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FCC RADIO TEST REPORT

Applicant's company	**Cambium Networks Inc.**
Applicant Address	3800 Golf Road, Suite 360 Rolling Meadows, IL 60008, USA
FCC ID	**Z8H89FT0017**
Manufacturer's company	**Cambium Networks Inc.**
Manufacturer Address	3800 Golf Road, Suite 360 Rolling Meadows, IL 60008, USA

Product Name	Force 300
Brand Name	Cambium Networks
Model No.	Force 300
Test Rule Part(s)	47 CFR FCC Part 15 Subpart E § 15.407
Test Freq. Range	5150 ~ 5250 MHz / 5725 ~ 5850 MHz
Received Date	Nov. 16, 2017
Final Test Date	Dec. 04, 2017
Submission Type	Original Equipment

Statement

The test result in this report refers exclusively to the presented test model / sample.
Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.
The measurements and test results shown in this test report were made in accordance with the procedures and found in compliance with the limit given in **ANSI C63.10-2013, 47 CFR FCC Part 15 Subpart E, KDB789033 D02 v02, KDB662911 D01 v02r01, ET Docket No. 13-49; FCC 16-24.**
The test equipment used to perform the test is calibrated and traceable to NML/ROC.

Testing Laboratory
1190

Table of Contents

History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR7D0728	Rev. 01	Initial issue of report	Dec. 27, 2017

1. VERIFICATION OF COMPLIANCE

Product Name	:	Force 300
Brand Name	:	Cambium Networks
Model No.	:	Force 300
Applicant	:	Cambium Networks Inc.
Test Rule Part(s)	:	47 CFR FCC Part 15 Subpart E § 15.407

Sporton International as requested by the applicant to evaluate the EMC performance of the product sample received on Nov. 16, 2017 would like to declare that the tested sample has been evaluated and found to be in compliance with the tested rule parts. The data recorded as well as the test configuration specified is true and accurate for showing the sample's EMC nature.

Cliff Chang
SPORTON INTERNATIONAL INC.

2. SUMMARY OF THE TEST RESULT

Applied Standard: 47 CFR FCC Part 15 Subpart E			
Part	**Rule Section**	**Description of Test**	**Result**
4.1	15.207	AC Power Line Conducted Emissions	Complies
4.2	15.407(a)	26dB Spectrum Bandwidth and 99% Occupied Bandwidth	Complies
4.3	15.407(e)	6dB Spectrum Bandwidth	Complies
4.4	15.407(a)	Maximum Conducted Output Power	Complies
4.5	15.407(a)	Power Spectral Density	Complies
4.6	15.407(b)	Radiated Emissions	Complies
4.7	15.407(b)	Band Edge Emissions	Complies
4.8	15.407(g)	Frequency Stability	Complies
4.9	15.203	Antenna Requirements	Complies

3. GENERAL INFORMATION

3.1. Product Details

Items	Description
Product Type	2TX, 2RX
Radio Type	Intentional Transceiver
Power Type	From PoE
Modulation	QPSK
Frequency Range	5150 ~ 5250 MHz / 5725 ~ 5850 MHz
Channel Number	Band 1: 13 for 20MHz bandwidth ; Band 4: 17 for 20MHz bandwidth Band 1: 2 for 80MHz bandwidth ; Band 4: 9 for 80MHz bandwidth
Channel Bandwidth (99%)	For Antenna 2 Band 1: QPSK, 20M: 17.71 MHz QPSK, 80M: 76.12 MHz Band 4: QPSK, 20M: 17.63 MHz QPSK, 80M: 76.12MHz
	For Antenna 3 Band 1: QPSK, 20M: 21.62 MHz QPSK, 80M: 76.12 MHz Band 4: QPSK, 20M: 27.61 MHz QPSK, 80M: 75.83 MHz

Maximum Conducted Output Power	For Antenna 2 Band 1: QPSK, 20M: -4.10 dBm QPSK, 80M: -8.51 dBm Band 4: QPSK, 20M: 2.20 dBm QPSK, 80M: -1.43 dBm
	For Antenna 3 Band 1: QPSK, 20M: 29.81 dBm QPSK, 80M: 17.68 dBm Band 4: QPSK, 20M: 29.99 dBm QPSK, 80M: 24.41 dBm
Carrier Frequencies	Please refer to section 3.4
Antenna	Please refer to section 3.3

Items	Description	
Communication Mode	☒ IP Based (Load Based)	☐ Frame Based
Beamforming Function	☐ With beamforming	☒ Without beamforming
Operate Condition	☐ Indoor	☒ Outdoor

Antenna and Bandwidth

Antenna	Two (TX)	
Bandwidth Mode	20 MHz	80 MHz
QPSK	V	V

3.2. Accessories

N/A

3.3. Table for Filed Antenna

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
						2.4GHz	5GHz
1	1	-	-	Printed Antenna	N/A	25	-
2	1, 2	-	-	Printed Antenna	N/A	-	25
3	1, 2	-	-	Printed Antenna	N/A	-	2

Note: The EUT has three antennas.

For 2.4GHz function (1TX/1RX):

Only Port 1 can be used as transmitting/receiving antenna.

For 5GHz function (2TX/2RX):

Ant.2 and Ant.3 has been tested and recorded in the test report.

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

3.4. Table for Carrier Frequencies

There are two bandwidth systems.

For 20MHz bandwidth systems:

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250 MHz Band 1	1	5180 MHz	8	5215 MHz
	2	5185 MHz	9	5220 MHz
	3	5190 MHz	10	5225 MHz
	4	5195 MHz	11	5230 MHz
	5	5200 MHz	12	5235 MHz
	6	5205 MHz	13	5240 MHz
	7	5210 MHz	-	-
5725~5850 MHz Band 4	1	5745 MHz	10	5790 MHz
	2	5750 MHz	11	5795 MHz
	3	5755 MHz	12	5800 MHz
	4	5760 MHz	13	5805 MHz
	5	5765 MHz	14	5810 MHz
	6	5770 MHz	15	5815 MHz
	7	5775 MHz	16	5820 MHz
	8	5780 MHz	17	5825 MHz
	9	5785 MHz	-	-

For 80MHz bandwidth systems:

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5150~5250 MHz Band 1	1	5200 MHz	2	5210 MHz
5725~5850 MHz Band 4	1	5765 MHz	6	5790 MHz
	2	5770 MHz	7	5795 MHz
	3	5775 MHz	8	5800 MHz
	4	5780 MHz	9	5805 MHz
	5	5785 MHz	-	-

3.5. Table for Test Modes

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. The following table is a list of the test modes shown in this test report.

Test Items	Mode		Frequency	Port
AC Power Conducted Emission	CTX		-	-
Max. Conducted Output Power	QPSK, 20M	Band 1	5180 / 5200 / 5240	1+2
		Band 4	5745 / 5785 / 5825	1+2
	QPSK, 80M	Band 1	5200 / 5210	1+2
		Band 4	5765 / 5785 / 5805	1+2
Power Spectral Density	QPSK, 20M	Band 1	5180 / 5200 / 5240	1+2
		Band 4	5745 / 5785 / 5825	1+2
	QPSK, 80M	Band 1	5200 / 5210	1+2
		Band 4	5765 / 5785 / 5805	1+2
26dB Spectrum Bandwidth & 99% Occupied Bandwidth Measurement	QPSK, 20M	Band 1	5180 / 5200 / 5240	1+2
		Band 4	5745 / 5785 / 5825	1+2
	QPSK, 80M	Band 1	5200 / 5210	1+2
		Band 4	5765 / 5785 / 5805	1+2
6dB Spectrum Bandwidth Measurement	QPSK, 20M	Band 4	5745 / 5785 / 5825	1+2
	QPSK, 80M	Band 4	5765 / 5785 / 5805	1+2
Radiated Emission Below 1GHz	CTX			-
Radiated Emission Above 1GHz	QPSK, 20M	Band 1	5180 / 5200 / 5240	1+2
		Band 4	5745 / 5785 / 5825	1+2
	QPSK, 80M	Band 1	5200 / 5210	1+2
		Band 4	5765 / 5785 / 5805	1+2
Band Edge Emission	QPSK, 20M	Band 1	5180 / 5200 / 5240	1+2
		Band 4	5745 / 5785 / 5825	1+2
	QPSK, 80M	Band 1	5200 / 5210	1+2
		Band 4	5765 / 5785 / 5805	1+2
Frequency Stability	20 MHz	Band 1	5200	2
		Band 4	5785	2
	80 MHz	Band 1	5210	2
		Band 4	5765	2

Note 1: The EUT can only be used at Z axis position.

Note 2: The EUT was powered by PoE, and the PoE was for measurement only, would not be marketed.

PoE information as below:

Support Unit	Brand	Model
PoE	Cambium Networks	NET-P15-30IN

3.6. Table for Testing Locations

Test Site Location					
Address:	No.8, Lane 724, Bo-ai St., Jhubei City, Hsinchu County 302, Taiwan, R.O.C.				
TEL:	886-3-656-9065				
FAX:	886-3-656-9085				
Test Site No.	**Site Category**	**Location**	**FCC Designation No.**	**IC File No.**	**VCCI Reg. No**
03CH01-CB	SAC	Hsin Chu	TW0006	IC 4086D	-
CO02-CB	Conduction	Hsin Chu	TW0006	IC 4086D	-
TH01-CB	OVEN Room	Hsin Chu	-	-	-

Open Area Test Site (OATS); Semi Anechoic Chamber (SAC).

3.7. Table for Supporting Units

For Test Site No: CO02-CB

Support Unit	Brand	Model	FCC ID
NB	DELL	E6430	DoC
PoE	Cambium Networks	NET-P15-30IN	DoC

For Test Site No: 03CH01-CB / TH01-CB

Support Unit	Brand	Model	FCC ID
NB	DELL	E4300	DoC
PoE	Cambium Networks	NET-P15-30IN	DoC

3.8. Table for Parameters of Test Software Setting

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

For Antenna 2:

Test Software Version	QRCT Version3.0.250.0					
Mode	Test Frequency (MHz)					
	5180 MHz	5200 MHz	5240 MHz	5745 MHz	5785 MHz	5825 MHz
20M	0	5	5	10	9.5	9.5
Mode	5200 MHz	5210 MHz	5765 MHz	5785 MHz	5805 MHz	-
80M	0	0	6	6	5.5	-

For Antenna 3:

Test Software Version	QRCT Version3.0.250.0					
Mode	Test Frequency (MHz)					
	5180 MHz	5200 MHz	5240 MHz	5745 MHz	5785 MHz	5825 MHz
20M	18.5	25	30	30	30	30
Mode	5200 MHz	5210 MHz	5765 MHz	5785 MHz	5805 MHz	-
80M	12.5	13	20.5	20.5	19.5	-

3.9. EUT Operation during Test

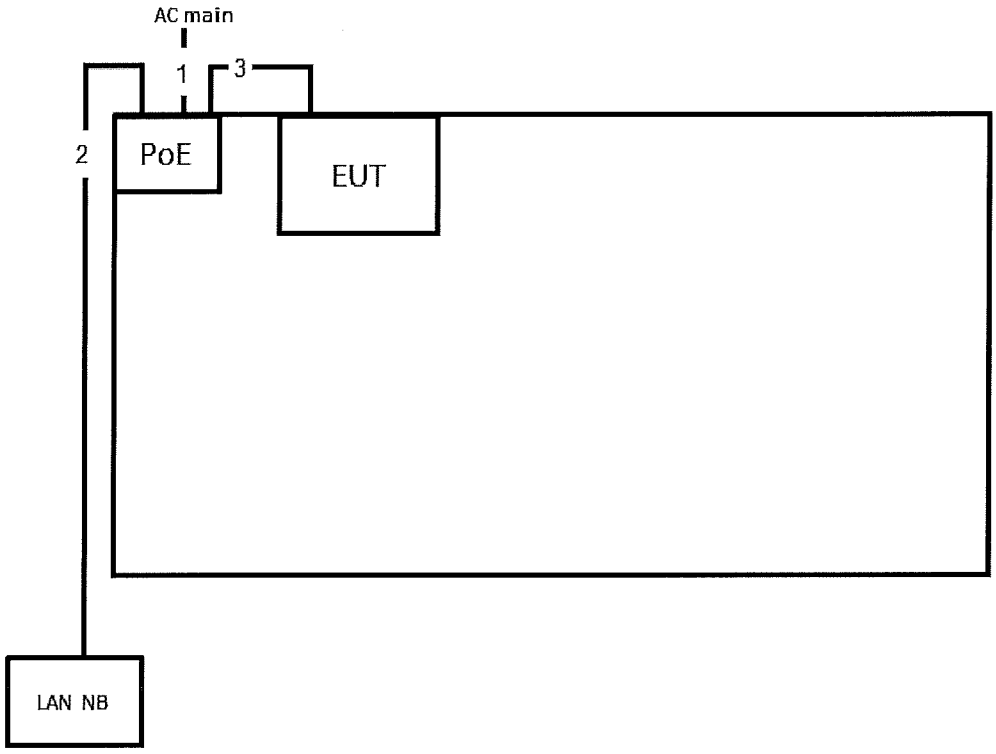
The EUT was programmed to be in continuously transmitting mode.

