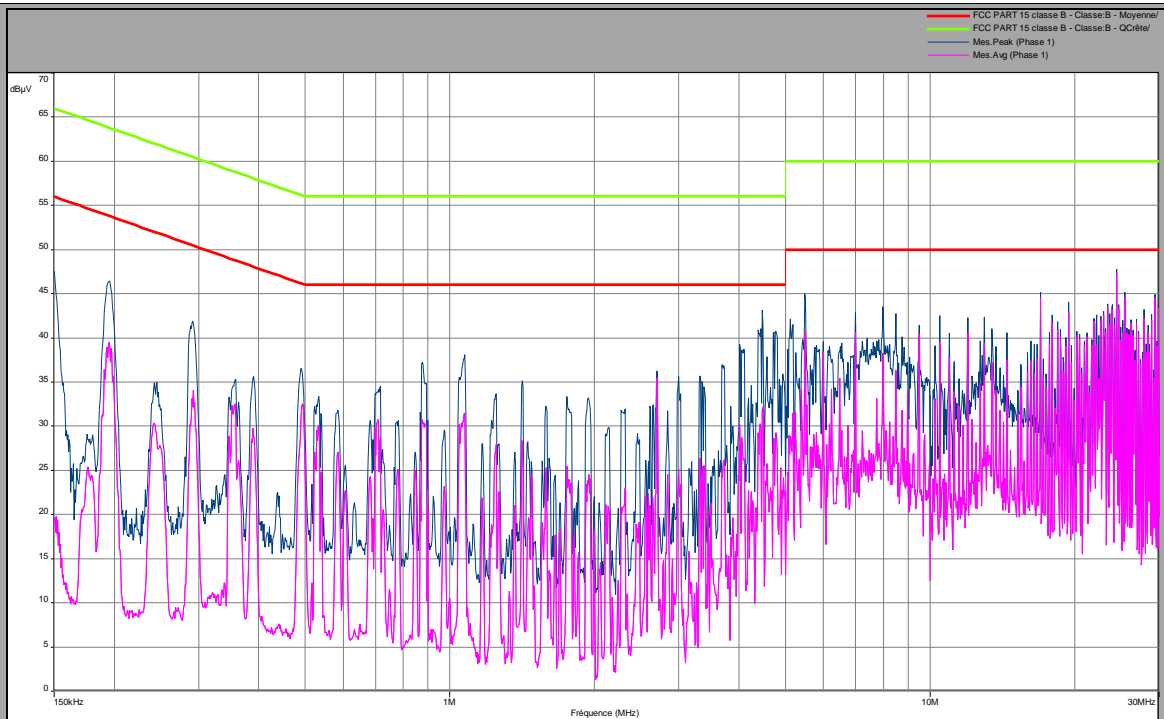
Apparatus	Mark	Type	Registration number	Cal date	Cal due
Receiver	RHODE & SCHWARZ	ESU	A2642018	2014/12	2015/12
V ISLN	ROHDE & SCHWARZ	ESH2-Z5	C2322002	2014/06	2015/06
Pulse limiter	ROHDE & SCHWARZ	ESH3-Z2	A2649008	2014/02	2015/02 (note)
Cable	-	-	A5329417	2014/09	2015/09
Reference ground plan 2 x 3m	L.C.I.E.	-	-	-	-

Note: In our system quality, the calibration due is more & less 2 months.

**6.5. DIVERGENCE, ADDITION OR SUPPRESSION ON THE TEST SPECIFICATION**

☒ None

☐ Divergence:

**6.6. GRAPHICS & RESULTS****Configuration 1****AC Power Line Conducted Emissions****Phase Line****Neutral Line**



Configuration 1					
Phase Line					
Frequencies (kHz)	Peak Level (dBμV)	Quasi-Peak Level (dBμV)	Average Level (dBμV)	Quasi-Peak Limit (dBμV)	Average Limit (dBμV)
195	47.8	-	40.2	63.8	53.8
2700	35.8	-	34.9	56	46
6986	41.8	-	40.7	60	50
16964	46	-	45.6	60	50
24448	48.7	-	48.3	60	50
Neutral Line					
Frequencies (kHz)	Peak Level (dBμV)	Quasi-Peak Level (dBμV)	Average Level (dBμV)	Quasi-Peak Limit (dBμV)	Average Limit (dBμV)
195.5	46.3	-	39.5	63.8	53.8
1074	38.2	-	31.5	56	46
2700	36.2	-	35.4	56	46
16970	45.2	-	44.5	60	50
24456	47.8	-	47.4	60	50

## 6.7. CONCLUSION

AC Power Line Conducted Emissions measurement performed on the sample of the product FL58R2HDBW45-CEN, SN: 0006, in configuration and description presented in this test report, show levels **conform to** the FCC 15.407 limits.



## 7. UNWANTED EMISSIONS

### 7.1. TEST CONDITIONS

Test performed by : Laurent Deneux  
Date of test : 2015/03/18  
Ambient temperature : 23°C  
Relative humidity : 43%

### 7.2. TEST SETUP

- The Equipment under Test is installed:

☐ SAR ☒ OATS

- Distance between EUT and the measuring antenna is:

☐ 3m ☒ 10m

- Choice of measuring antenna below 1GHz:

☐ Bilog ☒ Log periodic ☐ Biconic ☐ Dipole antenna

- Choice of measuring antenna above 1GHz:

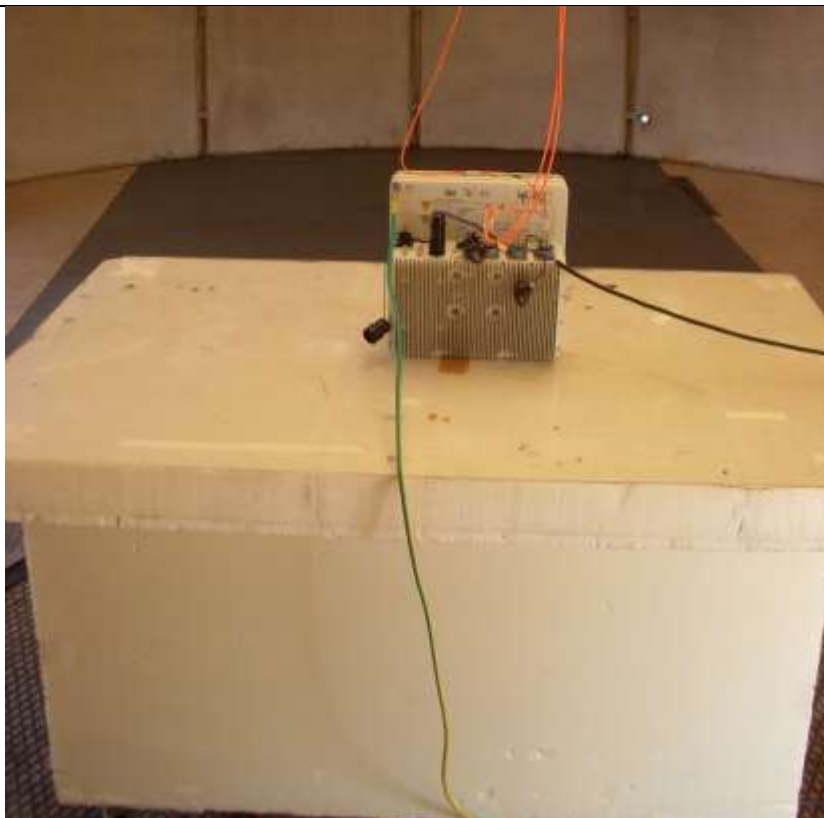
☒ Horn

The product has been tested according to ANSI C63.10 (2009). Test is performed in horizontal (H) and vertical (V) polarization. Measurement bandwidth was 120kHz below 1GHz and 1MHz above 1GHz. The level has been maximised by the turntable rotation of 360 degrees range on the 3 axis of EUT. Antenna height search was performed from 1 to 4m.



Photograph for Unwanted Emissions





Photograph for Unwanted Emissions



### 7.3. LIMIT

Unwanted Emissions shall not exceed value below:

30MHz to 88MHz: 29.5dBμV/m QPeak  
88MHz to 216MHz: 33dBμV/m QPeak  
216MHz to 960MHz: 35.5dBμV/m QPeak  
960MHz to 1000MHz: 43.5dBμV/m QPeak  
Above 1000MHz: 63.5dBμV/m Peak  
43.5dBμV/m Average

### 7.4. TEST EQUIPMENT LIST

Test	Appareil	Marque	Type	Immatriculation	Cal. date	Cal. Due
<i>Open area test site</i>						
X	Receiver	RHODE & SCHWARZ	ESU	A2642018	2014/12	2015/12
X	Preamplifier	HEWLETT PACKARD	8449B	A4069002	2014/02	2015/02 (note)
X	Bilog antenna	CHASE	CBL 6112A	C2040040	2014/02	2015/02 (note)
X	Horn antenna 1GHz-18GHz	EMV	3115	C2040023		
X	Horn antenna 1GHz-18GHz	EMCO	.3115	C2042016	2014/04	2015/04
X	Cable	-	-	A5329449	2014/09	2015/09
X	Cable	-	-	A5329368	2014/04	2015/04
X	cable	-	-	A5329444	2014/09	2015/09
X	FILTER	-	-	A7484037	2014/11	2015/11
X	FILTER	MICROTRONICS-	HPS17421	A7484059	2014/06	2015/06
X	OATS	L.C.I.E.	-	F2000400	2014/06	2015/06
X	Receiver	RHODE & SCHWARZ	ESI40	A2642010	2014/02	2015/02 2015/12 (note)
X	Horn antenna 18GHz-26GHz	AH-SYSTEMS	SAS-572	C2042026	2014/01	2016/01
X	Horn antenna 26GHz-40GHz	PASTERNAK	PE9850/2F-20	C2042052	2013/09	2015/09

Note: In our system quality, the calibration due is more & less 2 months.

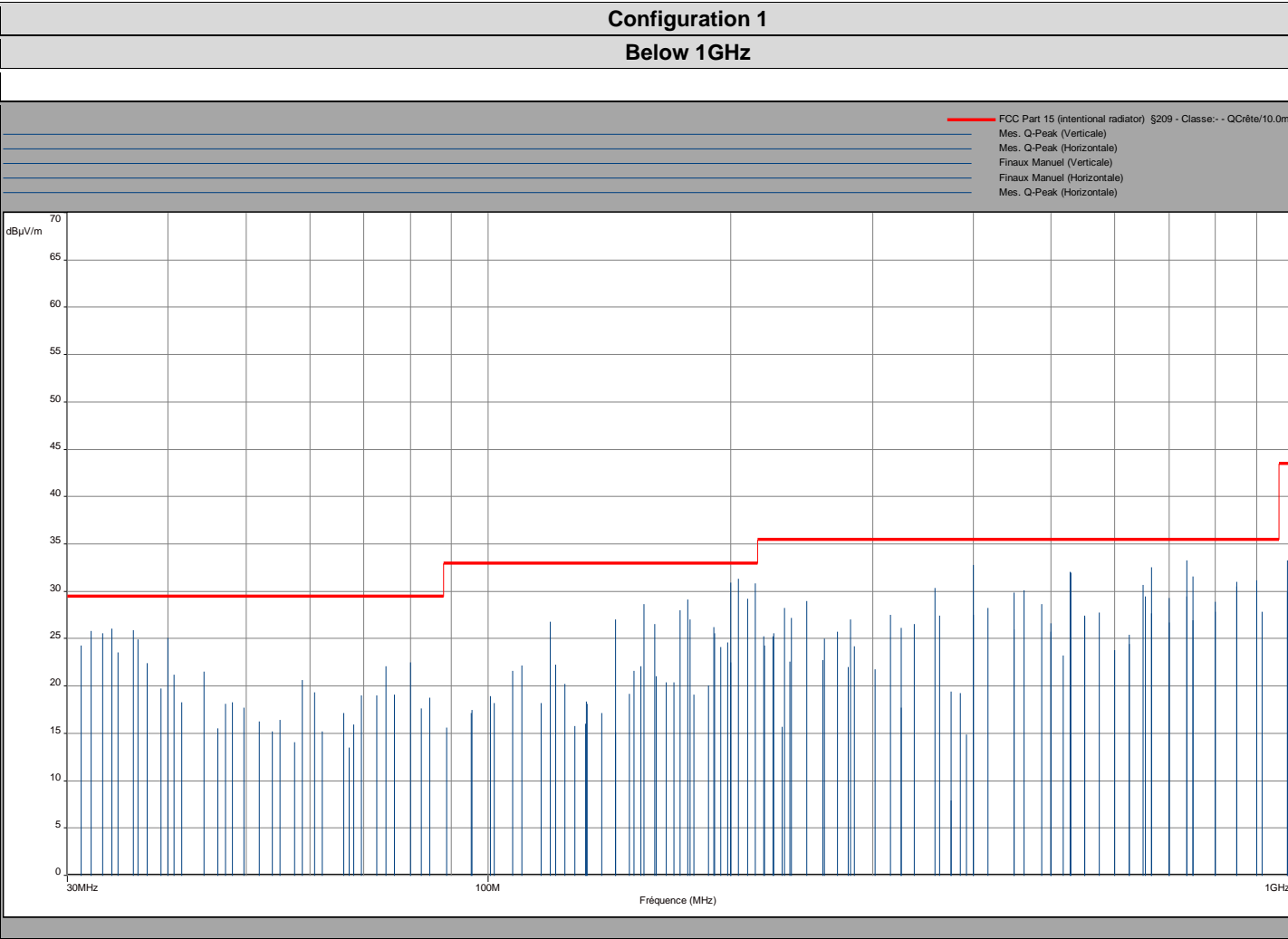
### 7.5. DIVERGENCE, ADDITION OR SUPPRESSION ON THE TEST SPECIFICATION

☒ None

☐ Divergence:



