1250 Peterson Dr., Wheeling, IL 60090

Company: Motorola, Inc.
Model Tested: 5780APUS (for USA), 5780APC (for Canada & Europe)
Report Number: 16018

FCC Rules and Regulations / Intentional Radiators

Operational in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz, Bands

Part 15, Subpart C, Section 15.247

THE FOLLOWING **MEETS** THE ABOVE TEST SPECIFICATION

Formal Name:	OFDM Access Point - CAP58430
Kind of Equipment:	Digital Transmission Transceiver
Frequency Range:	5730 MHz - 5845 MHz
Test Configuration:	Stand-alone
Model Number(s):	5780AP, 5781AP (for Canada), 5780APUS, 5781APUS (for USA), and 5780APC, 5781APC (for Europe)
Model(s) Tested:	5780APUS (for USA), 5780APC (for Canada & Europe)
Serial Number(s):	0A003E37A00D (5MHz), 0A003E3FFF59 (10MHz), 0A003E370A0A (20MHz)
Date of Tests:	February 16, 17 & 18, 2010
Test Conducted For:	Motorola, Inc. 1299 E. Algonquin Rd. Schaumburg, Illinois 60196

NOTICE: "This report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government". Please see the "Additional Description of Equipment Under Test" page listed inside of this report.

SIGNATURE PAGE

Report By:

Adam Alger
Test Engineer

Reviewed By:

William Stumpf
OATS Manager

Approved By:

Brian Mattson
General Manager

TABLE OF CONTENTS

TABLE OF CONTENTS (cont.)

United States Department of Commerce
National Institute of Standards and Technology

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NVLAP LAB CODE: 100276-0

D.L.S. Electronic Systems, Inc.

Wheeling, IL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2009-10-01 through 2010-09-30
Effective dates

For the National Institute of Standards and Technology

NVLAP-01C (REV. 2009-01-28)

1.0 SUMMARY OF TEST REPORT

It was found that the OFDM Access Point - CAP58430, Model Number(s) 5780APUS (for USA), 5780APC (for Canada & Europe)as tested as a CLASS II permissive change **meets** the radio interference radiated emission requirements of the FCC "Rules and Regulations", Part 15, Subpart C, Section 15.247 for operational in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz, Bands. Test report 15749 (tested in October 2009) is referenced as the basis for this CLASS II permissive change test report.

2.0 INTRODUCTION

On February 16, 17 & 18, 2010, a series of radio frequency interference measurements was performed on OFDM Access Point - CAP58430, Model Number(s) 5780APUS (for USA), 5780APC (for Canada & Europe), Serial Numbers: 0A003E37A00D, 0A003E3FFF59, 0A003E370A0A. The tests were performed according to the procedures of the FCC as stated in the "Methods of Measurement of Radio-Noise Emissions for Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz" found in the American National Standards Institute, ANSI C63.4-2003 & the FCC guidance document "Measurement of Digital Transmission Systems Operating under Section 15.247 - March 23, 2005". Tests were performed by personnel of D.L.S. Electronic Systems, Inc. who are responsible to Donald L. Sweeney, Senior EMC Engineer.

D.L.S. Electronic Systems, Inc. is a full service EMC/Safety Testing Laboratory accredited to ISO 17025. NVLAP Certificate and Scope can be viewed at http://www.dlsemc.com/certificate. Our facilities are registered with the FCC, Industry Canada, and VCCI.

Main Test Facility:
D.L.S. Electronic Systems, Inc.
1250 Peterson Drive
Wheeling, Illinois 60090

O.A.T.S. Test Facility:
D.L.S. Electronic Systems, Inc.
166 S. Carter Street
Genoa City, Wisconsin 53128
FCC Registration Number: 334127

3.0 OBJECT

The purpose of this series of tests was to determine if the test sample could meet the radio frequency interference emission requirements of the FCC "Rules and Regulations", Part 15, Subpart C, Sections 15.205, 15.209 & 15.247 for Intentional Radiators operating in the Bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.

4.0 TEST SET-UP

All emission tests were performed at D.L.S. Electronic Systems, Inc. and set up according to the ANSI C63.4-2003, Annex H or following the guidelines in the FCC's "Measurement of Digital Transmission Systems Operating under Section 15.247 - March 23, 2005". The conducted tests were performed with the test item placed on a non-conductive table (table top equipment), located in the test room. Equipment normally operated on the floor was tested by placing it on the metal ground plane. The ground plane has an electrical isolation layer over its surface approximately 7mm thick. The power line supplied was connected to a dual line impedance stabilization network electrically bonded to the ground plane, located on the floor. The networks were constructed per the requirements of the ANSI C63.4-2003, Annex H.

All radiated emissions tests were performed with the test item placed on a 80 cm high rotating non-conductive table, located in the test room. Equipment normally operated on the floor was placed on a metal covered turntable which is flush with the surrounding conducting ground plane. The ground plane has an electrical isolation layer over its surface approximately 7 mm thick. The EUT is separated from the turntable ground plane by a non-conductive layer. The equipment under test was set up according to ANSI C63.4-2003, Sections 6 and 8 or following the guidelines in the FCC's "Measurement of Digital Transmission Systems Operating under Section 15.247 - March 23, 2005", as indicated in the test data section of this test report..

5.0 TEST EQUIPMENT (Bandwidths and Detector Function)

All preliminary data below 1000 MHz was automatically plotted using the ESI 26/40 Fixed Tuned Receiver. The data was taken using Peak, Quasi-Peak or the Average Detector Functions as required. This information was then used to determine the frequencies of maximum emissions. Above 1000 MHz, final data was taken using the Average Detector.

Below 1000 MHz, final data was taken using the ESI 26/40 Fixed Tuned Receiver. These plots were made using the Peak or Quasi-Peak Detector functions, with manual measurements performed on the questionable frequencies using the Quasi-Peak or the Average Detector Function of the ESI 26/40 Fixed Tuned Receiver as required. Above 1000 MHz, final data was taken using the Average Detector on the Spectrum Analyzer.

The bandwidths shown below are specified by ANSI C63.4-2003, Section 4.2.

Frequency Range	Bandwidth (-6 dB)
10 to 150 kHz	200 Hz
150 kHz to 30 MHz	9 kHz
30 MHz to 1 GHz	120 kHz
Above 1 GHz	1 MHz

A list of the equipment used can be found in Table 1. All primary equipment was calibrated against known reference standards with a verified traceable path to NIST.

6.0 AMBIENT MEASUREMENTS

For emissions measurements, broadband antennas and an EMI Test Receiver with a panoramic spectrum display are used. First the frequency range is scanned and displayed on the test receiver display. Next the scanned frequency range is divided into smaller ranges, and then it is manually tuned through to determine the emissions from the EUT. A headset or loudspeaker is connected to the test receiver's AM/FM demodulated output as an aid in detecting ambient signals and finding frequencies of significant emission from the EUT. If there is any doubt as to the source of the emission, it is further investigated by rotating the EUT, or by disconnecting the power from the EUT.

The EUT is set up in its typical configuration and operated in its various modes. For tabletop systems, cables are manipulated within the range of likely configurations. For floor-standing equipment, the cables are located in the same manner as the user would install them and no further manipulation is made. If the manner of cable installation is not known, or if it changes with each installation, cables or wires for floor-standing equipment shall be manipulated to the extent possible to produce the maximum level of emissions. For each mode of operation, the frequency spectrum is monitored. Variations in antenna height, antenna polarization, EUT azimuth, and cable or wire placement (each variable within bounds specified elsewhere) are explored to produce the emissions that have the highest amplitude relative to the limit. These methods are performed to the specifications in ANSI C63.4-2003.

7.0 DESCRIPTION OF TEST SAMPLE: (See also Paragraph 8.0)

7.1 Description:

5.7GHz ISM transceiver Motorola OFDM Access Point.

7.2 PHYSICAL DIMENSIONS OF EQUIPMENT UNDER TEST

Length: 14 in x Width: 9 in x Height: 3 in

7.3 LINE FILTER USED:

7.4 INTERNAL CLOCK FREQUENCIES:

Switching Power Supply Frequencies:

150 kHz, 75 kHz

Clock Frequencies:

25 MHz, 20 MHz

7.5 DESCRIPTION OF ALL CIRCUIT BOARDS:

1. Gen 2 HP PC Board — PN: 8401008001p3 Issue A
2. 17 dBi Antenna — PN: 8514724E01 antenna sector AP
3. Connector — PN: 09010084001
4. Cable for Connectorized Antenna — PN:3001D132J01/B

1250 Peterson Dr., Wheeling, IL 60090

8.0 ADDITIONAL DESCRIPTION OF TEST SAMPLE:
(See also Paragraph 7.0)

Transmitter parameters are software controlled and set to Motorola's specifications.

EUT was tested at 5, 10, and 20 MHz channel bandwidth.

9.0 PHOTO INFORMATION AND TEST SET-UP

Item 0 OFDM Access Point - CAP58430
Model Number(s) 5780APUS (for USA), 5780APC (for Canada & Europe)
Serial Numbers: 0A003E37A00D, 0A003E3FFF59, 0A003E370A0A

Item 1 Motorola 17 dBi Antenna with 1 dB loss cable.
Model: Ant. part No: 8514724E01; Serial Number: NA

Item 2 15 meter non-shielded Power/Ethernet CAT 5e communications cable with plastic connectors.

1250 Peterson Dr., Wheeling, IL 60090

10.0 RADIATED PHOTOS TAKEN DURING TESTING

Radiated Front

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10.0 RADIATED PHOTOS TAKEN DURING TESTING (CON'T)

Radiated Back

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10.0 RF CONDUCTED PHOTO TAKEN DURING TESTING

RF Conducted

1250 Peterson Dr., Wheeling, IL 60090

11.0 RESULTS OF TESTS

The radio interference emission charts can be seen on the pages at the end of this report. Data sheets indicating the test measurements taken during testing can also be found at the end of this report.

NOTE:
The Transmitter Duty Cycle test and the Power Line Conducted Emissions tests are not required. The modifications made to the OFDM Access Point - CAP58430, Model Number(s) 5780APUS (for USA), 5780APC (for Canada & Europe) will not affect the powerline conducted emissions or the duty cycle. Data and graphs for the transmitter duty cycle and powerline conducted emissions can be seen in test report 15749 (October 2009).

12.0 CONCLUSION

It was found that the OFDM Subscriber Module - OFDM Access Point - CAP58430, Model Number(s) 5780APUS (for USA), 5780APC (for Canada & Europe) **meets** the radio interference radiated emission requirements of the FCC "Rules and Regulations", Part 15, Subpart C, Section 15.247 for operational in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz Bands.

TABLE 1 – EQUIPMENT LIST

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Due Dates
Receiver	Rohde & Schwarz	ESI 40	837808/006	20 Hz – 40 GHz	3/10
Preamplifier	Rohde & Schwarz	TS-PR10	032001/004	9 kHz – 1 GHz	1/11
Antenna	EMCO	3104C	00054892	20 MHz – 200 MHz	7/11
Antenna	EMCO	3146	1205	200 MHz – 1 GHz	7/11
Preamp	Miteq	AMF-6D-100200-50	313936	1GHz-10GHz	5/10
Horn Antenna	EMCO	3115	6204	1-18GHz	5/11
High Pass Filter	Planar	HP8G-7G8-CD-SFF	PF1225/0728	7-26 GHz	7/10
Preamp	Miteq	AMF-8B-180265-40-10P-H/S	438727	18GHz-26GHz	8/10
Horn Antenna	A.H. Systems, inc.	SAS-574	222	18 – 40GHz	5/10
High Pass Filter	Planar	CL22500-9000-CD-SS	PF1229/0728	15-40 GHz	7/10
Preamp	Rohde & Schwarz	TS-PR40	052002/025	26GHz-40GHz	8/10

All primary equipment is calibrated against known reference standards with a verified traceable path to NIST.

APPENDIX A

TEST PROCEDURE

Part 15, Subpart C, Section 15.207

ANSI C63.4-2003

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

1.0 AC POWER LINE CONDUCTED EMISSION MEASUREMENTS

If applicable, the conducted emissions were measured over the frequency range from 150 kHz to 30 MHz in accordance with the power line measurements as specified in the American National Standards Institute, ANSI C63.4-2003, Section 12. Since the device is operated from the public utility lines, the 115 Vac 60 Hz power leads, high and low sides, were to be measured by connecting the measuring equipment to the appropriate meter terminal of the LISN. All signals were then recorded. The allowed levels for Intentional Radiators cannot exceed the following:

Frequency of Emissions (MHz)	Conducted Limits (dBuV)	
	Quasi Peak	Average
.15 to .5	66 to 56	56 to 46
.5 to 5	56	46
5 to 30	60	50

NOTE:

The conducted emissions test was not required because the OFDM Access Point - CAP58430 modifications will not affect the conducted emissions. See test report 15749 (October 2009).

APPENDIX B

TEST PROCEDURES

Part 15, Subpart C, Section 15.247 (a-h)

OPERATION WITHIN THE BAND 902-928 MHz,

2400-2483.5 MHz AND 5725-5857 MHz

ANSI C63.4-2003

AND

KDB Publication No. 558074 (DTS)

NOTE:

Per the FCC's guidance document "Measurement of Digital Transmission Systems Operating under Section 15.247 - March 23, 2005", as indicated in the test data section of this test report.

1250 Peterson Dr., Wheeling, IL 60090

1.0 SPURIOUS EMISSIONS AT ANTENNA TERMINALS – PART 15.247(d), 15.203 & FCC Guidance Document "Measurement of Digital Transmission Systems Operating under Section 15.247 - March 23, 2005".

Spurious conducted emissions were measured at the antenna terminals. Plots were made showing the amplitude of each harmonic emission with the equipment operated. As shown by the radiated charts there was no reason to believe that there were any spurious emissions other than the harmonics that were than individually investigated when doing the conducted test at the antenna terminals. Measurements were made up to the 10^{th} harmonic of the fundamental.

As stated in 15.203 the OFDM Access Point - CAP58430 was designed to ensure that no antenna other than that furnished by Motorola Inc will be used with the EUT. The use of a permanently attached antenna or antenna that uses an unique coupling to the intentional radiator was considered to comply with section 15.203.

The allowed emissions for transmitters operating in the 5725 MHz - 5850 MHz bands for OFDM Access Point - CAP58430 equipment are found under Part 15, Section 15.247(d). This paragraph states that in any 100 kHz bandwidth outside the frequency band which the spread spectrum intentional radiator is operating, the radio frequency power produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

NOTE: See pages below for the data and graphs of the actual measurements made.

1250 Peterson Dr., Wheeling, IL 60090

2.0 RESTRICTED BANDS

As stated in Section 15.205a, the fundamental emission from the OFDM Access Point - CAP58430 shall not fall within any of the bands listed below:

Frequency in MHz	Frequency in MHz	Frequency in MHz	Frequency in GHz
.0900 to .1100	162.0125 to 167.17	2310.0 to 2390	9.30 to 9.50
.4900 to .5100	167.7200 to 173.20	2483.5 to 2500	10.60 to 12.70
2.1735 to 2.1905	240.000 to 285.00	2655.0 to 2900	13.25 to 13.40
8.362 to 8.3660	322.200 to 335.40	3260.0 to 3267	14.47 to 14.50
13.36 to 13.410	399.900 to 410.00	3332.0 to 3339	15.35 to 16.20
25.50 to 25.670	608.000 to 614.00	3345.8 to 3358	17.70 to 21.40
37.50 to 38.250	960.000 to 1240.00	3600.0 to 4400	22.01 to 23.13
73.00 to 75.500	1300.000 to 1427.00	4500.0 to 5250	23.60 to 24.00
108.00 to 121.94	1435.000 to 1626.50	5350.0 to 5450	31.20 to 31.80
123.00 to 138.00	1660.000 to 1710.00	7250.0 to 7750	36.43 to 36.50
149.90 to 150.00	1718.800 to 1722.20	8025.0 to 8500	ABOVE 38.60
156.70 to 156.90	2200.000 to 2300.00	9000.0 to 9200	

NOTE:

The noise floor within the Restricted Bands for the EMC Receiver will typically lay 20 dB below the limit.

3.0 RESTRICTED BAND AND BAND EDGE COMPLIANCE

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the attenuation below the general limits specified in 15.209 is not required.

The field strength of any **radiated emissions** which fall within the restricted bands shall not exceed the general radiated emissions limits as stated Section 15.209.

NOTE: See pages below for the graphs made showing compliance for Restricted Band and Band Edge Compliance.

1250 Peterson Dr., Wheeling, IL 60090

4.0 FIELD STRENGTH OF FUNDAMENTAL AND SPURIOUS EMISSION MEASUREMENTS

The radiated measurements made at D.L.S. Electronic Systems, Inc., for the OFDM Access Point - CAP58430, Model Number(s) 5780APUS (for USA), 5780APC (for Canada & Europe), are shown in tabulated and graph form. Preliminary radiation measurements were performed at a 3 meter test distance with the limits adjusted linearly when required. The frequency range from 30 MHz to over 960 MHz, depending upon the fundamental frequency as stated in Part 15.33a, was automatically scanned and plotted at various angles.

Measurements for the OFDM Access Point - CAP58430 were made up to 40000 MHz, in accordance with Section 15.33a for Intentional Radiators with a fundamental frequency of 5730 - 5845 MHz. For intentional radiators, the frequency range to be investigated is determined by the lowest radio frequency generated by the device without going below 30 MHz, up to at least the tenth harmonic of the highest fundamental frequency or 10 GHz, whichever is lower. At those frequencies where significant signals were detected, measurements were made over the entire frequency range specified in FCC Part 15, Subpart C, Section 15.247 at the open field test site, located at Genoa City, Wisconsin, FCC file number **31040/SIT**. When required, limits were extrapolated using a linear extrapolation.

All signals in the frequency range of 30 MHz to 2000 MHz were measured with a Biconical Antenna or tuned dipoles and from 200 MHz to 1000 MHz, a Log Periodic or Tuned Dipoles were used. From 1000 MHz to 25 GHz Horn Antennas were used. During the test the equipment was rotated and the antenna was raised and lowered from 1 meter to 4 meters to find the maximum level of emissions. In order to find maximum emissions, the cables were moved through all the positions the equipment would be expected to experience in the field. The EUT, peripheral equipment and cables were configured to meet the conditions in ANSI C63.4-2003, Clauses 6 & 8, Test procedures for the radiated field strength of spurious emissions is per FCC Guidance Document "Measurement of Digital Transmission Systems Operating under Section 15.247 - March 23, 2005". Tests were made with the receive antenna(s) in both the horizontal and vertical planes of polarization. In each case, the table was rotated to find the maximum emissions.

4.0 FIELD STRENGTH OF FUNDAMENTAL AND SPURIOUS EMISSION MEASUREMENTS (CON'T)

As stated in Section 15.247(b) the allowed maximum peak output power of the transmitter shall not exceed 1 Watt. In any 100 kHz bandwidth outside these frequency bands (the power that is produced by the modulation products of the spreading sequence), the information sequence and the carrier frequency shall be either at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. Attenuation below the general limits specified in 15.209 is not required.

Field strength limits are at a distance of 3 meters. The emission limits shown are based on measurement instrumentation employing an average detector.

Emissions radiated outside of the specified frequency bands, except for harmonics are attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

Preliminary radiated emission measurements were performed at a 3 meter test distance. The frequency range from 30 MHz to 1000 MHz was automatically scanned and plotted at various angles.

NOTE:

See test report 15749 (tested in October 2009) for additional Fundamental and Spurious Emission Measurements.

APPENDIX C

Part 15, Subpart C, Section 15.247 (d)

Radiated Spurious Emissions in Restricted Bands

1250 Peterson Dr., Wheeling, IL 60090

1.0 Test Run: Radiated emission test

Rule Section: Section 15.247(d) – Spurious emissions

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

Description: This test applies to harmonics/spurs that fall in the restricted bands listed in Section 15.209. The EUT was set to transmit in continuous mode at the lowest, middle, and highest channel of operation. The channel bandwidth of the EUT was changed from 5 MHz to 10 MHz and 20 MHz. Worst-case emissions were determined to be with the EUT set to a 5 MHz channel bandwidth. The modulation of the EUT was changed from QPSK to 16-QAM, 64-QAM, and 256-QAM. Worst-case emissions were determined to be with the EUT set to 16-QAM. The highest field strengths for the worst-case conditions were recorded.

Limit: The permitted field strength limits are listed in Section 15.209.

Results: Passed

1250 Peterson Dr., Wheeling, IL 60090

Radiated Spurious Emissions in Restricted Bands - 1 GHz to 40 GHz

1 GHz to 10 GHz: Tested at a 3 Meter Distance
10 GHz to 40 GHz: Tested at a 1 Meter Distance

EUT: OFDM Access Point – CAP58430
Manufacturer: Motorola
Operating Condition: 70 deg F; 28% R.H.
Test Site: Site 3
Operator: Craig B
Comment: Continuous transmit.
Date: 02/18/2010

Notes: **(1)** Peak measurements were taken with RBW = 1 MHz, VBW = 3 MHz
(2) Average measurements were taken with RBW = 1 MHz, VBW = 10 Hz
(3) All other restricted band emissions at least 20 dB under the limit.
(4) Tested with QPSK, 16-QAM, 64-QAM, and 256-QAM modulations.
(5) Tested with 5 MHz, 10 MHz, and 20 MHz channel bandwidths.
(6) All data shown are noise-floor measurements. No harmonics/spurs were detected at a 3 meter or 1 meter test distance.

Low Channel (5730 MHz)

Frequency (GHz)	Measurement Type	Ant. Pol.	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Duty Cycle Correction (dB)	Final Corrected (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Comment
11.46	Average	Vert	19.63	39.00	-17.0	41.6	---	41.6	63.5	21.9	Res. Band
11.46	Max Peak	Vert	33.17	39.00	-17.0	55.2	---	55.2	84.5	29.3	Res. Band
11.46	Average	Horz	19.58	39.00	-17.0	41.6	---	41.6	63.5	21.9	Res. Band
11.46	Max Peak	Horz	32.45	39.00	-17.0	54.5	---	54.5	84.5	30.1	Res. Band

1250 Peterson Dr., Wheeling, IL 60090

Company: Motorola, Inc.
Model Tested: 5780APUS (for USA), 5780APC (for Canada & Europe)
Report Number: 16018

Radiated Spurious Emissions in Restricted Bands - 1 GHz to 40 GHz

1 GHz to 10 GHz: Tested at a 3 Meter Distance
10 GHz to 40 GHz: Tested at a 1 Meter Distance

EUT: OFDM Access Point – CAP58430
Manufacturer: Motorola
Operating Condition: 70 deg F; 28% R.H.
Test Site: Site 3
Operator: Craig B
Comment: Continuous transmit.
Date: 02/18/2010

Notes: **(1)** Peak measurements were taken with RBW = 1 MHz, VBW = 3 MHz
(2) Average measurements were taken with RBW = 1 MHz, VBW = 10 Hz
(3) All other restricted band emissions at least 20 dB under the limit.
(4) Tested with QPSK, 16-QAM, 64-QAM, and 256-QAM modulations.
(5) Tested with 5 MHz, 10 MHz, and 20 MHz channel bandwidths.
(6) All data shown are noise-floor measurements. No harmonics/spurs were detected at a 3 meter or 1 meter test distance.

Mid Channel (5775 MHz)

Frequency (GHz)	Measurement Type	Ant. Pol.	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Duty Cycle Correction (dB)	Final Corrected (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Comment
11.55	Average	Vert	17.05	39.05	-15.5	40.6	---	40.6	63.5	22.9	Res. Band
11.55	Max Peak	Vert	30.47	39.05	-15.5	54.0	---	54.0	84.5	30.5	Res. Band
11.55	Average	Horz	17.02	39.05	-15.5	40.6	---	40.6	63.5	22.9	Res. Band
11.55	Max Peak	Horz	30.46	39.05	-15.5	54.0	---	54.0	84.5	30.5	Res. Band

1250 Peterson Dr., Wheeling, IL 60090

Company: Motorola, Inc.
Model Tested: 5780APUS (for USA), 5780APC (for Canada & Europe)
Report Number: 16018

Radiated Spurious Emissions in Restricted Bands - 1 GHz to 40 GHz

1 GHz to 10 GHz: Tested at a 3 Meter Distance
10 GHz to 40 GHz: Tested at a 1 Meter Distance

EUT: OFDM Access Point – CAP58430
Manufacturer: Motorola
Operating Condition: 70 deg F; 28% R.H.
Test Site: Site 3
Operator: Craig B
Comment: Continuous transmit.
Date: 02/18/2010

Notes: **(1)** Peak measurements were taken with RBW = 1 MHz, VBW = 3 MHz
(2) Average measurements were taken with RBW = 1 MHz, VBW = 10 Hz
(3) All other restricted band emissions at least 20 dB under the limit.
(4) Tested with QPSK, 16-QAM, 64-QAM, and 256-QAM modulations.
(5) Tested with 5 MHz, 10 MHz, and 20 MHz channel bandwidths.
(6) All data shown are noise-floor measurements. No harmonics/spurs were detected at a 3 meter or 1 meter test distance.

High Channel (5845 MHz)

Frequency (GHz)	Measurement Type	Ant. Pol.	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Duty Cycle Correction (dB)	Final Corrected (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Comment
11.69	Average	Vert	15.94	39.05	-13.1	41.9	---	41.9	63.5	21.6	Res. Band
11.69	Max Peak	Vert	28.90	39.05	-13.1	54.9	---	54.9	84.5	29.7	Res. Band
11.69	Average	Horz	15.73	39.05	-13.1	41.7	---	41.7	63.5	21.8	Res. Band
11.69	Max Peak	Horz	29.12	39.05	-13.1	55.1	---	55.1	84.5	29.4	Res. Band

APPENDIX D

DATA AND GRAPHS

Part 15, Subpart C, Section 15.247 (a-h)

5 MHz Channel Bandwidth of EUT

1250 Peterson Dr., Wheeling, IL 60090

1.0 Test Run: Bandwidth

Rule Section: Section 15.247(a)(2)

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

Description: The EUT was set to transmit in continuous mode at the lowest, middle, and highest channel of operation. The channel bandwidth of the EUT was changed from 5 MHz to 10 MHz and 20 MHz, and the modulation of the EUT was changed from QPSK to 16-QAM, 64-QAM, and 256-QAM. The 6 dB bandwidth was measured and recorded for each condition. *Note: Since this testing was done for a Class II Permissive Change, and the 10 MHz channel bandwidth with QPSK, 16-QAM, and 64-QAM data is already in the original report, only the 256-QAM modulation was tested for the 10 MHz channel bandwidth condition.*

Limit: The 6 dB bandwidth must be greater than 500 kHz

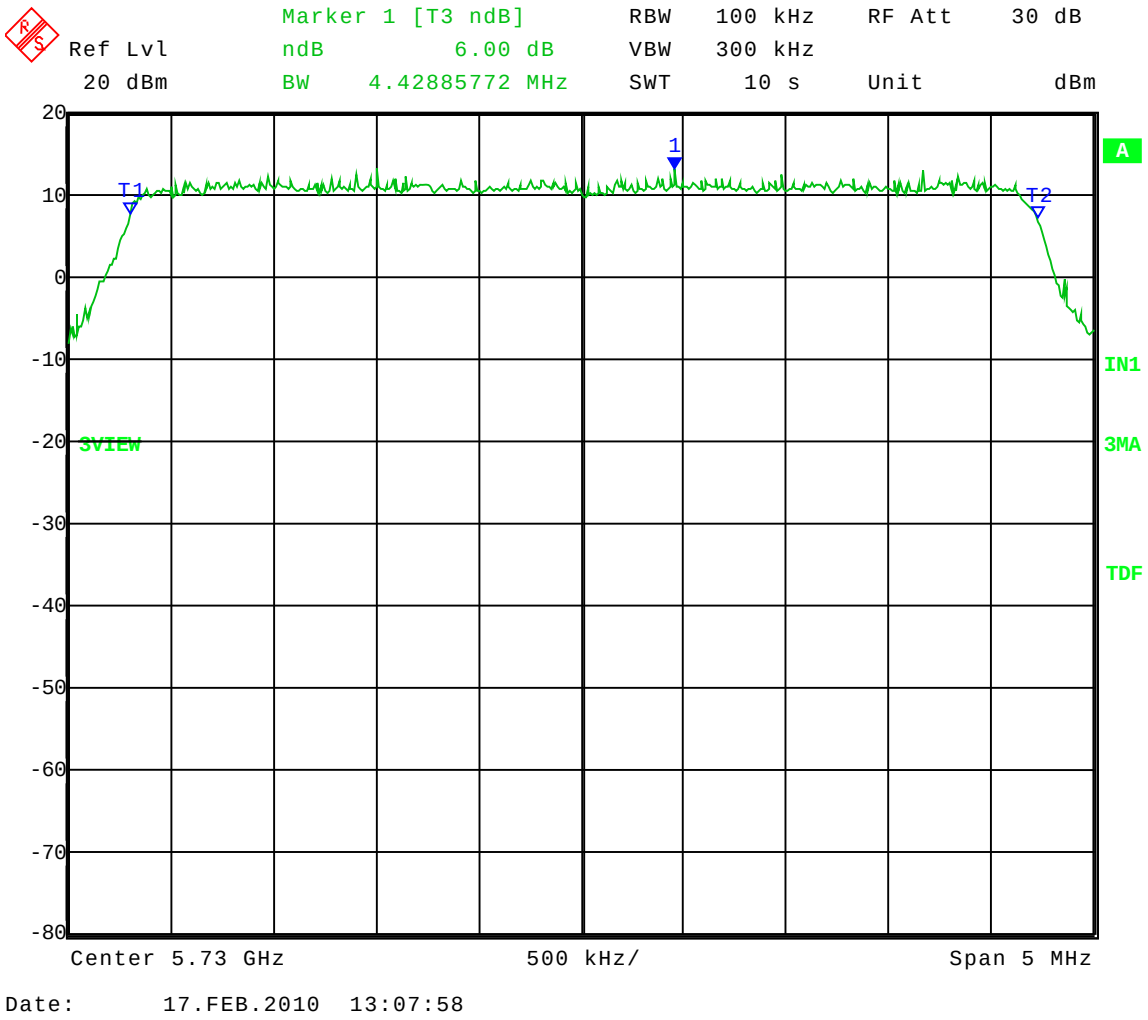
Results: Passed

1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Low Channel: Frequency – 5.730 GHz
Power setting: 5F
Modulation: 16QAM
Channel BW: 5 MHz

6 dB Bandwidth = 4.43 MHz

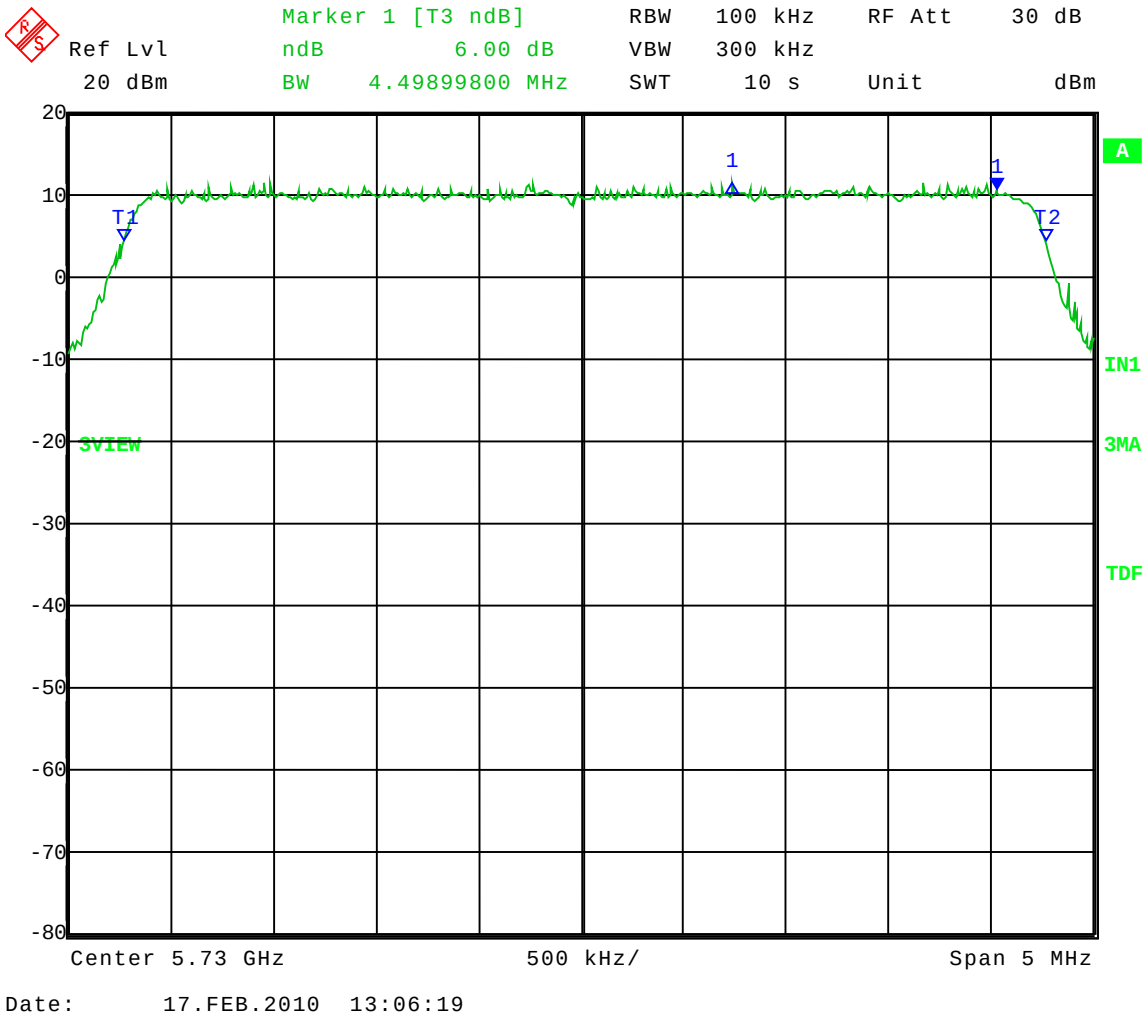


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Low Channel: Frequency – 5.730 GHz
Power setting: 5F
Modulation: 64QAM
Channel BW: 5 MHz

6 dB Bandwidth = 4.50 MHz

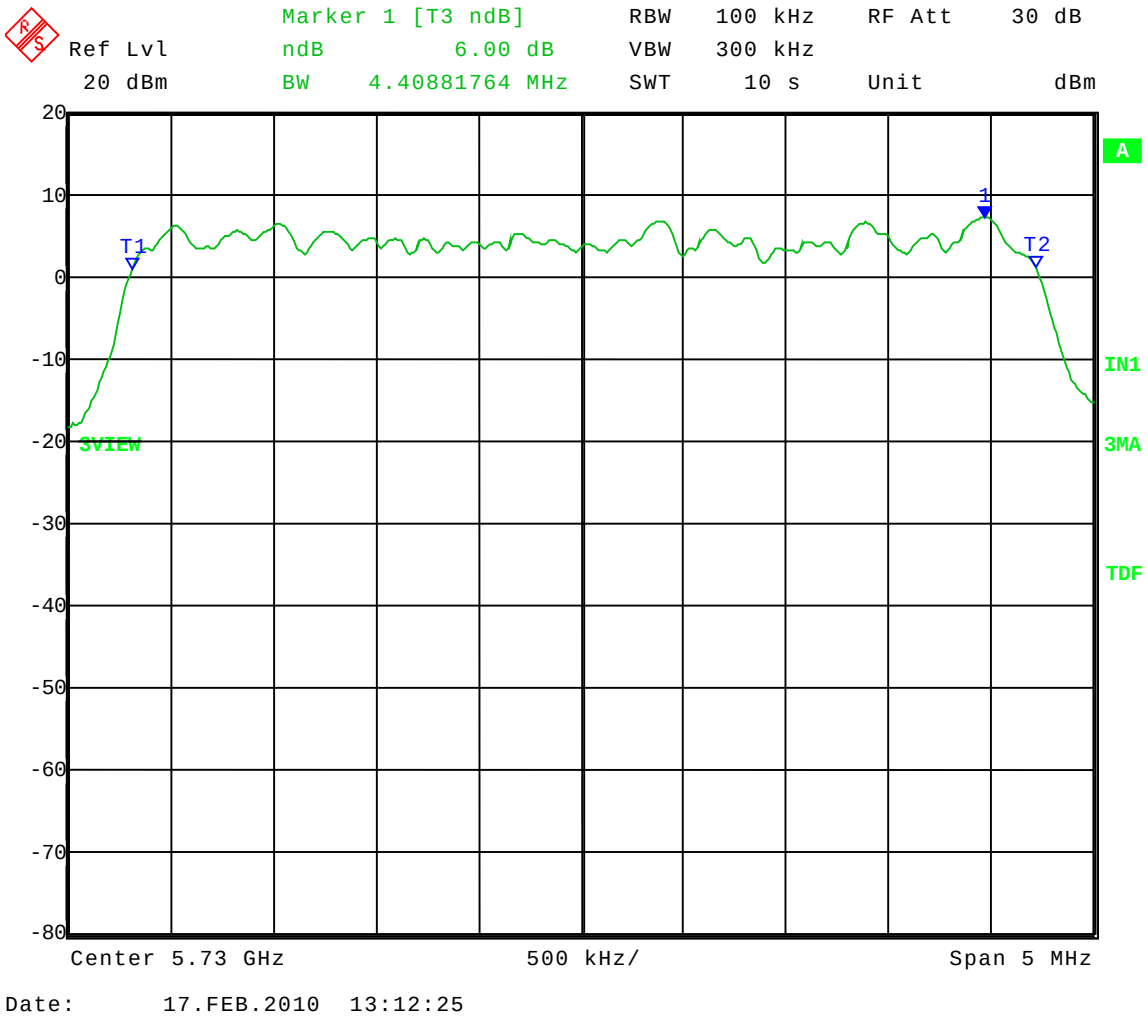


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Low Channel: Frequency – 5.730 GHz
Power setting: 53
Modulation: 256QAM
Channel BW: 5 MHz

6 dB Bandwidth = 4.41 MHz

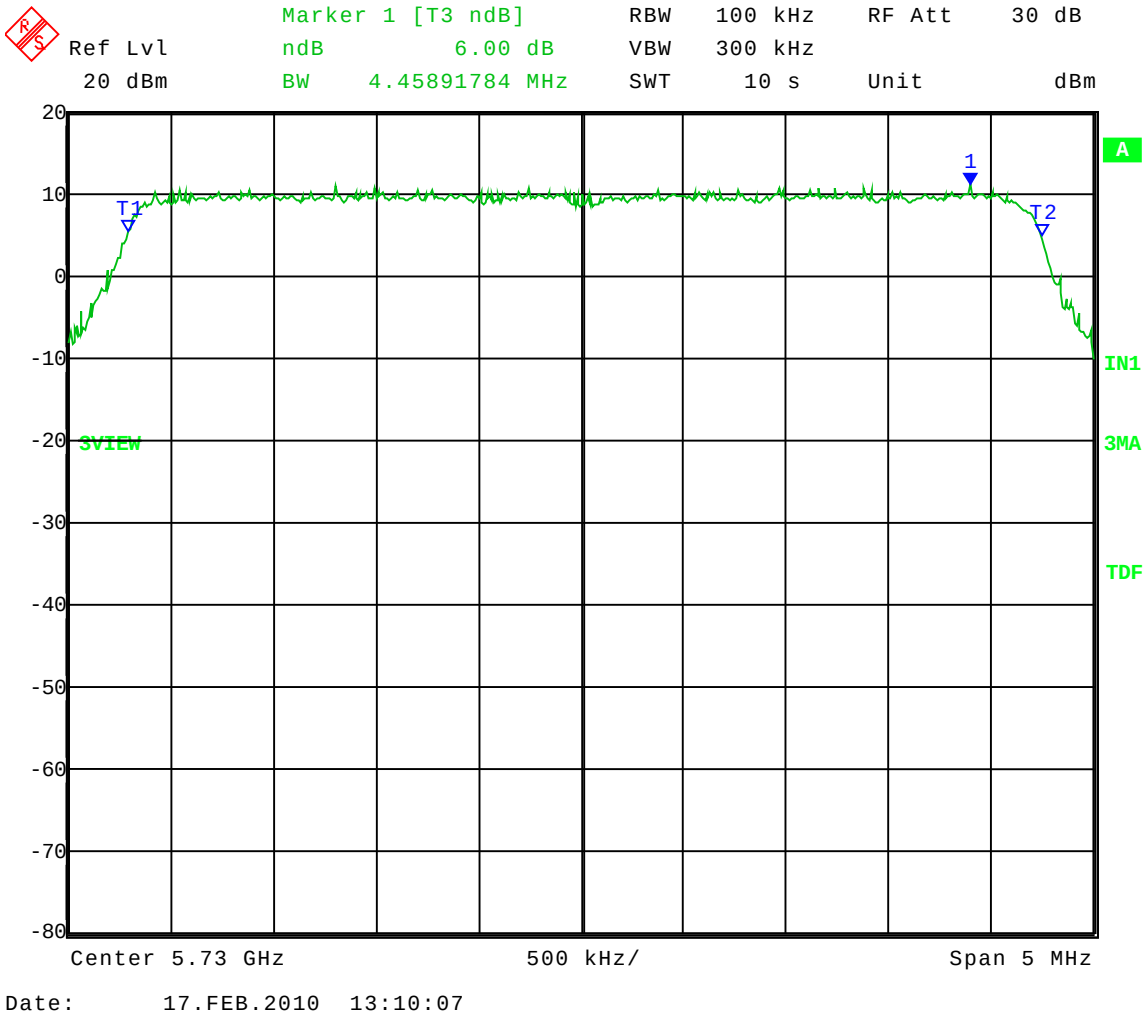


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Low Channel: Frequency – 5.730 GHz
Power setting: 5E
Modulation: QPSK
Channel BW: 5 MHz

6 dB Bandwidth = 4.46 MHz

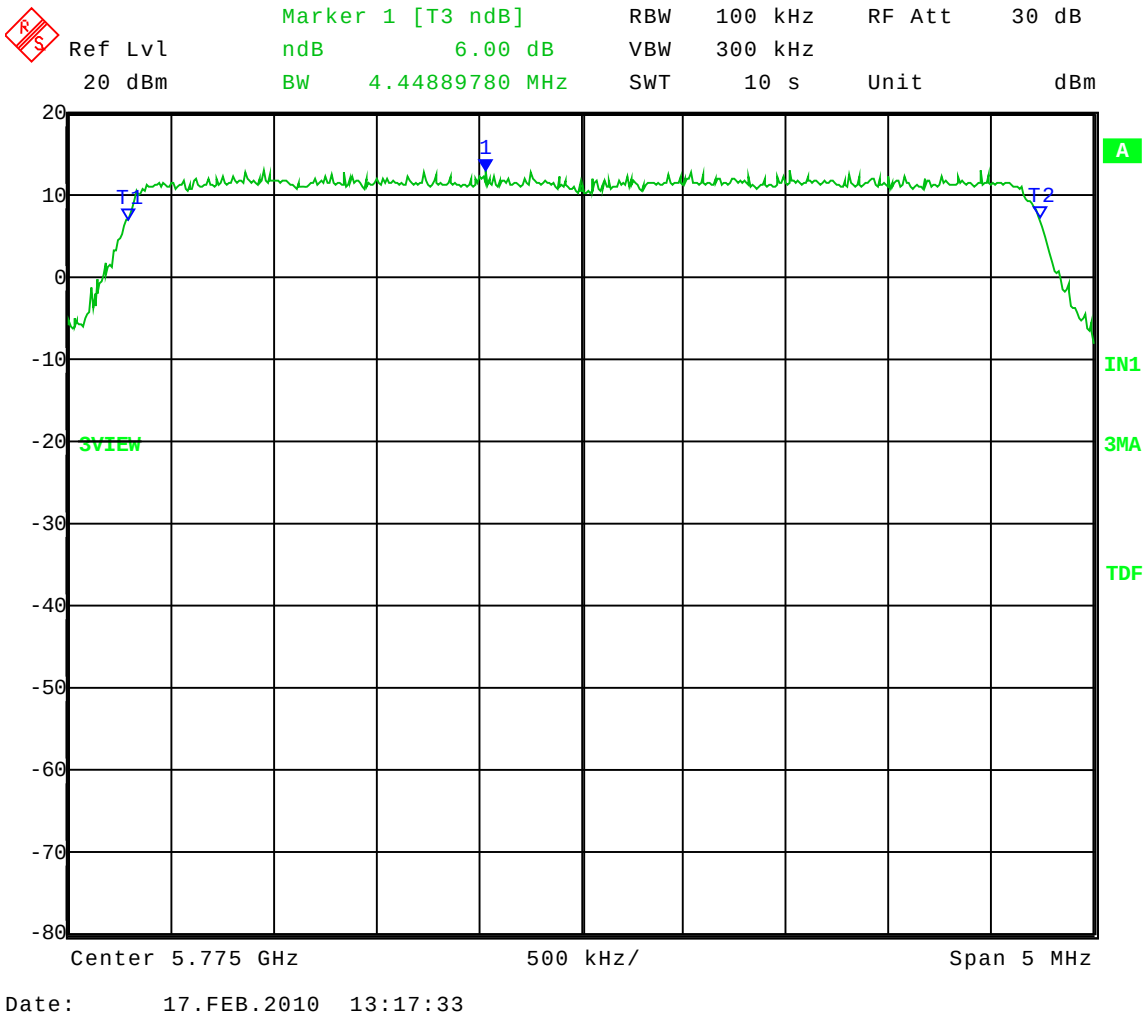


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 16QAM
Channel BW: 5 MHz

6 dB Bandwidth = 4.45 MHz

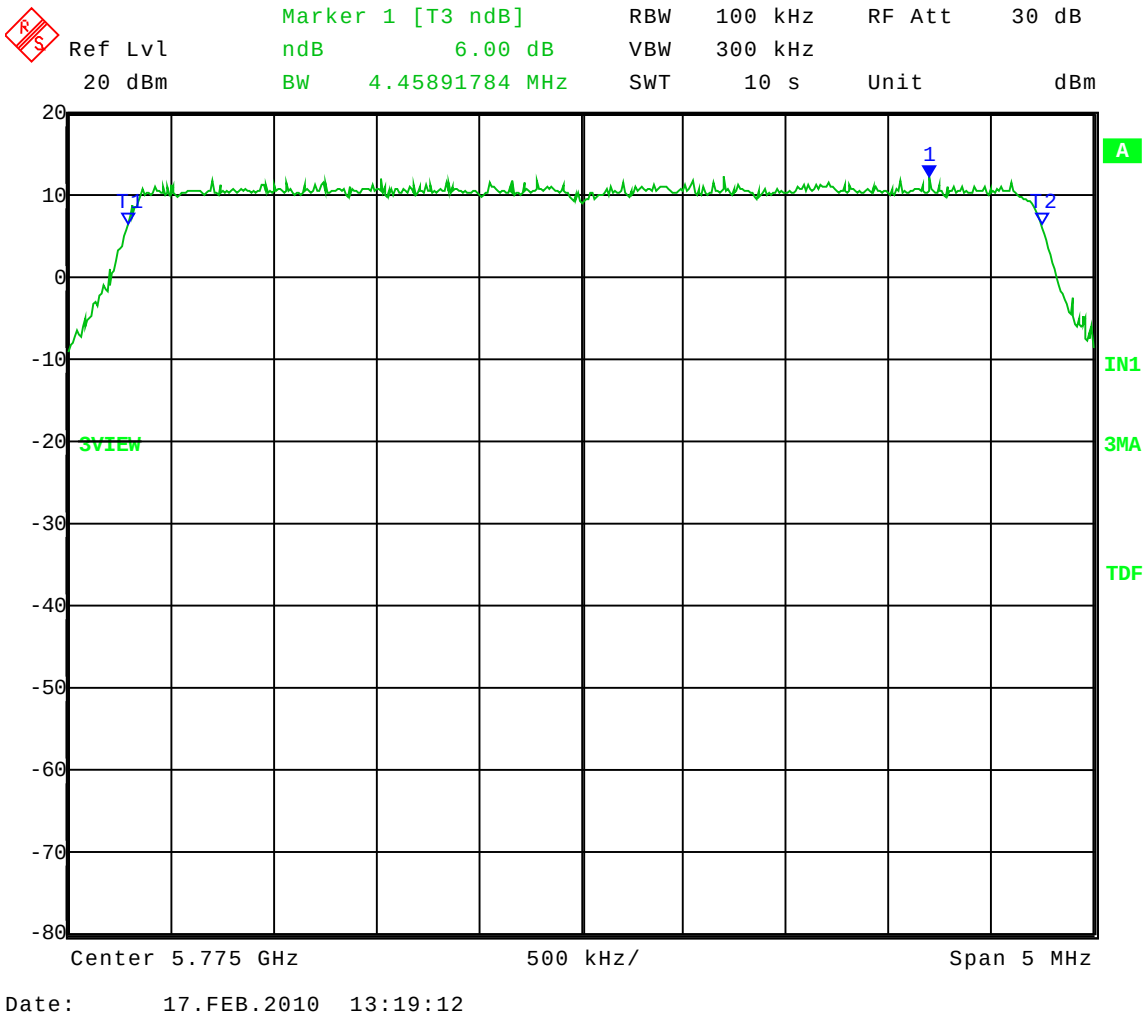


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 64QAM
Channel BW: 5 MHz

6 dB Bandwidth = 4.46 MHz

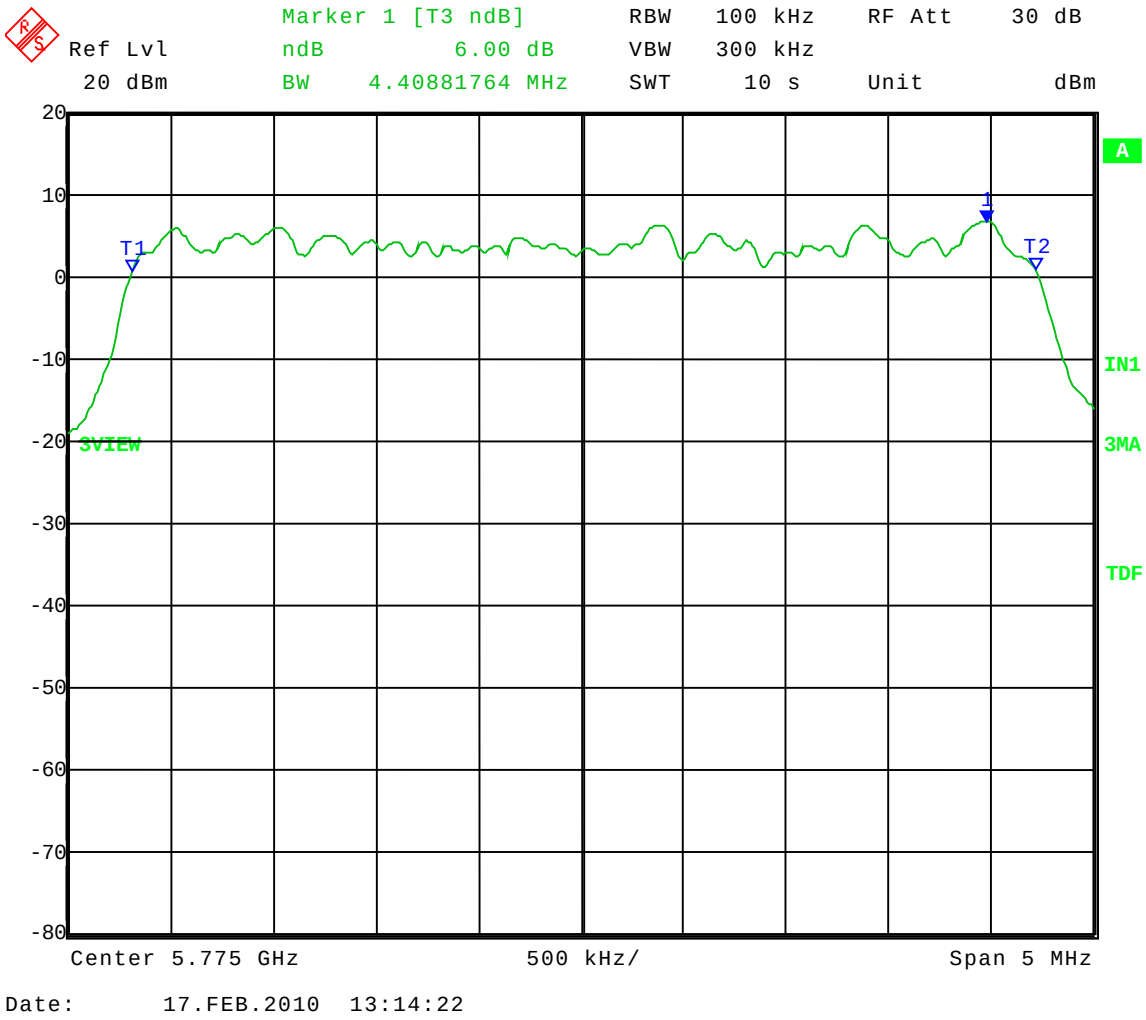


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Middle Channel: Frequency – 5.775 GHz
Power setting: 53
Modulation: 256QAM
Channel BW: 5 MHz

6 dB Bandwidth = 4.41 MHz

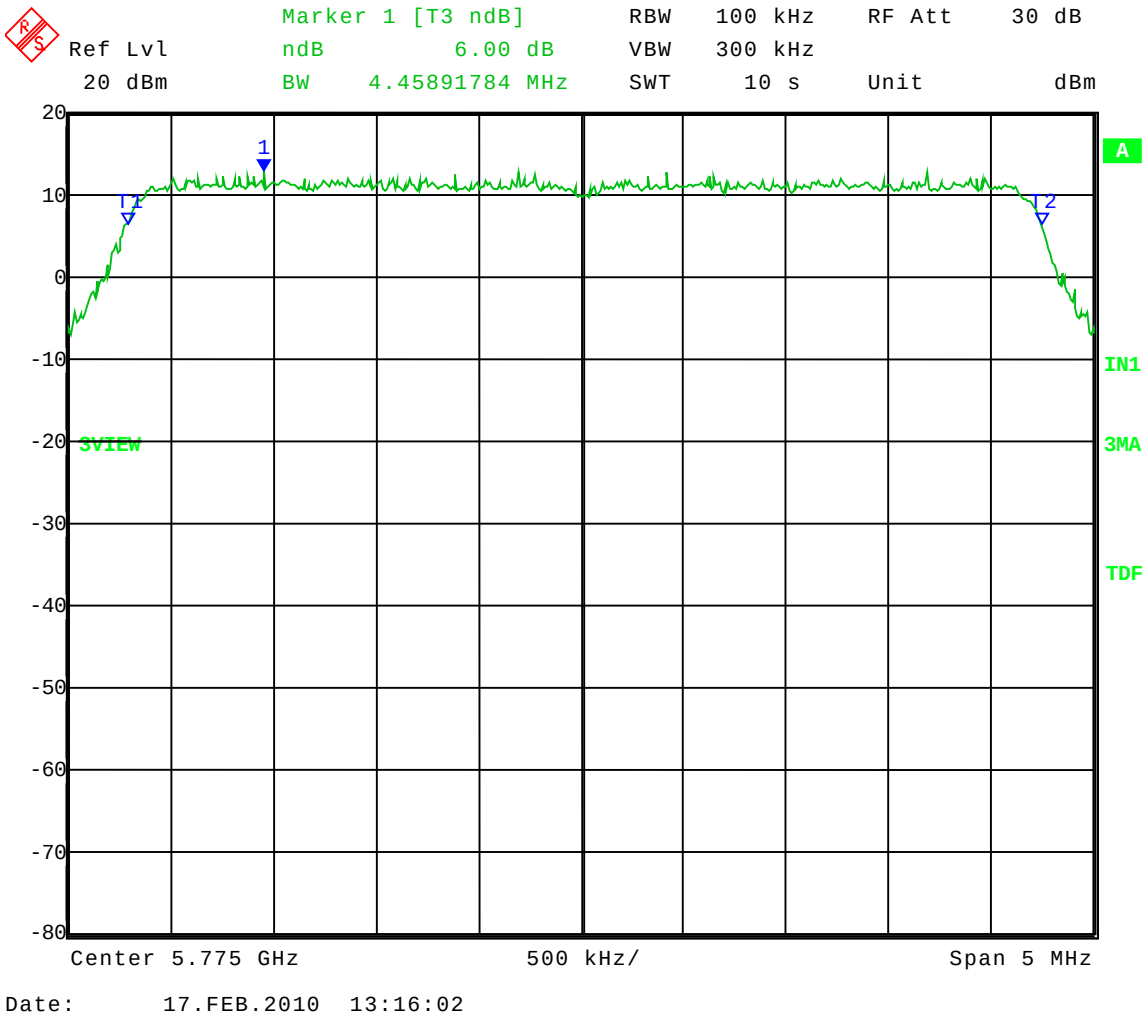


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: QPSK
Channel BW: 5 MHz

6 dB Bandwidth = 4.46 MHz

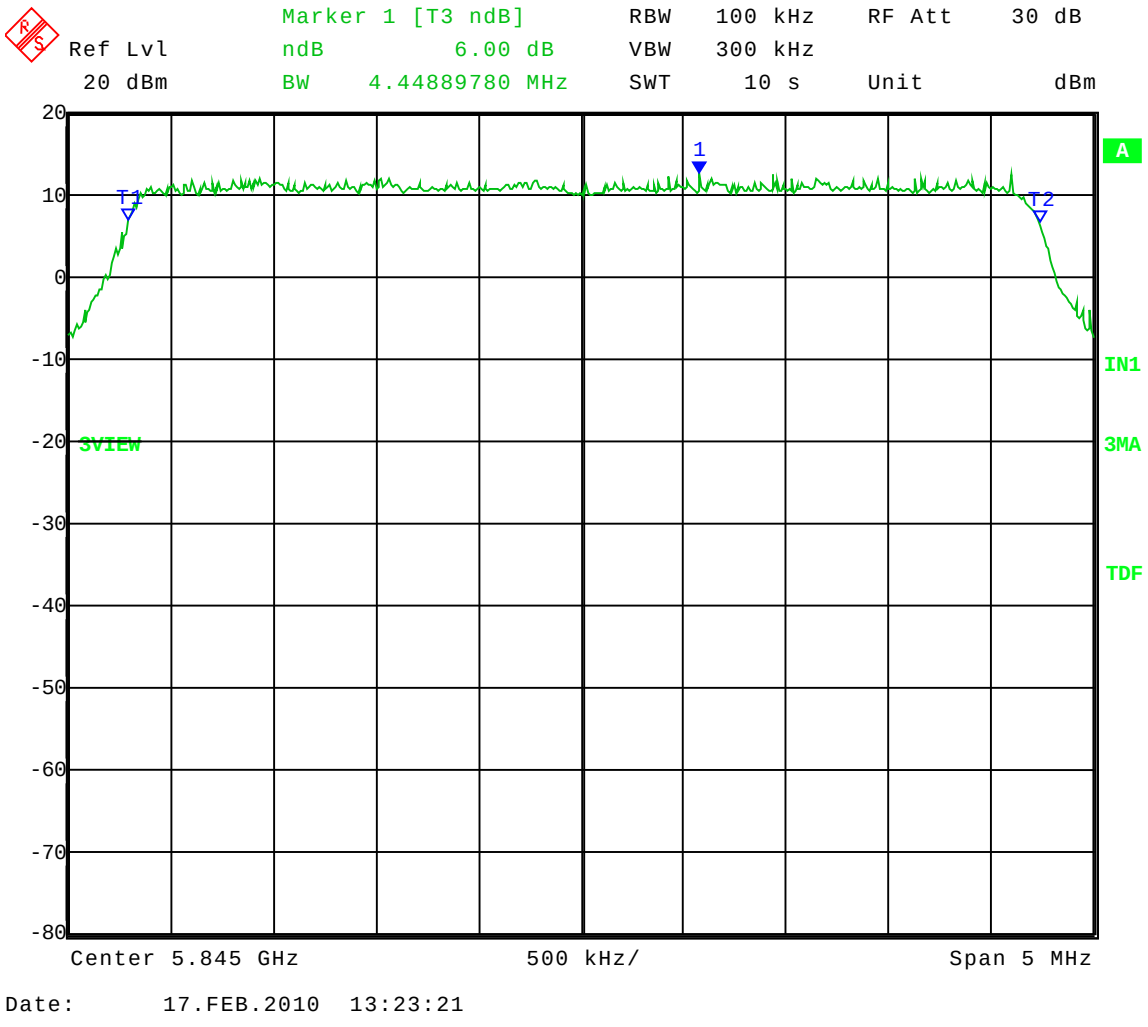


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

High Channel: Frequency – 5.845 GHz
Power setting: 62
Modulation: 16QAM
Channel BW: 5 MHz

6 dB Bandwidth = 4.45 MHz

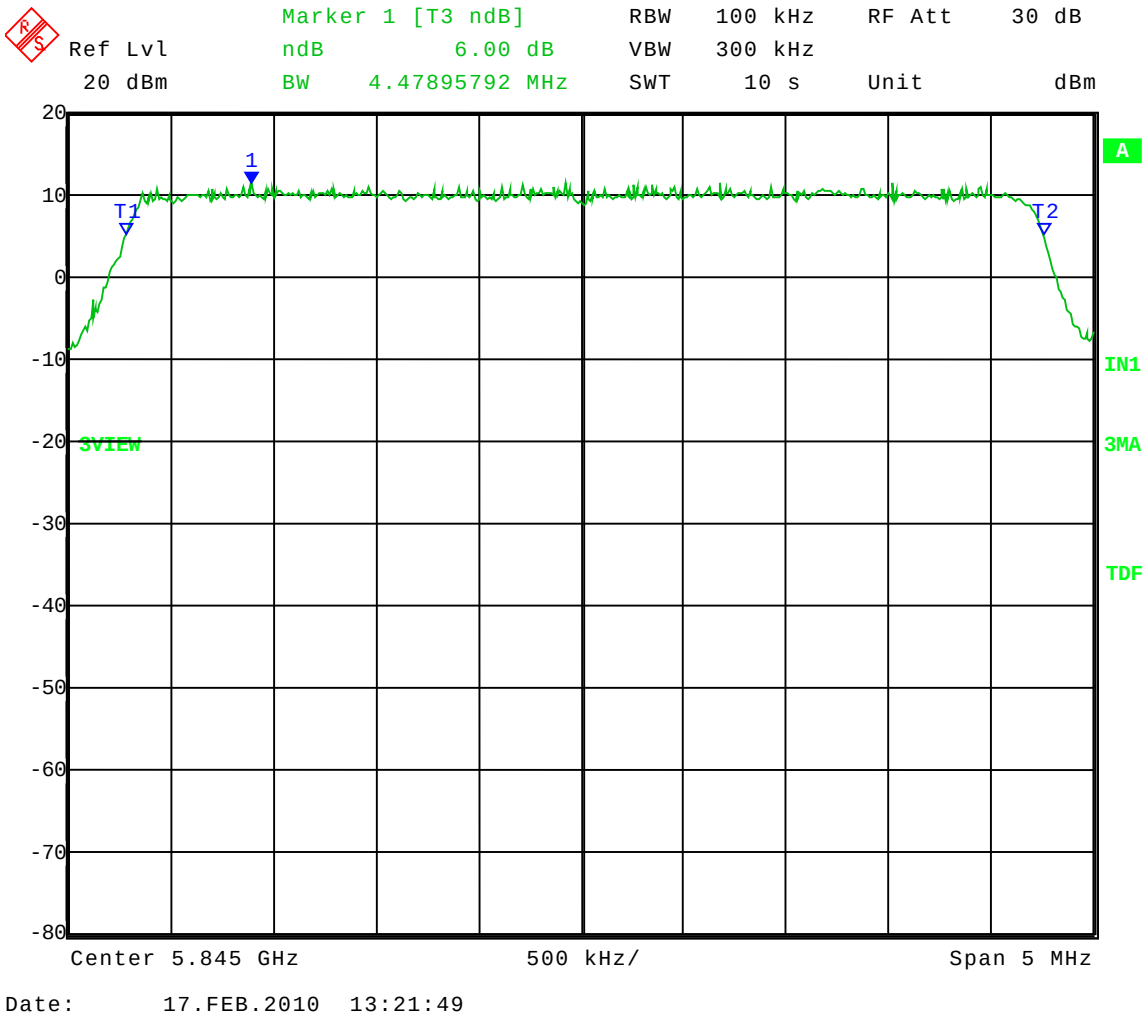


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

High Channel: Frequency – 5.845 GHz
Power setting: 62
Modulation: 64QAM
Channel BW: 5 MHz

6 dB Bandwidth = 4.48 MHz

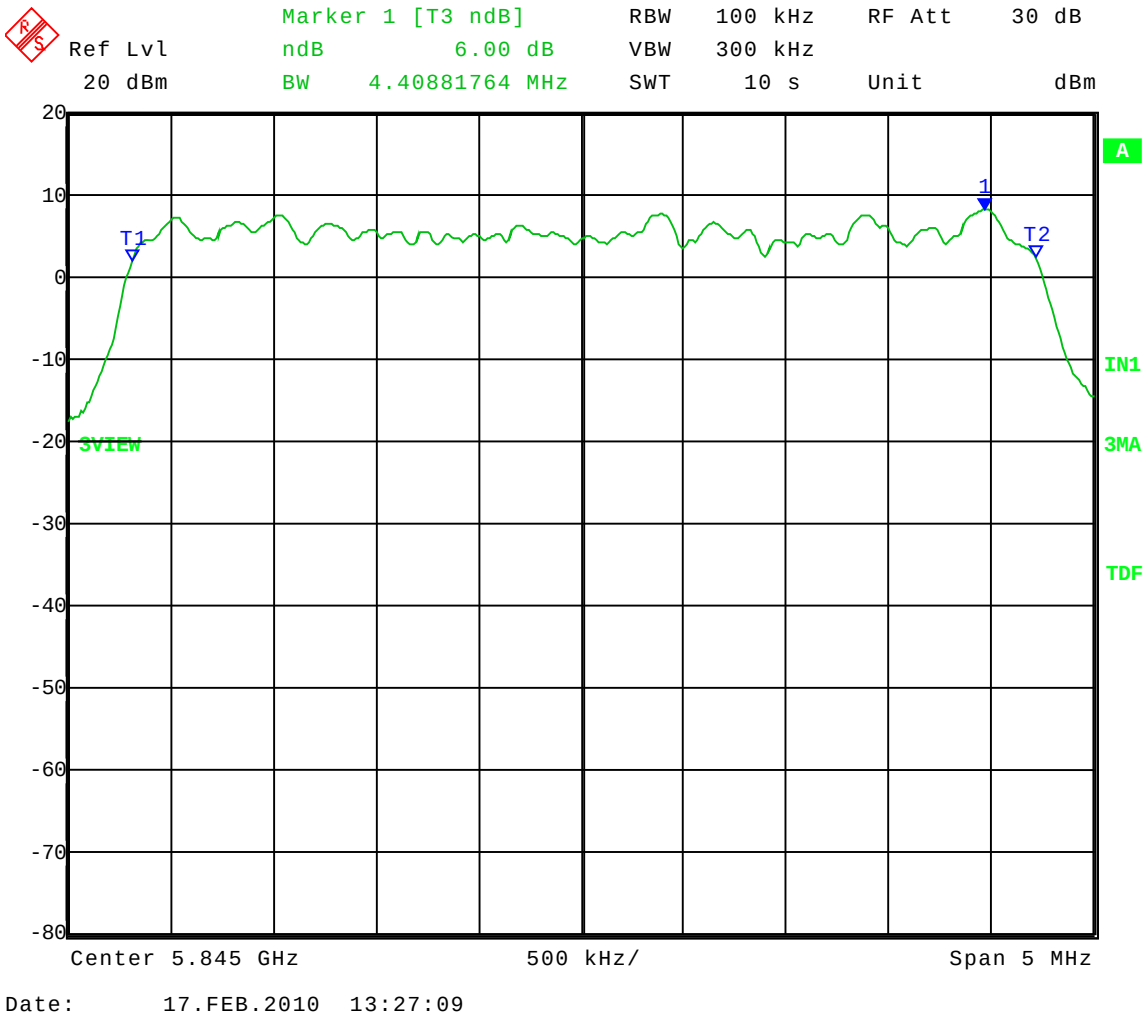


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

High Channel: Frequency – 5.845 GHz
Power setting: 58
Modulation: 256QAM
Channel BW: 5 MHz

6 dB Bandwidth = 4.41 MHz

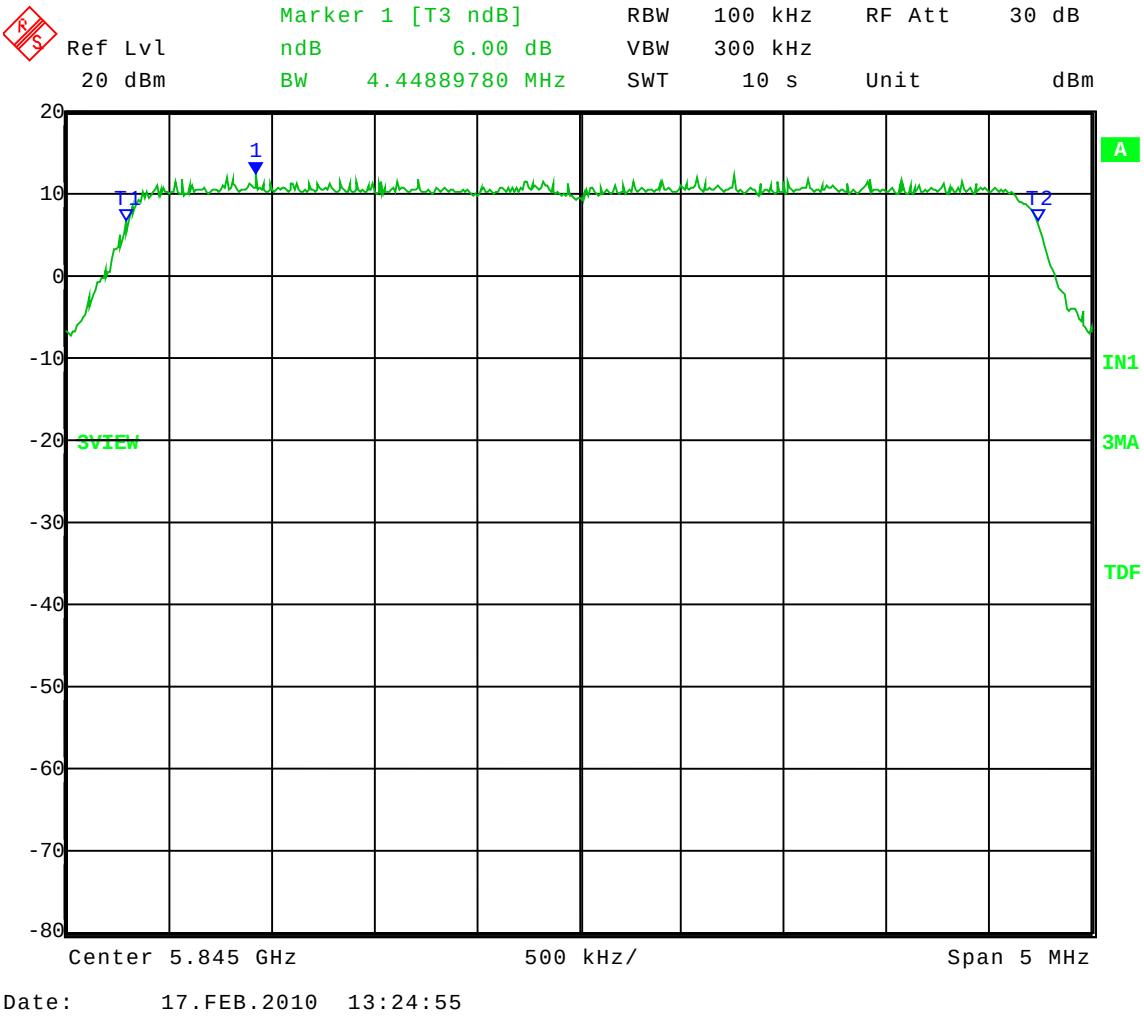


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

High Channel: Frequency – 5.845 GHz
Power setting: 62
Modulation: QPSK
Channel BW: 5 MHz

6 dB Bandwidth = 4.45 MHz



1250 Peterson Dr., Wheeling, IL 60090

2.0 Test Run: RF antenna conducted test – Band-edge compliance

Rule Section: Section 15.247(d) – Spurious emissions

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

Description: The EUT was set to transmit in continuous mode at the lowest, middle, and highest channel of operation. The channel bandwidth of the EUT was changed from 5 MHz to 10 MHz and 20 MHz, and the modulation of the EUT was changed from QPSK to 16-QAM, 64-QAM, and 256-QAM. A measurement of the emission at the edge of the authorized operating band was made for each of the above conditions. *Note: Since this testing was done for a Class II Permissive Change, and the 10 MHz band-edge data is already in the original report, only the 256-QAM modulation was tested for the 10 MHz channel bandwidth condition.*

Limit: This device complies with the use of power option 2. Therefore, the emission level at the edge of the authorized operating band must be at least 30 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

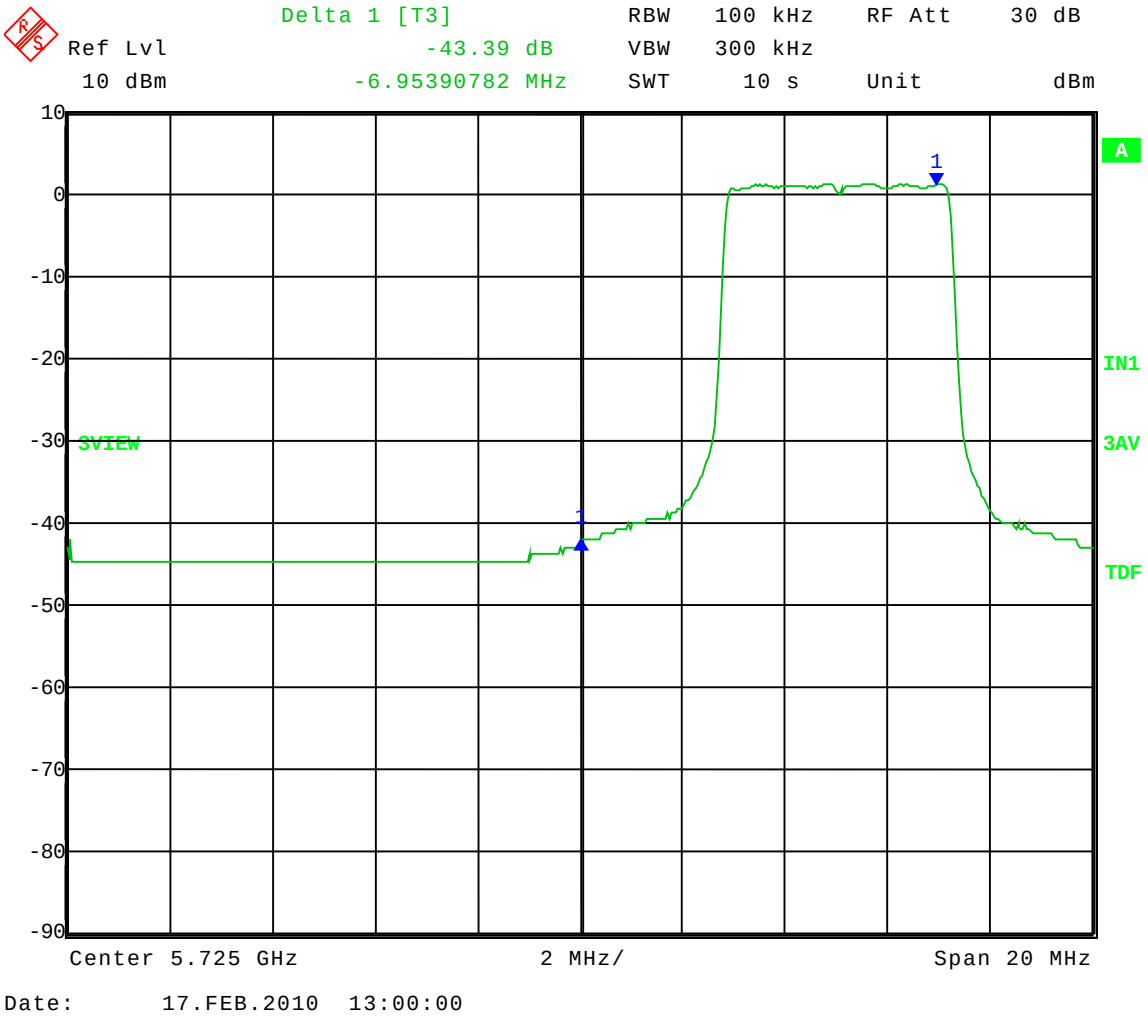
Results: Passed

1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Lower Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.725 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

Low Channel: Frequency – 5.730 GHz
Power setting: 5F
Modulation: 16QAM
Channel BW: 5 MHz

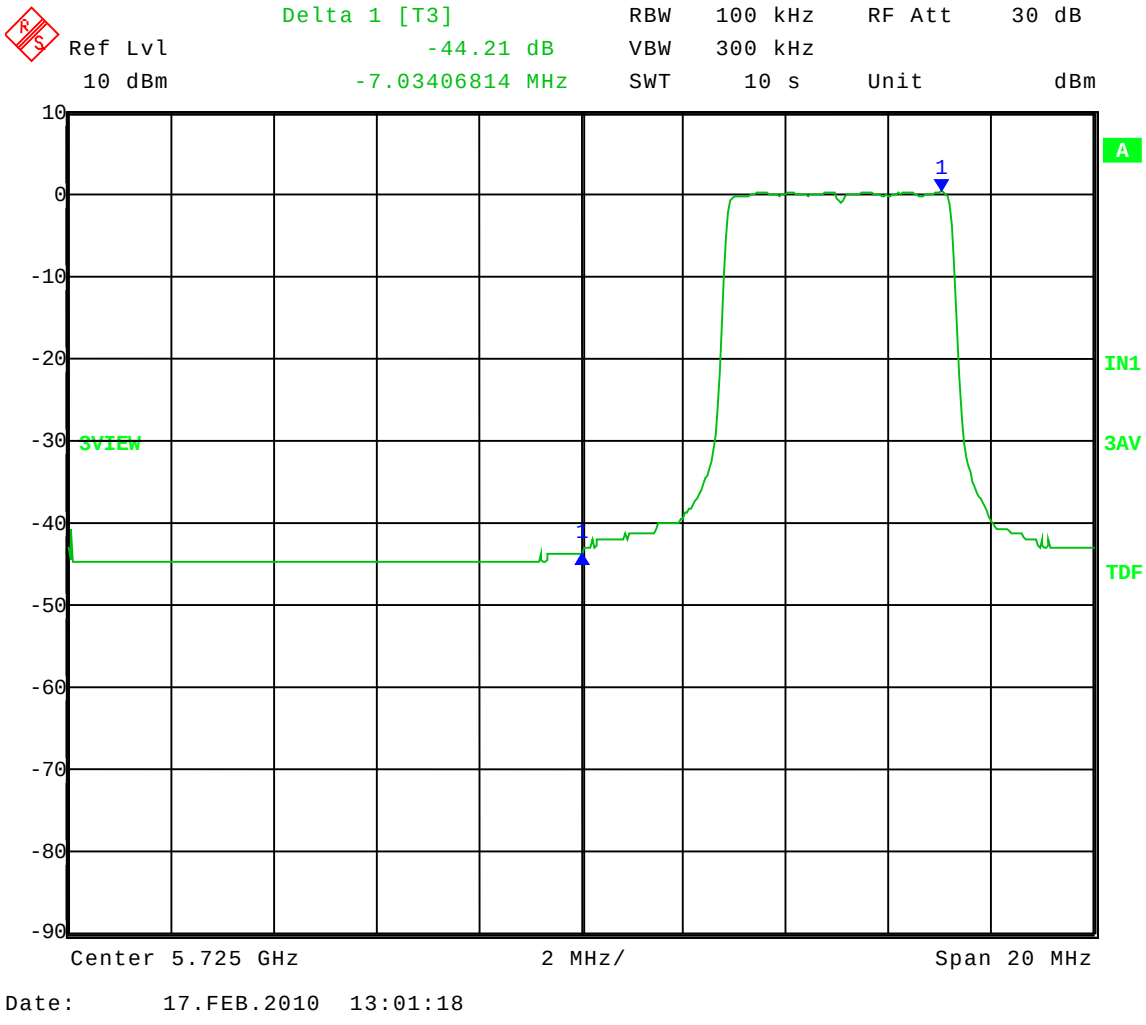


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Lower Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.725 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

Low Channel: Frequency – 5.730 GHz
Power setting: 5F
Modulation: 64QAM
Channel BW: 5 MHz

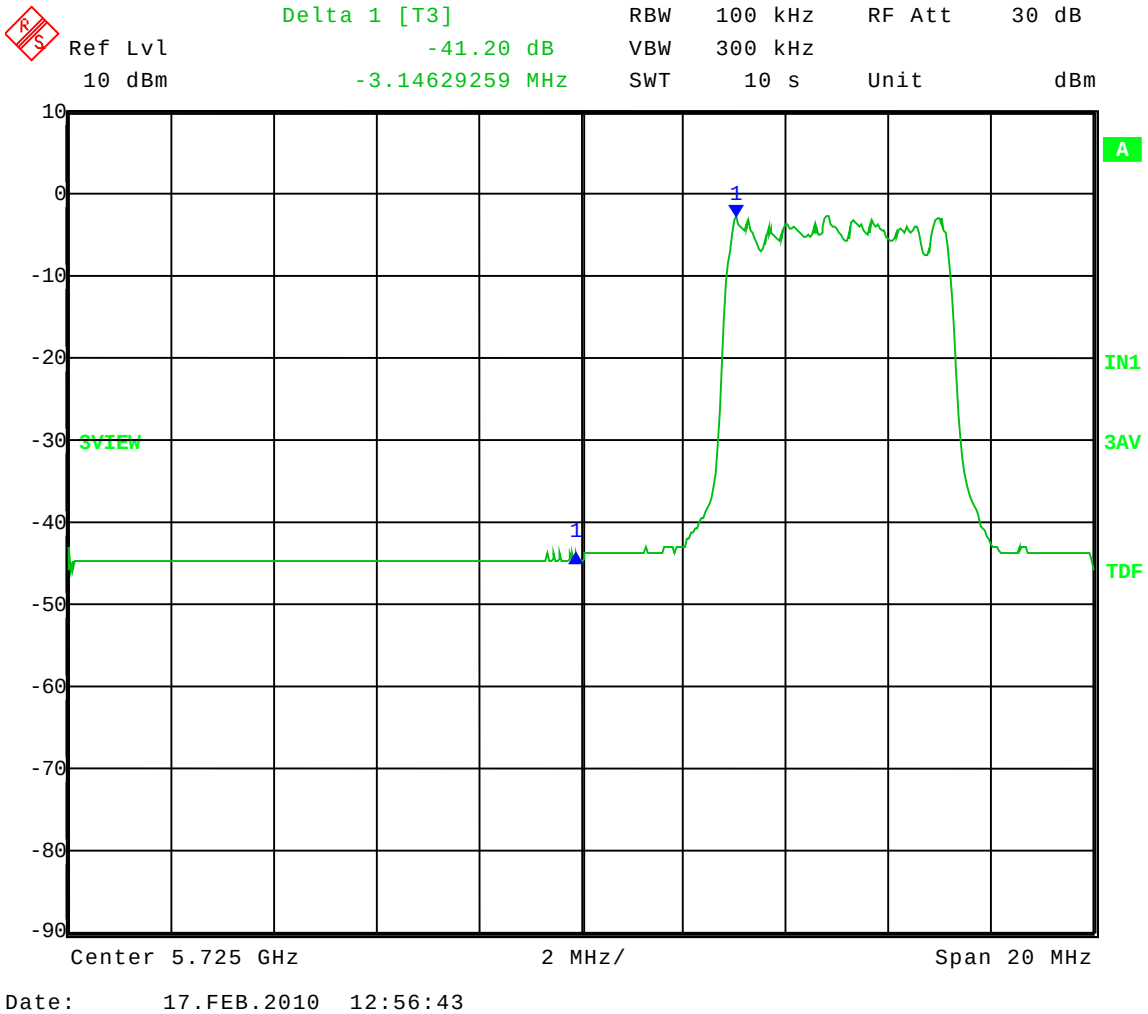


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Lower Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.725 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

Low Channel: Frequency – 5.730 GHz
Power setting: 53
Modulation: 256QAM
Channel BW: 5 MHz

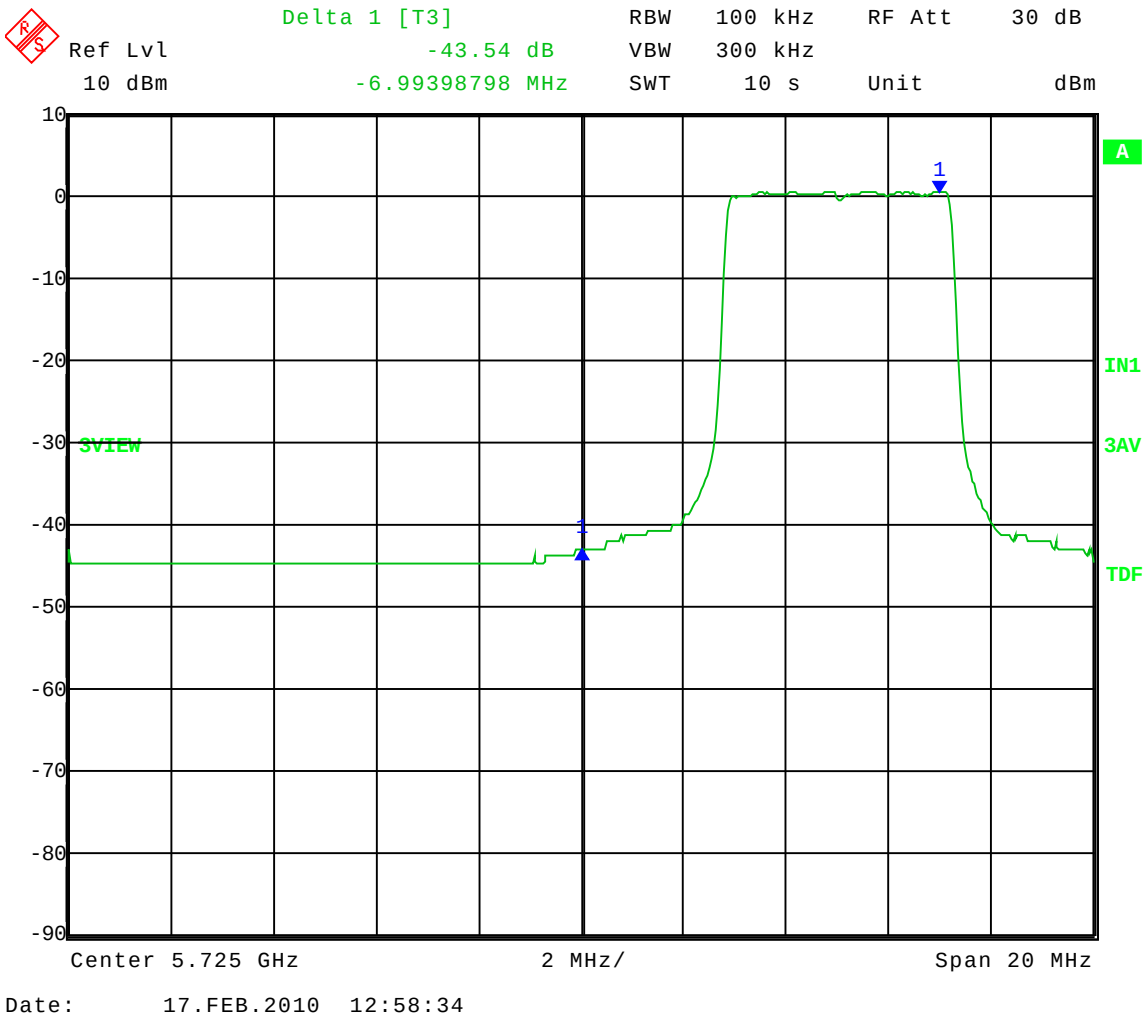


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Lower Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.725 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

