EMC TEST REPORT	
TEST REPORT NUMBER	DOJ 1504TEL567-A2
TEST REPORT DATE	22nd Apr 2015
TEST REPORT VERSION	1.20
MANUFACTURER	Gemtek Electronics (ChangSHU) Co.
PRODUCT NAME	5GHz ePMP Integrated Radio and 5GHz ePMP Connectorized Radio
PRODUCT MODEL NO.	C058900P072A, C058900C072A, C058900P062A, C058900C062A
PART NO.	142000001193A
REV	0B
CONDITION OF EUT WHEN RECEIVED	GOOD and in working condition
ISSUED TO	3800 Golf Road, Suite 360 Rolling Meadows, IL 60008. USA +1 888-863-5250
ISSUED BY	**TARANG Lab** Wipro Technologies, SJP2, Survey#70,77,78/8A, Dodda Kanelli, Sarjapur road, Bangalore. Karnataka. India - 560 035 Tel: +91-80-30292929 Fax: +91-80-30298200 Email: tarang.planet@wipro.com Web: www.wipro.com

AMENDMENT HISTORY

Amendment Number	Amendment Date	Author of Amendment	Previous Report Version	Previous Report Date
1.10	14th Apr 2015	Harsha K	1.0	11th Apr 2015
Amendment Details	• Measurement of "Restricted Band of Operations" (Conducted) shown as Section 5.3.1. • Updated "Maximum conducted Output power" test using Power meter as described in Section 9.2.3 (Method AVGPM) of KDB "558074 D01 DTS measurement Guidance v03r02". This amendment is reflected in Section 5.3.3			

Amendment Number	Amendment Date	Author of Amendment	Previous Report Version	Previous Report Date
1.20	22nd Apr 2015	Harsha K	1.10	14th Apr 2015
Amendment Details	• The reference to the Tunable Band reject/Notch filter from Wainwright Instruments GmbH used to reject the intentional frequency has been listed in Section 3.2 • More specific details of firmware settings of the radio module for the various tests have been captured in Section 4.2. • Added conducted measurement data till 40GHz for "Emissions in Restricted Frequency bands" test. This amendment is reflected in Section 5.3.1. • Added conducted measurement data till 40GHz for "Radio frequency power in any 100 kHz bandwidth outside the intention band" test. This amendment is reflected in Section 5.3.5.			

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LIST OF FIGURES

1 TEST REPORT SUMMARY

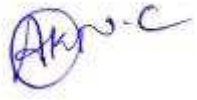
Applicant	Cambium Networks			
Manufacturer	Gemtek Electronics (ChangSHU) Co.			
Equipment Under Test	5GHz ePMP Integrated Radio and 5GHz ePMP Connectorized Radio			
Model	C058900P072A, C058900C072A, C058900P062A, C058900C062A			
Serial number	**Type of test**	**Serial no.**	**Wi-Fi MAC**	**Ethernet MAC**
	Radiated	AE50013161	000456F802FD	000456F802FC
	Conducted	AE50013121	000456F802AD	000456F802AC
Date of Submission	20th Jan 2015			
Date of Test	20th Jan 2015 to 22nd Apr 2015			
Venue of Test	Tarang Lab			

Applicable Standard	**FCC Section**	**RSS Rule part**	**Description**	**Results**
47 CFR Ch. I (10–1–13 Ed), Part 15, Subpart C; RSS-Gen, Issue 4, Nov 2014 RSS-210, Issue 8, Dec 2010	§15.205	RSS-Gen, 8.1	Emissions in Restricted frequency bands	PASS
	§15.247 (a) (2)	RSS 210 A8.2 (a)	6 dB Bandwidth measurement	PASS
	§15.247 (b) (3)	RSS 210 A8.4 (4)	Maximum conducted Output Power	PASS
	§15.247 (d)	RSS 210 A8.5	Radio frequency power in any 100 kHz bandwidth outside the Intentional band	PASS
	§15.247 (e)	RSS 210 A8.2 (b)	Power Spectral Density	PASS
	§15.247 (d)	RSS 210 A8.5	Operating Band edge measurements	PASS

5GHz ePMP Integrated Radio and 5GHz ePMP Connectorized Radio was tested by Tarang Lab as per the standards that are listed in the table above. Based on the observations during the test and interpretations by Tarang lab, results have been indicated. The test results produced in this report shall apply only to the above sample that have been tested under the specific conditions and modes of testing as described in the report. Other similar equipment may not necessarily reproduce same result due to production tolerances and measurement uncertainties. Any measurement uncertainties listed in this report are for information purpose only.

The results shall stand invalid, in case there are any modifications / additions / removals to the hardware or software or end use atmosphere to the product tested. This report shall not be modified or in any way revised unless it is expressly permitted and endorsed by Tarang lab, through a duly authorized representative. Particulars on Manufacturer / Supplier / Product configuration / performance criteria, given in this report, are based on the information given by the customer, along with test request. Tarang does not assume any responsibility for the correctness of such information for the above mentioned equipment under test.

Customer acknowledges that this is a test report and not a certificate to gain market access for the product. To gain market access, Customer needs appropriate clearance from the Government or authorized agency for the target market. For markets that allow self-declaration, customer needs to follow the procedure defined by the target market.

Prepared by	Reviewed by	Approved by
		
Arun Kumar	Harsha K	Rajneesh R
Test Engineer	Test Engineer	Functional Head

2 GENERAL INFORMATION

2.1 TEST DETAILS

The tests documented in this report are performed according to the following standards:

- ANSI C63.10-2013
- 47 CFR Ch. I (10–1–13 Ed), Part 15, Subpart C
- RSS-Gen, Issue 4, Nov 2014
- RSS-210, Issue 8, Dec 2010

2.2 TEST FACILITY DETAILS

All the tests were carried out at Tarang – Product Qualification and Compliance Planet located at Wipro Limited, SJP2, Dodda Kanelli, Sarjapur road, Bangalore, Karnataka, India. 560035.

Following are the accreditation and listing details for Tarang.

Accreditation / Listing body	Registration / Company / Certificate Number
ISO 17025 Accreditation	Certificate Number :T-1533 and T-1534(NABL) http://www.nabl- india.org
FCC (Federal Communications Commission)	Registration Number: 799247 http://www.fcc.gov/
IC (Industry Canada)	Company Number: 9023A http://www.ic.gc.ca
TEC Approval	Certificate Number: TEC/MRA/CAB/IND-D/3 CAB Identification: IND003
DGAQA Approval	1415/F-15/DGAQA/Aircraft
CEMILAC approval	Certificate Number: F-07-22 Reference Number: CEMILAC/6042/TH-13/TC & S

2.3 MEASUREMENT UNCERTAINTY

The following measurement uncertainties are applicable to the relevant tests that are mentioned below:

Test performed	Measurement Uncertainty
Radiated Emission from 9 kHz to 30MHz at 3meter	± 3.968 dB
Radiated Emission from 30MHz to 1GHz at 3meter	± 5.173 dB
Radiated Emission from 1 GHz to 18 GHz at 3meter	± 4.112 dB
Radiated Emission from 18 GHz to 40 GHz at 3meter	± 4.878 dB
Conducted Emission from 150 kHz to 30MHz	± 2.194 dB

3 INSTRUMENTATION AND CALIBRATION

3.1 TEST AND MEASURING EQUIPMENT

The list of following measuring equipment used for this testing conforms to the applicable standards. Performance of all test and measuring equipment including any accessories are checked periodically to ensure accuracy.

3.2 EQUIPMENTS USED

Name of Equipment	Manufacturer	Model No	Serial No	Calibration Due
EMI Test Receiver	R&S	ESU8	100324	12th Feb 2015
EMI Test Receiver	R&S	ESIB40	100306	07th Oct 2015
Hybrid Log Periodic Antenna	TDK	HLP-3003C	130334	25th Jul 2015
Pre-Amplifier	SONOMA	310	270817	31st May 2015
V-LISN	SME	NNLK 8128	8128-243	08th Aug 2015
Pulse Limiter	Impuls-Bergrelzer	ESH3-Z2	100718	14th Apr 2015
Double Ridged BB Horn	SME	BBHA 9120D	9120D 688	05th Aug 2015
Broadband Horn Antenna	SME	BBHA 9170	9170 336	11th Nov 2015
Preamplifier	TDK RF solutions	PA 02	100008	31st May 2015
Preamplifier	TDK RF solutions	Preamp	2007331	10th Nov 2015
Preamplifier	TDK RF solutions	Preamp	2007332	10th Nov 2015
Active Loop Antenna	ETS Lindgren	6507	00104711	22nd Apr 2015
Spectrum Analyzer	Agilent Technologies	E4407B	MY45112948	02nd Apr 2016
X-Series USB Peak & Average Power Sensor	Keysight Technologies	U2021XA	MY55050002	08th Feb 2016
X-Series USB Peak & Average Power Sensor	Keysight Technologies	U2021XA	MY55050001	08th Feb 2016
Tunable Band reject/Notch filter	Wainwright Instruments GmbH	WTRCJV8-5150-5850-40-160-50SSK	01	NA

4 PRODUCT INFORMATION

4.1 DESCRIPTION OF THE PRODUCT

EUT is a Point to point & Point to Multipoint Fixed outdoor Transceiver.

Product Category / Type of Equipment	TEL (Telecom)
EUT Operating AC Voltage	120V AC
Max EUT AC Operating Current	0.5A
Max EUT AC Power Rating	60W
EUT Operating DC Voltage	30V DC
Max EUT DC Operating Current	0.5A
Max EUT DC Power Rating	12W

4.2 SOFTWARE AND FIRMWARE DETAILS

The 5GHz ePMP Integrated Radio and 5GHz ePMP Connectorized Radio was configured with test software and configured to have the following settings during the course of testing:

- 40MHz modulation bandwidth for low, mid & high channels
  - Rate - HT40,
  - 54Mbps OFDM, MCS15 / 270 Mbps
  - Interframe spacing is tx99
  - Tx gain is 80 for 17dBi antenna configuration
  - Tx gain is 65 for 24dBi antenna configuration

- 5MHz modulation bandwidth for low, mid & high channels
  - Rate – HT20,
  - 54Mbps OFDM, MCS15 / 130 Mbps
  - Interframe spacing is tx99
  - Tx gain is 80 for 17dBi antenna configuration
  - Tx gain is 65 for 24dBi antenna configuration

The unit was continuously monitored for transmission using an auxiliary antenna during the radiated tests.

4.3 LIST OF PRODUCT CABLES

Cable No.	Cable Name	Cable Length	Power / Interconnection cable	Shielded / Unshielded
Cable - 1	Cat. 5E_Ethernet cable	0.5 meter	Interconnection	Unshielded
Cable - 2	Cat. 5E_Ethernet cable	2 meter	Interconnection	Unshielded
Cable - 3	RF cable (50 Ω)	0.125 meter	Interconnection	Shielded
Cable - 4	Power Cord	0.8 meter	Power	Unshielded

5 TEST DETAILS

5.1 PRODUCT AND TEST SETUP

5.1.1 PRODUCT CONFIGURATION

The EUT was powered through AC power supply (120V AC / 60Hz). The EUT was connected to Ethernet switch by using RJ45 cable. Figure 1 shows the product configuration during the tests. Following power supply module was used during the test to power ON the EUT.

Name of the Equipment	Manufacturer	Model Number	Serial Number
Switching Power Supply Gigabit Compatible	PHIHONG	PSA15M-300 (AP)	N000900L001A

5.1.2 TEST SETUP DETAILS

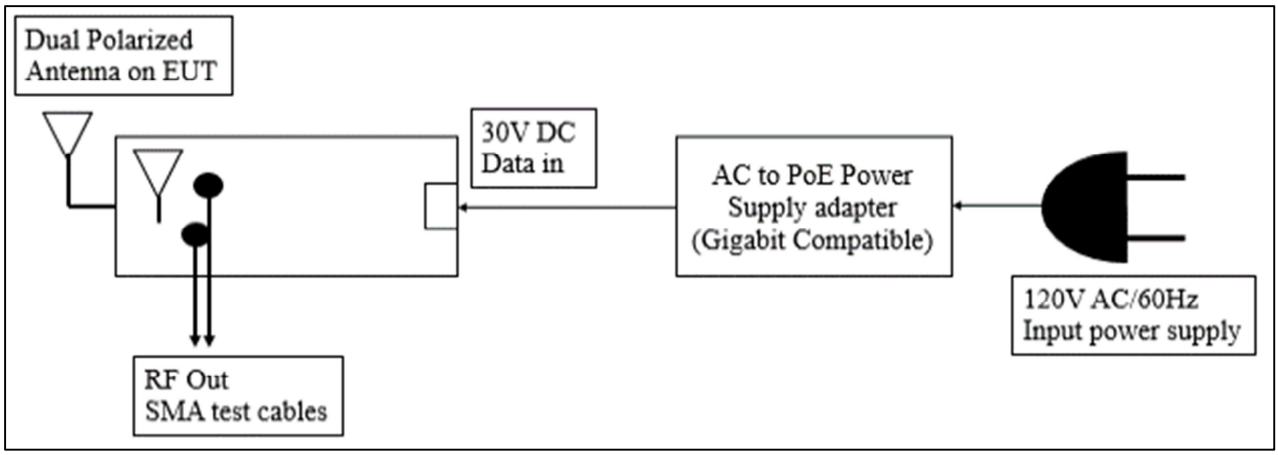


Figure 1: Block Diagram of the EUT test setup during the tests

5.1.3 ACCESSORIES

Name of the Equipment	Manufacturer	Model Number	Serial Number
Laptop	Wipro Technologies Ltd	WLG7E1100	1221

5.2 APPLICABLE TESTS

Applicable Standard	Description	Test level / Test Voltage	Applicability
47 CFR Ch. I (10–1–13 Ed), Part 15, Subpart C; RSS-Gen, Issue 4, Nov 2014 RSS-210 Issue 8, Dec 2010	Emissions in Restricted frequency bands	9kHz to 40GHz	Antenna port
	6 dB Bandwidth measurement	≥ 500 kHz	Antenna port
	Maximum Conducted Output Power	≤ 1 Watts	Antenna port
	Radio frequency power in any 100 kHz bandwidth outside the Intentional band	30 dB below intentional frequency power measured in any 100 kHz bandwidth	Antenna port
	Power Spectral Density	Power spectral density should be ≤ 8 dBm in 3 kHz bandwidth	Antenna port
	Operating Band edge measurements	5725MHz to 5850MHz	Antenna port

5.3 TEST RESULT

5.3.1 EMISSIONS IN RESTRICTED FREQUENCY BANDS

5.3.1.1 TEST SPECIFICATION

Test Standard	47 CFR Ch. I (10–1–13 Ed), Part 15, Subpart C RSS-Gen, Issue 4, Nov 2014			
Test Procedure	ANSI C63.10-2013			
Frequency Range	9 kHz-150 kHz	150 kHz-30MHz	30MHz-1GHz	1GHz-40GHz
Resolution Bandwidth	200Hz	9 kHz	120 kHz	1MHz
Video Bandwidth	1 kHz	30 kHz	300 kHz	3MHz
Sweep Time	Auto	Auto	Auto	Auto
Detector	Peak	Peak	Peak	Peak & Average
Attenuation	20dB			
Test Mode	Conducted			
Input Voltage	120V AC			
Input Frequency	60 Hz			
Temperature	22.0°C			
Humidity	56.0%			
Tested By	Harsha K/Narendra/Arun			
Test Date	10th Apr 2015, 13th Apr 2015 & 22nd Apr 2015			

5.3.1.2 LIMITS

Frequency range	**Limit (dBµV/m) as per Section 15.209**
9 kHz to 490 kHz	128.5194 to 93.8003*
490 kHz to 1.705 MHz	73.8003 to 62.9697*
1.705 MHz to 30 MHz	69.5429

*Note: * Decreases with the logarithm of the frequency*

Frequency range	**Limit (dBµV/m) as per Section 15.209**
30 MHz to 88 MHz	39.54
88 MHz to 216 MHz	43.52
216 MHz to 960 MHz	46.02
960 MHz to 40 GHz	53.98

Above table specifies limit with Average detector above 1GHz. 73.98dBµV/m is considered as the limit when Peak detector is employed for the measurements above 1GHz.

5.3.1.3 TEST SETUP

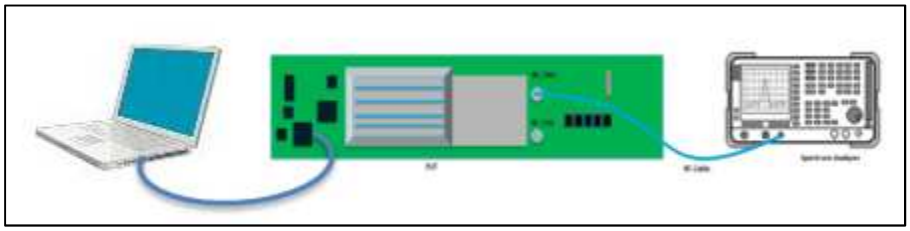


Figure 2: Typical test setup for Conducted Test setup

5.3.1.4 TEST PROCEDURE

The Conducted test was performed using the Spectrum analyzer. Measurements were done as per Section 12.0 of KDB **"558074 D01 DTS measurement Guidance v03r02".** The RF output of the EUT was connected to the input port of Spectrum analyzer using an attenuator. Captured the data from spectrum analyzer and performed required calculations to attain the Electric Field value and compared with the limits specified in the standard.

From 9 kHz to 1GHz, measurements have been performed with Peak detector. From 1GHz to 40GHz, measurements have been performed employing both Peak & Average detectors as specified in the standard. Detectors were selected based on FCC KDB document.

A tunable Band reject filter offering an attenuation of approximately 40dB was used to attenuate the intentional band during the testing. Peak search option was used to capture the frequency with maximum amplitude in the respective bands and final calculations have been performed on these frequencies to show compliance with the limits specified.

5.3.1.5 RESULT (SUPPORTING GRAPHS / DATA) FOR BASIC CONDITION

5.3.1.5.1 40MHz MODULATION BW-LOW CHANNEL_5750 MHz

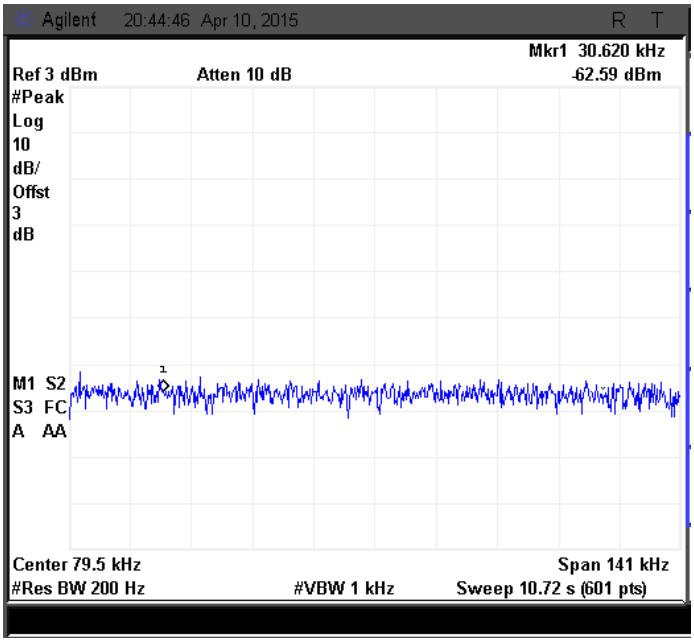


Figure 3: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

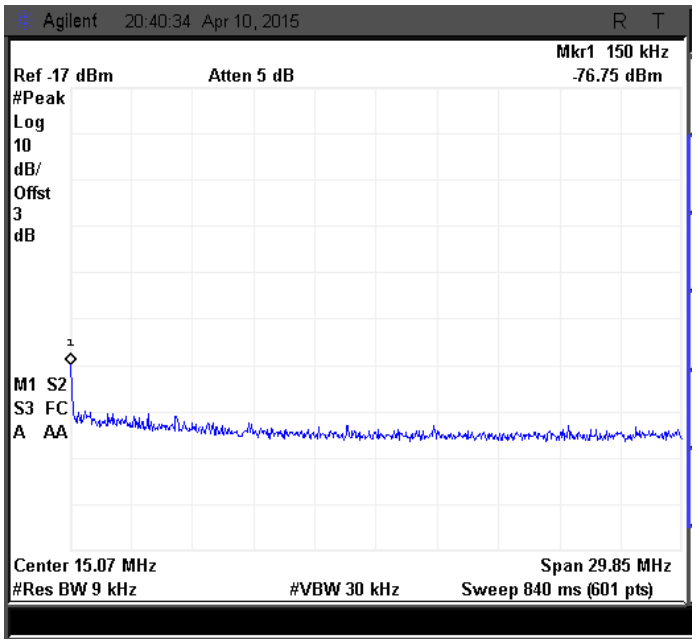


Figure 4: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

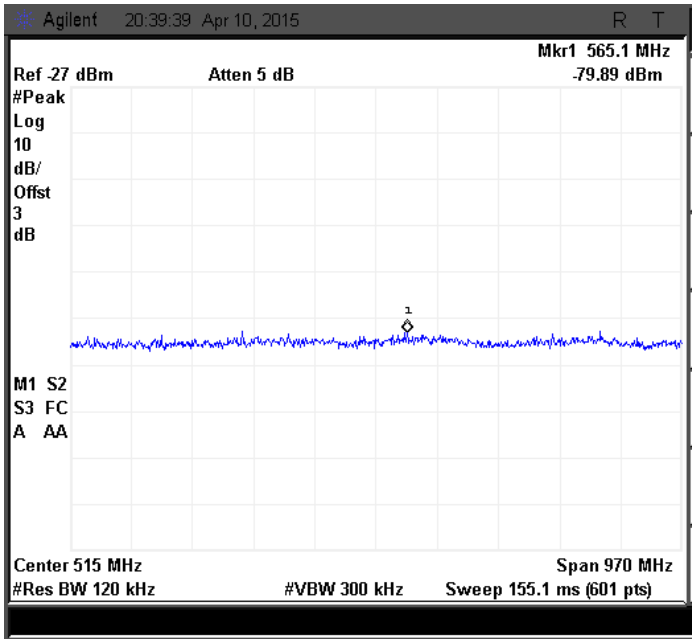


Figure 5: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

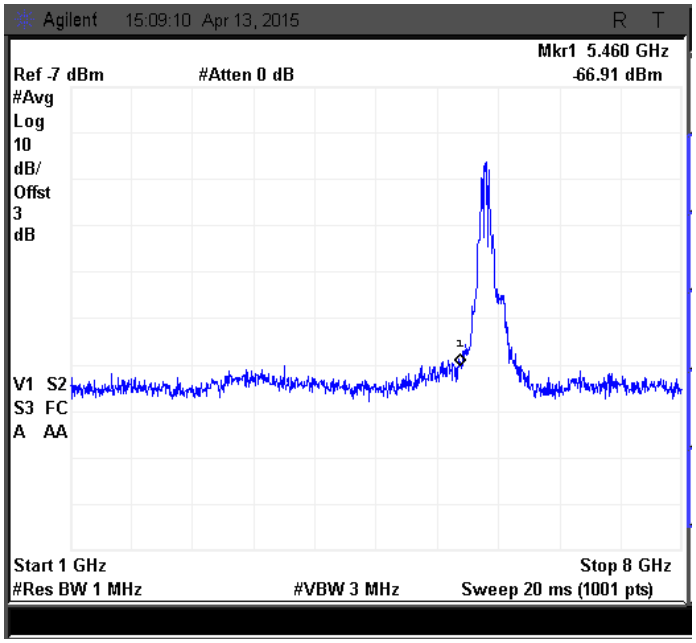


Figure 6: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

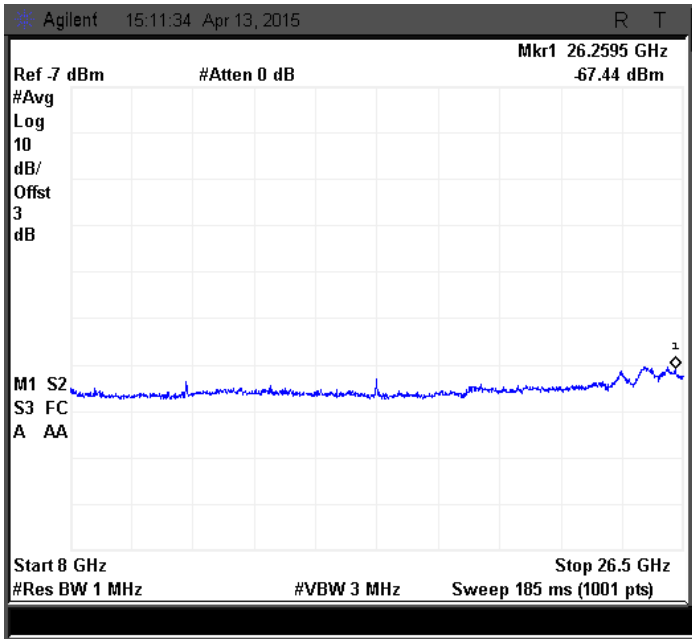


Figure 7: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

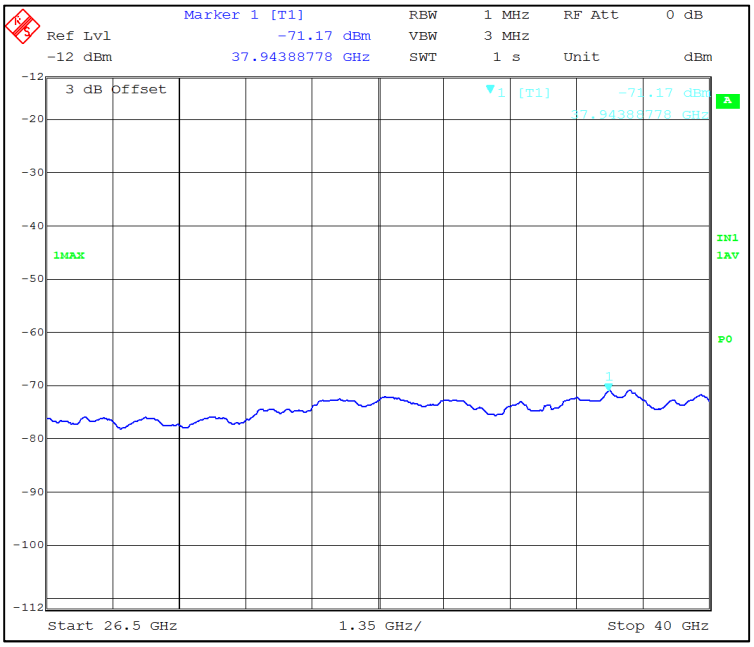


Figure 8: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

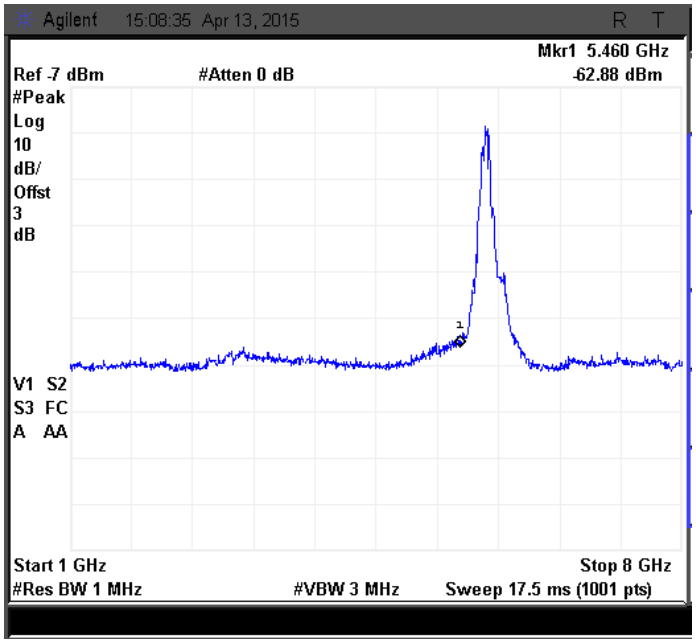


Figure 9: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

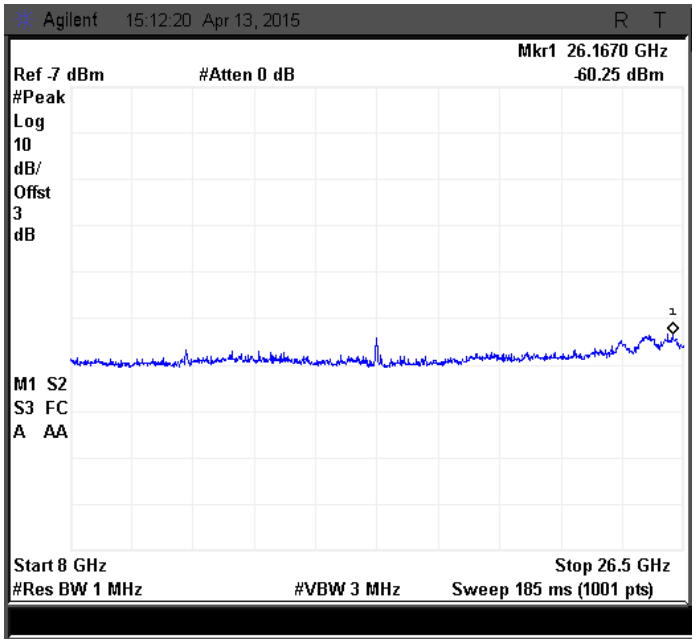


Figure 10: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

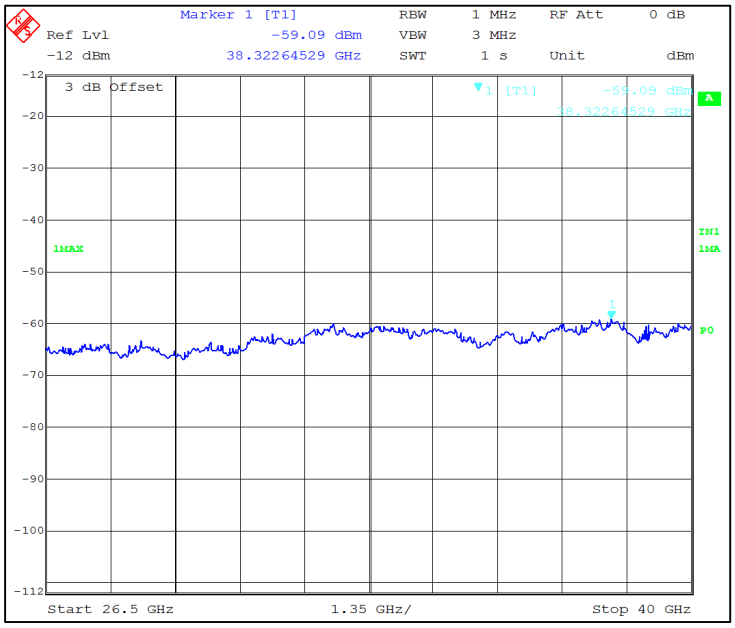


Figure 11: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

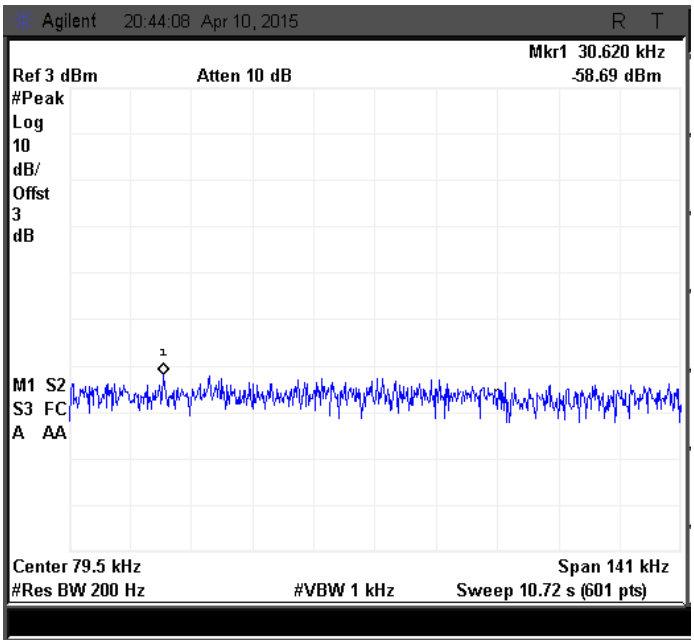


Figure 12: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

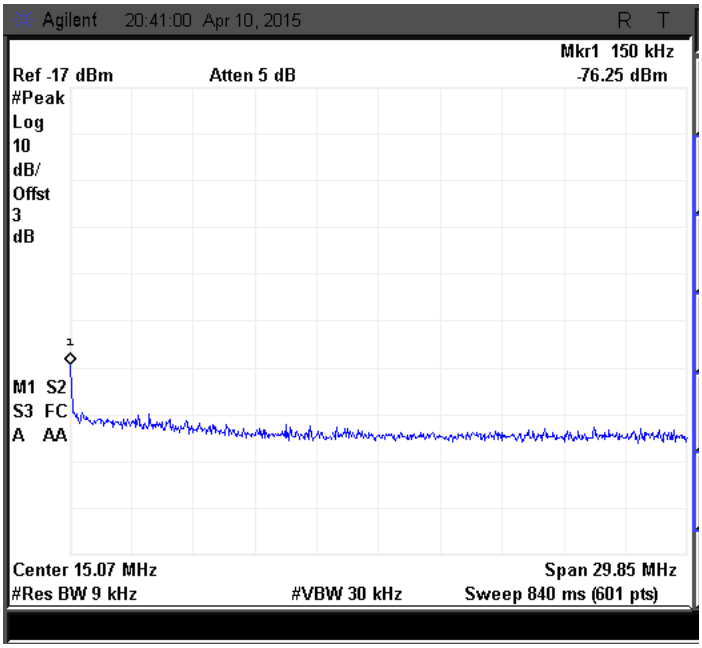


Figure 13: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

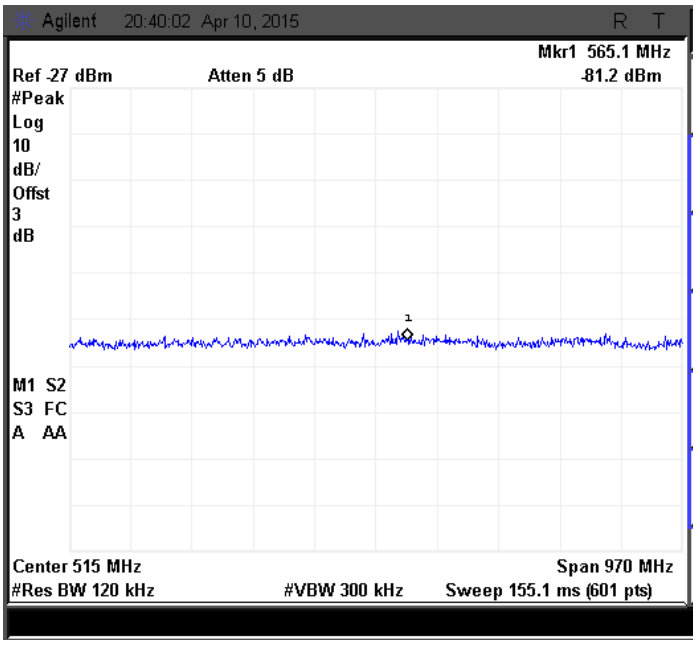


Figure 14: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

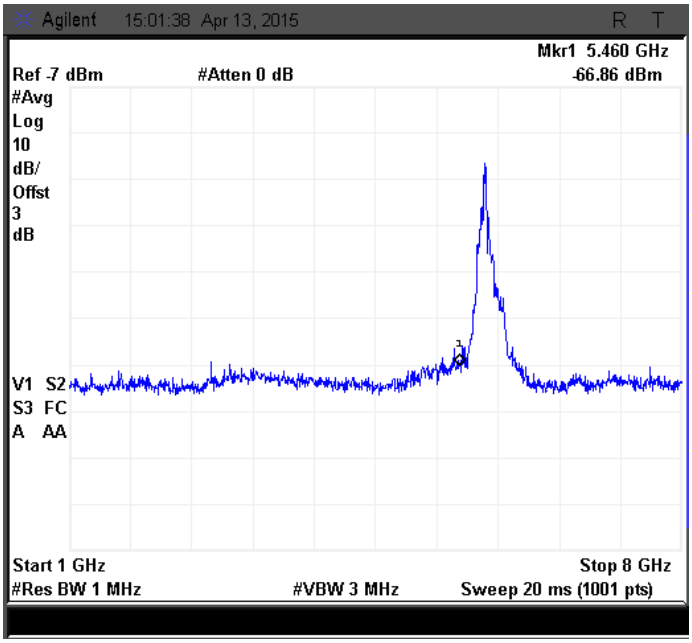


Figure 15: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

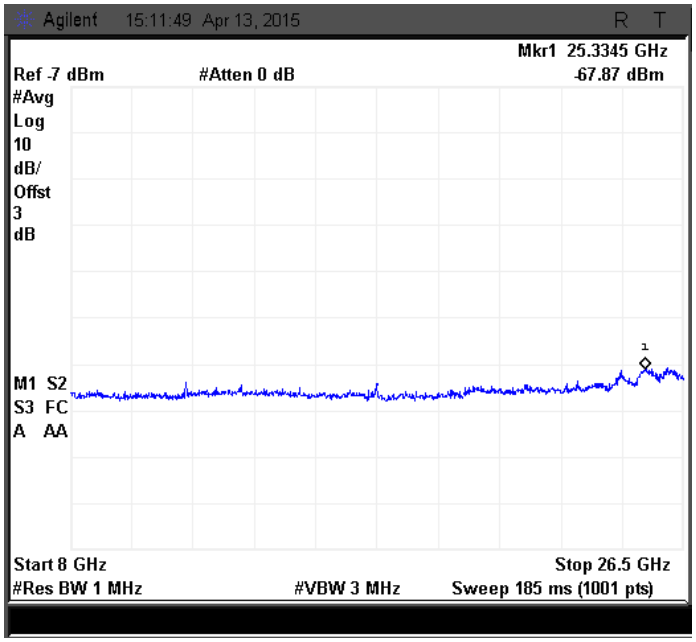


Figure 16: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

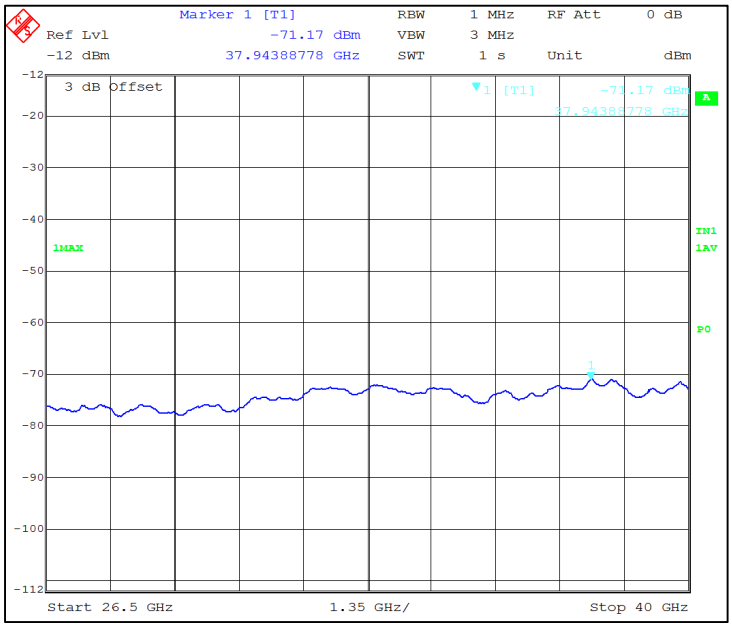


Figure 17: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

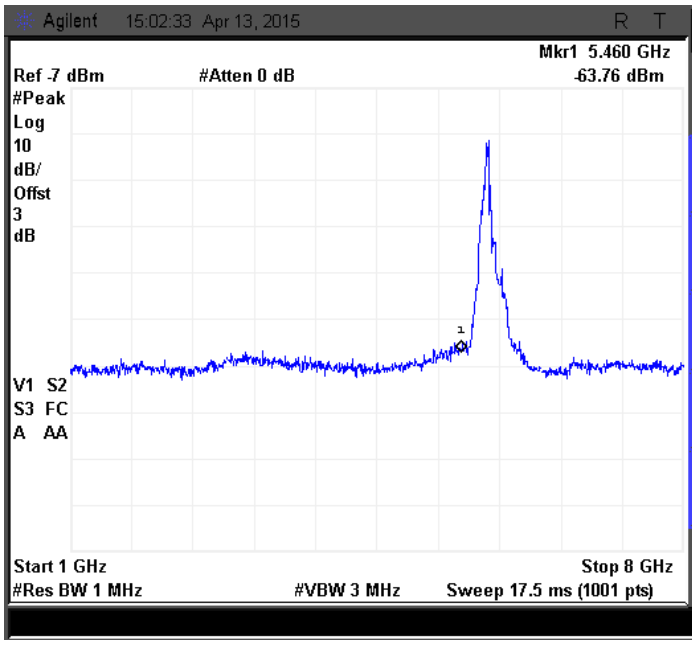


Figure 18: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

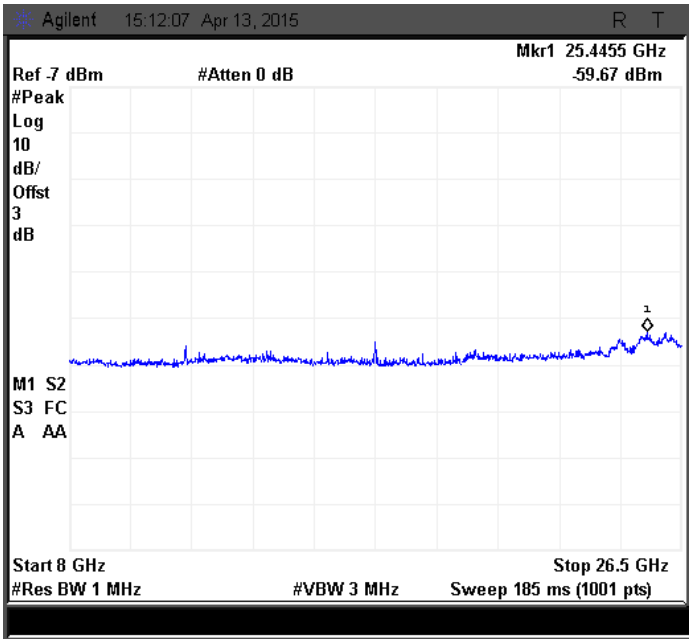


Figure 19: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

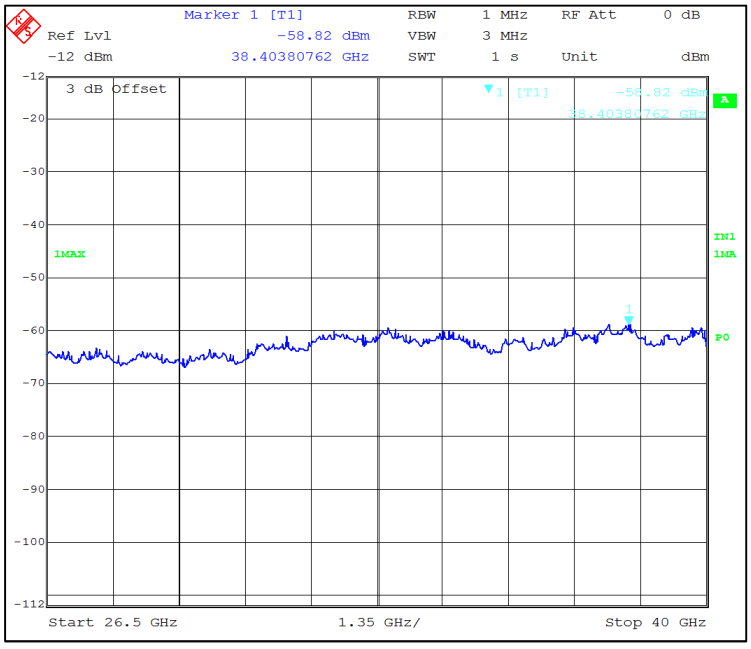


Figure 20: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.5.2 40MHz MODULATION BW-MID CHANNEL_5785 MHz

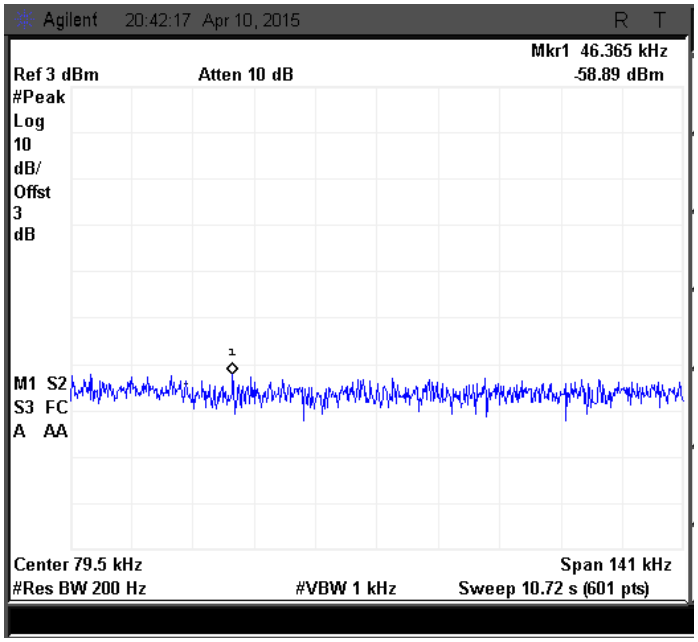


Figure 21: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

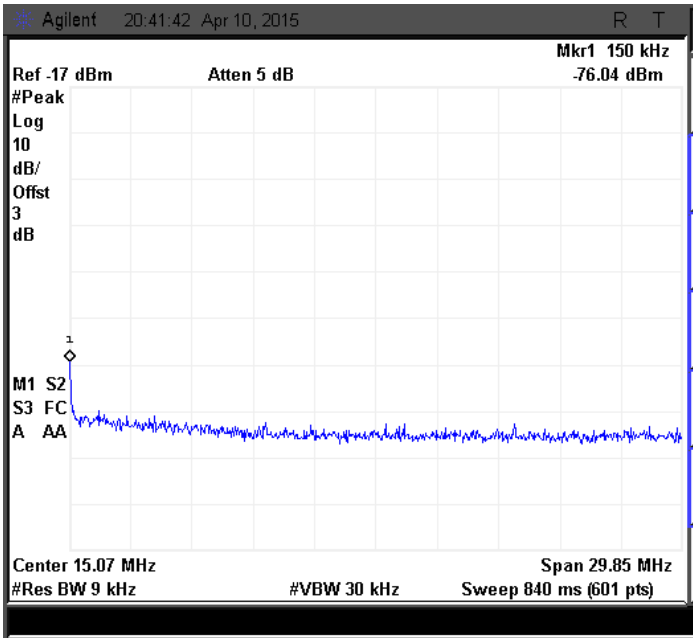


Figure 22: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

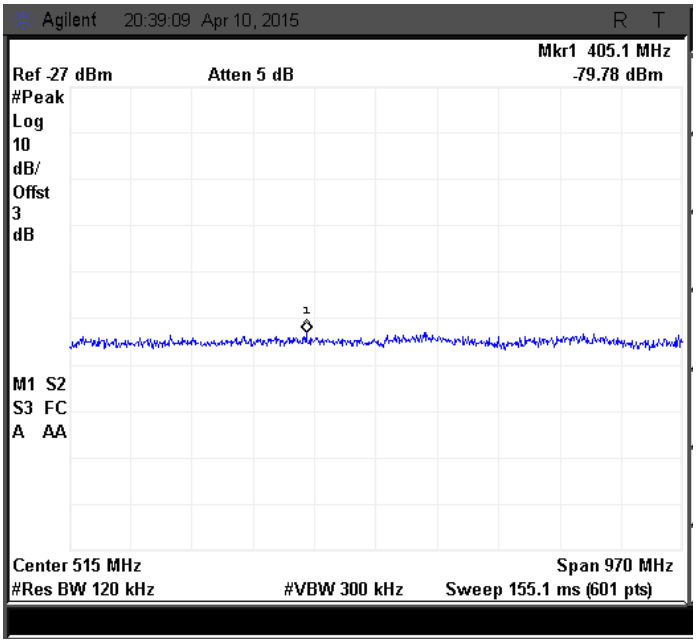


Figure 23: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

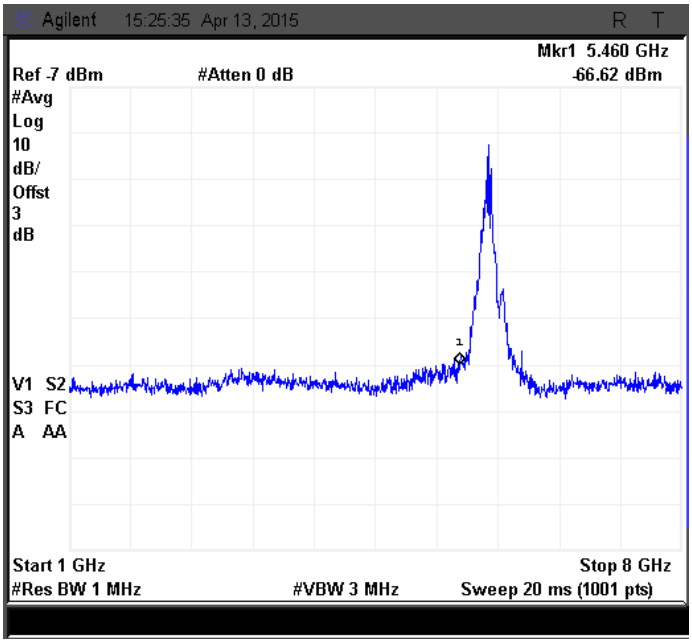


Figure 24: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

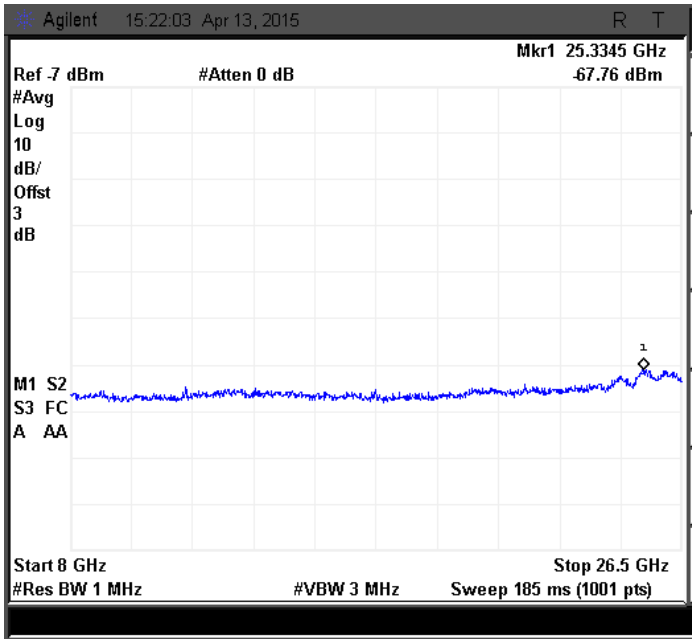


Figure 25: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

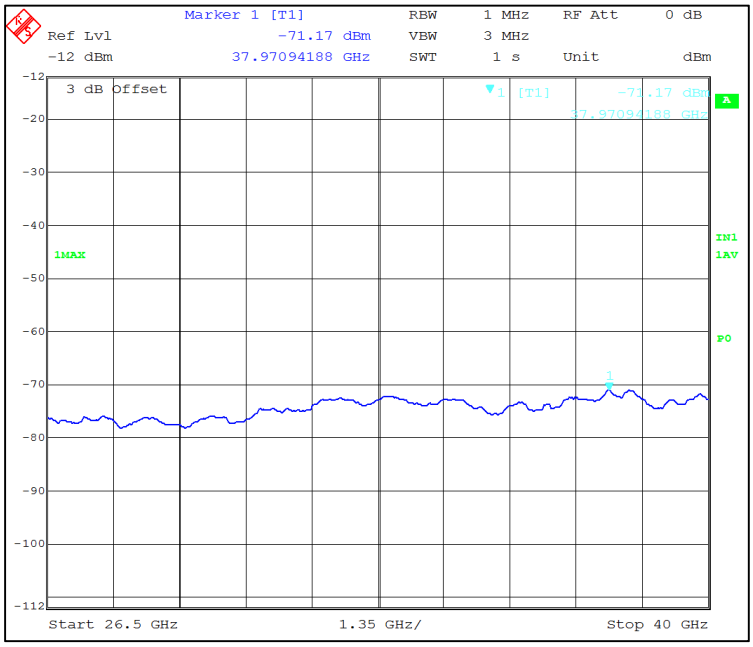


Figure 26: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

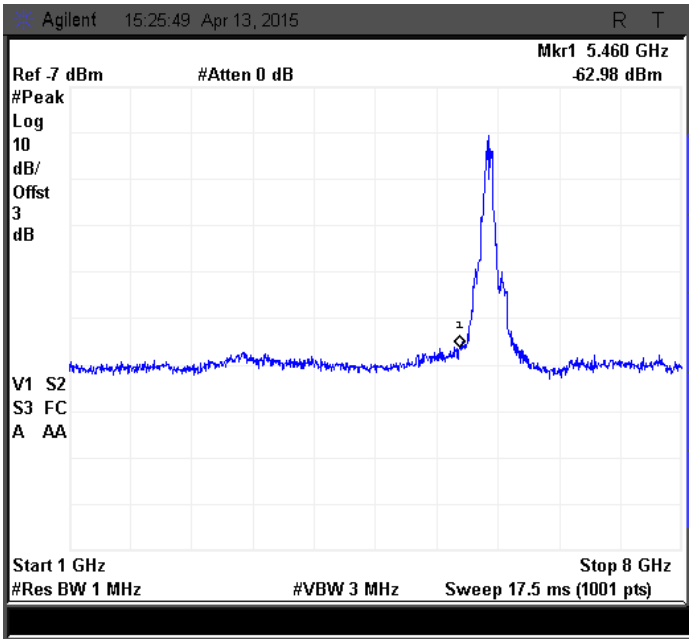


Figure 27: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

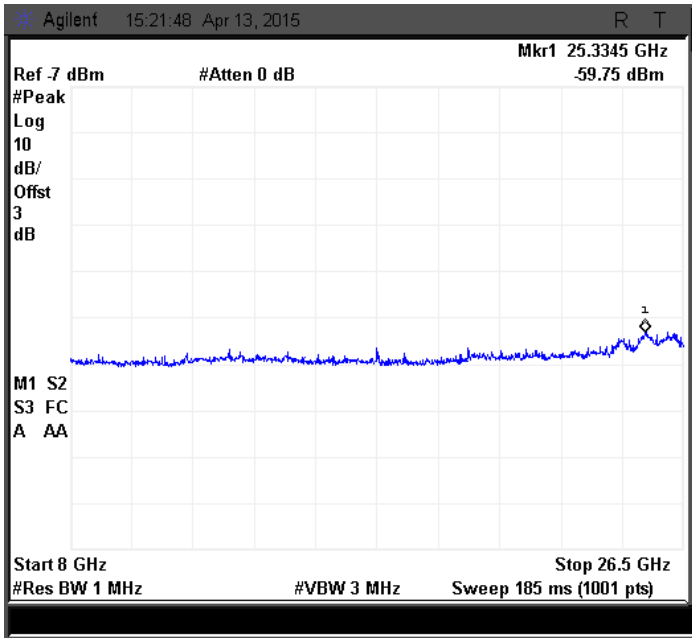


Figure 28: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

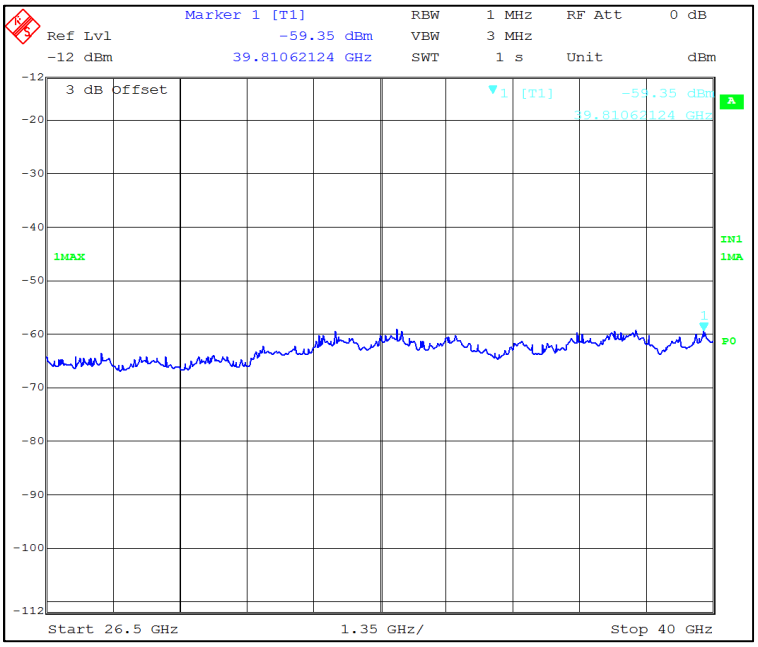


Figure 29: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

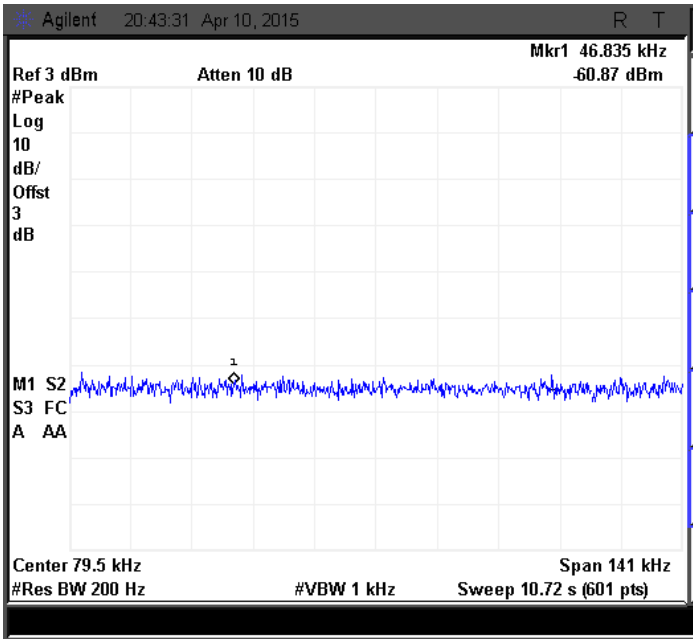


Figure 30: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

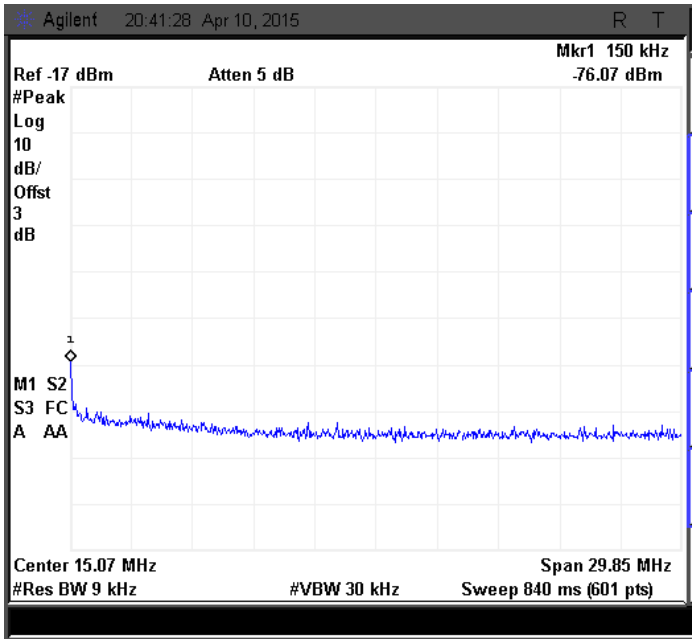


Figure 31: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

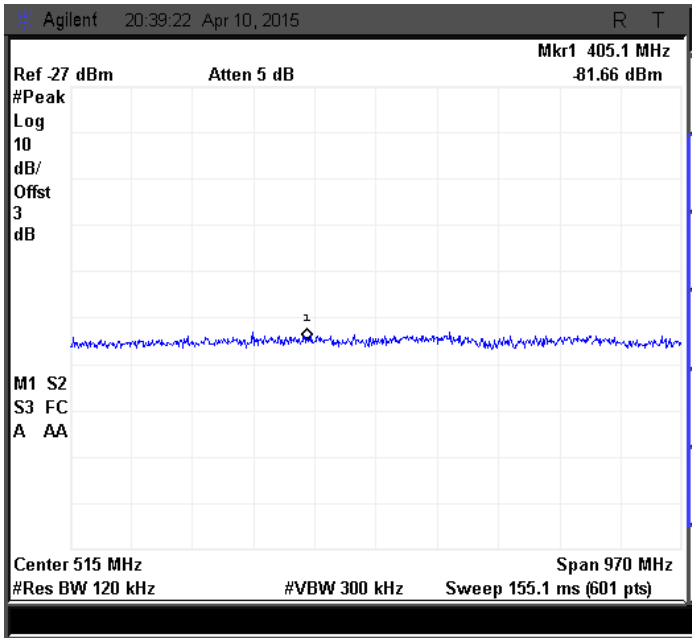


Figure 32: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

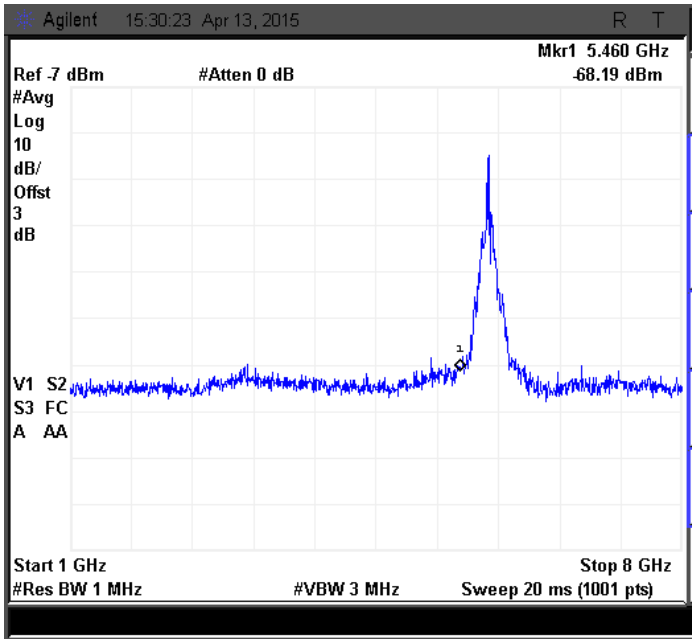


Figure 33: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

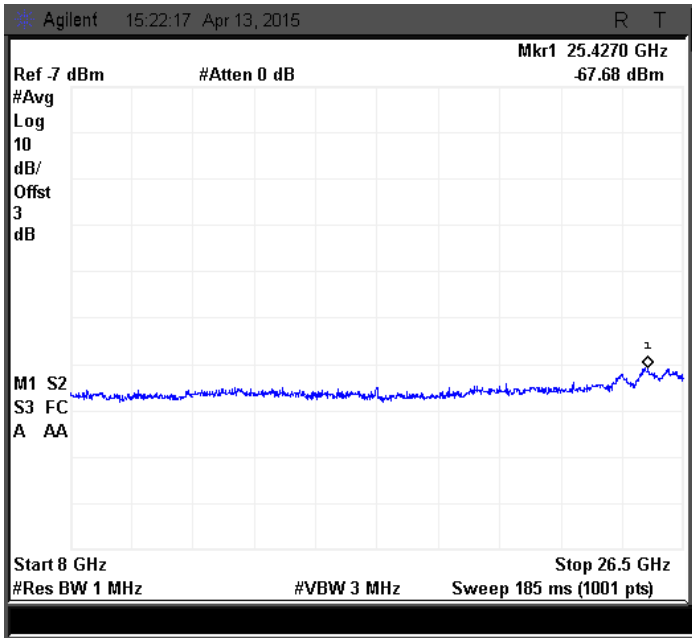


Figure 34: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

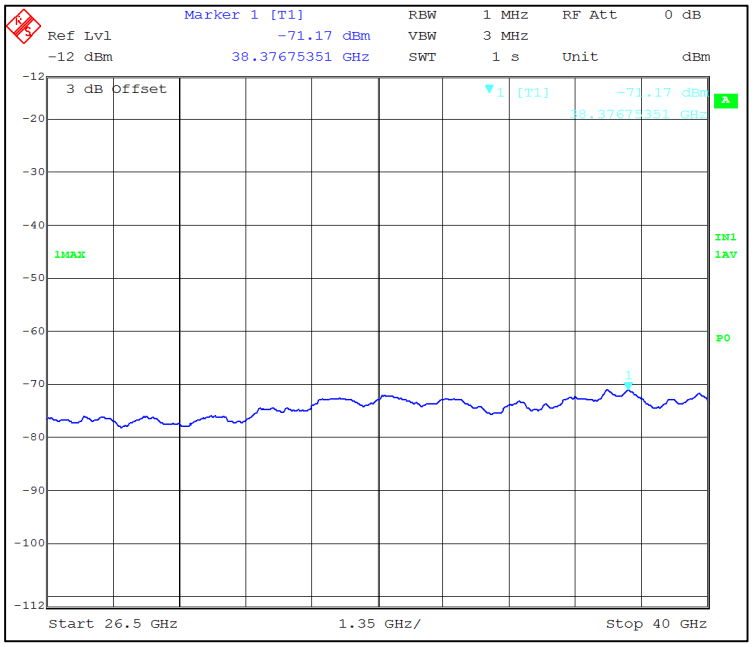


Figure 35: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

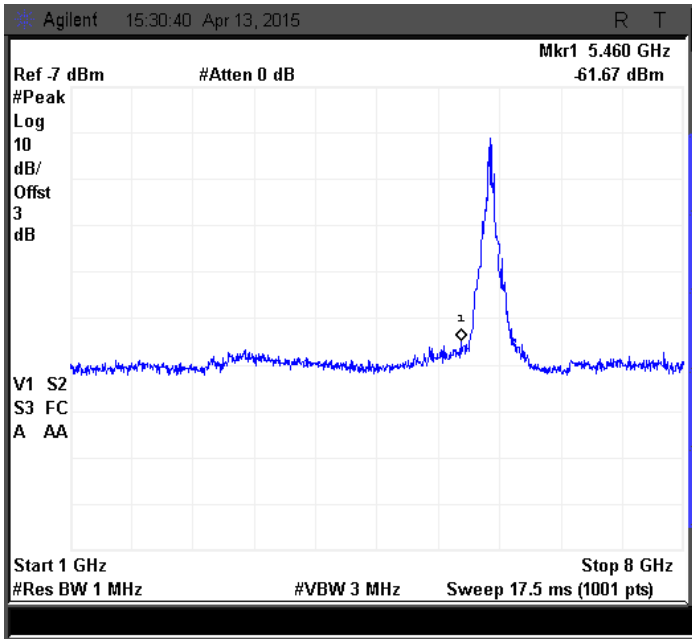


Figure 36: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

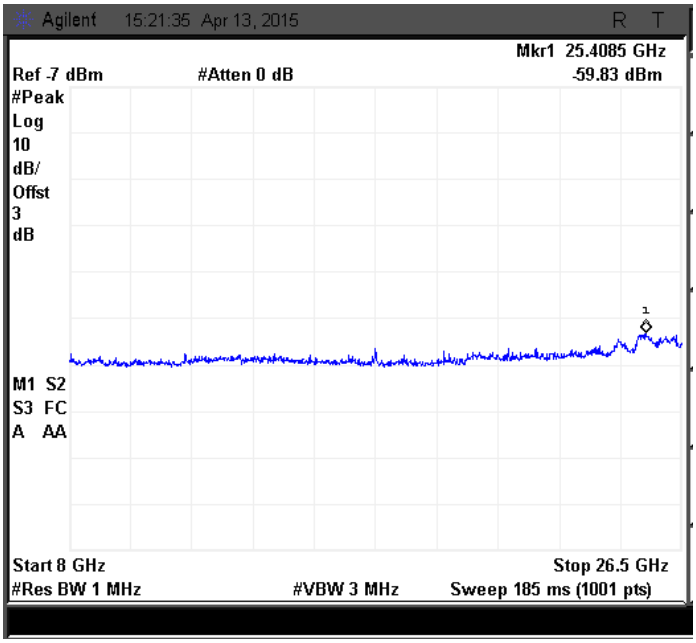


Figure 37: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

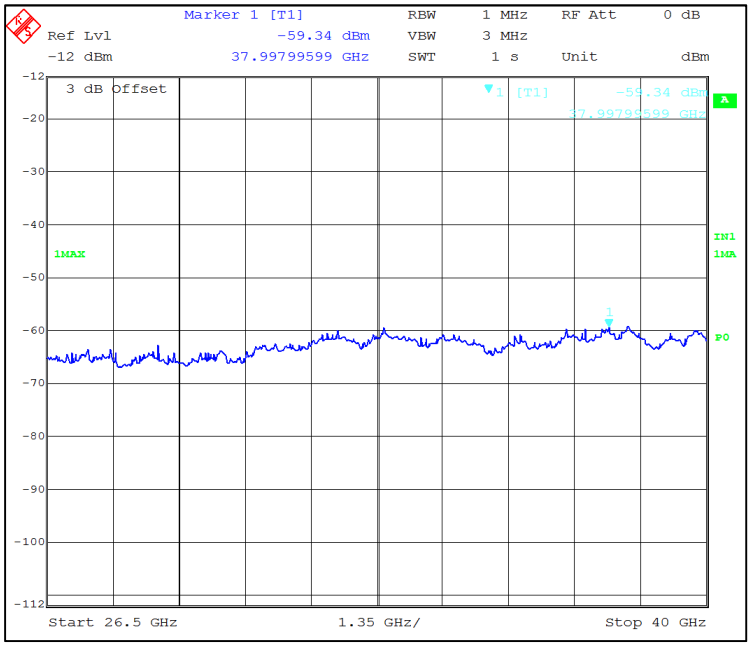


Figure 38: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.5.3 40MHz MODULATION BW-HIGH CHANNEL_5825 MHz

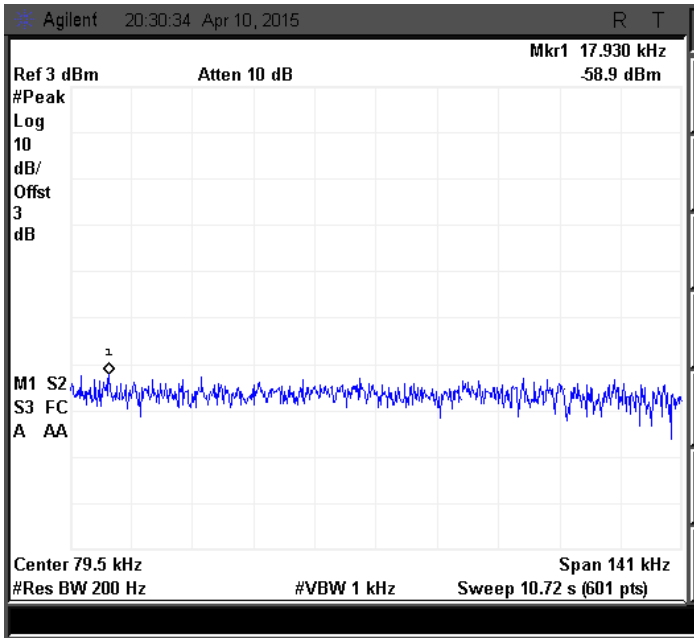


Figure 39: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

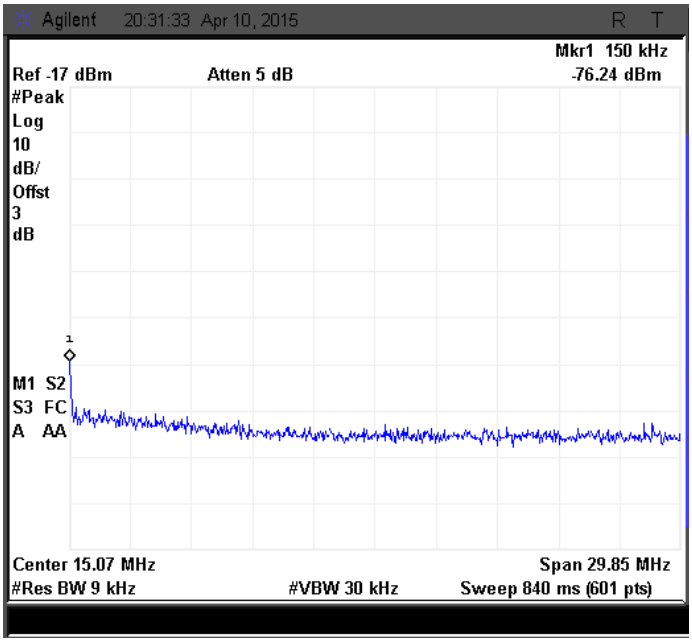


Figure 40: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

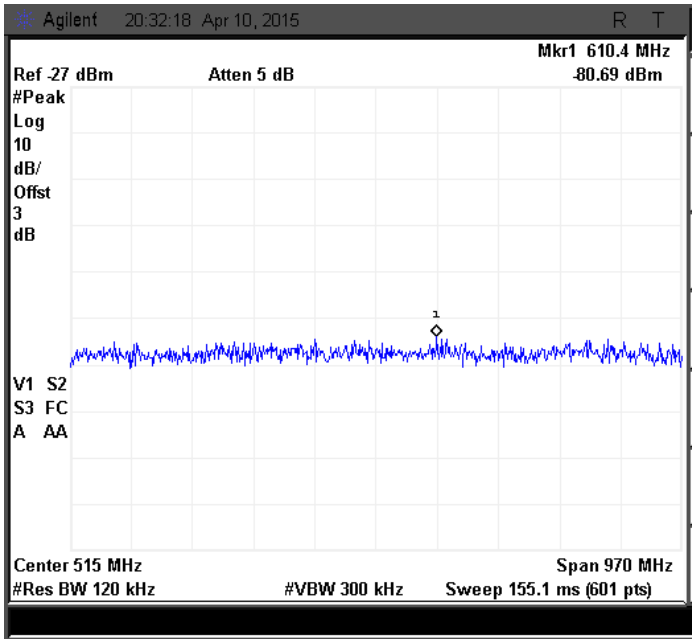


Figure 41: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

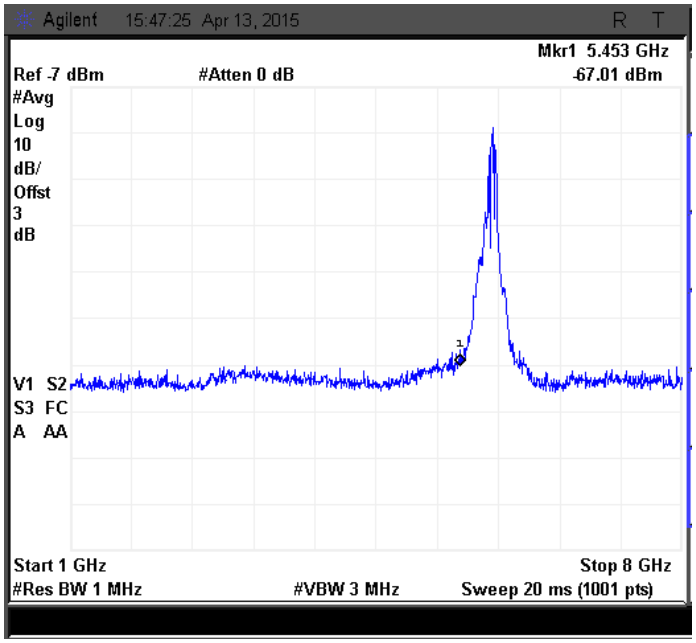


Figure 42: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

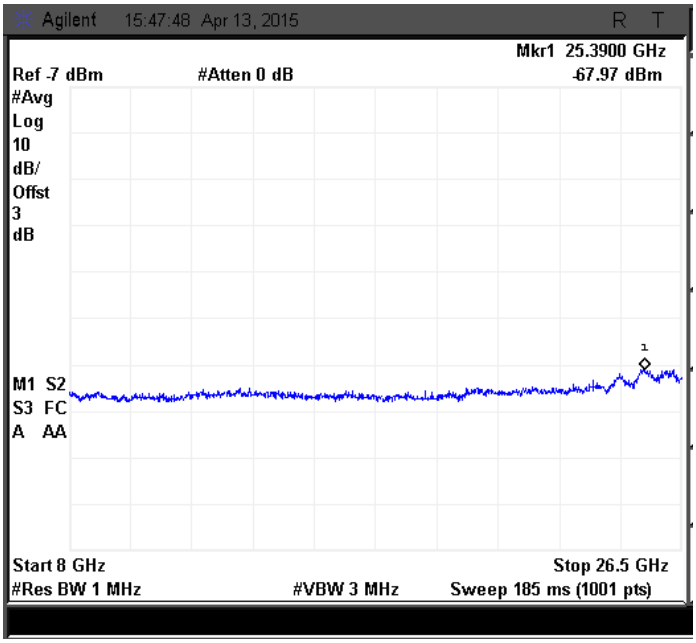


Figure 43: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

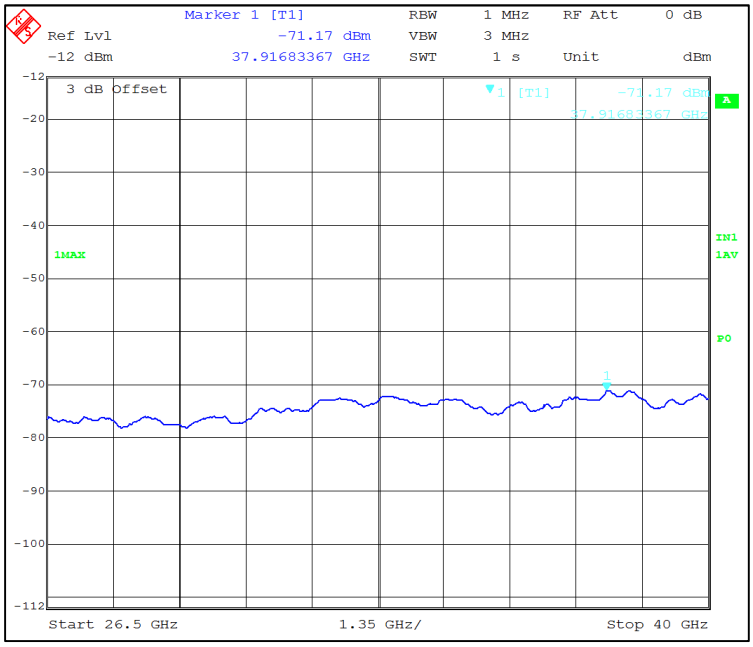


Figure 44: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

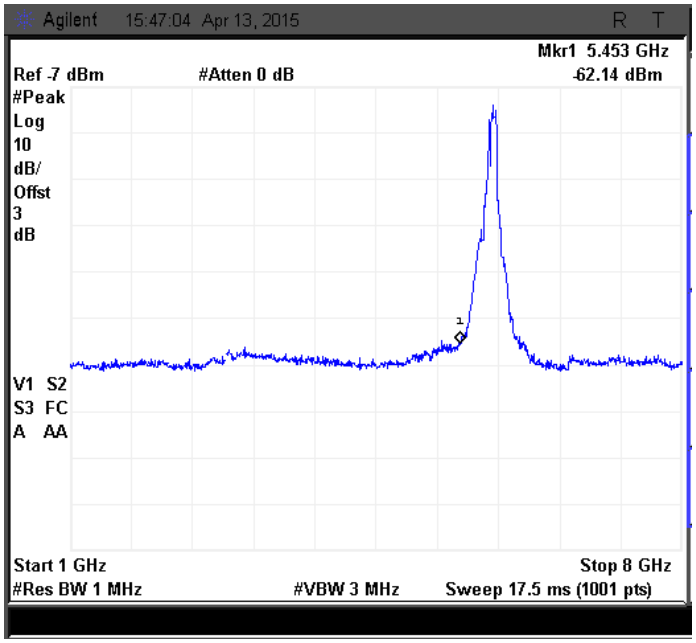


Figure 45: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

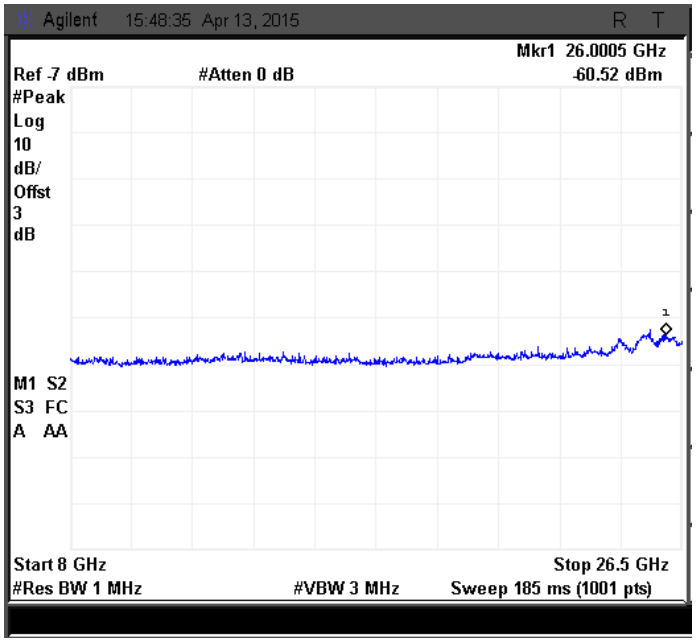


Figure 46: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

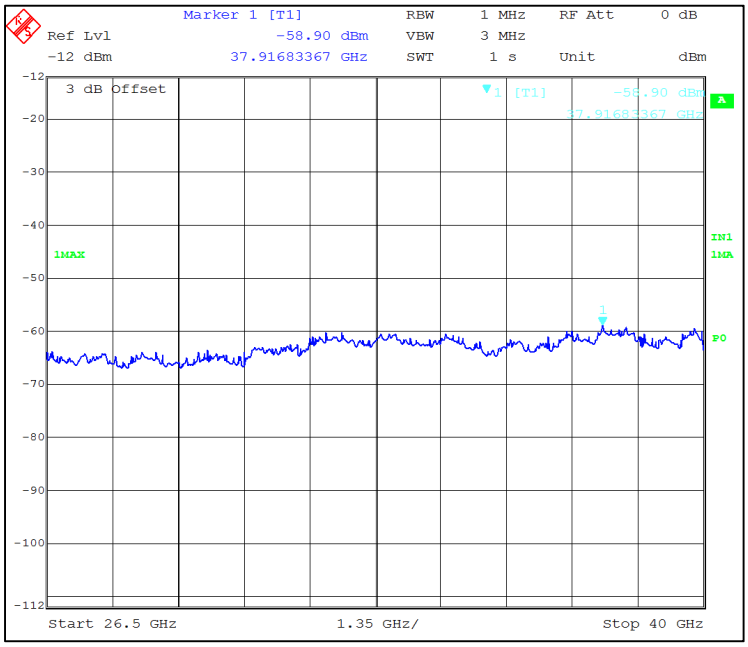


Figure 47: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

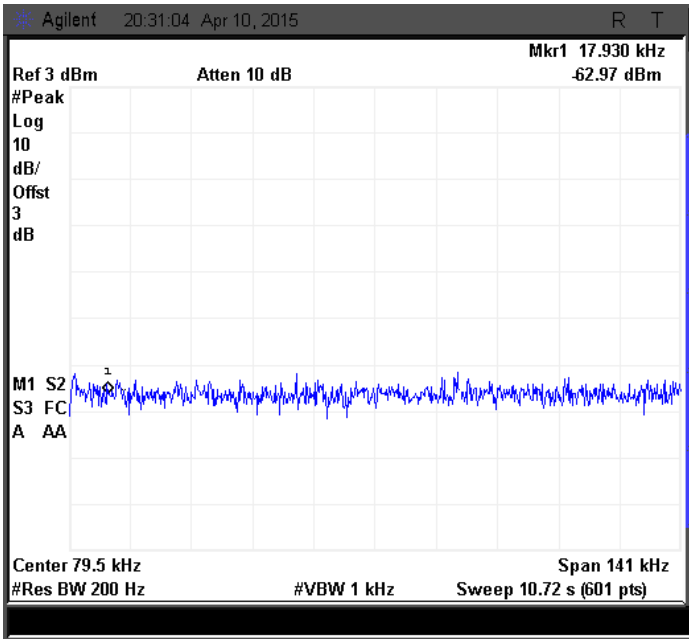


Figure 48: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

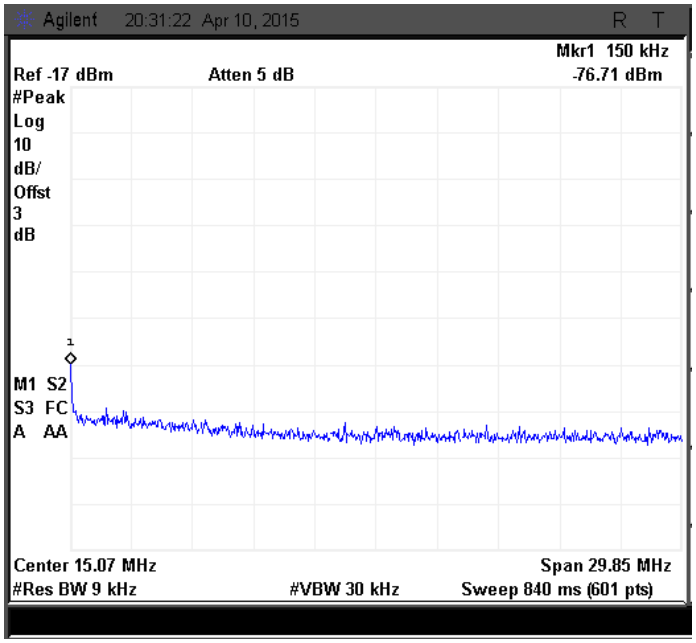


Figure 49: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

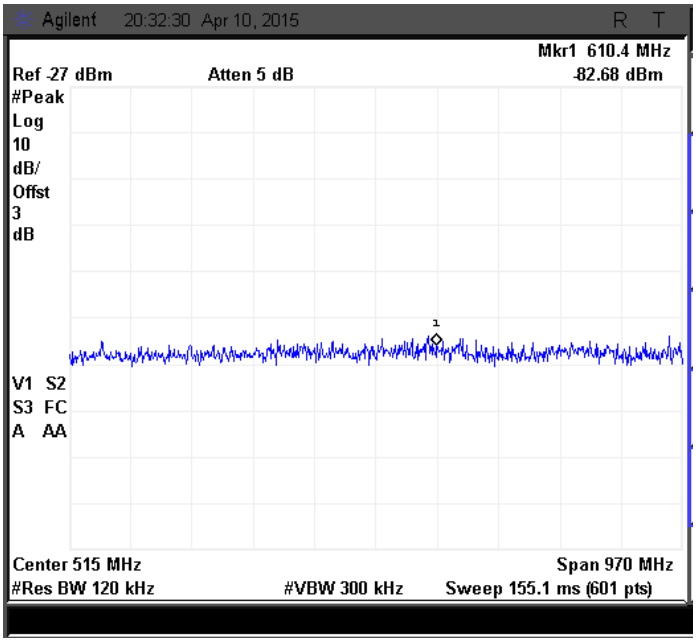


Figure 50: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

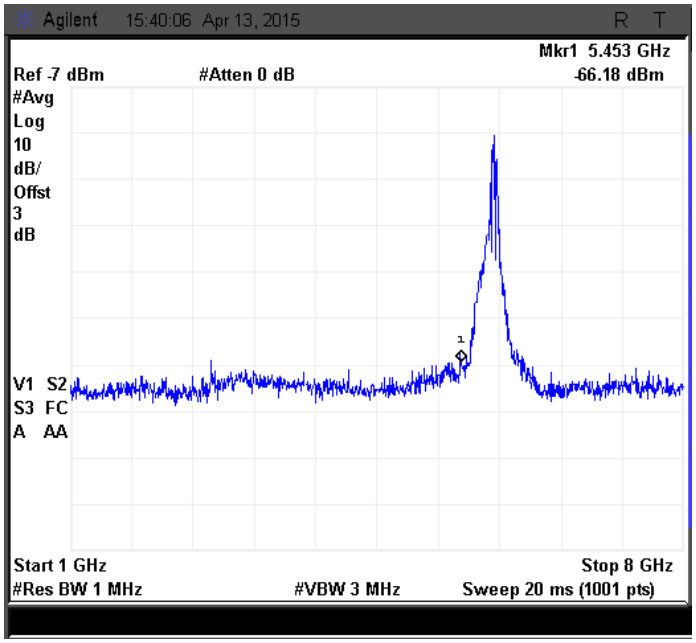


Figure 51: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

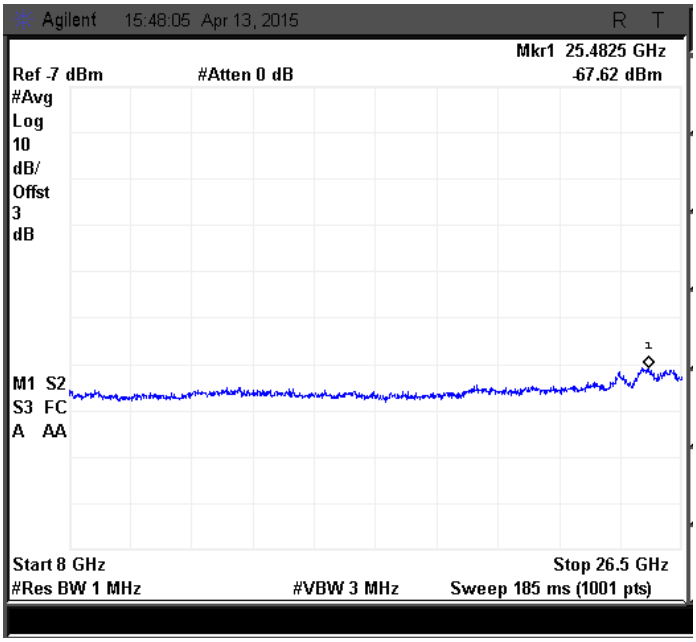


Figure 52: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

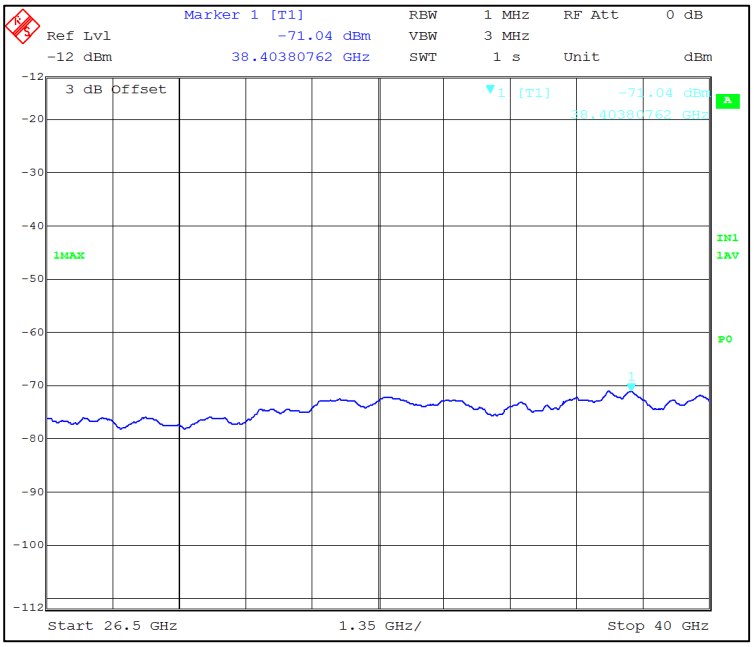


Figure 53: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

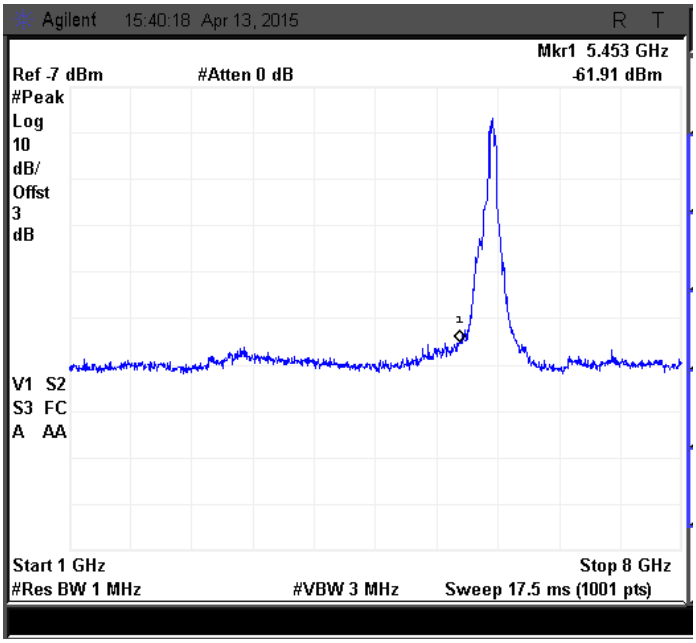


Figure 54: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

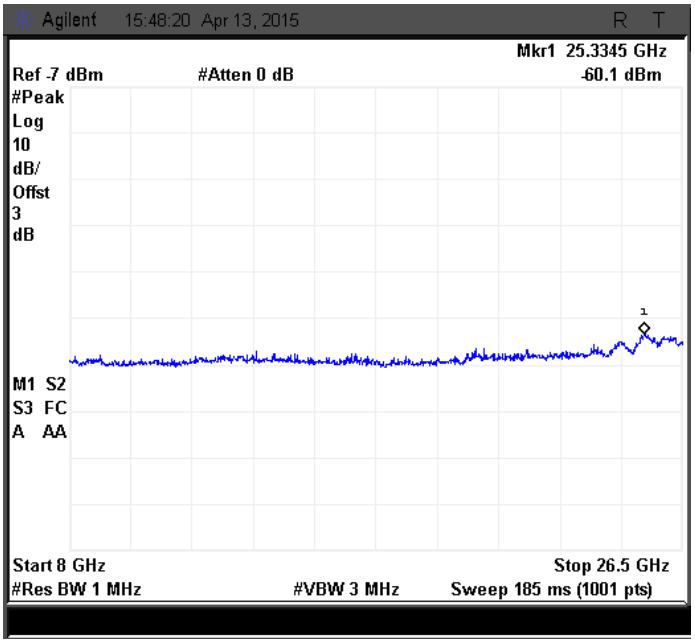


Figure 55: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

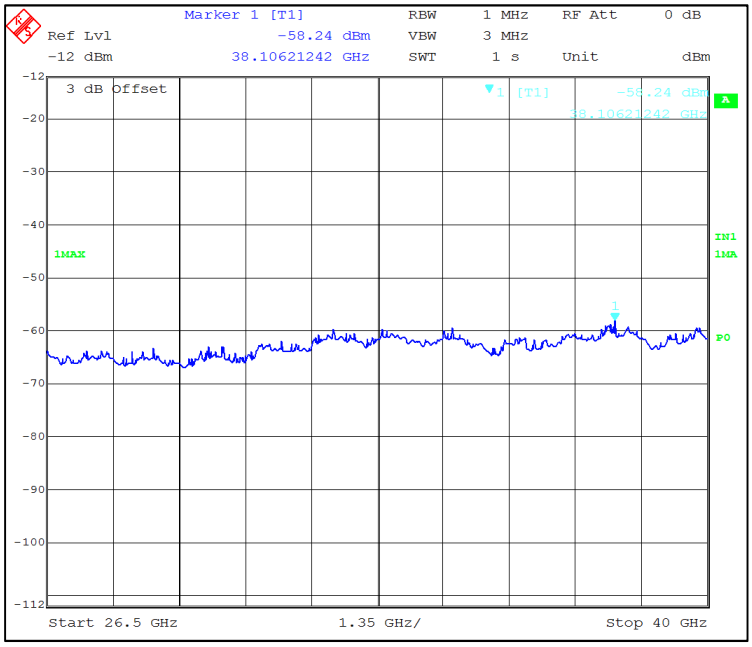


Figure 56: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.5.4 5MHz Modulation BW-Low channel_5735 MHz