7.6. GRAPHICS & RESULTS

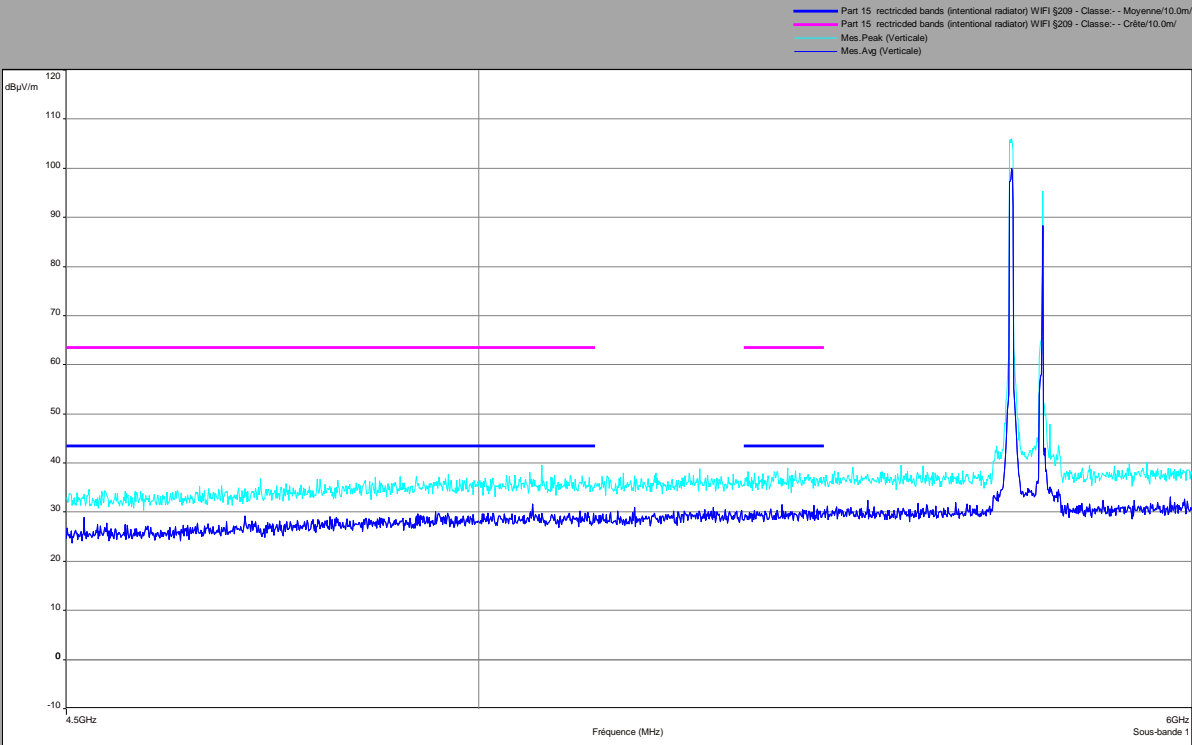




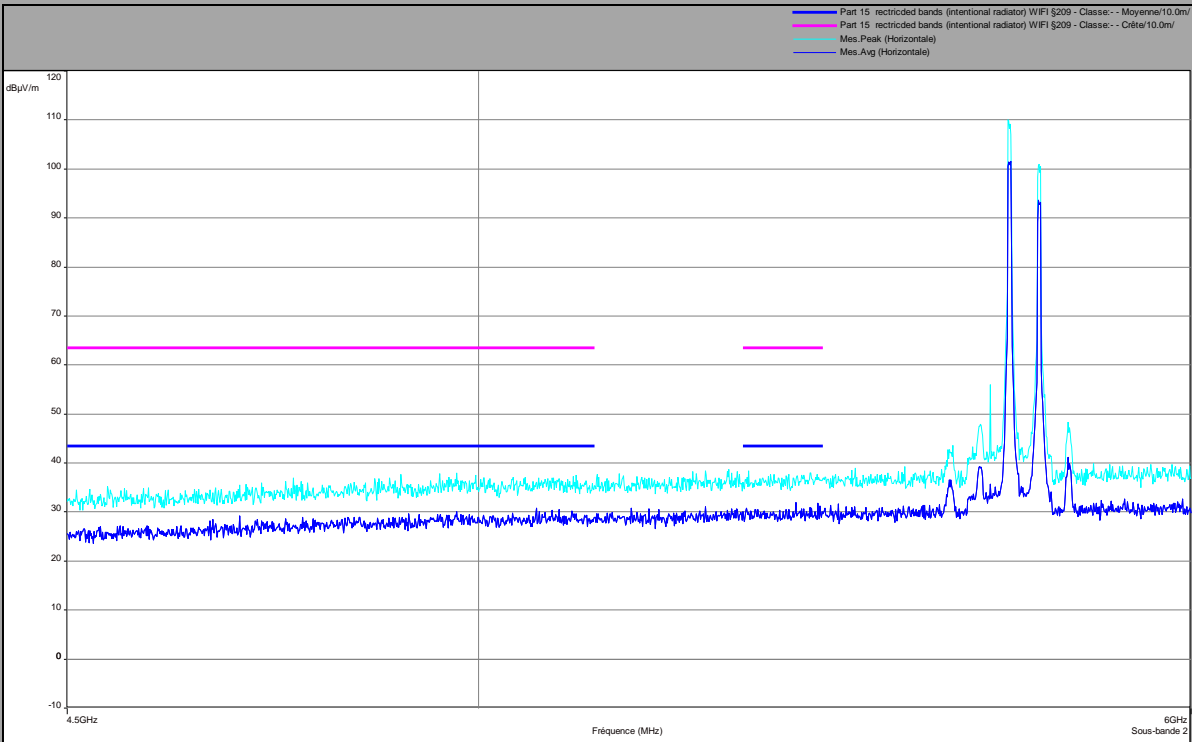
Configuration 1

Above 1GHz

Vertical Polarization



Horizontal Polarization

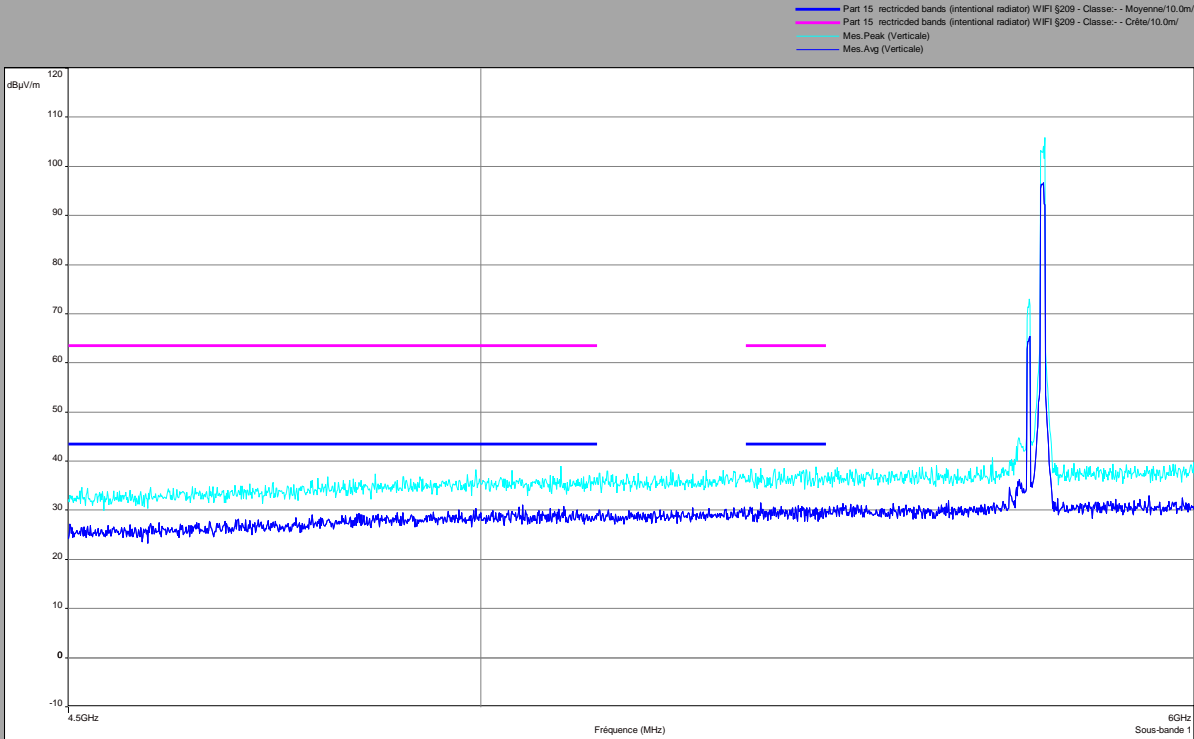




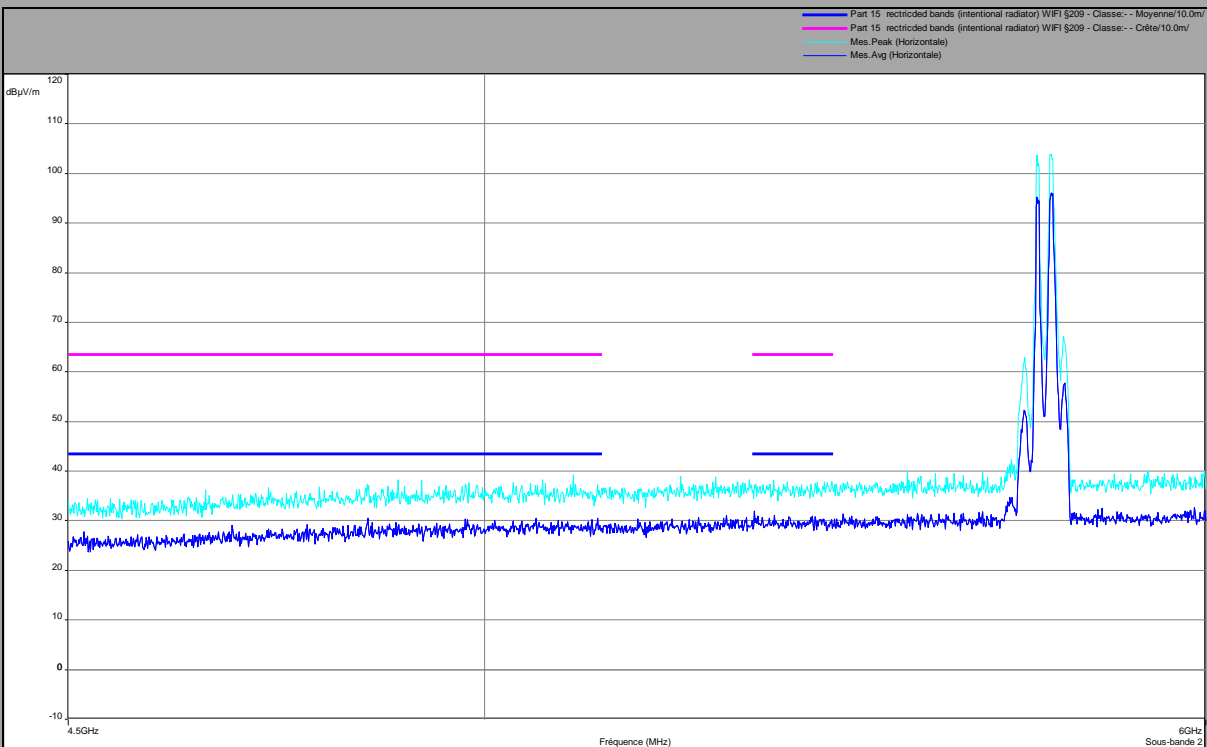
Configuration 3

Above 1GHz

Vertical Polarization



Horizontal Polarization

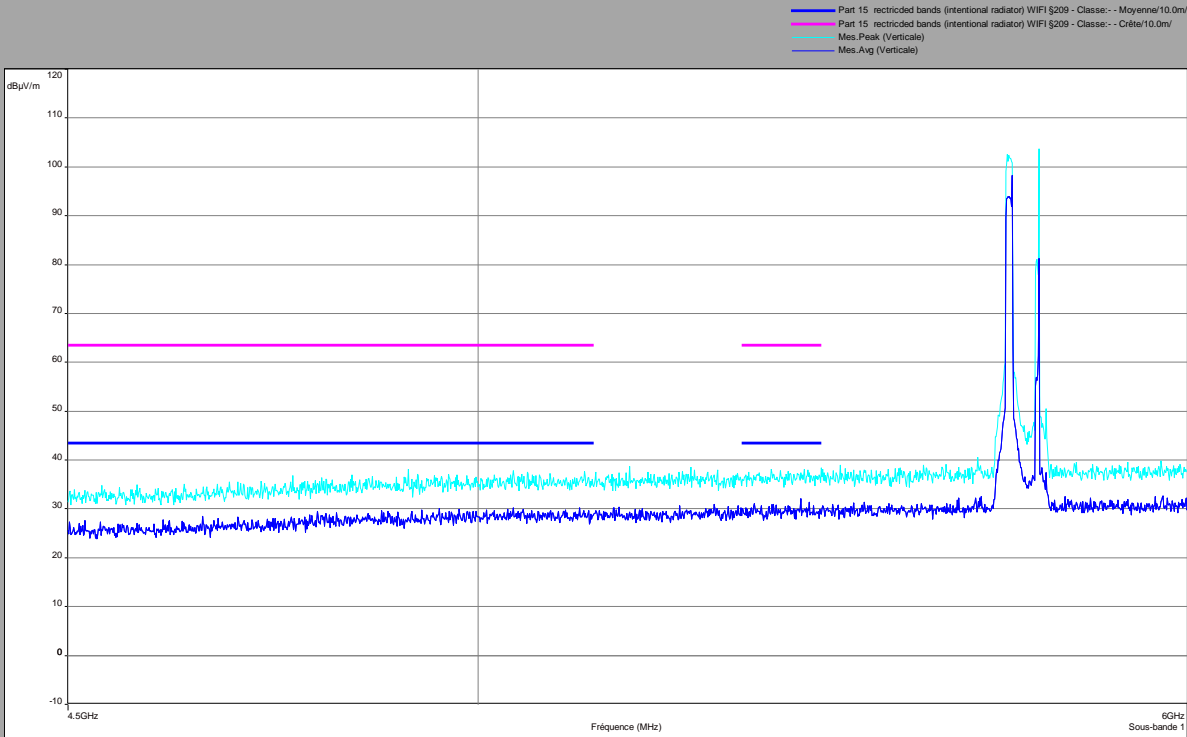