Low Channel: Frequency – 5.730 GHz
Power setting: 5E
Modulation: QPSK
Channel BW: 5 MHz

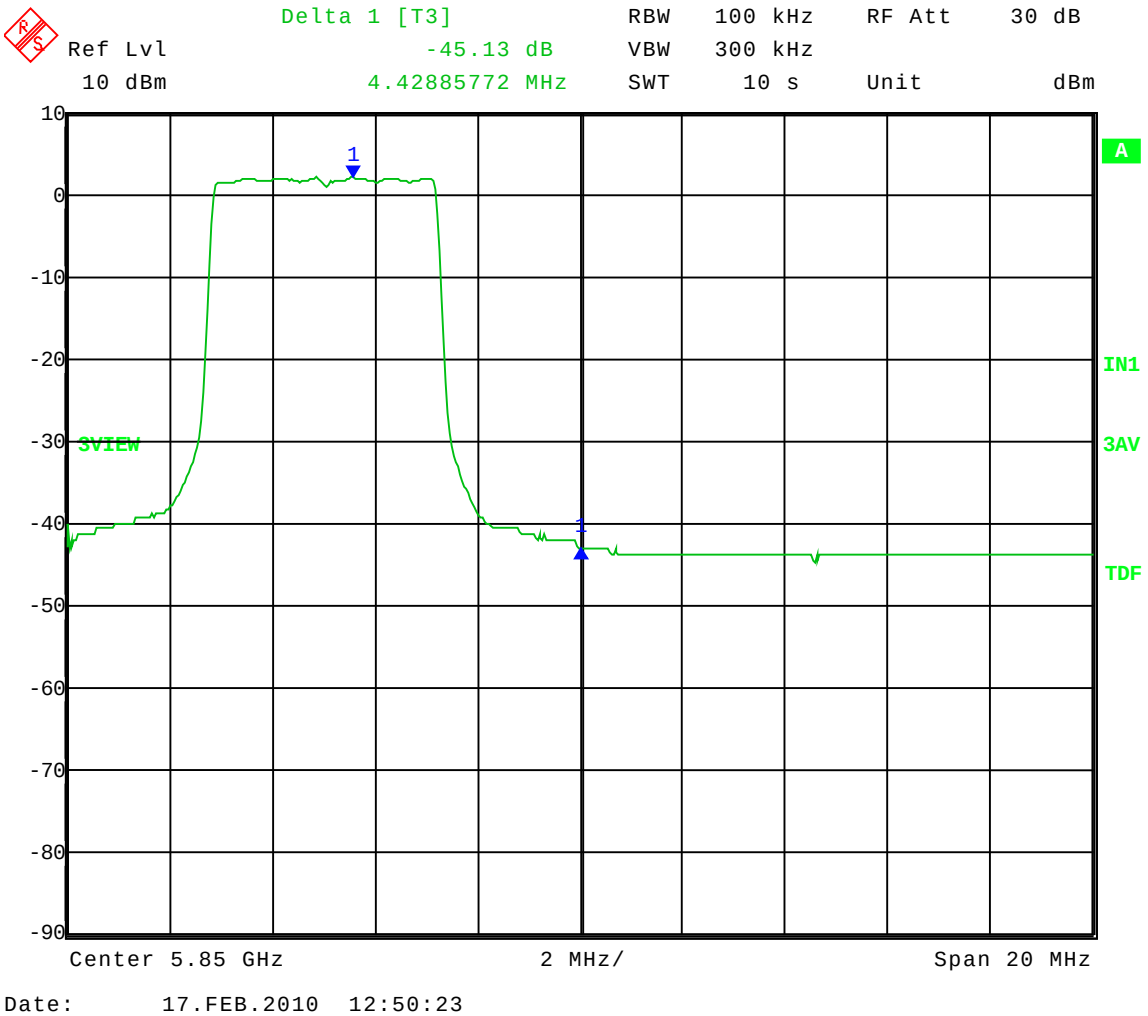


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Upper Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.850 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

High Channel: Frequency – 5.845 GHz
Power setting: 62
Modulation: 16QAM
Channel BW: 5 MHz

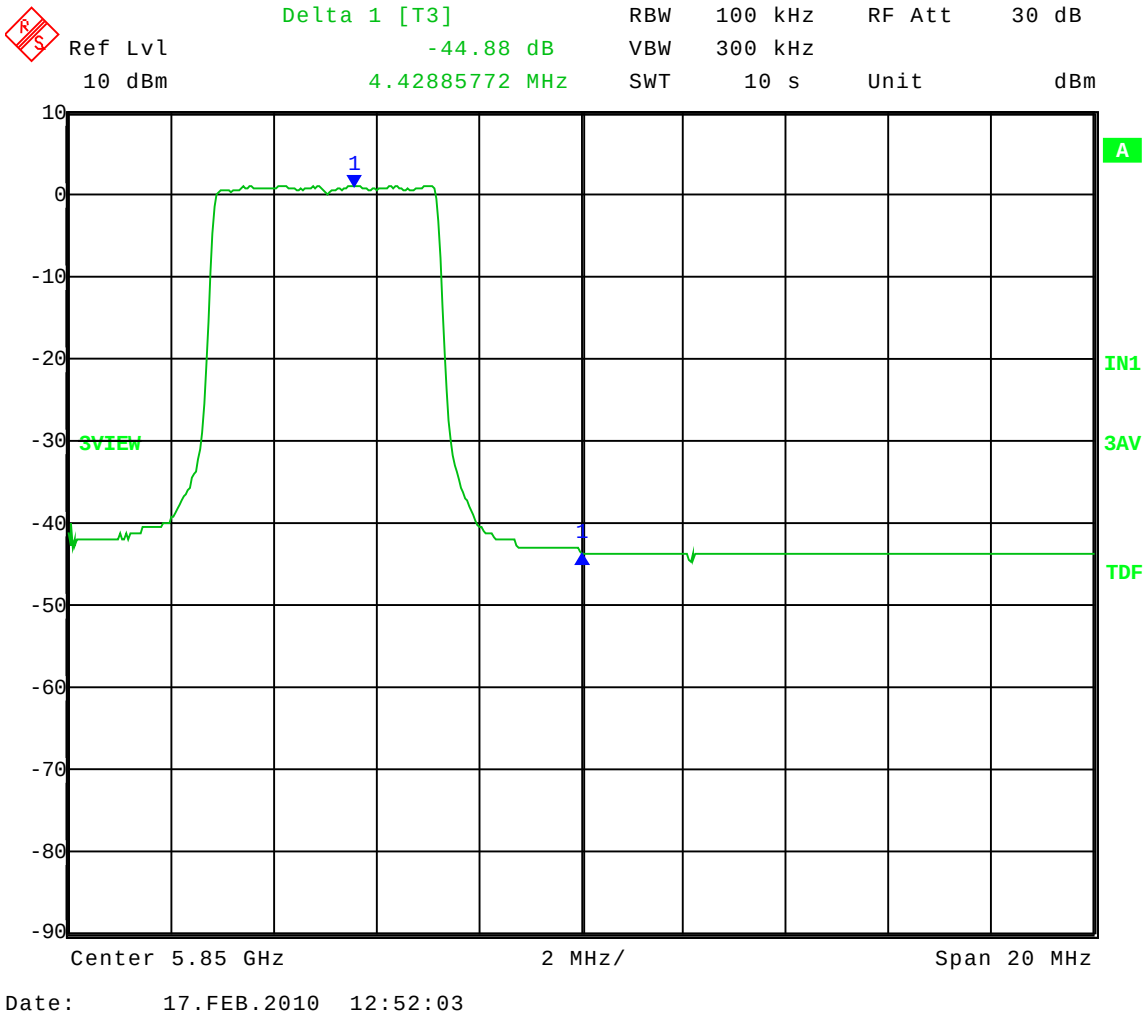


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Upper Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.850 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

High Channel: Frequency – 5.845 GHz
Power setting: 62
Modulation: 64QAM
Channel BW: 5 MHz

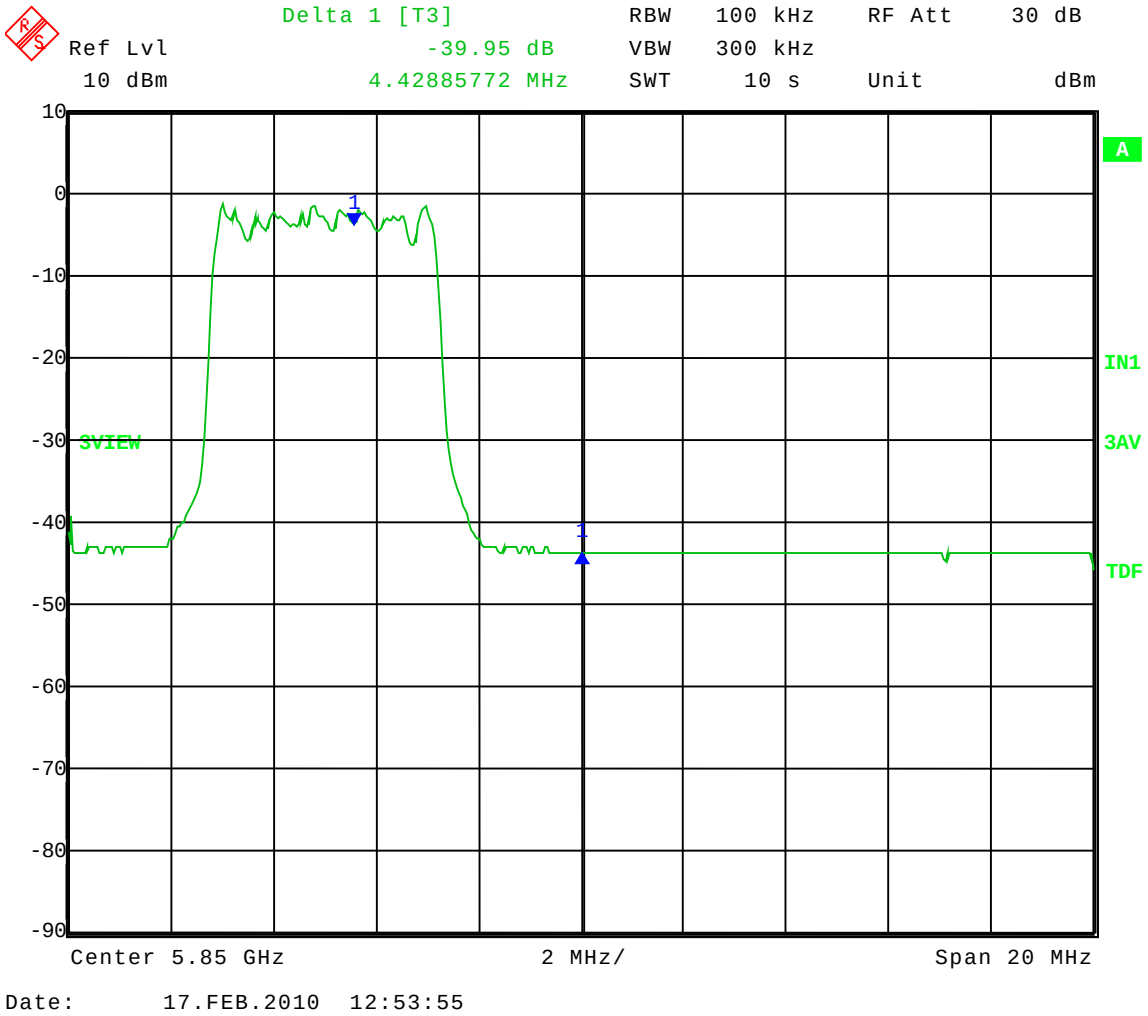


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Upper Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.850 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

High Channel: Frequency – 5.845 GHz
Power setting: 58
Modulation: 256QAM
Channel BW: 5 MHz

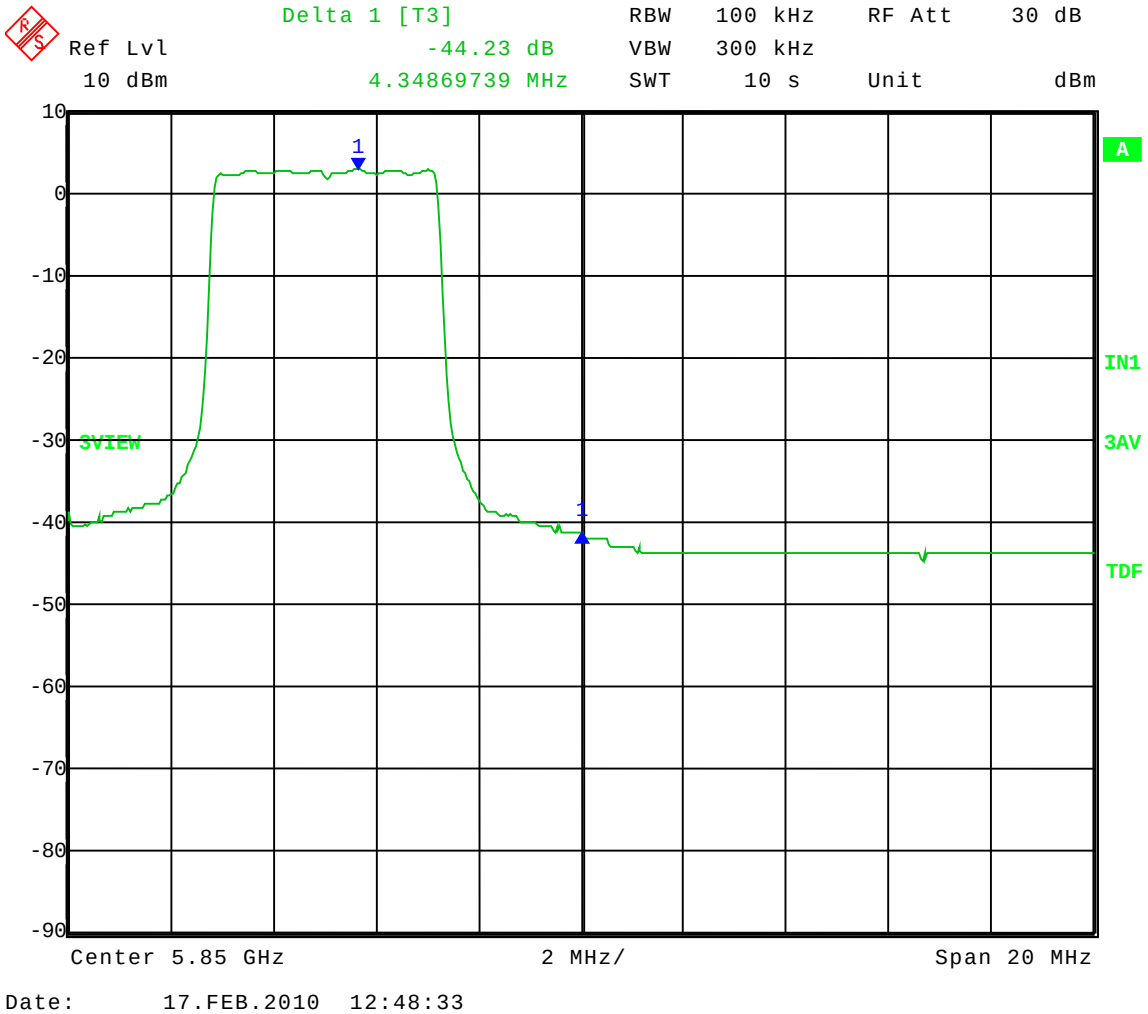


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Upper Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.850 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

High Channel: Frequency – 5.845 GHz
Power setting: 62
Modulation: QPSK
Channel BW: 5 MHz



1250 Peterson Dr., Wheeling, IL 60090

3.0 Test Run: Power Output

Rule Section: Section 15.247(b)(3)

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

- Power Output Option 2 -
- Method #2 -

Description: The pulse duration "T" measured 4.9 ms. With the RBW set to 1 MHz and the span set to equal the EBW, the Auto-sweep time on the analyzer was 5 ms. Since the sweep time is greater than "T", and the EBW is less that the largest available on the spectrum analyzer, Method 2 was used.

The center frequency was set to the midpoint of the signal in zero span mode. The RBW was set greater than the EBW. The VBW was set to the spectrum analyzers maximum value, which is greater than the RBW. The sweep time was set to "T" (the analyzer rounded this setting to 5 ms). The detector was set to Sample mode. A video trigger was set to trigger only on full power pulses. 100 traces were trace-averaged in power averaging mode. The highest peak marked on the trace is recorded as the output power.

Measurements were taken for QPSK, 16-QAM, 64-QAM, and 256-QAM modulation types, and at the lowest, middle, and highest channels of operation.

Limit: The level measured must be no greater than what is listed on the original grant of certification.

Results: Passed

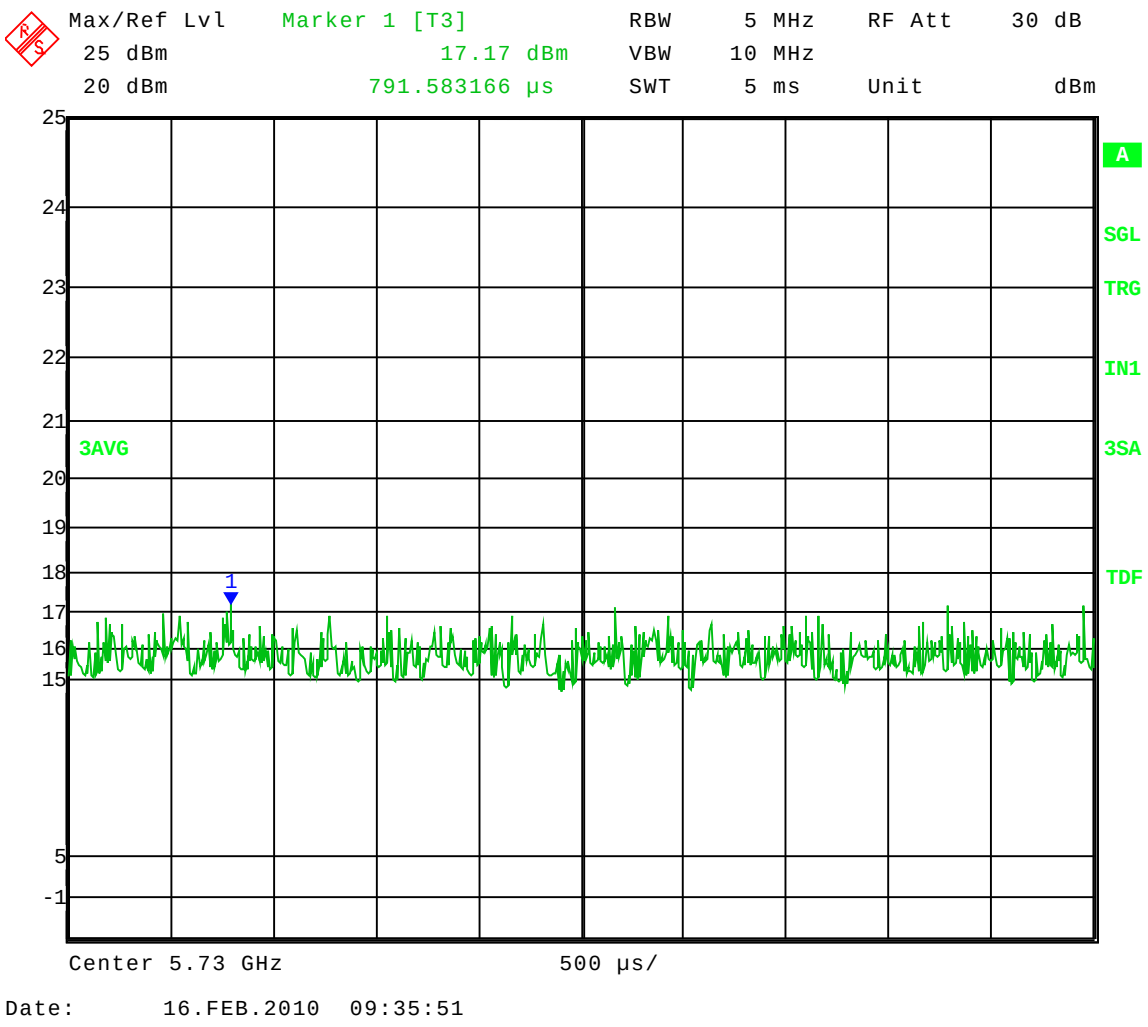
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Power setting: 5F
Modulation: 16QAM
Channel BW: 5 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 17.17 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **18.17 dBm = 65.61 mW**



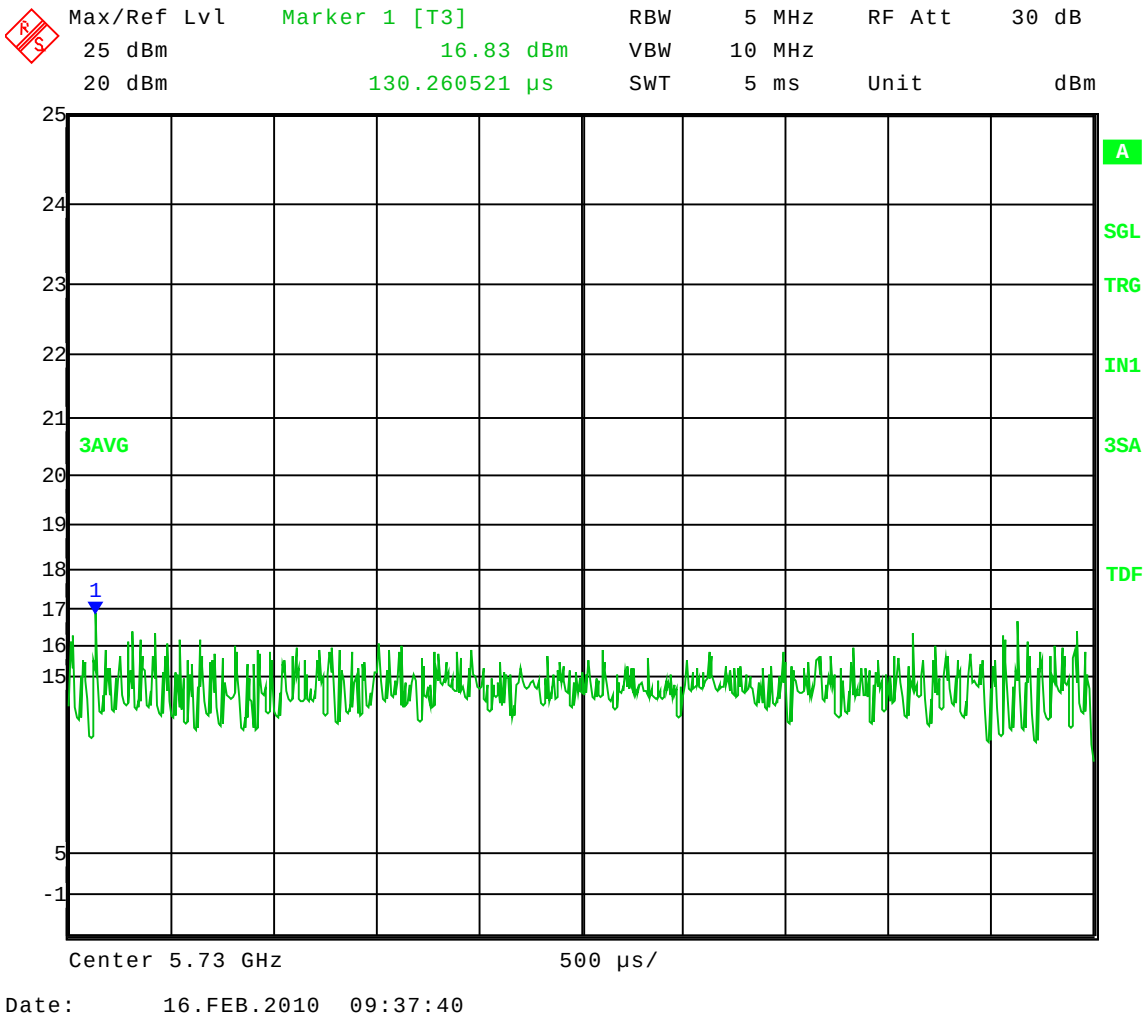
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Power setting: 5F
Modulation: 64QAM
Channel BW: 5 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 16.83 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **17.83 dBm = 60.67 mW**



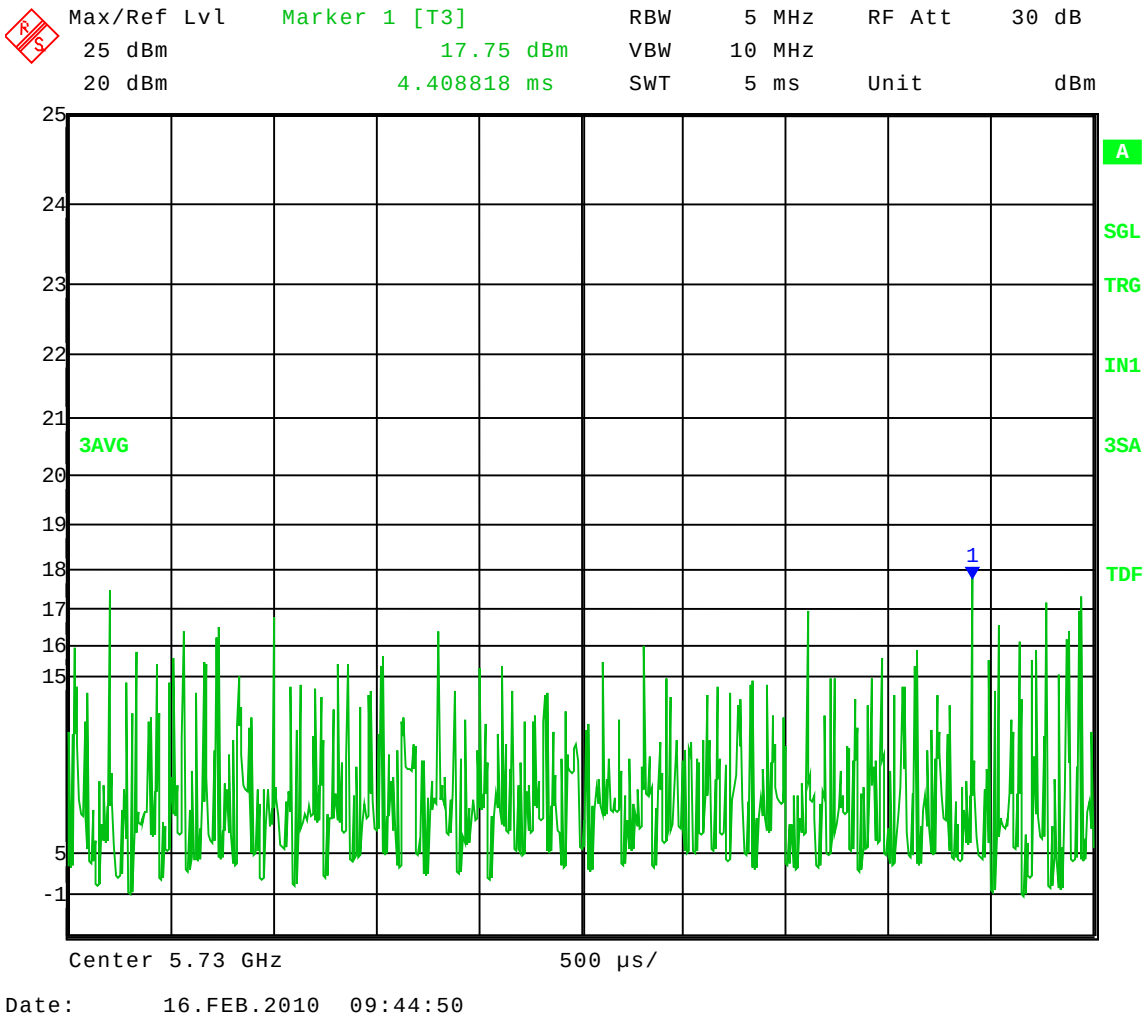
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Power setting: 53
Modulation: 256QAM
Channel BW: 5 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 17.75 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **18.75 dBm = 74.99 mW**



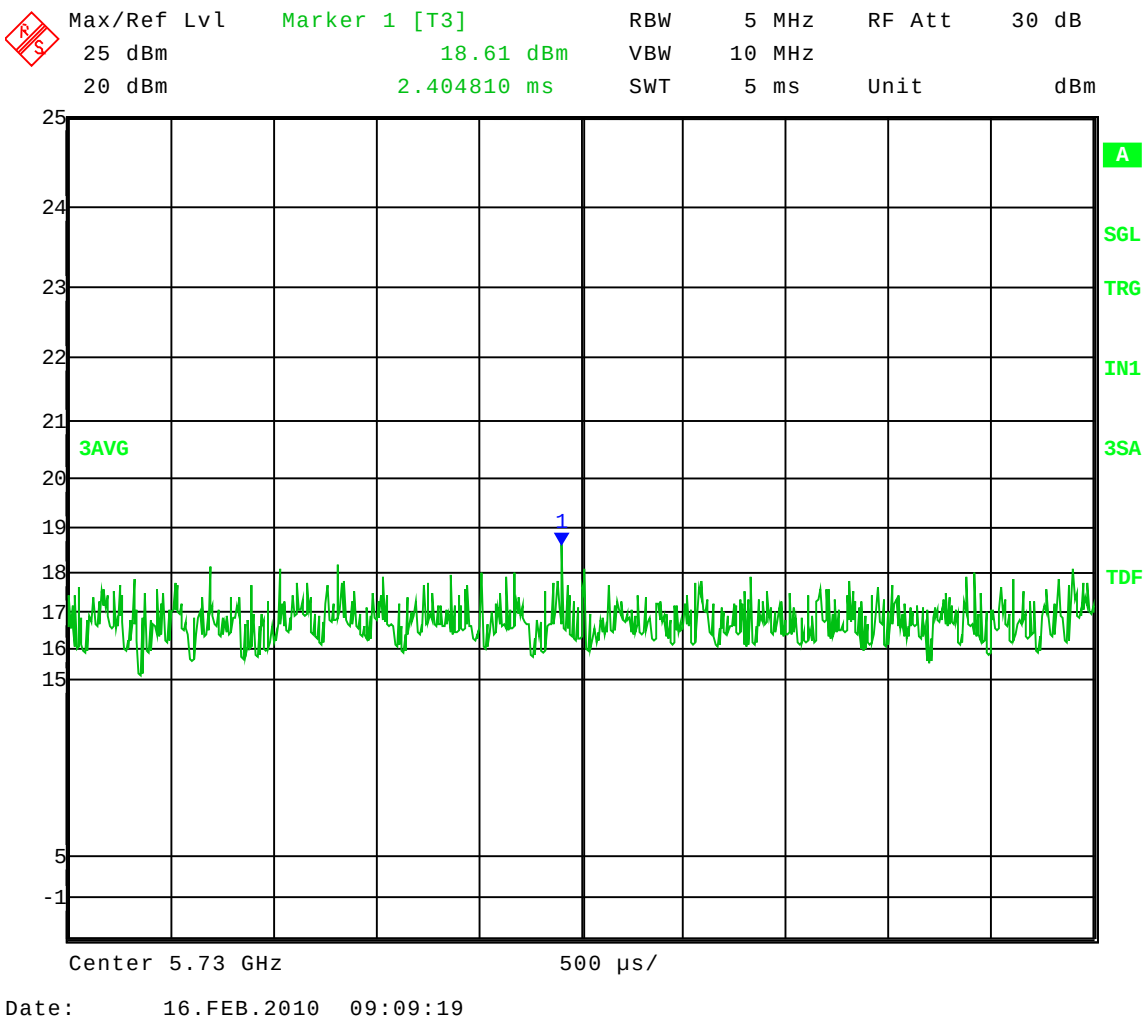
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Power setting: 5E
Modulation: QPSK
Channel BW: 5 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 18.61 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **19.61 dBm = 91.41 mW**



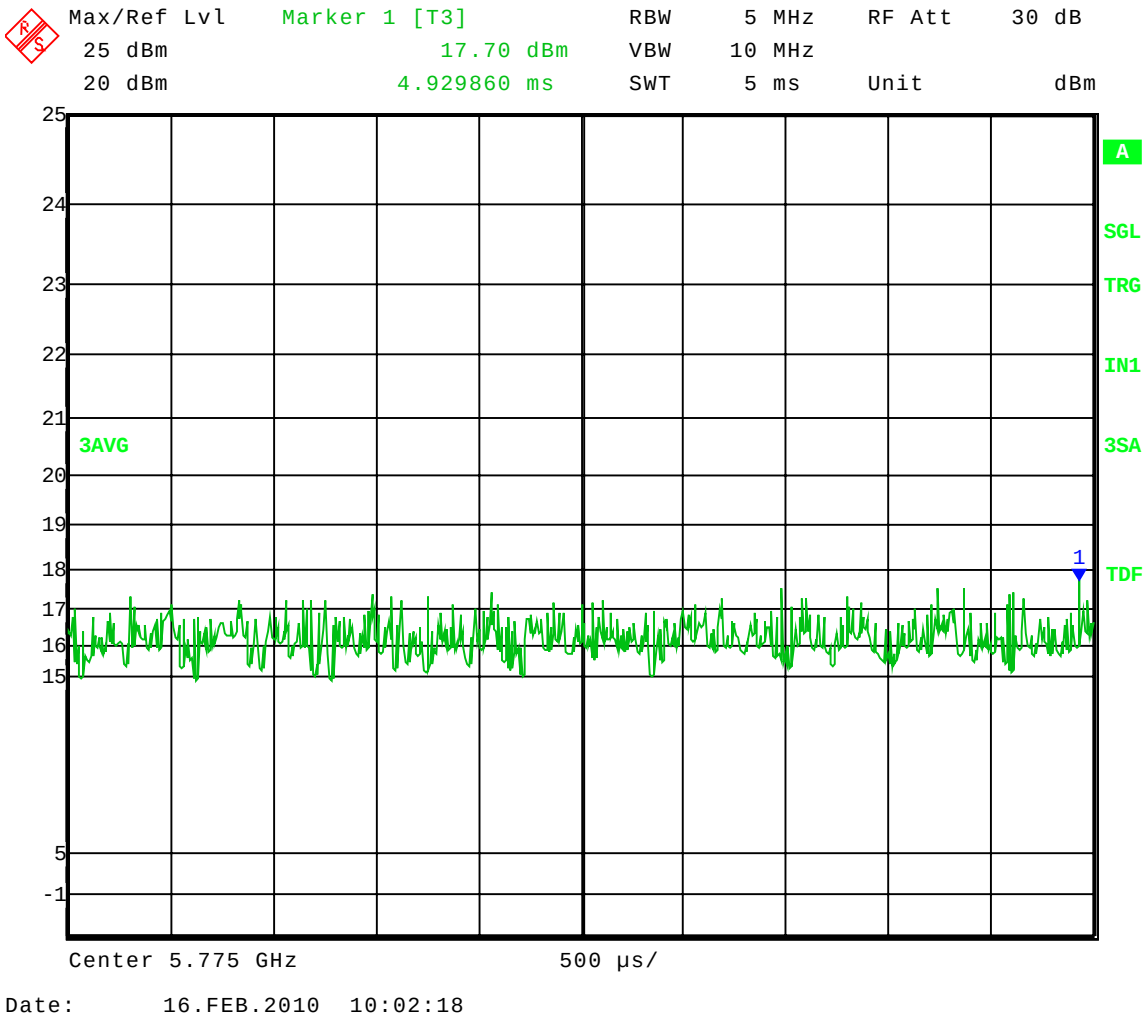
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 16QAM
Channel BW: 5 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 17.70 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **18.70 dBm = 74.13 mW**



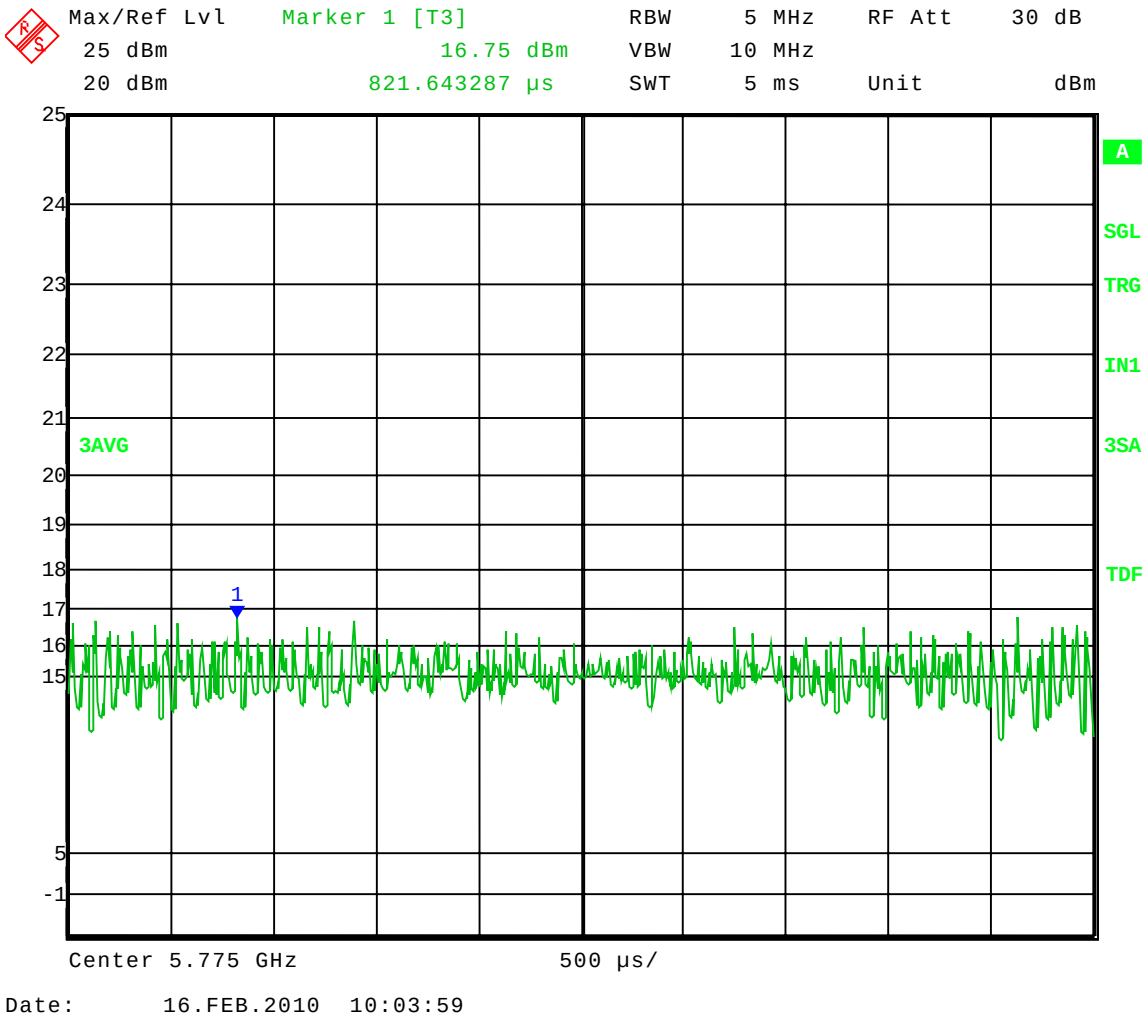
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 64QAM
Channel BW: 5 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 16.75 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **17.75 dBm = 59.57 mW**



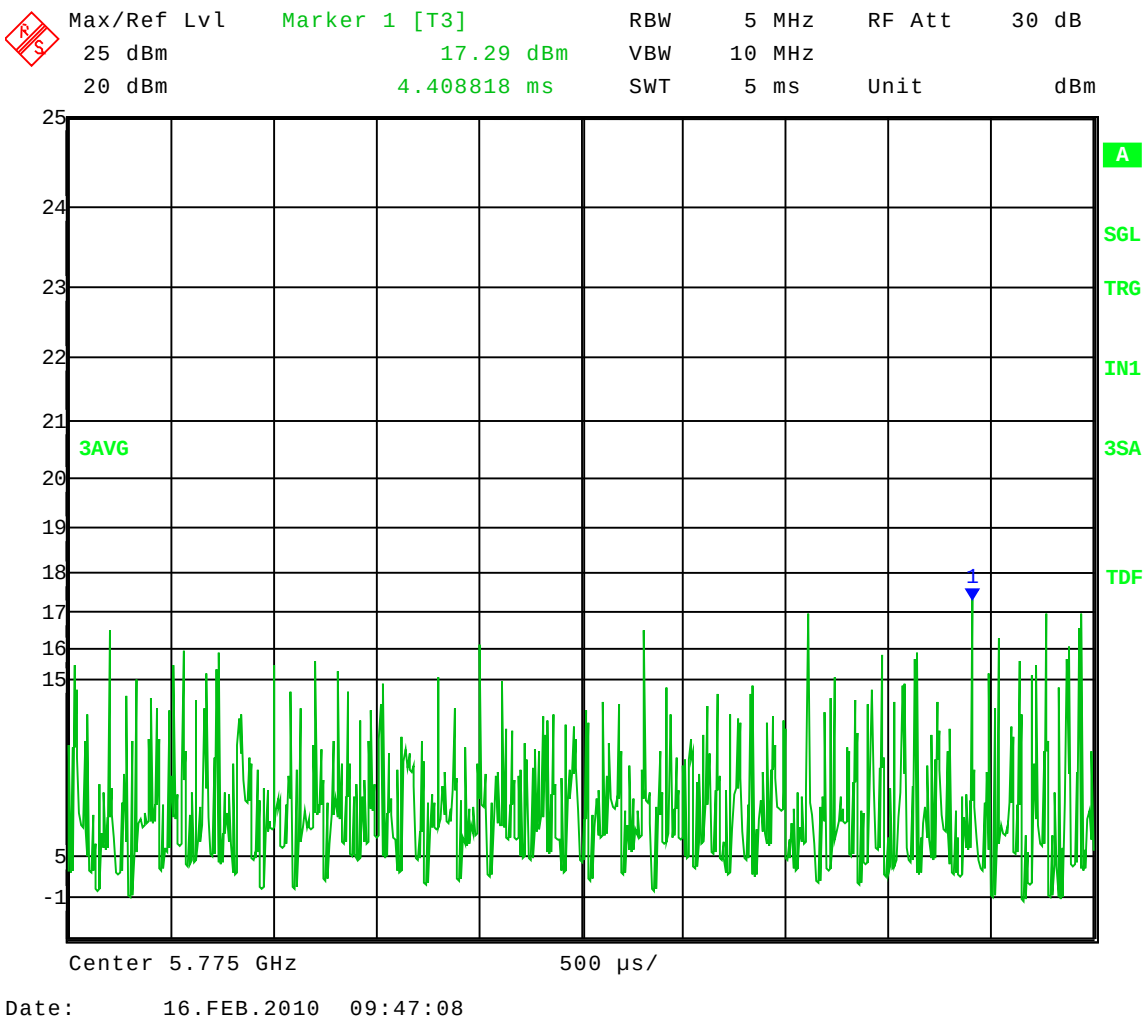
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Power setting: 53
Modulation: 256QAM
Channel BW: 5 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 17.29 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **18.29 dBm = 67.45 mW**



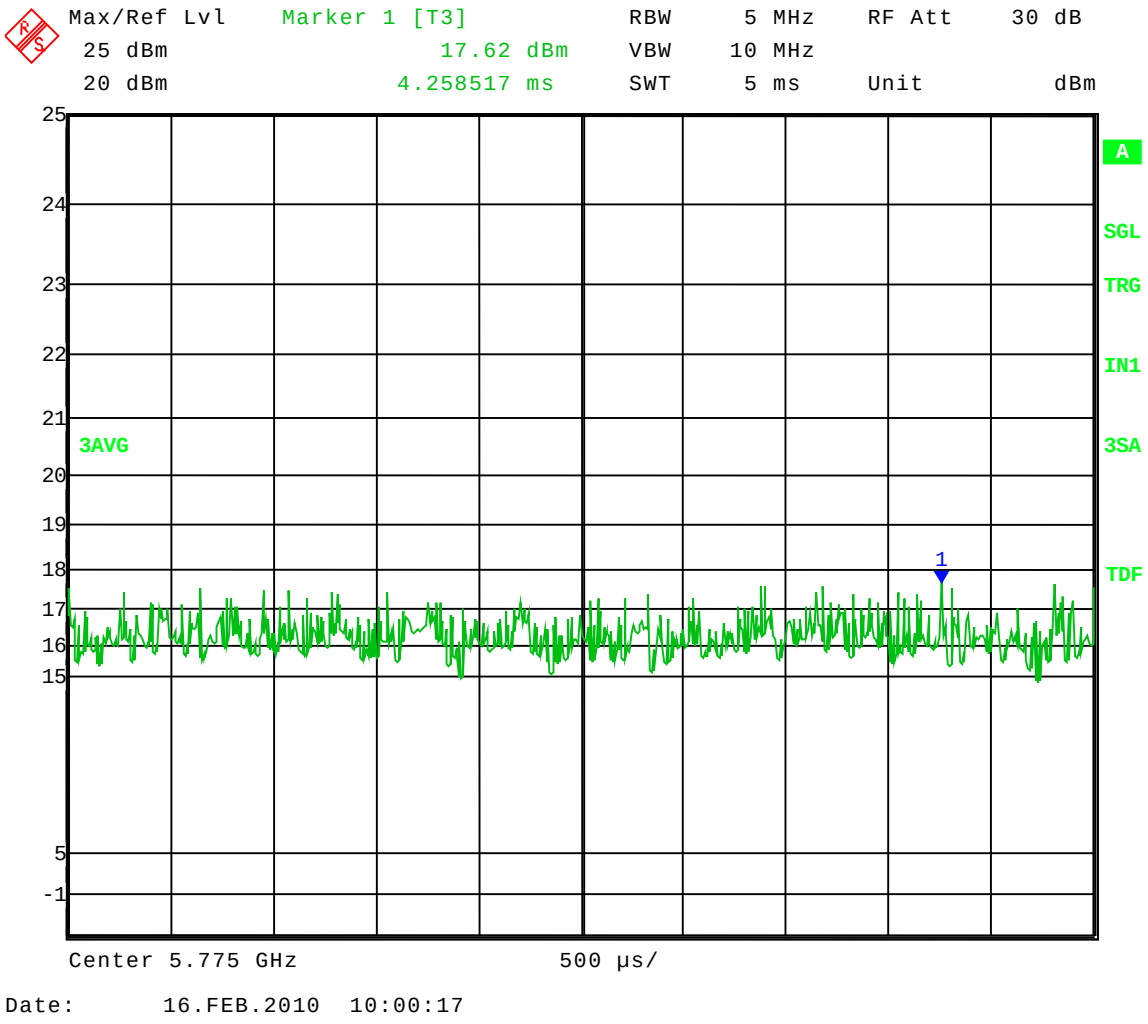
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: QPSK
Channel BW: 5 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 17.62 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **18.62 dBm = 72.78 mW**



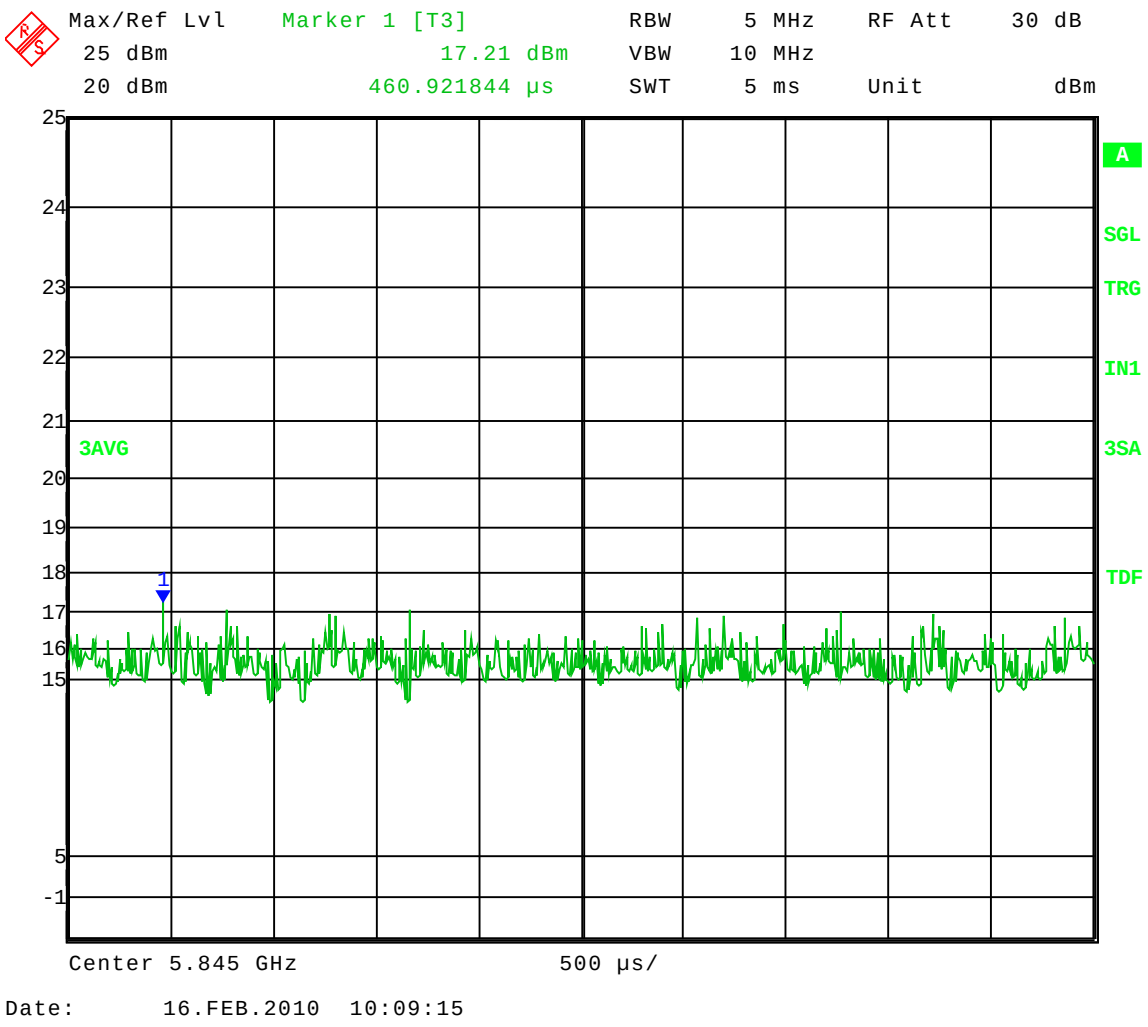
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Power setting: 62
Modulation: 16QAM
Channel BW: 5 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 17.21 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **18.21 dBm = 66.22 mW**



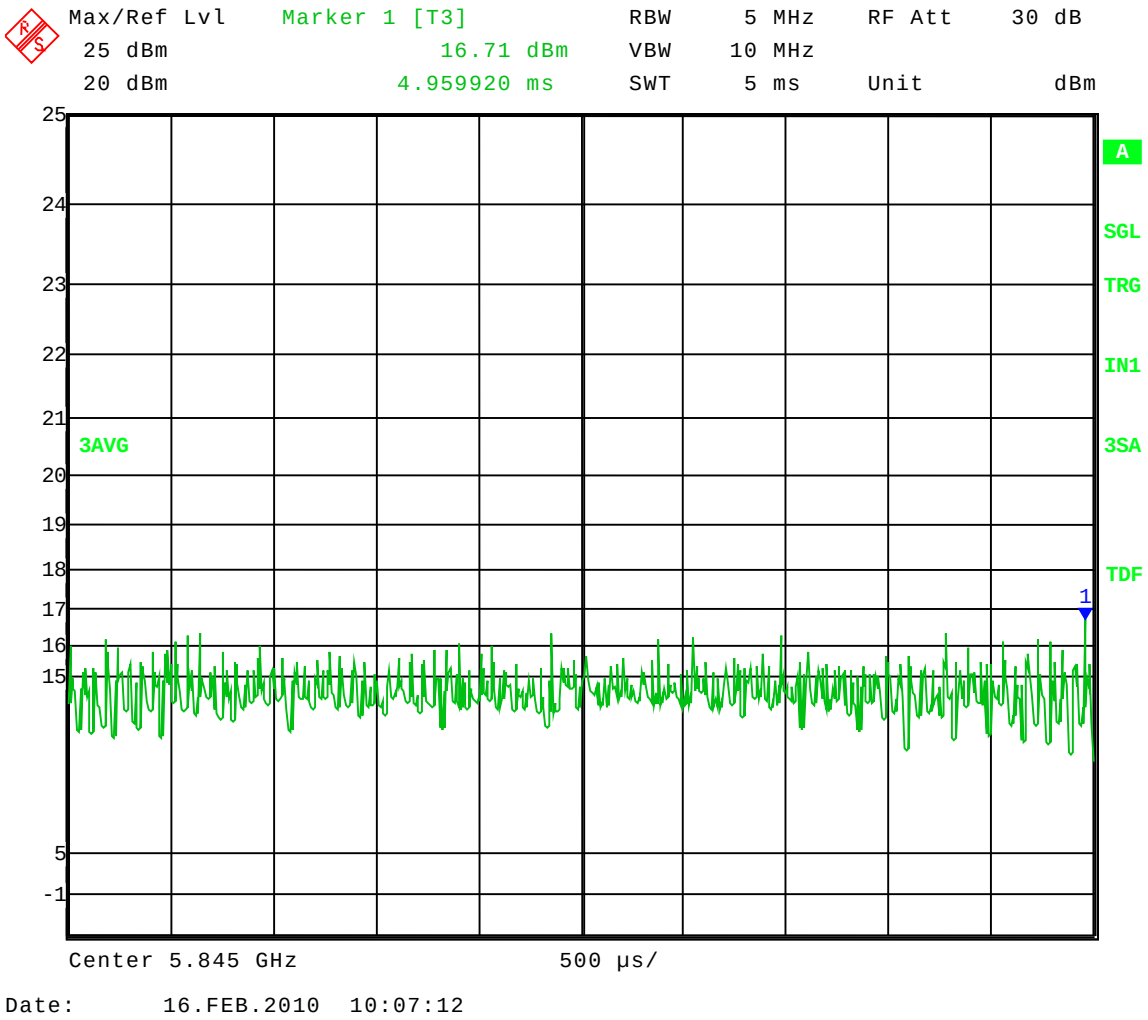
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Power setting: 62
Modulation: 64QAM
Channel BW: 5 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 16.71 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **17.71 dBm = 59.02 mW**



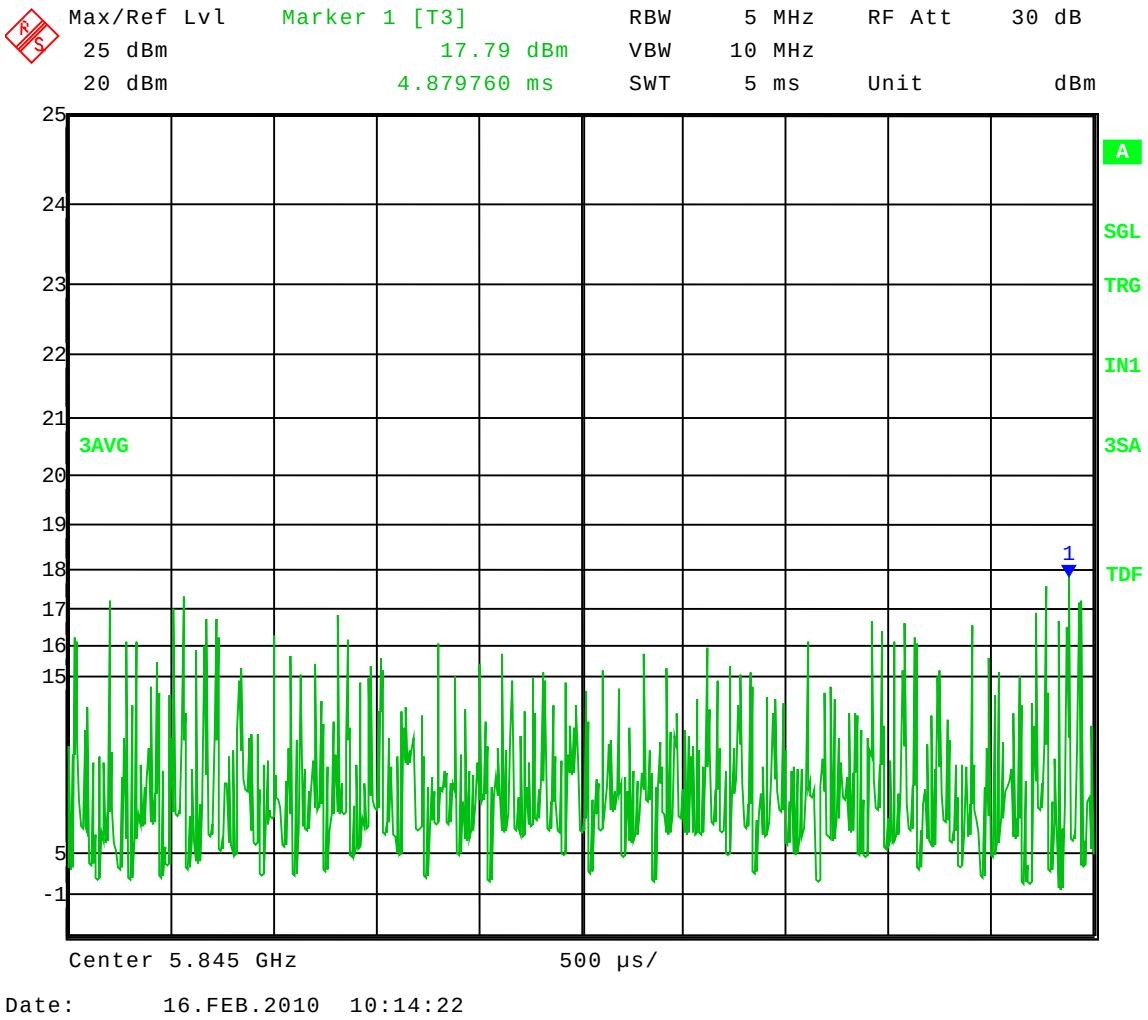
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Power setting: 58
Modulation: 256QAM
Channel BW: 5 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 17.79 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **18.79 dBm = 75.68 mW**



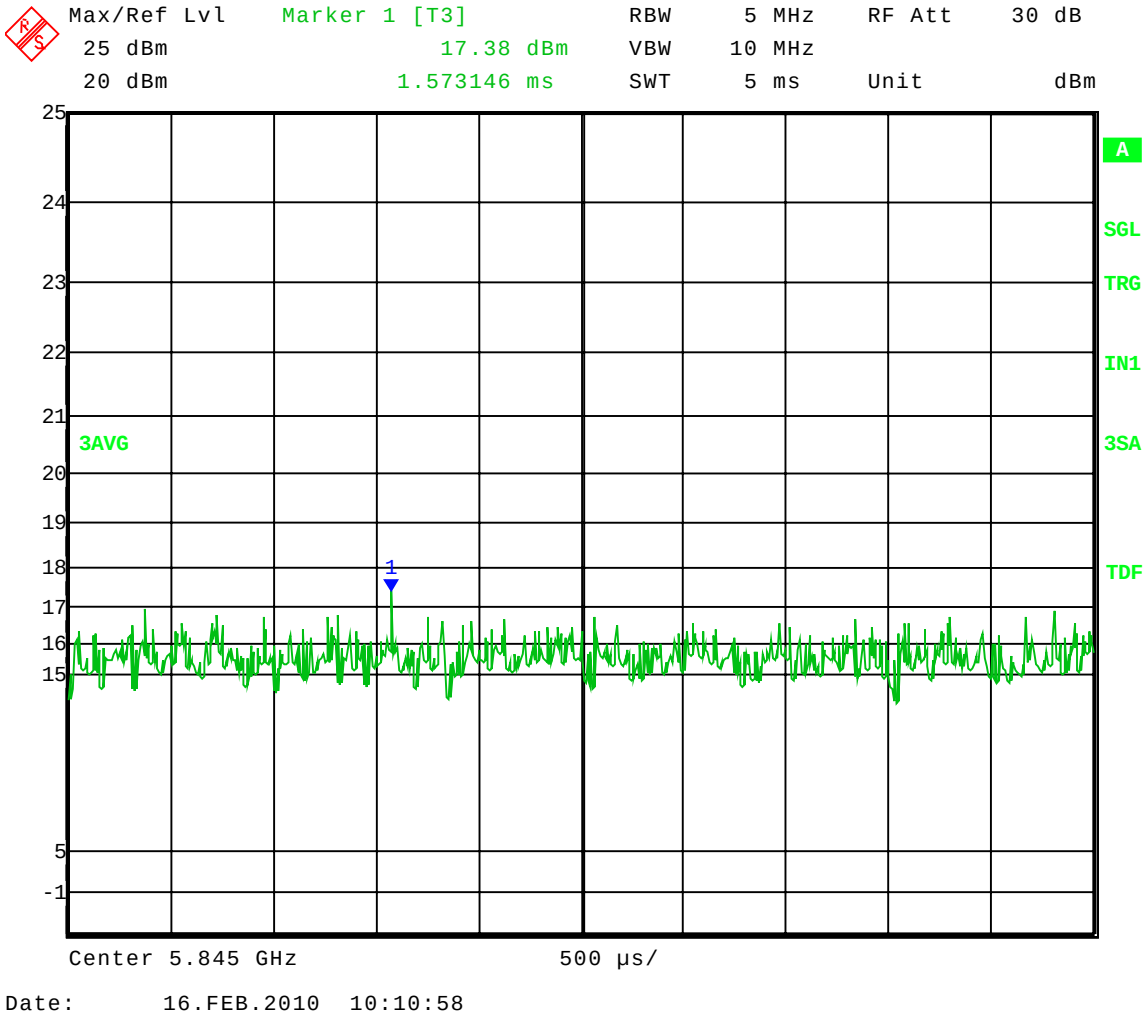
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Power setting: 62
Modulation: QPSK
Channel BW: 5 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 17.38 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **18.38 dBm = 68.87 mW**



1250 Peterson Dr., Wheeling, IL 60090

4.0 Test Run: RF antenna conducted test

Rule Section: Section 15.247(d) – Spurious emissions

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

Description: The EUT was set to transmit in continuous mode.
Measurements were taken for QPSK, 16-QAM, 64-QAM, and 256-QAM modulation types, and at the lowest, middle, and highest channels of operation. Measurements were taken for the 5 MHz, 10 MHz, and 20 MHz channel bandwidth settings.

Limit: This device complies with the use of power option 2. Therefore, all harmonics/spurs must be at least 30 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

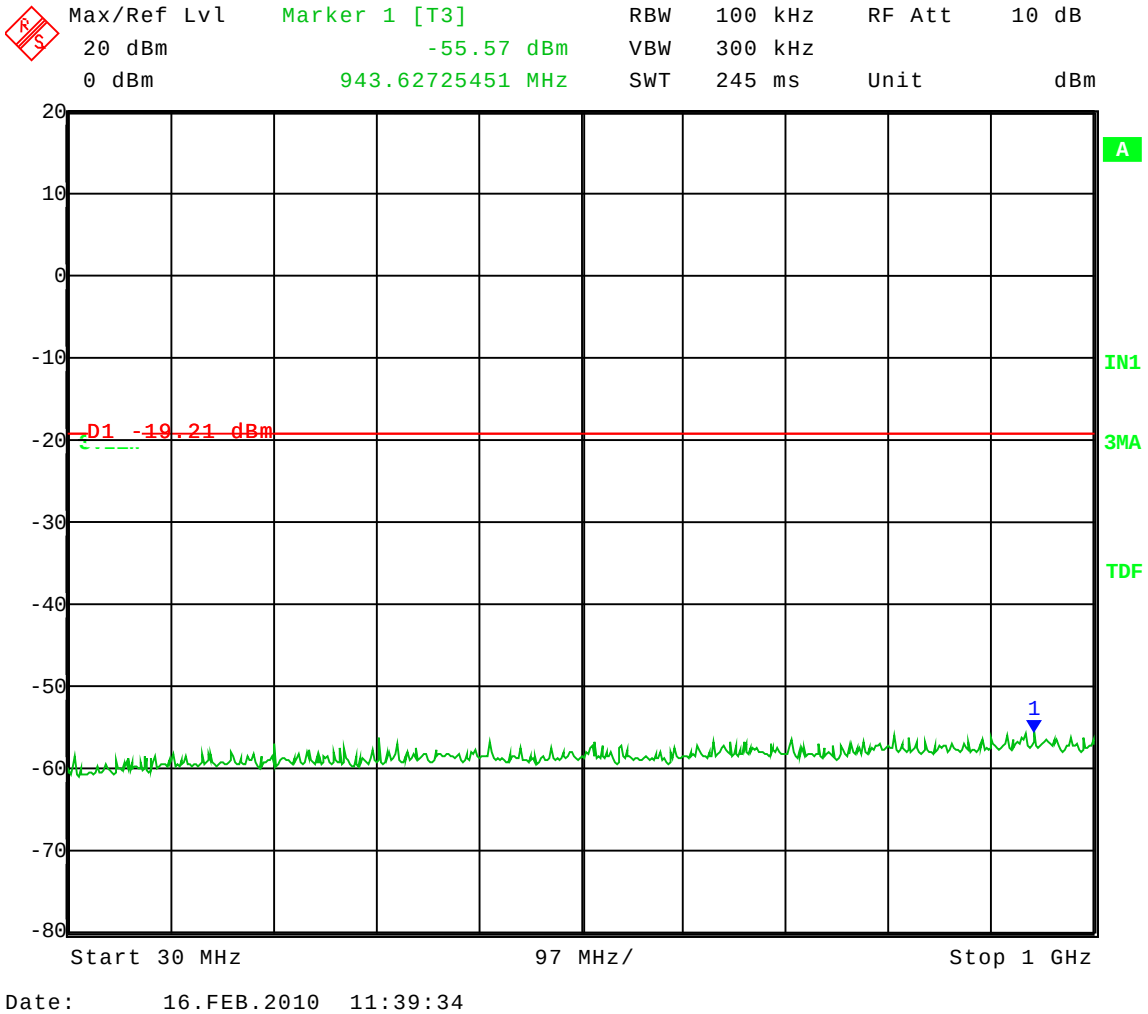
Results: Passed

1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5F
Modulation: 16QAM

Frequency Range: 30 to 1000 MHz
Limit = -19.21 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

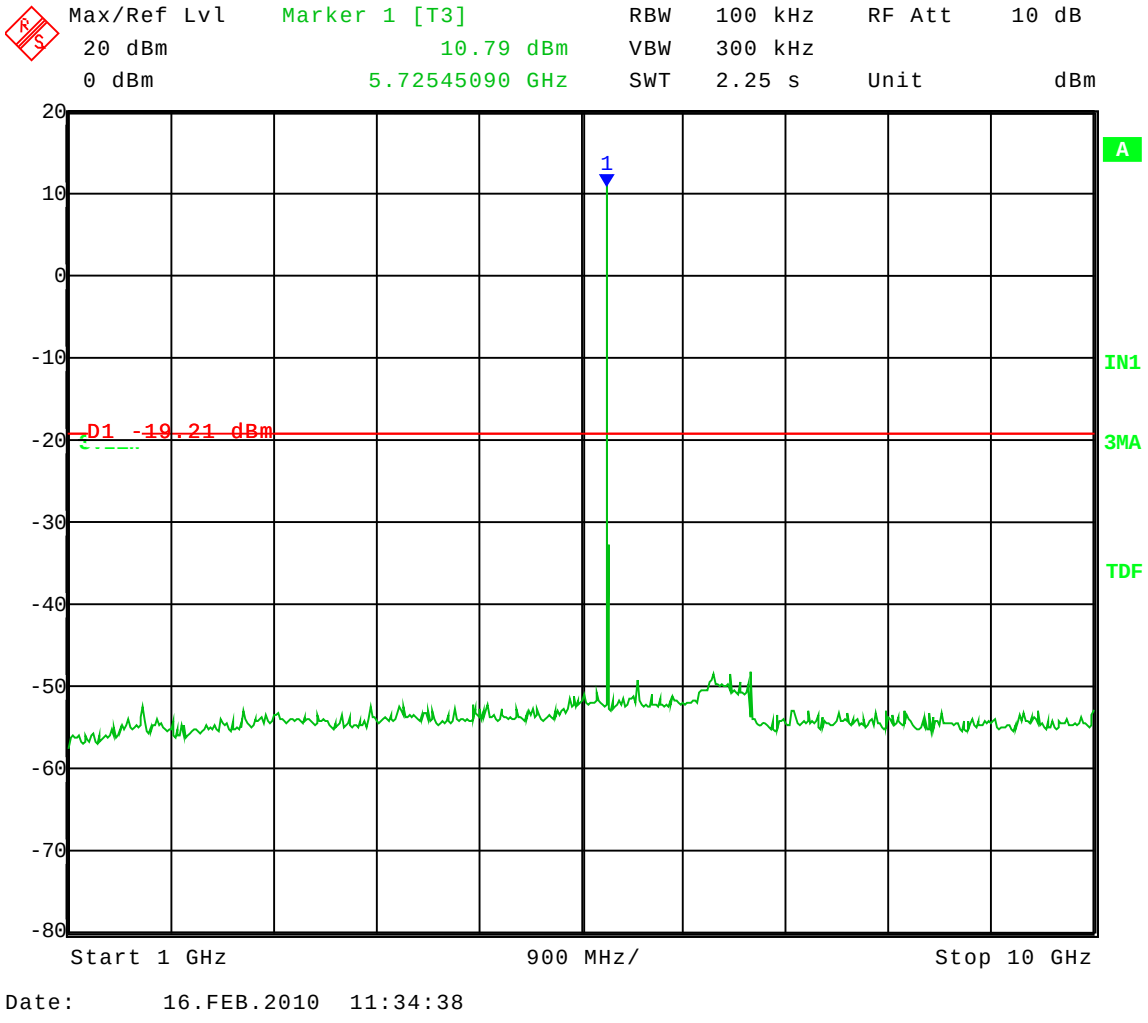


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5F
Modulation: 16QAM

Frequency Range: 1 to 10 GHz
Limit = -19.21 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

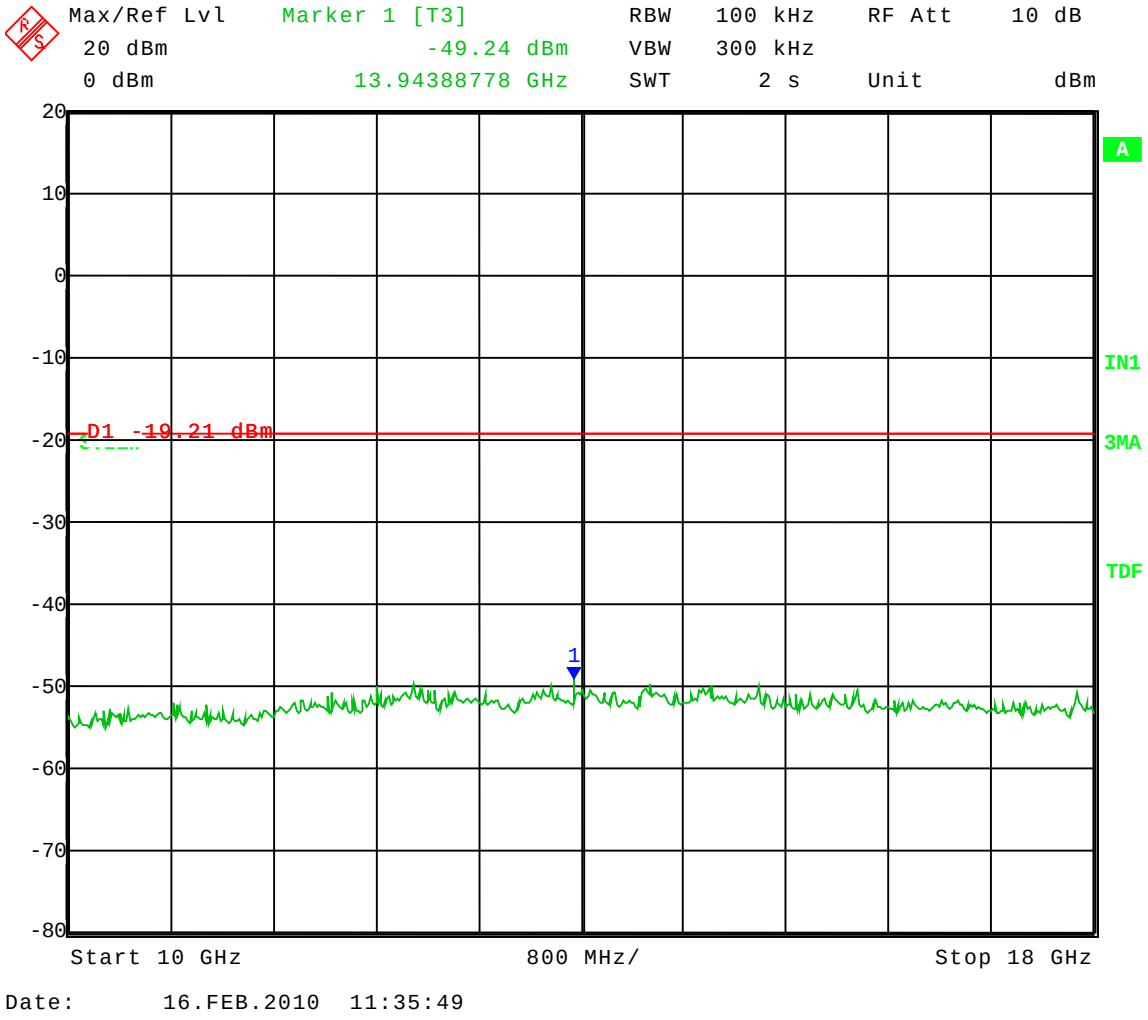


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5F
Modulation: 16QAM

Frequency Range: 10 to 18 GHz
Limit = -19.21 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

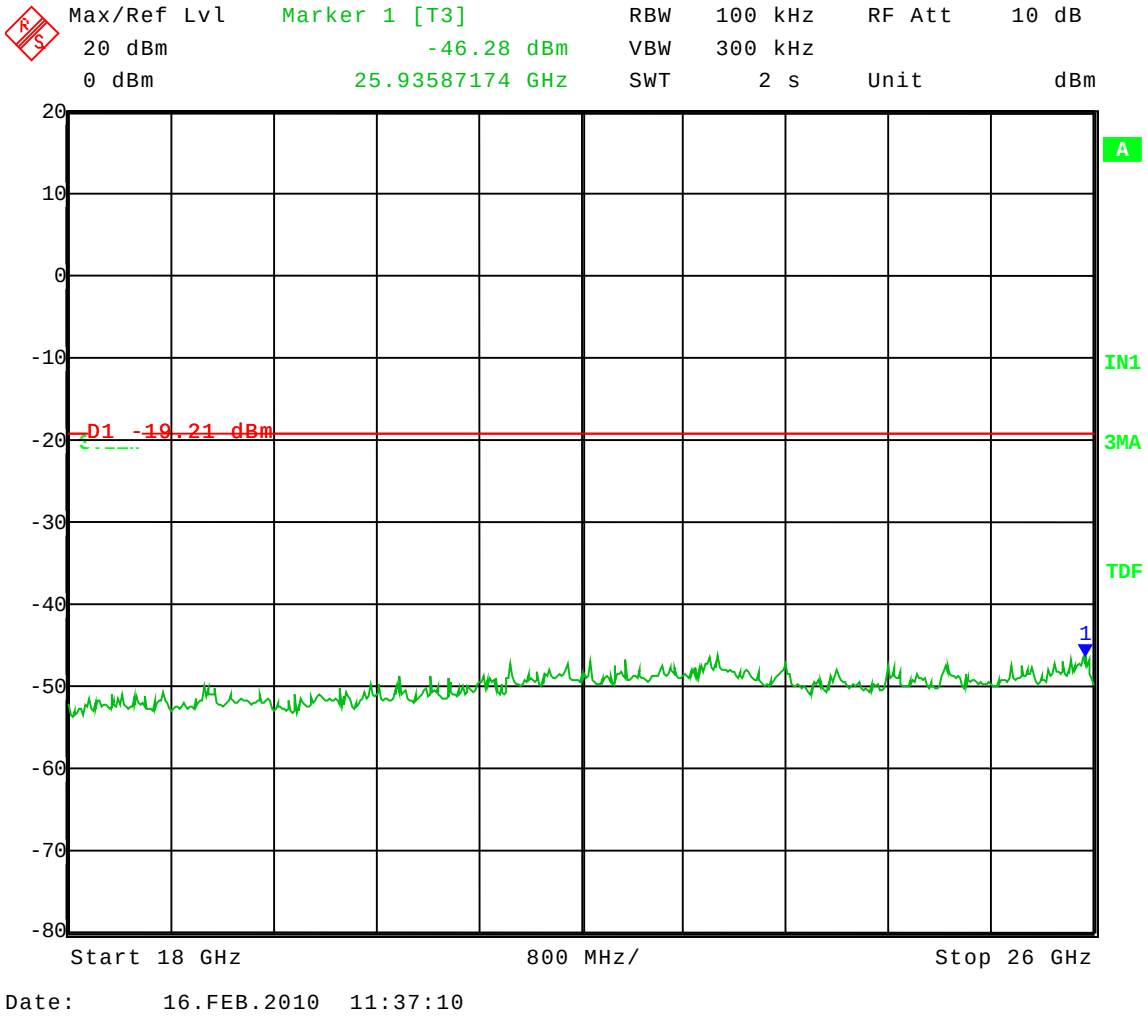


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5F
Modulation: 16QAM

Frequency Range: 18 to 26 GHz
Limit = -19.21 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

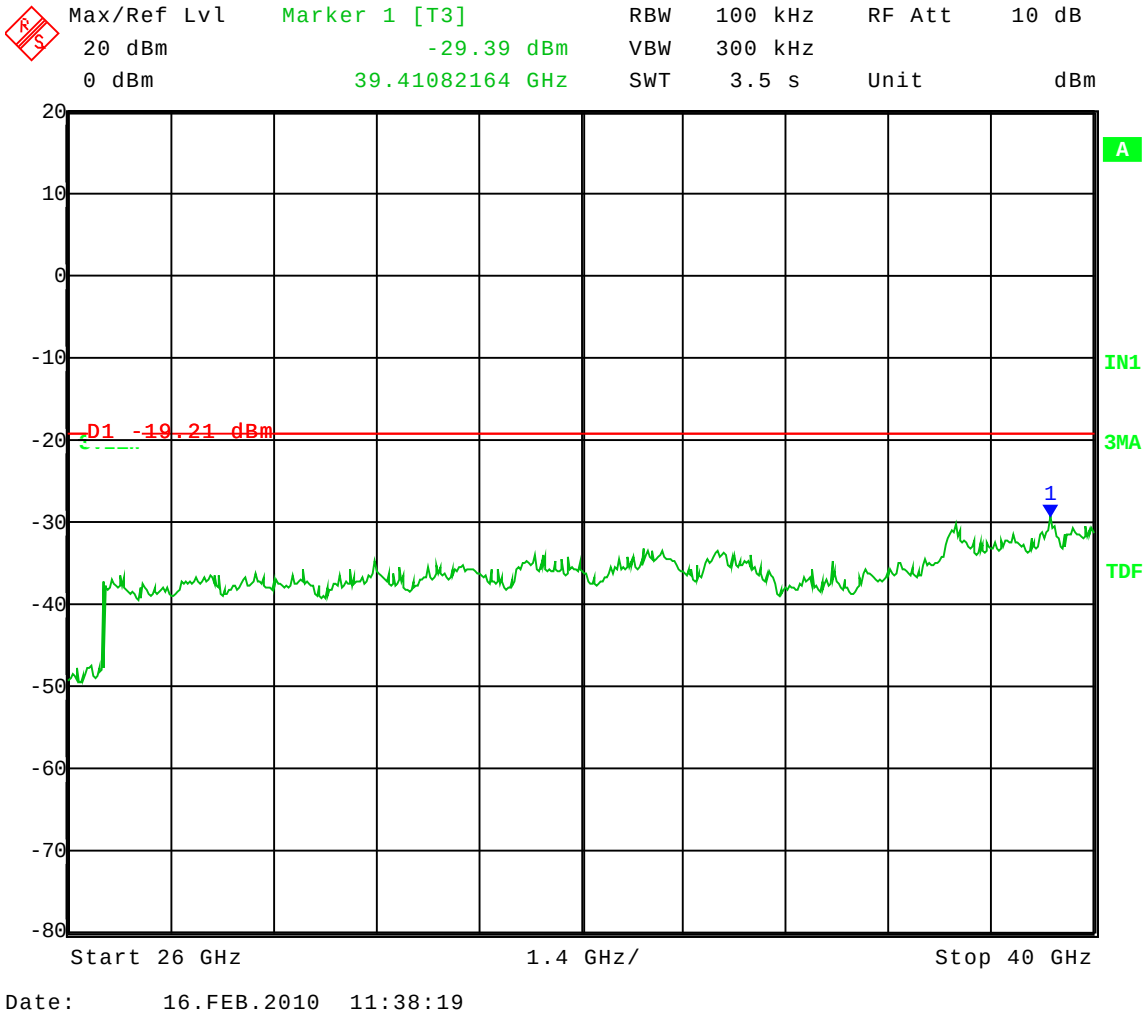


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5F
Modulation: 16QAM

Frequency Range: 26 to 40 GHz
Limit = -19.21 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

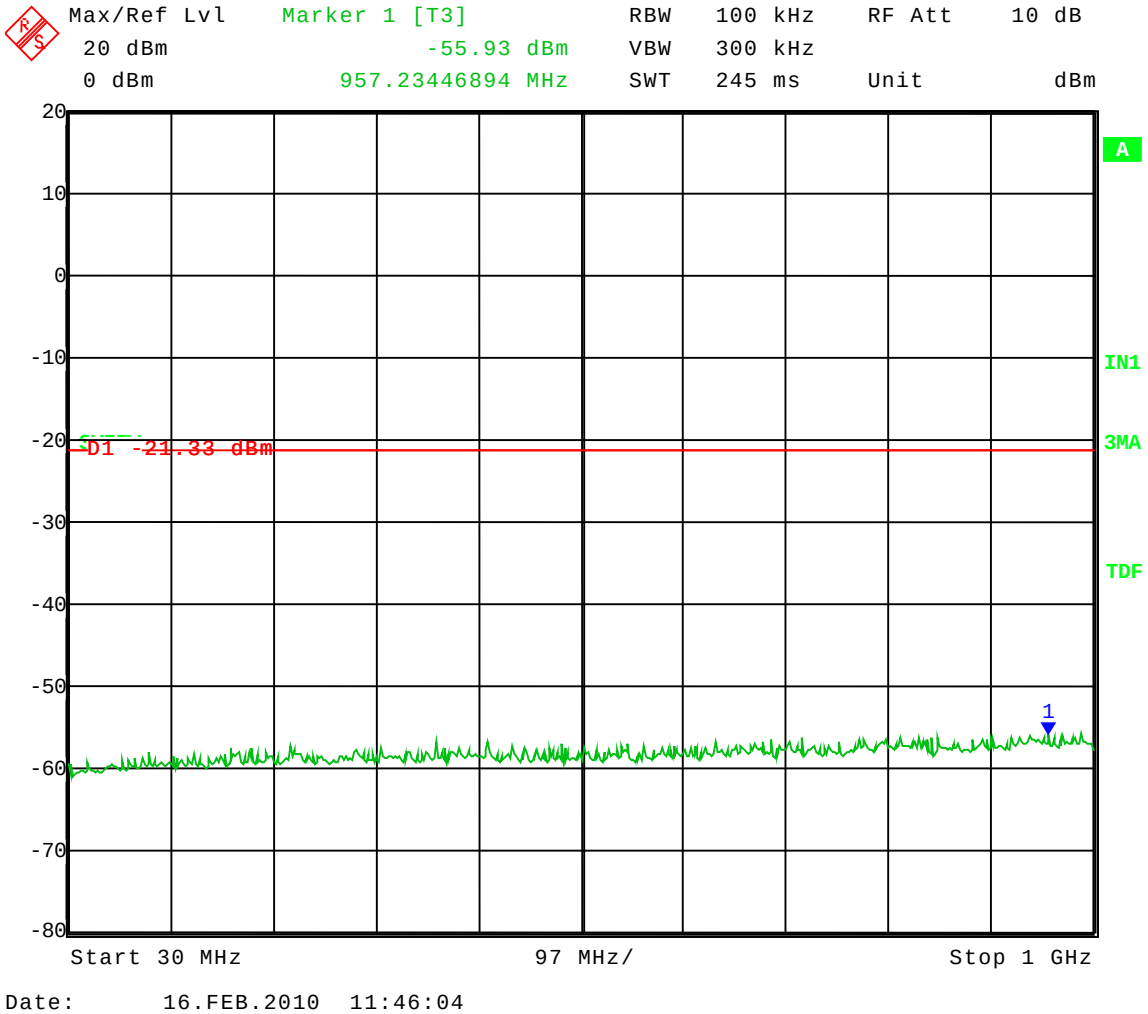


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5F
Modulation: 64QAM

Frequency Range: 30 to 1000 MHz
Limit = -21.33 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