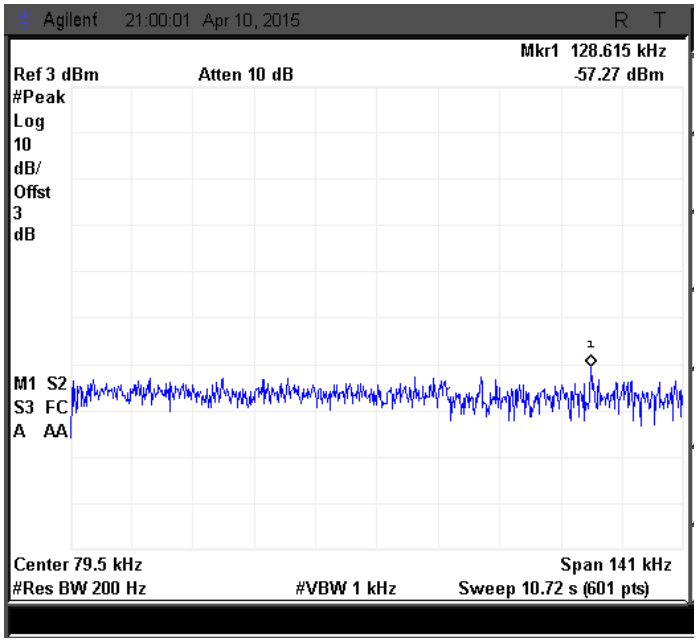


Figure 57: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

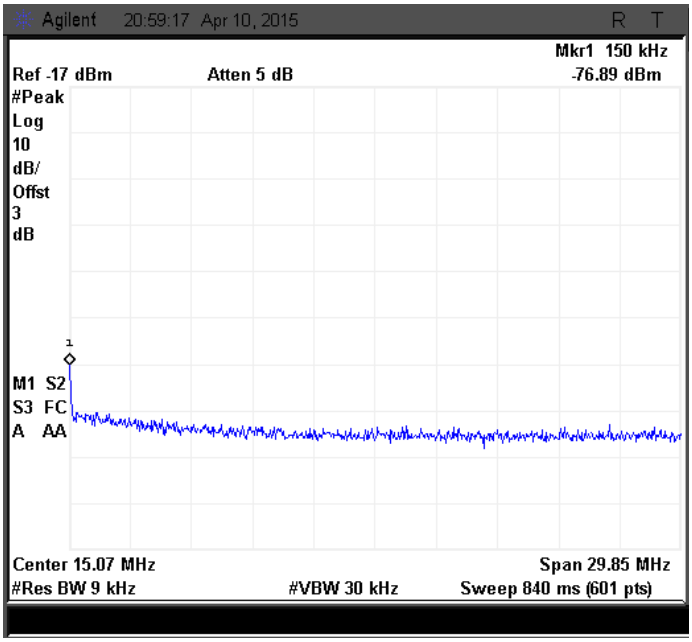


Figure 58: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

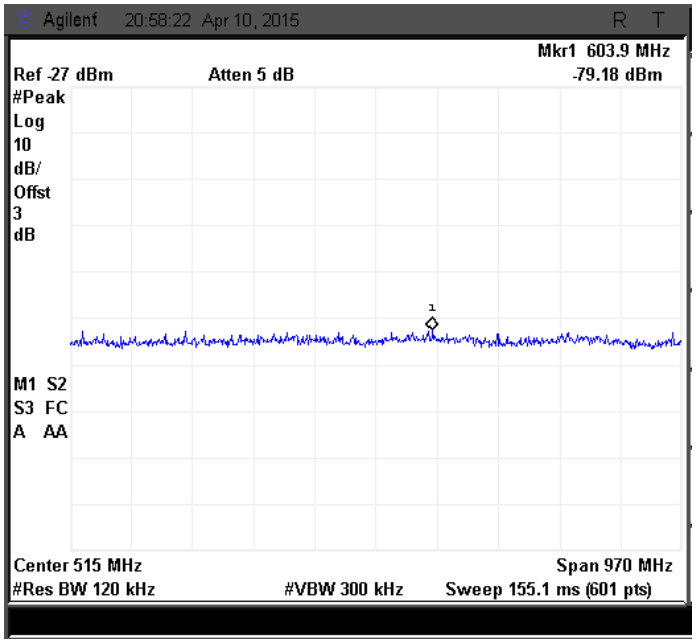


Figure 59: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

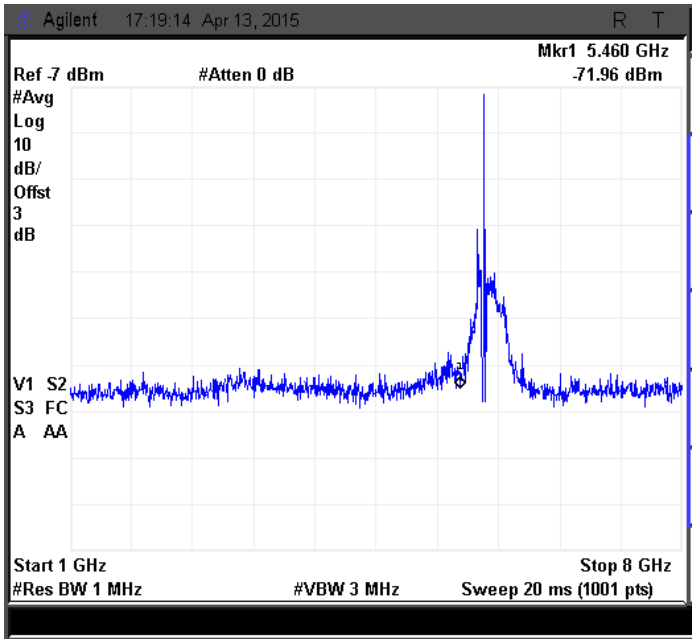


Figure 60: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

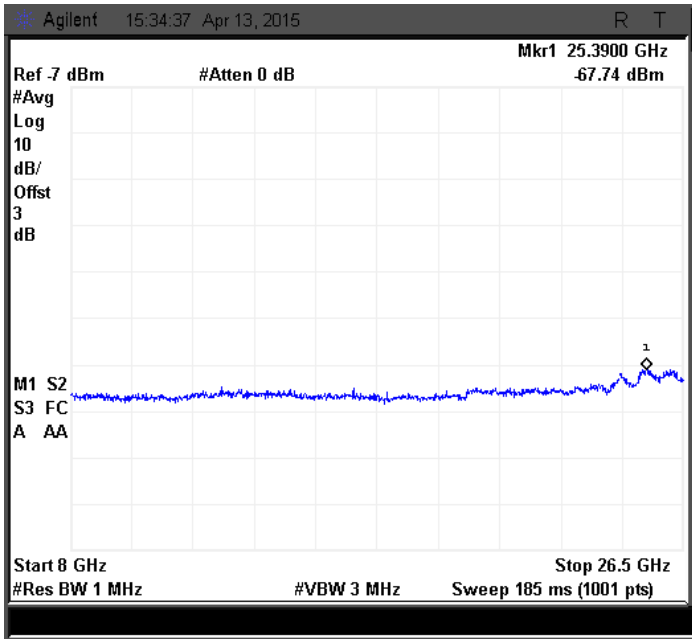


Figure 61: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

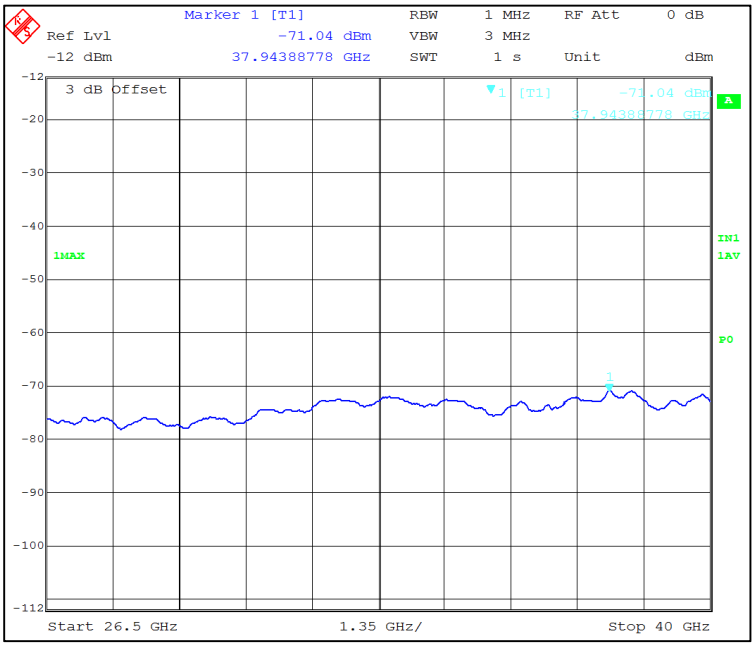


Figure 62: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

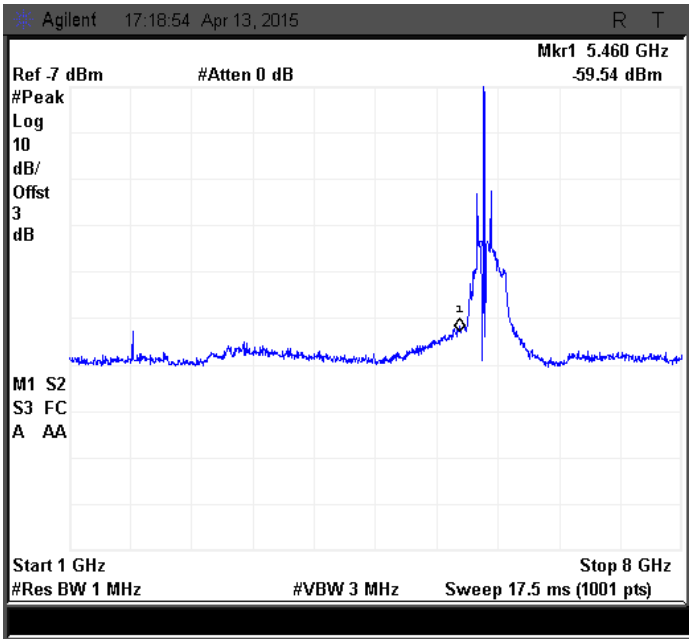


Figure 63: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

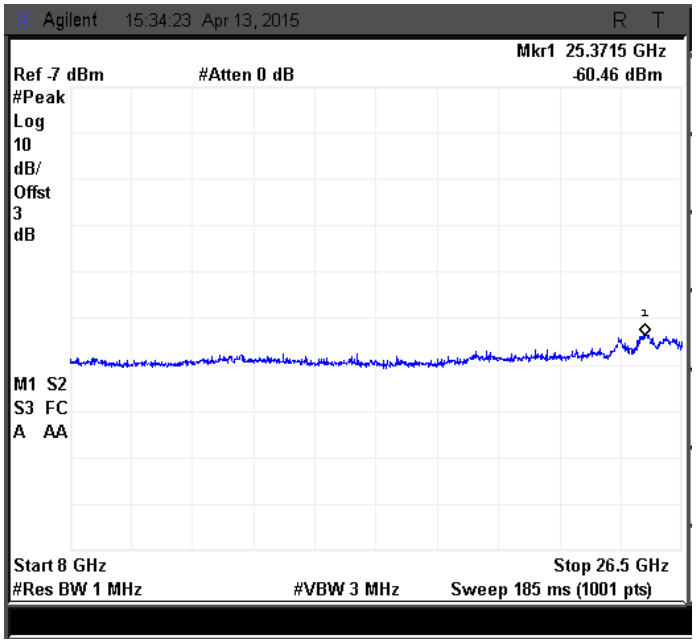


Figure 64: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

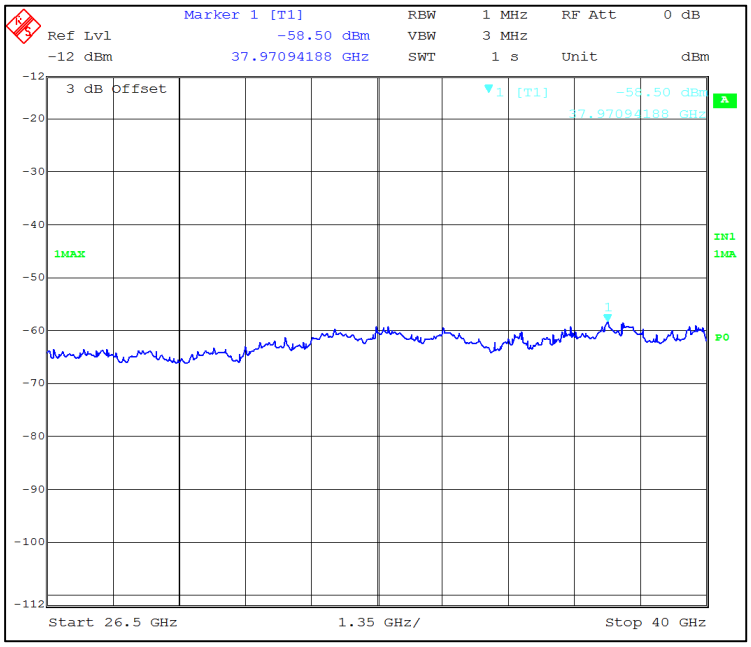


Figure 65: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

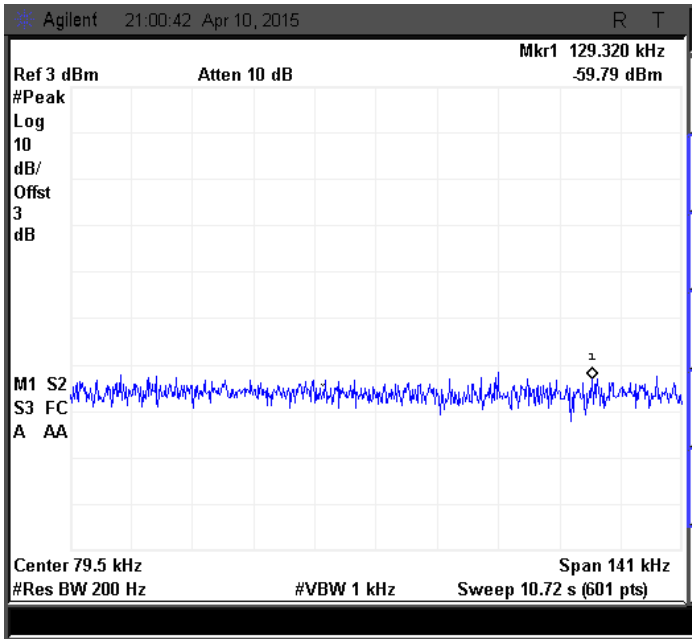


Figure 66: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

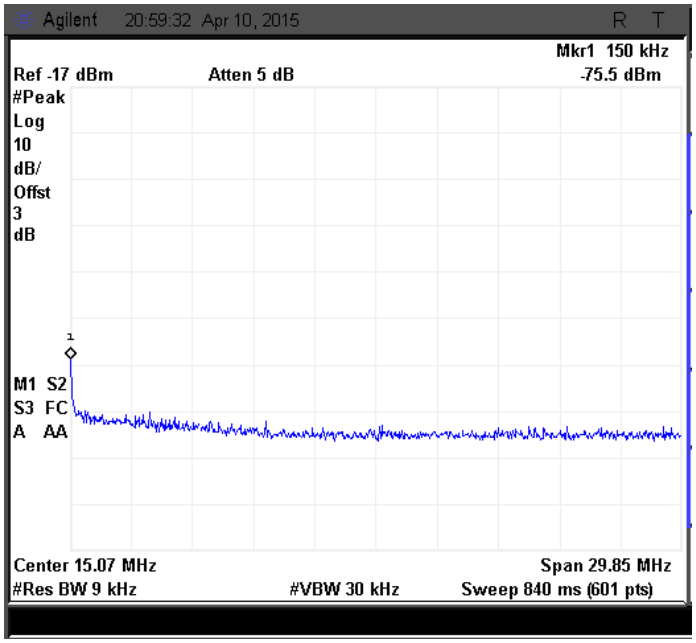


Figure 67: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

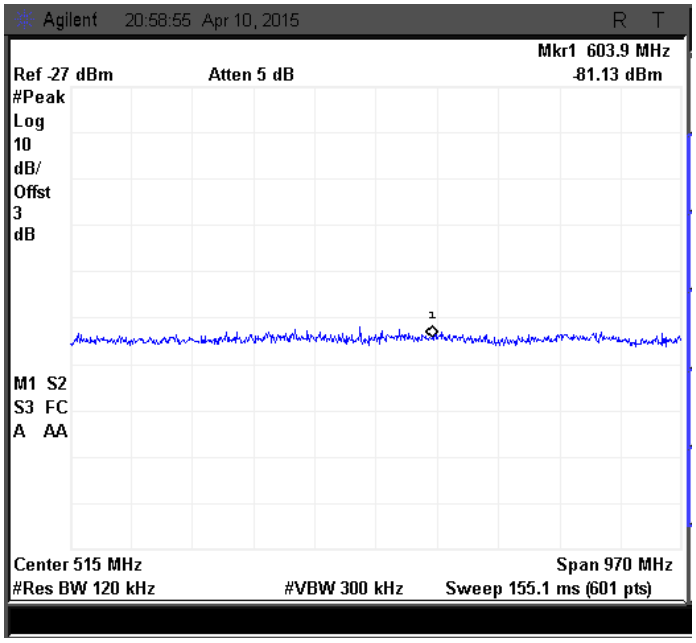


Figure 68: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

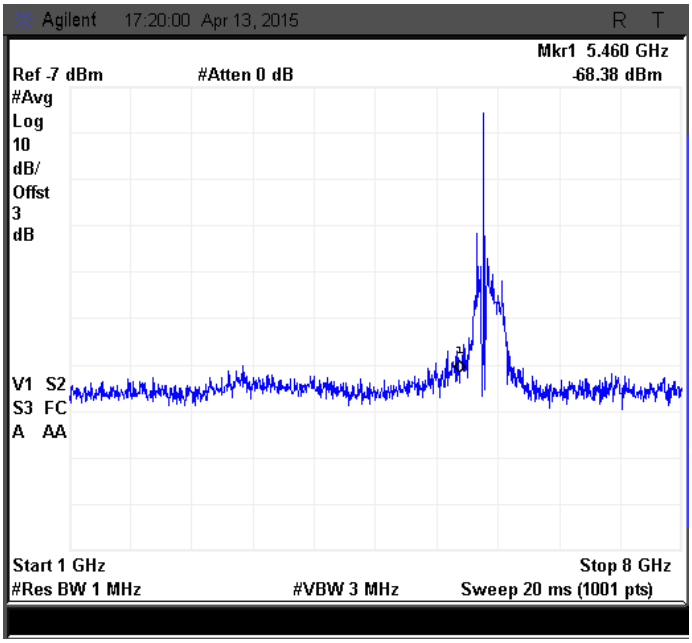


Figure 69: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

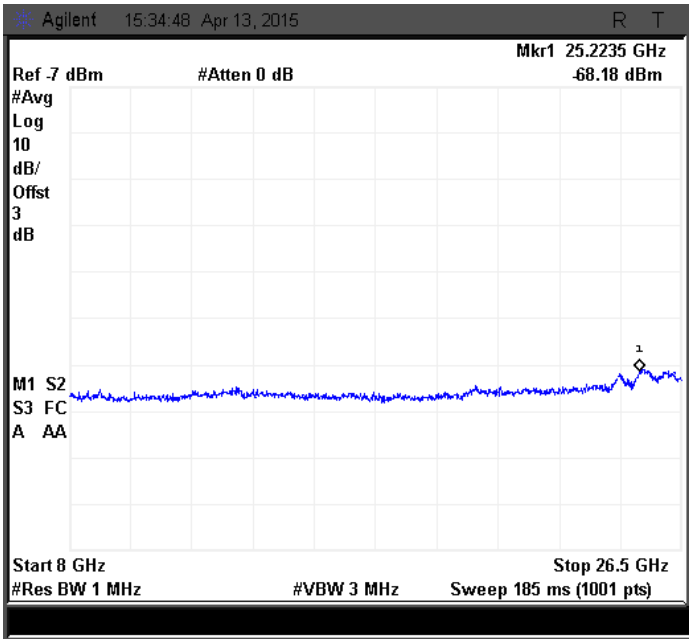


Figure 70: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

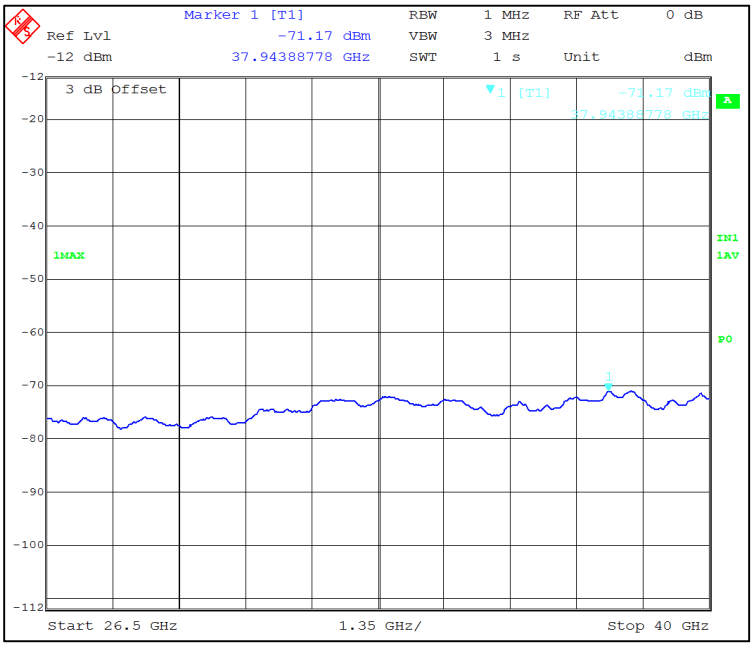


Figure 71: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

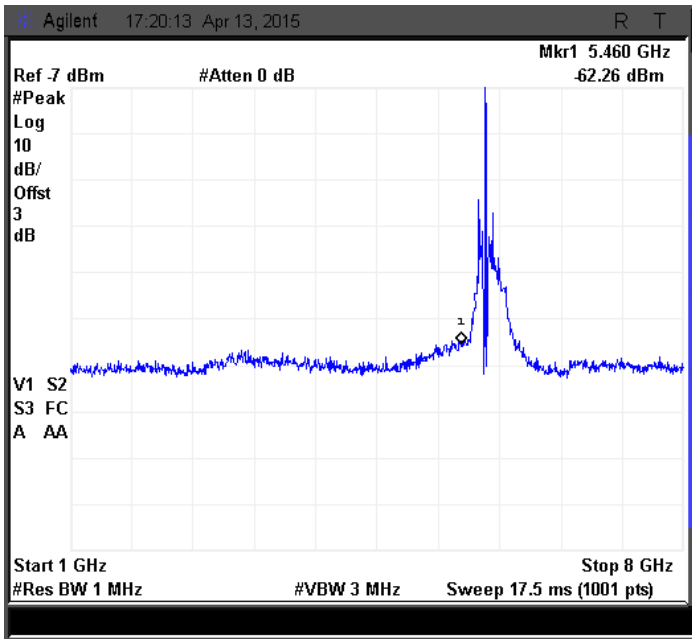


Figure 72: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

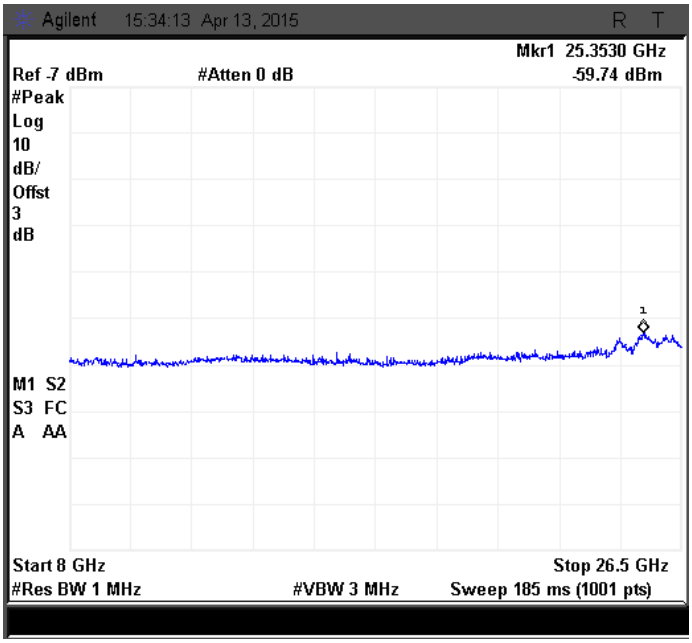


Figure 73: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

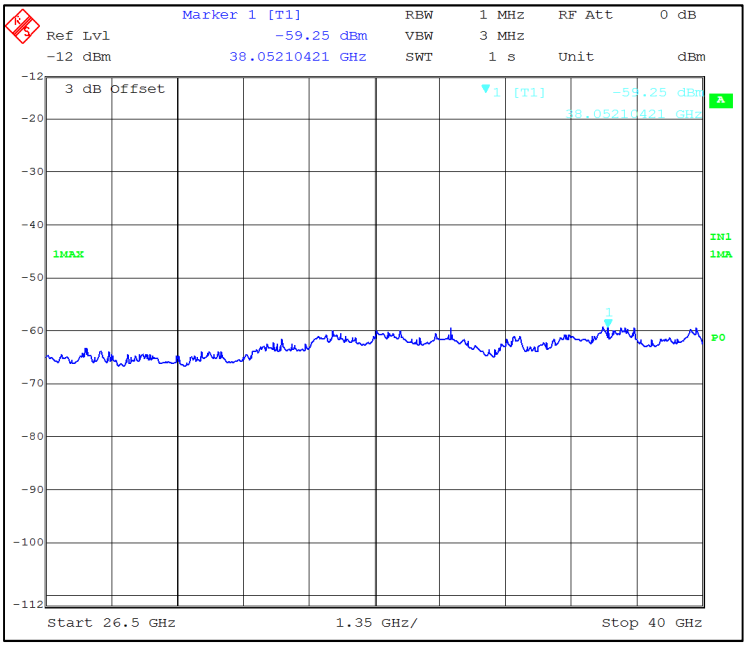


Figure 74: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.5.5 5MHz Modulation BW-Mid channel_5775 MHz

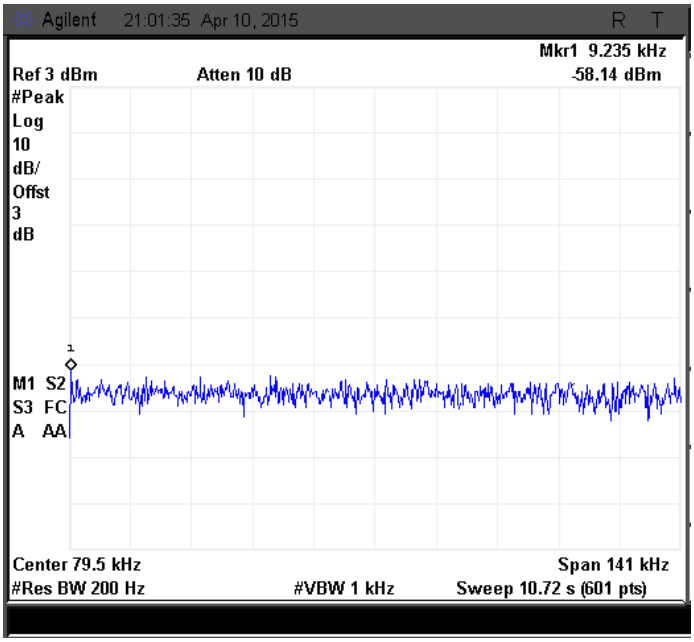


Figure 75: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

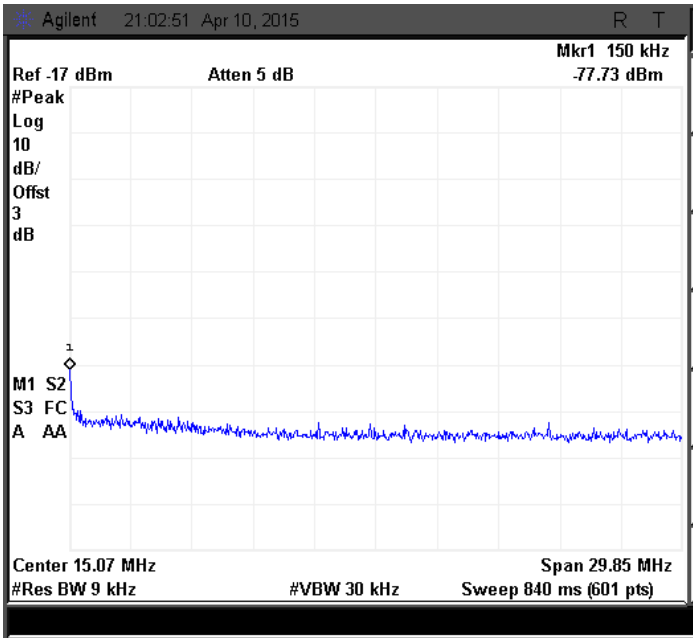


Figure 76: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

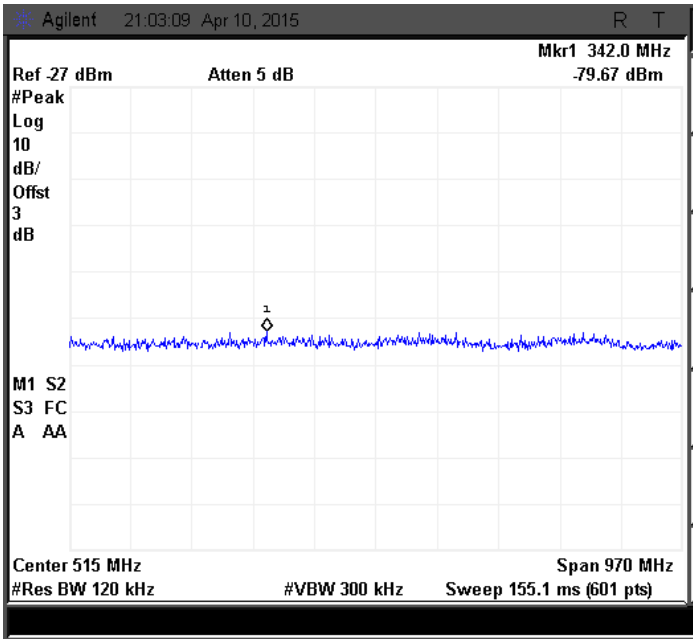


Figure 77: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

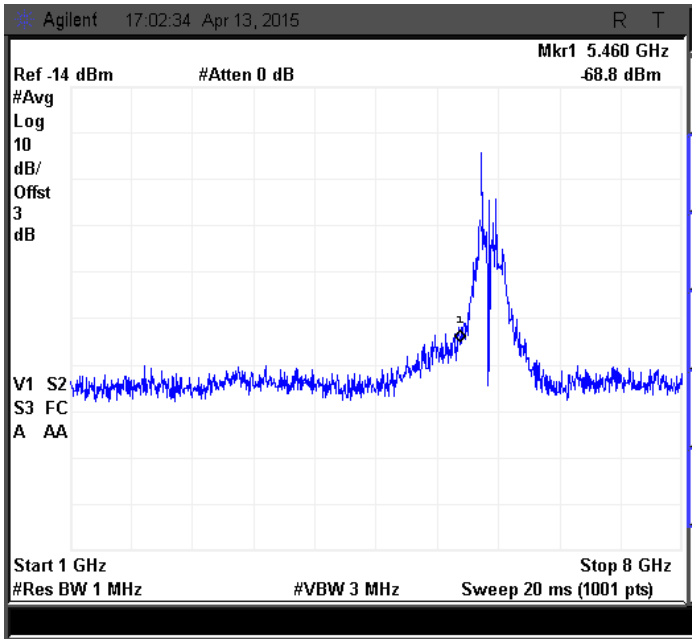


Figure 78: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

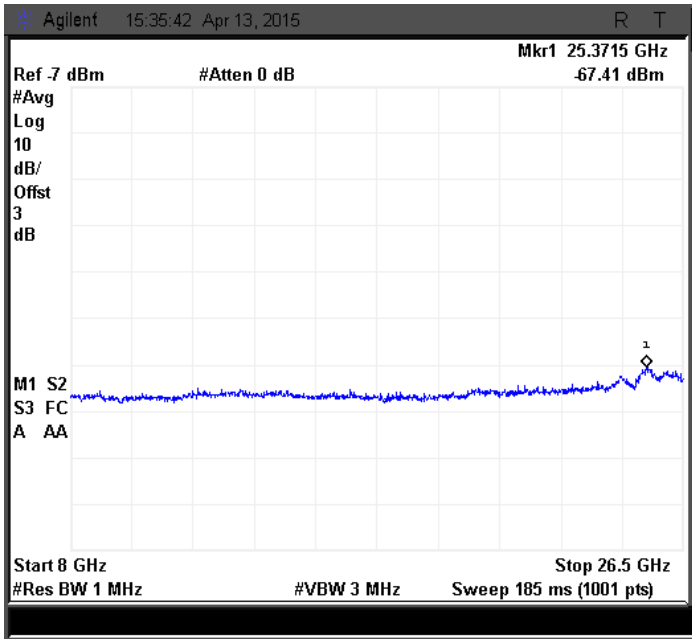


Figure 79: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

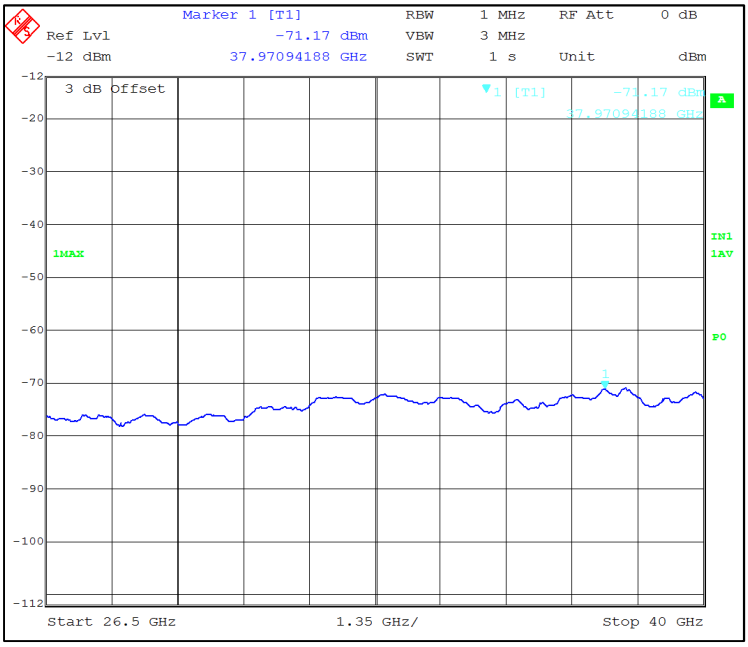


Figure 80: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

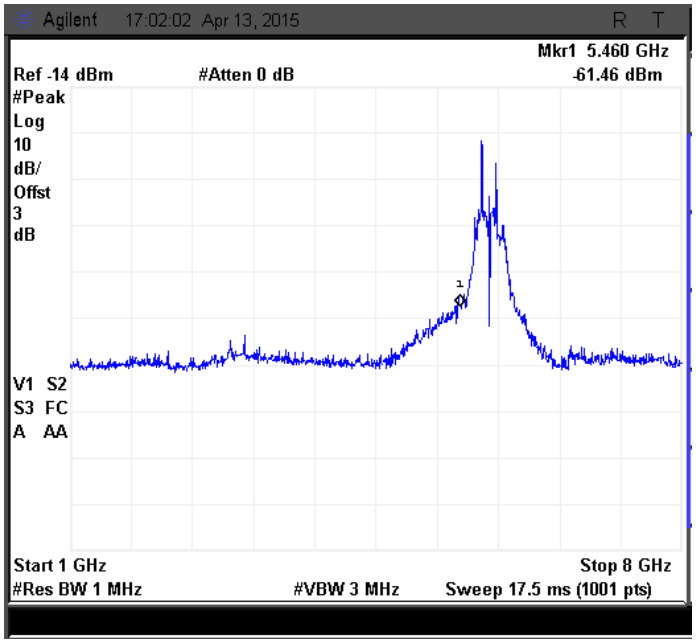


Figure 81: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

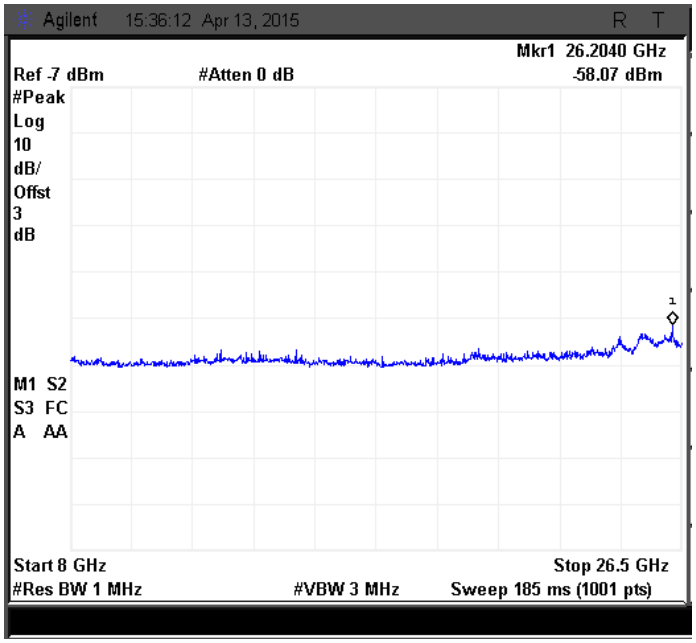


Figure 82: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

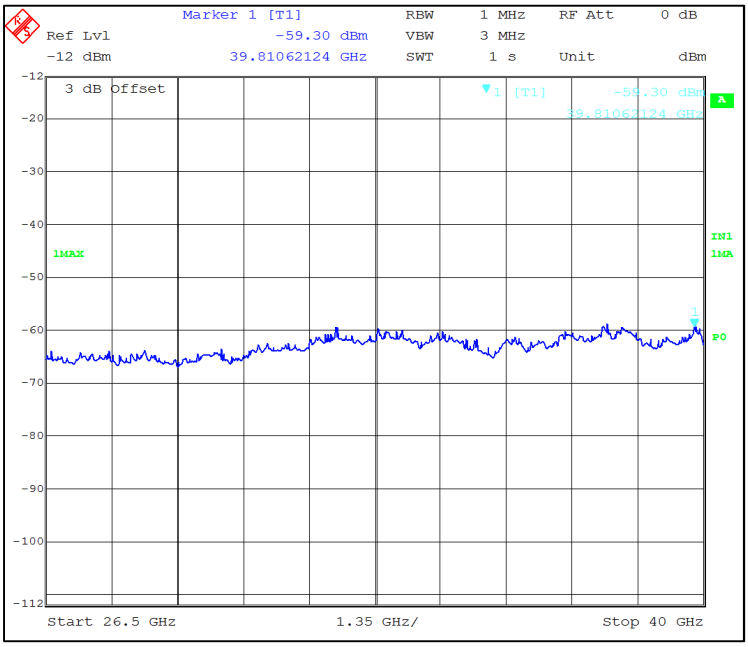


Figure 83: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

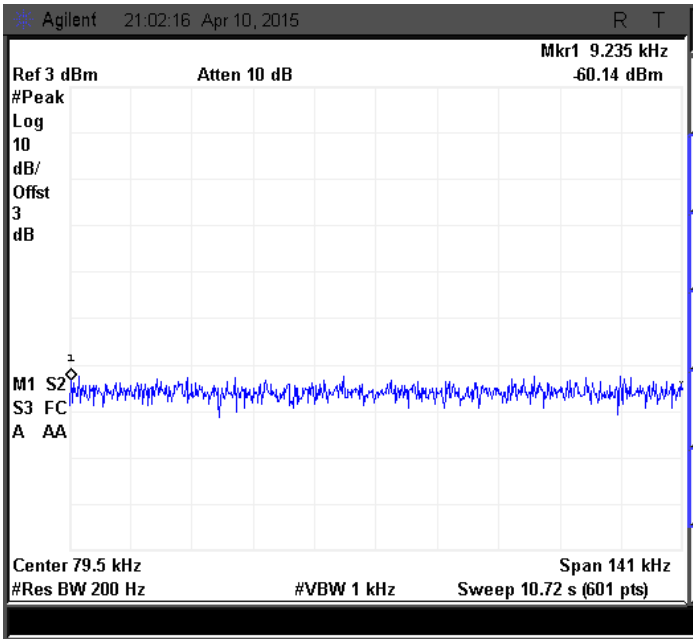


Figure 84: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

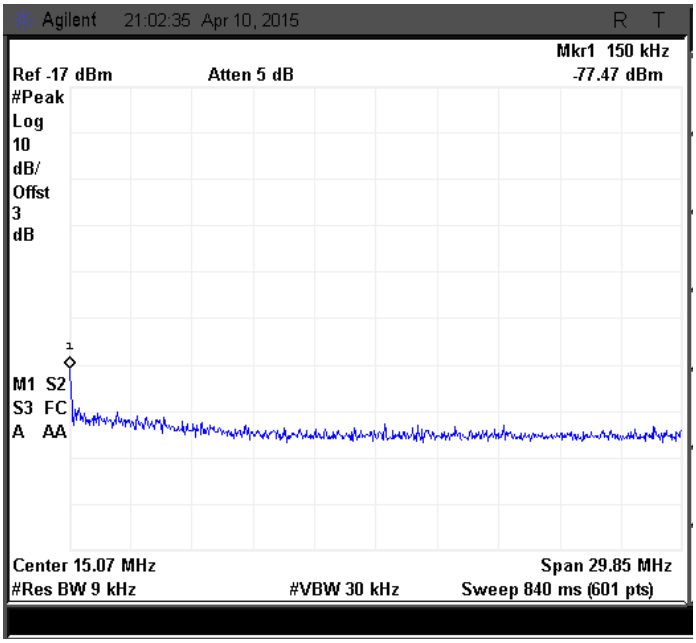


Figure 85: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

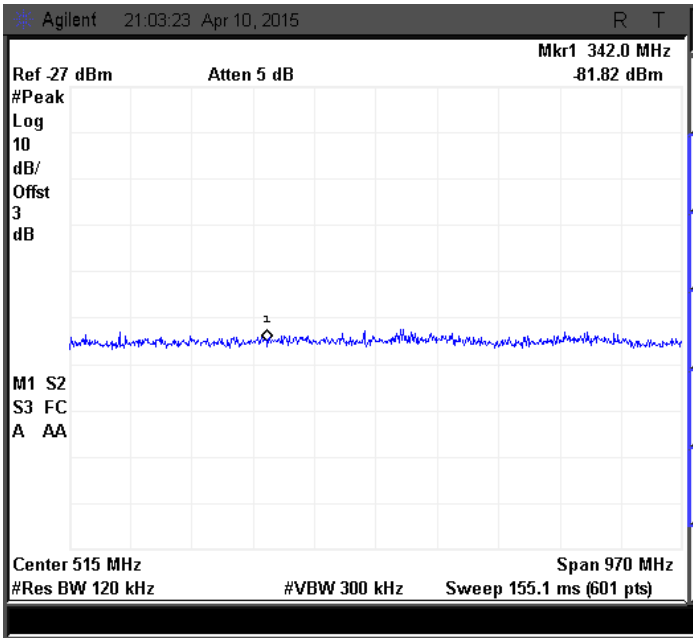


Figure 86: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

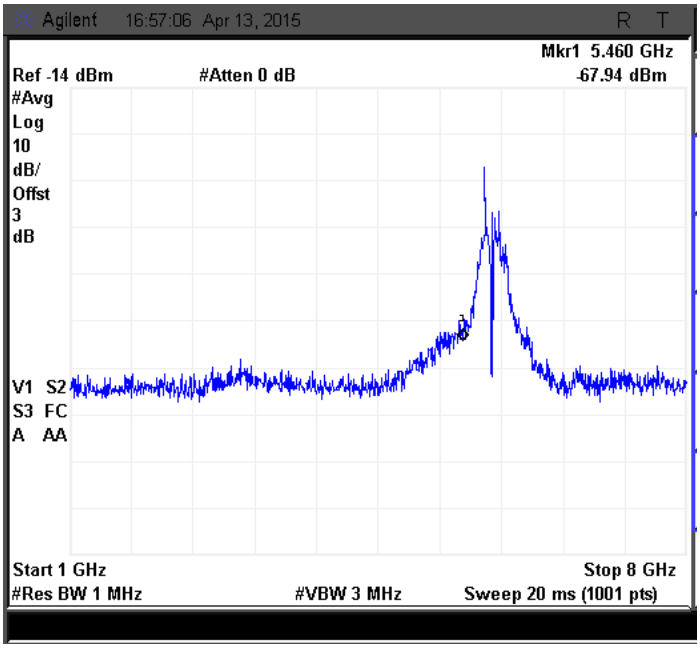


Figure 87: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

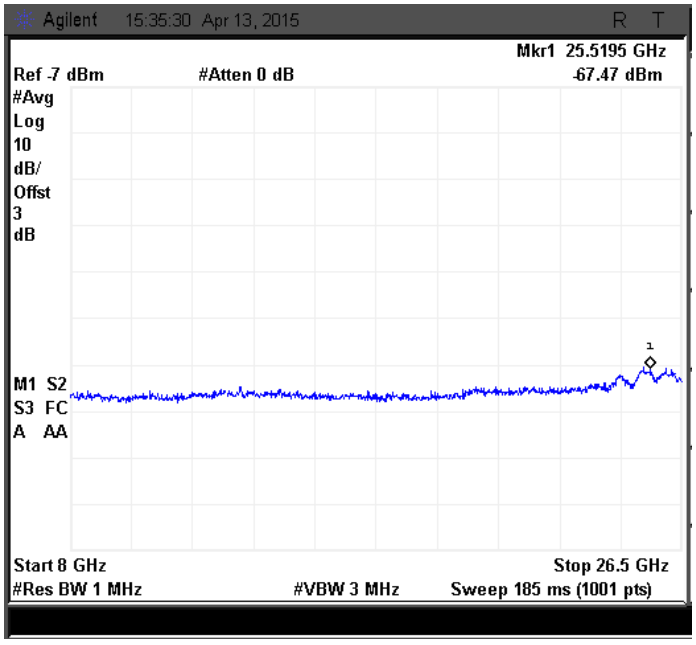


Figure 88: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

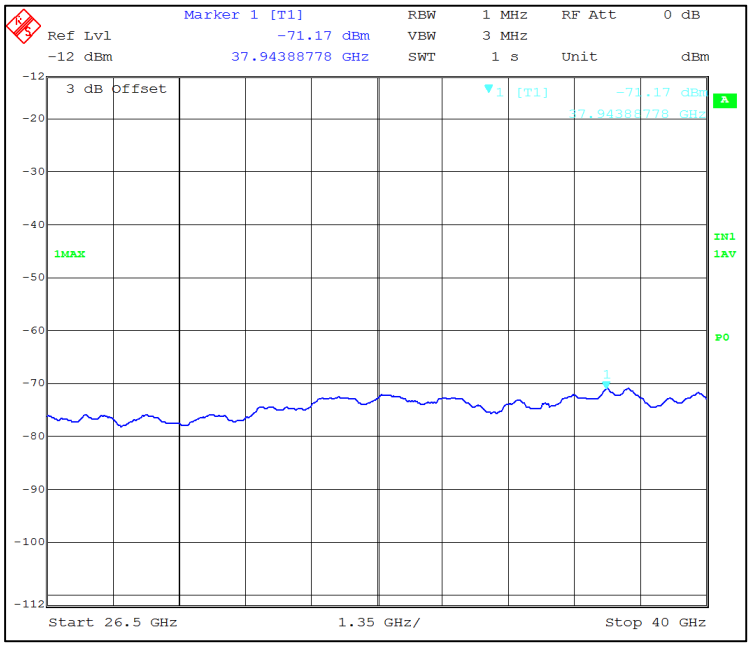


Figure 89: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

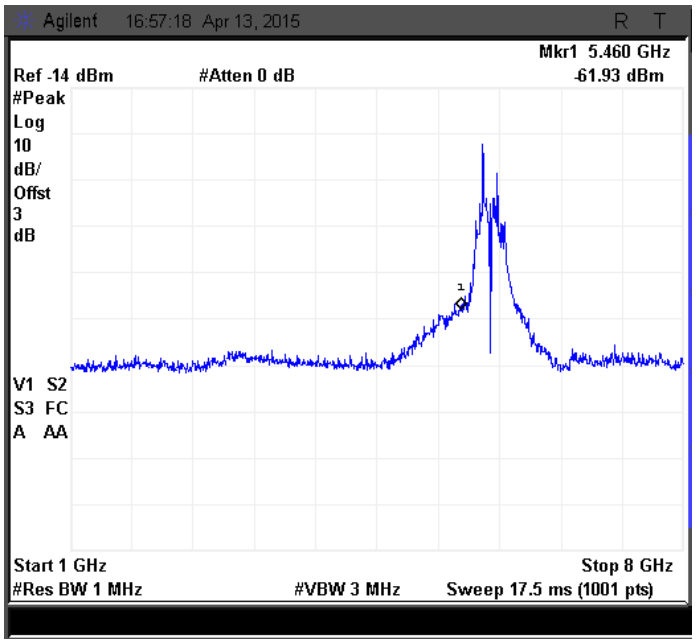


Figure 90: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

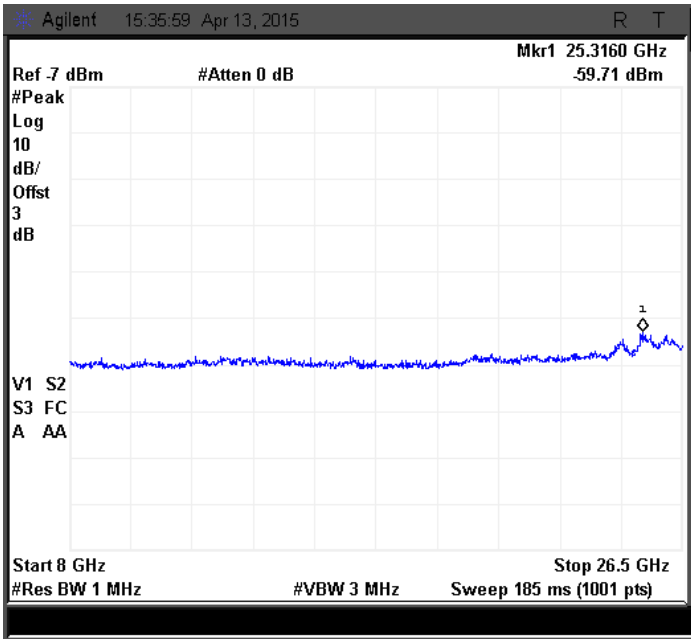


Figure 91: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

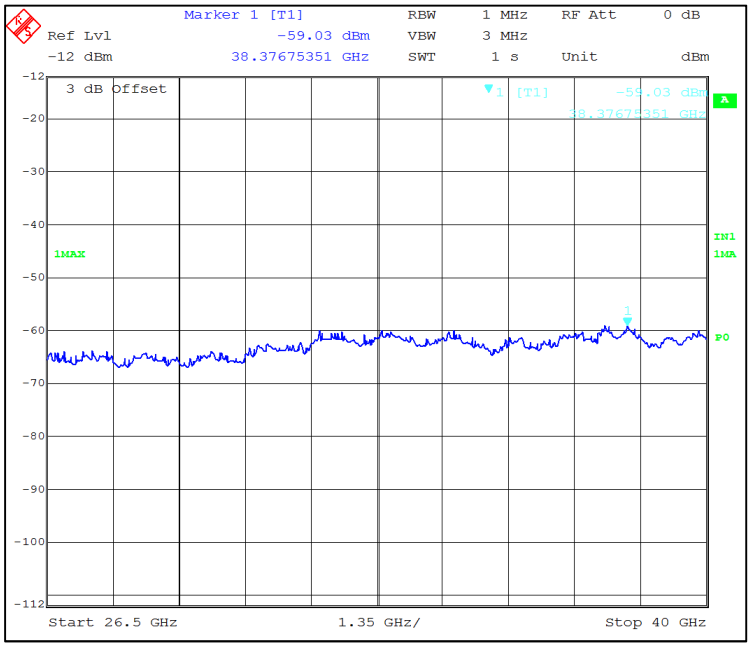


Figure 92: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.5.6 5MHz Modulation BW-High channel_5840 MHz

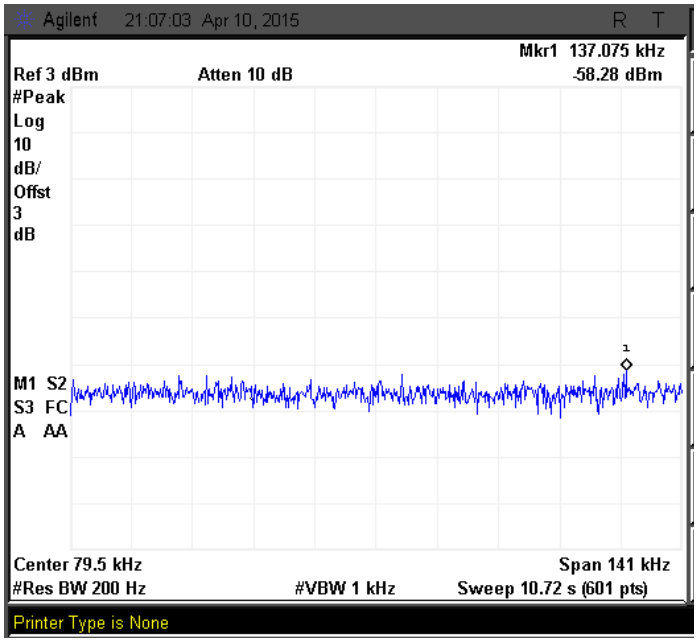


Figure 93: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

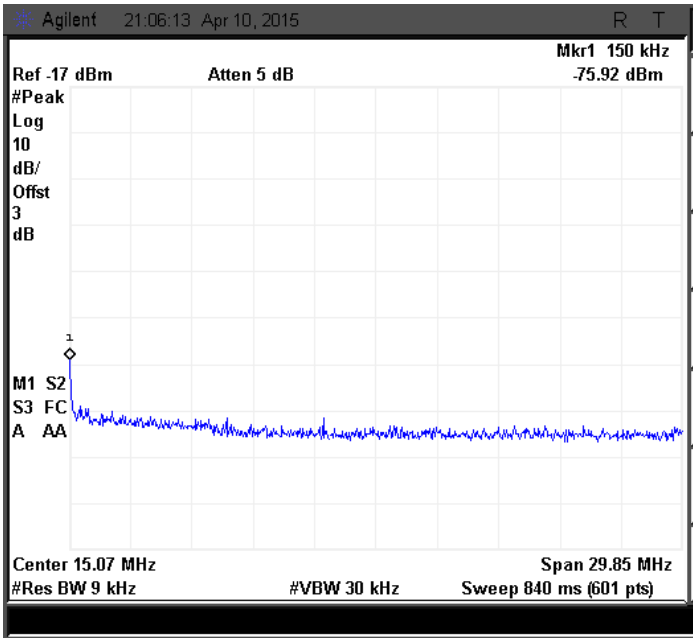


Figure 94: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

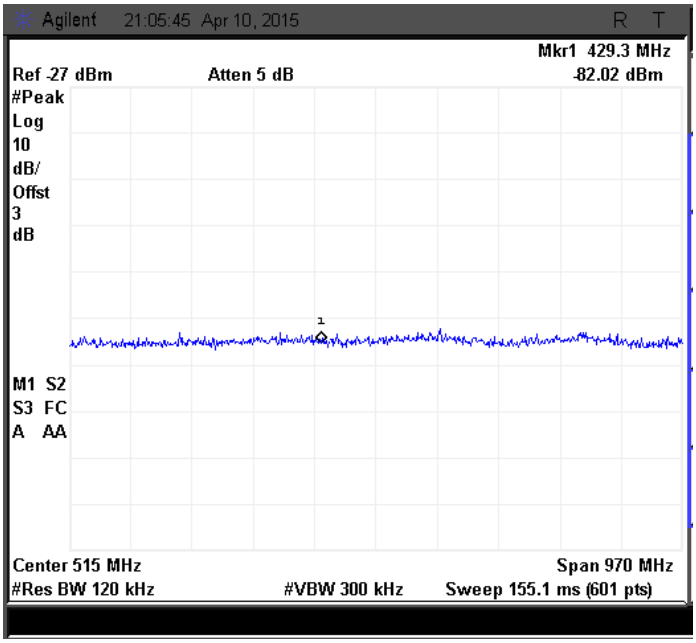


Figure 95: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

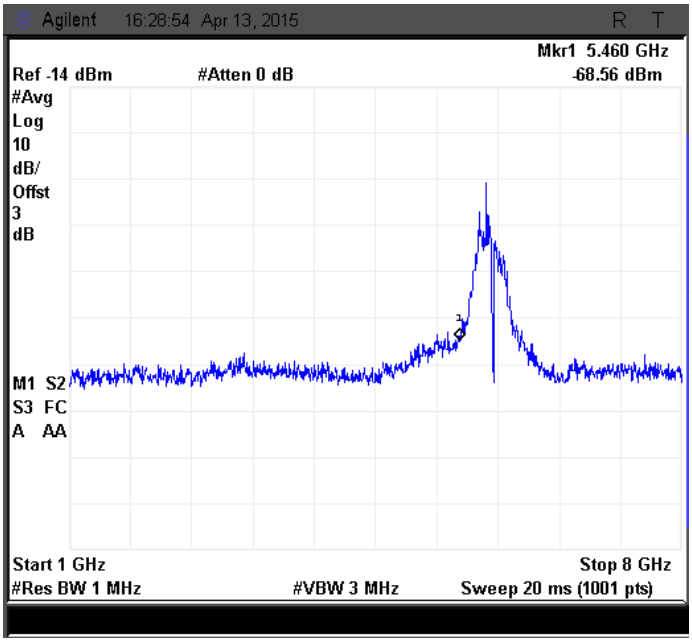


Figure 96: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

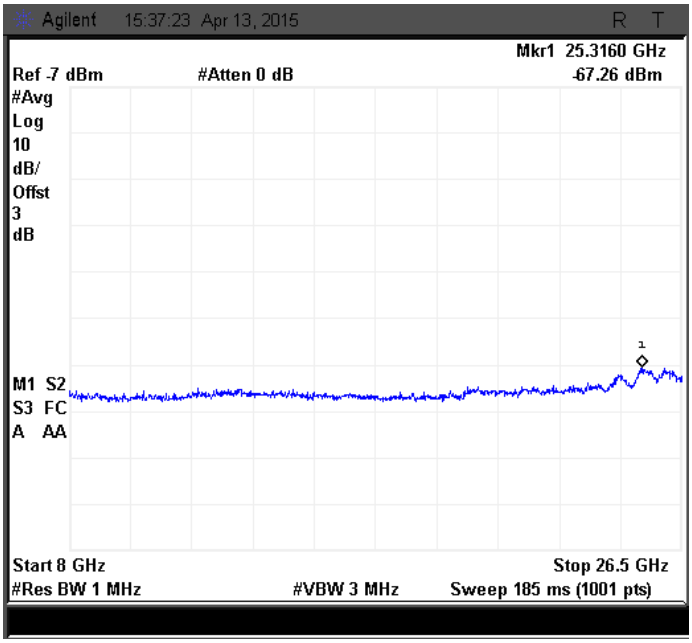


Figure 97: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

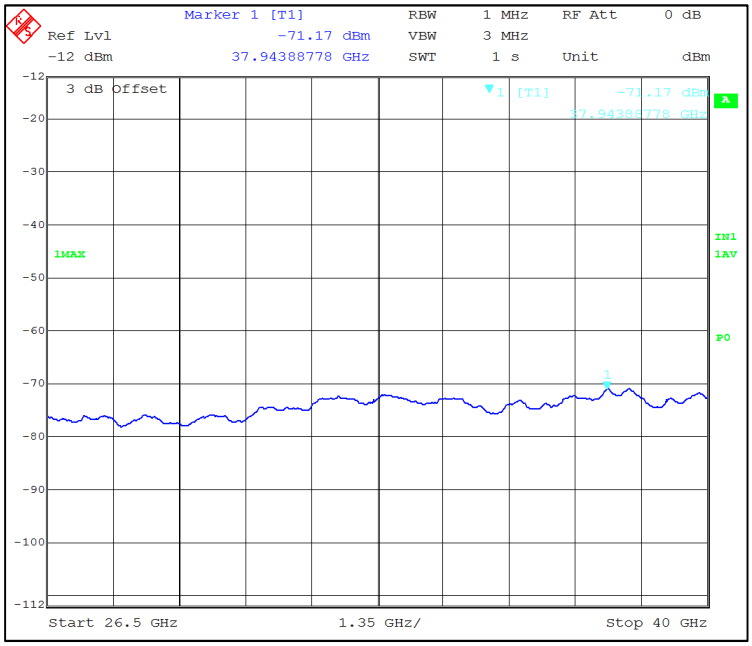


Figure 98: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

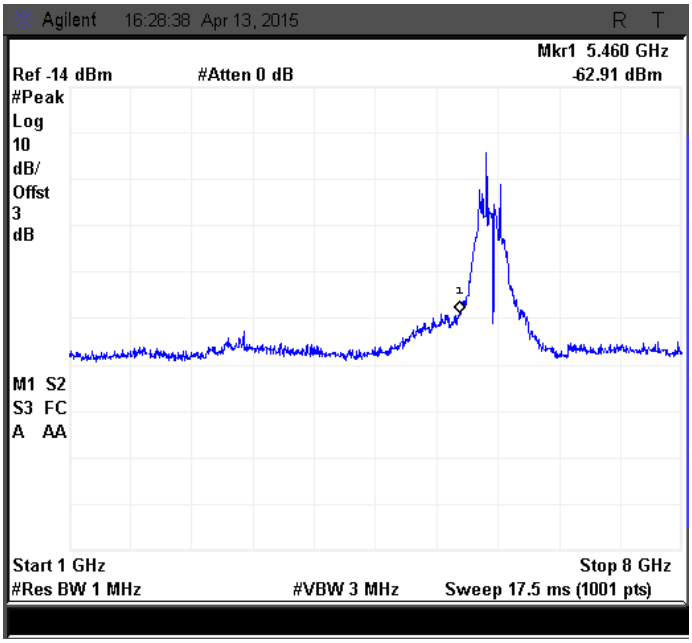


Figure 99: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

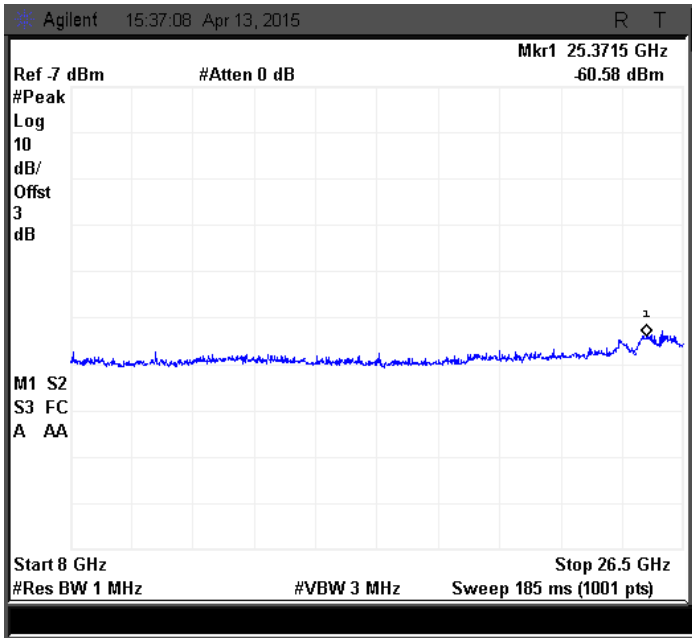


Figure 100: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

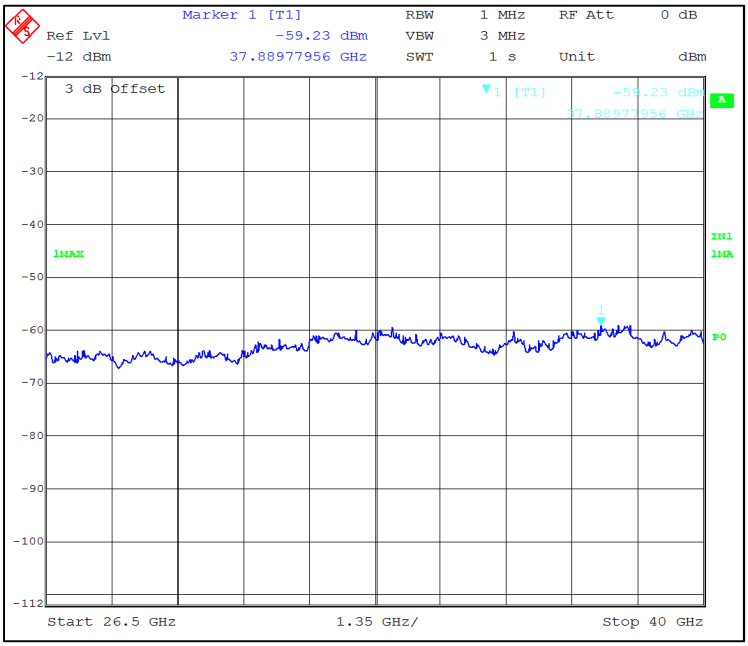


Figure 101: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

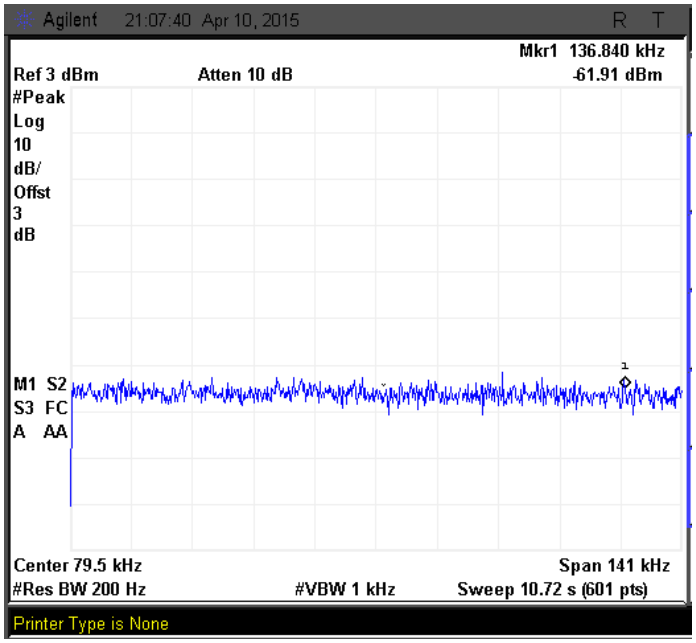


Figure 102: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

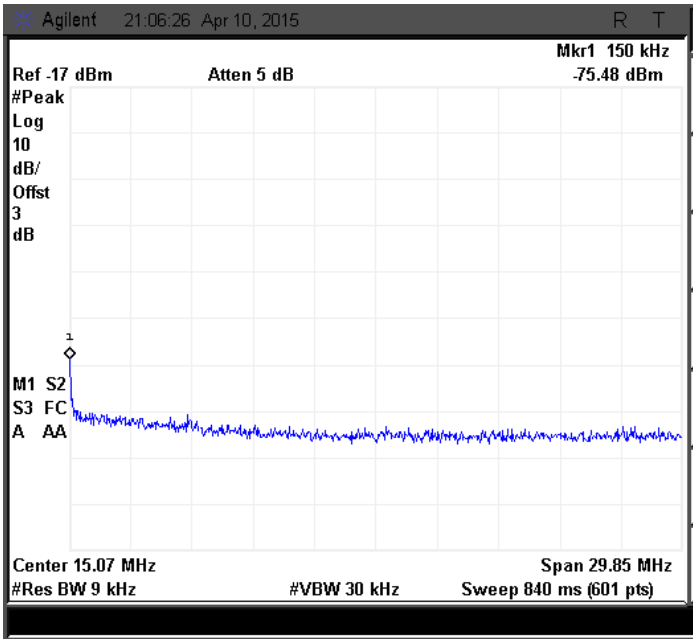


Figure 103: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

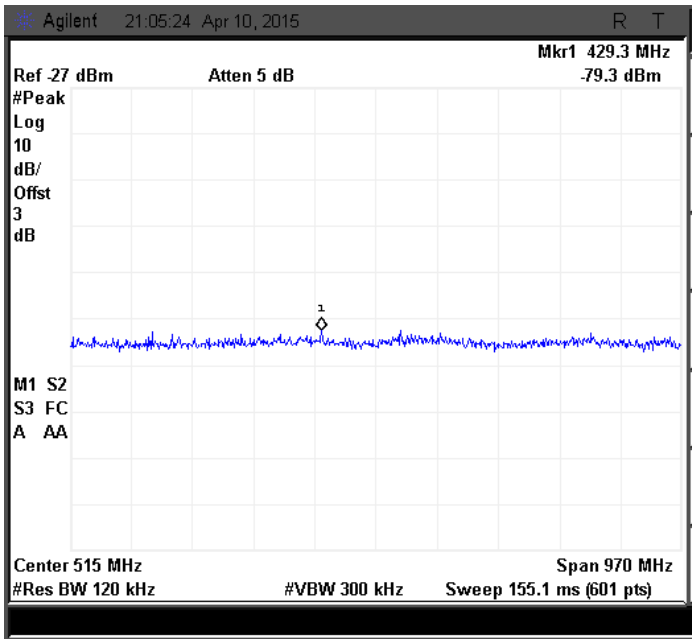


Figure 104: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

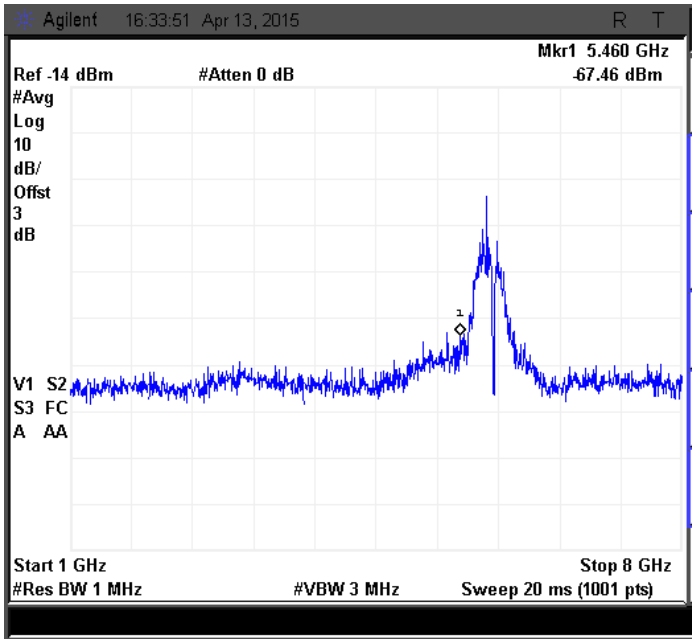


Figure 105: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

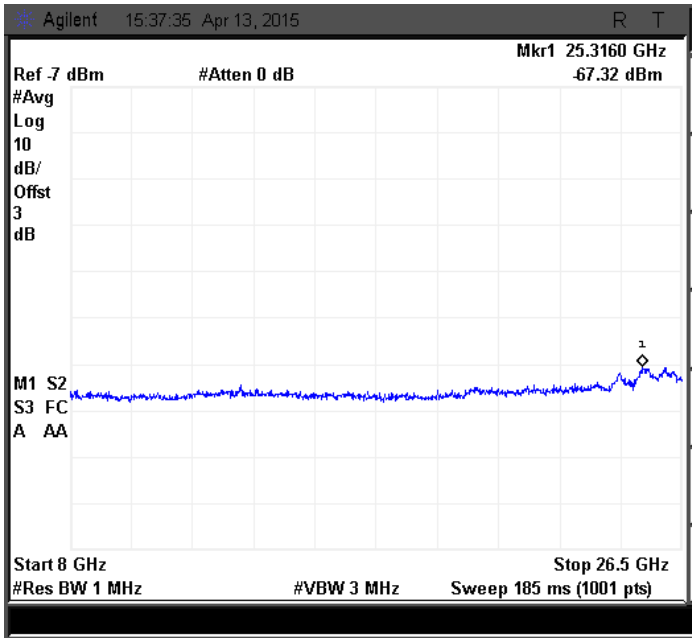


Figure 106: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

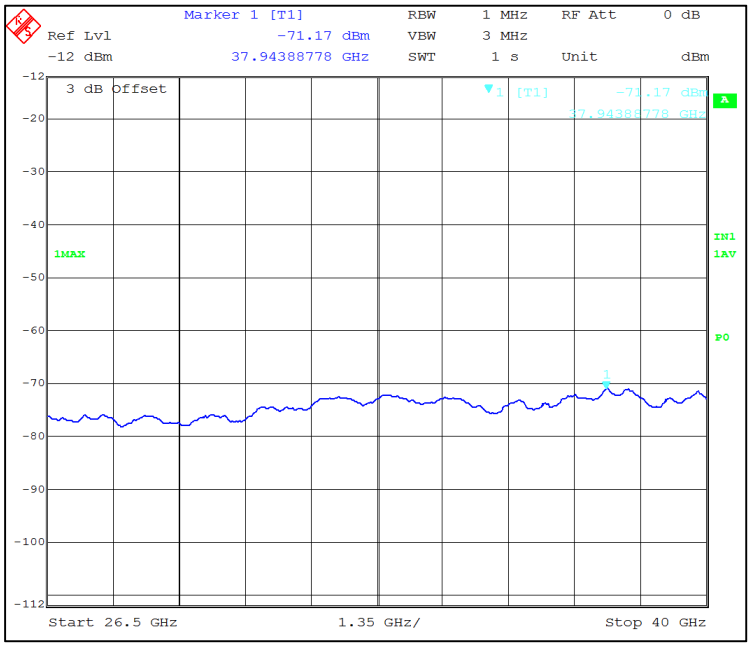


Figure 107: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

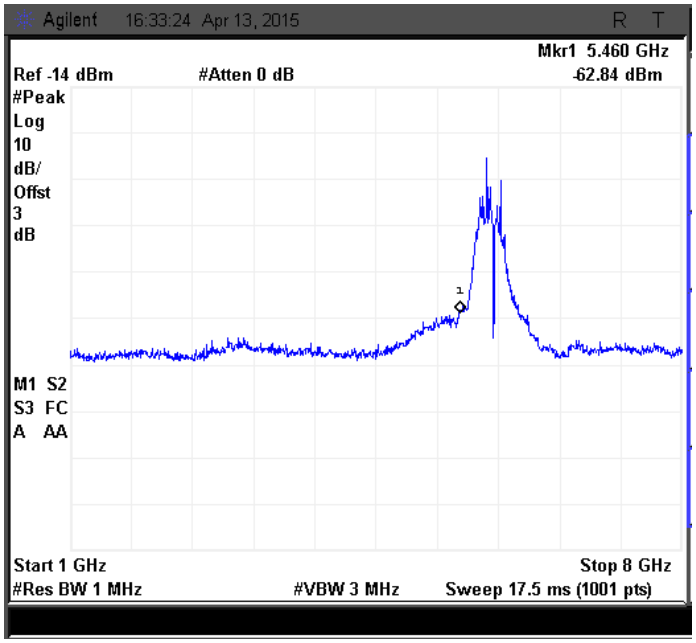


Figure 108: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

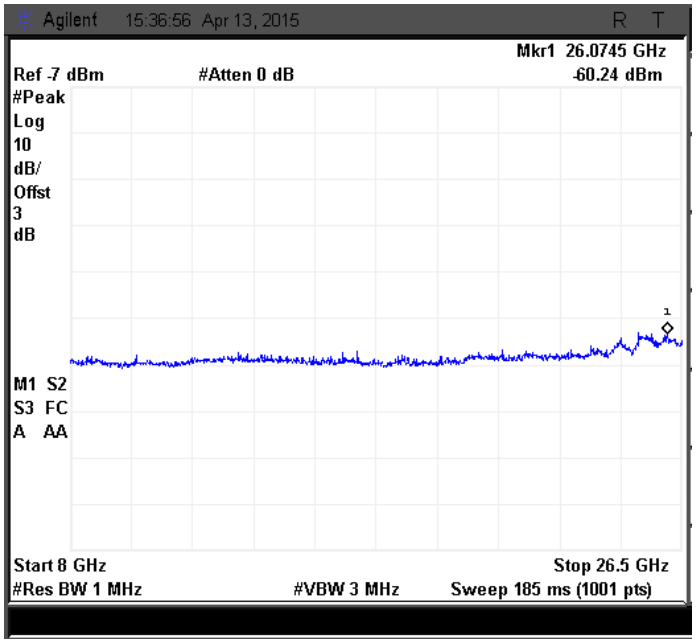


Figure 109: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

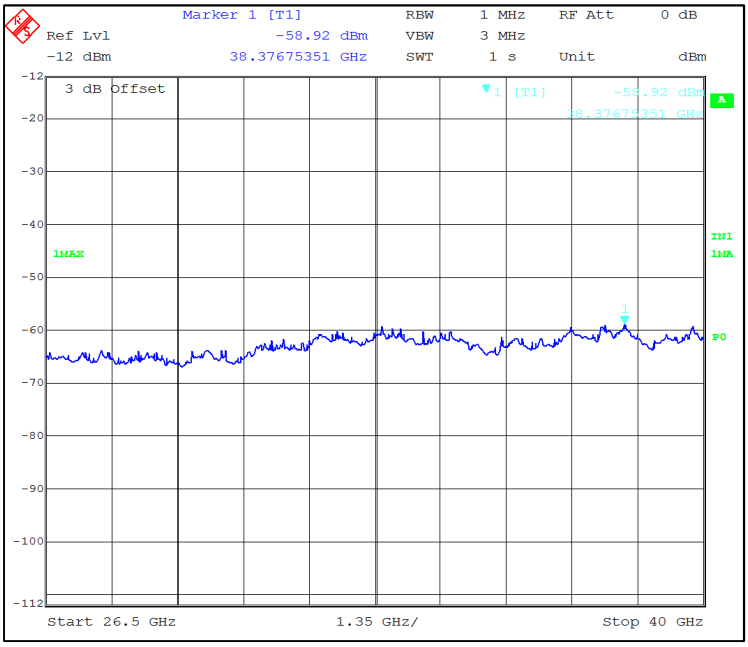


Figure 110: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.6 RESULT (SUPPORTING GRAPHS / DATA) FOR 17DBI ANTENNA CONDITION