3.10. Duty Cycle

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
20M	4.983	5.070	98.28%	0.08	0.01
80M	1.123	1.217	92.28%	0.35	0.89

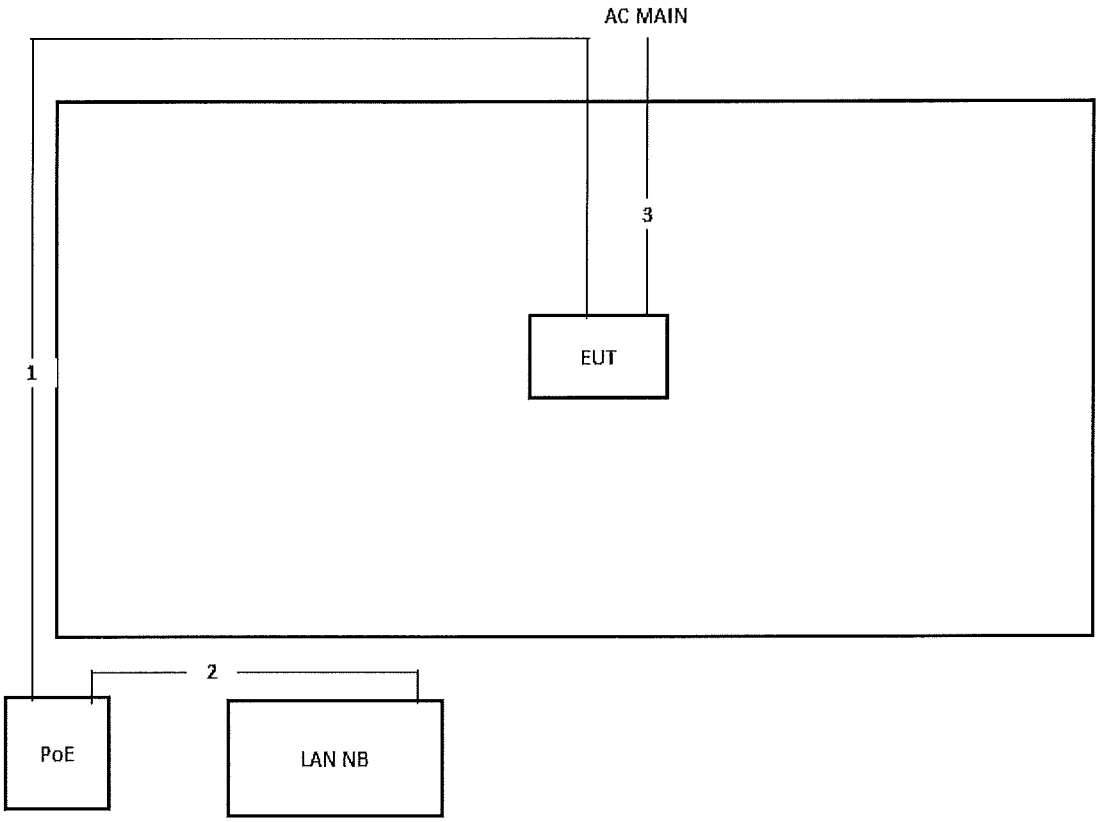
3.11. Test Configurations

3.11.1. AC Power Line Conduction Emissions Test Configuration



Item	Connection	Shielded	Length
1	Power cable	No	0.7m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m

3.11.2. Radiation Emissions Test Configuration



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	RJ-45 cable	No	1.5m
3	Power cable	No	1.5m

4. TEST RESULT

4.1. AC Power Line Conducted Emissions Measurement

4.1.1. Limit

For this product that is designed to connect to the AC power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed below limits table.

Frequency (MHz)	QP Limit (dBuV)	AV Limit (dBuV)
0.15~0.5	66~56	56~46
0.5~5	56	46
5~30	60	50

4.1.2. Measuring Instruments and Setting

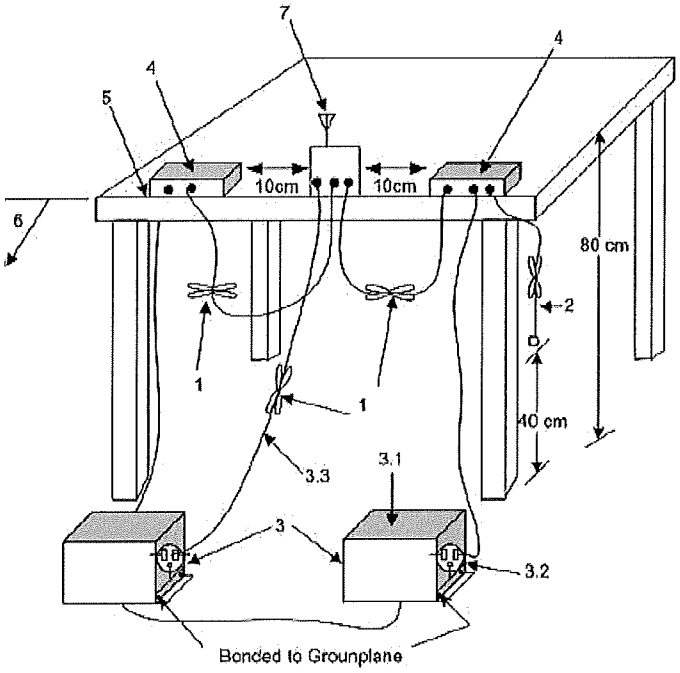
Please refer to section 5 of equipments list in this report. The following table is the setting of the receiver.

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

4.1.3. Test Procedures

1. Configure the EUT according to ANSI C63.10. The EUT or host of EUT has to be placed 0.4 meter far from the conducting wall of the shielding room and at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT or host of EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connected to the other LISNs. The LISN should provide 50uH/50ohms coupling impedance.
4. The frequency range from 150 kHz to 30 MHz was searched.
5. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. The measurement has to be done between each power line and ground at the power terminal.

4.1.4. Test Setup Layout



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

4.1.5. Test Deviation

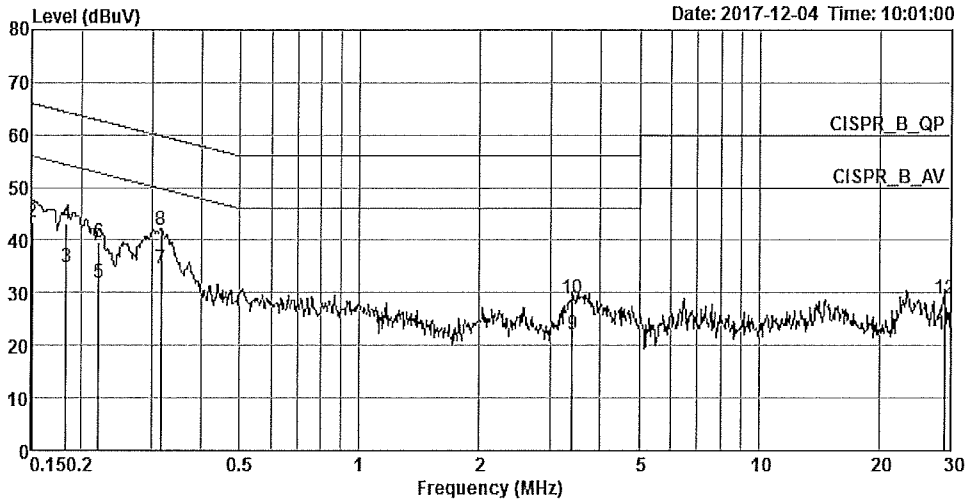
There is no deviation with the original standard.

4.1.6. EUT Operation during Test

The EUT was placed on the test table and programmed in normal function.

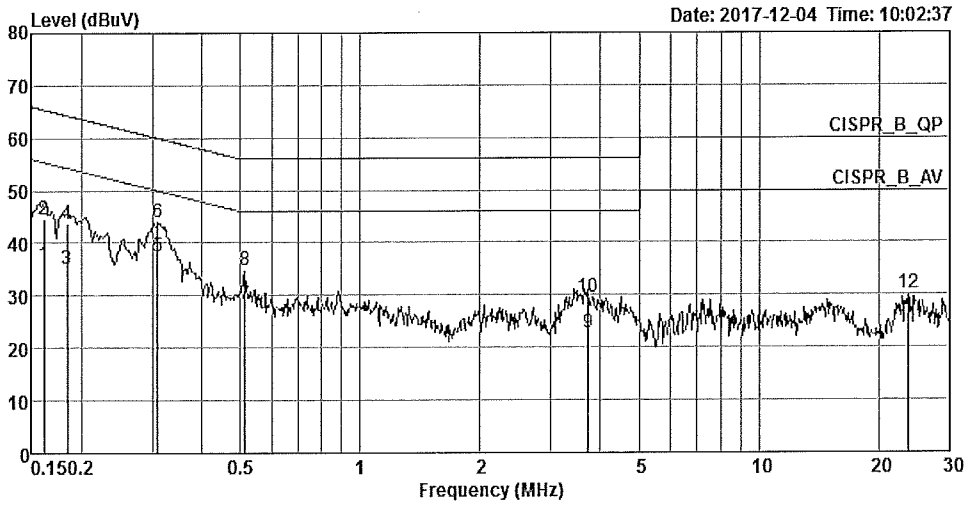
4.1.7. Results of AC Power Line Conducted Emissions Measurement

Temperature	22°C	Humidity	59%
Test Engineer	GN Hou	Phase	Line
Configuration	CTX		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1500	34.89	-21.11	56.00	24.88	10.00	0.01	Average	LINE
2	0.1500	43.35	-22.65	66.00	33.34	10.00	0.01	QP	LINE
3	0.1835	34.81	-19.52	54.33	24.87	9.93	0.01	Average	LINE
4	0.1835	43.16	-21.17	64.33	33.22	9.93	0.01	QP	LINE
5	0.2208	31.82	-20.97	52.79	21.91	9.90	0.01	Average	LINE
6	0.2208	39.44	-23.35	62.79	29.53	9.90	0.01	QP	LINE
7	0.3166	34.40	-15.40	49.80	24.50	9.88	0.02	Average	LINE
8	0.3166	41.85	-17.95	59.80	31.95	9.88	0.02	QP	LINE
9	3.3994	22.07	-23.93	46.00	12.06	9.95	0.06	Average	LINE
10	3.3994	28.94	-27.06	56.00	18.93	9.95	0.06	QP	LINE
11	29.2157	22.06	-27.94	50.00	11.48	10.35	0.23	Average	LINE
12	29.2157	28.91	-31.09	60.00	18.33	10.35	0.23	QP	LINE

Temperature	22°C	Humidity	59%
Test Engineer	GN Hou	Phase	Neutral
Configuration	CTX		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1616	36.06	-19.32	55.38	26.03	10.02	0.01	Average	NEUTRAL
2	0.1616	44.68	-20.70	65.38	34.65	10.02	0.01	QP	NEUTRAL
3	0.1844	35.05	-19.23	54.28	25.06	9.98	0.01	Average	NEUTRAL
4	0.1844	43.70	-20.58	64.28	33.71	9.98	0.01	QP	NEUTRAL
5	0.3100	37.46	-12.51	49.97	27.49	9.95	0.02	Average	NEUTRAL
6	0.3100	44.02	-15.95	59.97	34.05	9.95	0.02	QP	NEUTRAL
7	0.5128	28.21	-17.79	46.00	18.23	9.95	0.03	Average	NEUTRAL
8	0.5128	34.92	-21.08	56.00	24.94	9.95	0.03	QP	NEUTRAL
9	3.7198	22.64	-23.36	46.00	12.52	10.05	0.07	Average	NEUTRAL
10	3.7198	29.57	-26.43	56.00	19.45	10.05	0.07	QP	NEUTRAL
11	23.6361	23.57	-26.43	50.00	13.09	10.30	0.18	Average	NEUTRAL
12	23.6361	30.00	-30.00	60.00	19.52	10.30	0.18	QP	NEUTRAL

Note:

Level = Read Level + LISN Factor + Cable Loss.

4.2. 26dB Bandwidth and 99% Occupied Bandwidth Measurement

4.2.1. Limit

No restriction limits.

4.2.2. Measuring Instruments and Setting

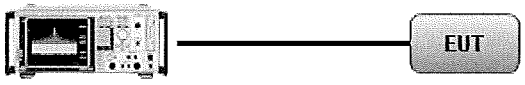
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

26dB Bandwidth	
Spectrum Parameters	**Setting**
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RBW	Approximately 1% of the emission bandwidth
VBW	VBW > RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto
99% Occupied Bandwidth	
Spectrum Parameters	**Setting**
Span	1.5 times to 5.0 times the OBW
RBW	1 % to 5 % of the OBW
VBW	≥ 3 x RBW
Detector	Peak
Trace	Max Hold

4.2.3. Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
☒	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
☒	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

4.2.4. Test Setup Layout



Spectrum Analyzer

4.2.5. Test Deviation

There is no deviation with the original standard.