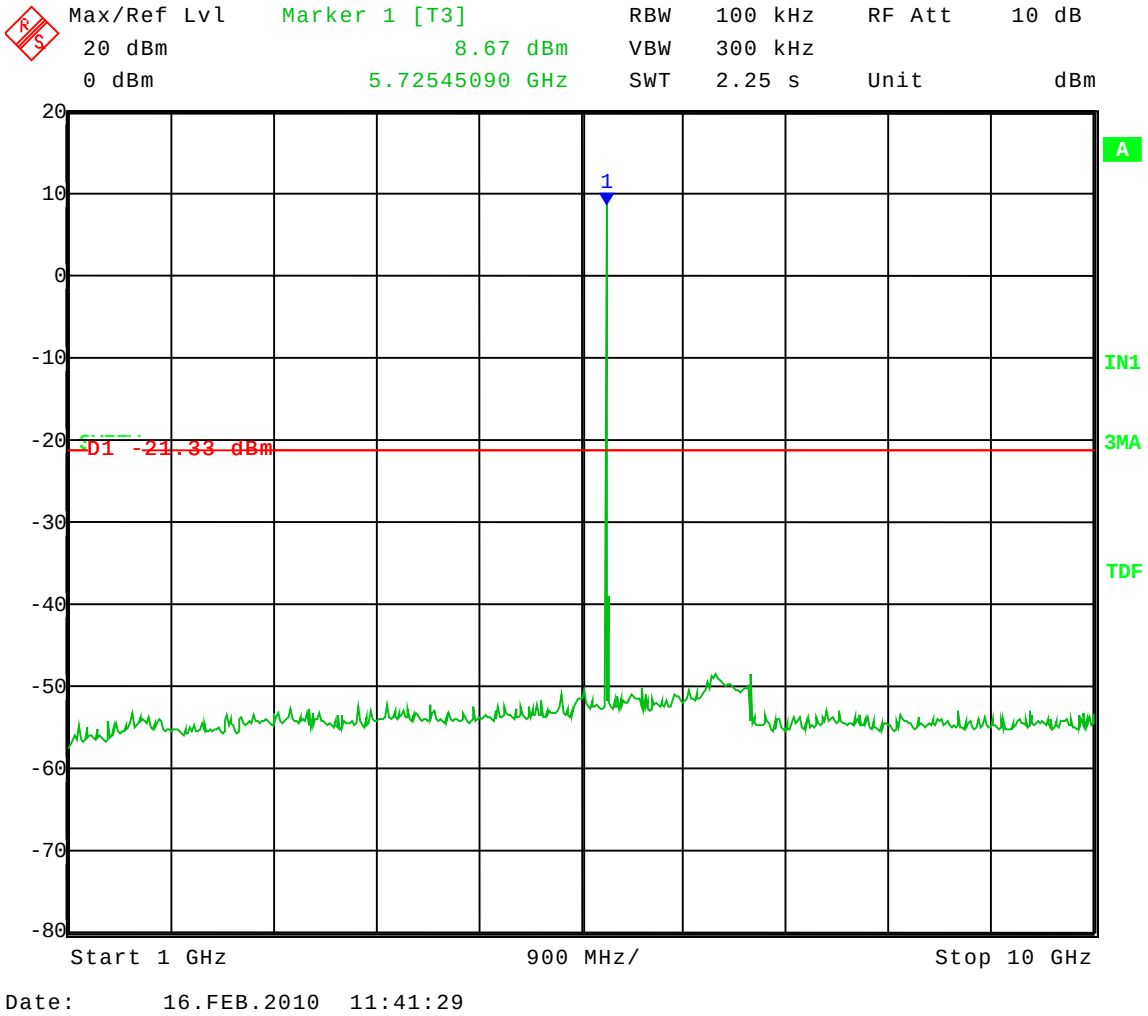


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5F
Modulation: 64QAM

Frequency Range: 1 to 10 GHz
Limit = -21.33 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

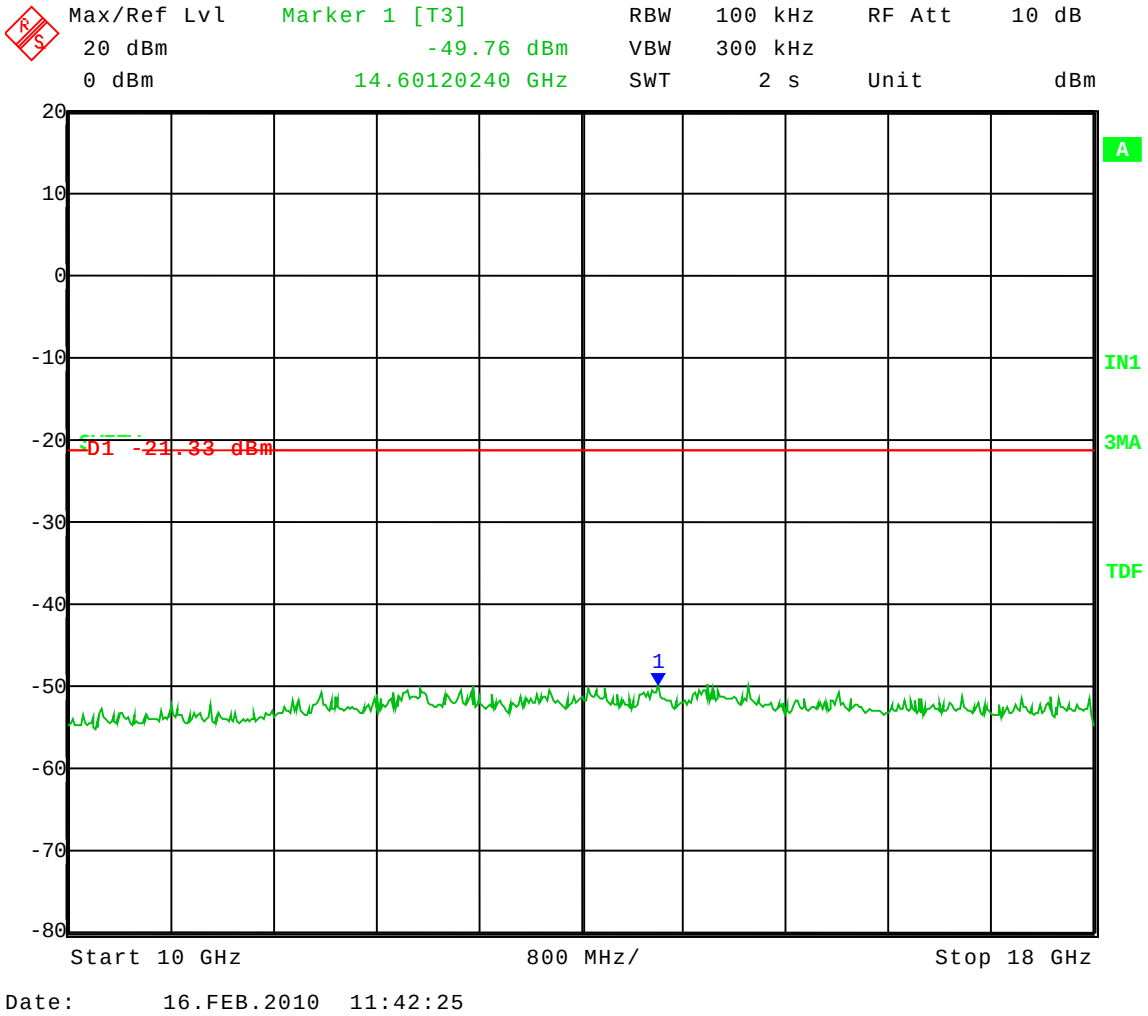


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5F
Modulation: 64QAM

Frequency Range: 10 to 18 GHz
Limit = -21.33 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

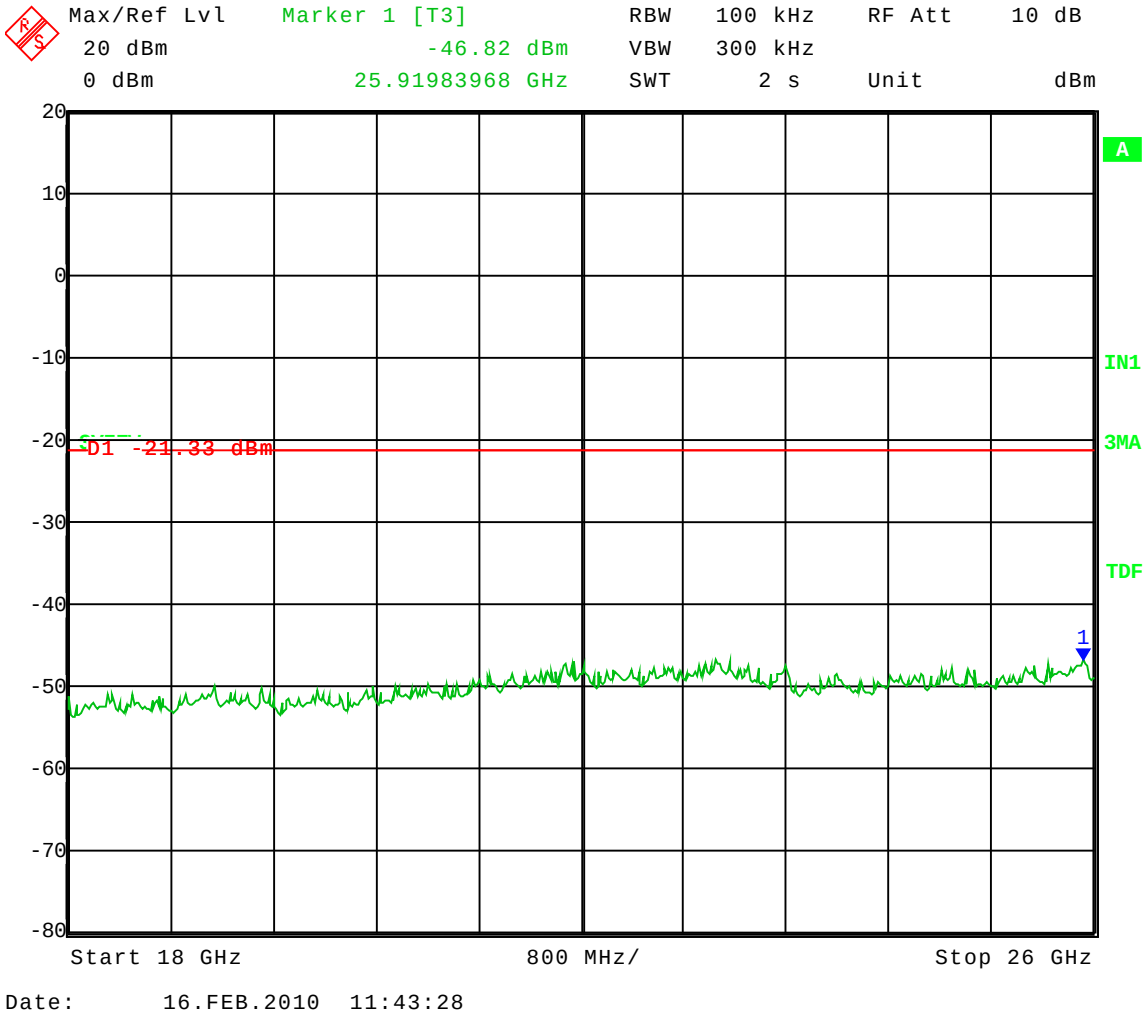


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5F
Modulation: 64QAM

Frequency Range: 18 to 26 GHz
Limit = -21.33 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

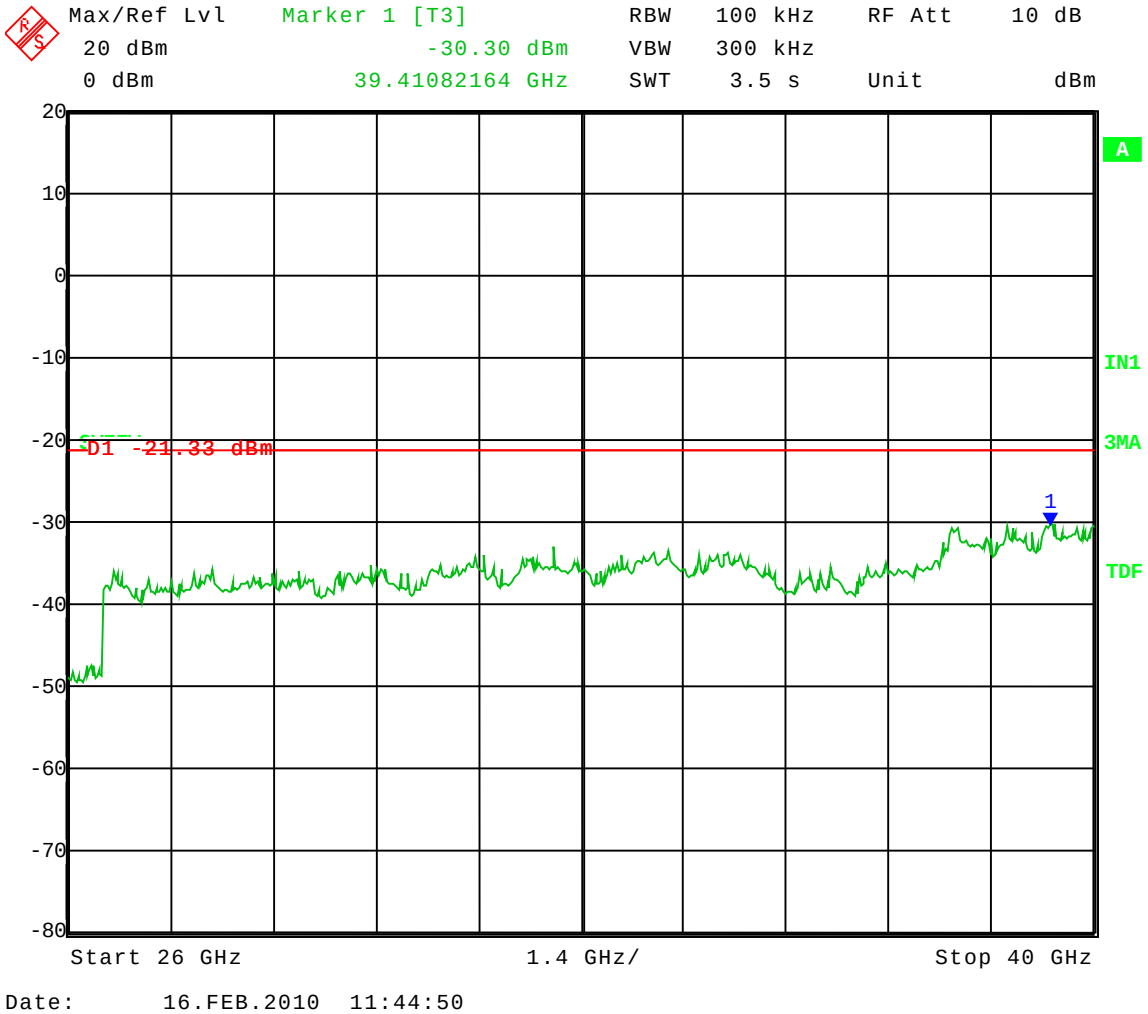


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5F
Modulation: 64QAM

Frequency Range: 26 to 40 GHz
Limit = -21.33 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

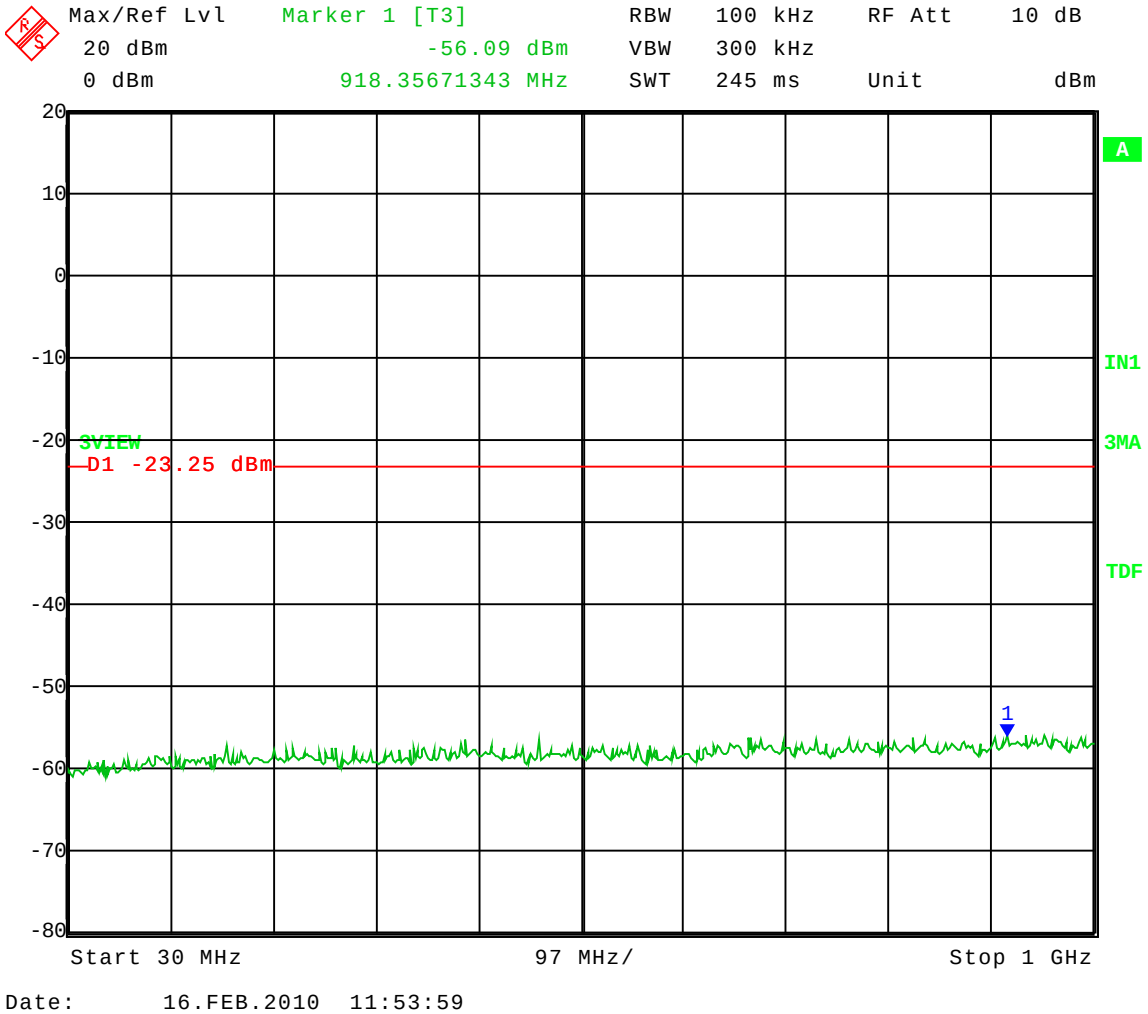


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 53
Modulation: 256QAM

Frequency Range: 30 to 1000 MHz
Limit = -23.25 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

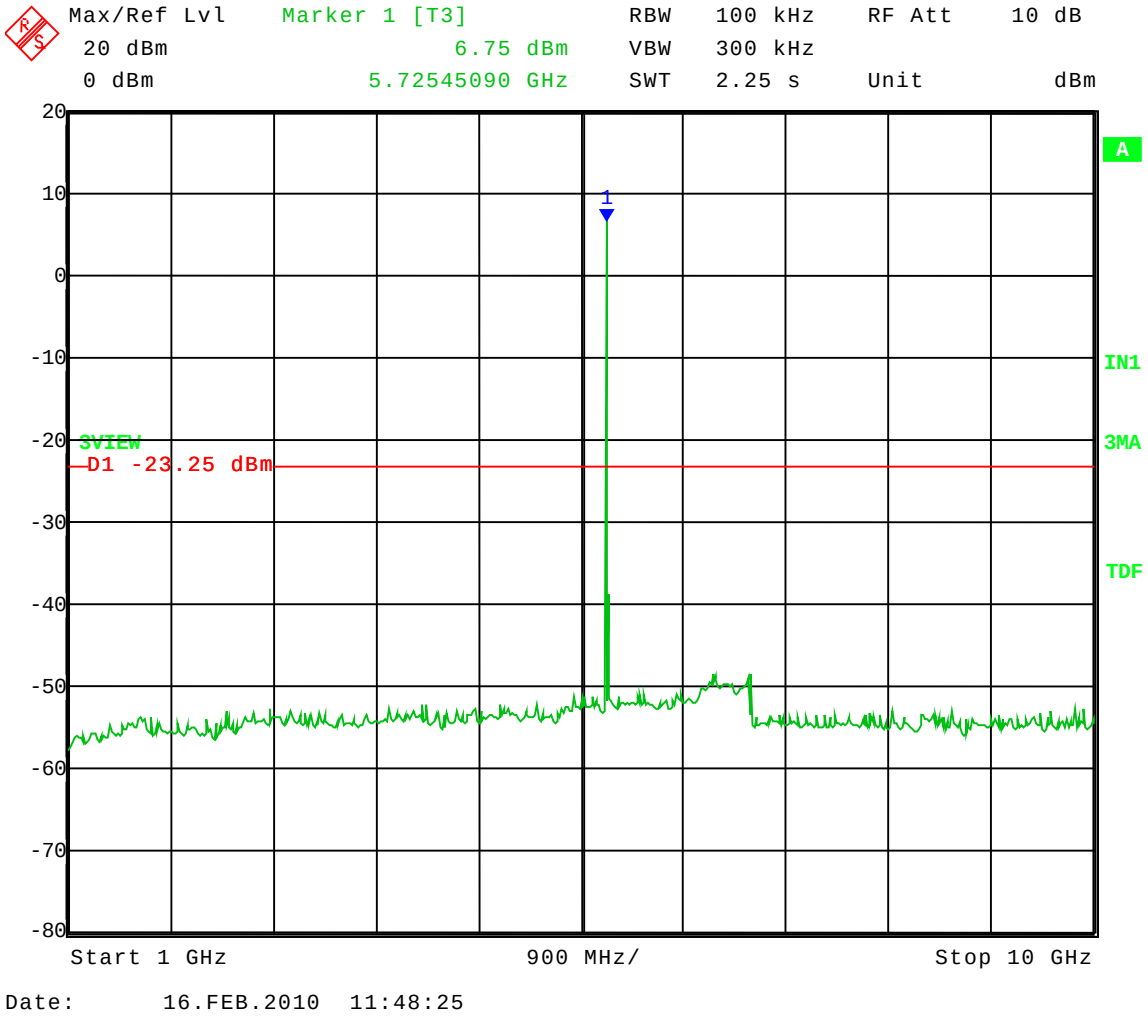


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 53
Modulation: 256QAM

Frequency Range: 1 to 10 GHz
Limit = -23.25 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

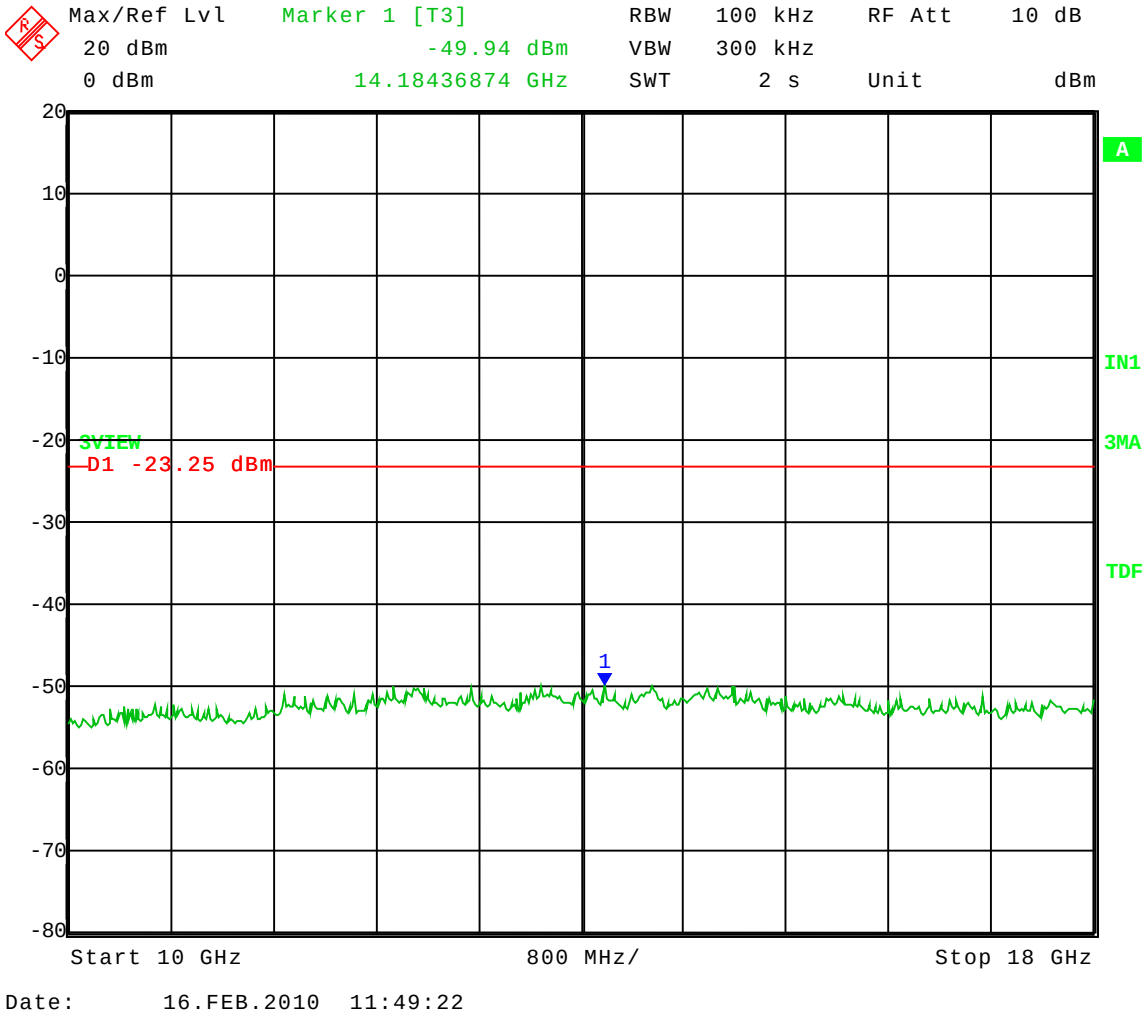


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 53
Modulation: 256QAM

Frequency Range: 10 to 18 GHz
Limit = -23.25 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

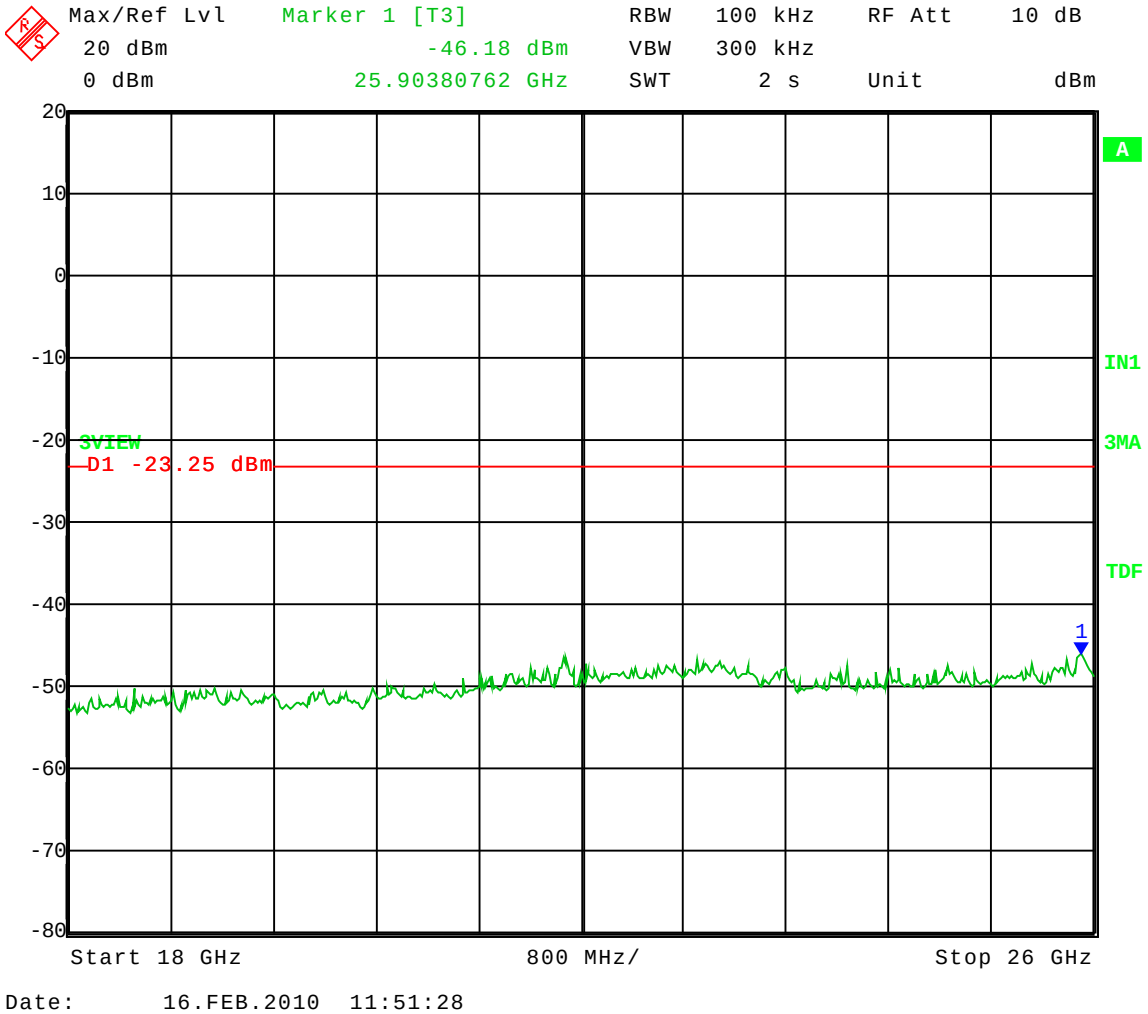


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 53
Modulation: 256QAM

Frequency Range: 18 to 26 GHz
Limit = -23.25 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

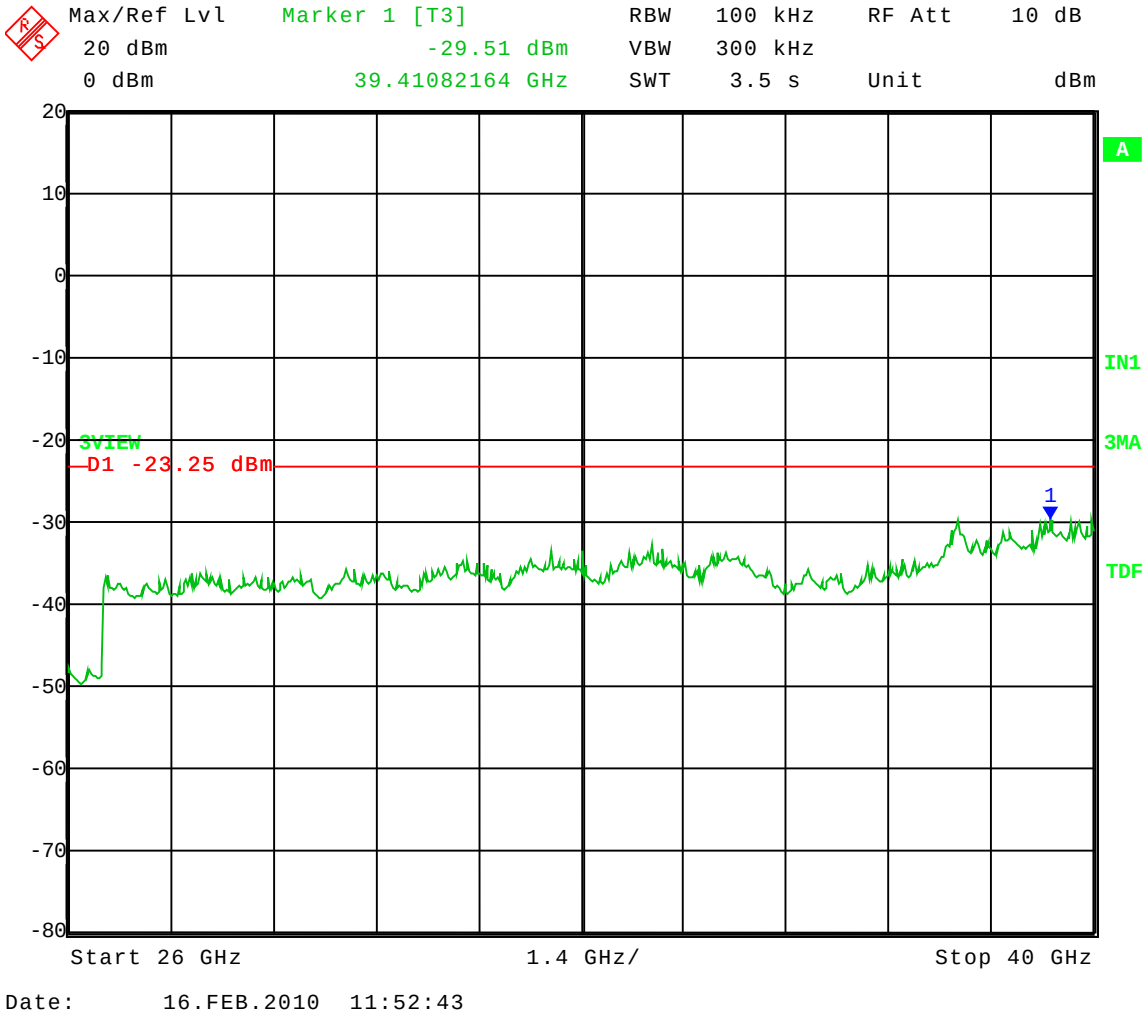


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 53
Modulation: 256QAM

Frequency Range: 26 to 40 GHz
Limit = -23.25 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

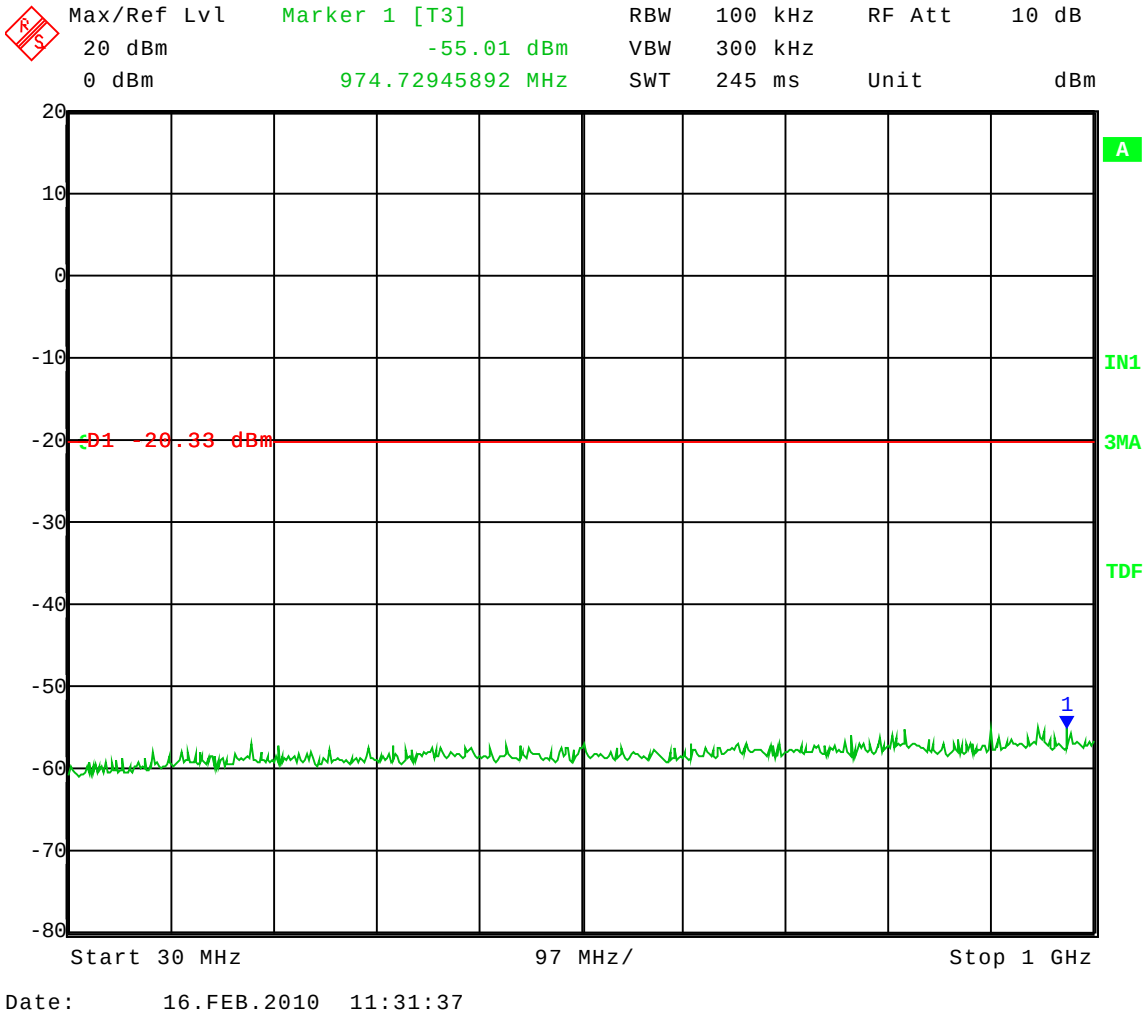


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5E
Modulation: QPSK

Frequency Range: 30 to 1000 MHz
Limit = -20.33 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

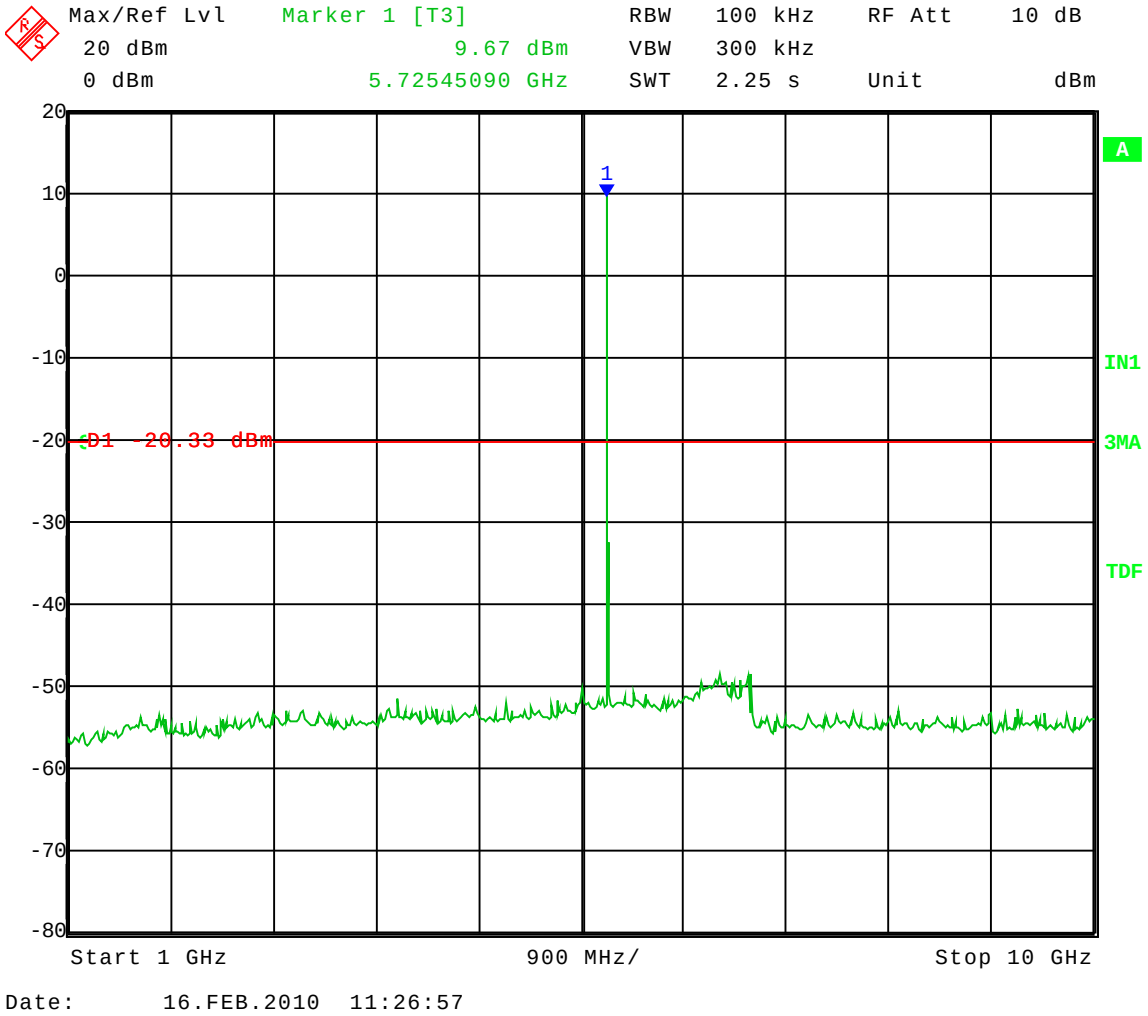


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5E
Modulation: QPSK

Frequency Range: 1 to 10 GHz
Limit = -20.33 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

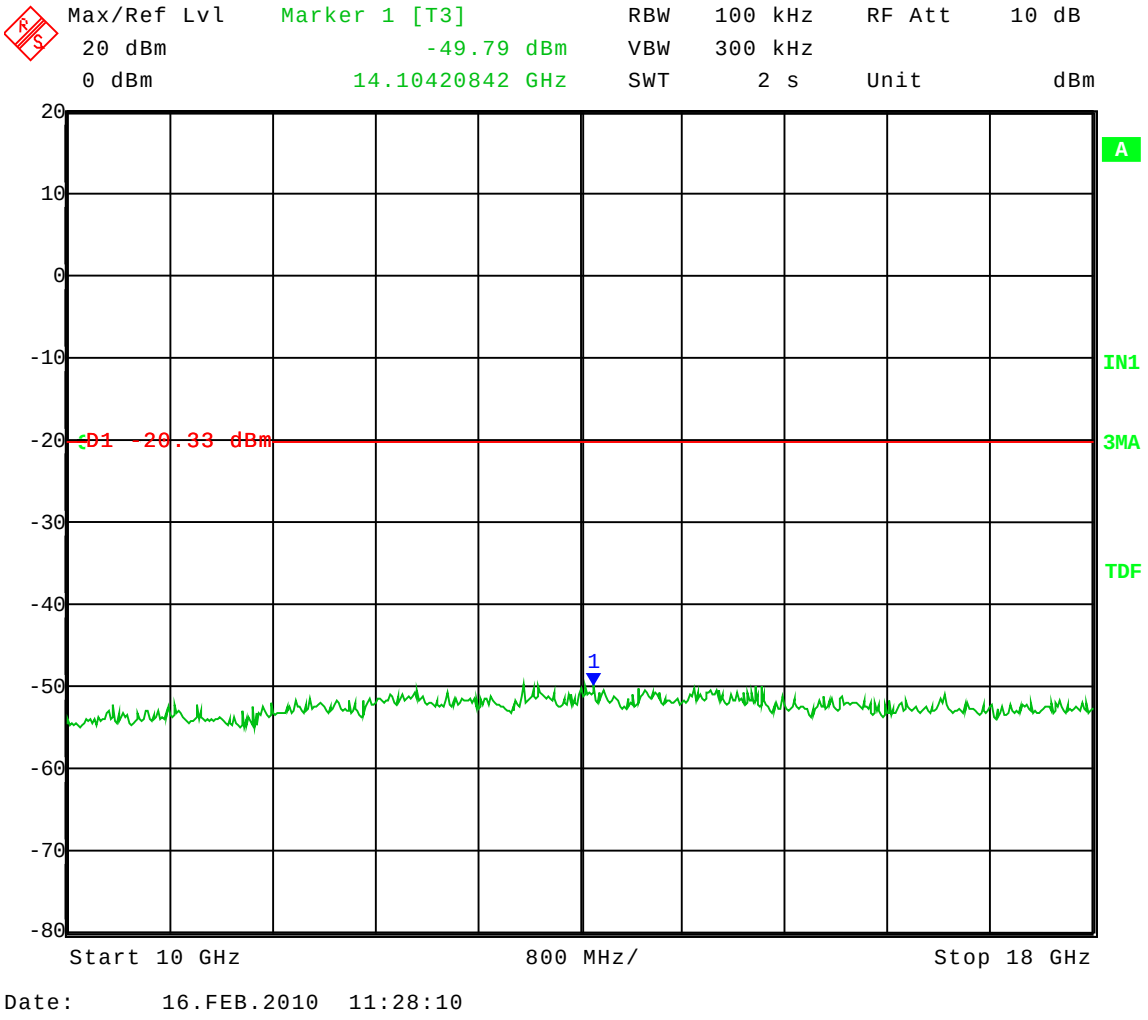


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5E
Modulation: QPSK

Frequency Range: 10 to 18 GHz
Limit = -20.33 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

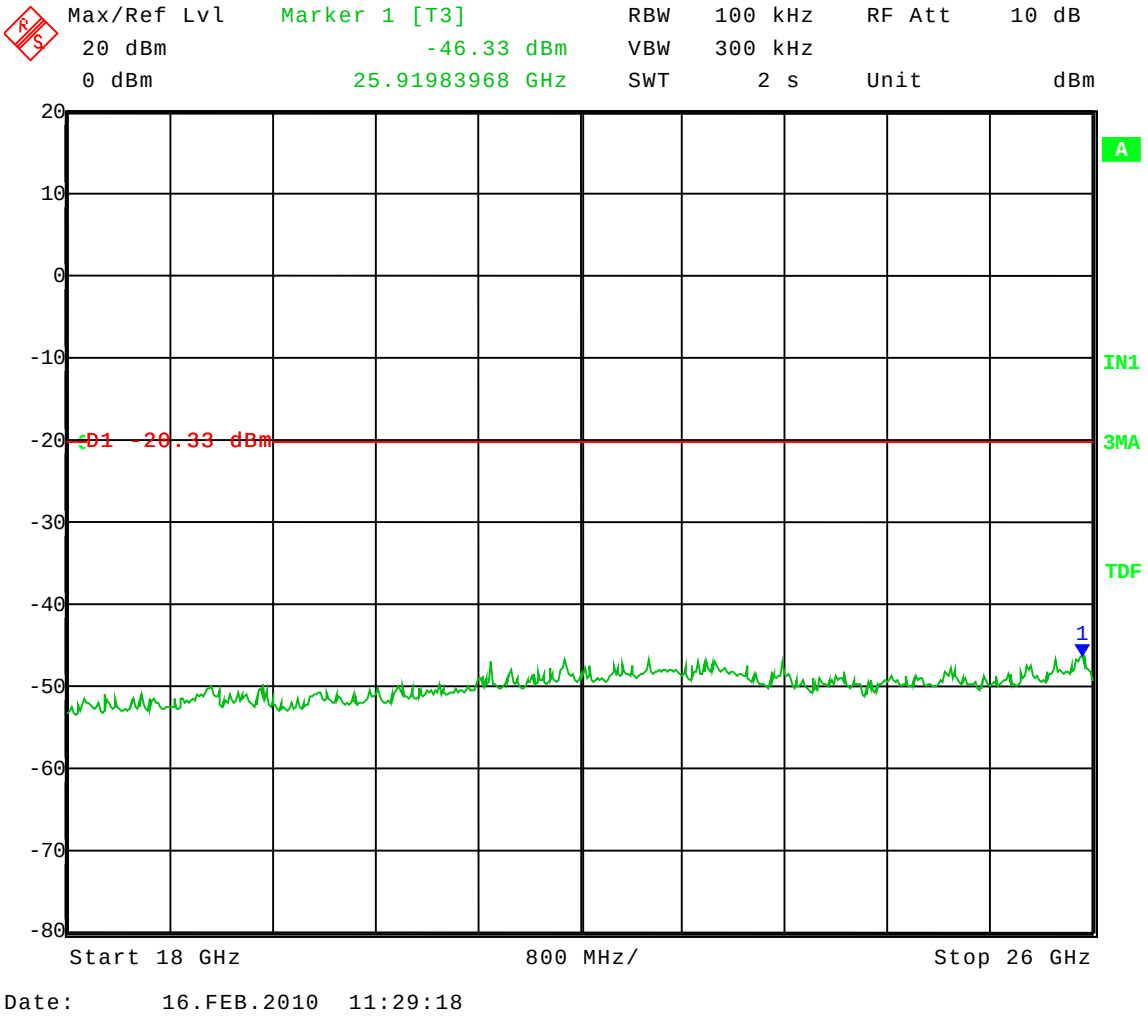


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5E
Modulation: QPSK

Frequency Range: 18 to 26 GHz
Limit = -20.33 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

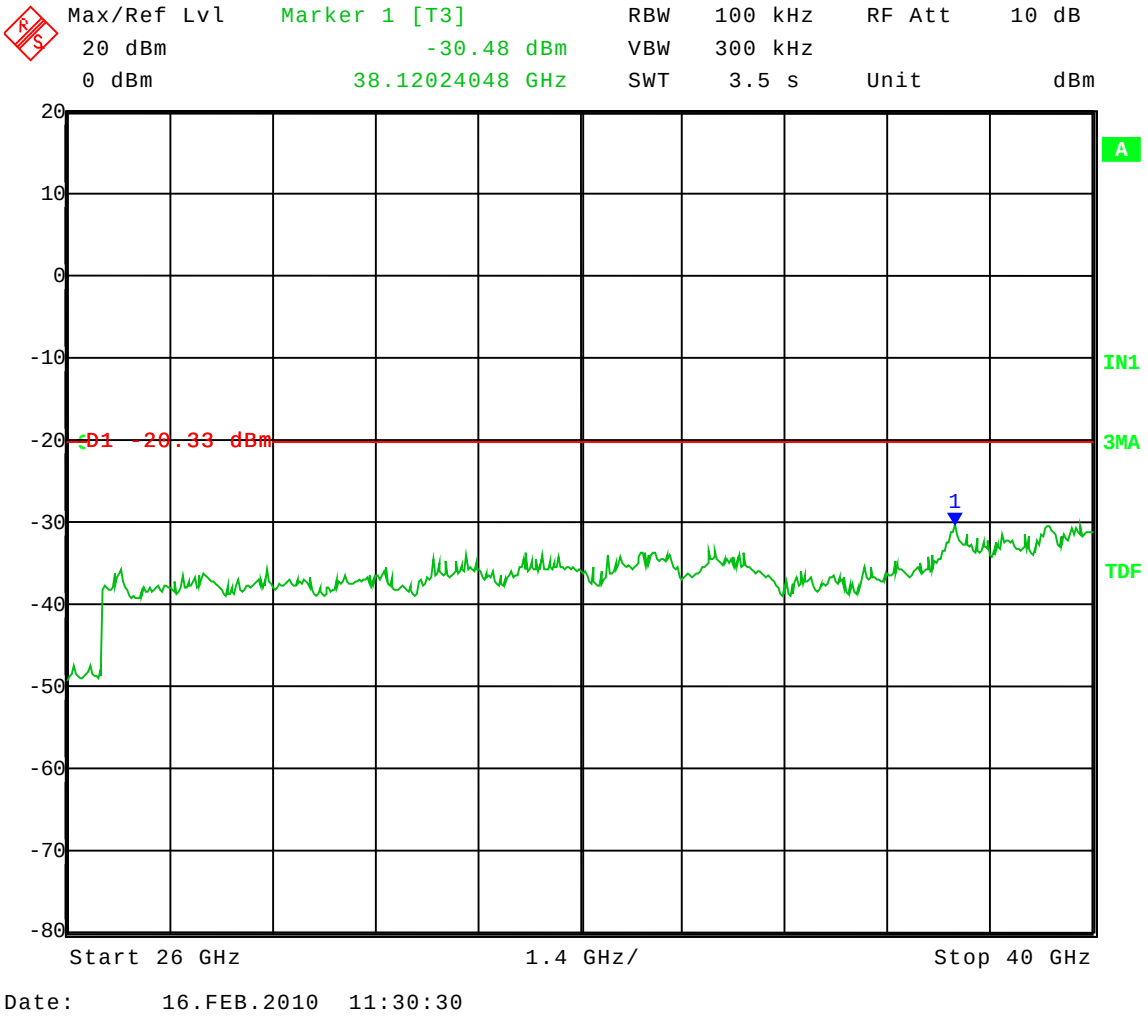


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 5 MHz
Power setting: 5E
Modulation: QPSK

Frequency Range: 26 to 40 GHz
Limit = -20.33 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

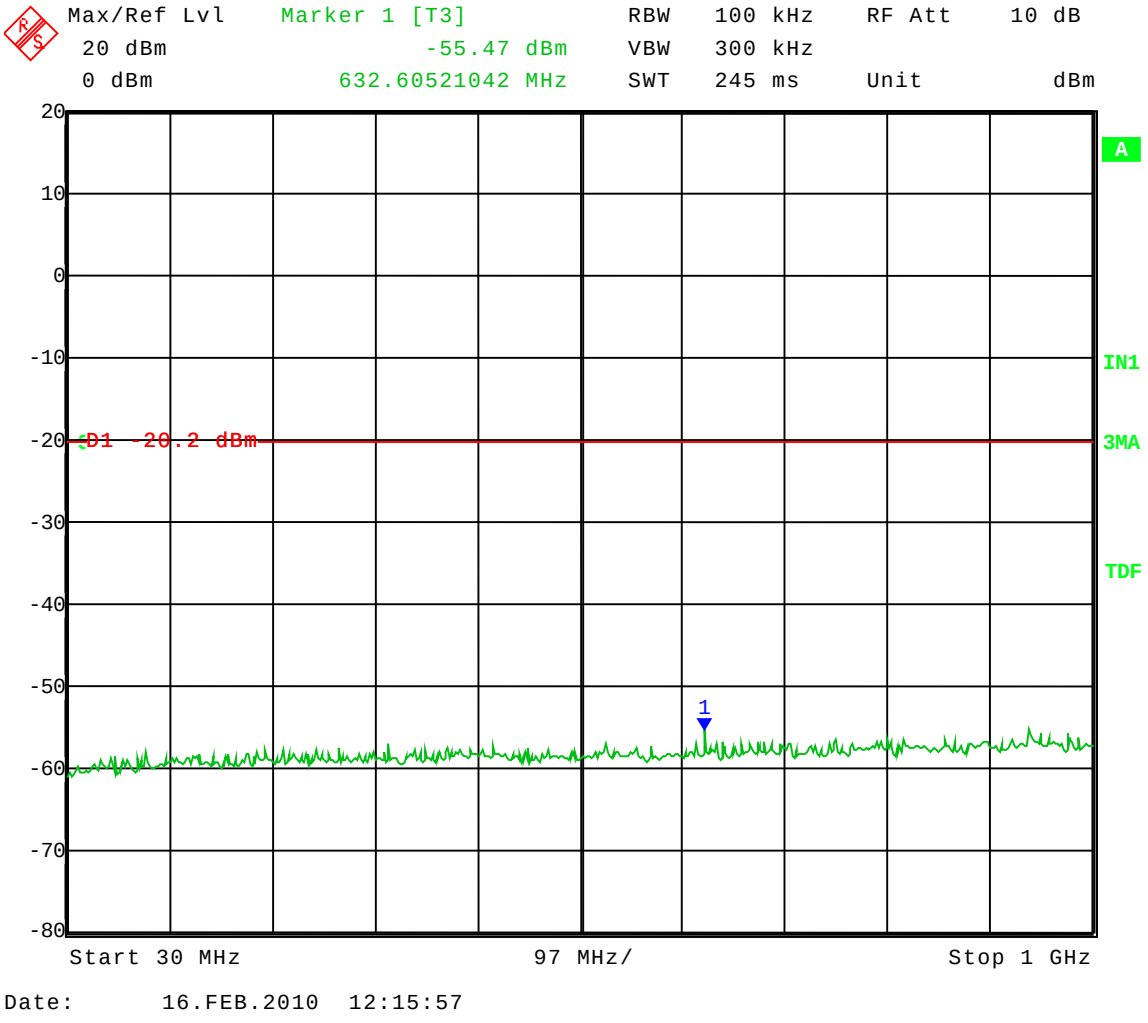


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: 16QAM

Frequency Range: 30 to 1000 MHz
Limit = -20.20 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

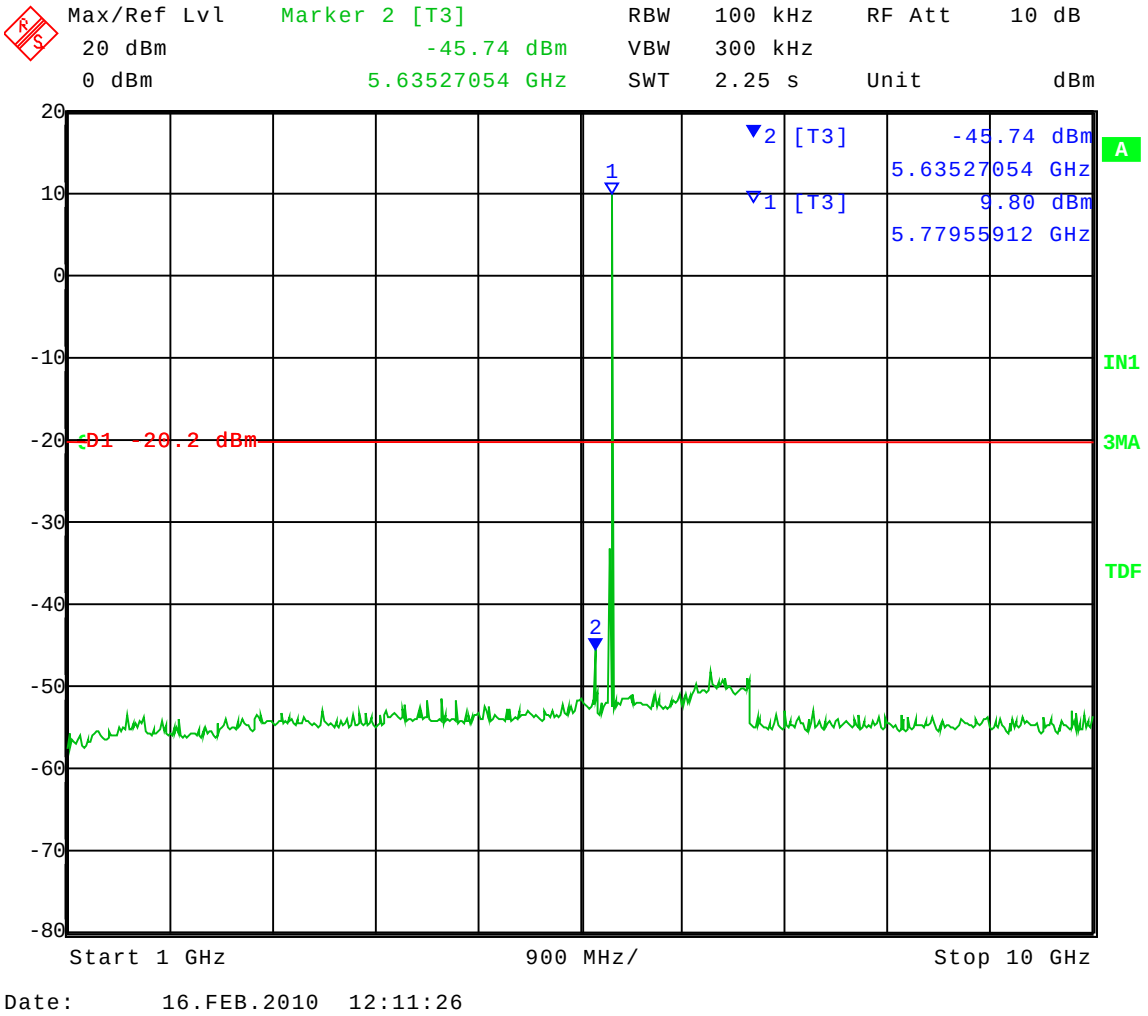


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: 16QAM

Frequency Range: 1 to 10 GHz
Limit = -20.20 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

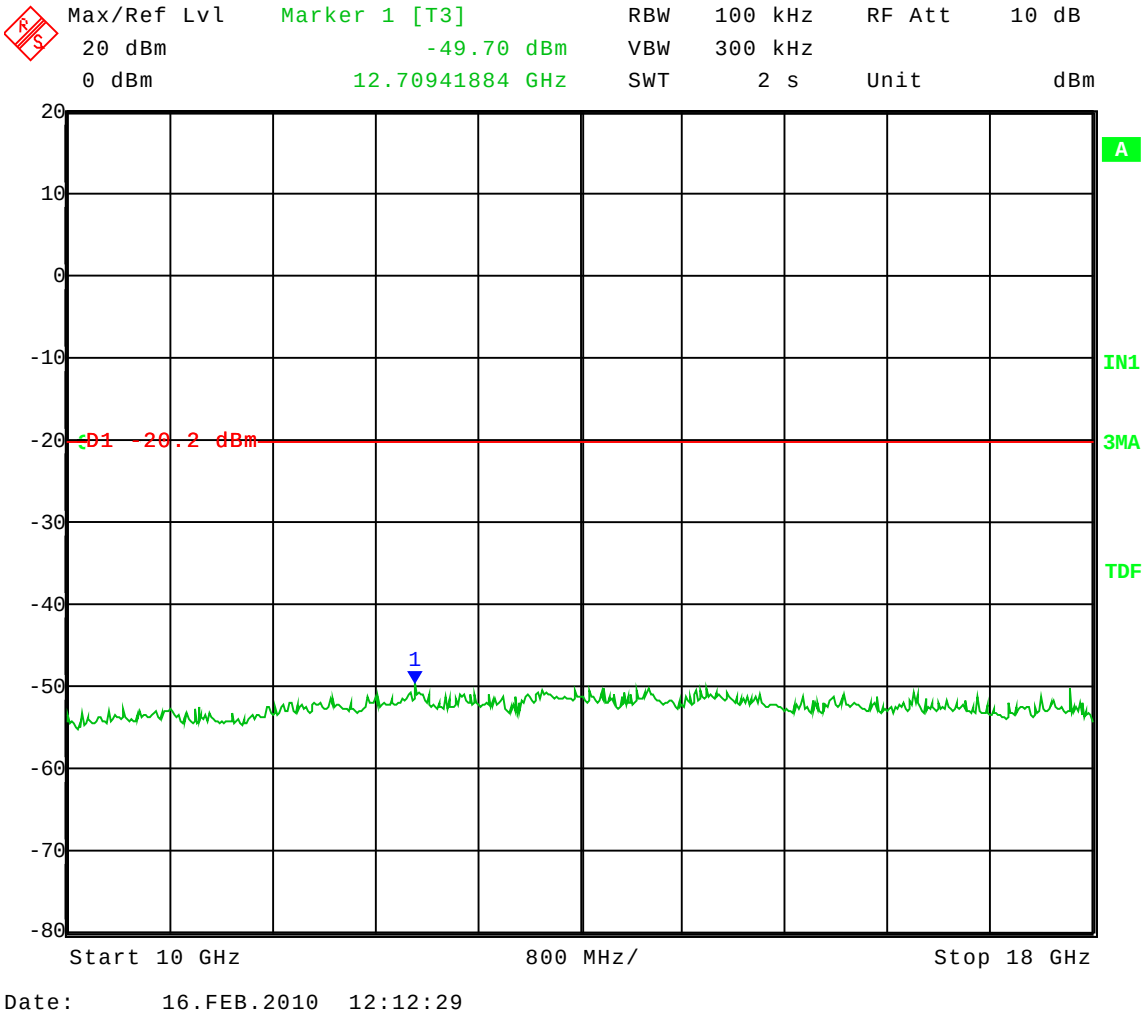


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: 16QAM

Frequency Range: 10 to 18 GHz
Limit = -20.20 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

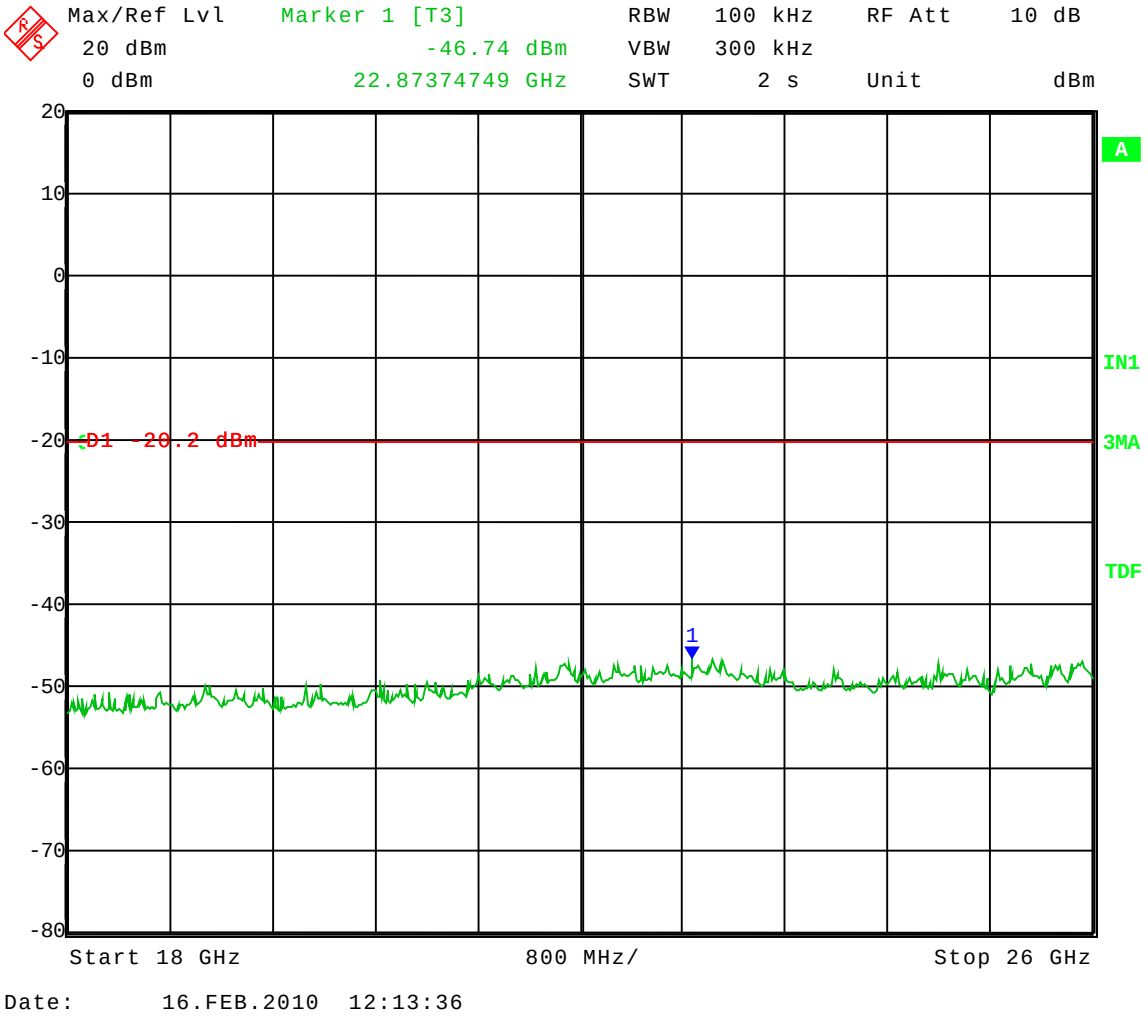


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: 16QAM

Frequency Range: 18 to 26 GHz
Limit = -20.20 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

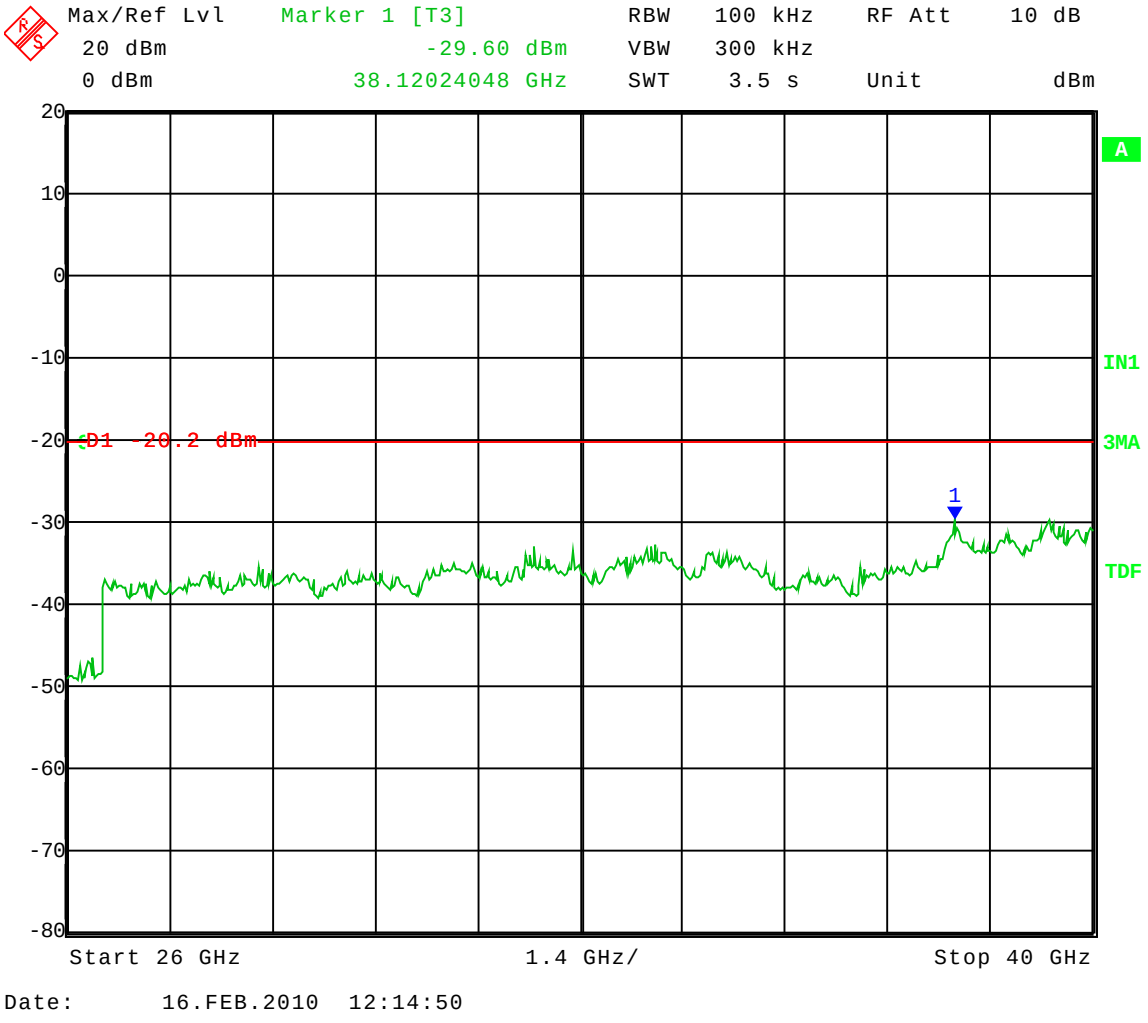


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: 16QAM

Frequency Range: 26 to 40 GHz
Limit = -20.20 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

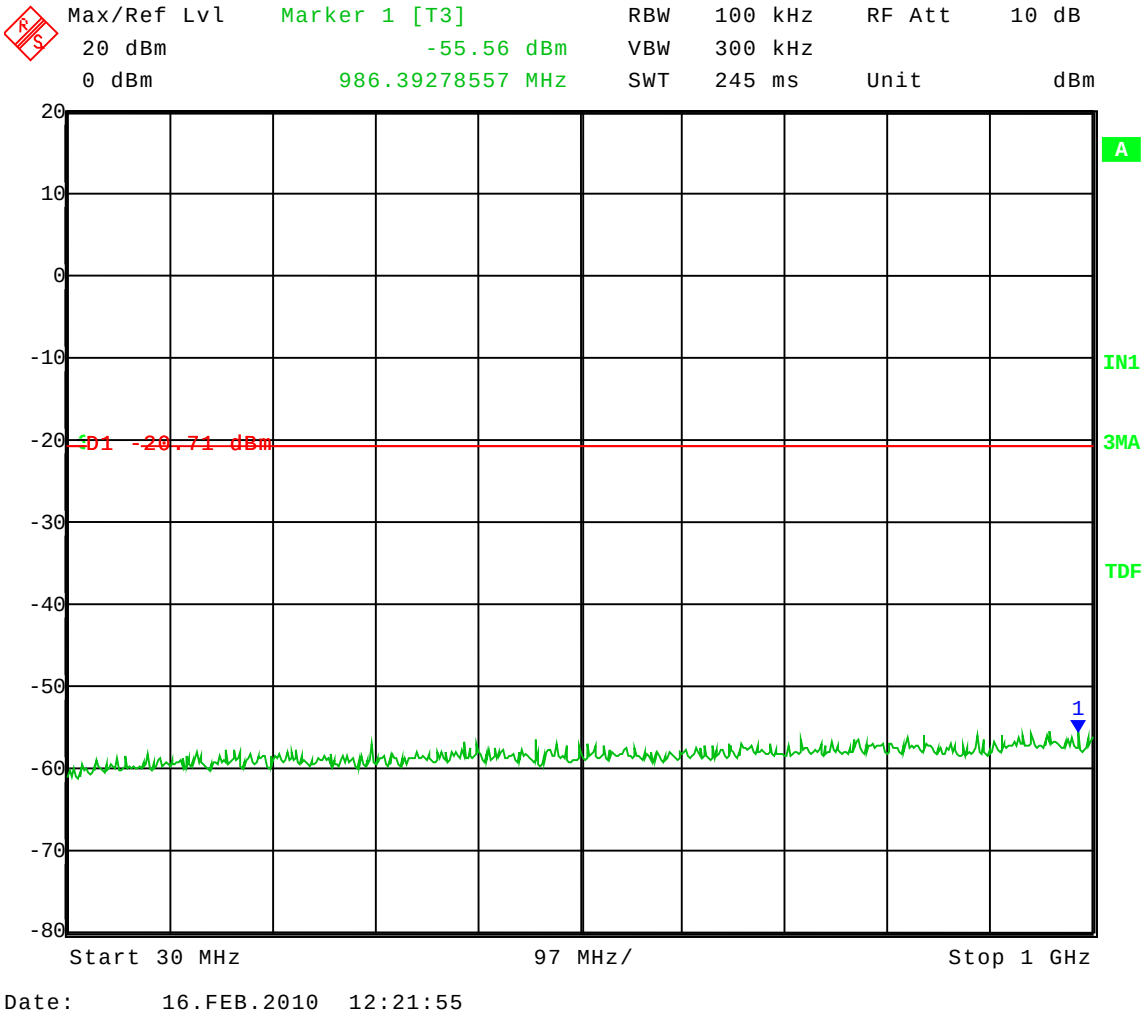


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: 64QAM

Frequency Range: 30 to 1000 MHz
Limit = -20.71 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

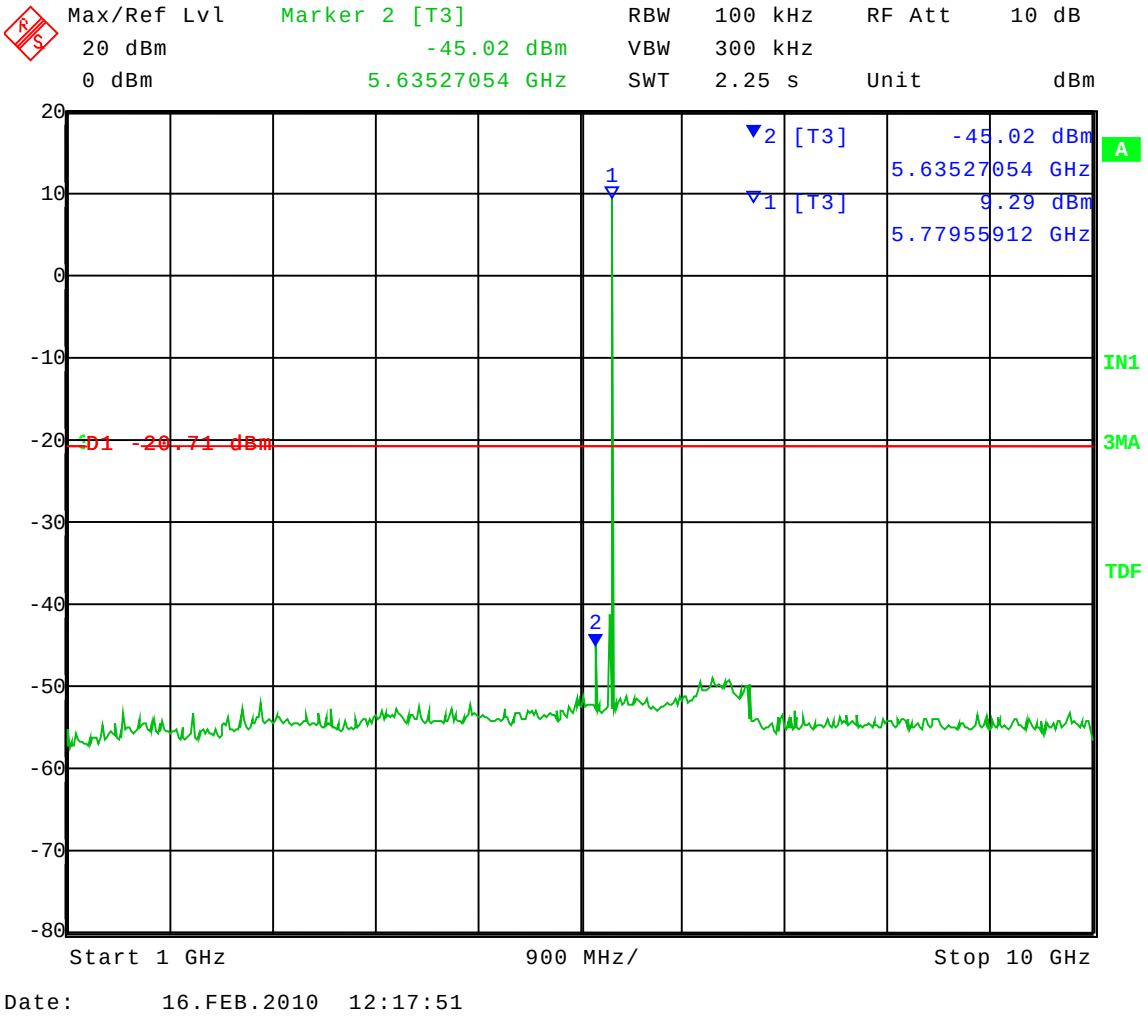


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: 64QAM

Frequency Range: 1 to 10 GHz
Limit = -20.71 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

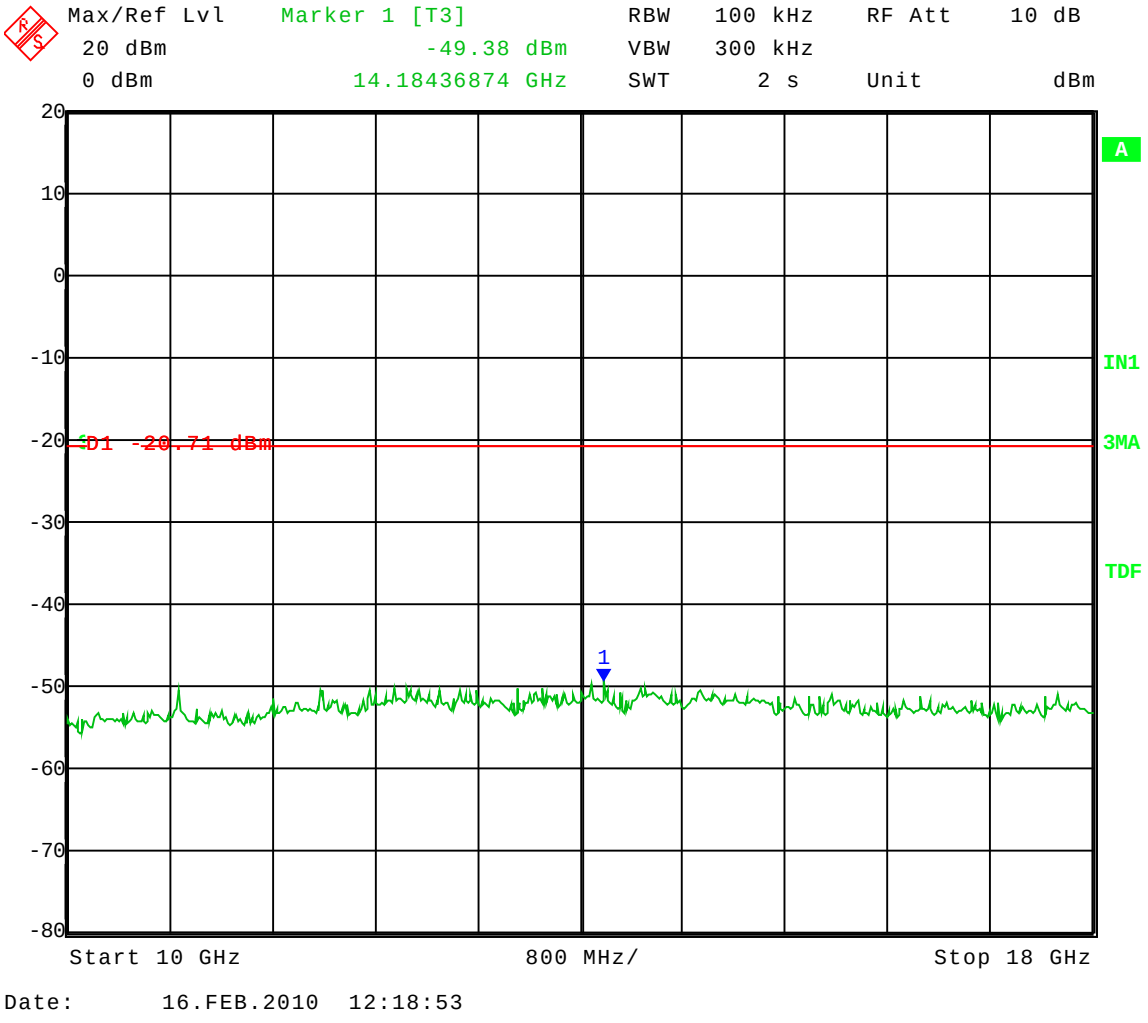


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: 64QAM

Frequency Range: 10 to 18 GHz
Limit = -20.71 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

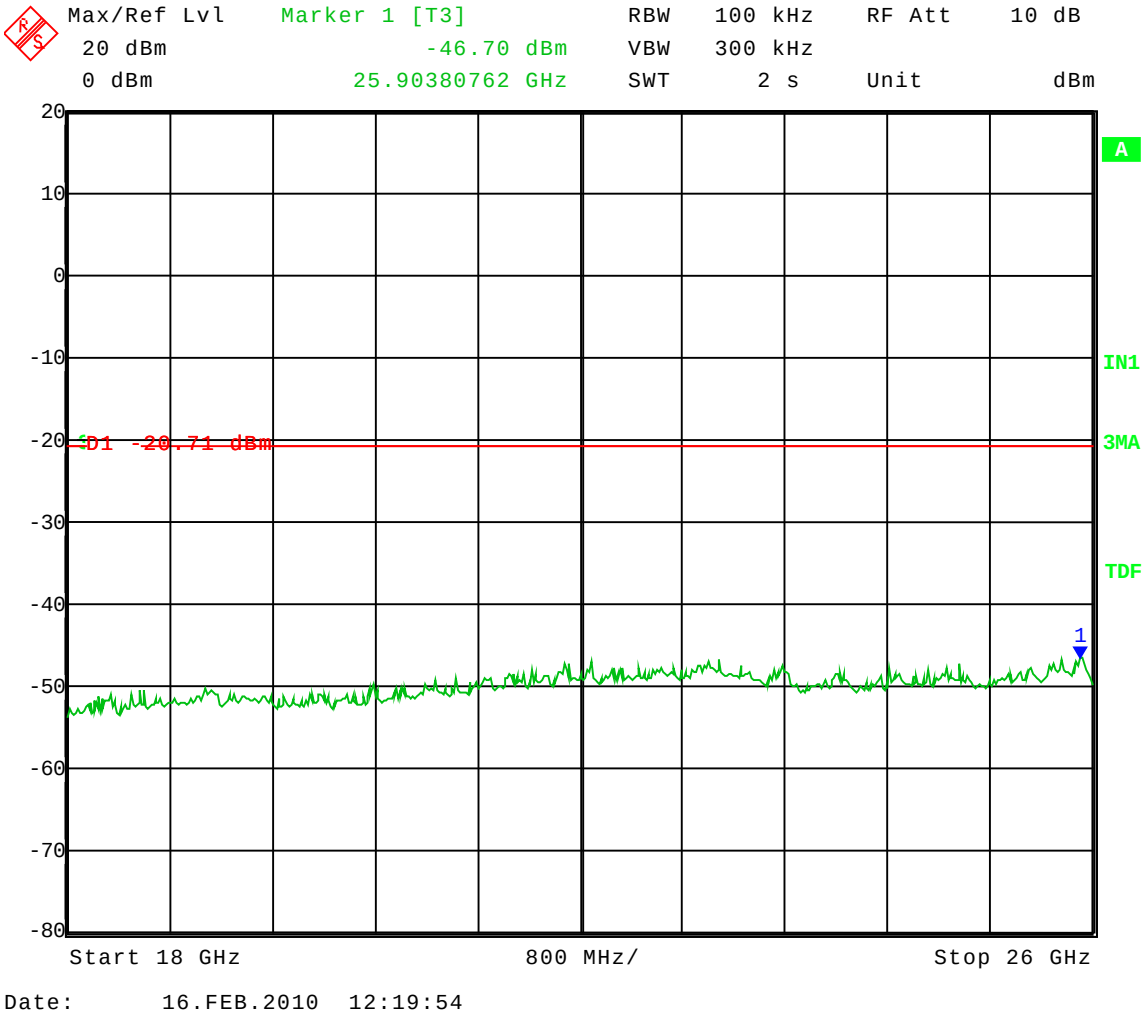


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: 64QAM

Frequency Range: 18 to 26 GHz
Limit = -20.71 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