5.3.1.6.1 40MHZ MODULATION BW-HIGH CHANNEL_5750 MHZ

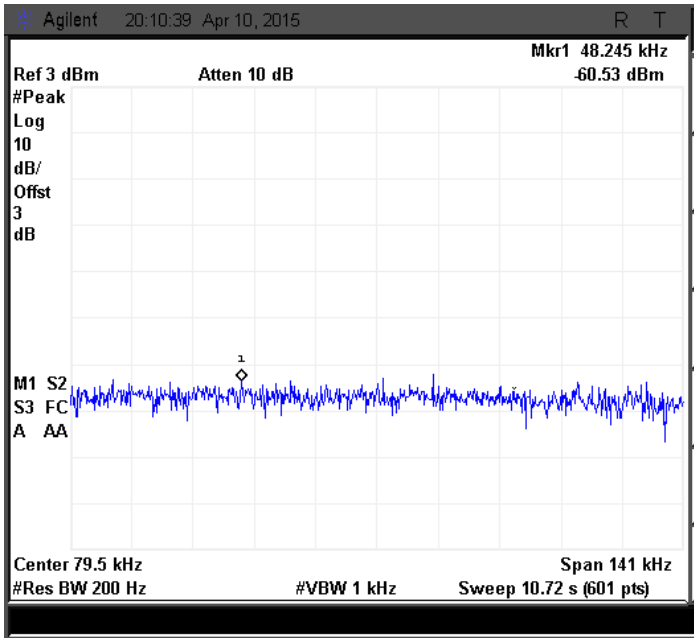


Figure 111: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

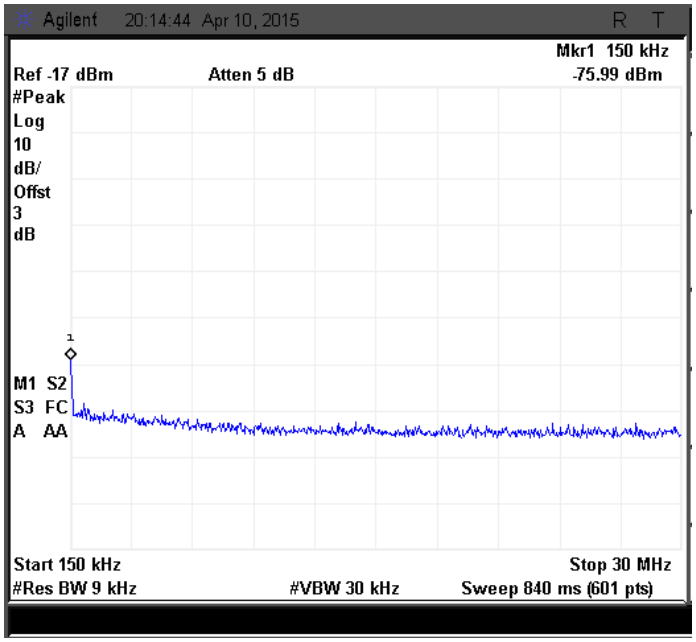


Figure 112: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

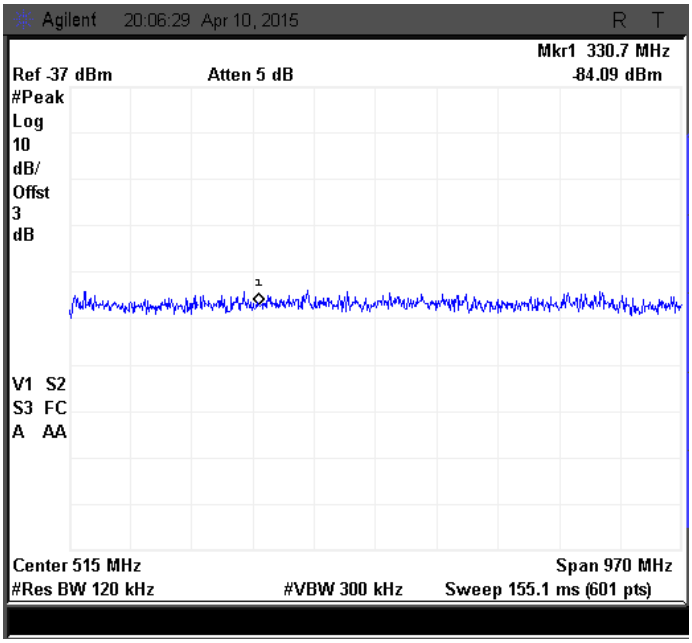


Figure 113: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

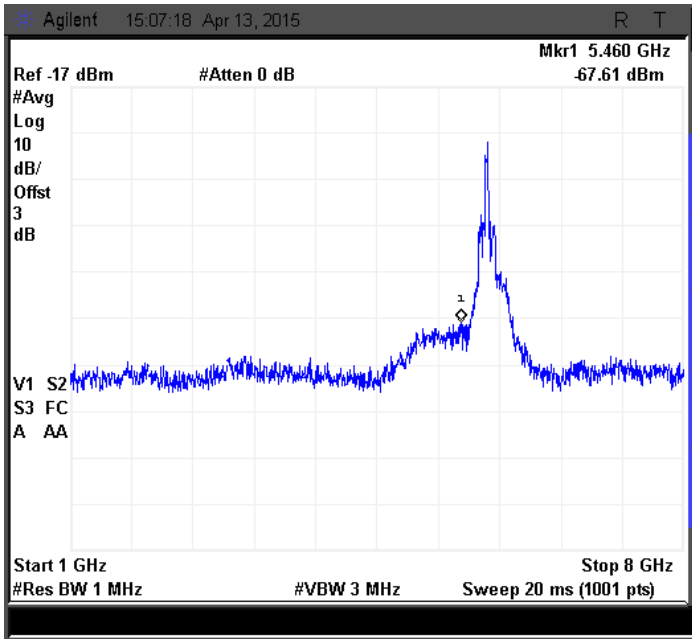


Figure 114: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

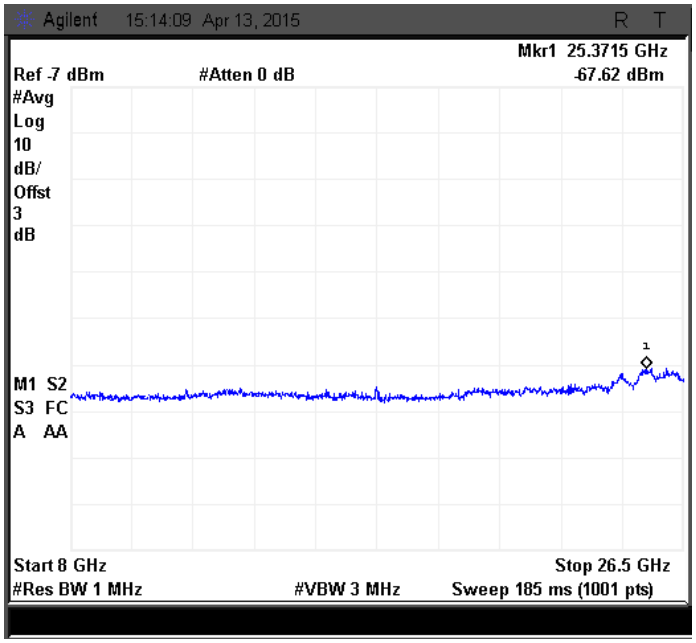


Figure 115: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

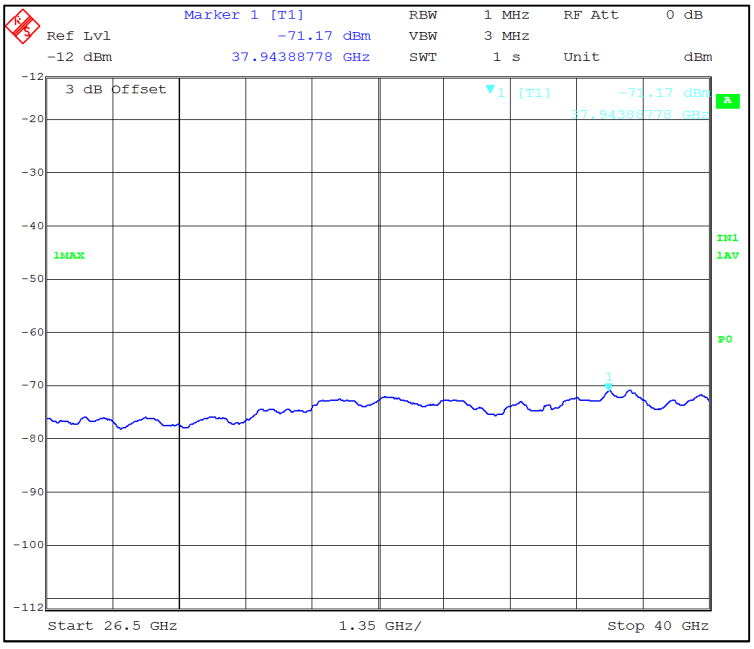


Figure 116: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

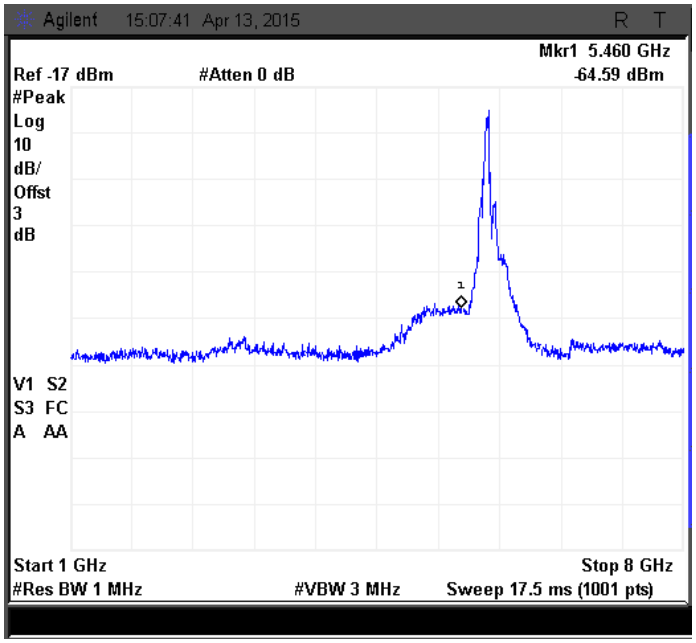


Figure 117: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

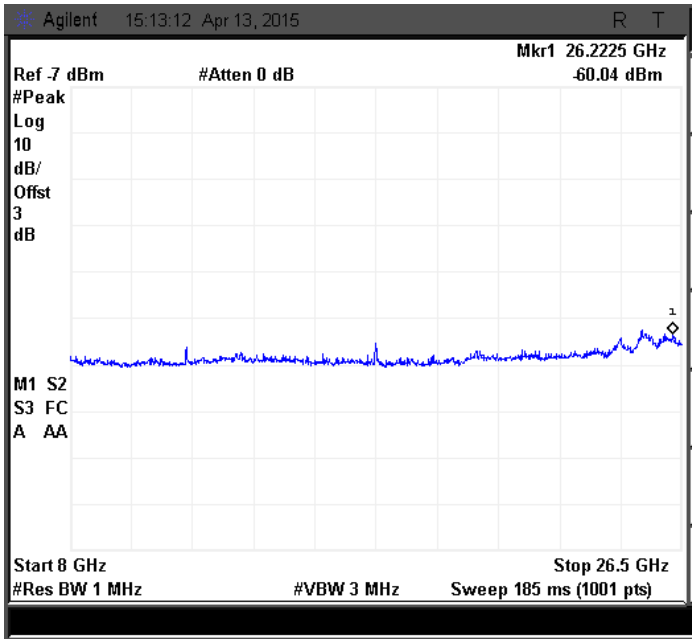


Figure 118: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

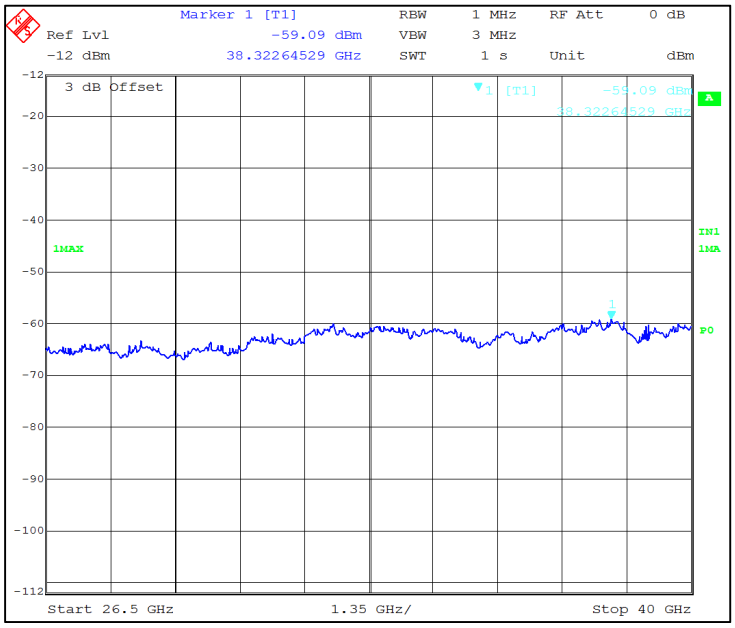


Figure 119: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

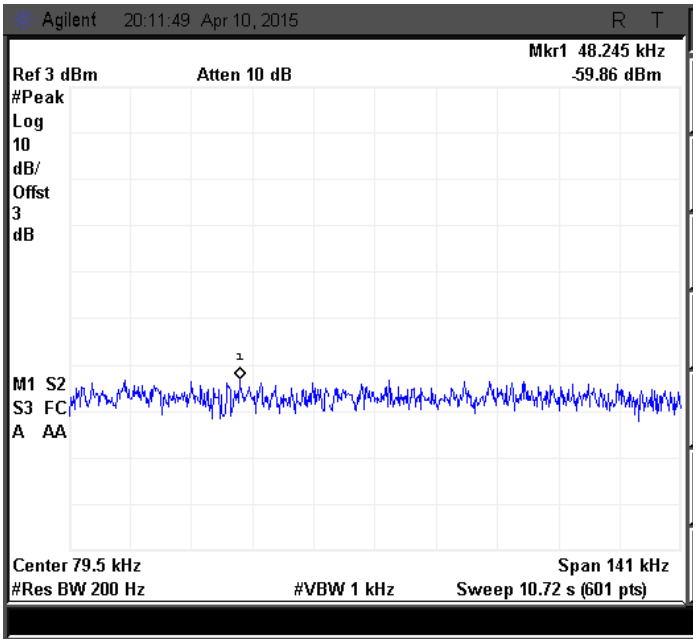


Figure 120: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

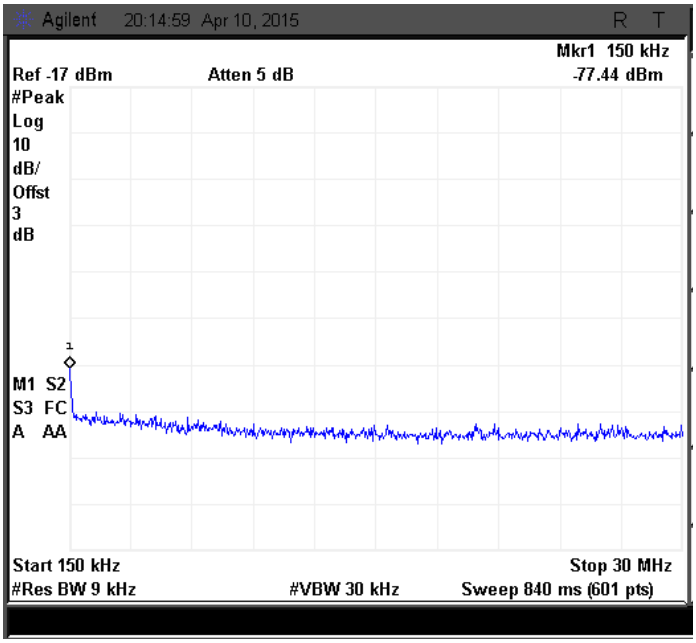


Figure 121: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

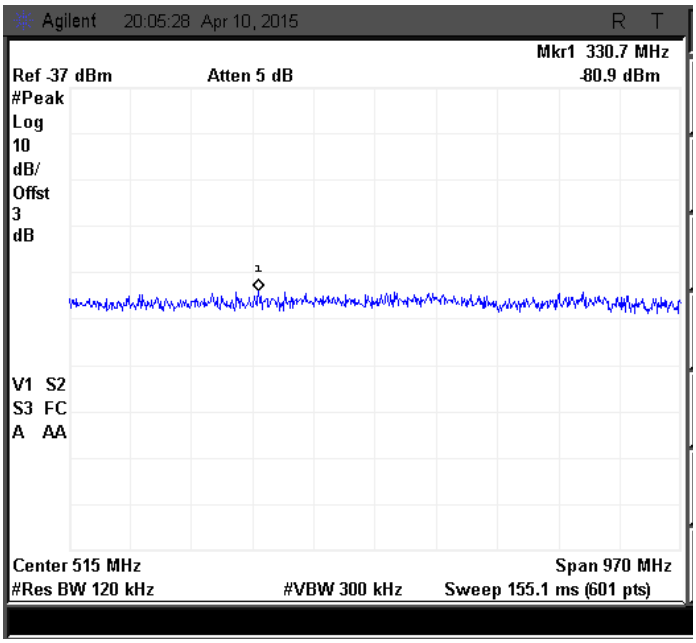


Figure 122: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

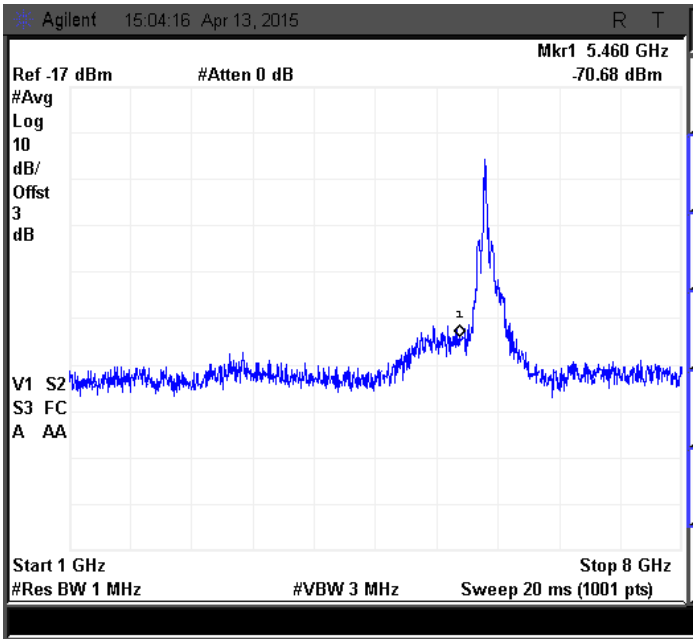


Figure 123: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

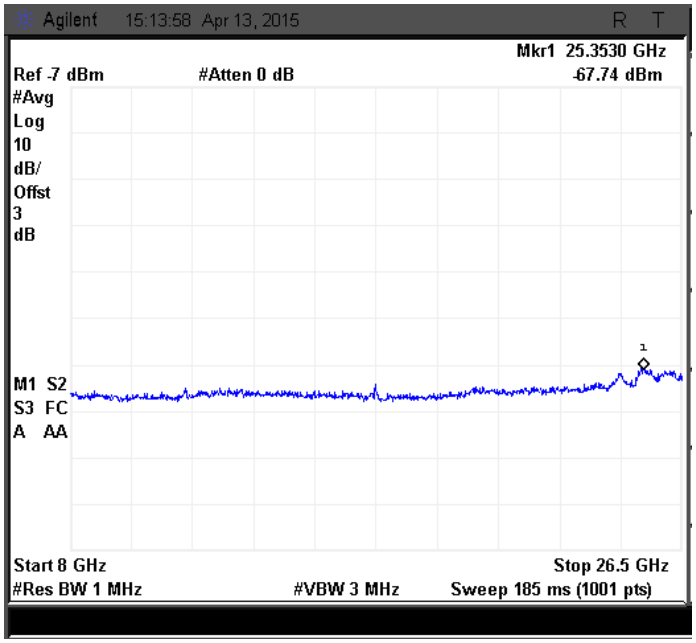


Figure 124: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

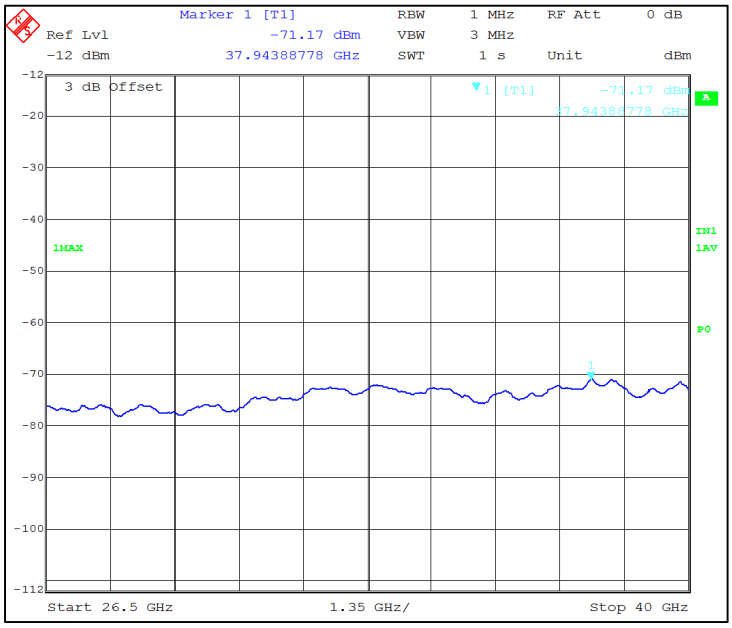


Figure 125: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

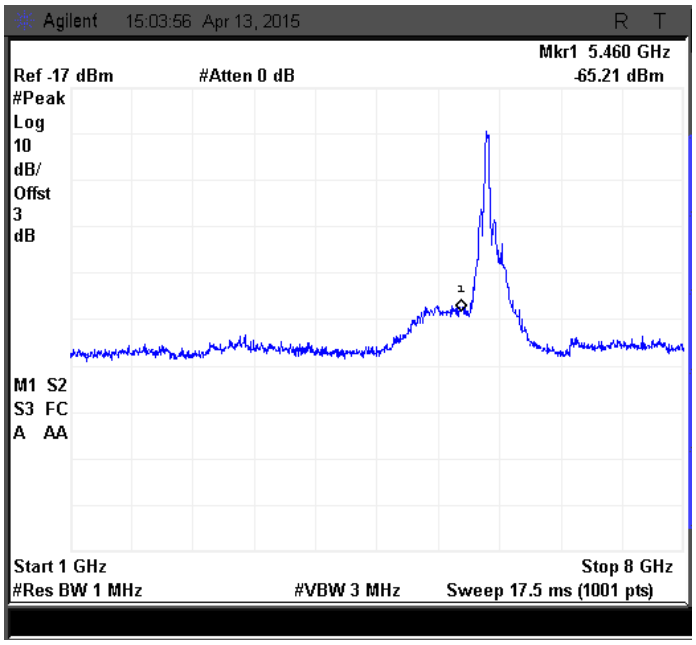


Figure 126: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

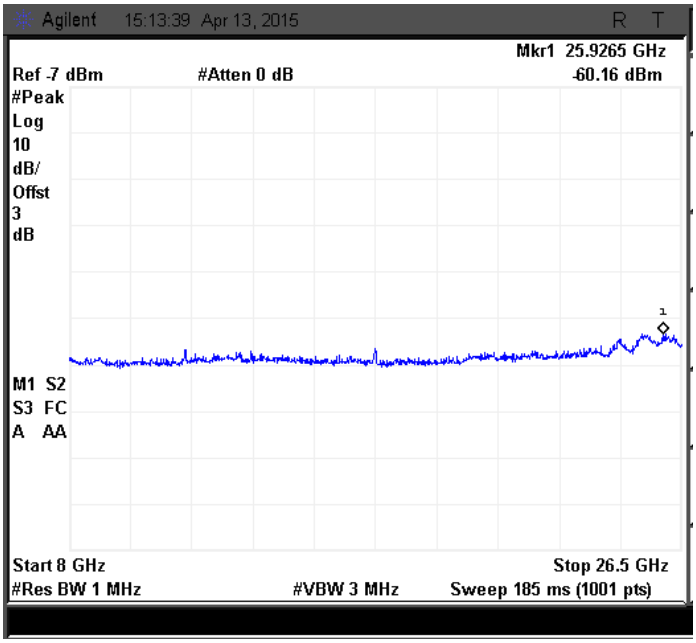


Figure 127: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

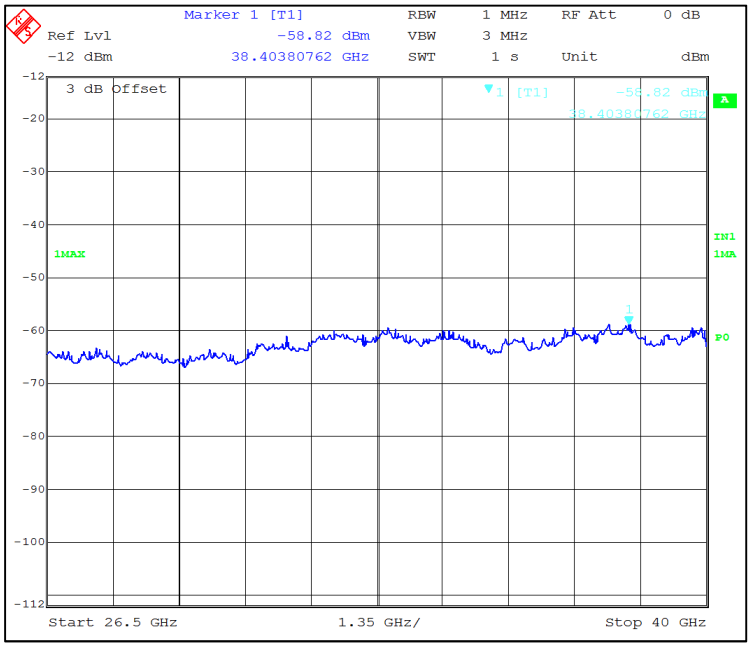


Figure 128: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.6.2 40MHz Modulation BW-Mid channel_5785 MHz

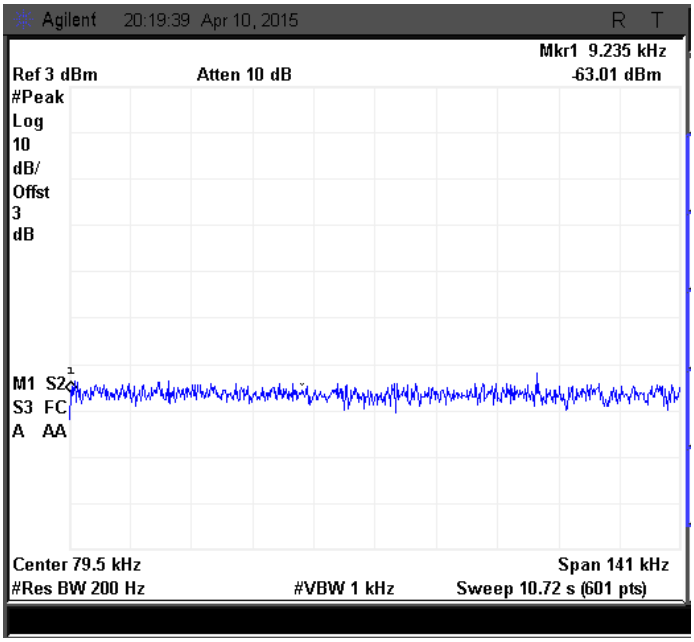


Figure 129: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

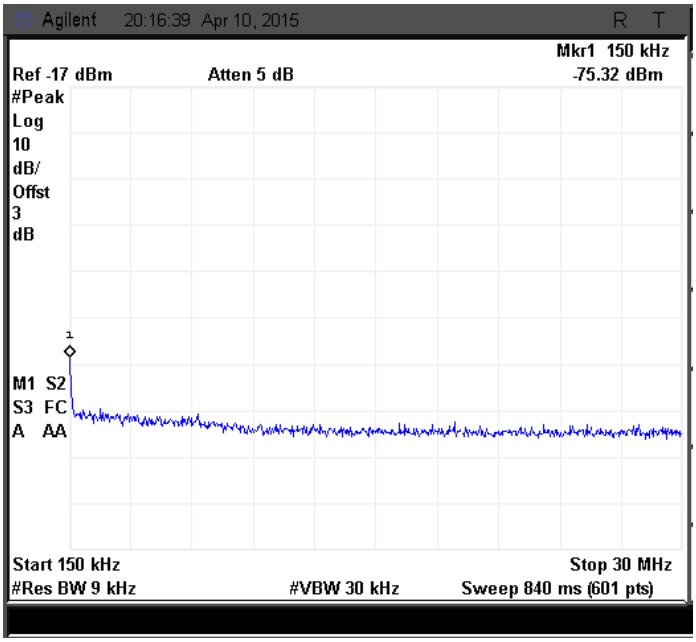


Figure 130: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

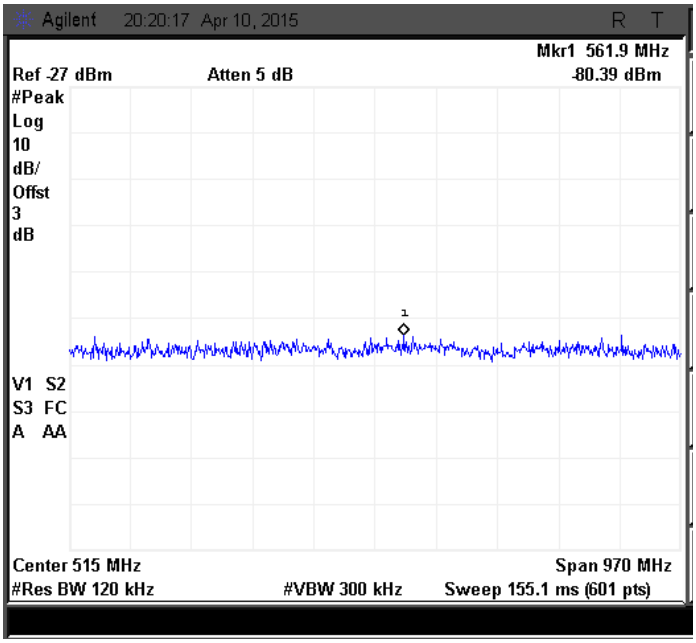


Figure 131: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

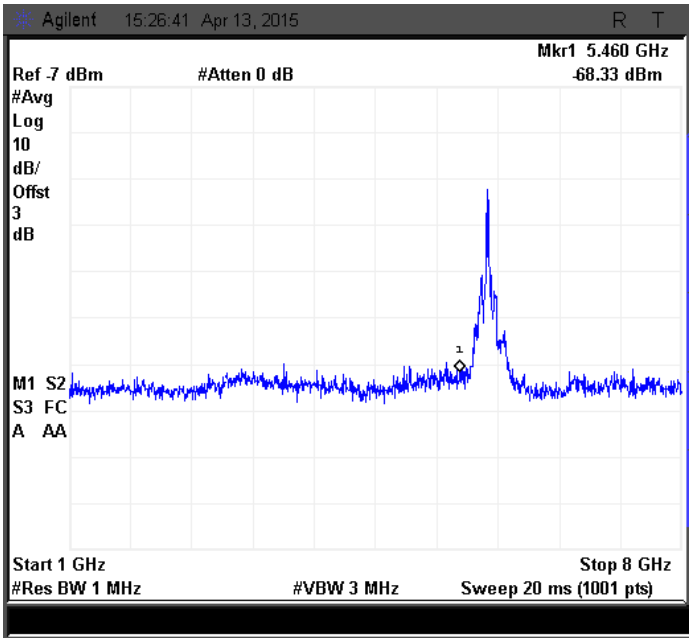


Figure 132: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

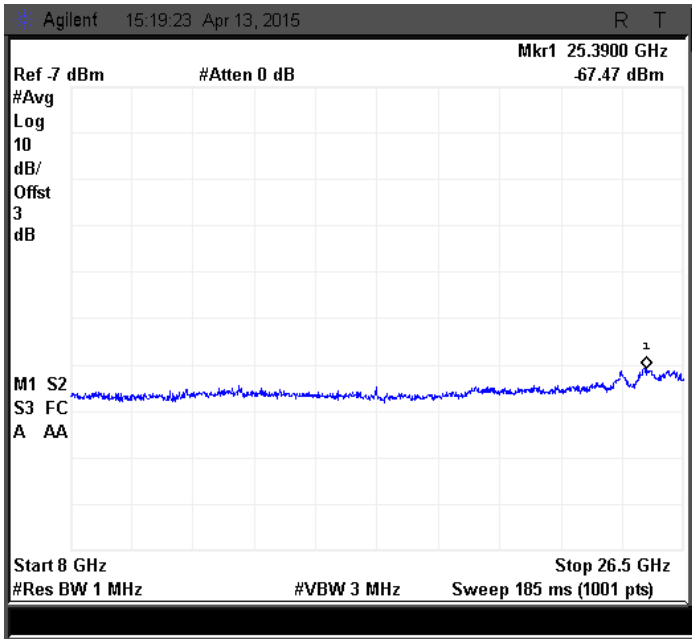


Figure 133: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

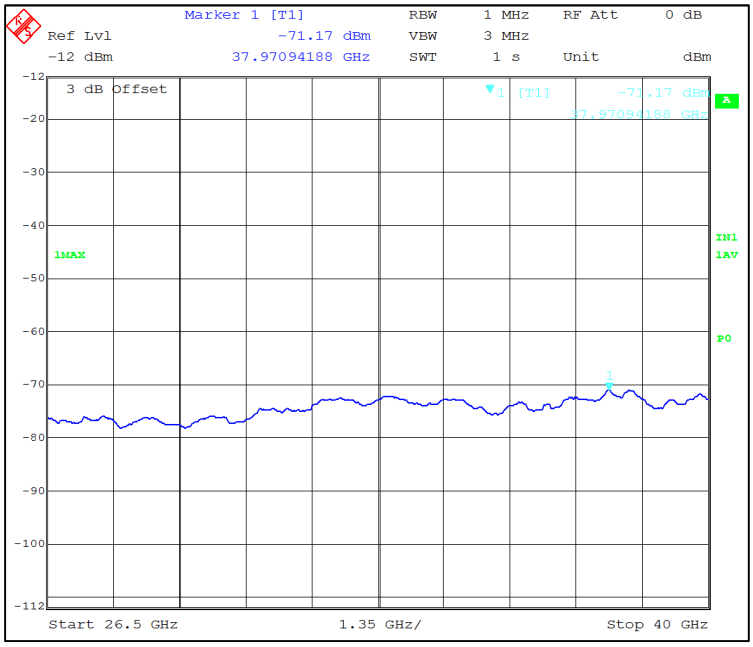


Figure 134: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

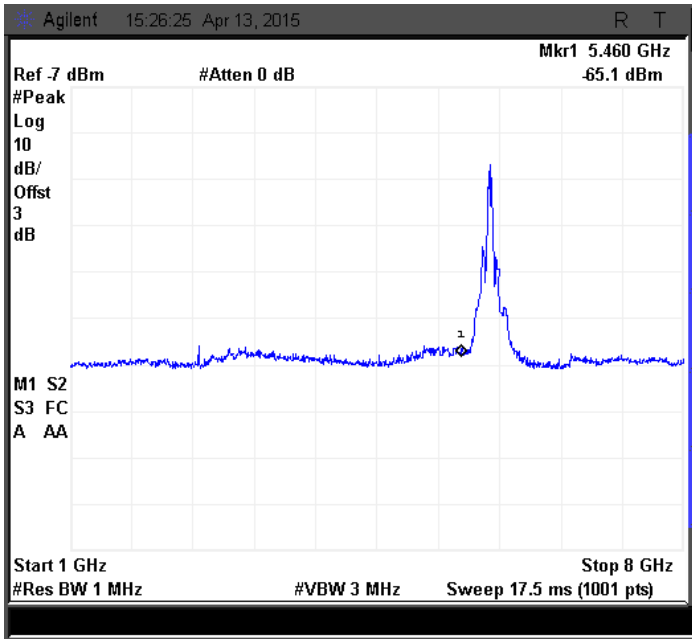


Figure 135: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

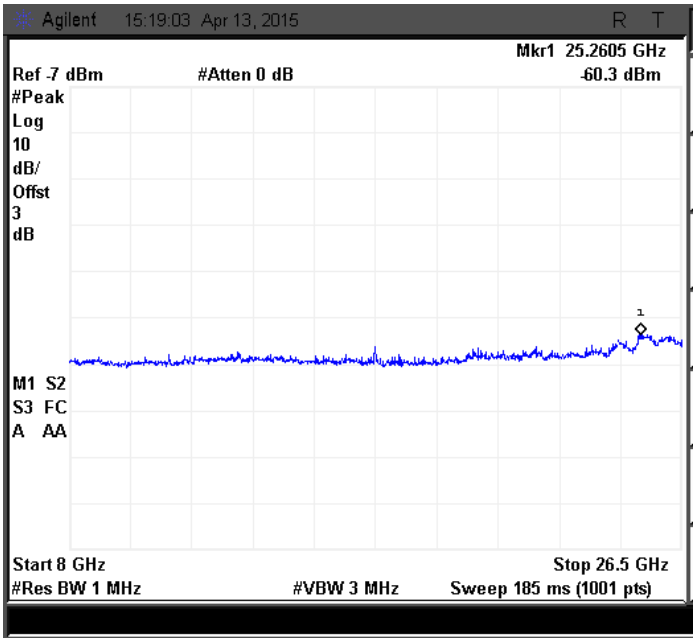


Figure 136: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

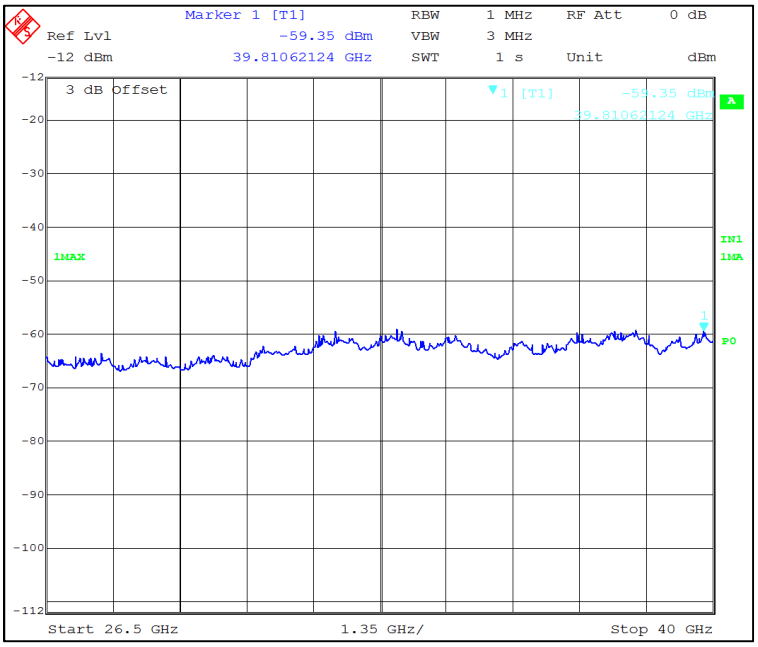


Figure 137: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

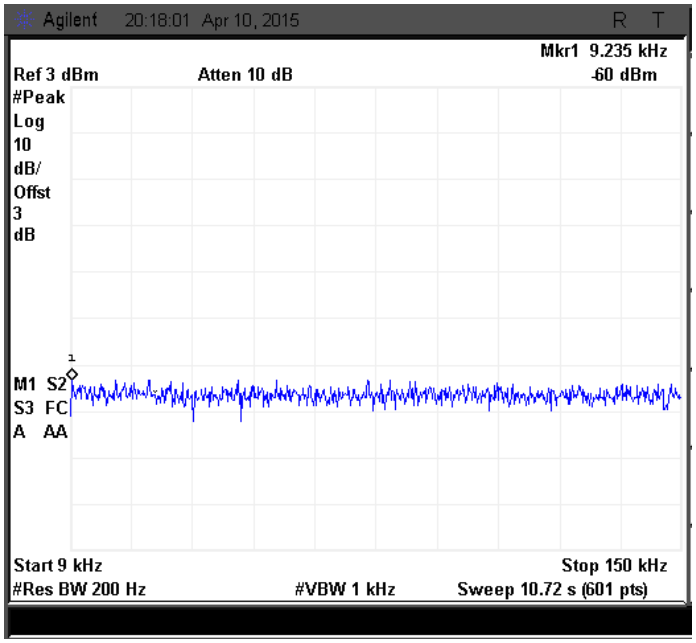


Figure 138: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

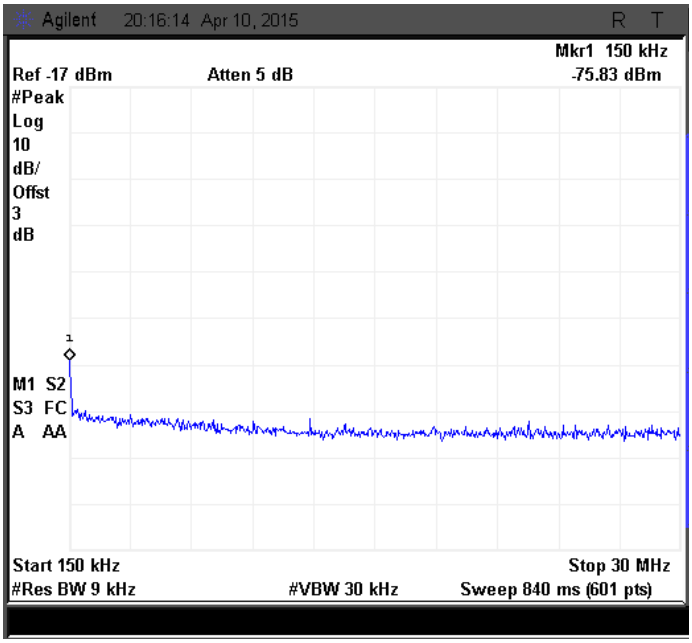


Figure 139: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

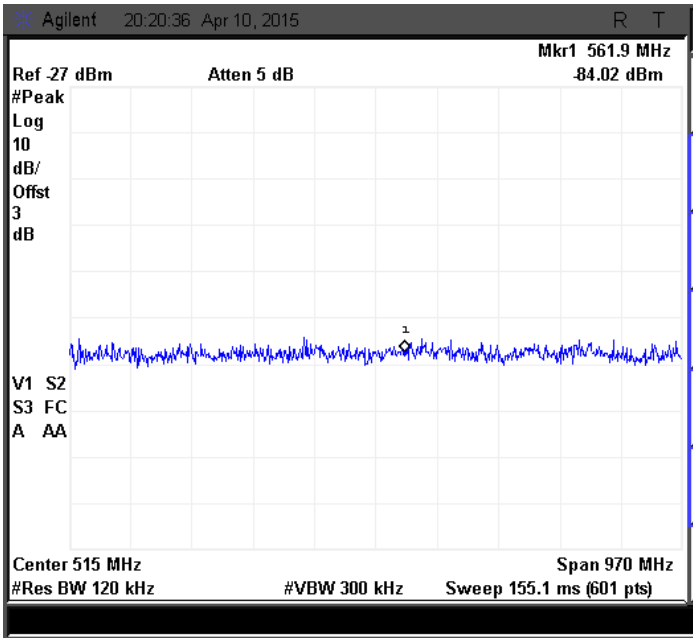


Figure 140: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

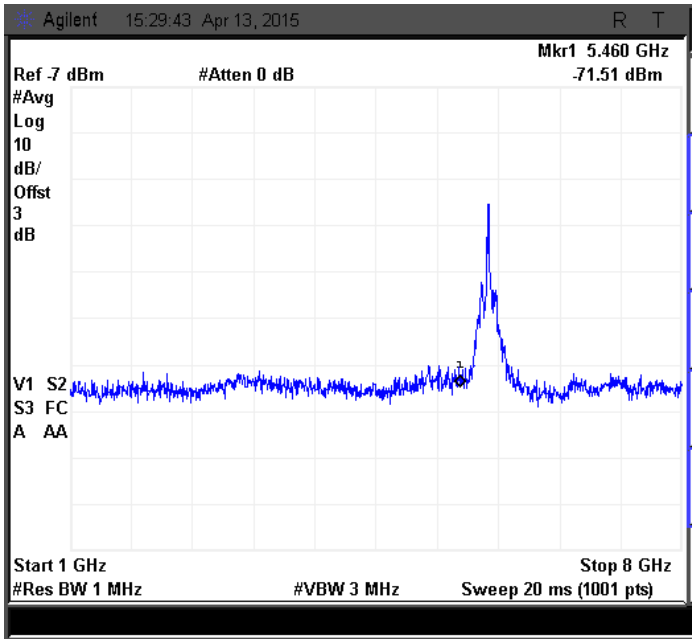


Figure 141: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

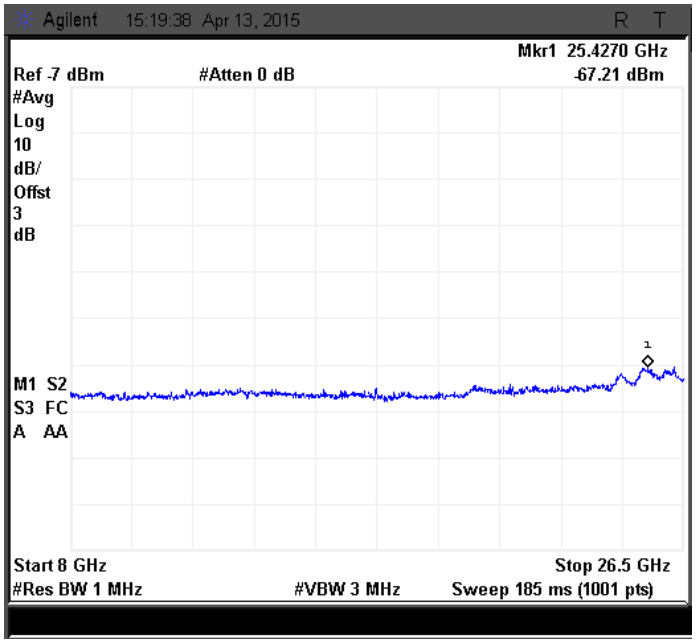


Figure 142: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

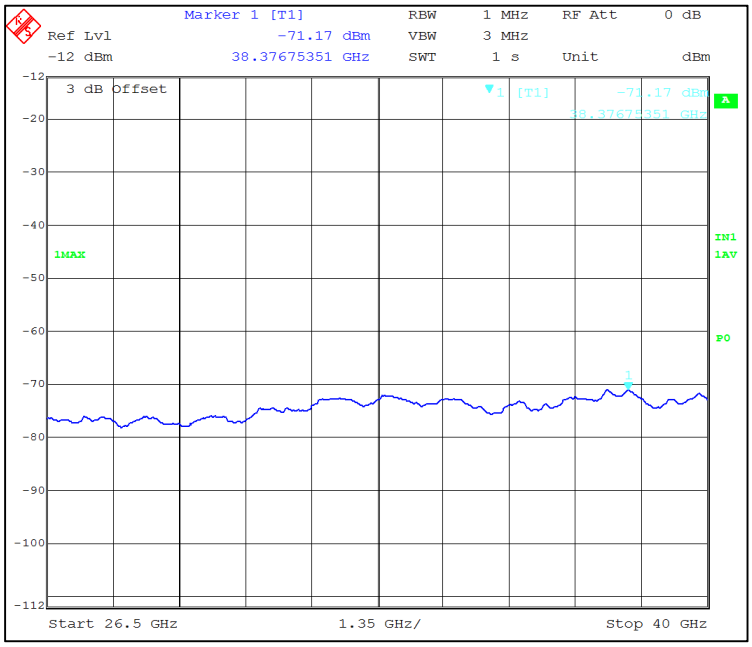


Figure 143: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

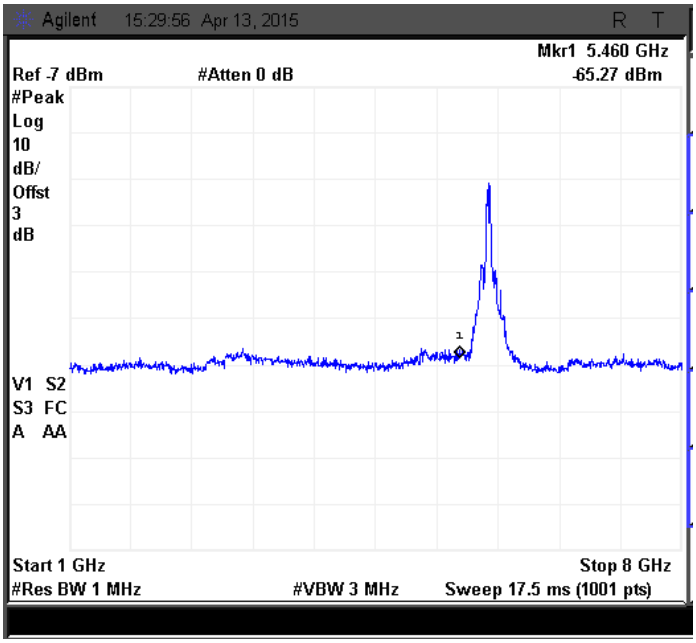


Figure 144: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

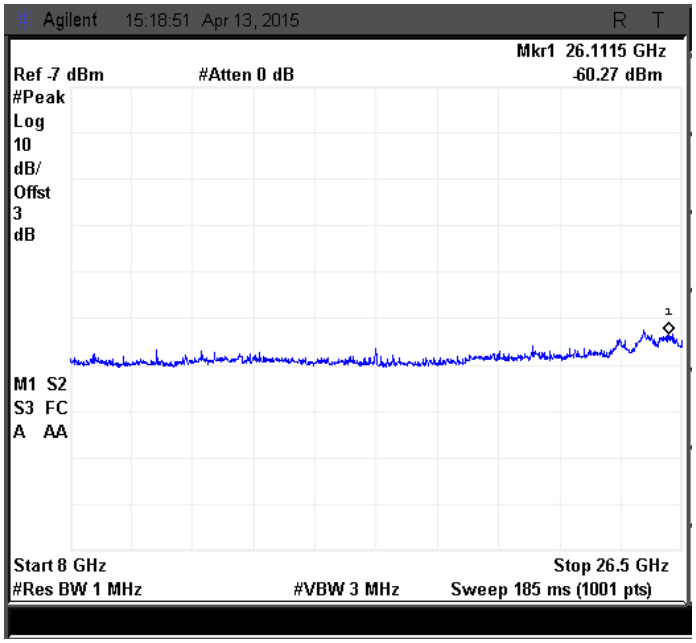


Figure 145: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

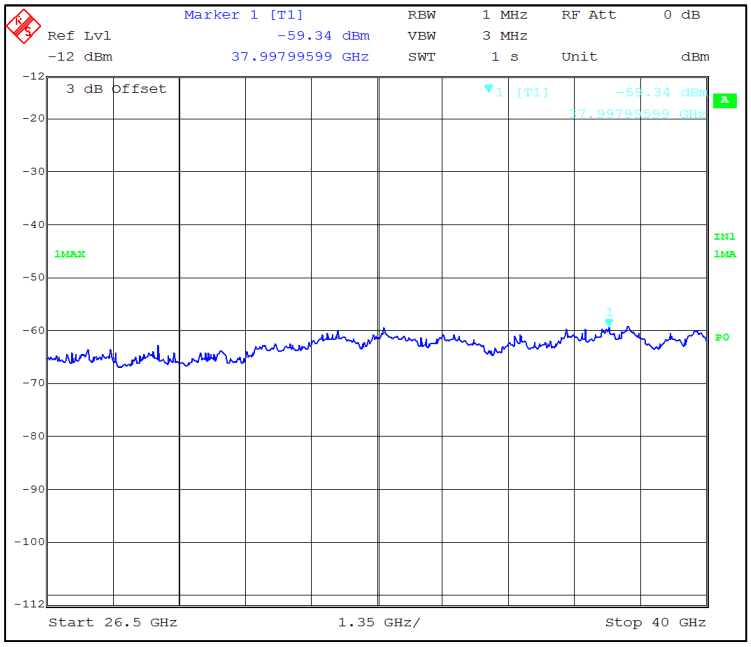


Figure 146: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.6.3 40MHz Modulation BW-High channel_5825 MHz

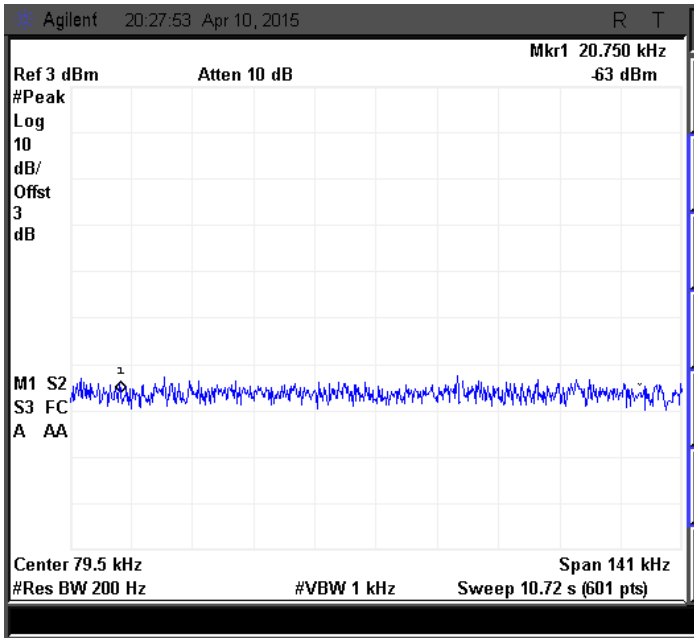


Figure 147: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

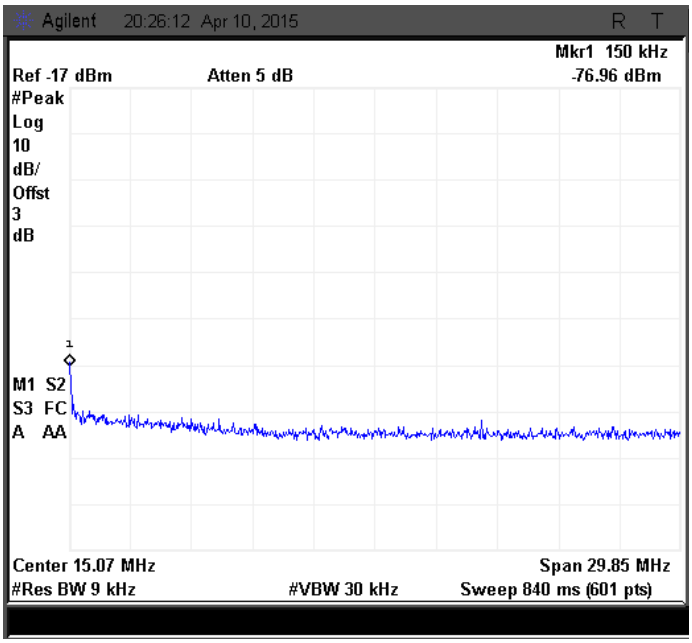


Figure 148: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

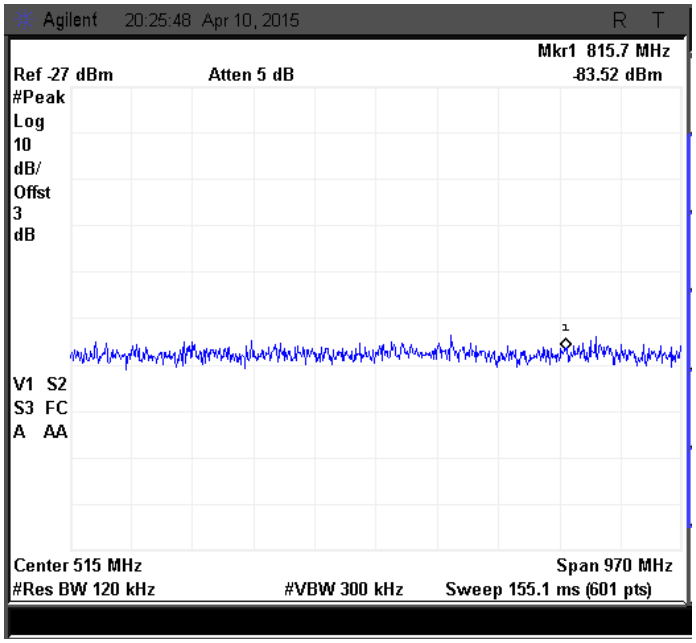


Figure 149: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

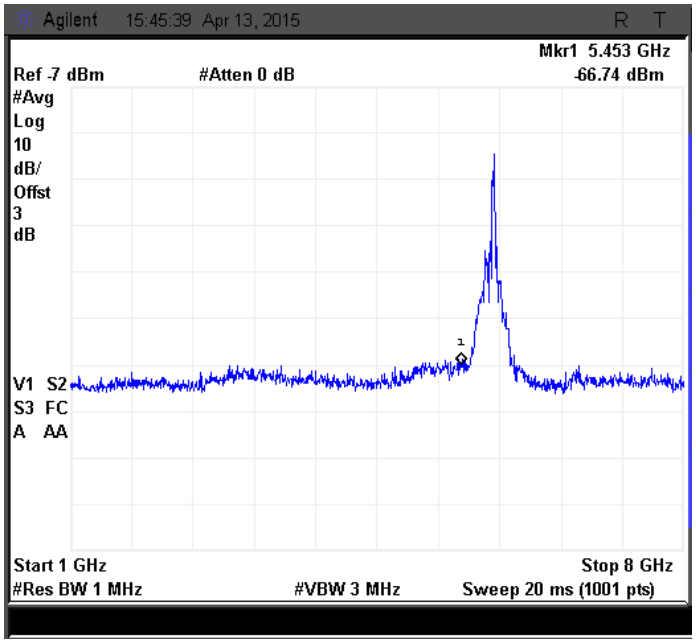


Figure 150: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

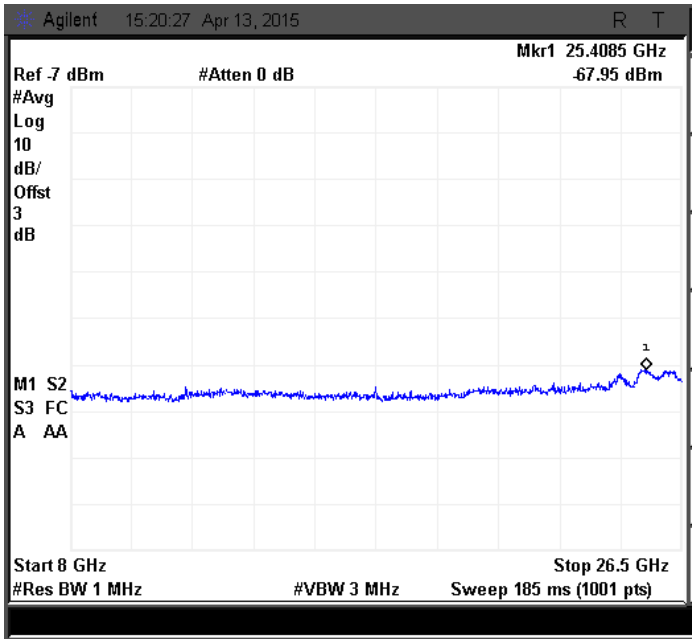


Figure 151: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

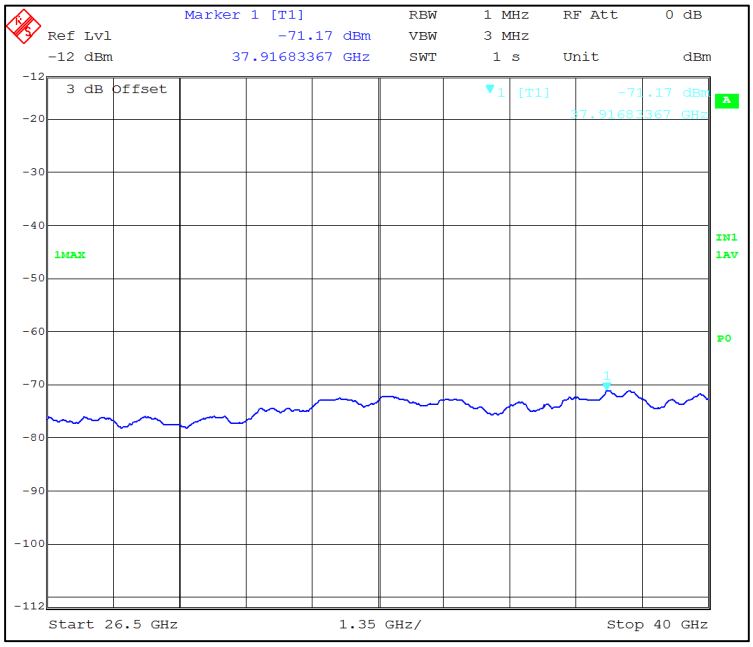


Figure 152: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

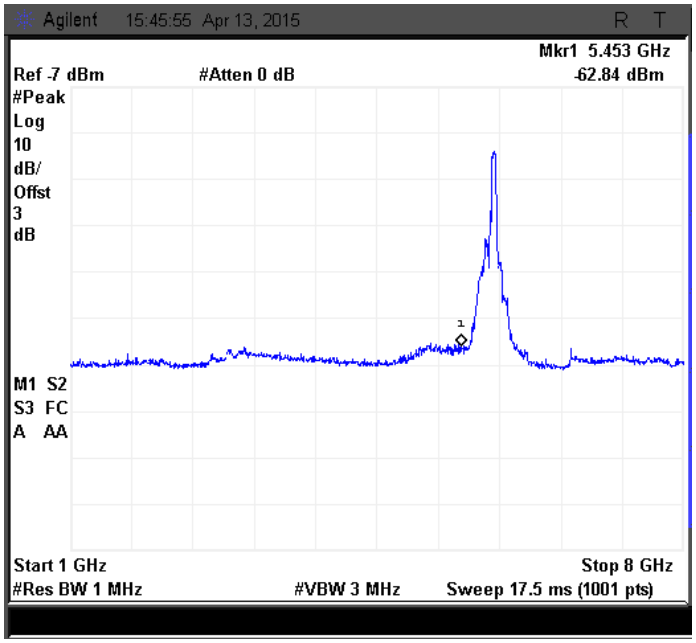


Figure 153: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

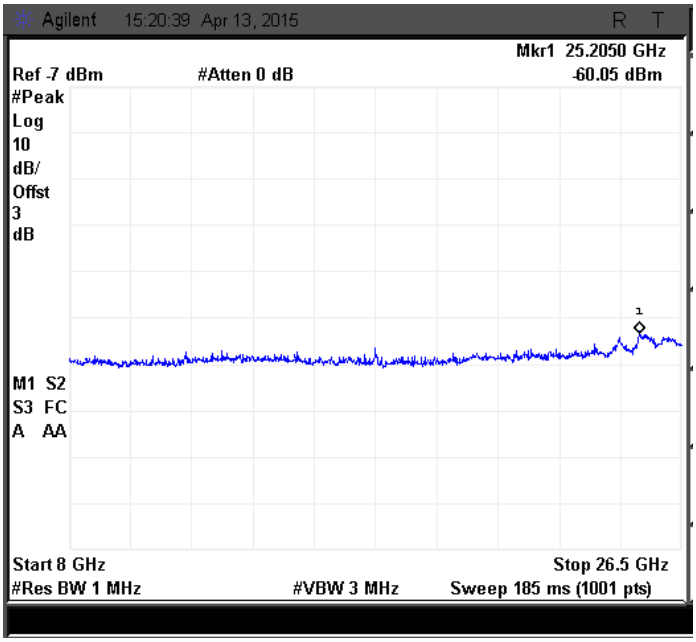


Figure 154: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

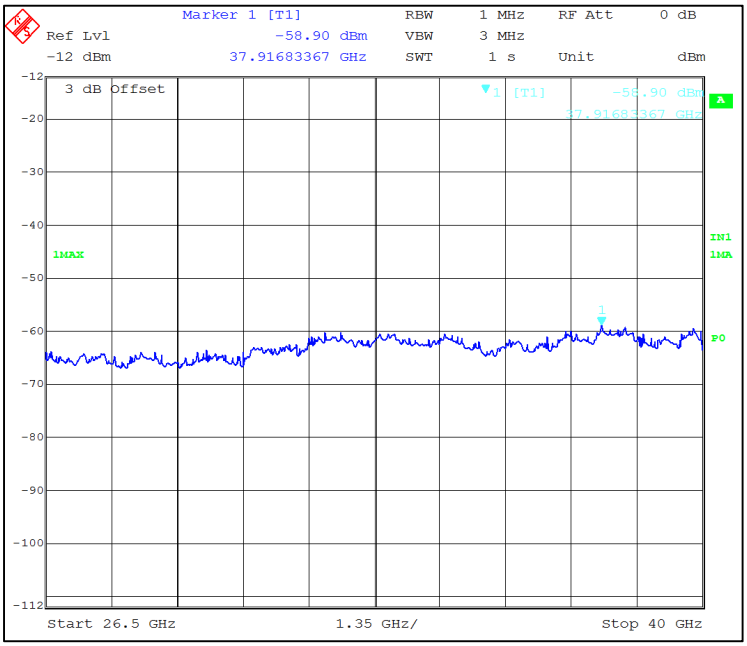


Figure 155: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

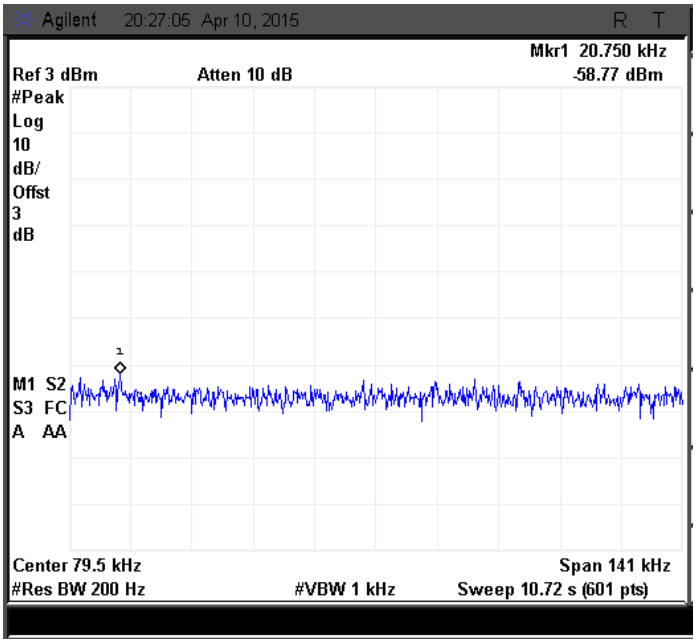


Figure 156: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

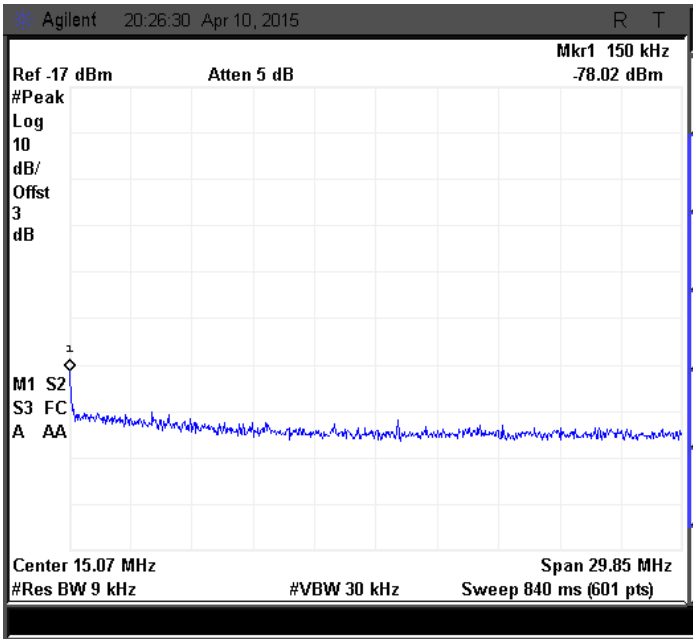


Figure 157: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

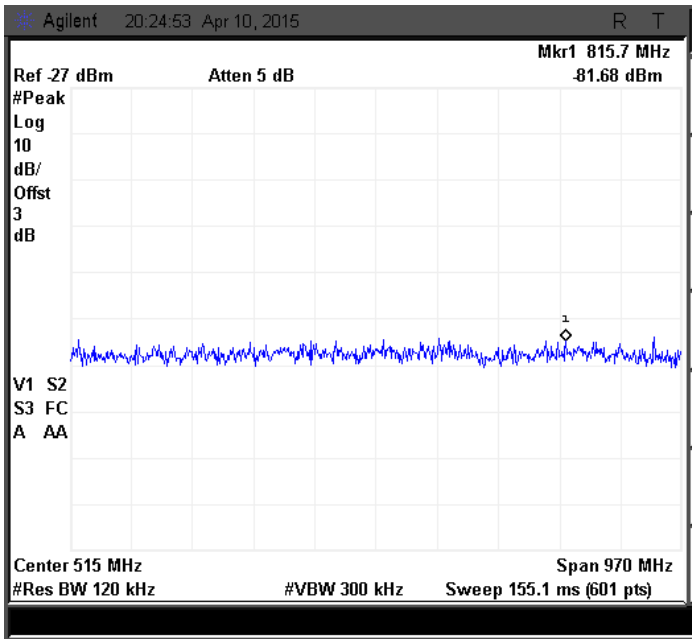


Figure 158: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

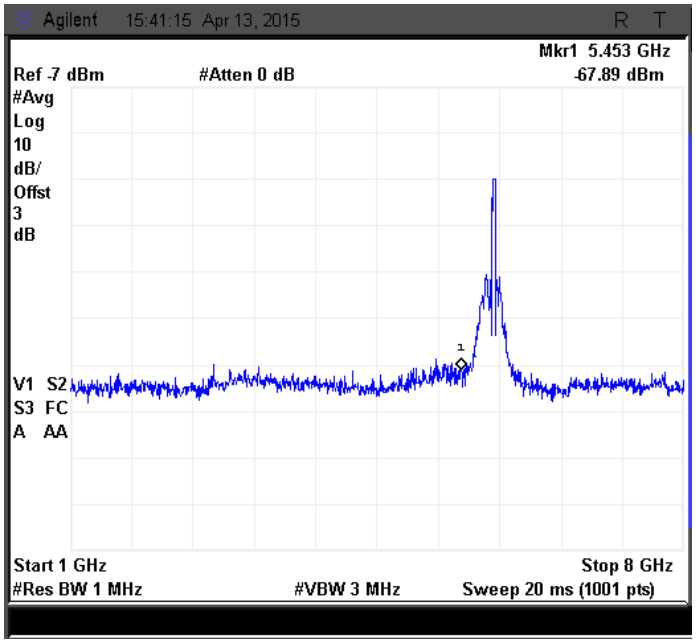


Figure 159: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

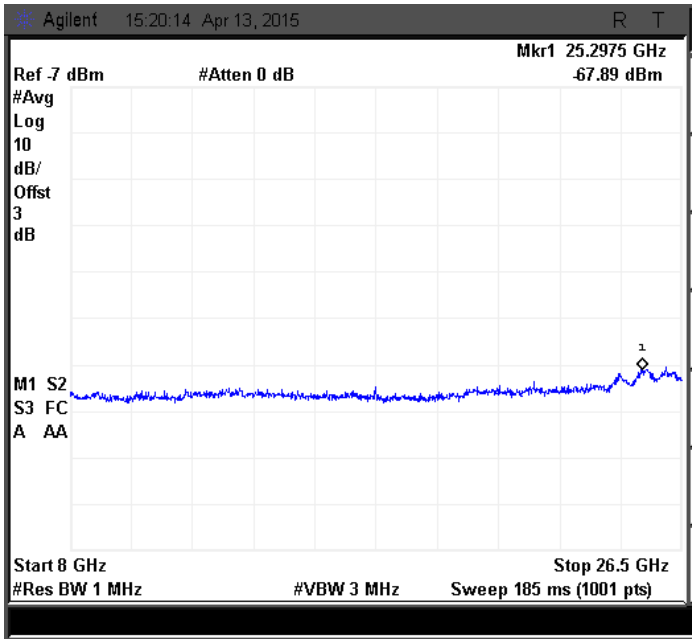


Figure 160: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

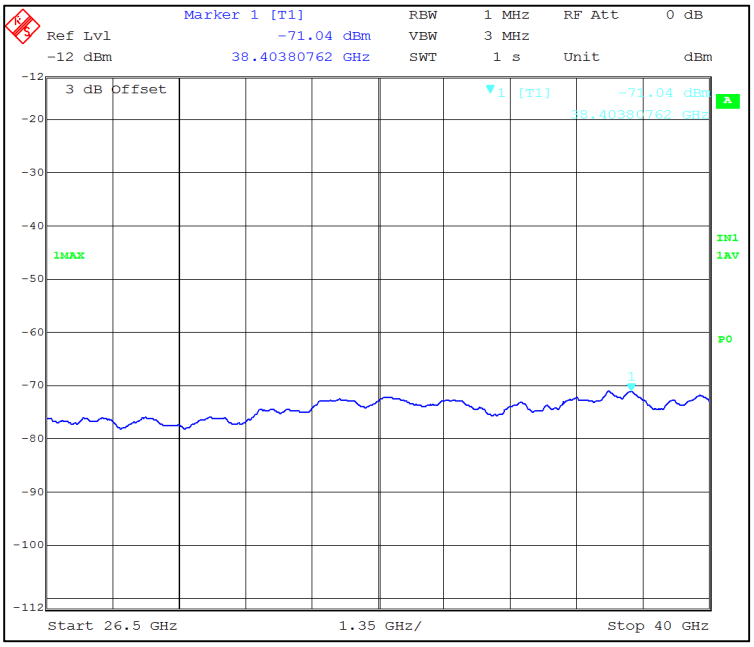


Figure 161: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

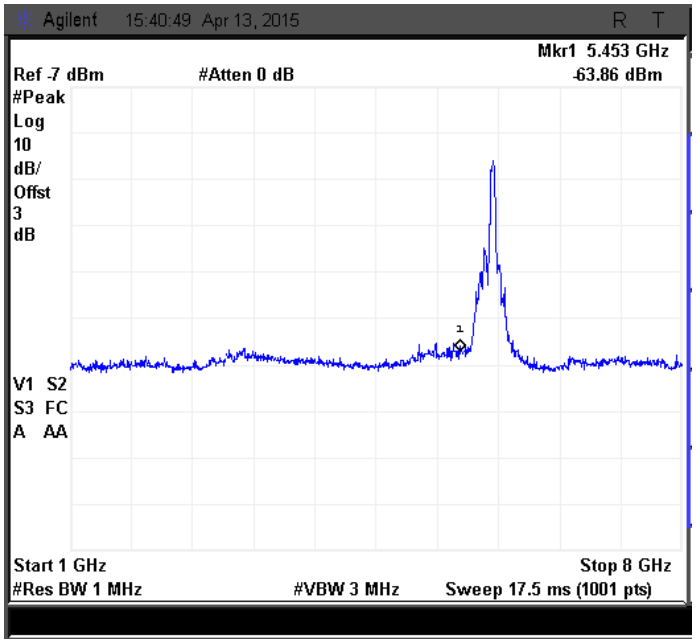


Figure 162: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

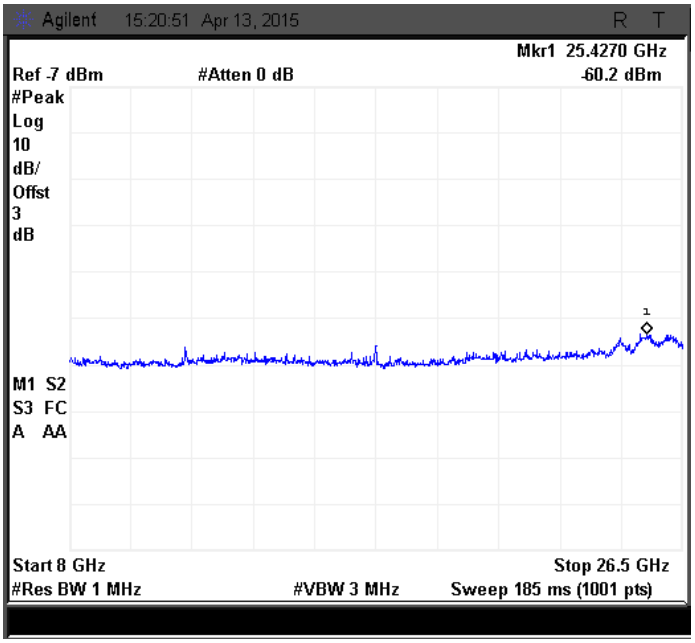


Figure 163: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

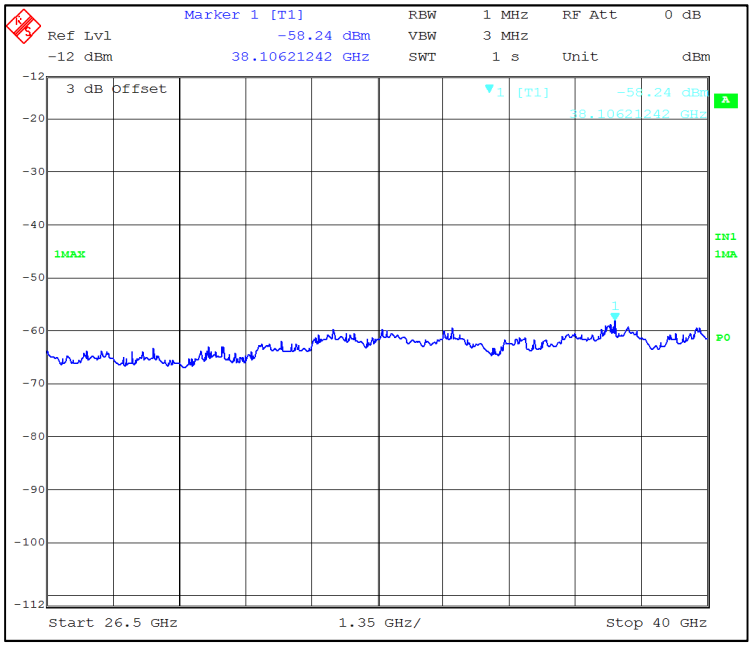


Figure 164: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.6.4 5MHz Modulation BW-Low channel_5735 MHz