4.2.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.2.7. Test Result of 26dB Bandwidth and 99% Occupied Bandwidth

Temperature	22°C	Humidity	54%
Test Engineer	Ron Huang / Lucke Hsieh / Brian Sun / Serway Li		

For Antenna 2:

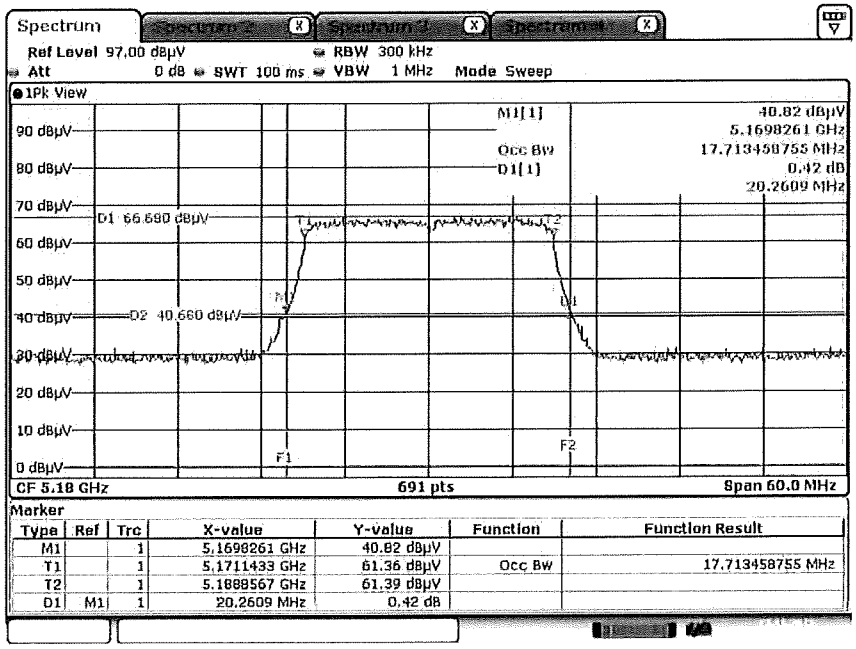
Mode	Frequency	26dB/99% Bandwidth (MHz)		26dB/99% Occupied Bandwidth (MHz)	
		Port 1		Port 2	
20M	5180 MHz	20.26	17.71	20.35	17.63
	5200 MHz	20.26	17.71	20.44	17.71
	5240 MHz	20.26	17.71	20.35	17.71
	5745 MHz	20.26	17.63	20.26	17.63
	5785 MHz	20.44	17.63	20.26	17.63
	5825 MHz	20.44	17.63	20.35	17.63
80M	5200 MHz	83.48	76.12	84.35	76.12
	5210 MHz	82.32	76.12	84.35	76.12
	5765 MHz	83.77	75.83	83.19	75.83
	5785 MHz	83.48	75.83	83.77	75.83
	5805 MHz	84.06	76.12	83.48	75.83

For Antenna 3:

Mode	Frequency	26dB/99% Bandwidth (MHz)		26dB/99% Occupied Bandwidth (MHz)	
		Port 1		Port 2	
20M	5180 MHz	20.35	17.63	20.35	17.63
	5200 MHz	24.17	17.71	32.52	17.97
	5240 MHz	33.22	18.15	41.57	21.62
	5745 MHz	42.61	24.14	39.13	20.49
	5785 MHz	41.57	24.66	44.44	27.27
	5825 MHz	44.52	27.61	42.96	25.44
80M	5200 MHz	83.48	75.83	83.77	76.12
	5210 MHz	82.90	75.83	83.48	76.12
	5765 MHz	82.90	75.83	83.48	75.83
	5785 MHz	84.06	75.83	83.48	75.83
	5805 MHz	83.77	75.83	82.90	75.83

For Antenna 2:

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 1 / 5180 MHz



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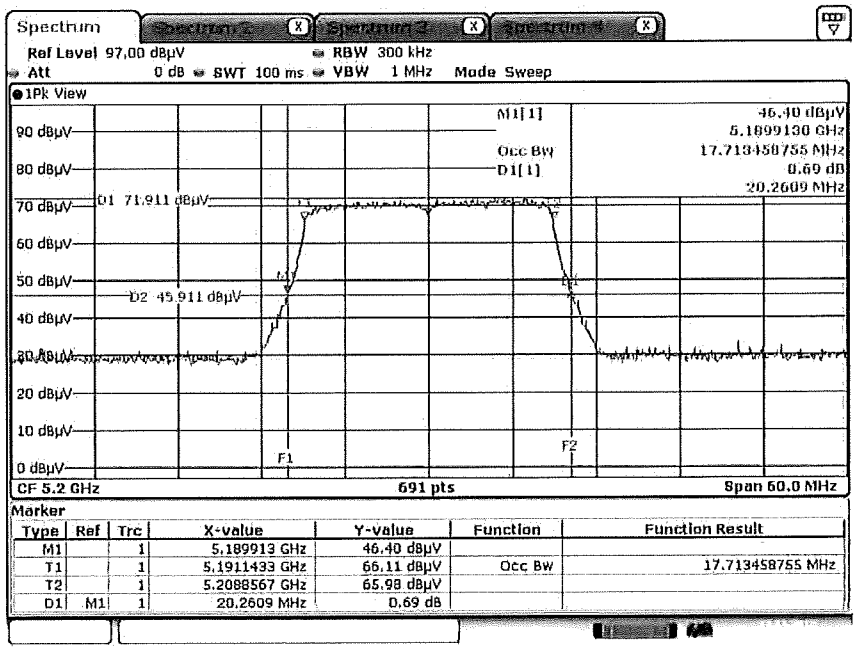
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 1 / 5200 MHz



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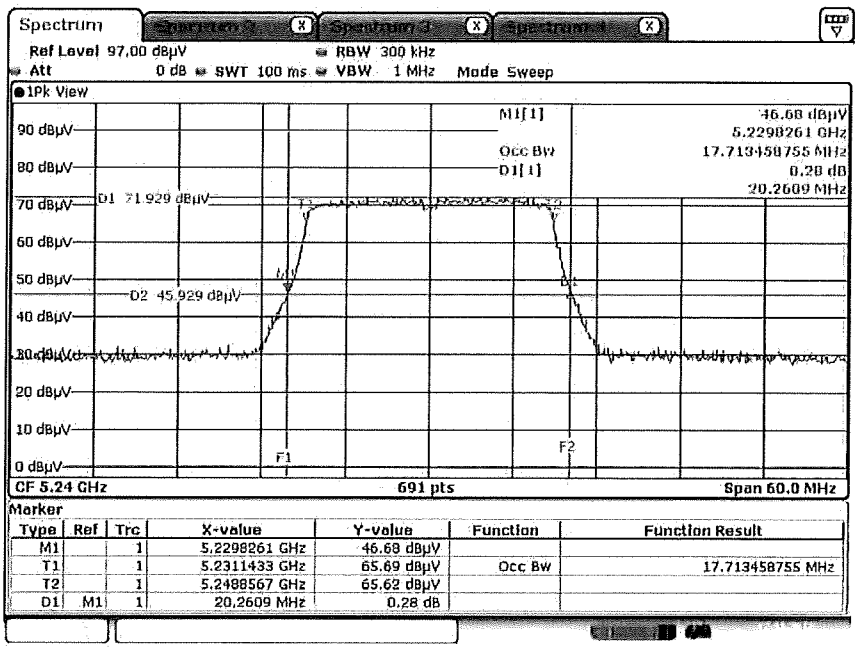
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 1 / 5240 MHz



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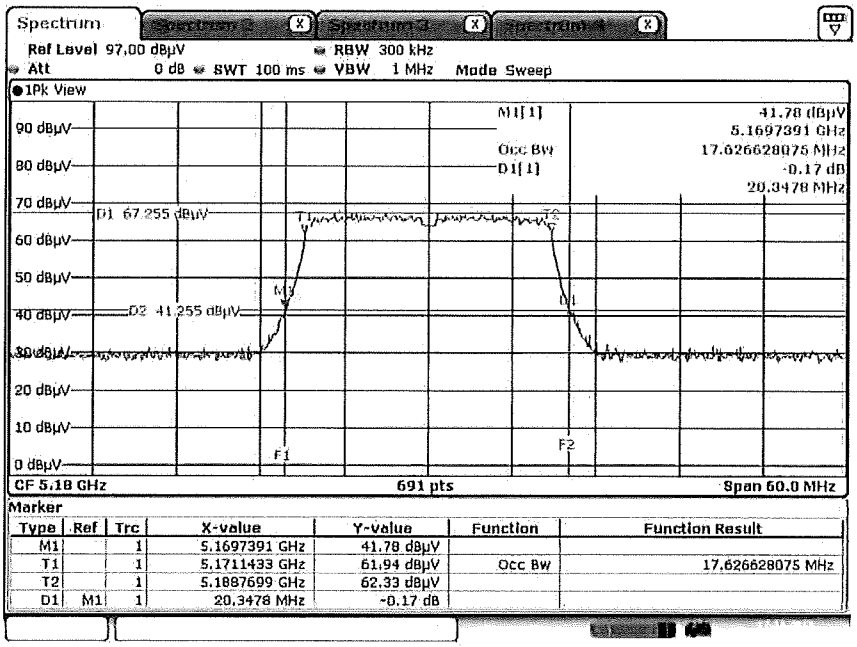
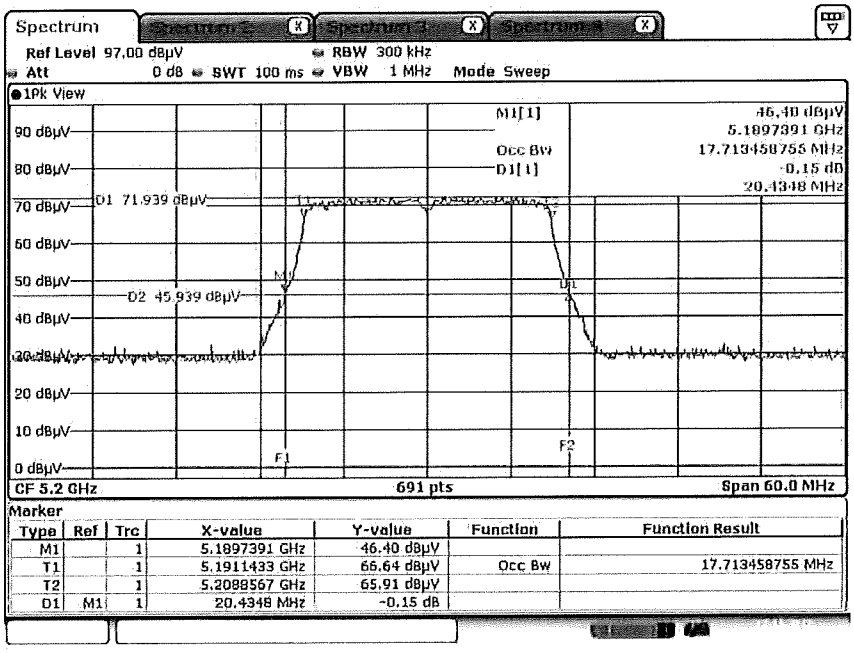
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 2 / 5180 MHz