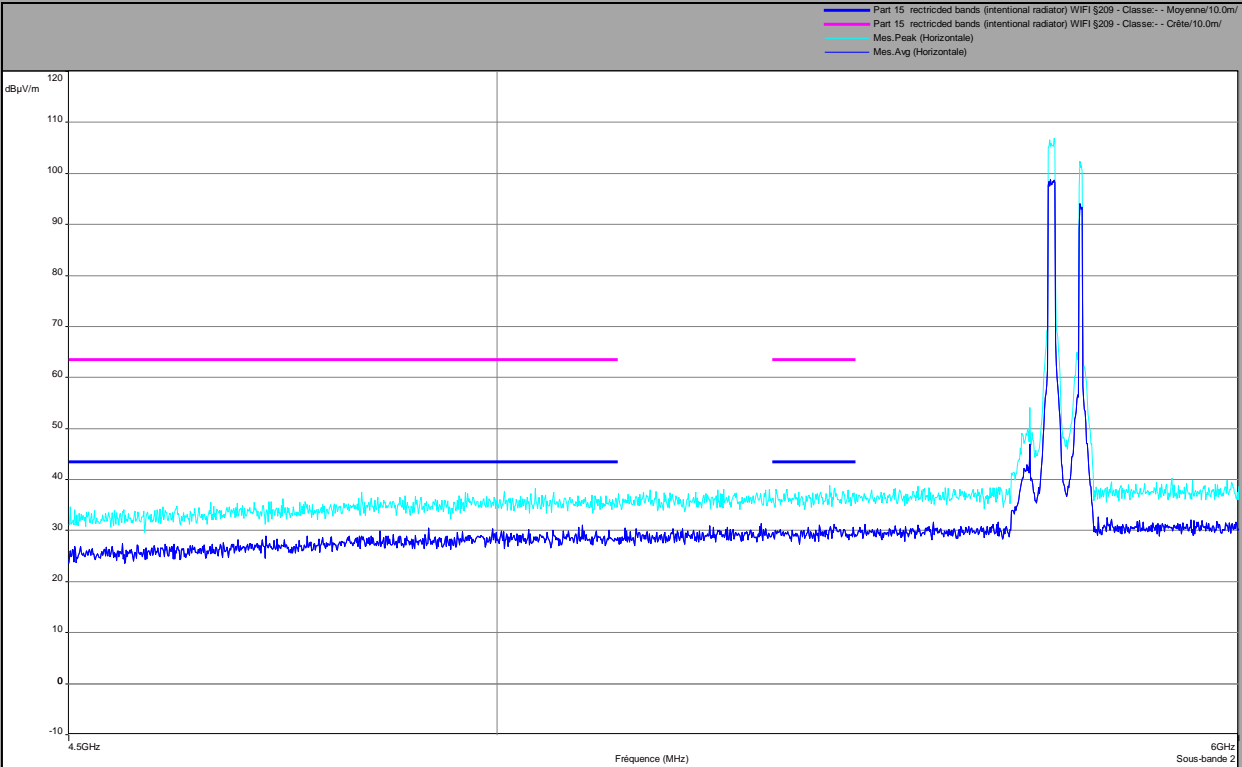
Configuration 7

Above 1GHz

Vertical Polarization



Horizontal Polarization

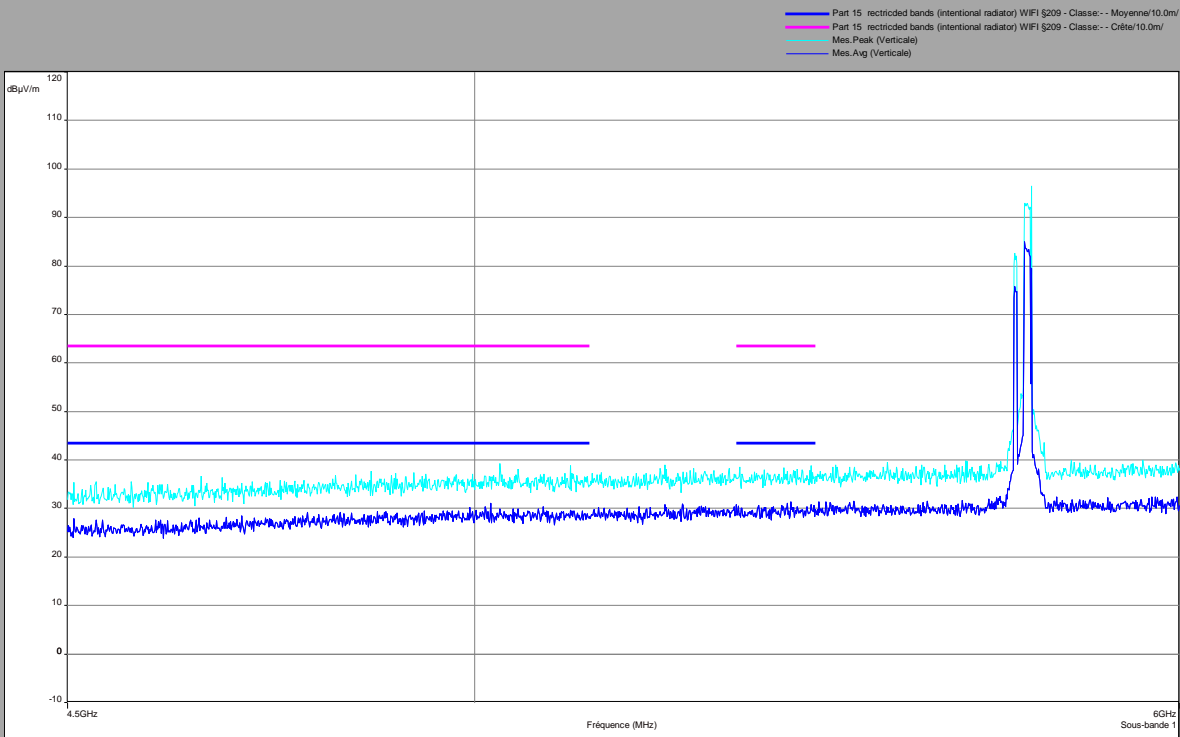




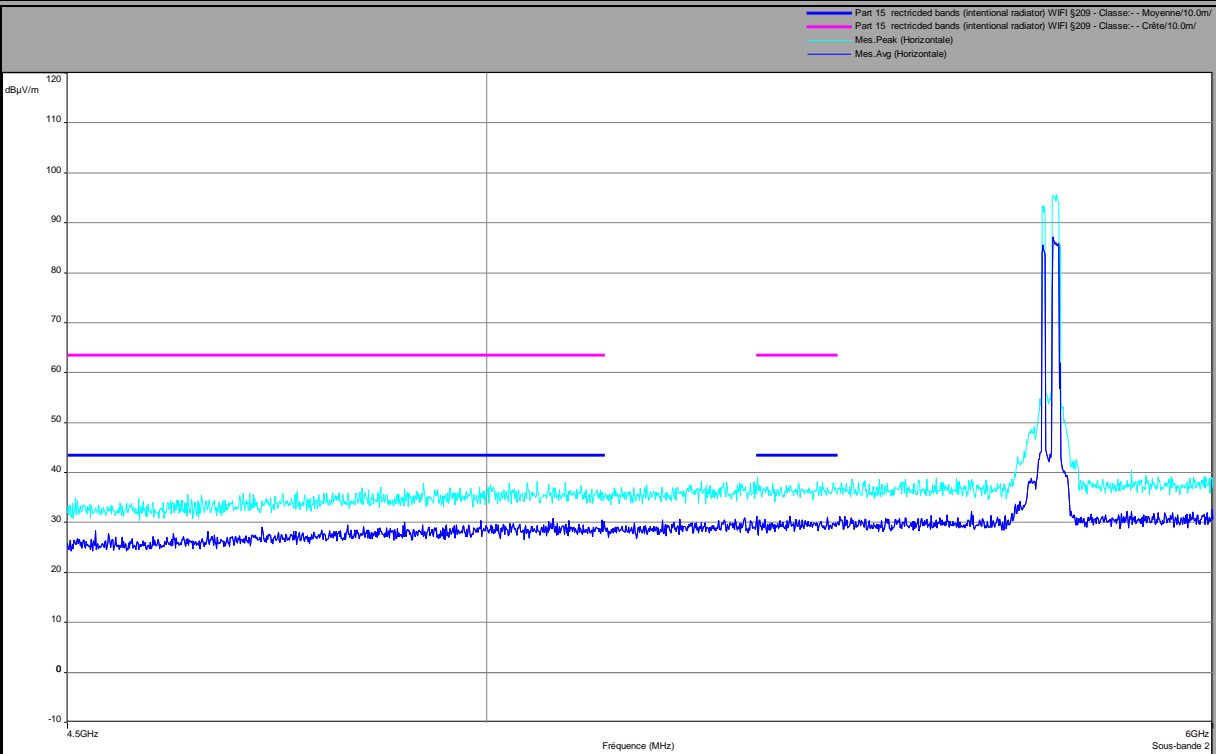
Configuration 9

Above 1GHz

Vertical Polarization



Horizontal Polarization

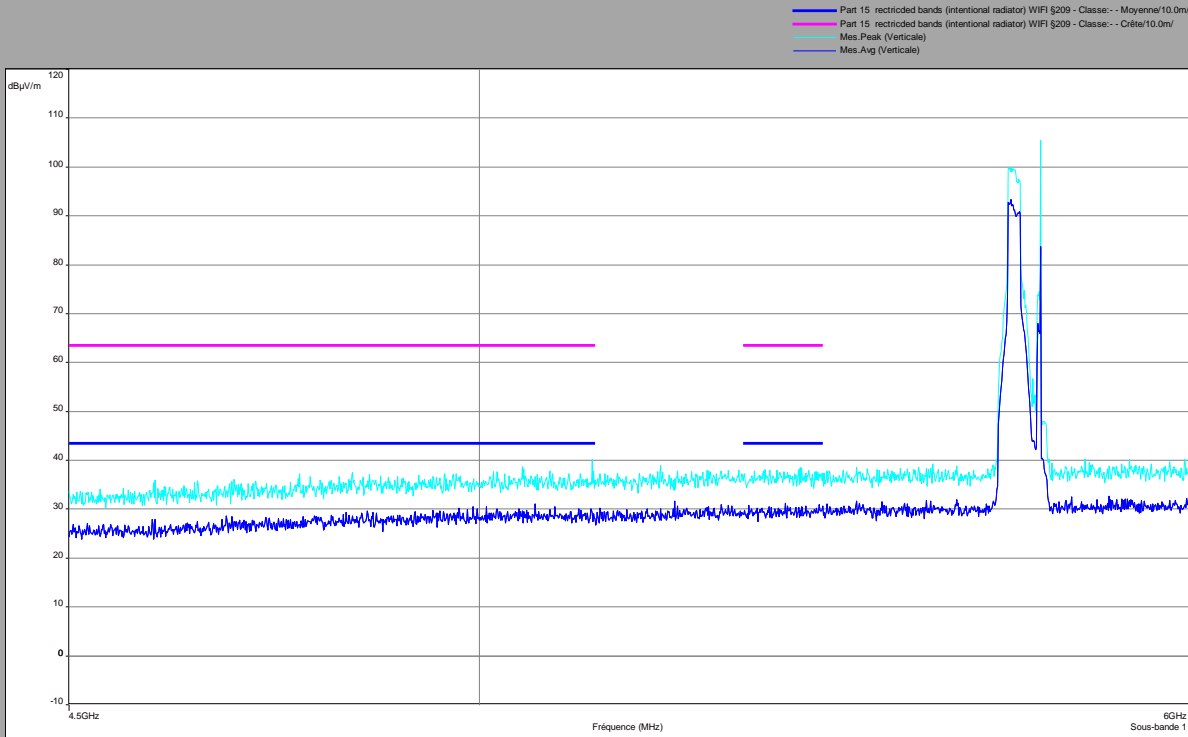




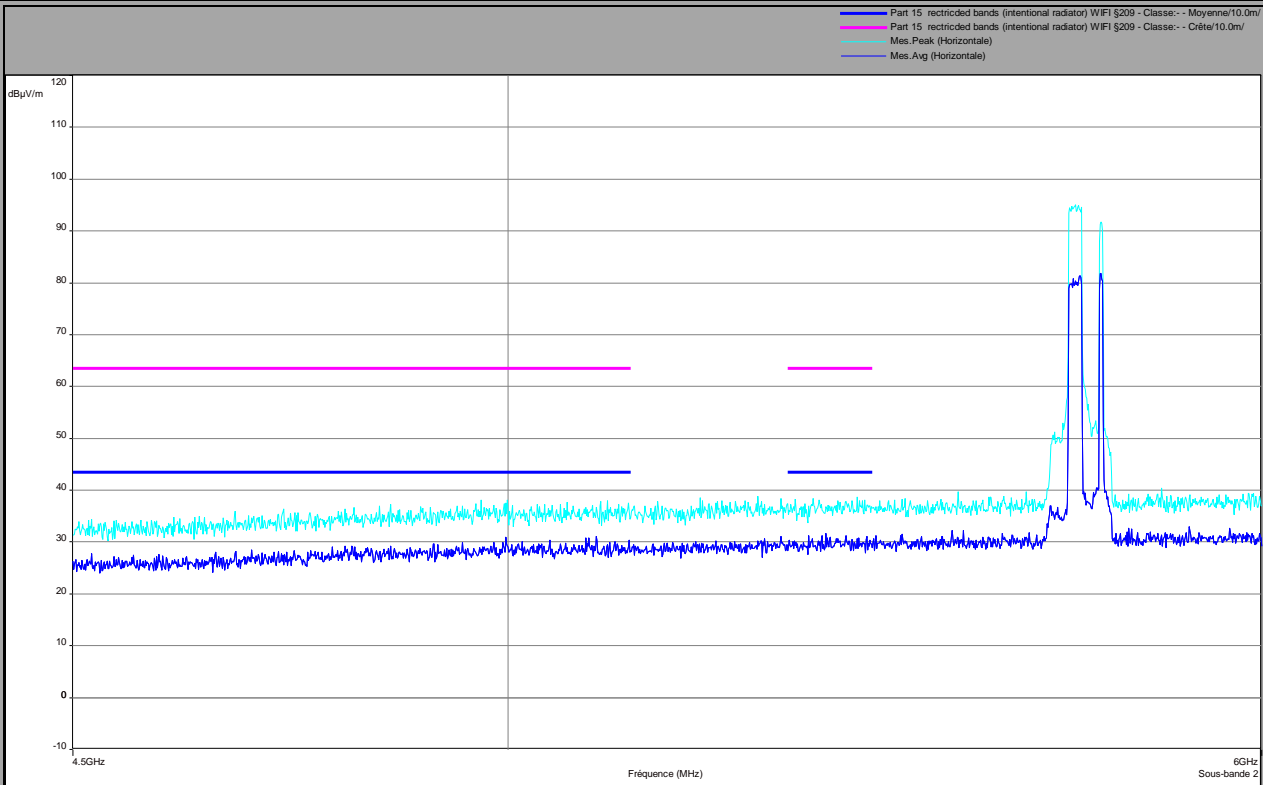