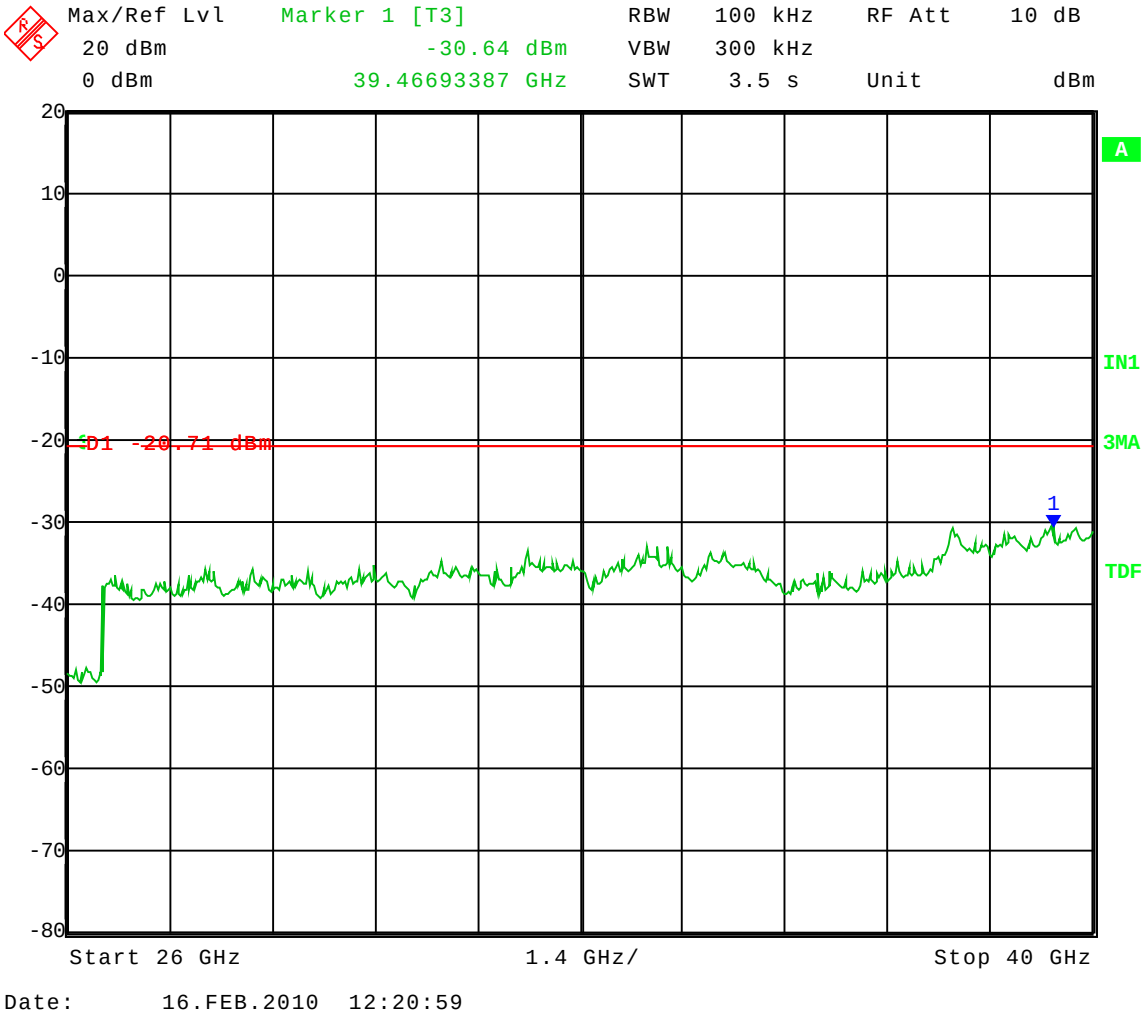


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: 64QAM

Frequency Range: 26 to 40 GHz
Limit = -20.71 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

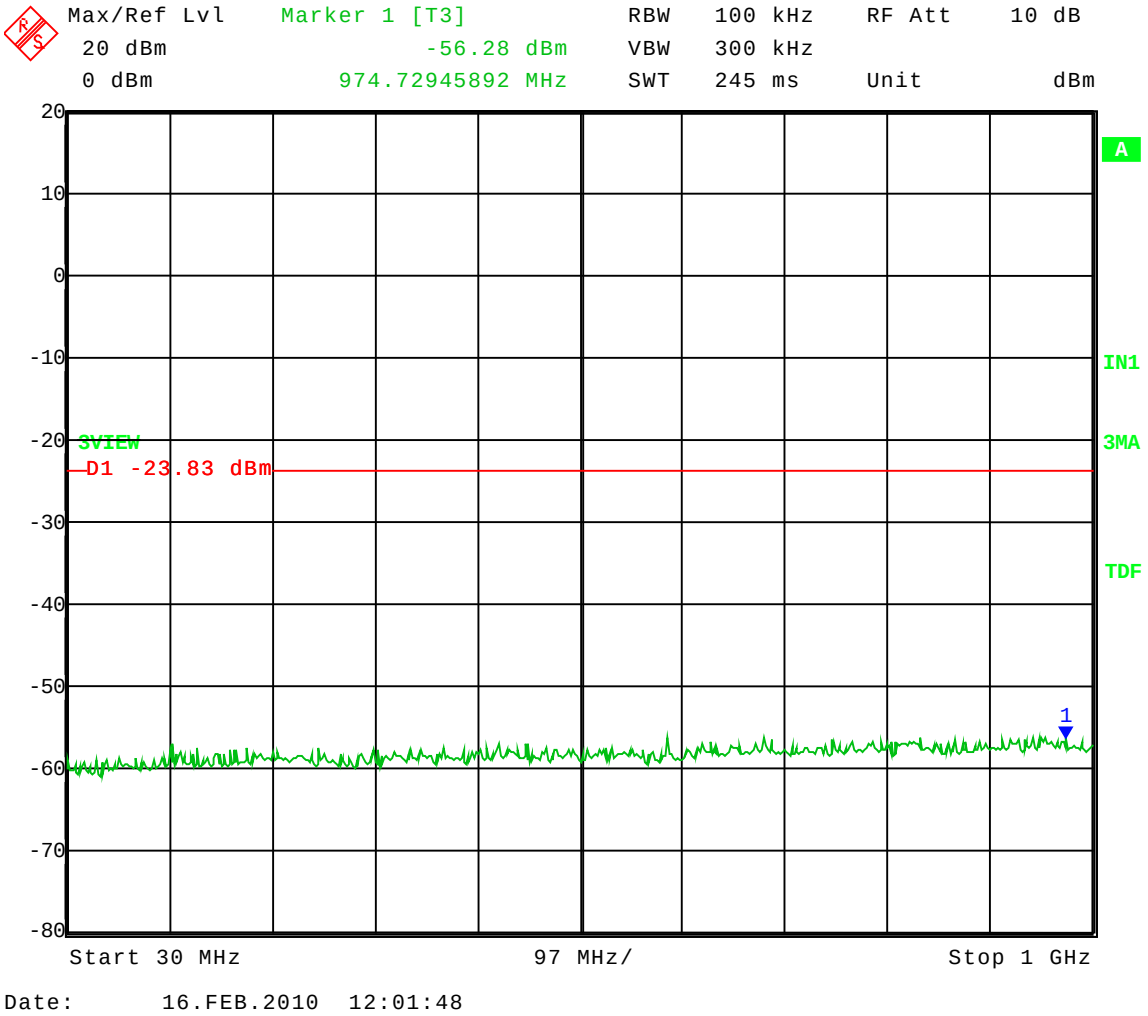


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 53
Modulation: 256QAM

Frequency Range: 30 to 1000 MHz
Limit = -23.83 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

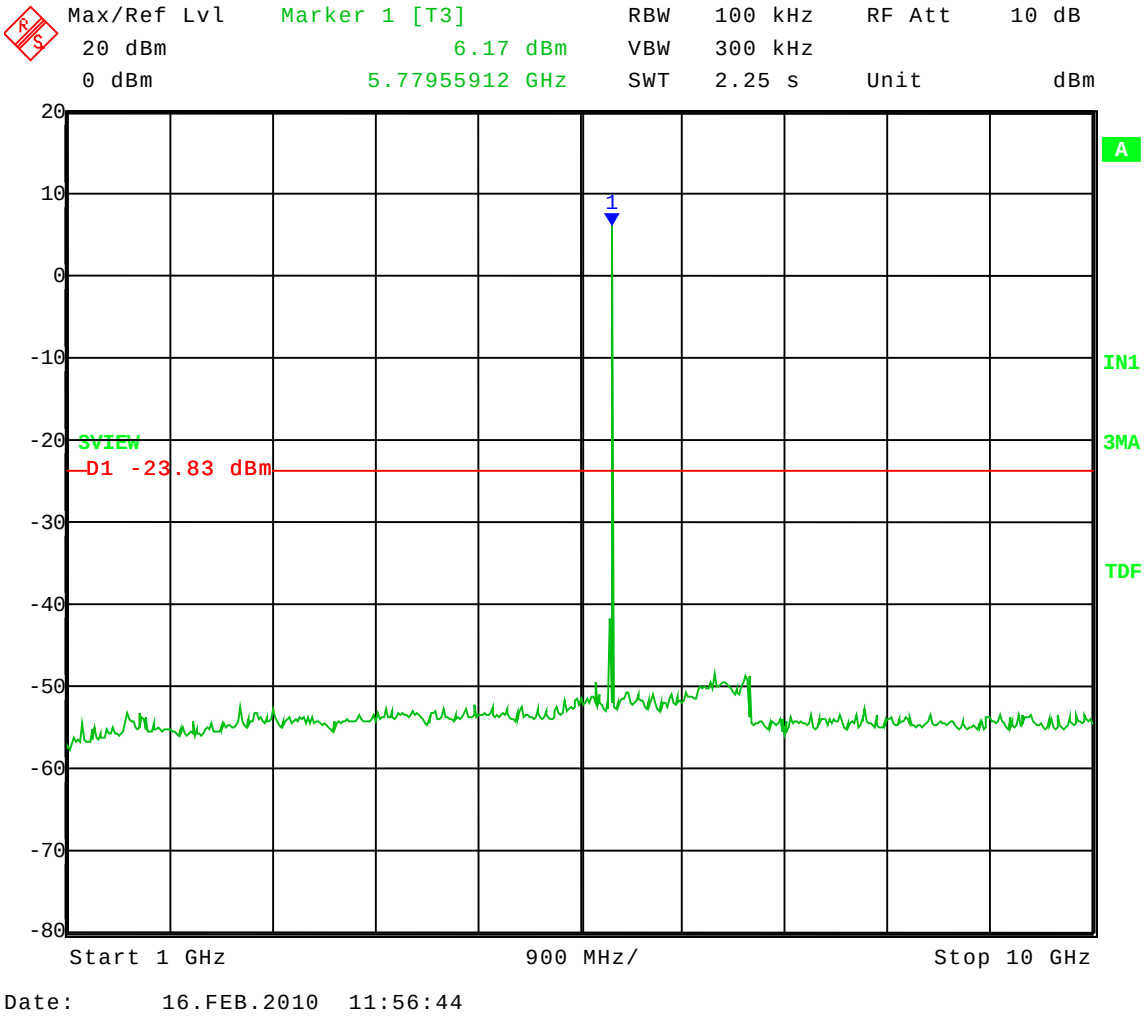


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 53
Modulation: 256QAM

Frequency Range: 1 to 10 GHz
Limit = -23.83 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

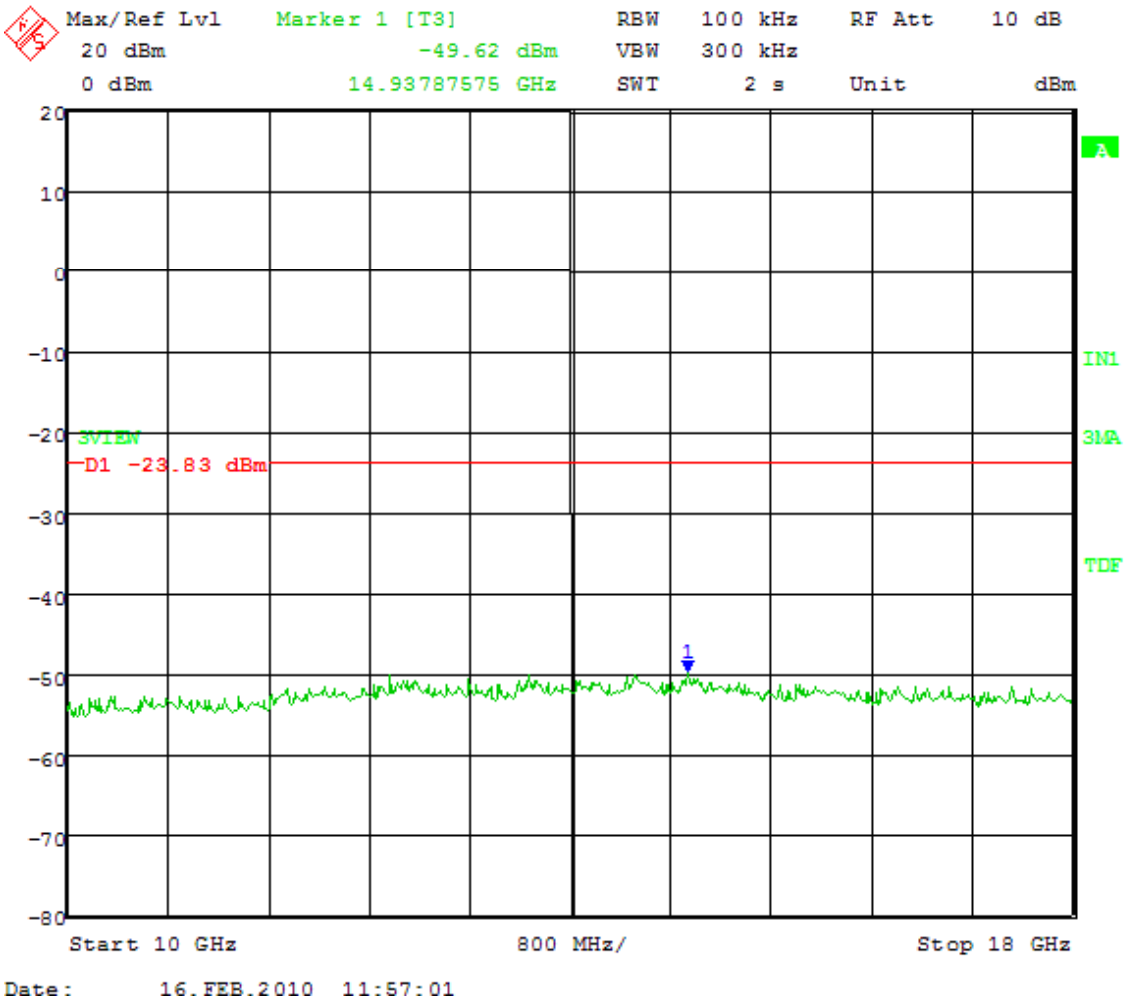


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 53
Modulation: 256QAM

Frequency Range: 10 to 18 GHz
Limit = -23.83 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

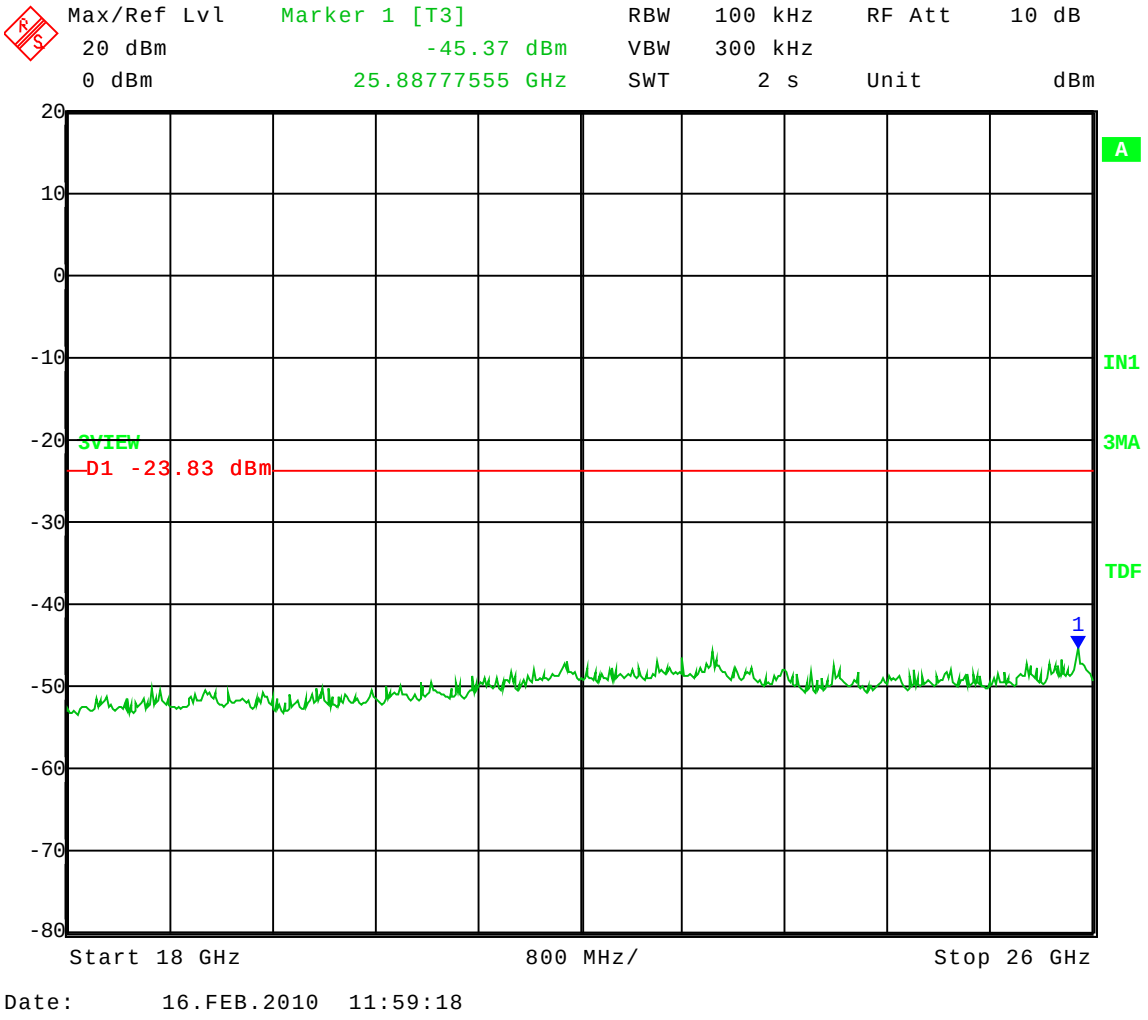


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 53
Modulation: 256QAM

Frequency Range: 18 to 26 GHz
Limit = -23.83 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

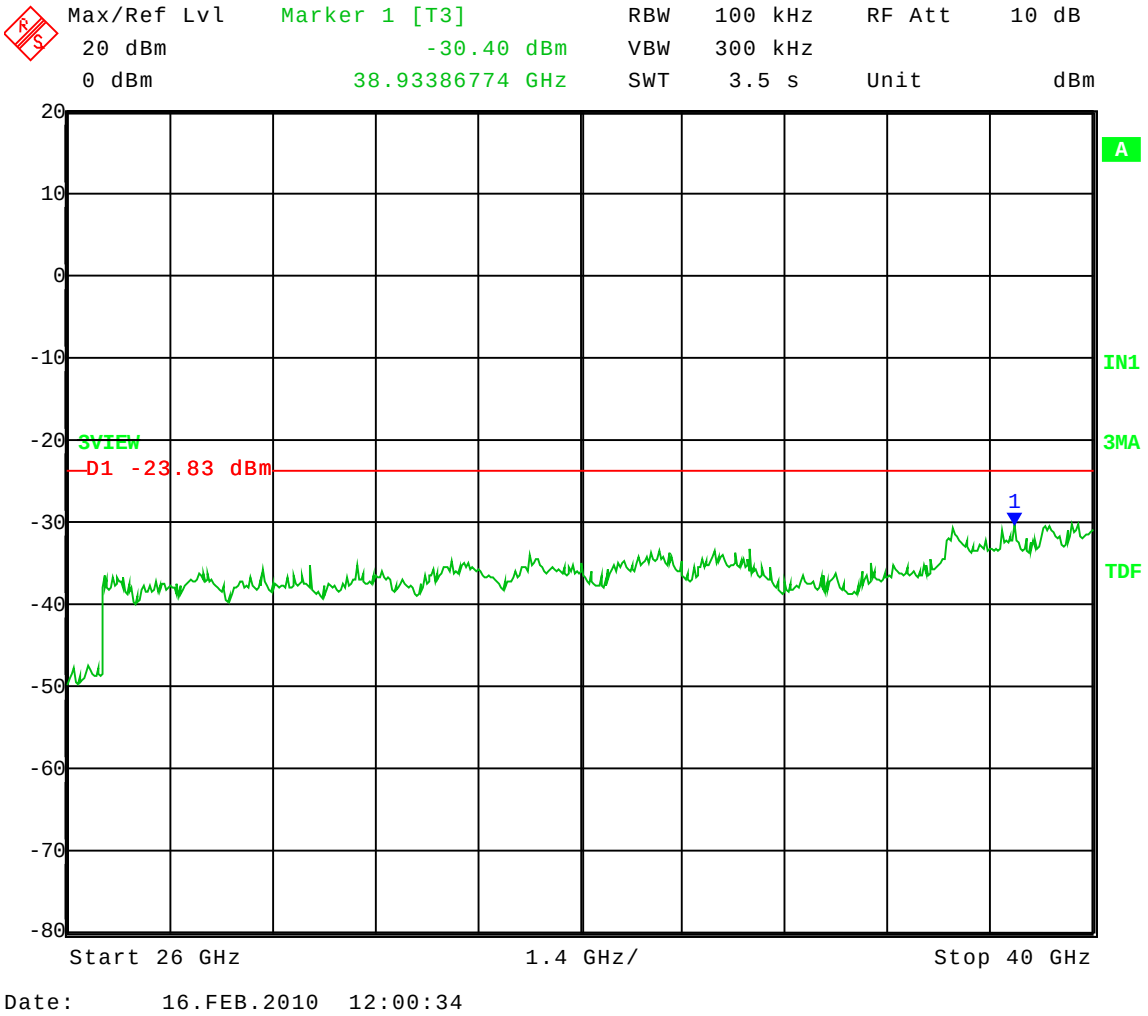


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 53
Modulation: 256QAM

Frequency Range: 26 to 40 GHz
Limit = -23.83 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

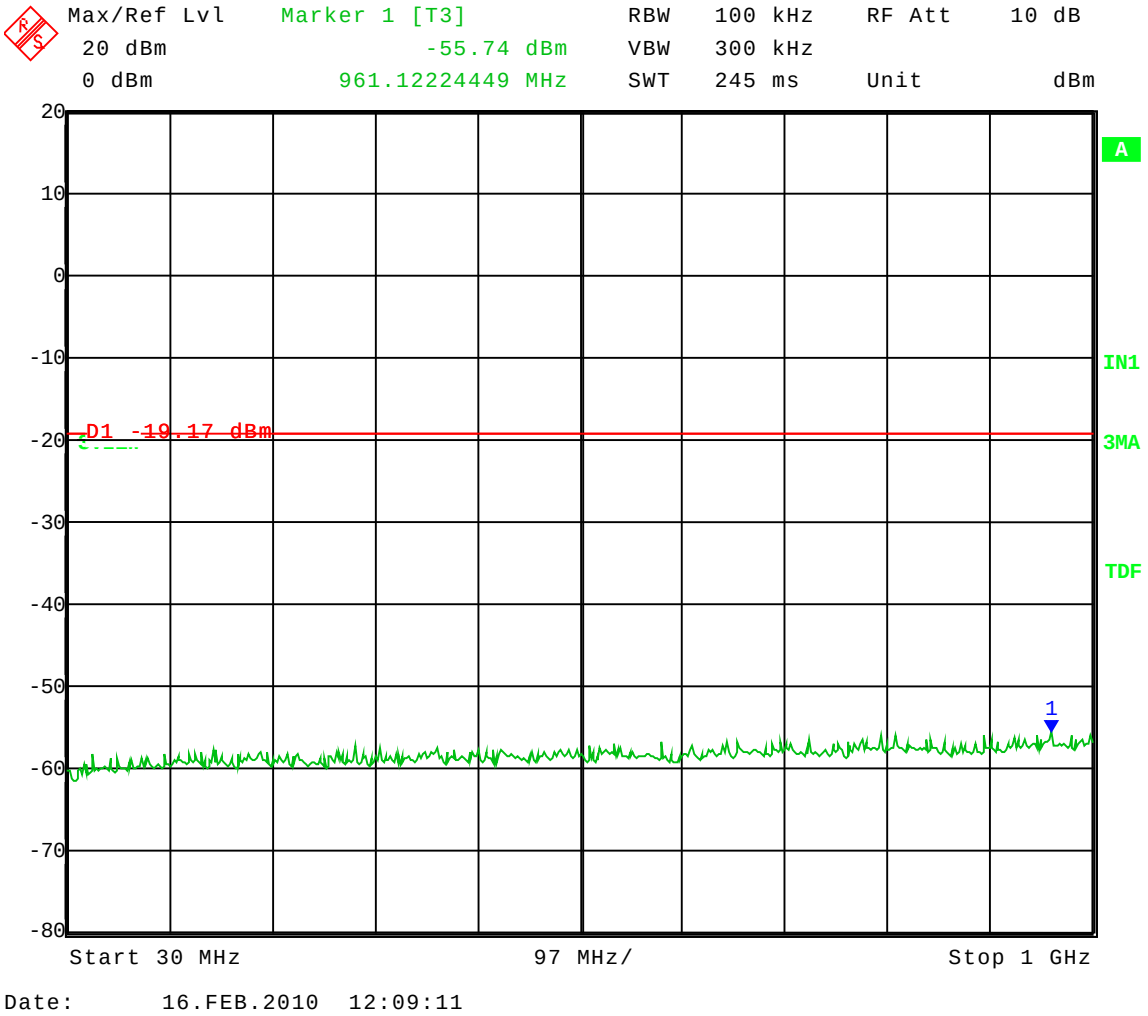


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: QPSK

Frequency Range: 30 to 1000 MHz
Limit = -19.17 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

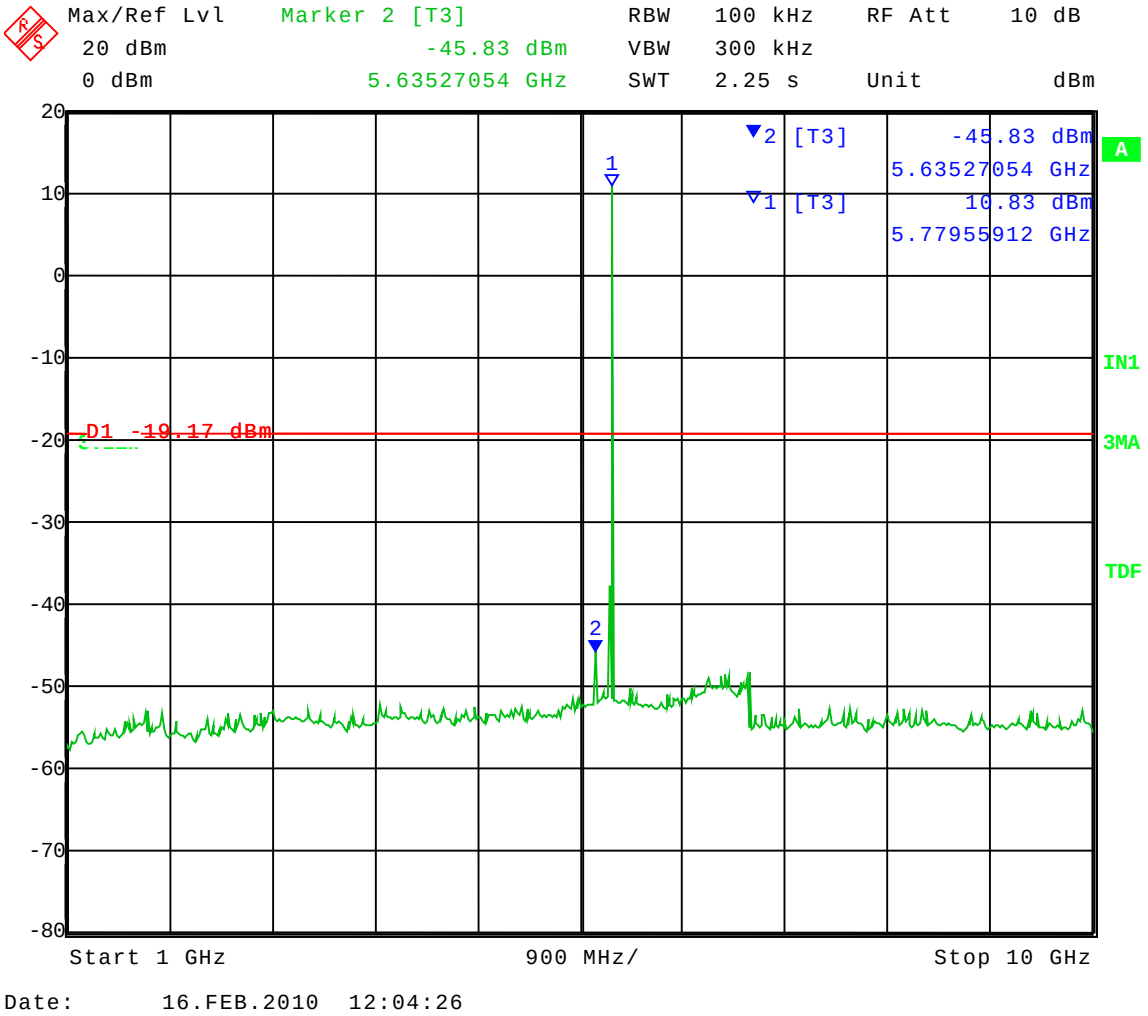


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: QPSK

Frequency Range: 1 to 10 GHz
Limit = -19.17 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

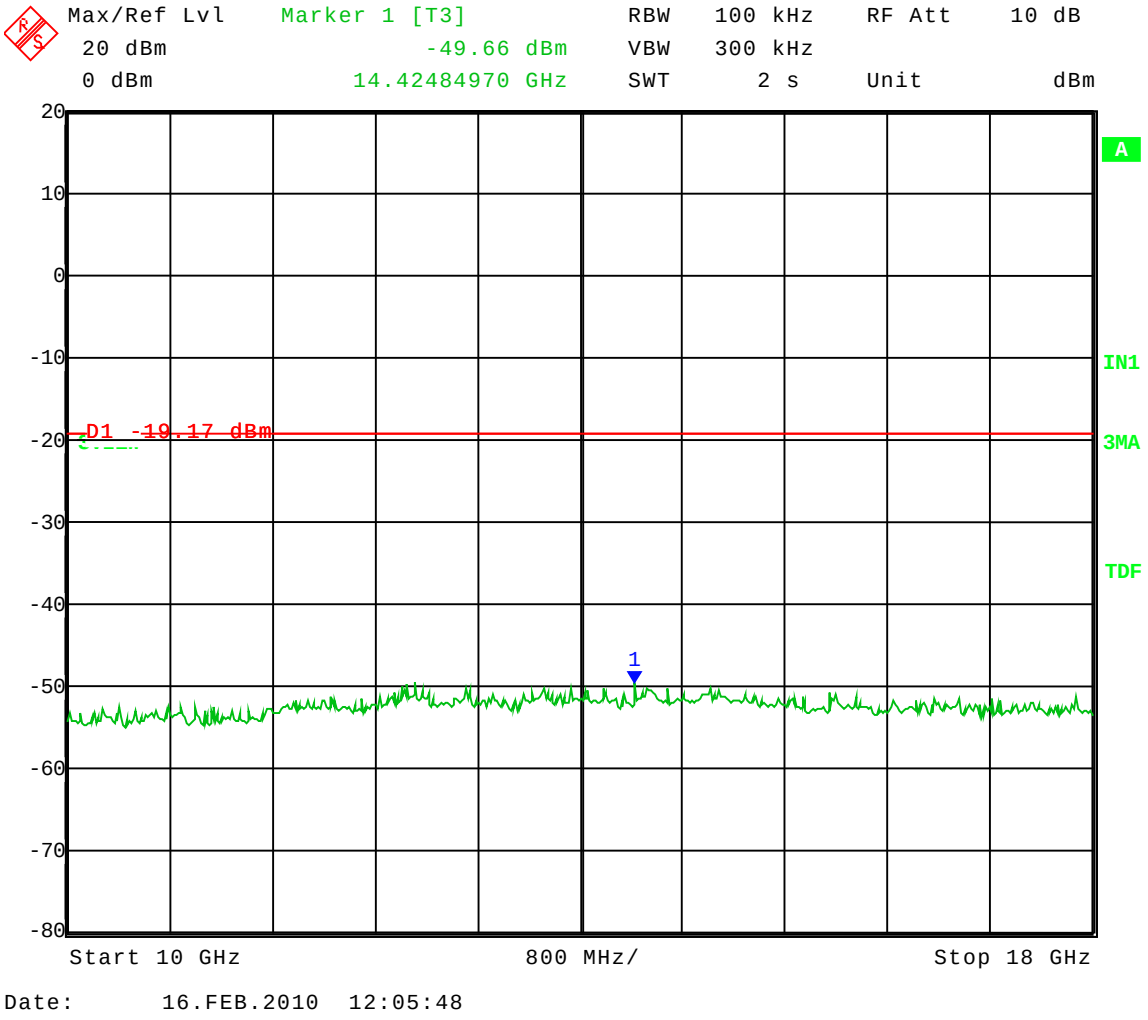


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: QPSK

Frequency Range: 10 to 18 GHz
Limit = -19.17 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

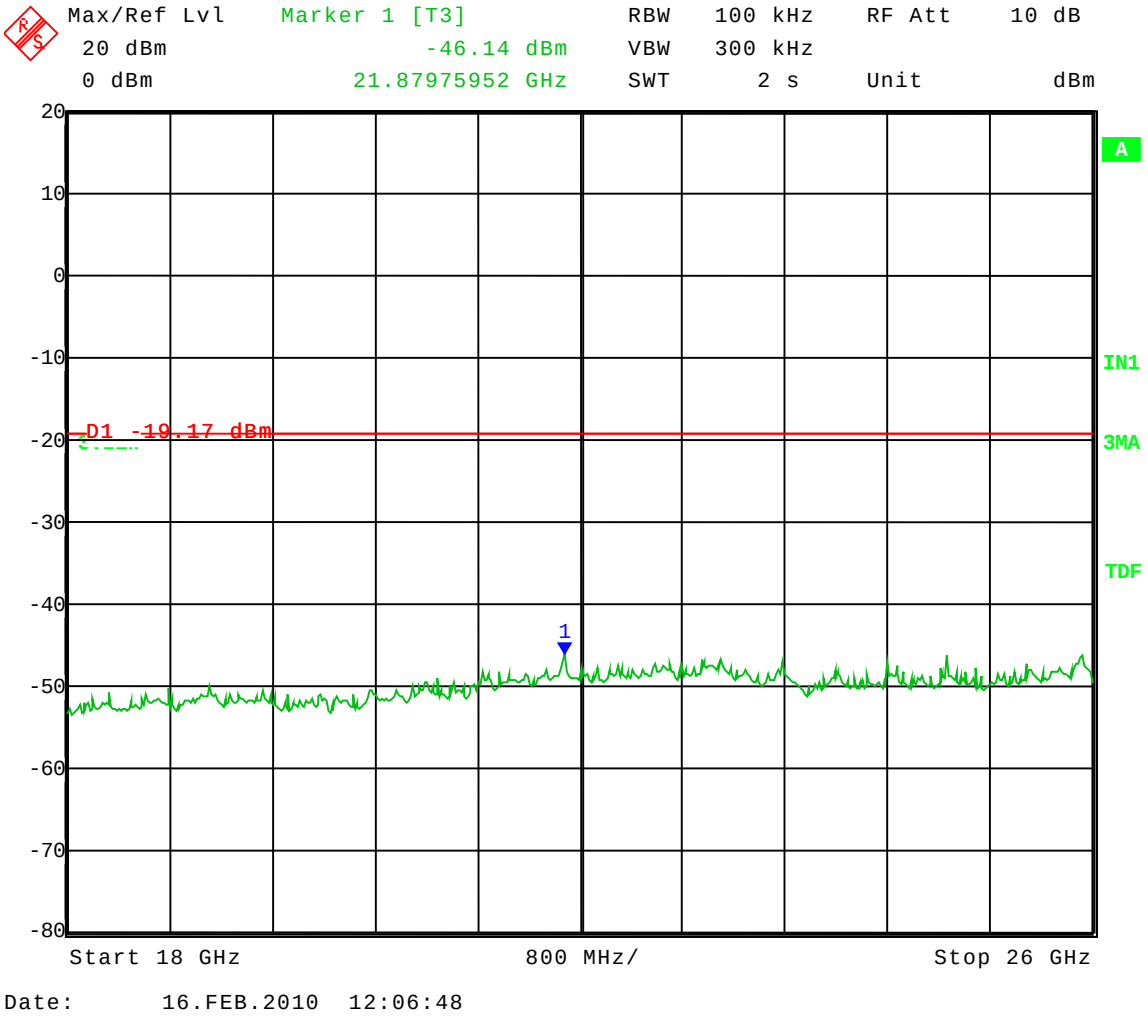


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: QPSK

Frequency Range: 18 to 26 GHz
Limit = -19.17 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

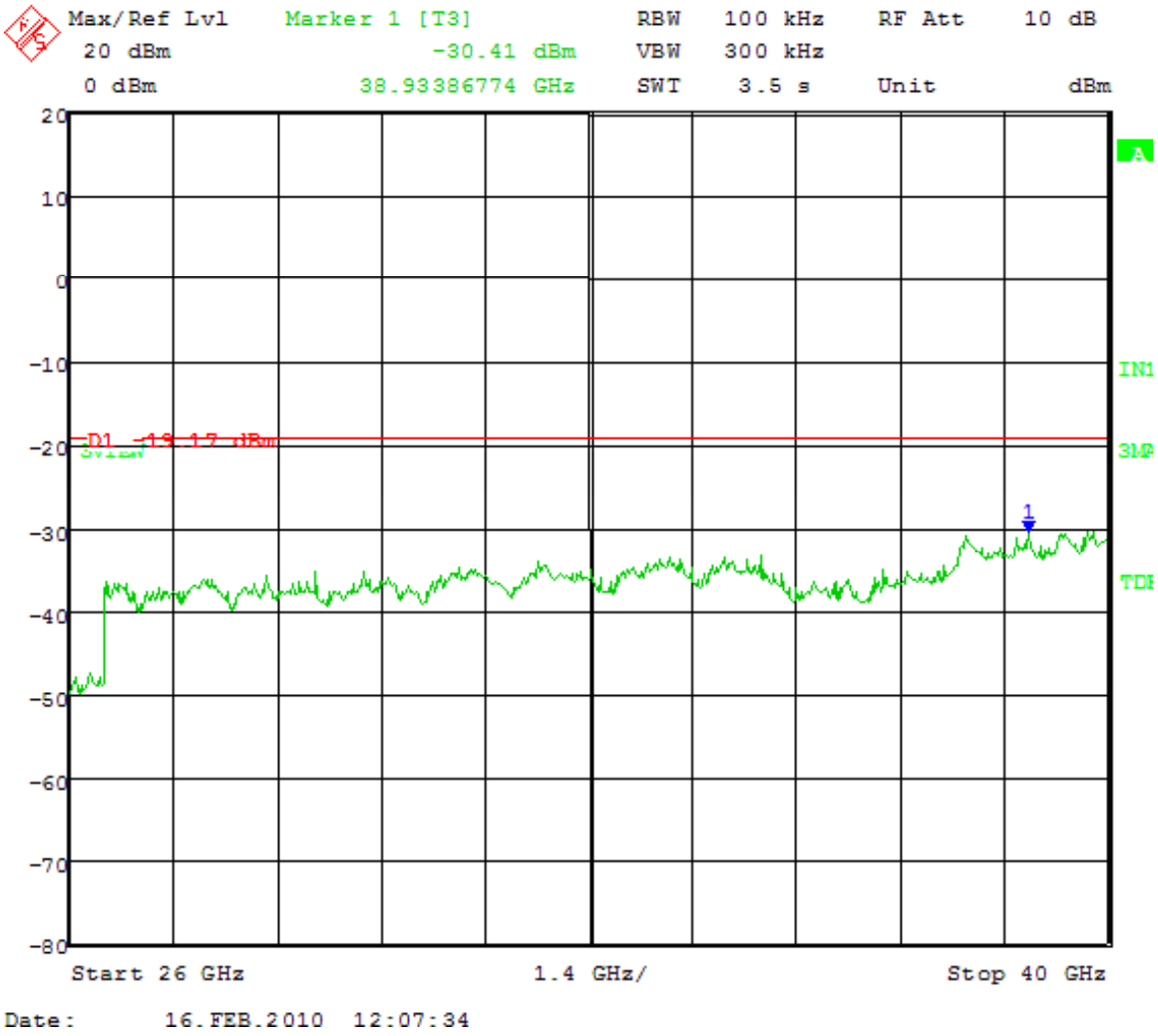


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Mid Channel: Frequency – 5.775 GHz
Channel BW: 5 MHz
Power setting: 61
Modulation: QPSK

Frequency Range: 26 to 40 GHz
Limit = -19.17 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

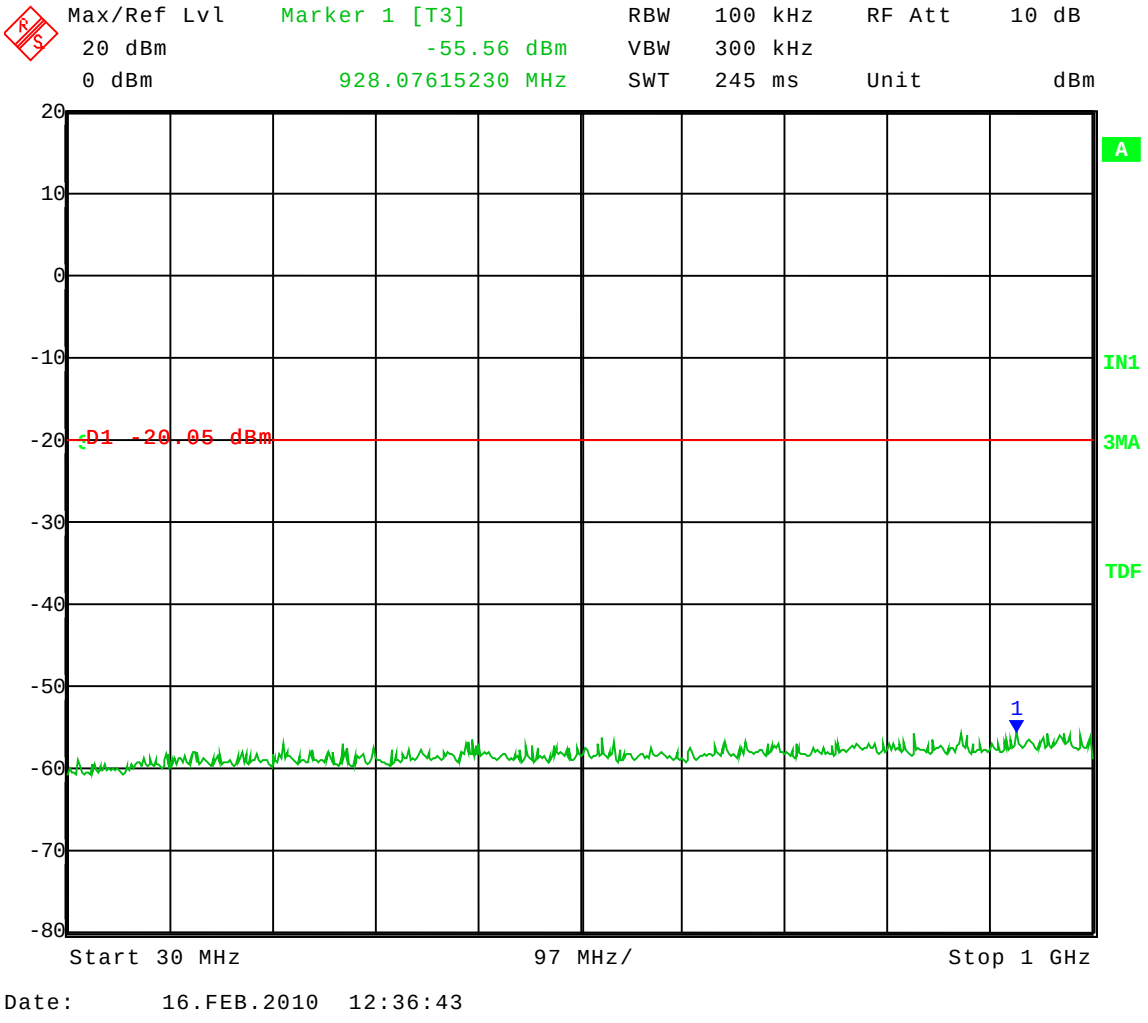


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: 16QAM

Frequency Range: 30 to 1000 MHz
Limit = -20.05 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

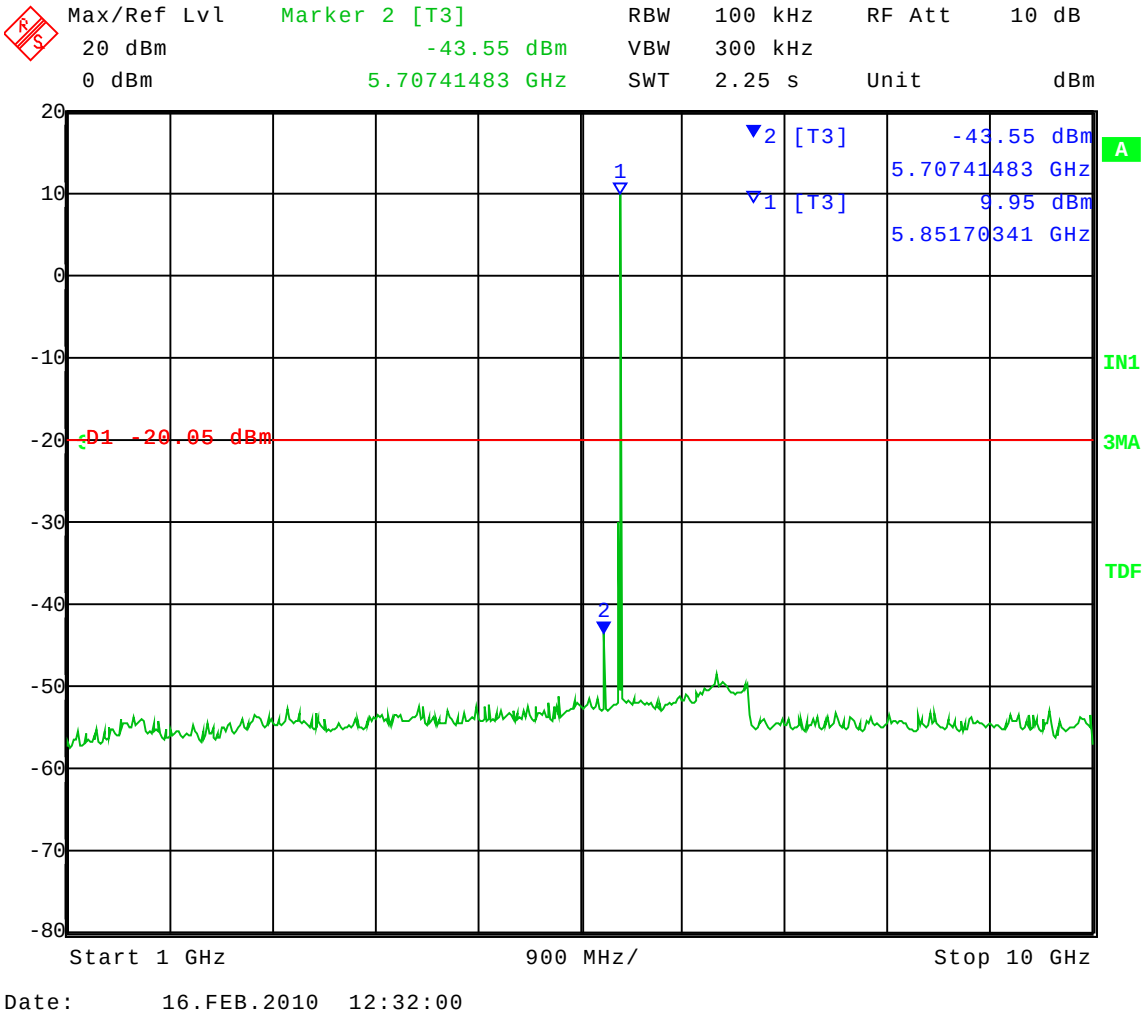


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: 16QAM

Frequency Range: 1 to 10 GHz
Limit = -20.05 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

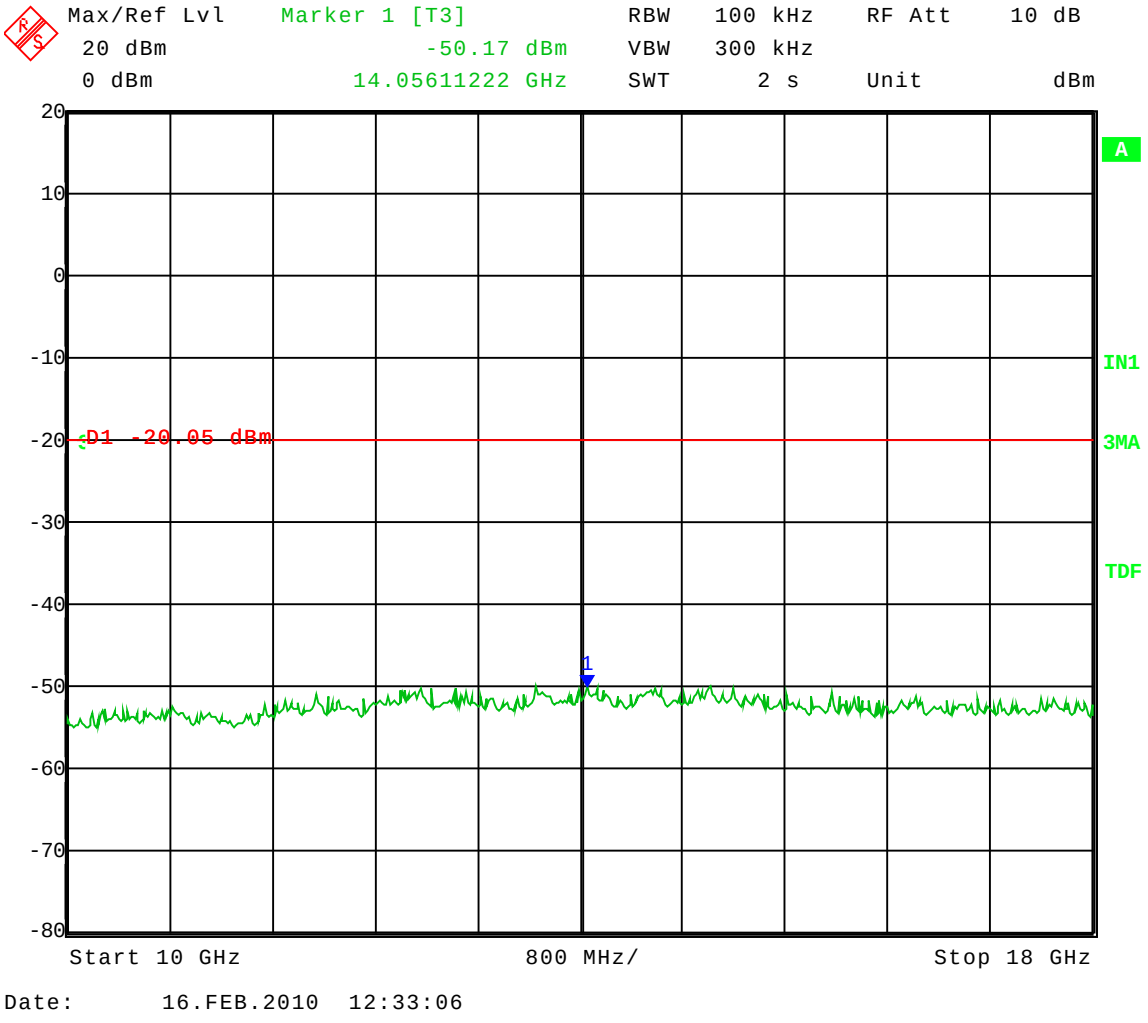


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: 16QAM

Frequency Range: 10 to 18 GHz
Limit = -20.05 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

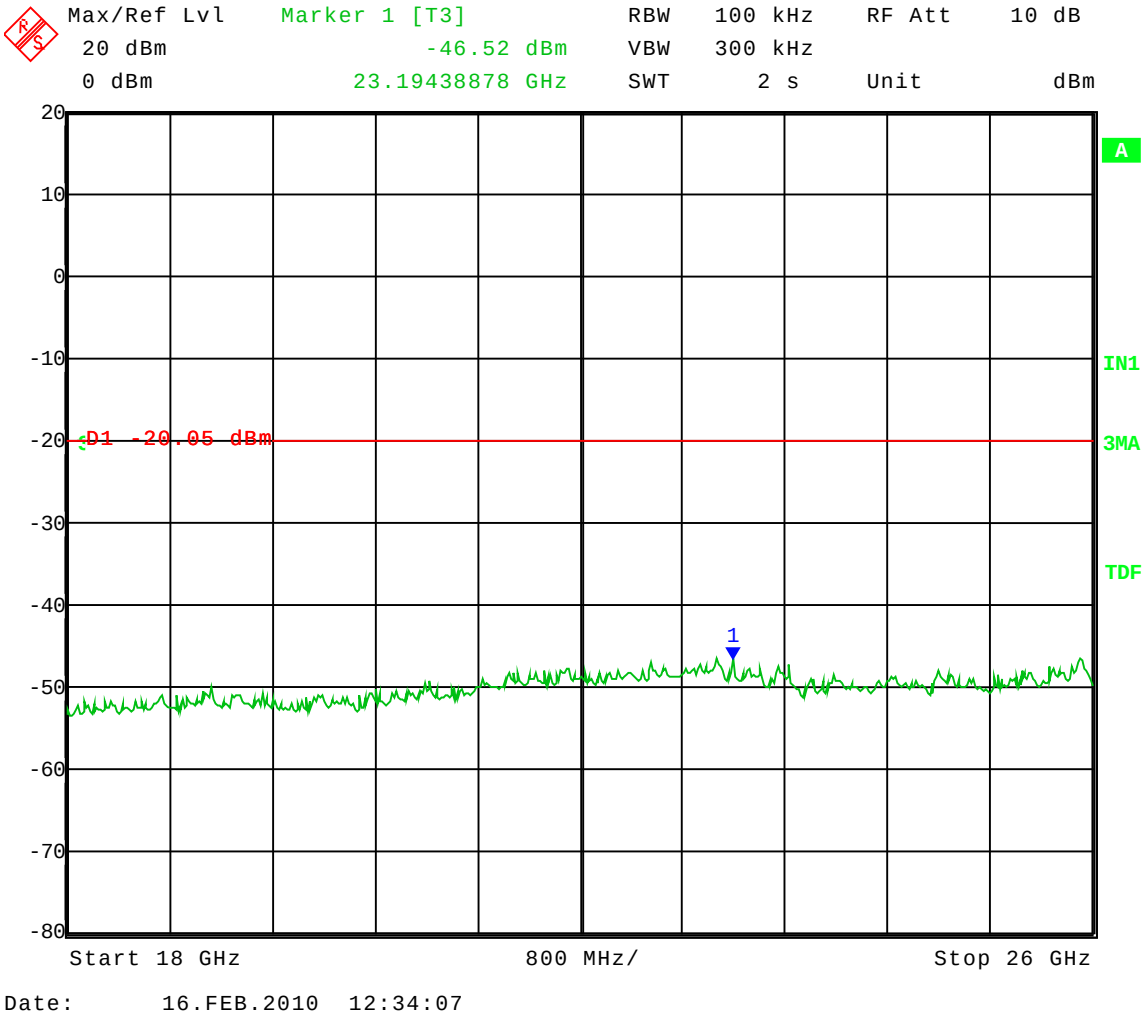


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: 16QAM

Frequency Range: 18 to 26 GHz
Limit = -20.05 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

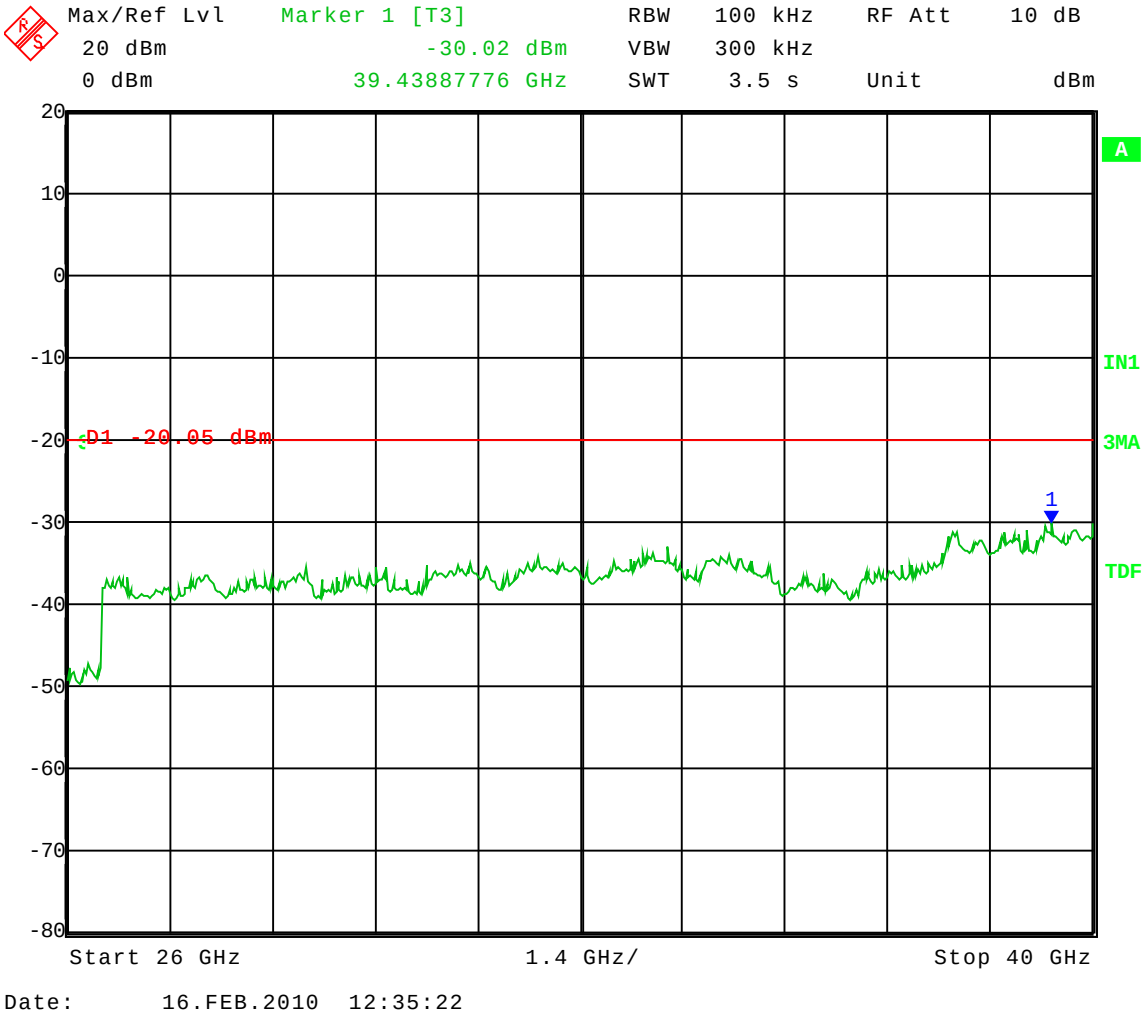


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: 16QAM

Frequency Range: 26 to 40 GHz
Limit = -20.05 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

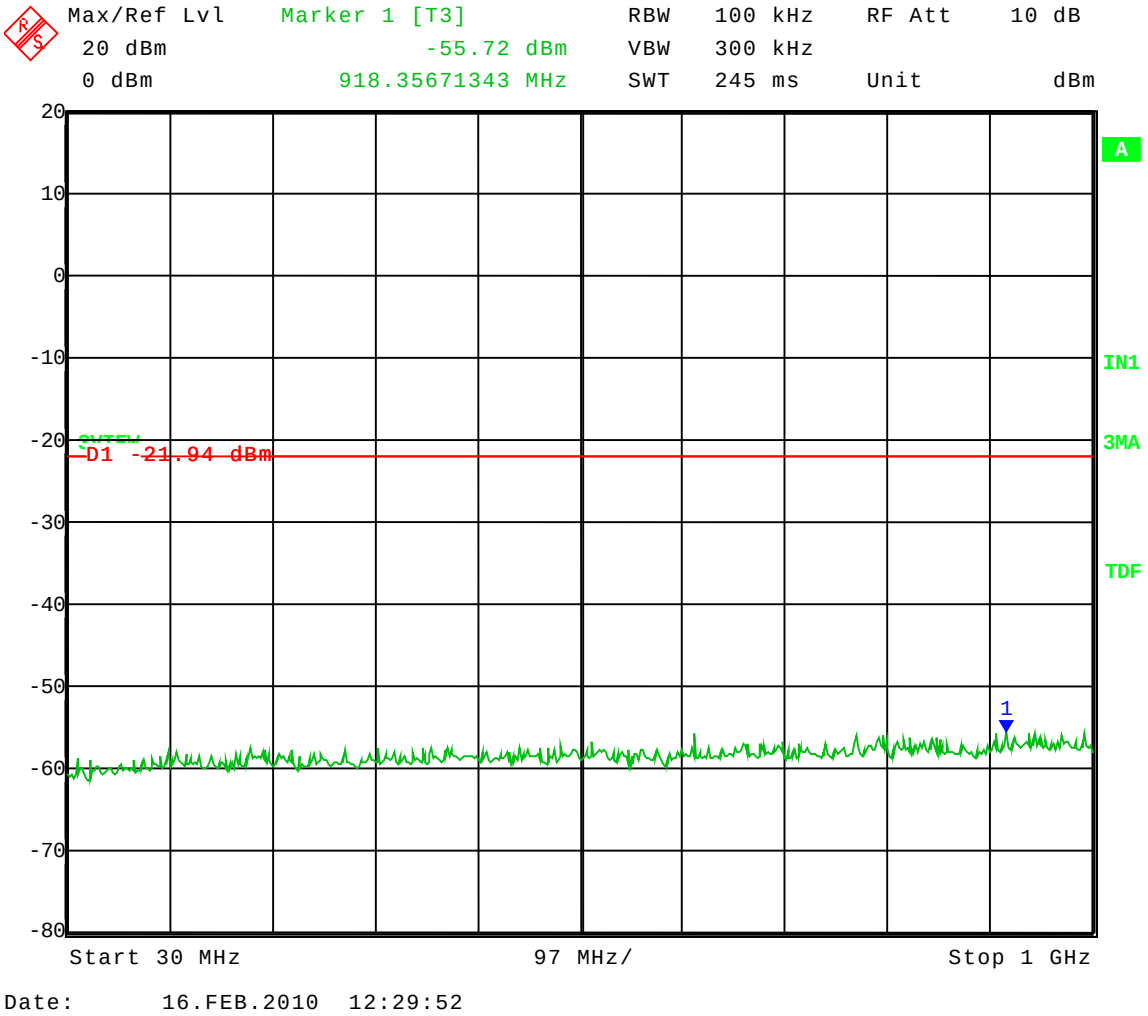


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: 64QAM

Frequency Range: 30 to 1000 MHz
Limit = -21.94 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

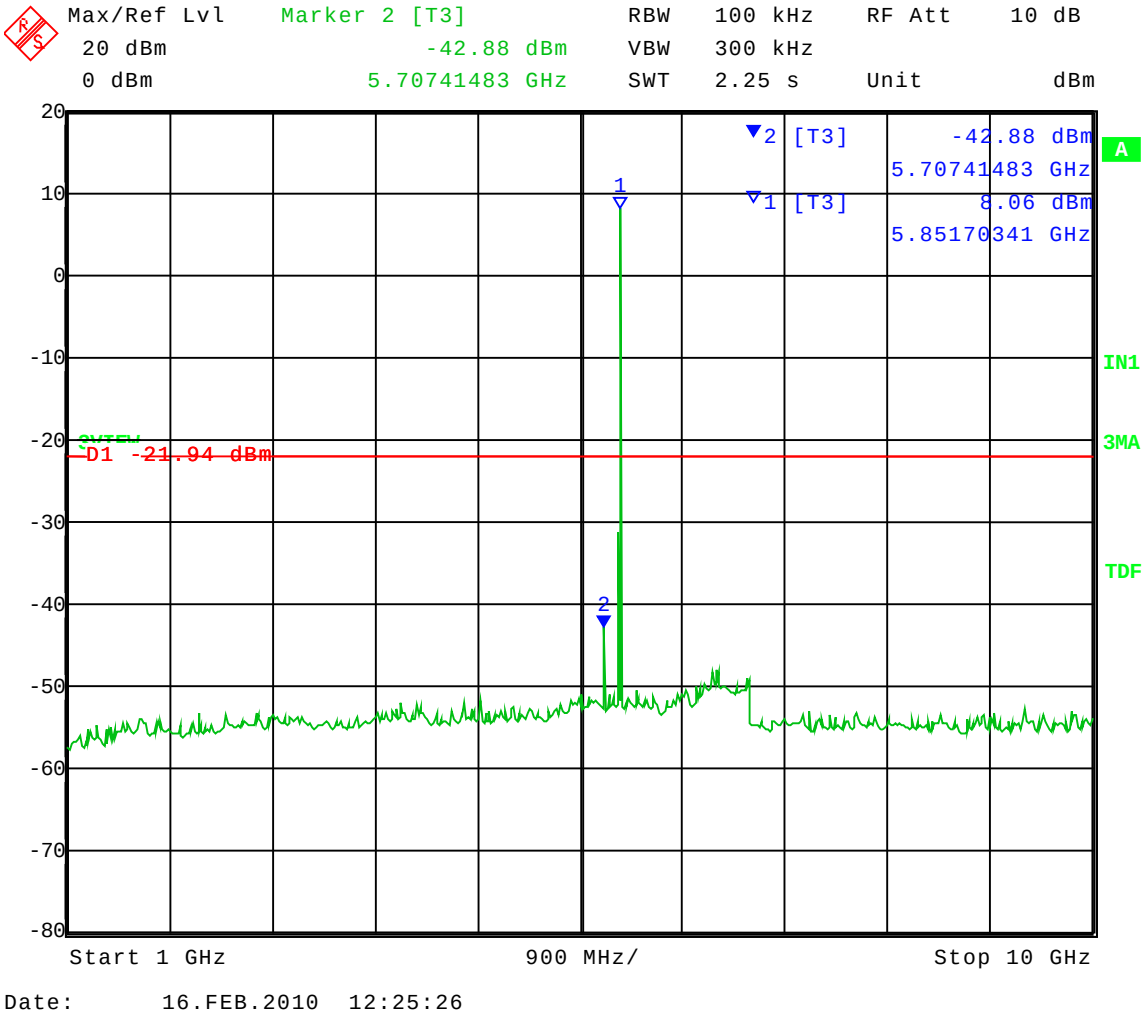


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: 64QAM

Frequency Range: 1 to 10 GHz
Limit = -21.94 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

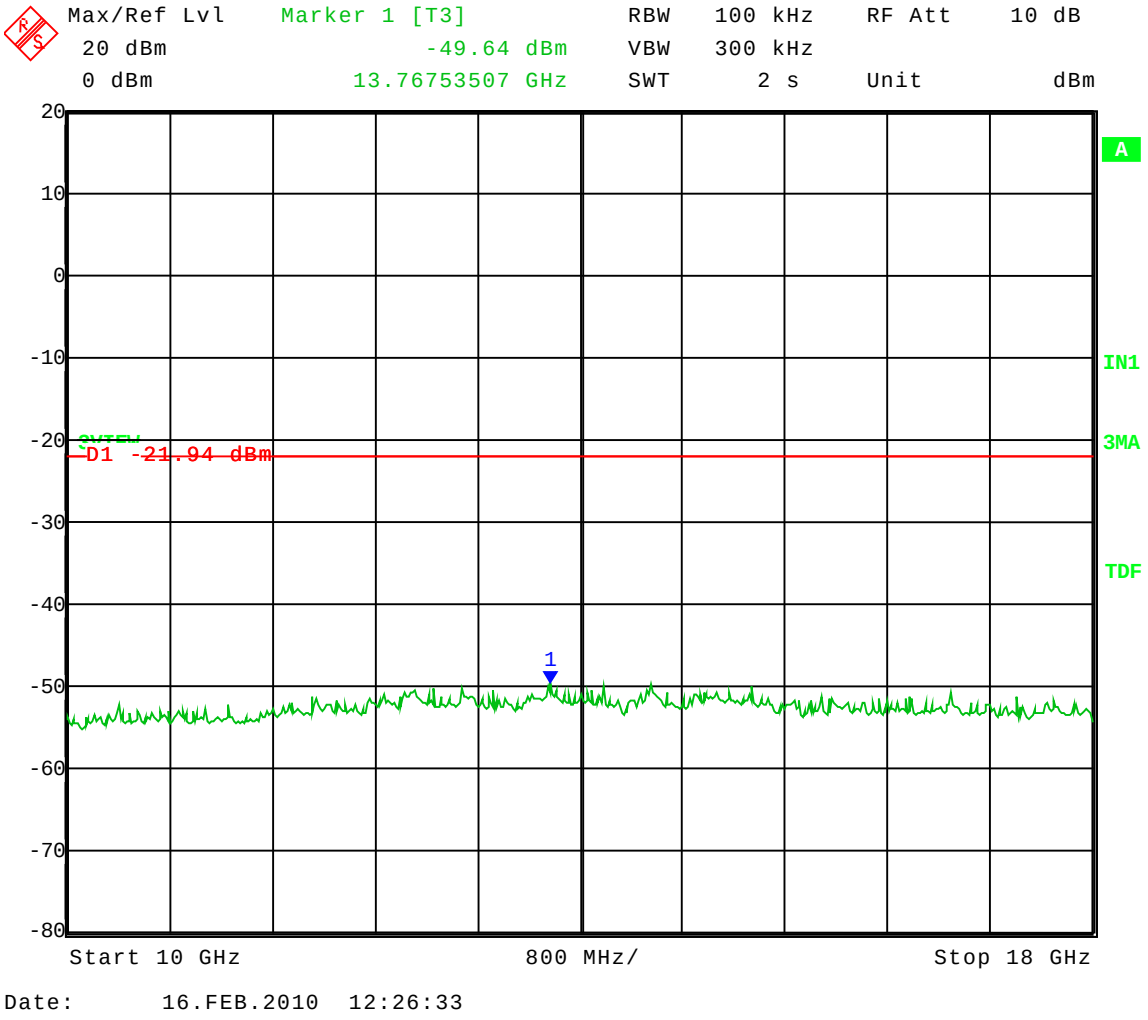


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: 64QAM

Frequency Range: 10 to 18 GHz
Limit = -21.94 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

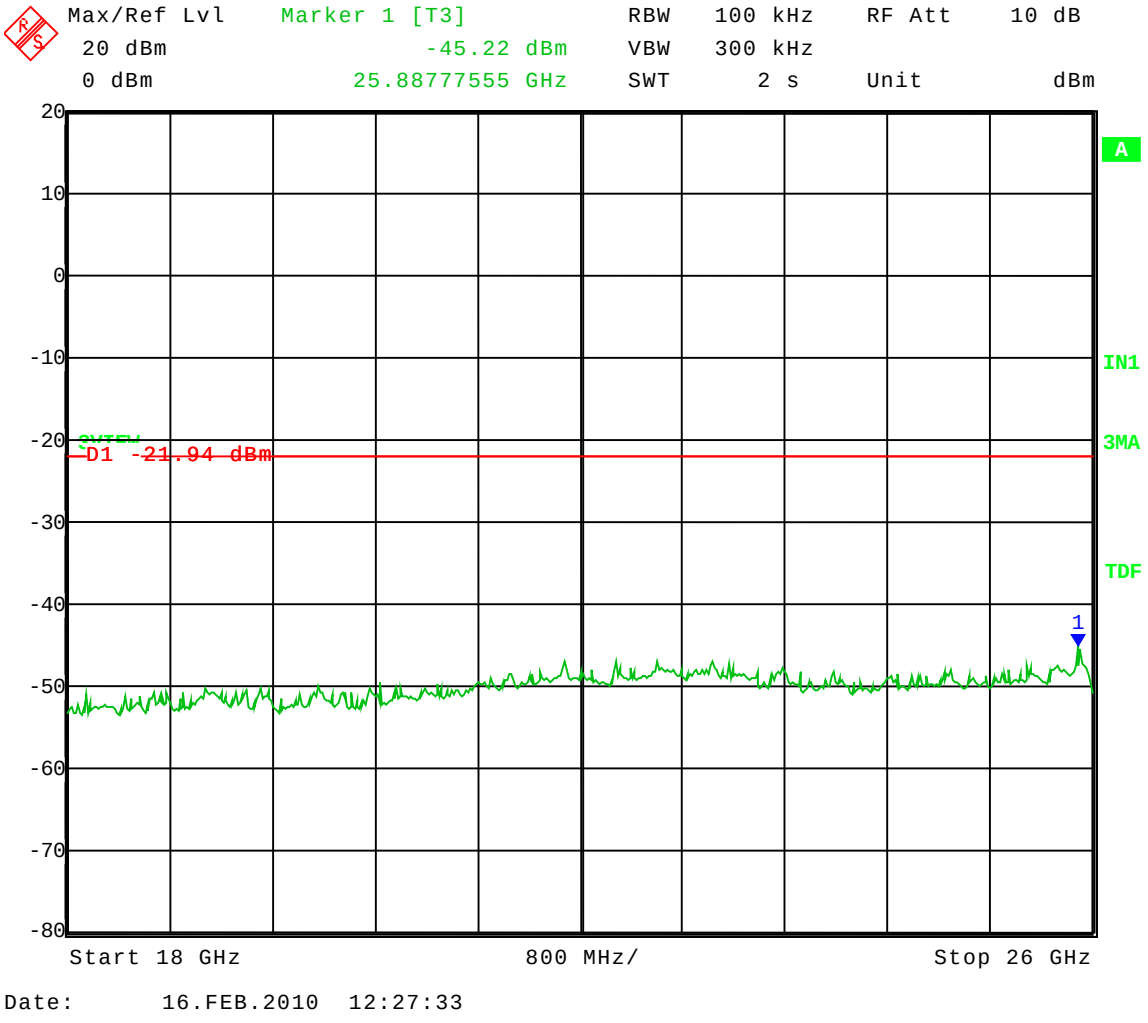


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: 64QAM

Frequency Range: 18 to 26 GHz
Limit = -21.94 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

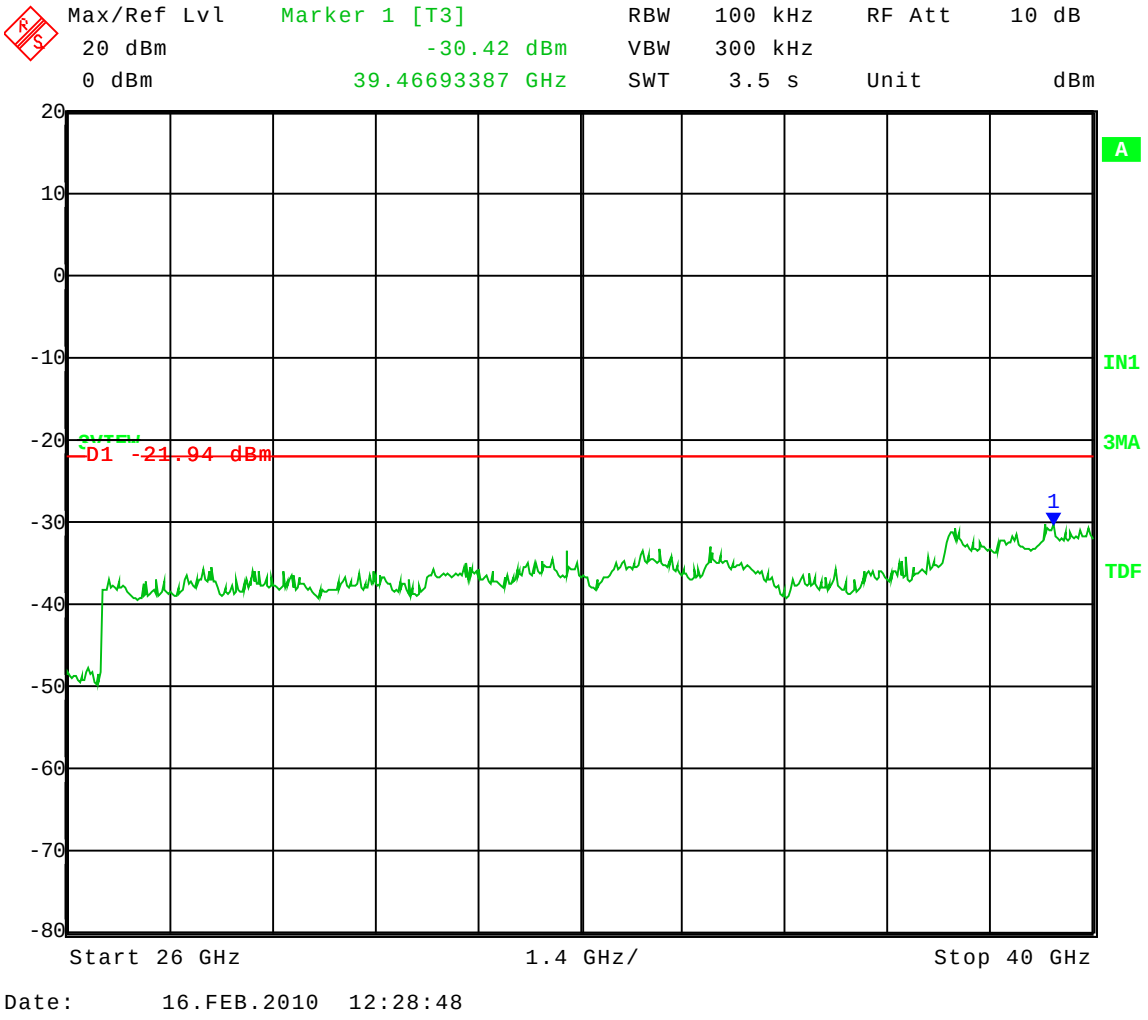


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: 64QAM

Frequency Range: 26 to 40 GHz
Limit = -21.94 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

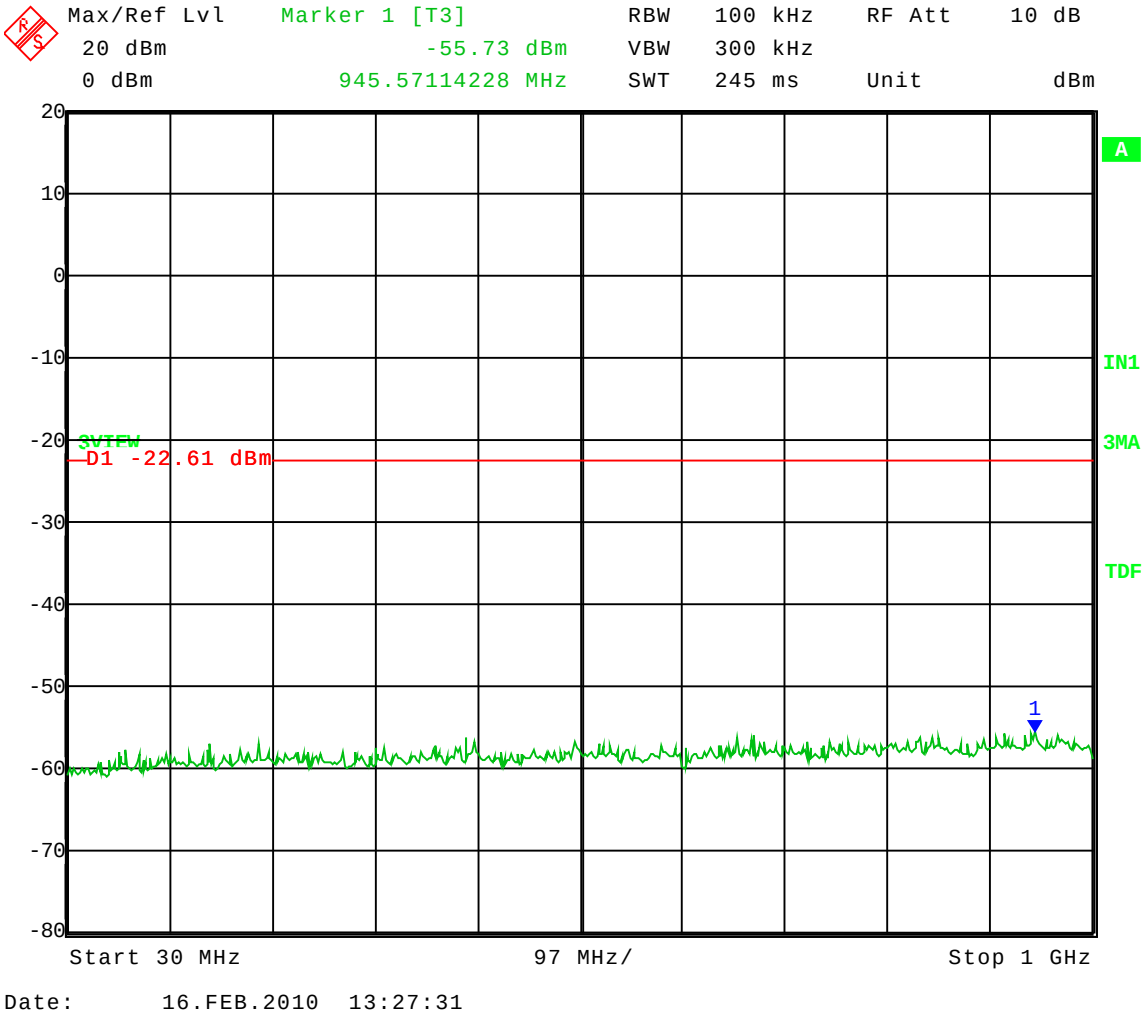


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 58
Modulation: 256QAM

Frequency Range: 30 to 1000 MHz
Limit = -22.61 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

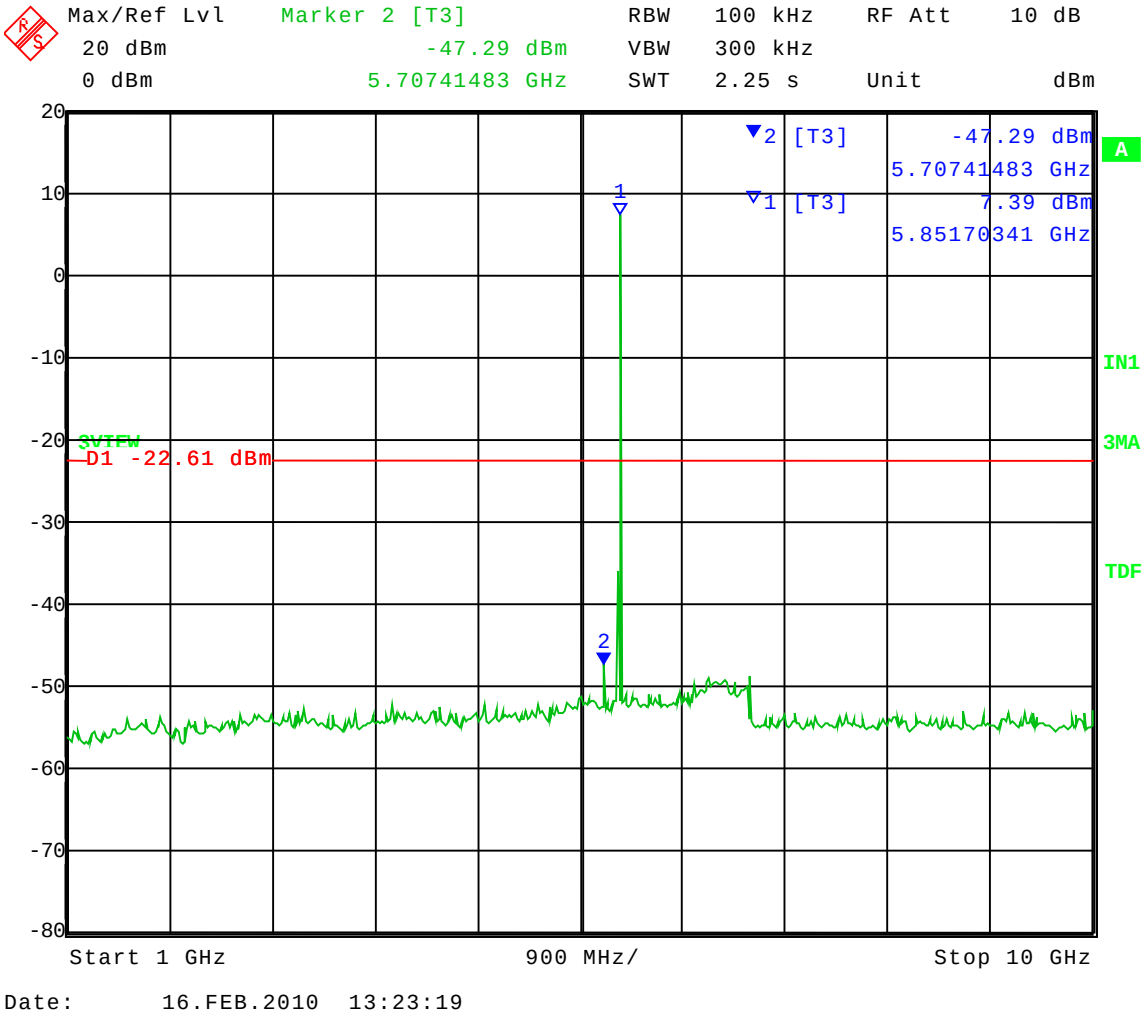


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 58
Modulation: 256QAM

Frequency Range: 1 to 10 GHz
Limit = -22.61 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

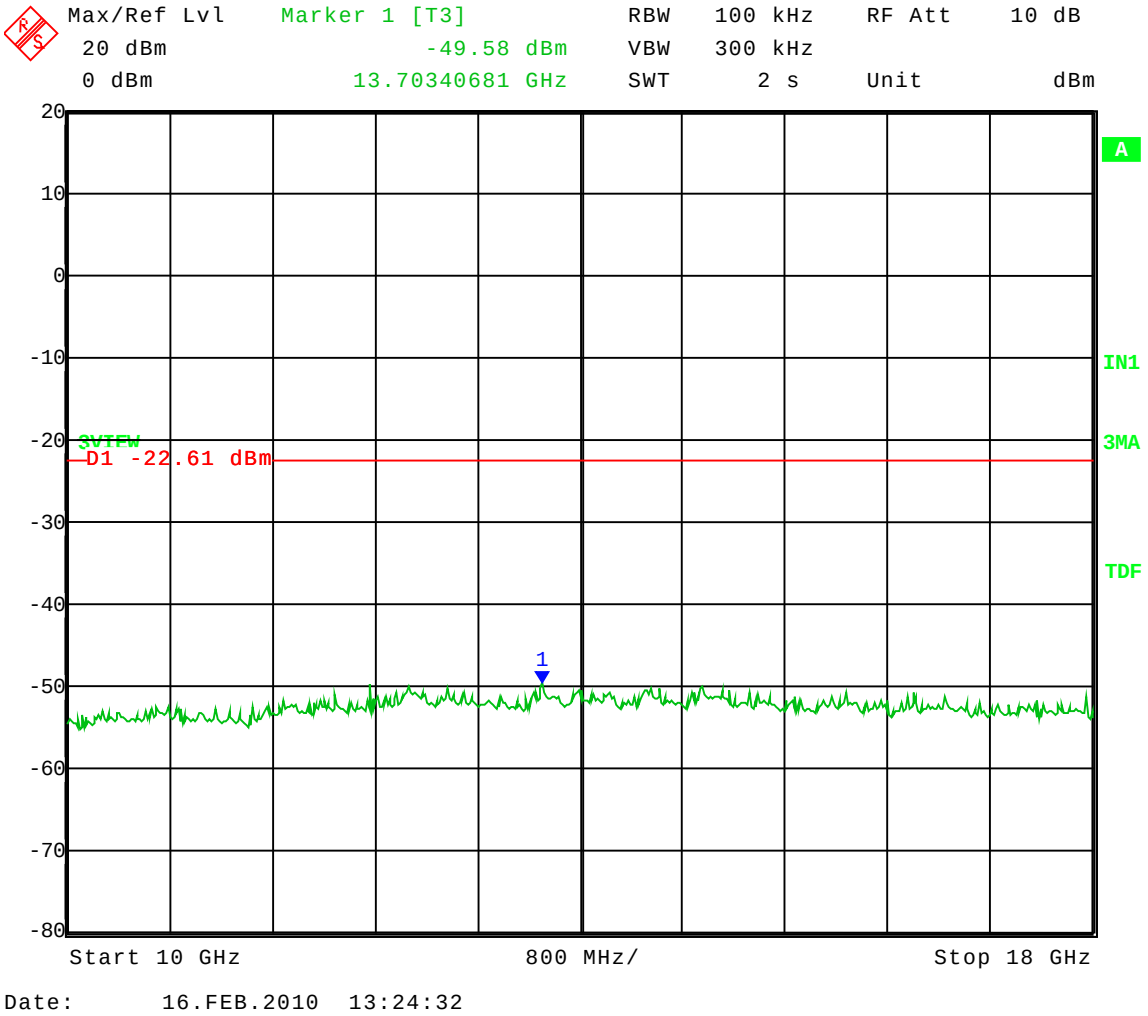


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 58
Modulation: 256QAM

Frequency Range: 10 to 18 GHz
Limit = -22.61 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