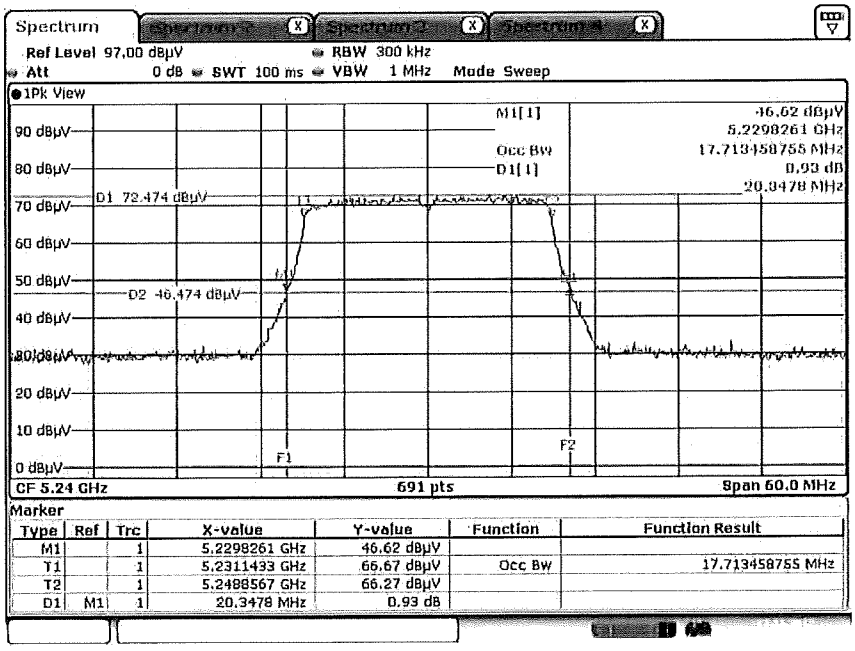
Date: 22.NOV.2017 17:58:22

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 2 / 5200 MHz



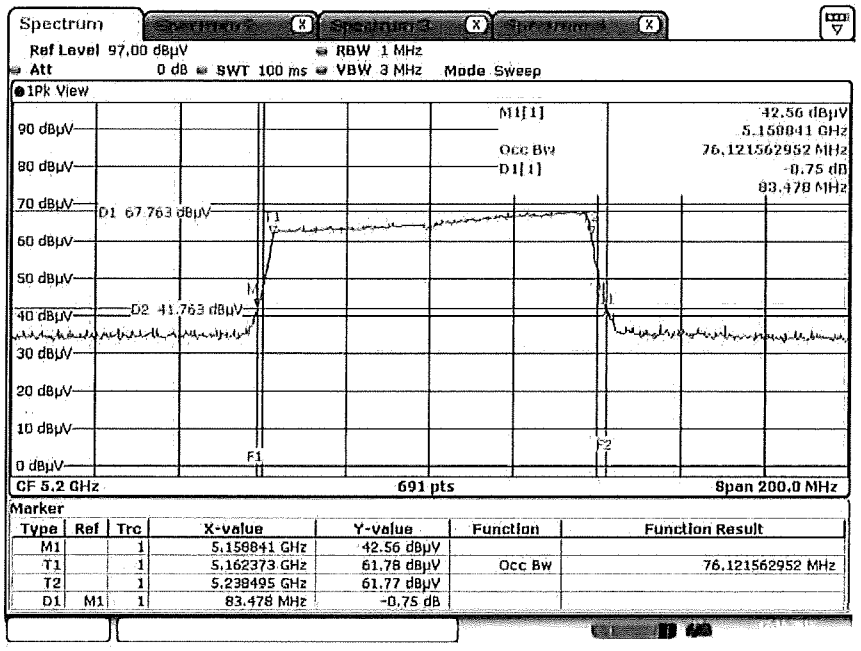
Date: 22.NOV.2017 17:58:52

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 2 / 5240 MHz



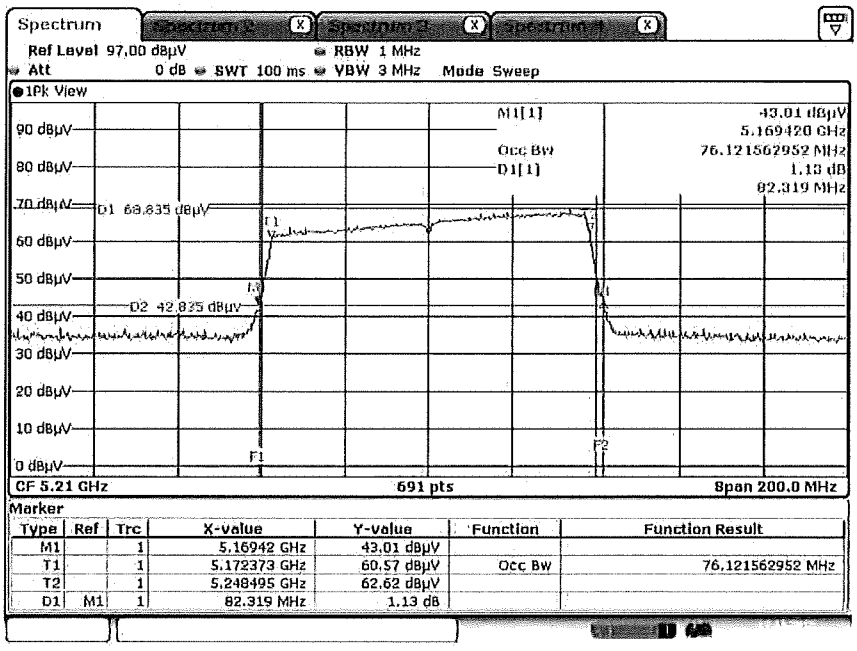
Date: 22.NOV.2017 17:59:16

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 1 / 5200 MHz



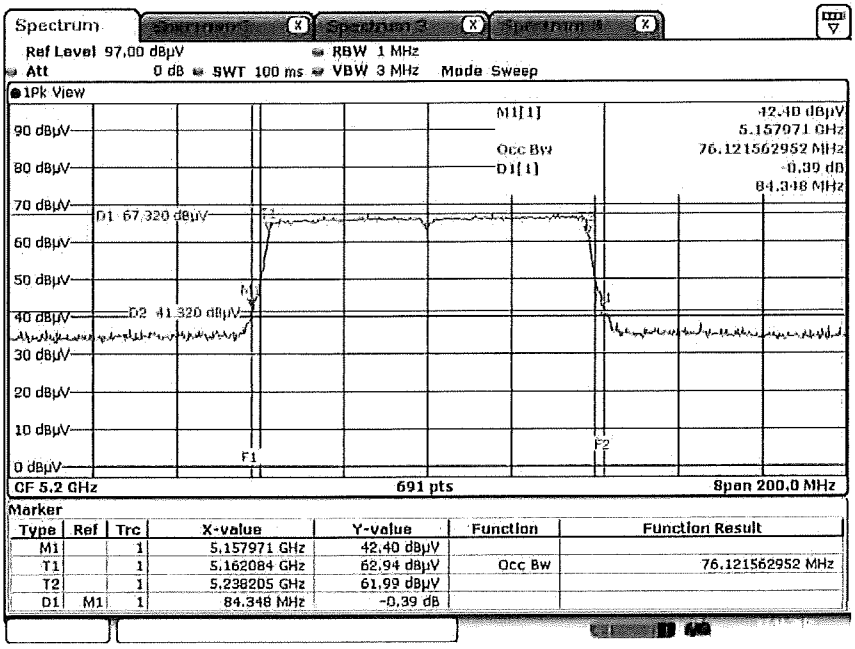
Date: 22.NOV.2017 18:07:57

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 1 / 5210 MHz



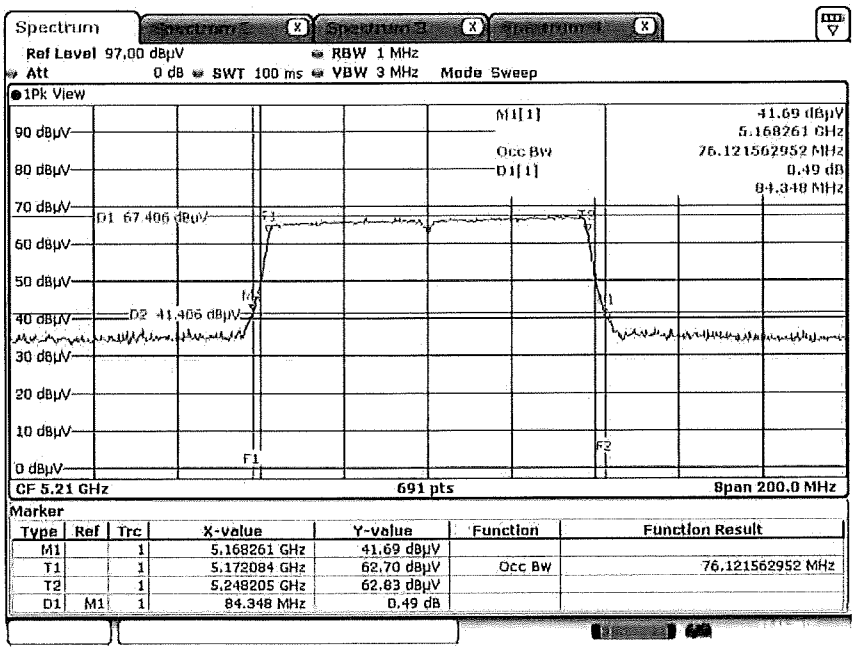
Date: 22.NOV.2017 18:08:31

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 2 / 5200 MHz



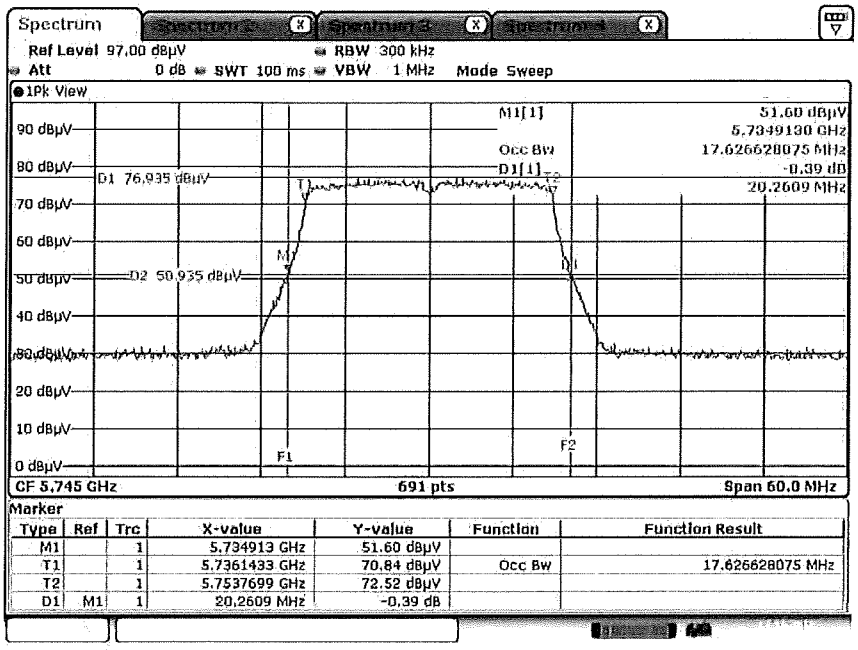
Date: 22.NOV.2017 18:00:22

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 2 / 5210 MHz



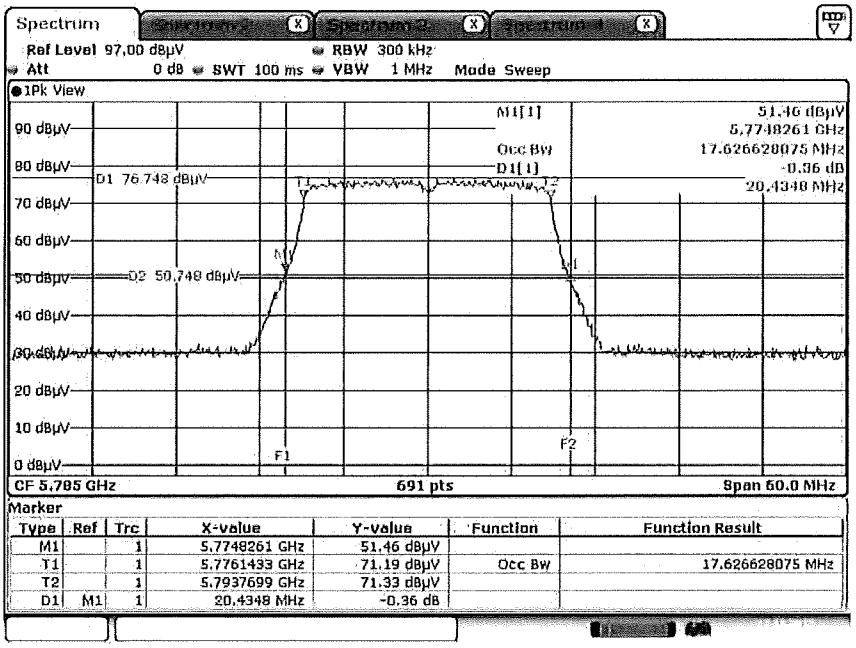