Configuration 13

Above 1GHz

Vertical Polarization



Horizontal Polarization



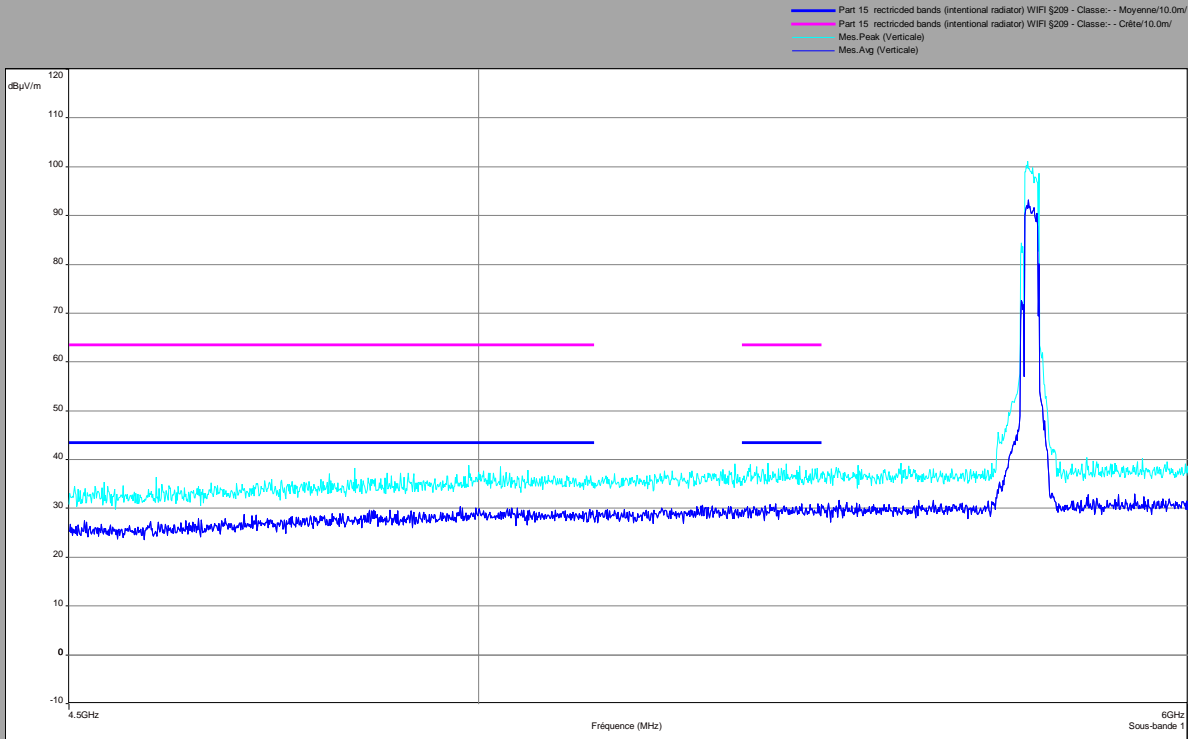




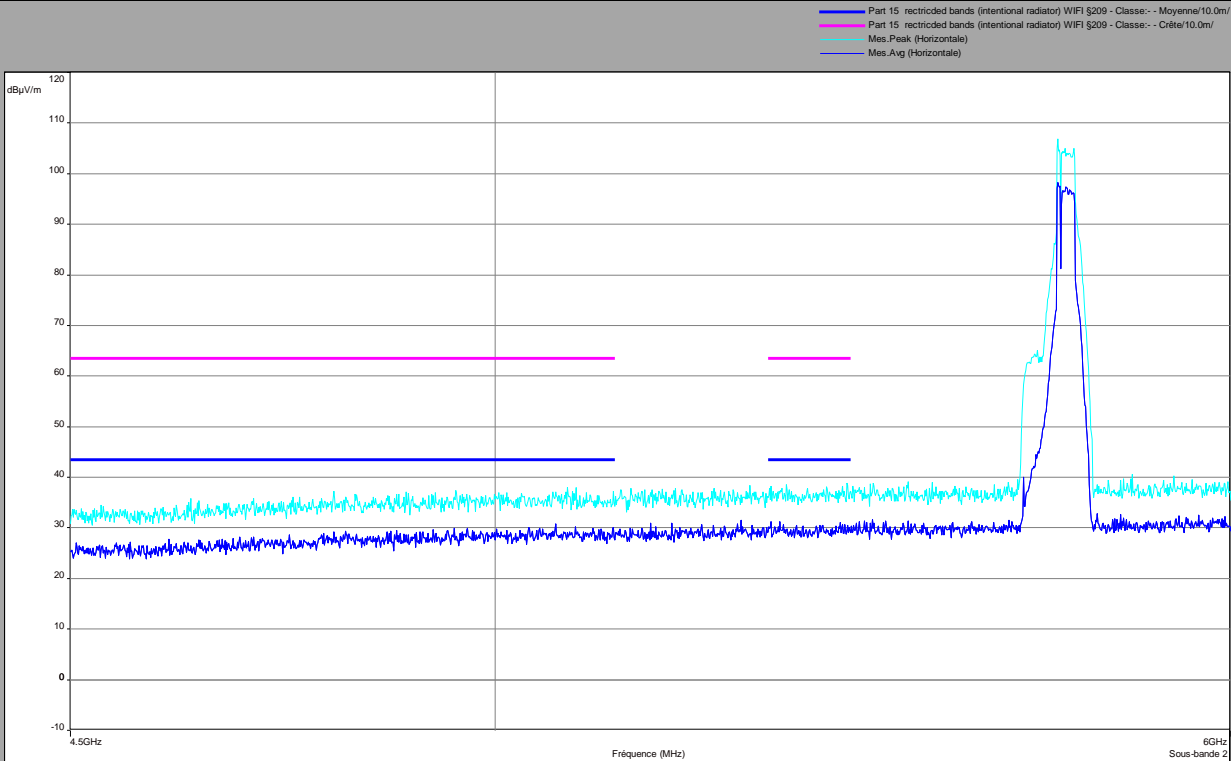
Configuration 15

Above 1GHz

Vertical Polarization



Horizontal Polarization

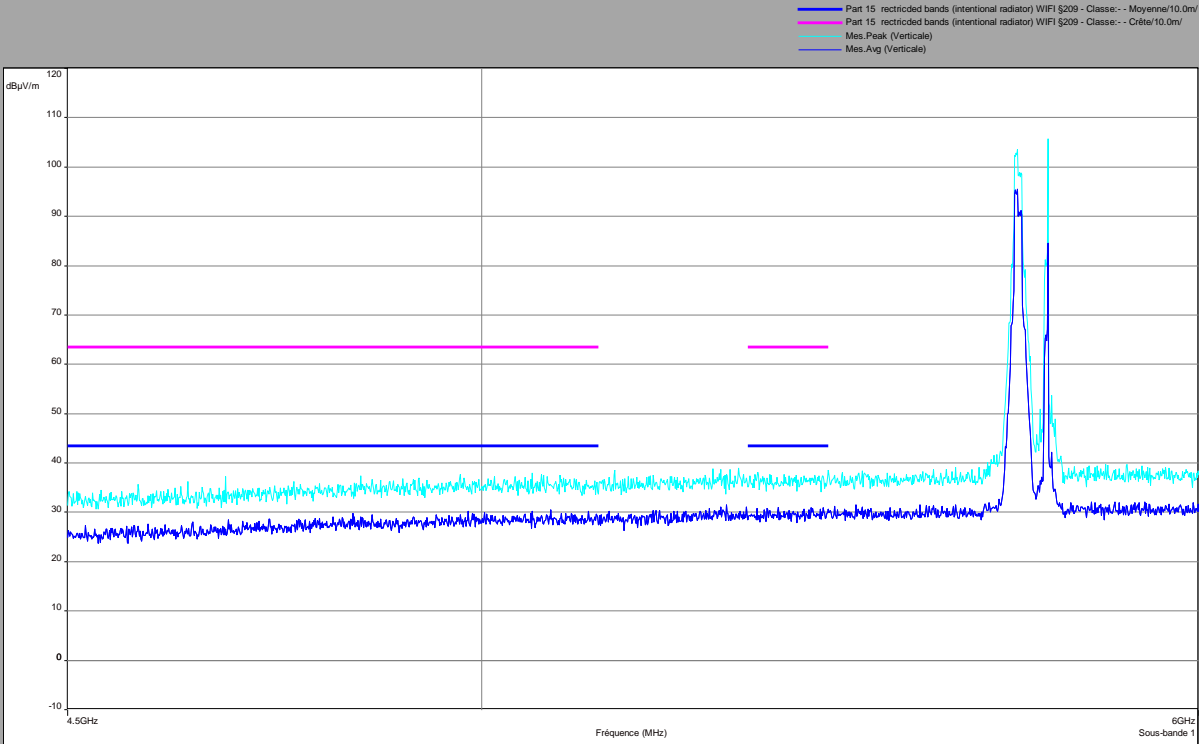




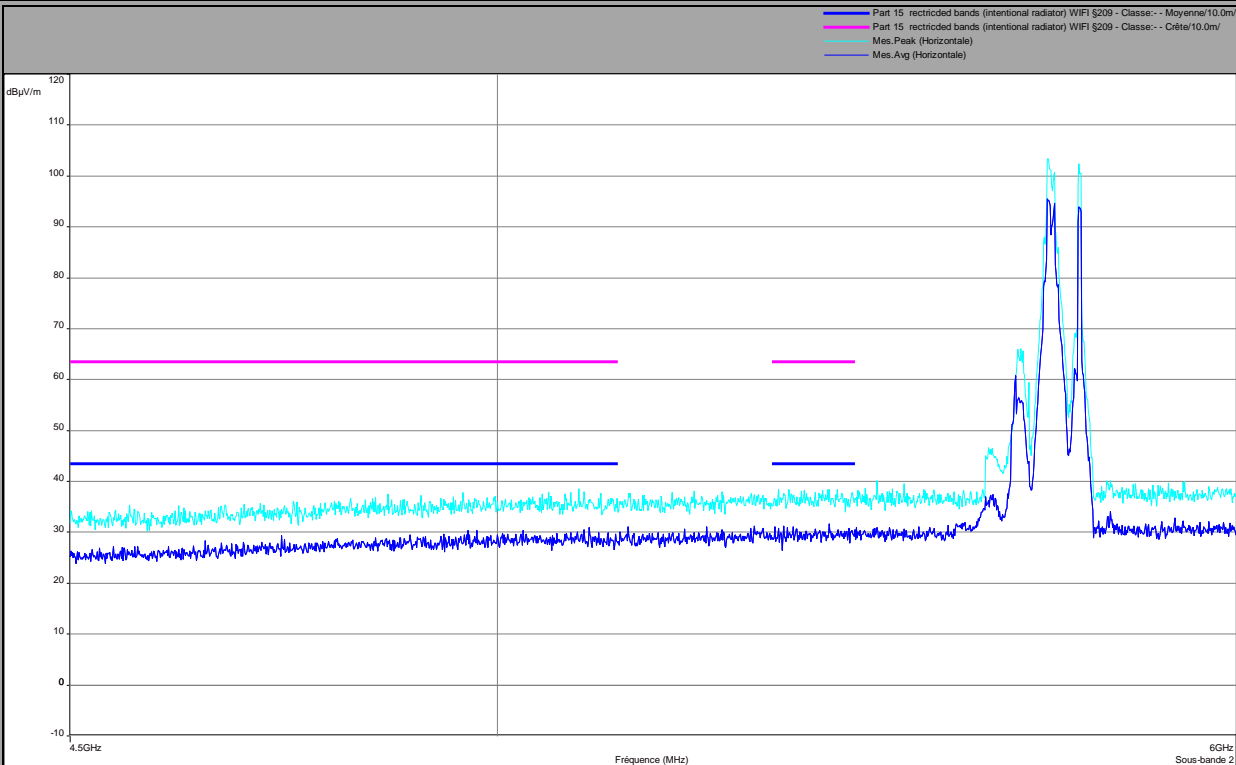
Configuration 19

Above 1GHz