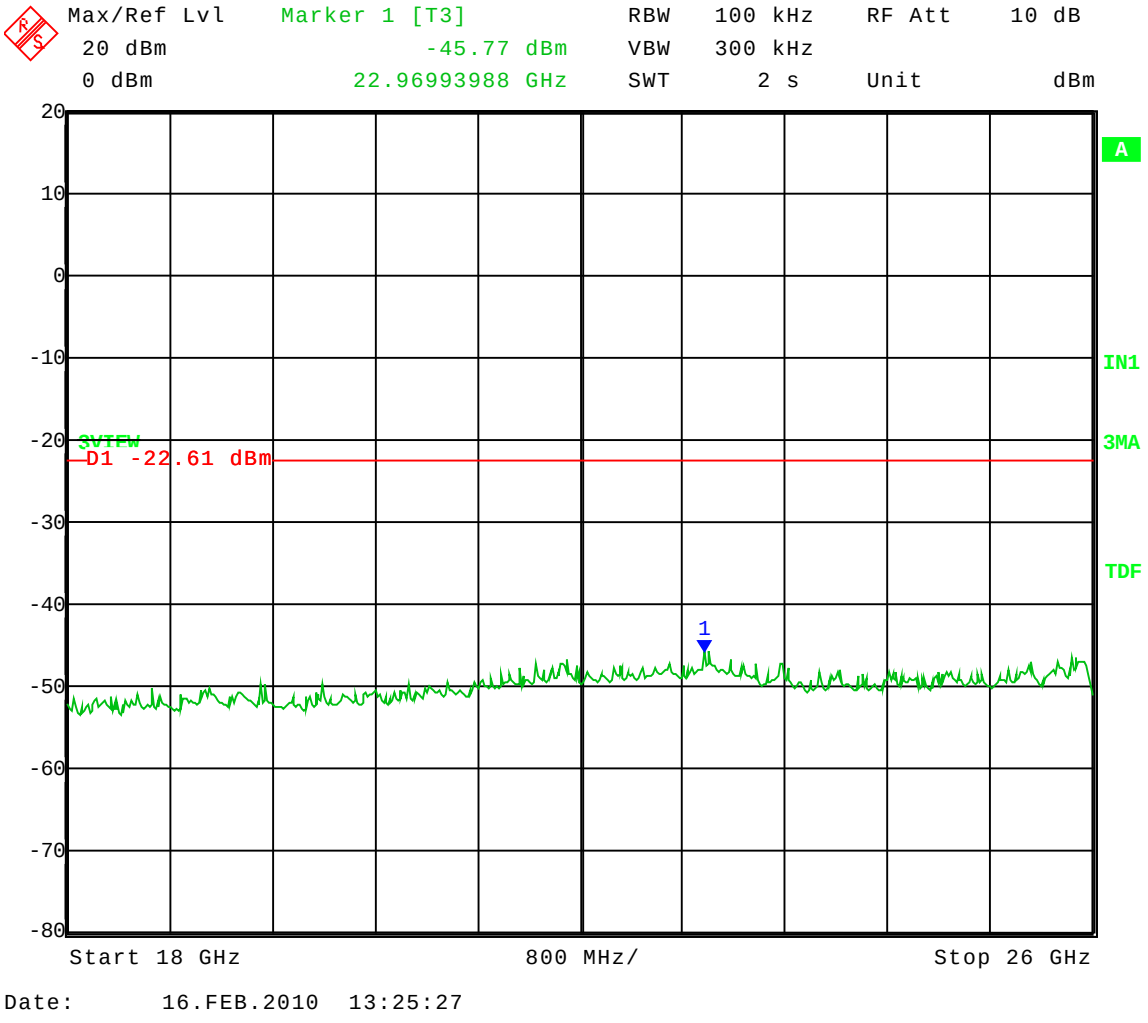


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 58
Modulation: 256QAM

Frequency Range: 18 to 26 GHz
Limit = -22.61 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

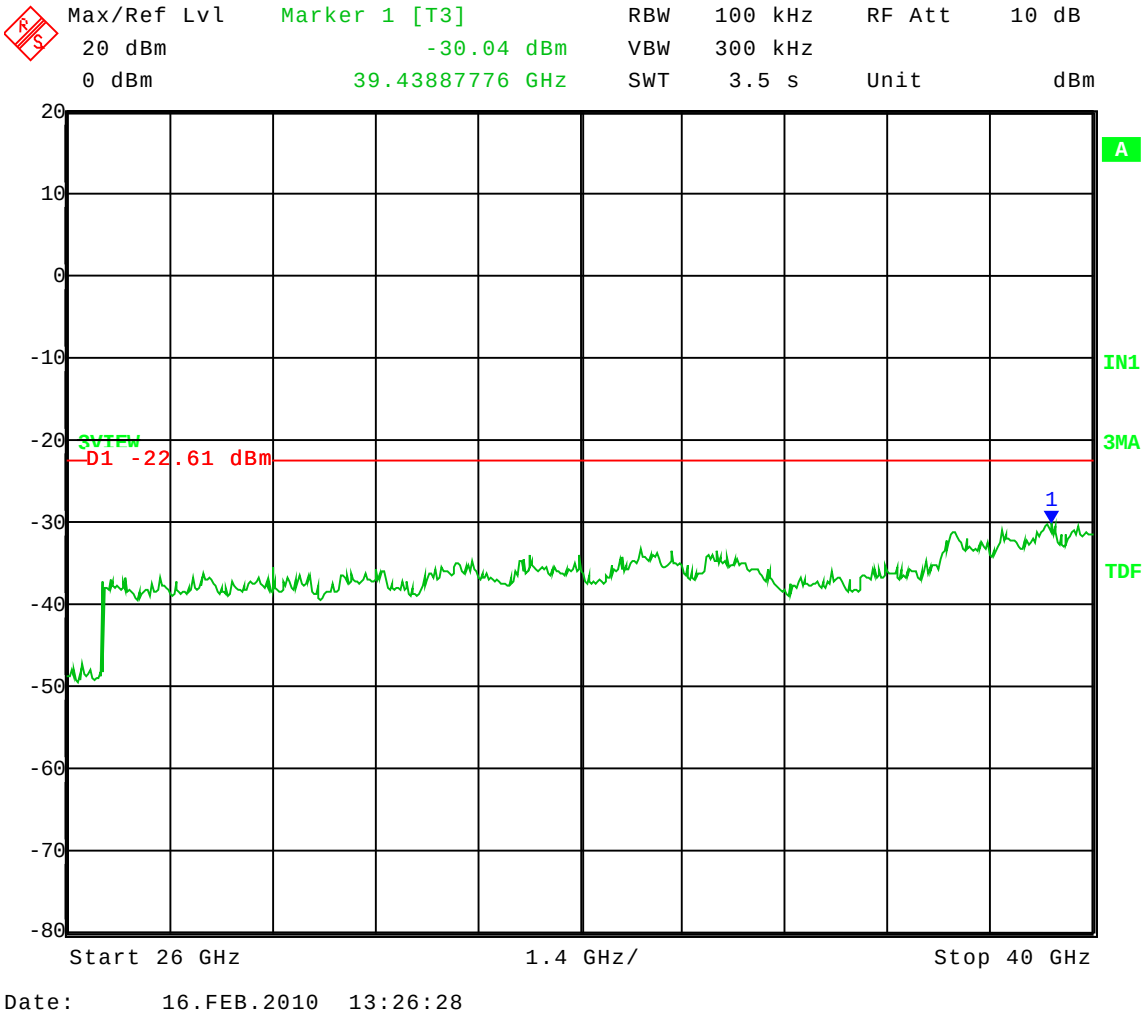


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 58
Modulation: 256QAM

Frequency Range: 26 to 40 GHz
Limit = -22.61 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

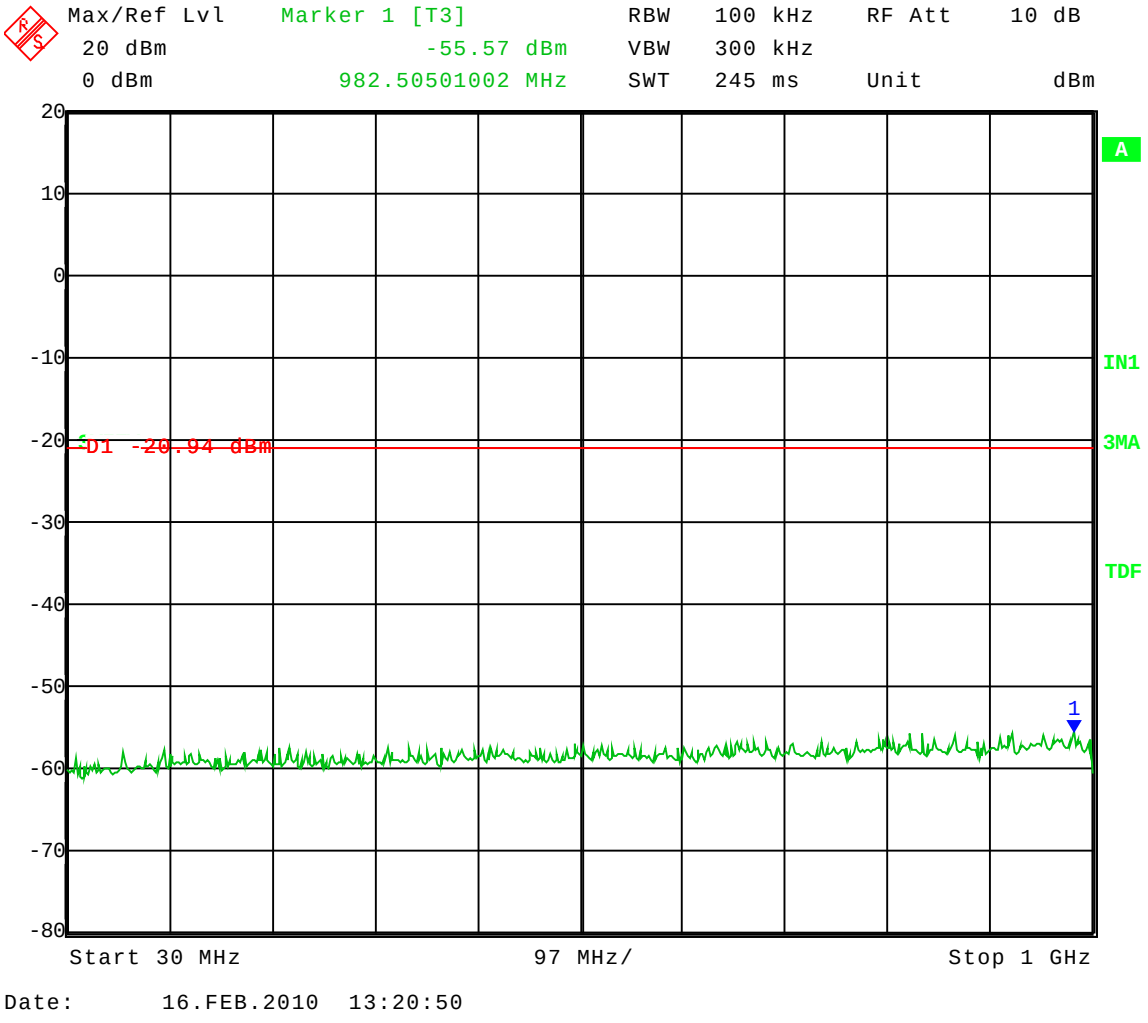


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: QPSK

Frequency Range: 30 to 1000 MHz
Limit = -20.94 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

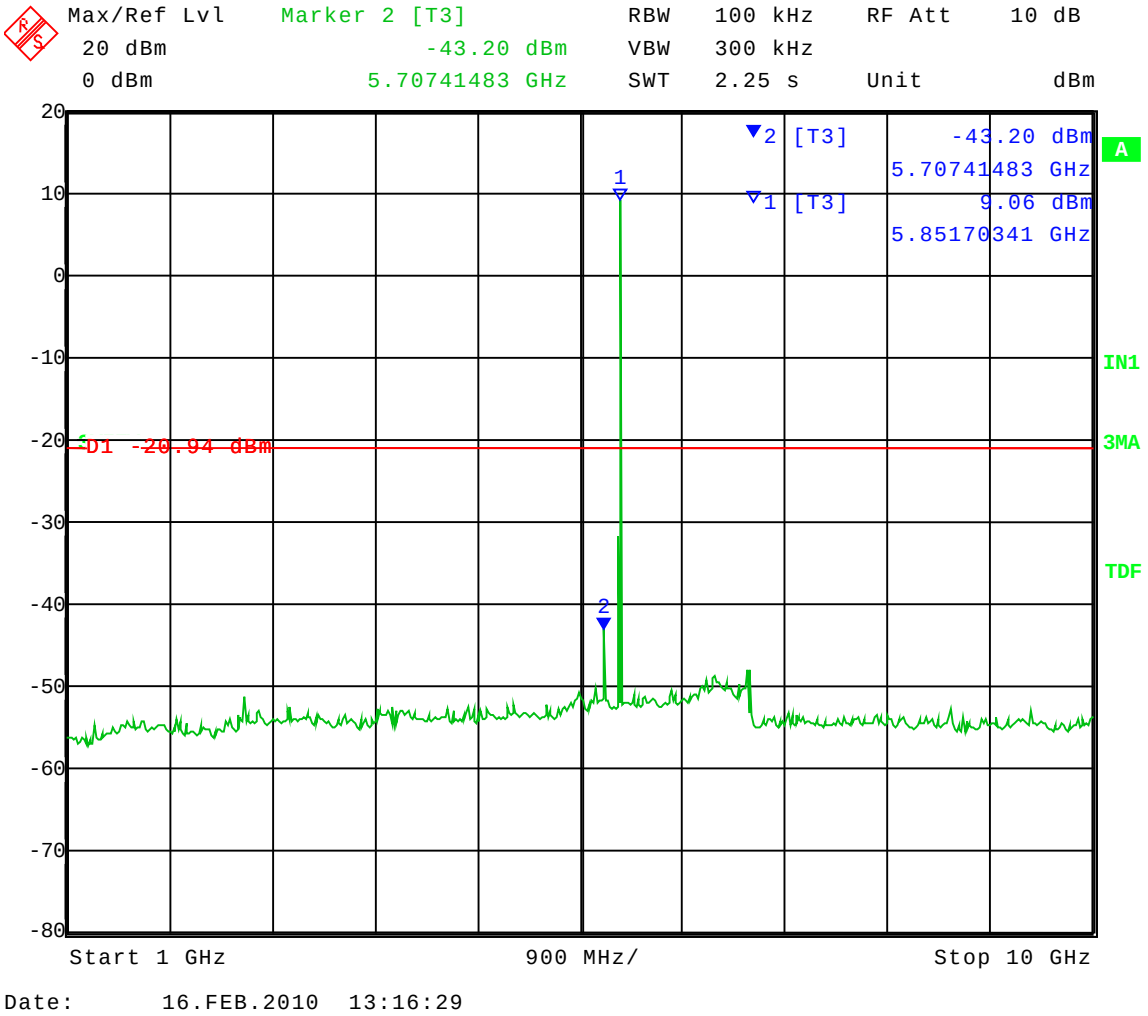


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: QPSK

Frequency Range: 1 to 10 GHz
Limit = -20.94 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

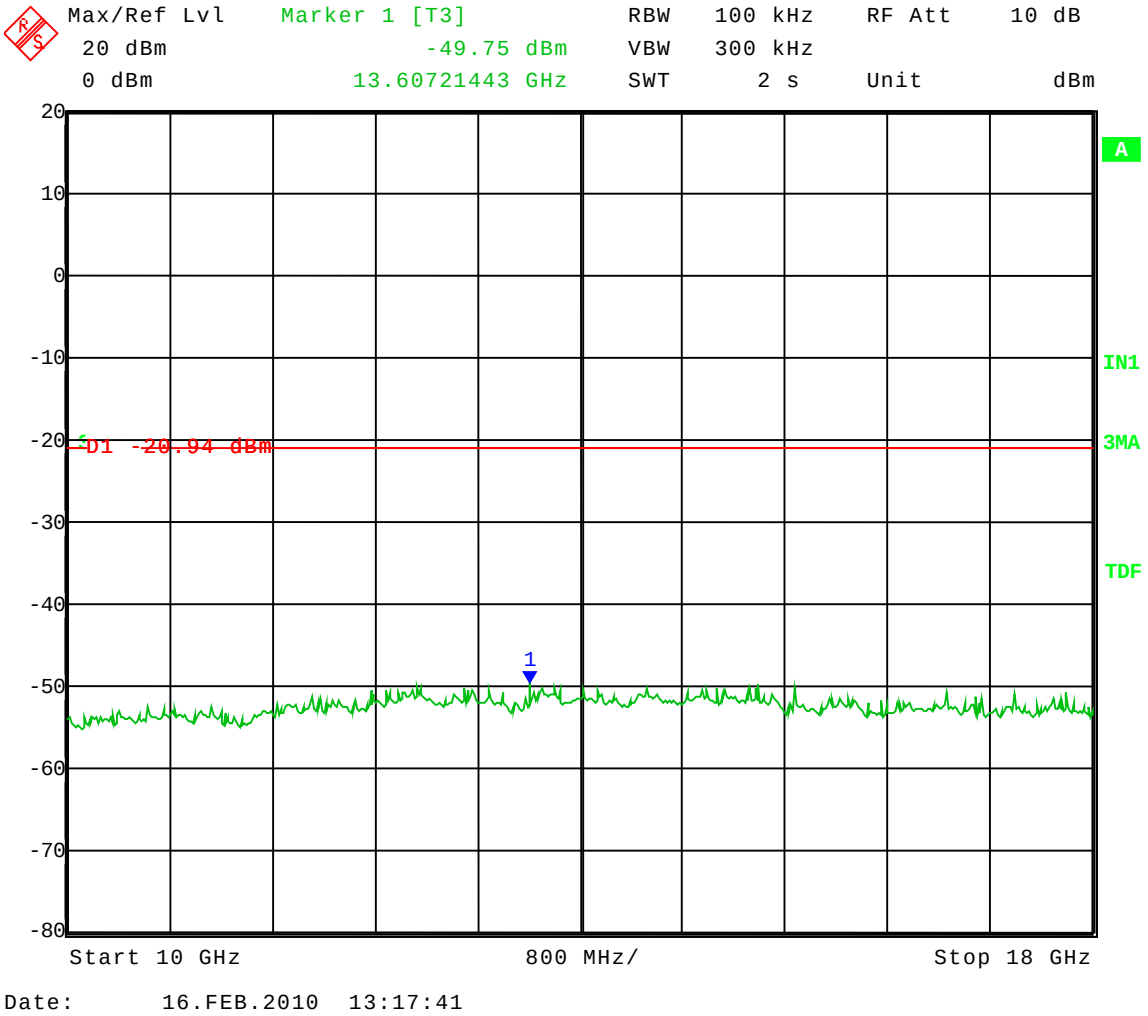


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: QPSK

Frequency Range: 10 to 18 GHz
Limit = -20.94 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

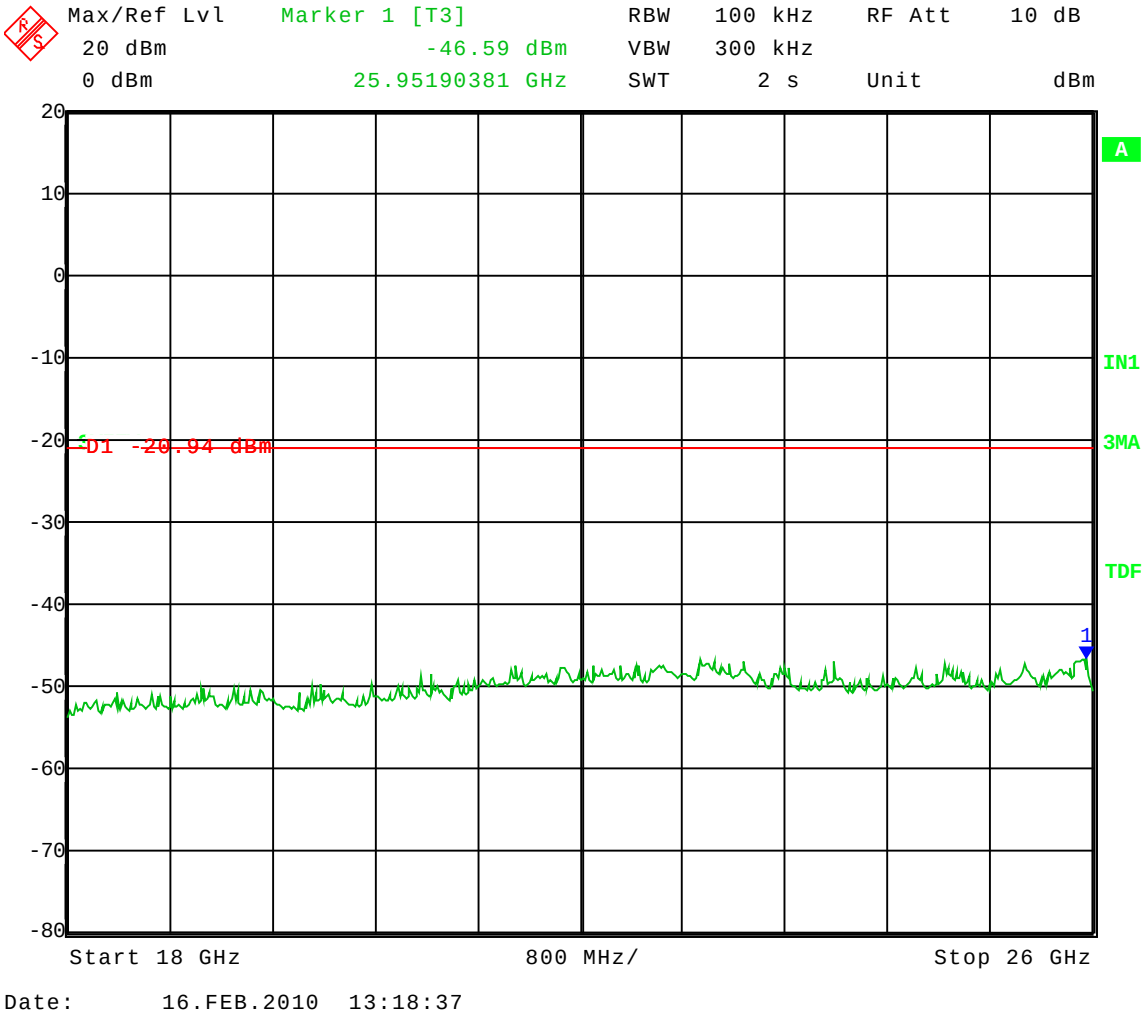


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: QPSK

Frequency Range: 18 to 26 GHz
Limit = -20.94 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

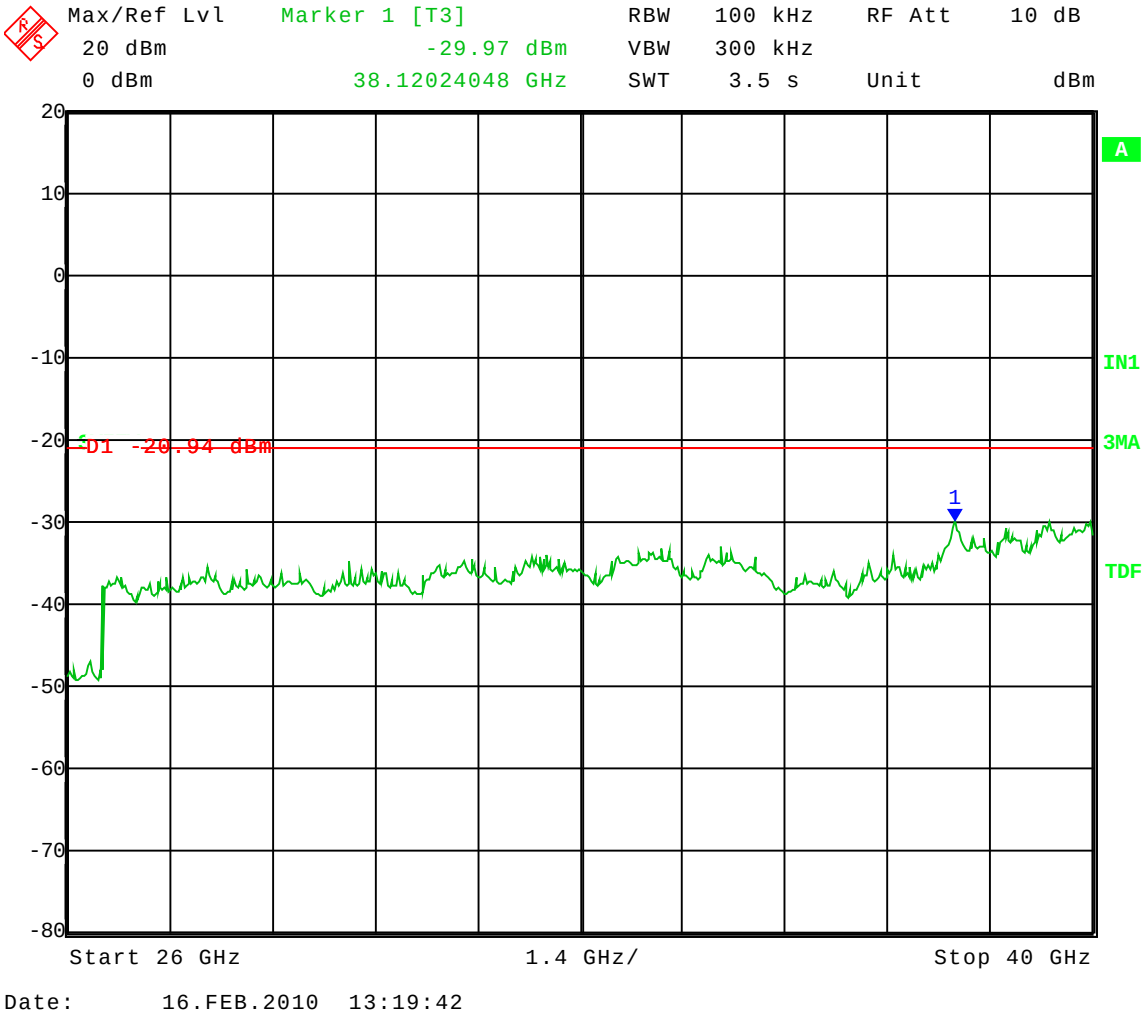


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 5 MHz
Power setting: 62
Modulation: QPSK

Frequency Range: 26 to 40 GHz
Limit = -20.94 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)



1250 Peterson Dr., Wheeling, IL 60090

5.0 Test Run: Power Spectral Density (PSD)

Rule Section: Section 15.247(e)

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

Description: The EUT was set to transmit at the lowest, middle, and highest channel of operation. The channel bandwidth of the EUT was changed from 5 MHz to 10 MHz and 20 MHz, and the modulation of the EUT was changed from QPSK to 16-QAM, 64-QAM, and 256-QAM. Since Power Output Option 2 was used, Option 2 for measuring PSD was also used. A peak detector was used. Since the device was transmitting at less than 100% duty cycle, video triggering and gating were set so that the entire sweep occurred while the transmitter was transmitting on full power pulses. The analyzer was set to trace average 100 traces in power averaging mode. The Power Spectral Density was measured and recorded for each condition.

Limit: The peak level measured must be no greater than +8 dBm.

Results: Passed

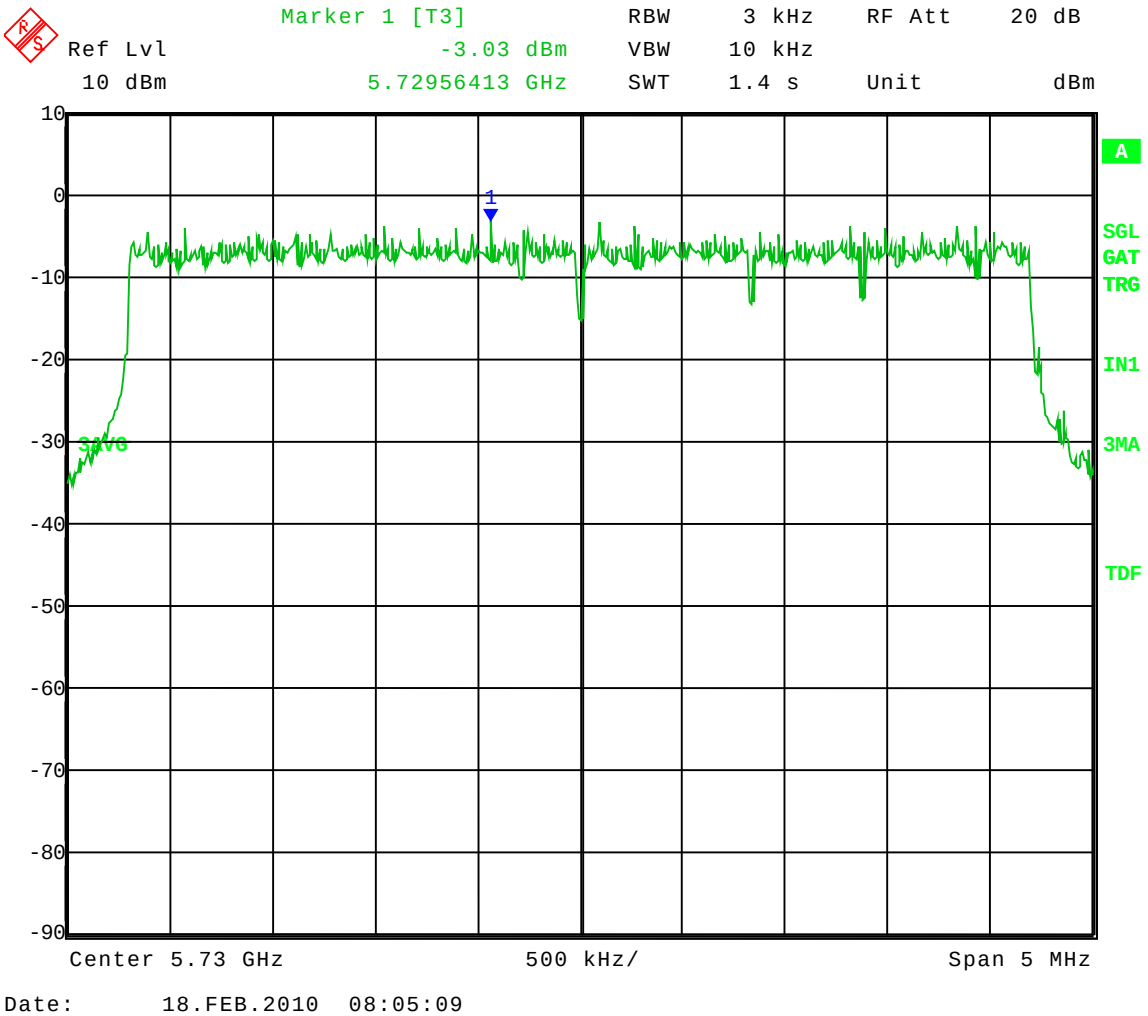
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Low Channel: Frequency – 5.730 GHz
Power setting: 5F
Modulation: 16QAM
Channel BW: 5 MHz

Limit: +8 dBm

Power Spectral Density = -3.03 dBm



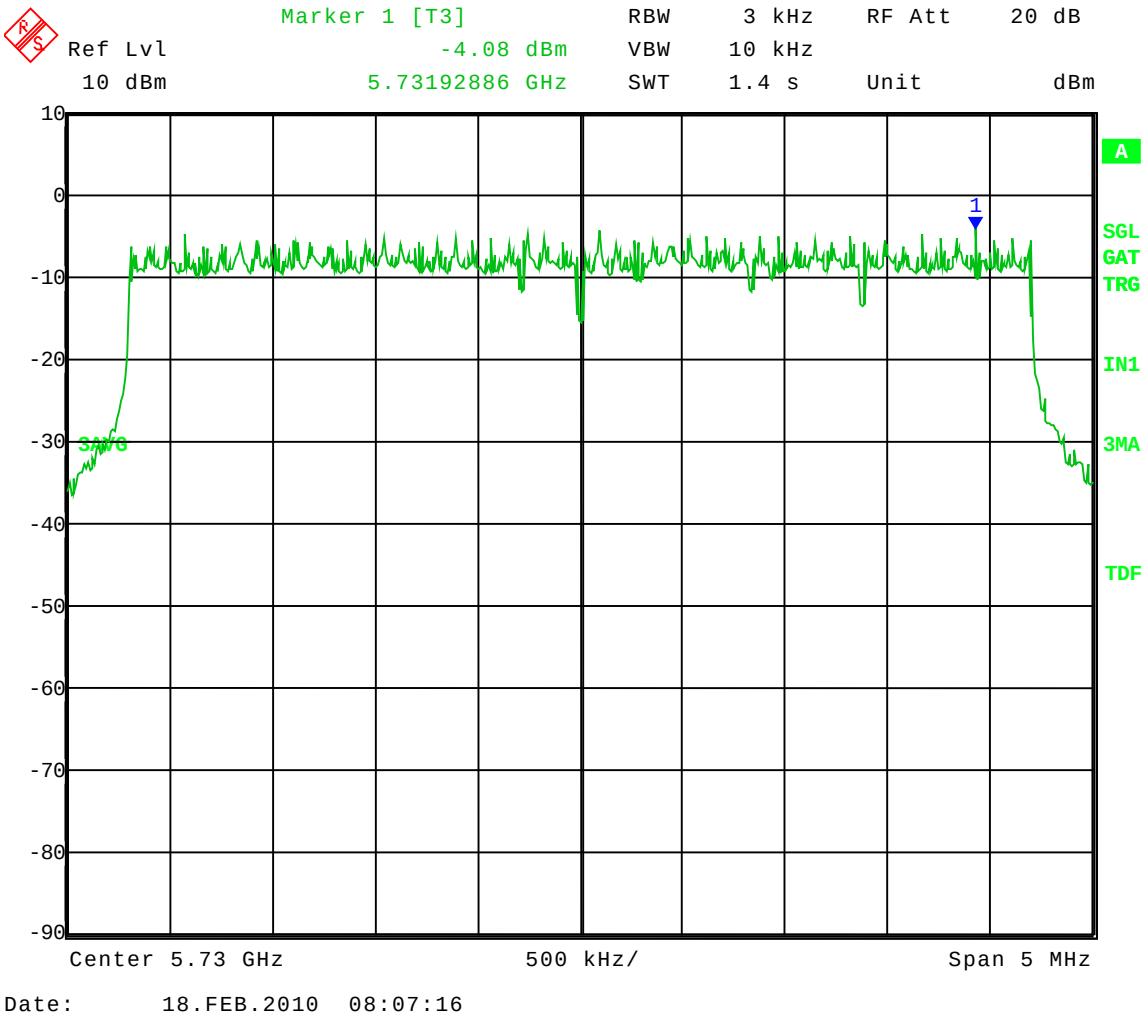
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Low Channel: Frequency – 5.730 GHz
Power setting: 5F
Modulation: 64QAM
Channel BW: 5 MHz

Limit: +8 dBm

Power Spectral Density = -4.08 dBm



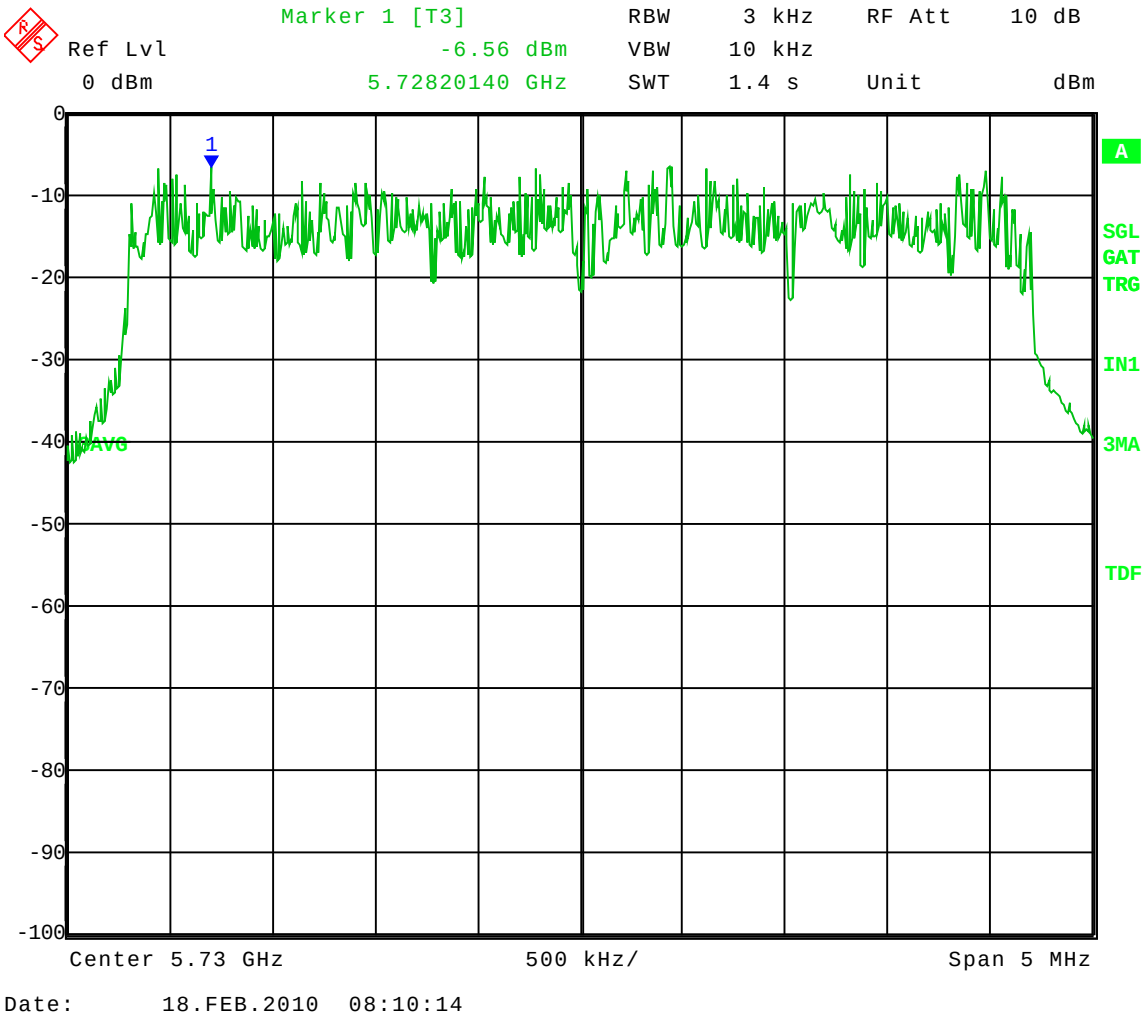
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Low Channel: Frequency – 5.730 GHz
Power setting: 53
Modulation: 256QAM
Channel BW: 5 MHz

Limit: +8 dBm

Power Spectral Density = -6.56 dBm



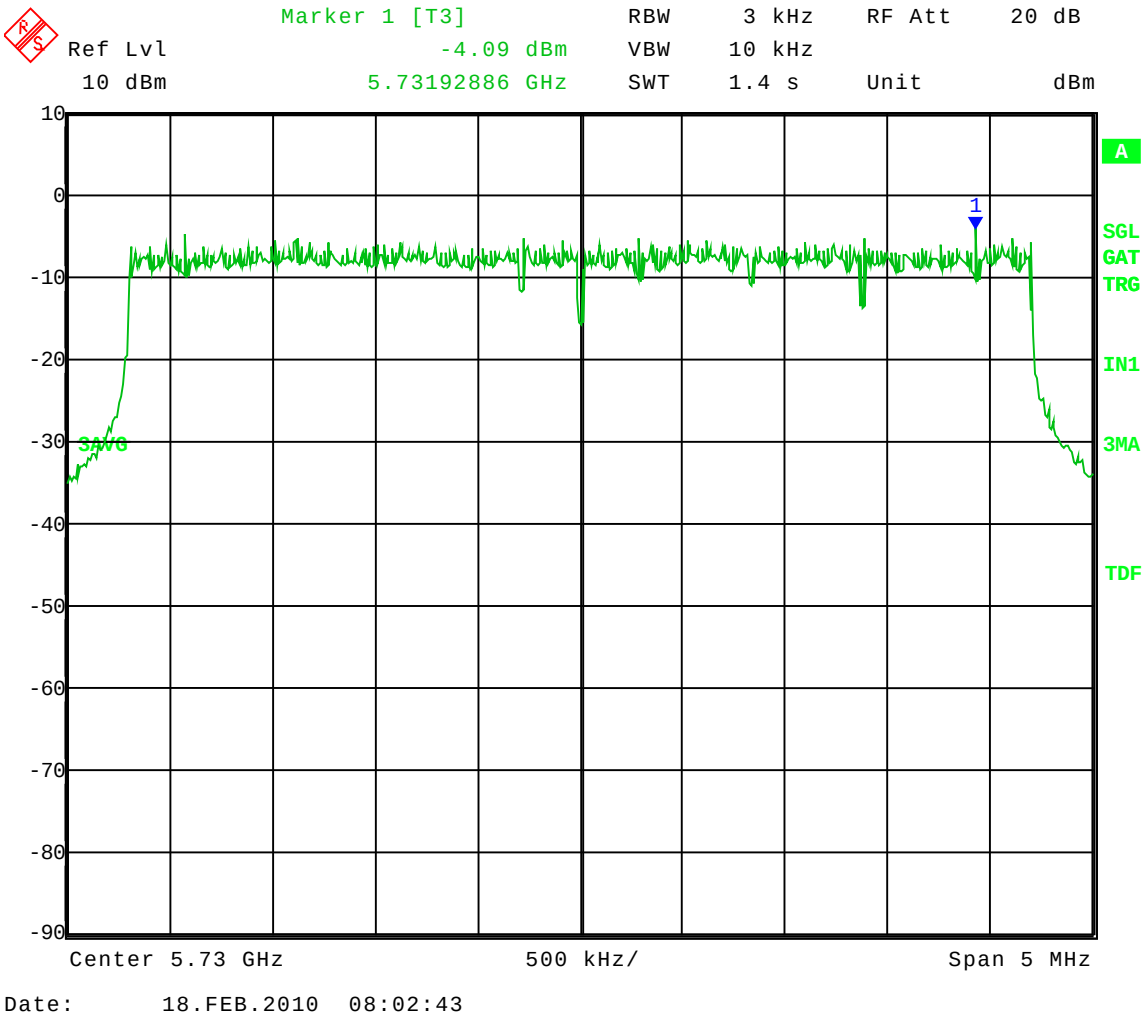
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Low Channel: Frequency – 5.730 GHz
Power setting: 5E
Modulation: QPSK
Channel BW: 5 MHz

Limit: +8 dBm

Power Spectral Density = -4.09 dBm



Date: 18.FEB.2010 08:02:43

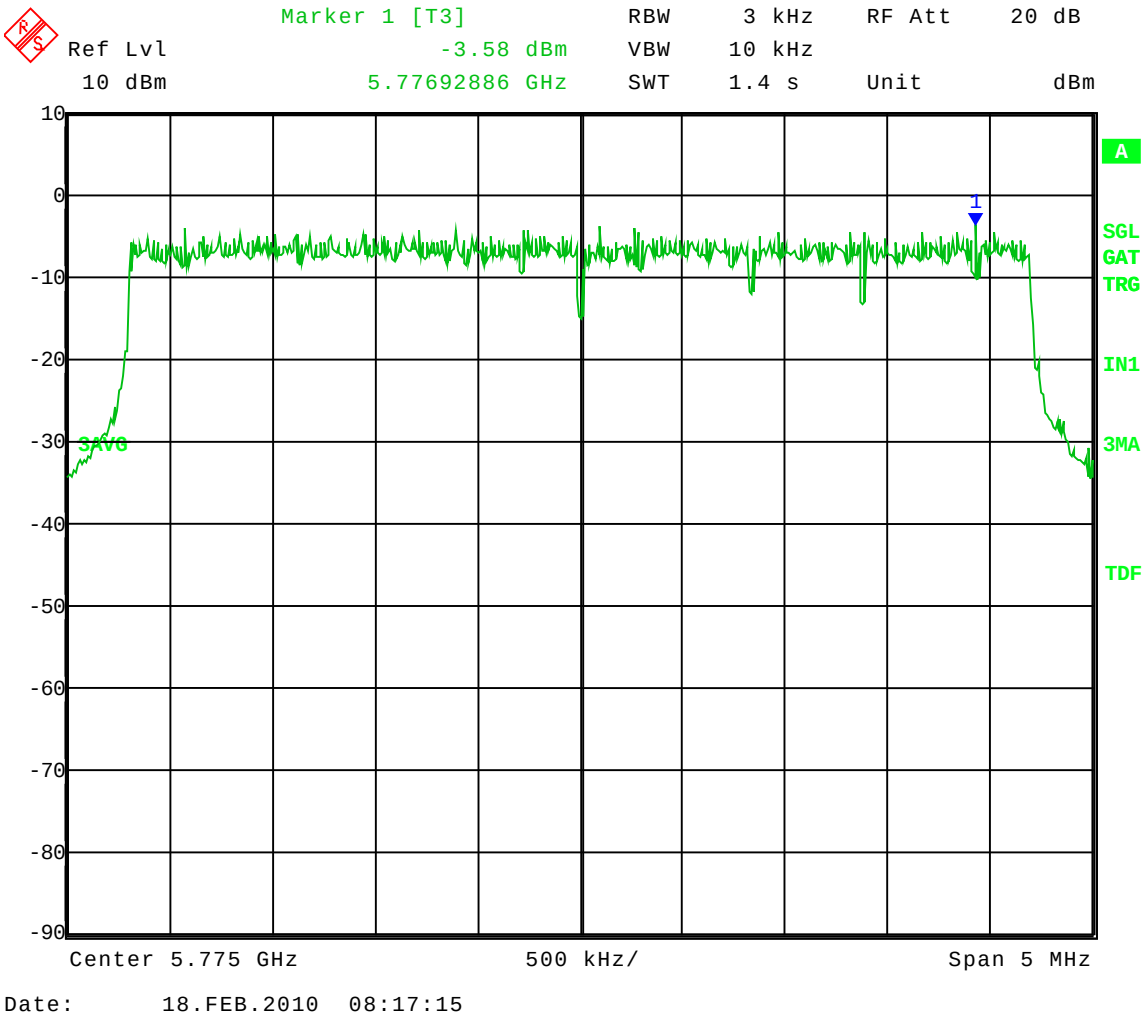
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 16QAM
Channel BW: 5 MHz

Limit: +8 dBm

Power Spectral Density = -3.58 dBm



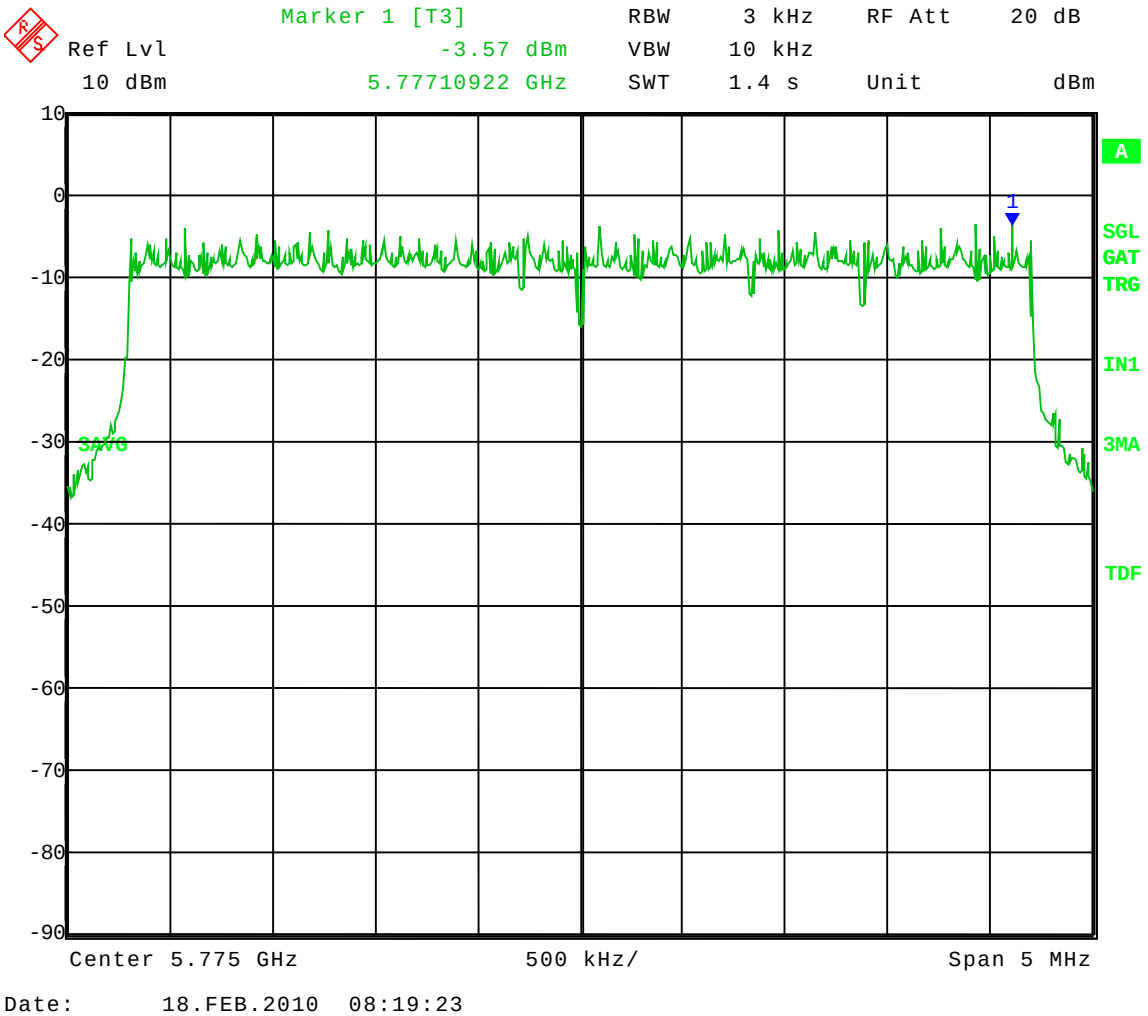
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 64QAM
Channel BW: 5 MHz

Limit: +8 dBm

Power Spectral Density = -3.57 dBm



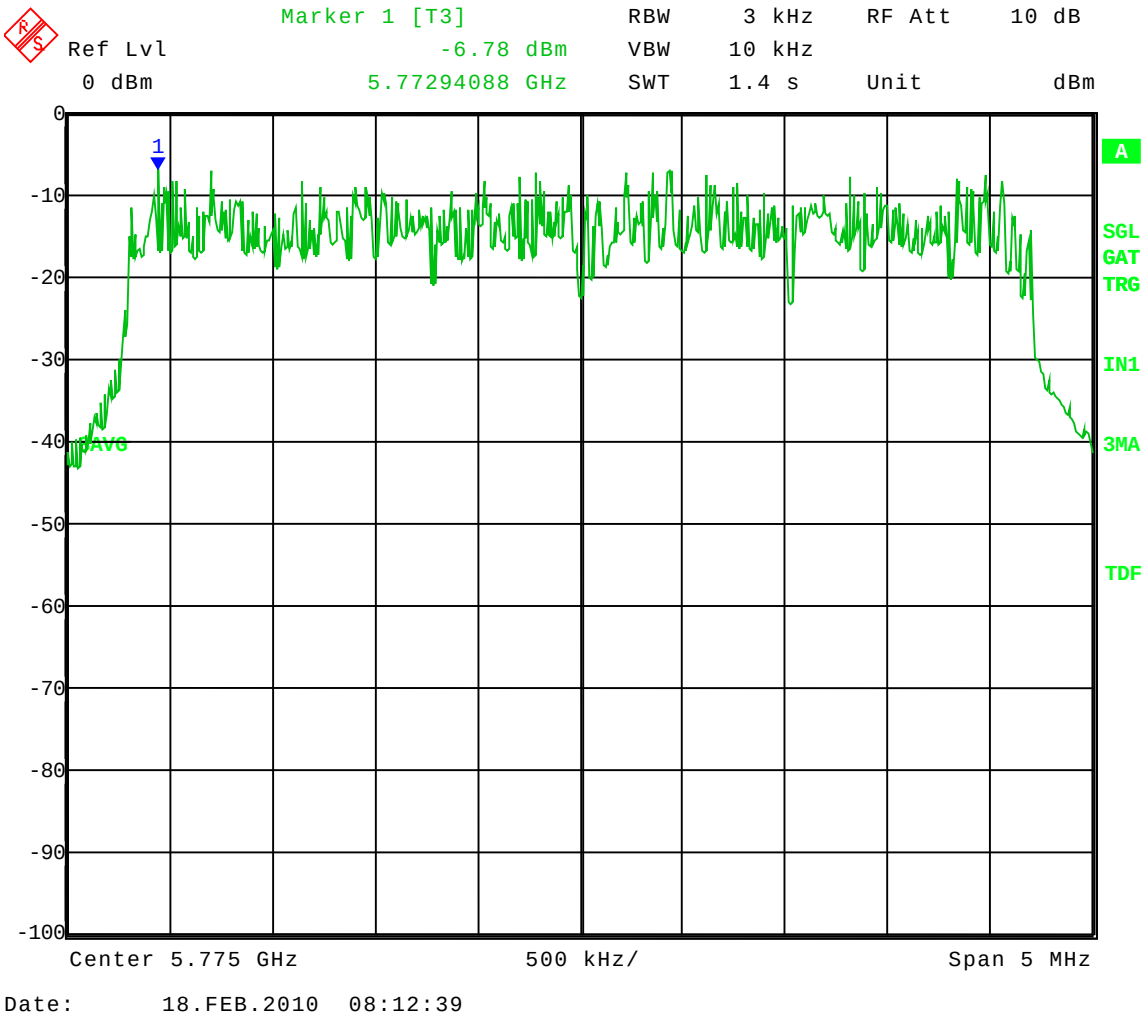
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Middle Channel: Frequency – 5.775 GHz
Power setting: 53
Modulation: 256QAM
Channel BW: 5 MHz

Limit: +8 dBm

Power Spectral Density = -6.78 dBm



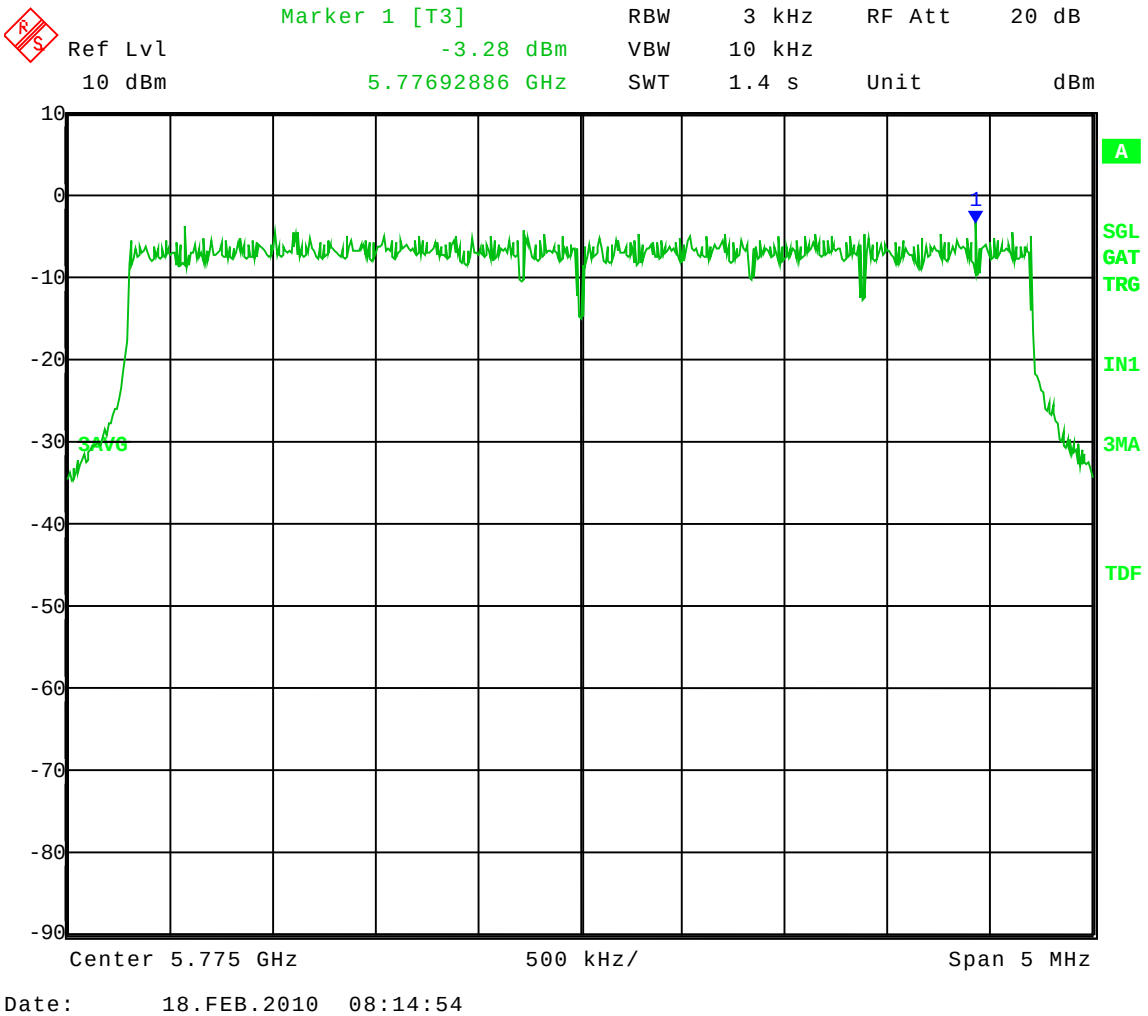
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: QPSK
Channel BW: 5 MHz

Limit: +8 dBm

Power Spectral Density = -3.28 dBm



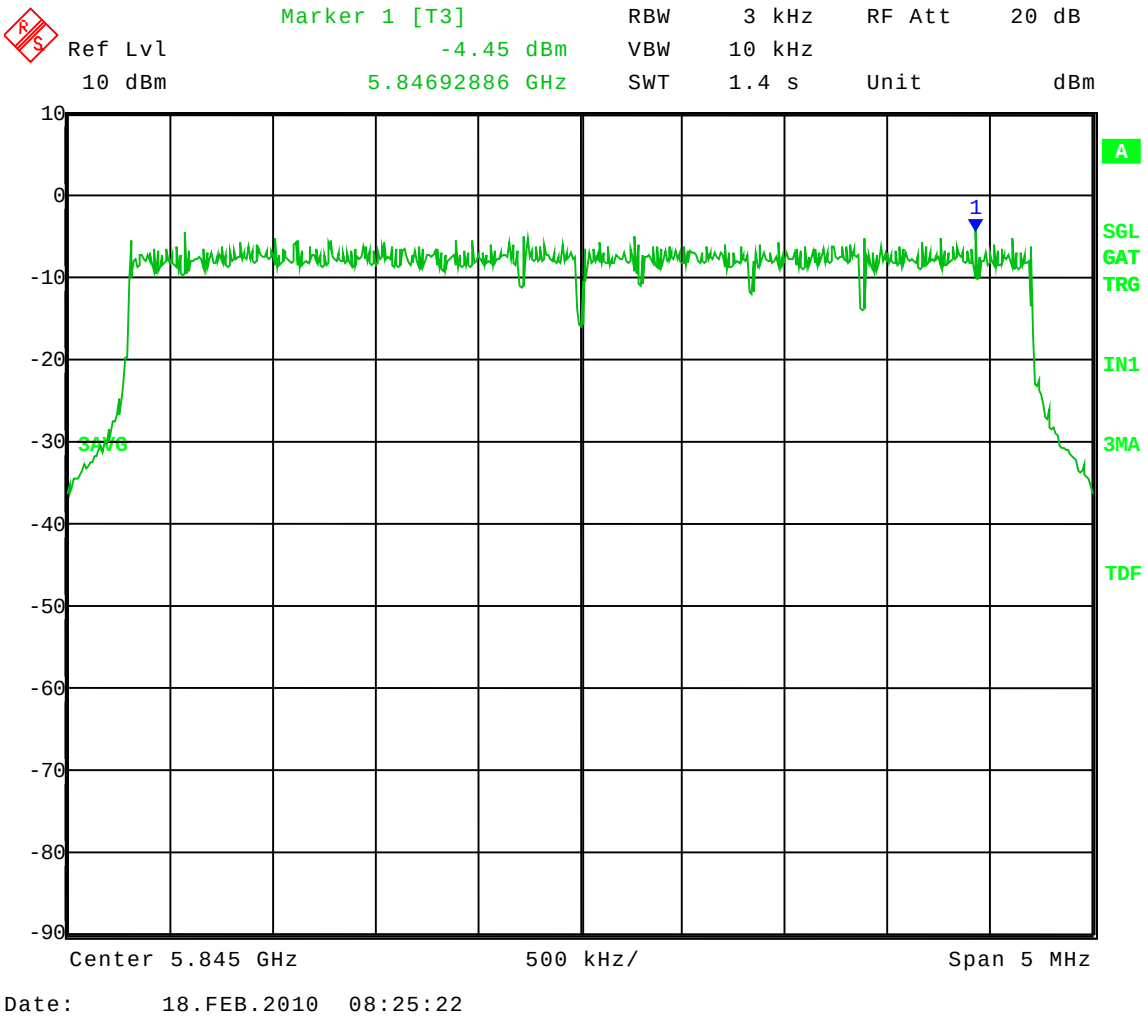
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
High Channel: Frequency – 5.845 GHz
Power setting: 62
Modulation: 16QAM
Channel BW: 5 MHz

Limit: +8 dBm

Power Spectral Density = -4.45 dBm



Date: 18.FEB.2010 08:25:22

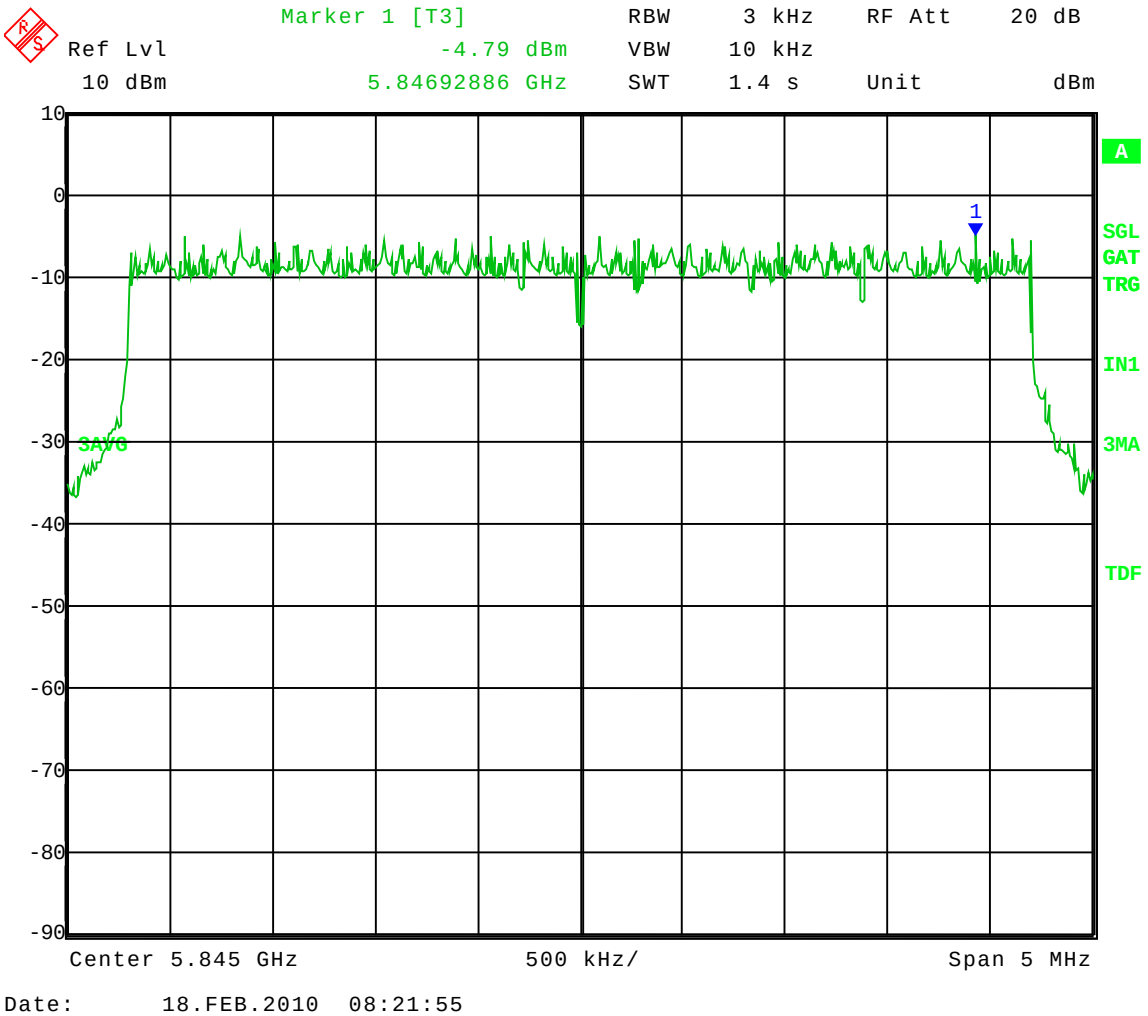
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
High Channel: Frequency – 5.845 GHz
Power setting: 62
Modulation: 64QAM
Channel BW: 5 MHz

Limit: +8 dBm

Power Spectral Density = -4.79 dBm



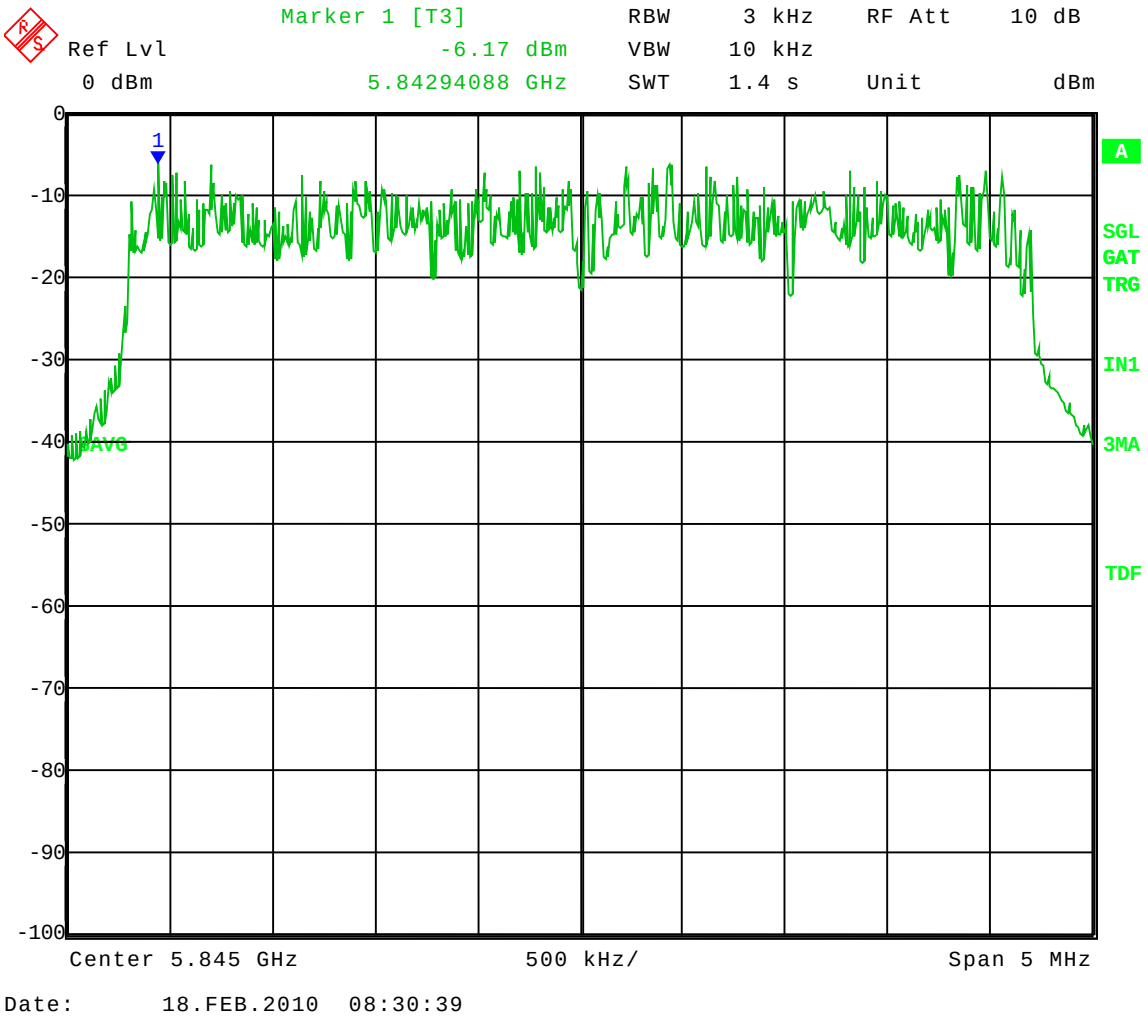
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
High Channel: Frequency – 5.845 GHz
Power setting: 58
Modulation: 256QAM
Channel BW: 5 MHz

Limit: +8 dBm

Power Spectral Density = -6.17 dBm



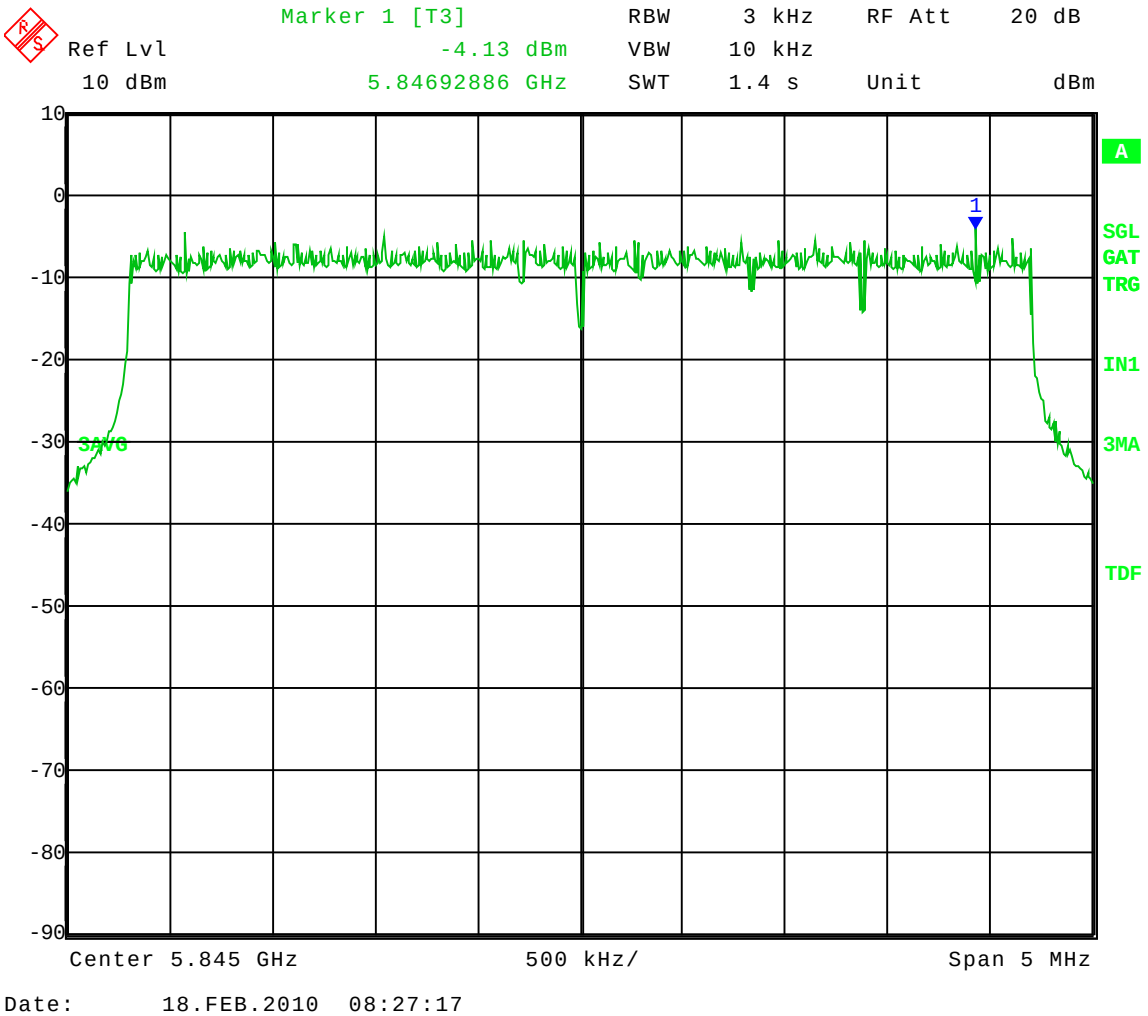
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
High Channel: Frequency – 5.845 GHz
Power setting: 62
Modulation: QPSK
Channel BW: 5 MHz

Limit: +8 dBm

Power Spectral Density = -4.13 dBm



1250 Peterson Dr., Wheeling, IL 60090

APPENDIX E

DATA AND GRAPHS

Part 15, Subpart C, Section 15.247 (a-h)

10 MHz Channel Bandwidth of EUT

1250 Peterson Dr., Wheeling, IL 60090

1.0 Test Run: Bandwidth

Rule Section: Section 15.247(a)(2)

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

Description: The EUT was set to transmit in continuous mode at the lowest, middle, and highest channel of operation. The channel bandwidth of the EUT was changed from 5 MHz to 10 MHz and 20 MHz, and the modulation of the EUT was changed from QPSK to 16-QAM, 64-QAM, and 256-QAM. The 6 dB bandwidth was measured and recorded for each condition. *Note: Since this testing was done for a Class II Permissive Change, and the 10 MHz channel bandwidth with QPSK, 16-QAM, and 64-QAM data is already in the original report, only the 256-QAM modulation was tested for the 10 MHz channel bandwidth condition.*

Limit: The 6 dB bandwidth must be greater than 500 kHz

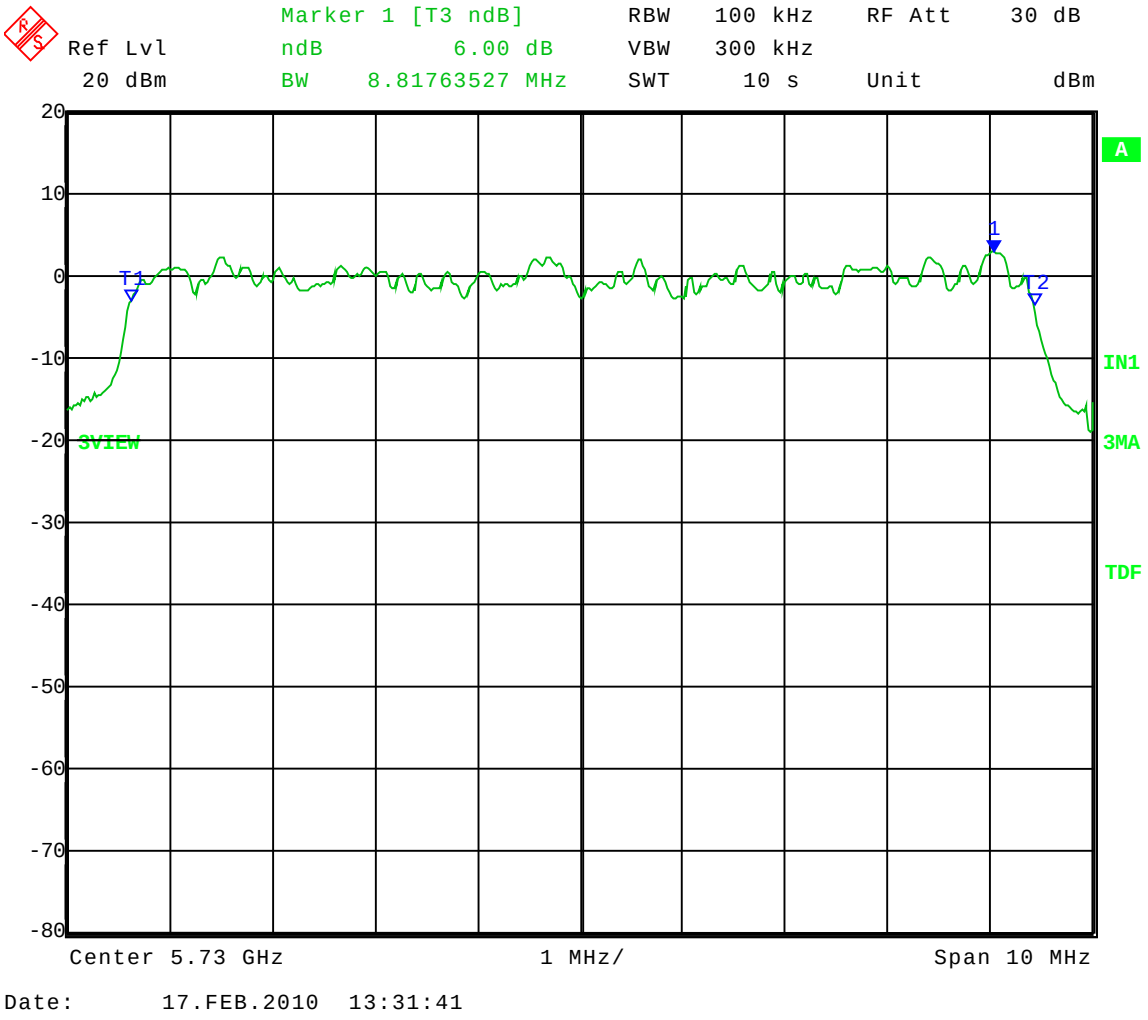
Results: Passed

1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Low Channel: Frequency – 5.730 GHz
Power setting: 4F
Modulation: 256QAM
Channel BW: 10 MHz

6 dB Bandwidth = 8.82 MHz

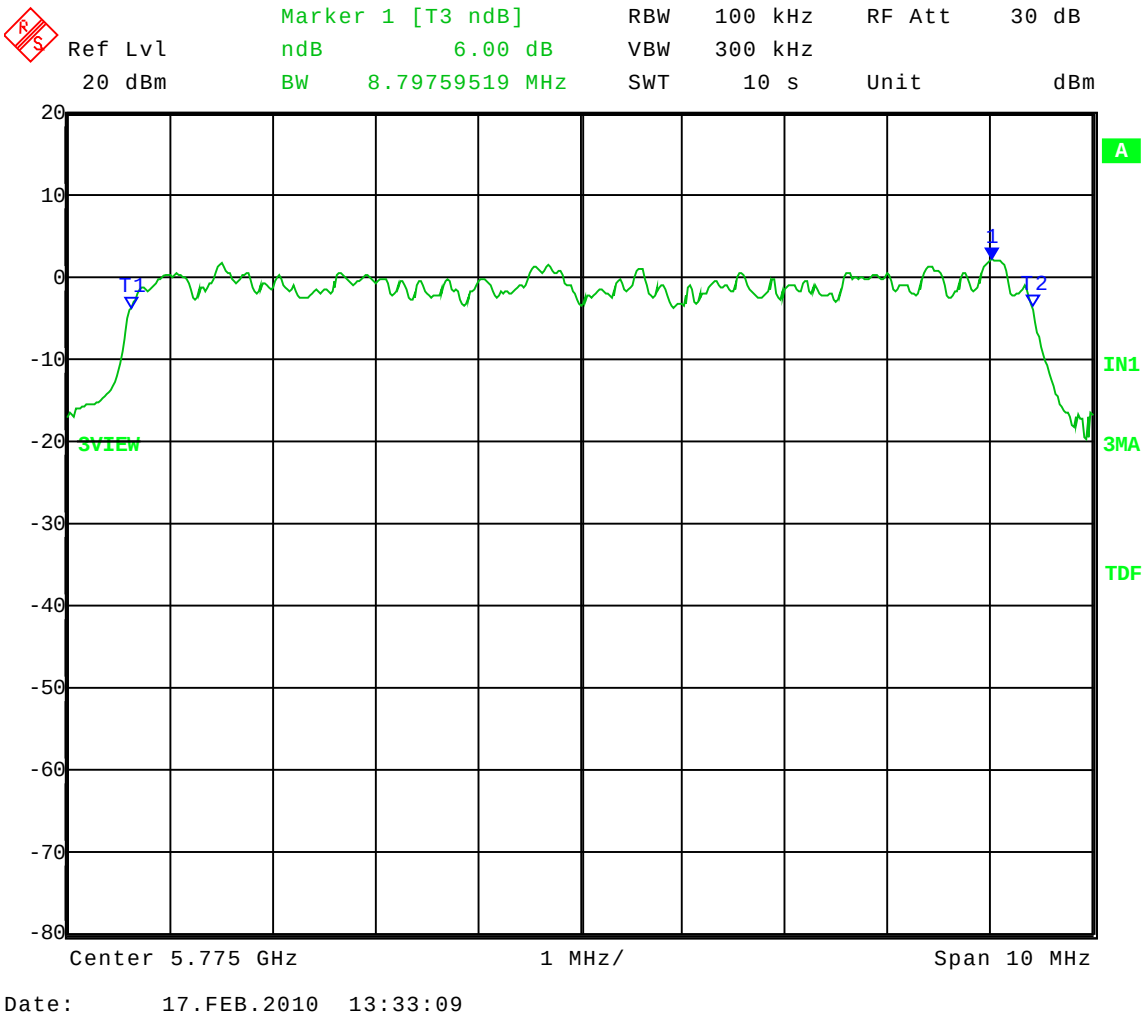


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Middle Channel: Frequency – 5.775 GHz
Power setting: 4F
Modulation: 256QAM
Channel BW: 10 MHz

6 dB Bandwidth = 8.80 MHz

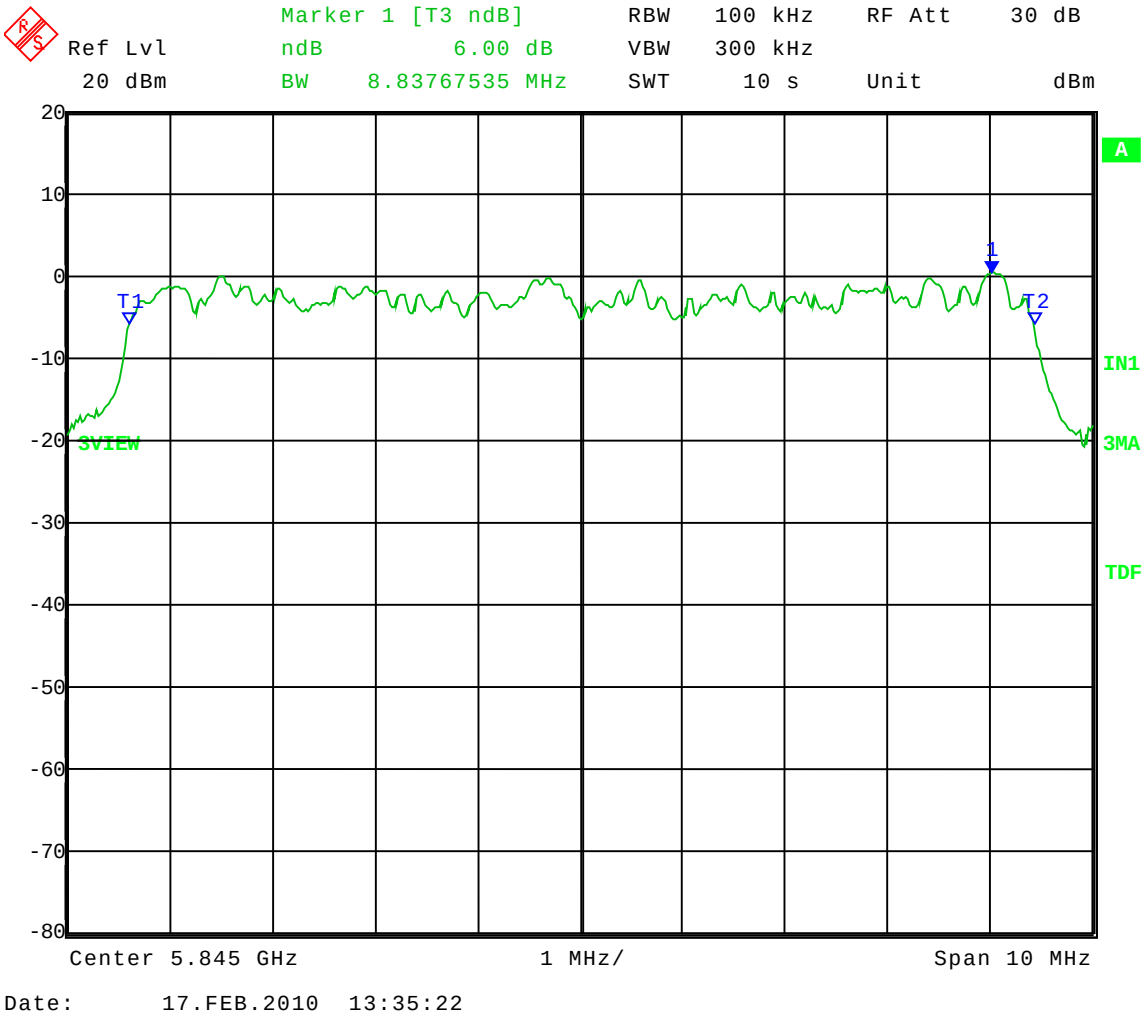


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

High Channel: Frequency – 5.845 GHz
Power setting: 4F
Modulation: 256QAM
Channel BW: 10 MHz

6 dB Bandwidth = 8.84 MHz



1250 Peterson Dr., Wheeling, IL 60090

2.0 Test Run: RF antenna conducted test – Band-edge compliance

Rule Section: Section 15.247(d) – Spurious emissions

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

Description: The EUT was set to transmit in continuous mode at the lowest, middle, and highest channel of operation. The channel bandwidth of the EUT was changed from 5 MHz to 10 MHz and 20 MHz, and the modulation of the EUT was changed from QPSK to 16-QAM, 64-QAM, and 256-QAM. A measurement of the emission at the edge of the authorized operating band was made for each of the above conditions. *Note: Since this testing was done for a Class II Permissive Change, and the 10 MHz band-edge data is already in the original report, only the 256-QAM modulation was tested for the 10 MHz channel bandwidth condition.*

Limit: This device complies with the use of power option 2. Therefore, the emission level at the edge of the authorized operating band must be at least 30 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

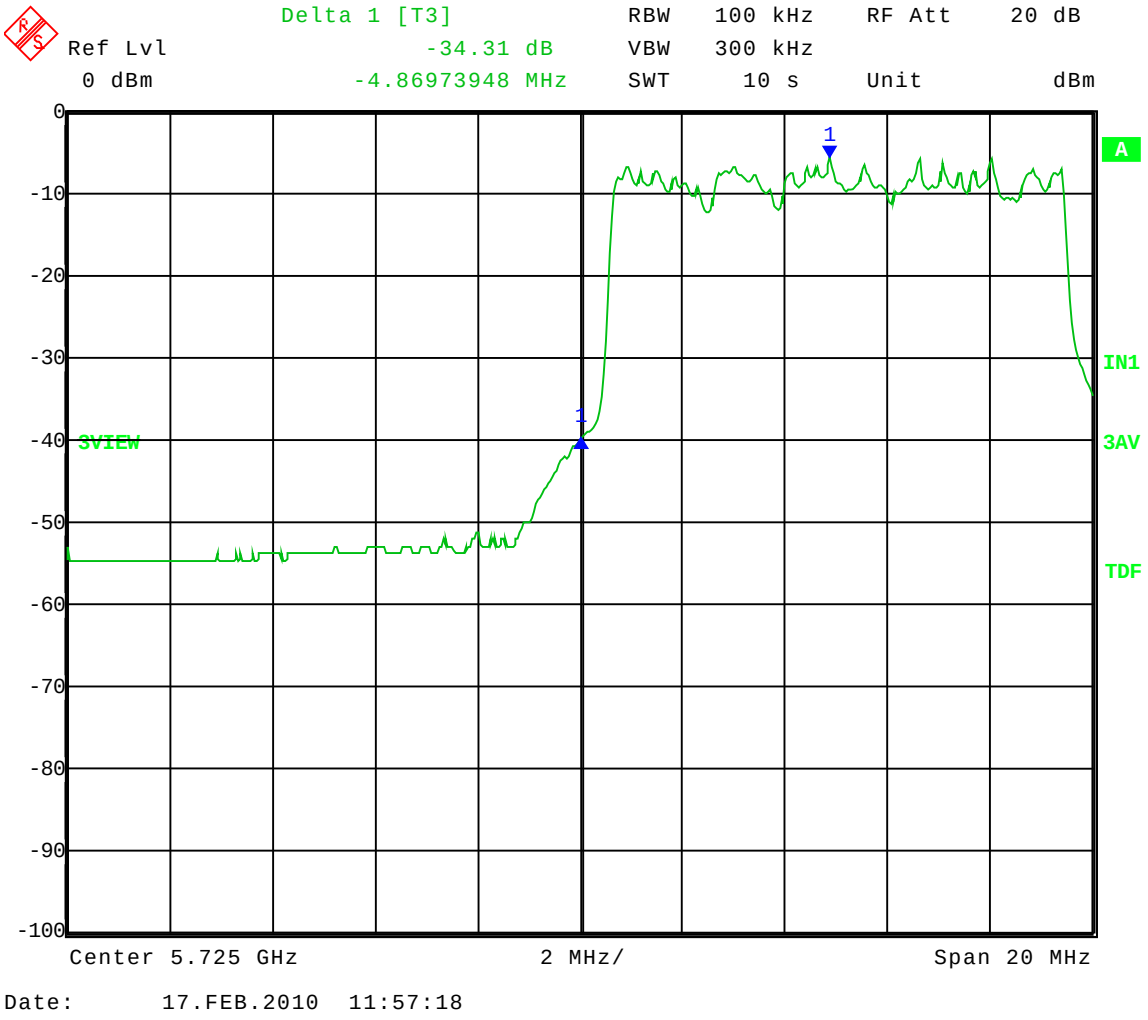
Results: Passed

1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Lower Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.725 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

Low Channel: Frequency – 5.730 GHz
Power setting: 4F
Modulation: 256QAM
Channel BW: 10 MHz

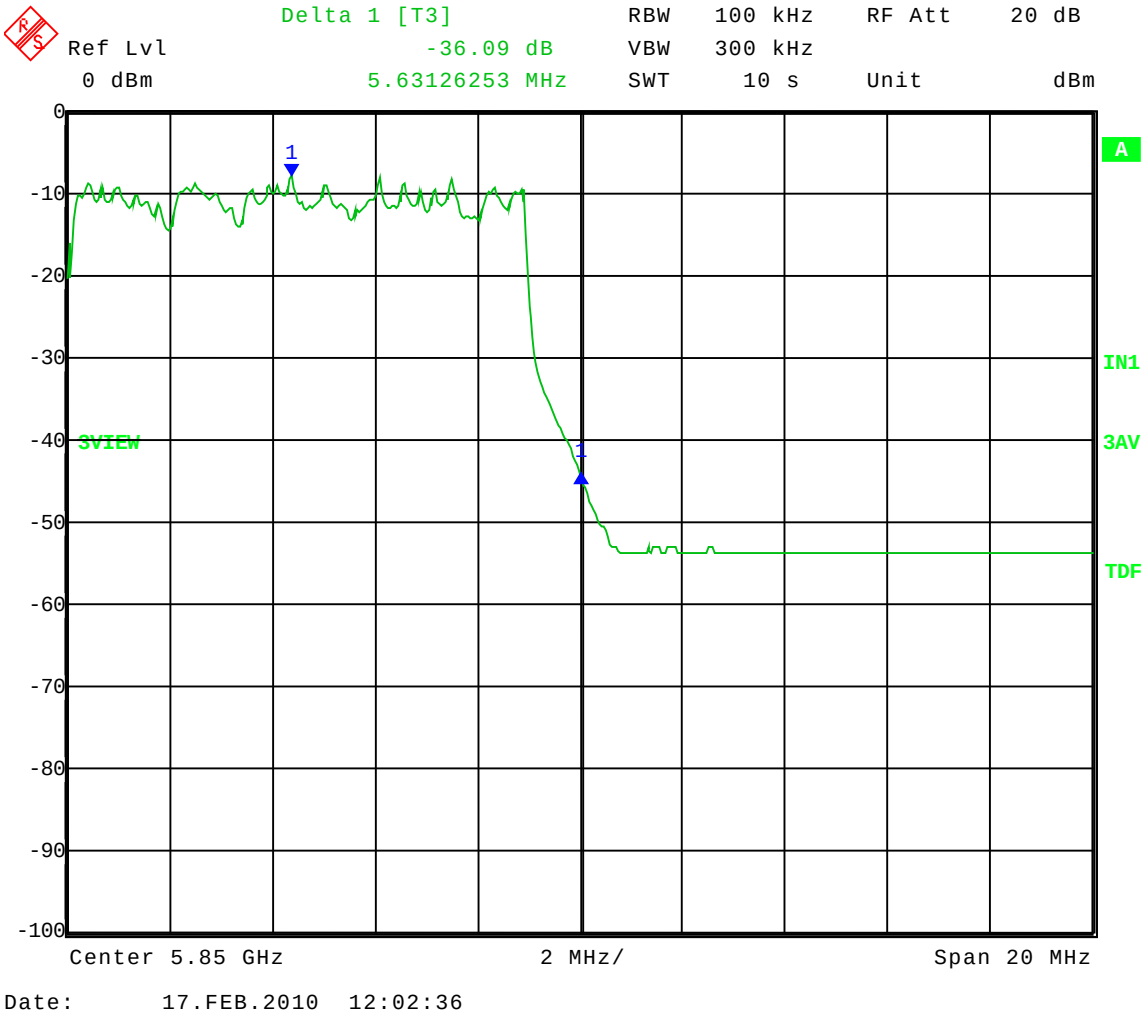


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Upper Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.850 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

High Channel: Frequency – 5.845 GHz
Power setting: 4F
Modulation: 256QAM
Channel BW: 10 MHz



1250 Peterson Dr., Wheeling, IL 60090

3.0 Test Run: Power Output

Rule Section: Section 15.247(b)(3)

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

- Power Output Option 2 -
- Method #2 -

Description: The pulse duration "T" measured 4.9 ms. With the RBW set to 1 MHz and the span set to equal the EBW, the Auto-sweep time on the analyzer was 5 ms. Since the sweep time is greater than "T", and the EBW is equal to the largest available on the spectrum analyzer, Method 2 was used.