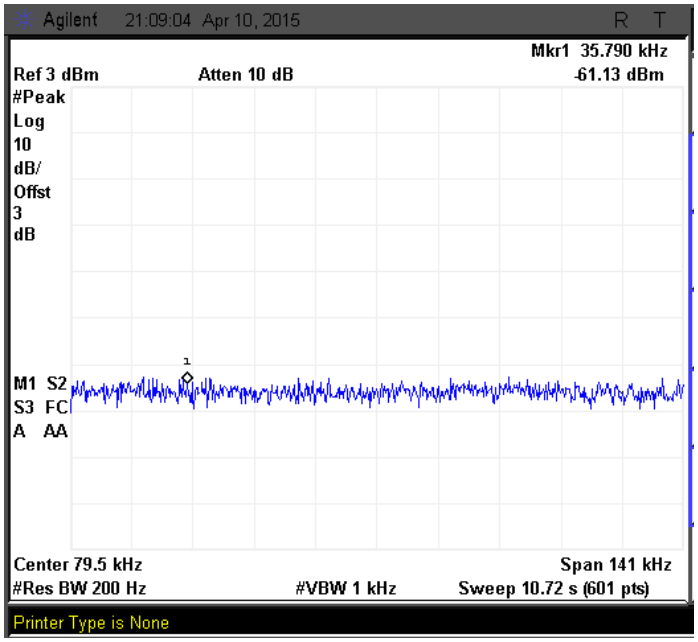


Figure 165: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

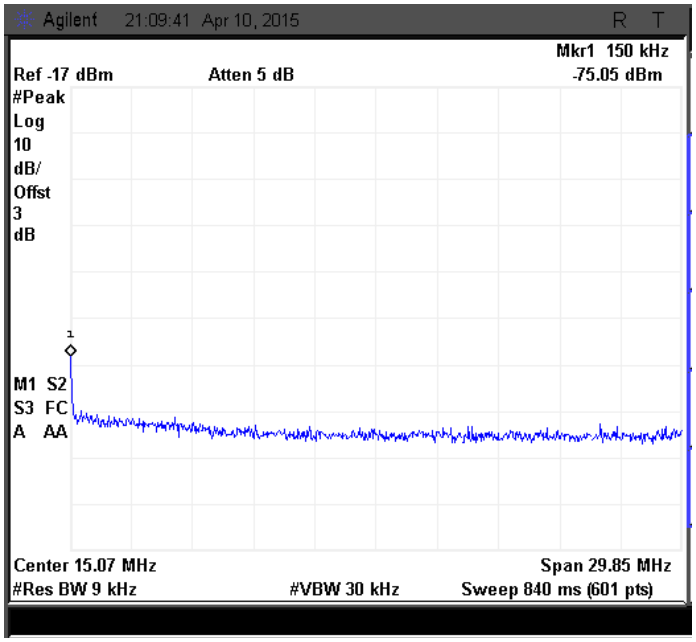


Figure 166: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

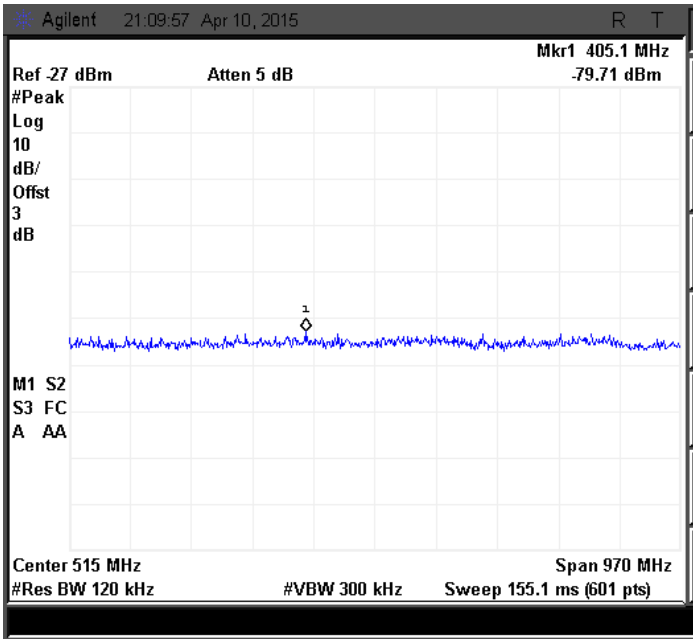


Figure 167: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

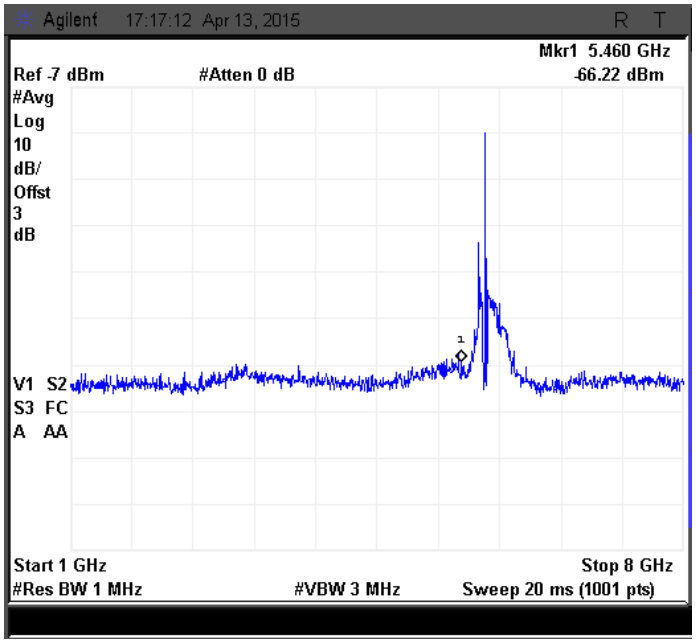


Figure 168: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

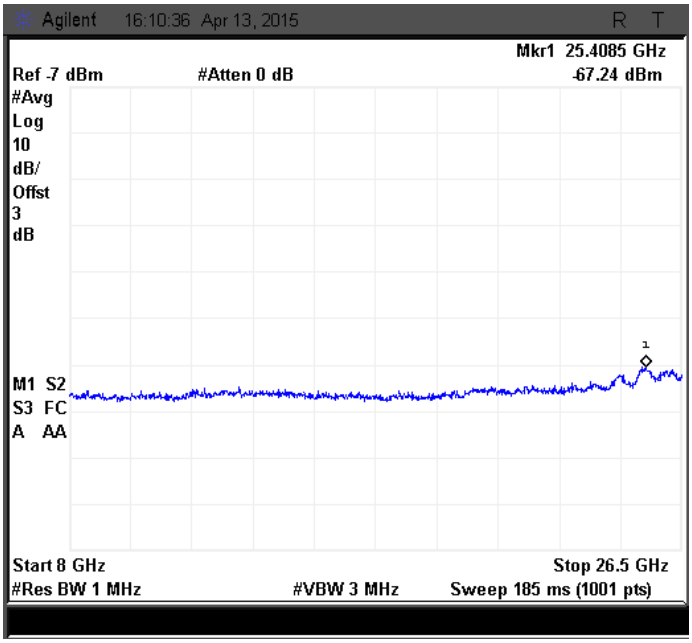


Figure 169: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

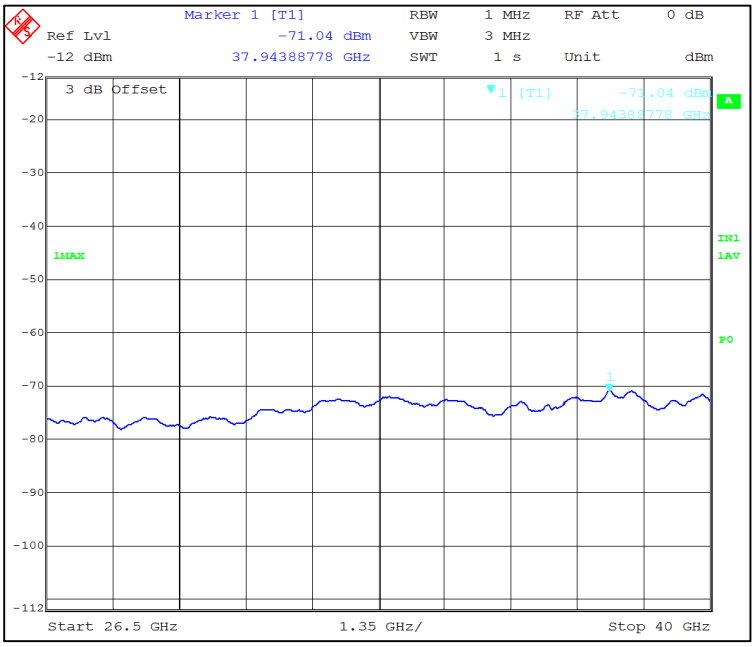


Figure 170: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

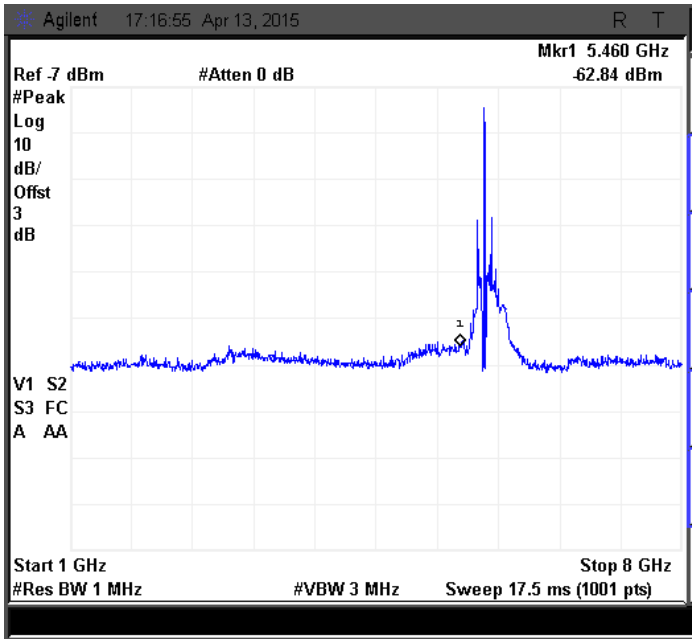


Figure 171: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

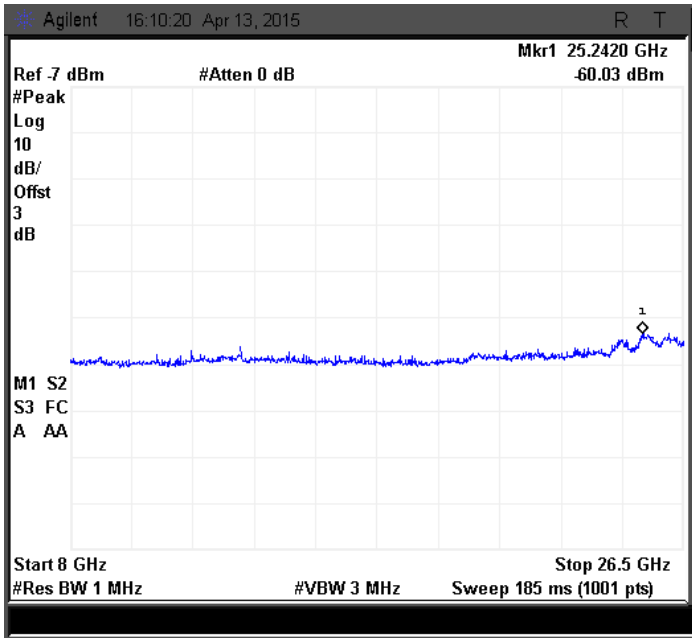


Figure 172: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

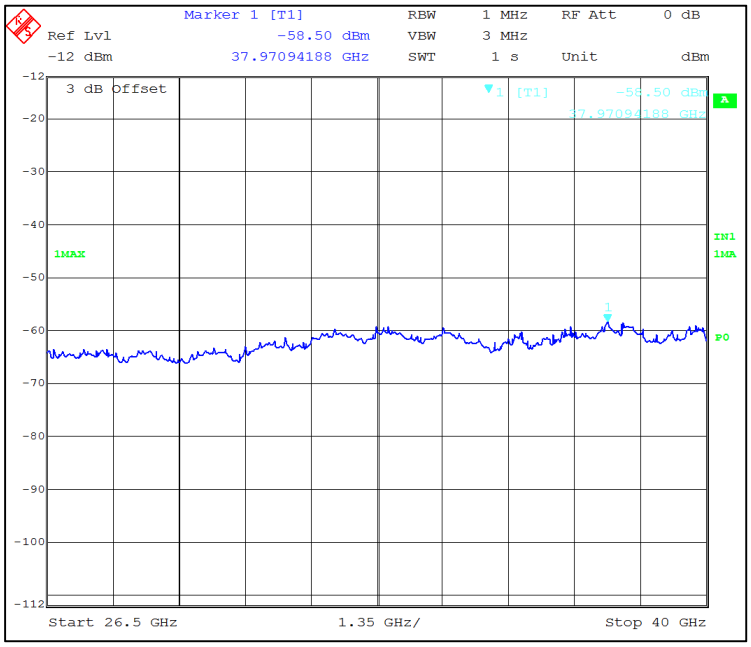


Figure 173: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

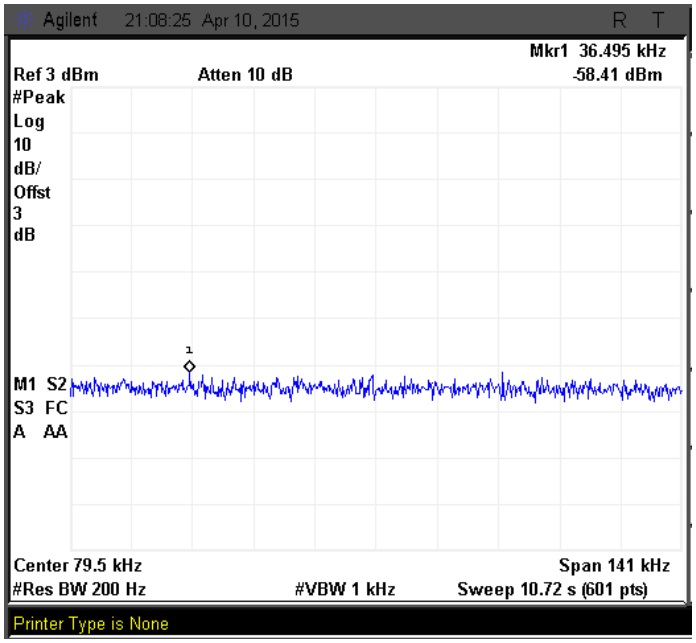


Figure 174: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

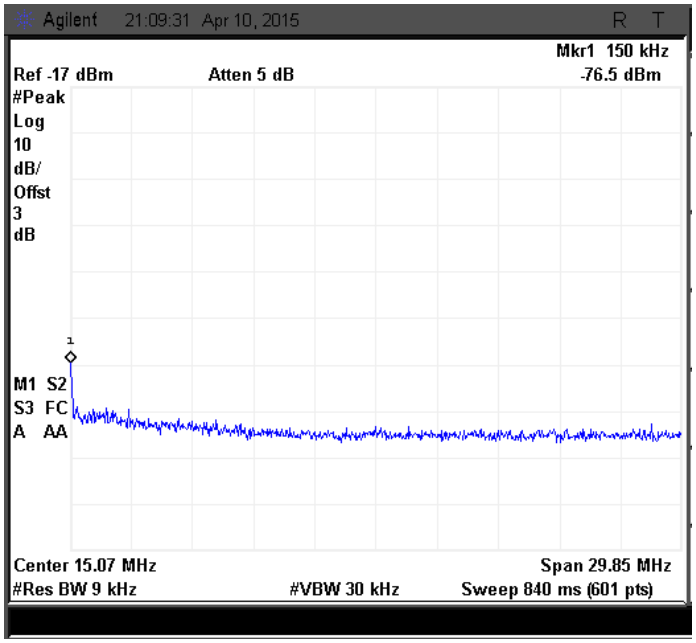


Figure 175: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

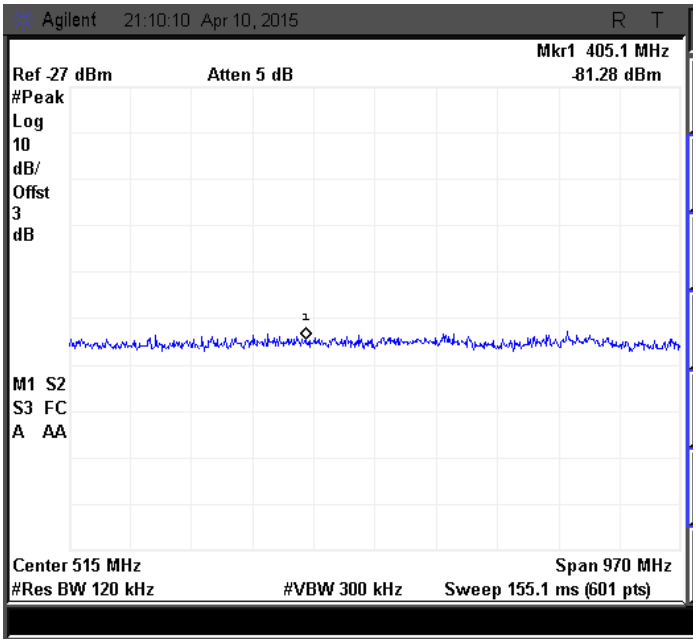


Figure 176: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

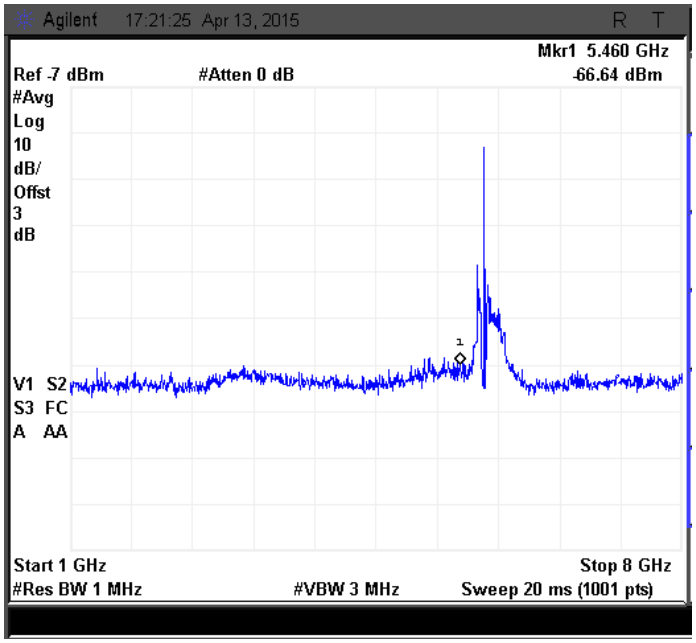


Figure 177: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

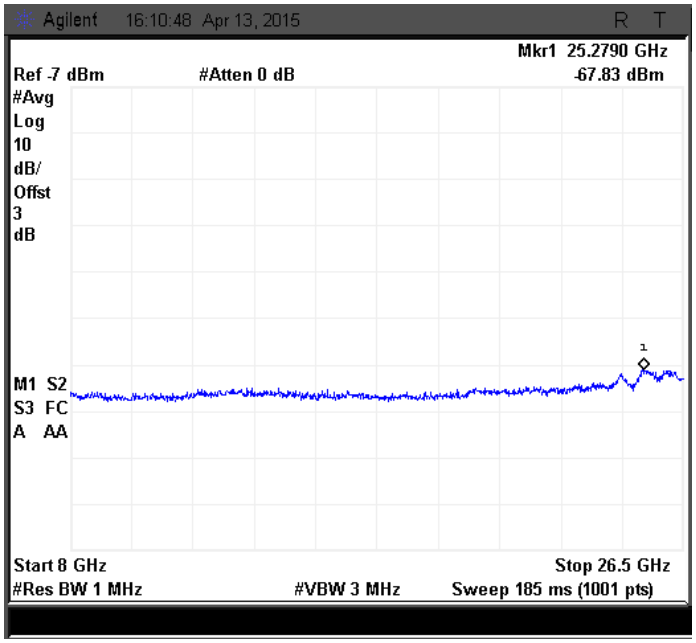


Figure 178: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

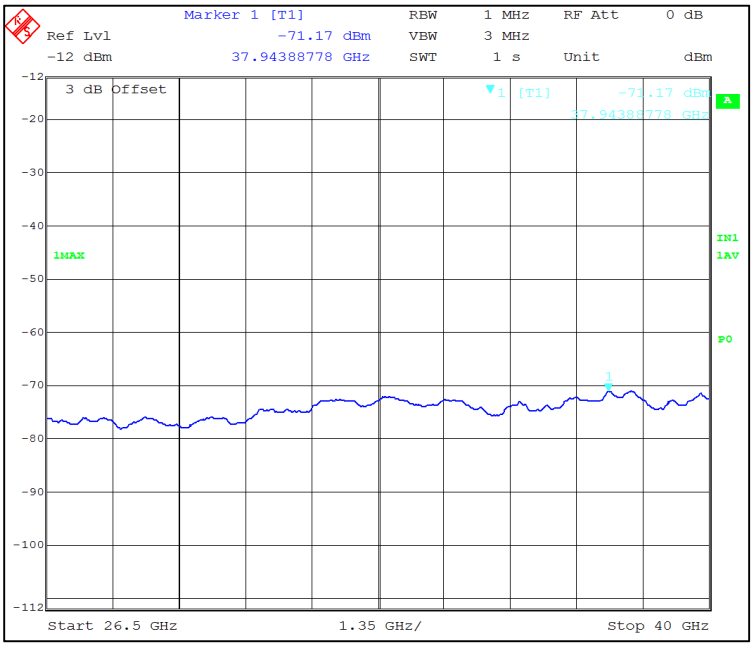


Figure 179: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

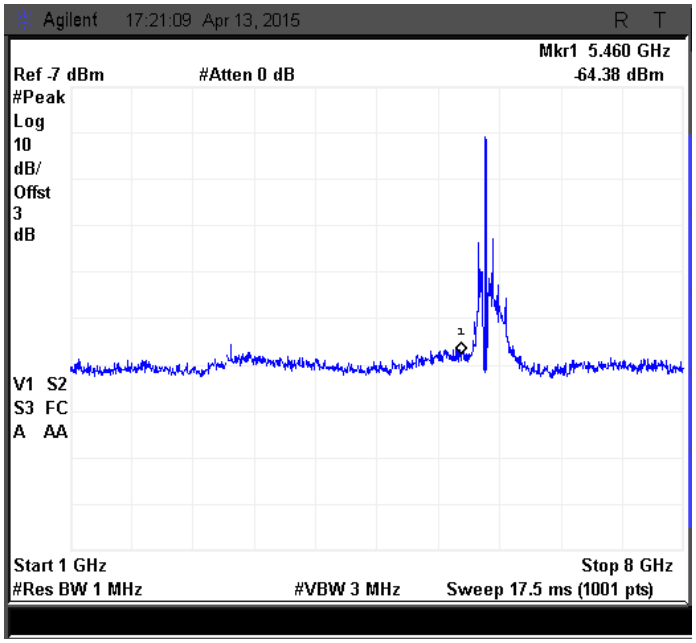


Figure 180: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

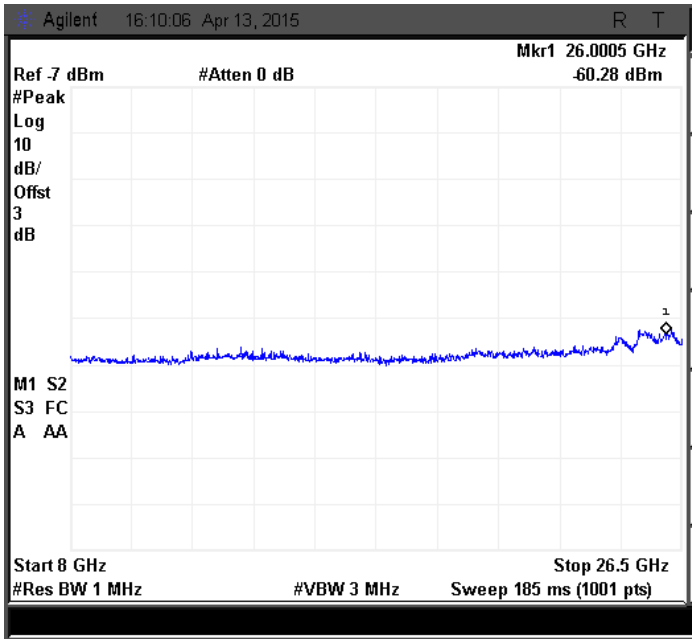


Figure 181: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

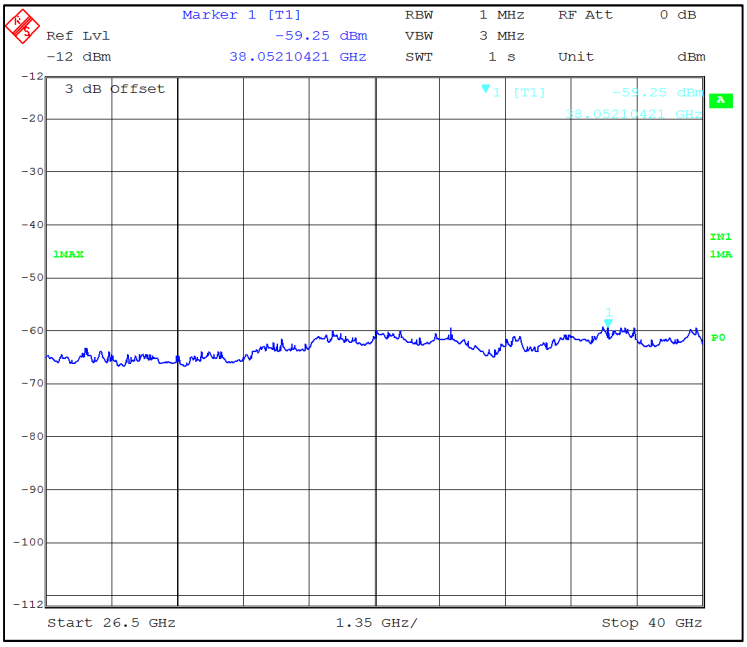


Figure 182: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.6.5 5MHz Modulation BW-Mid channel_5775 MHz

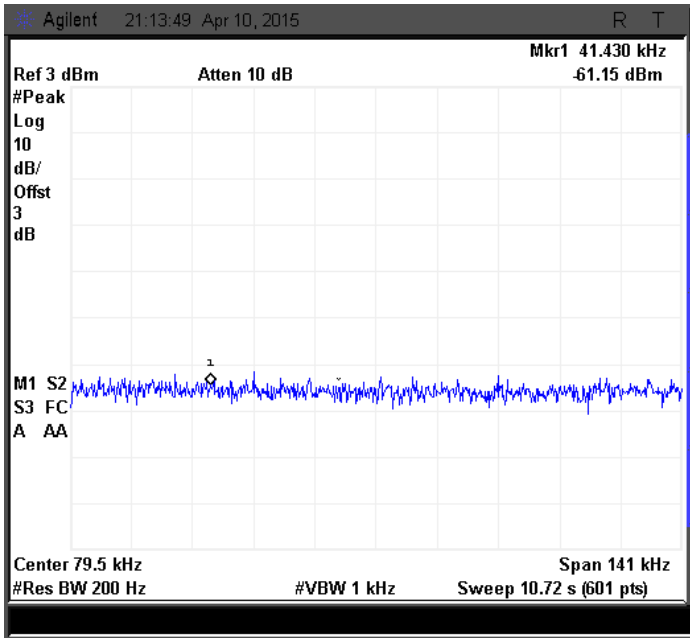


Figure 183: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

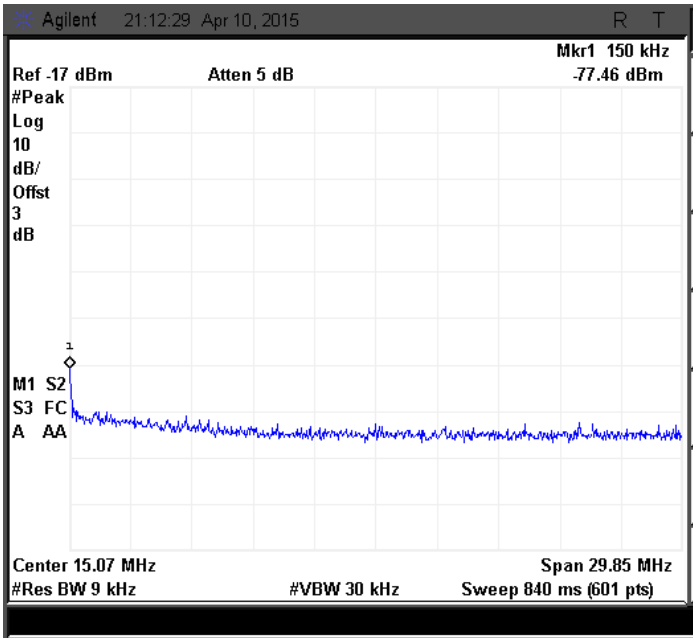


Figure 184: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

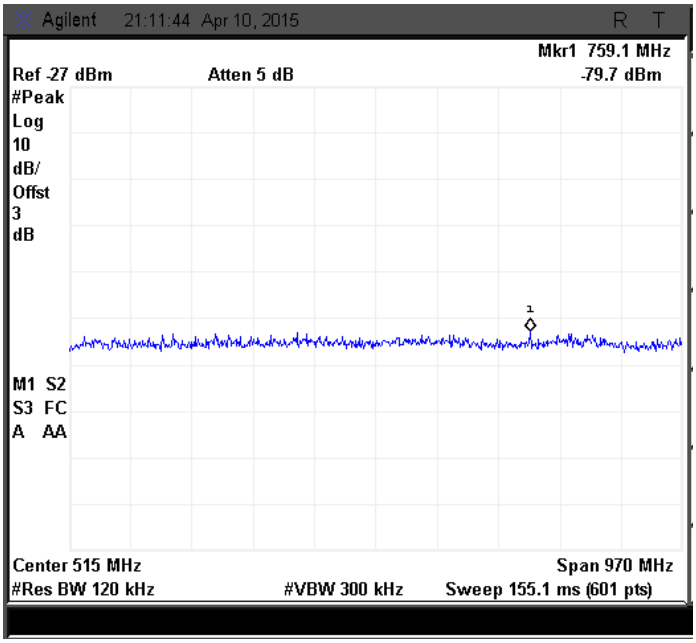


Figure 185: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

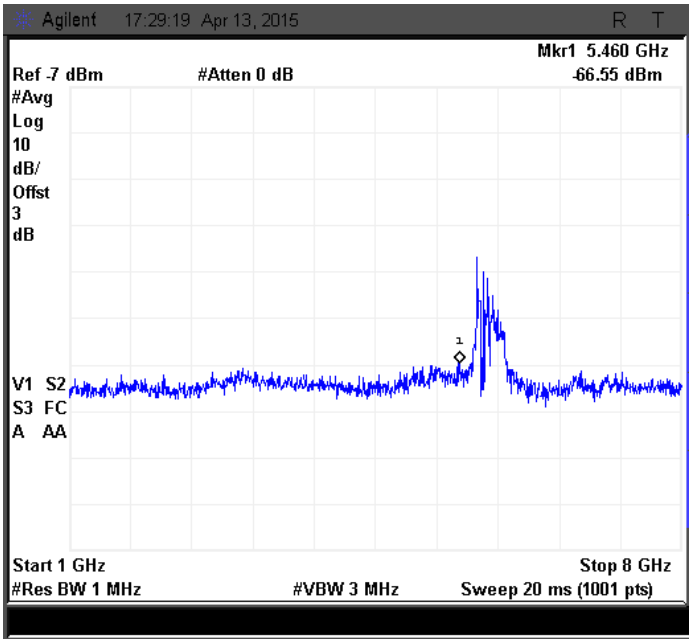


Figure 186: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

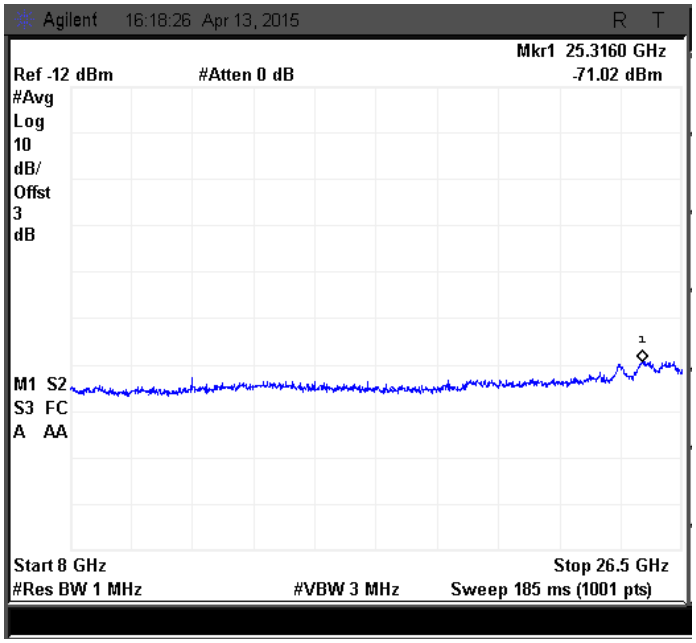


Figure 187: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

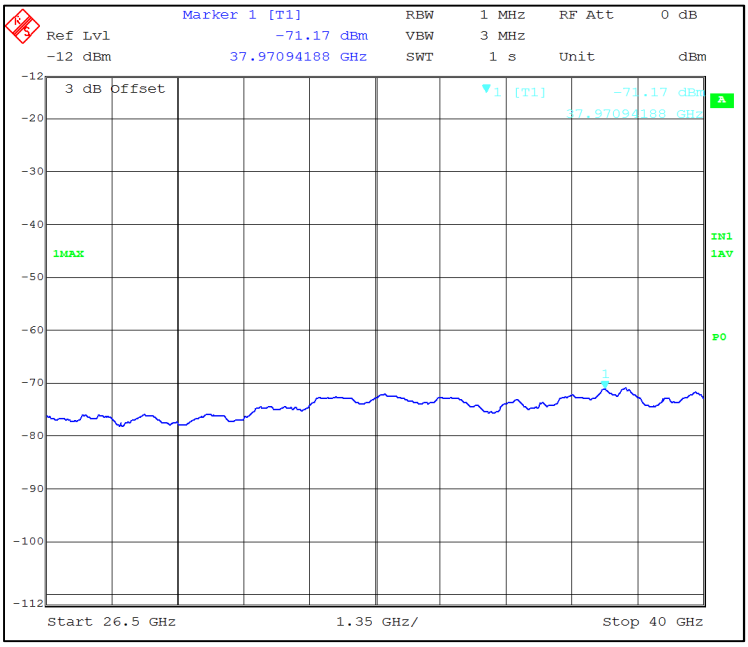


Figure 188: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

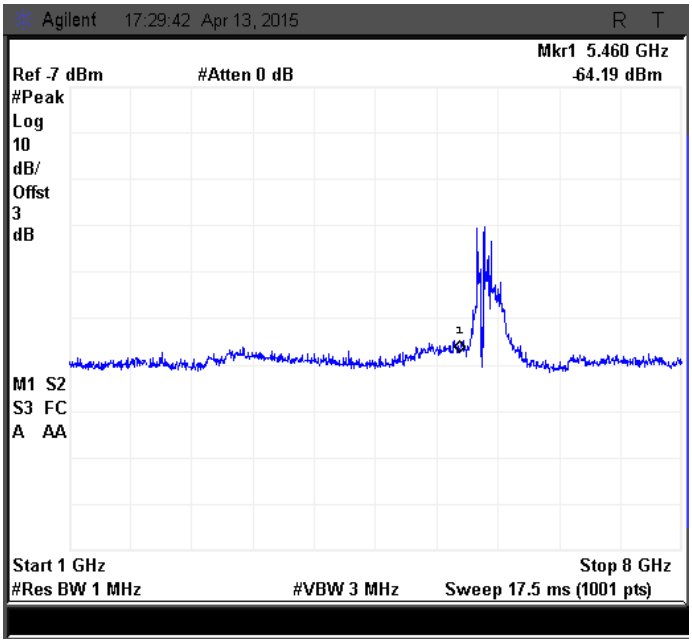


Figure 189: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

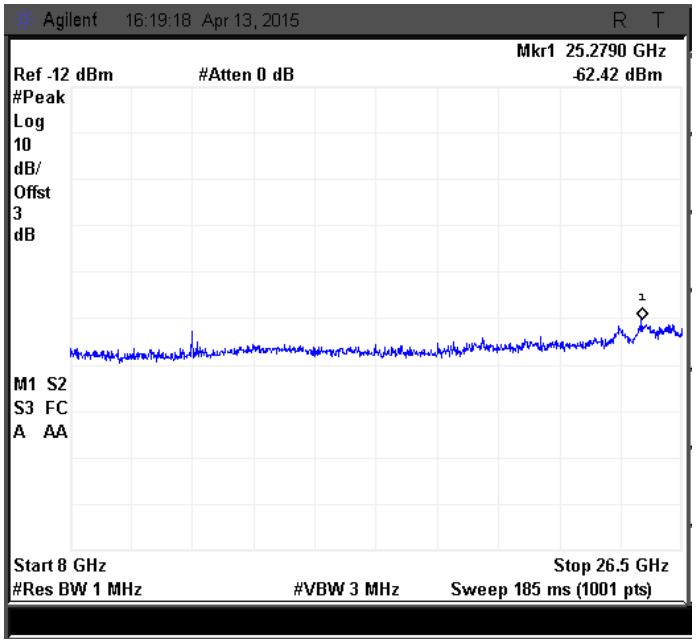


Figure 190: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

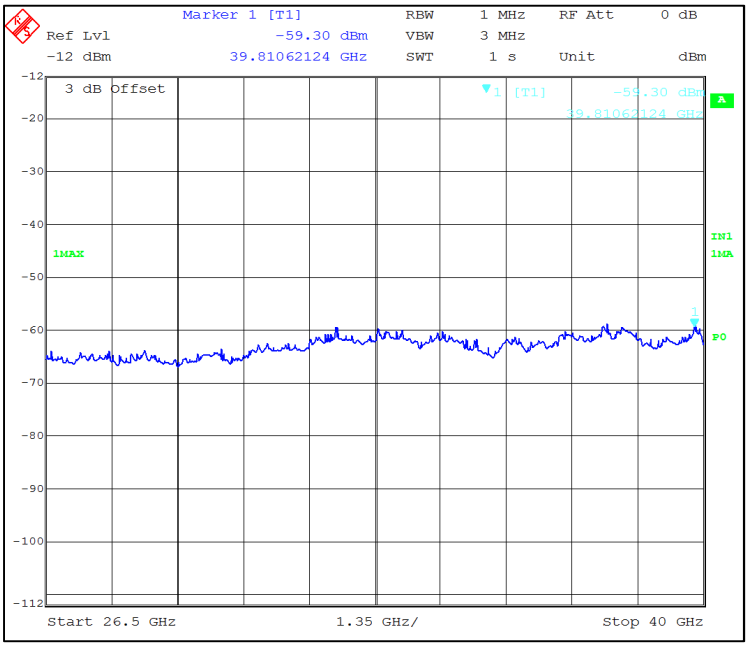


Figure 191: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

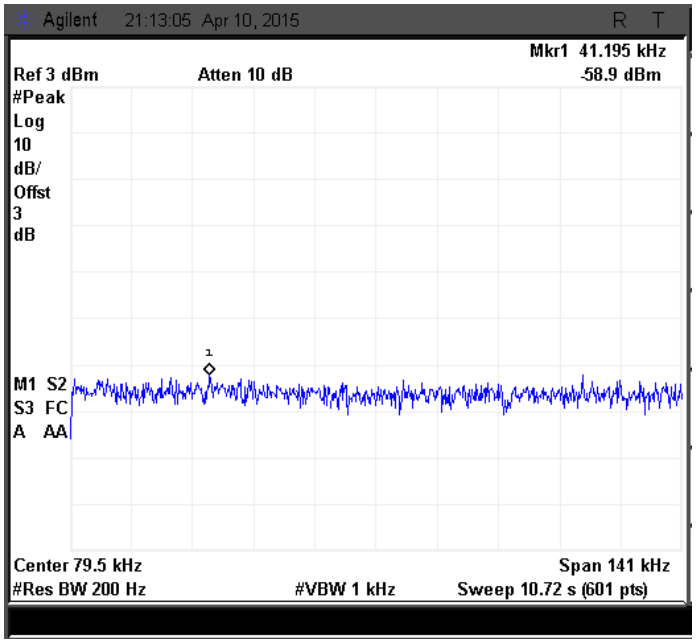


Figure 192: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

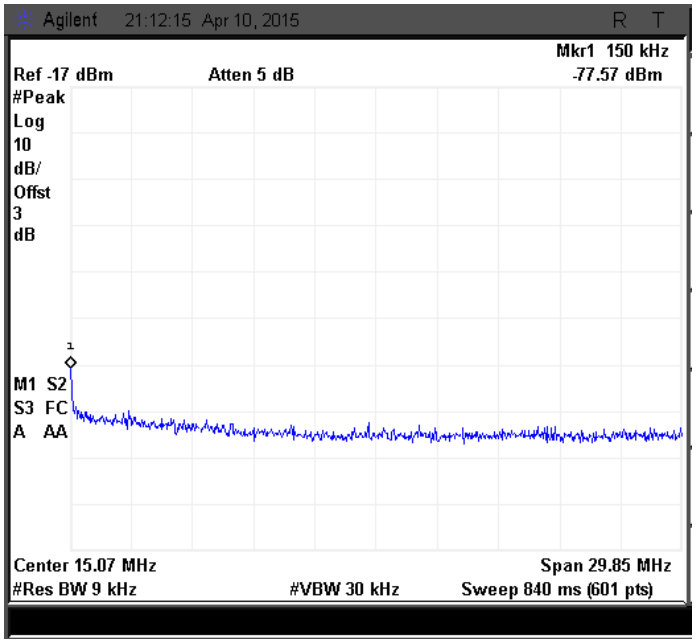


Figure 193: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

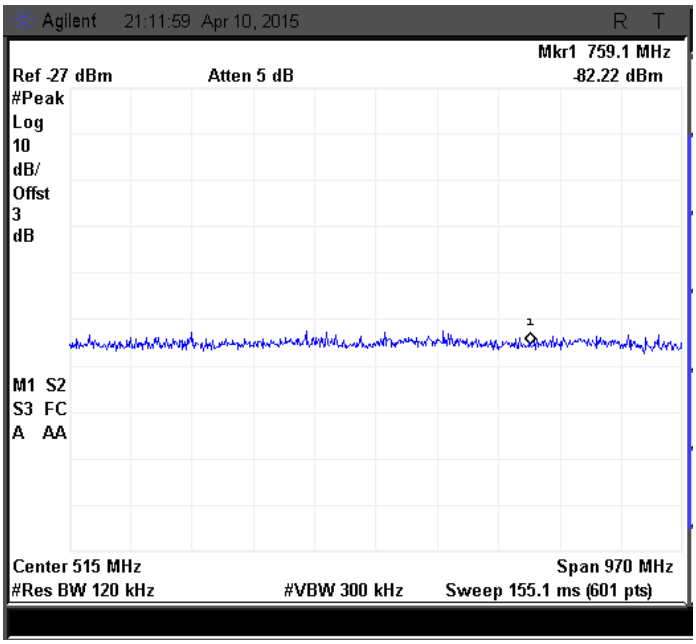


Figure 194: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

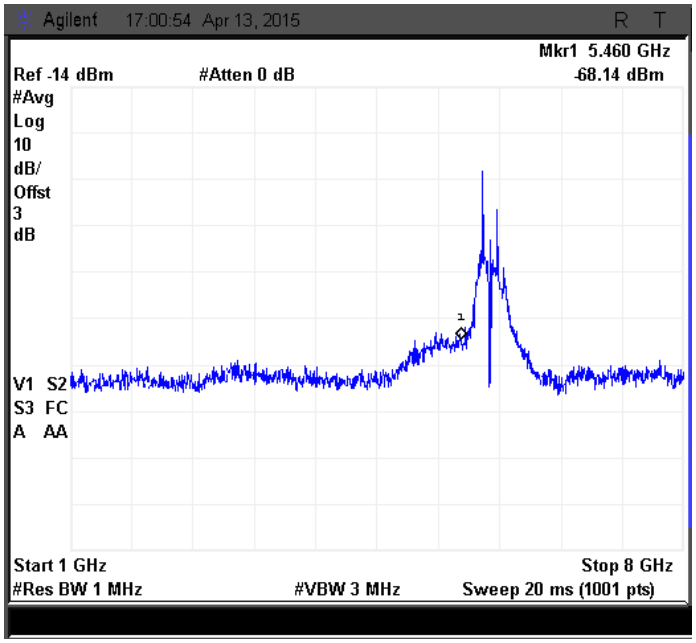


Figure 195: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

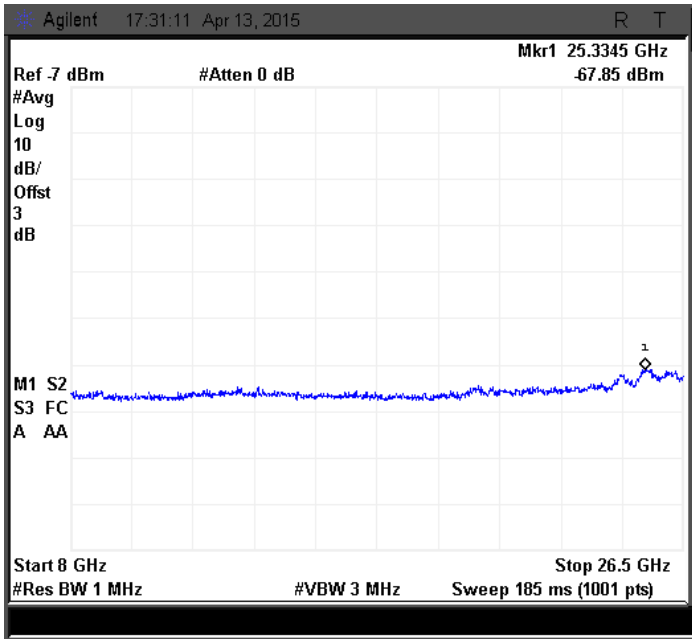


Figure 196: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

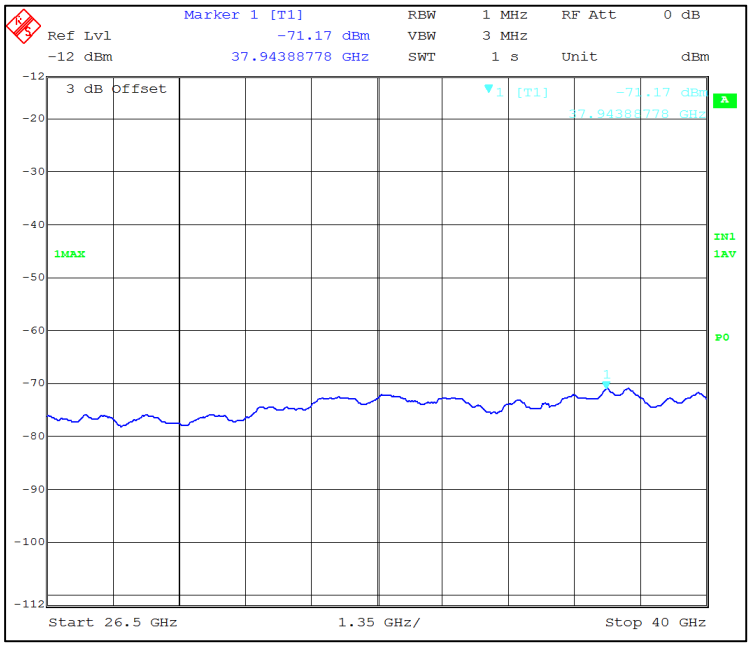


Figure 197: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

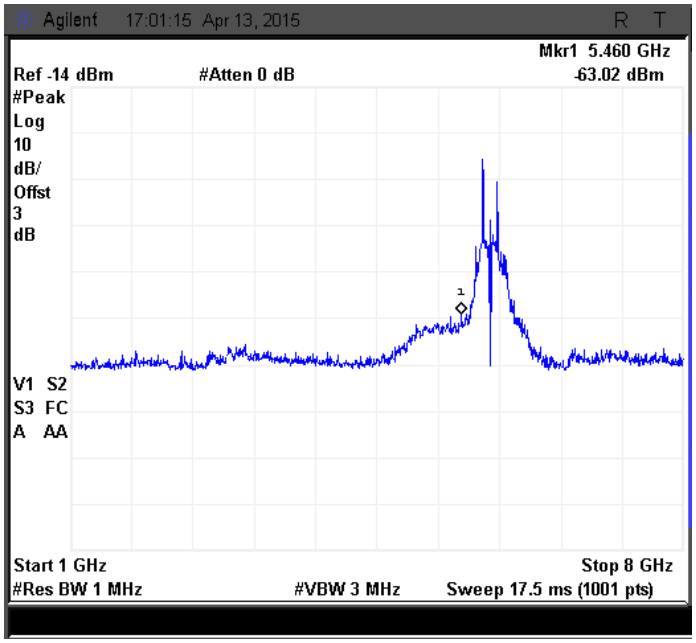


Figure 198: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

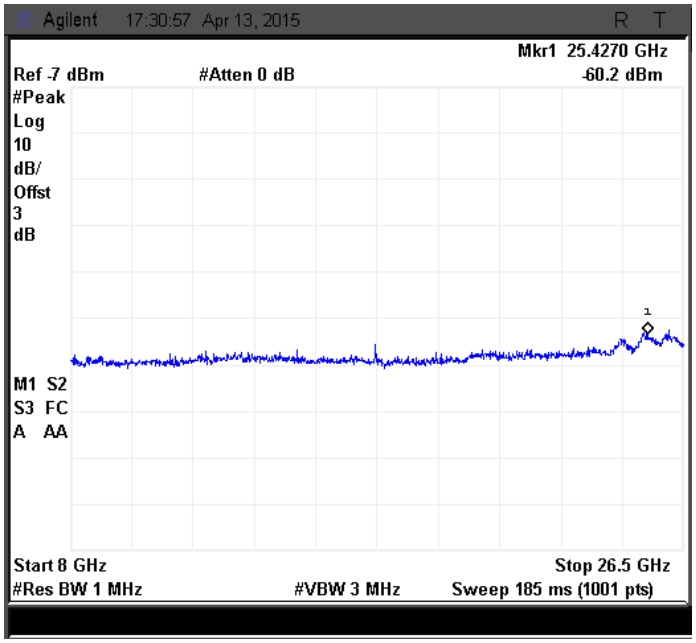


Figure 199: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

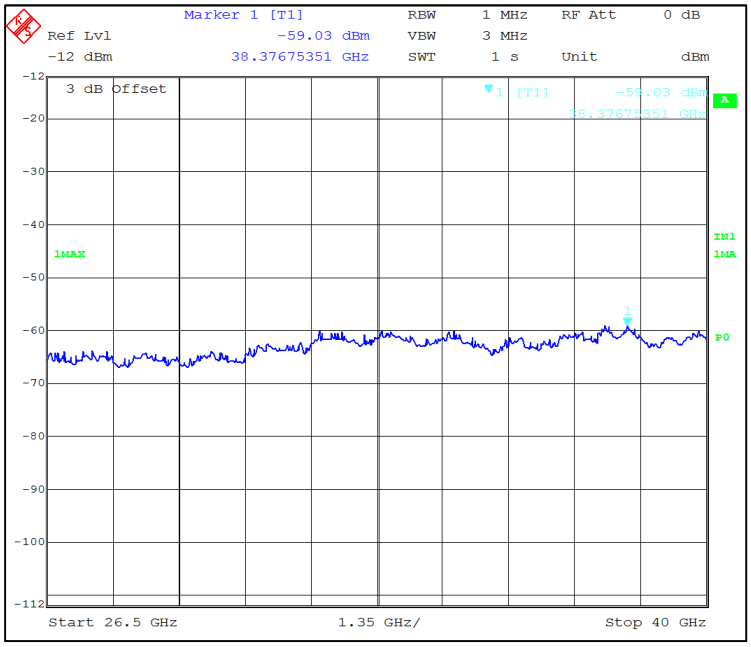


Figure 200: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.6.6 5MHz Modulation BW-High channel_5840 MHz

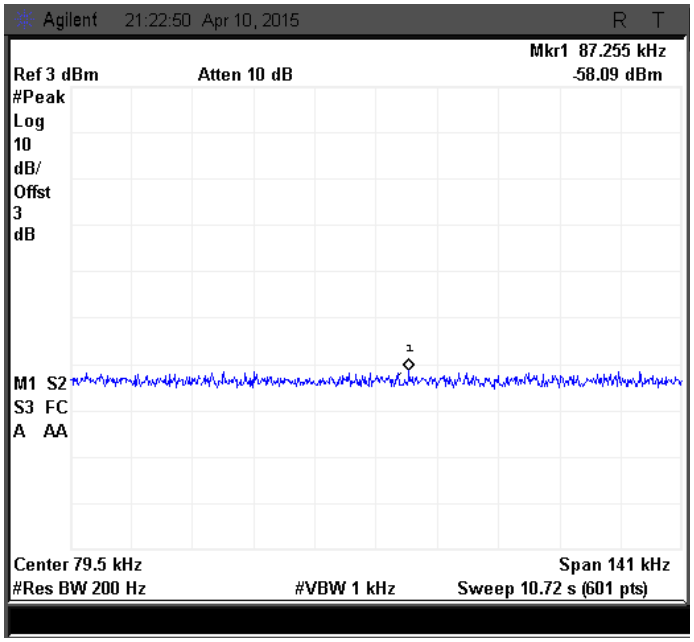


Figure 201: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

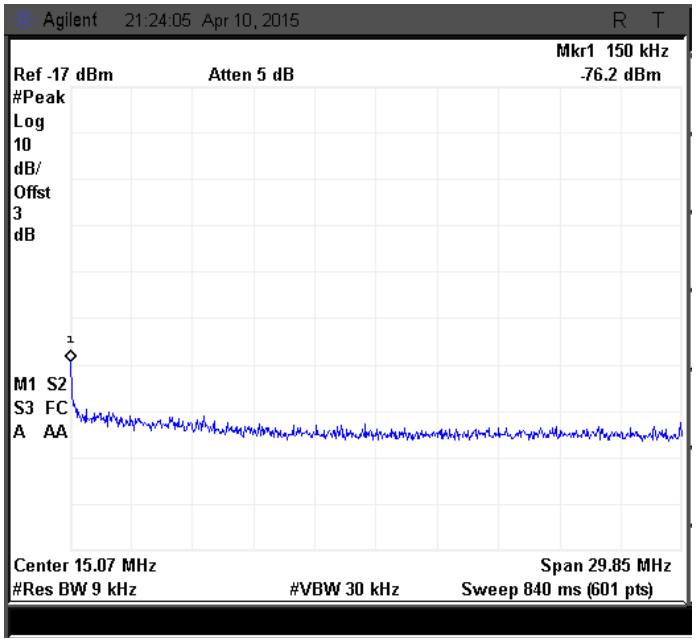


Figure 202: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

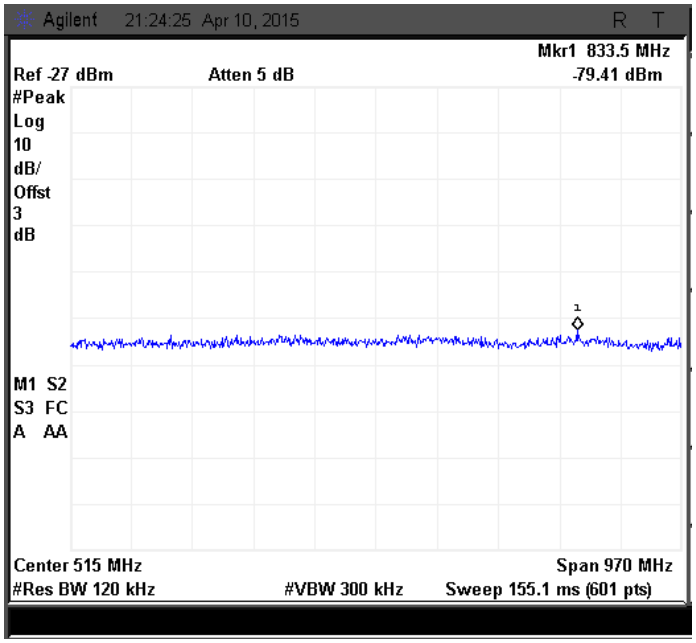


Figure 203: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

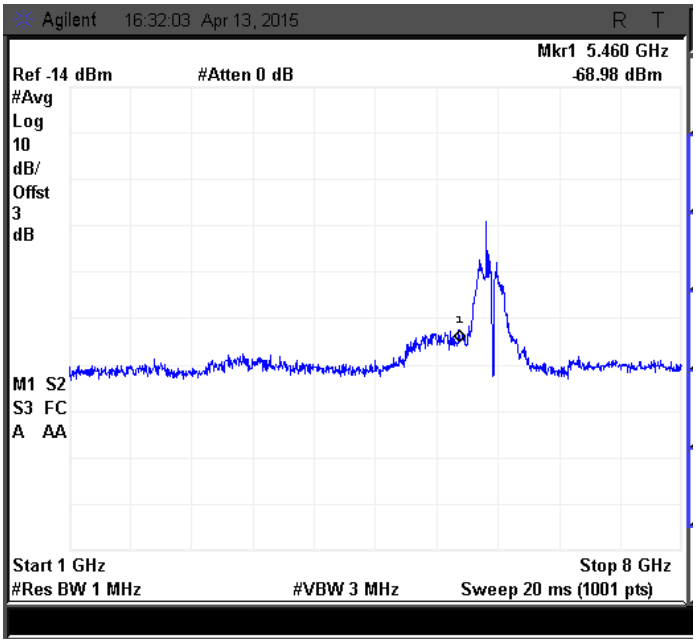


Figure 204: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

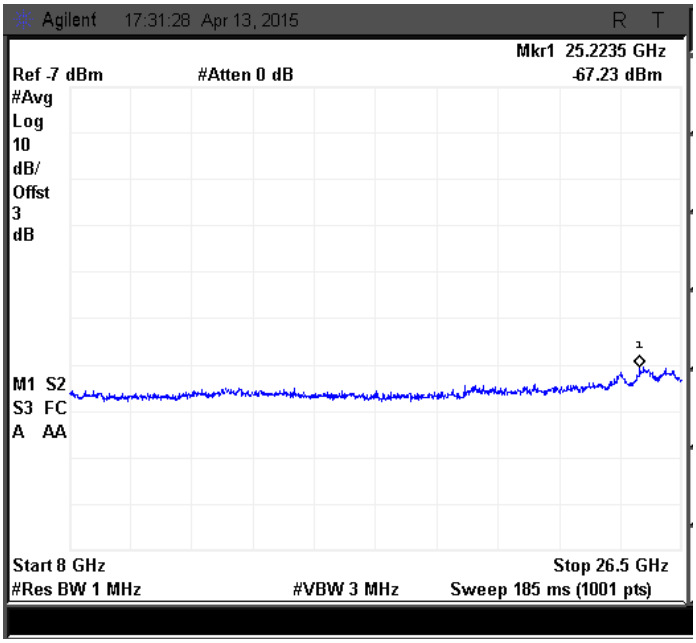


Figure 205: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

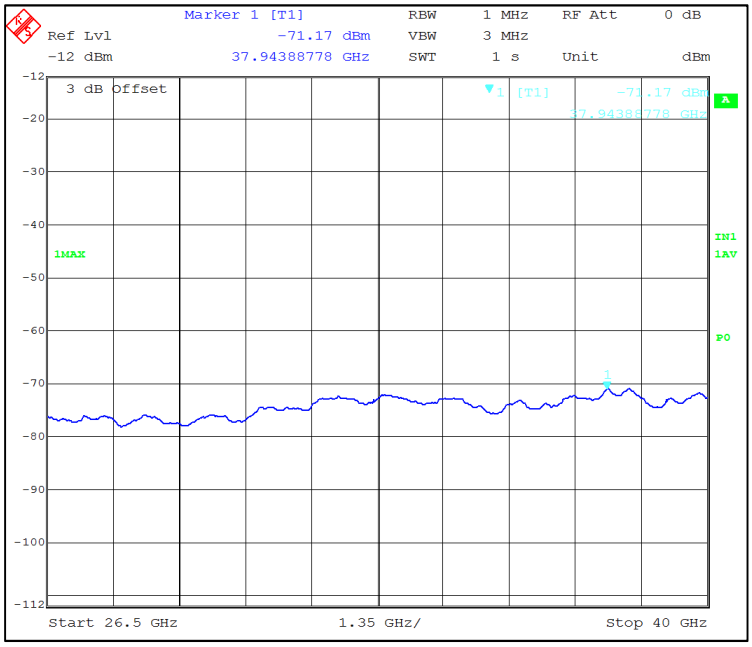


Figure 206: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

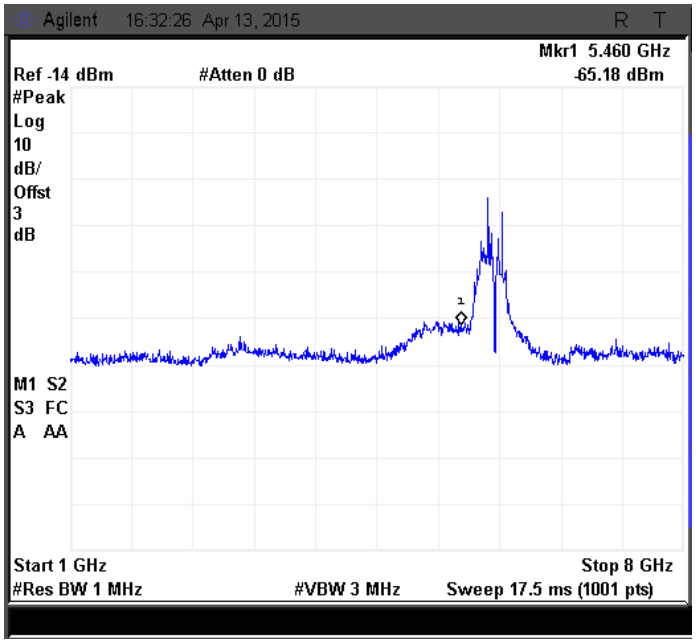


Figure 207: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

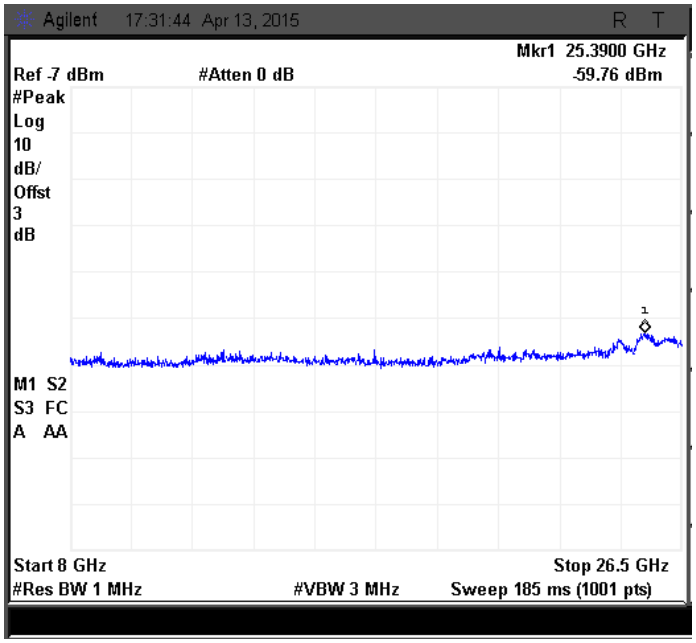


Figure 208: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

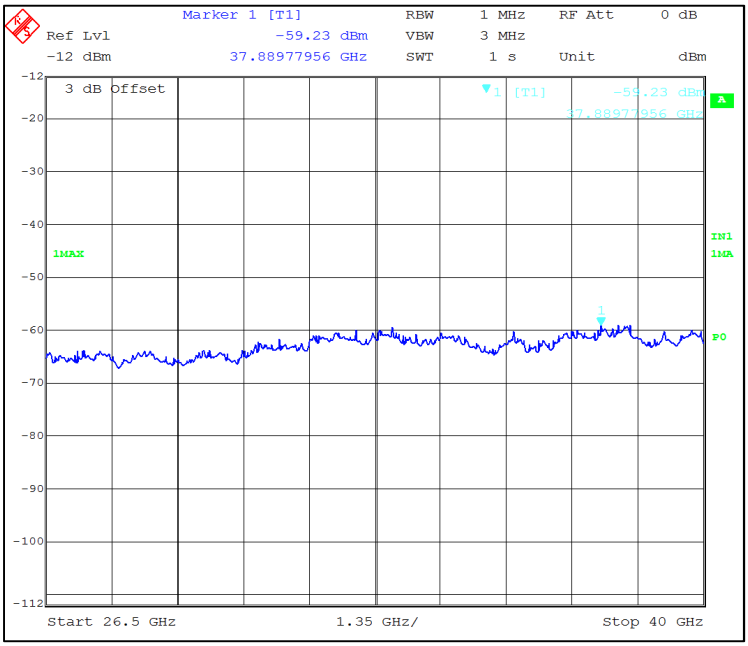


Figure 209: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

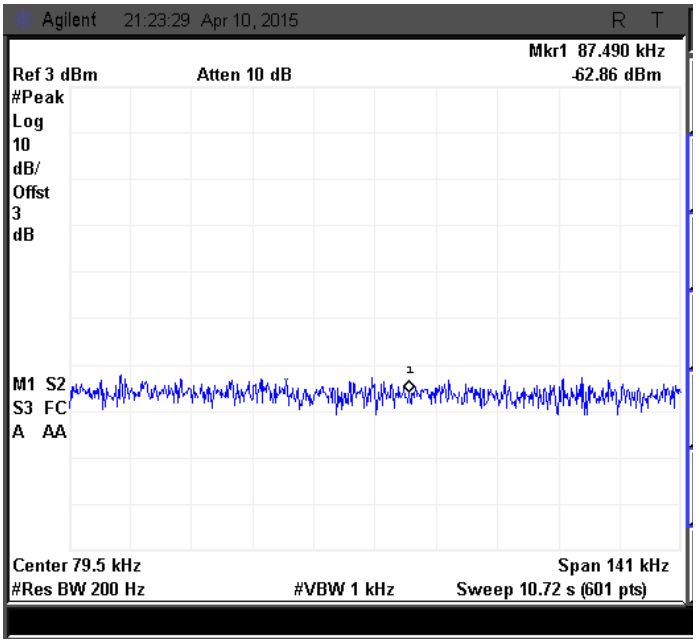


Figure 210: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

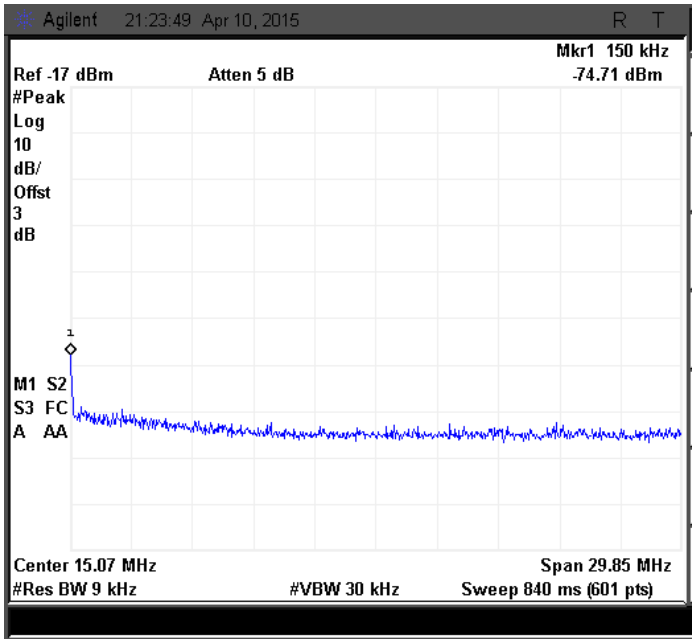


Figure 211: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

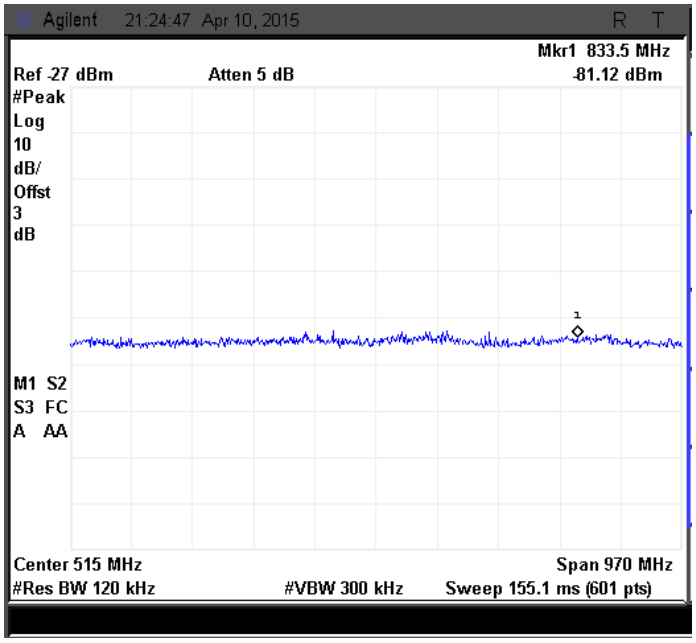


Figure 212: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

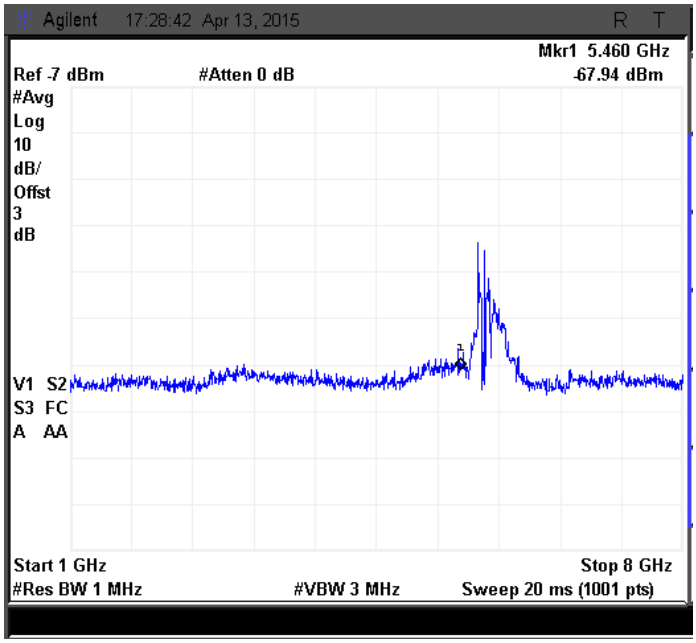


Figure 213: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

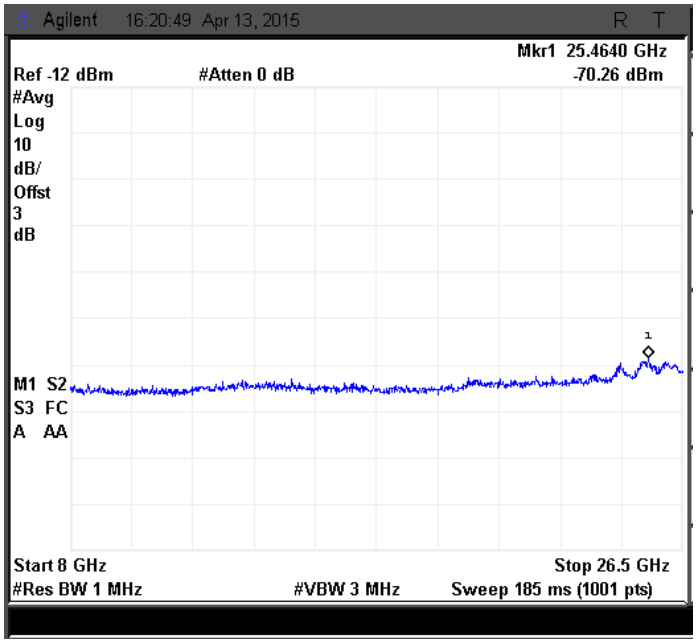


Figure 214: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

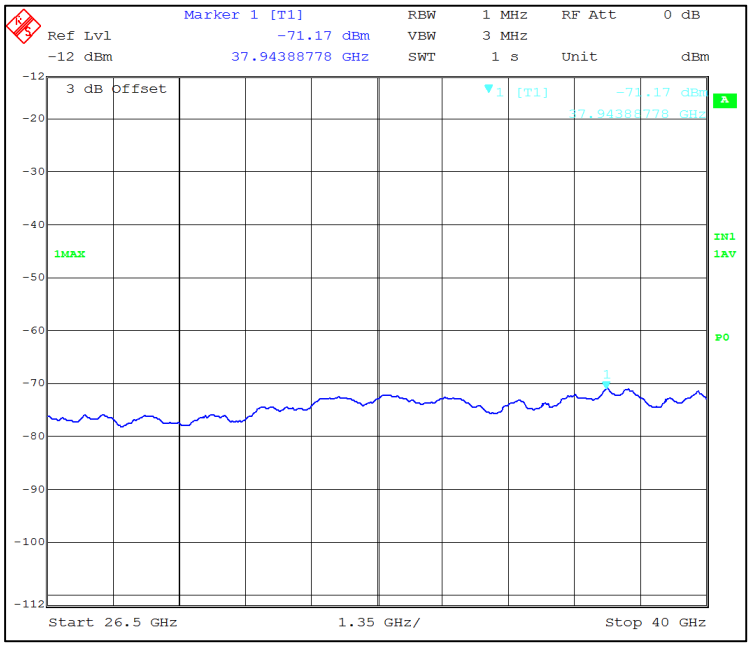


Figure 215: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

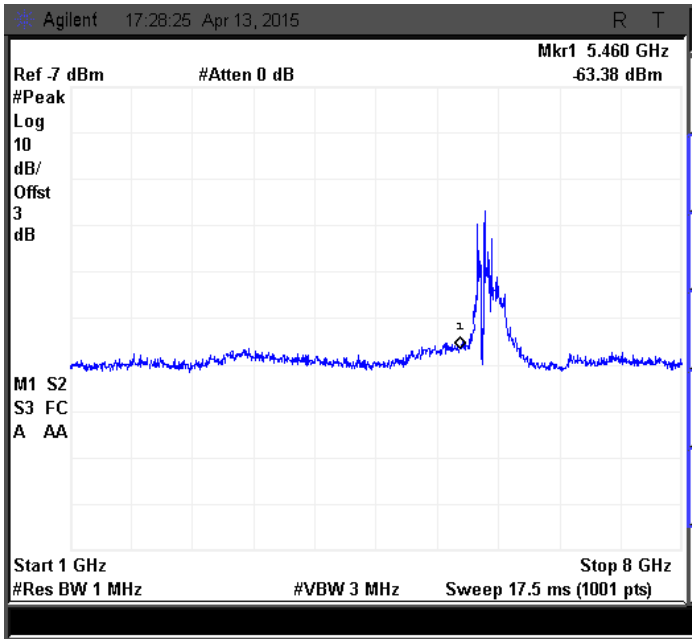


Figure 216: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

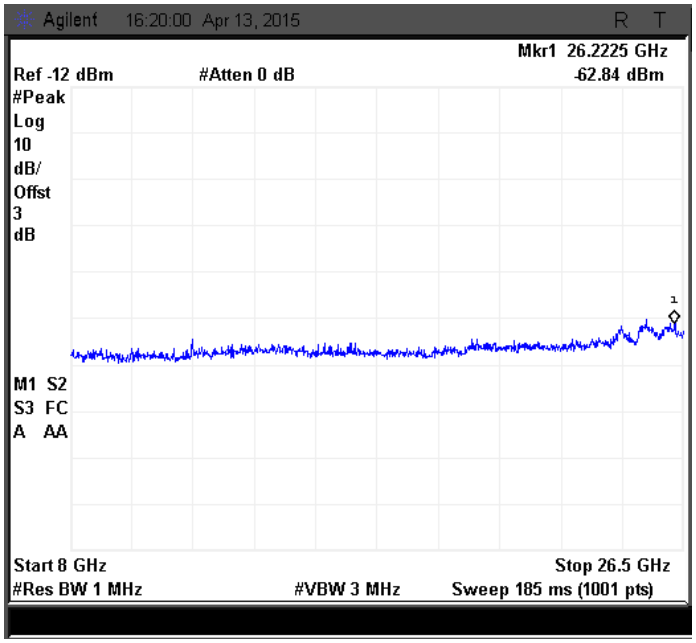


Figure 217: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

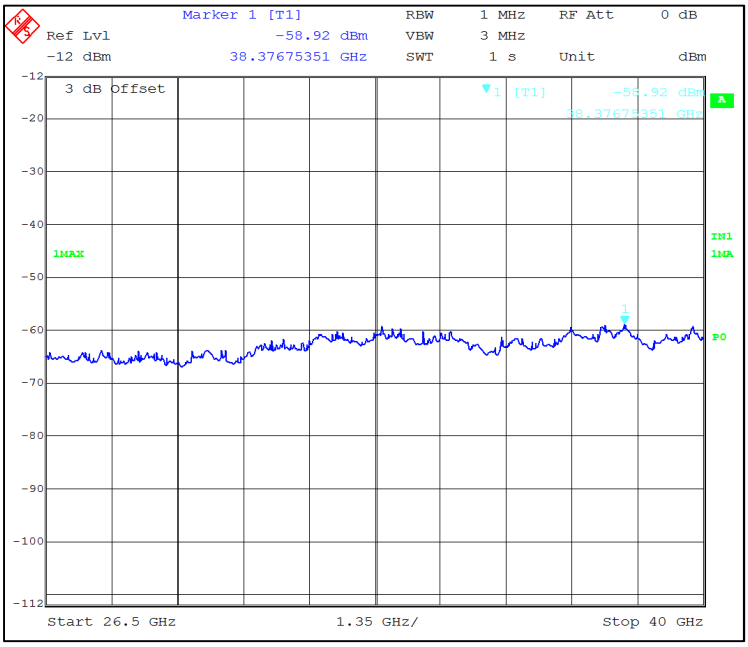


Figure 218: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.7 RESULT (SUPPORTING GRAPHS / DATA) FOR 24DBI ANTENNA CONDITION

5.3.1.7.1 40MHZ MODULATION BW-LOW CHANNEL_5750 MHZ

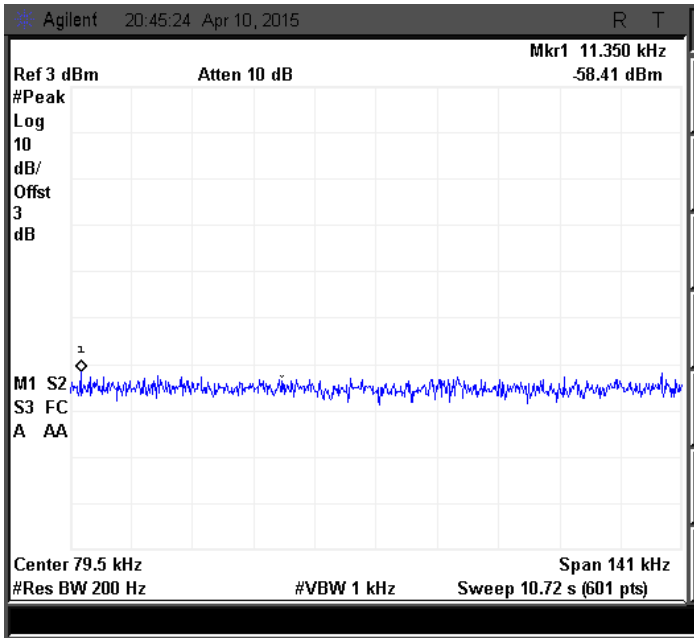


Figure 219: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

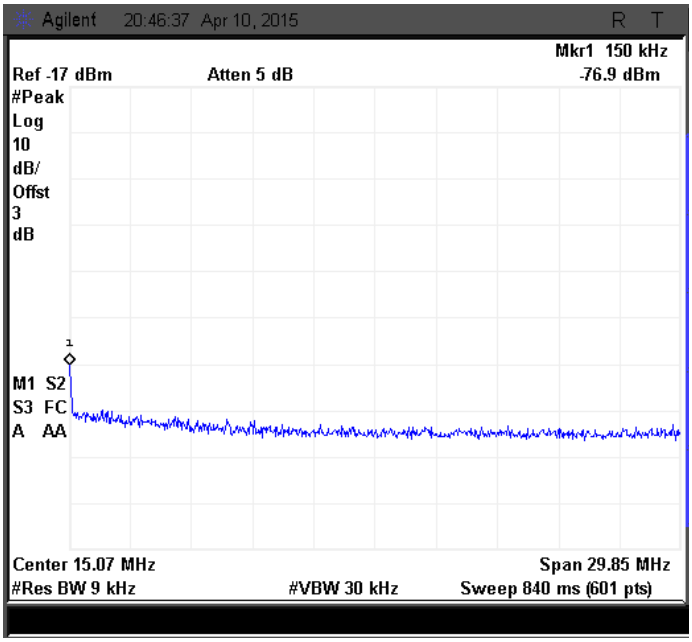


Figure 220: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

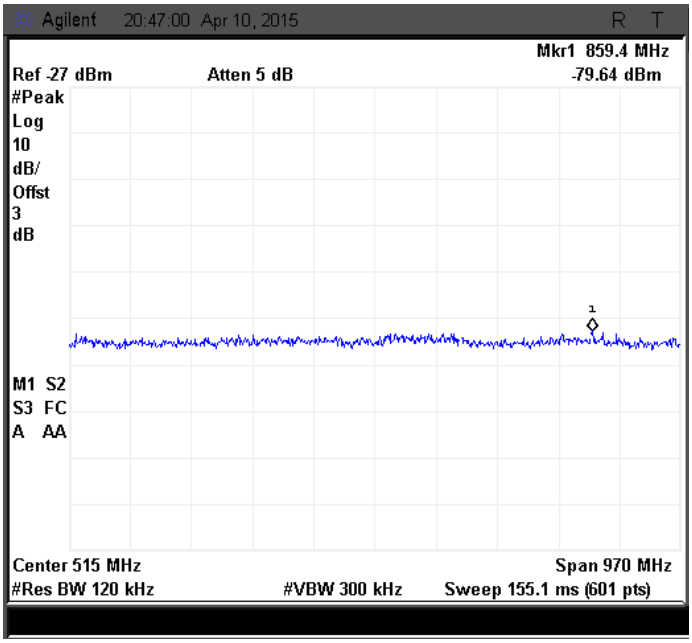


Figure 221: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

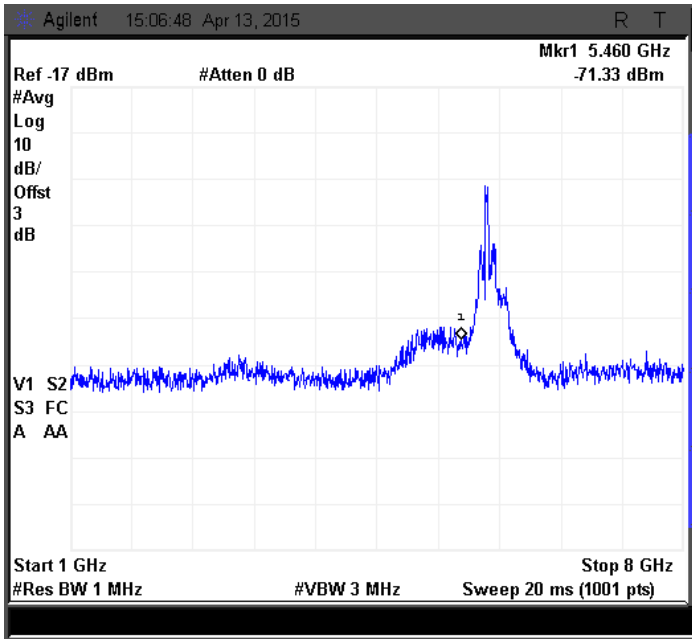


Figure 222: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

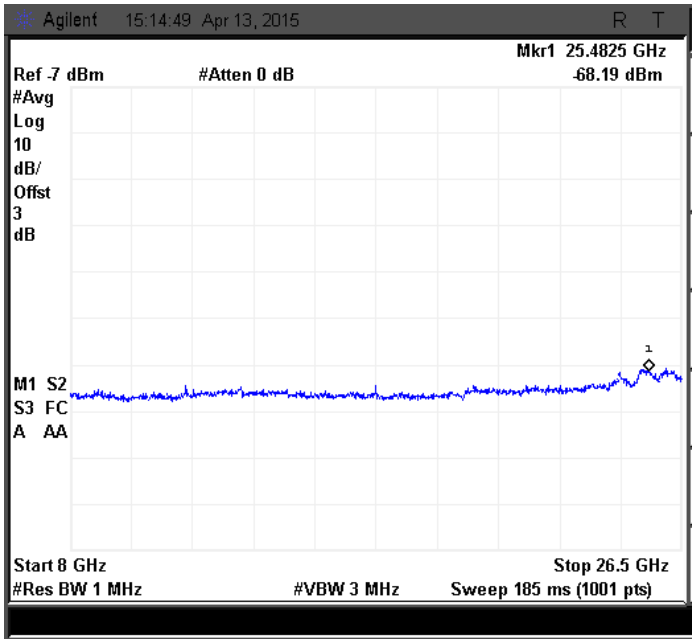


Figure 223: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

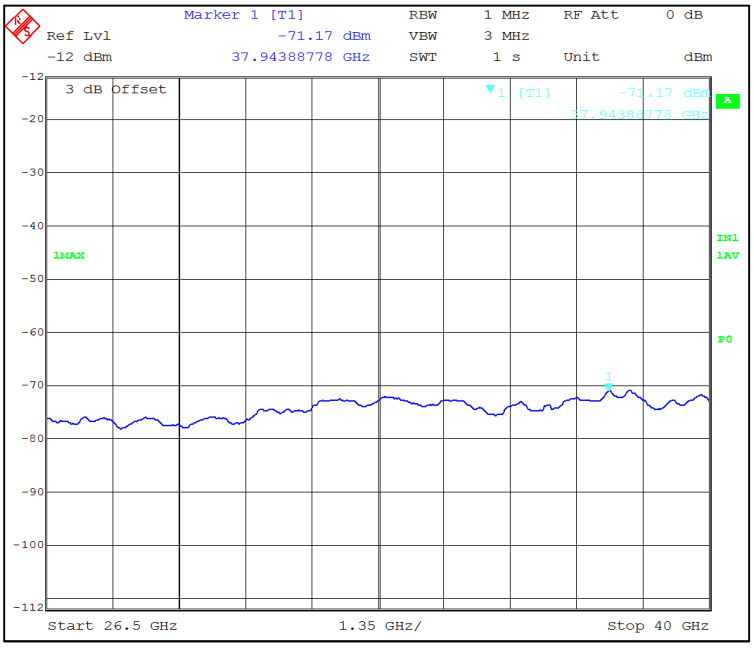


Figure 224: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

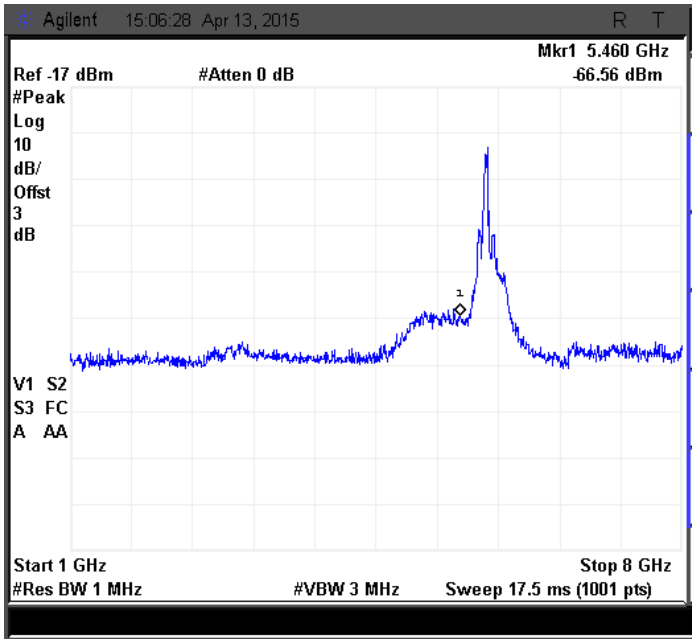


Figure 225: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

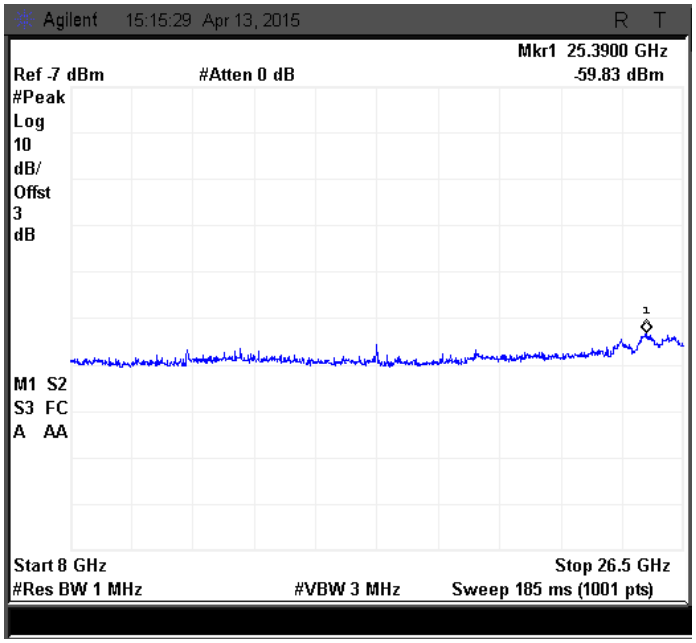


Figure 226: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

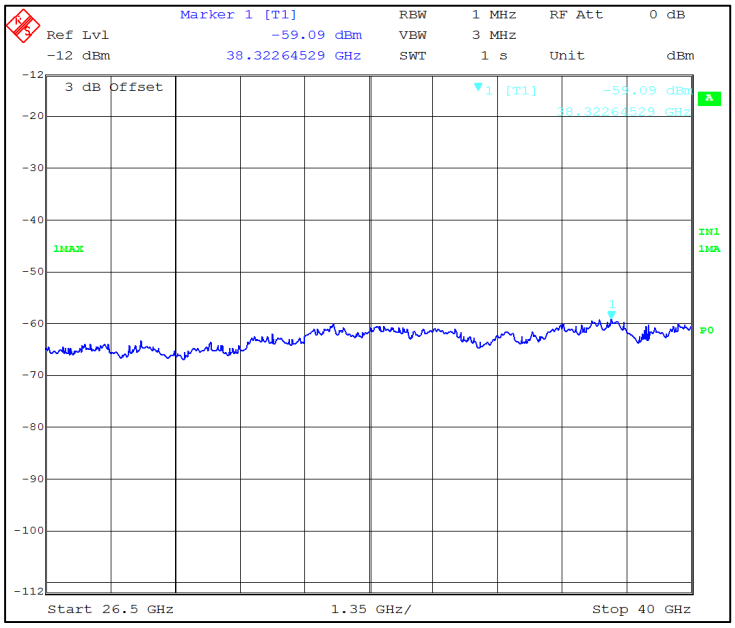


Figure 227: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

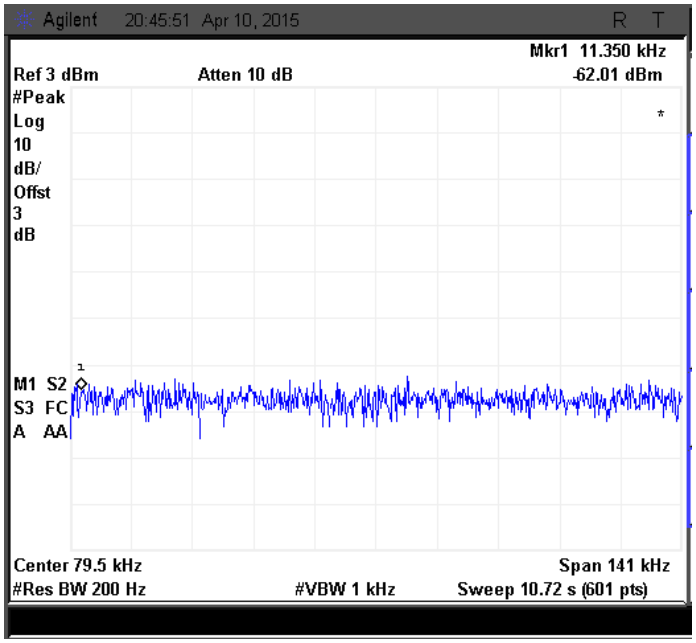


Figure 228: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

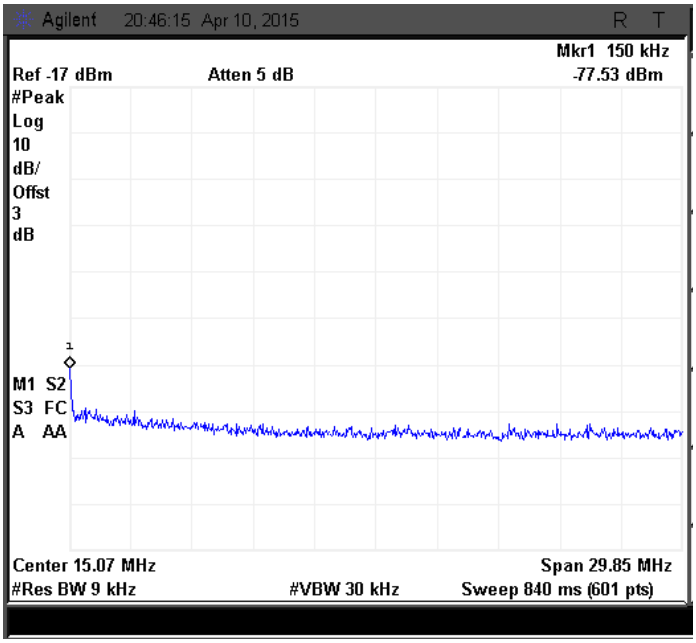


Figure 229: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

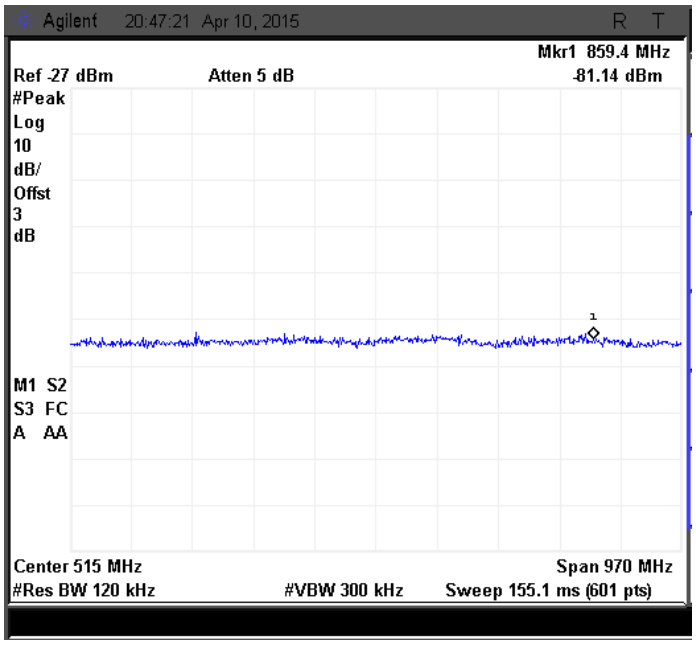


Figure 230: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

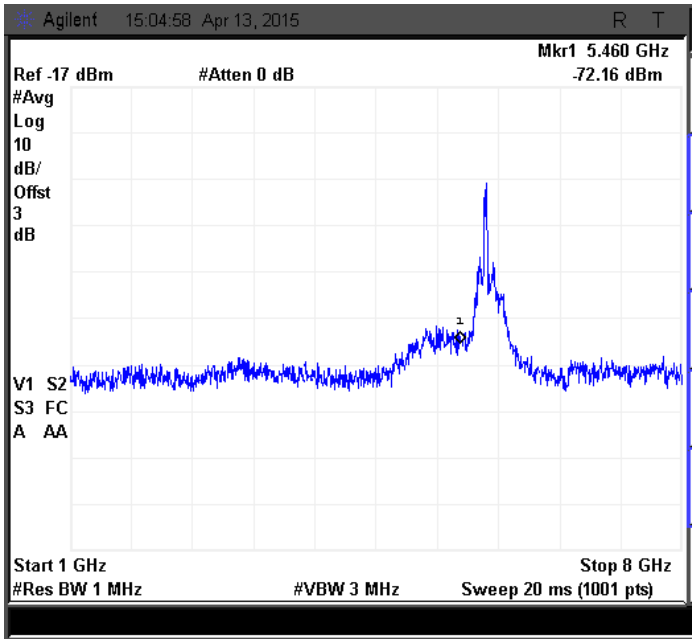


Figure 231: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

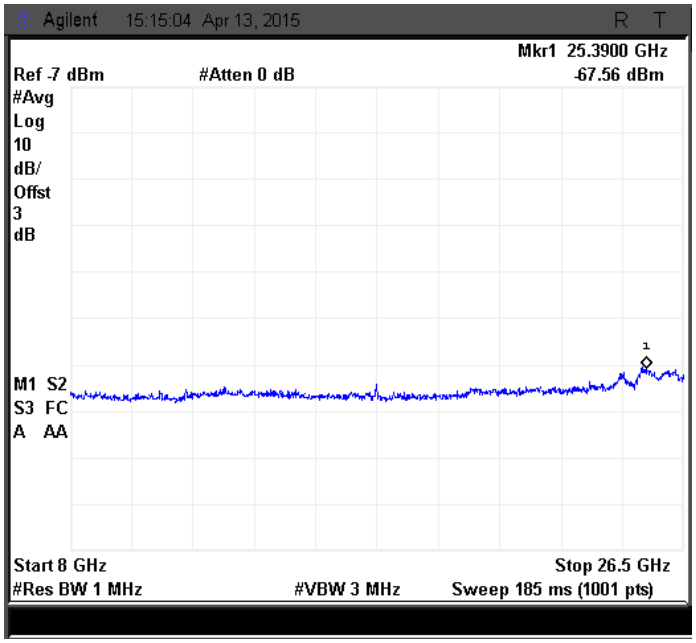


Figure 232: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

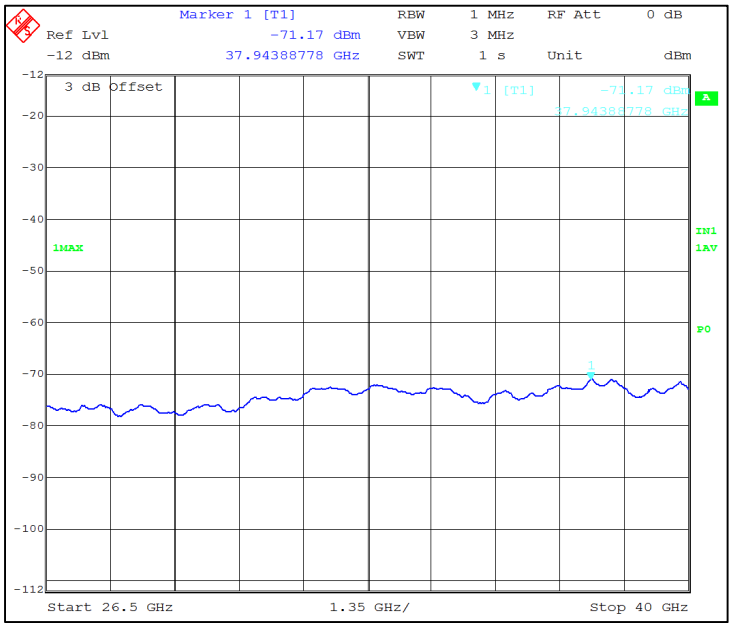


Figure 233: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

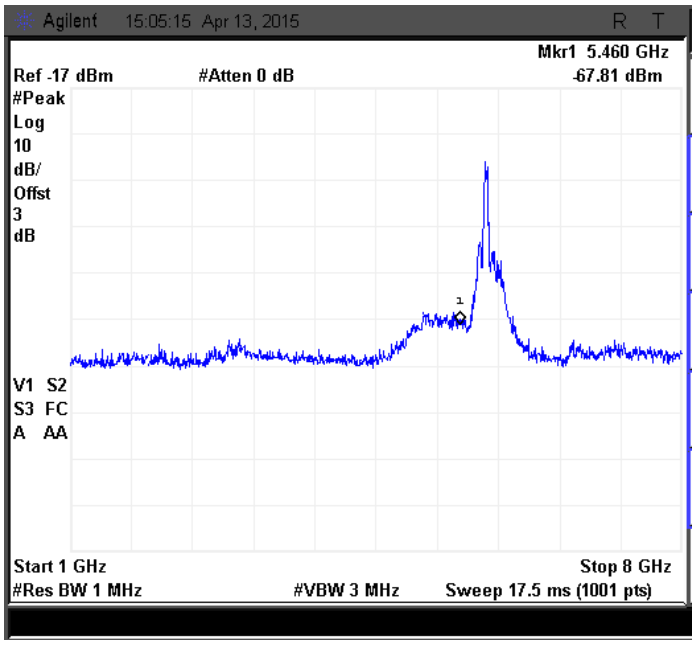


Figure 234: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

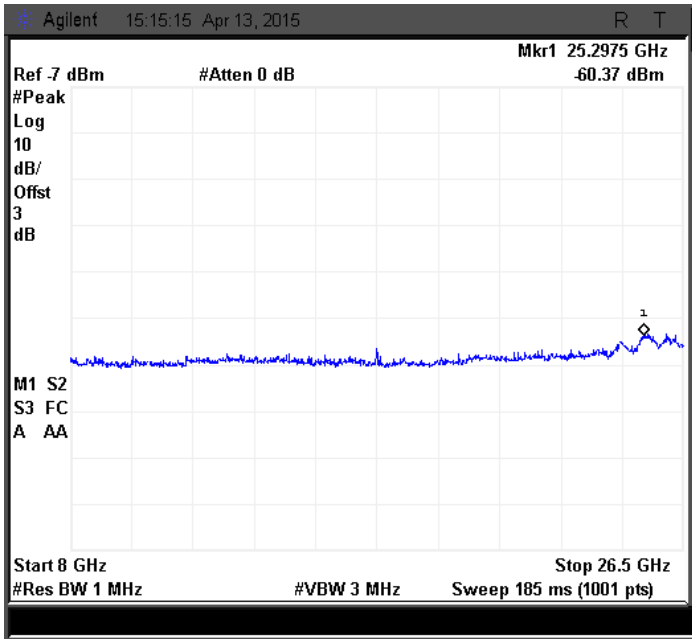


Figure 235: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

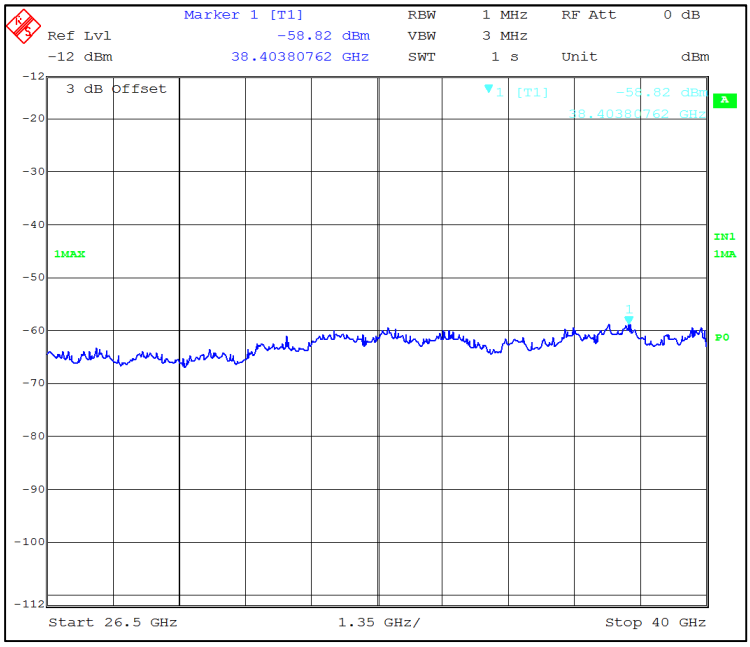


Figure 236: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.7.2 40MHz Modulation BW-Mid channel_5785 MHz