Vertical Polarization



Horizontal Polarization

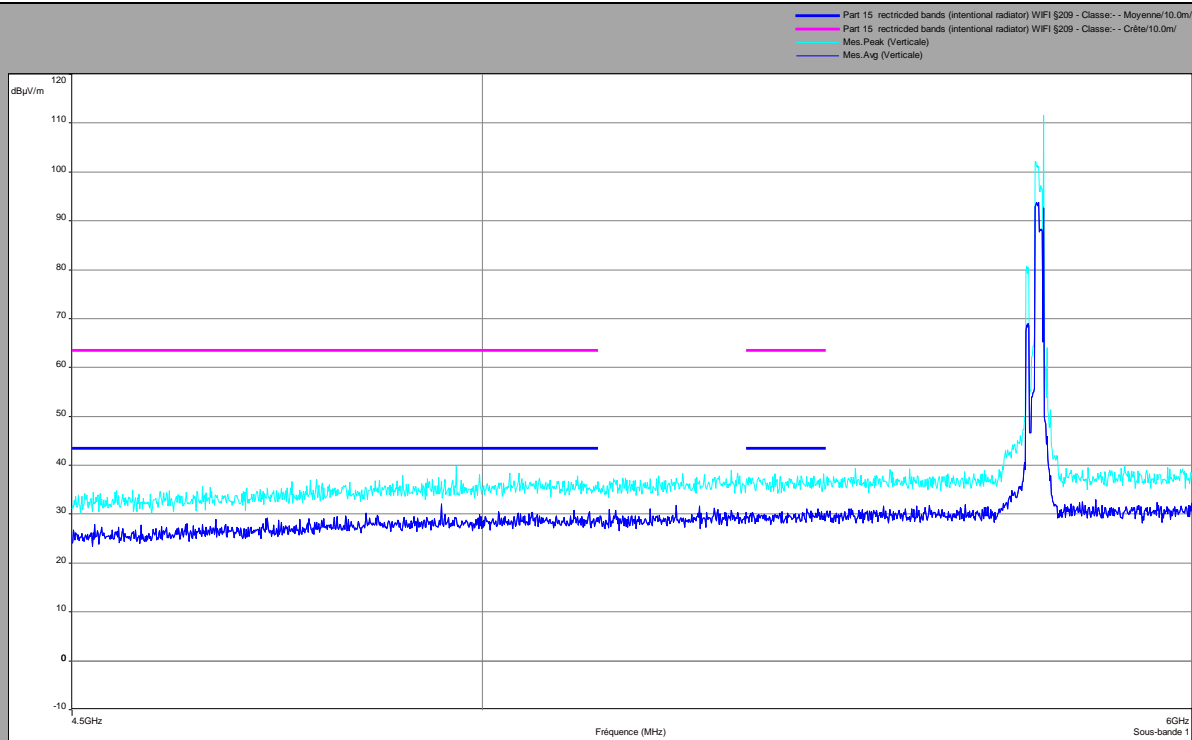




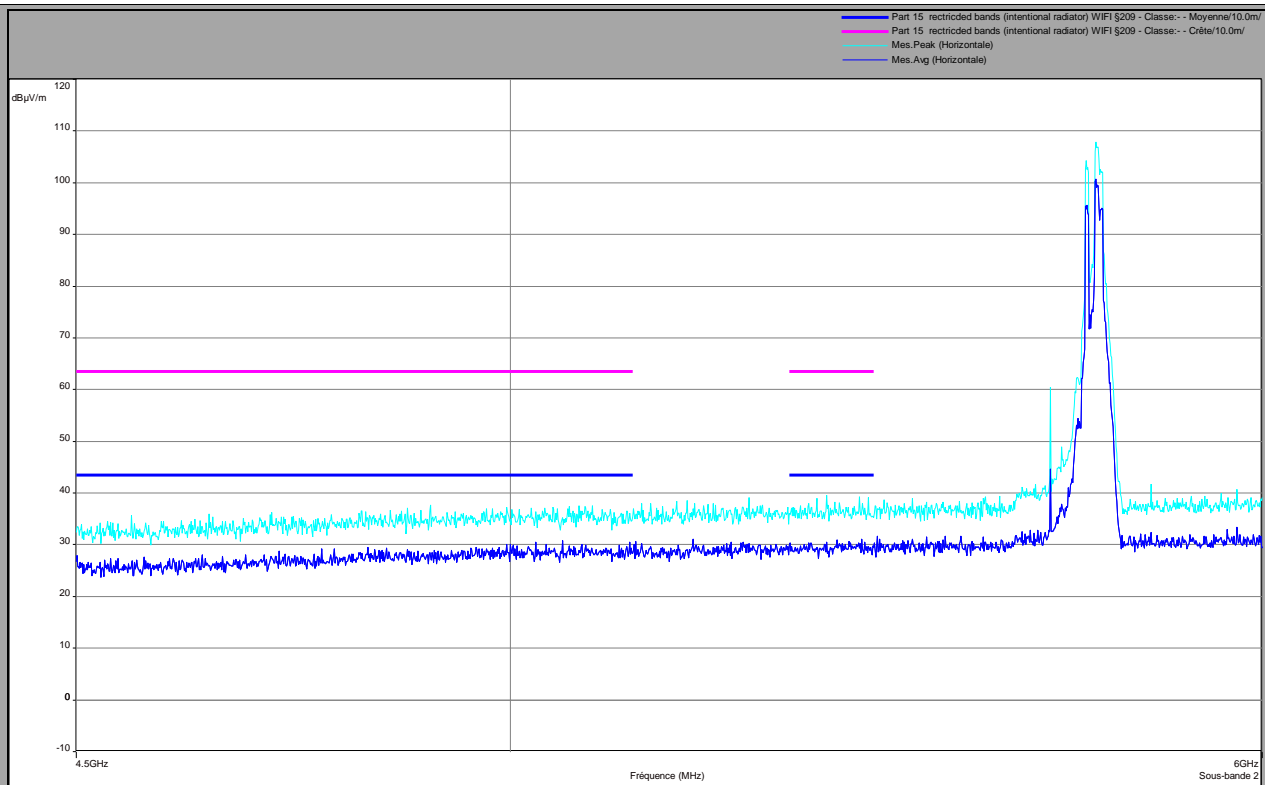
## Configuration 21

## Above 1GHz

## Vertical Polarization



## Horizontal Polarization

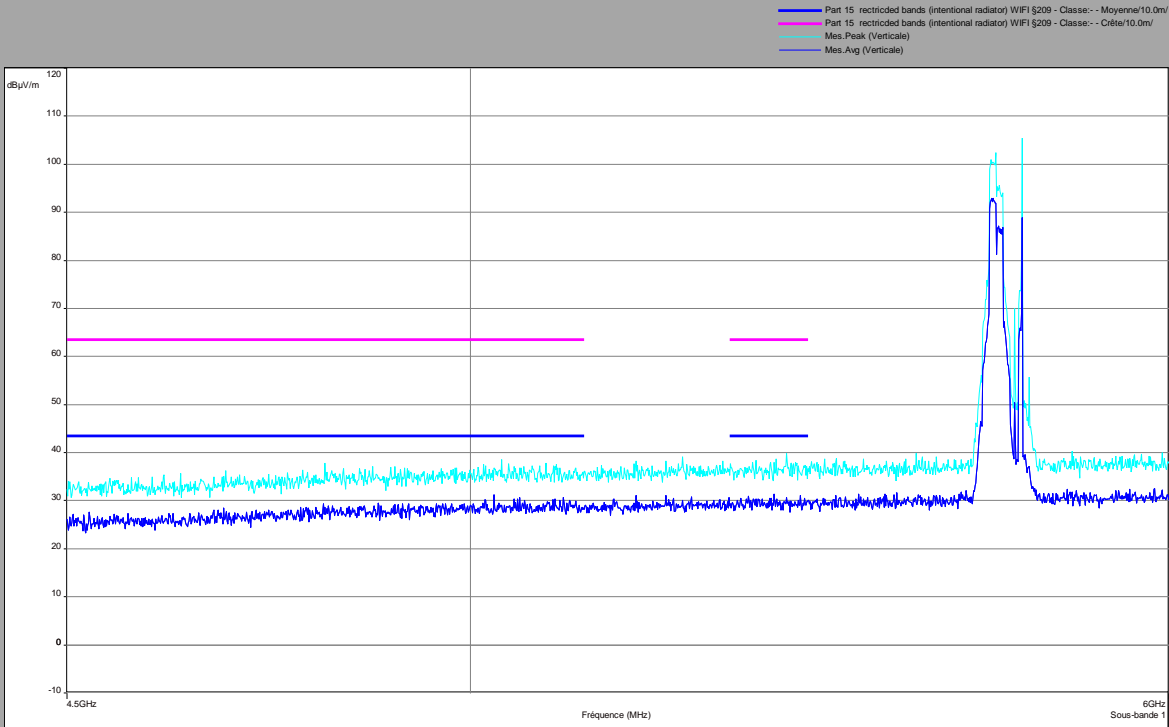




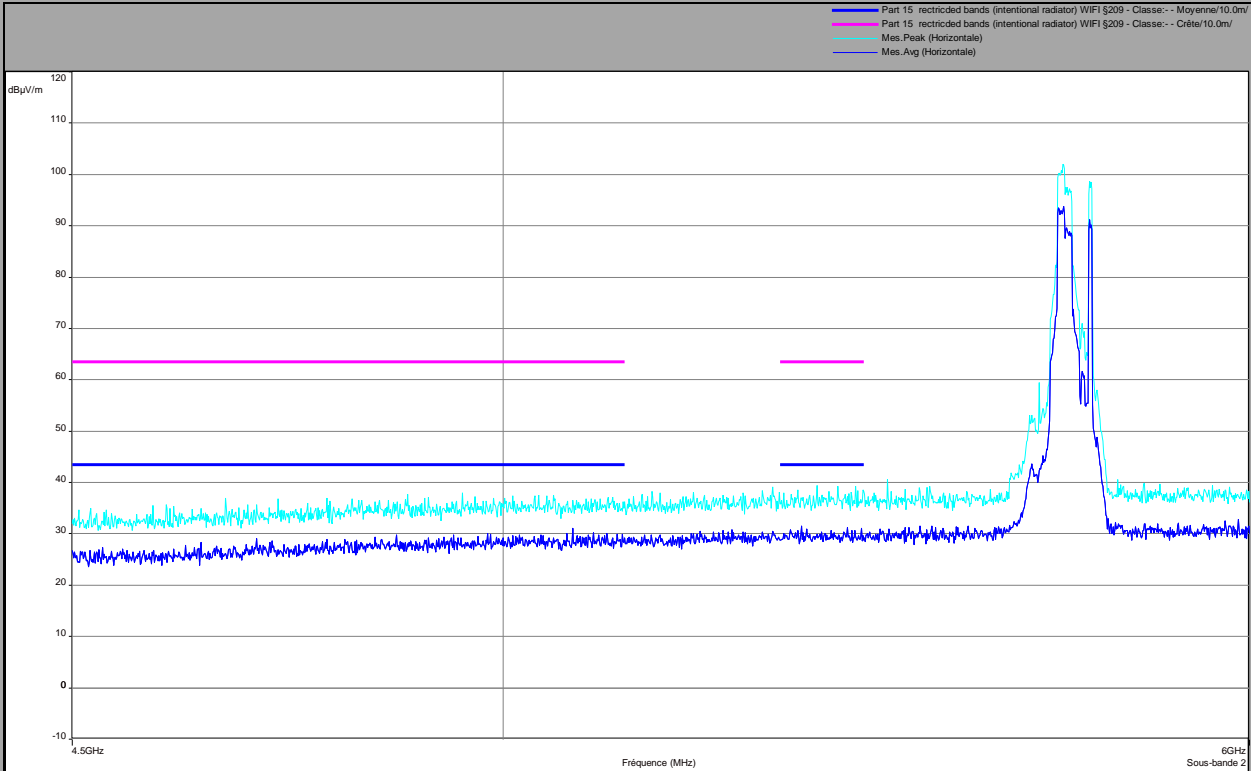
Configuration 25

Above 1GHz

Vertical Polarization



Horizontal Polarization