Date: 22.NOV.2017 18:00:50

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 1 / 5745 MHz



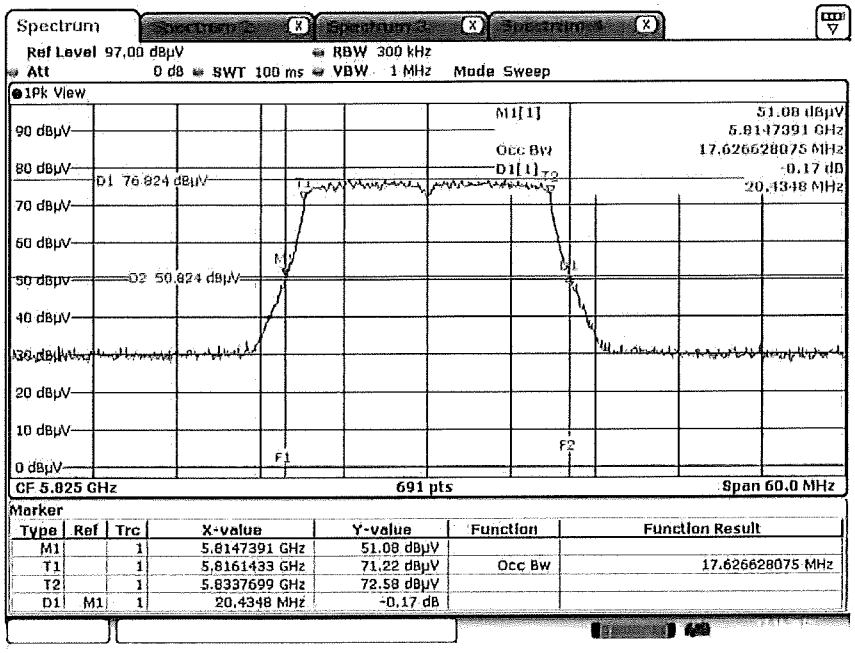
Date: 22.NOV.2017 17:47:53

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 1 / 5785MHz



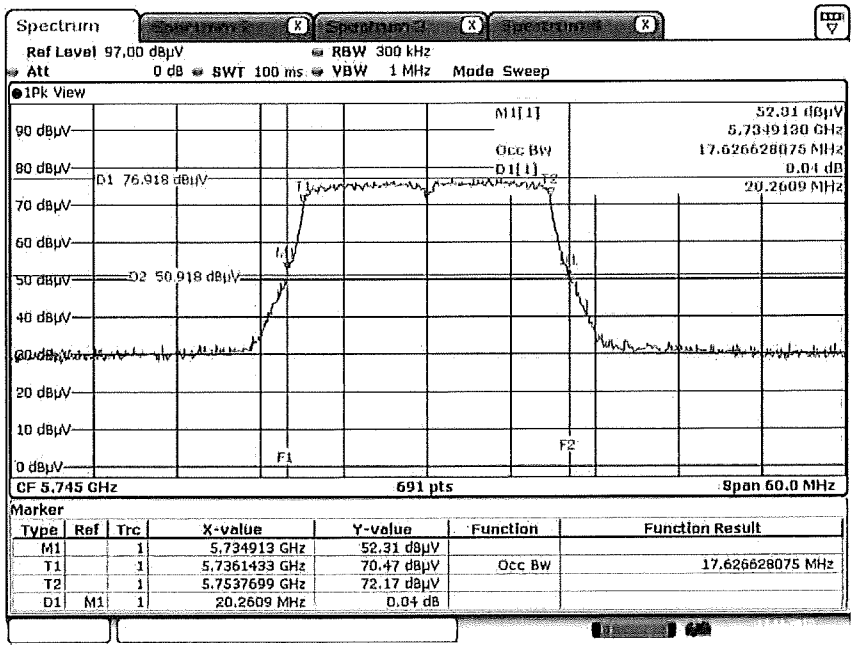
Date: 22.NOV.2017 17:48:28

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 1 / 5825 MHz



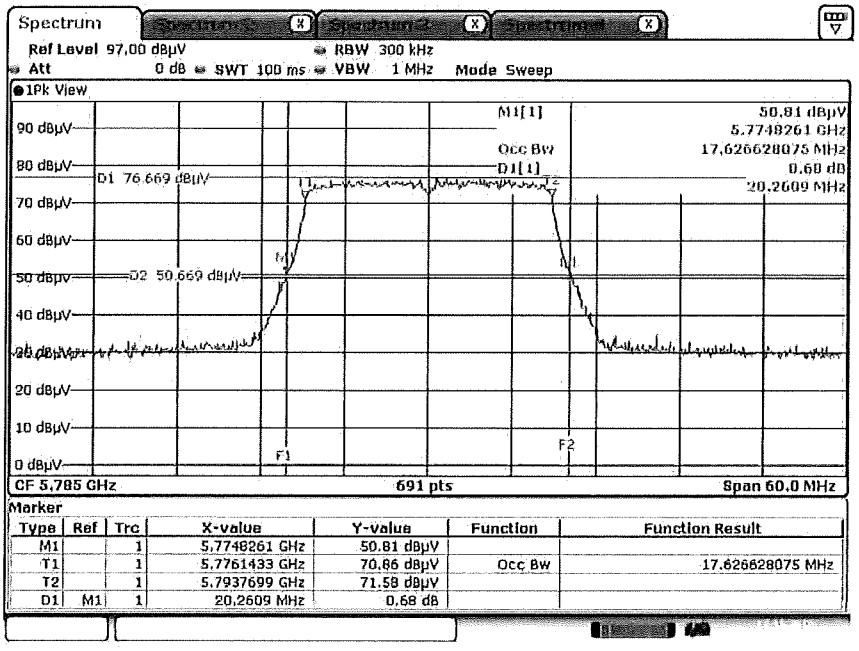
Date: 22.NOV.2017 17:48:58

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 2 / 5745 MHz



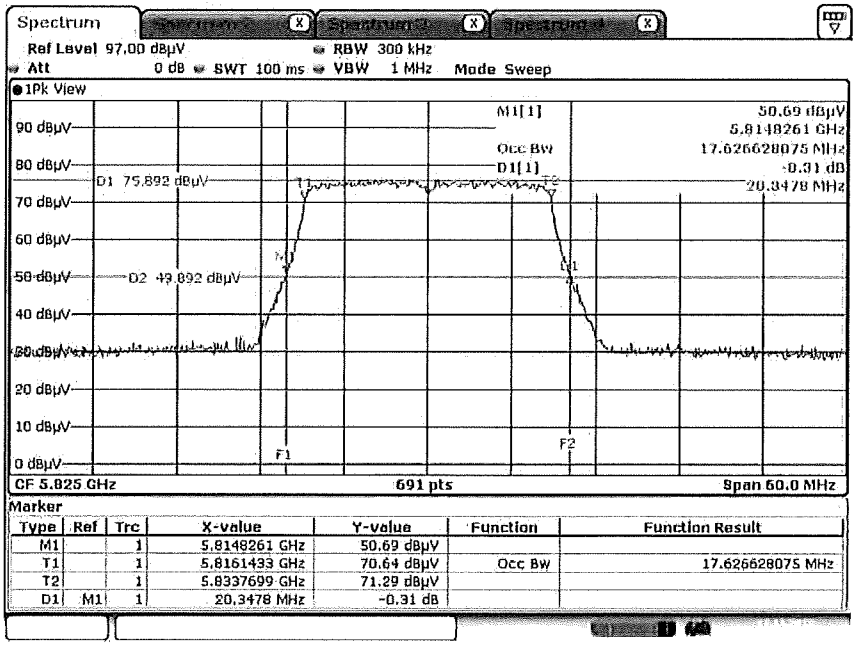
Date: 22.NOV.2017 17:57:13

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 2 / 5785 MHz



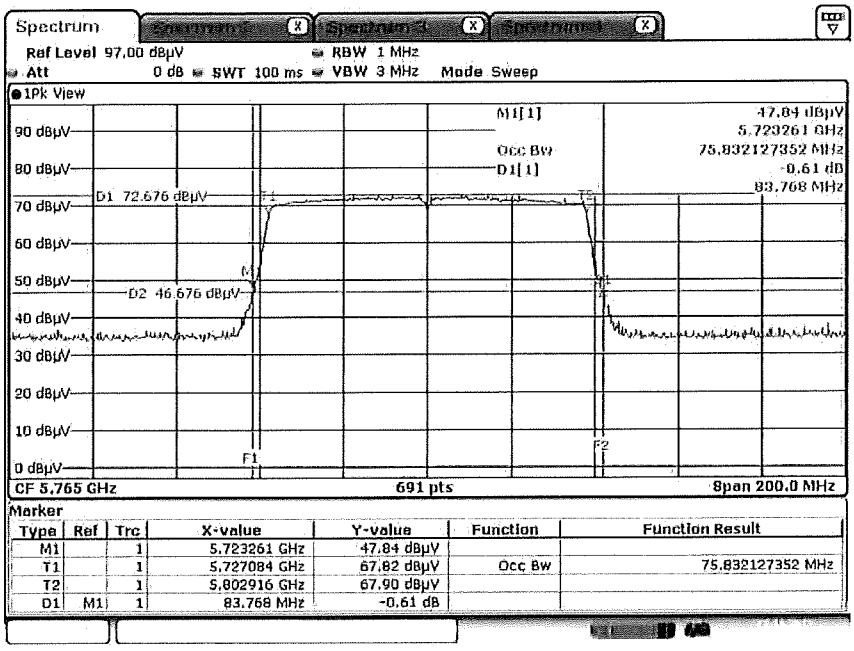
Date: 22.NOV.2017 17:56:43

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 2 / 5825 MHz



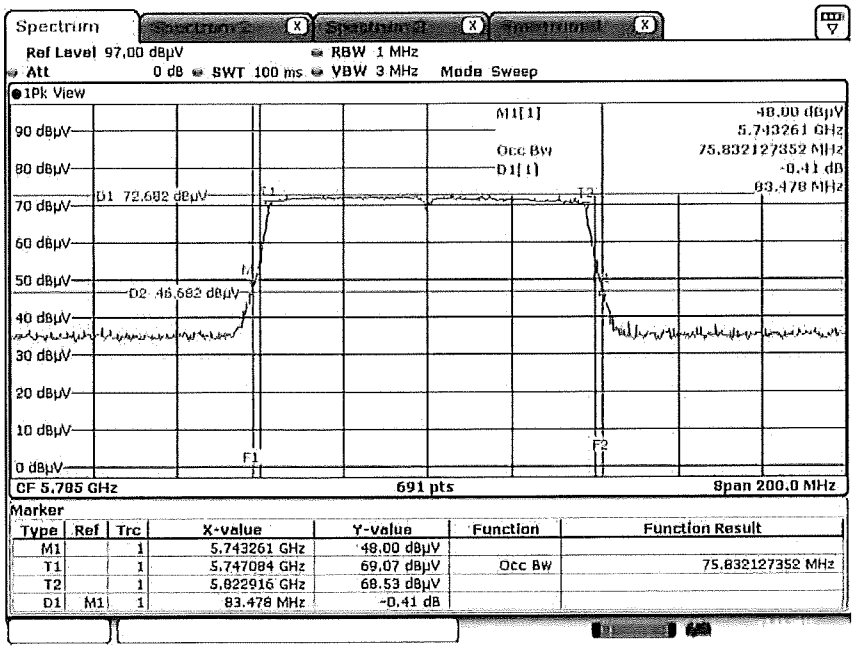
Date: 22.NOV.2017 17:58:12