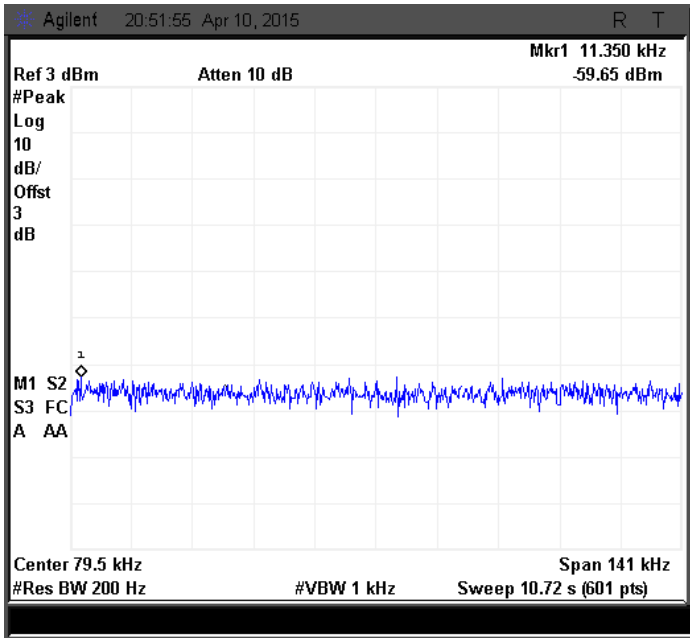


Figure 237: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

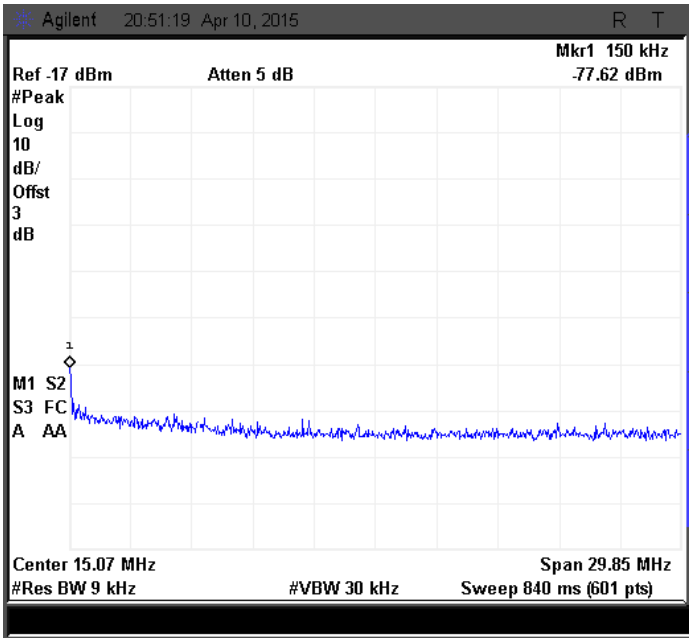


Figure 238: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

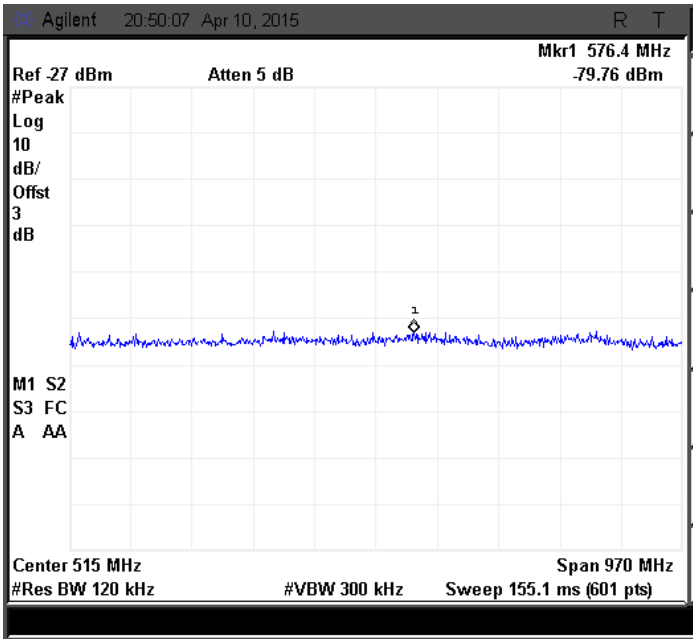


Figure 239: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

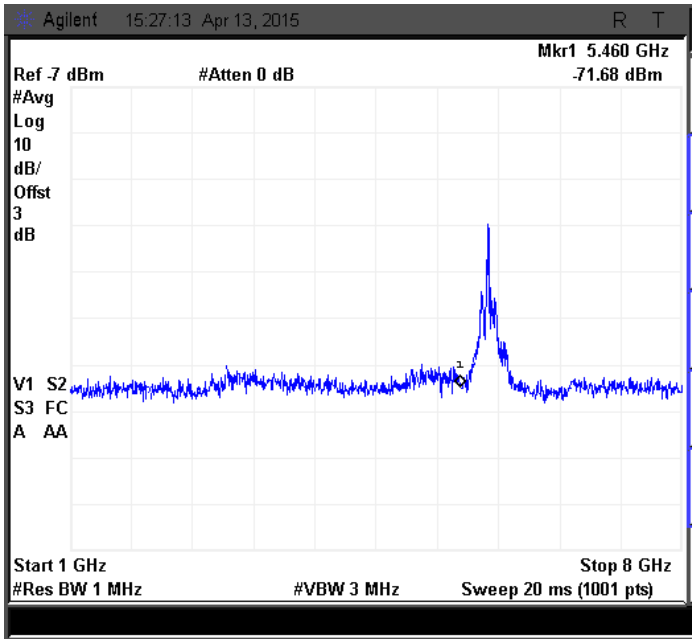


Figure 240: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

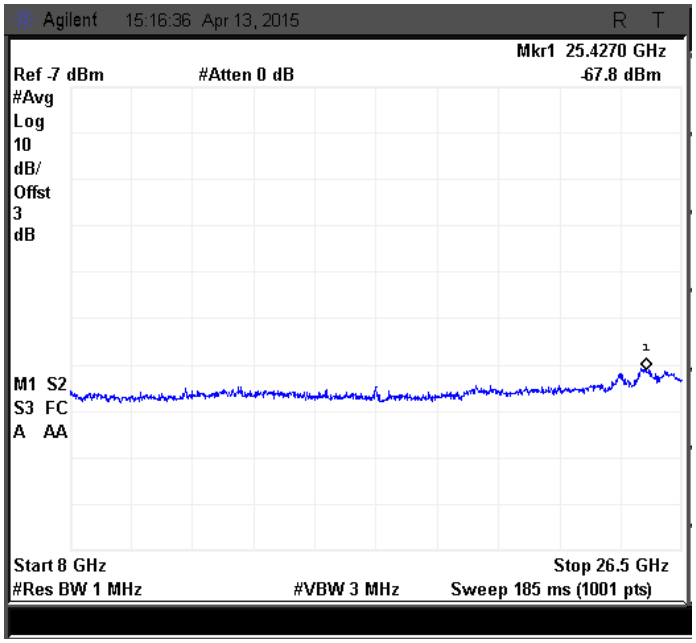


Figure 241: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

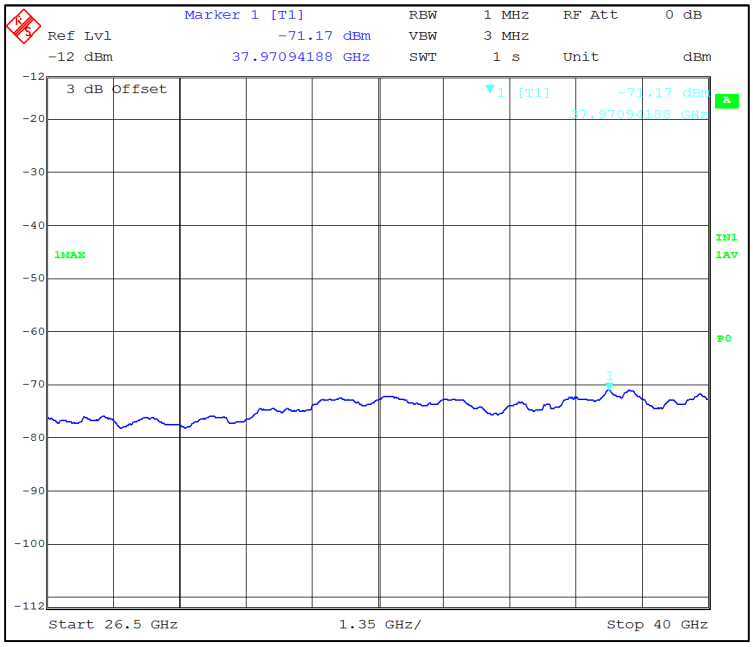


Figure 242: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

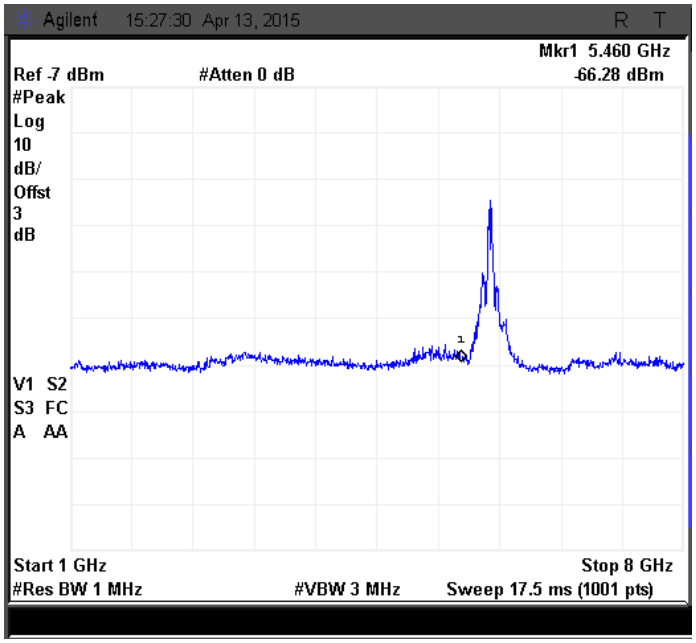


Figure 243: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

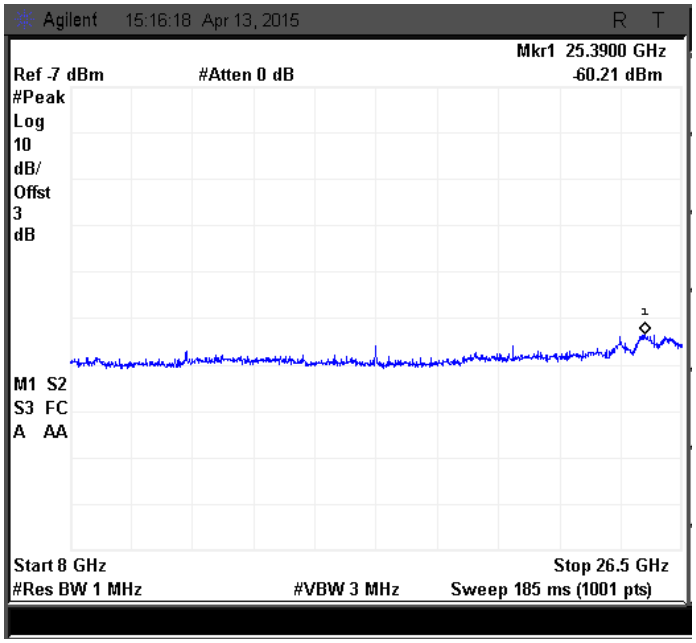


Figure 244: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

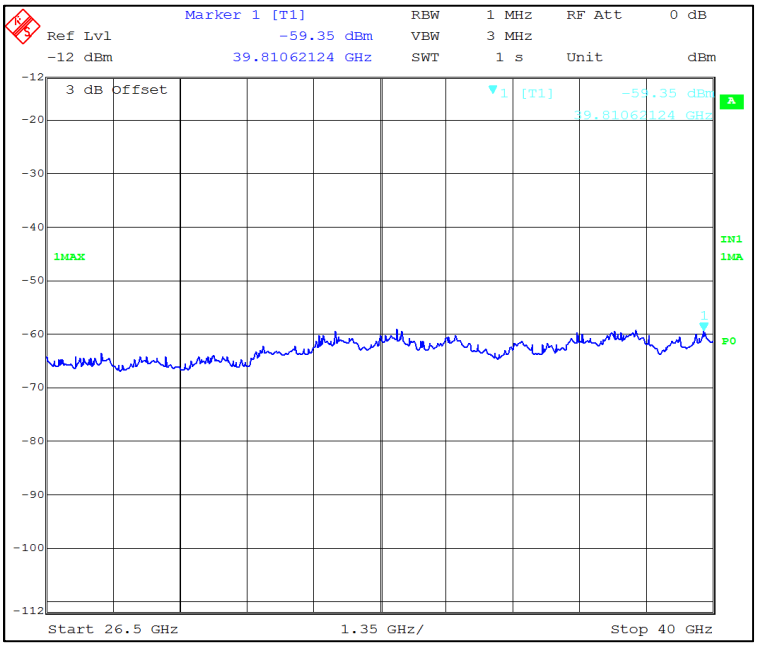


Figure 245: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

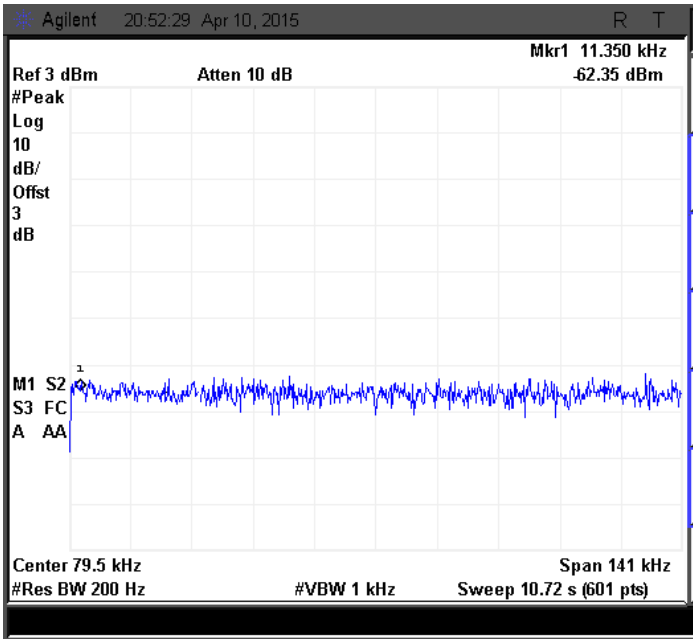


Figure 246: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

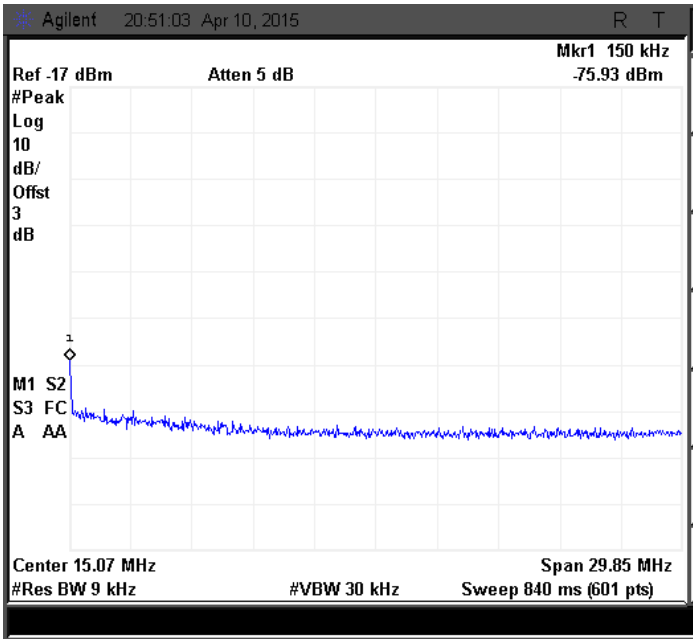


Figure 247: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

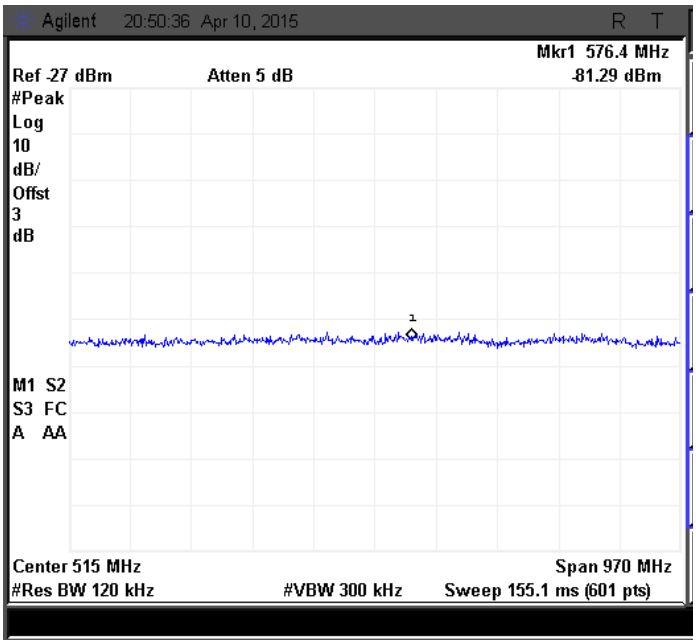


Figure 248: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

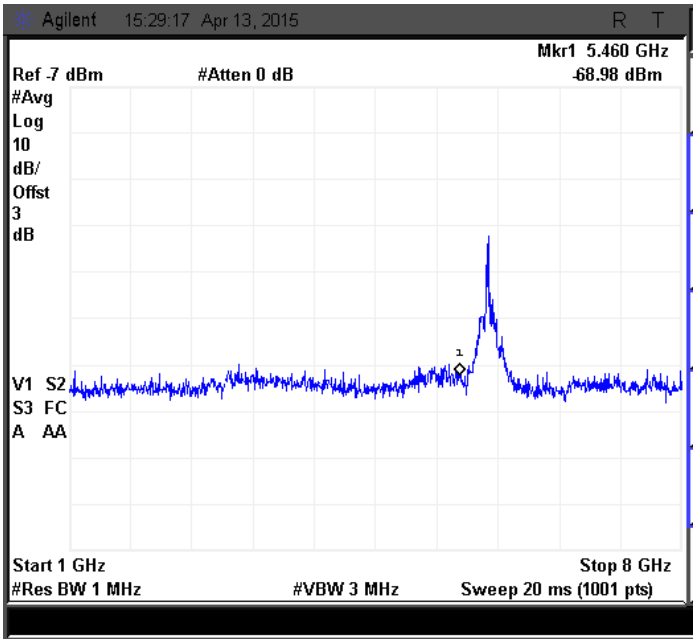


Figure 249: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

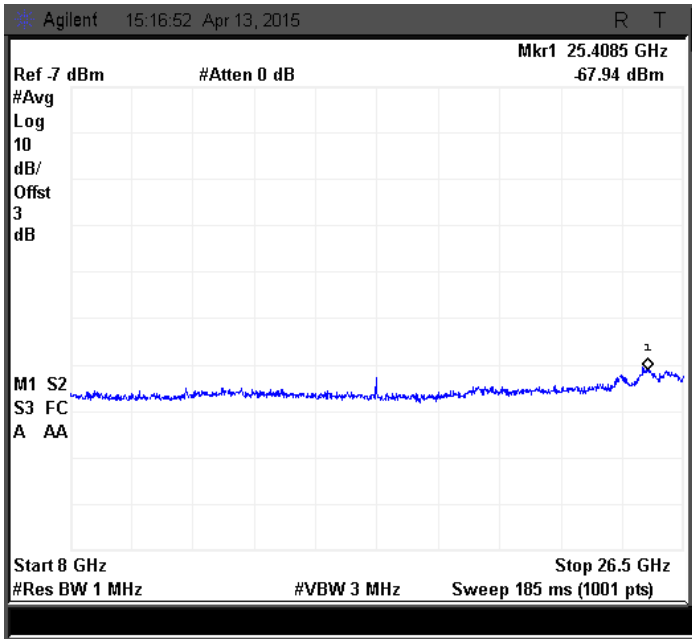


Figure 250: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

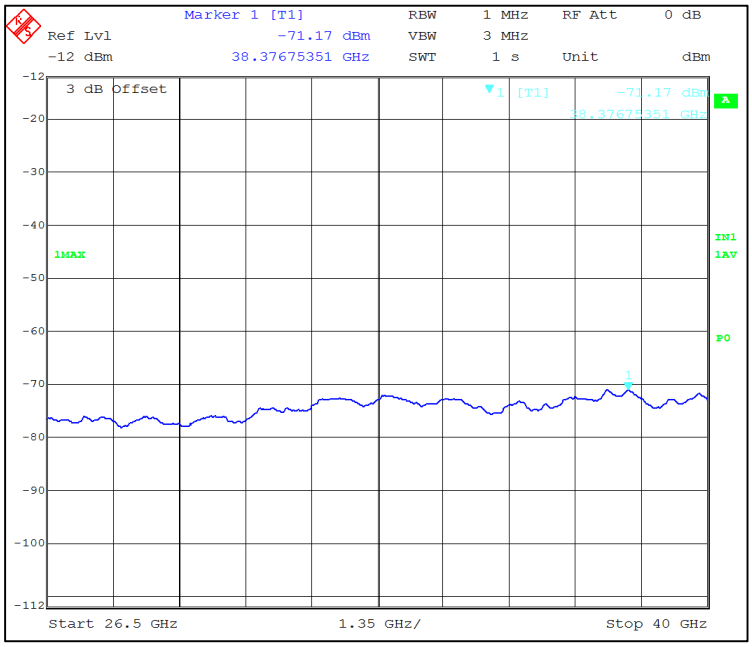


Figure 251: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

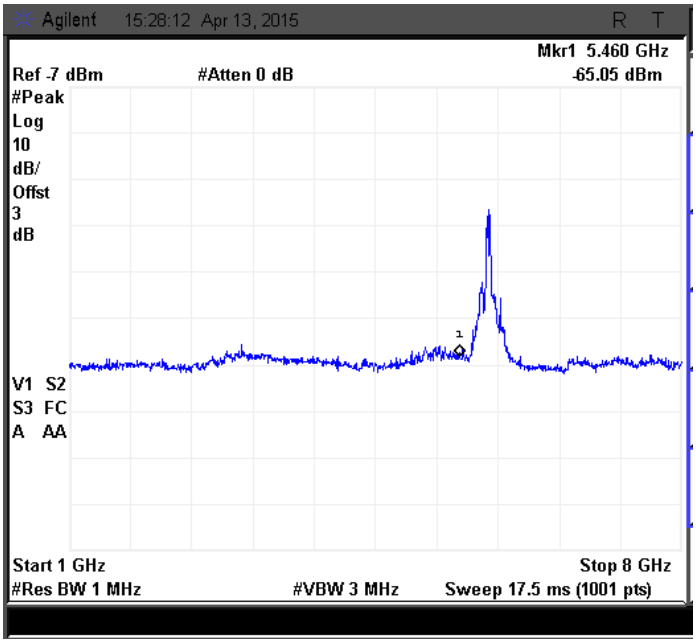


Figure 252: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

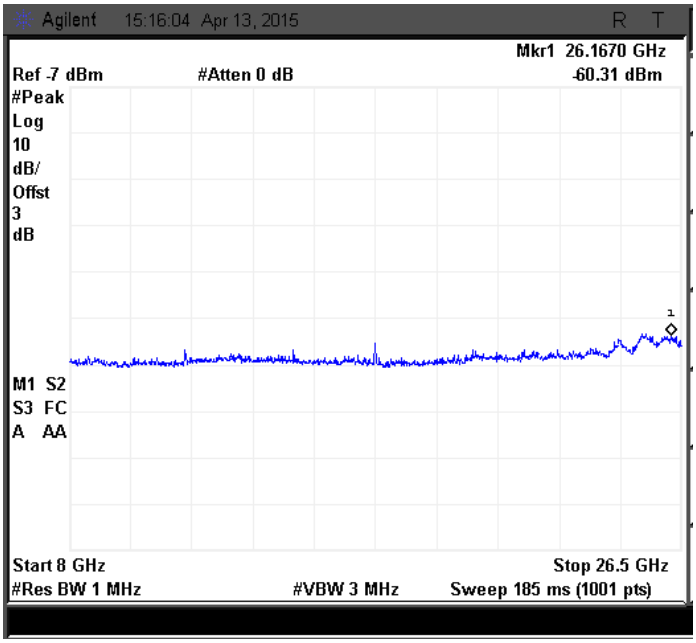


Figure 253: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

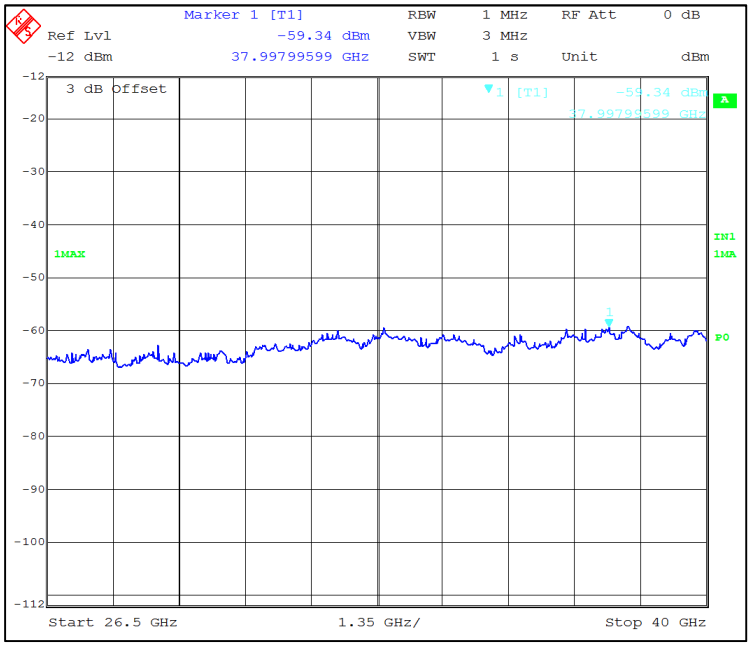


Figure 254: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.7.3 40MHz MODULATION BW-HIGH CHANNEL_5825 MHz

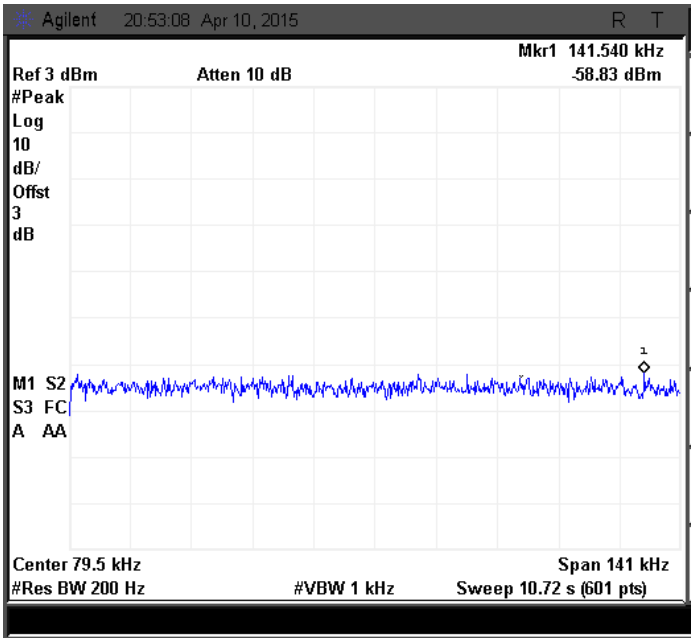


Figure 255: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

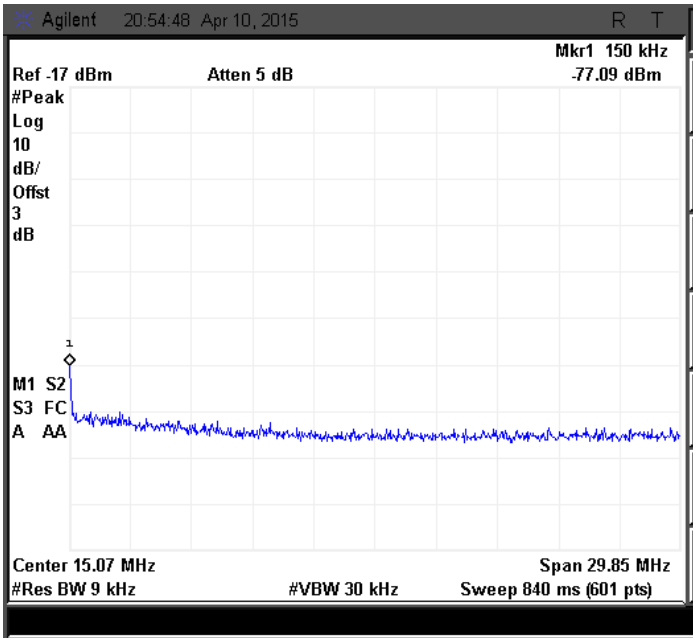


Figure 256: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

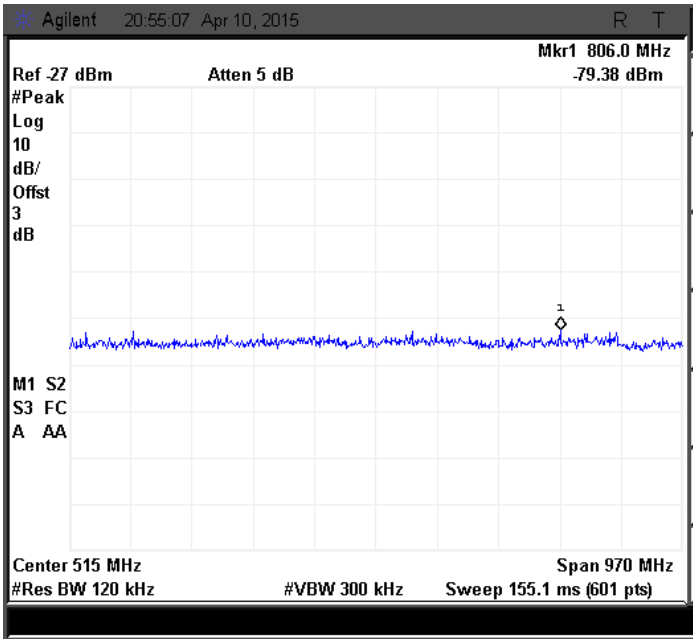


Figure 257: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

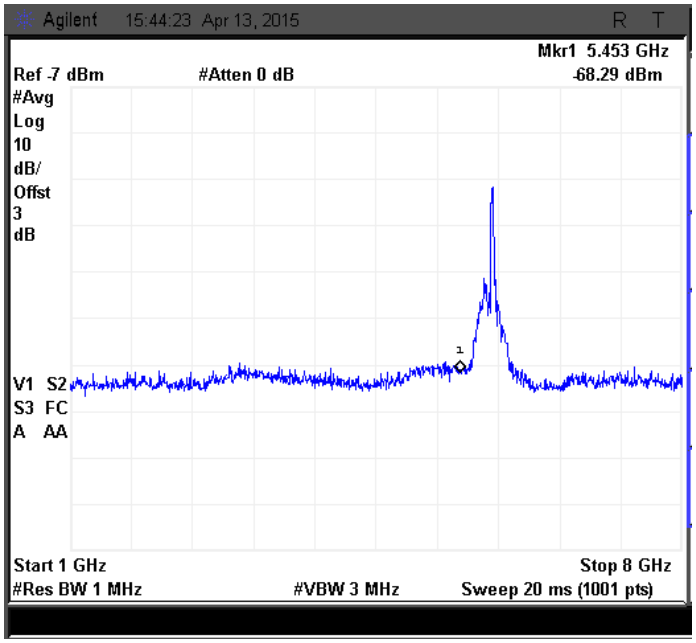


Figure 258: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

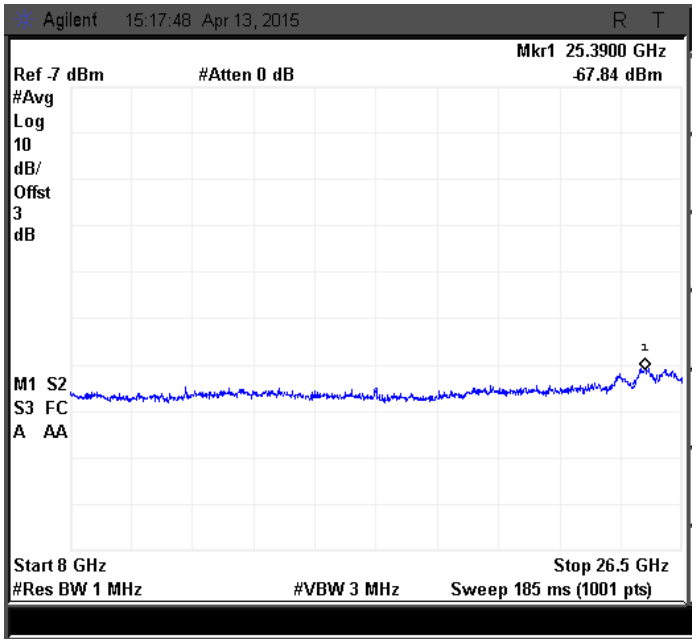


Figure 259: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

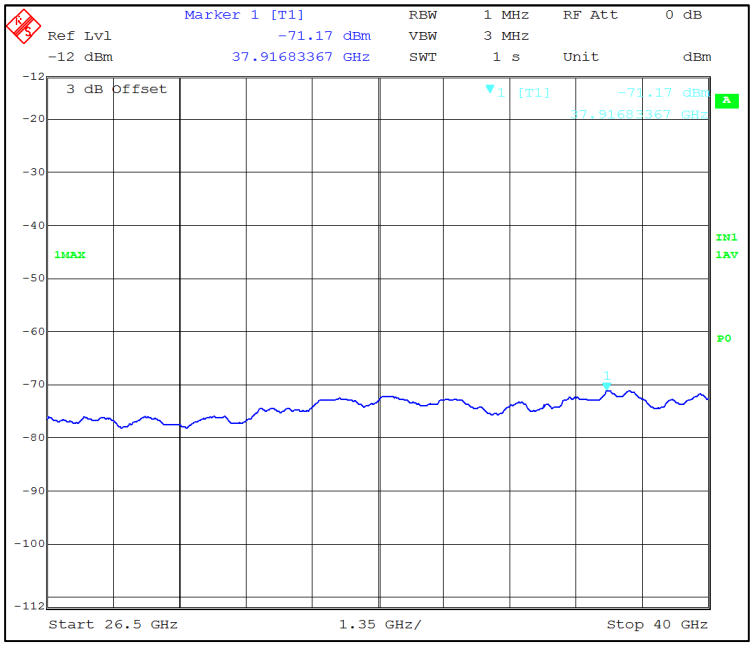


Figure 260: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

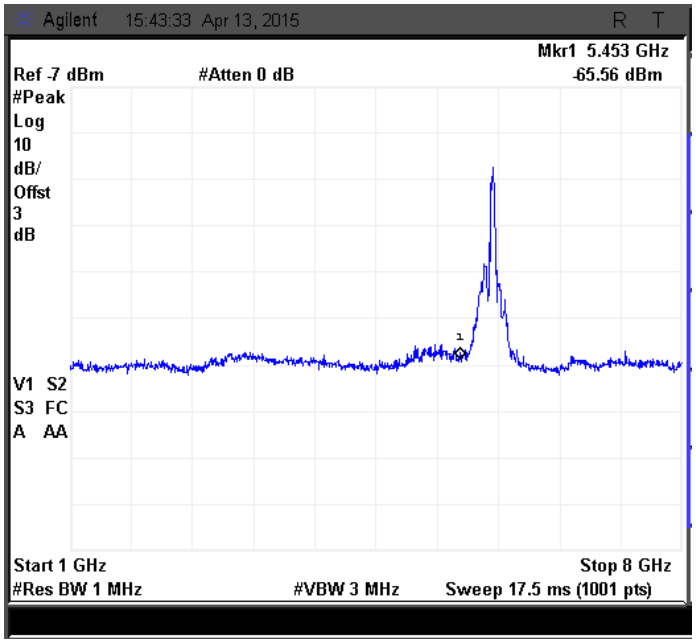


Figure 261: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

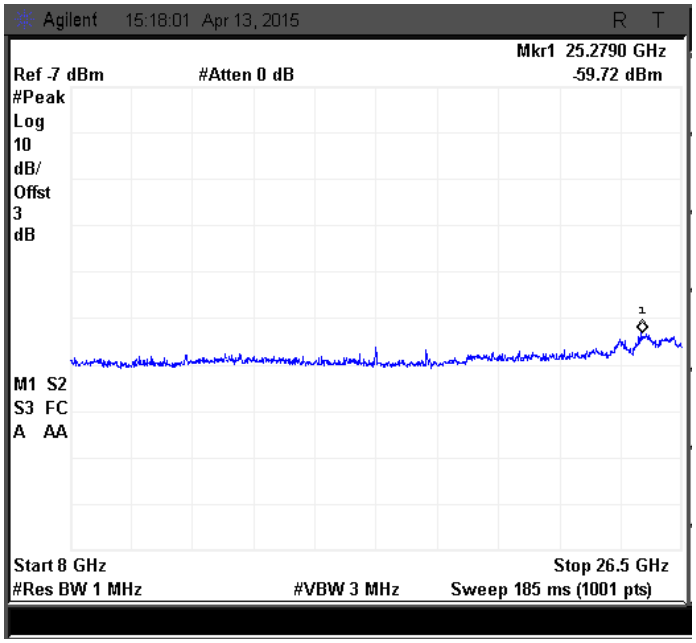


Figure 262: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

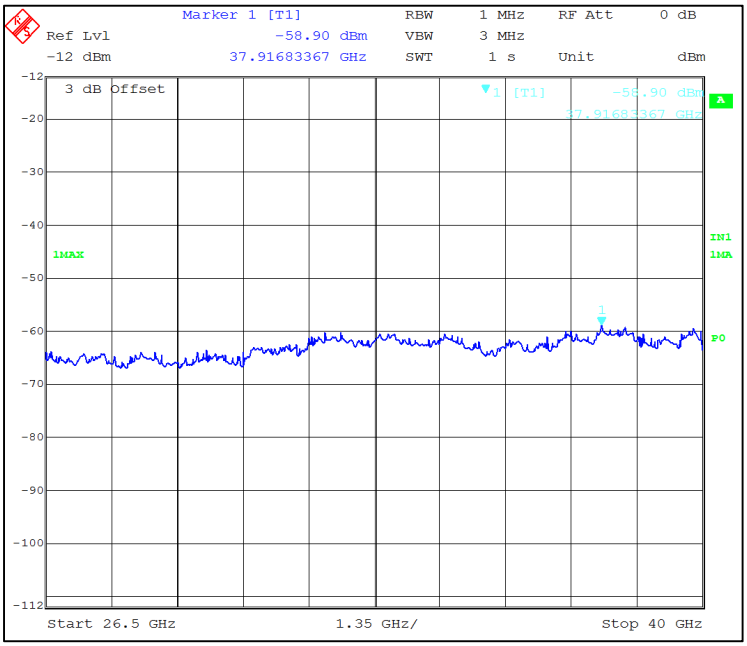


Figure 263: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

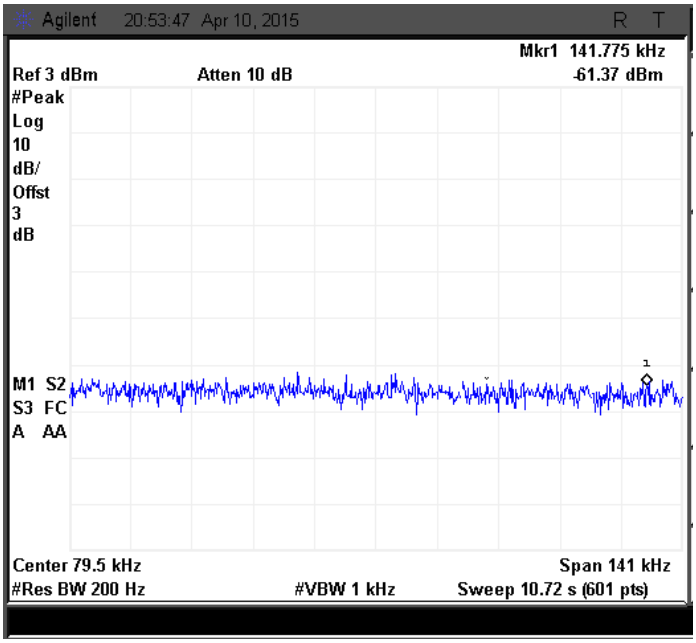


Figure 264: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

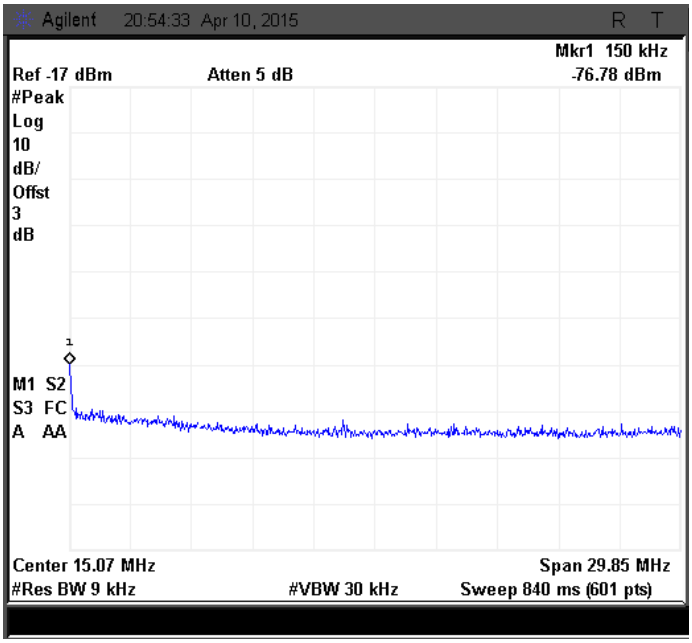


Figure 265: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

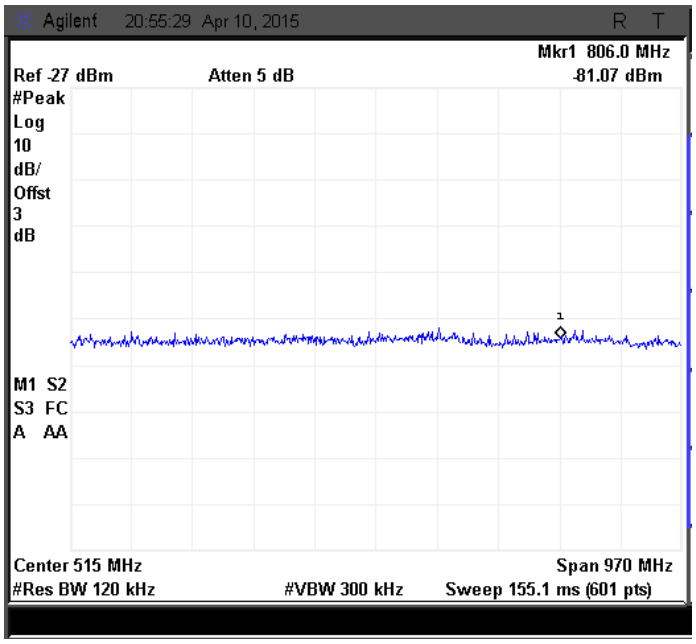


Figure 266: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

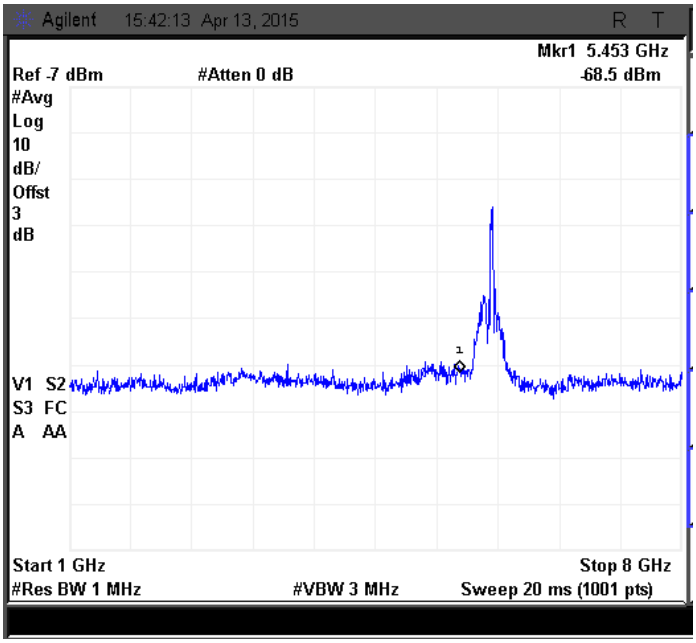


Figure 267: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

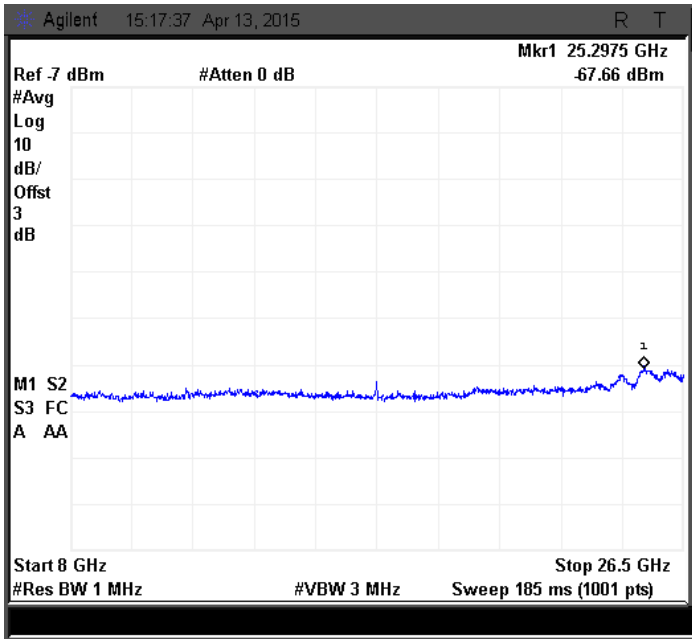


Figure 268: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

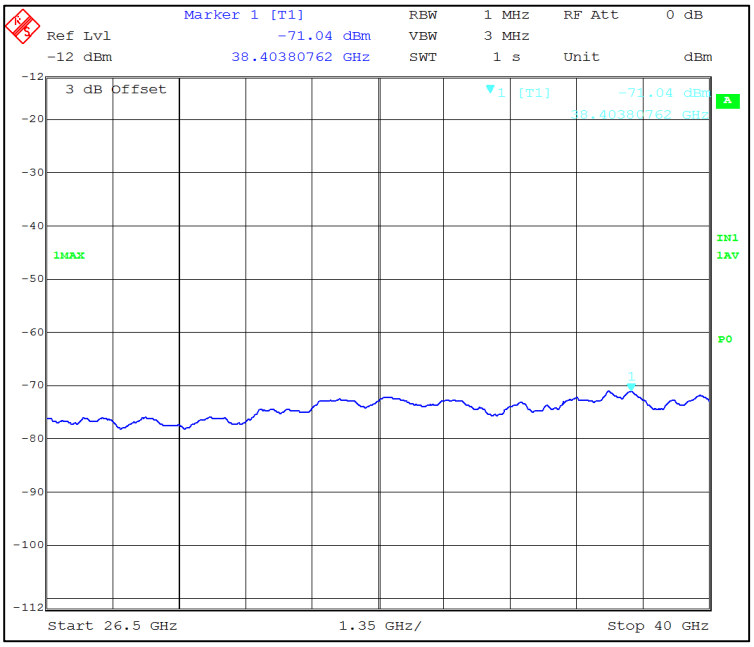


Figure 269: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

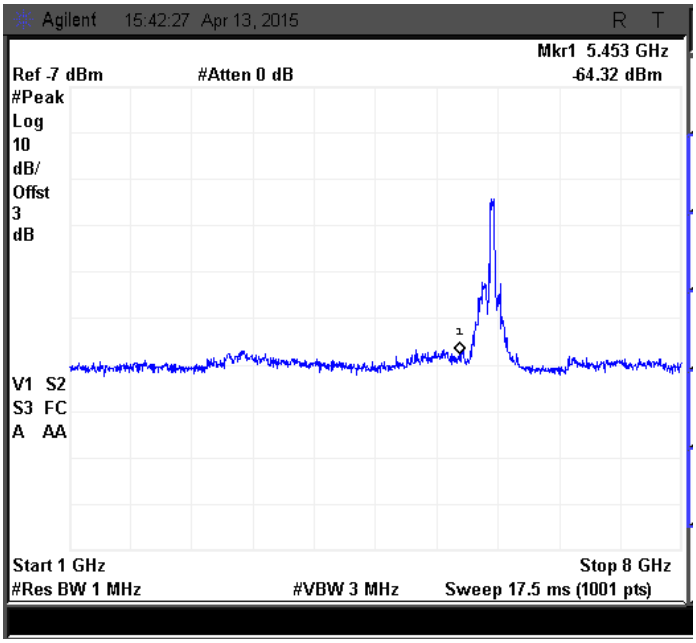


Figure 270: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

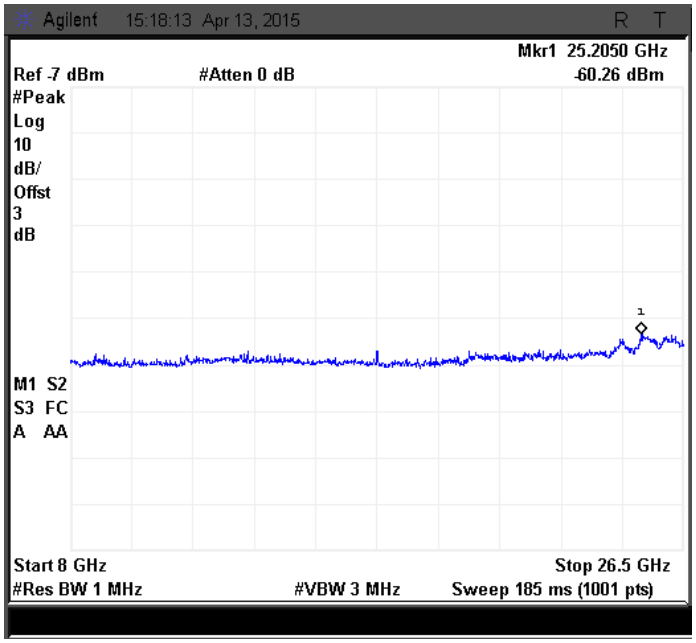


Figure 271: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

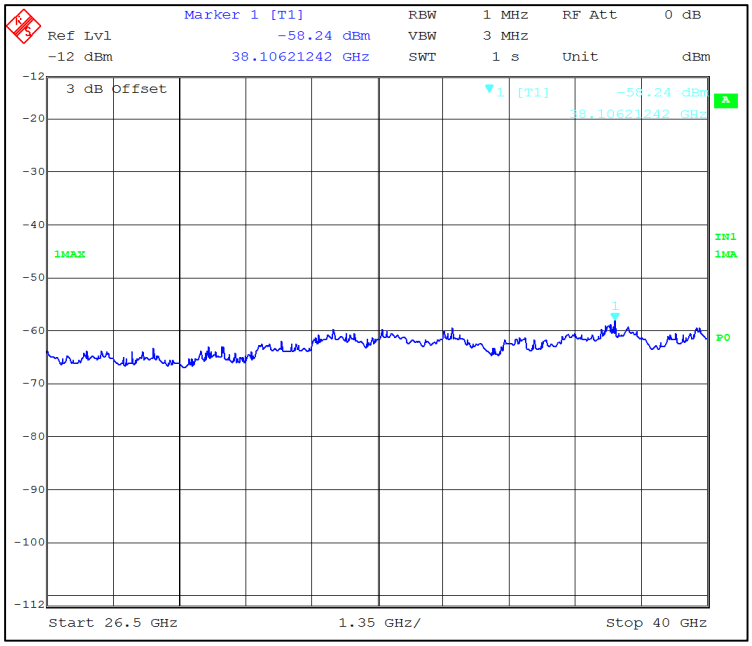


Figure 272: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.7.4 5MHz Modulation BW-Low channel_5735 MHz

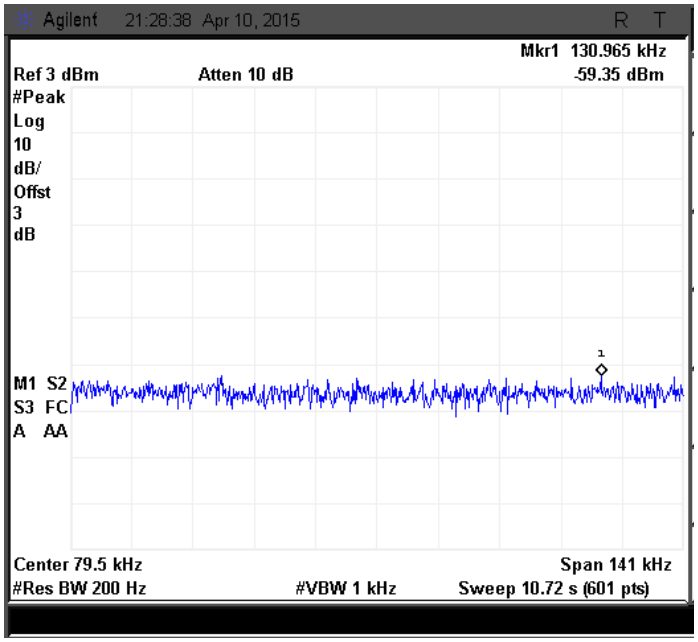


Figure 273: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

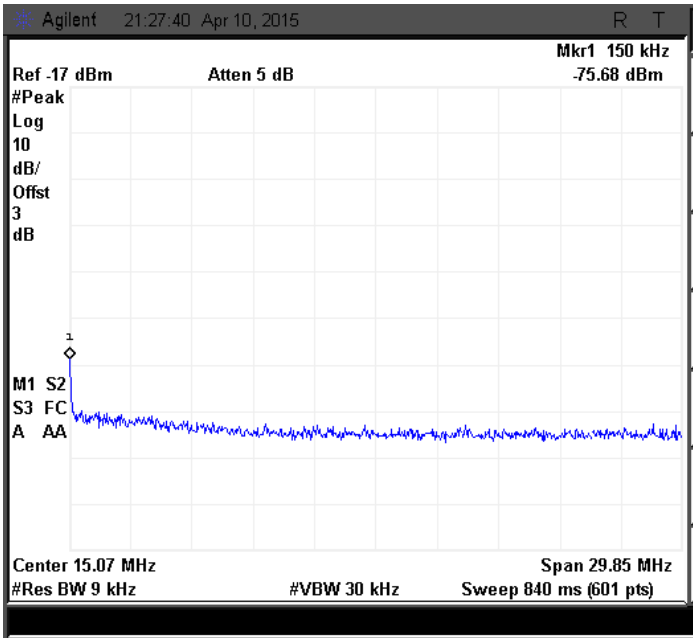


Figure 274: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

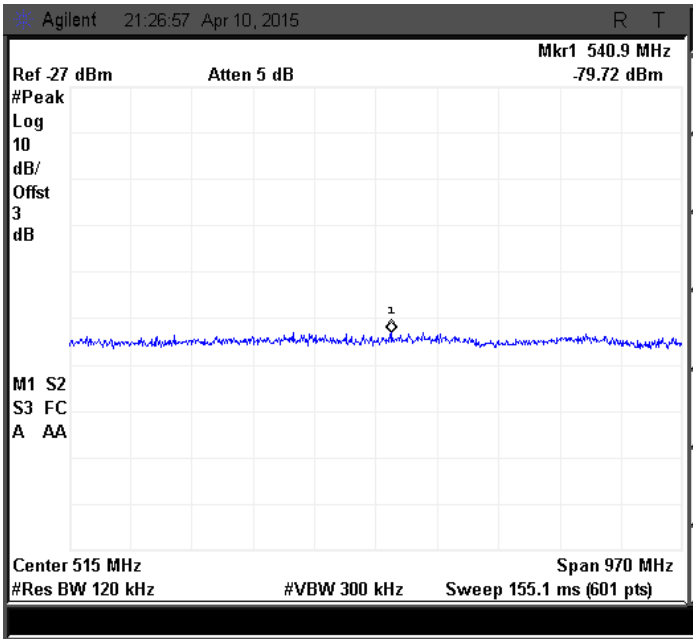


Figure 275: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

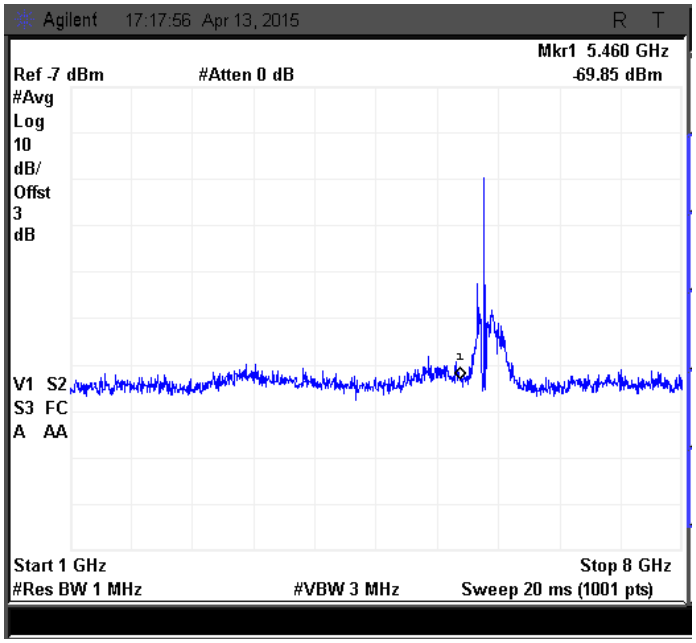


Figure 276: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

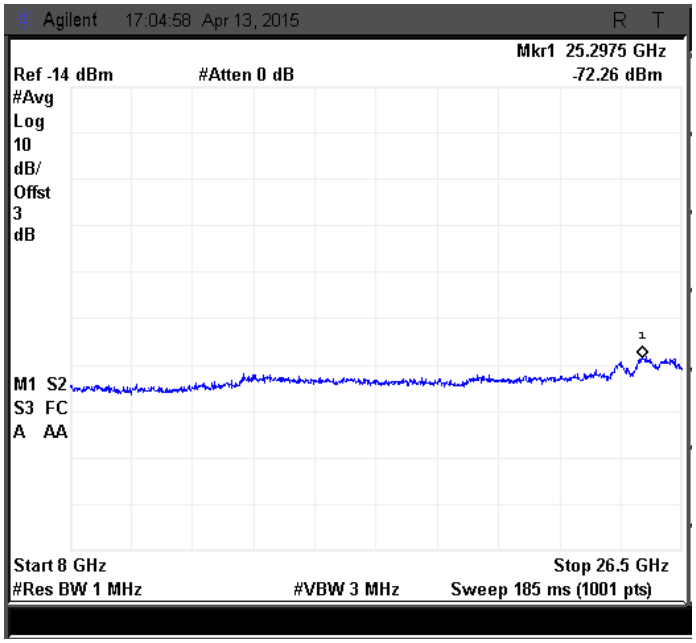


Figure 277: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

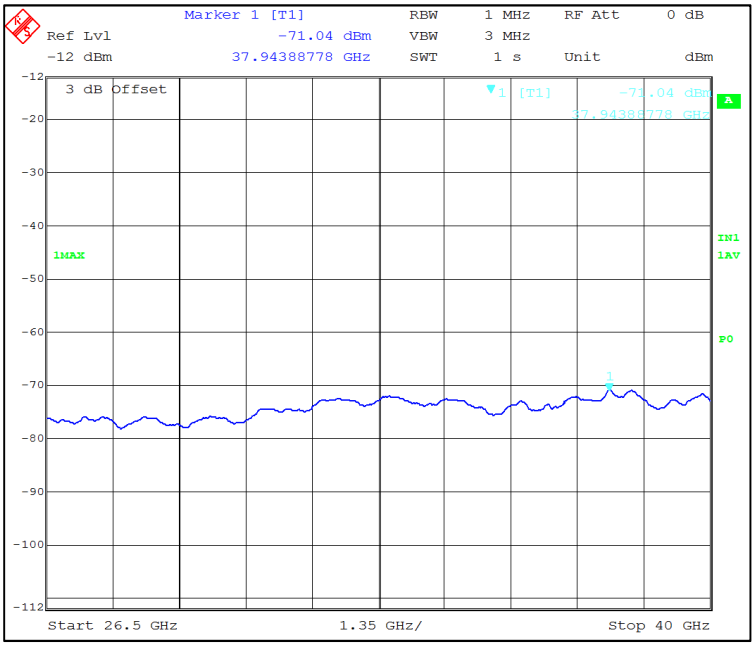


Figure 278: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

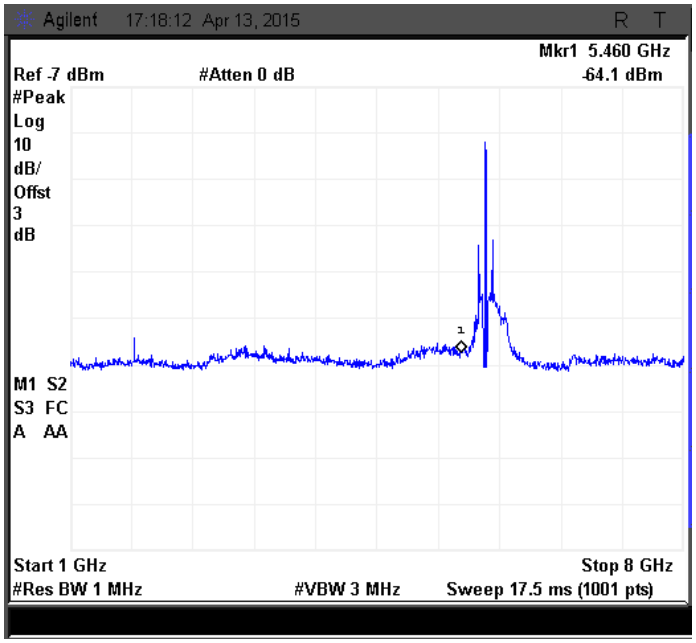


Figure 279: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

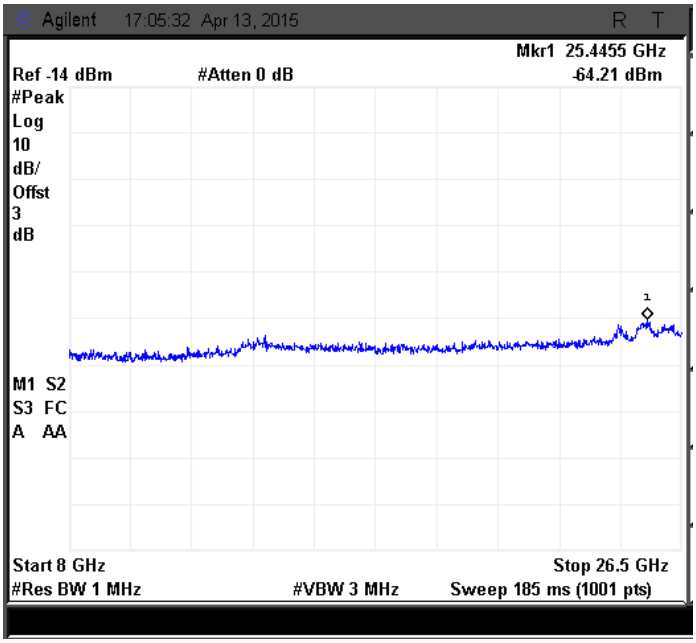


Figure 280: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

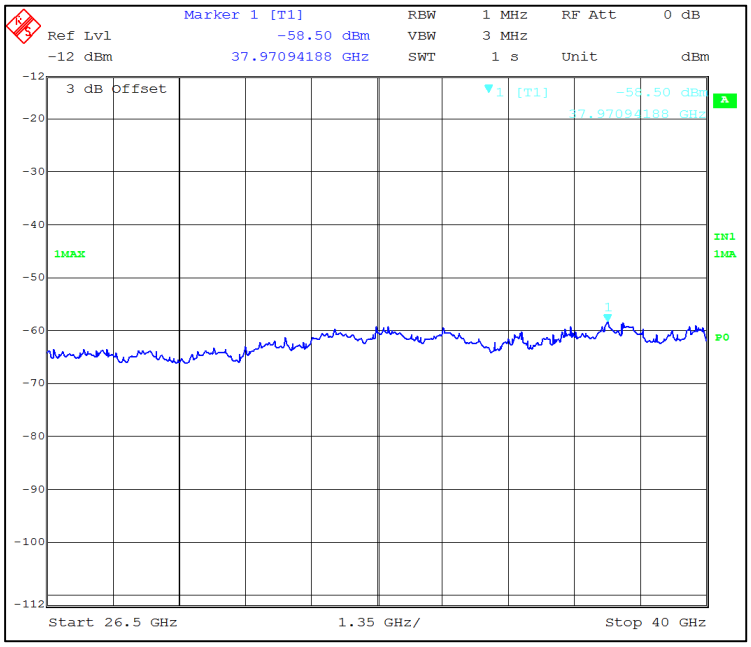


Figure 281: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

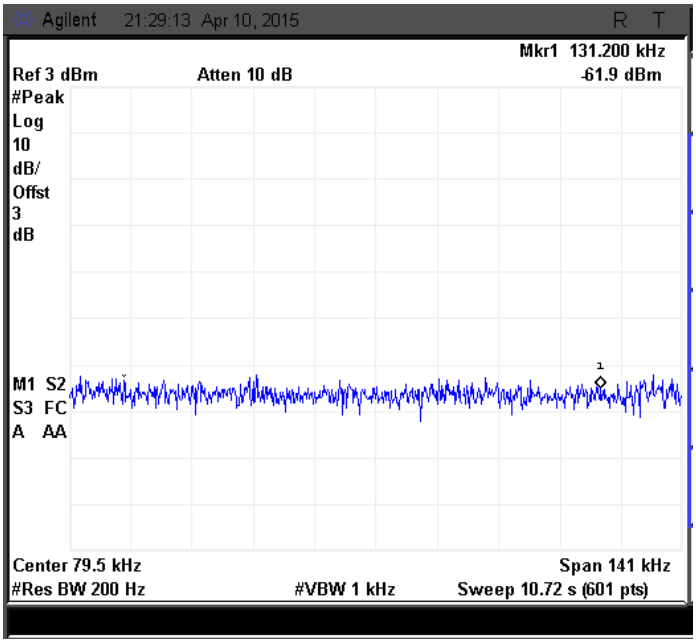


Figure 282: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

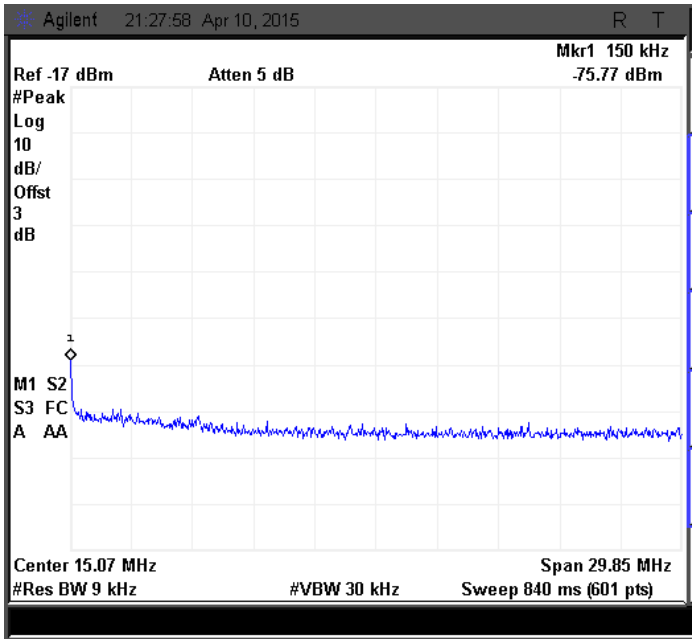


Figure 283: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

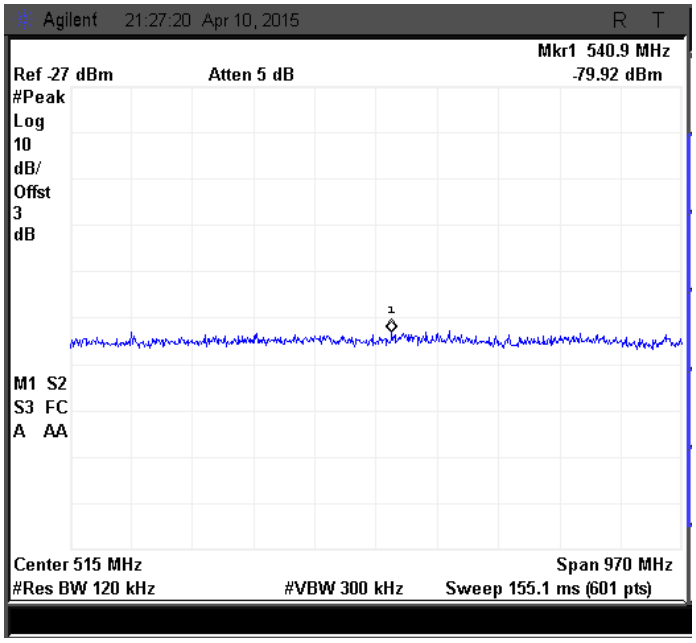


Figure 284: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

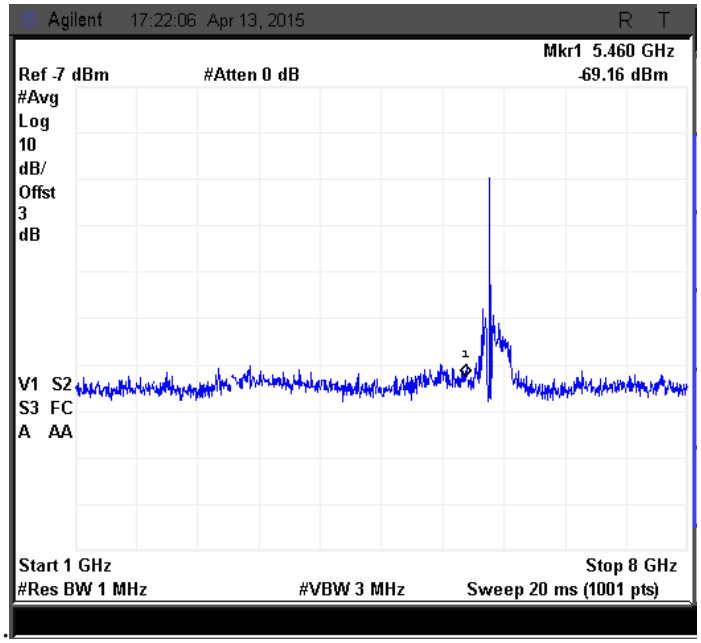


Figure 285: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

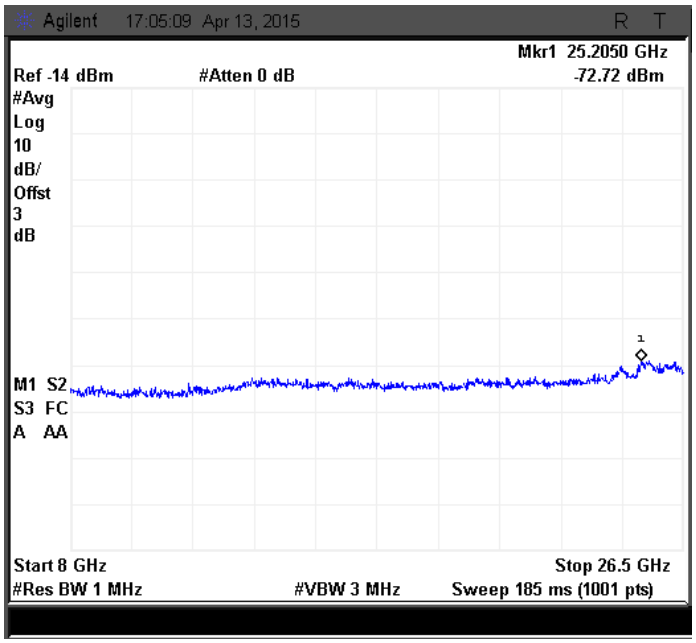


Figure 286: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

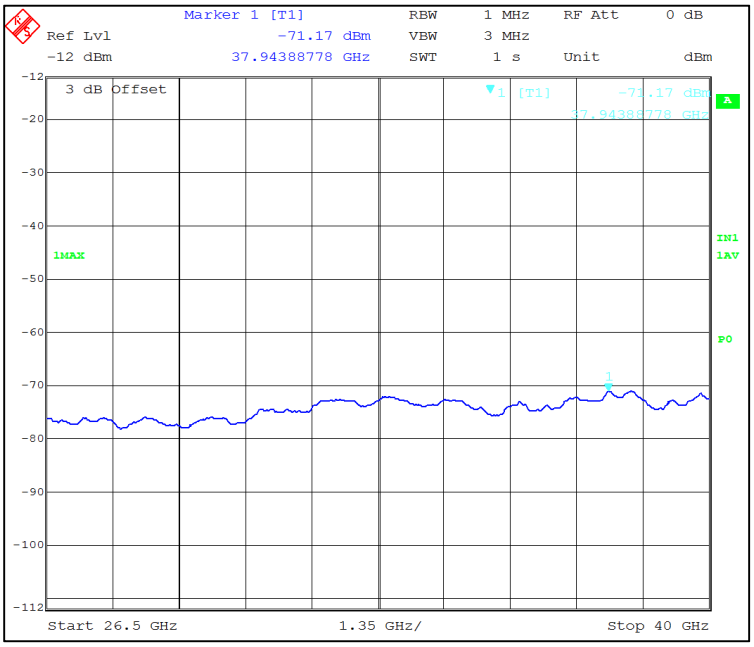


Figure 287: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

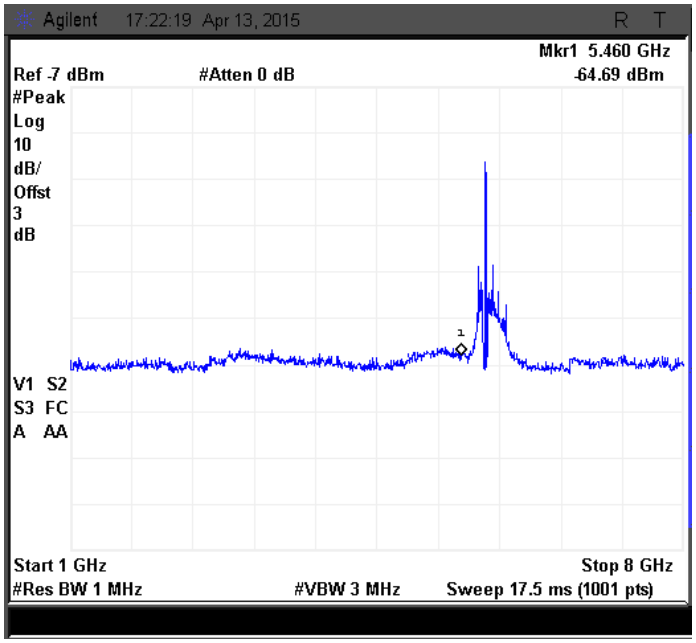


Figure 288: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

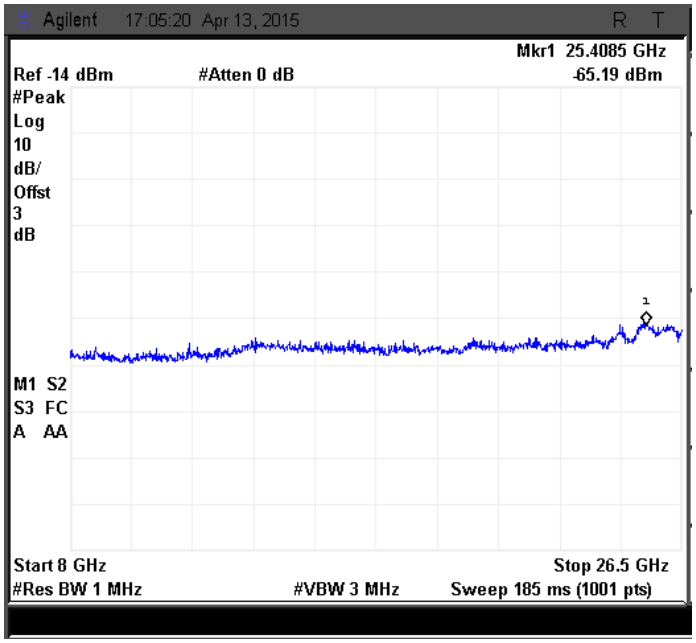


Figure 289: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

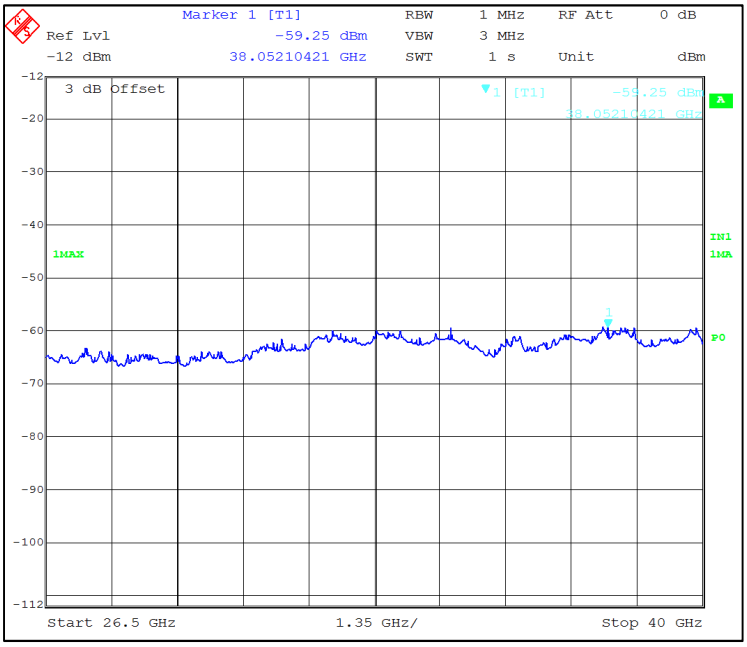


Figure 290: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.7.5 5MHz Modulation BW-Mid channel_5775 MHz