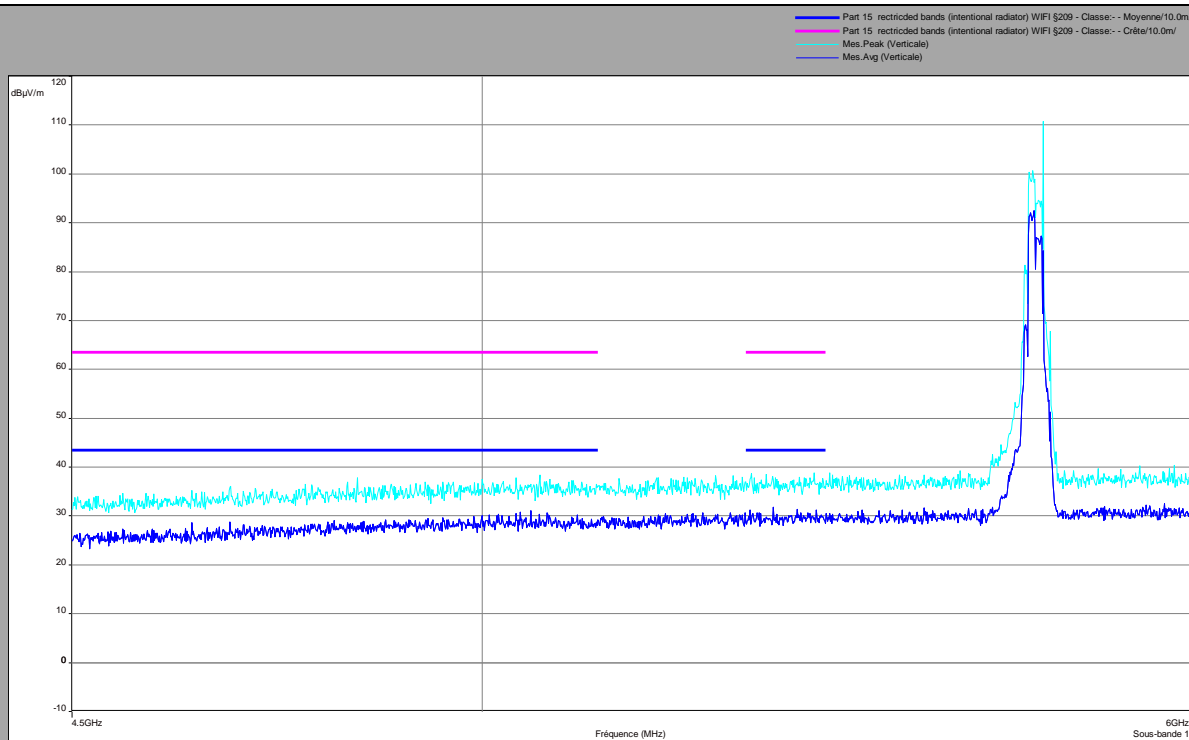




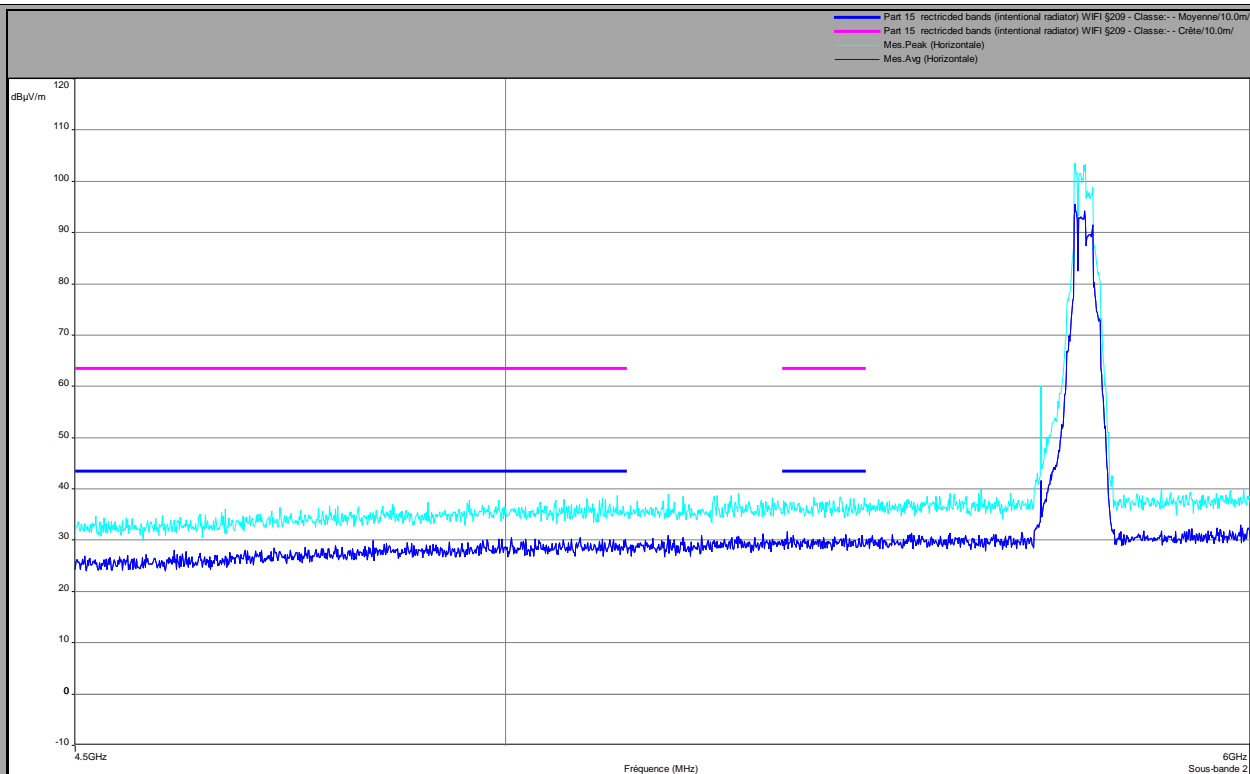
### Configuration 27

#### Above 1GHz

#### Vertical Polarization



#### Horizontal Polarization

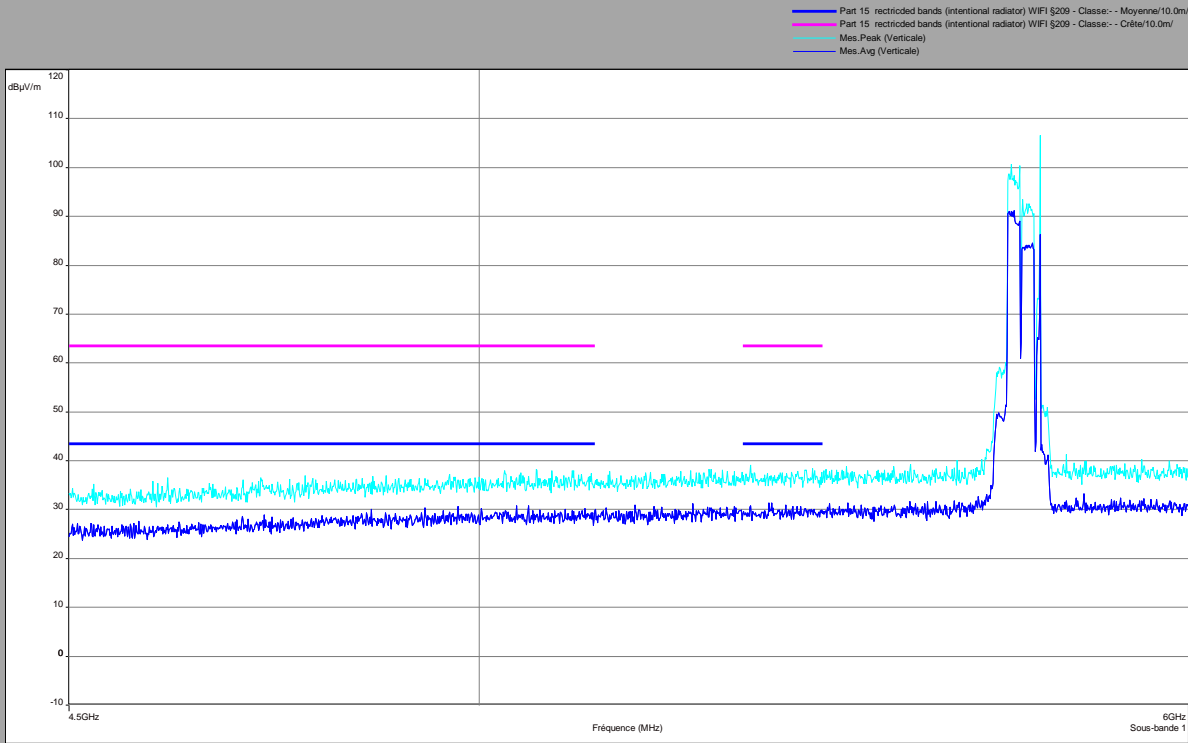




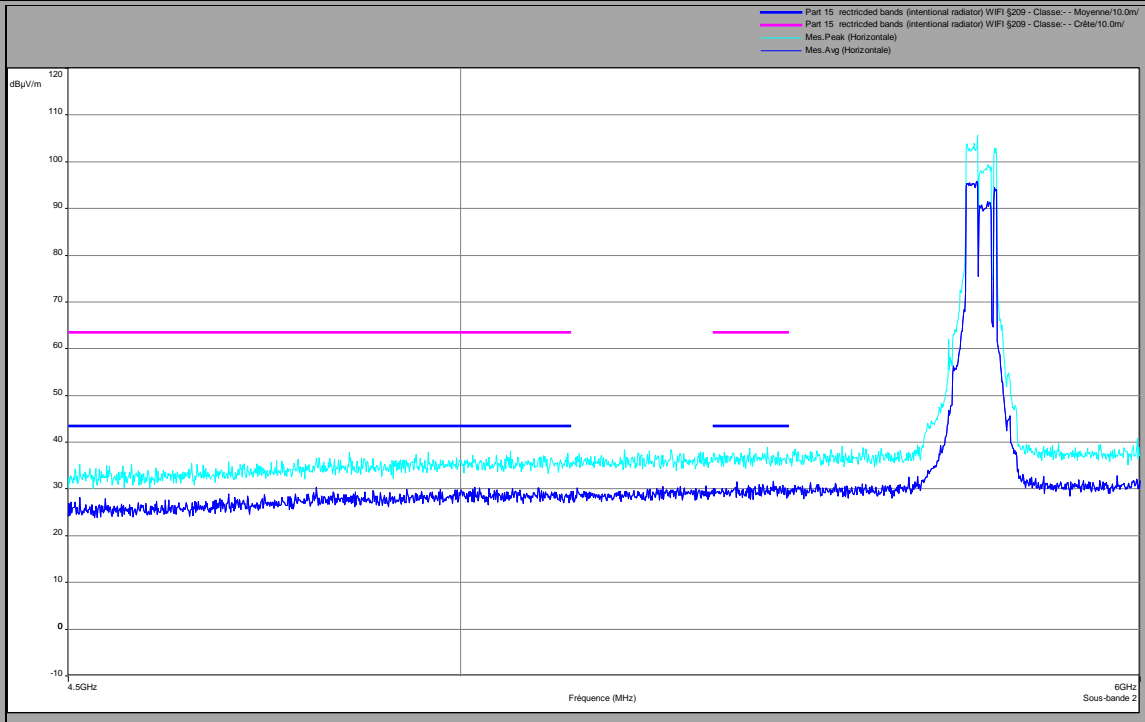
Configuration 31

Above 1GHz

Vertical Polarization



Horizontal Polarization