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 1 / 5765 MHz



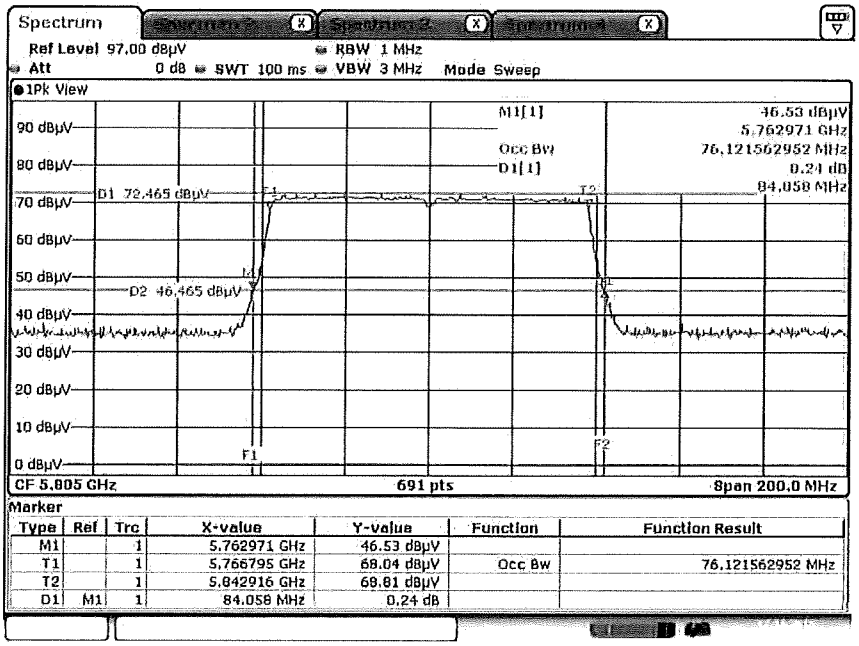
Date: 22.NOV.2017 18:07:20

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 1 / 5785 MHz



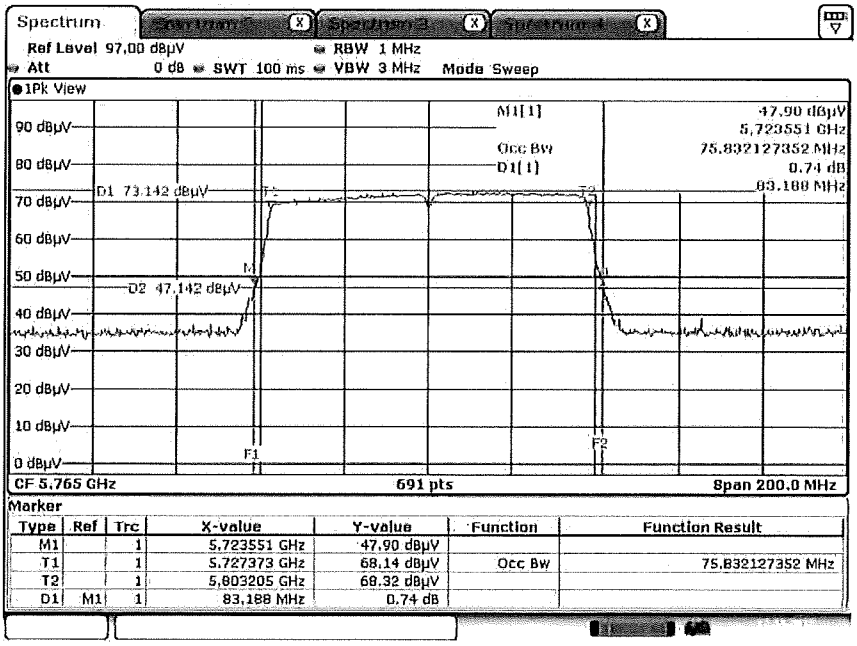
Date: 22.NOV.2017 18:07:00

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 1 / 5805MHz



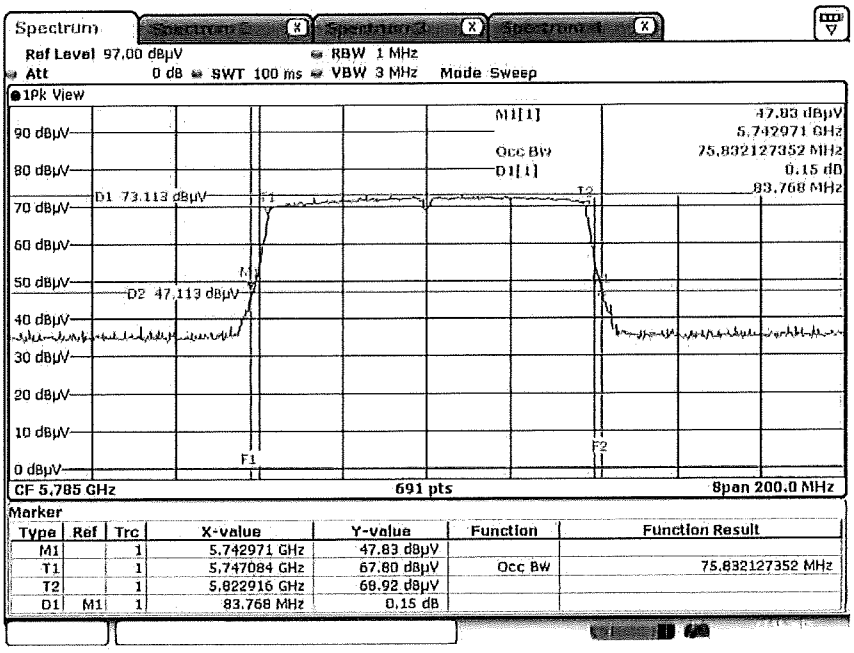
Date: 22.NOV.2017 18:06:42

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 2 / 5765 MHz



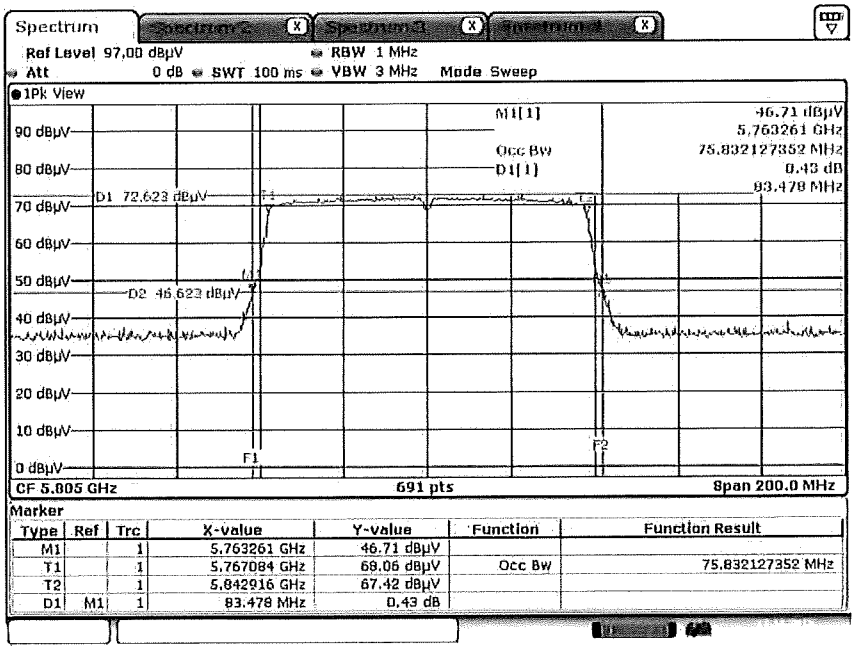
Date: 22.NOV.2017 18:01:30

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 2 / 5785MHz



Date: 22.NOV.2017 18:01:50

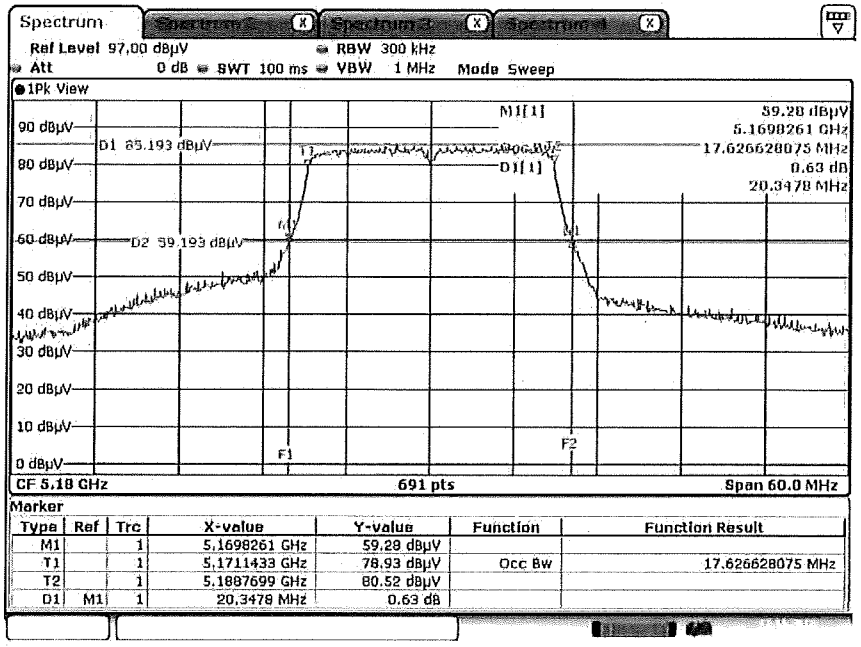
26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 2 / 5805MHz



Date: 22.NOV.2017 18:02:10

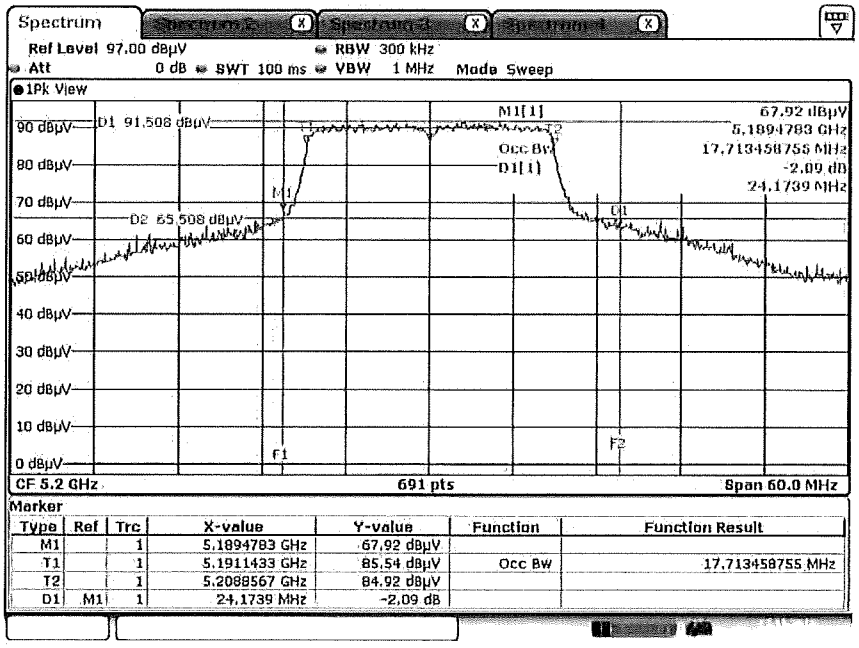
For Antenna 3:

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 1 / 5180 MHz



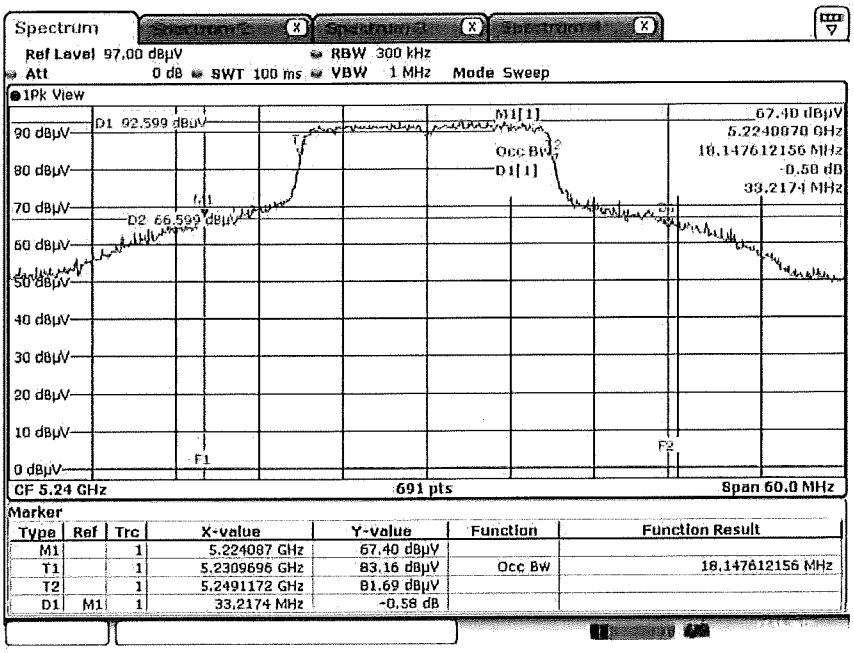
Date: 22.NOV.2017 16:17:17

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 1 / 5200 MHz



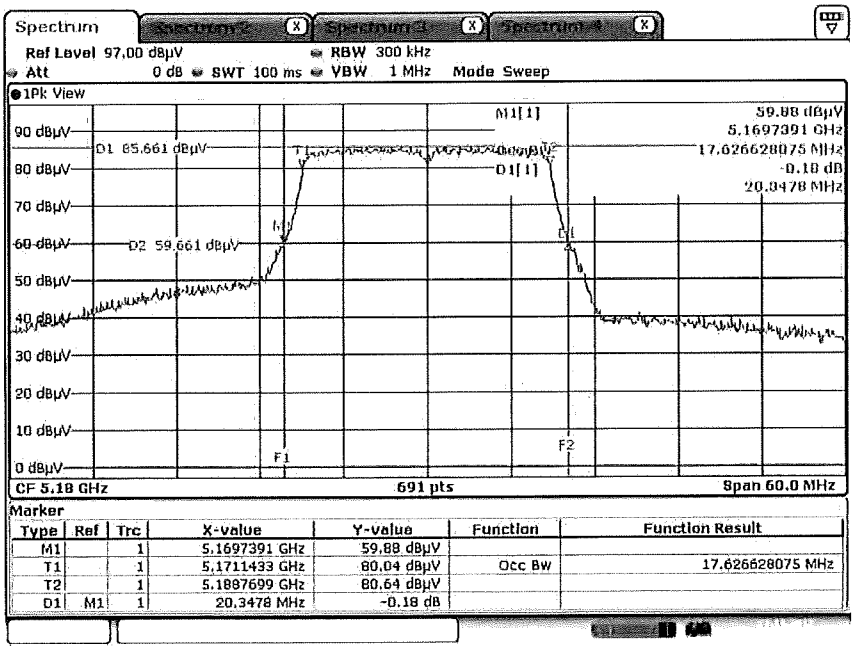
Date: 22.NOV.2017 16:17:45

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 1 / 5240 MHz



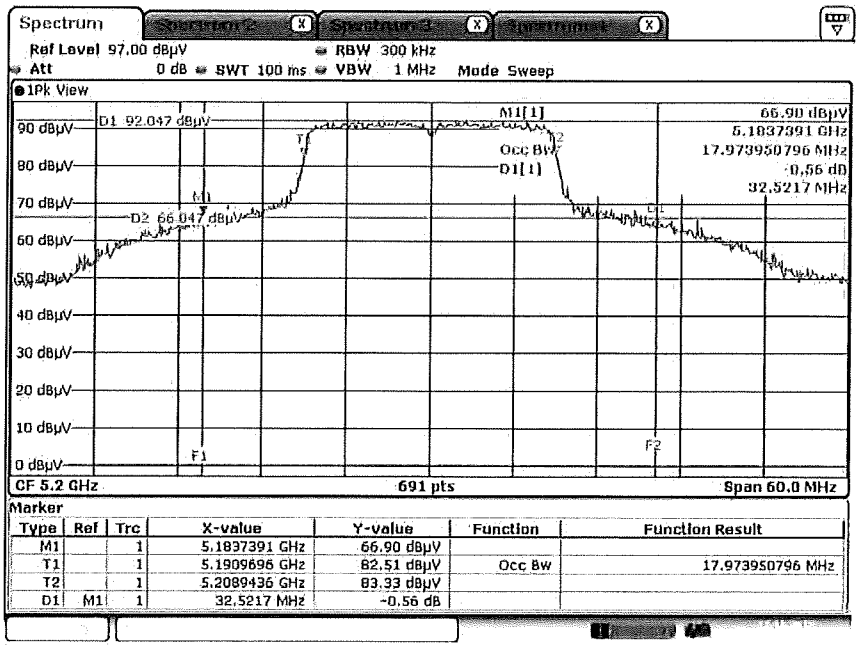
Date: 22.NOV.2017 16:18:28

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 2 / 5180 MHz



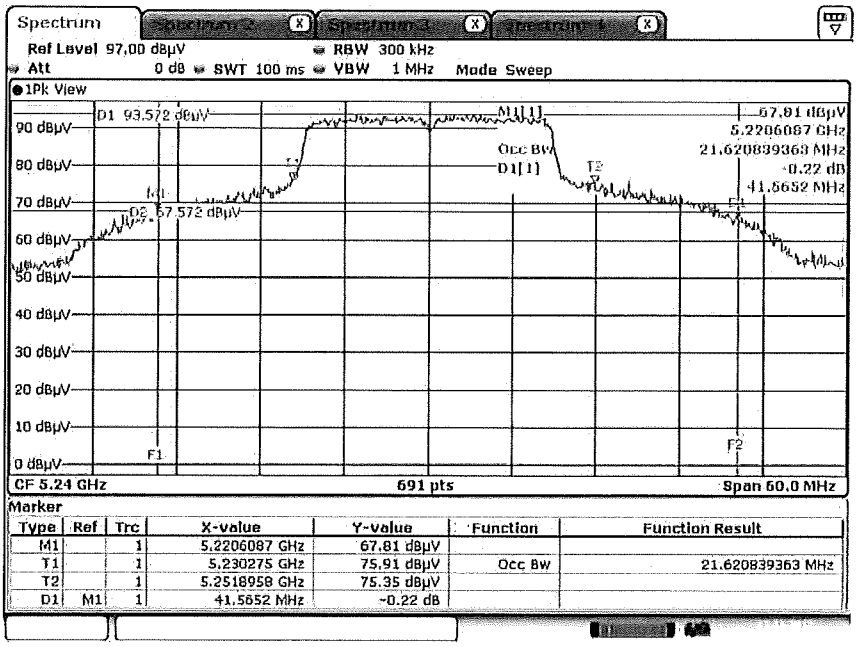
Date: 22.NOV.2017 16:06:15

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 2 / 5200 MHz



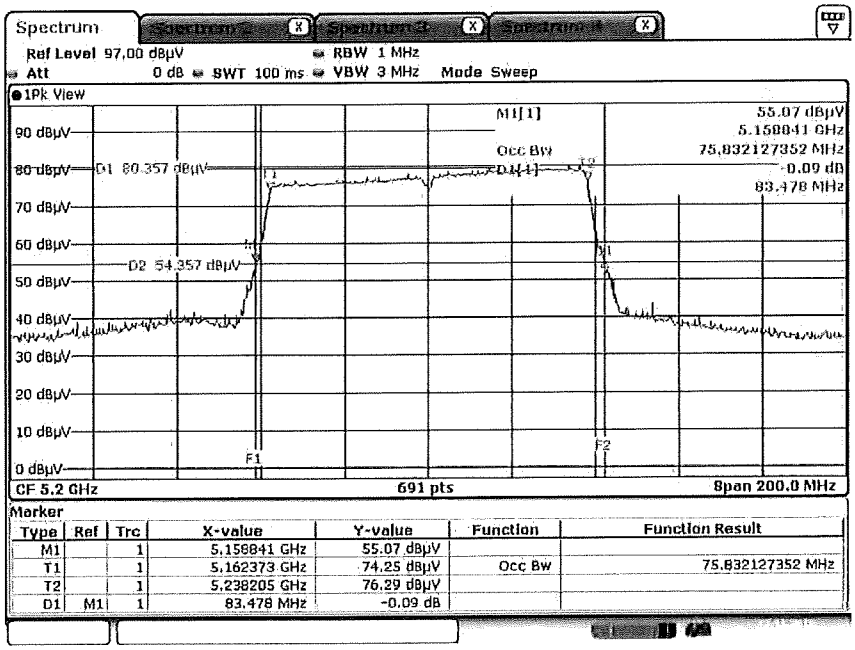
Date: 22.NOV.2017 16:07:00

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 2 / 5240 MHz



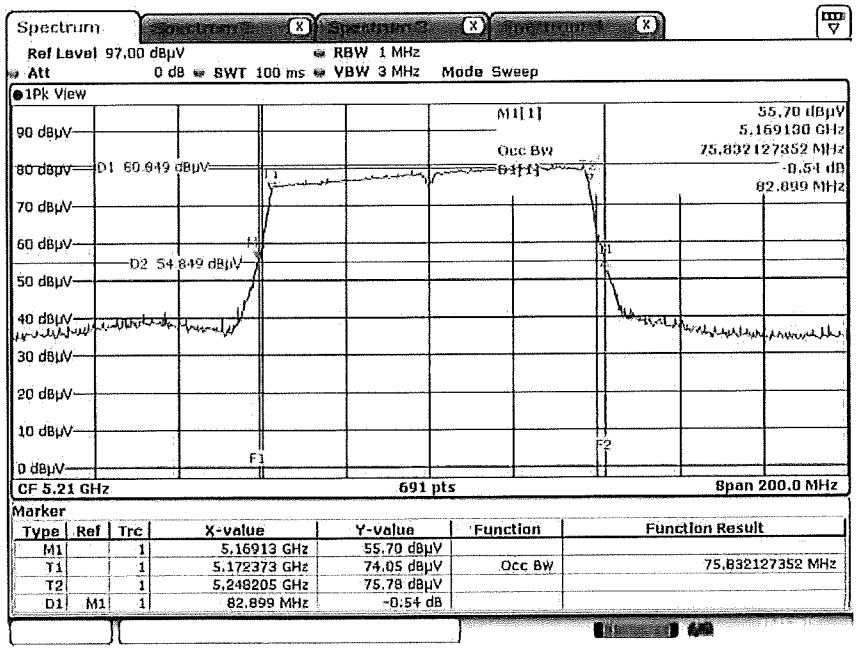
Date: 22.NOV.2017 16:07:46

26dB Bandwidth and 99% Occupied Bandwidth Plot on QPSK, 80M / Port 1 / 5200 MHz



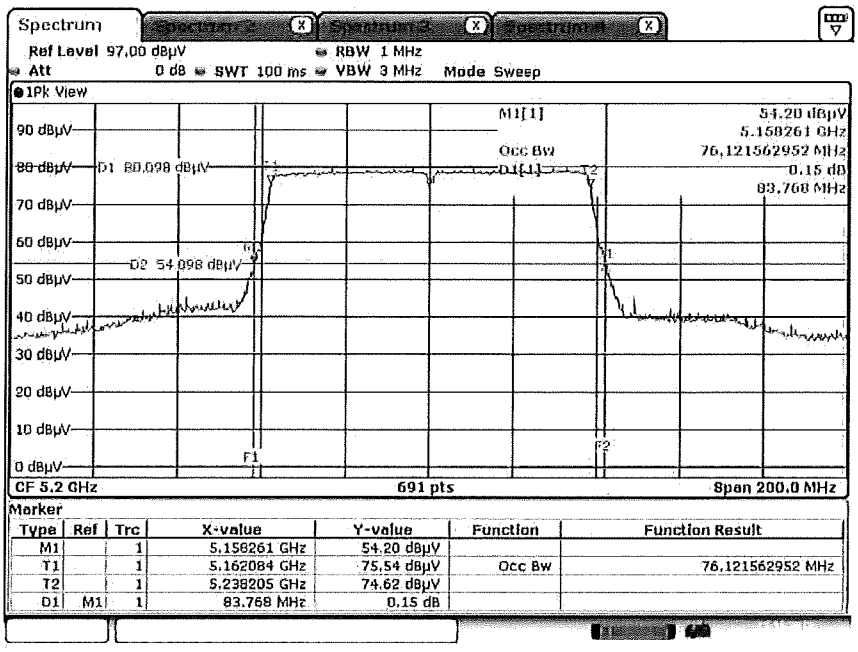
Date: 22.NOV.2017 16:47:53

26dB Bandwidth and 99% Occupied Bandwidth Plot on QPSK, 80M / Port 1 / 5210 MHz



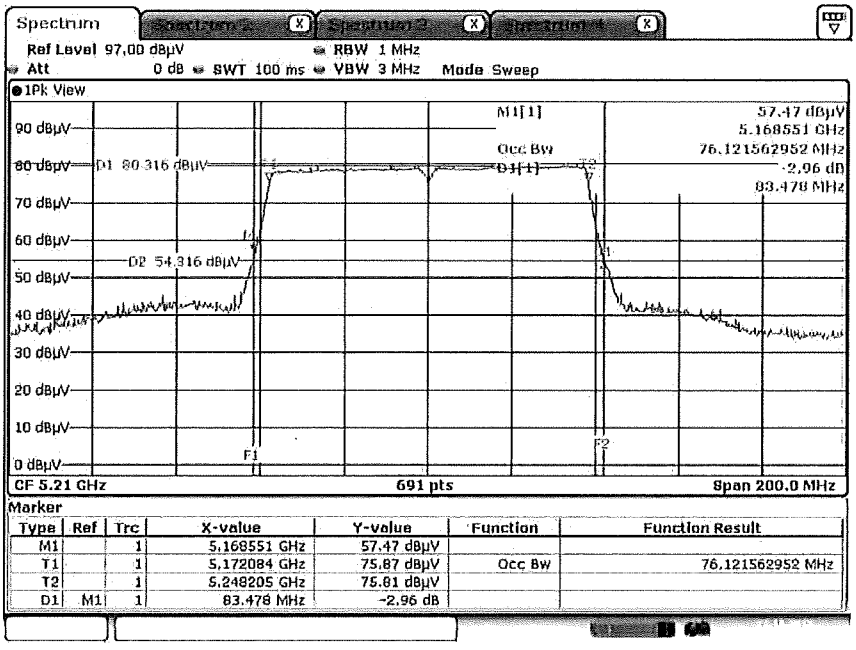
Date: 22.NOV.2017 16:59:29

26dB Bandwidth and 99% Occupied Bandwidth Plot on QPSK, 80M / Port 2 / 5200 MHz



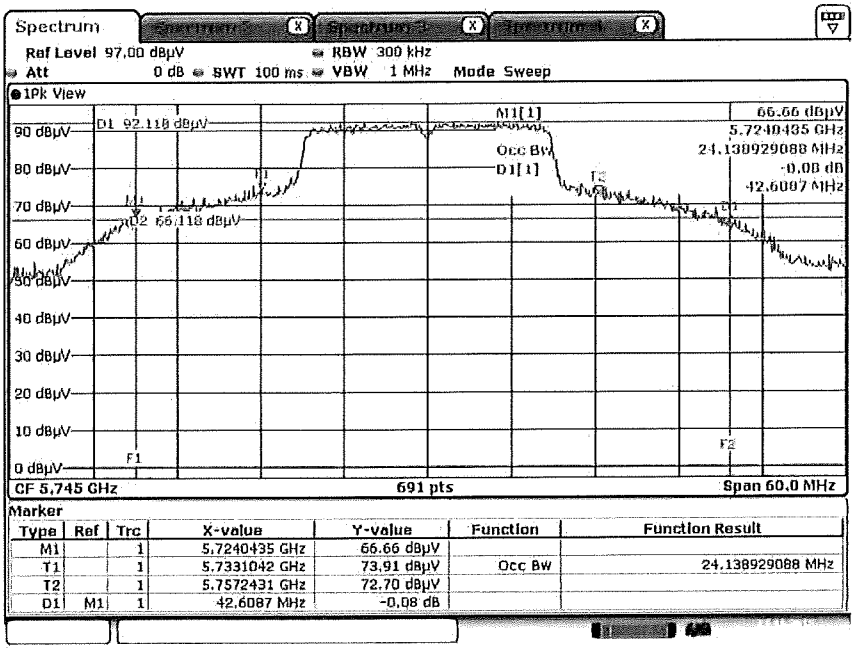
Date: 22.NOV.2017 17:12:18

26dB Bandwidth and 99% Occupied Bandwidth Plot on QPSK, 80M / Port 2 / 5210 MHz