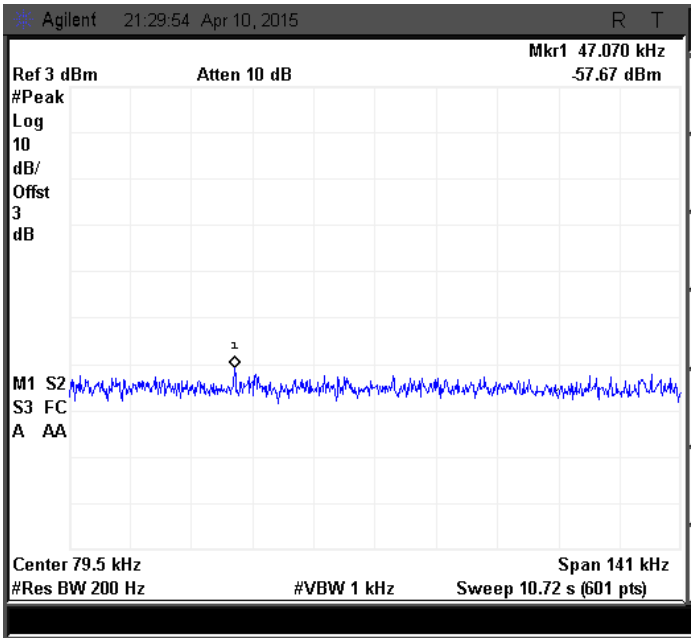


Figure 291: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

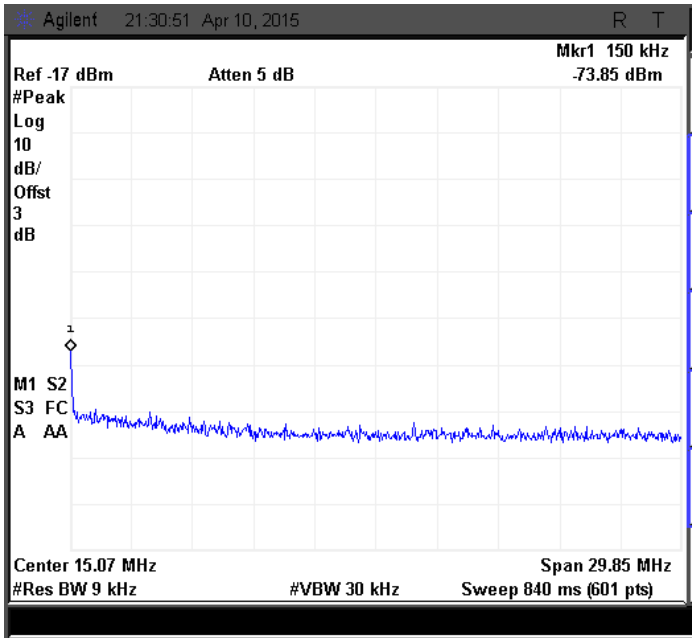


Figure 292: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

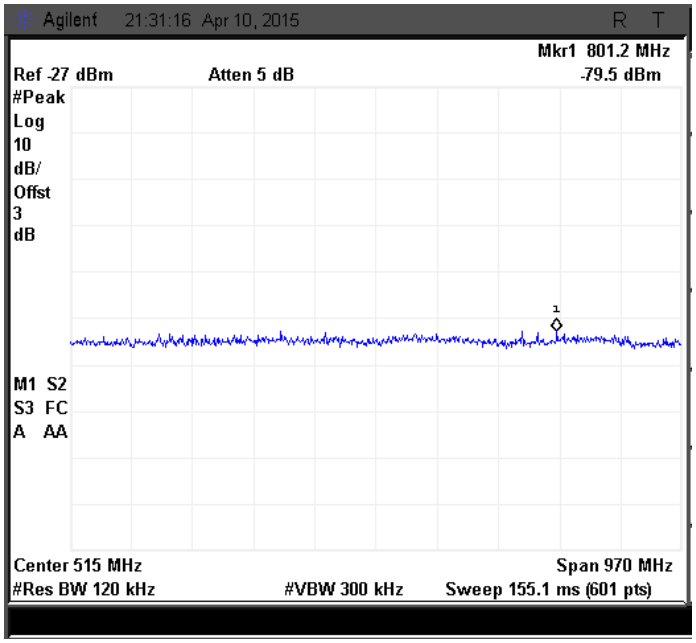


Figure 293: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

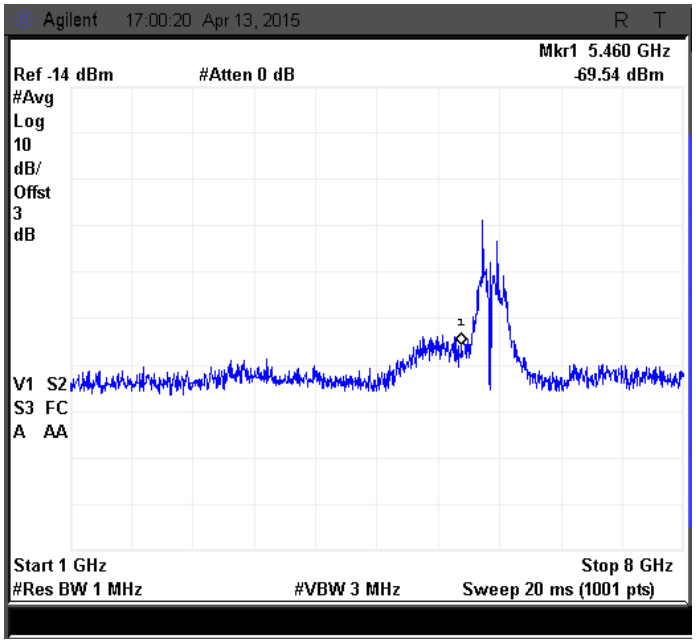


Figure 294: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

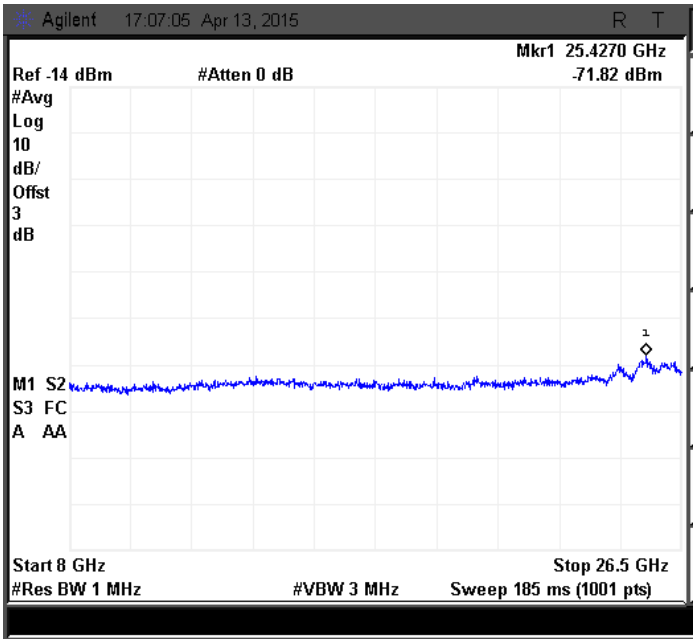


Figure 295: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

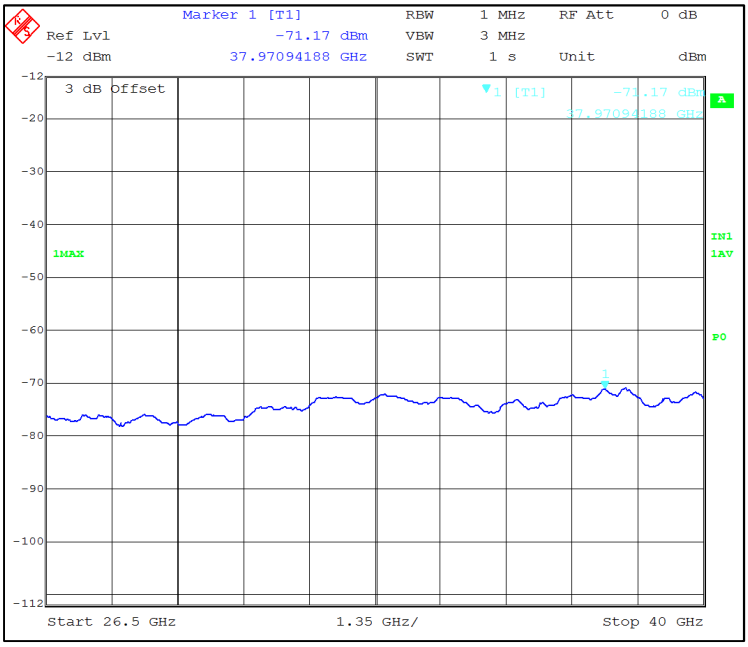


Figure 296: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

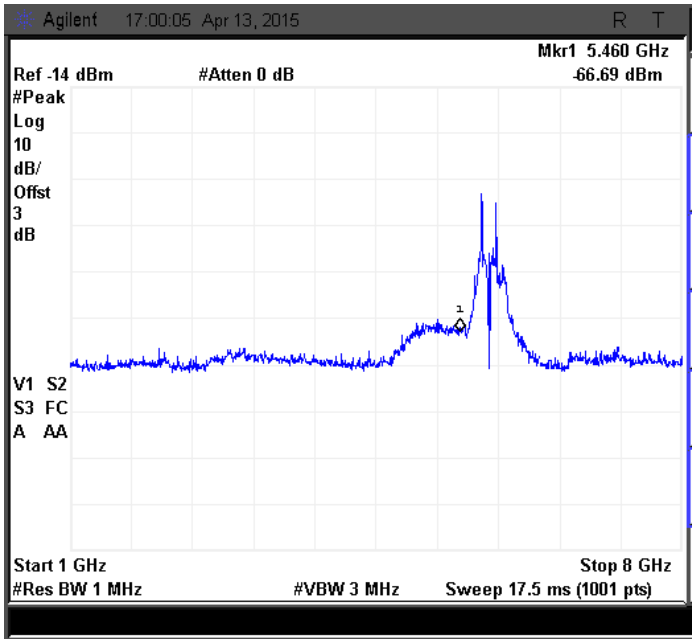


Figure 297: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

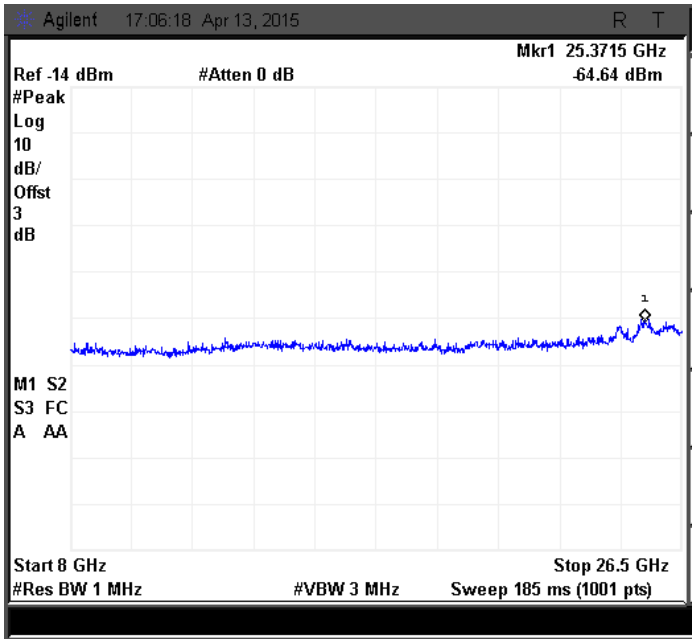


Figure 298: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

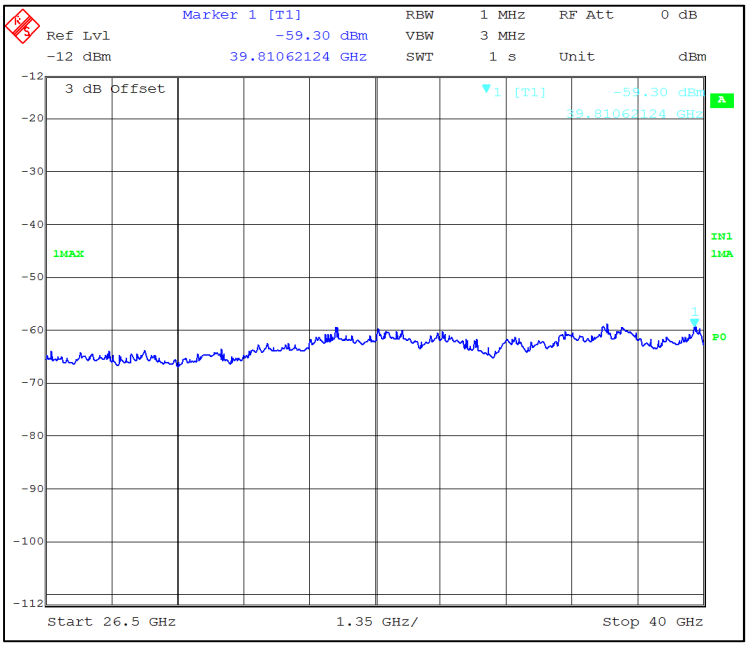


Figure 299: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

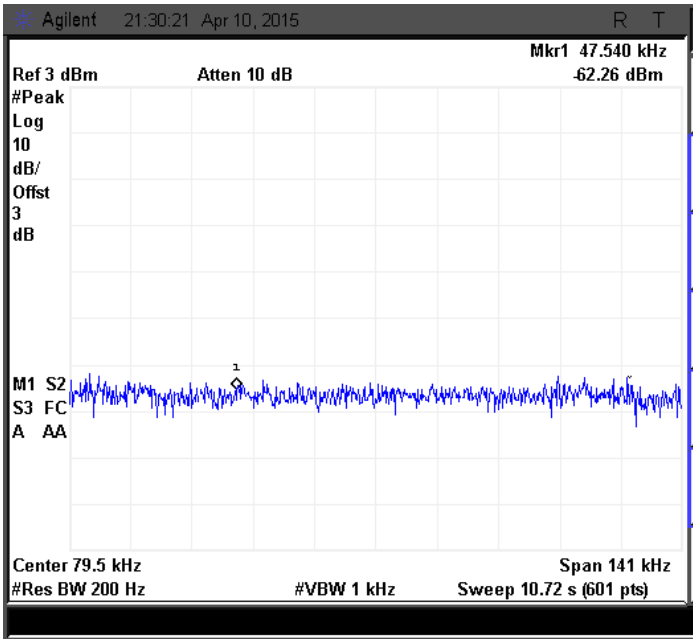


Figure 300: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

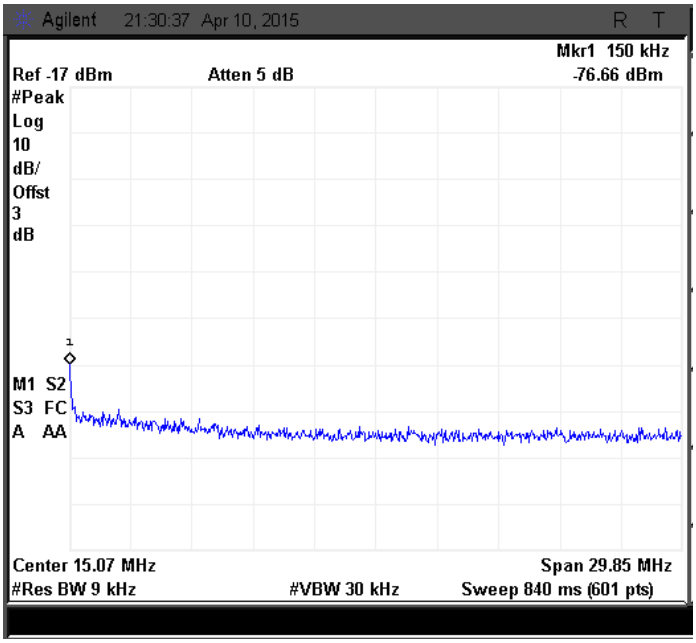


Figure 301: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

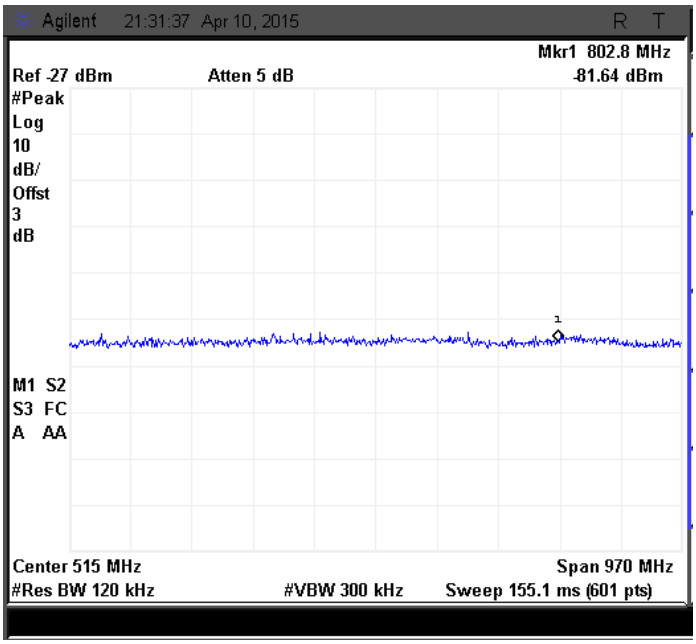


Figure 302: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

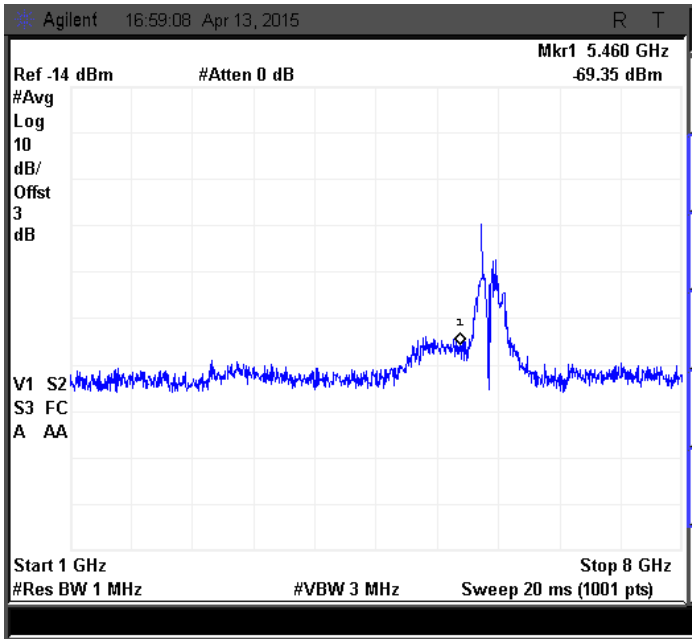


Figure 303: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

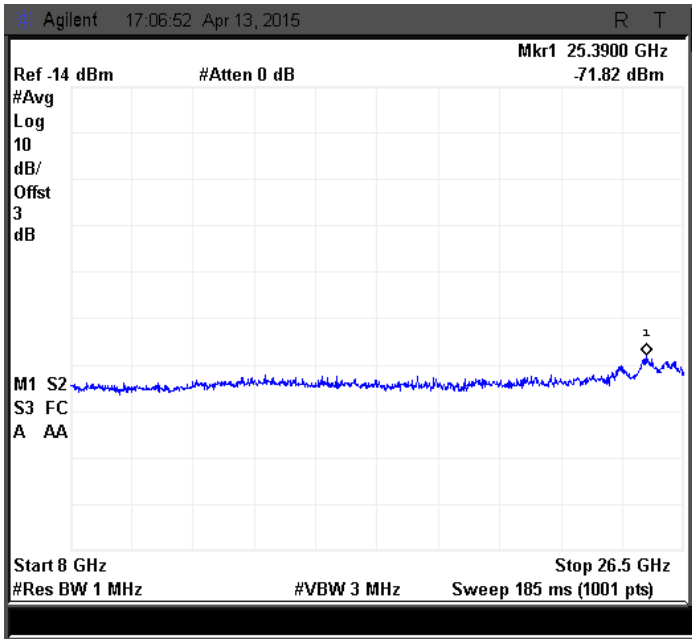


Figure 304: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

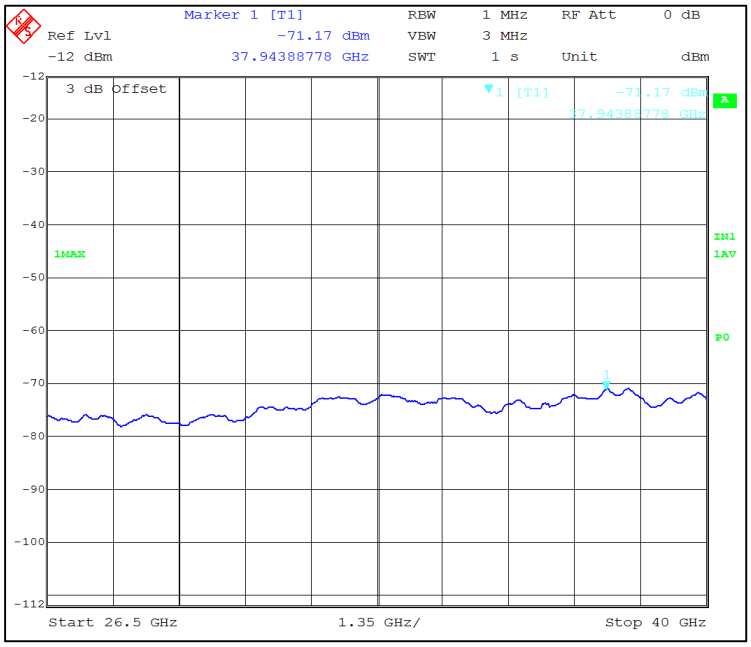


Figure 305: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

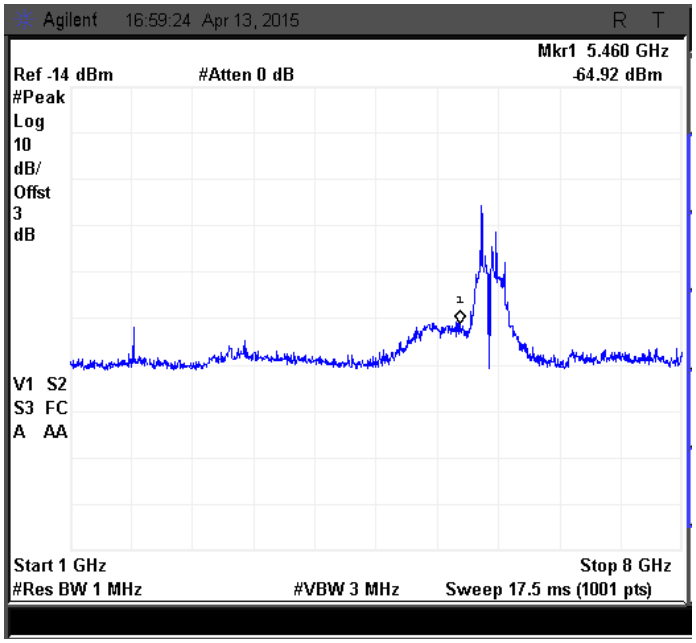


Figure 306: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

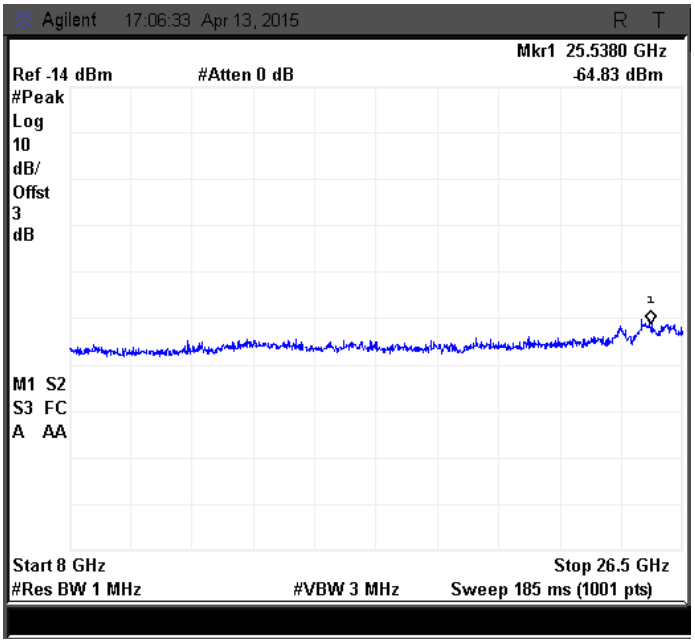


Figure 307: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

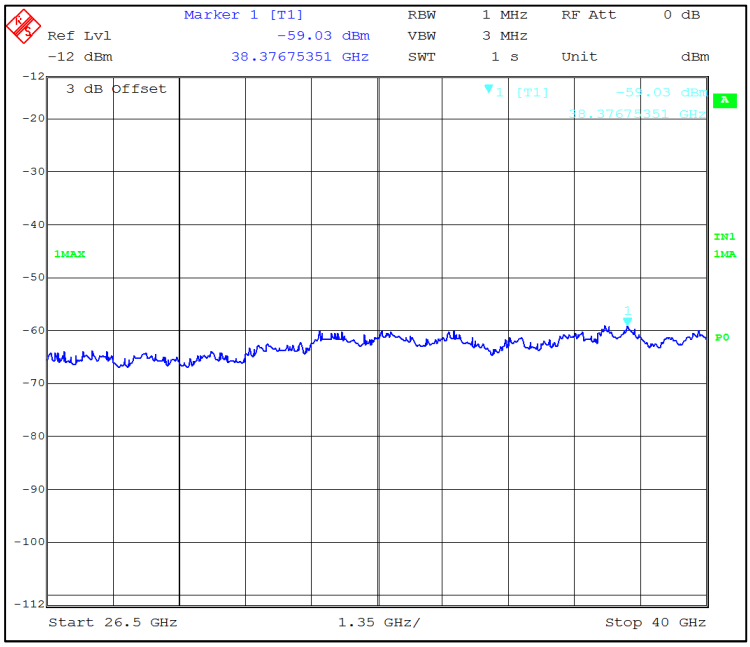


Figure 308: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.7.6 5MHz Modulation BW-High channel_5840 MHz

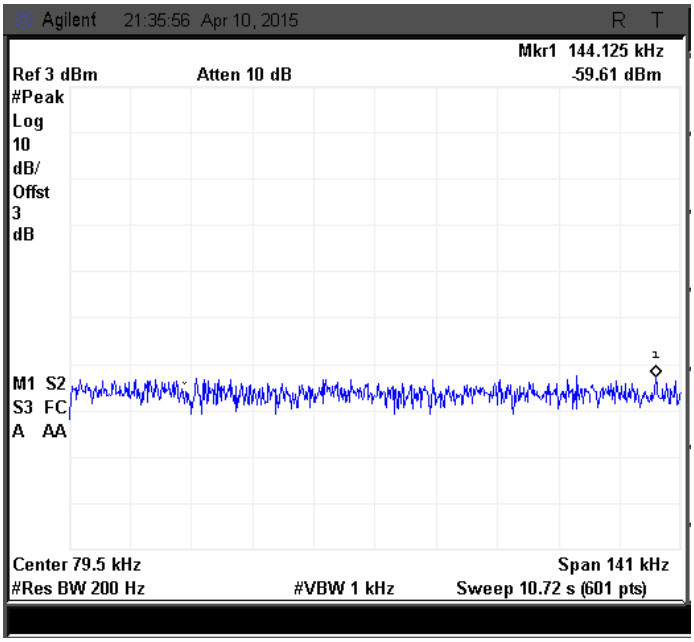


Figure 309: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 0

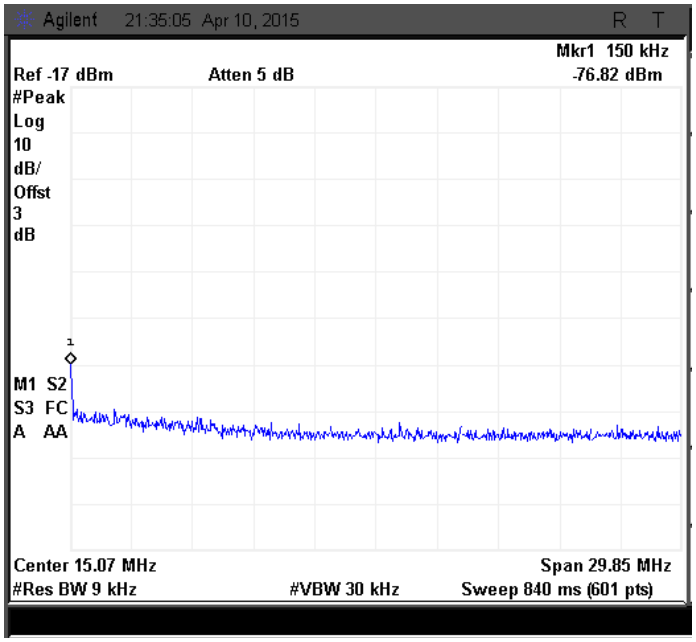


Figure 310: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 0

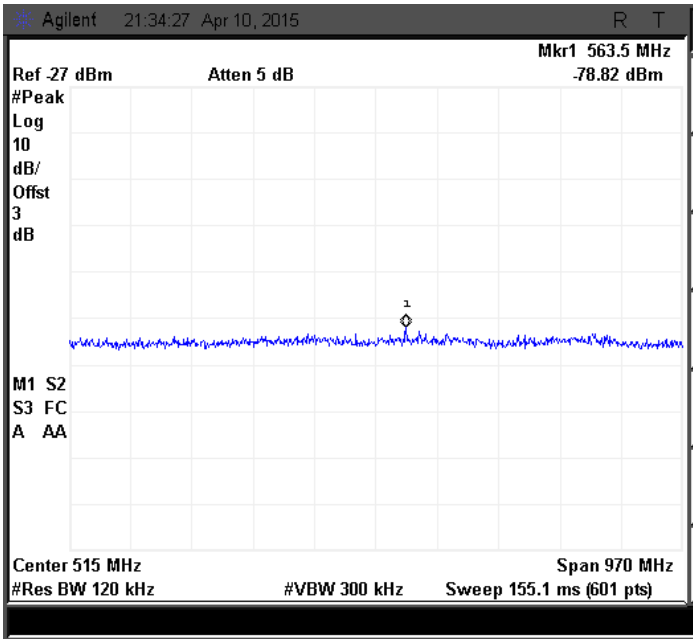


Figure 311: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 0

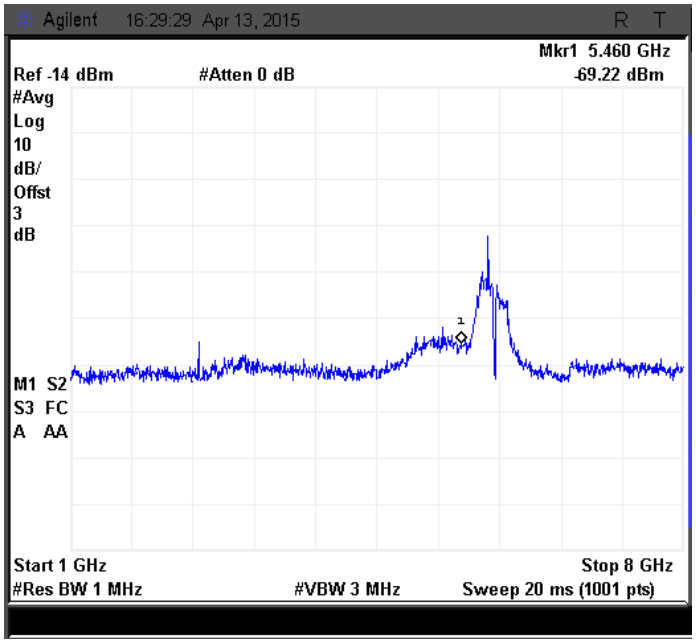


Figure 312: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 0

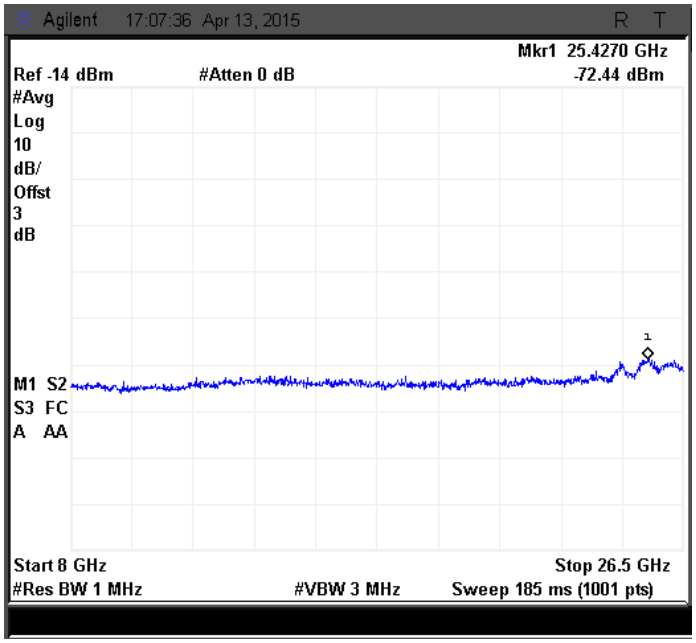


Figure 313: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 0

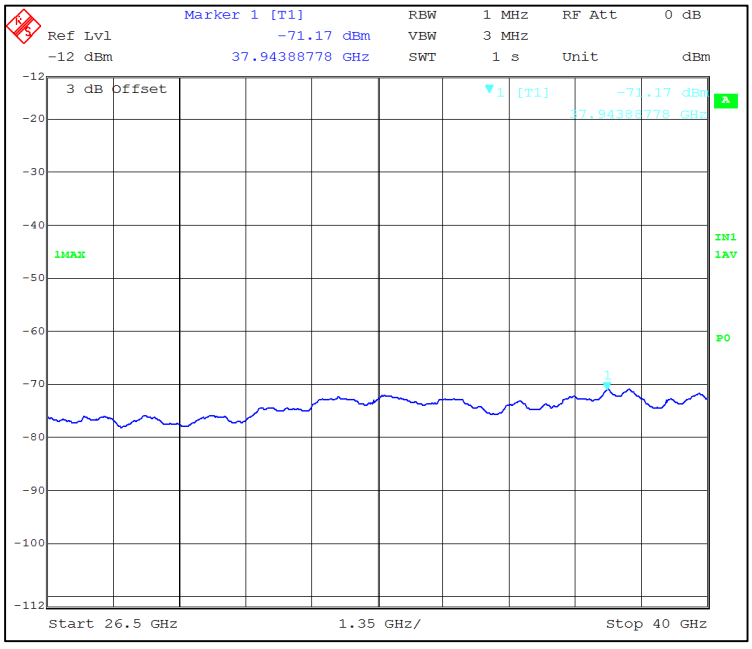


Figure 314: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 0

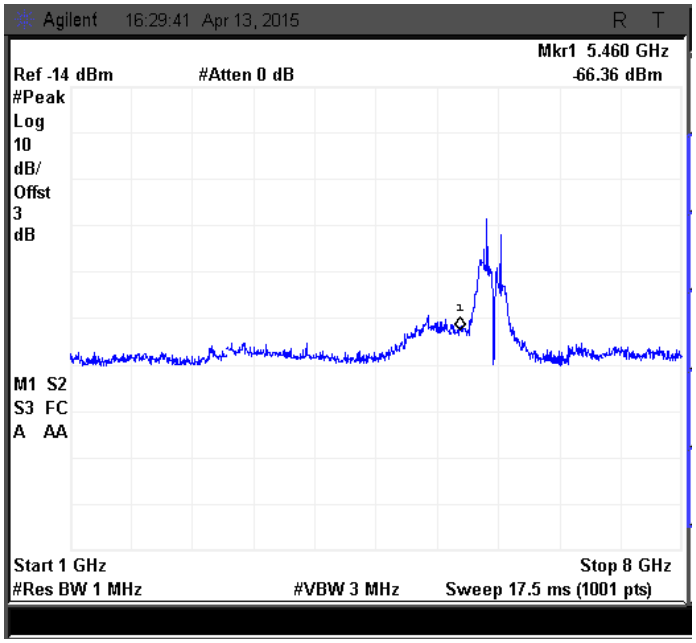


Figure 315: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 0

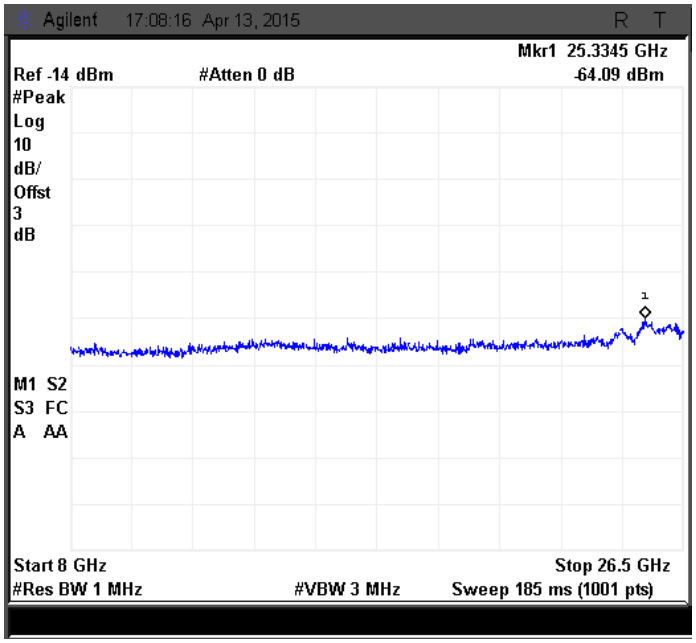


Figure 316: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 0

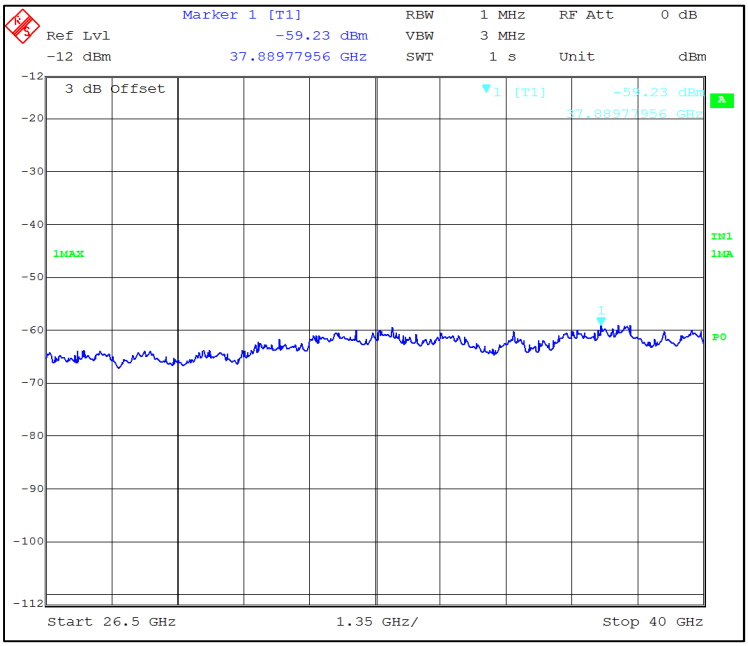


Figure 317: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 0

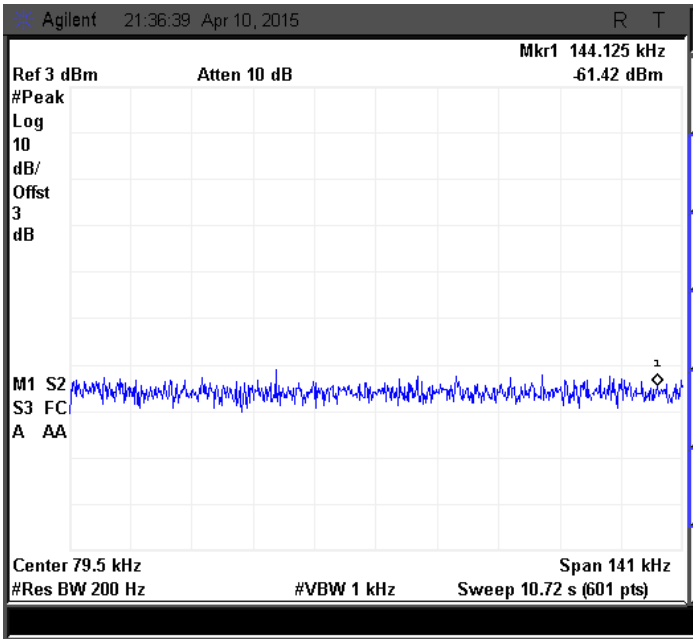


Figure 318: Emission measured with Peak Detector from 9 kHz to 150 kHz at Ch. 1

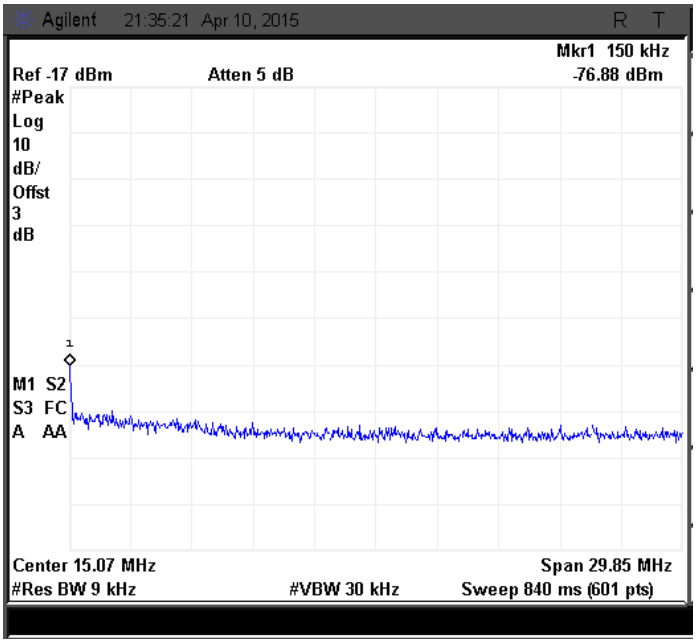


Figure 319: Emission measured with Peak Detector from 150 kHz to 30MHz at Ch. 1

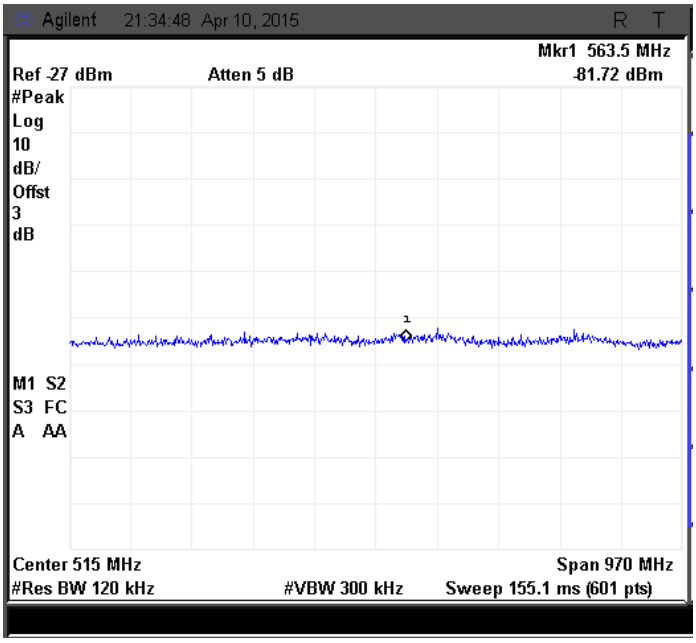


Figure 320: Emission measured with Peak Detector from 30MHz to 1GHz at Ch. 1

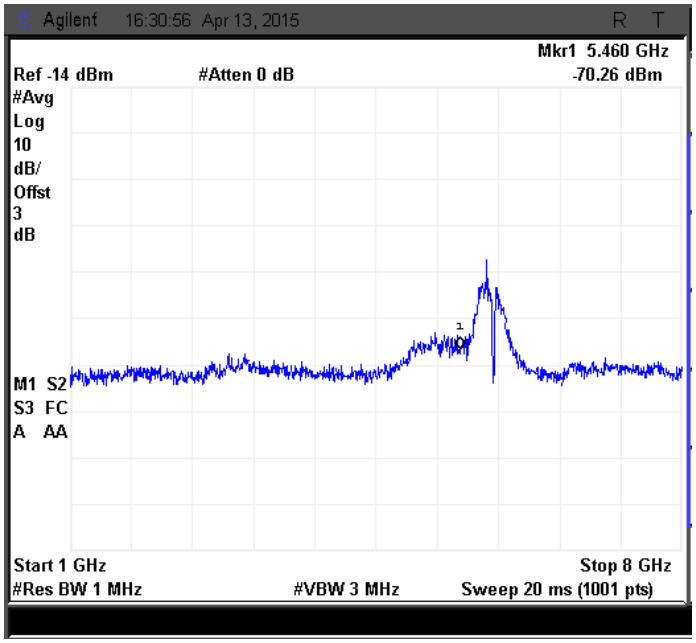


Figure 321: Emission measured with Average Detector from 1GHz to 8GHz at Ch. 1

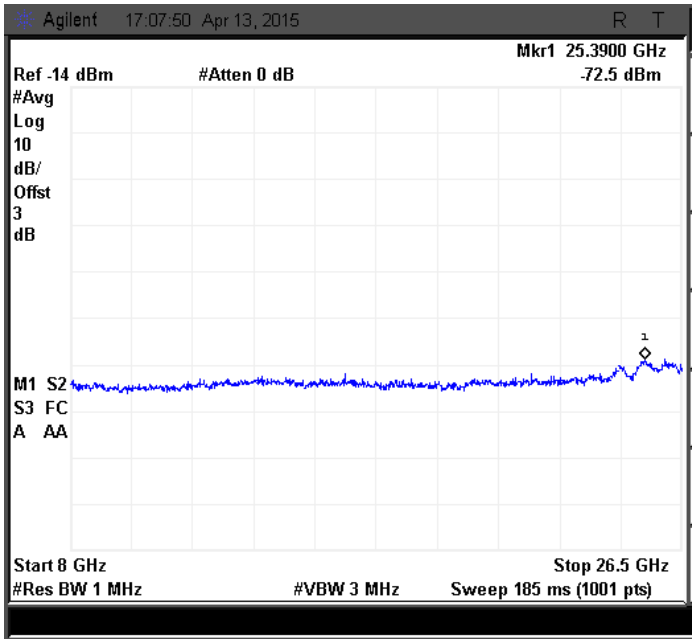


Figure 322: Emission measured with Average Detector from 8GHz to 26.5GHz at Ch. 1

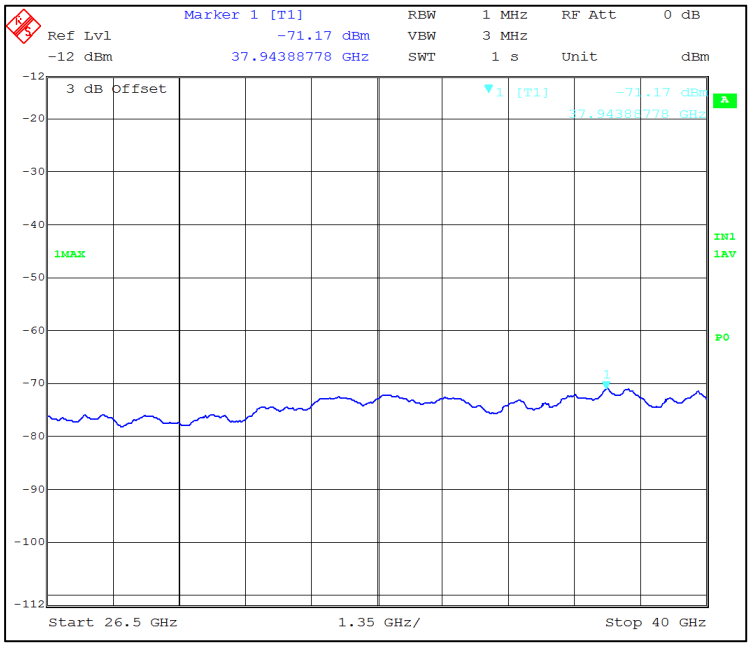


Figure 323: Emission measured with Average Detector from 26.5GHz to 40GHz at Ch. 1

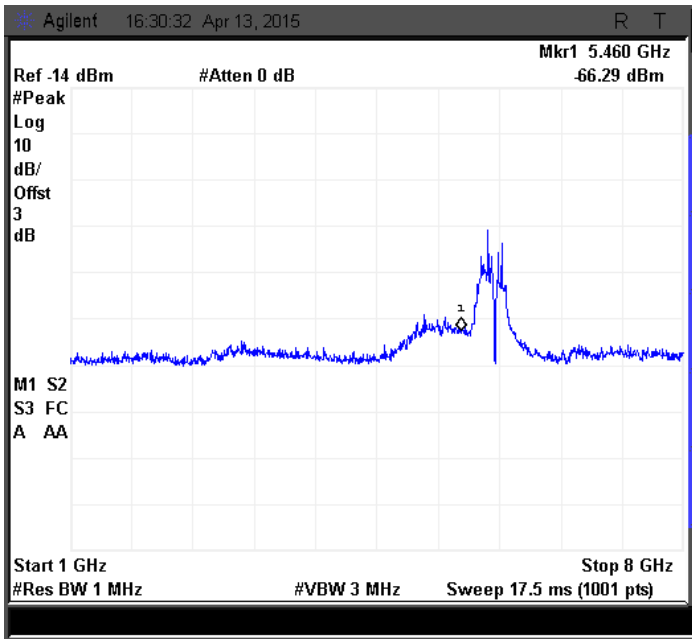


Figure 324: Emission measured with Peak Detector from 1GHz to 8GHz at Ch. 1

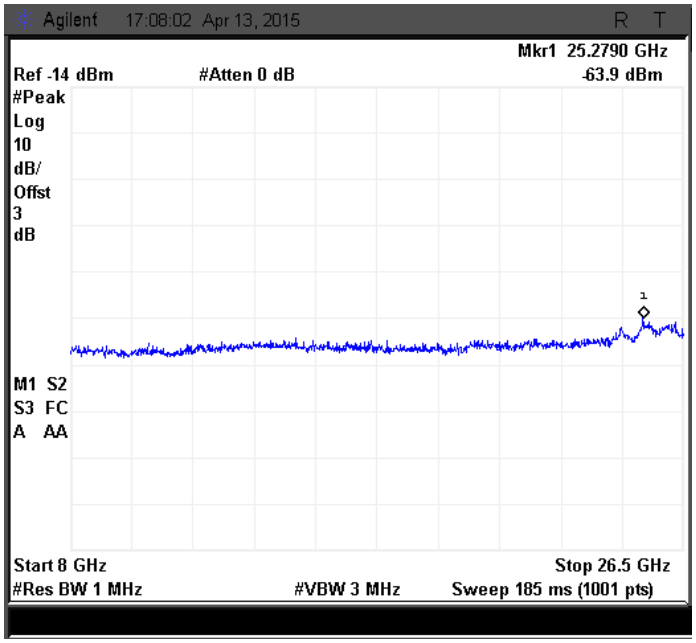


Figure 325: Emission measured with Peak Detector from 8GHz to 26.5GHz at Ch. 1

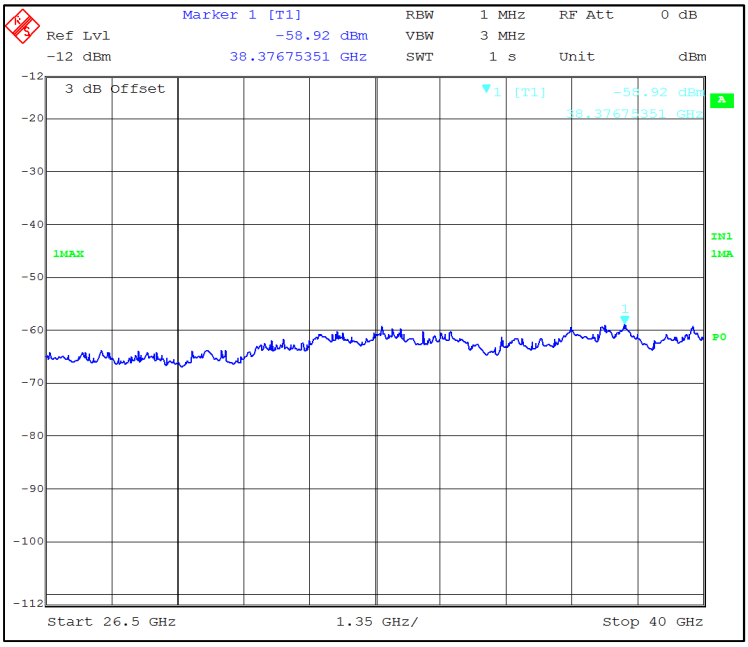


Figure 326: Emission measured with Peak Detector from 26.5GHz to 40GHz at Ch. 1

5.3.1.8 RESULT

Conducted RF Emission is within the Restricted bands of operation limits specified. Refer below table for data.

5.3.1.8.1 BASIC CONDITION

40MHz Modulation Bandwidth

Channel	Detector (PK/ AVG)	Freq. (Hz)	Ch. 0 (dBm)	Ch. 1 (dBm)	Ant Gain (dBi)	EIRP+GRF Ch. 0 (dBm)	EIRP+GRF Ch. 1 (dBm)	Ch. 0 + Ch. 1 (dBm)	E (dBµV/m)	Limit	Margin (dB)
Low	PK	30.62k	-62.59	-58.69	2.15	-54.44	-50.54	-49.06	46.20	118	-71.80
	PK	150K	-76.75	-76.25	2.15	-68.6	-68.1	-67.91	27.35	104.13	-76.78
	PK	565.1M	-79.89	-81.2	2.15	-73.04	-74.35	-72.42	22.83	46.02	-23.19
	AVG	5.46G	-66.91	-66.86	2.15	-64.76	-64.71	-62.67	32.58	53.98	-21.40
	PK	5.46G	-62.88	-63.76	2.15	-60.73	-61.61	-58.98	36.28	73.98	-37.70
Mid	PK	43.365k	-58.89	-60.87	2.15	-50.74	-52.72	-56.76	38.50	114.9	-76.40
	PK	150k	-76.04	-76.07	2.15	-67.89	-67.92	-73.04	22.21	104.13	-81.92
	PK	405.1M	-79.78	-81.66	2.15	-72.93	-74.81	-77.61	17.65	46.02	-28.37
	AVG	5.46G	-66.62	-68.19	2.15	-64.47	-66.04	-62.17	33.08	53.98	-20.90
	PK	5.46G	-62.98	-61.17	2.15	-60.83	-59.02	-56.82	38.40	73.98	-35.58
High	PK	17.93k	-58.9	-62.97	2.15	-50.75	-54.82	-57.46	37.79	122.57	-84.78
	PK	150k	-76.24	-76.71	2.15	-68.09	-68.56	-73.46	21.80	104.13	-82.33
	PK	610.4M	-80.69	-82.68	2.15	-73.84	-75.83	-78.56	16.70	46.02	-29.32
	AVG	5.46G	-67.01	-66.18	2.15	-64.86	-64.03	-61.41	33.80	53.98	-20.18
	PK	5.46G	-62.14	-61.91	2.15	-59.99	-59.76	-56.86	38.30	73.98	-35.68

5MHz Modulation Bandwidth

Channel	Detector (PK/ AVG)	Freq. (Hz)	Ch. 0 (dBm)	Ch. 1 (dBm)	Ant Gain (dBi)	EIRP+GRF Ch. 0 (dBm)	EIRP+GRF Ch. 1 (dBm)	Ch. 0 + Ch. 1 (dBm)	E (dBµV/m)	Limit	Margin (dB)
Low	PK	128.615k	-57.27	-59.79	2.15	-49.12	-51.64	-47.19	48.07	105.51	-57.44
	PK	150K	-76.89	-75.5	2.15	-68.74	-67.35	-67.91	27.35	104.13	-76.78
	PK	603.9M	-79.18	-81.3	2.15	-72.33	-74.45	-71.81	23.45	46.02	-22.57
	AVG	5.46G	-71.96	-68.38	2.15	-69.81	-66.23	-64.71	30.54	53.98	-23.44
	PK	5.46G	-59.54	-62.26	2.15	-57.39	-60.11	-55.53	39.72	73.98	-34.26
Mid	PK	9.235k	-58.14	-60.14	2.15	-49.99	-51.99	-56.02	39.24	128.26	-89.02
	PK	150k	-77.73	-77.47	2.15	-69.58	-69.32	-74.59	20.67	104.13	-83.46
	PK	342M	-79.67	-81.82	2.15	-72.82	-74.97	-77.60	17.65	46.02	-28.37
	AVG	5.46G	-68.8	-67.94	2.15	-66.65	-65.79	-63.14	32.11	53.98	-21.87
	PK	5.46G	-61.46	-61.93	2.15	-59.31	-59.78	-56.52	38.73	73.98	-35.25
High	PK	137.075k	-58.28	-61.91	2.15	-50.13	-53.76	-56.72	38.54	105	-66.46
	PK	150k	-75.92	-75.48	2.15	-67.77	-67.33	-72.68	22.57	104.13	-81.56
	PK	429.3M	-82.02	-79.3	2.15	-75.17	-72.45	-77.44	17.82	46.02	-28.20
	AVG	5.46G	-68.56	-67.46	2.15	-66.41	-65.31	-62.81	32.44	53.98	-21.54
	PK	5.46G	-62.91	-62.84	2.15	-60.76	-60.69	-57.71	37.54	73.98	-36.44

5.3.1.8.2 17DBI ANTENNA CONDITION

40MHz Modulation Bandwidth

Channel	Detector (PK/ AVG)	Freq. (Hz)	Ch. 0 (dBm)	Ch. 1 (dBm)	Ant Gain (dBi)	EIRP+GRF Ch. 0 (dBm)	EIRP+GRF Ch. 1 (dBm)	Ch. 0 + Ch. 1 (dBm)	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Low	PK	48.245k	-60.53	-59.86	17	-37.53	-36.86	-34.17	61.09	113.96	-52.87
	PK	150K	-75.99	-77.44	17	-52.99	-54.44	-52.97	42.28	104.13	-61.85
	PK	330.7M	-84.09	-80.9	17	-62.39	-59.2	-62.33	32.93	46.02	-13.09
	AVG	5.46G	-67.61	-70.68	17	-50.61	-53.68	-48.86	46.39	53.98	-7.59
	PK	5.46G	-64.59	-65.21	17	-47.59	-48.21	-44.87	50.38	73.98	-23.60
Mid	PK	9.235k	-63.01	-60	17	-40.01	-37	-58.24	37.02	128.26	-91.24
	PK	150k	-75.32	-75.83	17	-52.32	-52.83	-72.56	22.70	104.13	-81.43
	PK	561.9M	-80.39	-84.02	17	-58.69	-62.32	-78.83	16.43	46.02	-29.59
	AVG	5.46G	-68.33	-71.51	17	-51.33	-54.51	-49.62	45.63	53.98	-8.35
	PK	5.46G	-65.1	-65.27	17	-48.1	-48.27	-45.17	50.08	73.98	-23.90
High	PK	20.75k	-63	-58.77	17	-40	-35.77	-57.38	37.88	121.28	-83.40
	PK	150k	-76.96	-78.02	17	-53.96	-55.02	-74.45	20.81	104.13	-83.32
	PK	815.7M	-83.52	-81.68	17	-61.82	-59.98	-79.49	15.76	46.02	-30.26
	AVG	5.46G	-66.74	-67.89	17	-49.74	-50.89	-47.26	47.99	53.98	-5.99
	PK	5.46G	-62.84	-63.86	17	-45.84	-46.86	-43.30	51.90	73.98	-22.08

5MHz Modulation Bandwidth

Channel	Detector (PK/ AVG)	Freq. (Hz)	Ch. 0 (dBm)	Ch. 1 (dBm)	Ant Gain (dBi)	EIRP+GRF Ch. 0 (dBm)	EIRP+GRF Ch. 1 (dBm)	Ch. 0 + Ch. 1 (dBm)	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Low	PK	35.79k	-61.13	-58.41	17	-38.13	-35.41	-33.55	61.71	116.54	-54.83
	PK	150K	-75.05	-76.5	17	-52.05	-53.5	-52.03	43.22	104.13	-60.91
	PK	405.1M	-79.71	-81.28	17	-58.01	-59.58	-57.99	37.27	46.02	-8.75
	AVG	5.46G	-66.22	-66.64	17	-49.22	-49.64	-46.41	48.84	53.98	-5.14
	PK	5.46G	-62.84	-64.38	17	-45.84	-47.38	-43.50	51.75	73.98	-22.23
Mid	PK	41.43k	-61.5	-58.9	17	-38.5	-35.9	-57.00	38.26	115.33	-77.07
	PK	150k	-77.46	-77.57	17	-54.46	-54.57	-74.50	20.75	104.13	-83.38
	PK	759.1M	-79.7	-82.2	17	-58	-60.5	-77.76	17.50	46.02	-28.52
	AVG	5.46G	-66.55	-68.14	17	-49.55	-51.14	-47.26	47.99	53.98	-5.99
	PK	5.46G	-64.19	-63.02	17	-47.19	-46.02	-43.55	51.70	73.98	-22.28
High	PK	87.255k	-58.09	-62.86	17	-35.09	-39.86	-56.84	38.42	108.79	-70.37
	PK	150k	-76.2	-74.71	17	-53.2	-51.71	-72.38	22.88	104.13	-81.25
	PK	833.5M	-79.41	-81.2	17	-57.71	-59.5	-77.20	18.05	46.02	-27.97
	AVG	5.46G	-68.98	-67.94	17	-51.98	-50.94	-48.41	46.84	53.98	-7.14
	PK	5.46G	-65.18	-63.38	17	-48.18	-46.38	-44.17	51.08	73.98	-22.90

5.3.1.8.3 24DBI DISH CONDITION

40MHz Modulation Bandwidth

Channel	Detector (PK/ AVG)	Freq. (Hz)	Ch. 0 (dBm)	Ch. 1 (dBm)	Ant Gain (dBi)	EIRP+GRF Ch. 0 (dBm)	EIRP+GRF Ch. 1 (dBm)	Ch. 0 + Ch. 1 (dBm)	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Low	PK	11.35k	-58.41	-62.01	24	-28.41	-32.01	-26.84	68.42	126.53	-58.11
	PK	150K	-76.9	-77.53	24	-46.9	-47.53	-46.90	48.36	104.13	-55.77
	PK	859.4M	-79.64	-81.14	24	-50.94	-52.44	-50.94	44.32	46.02	-1.70
	AVG	5.46G	-71.33	-72.16	24	-47.33	-48.16	-44.71	50.54	53.98	-3.44
	PK	5.46G	-66.56	-67.81	24	-42.56	-43.81	-40.12	55.13	73.98	-18.85
Mid	PK	11.35k	-59.65	-62.35	24	-29.65	-32.35	-57.78	37.47	126.53	-89.06
	PK	150k	-77.62	-75.93	24	-47.62	-45.93	-73.68	21.57	104.13	-82.56
	PK	576.4M	-79.76	-81.29	24	-51.06	-52.59	-77.45	17.81	46.02	-28.21
	AVG	5.46G	-71.68	-68.98	24	-47.68	-44.98	-43.11	52.14	53.98	-1.84
	PK	5.46G	-66.28	-65.05	24	-42.28	-41.05	-38.61	56.64	73.98	-17.34
High	PK	141.54k	-58.83	-61.37	24	-28.83	-31.37	-56.91	38.35	104.65	-66.30
	PK	150k	-77.09	-76.78	24	-47.09	-46.78	-73.92	21.34	104.13	-82.79
	PK	806M	-79.38	-81.07	24	-50.68	-52.37	-77.13	18.12	46.02	-27.90
	AVG	5.46G	-68.29	-68.5	24	-44.29	-44.5	-41.38	53.87	53.98	-0.11
	PK	5.46G	-65.56	-64.32	24	-41.56	-40.32	-37.85	57.40	73.98	-16.58

5MHz Modulation Bandwidth

Channel	Detector (PK/ AVG)	Freq. (Hz)	Ch. 0 (dBm)	Ch. 1 (dBm)	Ant Gain (dBi)	EIRP+GRF Ch. 0 (dBm)	EIRP+GRF Ch. 1 (dBm)	Ch. 0 + Ch. 1 (dBm)	E (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Low	PK	130.965k	-59.35	-61.9	24	-29.35	-31.9	-27.43	67.83	105.34	-37.51
	PK	150K	-75.68	-75.77	24	-45.68	-45.77	-45.68	49.58	104.13	-54.55
	PK	540.9M	-79.72	-79.92	24	-51.02	-51.22	-51.01	44.24	46.02	-1.78
	AVG	5.46G	-69.85	-69.16	24	-45.85	-45.16	-42.48	52.77	53.98	-1.21
	PK	5.46G	-64.1	-64.69	24	-40.1	-40.69	-37.37	57.88	73.98	-16.10
Mid	PK	47.07k	-57.67	-62.26	24	-27.67	-32.26	-56.37	38.88	114.2	-75.32
	PK	150k	-73.85	-76.66	24	-43.85	-46.66	-72.02	23.24	104.13	-80.89
	PK	801.2M	-79.5	-81.64	24	-50.8	-52.94	-77.43	17.83	46.02	-28.19
	AVG	5.46G	-69.54	-69.35	24	-45.54	-45.35	-42.43	52.82	53.98	-1.16
	PK	5.46G	-66.69	-64.92	24	-42.69	-40.92	-38.70	56.55	73.98	-17.43
High	PK	144.125k	-59.61	-61.42	24	-29.61	-31.42	-57.41	37.85	104.5	-66.65
	PK	150k	-76.82	-76.88	24	-46.82	-46.88	-73.84	21.42	104.13	-82.71
	PK	563.5M	-78.82	-81.72	24	-50.12	-53.02	-77.02	18.24	46.02	-27.78
	AVG	5.46G	-69.22	-70.26	24	-45.22	-46.26	-42.69	52.56	53.98	-1.42
	PK	5.46G	-66.36	-66.29	24	-42.36	-42.29	-39.31	55.94	73.98	-18.04

Note:

GRF is Ground Reflection Factor and it is considered to be 6dB for frequencies below 30MHz, 4.7dB for frequencies between 30MHz to 1GHz & 0dB for frequencies above 1GHz.

EIRP = Ch. x measured power + Antenna gain

E = (EIRP+GRF) – 20log D + 104.8

Margin = E – Limit

5.3.2 6 dB BANDWIDTH MEASUREMENT

5.3.2.1 TEST SPECIFICATION

Test Standard	47 CFR Ch. I (10–1–13 Ed), Part 15, Subpart C RSS-210 Issue 8, Dec 2010
Test Procedure	ANSI C63.10-2013
Resolution Bandwidth	1 MHz
Video Bandwidth	3 MHz
Sweep Time	100ms
Attenuation	20dB
Test Mode	Conducted
Detector	Average
Input Voltage	120V AC
Input Frequency	60 Hz
Temperature	21.0°C
Humidity	54.0%
Tested By	Harsha K
Test Date	09th Apr 2015 & 10th Apr 2015

5.3.2.2 LIMITS

Standard	Reference section	Frequency range	Limit (min. 6 dB Bandwidth)
47 CFR Ch. I (10–1–13 Ed), Part 15, Subpart C RSS-210, Issue 8, Dec 2010	§15.247 (a) (2) A8.2 (a)	5725 MHz to 5850 MHz	≥ 500 kHz

5.3.2.3 TEST SETUP

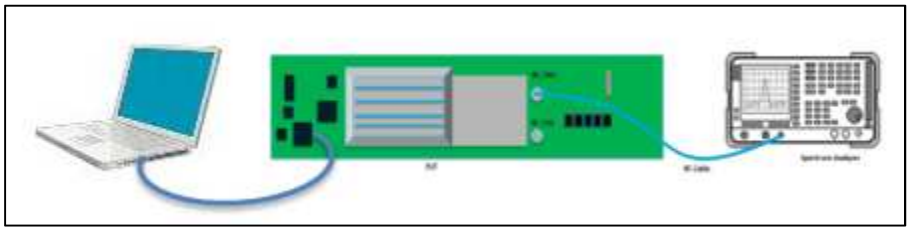


Figure 327: Typical test setup for Conducted RF Test setup

5.3.2.4 TEST PROCEDURE

The Conducted test was performed using the Spectrum analyzer. Measurements were done as per the **"558074 D01 DTS measurement Guidance v03r02".** The RF output of the EUT was connected to the input port of Spectrum analyzer using an attenuator. Captured the data from spectrum analyzer and compared with the limits specified in the standard.

5.3.2.5 RESULT (SUPPORTING GRAPHS / DATA) FOR 40 MHZ MODULATION BANDWIDTH

5.3.2.5.1 LOW CHANNEL_5750 MHZ

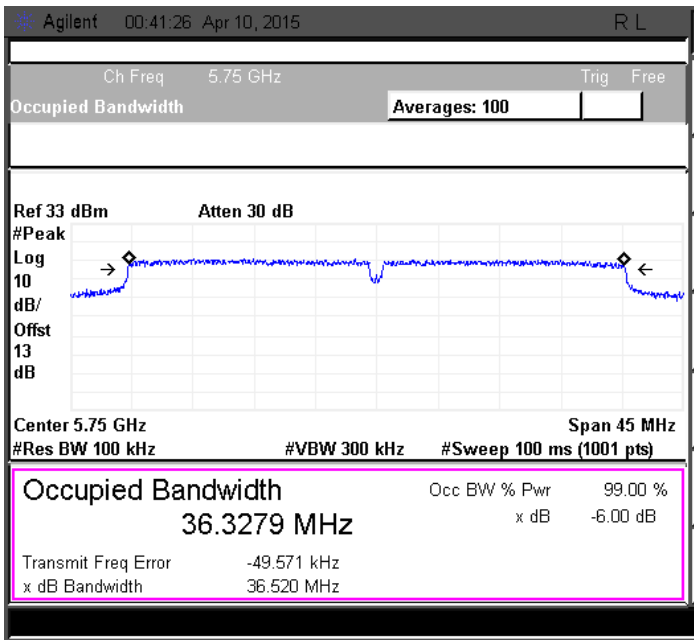


Figure 328: 6dB Bandwidth measured at Ch.0

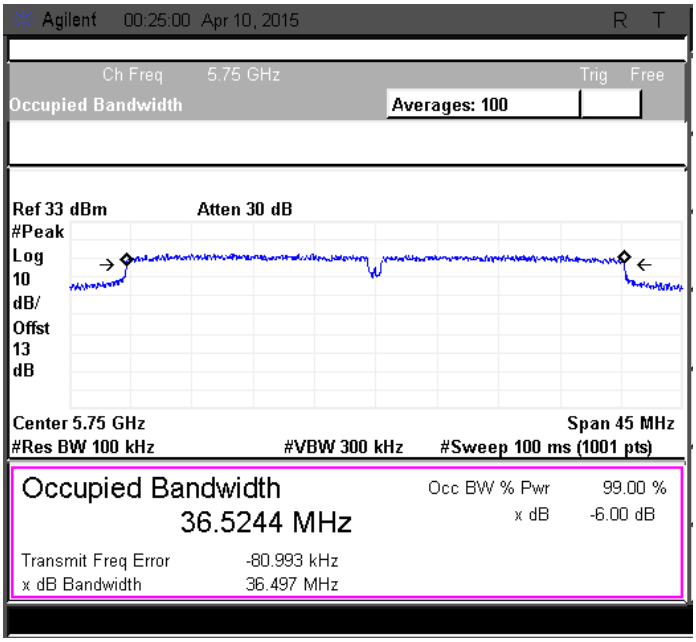


Figure 329: 6dB Bandwidth measured at Ch.1

5.3.2.5.2 MID CHANNEL_5785 MHZ

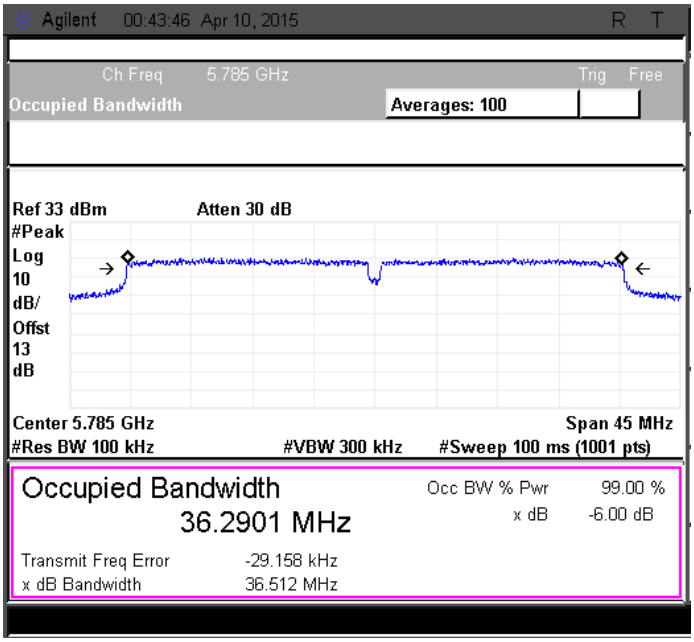


Figure 330: 6dB Bandwidth measured at Ch.0

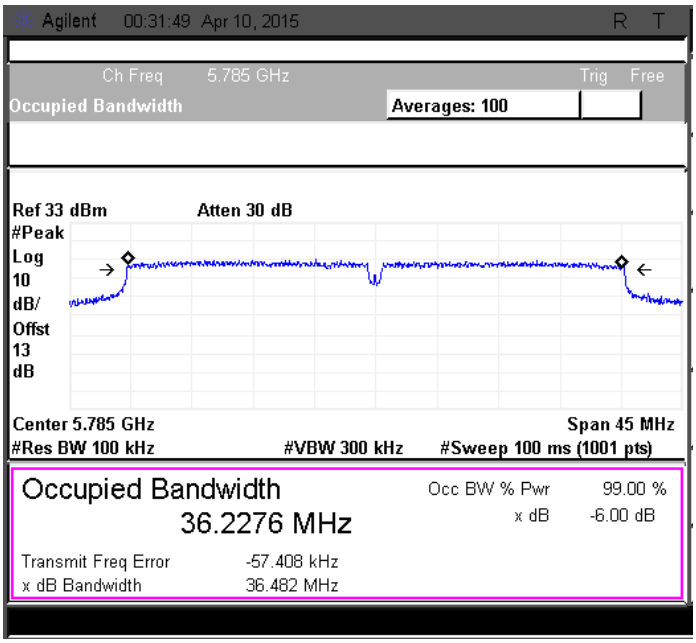


Figure 331: 6dB Bandwidth measured at Ch.1

5.3.2.5.3 HIGH CHANNEL_5825 MHZ

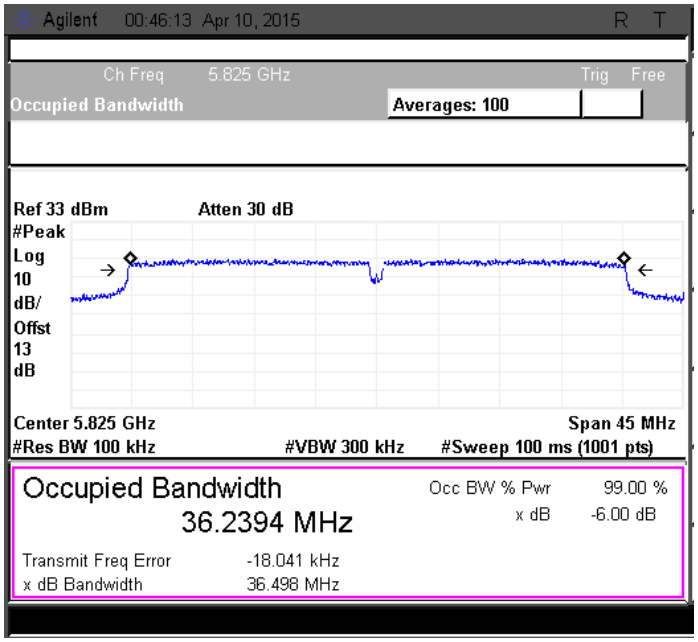


Figure 332: 6dB Bandwidth measured at Ch.0

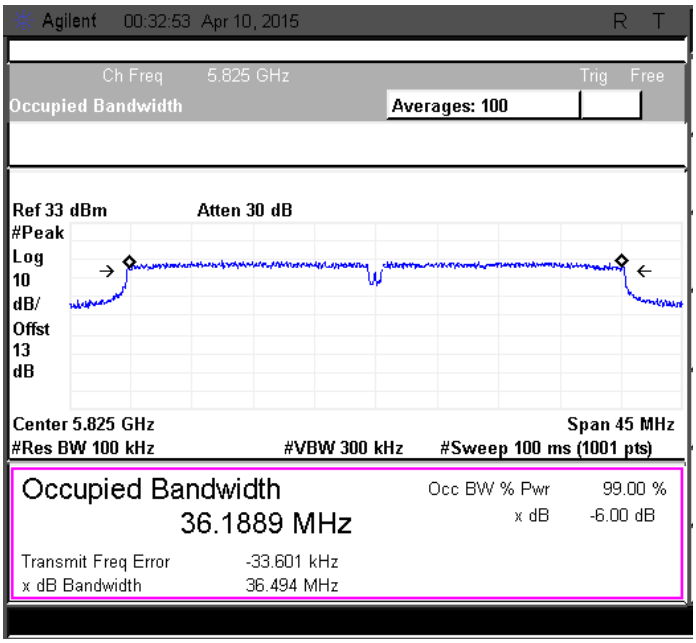


Figure 333: 6dB Bandwidth measured at Ch.1

5.3.2.6 RESULT (SUPPORTING GRAPHS / DATA) FOR 5 MHZ MODULATION BANDWIDTH

5.3.2.6.1 LOW CHANNEL_5735 MHZ

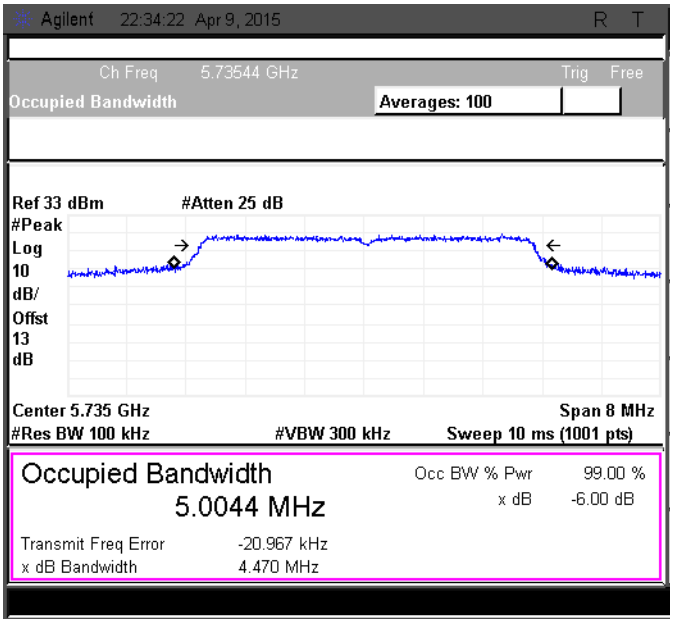


Figure 334: 6dB Bandwidth measured at Ch.0

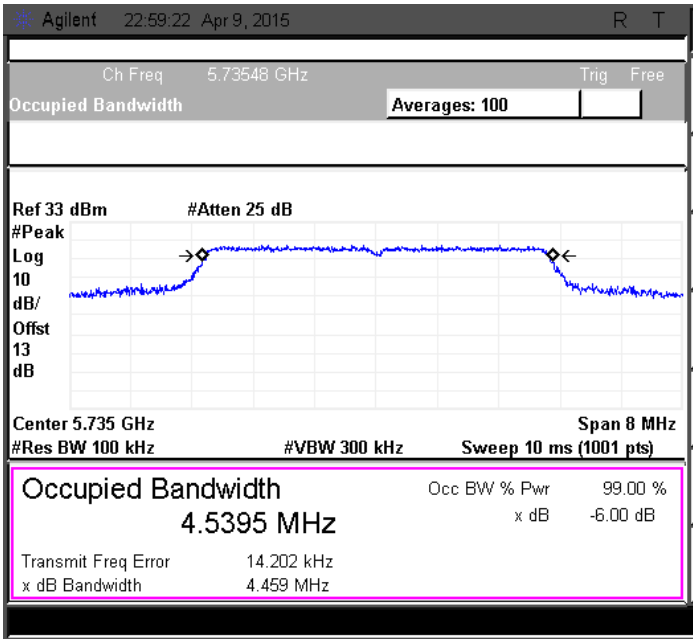


Figure 335: 6dB Bandwidth measured at Ch.1

5.3.2.6.2 MID CHANNEL_5775 MHZ

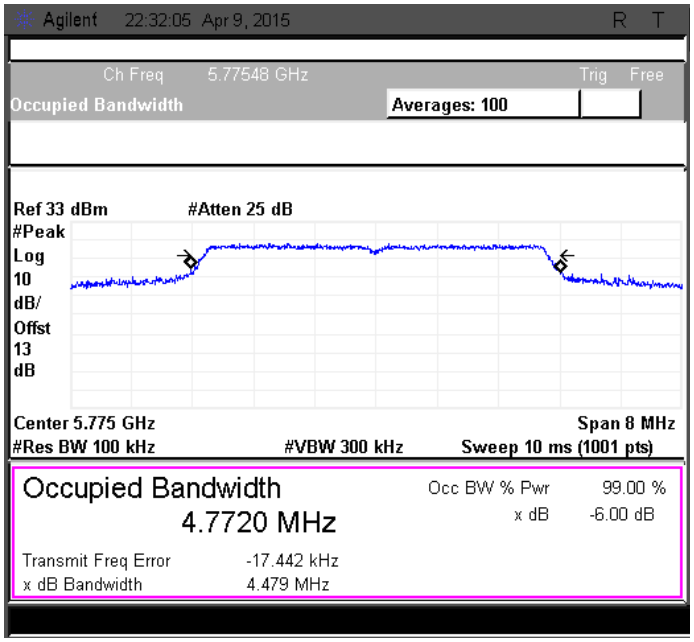


Figure 336: 6dB Bandwidth measured at Ch.0

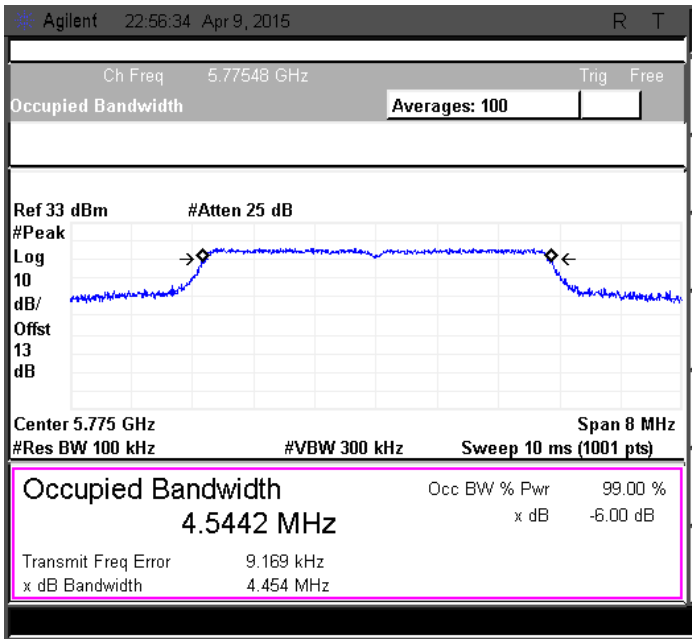


Figure 337: 6dB Bandwidth measured at Ch.1

5.3.2.6.3 HIGH CHANNEL_5840 MHZ

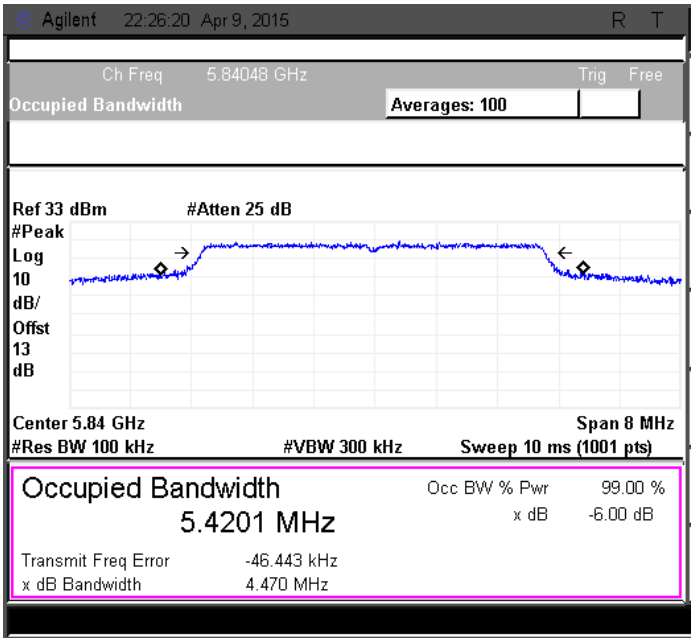


Figure 338: 6dB Bandwidth measured at Ch.0

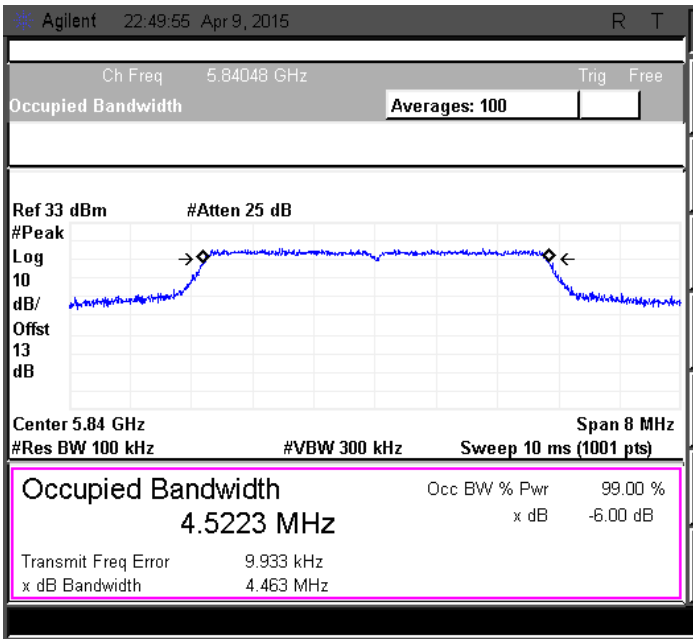


Figure 339: 6dB Bandwidth measured at Ch.1

5.3.2.7 RESULT

6dB Bandwidth for all channels in both 40MHz & 5MHz Modulation Bandwidths exceed 500 kHz. Refer below table for consolidated data.

Modulation Bandwidth (MHz)	Antenna path	Channel Frequency (MHz)	Recorded value (MHz)	Limit (kHz)	Result
40	Ch. 0	5750	36.520	≥500	Pass
40	Ch. 0	5785	36.512	≥500	Pass
40	Ch. 0	5825	36.498	≥500	Pass
40	Ch. 1	5750	36.497	≥500	Pass
40	Ch. 1	5785	36.482	≥500	Pass
40	Ch. 1	5825	36.494	≥500	Pass
5	Ch. 0	5735	4.470	≥500	Pass
5	Ch. 0	5775	4.479	≥500	Pass
5	Ch. 0	5840	4.470	≥500	Pass
5	Ch. 1	5735	4.459	≥500	Pass
5	Ch. 1	5775	4.454	≥500	Pass
5	Ch. 1	5840	4.463	≥500	Pass

5.3.3 MAXIMUM CONDUCTED OUTPUT POWER

5.3.3.1 TEST SPECIFICATION

Test Standard	47 CFR Ch. I (10–1–13 Ed), Part 15, Subpart C RSS-210 Issue 8, Dec 2010
Test Procedure	ANSI C63.10-2013
Resolution Bandwidth	1 MHz
Video Bandwidth	3 MHz
Sweep Time	100ms
Attenuation	20dB
Test Mode	Conducted
Detector	Average
Input Voltage	120V AC
Input Frequency	60 Hz
Temperature	21.0°C
Humidity	54.0%
Tested By	Harsha K
Test Date	09th Apr 2015 & 10th Apr 2015

5.3.3.2 LIMITS

Frequency range	**Limit**
5725 MHz to 5850 MHz	Point to Point: ≤ 30dBm (1W) Point to Multi point (With 17dBi Antenna gain): ≤ 19dBm Point to Multi point (With 24dBi Dish Gain): ≤ 12dBm

5.3.3.3 TEST SETUP

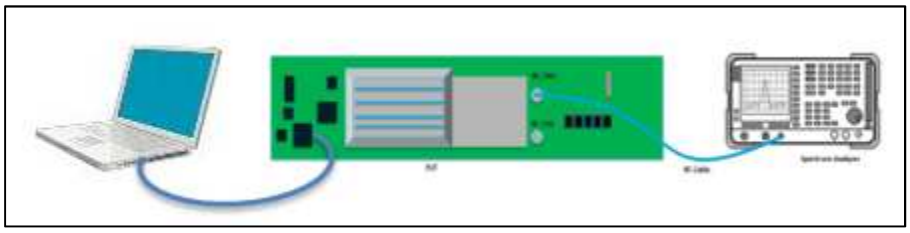


Figure 340: Typical test setup for Conducted RF Test setup

5.3.3.4 TEST PROCEDURE

The Conducted test was performed using the Spectrum analyzer. Measurements were done as per Section 9.2.3 (Method AVGPM) of KDB **"558074 D01 DTS measurement Guidance v03r02".** The RF output of the EUT was connected to the input port of Spectrum analyzer using an attenuator. Captured the data from spectrum analyzer and compared with the limits specified in the standard.

5.3.3.5 RESULT (SUPPORTING GRAPHS / DATA) FOR BASIC CONDITION

Note: *Top box indicates power read from Ch.1 & Bottom box indicates the power read from Ch.0*

5.3.3.5.1 40MHz MODULATION BW-LOW CHANNEL_5750MHz

Figure 341: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.5.2 40MHz MODULATION BW-MID CHANNEL_5785MHz

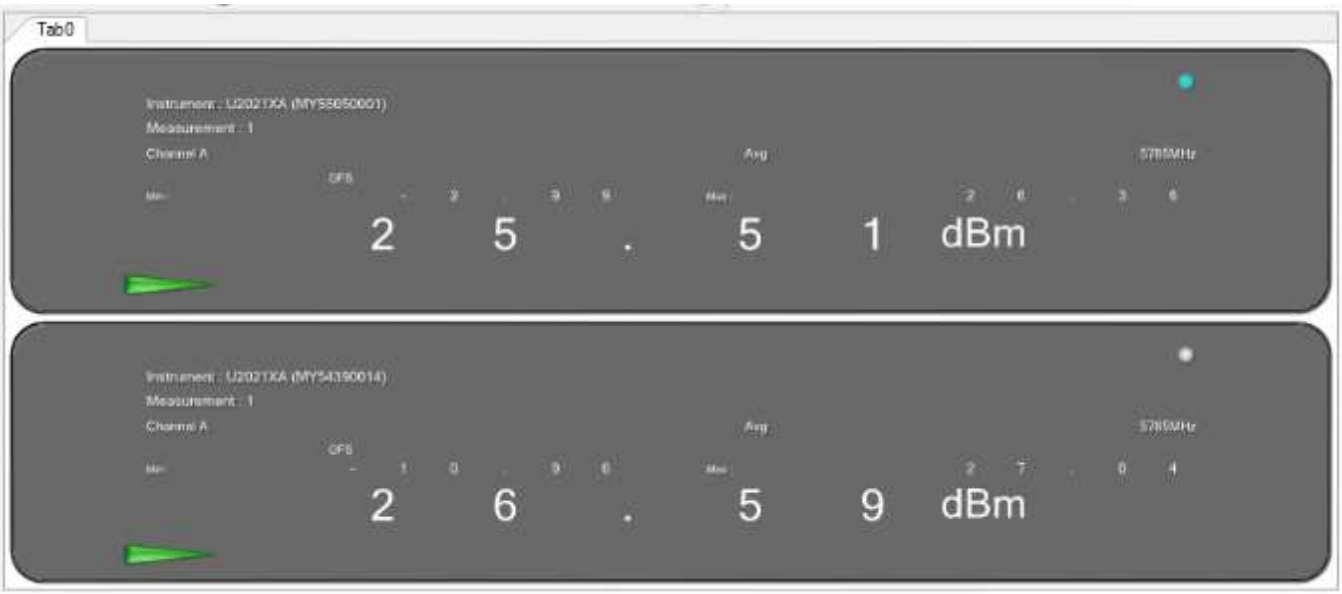


Figure 342: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.5.3 40MHz Modulation BW-High channel_5825MHz

Figure 343: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.5.4 5MHz Modulation BW-Low channel_5735MHz

Figure 344: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.5.5 5MHz Modulation BW-Mid channel_5775MHz

Figure 345: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.5.6 5MHz Modulation BW-High channel_5840MHz

Figure 346: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.6 RESULT (SUPPORTING GRAPHS / DATA) FOR 17DBI ANTENNA CONDITION

5.3.3.6.1 40MHZ MODULATION BW-LOW CHANNEL_5750MHZ

Figure 347: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.6.2 40MHZ MODULATION BW-MID CHANNEL_5785MHZ

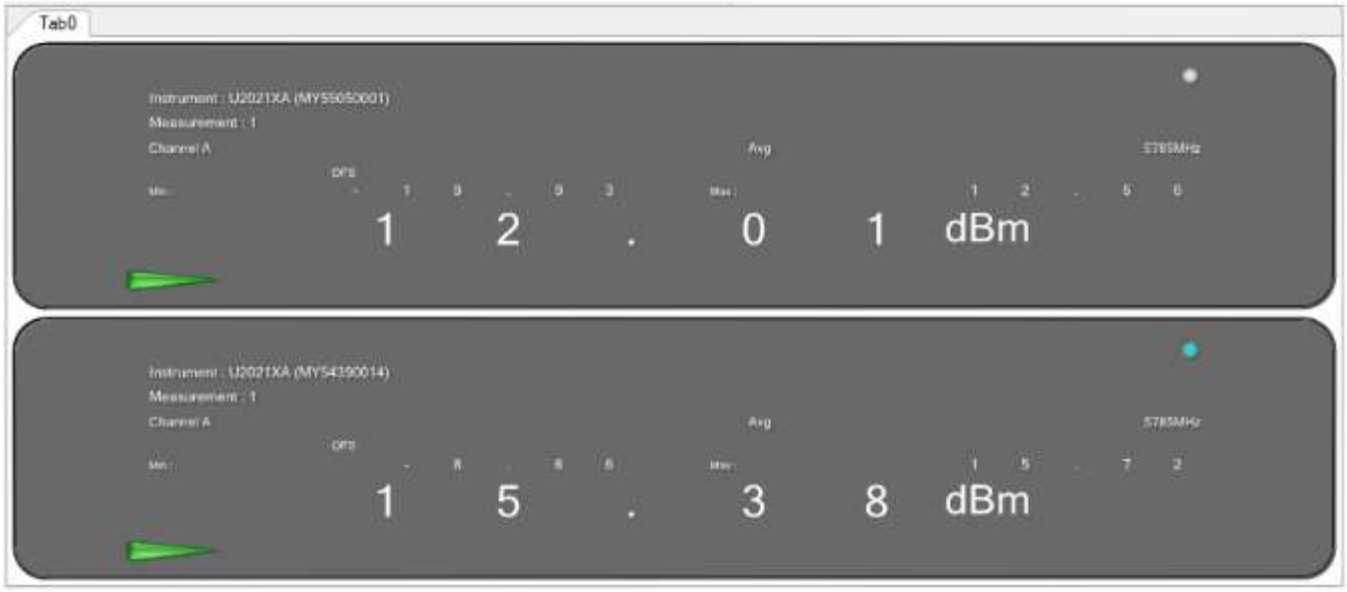


Figure 348: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.6.3 40MHz Modulation BW-High channel_5825MHz

Figure 349: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.6.4 5MHz Modulation BW-Low channel_5735MHz

Figure 350: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.6.5 5MHz Modulation BW-Mid channel_5775MHz

Figure 351: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.6.6 5MHz Modulation BW-High channel_5840MHz

Figure 352: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.7 RESULT (SUPPORTING GRAPHS / DATA) FOR 24DBI DISH CONDITION

5.3.3.7.1 40MHZ MODULATION BW-LOW CHANNEL_5750MHZ

Figure 353: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.7.2 40MHZ MODULATION BW-MID CHANNEL_5785MHZ

Figure 354: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.7.3 40MHz Modulation BW-High channel_5825MHz

Figure 355: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.7.4 5MHz Modulation BW-Low channel_5735MHz

Figure 356: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.7.5 5MHz Modulation BW-Mid channel_5775MHz

Figure 357: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.7.6 5MHz Modulation BW-High channel_5840MHz

Figure 358: Maximum Conducted Output power measured at Ch.0 & Ch.1

5.3.3.8 RESULT

Maximum Conducted Output Power for all channels in both 40MHz & 5MHz Modulation Bandwidths is within the specified limits. Refer below table for consolidated data.