The center frequency was set to the midpoint of the signal in zero span mode. The RBW was set to equal the EBW. The VBW was set to the spectrum analyzers maximum value, which is equal to the RBW. The sweep time was set to "T" (the analyzer rounded this setting to 5 ms). The detector was set to Sample mode. A video trigger was set to trigger only on full power pulses. 100 traces were trace-averaged in power averaging mode. The highest peak marked on the trace is recorded as the output power.

Measurements were taken at the lowest, middle, and highest channels of operation.

Note: Since this testing was done for a Class II Permissive Change, and the 10 MHz channel bandwidth with QPSK, 16-QAM, and 64-QAM data is already in the original report, only the 256-QAM modulation was tested for the 10 MHz channel bandwidth condition.

Limit: The level measured must be no greater than what is listed on the original grant of certification.

Results: Passed

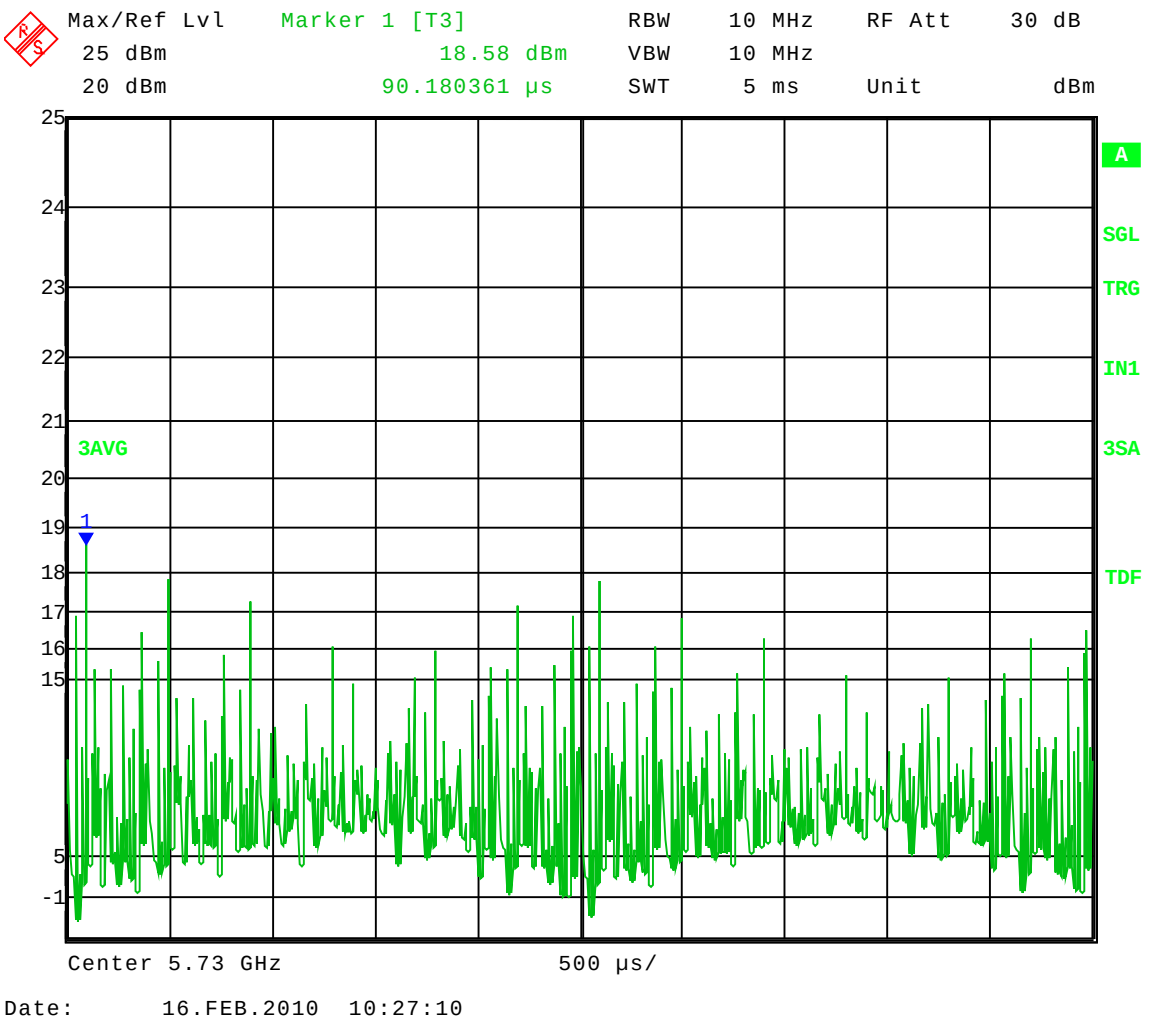
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Power setting: 4F
Modulation: 256QAM
Channel BW: 10 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 18.58 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **19.58 dBm = 90.78 mW**



Date: 16.FEB.2010 10:27:10

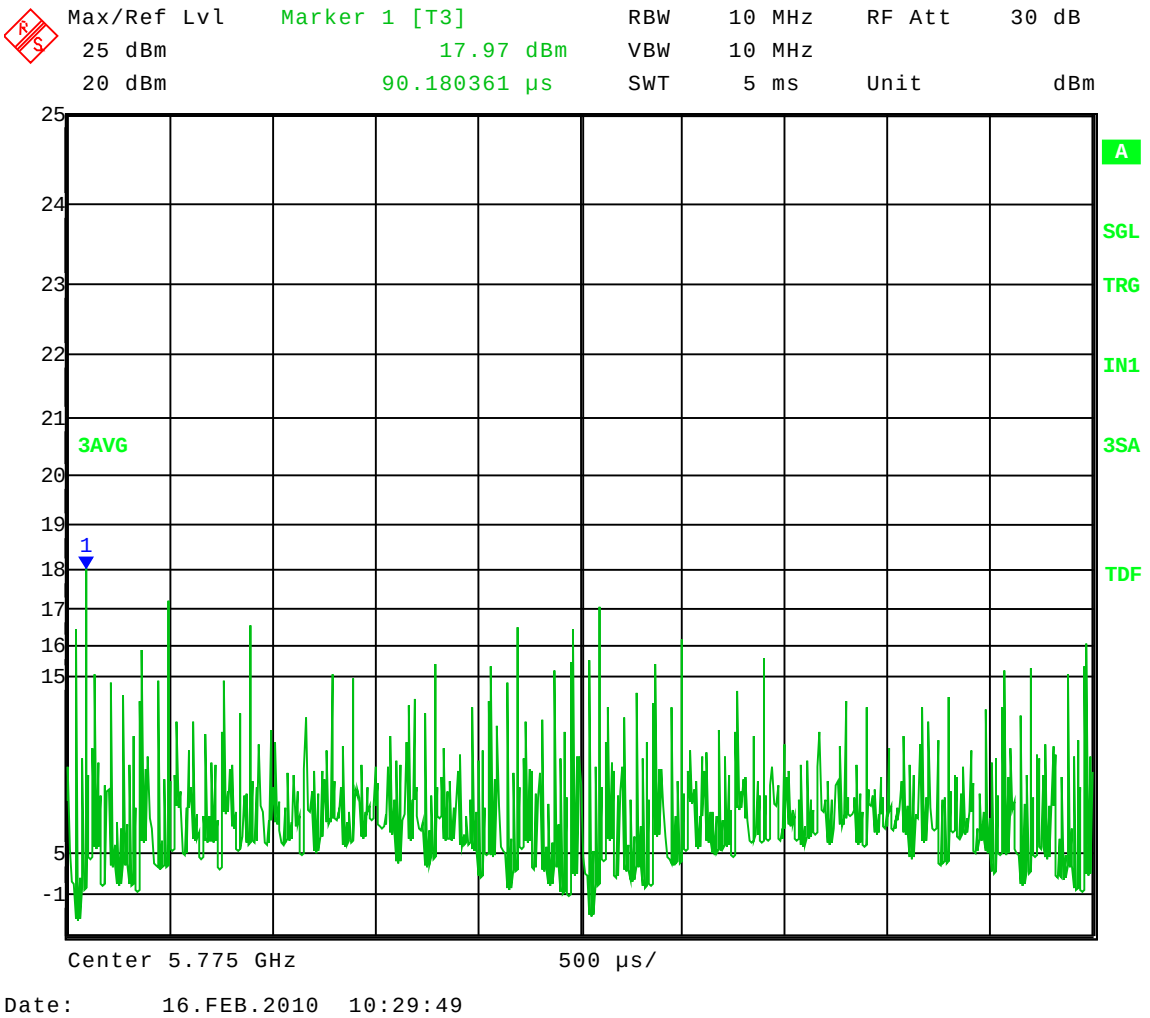
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Power setting: 4F
Modulation: 256QAM
Channel BW: 10 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 17.97 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **18.97 dBm = 78.89 mW**



Date: 16.FEB.2010 10:29:49

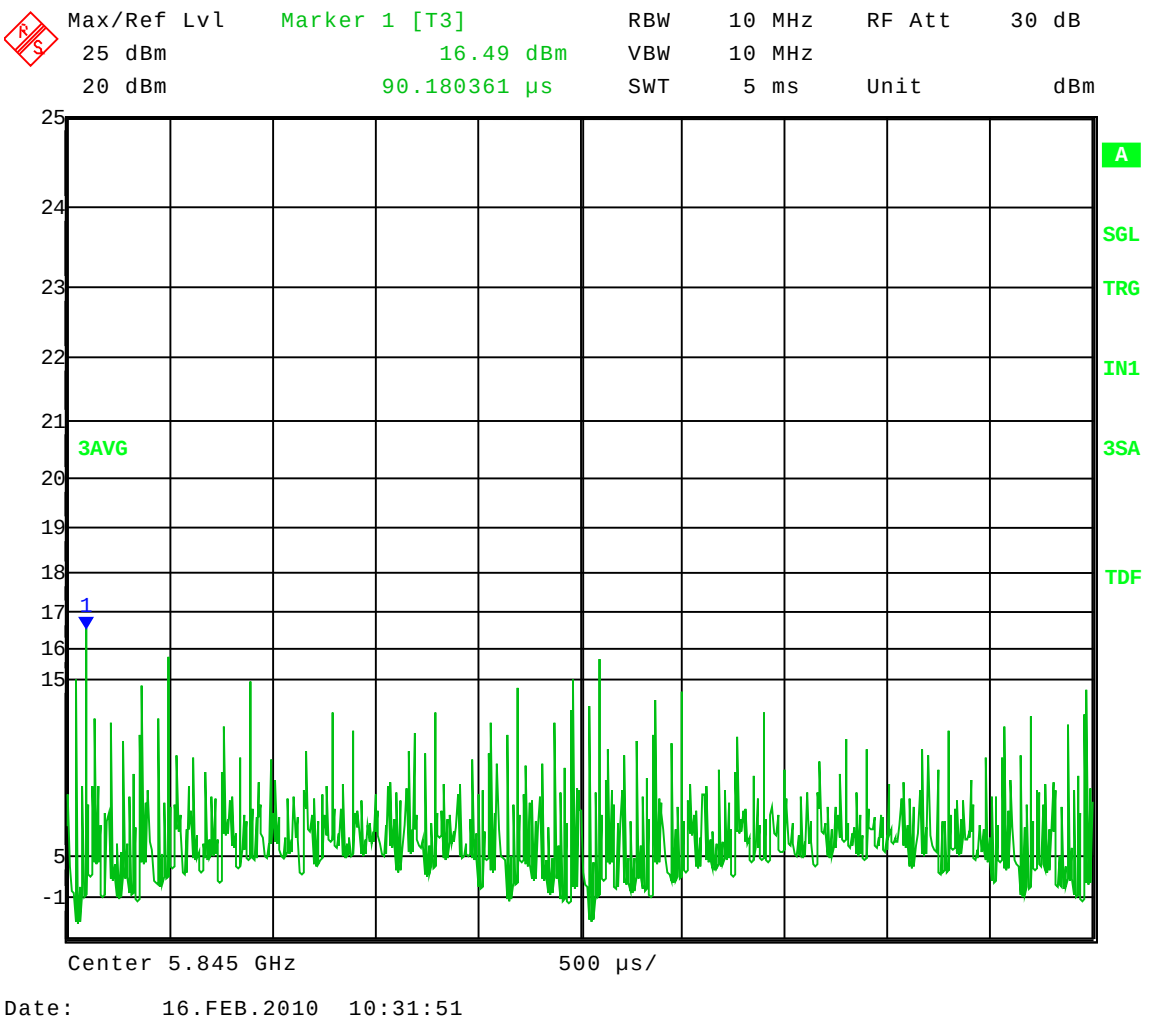
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Power setting: 4F
Modulation: 256QAM
Channel BW: 10 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power = 16.49 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **17.49 dBm = 56.10 mW**



1250 Peterson Dr., Wheeling, IL 60090

4.0 Test Run: RF antenna conducted test

Rule Section: Section 15.247(d) – Spurious emissions

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

Description: The EUT was set to transmit in continuous mode.
Measurements were taken for QPSK, 16-QAM, 64-QAM, and 256-QAM modulation types, and at the lowest, middle, and highest channels of operation. Measurements were taken for the 5 MHz, 10 MHz, and 20 MHz channel bandwidth settings.

Note: Since this testing was done for a Class II Permissive Change, and the 10 MHz channel bandwidth with QPSK, 16-QAM, and 64-QAM data is already in the original report, only the 256-QAM modulation was tested for the 10 MHz channel bandwidth condition.

Limit: This device complies with the use of power option 2. Therefore, all harmonics/spurs must be at least 30 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

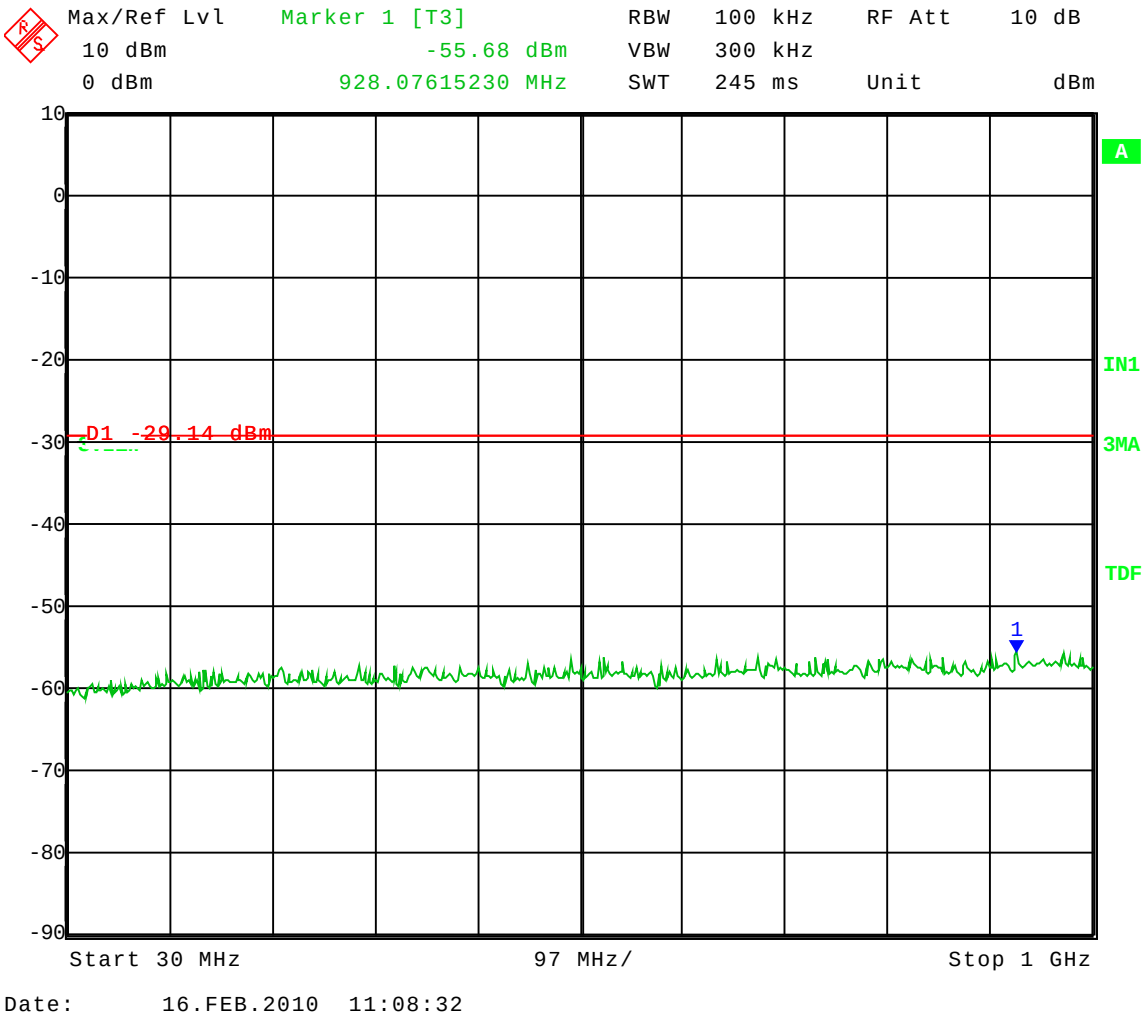
Results: Passed

1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 30 to 1000 MHz
Limit = -29.14 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)



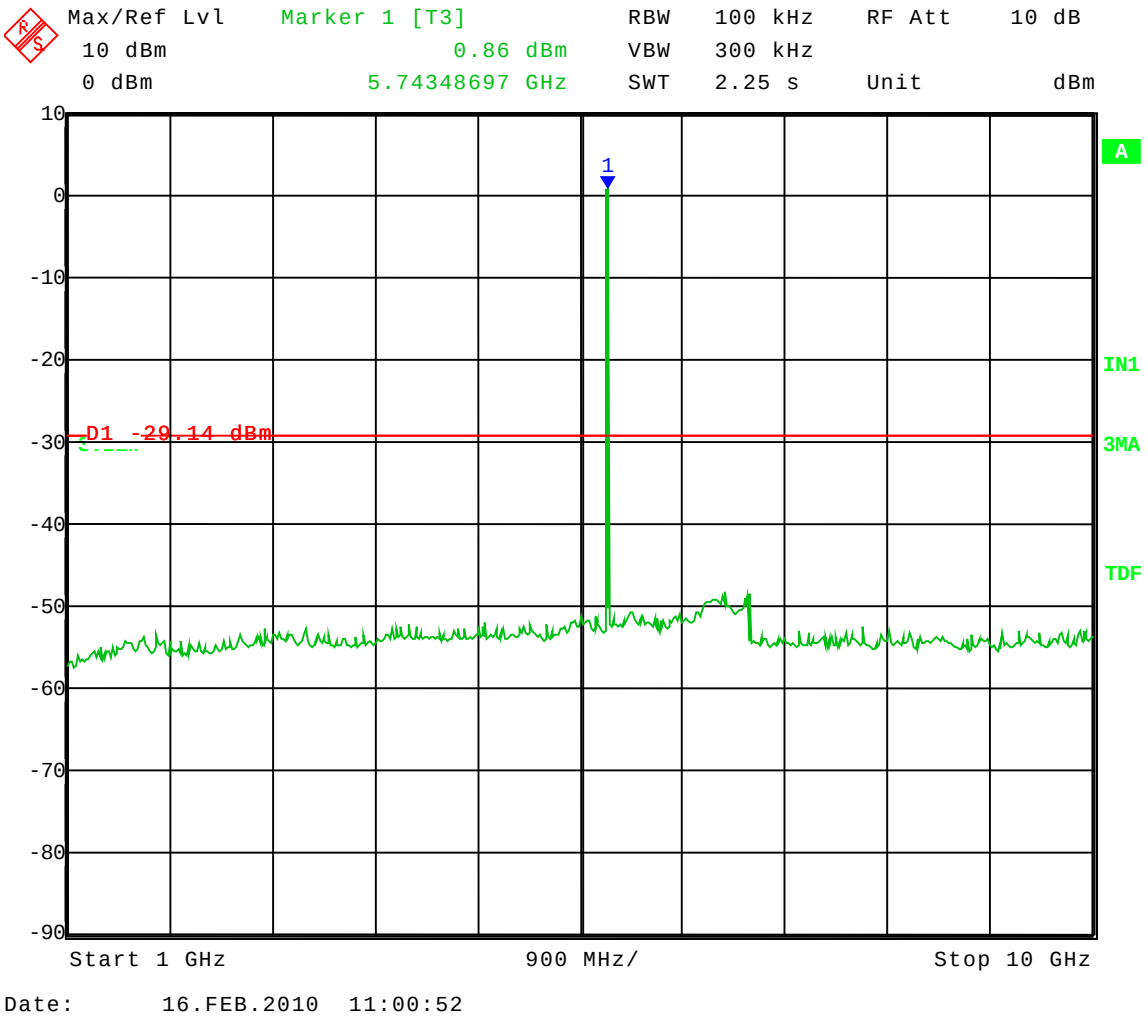
Date: 16.FEB.2010 11:08:32

1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 1 to 10 GHz
Limit = -29.14 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

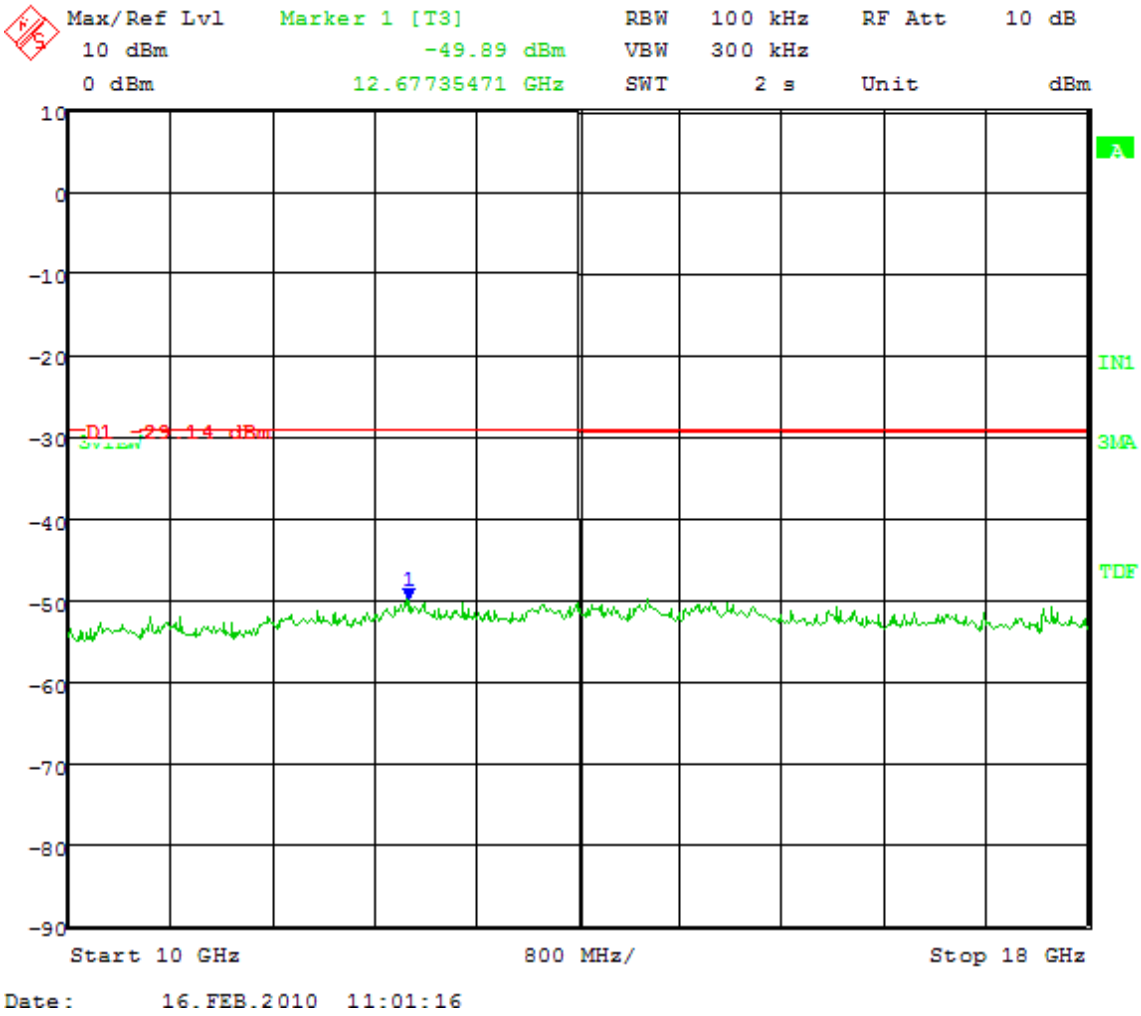


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 10 to 18 GHz
Limit = -29.14 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

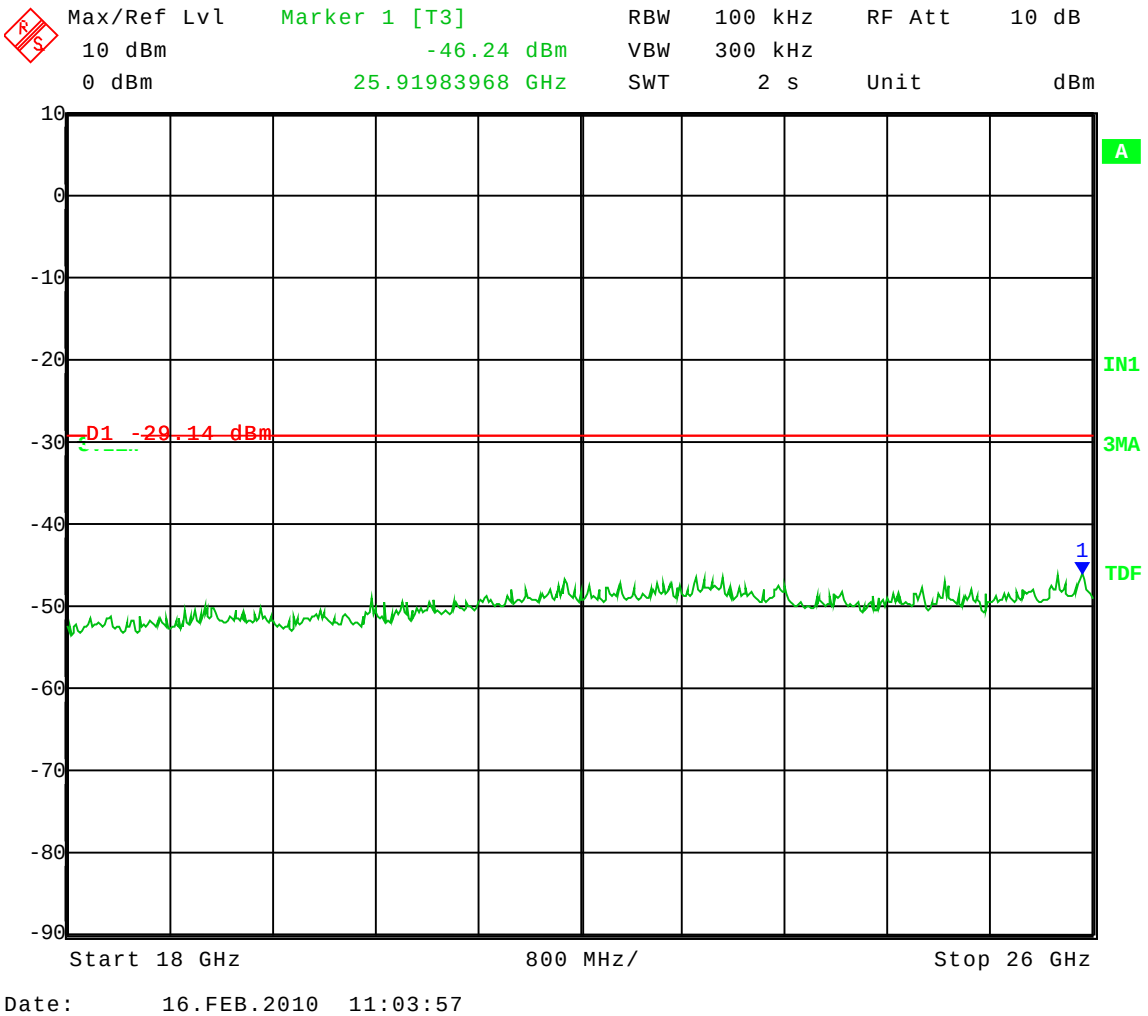


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 18 to 26 GHz
Limit = -29.14 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

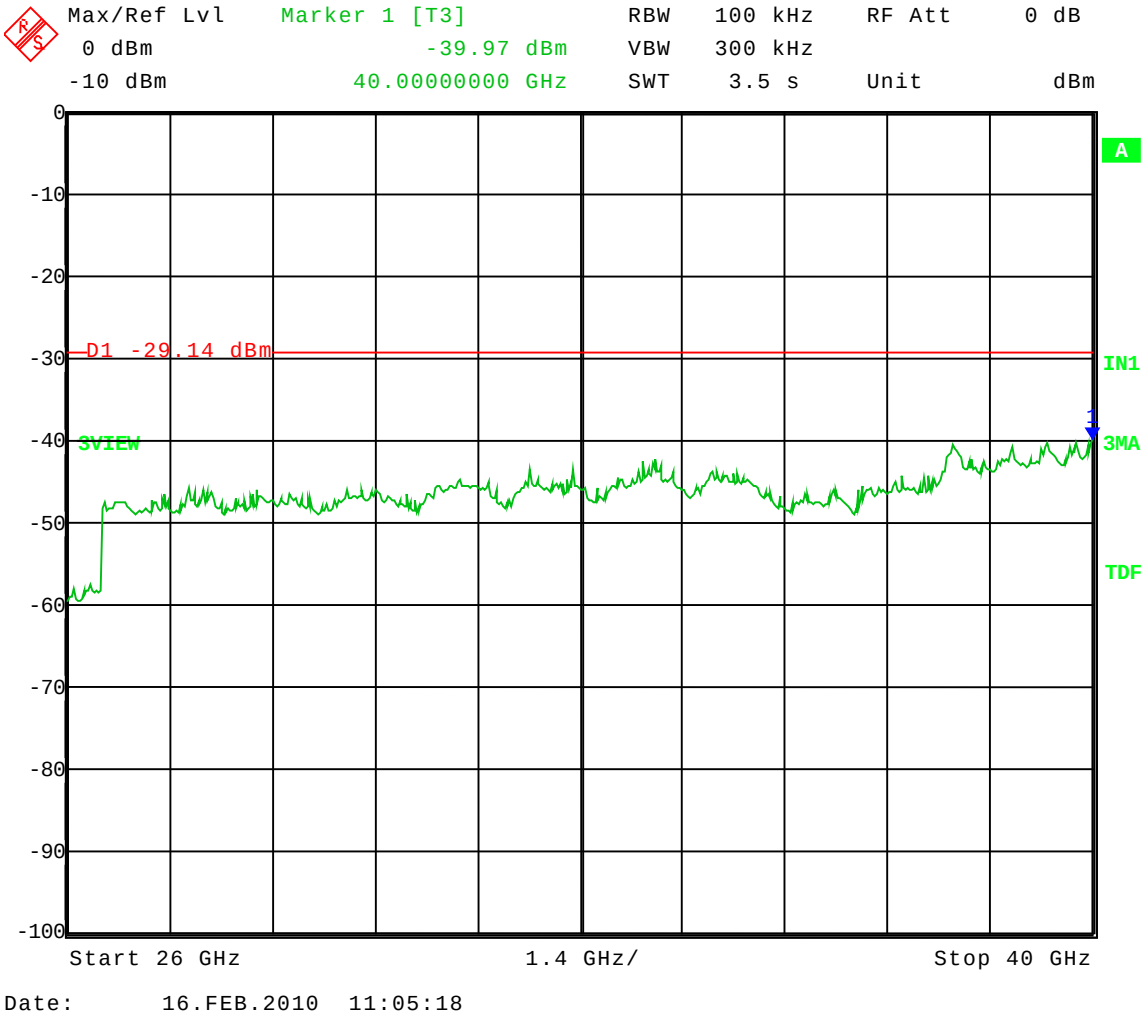


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.730 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 26 to 40 GHz
Limit = -29.14 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

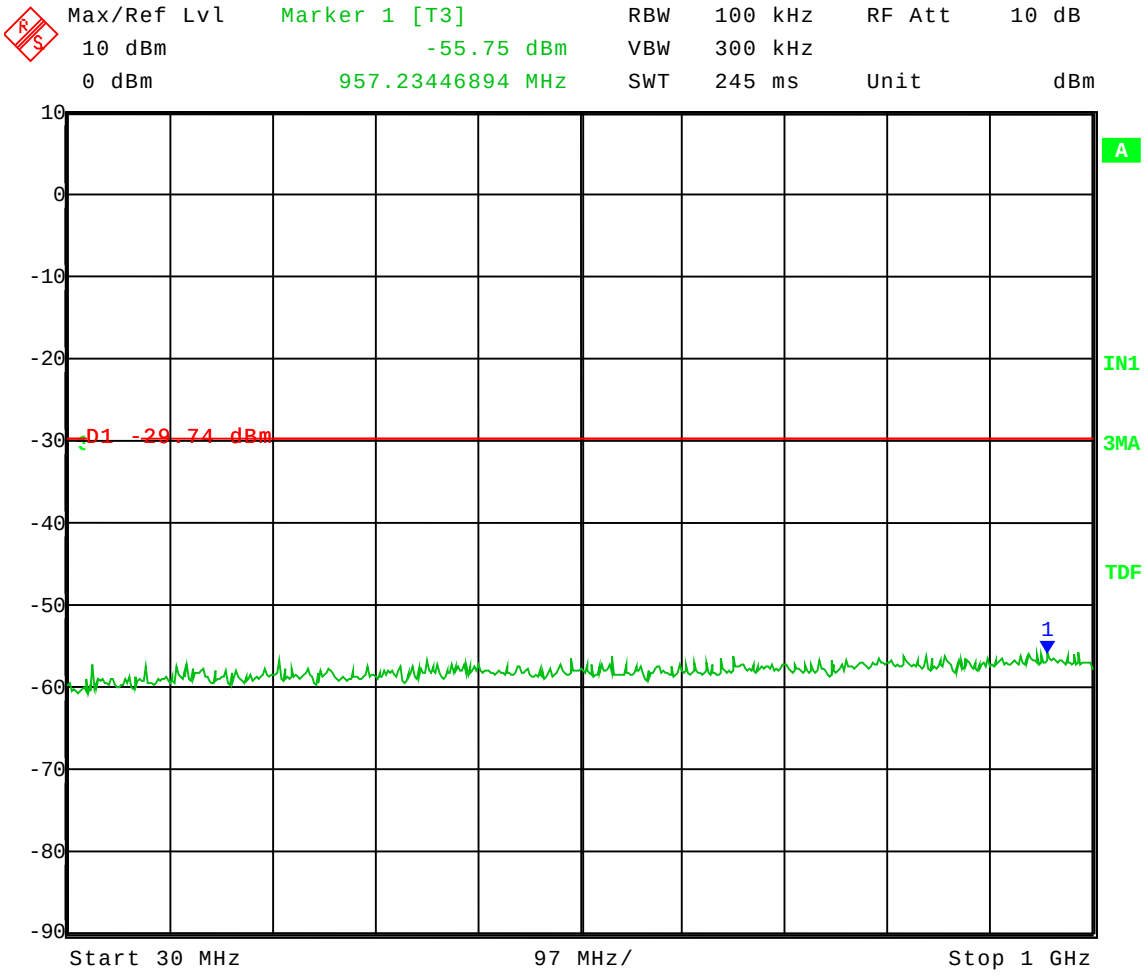


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 30 to 1000 MHz
Limit = -29.74 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)



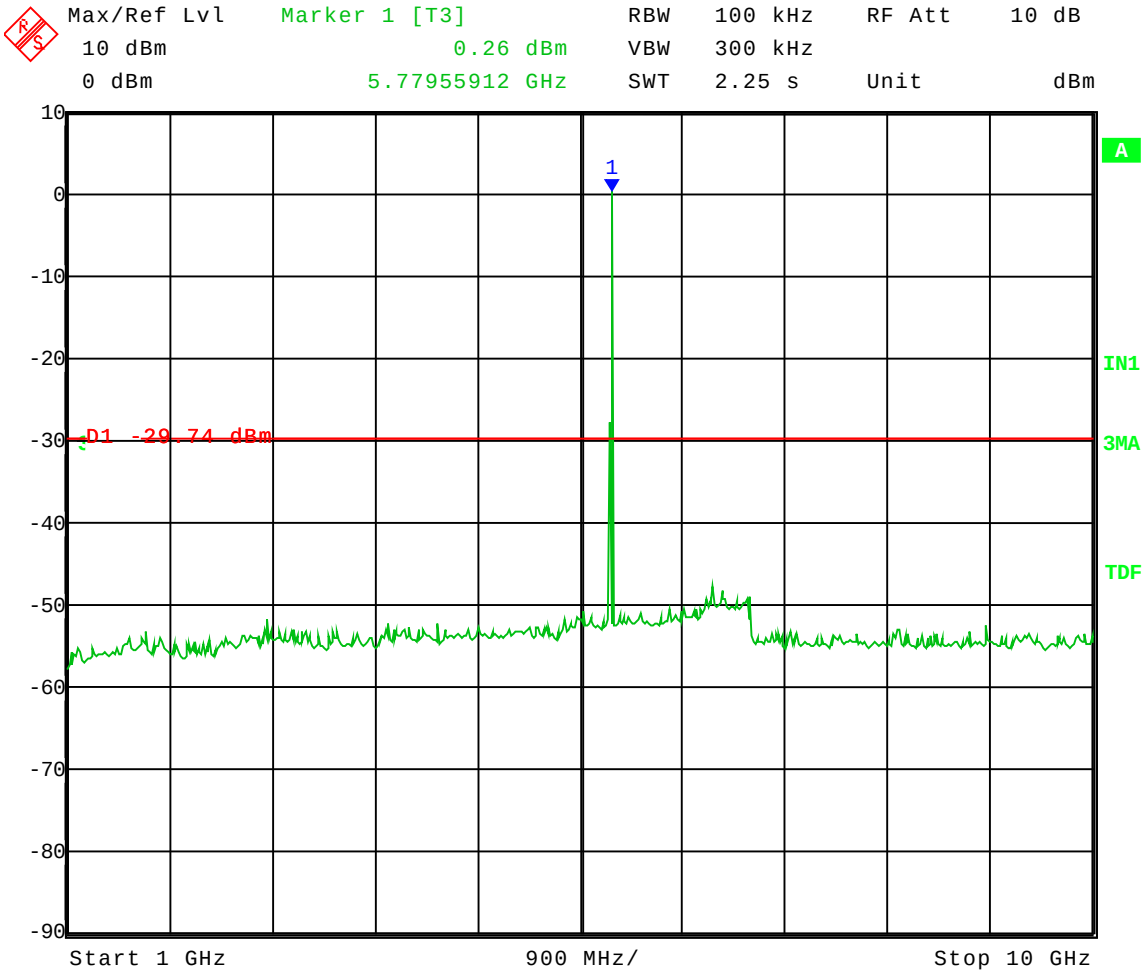
Date: 16.FEB.2010 11:19:32

1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 1 to 10 GHz
Limit = -29.74 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

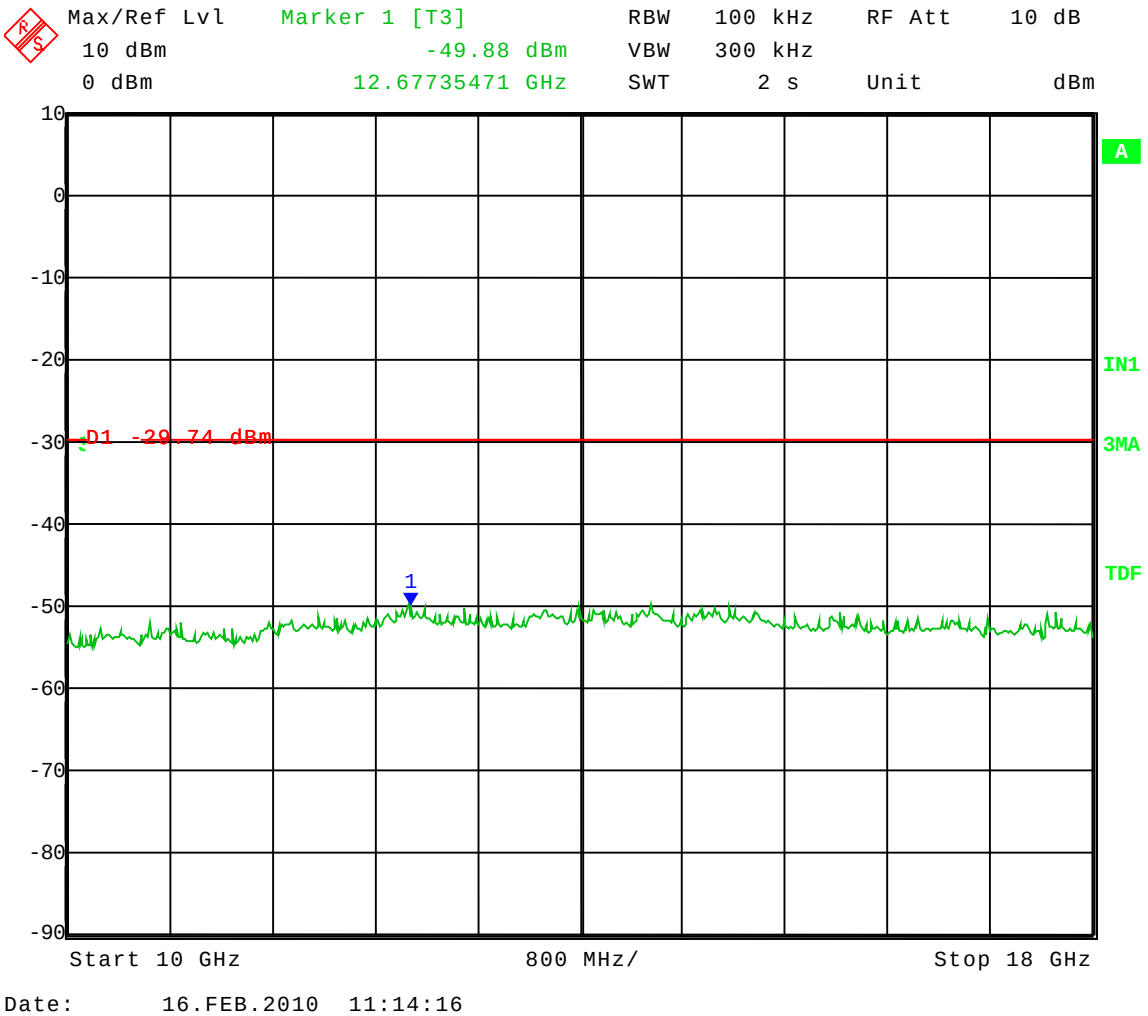


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 10 to 18 GHz
Limit = -29.74 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

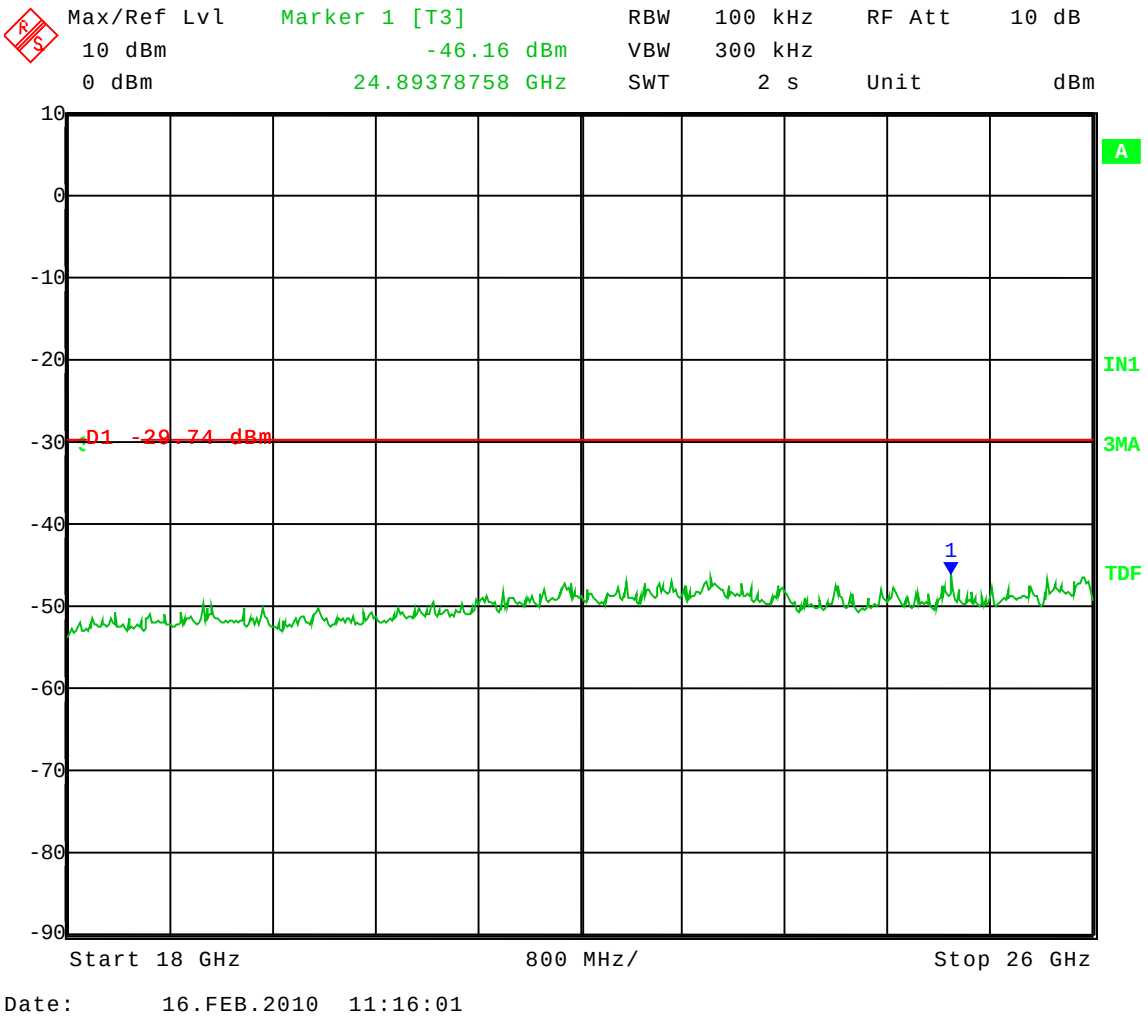


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 18 to 26 GHz
Limit = -29.74 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

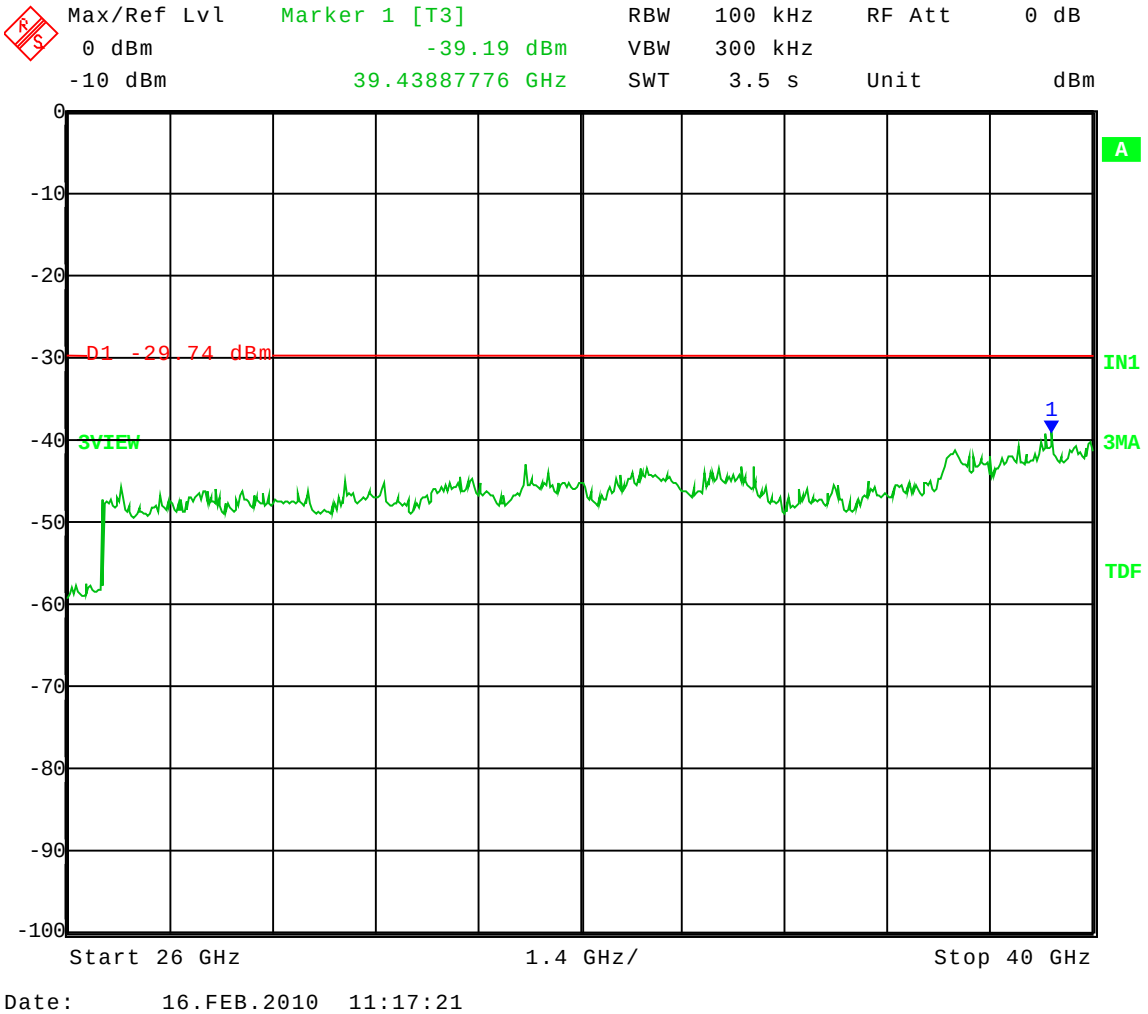


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 26 to 40 GHz
Limit = -29.74 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

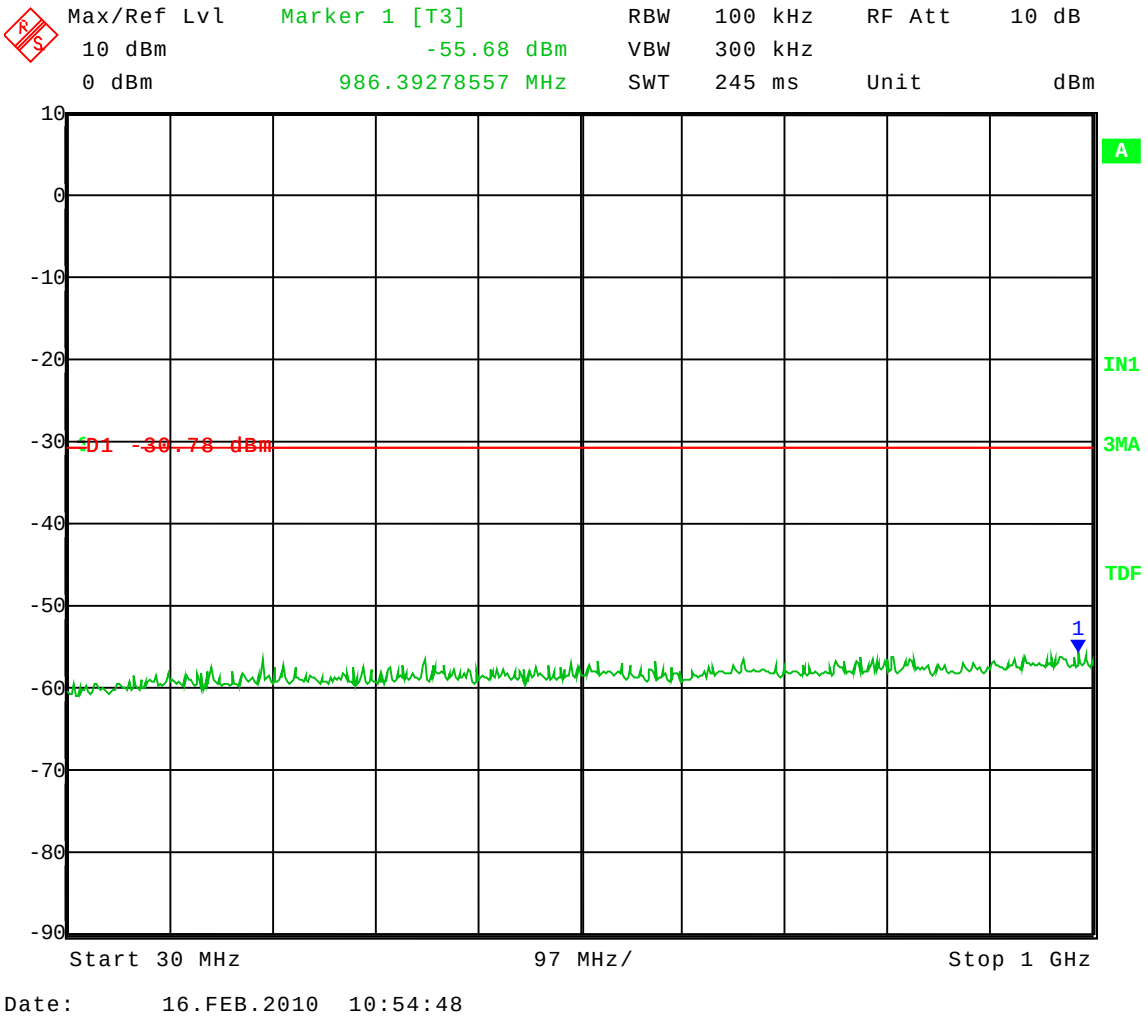


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 30 to 1000 MHz
Limit = -30.78 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

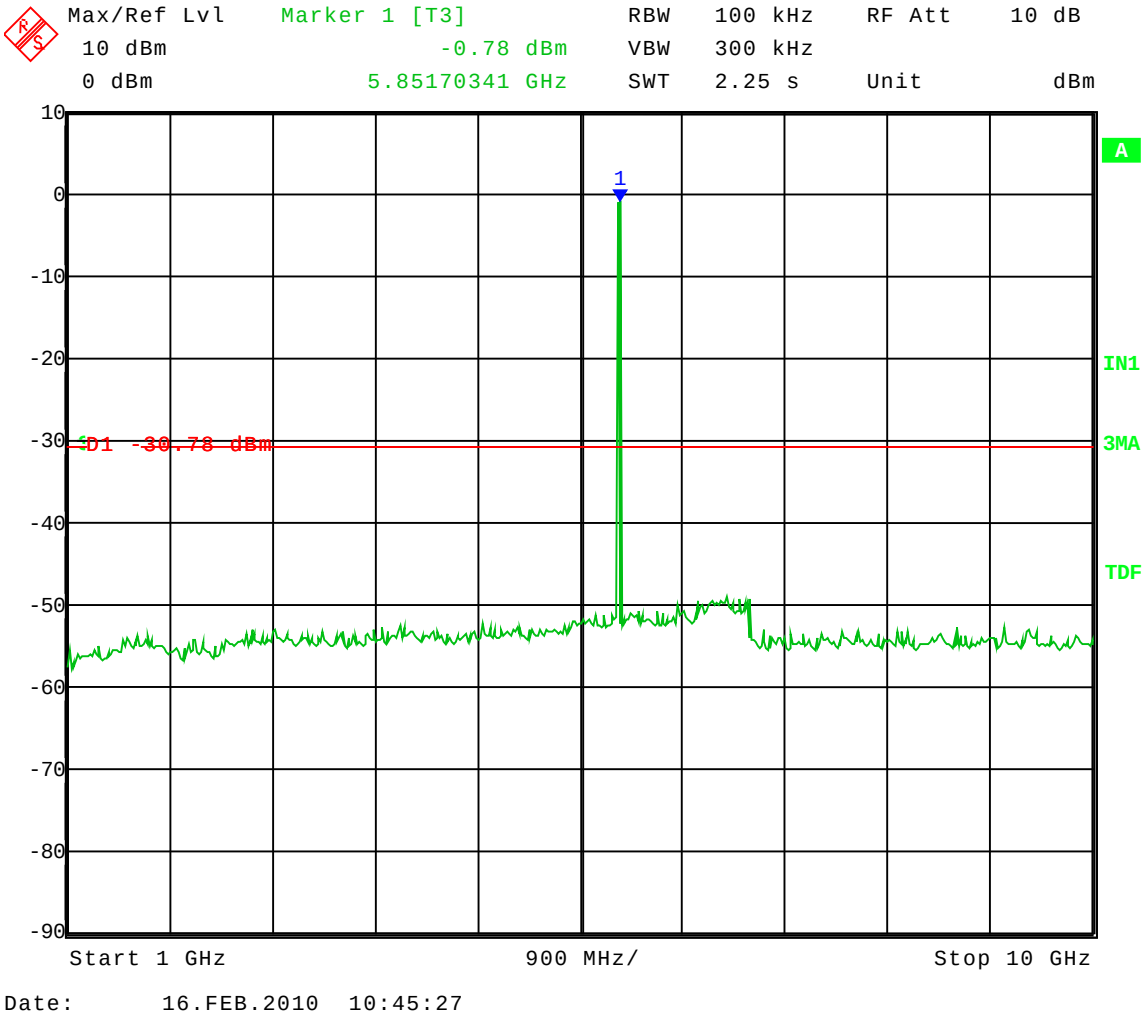


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 1 to 10 GHz
Limit = -30.78 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

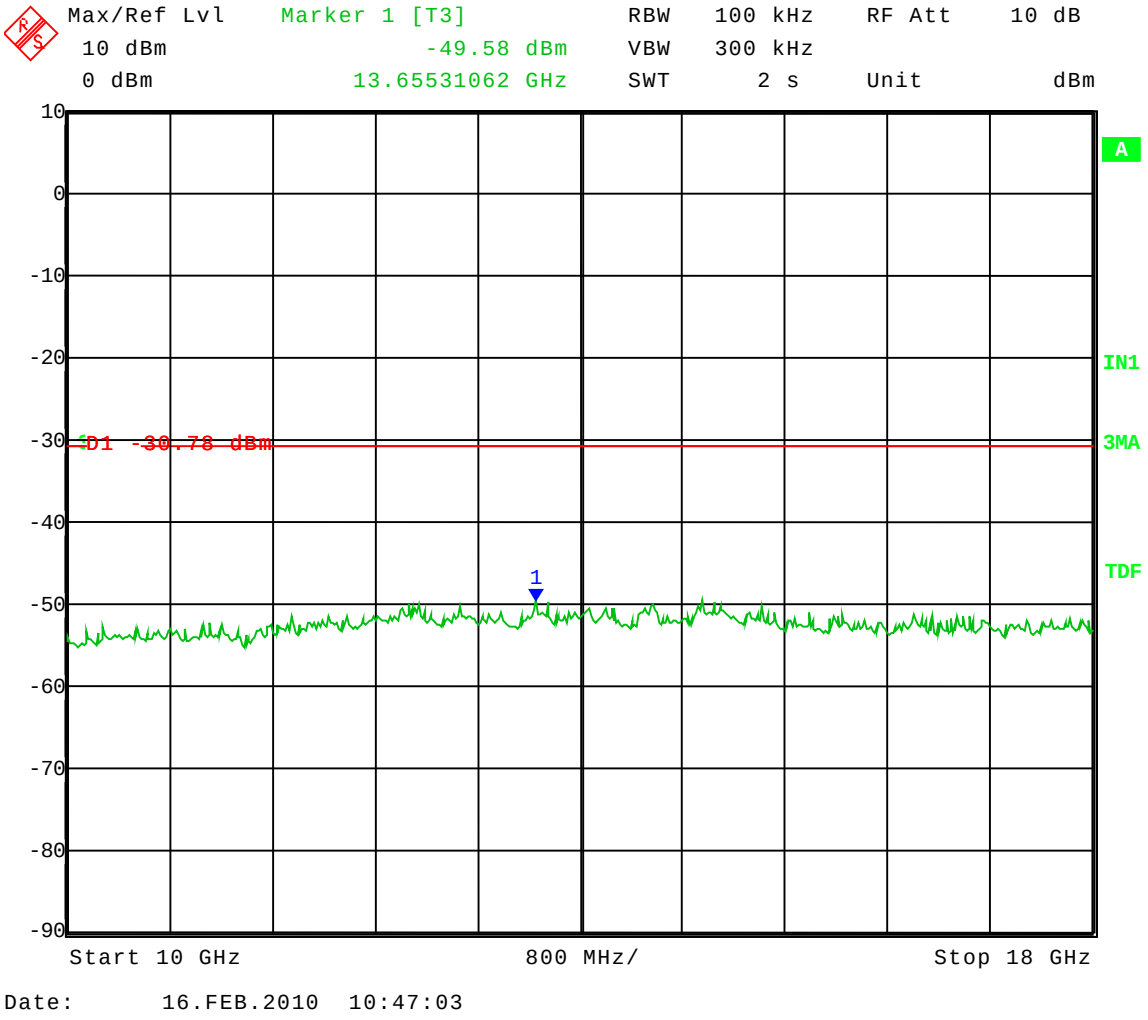


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 10 to 18 GHz
Limit = -30.78 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

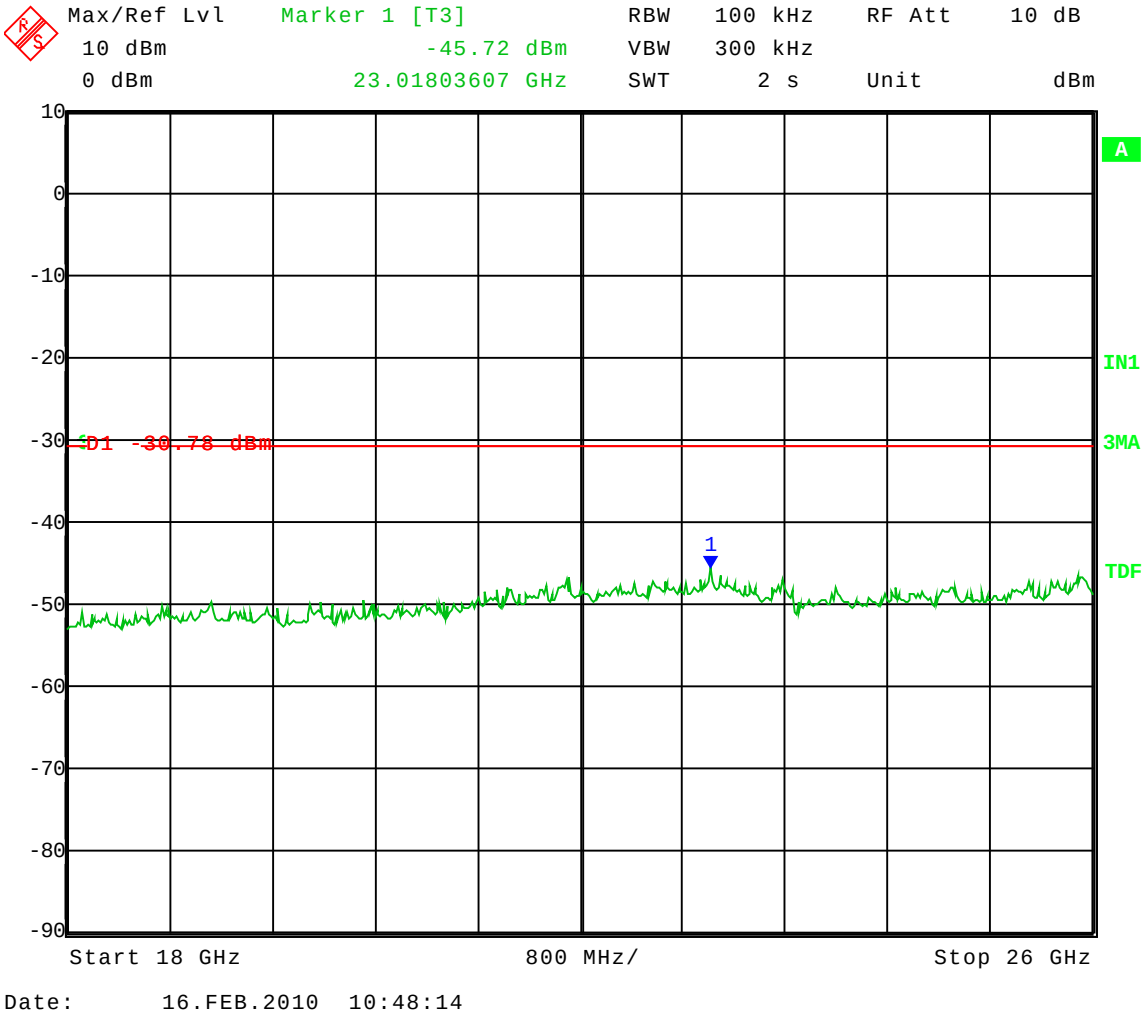


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 18 to 26 GHz
Limit = -30.78 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

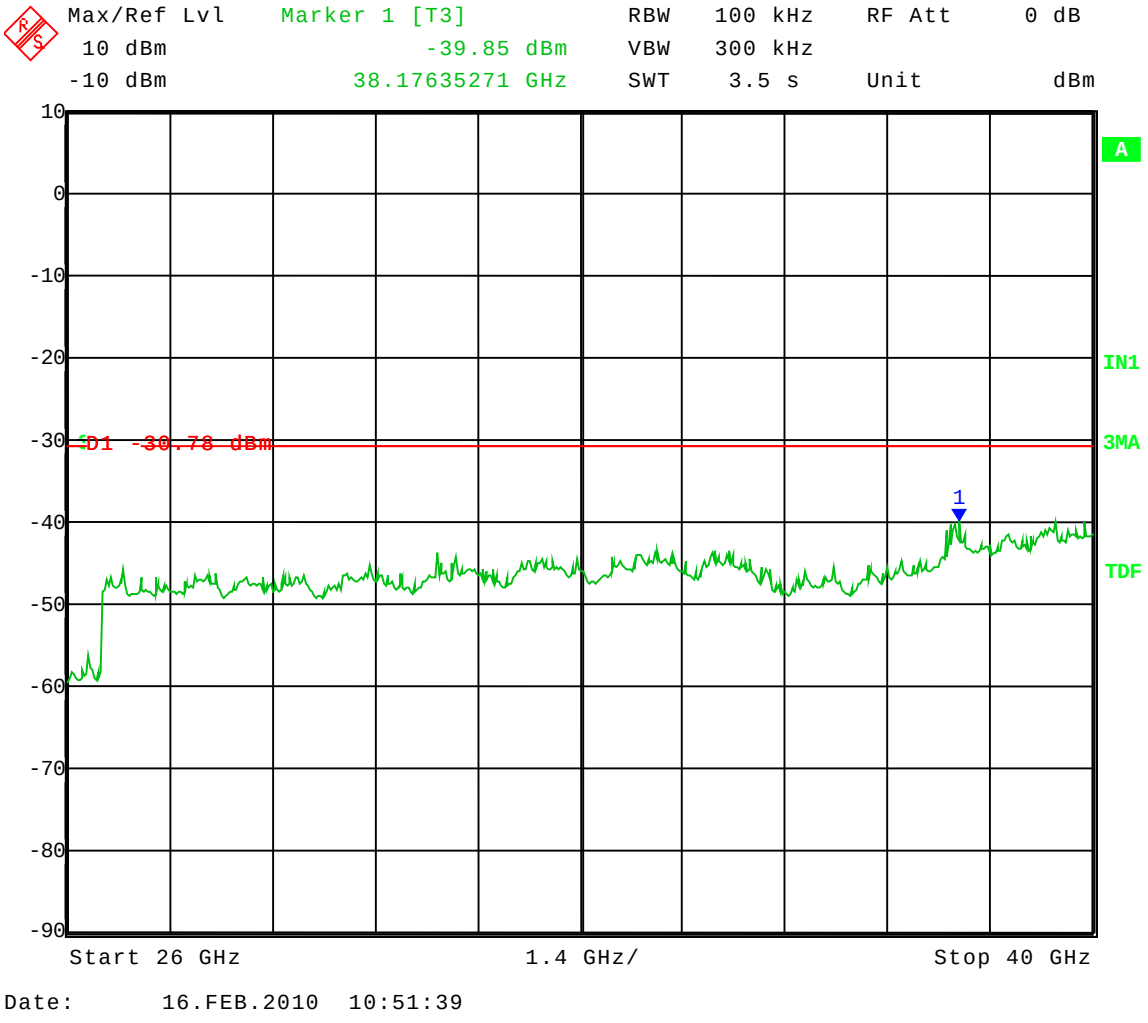


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.845 GHz
Channel BW: 10 MHz
Power setting: 4F
Modulation: 256QAM

Frequency Range: 26 to 40 GHz
Limit = -30.78 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)



1250 Peterson Dr., Wheeling, IL 60090

5.0 Test Run: Power Spectral Density (PSD)

Rule Section: Section 15.247(e)

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

Description: The EUT was set to transmit at the lowest, middle, and highest channel of operation. The channel bandwidth of the EUT was set to 10 MHz, and the modulation of the EUT was set to 256-QAM. Since Power Output Option 2 was used, Option 2 for measuring PSD was also used. A peak detector was used. Since the device was transmitting at less than 100% duty cycle, video triggering and gating were set so that the entire sweep occurred while the transmitter was transmitting on full power pulses. The analyzer was set to trace average 100 traces in power averaging mode. The Power Spectral Density was measured and recorded for each condition.

Note: Since this testing was done for a Class II Permissive Change, and the 10 MHz channel bandwidth with QPSK, 16-QAM, and 64-QAM data is already in the original report, only the 256-QAM modulation was tested for the 10 MHz channel bandwidth condition.

Limit: The peak level measured must be no greater than +8 dBm.