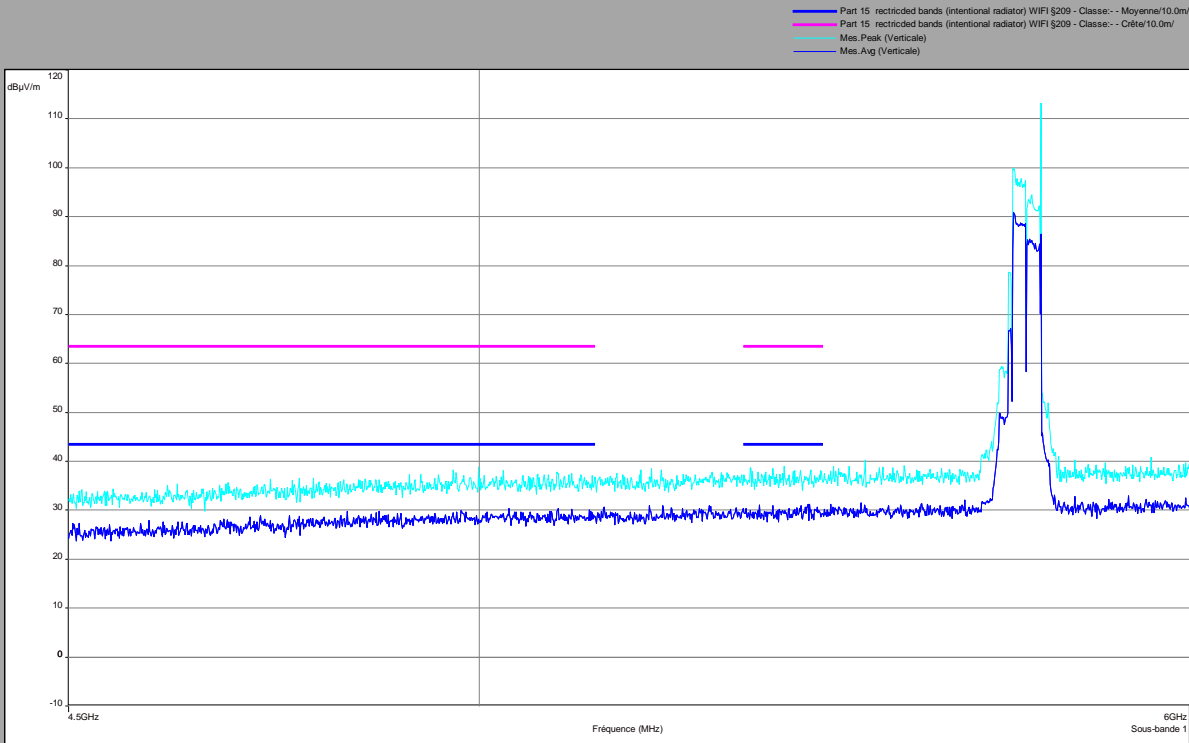




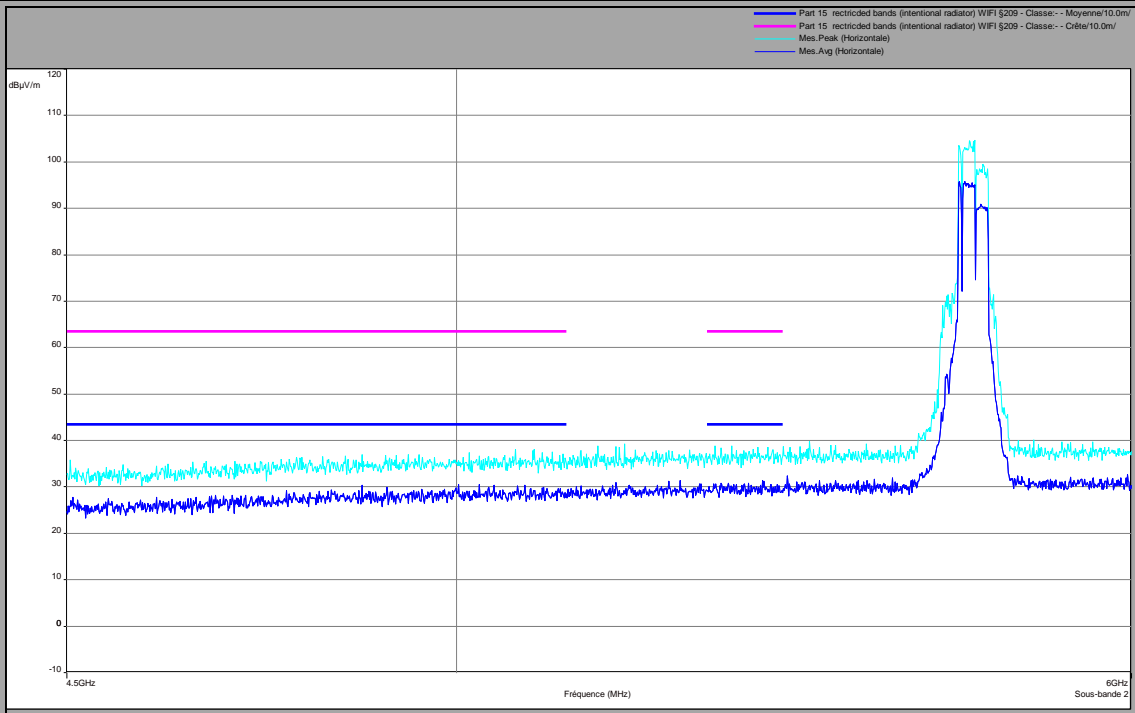
Configuration 32

Above 1GHz

Vertical Polarization



Horizontal Polarization

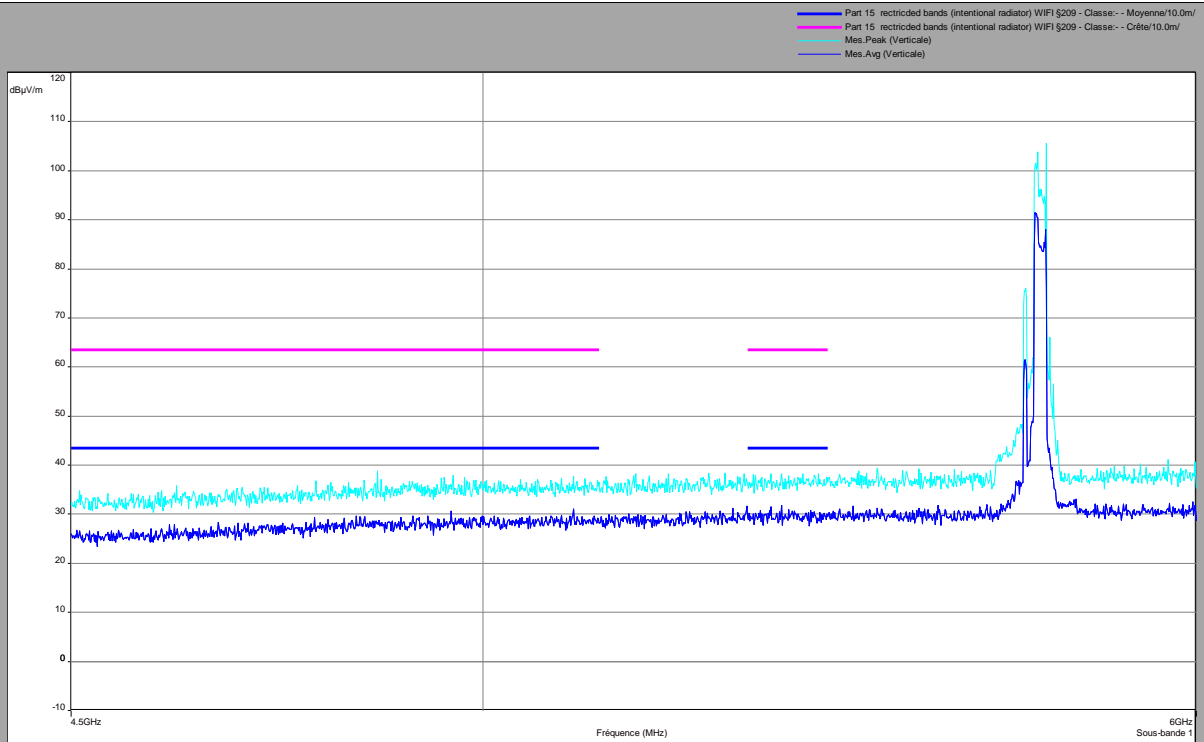




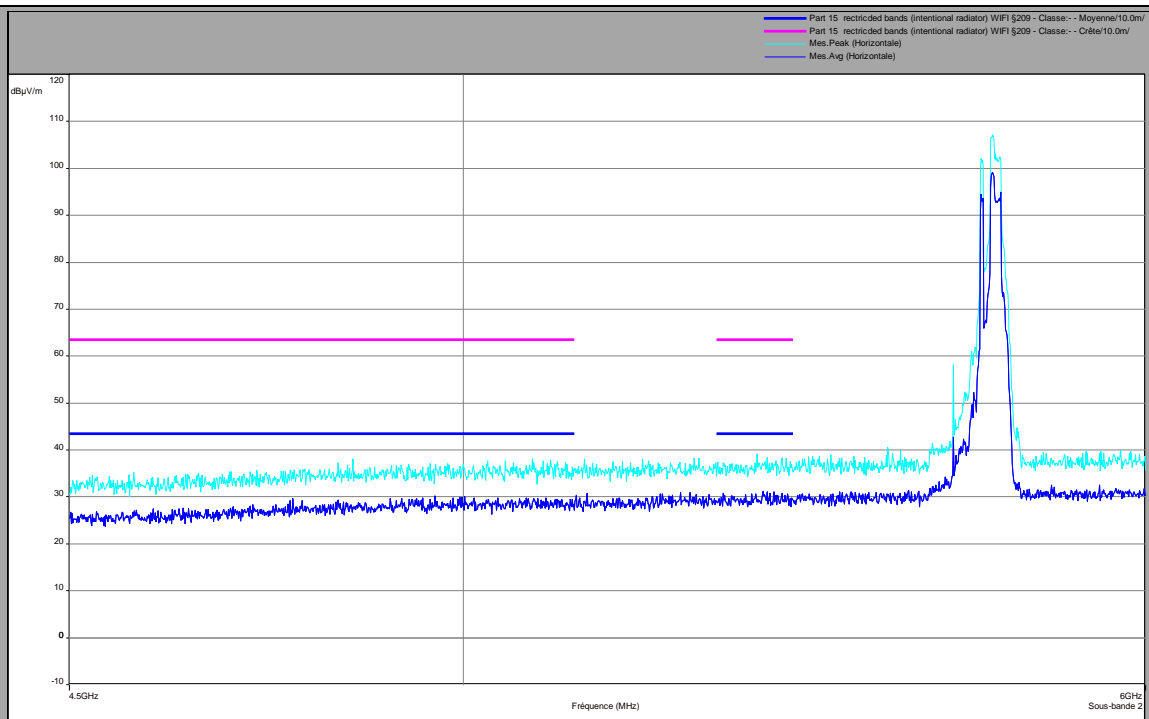
### Configuration 38

### Above 1GHz

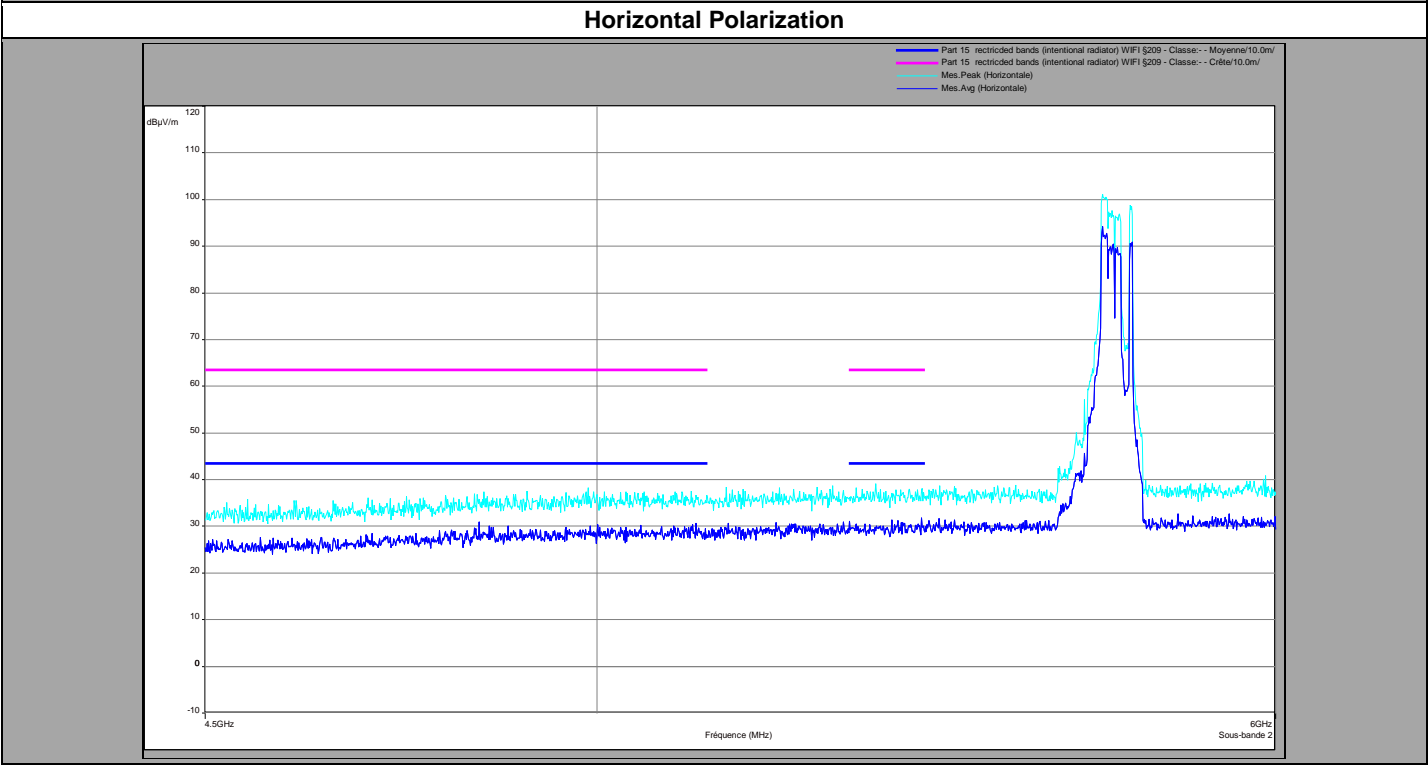
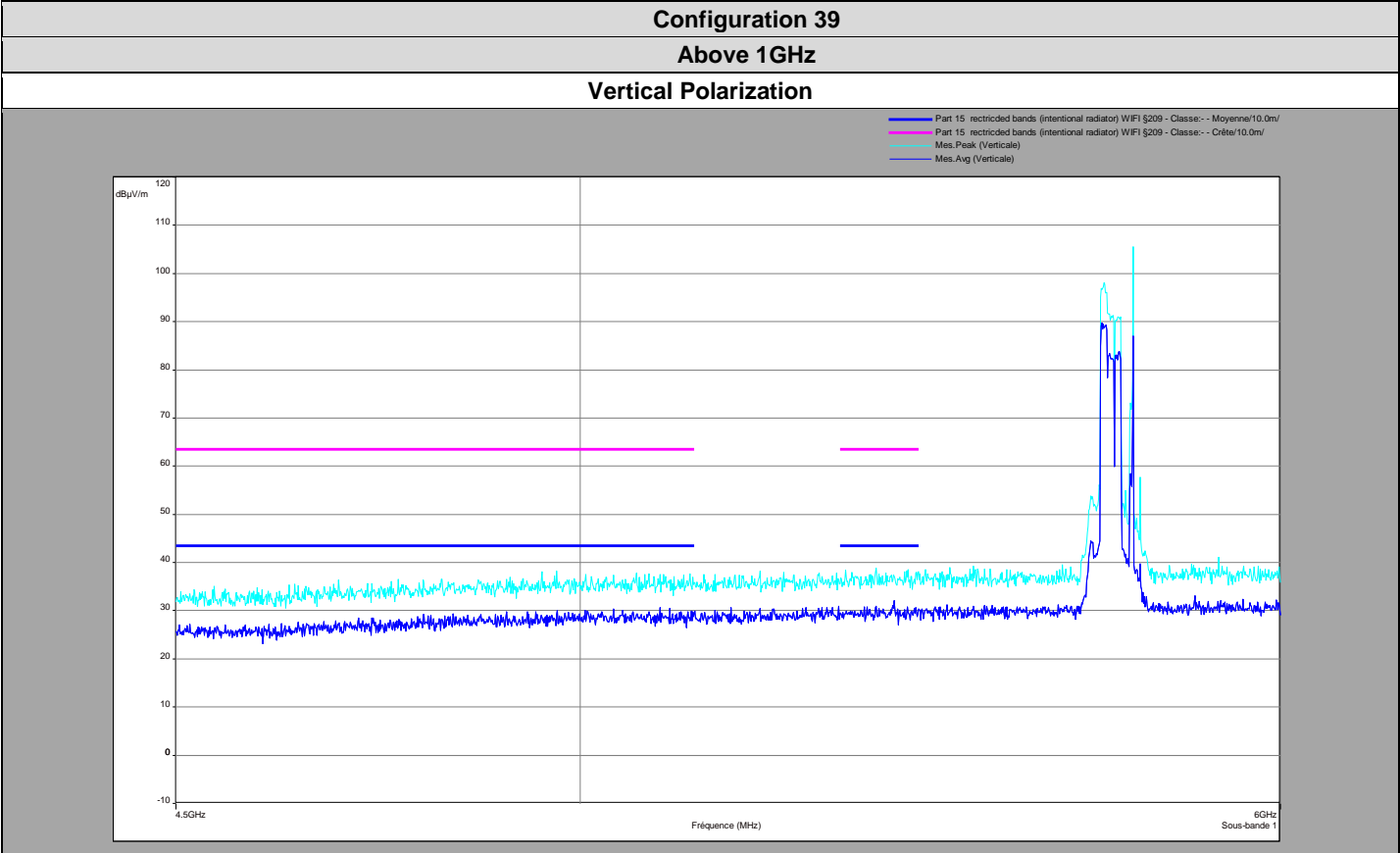
### Vertical Polarization