5.3.3.8.1 BASIC CONDITION

Modulation Bandwidth (MHz)	Antenna path	Channel Frequency (MHz)	Recorded value (dBm)
40	Ch. 0	5750	26.7
40	Ch. 0	5785	26.59
40	Ch. 0	5825	26.39
40	Ch. 1	5750	25.64
40	Ch. 1	5785	25.51
40	Ch. 1	5825	25.2
5	Ch. 0	5735	26.79
5	Ch. 0	5775	26.58
5	Ch. 0	5840	26.35
5	Ch. 1	5735	25.94
5	Ch. 1	5775	25.4
5	Ch. 1	5840	25.22

Consolidated values across channels and Final Power

Modulation Bandwidth (MHz)	Antenna path	Channel Frequency (MHz)	Consolidated Power (dBm)	Limit (dBm)	Result
40	Ch. 0 & Ch. 1	5750	29.21	30	PASS
40	Ch. 0 & Ch. 1	5785	29.09	30	PASS
40	Ch. 0 & Ch. 1	5825	28.83	30	PASS
5	Ch. 0 & Ch. 1	5735	29.39	30	PASS
5	Ch. 0 & Ch. 1	5775	29.04	30	PASS
5	Ch. 0 & Ch. 1	5840	28.831	30	PASS

5.3.3.8.2 17DBI ANTENNA CONDITION

Modulation Bandwidth (MHz)	Antenna path	Channel Frequency (MHz)	Recorded value (dBm)
40	Ch. 0	5750	15.47
40	Ch. 0	5785	15.38
40	Ch. 0	5825	15.54
40	Ch. 1	5750	12.09
40	Ch. 1	5785	12.01
40	Ch. 1	5825	12.11
5	Ch. 0	5735	16.45
5	Ch. 0	5775	16.05
5	Ch. 0	5840	15.91
5	Ch. 1	5735	1305
5	Ch. 1	5775	12.64
5	Ch. 1	5840	12.52

Consolidated values across channels and Final Power

Modulation Bandwidth (MHz)	Antenna path	Channel Frequency (MHz)	Consolidated Power (dBm)	Limit (dBm)	Result
40	Ch. 0 & Ch. 1	5750	17.11	19	PASS
40	Ch. 0 & Ch. 1	5785	17.02	19	PASS
40	Ch. 0 & Ch. 1	5825	17.16	19	PASS
5	Ch. 0 & Ch. 1	5735	18.08	19	PASS
5	Ch. 0 & Ch. 1	5775	17.68	19	PASS
5	Ch. 0 & Ch. 1	5840	17.548	19	PASS

5.3.3.8.3 24DBI DISH CONDITION

Modulation Bandwidth (MHz)	Antenna path	Channel Frequency (MHz)	Recorded value (dBm)
40	Ch. 0	5750	8.24
40	Ch. 0	5785	9.12
40	Ch. 0	5825	9.2
40	Ch. 1	5750	3.84
40	Ch. 1	5785	4.79
40	Ch. 1	5825	5
5	Ch. 0	5735	9.52
5	Ch. 0	5775	9.05
5	Ch. 0	5840	8.78
5	Ch. 1	5735	5.76
5	Ch. 1	5775	5.16
5	Ch. 1	5840	4.93

Consolidated values across channels and Final Power

Modulation Bandwidth (MHz)	Antenna path	Channel Frequency (MHz)	Consolidated Power (dBm)	Limit (dBm)	Result
40	Ch. 0 & Ch. 1	5750	9.58	12	PASS
40	Ch. 0 & Ch. 1	5785	10.48	12	PASS
40	Ch. 0 & Ch. 1	5825	10.59	12	PASS
5	Ch. 0 & Ch. 1	5735	11.045	12	PASS
5	Ch. 0 & Ch. 1	5775	10.53	12	PASS
5	Ch. 0 & Ch. 1	5840	10.278	12	PASS

5.3.4 POWER SPECTRAL DENSITY

5.3.4.1 TEST SPECIFICATION

Test Standard	47 CFR Ch. I (10–1–13 Ed), Part 15, Subpart C RSS-210 Issue 8, Dec 2010
Test Procedure	ANSI C63.10-2013
Frequency Range	5745 MHz to 5825 MHz
Resolution Bandwidth	40MHz: 100 kHz; 5MHz: 10 kHz
Video Bandwidth	40MHz: 300 kHz; 5MHz: 30 kHz
Sweep Time	40MHz: 100ms; 5MHz: 150ms
Attenuation	20 dB
Test Mode	Conducted
Detector	Average
Input Voltage	120V AC
Input Frequency	60 Hz
Temperature	21.0°C
Humidity	54.0%
Tested By	Harsha K
Test Date	09th Apr 2015 & 10th Apr 2015

5.3.4.2 LIMITS

Standard	Reference section	Frequency range	Limit
47 CFR Ch. I (10–1–13 Ed), Part 15, Subpart C RSS-210, Issue 8, Dec 2010	§15.247 (e) A8.2 (b)	5725 MHz to 5825 MHz	≤ 8dBm in any 3 kHz band

5.3.4.3 TEST SETUP

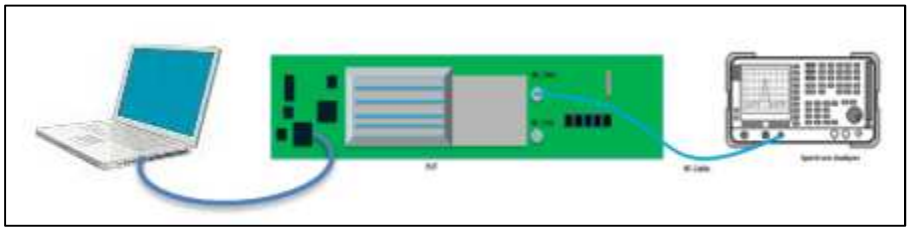


Figure 359: Typical test setup for Conducted Test setup

5.3.4.4 TEST PROCEDURE

The Conducted test was performed using the Spectrum analyzer. Measurements were done as per Section 10.3 (Method AVGPSD-1) of KDB **"558074 D01 DTS measurement Guidance v03r02".** The RF output of the EUT was connected to the input port of Spectrum analyzer using an attenuator. Captured the data from spectrum analyzer and compared with the limits specified in the standard.

5.3.4.5 RESULT (SUPPORTING GRAPHS / DATA) FOR 40 MHZ MODULATION BANDWIDTH

5.3.4.5.1 LOW CHANNEL_5750 MHZ

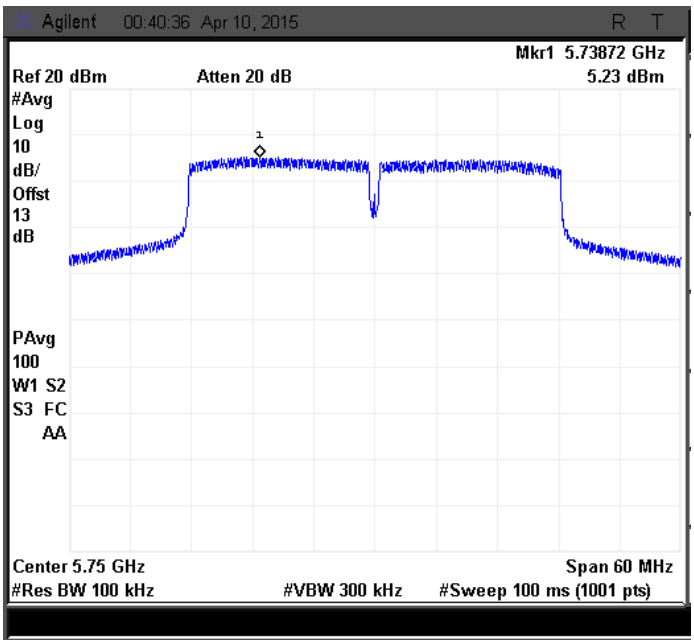


Figure 360: Power Spectral density measured at Ch. 0

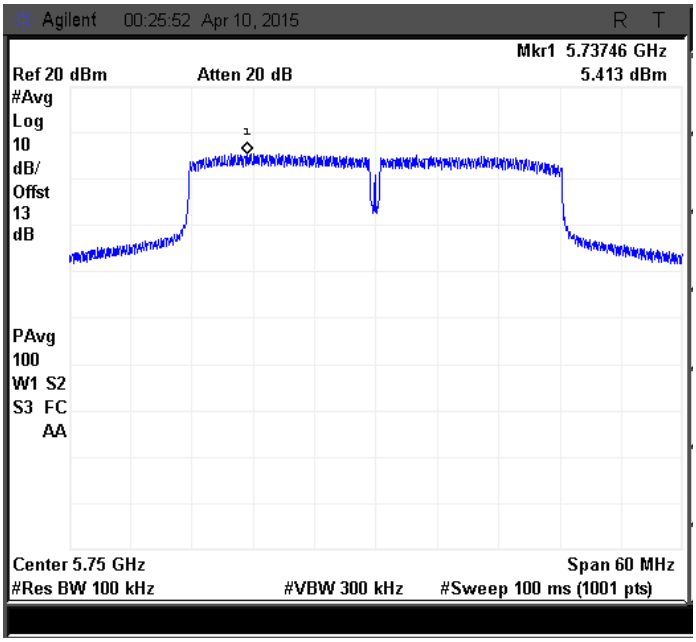


Figure 361: Power Spectral density measured at Ch. 1

5.3.4.5.2 MID CHANNEL_5785 MHz

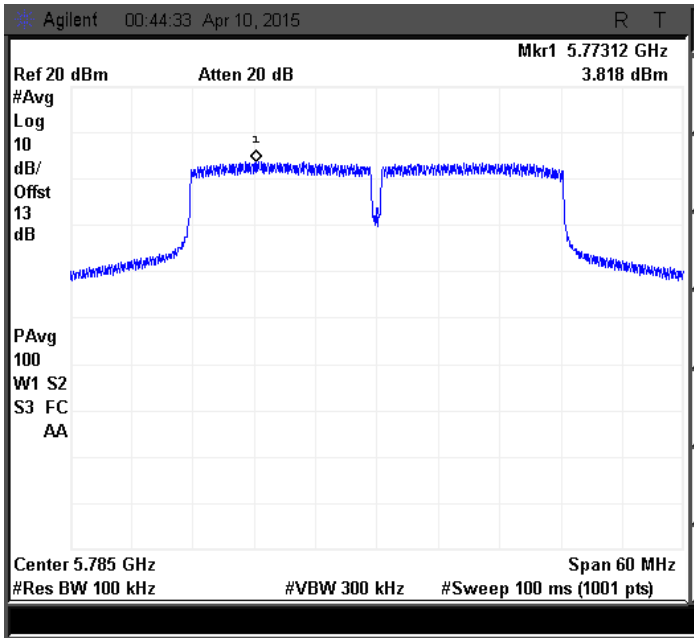


Figure 362: Power Spectral density measured at Ch. 0

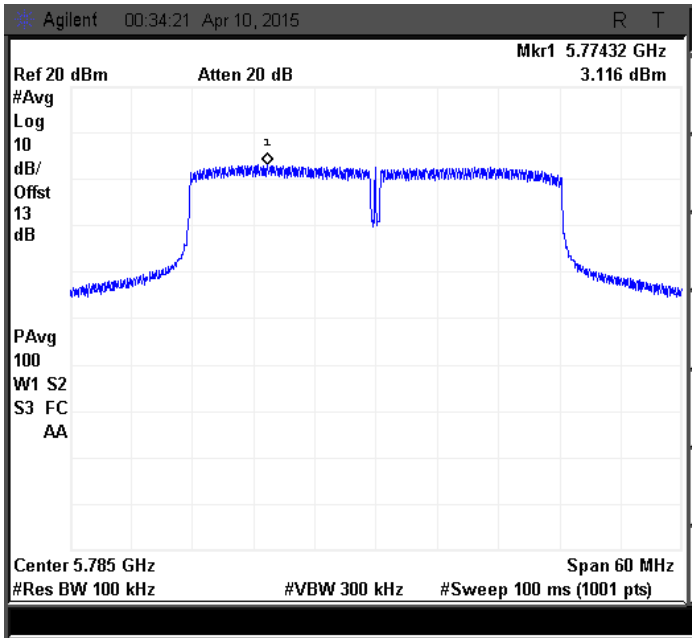


Figure 363: Power Spectral density measured at Ch. 1

5.3.4.5.3 HIGH CHANNEL_5825 MHZ

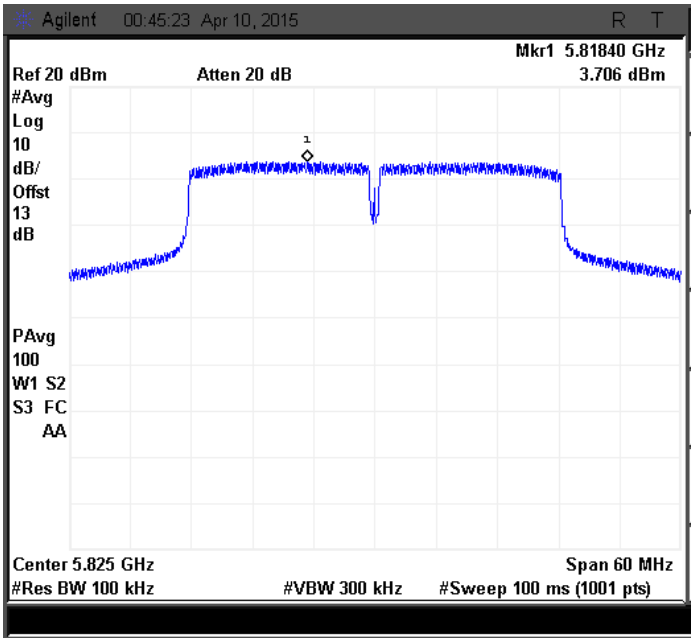


Figure 364: Power Spectral density measured at Ch. 0

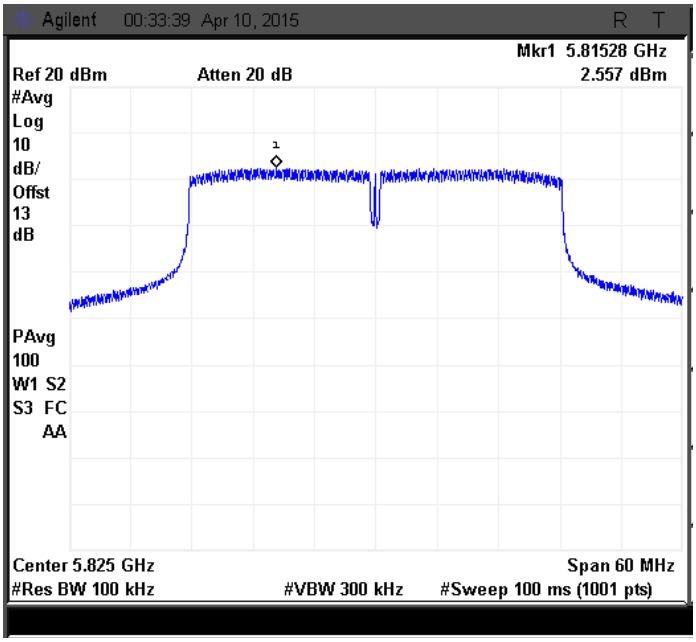


Figure 365: Power Spectral density measured at Ch. 1

5.3.4.6 RESULT (SUPPORTING GRAPHS / DATA) FOR 5 MHZ MODULATION BANDWIDTH

5.3.4.6.1 LOW CHANNEL_5735 MHZ

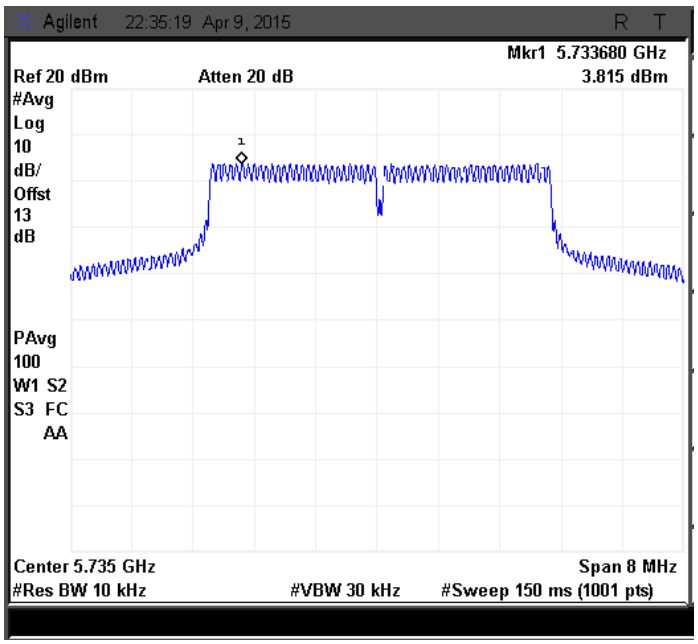


Figure 366: Power Spectral density measured at Ch. 0

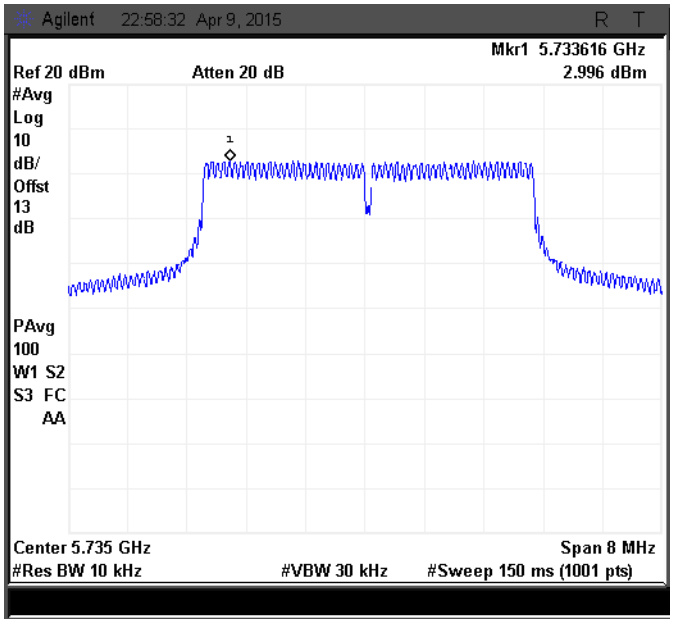


Figure 367: Power Spectral density measured at Ch. 1

5.3.4.6.2 MID CHANNEL_5775 MHZ

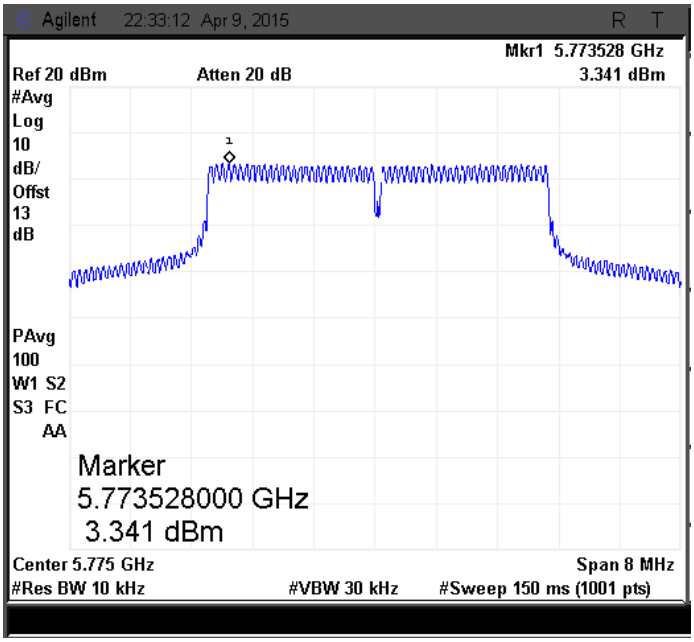


Figure 368: Power Spectral density measured at Ch. 0

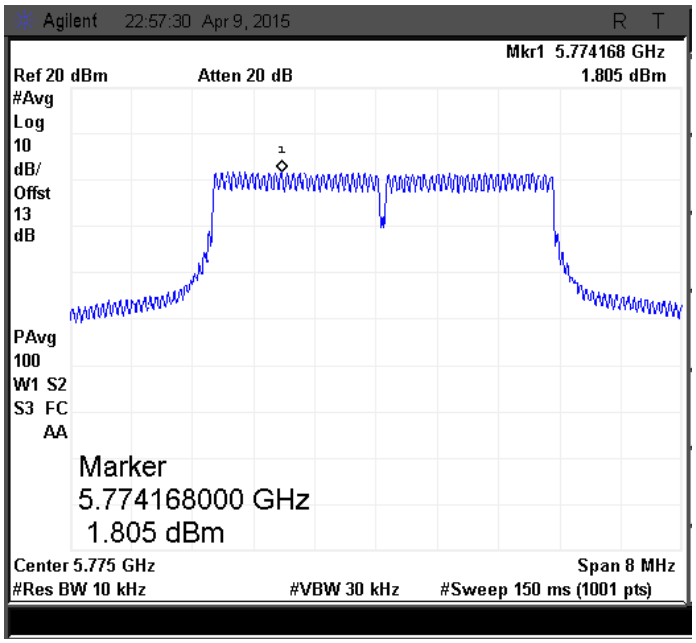


Figure 369: Power Spectral density measured at Ch. 1

5.3.4.6.3 HIGH CHANNEL_5840 MHZ

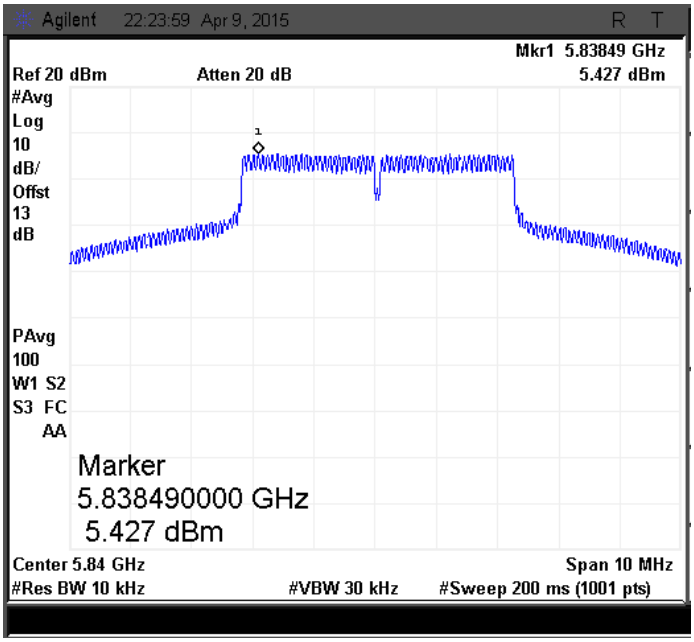


Figure 370: Power Spectral density measured at Ch. 0

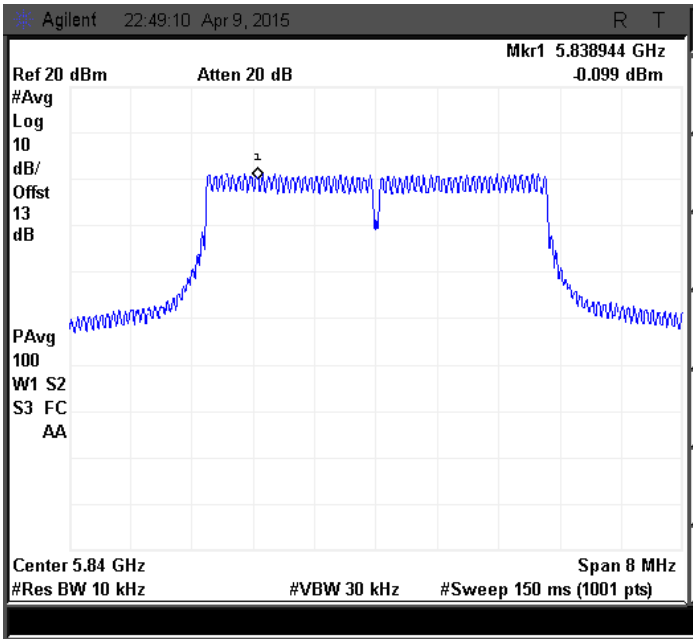


Figure 371: Power Spectral density measured at Ch. 1

5.3.4.7 RESULT

Power Spectral Density for all channels in both 40MHz & 5MHz Modulation Bandwidths is within the Specified limit. Refer below table for consolidated result.

Modulation Bandwidth (MHz)	Antenna path	Channel Frequency (MHz)	Recorded value (dBm/100kHz)	Limit (dBm/3kHz)	Result
40	Ch. 0	5750	5.23	8	Pass
40	Ch. 0	5785	3.818	8	Pass
40	Ch. 0	5825	3.706	8	Pass
40	Ch. 1	5750	5.413	8	Pass
40	Ch. 1	5785	3.116	8	Pass
40	Ch. 1	5825	2.557	8	Pass

Modulation Bandwidth (MHz)	Antenna path	Channel Frequency (MHz)	Recorded value (dBm/10kHz)	Limit (dBm/3kHz)	Result
5	Ch. 0	5735	3.815	8	Pass
5	Ch. 0	5775	3.341	8	Pass
5	Ch. 0	5840	5.427	8	Pass
5	Ch. 1	5735	2.996	8	Pass
5	Ch. 1	5775	1.805	8	Pass
5	Ch. 1	5840	-0.099	8	Pass

5.3.5 RADIO FREQUENCY POWER IN ANY 100 KHZ BANDWIDTH OUTSIDE THE INTENTIONAL BAND

5.3.5.1 TEST SPECIFICATION

Test Standard	47 CFR Ch. I (10–1–13 Ed), Part 15, Subpart C RSS-210 Issue 8, Dec 2010
Test Procedure	ANSI C63.10-2013
Frequency Range	30MHz to 40GHz
Resolution Bandwidth	100 kHz
Video Bandwidth	300 kHz
Sweep Time	Auto
Attenuation	Auto
Test Mode	Conducted
Detector	Peak
Input Voltage	120V AC
Input Frequency	60 Hz
Temperature	21.0°C
Humidity	54.0%
Tested By	Harsha K
Test Date	09th Apr 2015,10th Apr 2015 & 22nd Apr 2015

5.3.5.2 LIMITS

Standard	Reference section	Frequency range	Limit
47 CFR Ch. I (10–1–13 Ed), Part 15, Subpart C RSS-210, Issue 8, Dec 2010	§15.247 (d) A8.5	5725 MHz to 5825 MHz	-30dBc in any 100 kHz band outside the Intentional band

5.3.5.3 TEST SETUP

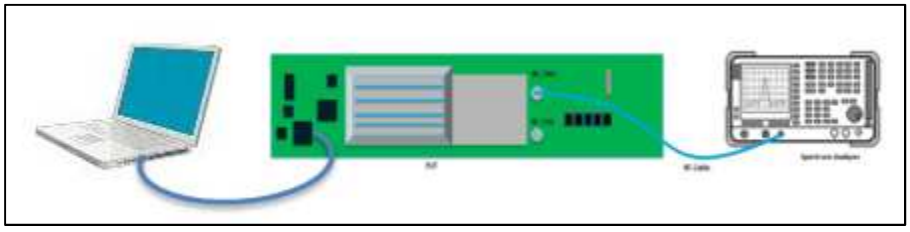


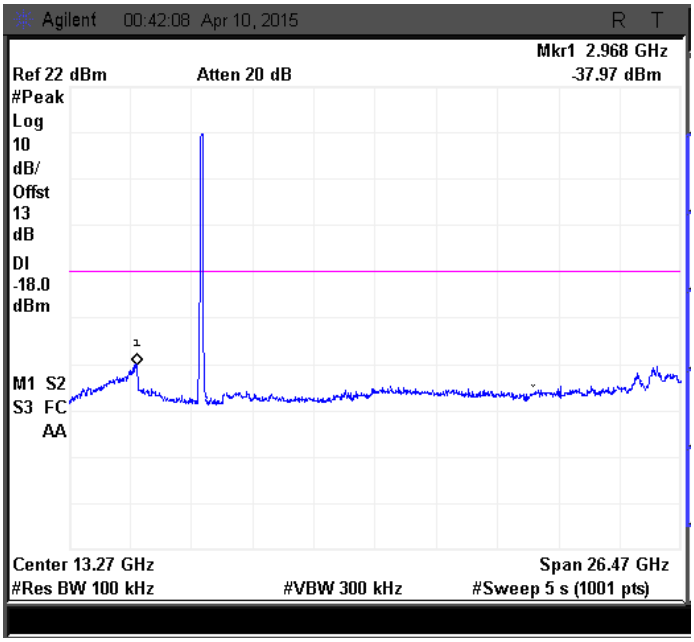
Figure 372: Typical test setup for Conducted Test setup

5.3.5.4 TEST PROCEDURE

The Conducted test was performed using the Spectrum analyzer. Measurements were done as per Section 11.3 of KDB **"558074 D01 DTS measurement Guidance v03r02".** The RF output of the EUT was connected to the input port of Spectrum analyzer using an attenuator. Captured the data from spectrum analyzer and compared with the limits specified in the standard

5.3.5.5 RESULT (SUPPORTING GRAPHS / DATA) FOR BASIC CONDITION

5.3.5.5.1 40MHZ MODULATION BW-HIGH CHANNEL_5750 MHZ



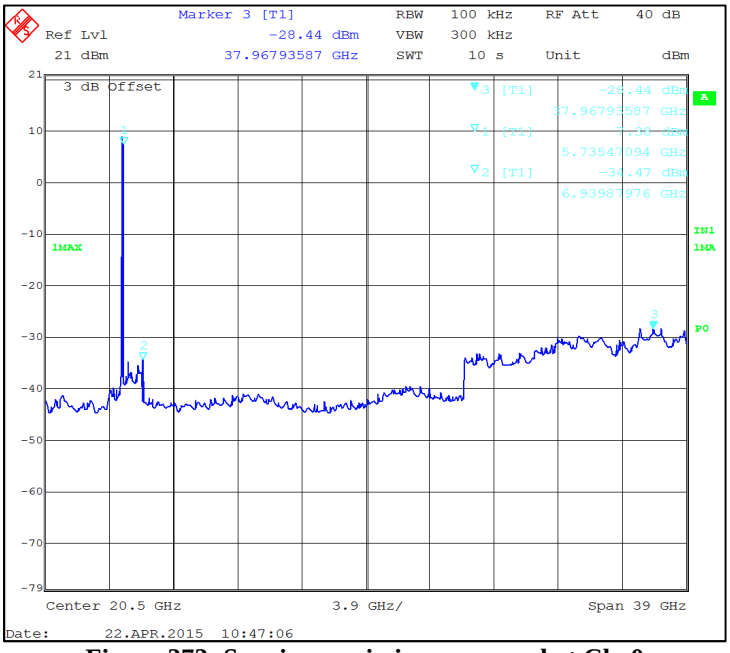
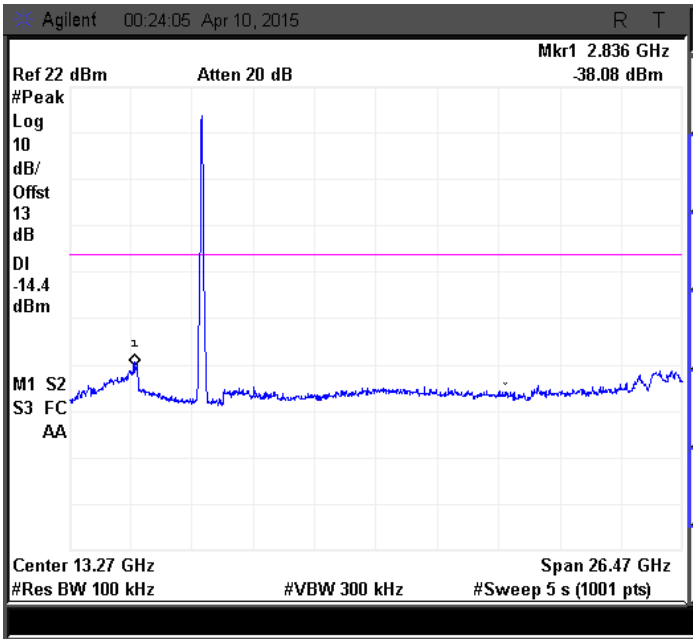


Figure 373: Spurious emission measured at Ch. 0



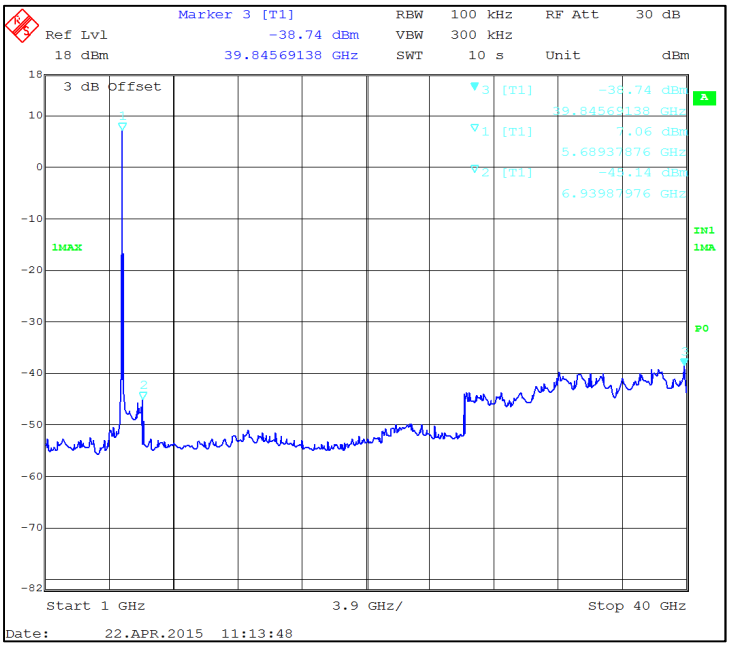
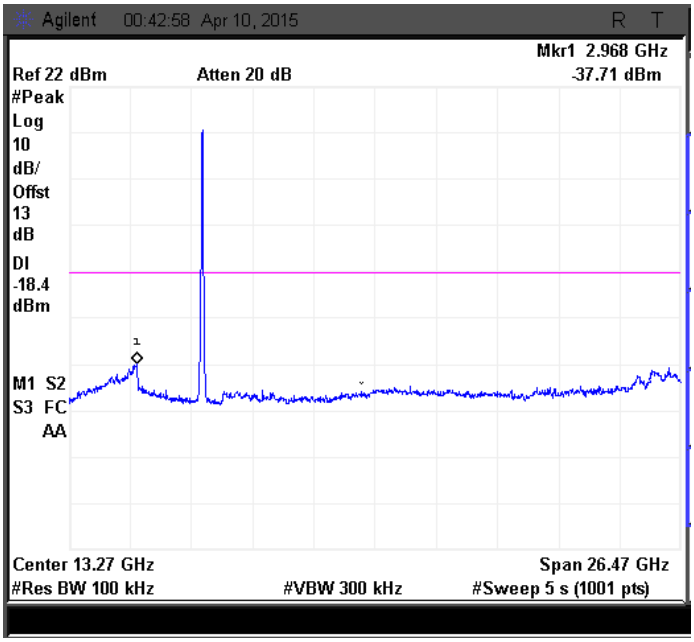


Figure 374: Spurious emission measured at Ch. 1

5.3.5.5.2 40MHz Modulation BW-Mid channel_5785 MHz



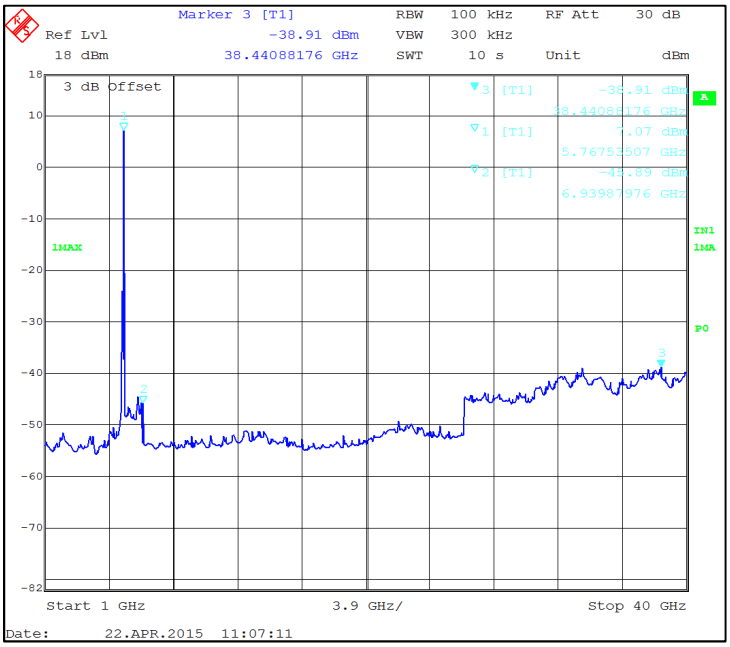
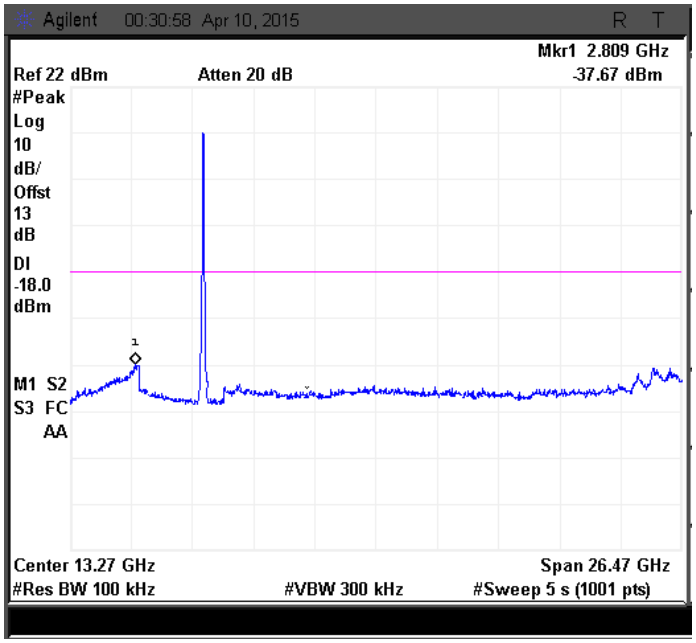


Figure 375: Spurious emission measured at Ch. 0



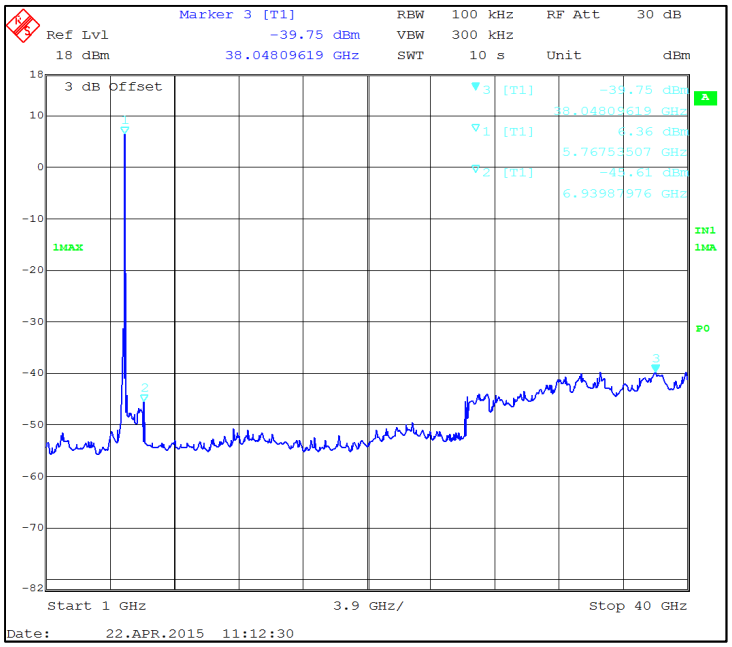
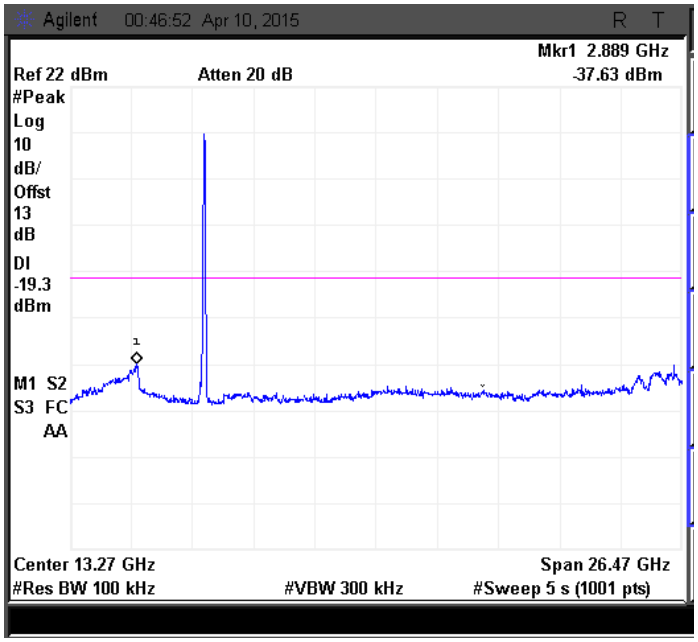


Figure 376: Spurious emission measured at Ch. 1

5.3.5.5.3 40MHZ MODULATION BW-HIGH CHANNEL_5825 MHZ



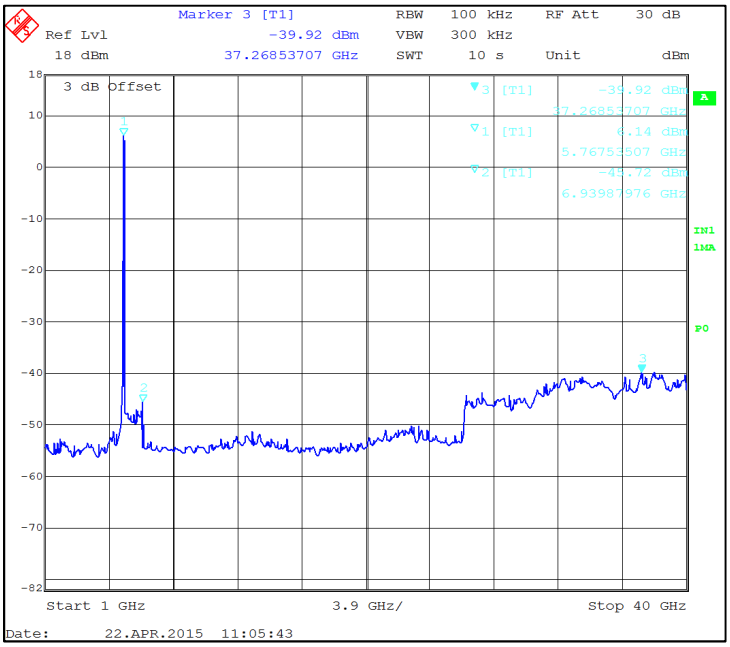
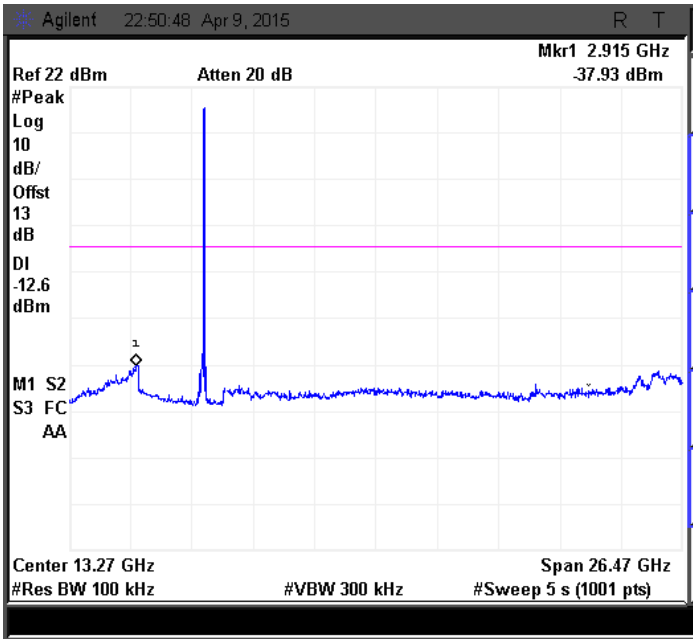


Figure 377: Spurious emission measured at Ch. 0



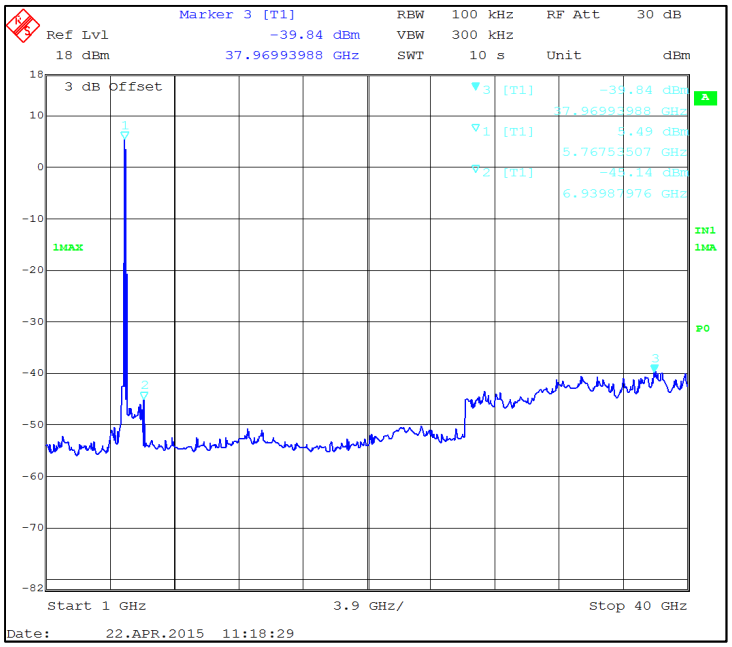
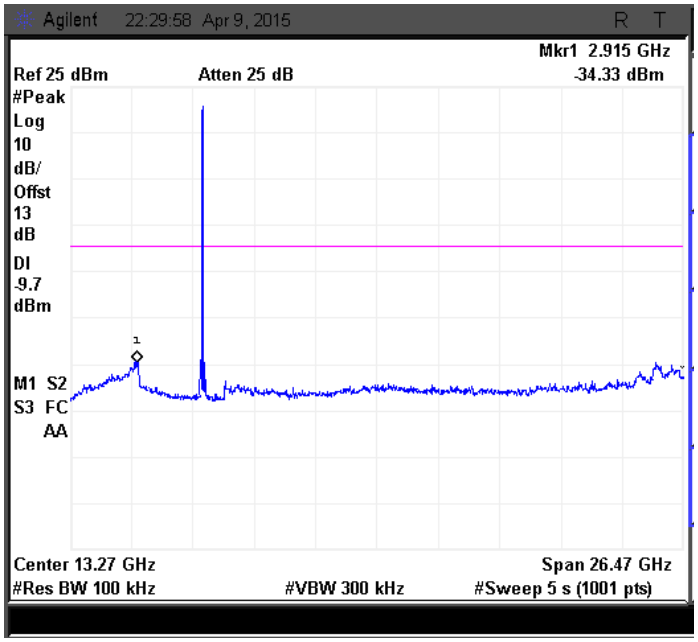


Figure 378: Spurious emission measured at Ch. 1

5.3.5.5.4 5MHz Modulation BW-Low channel_5735 MHz



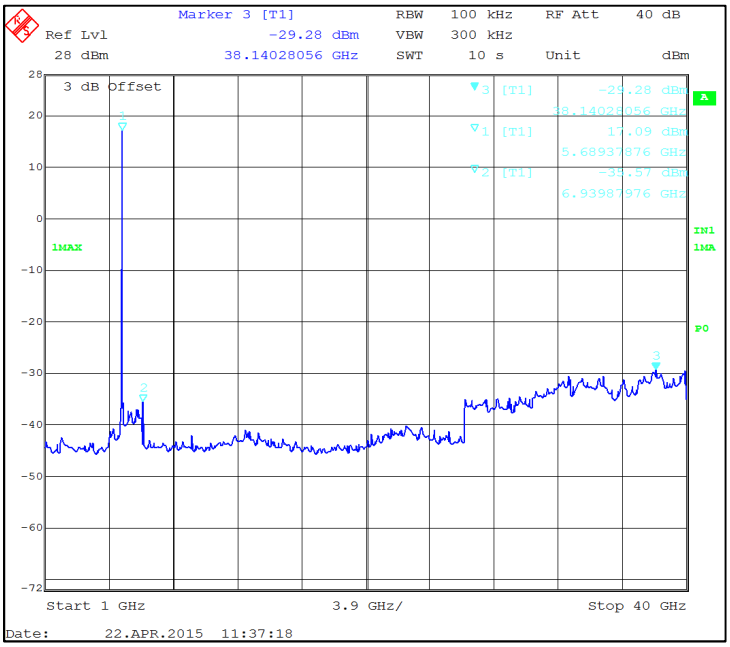
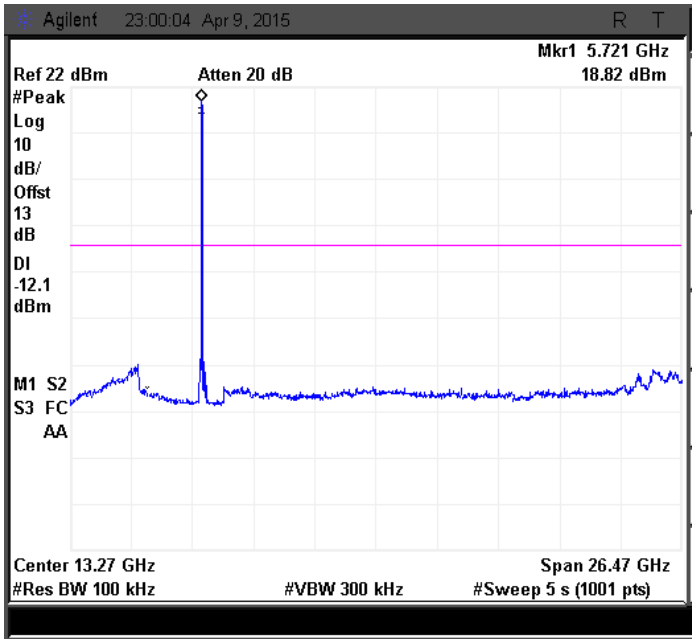


Figure 379: Spurious emission measured at Ch. 0



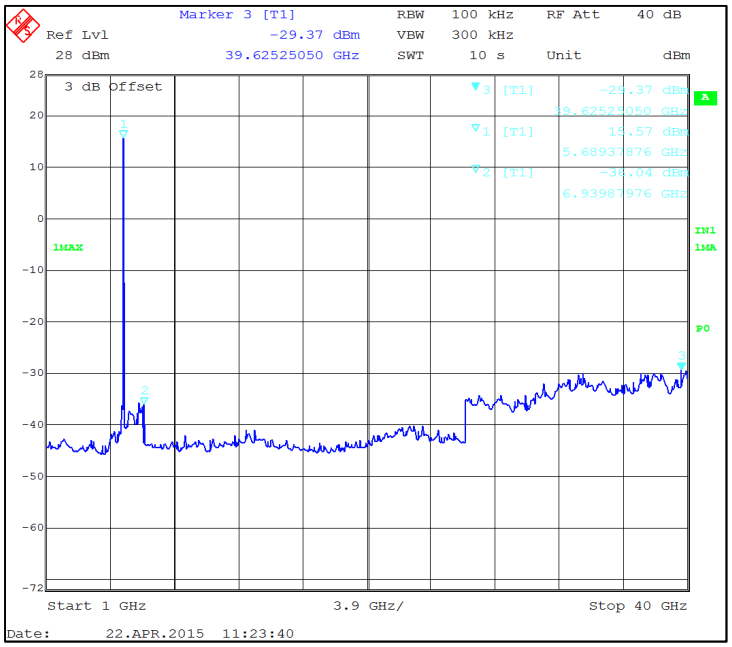
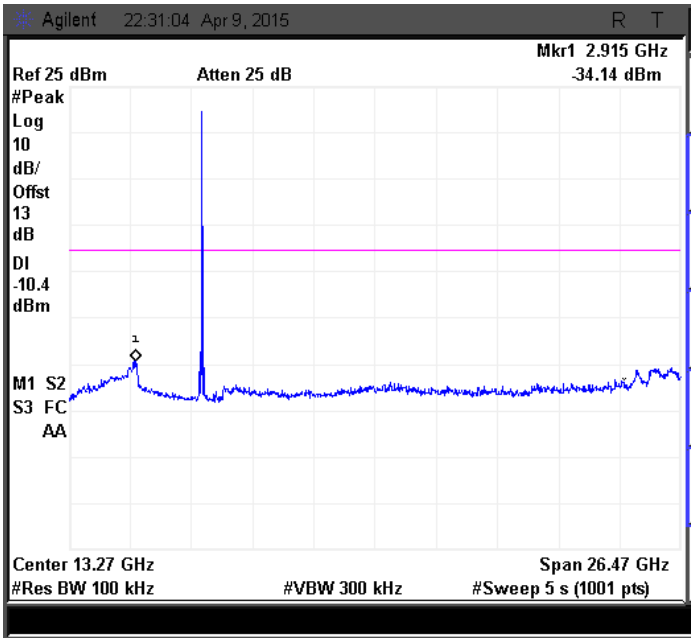


Figure 380: Spurious emission measured at Ch. 1

5.3.5.5.5 5MHz Modulation BW-Mid channel_5775 MHz



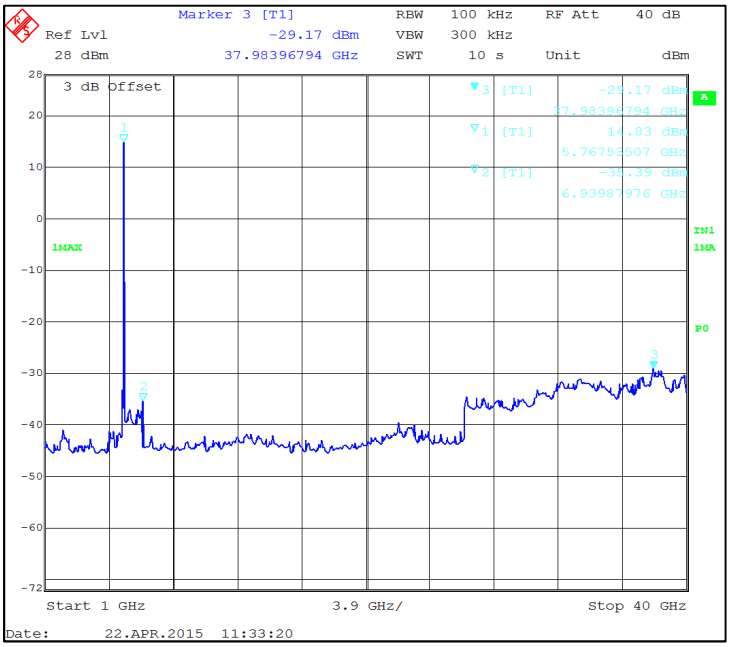
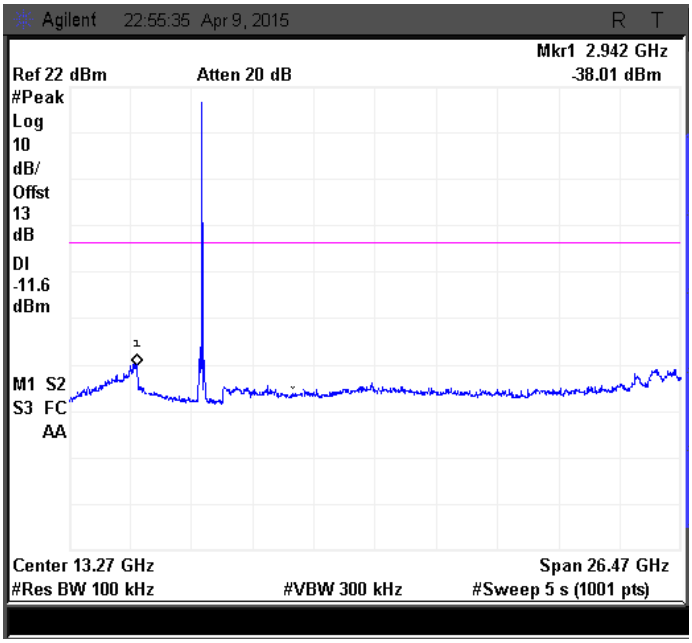


Figure 381: Spurious emission measured at Ch. 0



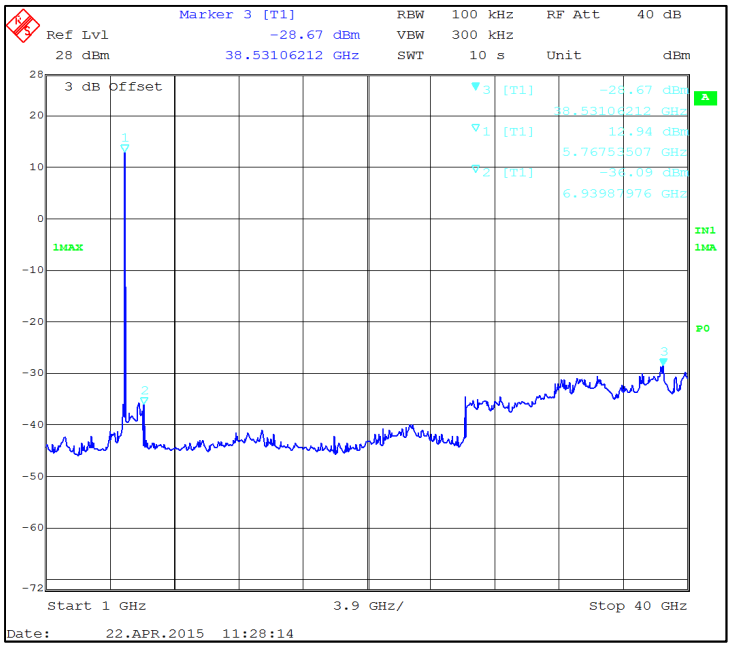
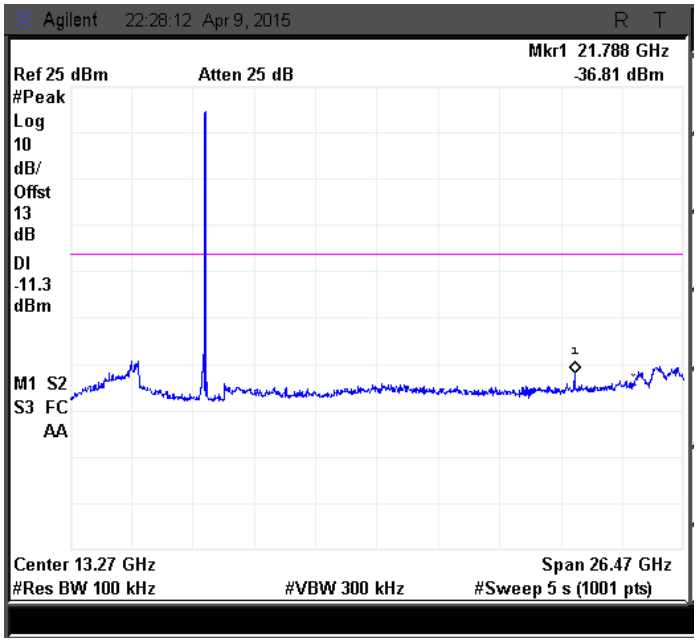


Figure 382: Spurious emission measured at Ch. 1

5.3.5.5.6 5MHz Modulation BW-High channel_5840 MHz



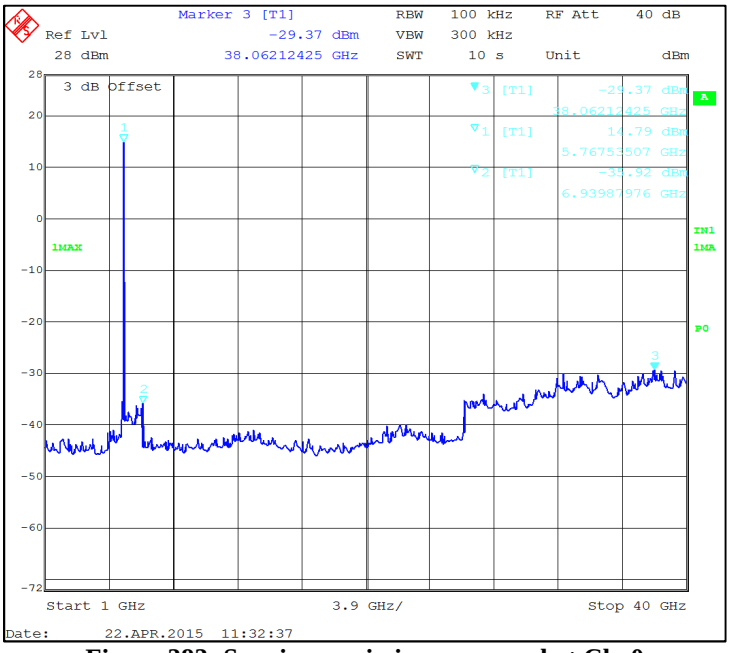
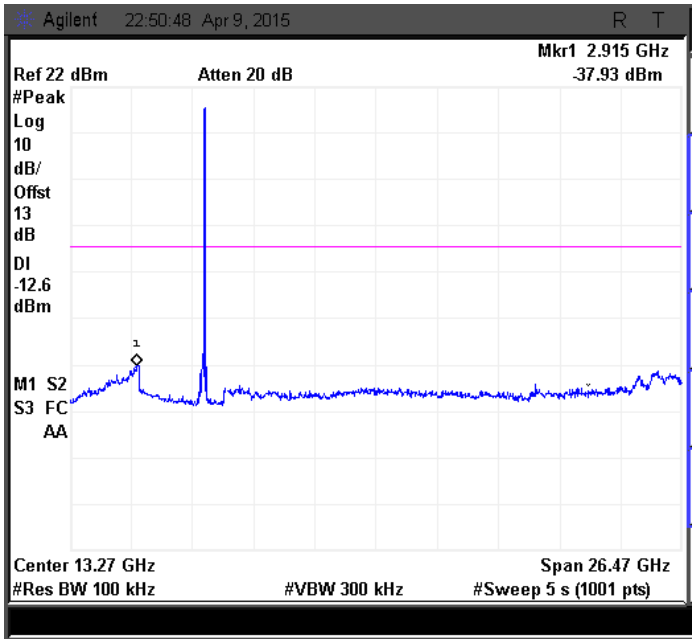


Figure 383: Spurious emission measured at Ch. 0



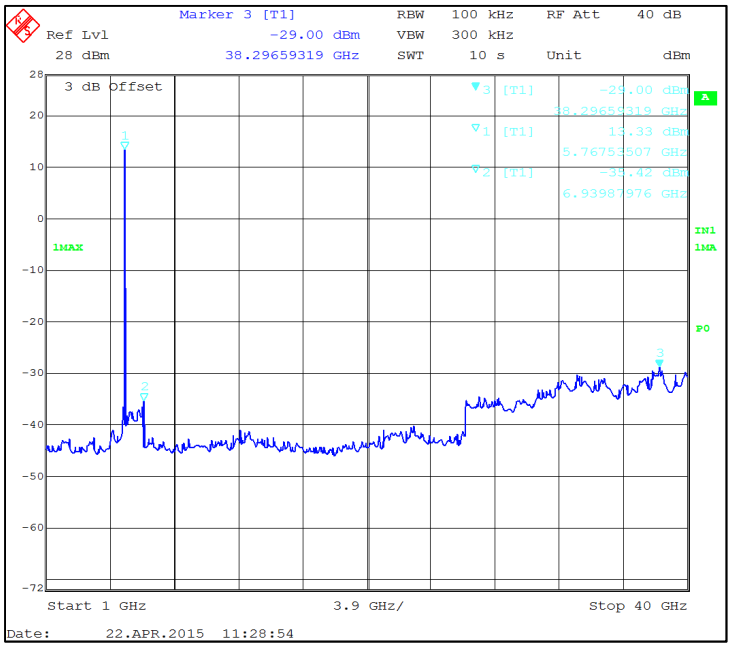
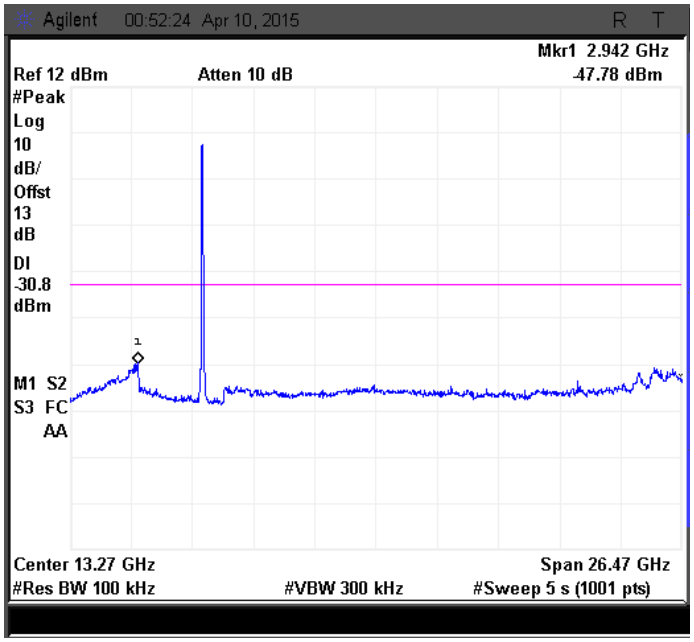


Figure 384: Spurious emission measured at Ch. 1

5.3.5.6 RESULT (SUPPORTING GRAPHS / DATA) FOR 17DBI ANTENNA CONDITION

5.3.5.6.1 40MHZ MODULATION BW-LOW CHANNEL_5750 MHZ



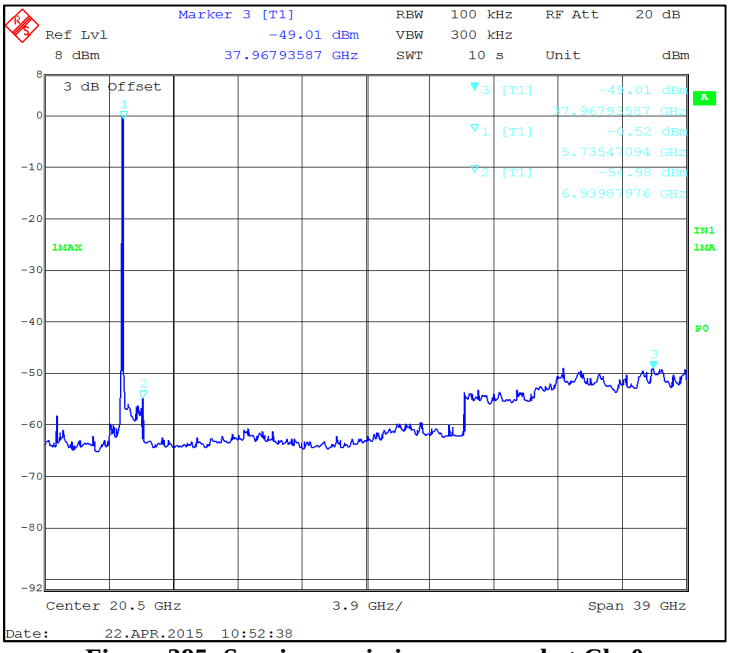
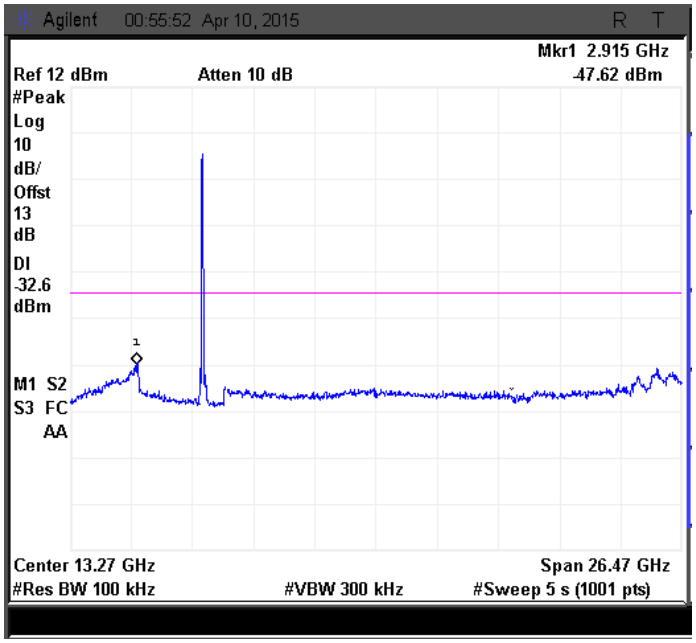


Figure 385: Spurious emission measured at Ch. 0



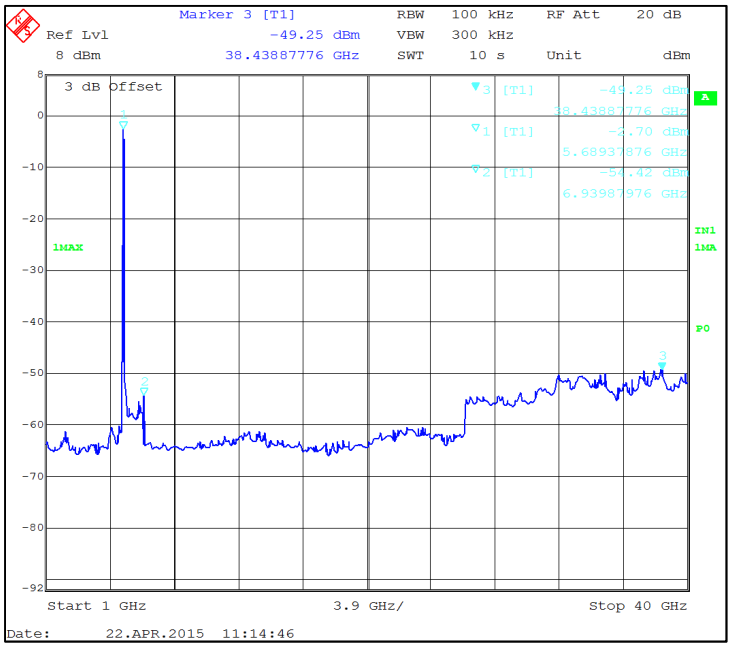
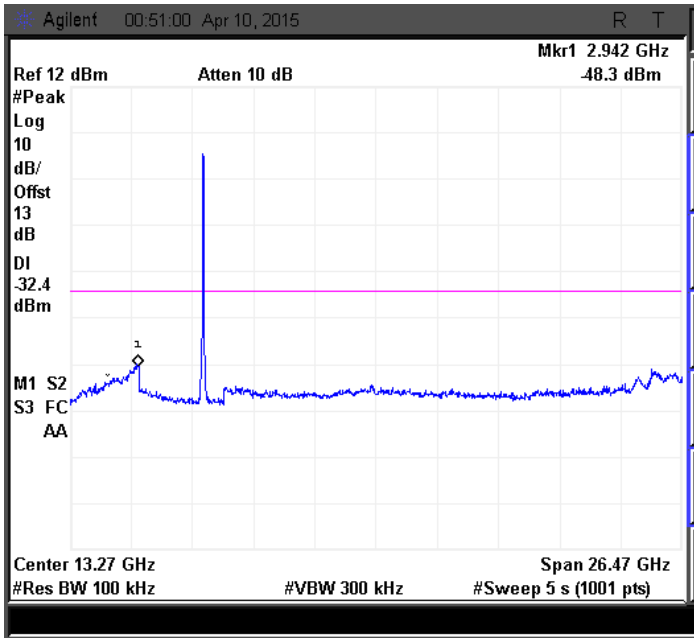


Figure 386: Spurious emission measured at Ch. 1

5.3.5.6.2 40MHz Modulation BW-Mid channel_5785 MHz



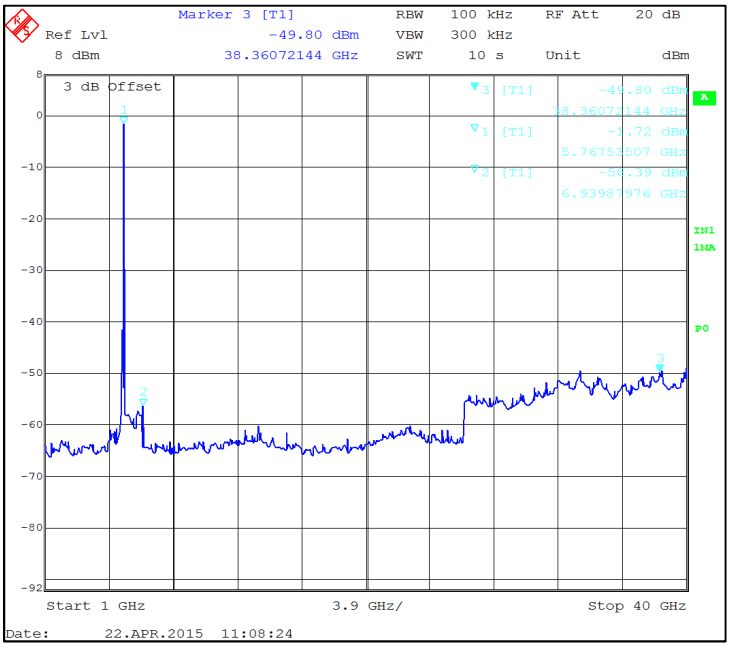
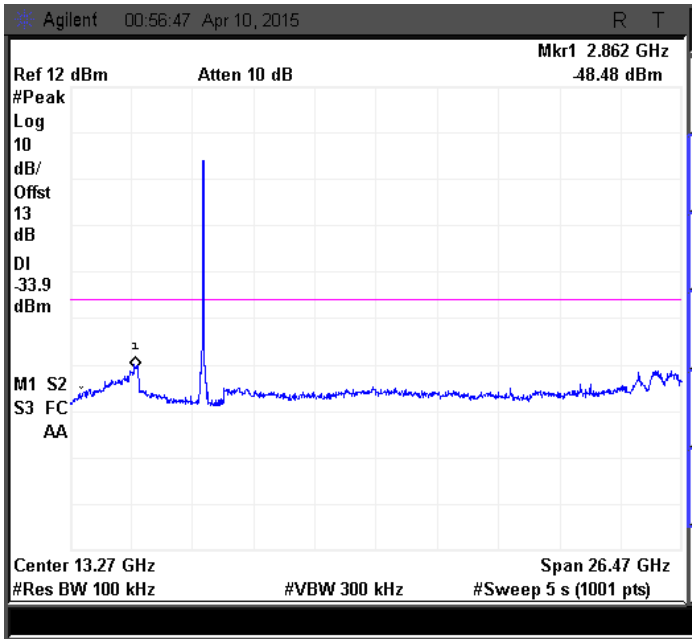


Figure 387: Spurious emission measured at Ch. 0



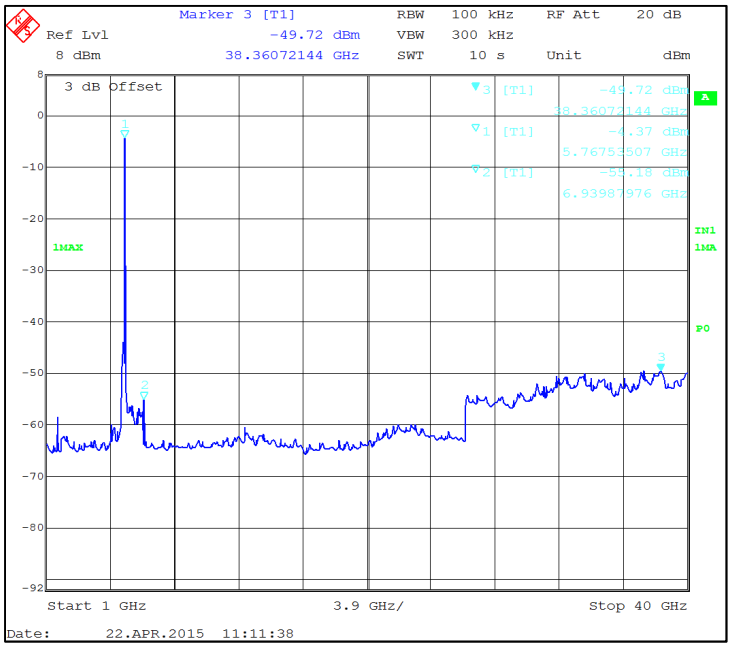
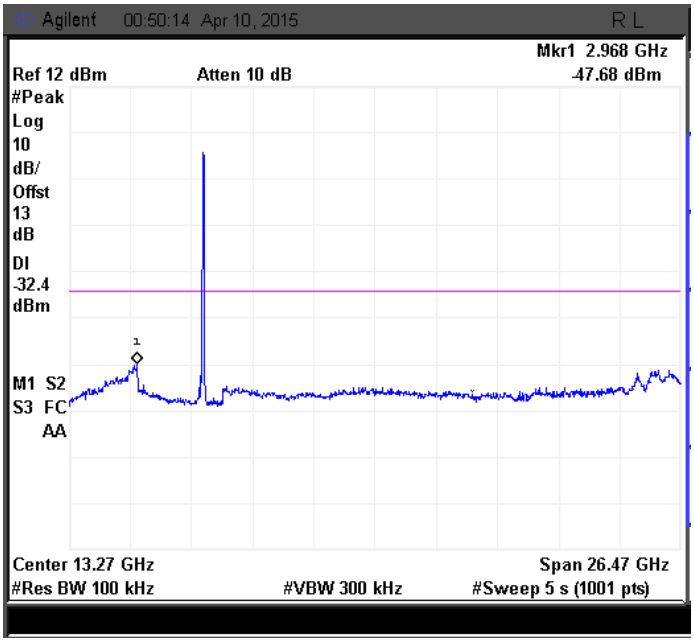


Figure 388: Spurious emission measured at Ch. 1

5.3.5.6.3 40MHz Modulation BW-High channel_5825 MHz



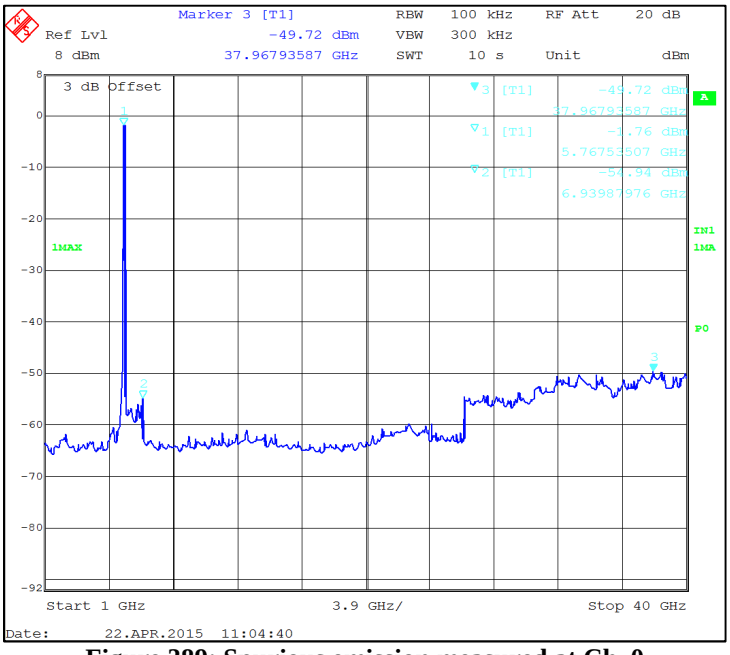
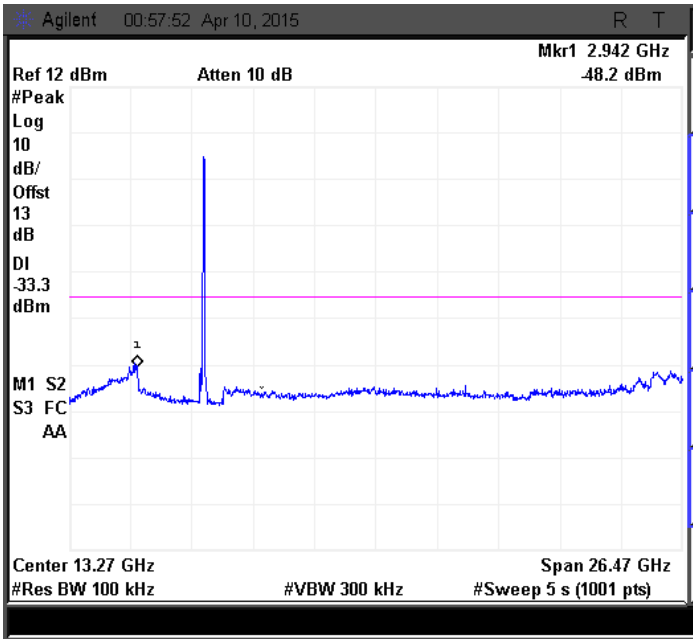


Figure 389: Spurious emission measured at Ch. 0



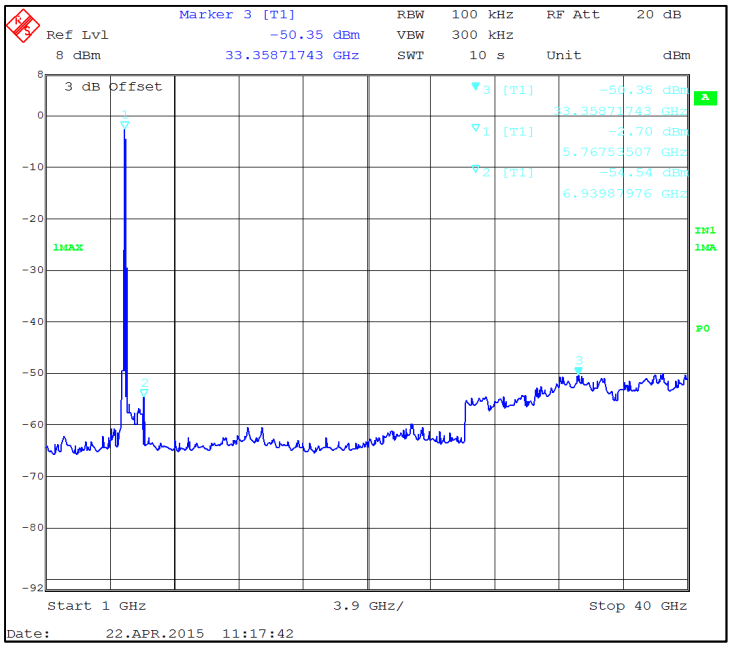
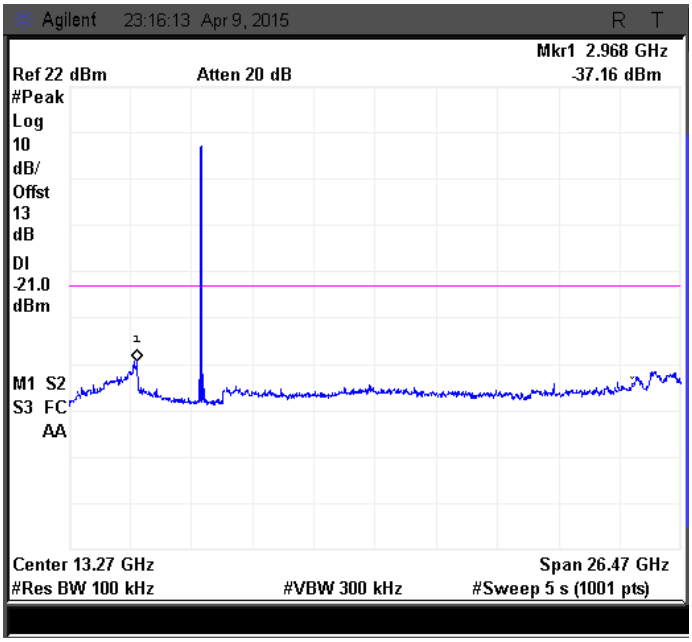


Figure 390: Spurious emission measured at Ch. 1

5.3.5.6.4 5MHz Modulation BW-Low channel_5735 MHz



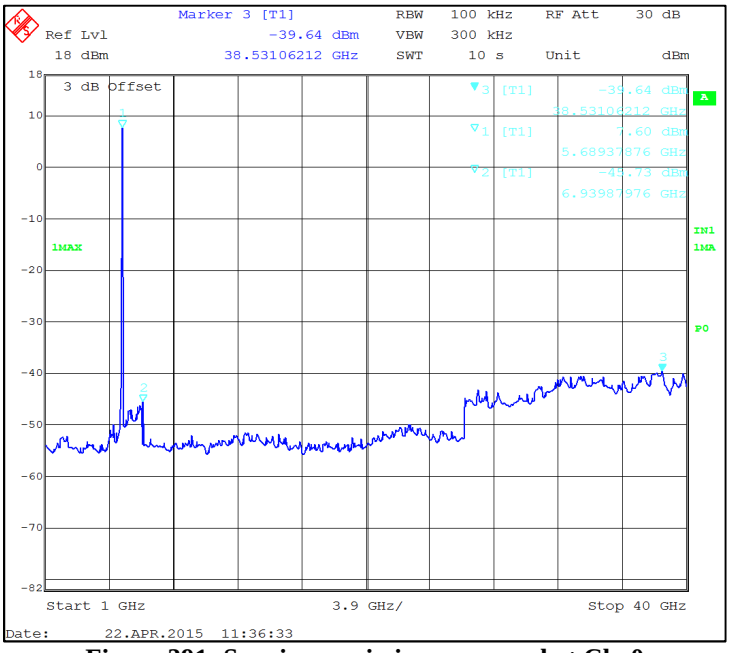
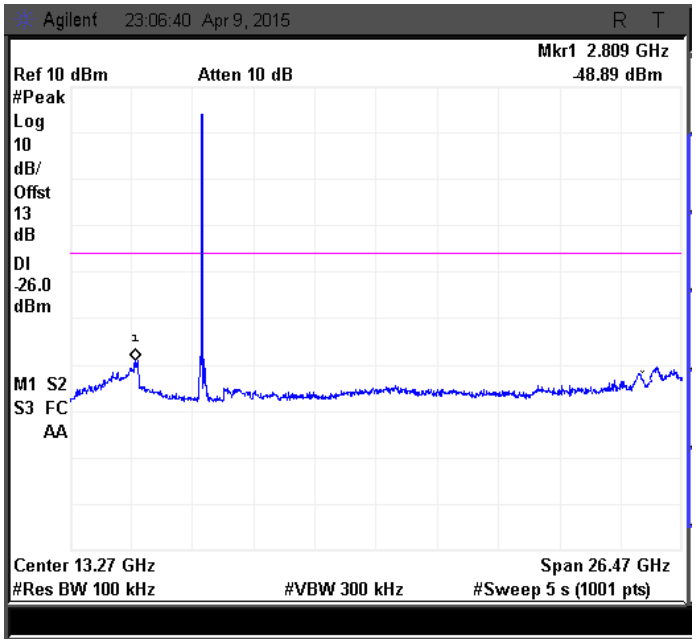