Results: Passed

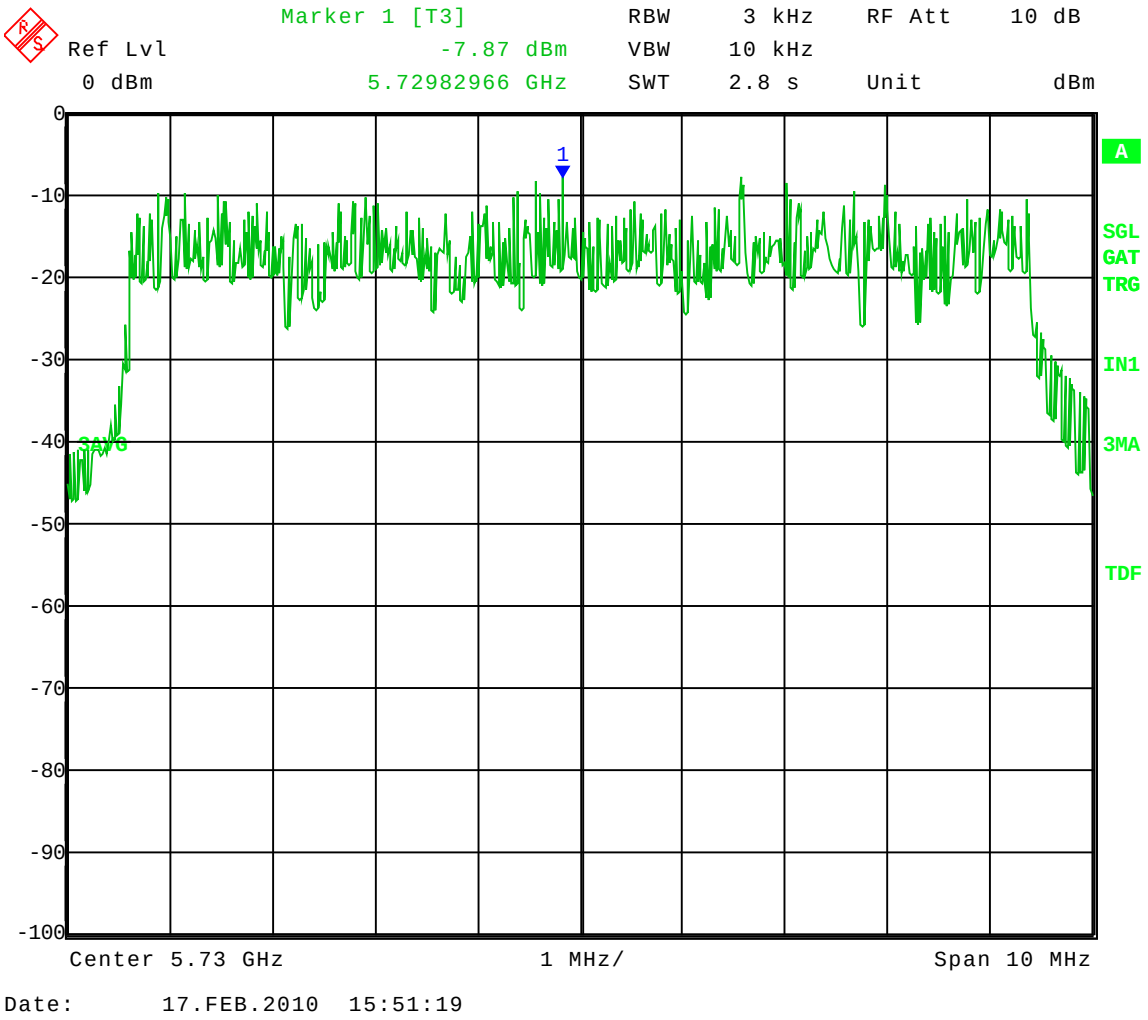
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Low Channel: Frequency – 5.730 GHz
Power setting: 4F
Modulation: 256QAM
Channel BW: 10 MHz

Limit: +8 dBm

Power Spectral Density = -7.87 dBm



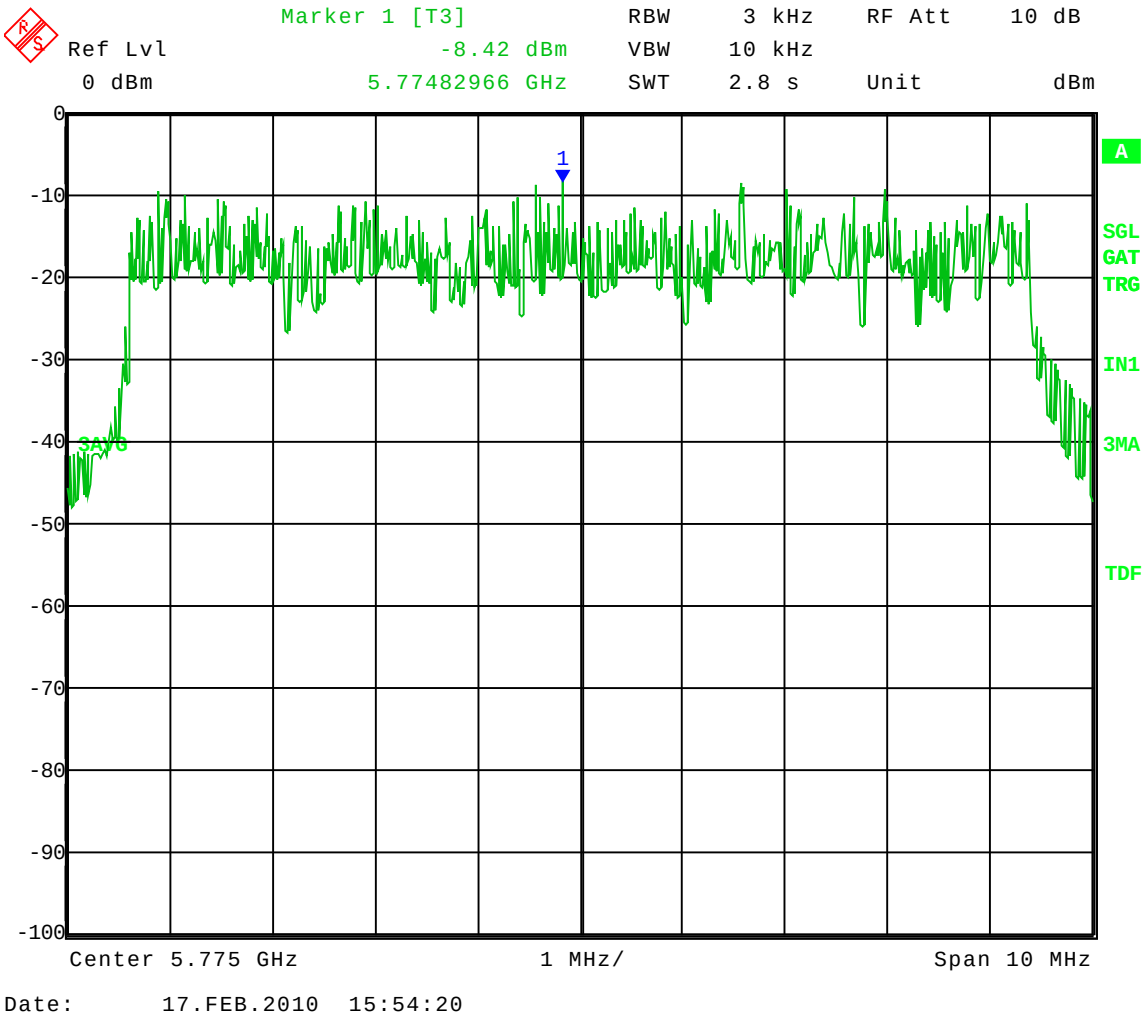
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Middle Channel: Frequency – 5.775 GHz
Power setting: 4F
Modulation: 256QAM
Channel BW: 10 MHz

Limit: +8 dBm

Power Spectral Density = -8.42 dBm



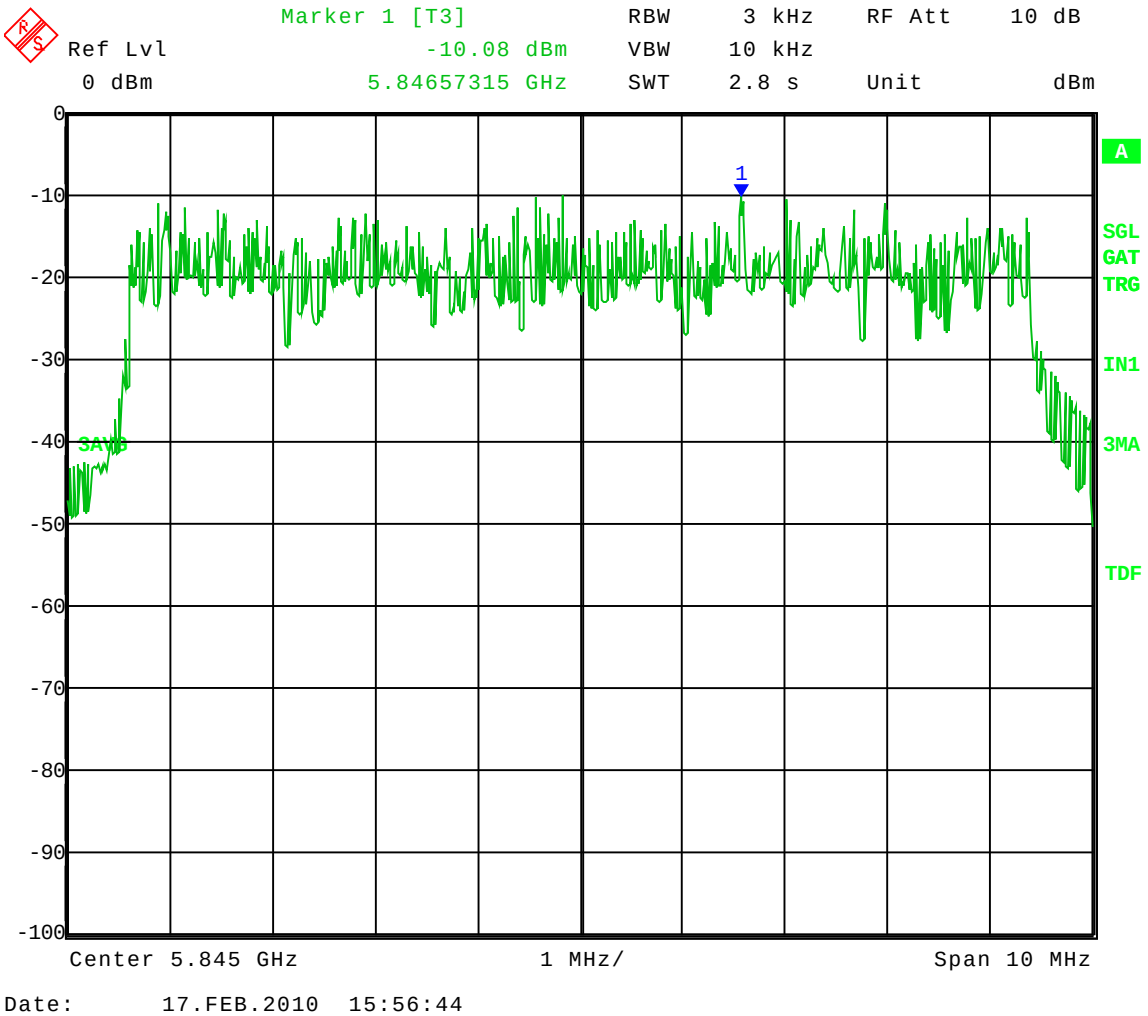
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
High Channel: Frequency – 5.845 GHz
Power setting: 4F
Modulation: 256QAM
Channel BW: 10 MHz

Limit: +8 dBm

Power Spectral Density = -10.08 dBm



1250 Peterson Dr., Wheeling, IL 60090

APPENDIX F

DATA AND GRAPHS

Part 15, Subpart C, Section 15.247 (a-h)

20 MHz Channel Bandwidth of EUT

1250 Peterson Dr., Wheeling, IL 60090

1.0 Test Run: Bandwidth

Rule Section: Section 15.247(a)(2)

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

Description: The EUT was set to transmit in continuous mode at the lowest, middle, and highest channel of operation. The channel bandwidth of the EUT was changed from 5 MHz to 10 MHz and 20 MHz, and the modulation of the EUT was changed from QPSK to 16-QAM, 64-QAM, and 256-QAM. The 6 dB bandwidth was measured and recorded for each condition. *Note: Since this testing was done for a Class II Permissive Change, and the 10 MHz channel bandwidth with QPSK, 16-QAM, and 64-QAM data is already in the original report, only the 256-QAM modulation was tested for the 10 MHz channel bandwidth condition.*

Limit: The 6 dB bandwidth must be greater than 500 kHz

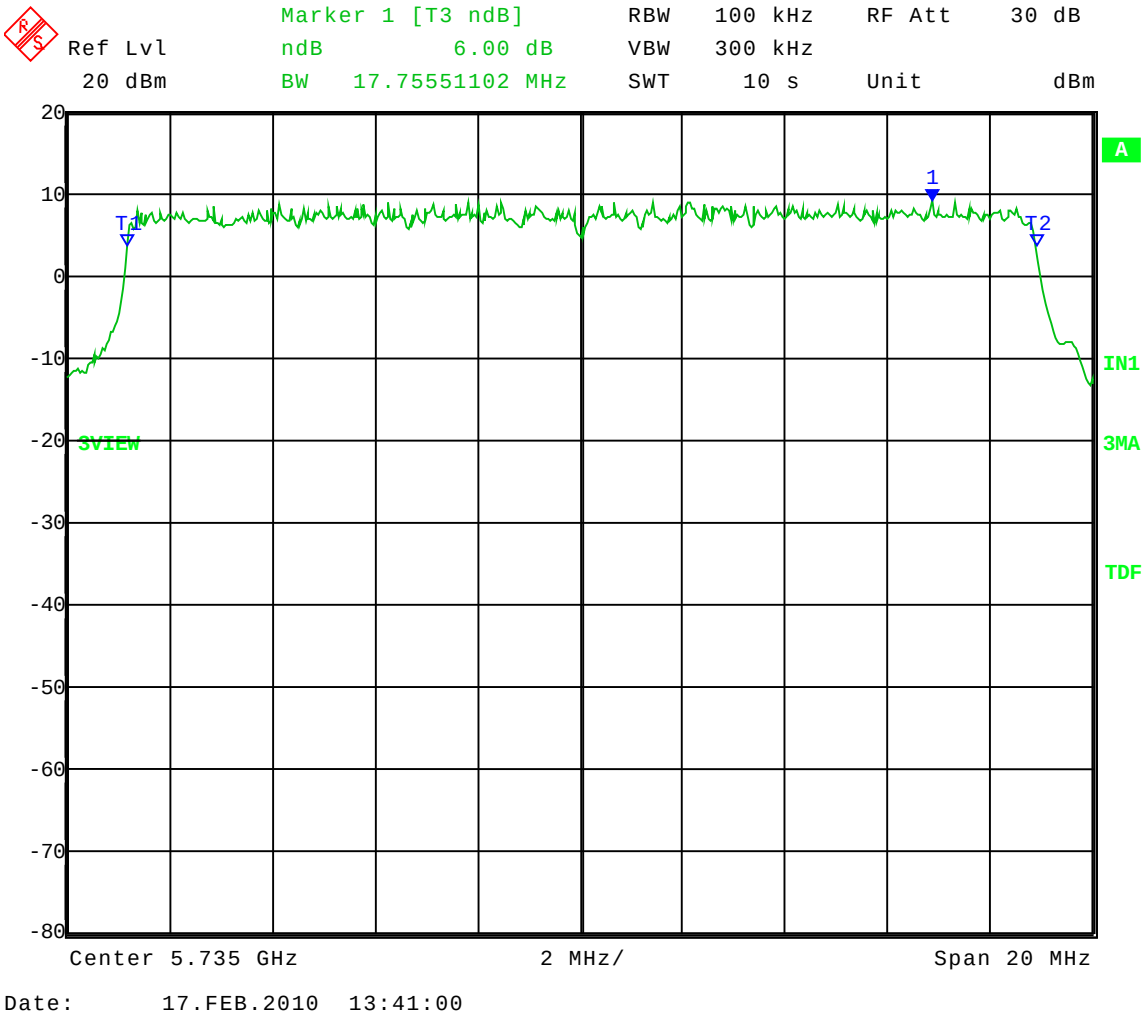
Results: Passed

1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Low Channel: Frequency – 5.735 GHz
Power setting: 62
Modulation: 16QAM
Channel BW: 20 MHz

6 dB Bandwidth = 17.76 MHz

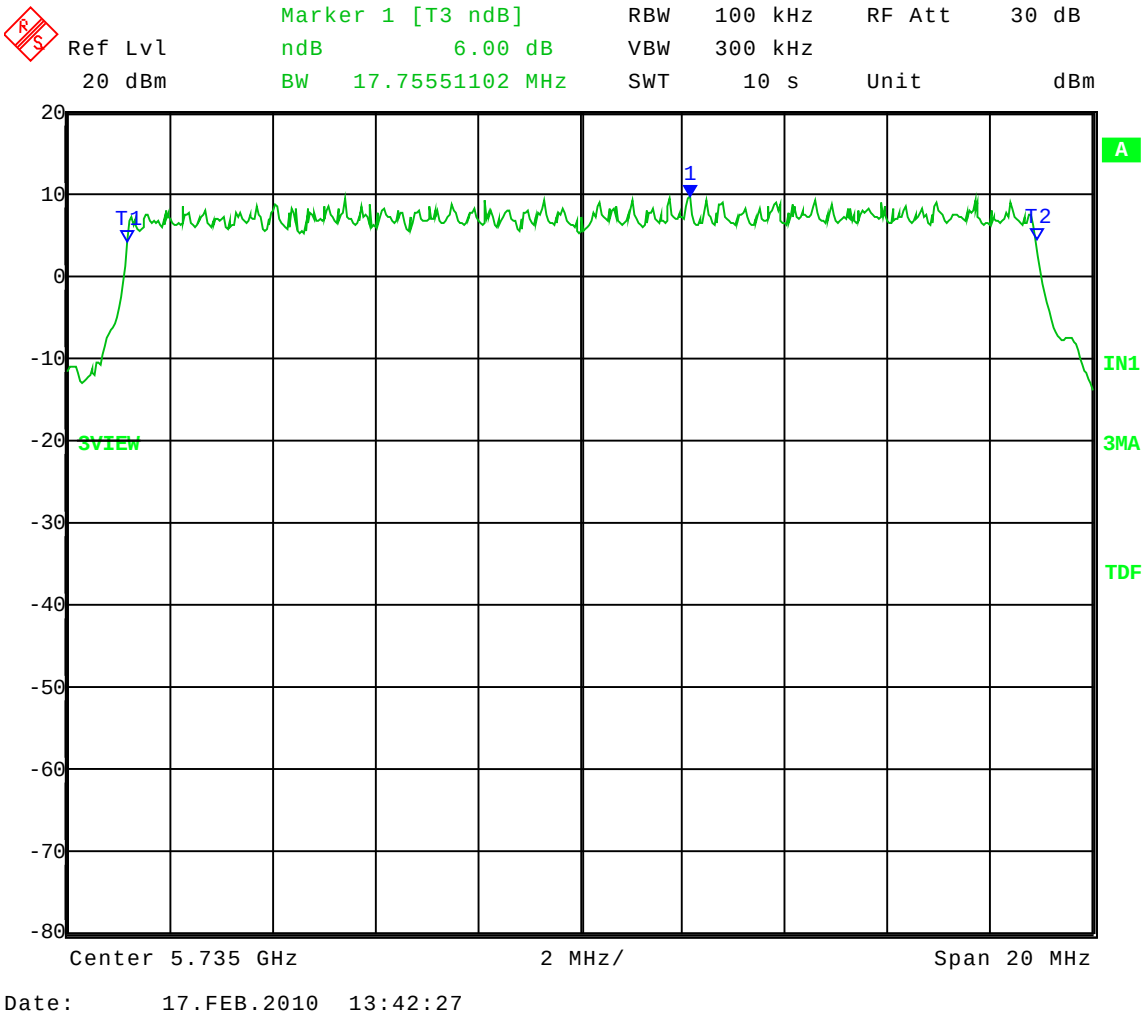


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Low Channel: Frequency – 5.735 GHz
Power setting: 63
Modulation: 64QAM
Channel BW: 20 MHz

6 dB Bandwidth = 17.76 MHz

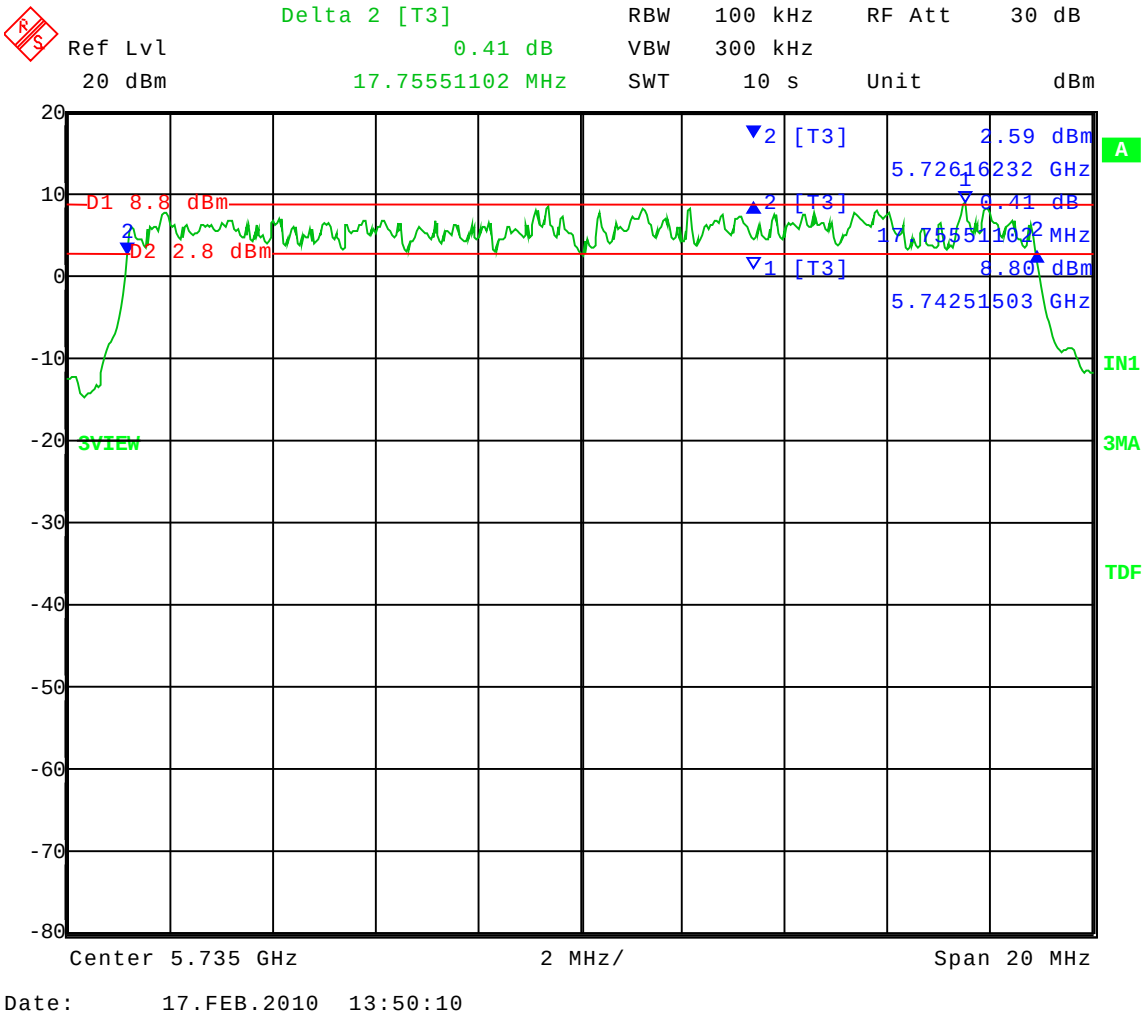


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Low Channel: Frequency – 5.735 GHz
Power setting: 61
Modulation: 256QAM
Channel BW: 20 MHz

6 dB Bandwidth = 17.76 MHz

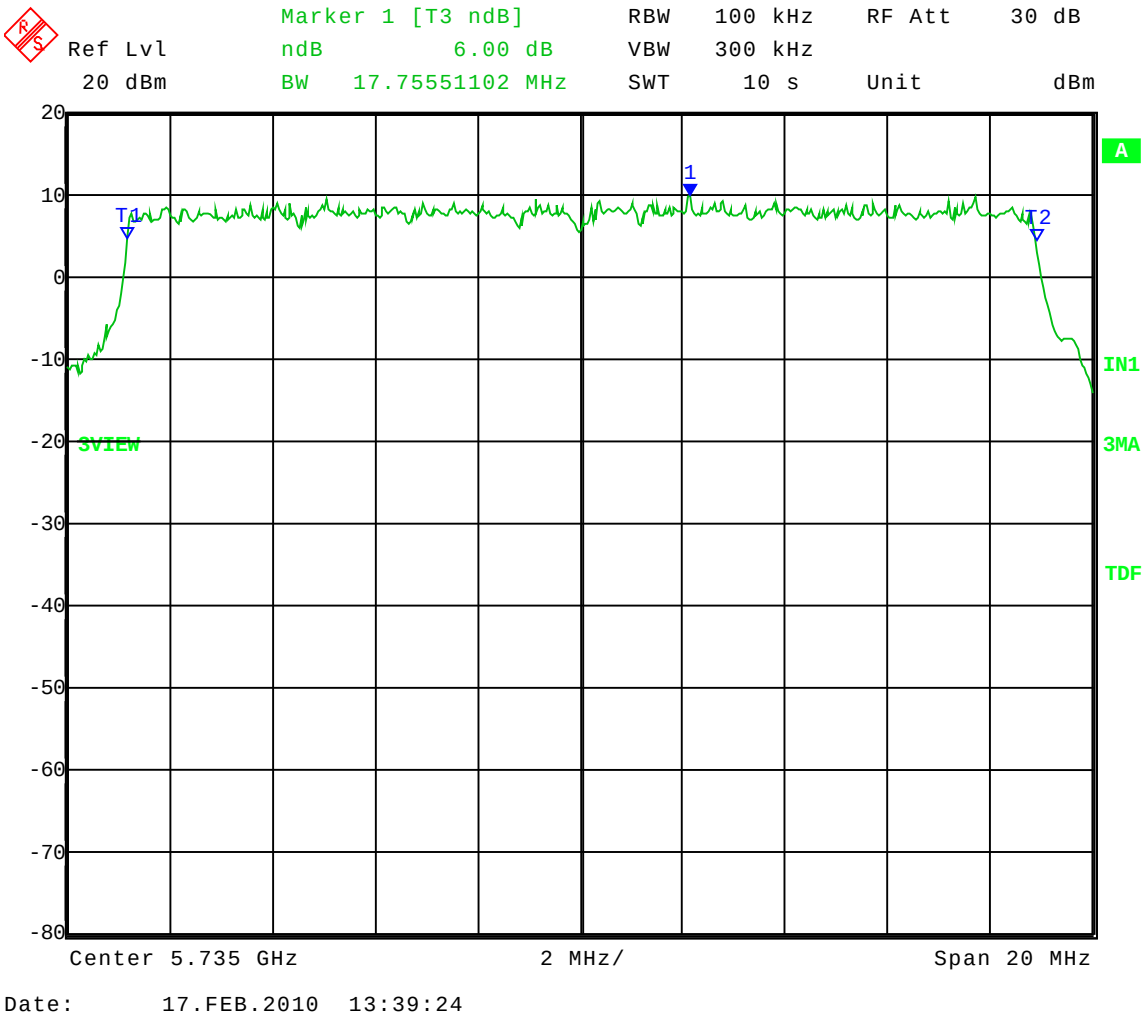


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Low Channel: Frequency – 5.735 GHz
Power setting: 62
Modulation: QPSK
Channel BW: 20 MHz

6 dB Bandwidth = 17.76 MHz

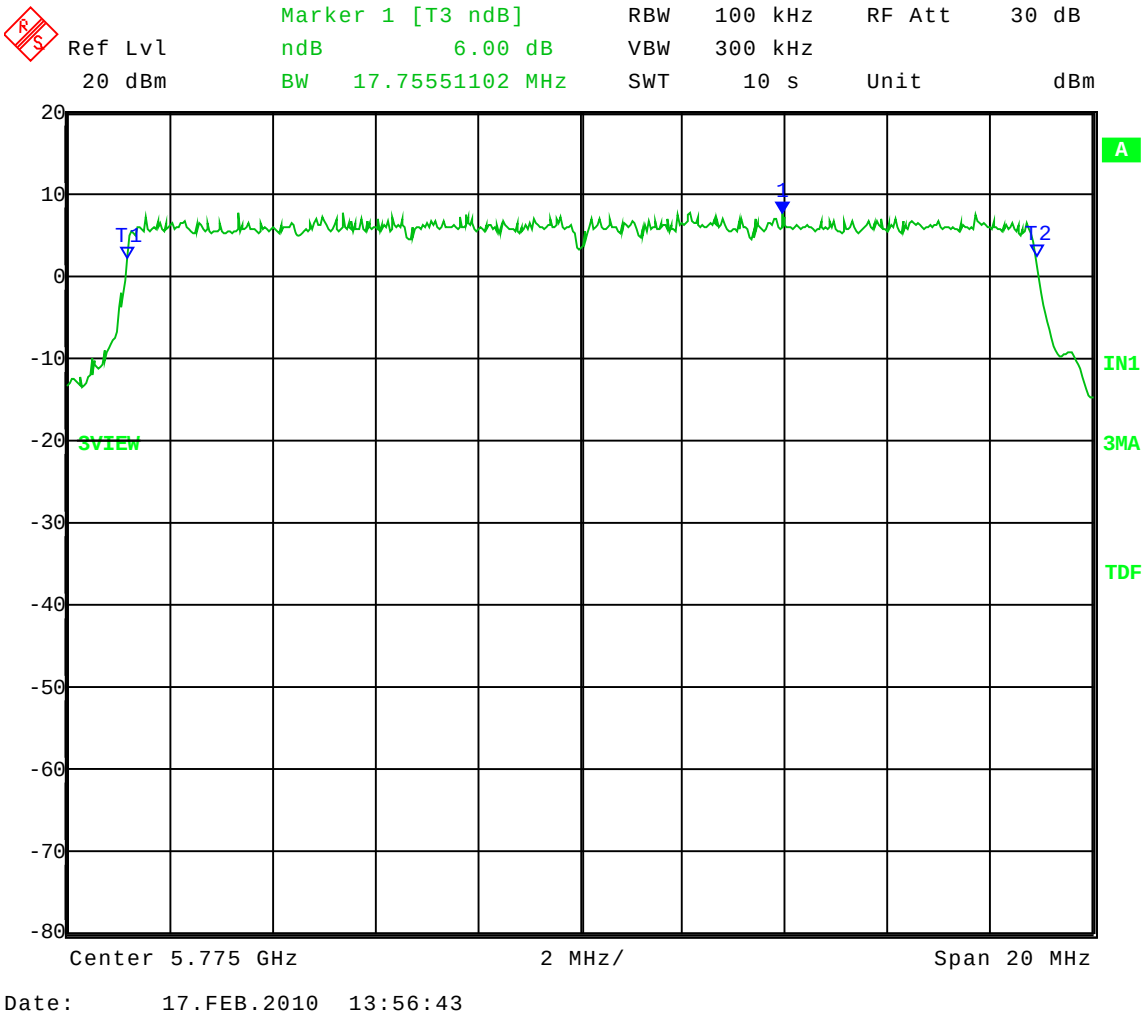


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 16QAM
Channel BW: 20 MHz

6 dB Bandwidth = 17.76 MHz

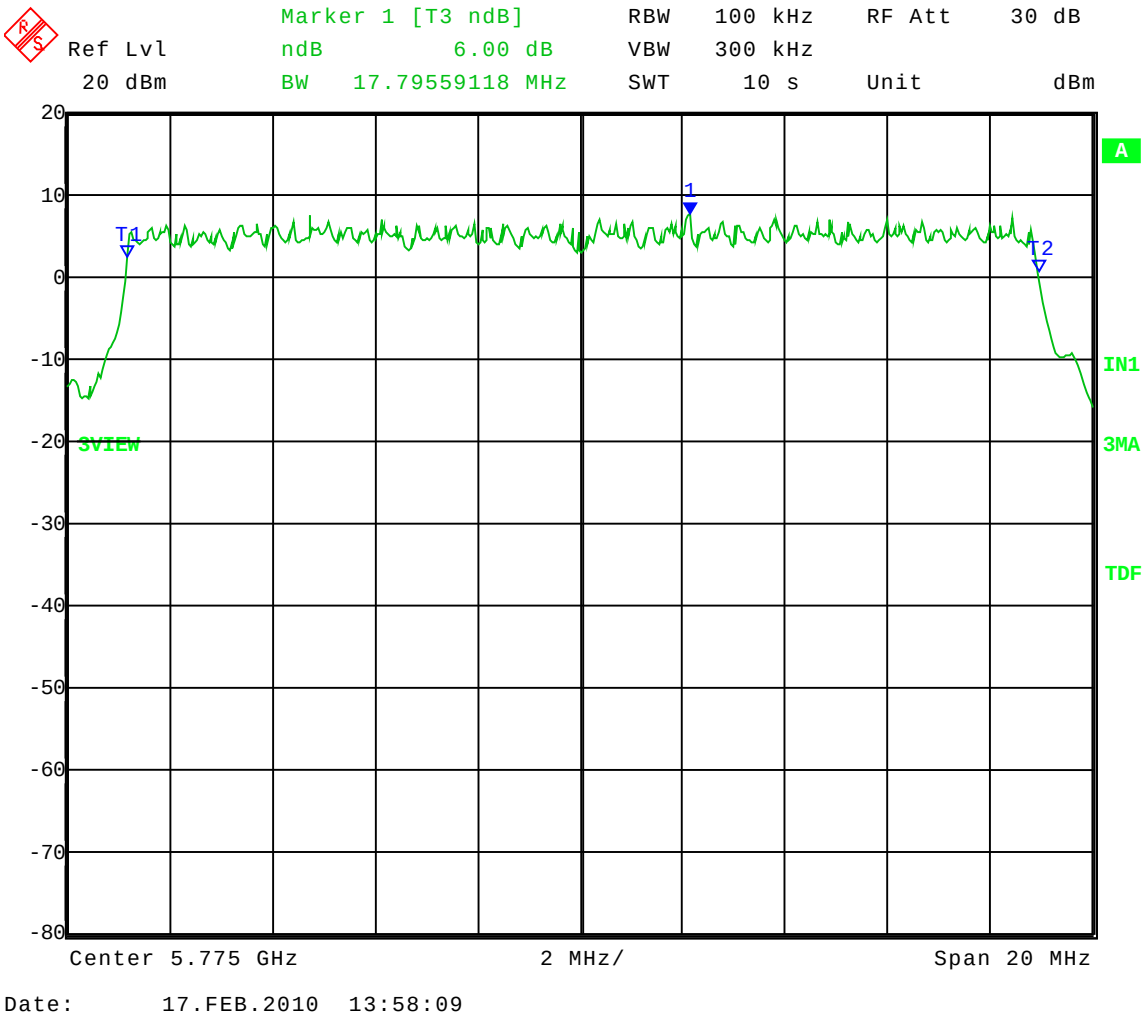


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 64QAM
Channel BW: 20 MHz

6 dB Bandwidth = 17.80 MHz

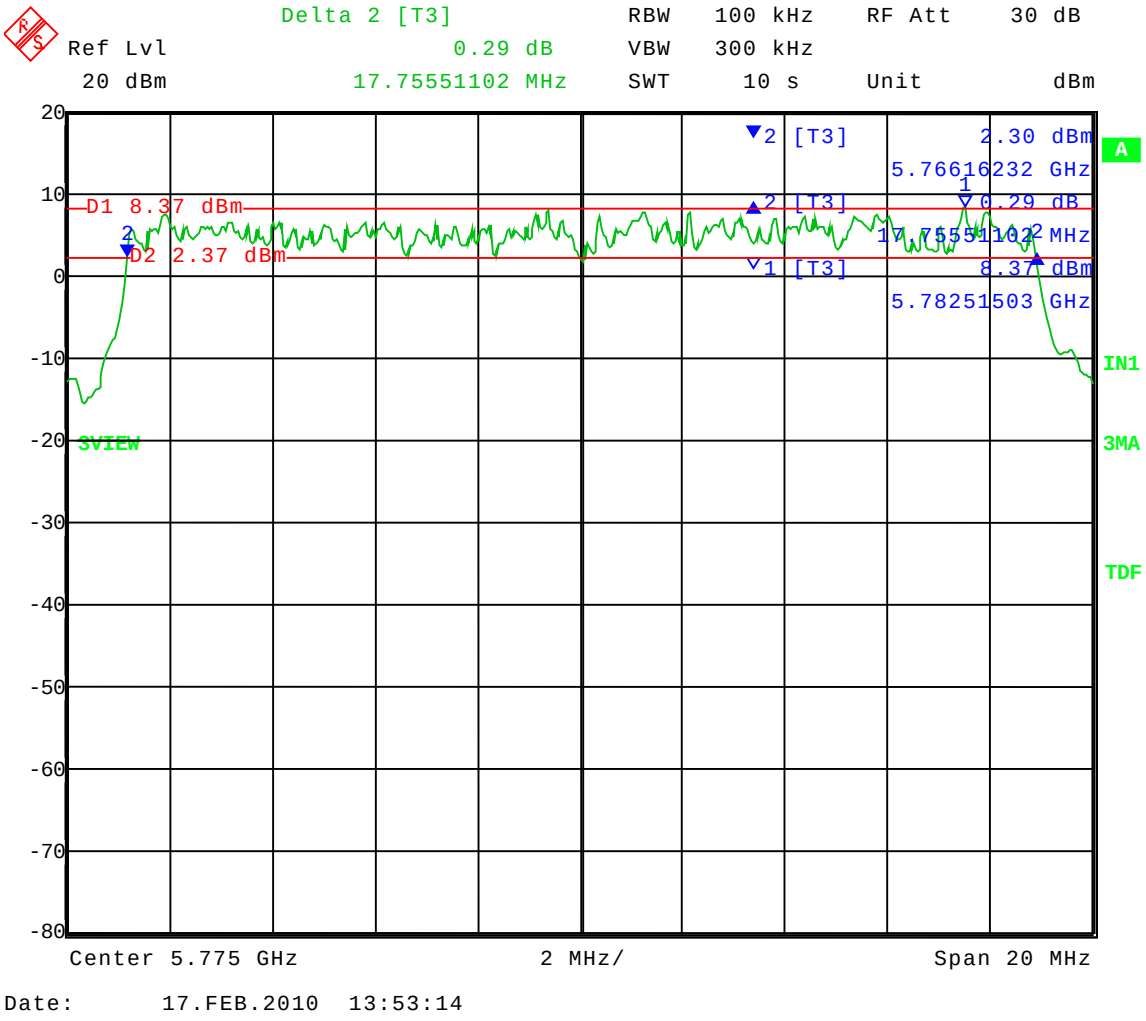


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 256QAM
Channel BW: 20 MHz

6 dB Bandwidth = 17.76 MHz

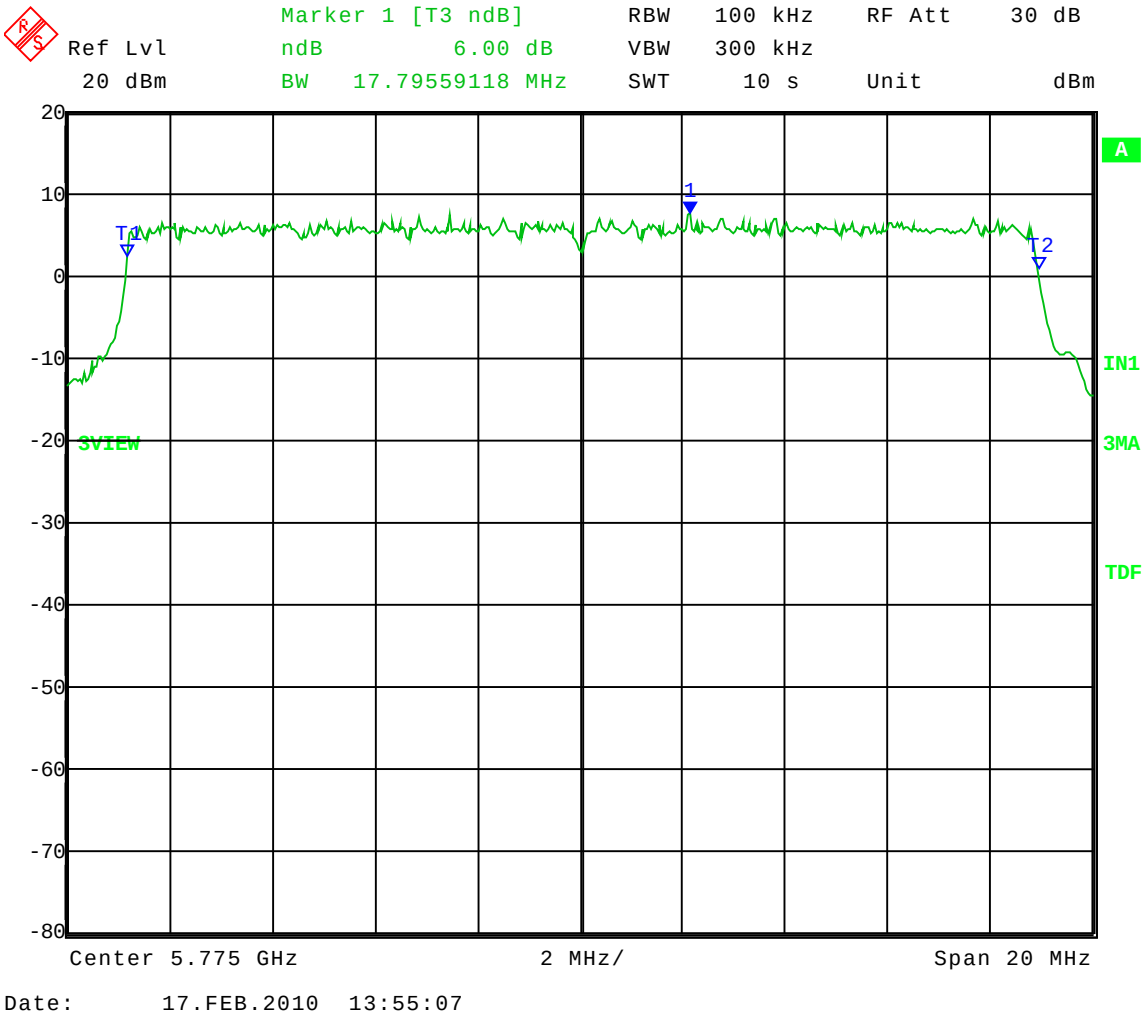


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: QPSK
Channel BW: 20 MHz

6 dB Bandwidth = 17.80 MHz

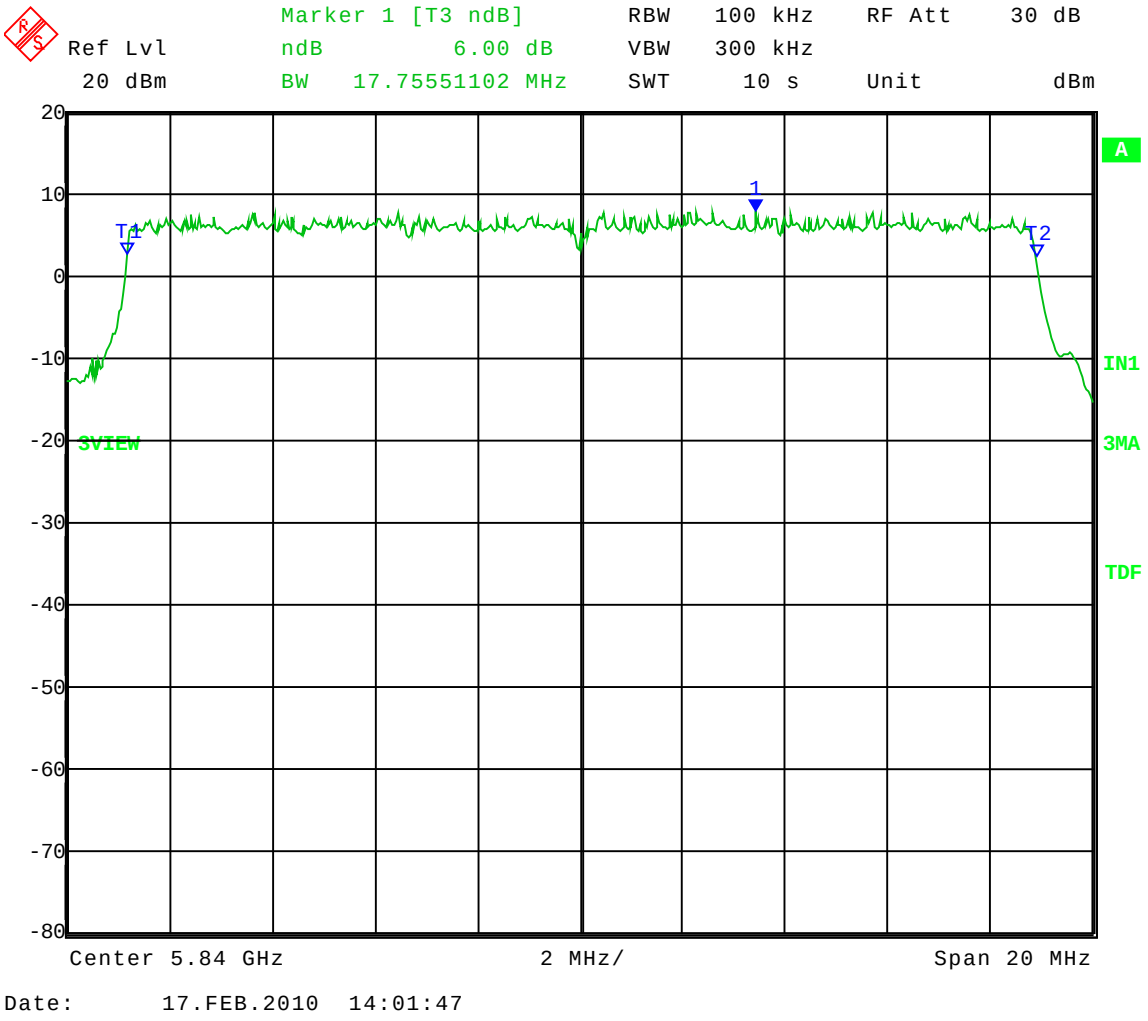


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

High Channel: Frequency – 5.840 GHz
Power setting: 64
Modulation: 16QAM
Channel BW: 20 MHz

6 dB Bandwidth = 17.76 MHz

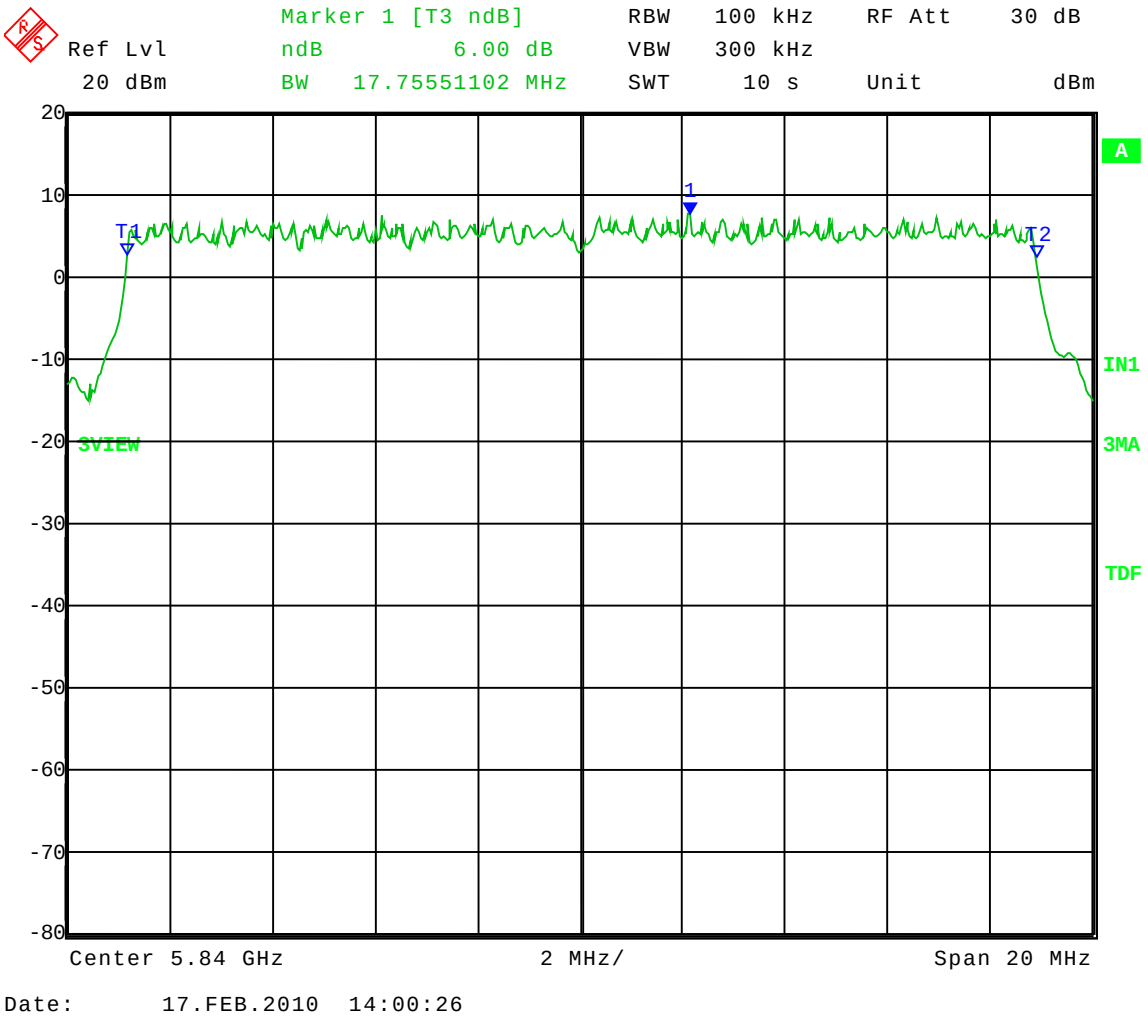


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

High Channel: Frequency – 5.840 GHz
Power setting: 64
Modulation: 64QAM
Channel BW: 20 MHz

6 dB Bandwidth = 17.76 MHz

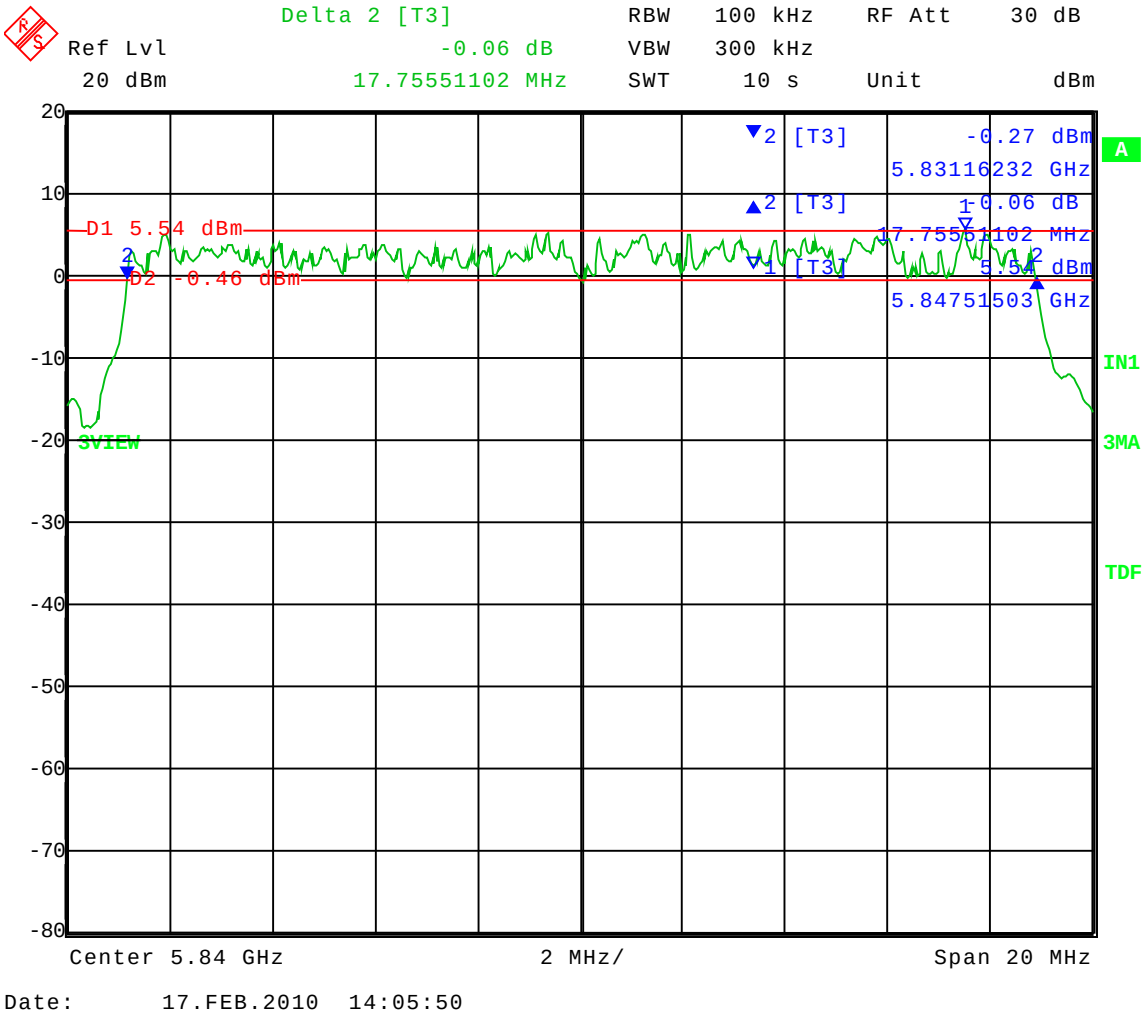


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

High Channel: Frequency – 5.840 GHz
Power setting: 5F
Modulation: 256QAM
Channel BW: 20 MHz

6 dB Bandwidth = 17.76 MHz

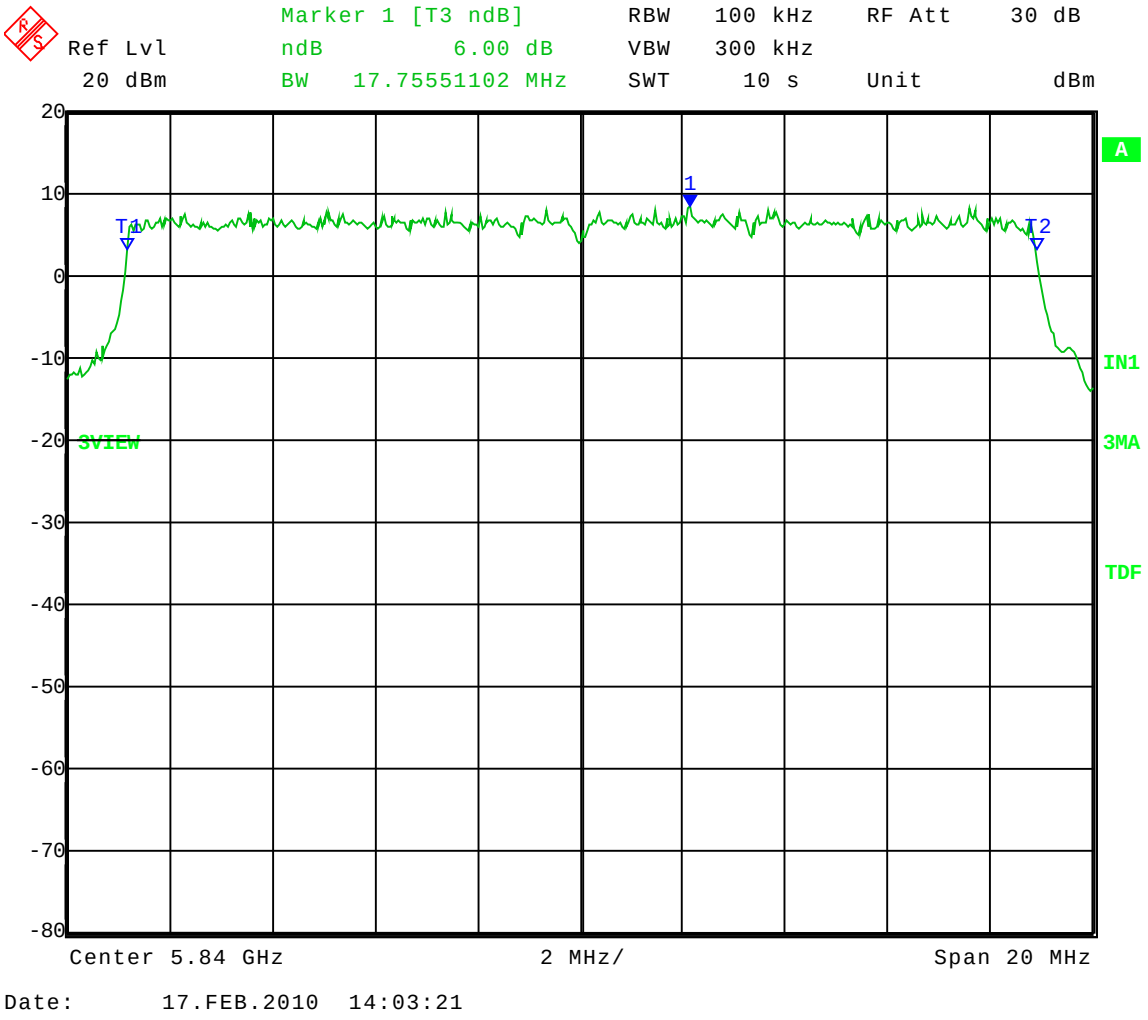


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: 6 dB Bandwidth - Conducted
Operator: Craig B

High Channel: Frequency – 5.840 GHz
Power setting: 65
Modulation: QPSK
Channel BW: 20 MHz

6 dB Bandwidth = 17.76 MHz



1250 Peterson Dr., Wheeling, IL 60090

2.0 Test Run: RF antenna conducted test – Band-edge compliance

Rule Section: Section 15.247(d) – Spurious emissions

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

Description: The EUT was set to transmit in continuous mode at the lowest, middle, and highest channel of operation. The channel bandwidth of the EUT was changed from 5 MHz to 10 MHz and 20 MHz, and the modulation of the EUT was changed from QPSK to 16-QAM, 64-QAM, and 256-QAM. A measurement of the emission at the edge of the authorized operating band was made for each of the above conditions. *Note: Since this testing was done for a Class II Permissive Change, and the 10 MHz band-edge data is already in the original report, only the 256-QAM modulation was tested for the 10 MHz channel bandwidth condition.*

Limit: This device complies with the use of power option 2. Therefore, the emission level at the edge of the authorized operating band must be at least 30 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

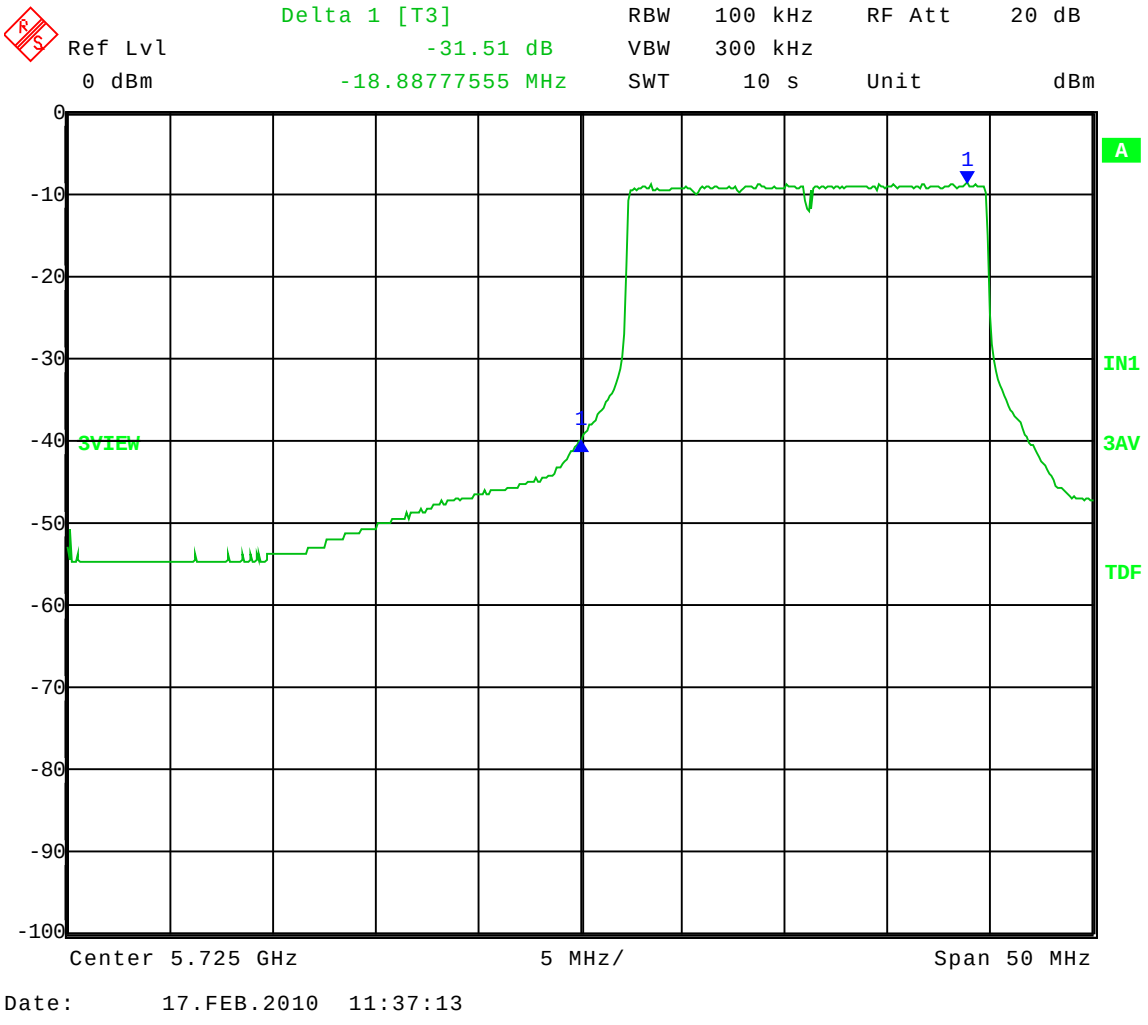
Results: Passed

1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Lower Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.725 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

Low Channel: Frequency – 5.735 GHz
Power setting: 62
Modulation: 16QAM
Channel BW: 20 MHz

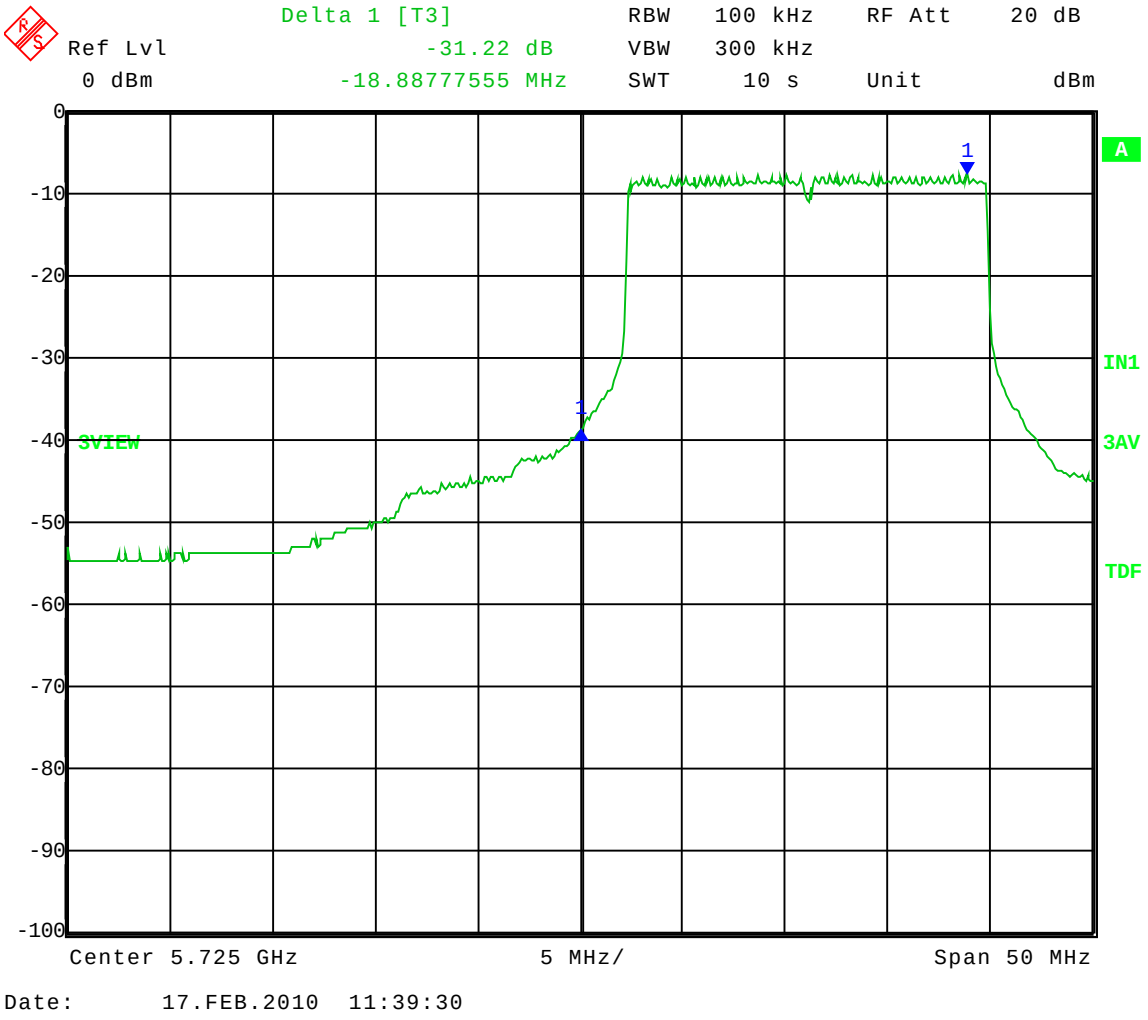


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Lower Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.725 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

Low Channel: Frequency – 5.735 GHz
Power setting: 63
Modulation: 64QAM
Channel BW: 20 MHz

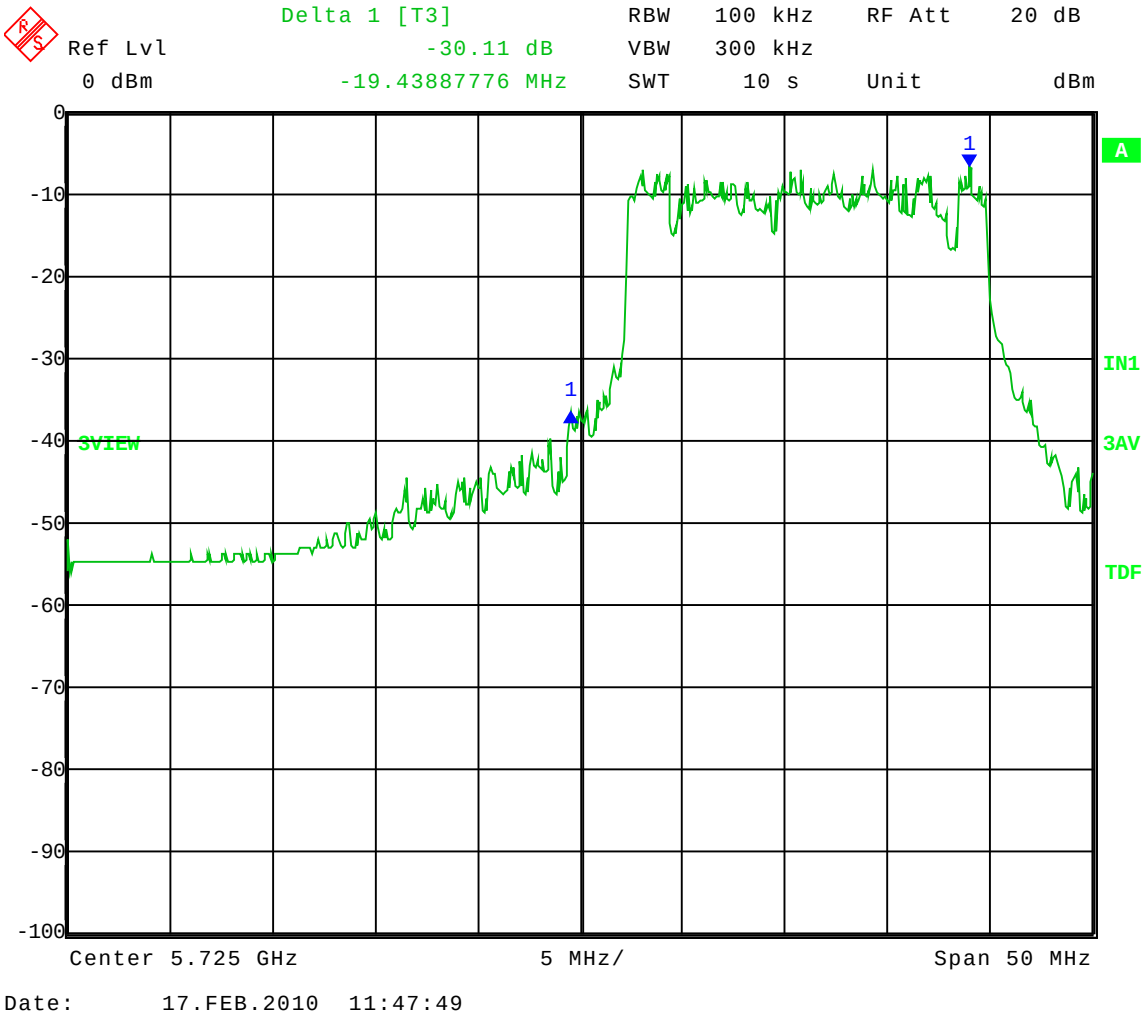


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Lower Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.725 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

Low Channel: Frequency – 5.735 GHz
Power setting: 5F
Modulation: 256QAM
Channel BW: 20 MHz

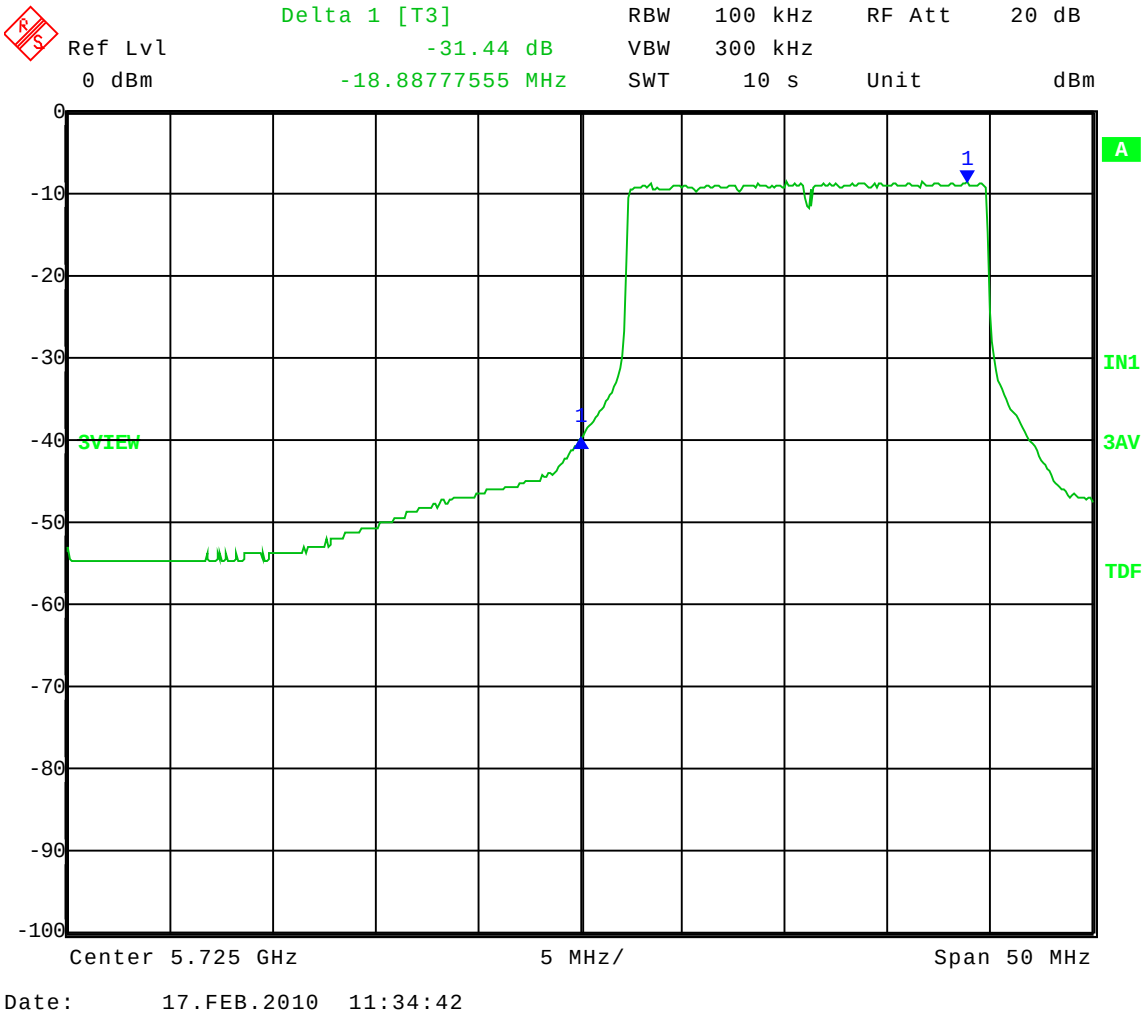


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Lower Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.725 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

Low Channel: Frequency – 5.735 GHz
Power setting: 62
Modulation: QPSK
Channel BW: 20 MHz

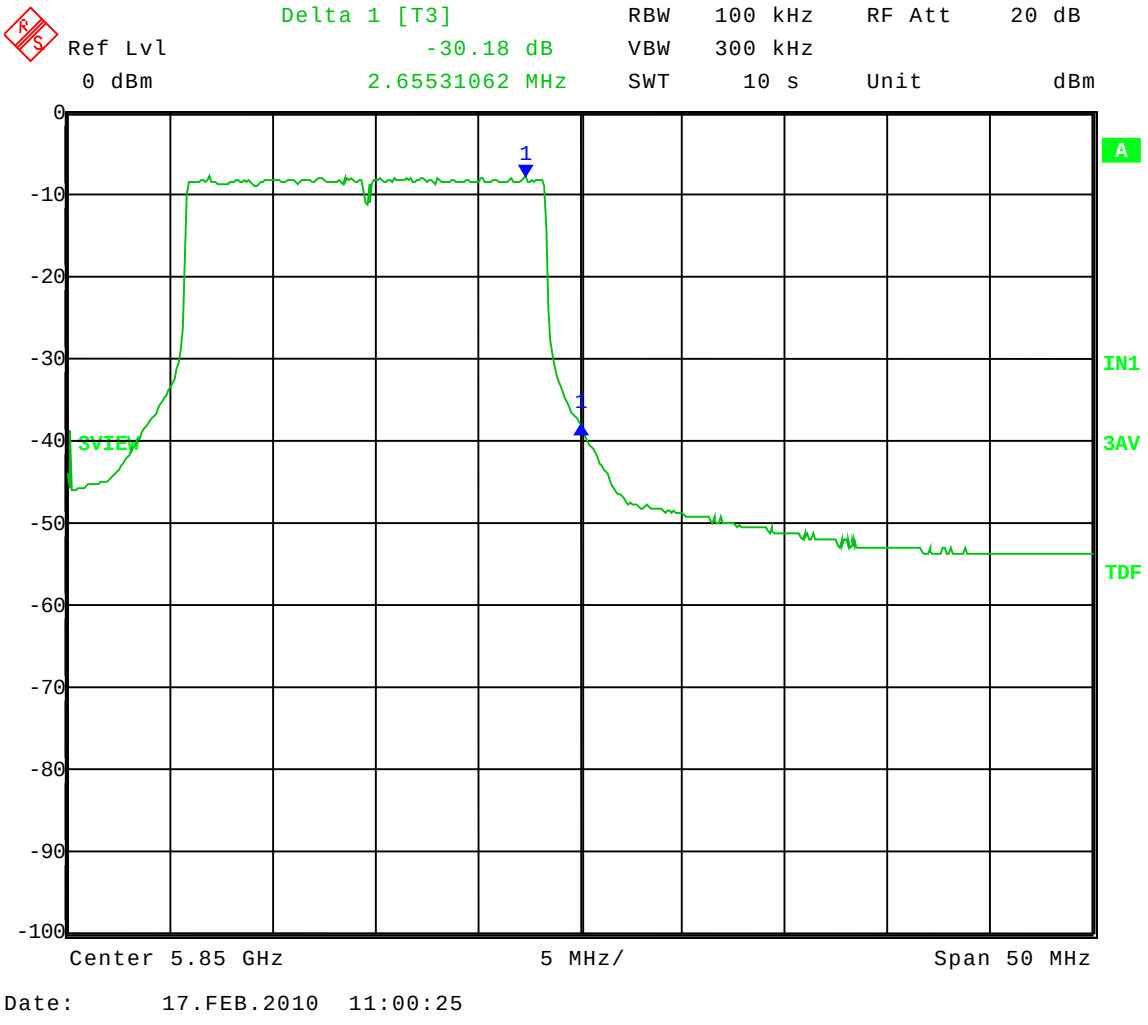


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Upper Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.850 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

High Channel: Frequency – 5.840 GHz
Power setting: 64
Modulation: 16QAM
Channel BW: 20 MHz

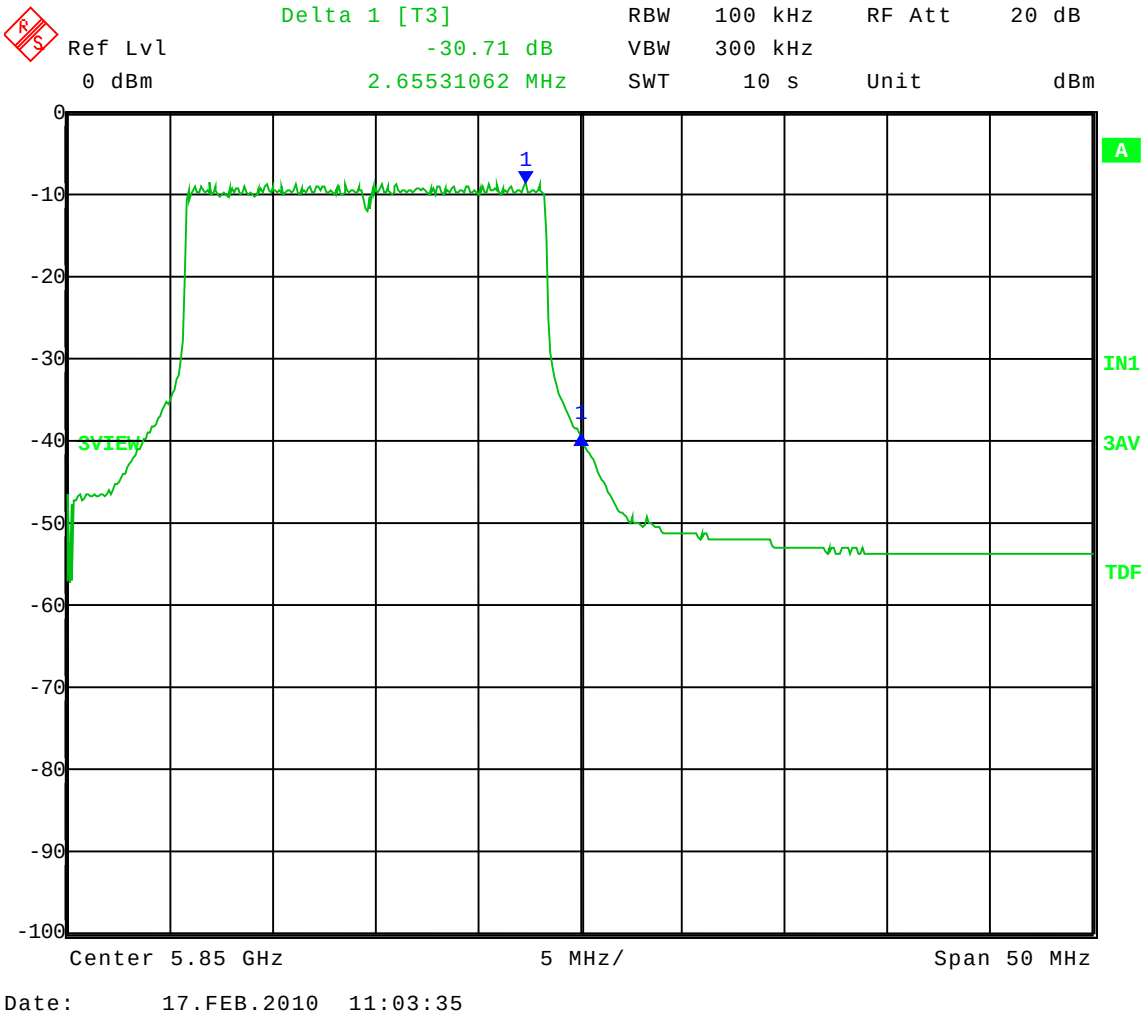


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Upper Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.850 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

High Channel: Frequency – 5.840 GHz
Power setting: 64
Modulation: 64QAM
Channel BW: 20 MHz

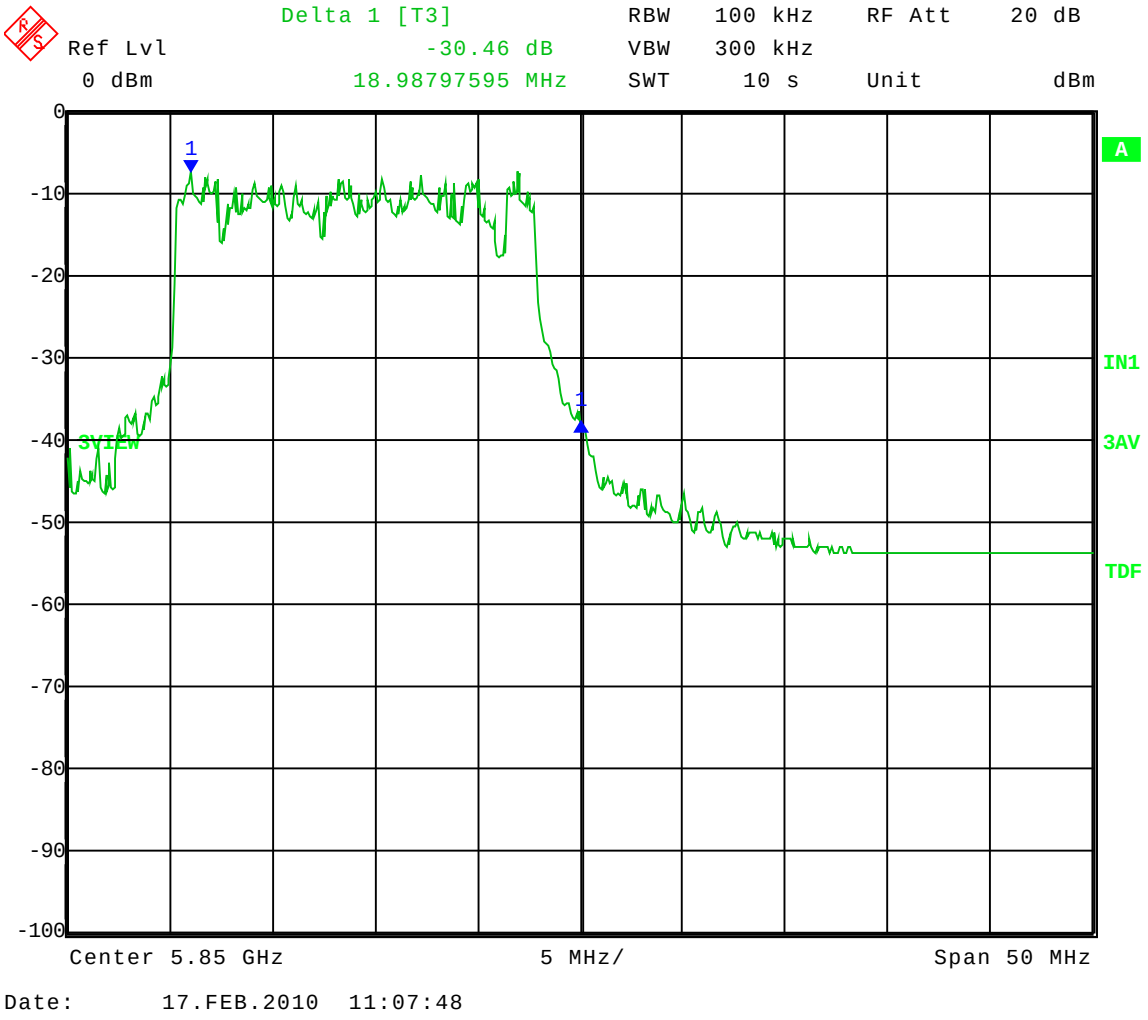


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Upper Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.850 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

High Channel: Frequency – 5.840 GHz
Power setting: 5F
Modulation: 256QAM
Channel BW: 20 MHz

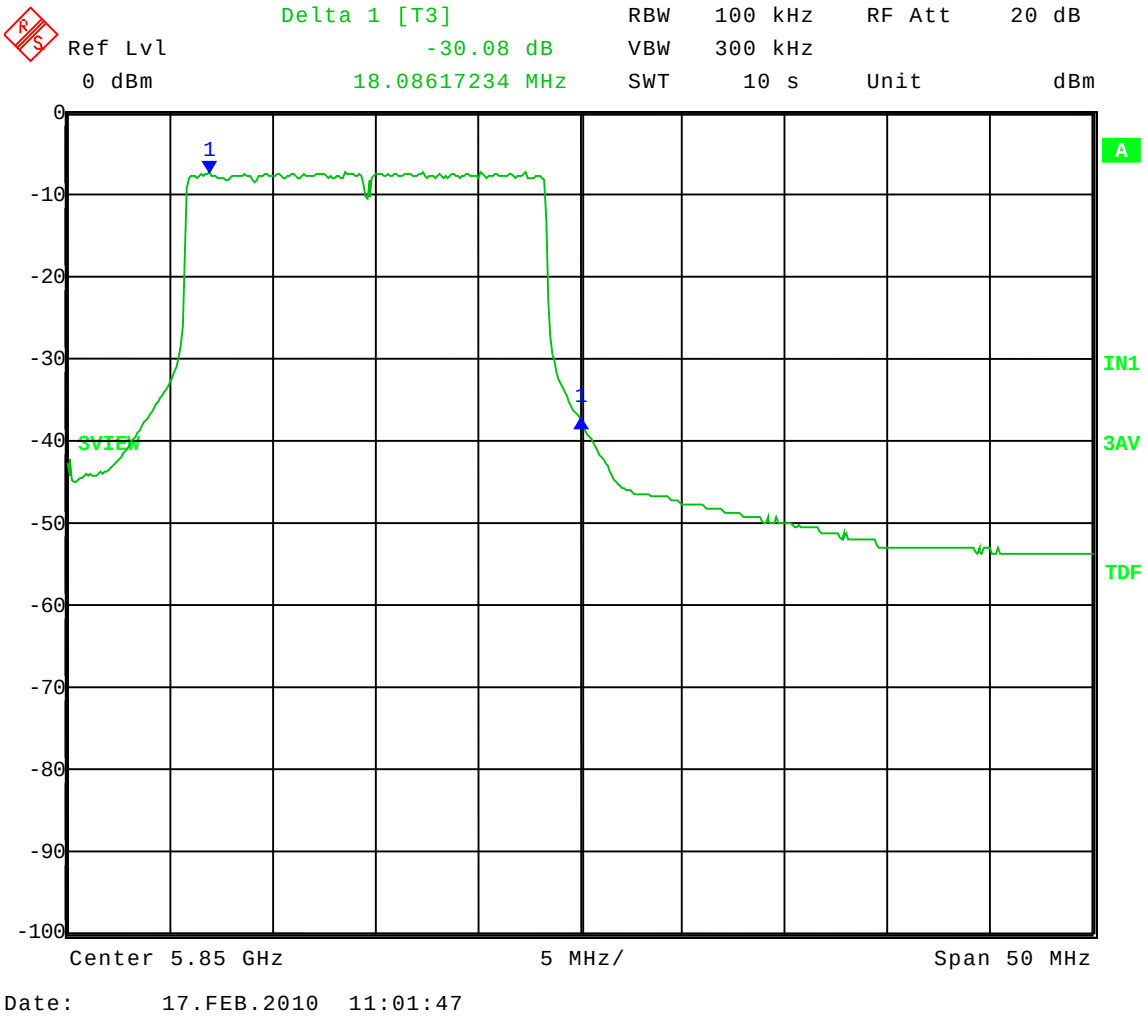


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-17-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Upper Band-Edge Compliance - Conducted
Operator: Craig B

Comment: Band-Edge Frequency = 5.850 GHz
Band-Edge > 30 dB Below Peak In-Band Emission (power option 2 used)

High Channel: Frequency – 5.840 GHz
Power setting: 65
Modulation: QPSK
Channel BW: 20 MHz



1250 Peterson Dr., Wheeling, IL 60090

3.0 Test Run: Power Output

Rule Section: Section 15.247(b)(3)

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

- Power Output Option 2 -
- Method #3 -

Description: The pulse duration "T" measured 1.18 ms. With the RBW set to 1 MHz and the span set to equal the EBW, the Auto-sweep time on the analyzer was 5 ms. Since the sweep time is greater than "T", and the EBW is larger than the largest available on the spectrum analyzer, Method #3 was used.

The span was set to the EBW. The trigger was set to "free run". The RBW was set to 1 MHz. The VBW was set to 1 kHz, which is greater than 1/T (846 Hz). The analyzer was set to linear display mode. There were 500 points in the spectrum. The span (20 MHz) / 500 points = 40 kHz. 40 kHz is less than 0.5 RBW which is 500 kHz. Therefore, the Sample detector mode was used. The sweep was set to Max Hold for 60 seconds. The spectrum analyzer's power measurement function was used to integrate the power levels across the EBW of the signal.

Measurements were taken for QPSK, 16-QAM, 64-QAM, and 256-QAM modulation types, and at the lowest, middle, and highest channels of operation.

Limit: The level measured must be no greater than what is listed on the original grant of certification.