### Horizontal Polarization





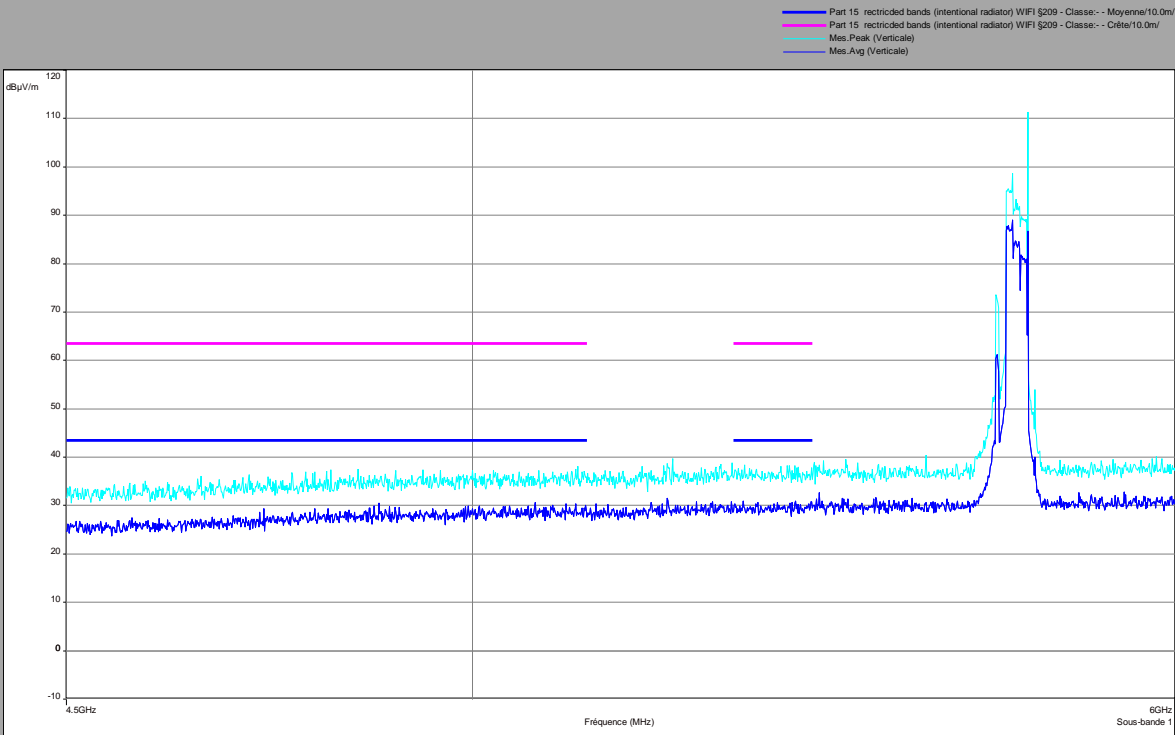




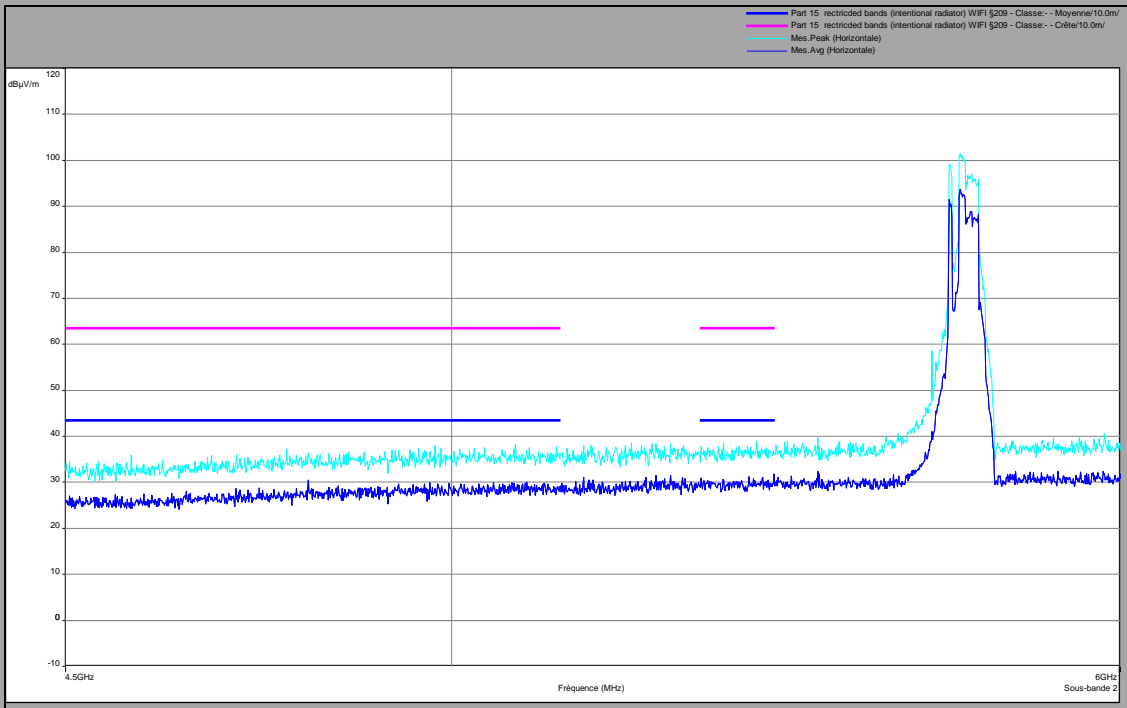
Configuration 42

Above 1GHz

Vertical Polarization



Horizontal Polarization





Configuration 1			
Below 1GHz			
Polarization	Frequencies (MHz)	Quasi-Peak Level (dB $\mu$ V/m)	Quasi-Peak Limit (dB $\mu$ V/m)
Vertical	31,2	24,27	29.5
Vertical	32,1	25,86	29.5
Vertical	33,2	25,62	29.5
Vertical	34,1	26,11	29.5
Vertical	34,7	23,61	29.5
Vertical	36,2	25,96	29.5
Vertical	36,7	24,98	29.5
Vertical	37,7	22,47	29.5
Vertical	39,2	19,78	29.5
Vertical	40	25,15	29.5
Vertical	40,7	21,2	29.5
Vertical	41,6	18,27	29.5
Vertical	44,3	21,54	29.5
Vertical	46,1	15,53	29.5
Vertical	47,2	18,15	29.5
Vertical	48,1	18,34	29.5
Vertical	49,7	17,76	29.5
Vertical	51,9	16,26	29.5
Vertical	53,9	15,23	29.5
Vertical	55,1	16,41	29.5
Vertical	57,5	14,13	29.5
Vertical	58,7	20,63	29.5
Vertical	60,8	19,39	29.5
Vertical	62,2	15,26	29.5
Vertical	66,1	17,14	29.5
Vertical	67,1	13,57	29.5
Vertical	68	15,95	29.5
Vertical	69,5	19,04	29.5
Vertical	72,7	19	29.5
Vertical	74,6	22,12	29.5
Vertical	76,5	19,09	29.5
Vertical	80	22,49	29.5
Vertical	82,5	17,63	29.5
Vertical	84,6	18,83	29.5



Configuration 1			
Below 1GHz			
Polarization	Frequencies (MHz)	Quasi-Peak Level (dB $\mu$ V/m)	Quasi-Peak Limit (dB $\mu$ V/m)
Vertical	95,2	17,15	33
Vertical	107,1	21,6	33
Vertical	110	26,8	33
Vertical	116,2	22,27	33
Vertical	119,4	20,23	33
Vertical	121,2	15,8	33
Vertical	124,6	16,05	33
Vertical	128,1	17,15	33
Vertical	132	19,18	33
Vertical	138,4	21,63	33
Vertical	149,7	22,12	33
Vertical	151,6	21,05	33
Vertical	154,6	29,14	33
Vertical	161,5	27,03	33
Vertical	176,7	26,26	33
Vertical	178	24,27	33
Vertical	190,7	25,57	33
Vertical	220,4	28,31	33.5
Vertical	226	27,25	33.5
Vertical	233	29	33.5
Vertical	237,9	25,06	33.5
Vertical	248,5	22,07	33.5
Vertical	261,3	24,23	33.5
Vertical	280,1	27,52	35.5
Vertical	285	17,78	35.5
Vertical	316	27,44	35.5
Vertical	325,8	27,58	35.5
Vertical	363,7	29,9	35.5
Vertical	400	30,11	35.5
Vertical	450	25,76	35.5
Vertical	463,2	32,11	35.5
Vertical	500	32,01	35.5



Configuration 1			
Below 1GHz			
Polarization	Frequencies (MHz)	Quasi-Peak Level (dB $\mu$ V/m)	Quasi-Peak Limit (dB $\mu$ V/m)
Vertical	528,2	27,46	35.5
Vertical	529,3	24,44	35.5
Vertical	550	29,52	35.5
Vertical	625	27,73	35.5
Vertical	653,9	26,7	35.5
Vertical	666,7	33,26	35.5
Vertical	700	31,59	35.5
Vertical	737,3	27,9	35.5
Vertical	750	30,99	35.5
Vertical	800	31,2	35.5
Vertical	850	33,28	35.5
Vertical	900	18,17	35.5
Vertical	983	27,05	43.5



Configuration 1			
Below 1GHz			
Polarization	Frequencies (MHz)	Quasi-Peak Level (dB $\mu$ V/m)	Quasi-Peak Limit (dB $\mu$ V/m)
Horizontal	95,4	17,51	33
Horizontal	100,5	18,99	33
Horizontal	101,7	18,25	33
Horizontal	132,7	20,43	33
Horizontal	143,9	28,03	33
Horizontal	156	19,11	33
Horizontal	160,8	20,09	33
Horizontal	166,5	25,64	33
Horizontal	169,9	24,15	33
Horizontal	173,2	24,62	33
Horizontal	179,9	22,53	33
Horizontal	187,7	30,96	33
Horizontal	190,8	31,34	33
Horizontal	194,3	30,83	33
Horizontal	198,3	29,26	33
Horizontal	199,8	25,25	33
Horizontal	200,1	25,25	33
Horizontal	204,3	15,69	33
Horizontal	214,7	22,58	33
Horizontal	210	22,8	33
Horizontal	219,7	25,81	35.5
Horizontal	225,5	27,06	35.5
Horizontal	231,8	21,81	35.5
Horizontal	236,8	26,19	35.5
Horizontal	260,1	26,57	35.5
Horizontal	271,1	30,39	35.5
Horizontal	281,9	19,45	35.5
Horizontal	302,2	19,27	35.5
Horizontal	325,9	32,8	35.5
Horizontal	337,8	28,27	35.5
Horizontal	358,6	26	35.5
Horizontal	375,9	28,71	35.5
Horizontal	385,2	26,64	35.5
Horizontal	400	23,26	35.5
Horizontal	417,1	27,31	35.5
Horizontal	450	27,79	35.5



Configuration 1			
Below 1GHz			
Polarization	Frequencies (MHz)	Quasi-Peak Level (dB $\mu$ V/m)	Quasi-Peak Limit (dB $\mu$ V/m)
Horizontal	486,6	23,8	35.5
Horizontal	500	25,47	35.5
Horizontal	517,6	30,73	35.5
Horizontal	550	32,56	35.5
Horizontal	573,4	29,34	35.5
Horizontal	600	29,53	35.5
Horizontal	625	27,02	35.5
Horizontal	650	28,94	35.5
Horizontal	666,7	30,53	35.5
Horizontal	700	30,58	35.5
Horizontal	737,3	27,9	35.5
Horizontal	750	29,98	35.5
Horizontal	800	28,94	35.5
Horizontal	850	30,53	35.5
Horizontal	900	30,58	35.5
Horizontal	913	27,9	35.5
Horizontal	983	29,98	43.5

**Worst case results among configurations 1-3-7-9-13-15-19-21-25-27-31-32-38-39-42****Above 1GHz**

Polarization	Frequencies (MHz)	Peak Level (dBμV/m)	Average Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)
Vertical	1100	46,76	28,05	63,5	43,5
Vertical	1150	45,68	24,7	63,5	43,5
Vertical	1200	31,69	30,45	63,5	43,5
Vertical	1250	34,54	29,97	63,5	43,5
Vertical	1300	30,61	22,07	63,5	43,5
Vertical	1400	32,72	23,72	63,5	43,5
Vertical	1500	32,28	30,85	63,5	43,5
Vertical	1666,6	32	30,26	63,5	43,5
Vertical	2000	33,11	27,48	63,5	43,5

**Worst case results among the configurations 1-3-7-9-13-15-19-21-25-27-31-32-38-39-42****Above 1GHz**

Polarization	Frequencies (MHz)	Peak Level (dBμV/m)	Average Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)
Horizontal	1100	47,5	19,83	63,5	43,5
Horizontal	1125	43,31	24,73	63,5	43,5
Horizontal	1200	33,78	24,22	63,5	43,5
Horizontal	1250	35,31	24,64	63,5	43,5
Horizontal	1300	31,42	25,34	63,5	43,5
Horizontal	1475	32,95	29,99	63,5	43,5
Horizontal	1500	35,46	30,95	63,5	43,5
Horizontal	2000	35,32	27,08	63,5	43,5

**7.7. CONCLUSION**

Unwanted Emission into Restricted Bands measurement performed on the sample of the product FL58R2HDBW45-CEN, SN: 0006, in configuration and description presented in this test report, show levels **conform to** the FCC 15.407 limits.





## 8. UNCERTAINTIES CHART

Kind of test	Measurement uncertainties (k=2) $\pm x(\text{dB})$ / (Hz)	Limit for uncertainties $\pm y(\text{dB})$
<b>REQUIREMENTS</b>		
RF output power, conducted	$\pm 0.6 \text{ dB}$	$\pm 1,5 \text{ dB}$
Power Spectral Density, conducted	$\pm 0.6 \text{ dB}$	$\pm 1,5 \text{ dB}$
Unwanted Emissions, conducted	$\pm 0.6 \text{ dB}$	$\pm 1,5 \text{ dB}$
Radiated emissions <ul style="list-style-type: none"><li>Frequency &lt; 1000 MHz</li><li>Frequency &gt; 1000 MHz</li></ul>	$\pm 3.9 \text{ dB}$ $\pm 3.1 \text{ dB}$	$\pm 6 \text{ dB}$
Temperature	$\pm 0.5^\circ\text{C}$	$\pm 1^\circ\text{C}$
Humidity	$\pm 2.5 \%$	$\pm 5 \%$