Figure 391: Spurious emission measured at Ch. 0



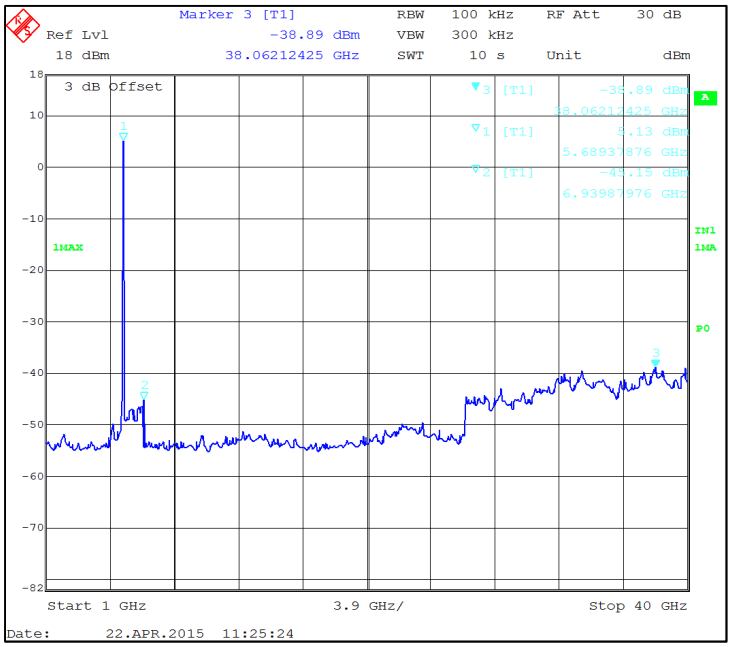
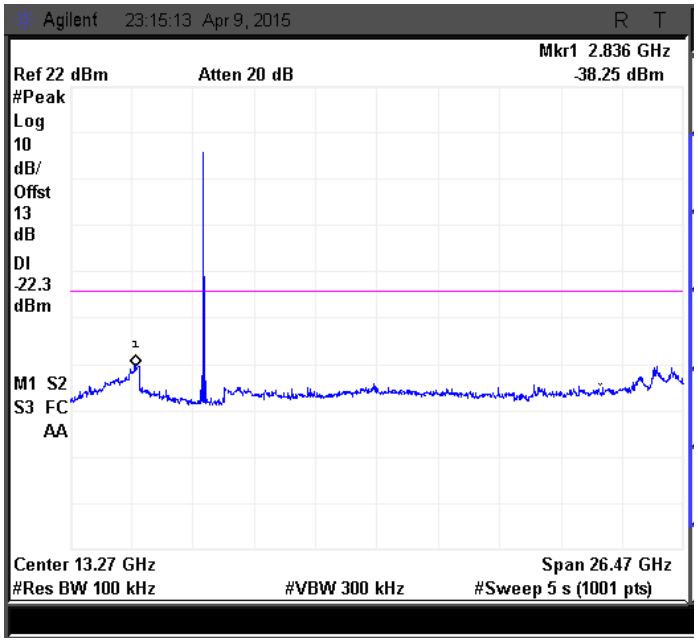


Figure 392: Spurious emission measured at Ch. 1

5.3.5.6.5 5MHz Modulation BW-Mid channel_5775 MHz



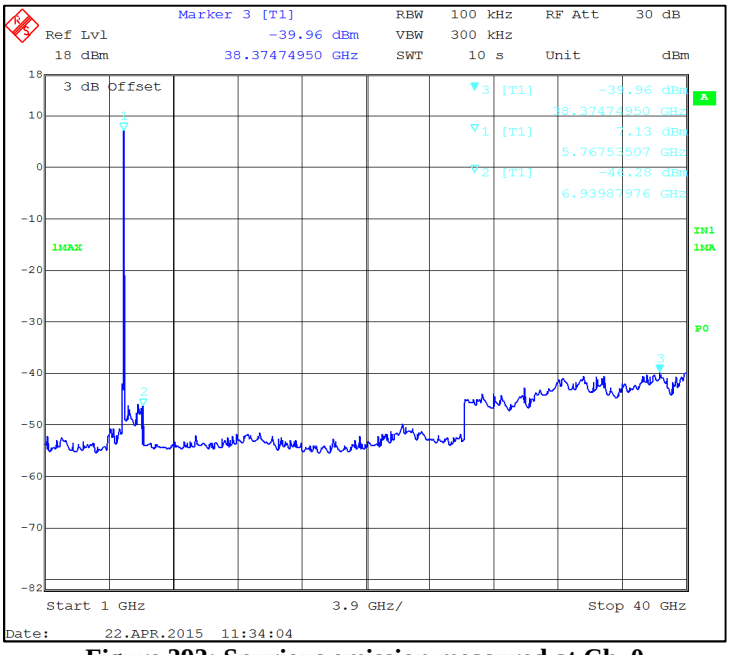
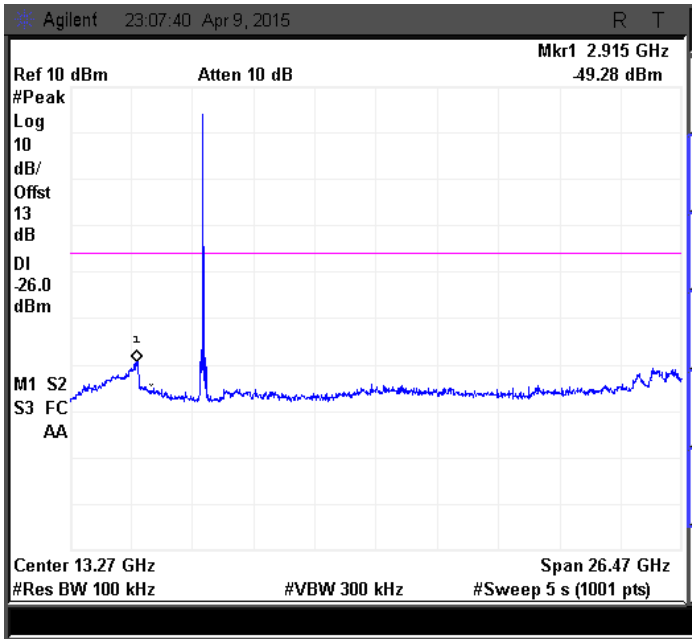


Figure 393: Spurious emission measured at Ch. 0



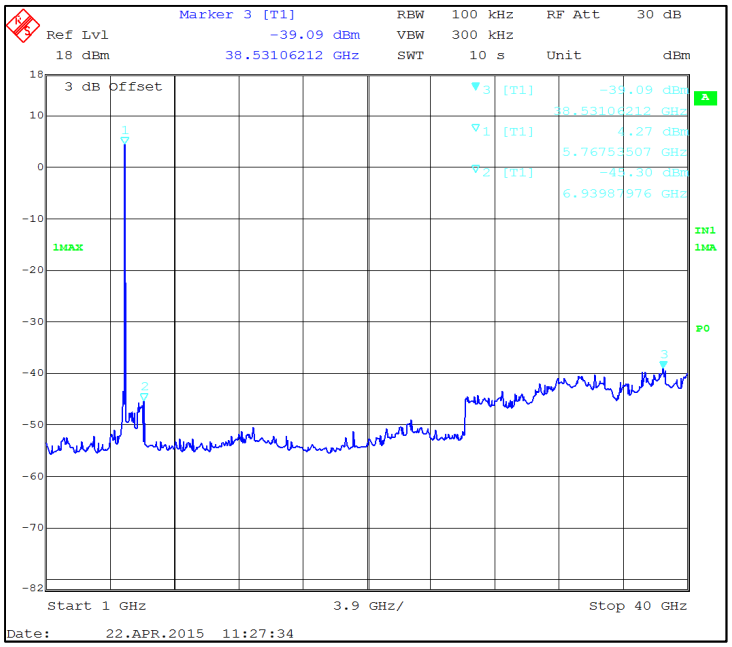
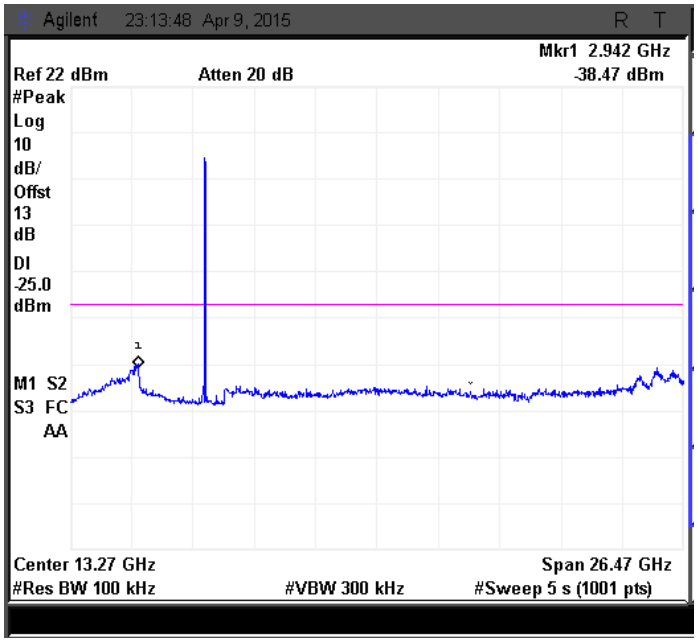


Figure 394: Spurious emission measured at Ch. 1

5.3.5.6.6 5MHz Modulation BW-High channel_5840 MHz



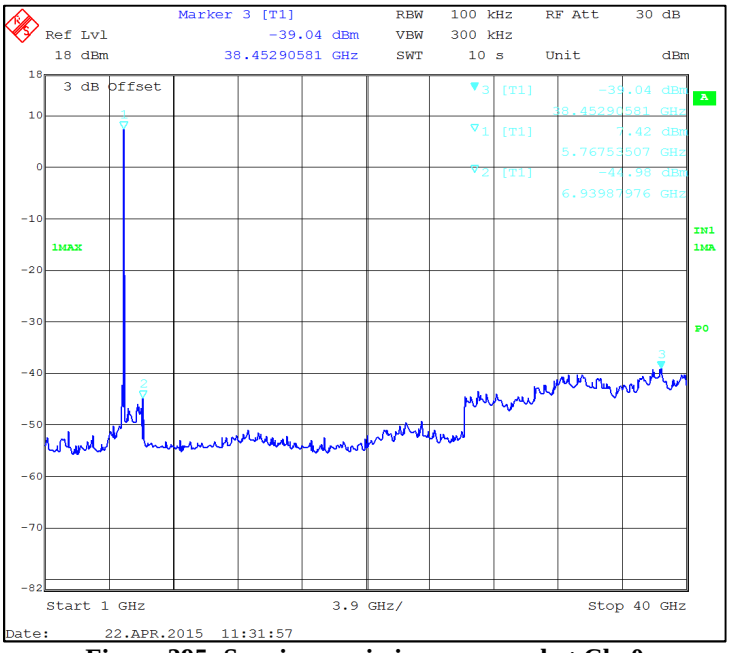
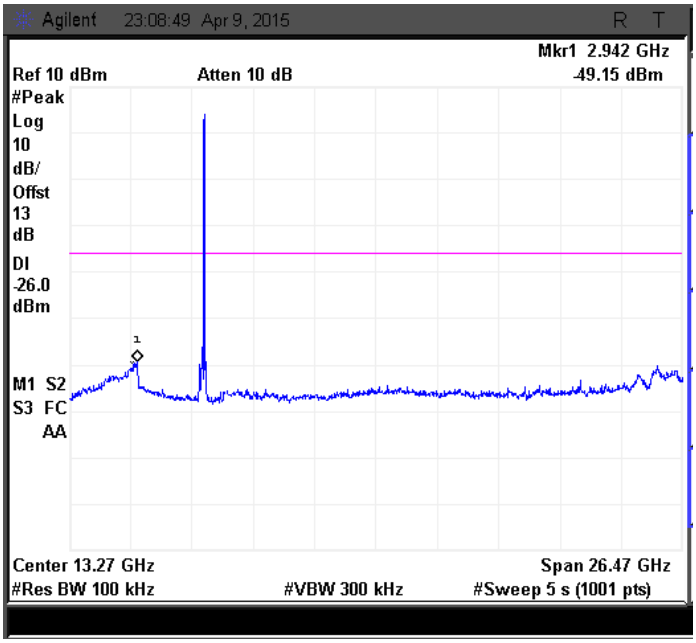


Figure 395: Spurious emission measured at Ch. 0



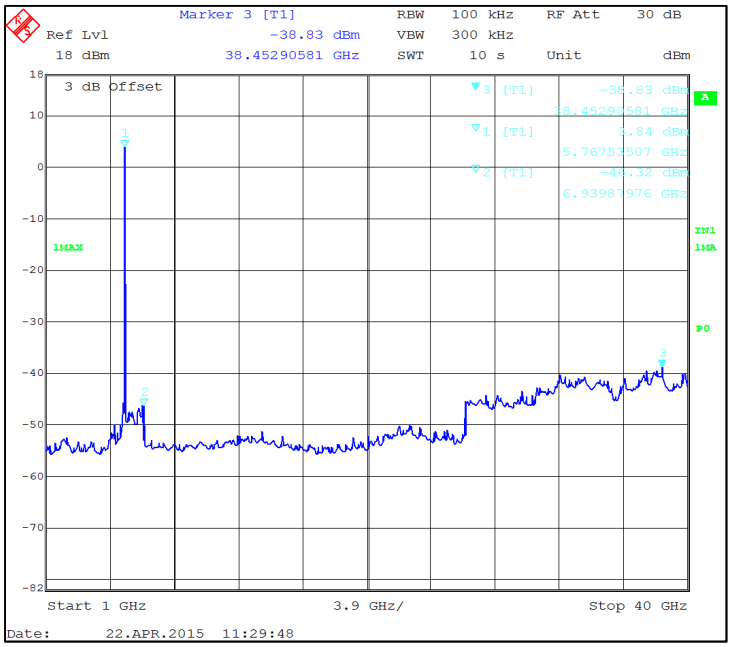
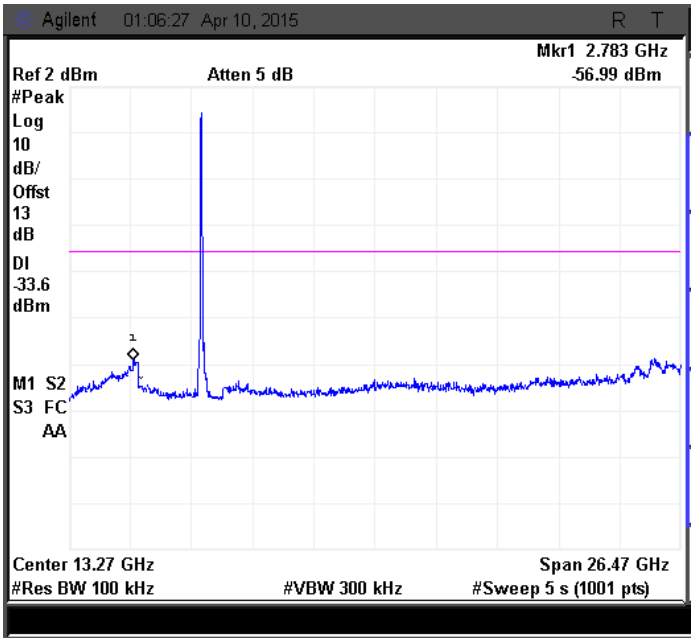


Figure 396: Spurious emission measured at Ch. 1

5.3.5.7 RESULT (SUPPORTING GRAPHS / DATA) FOR 24DBI ANTENNA CONDITION

5.3.5.7.1 40MHZ MODULATION BW-LOW CHANNEL_5750 MHZ



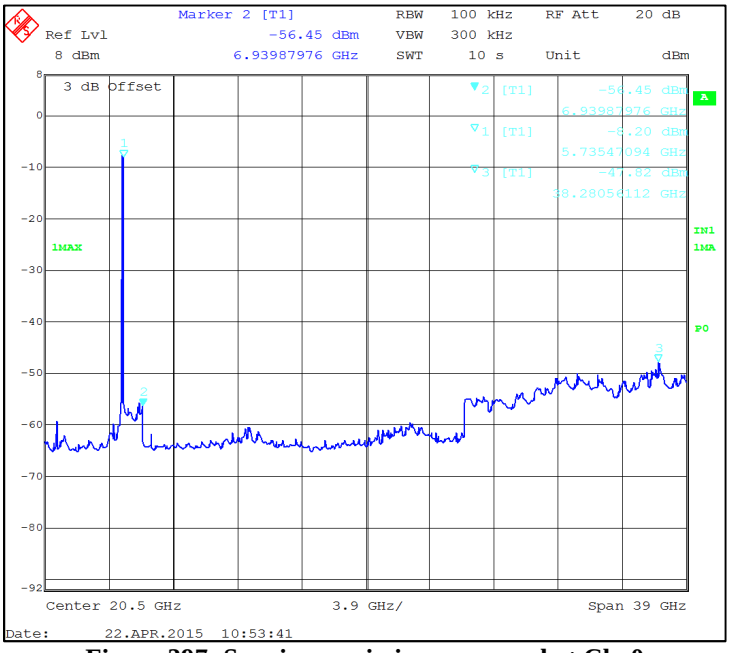
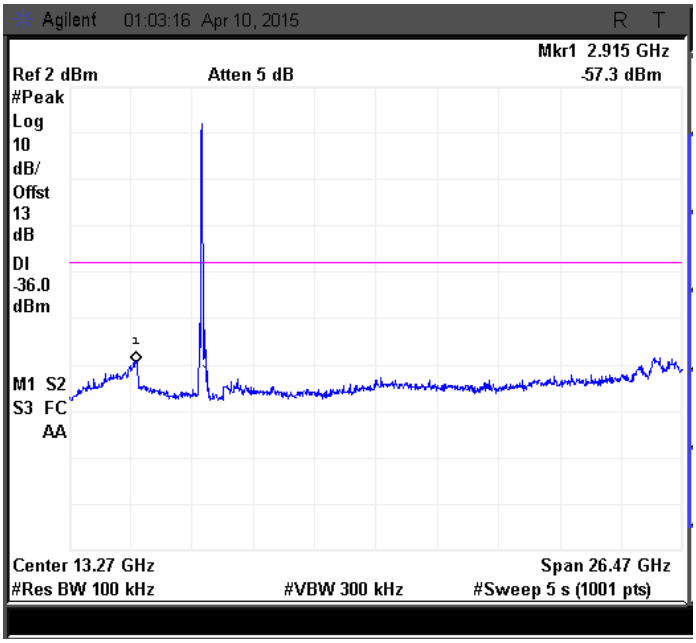


Figure 397: Spurious emission measured at Ch. 0



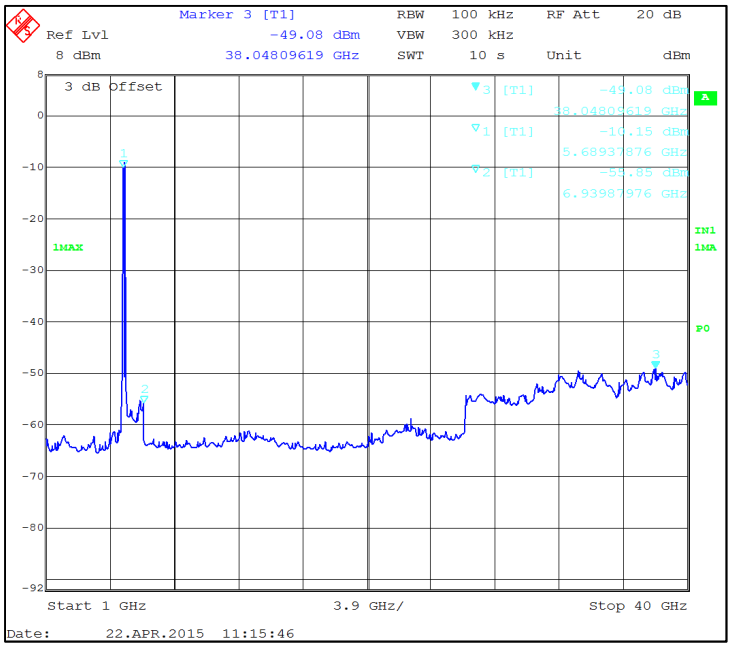
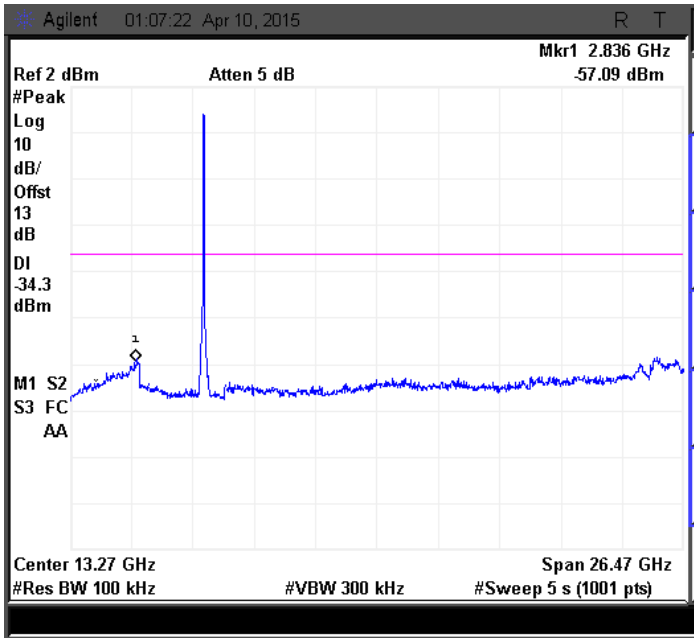


Figure 398: Spurious emission measured at Ch. 1

5.3.5.7.2 40MHz MODULATION BW-MID CHANNEL_5785 MHz



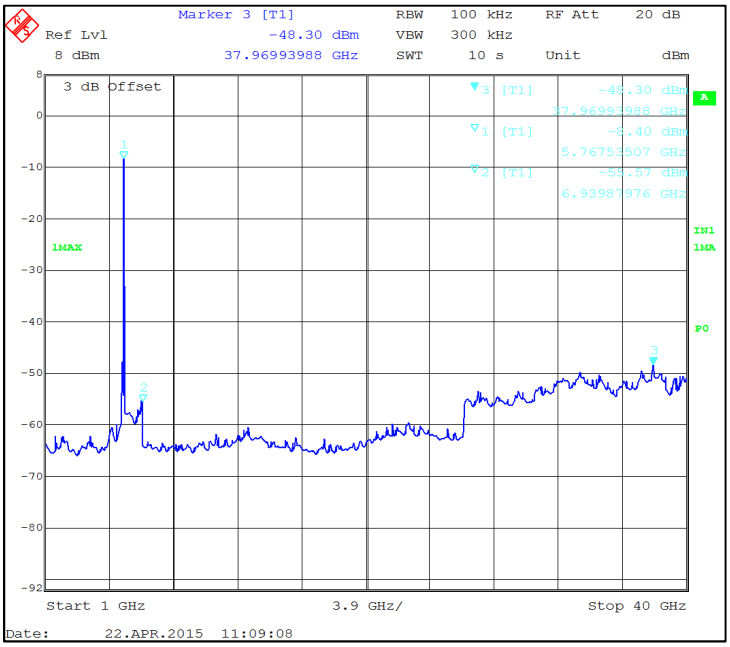
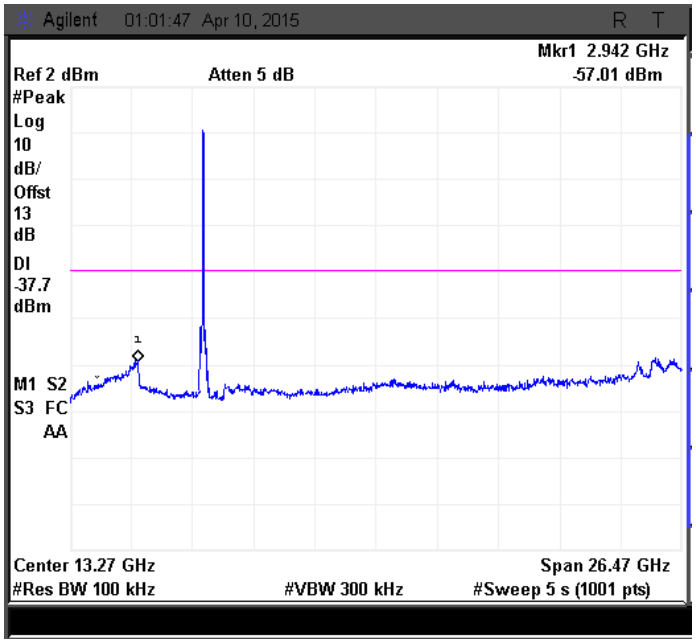


Figure 399: Spurious emission measured at Ch. 0



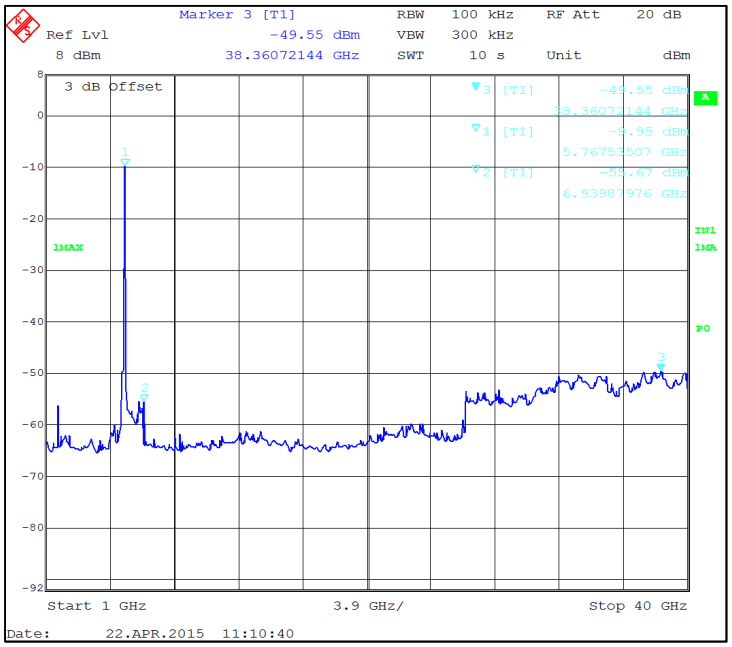
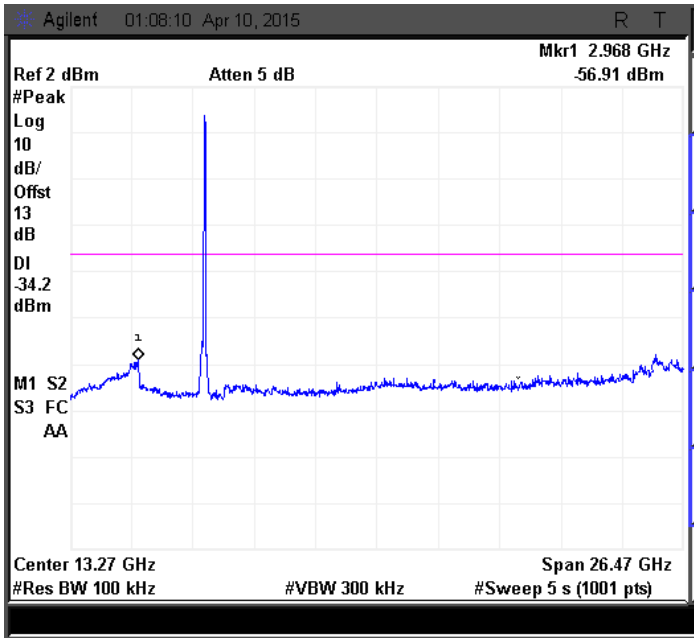


Figure 400: Spurious emission measured at Ch. 1

5.3.5.7.3 40MHz Modulation BW-High channel_5825 MHz



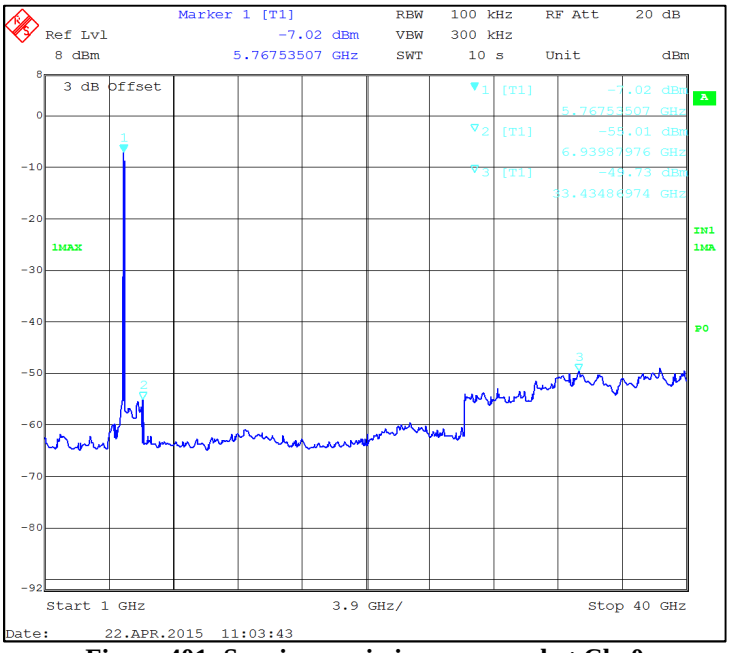
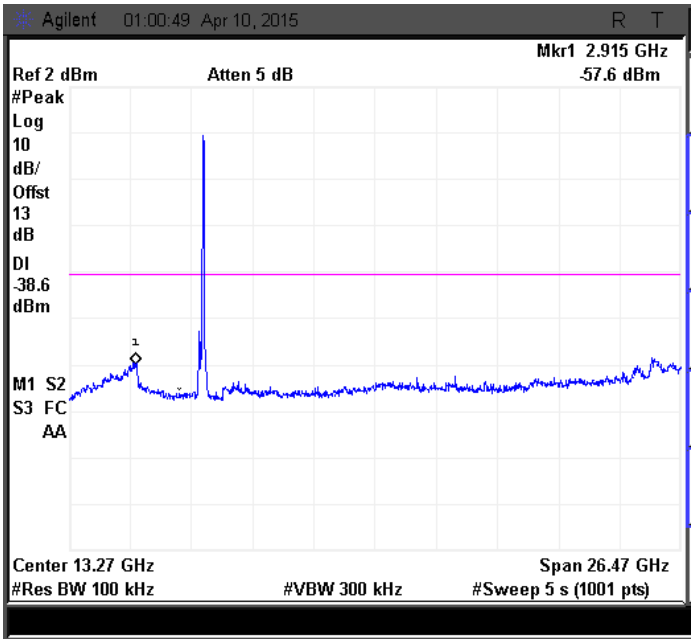


Figure 401: Spurious emission measured at Ch. 0



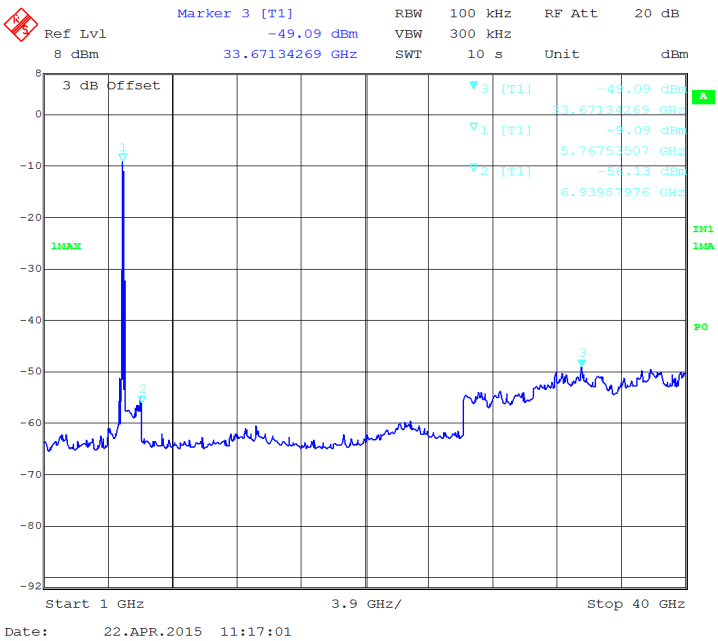
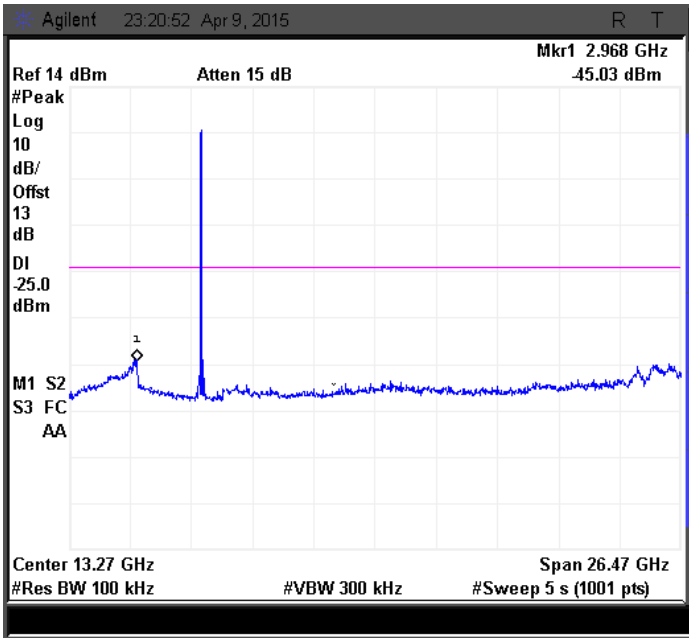


Figure 402: Spurious emission measured at Ch. 1

5.3.5.7.4 5MHz Modulation BW-Low channel_5735 MHz



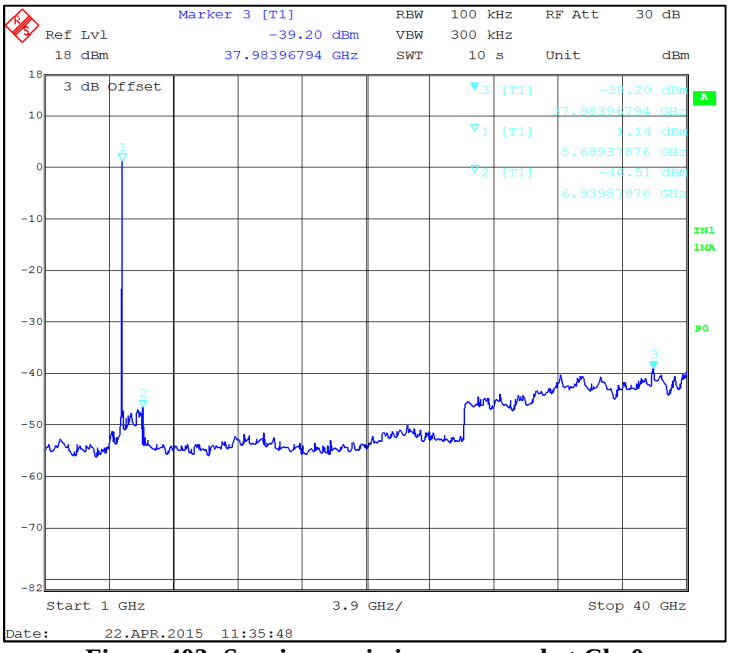
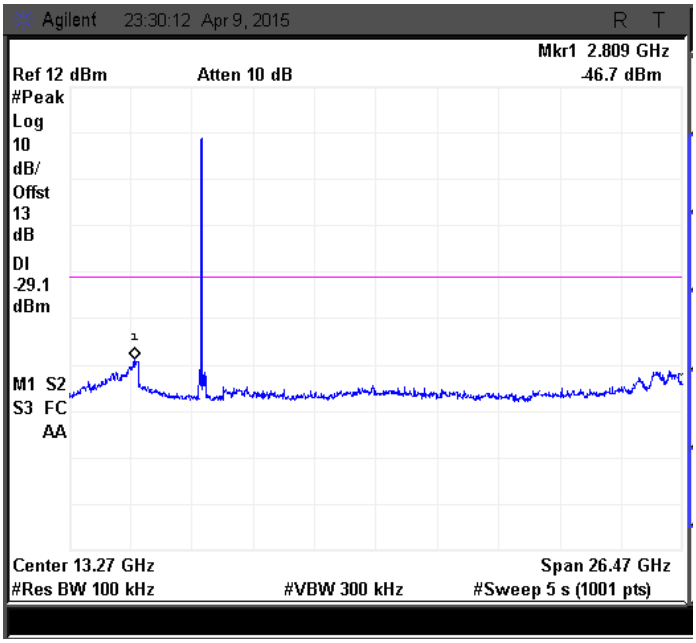


Figure 403: Spurious emission measured at Ch. 0



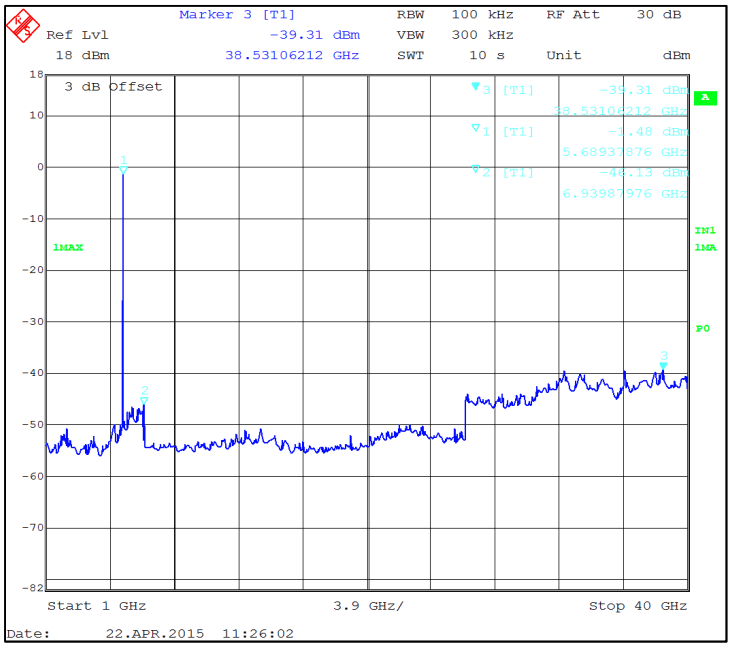
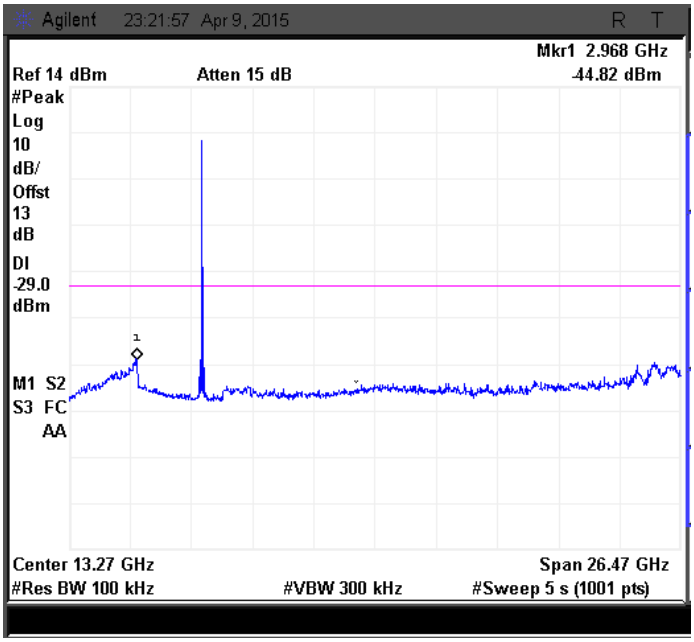


Figure 404: Spurious emission measured at Ch. 1

5.3.5.7.5 5MHz Modulation BW-Mid channel_5775 MHz



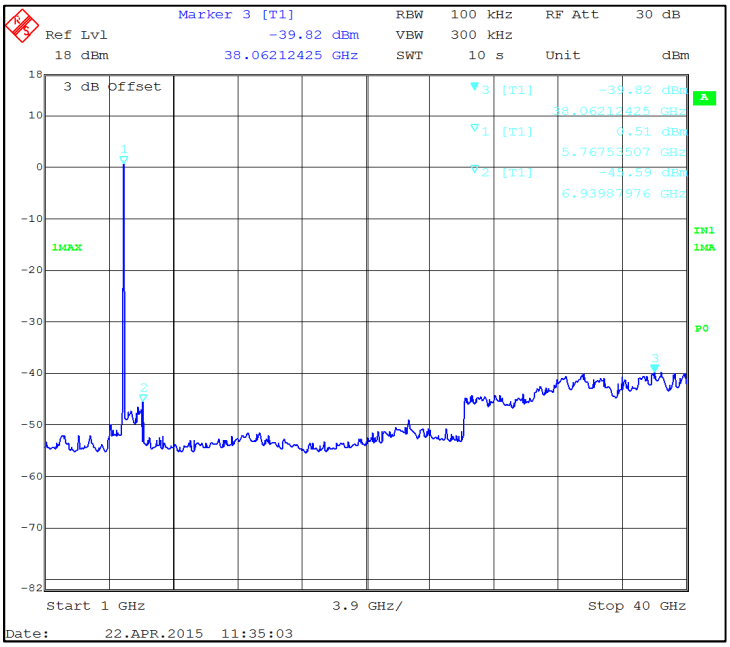
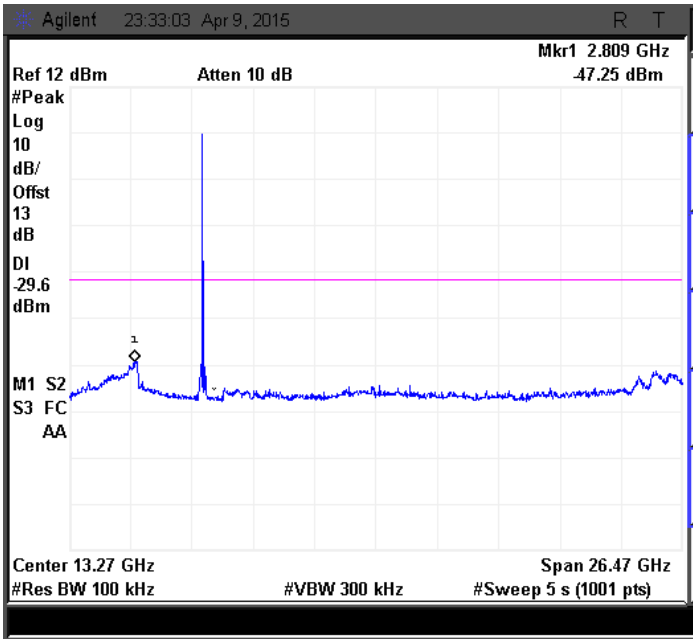


Figure 405: Spurious emission measured at Ch. 0



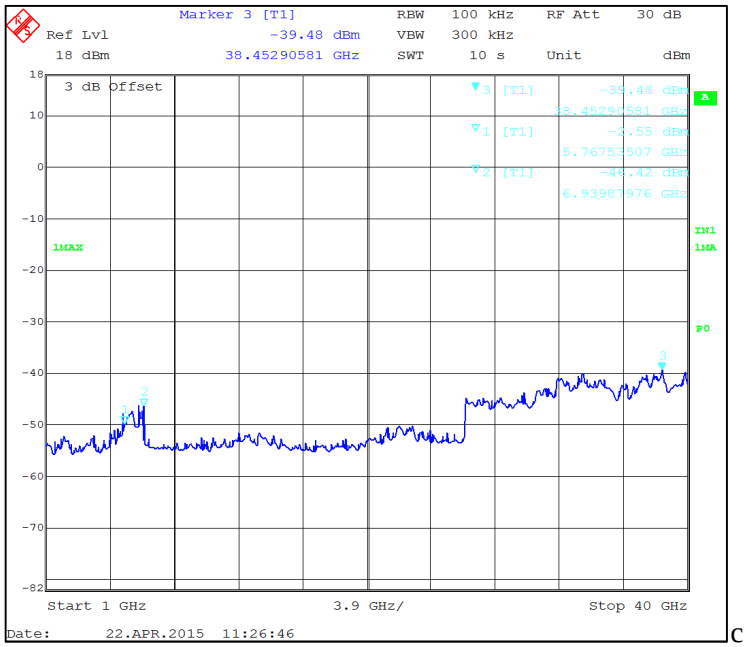
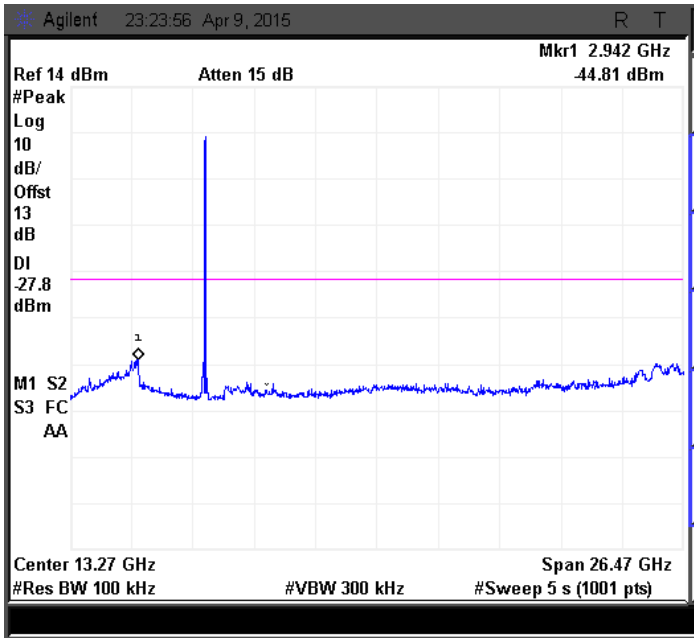


Figure 406: Spurious emission measured at Ch. 1

5.3.5.7.6 5MHz Modulation BW-High channel_5840 MHz



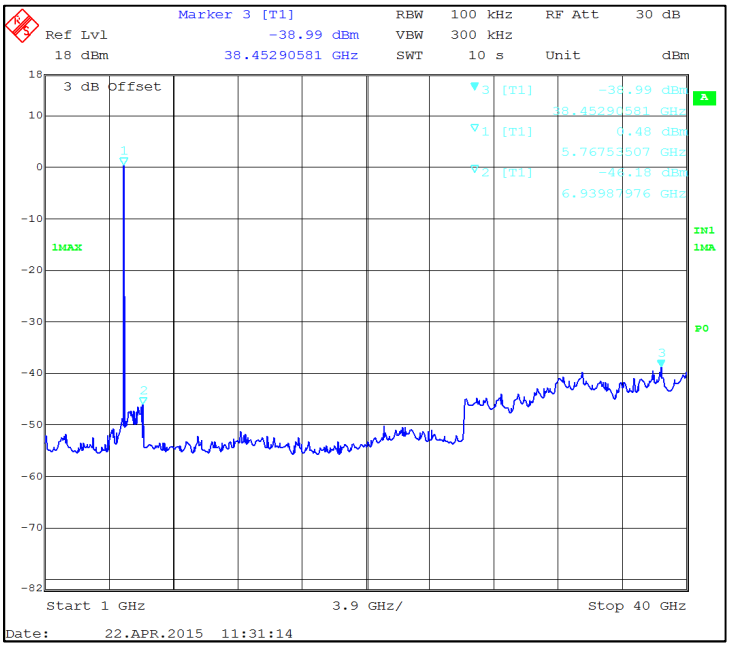
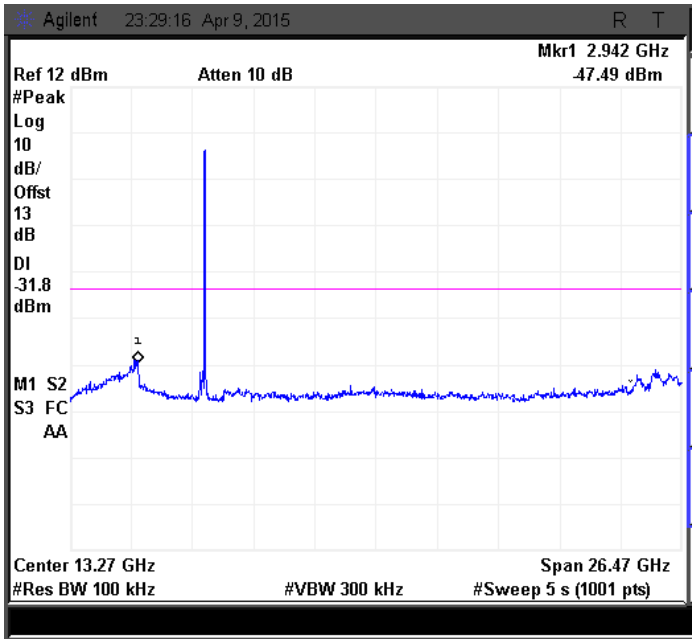


Figure 407: Spurious emission measured at Ch. 0



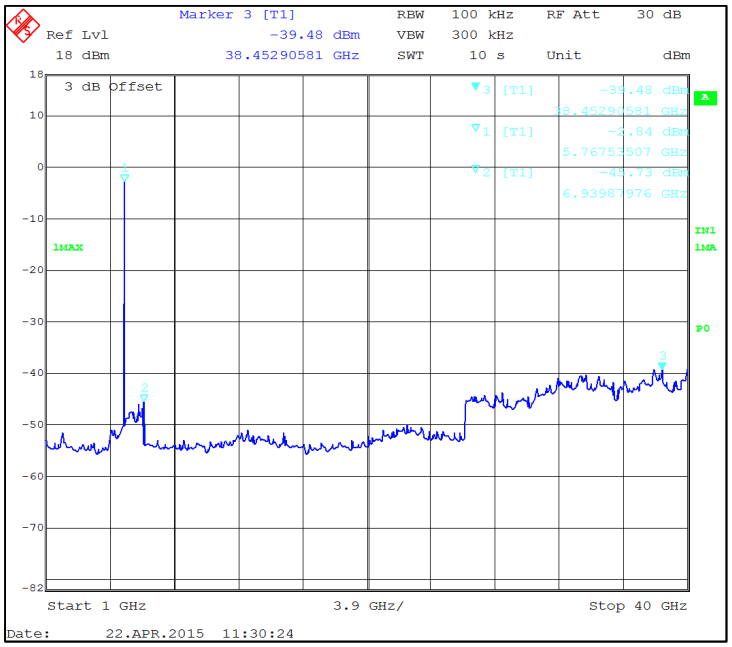


Figure 408: Spurious emission measured at Ch. 1

5.3.5.8 RESULT

Emission is below -30dBc from the carrier in all channels for both 40MHz & 5MHz Modulation Bandwidths.

5.3.6 OPERATING BAND EDGE MEASUREMENTS

5.3.6.1 TEST SPECIFICATION

Test Standard	47 CFR Ch. I (10–1–13 Ed), Part 15, Subpart C RSS-210 Issue 8, Dec 2010
Test Procedure	ANSI C63.10-2013
Frequency Range	As applicable
Resolution Bandwidth	100 kHz
Video Bandwidth	300 kHz
Sweep Time	Auto
Attenuation	Auto
Test Mode	Conducted
Detector	Peak & Average
Input Voltage	120V AC
Input Frequency	60 Hz
Temperature	21.0°C
Humidity	54.0%
Tested By	Harsha K
Test Date	09th Apr 2015, 10th Apr 2015, 12th Apr 2015 & 13th Apr 2015

5.3.6.2 LIMITS

Standard	Reference section	Frequency range	Limit
47 CFR Ch. I (10–1–13 Ed), Part 15, Subpart C RSS-210, Issue 8, Dec 2010	§15.247 (d) A8.5	5725 MHz to 5825 MHz	30dB below the maximum in- band average PSD level

5.3.6.3 TEST SETUP

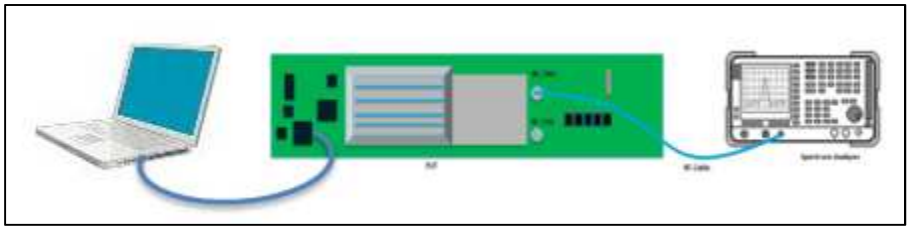


Figure 409: Typical test setup for Conducted Test setup

5.3.6.4 TEST PROCEDURE

The Conducted test was performed using the Spectrum analyzer. Measurements were done as per Section 13 of KDB **"558074 D01 DTS measurement Guidance v03r02".** The RF output of the EUT was connected to the input port of Spectrum analyzer using an attenuator. Captured the data from spectrum analyzer and compared with the limits specified in the standard.

5.3.6.5 RESULT (SUPPORTING GRAPHS / DATA) FOR BASIC CONDITION

5.3.6.5.1 40MHz MODULATION BW-LOW CHANNEL_5750 MHz

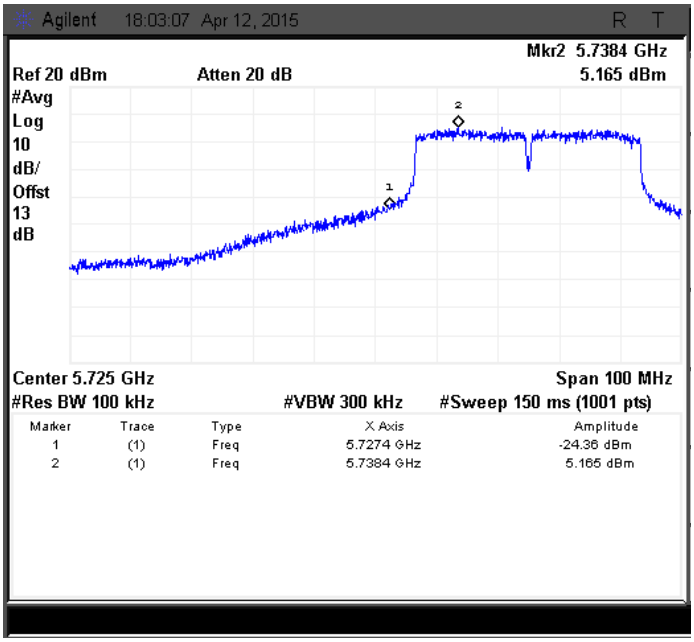


Figure 410: Band edge measured at Ch. 0-Average detector

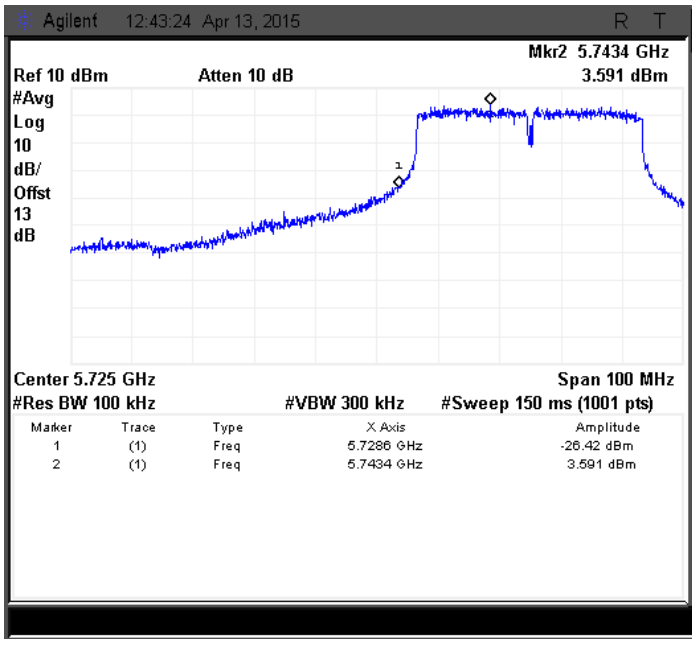


Figure 411: Band edge measured at Ch. 1-Average detector

5.3.6.5.2 40MHz Modulation BW-High channel_5825 MHz

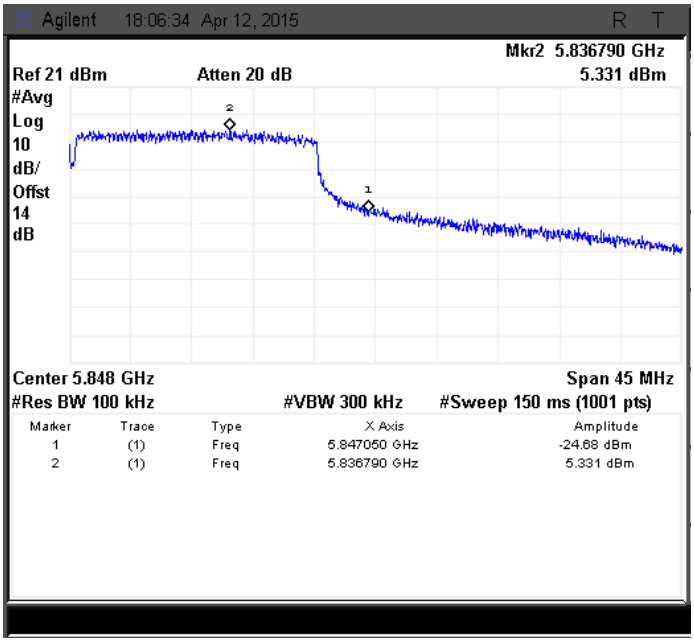


Figure 412: Band edge measured at Ch. 0-Average detector

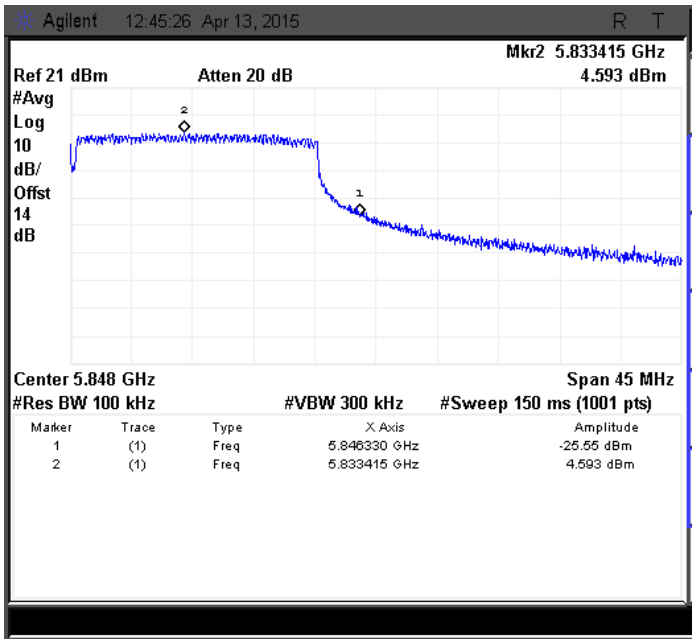


Figure 413: Band edge measured at Ch. 1-Average detector

5.3.6.5.3 5MHz Modulation BW-Low channel_5735 MHz

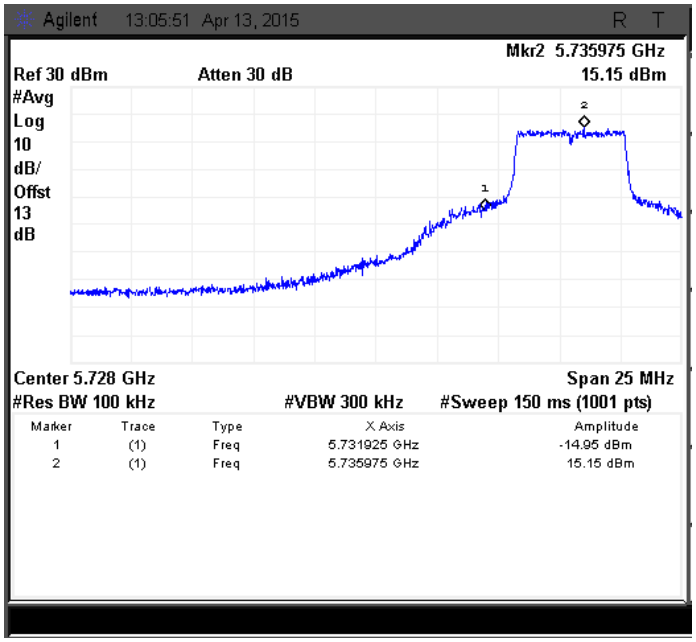


Figure 414: Band edge measured at Ch. 0-Average detector

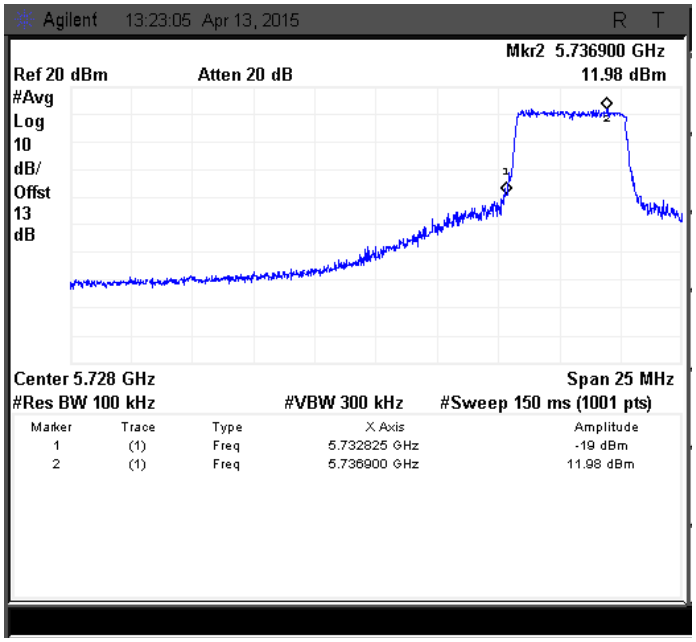


Figure 415: Band edge measured at Ch. 1-Average detector

5.3.6.5.4 5MHz Modulation BW-High channel_5840 MHz

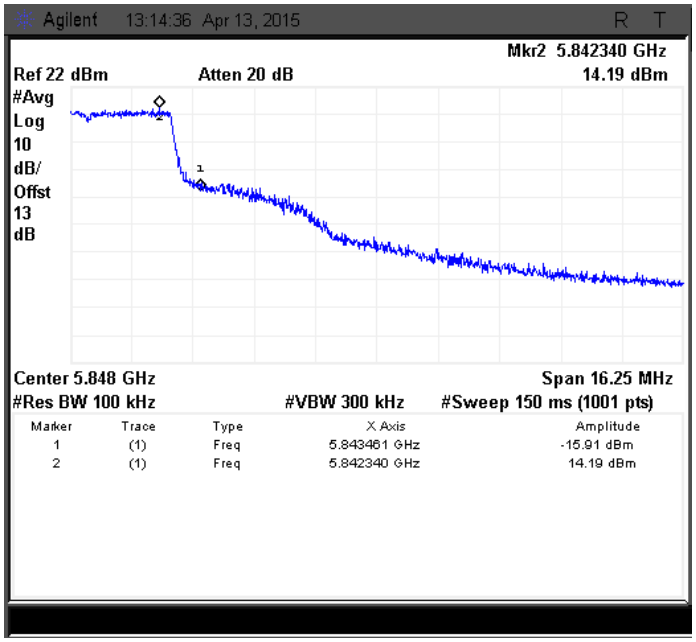


Figure 416: Band edge measured at Ch. 0-Average detector

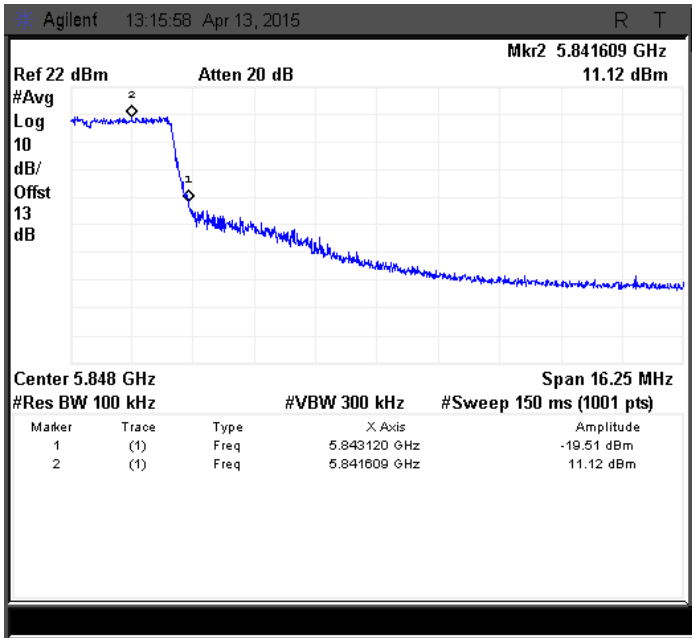


Figure 417: Band edge measured at Ch. 1-Average detector

5.3.6.6 RESULT (SUPPORTING GRAPHS / DATA) FOR 17DBI ANTENNA CONDITION

5.3.6.6.1 40MHZ MODULATION BW-HIGH CHANNEL_5750 MHZ

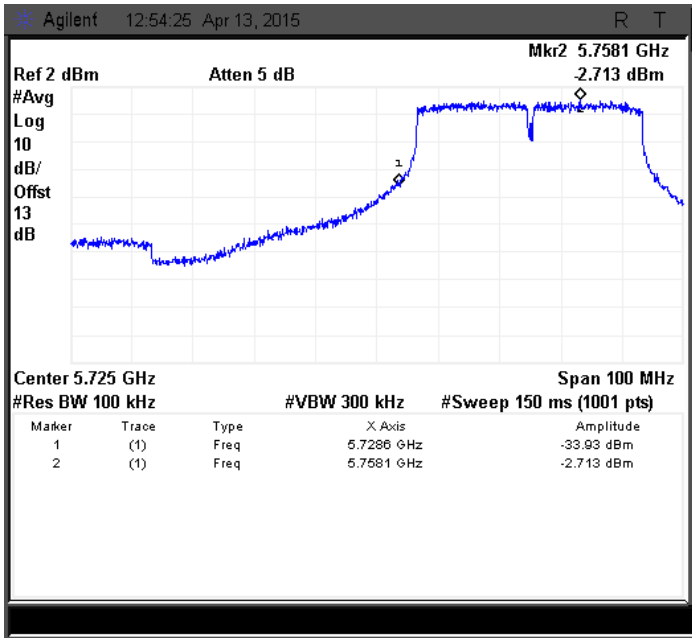


Figure 418: Band edge measured at Ch. 0-Average detector

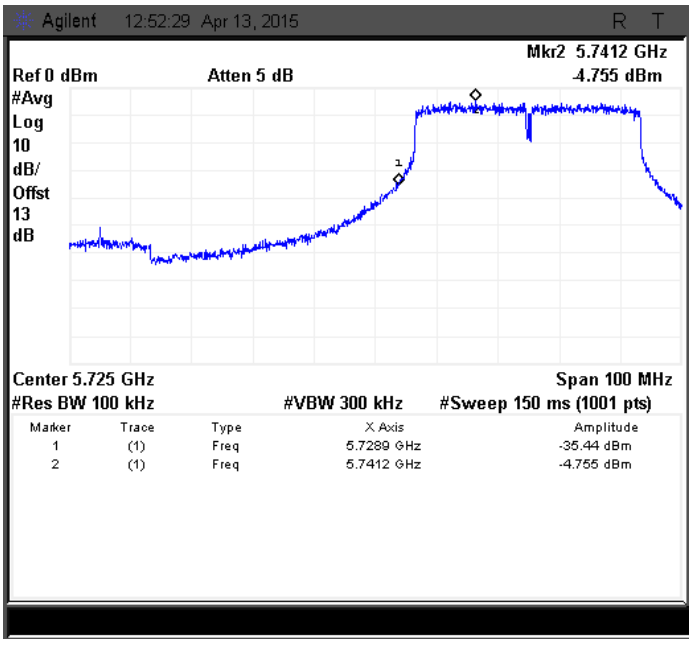


Figure 419: Band edge measured at Ch. 1-Average detector

5.3.6.6.2 5MHz Modulation BW-High channel_5840 MHz

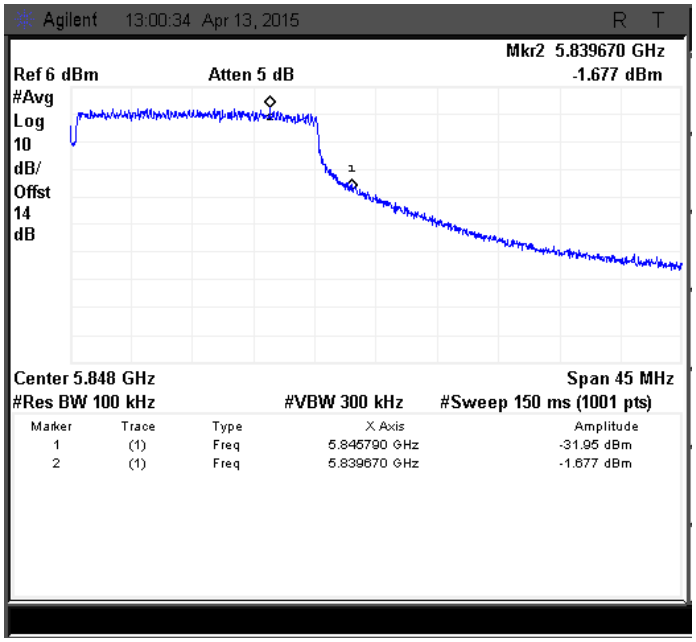


Figure 420: Band edge measured at Ch. 0-Average detector

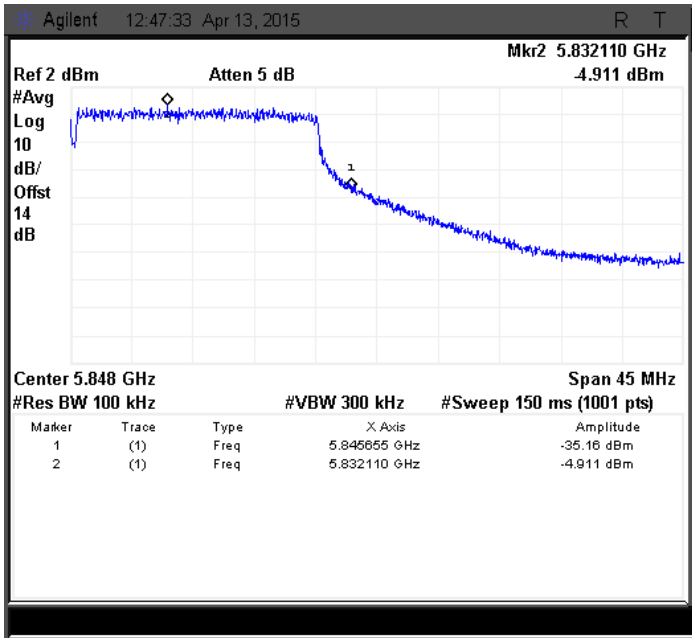


Figure 421: Band edge measured at Ch. 1-Average detector

5.3.6.6.3 5MHz Modulation BW-Low channel_5735 MHz

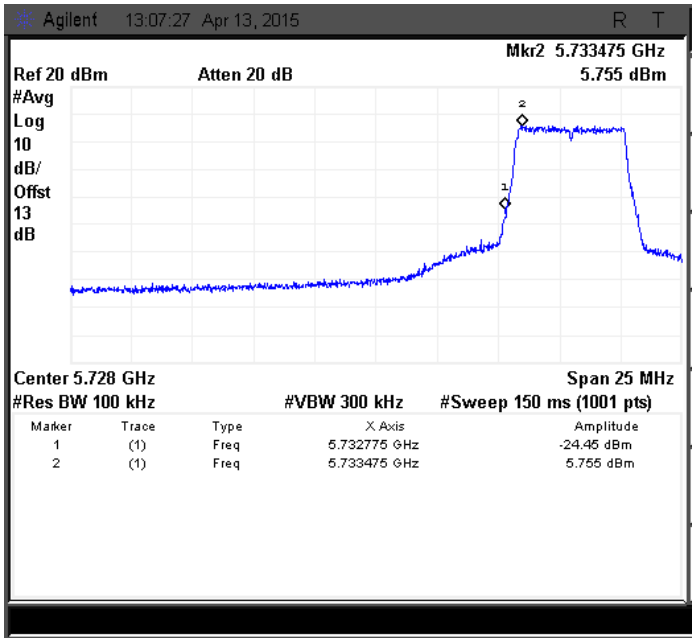


Figure 422: Band edge measured at Ch. 0-Average detector

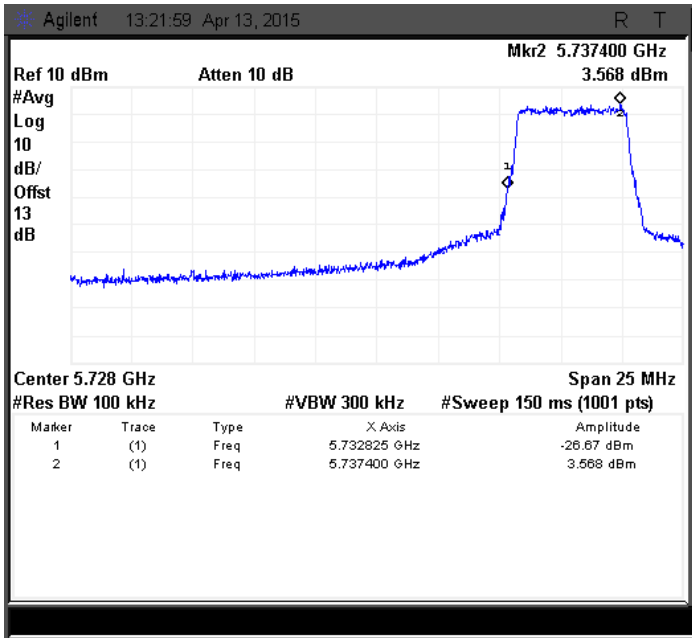


Figure 423: Band edge measured at Ch. 1-Average detector

5.3.6.6.4 5MHz Modulation BW-High channel_5840 MHz

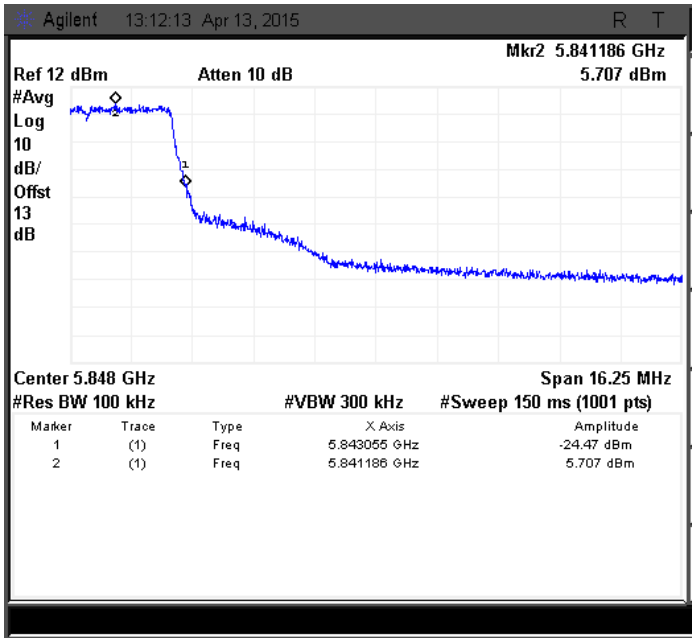


Figure 424: Band edge measured at Ch. 0-Average detector

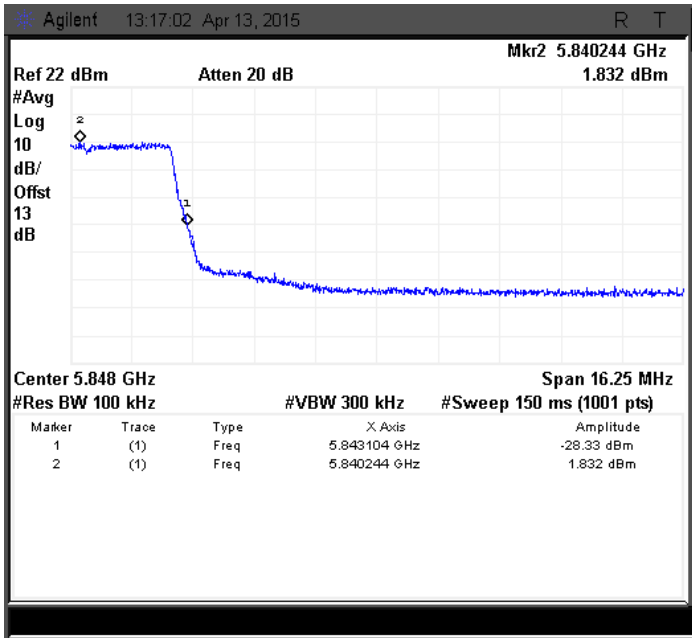


Figure 425: Band edge measured at Ch. 1-Average detector

5.3.6.7 RESULT (SUPPORTING GRAPHS / DATA) FOR 24DBI ANTENNA CONDITION

5.3.6.7.1 40MHZ MODULATION BW-LOW CHANNEL_5750 MHZ

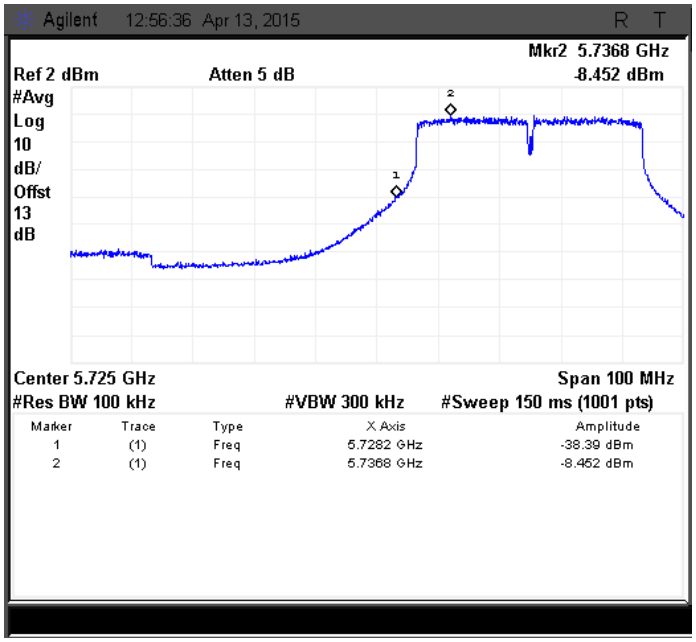


Figure 426: Band edge measured at Ch. 0-Average detector

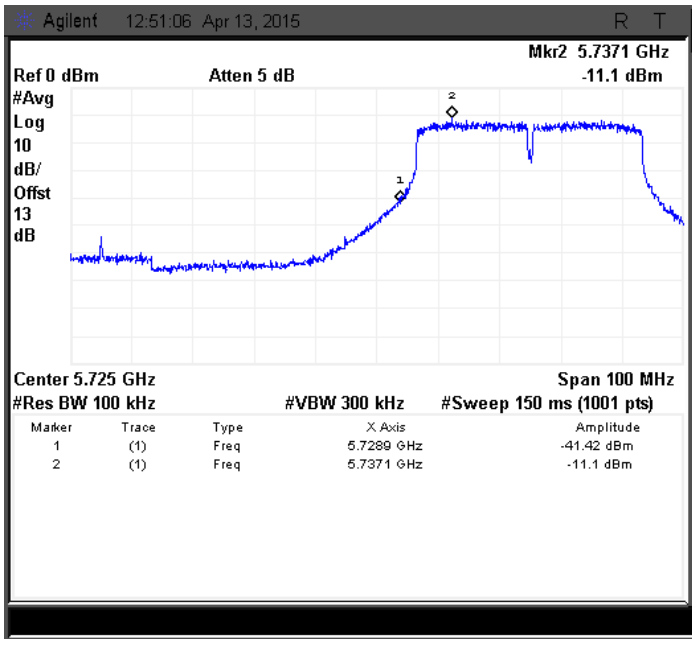


Figure 427: Band edge measured at Ch. 1-Average detector

5.3.6.7.2 40MHZ MODULATION BW-HIGH CHANNEL_5825 MHZ

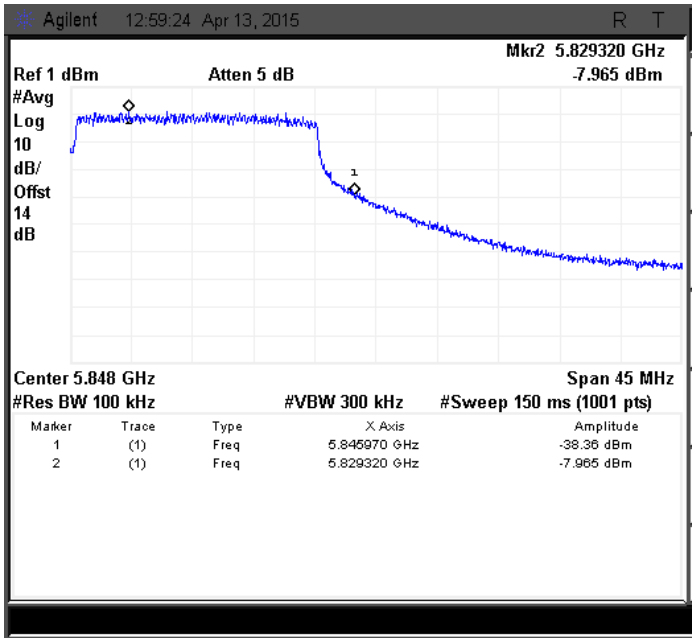


Figure 428: Band edge measured at Ch. 0-Average detector

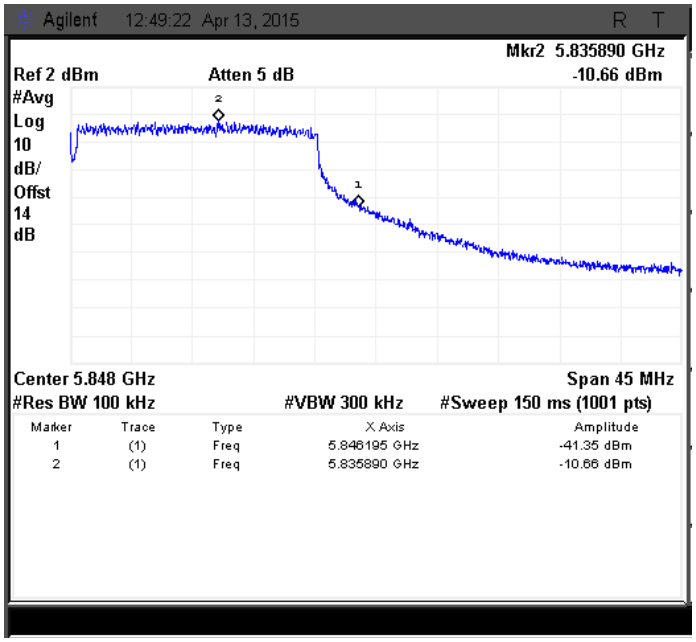


Figure 429: Band edge measured at Ch. 1-Average detector

5.3.6.7.3 5MHz Modulation BW-Low channel_5735 MHz

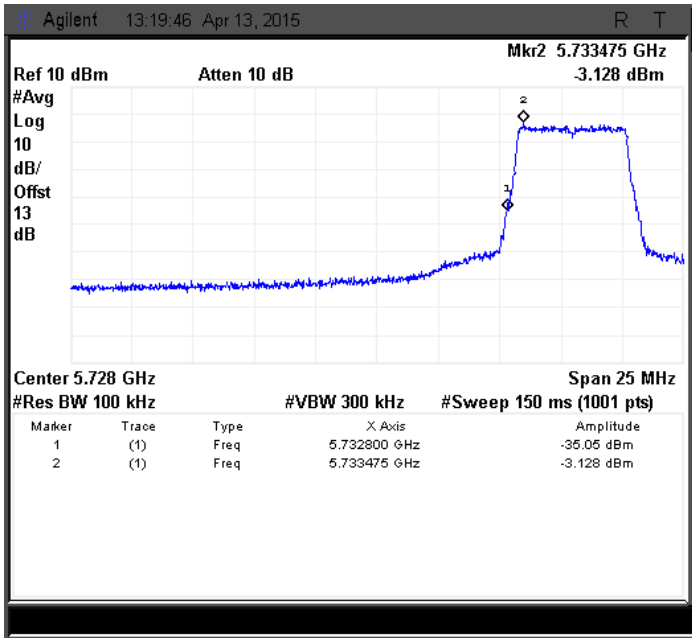


Figure 430: Band edge measured at Ch. 0-Average detector

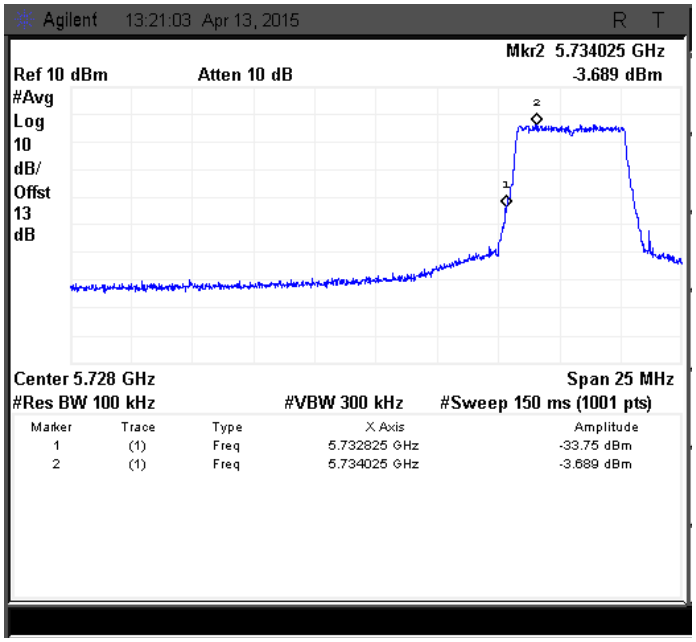


Figure 431: Band edge measured at Ch. 1-Average detector

5.3.6.7.4 5MHz Modulation BW-High channel_5840 MHz

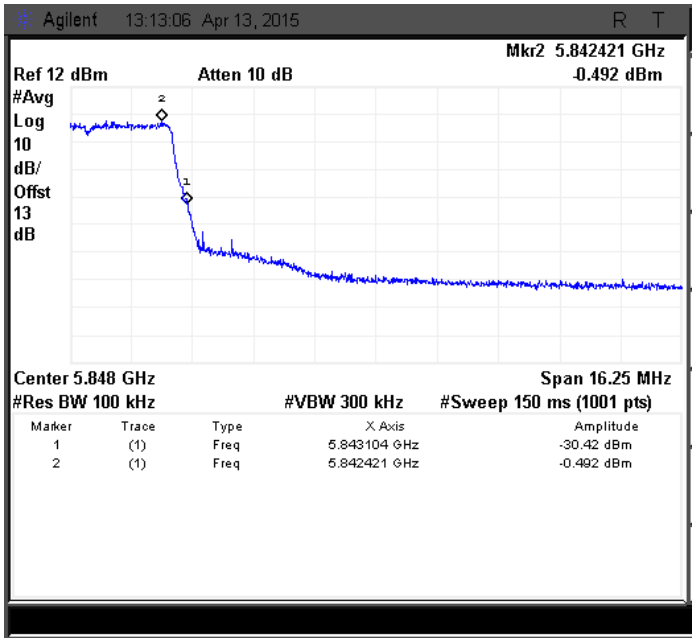


Figure 432: Band edge measured at Ch. 0-Average detector

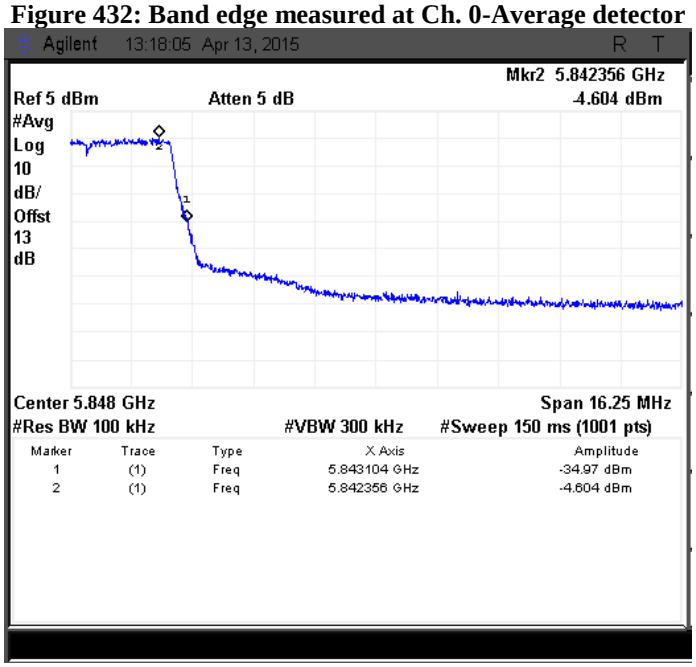


Figure 433: Band edge measured at Ch. 1-Average detector

5.3.6.8 RESULT

Emission is below -30dBc from the carrier in all channels for both 40MHz & 5MHz Modulation Bandwidths.

APPENDIX I – ACRONYMS

dBµV	Decibel micro Volts
EUT	Equipment Under Test
FCC	Federal Communications Commission
GHz	Giga Hertz
kHz	Kilo Hertz
LISN	Line Impedance Stabilization Network
MHz	Mega Hertz
QP	Quasi Peak

END OF REPORT