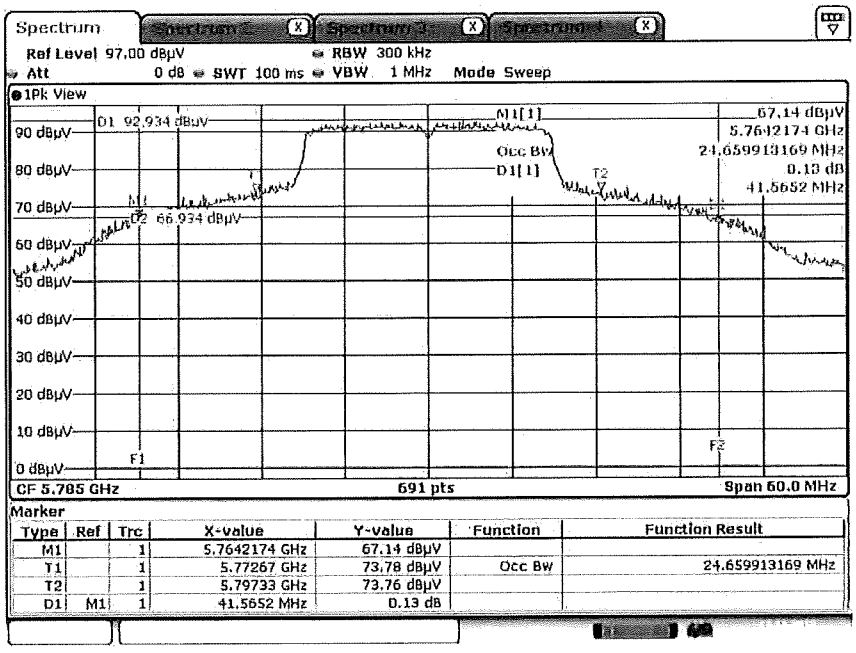
Date: 22.NOV.2017 17:12:51

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 1 / 5745 MHz



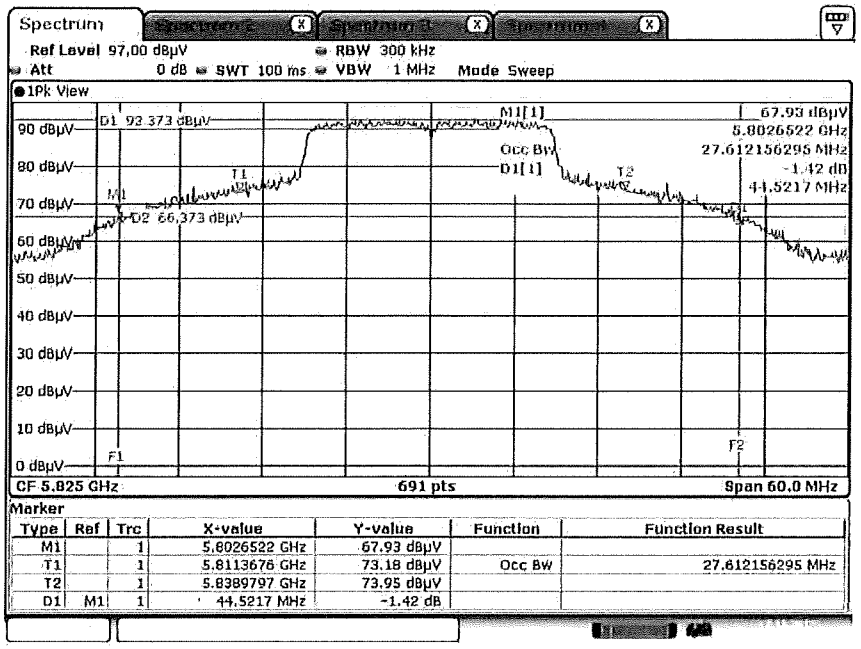
Date: 22.NOV.2017 16:15:31

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 1 / 5785MHz



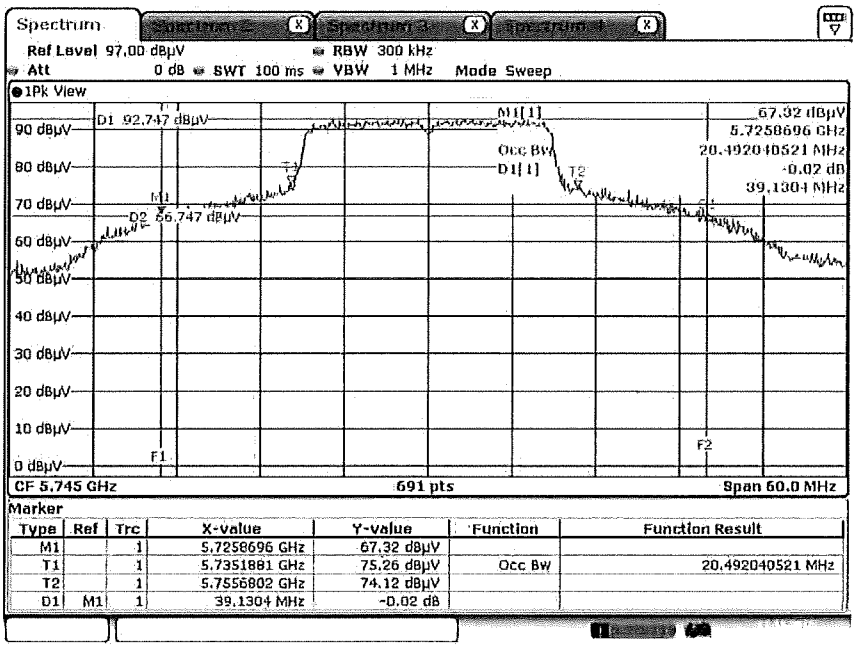
Date: 22.NOV.2017 16:15:58

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 1 / 5825 MHz



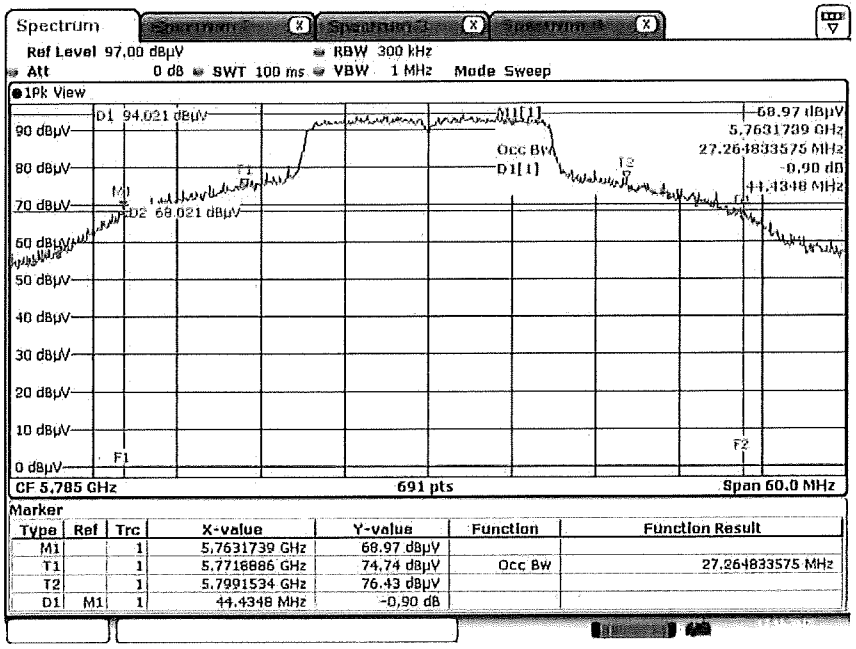
Date: 22.NOV.2017 16:16:29

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 2 / 5745 MHz



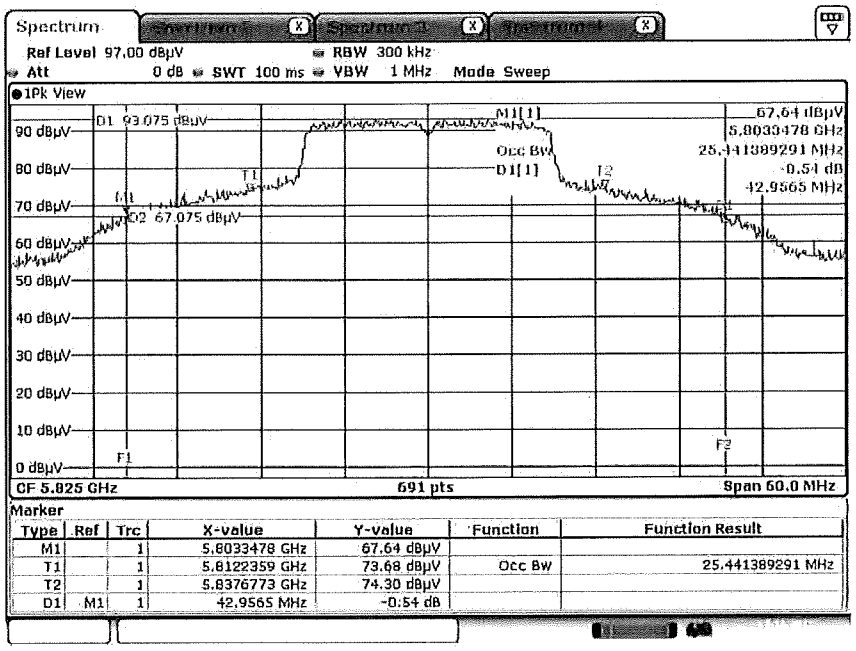
Date: 22.NOV.2017 16:08:59

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 2 / 5785 MHz



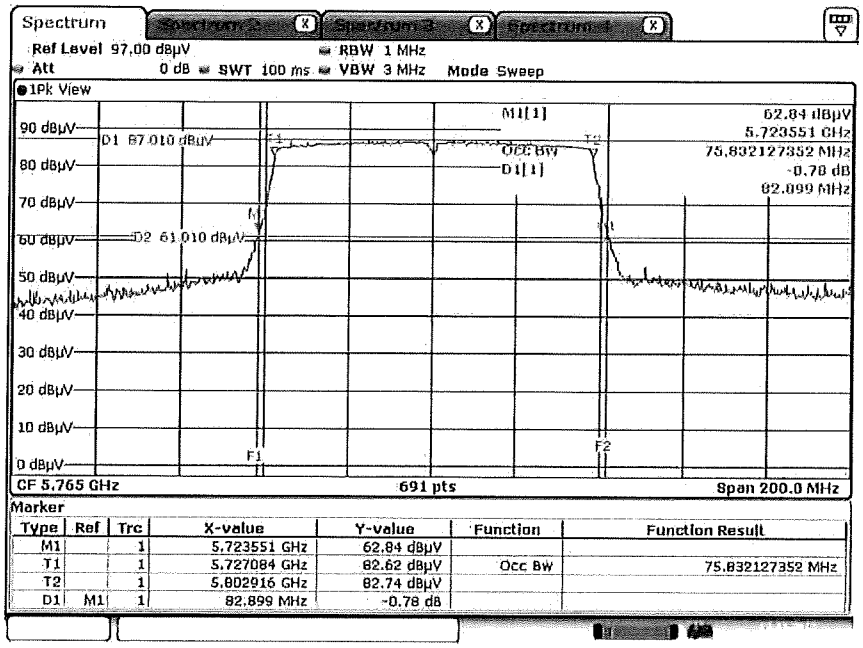
Date: 22.NOV.2017 16:09:29

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 20M / Port 2 / 5825 MHz



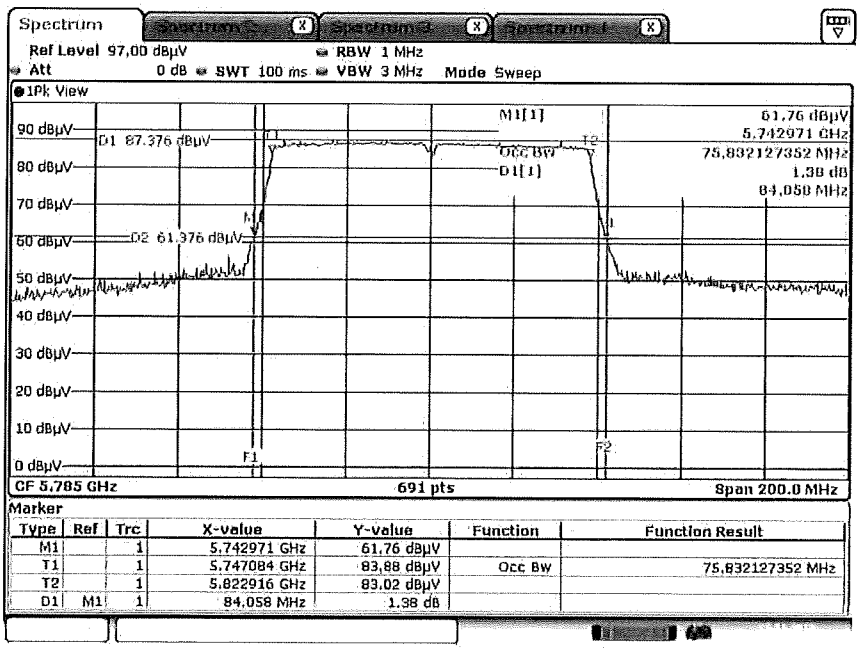
Date: 22.NOV.2017 16:10:06

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 1 / 5765 MHz



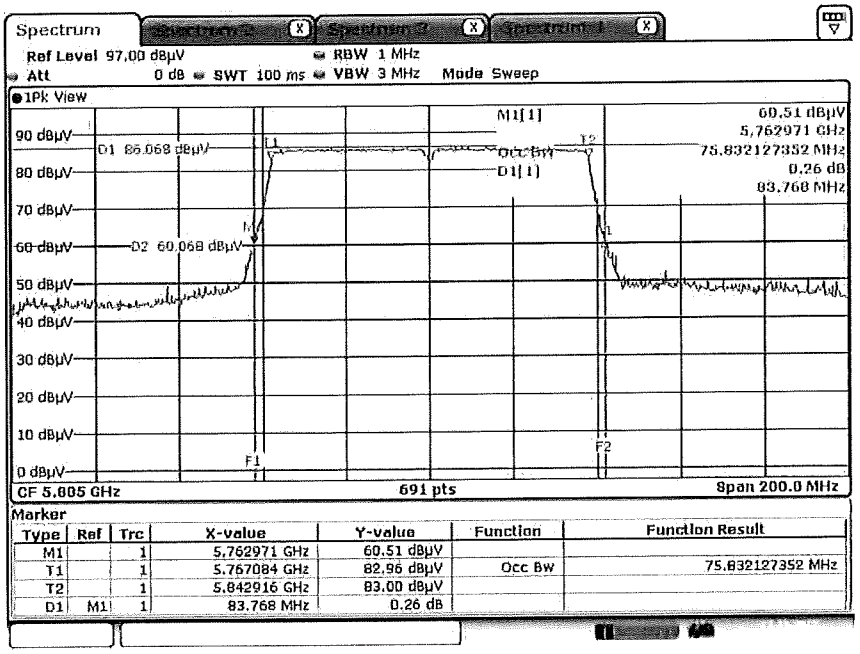
Date: 22.NOV.2017 17:01:25

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 1 / 5785 MHz



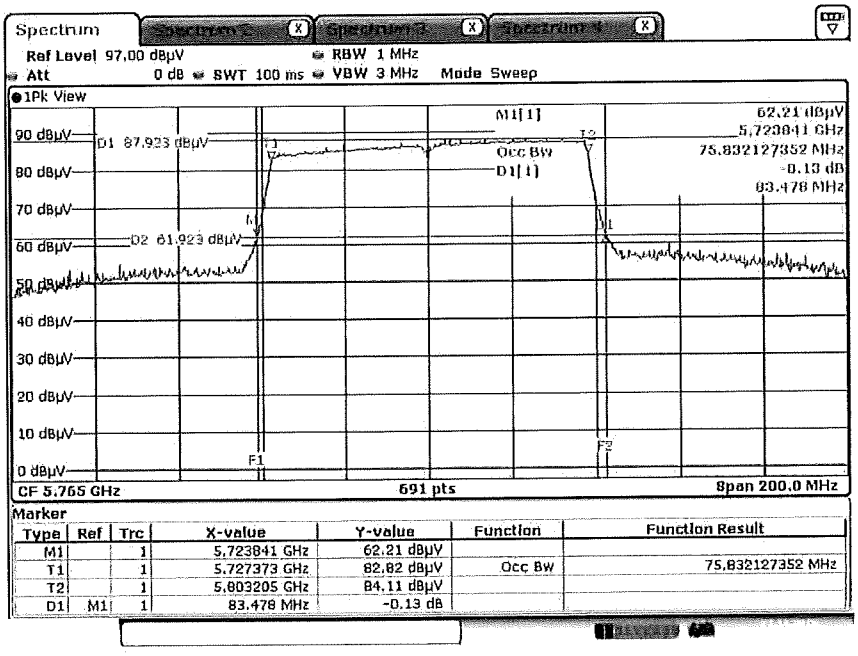
Date: 22.NOV.2017 17:02:31

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 1 / 5805MHz



Date: 22.NOV.2017 17:03:29

26dB Bandwidth and 99% Occupied Bandwidth Plot on Configuration QPSK, 80M / Port 2 / 5765 MHz



Date: 22.NOV.2017 17:17:41