Results: Passed

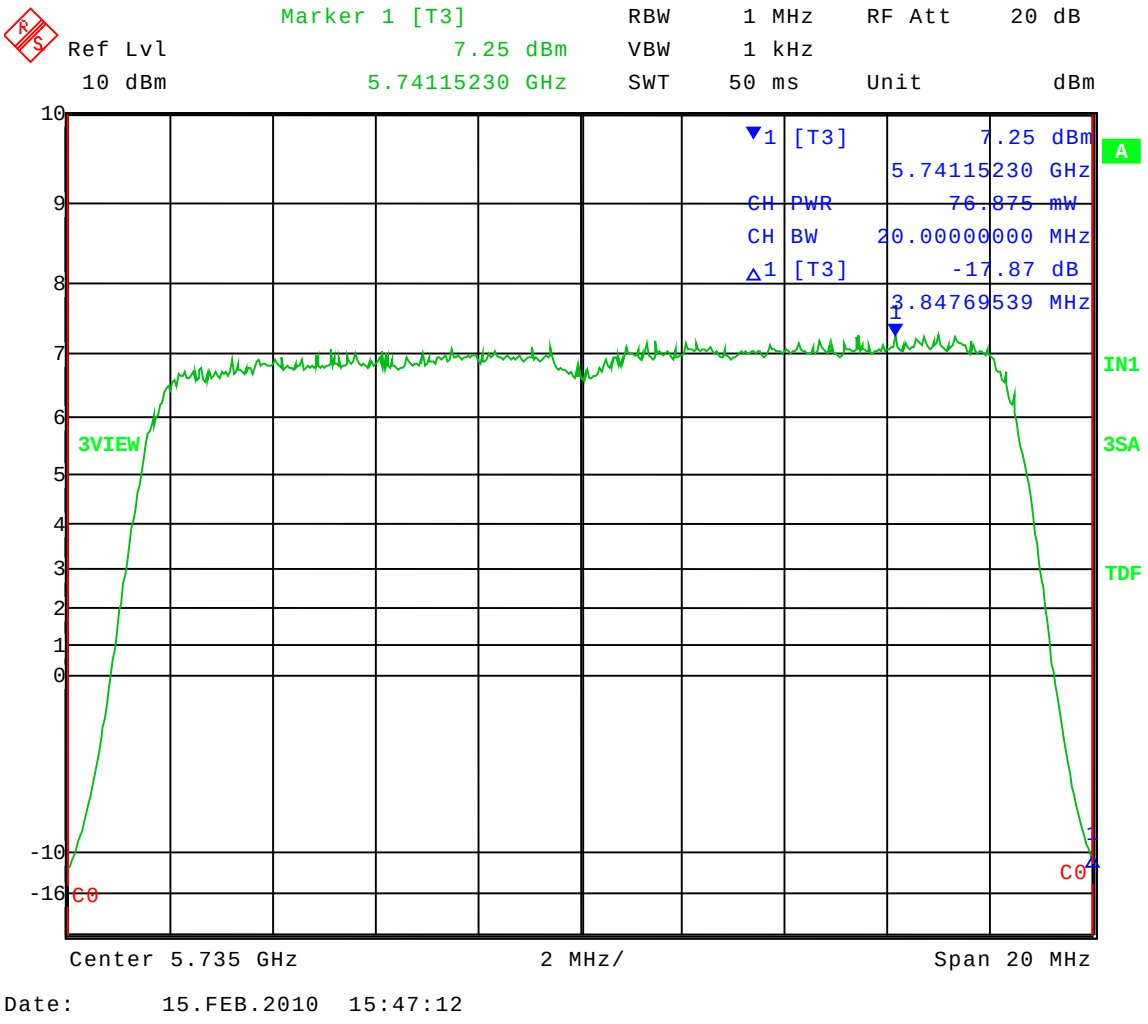
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-15-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Power setting: 62
Modulation: 16QAM
Channel BW: 20 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power: 76.875 mW = 18.86 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **19.86 dBm = 96.78 mW**



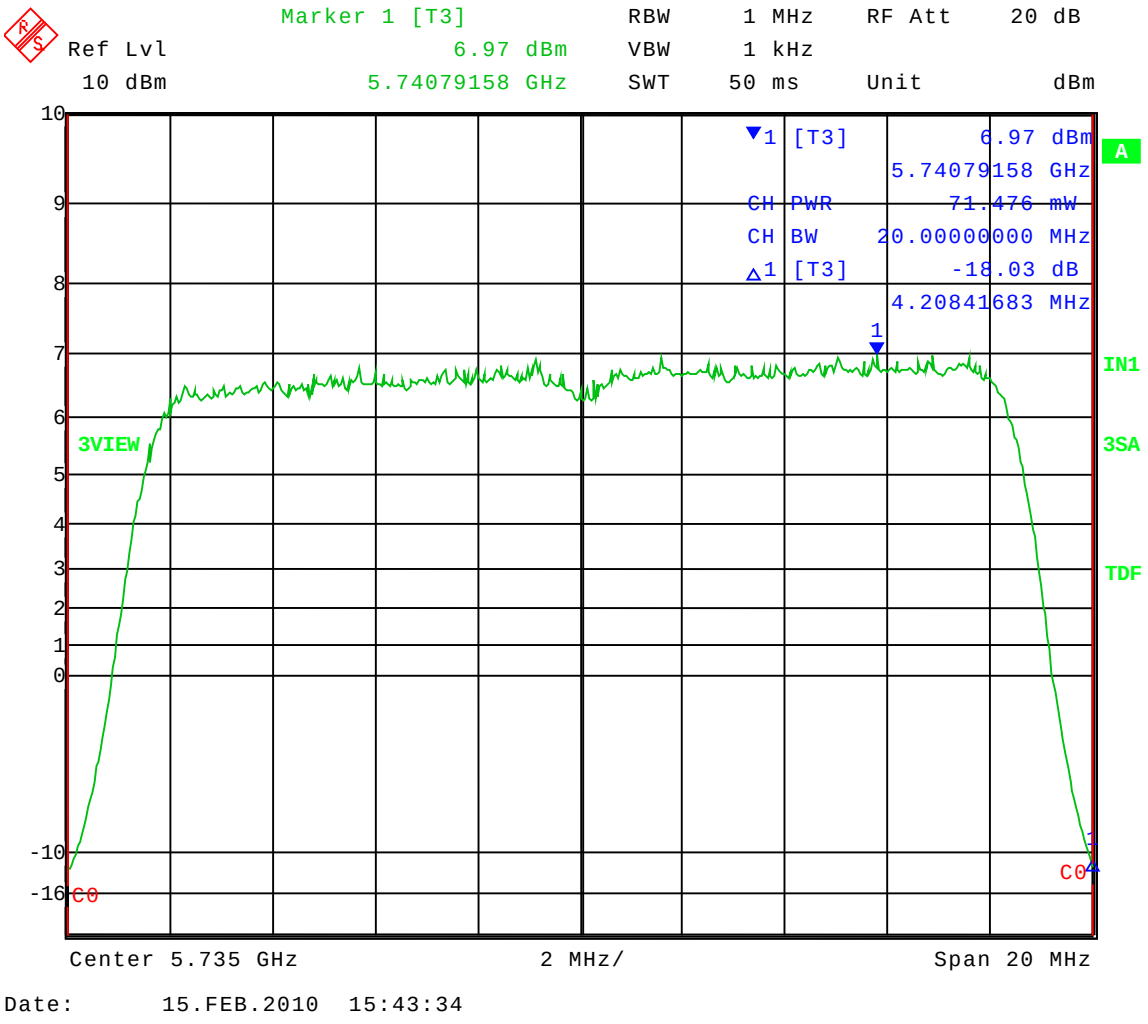
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-15-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Power setting: 63
Modulation: 64QAM
Channel BW: 20 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power: 71.476 mW = 18.54 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **19.54 dBm = 89.98 mW**



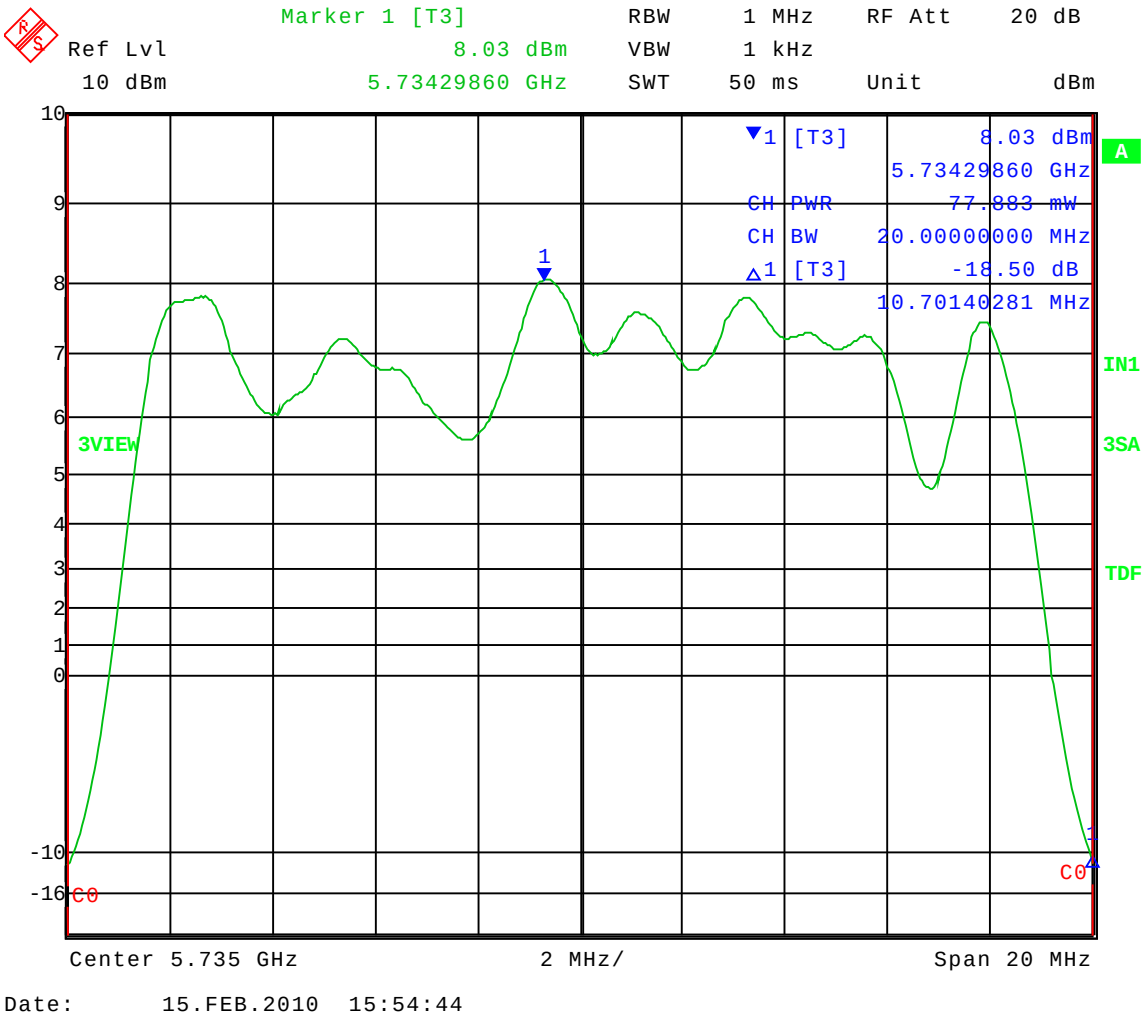
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-15-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Power setting: 61
Modulation: 256QAM
Channel BW: 20 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power: 77.88 mW = 18.91 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **19.91 dBm = 98.05 mW**



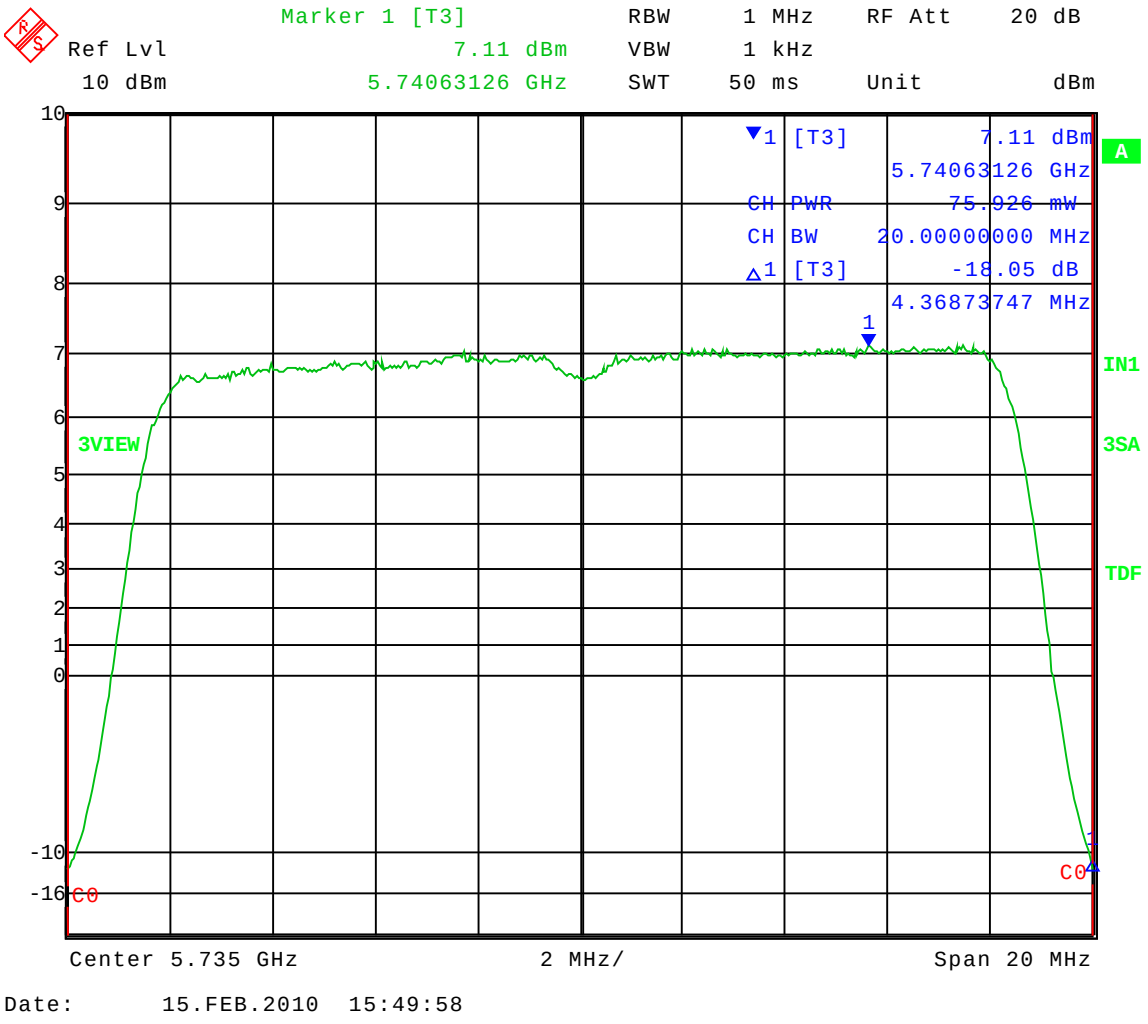
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-15-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Power setting: 62
Modulation: QPSK
Channel BW: 20 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power: 75.93 mW = 18.80 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **19.80 dBm = 95.60 mW**



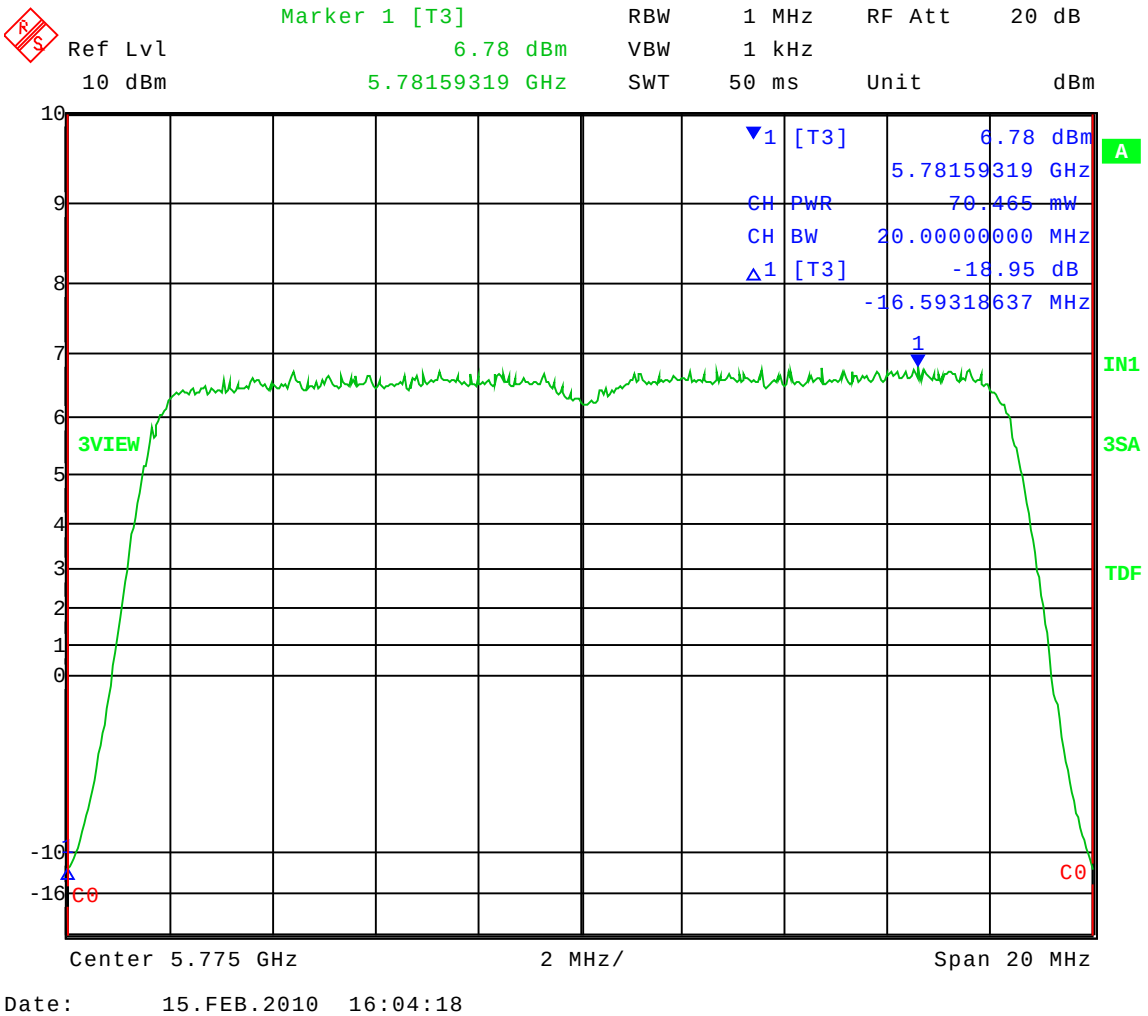
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-15-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 16QAM
Channel BW: 20 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power: 70.47 mW = 18.48 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **19.48 dBm = 88.72 mW**



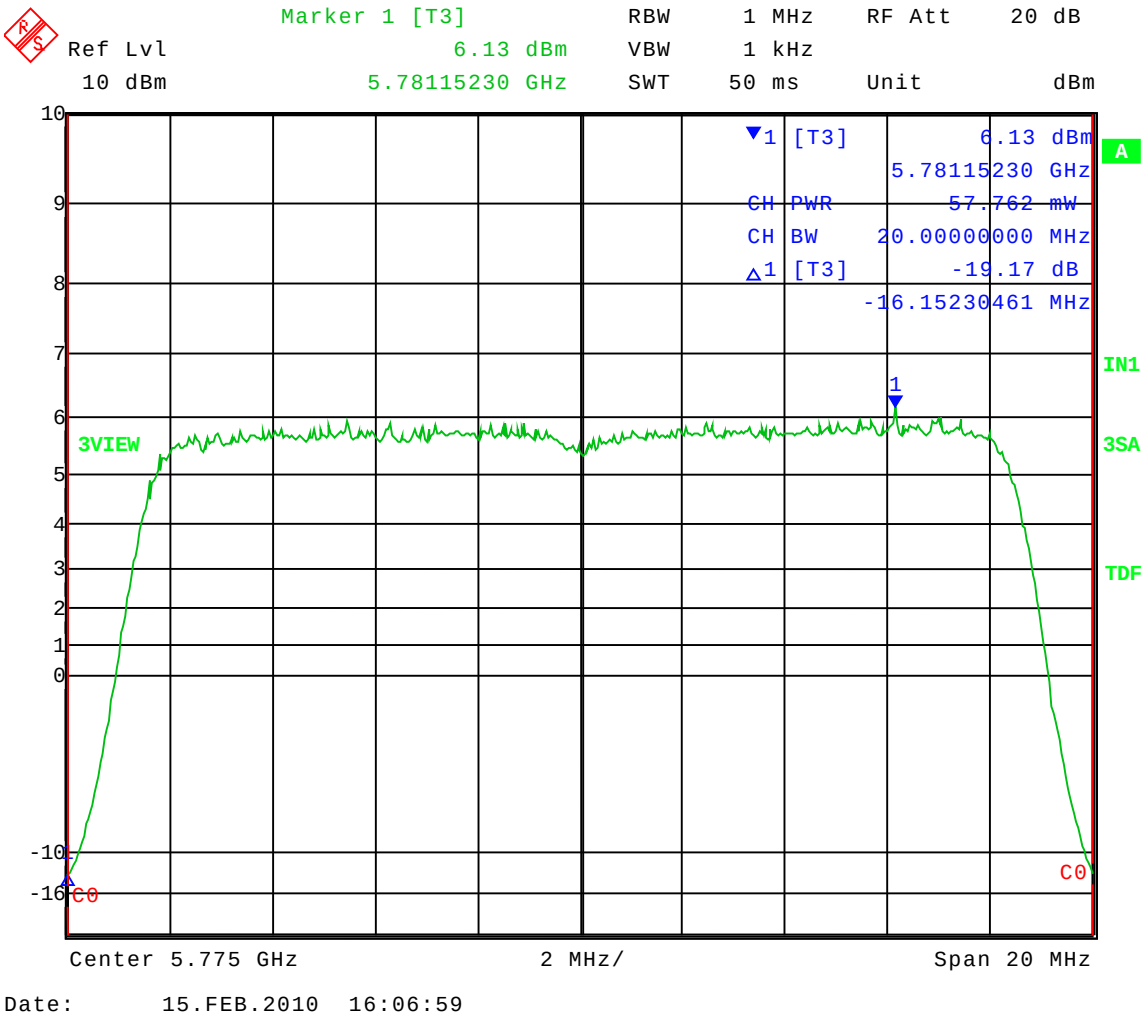
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-15-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 64QAM
Channel BW: 20 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power: 57.76 mW = 17.62 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **18.62 dBm = 72.72 mW**



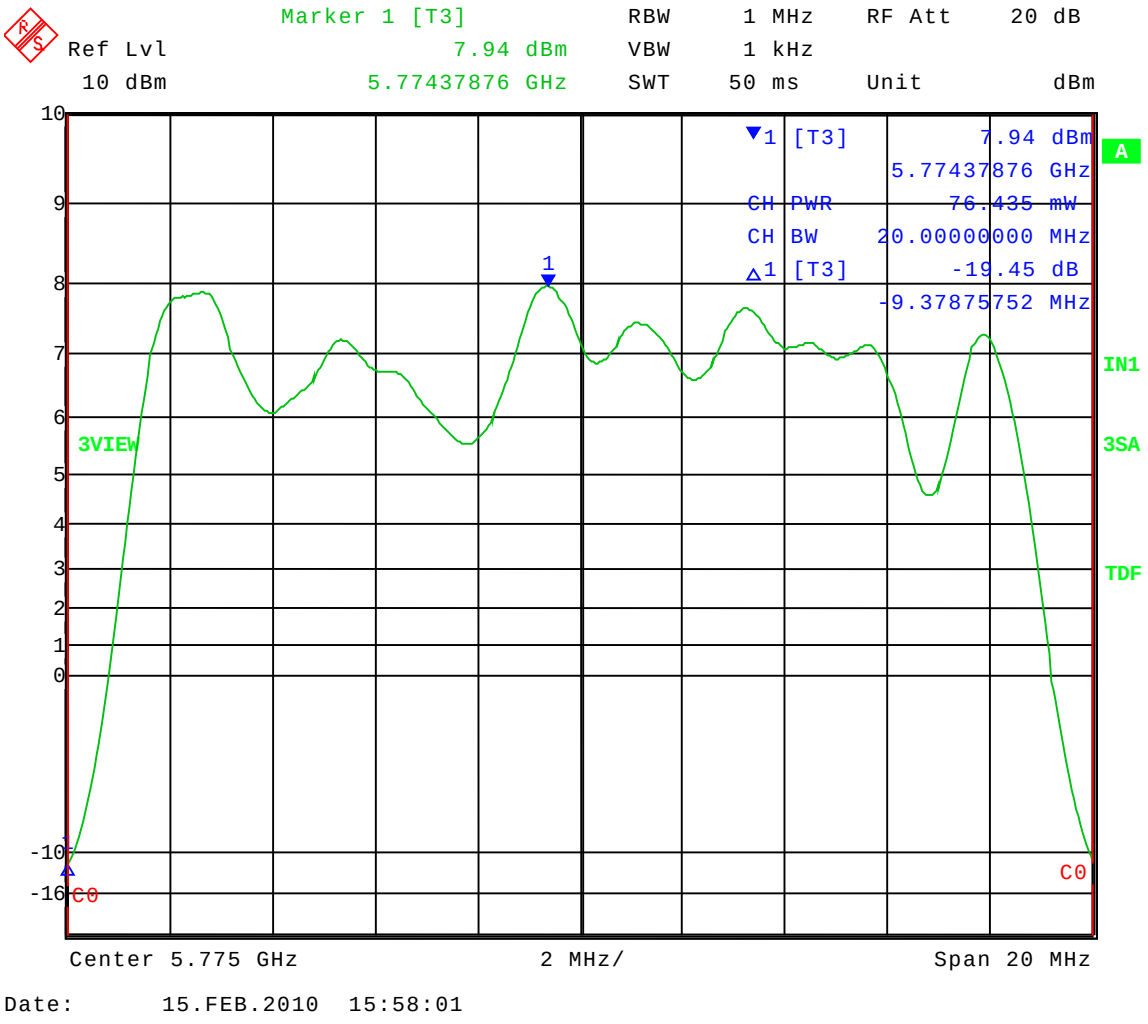
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-15-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 256QAM
Channel BW: 20 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power: 76.44 mW = 18.83 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **19.83 dBm = 96.23 mW**



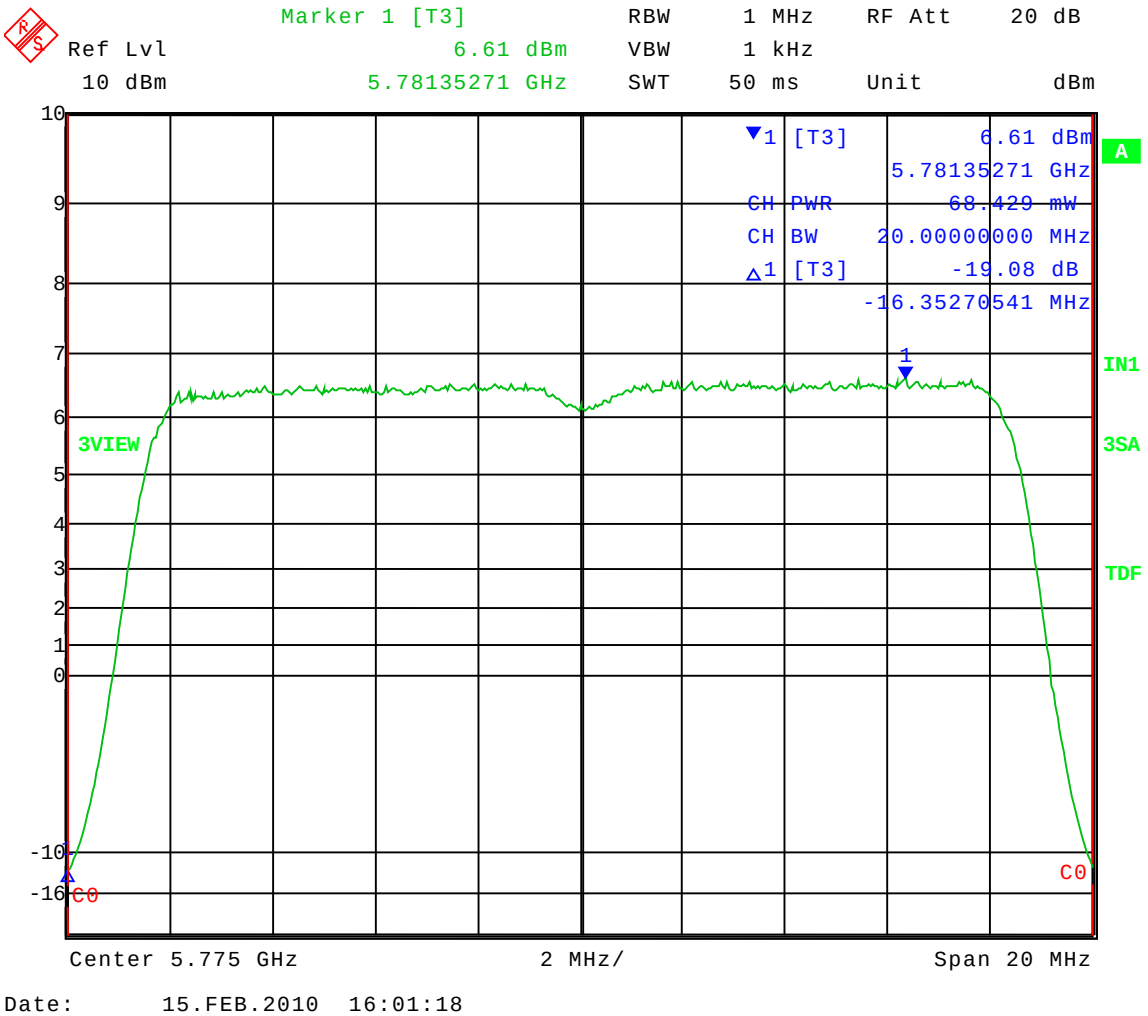
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-15-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: QPSK
Channel BW: 20 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power: 68.43 mW = 18.35 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **19.35 dBm = 86.15 mW**



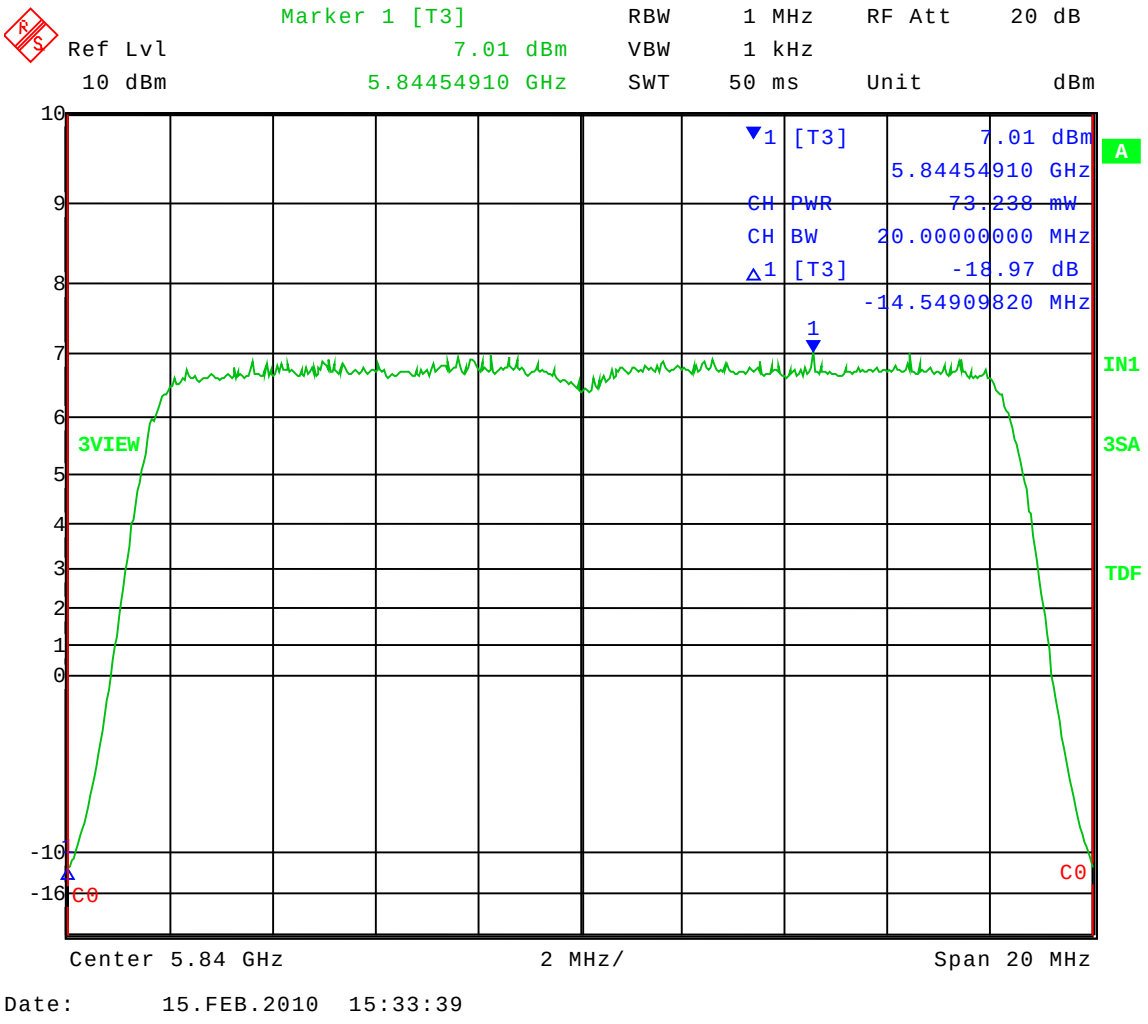
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-15-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Power setting: 64
Modulation: 16QAM
Channel BW: 20 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power: 73.24 mW = 18.65 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **19.65 dBm = 92.20 mW**



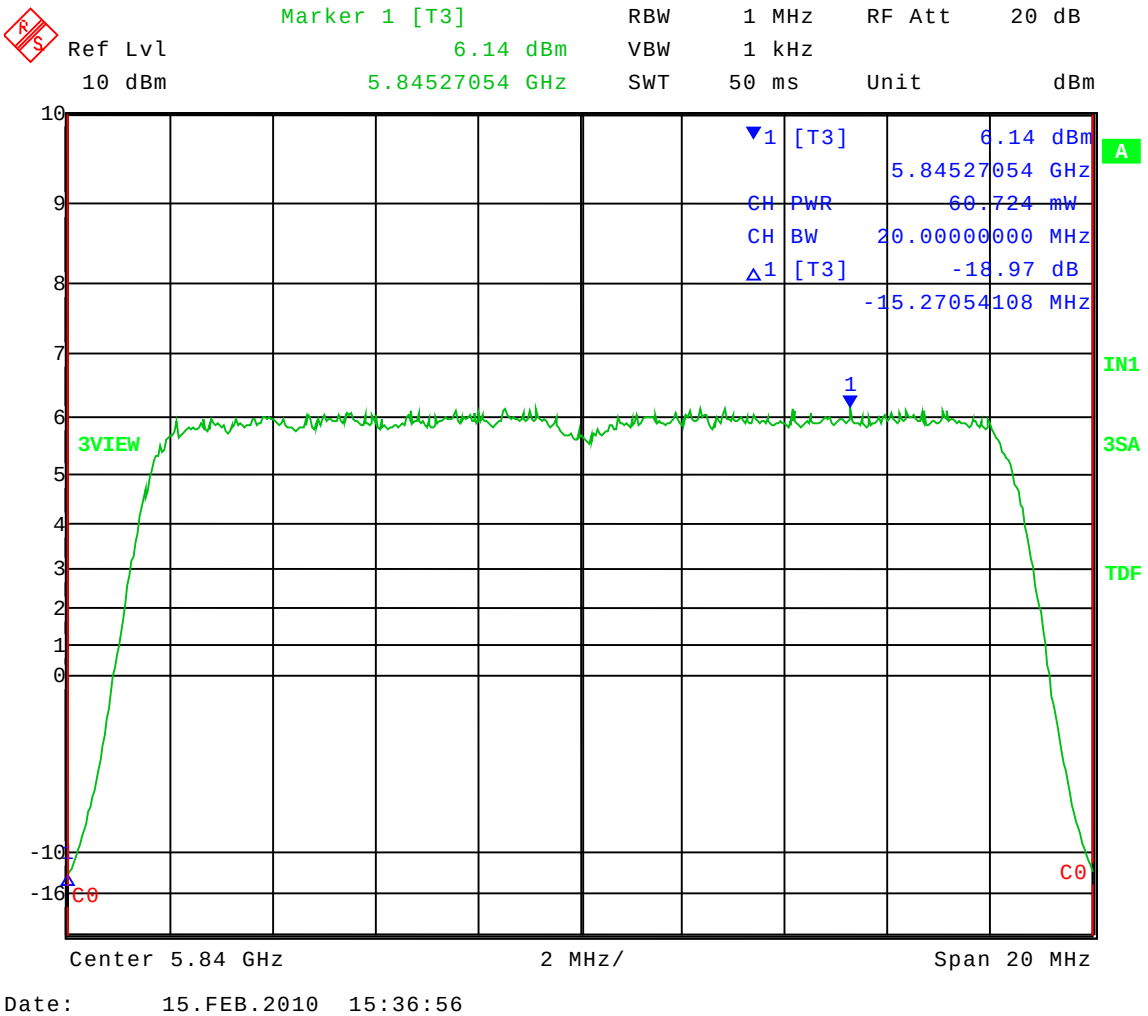
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-15-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Power setting: 64
Modulation: 64QAM
Channel BW: 20 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power: 60.72 mW = 17.83 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **18.83 dBm = 76.44 mW**



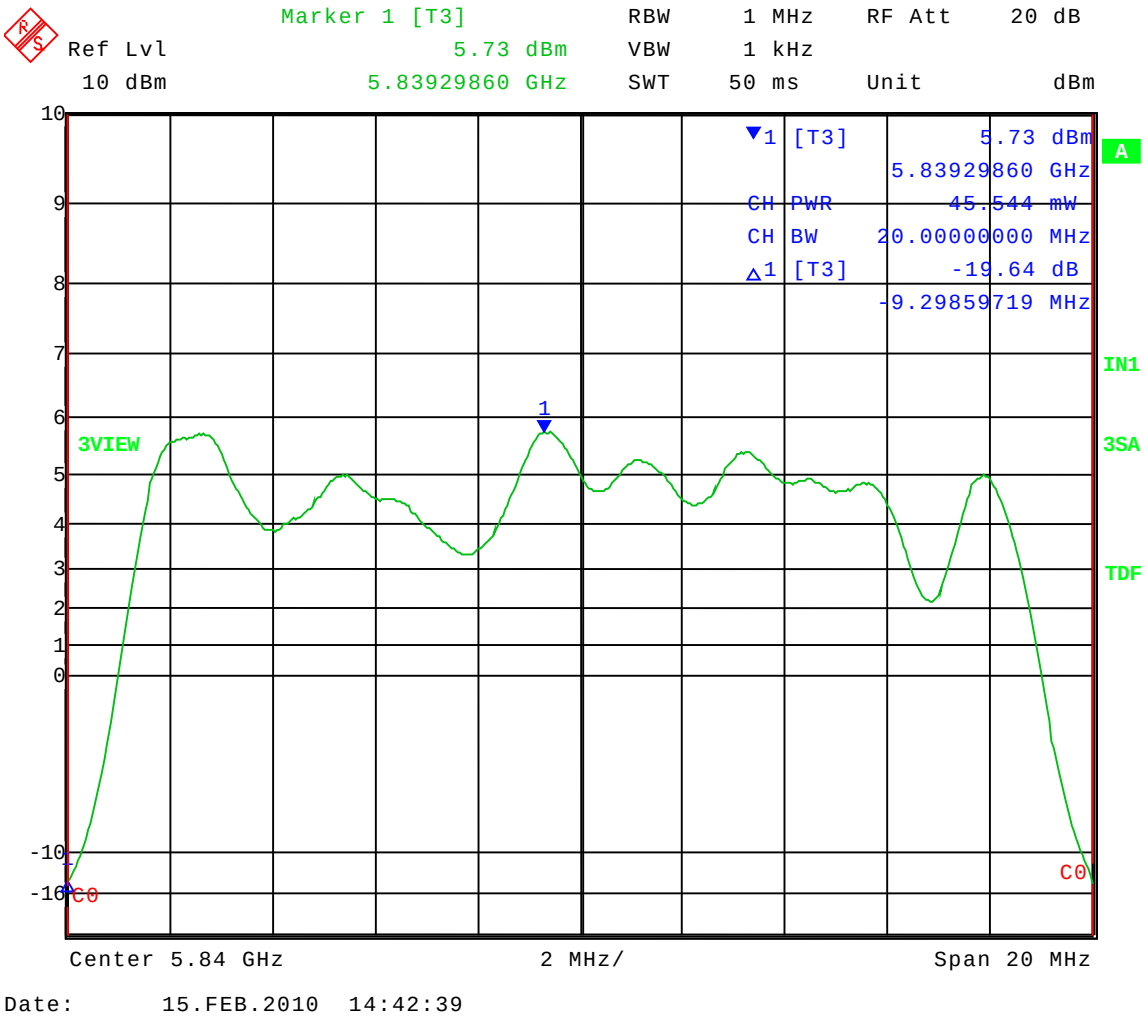
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-15-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Power setting: 5F
Modulation: 256QAM
Channel BW: 20 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power: 45.544 mW = 16.584 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **17.584 dBm** = 57.34 mW



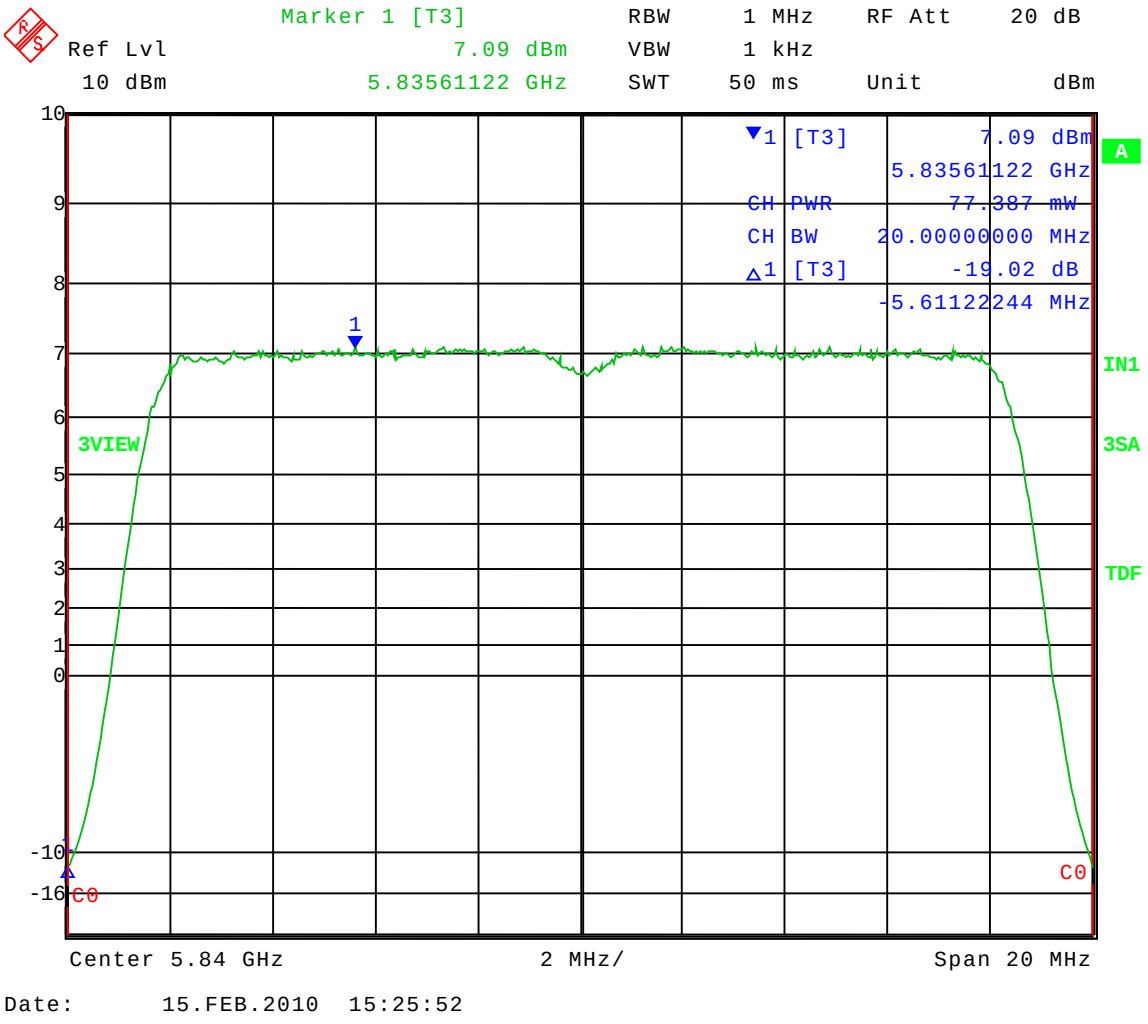
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-15-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Maximum Conducted Power Averaged

Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Power setting: 65
Modulation: QPSK
Channel BW: 20 MHz

Antenna gain: 16 dBi
Conducted RF Limit: 30 dBm – 10 dB (amount antenna gain is over 6 dBi) = 20 dBm.

Averaged Output Power: 77.387 mW = 18.89 dBm + 1 dB (Motorola cable from N-Type connector to circuit board) = **19.89 dBm = 97.42 mW**



1250 Peterson Dr., Wheeling, IL 60090

4.0 Test Run: RF antenna conducted test

Rule Section: Section 15.247(d) – Spurious emissions

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

Description: The EUT was set to transmit in continuous mode.
Measurements were taken for QPSK, 16-QAM, 64-QAM, and 256-QAM modulation types, and at the lowest, middle, and highest channels of operation. Measurements were taken for the 5 MHz, 10 MHz, and 20 MHz channel bandwidth settings.

Limit: This device complies with the use of power option 2. Therefore, all harmonics/spurs must be at least 30 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

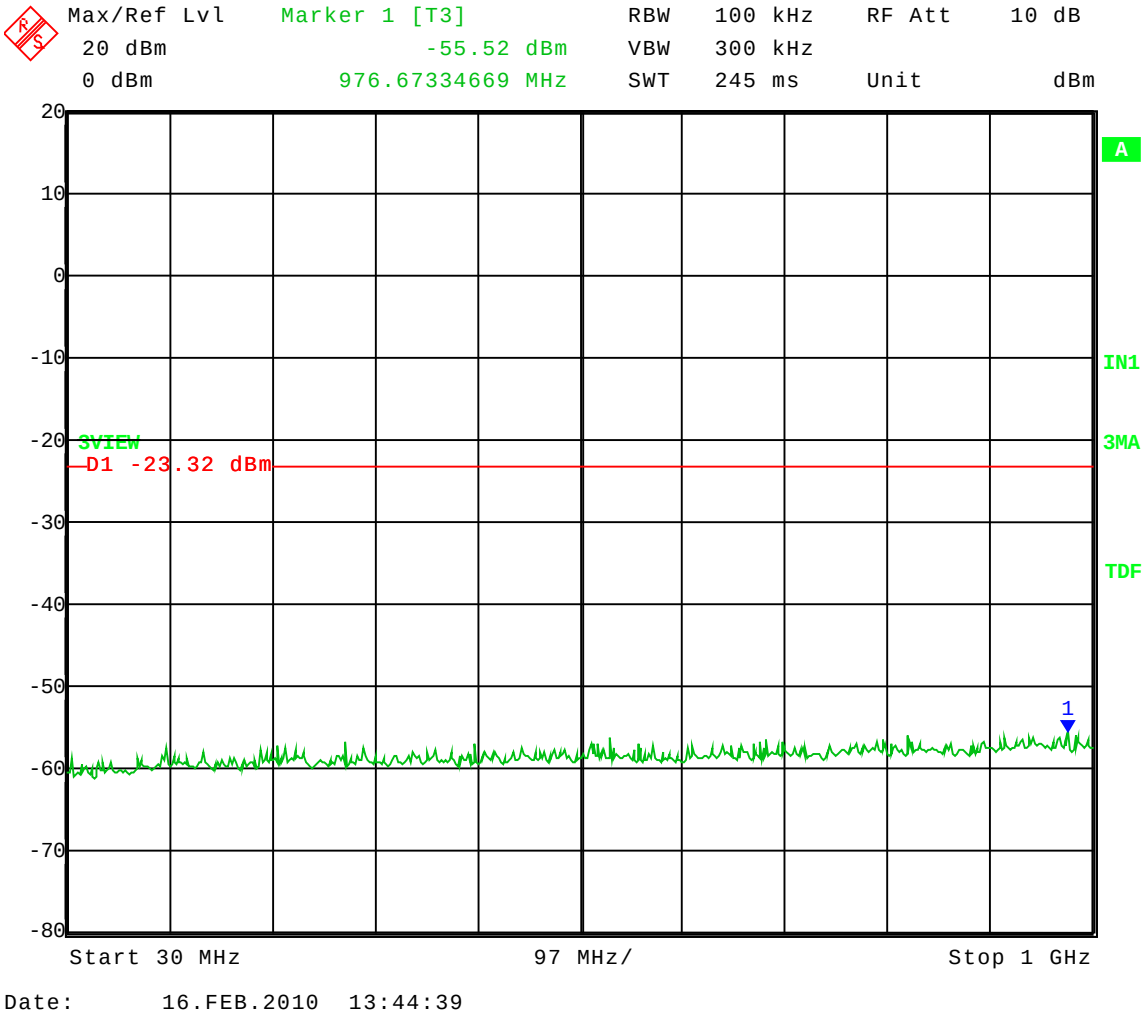
Results: Passed

1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 62
Modulation: 16QAM

Frequency Range: 30 to 1000 MHz
Limit = -23.32 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

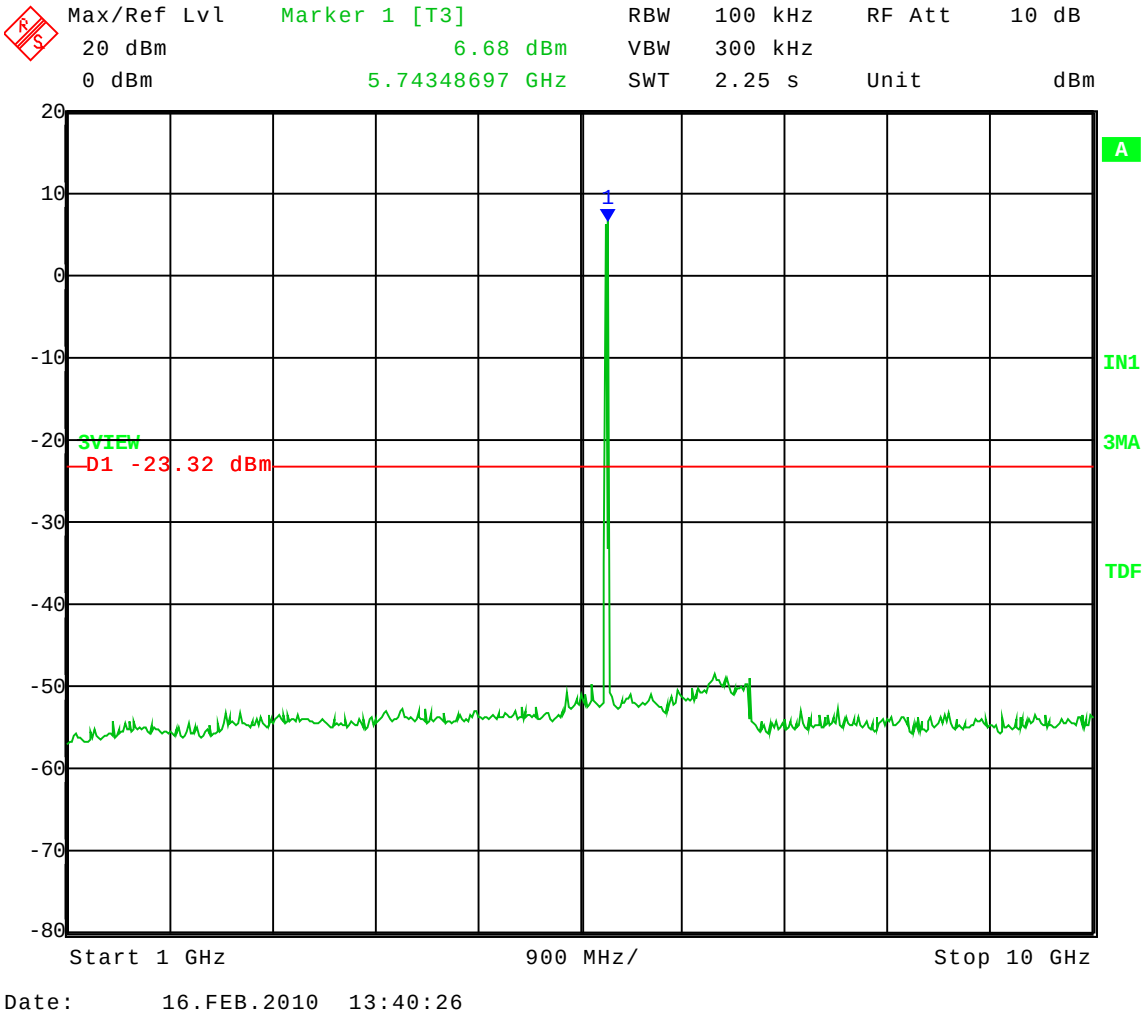


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 62
Modulation: 16QAM

Frequency Range: 1 to 10 GHz
Limit = -23.32 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

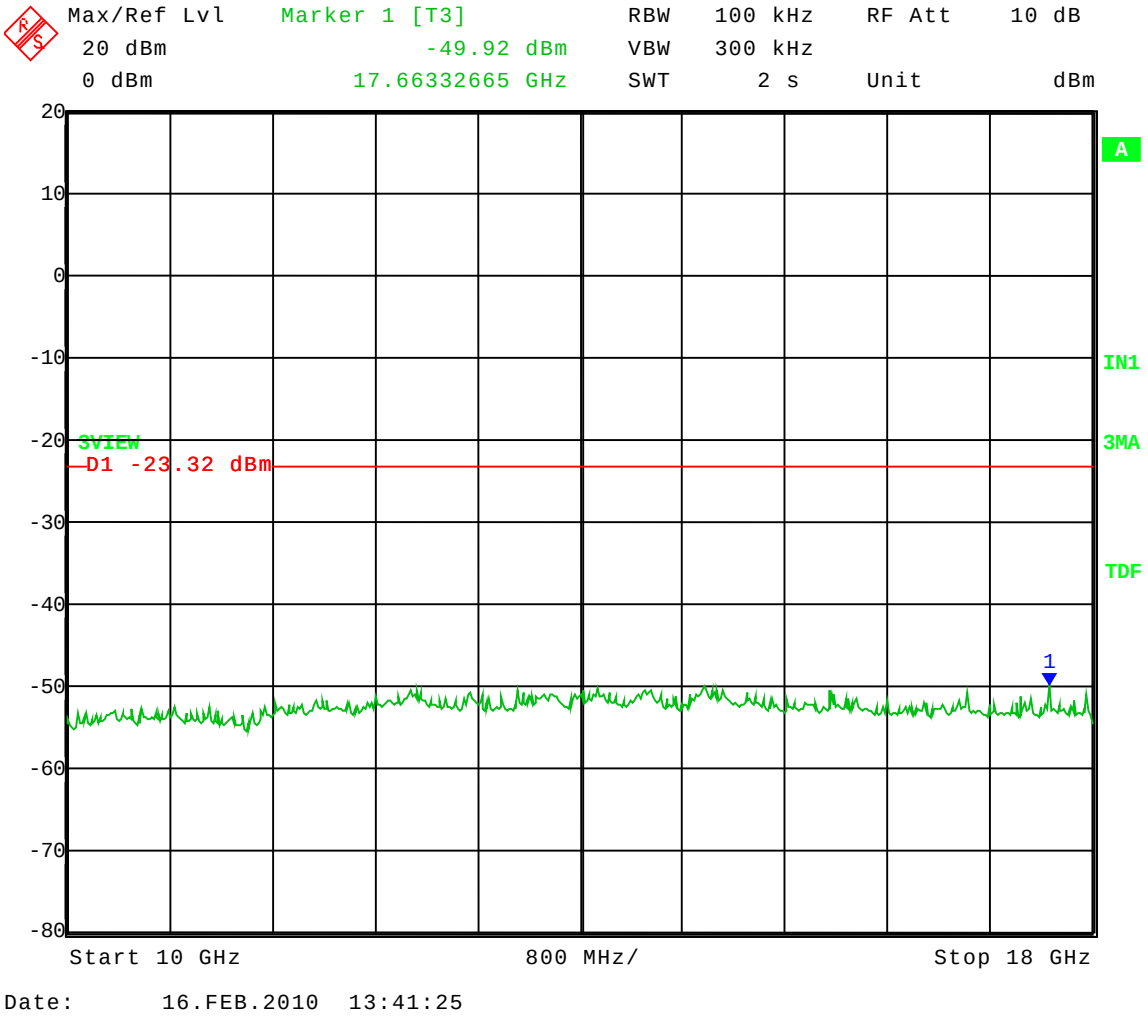


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 62
Modulation: 16QAM

Frequency Range: 10 to 18 GHz
Limit = -23.32 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

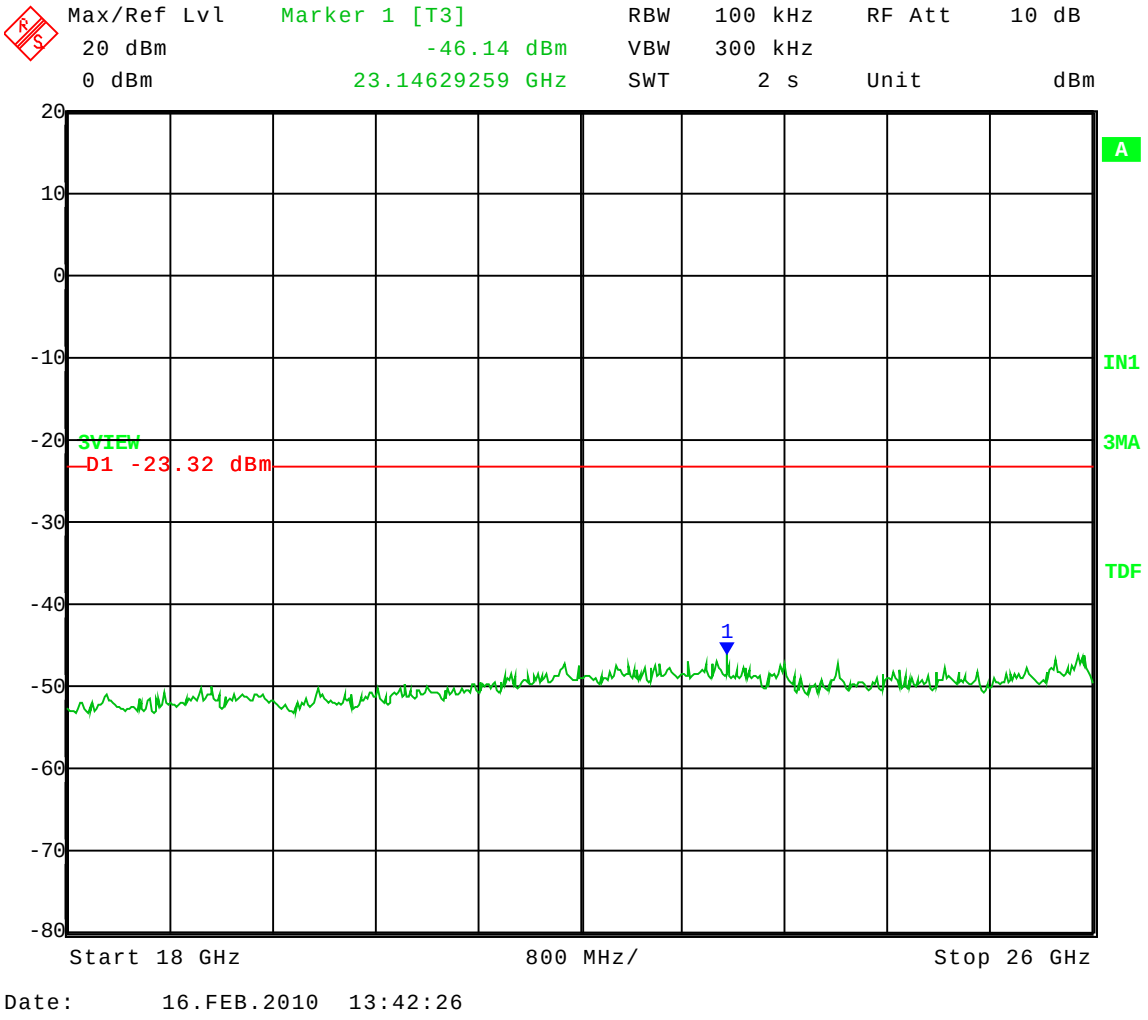


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 62
Modulation: 16QAM

Frequency Range: 18 to 26 GHz
Limit = -23.32 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

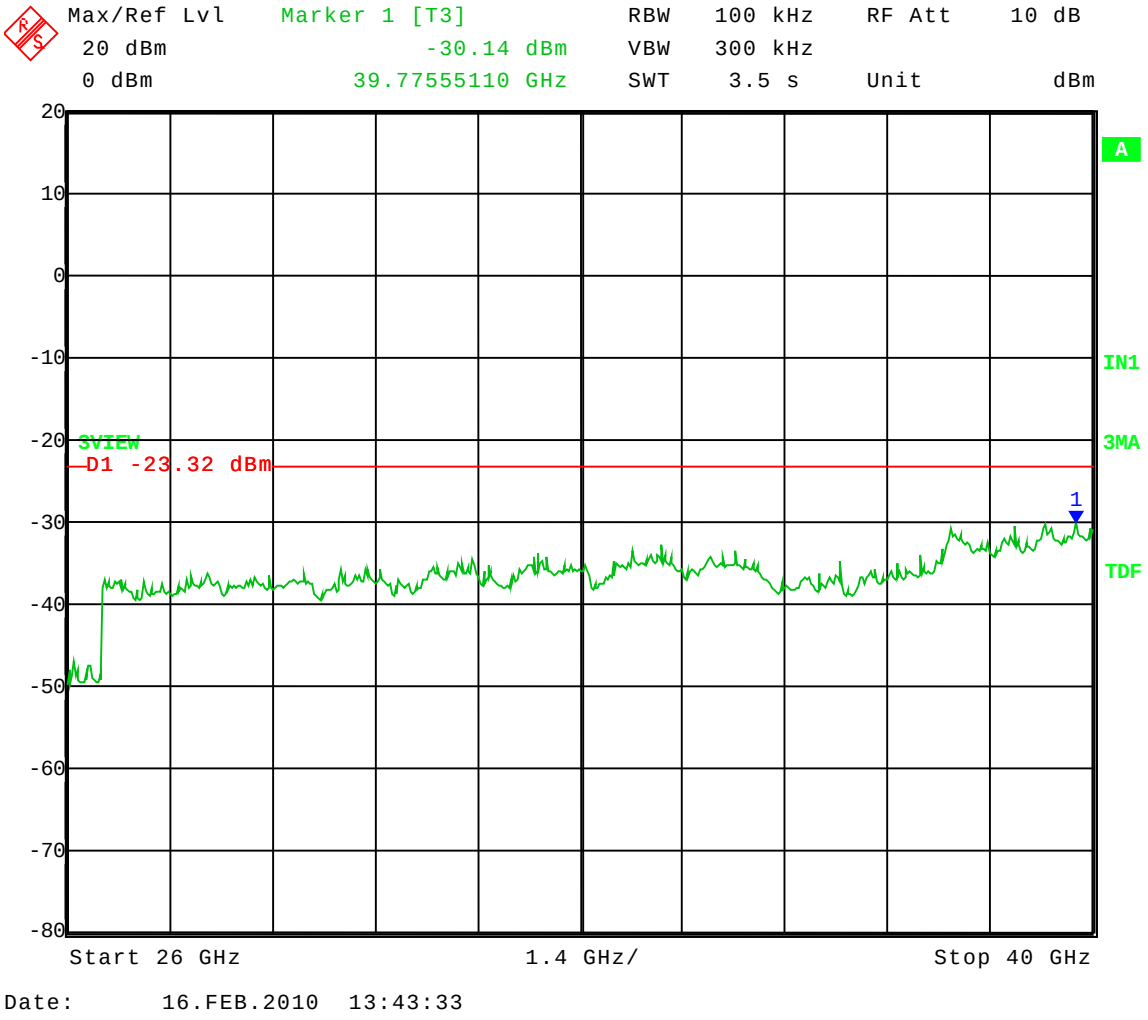


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 62
Modulation: 16QAM

Frequency Range: 26 to 40 GHz
Limit = -23.32 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

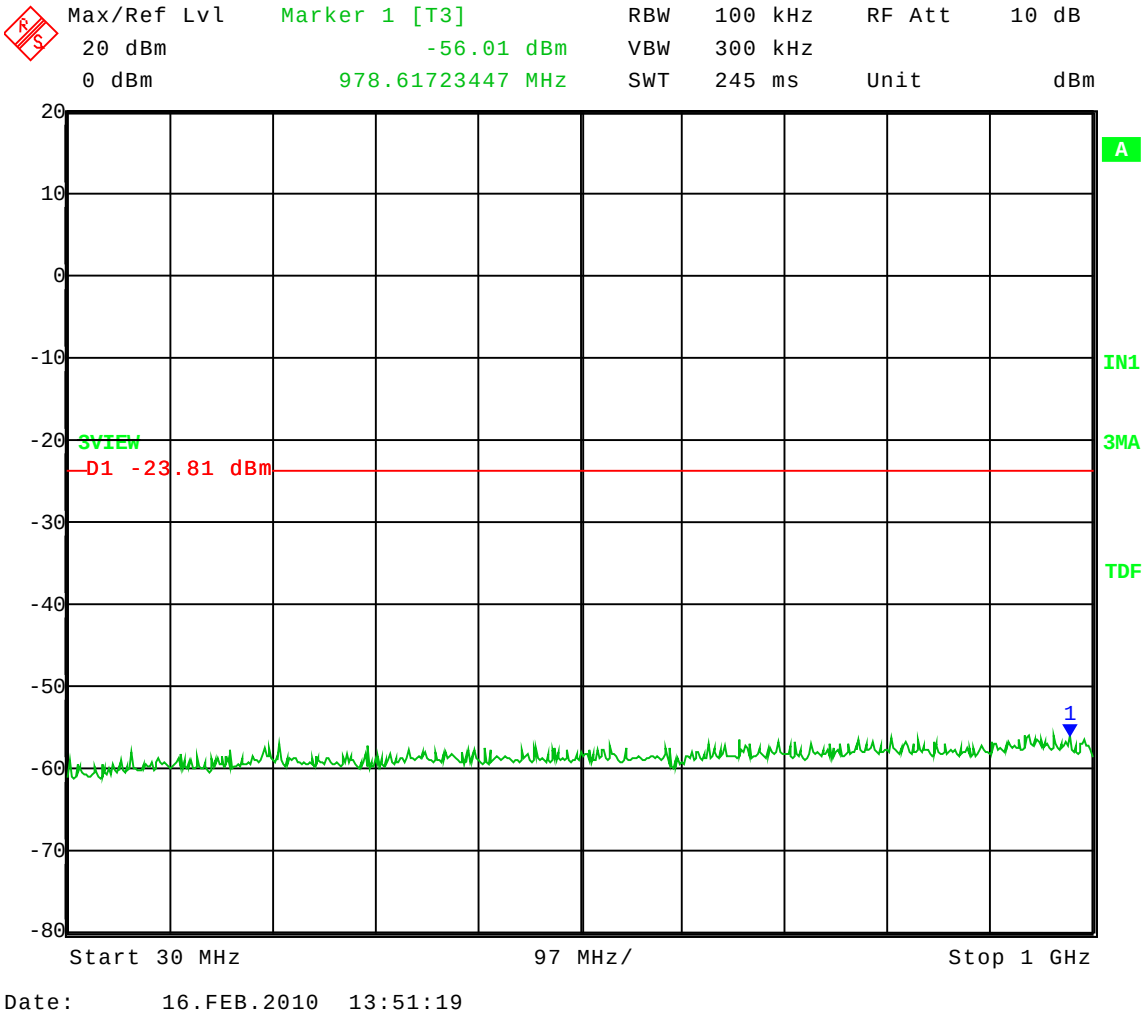


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 63
Modulation: 64QAM

Frequency Range: 30 to 1000 MHz
Limit = -23.81 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

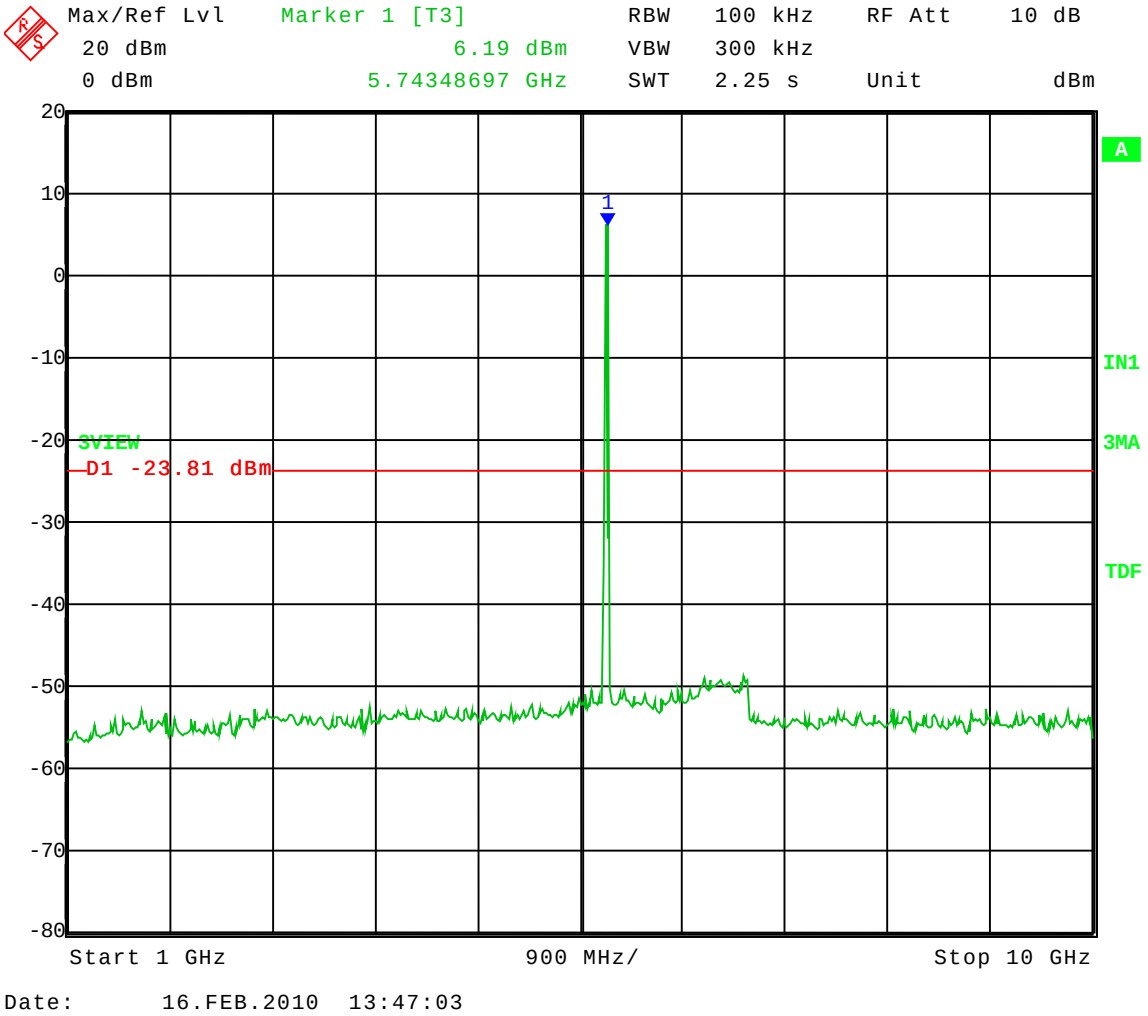


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 63
Modulation: 64QAM

Frequency Range: 1 to 10 GHz
Limit = -23.81 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

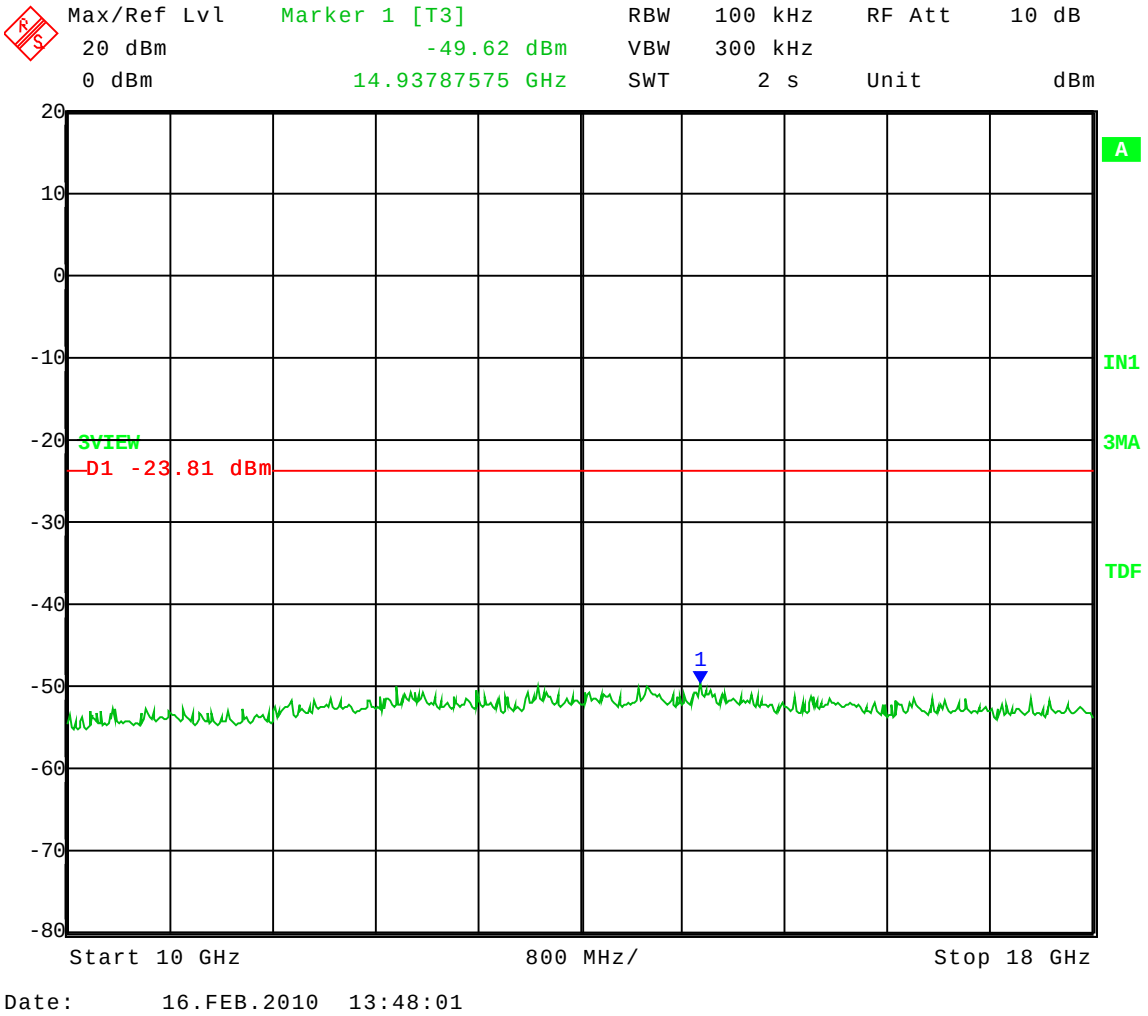


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 63
Modulation: 64QAM

Frequency Range: 10 to 18 GHz
Limit = -23.81 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

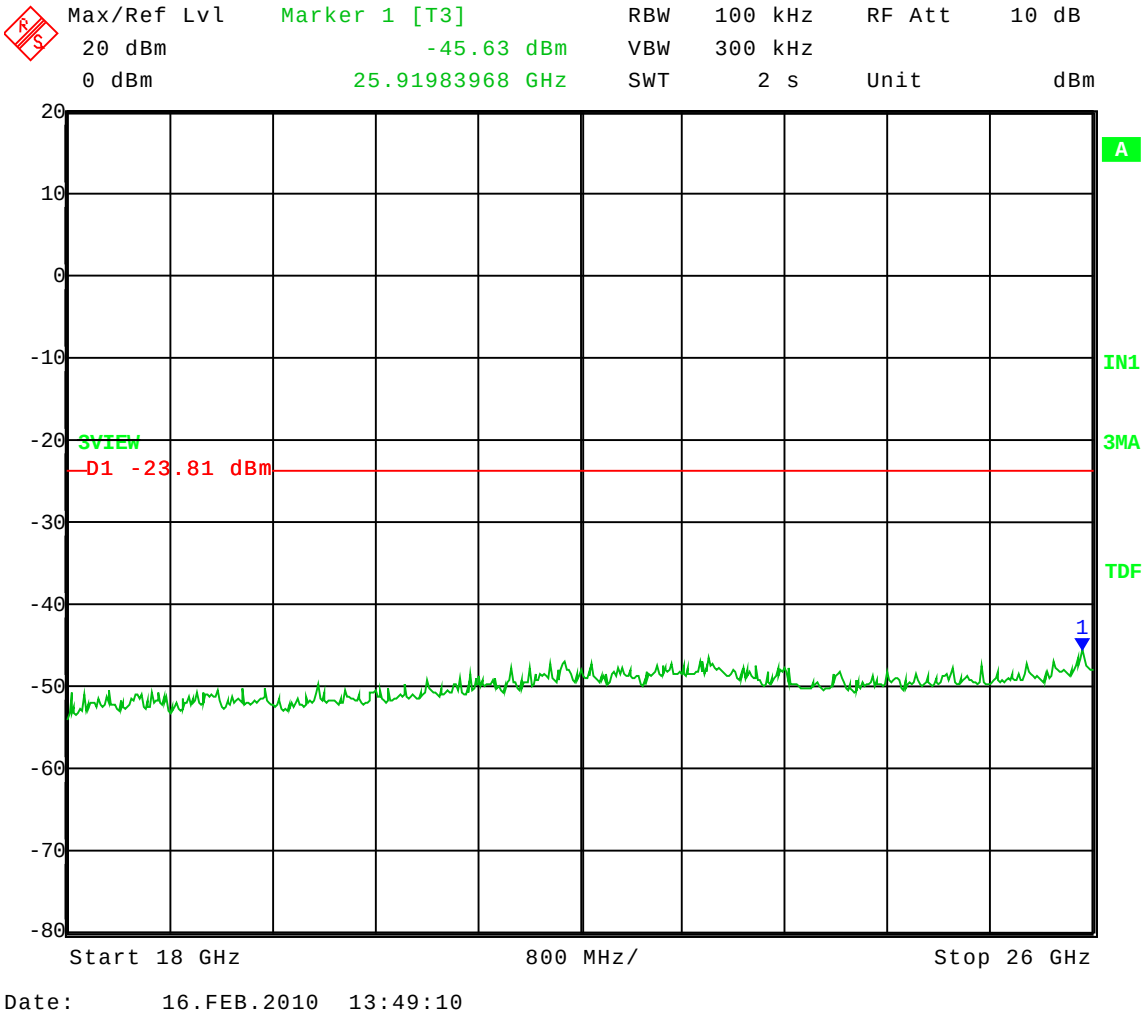


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 63
Modulation: 64QAM

Frequency Range: 18 to 26 GHz
Limit = -23.81 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

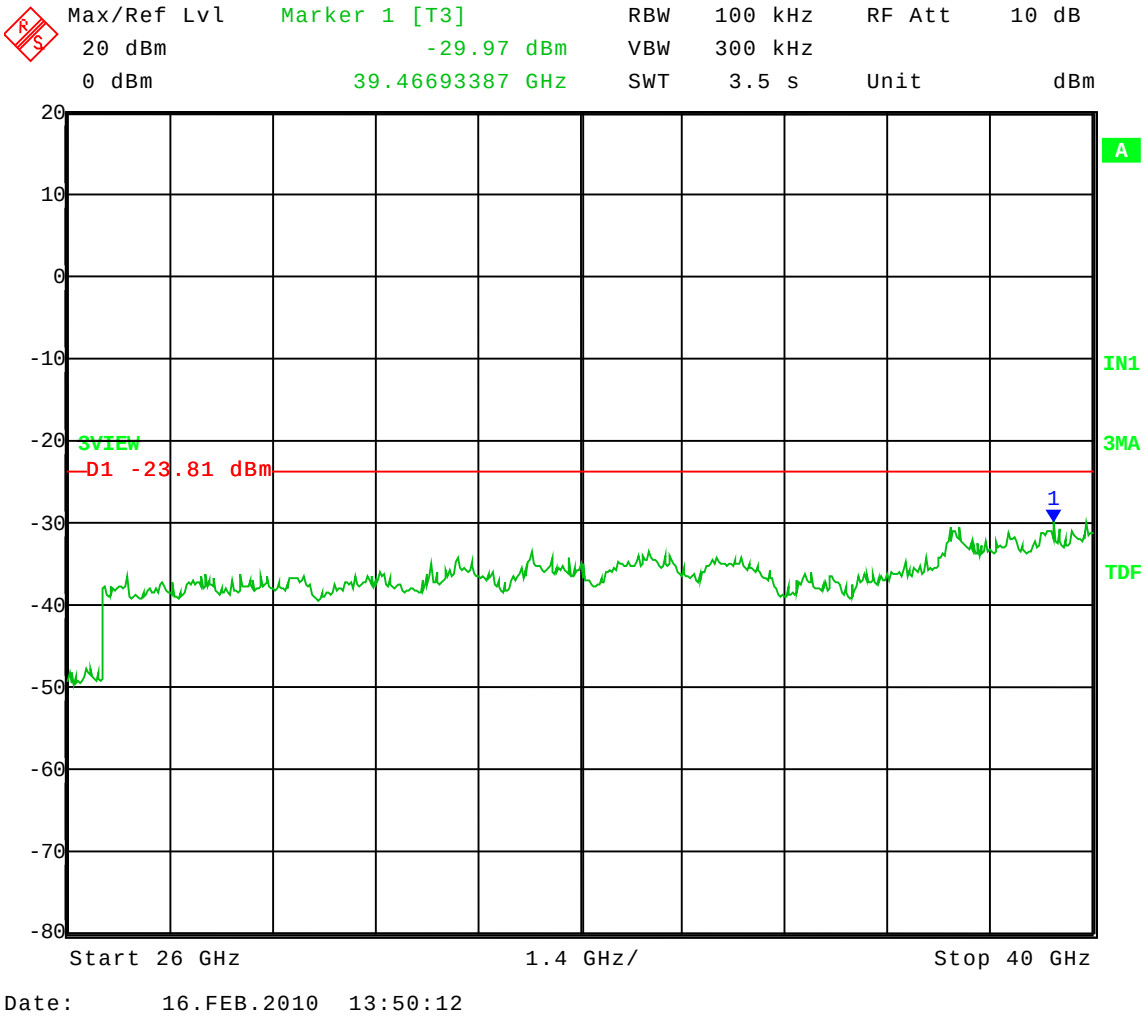


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 63
Modulation: 64QAM

Frequency Range: 26 to 40 GHz
Limit = -23.81 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

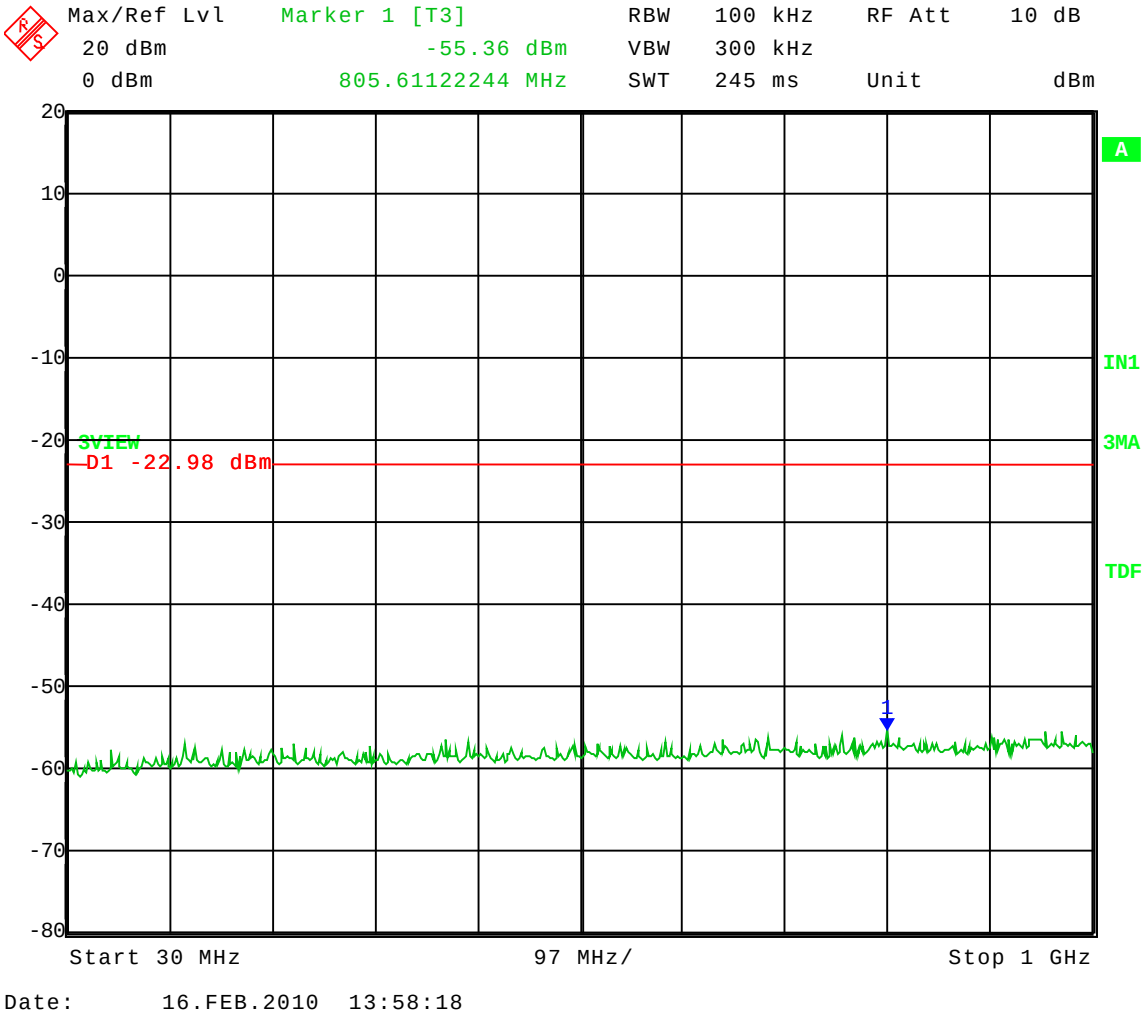


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 256QAM

Frequency Range: 30 to 1000 MHz
Limit = -22.98 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

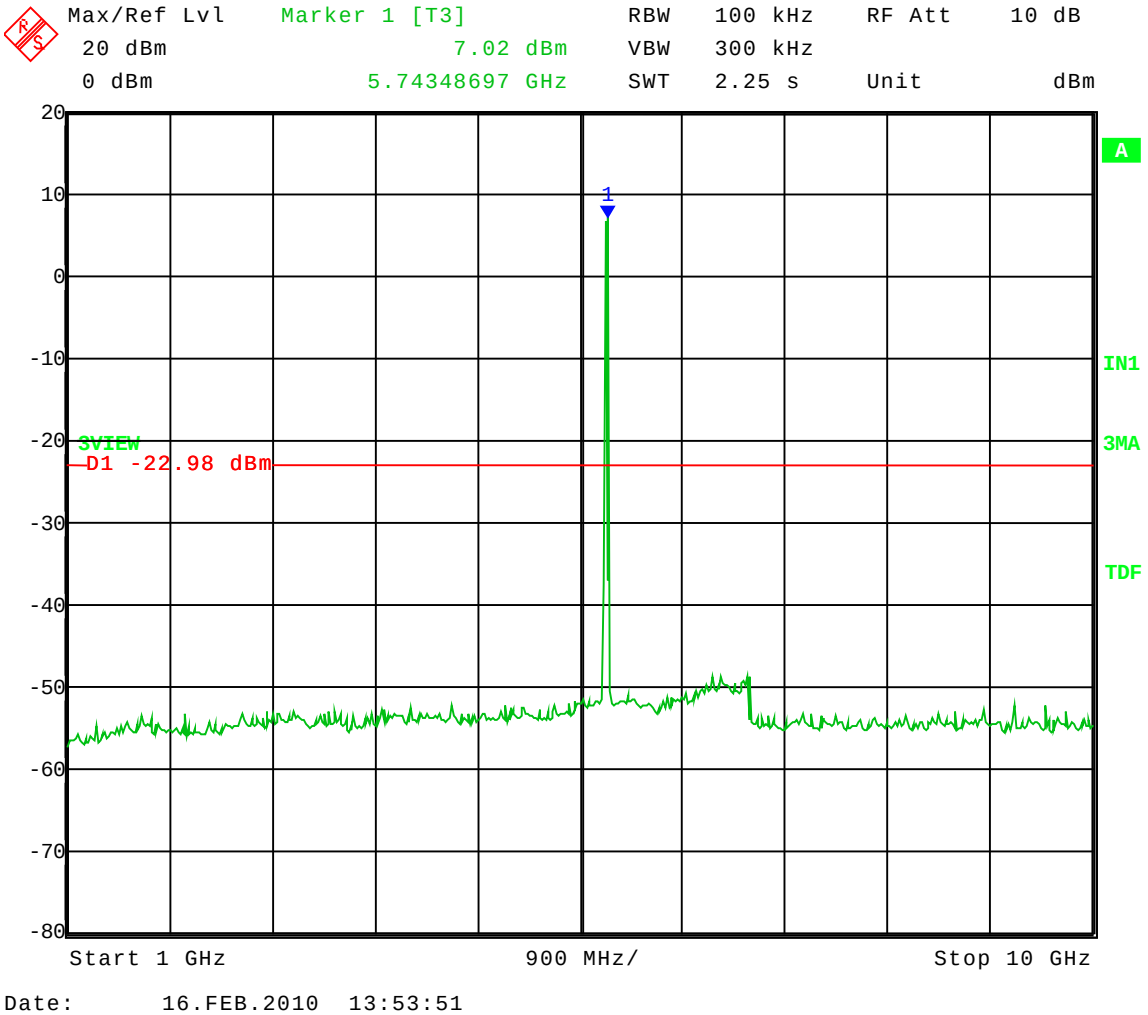


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 256QAM

Frequency Range: 1 to 10 GHz
Limit = -22.98 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

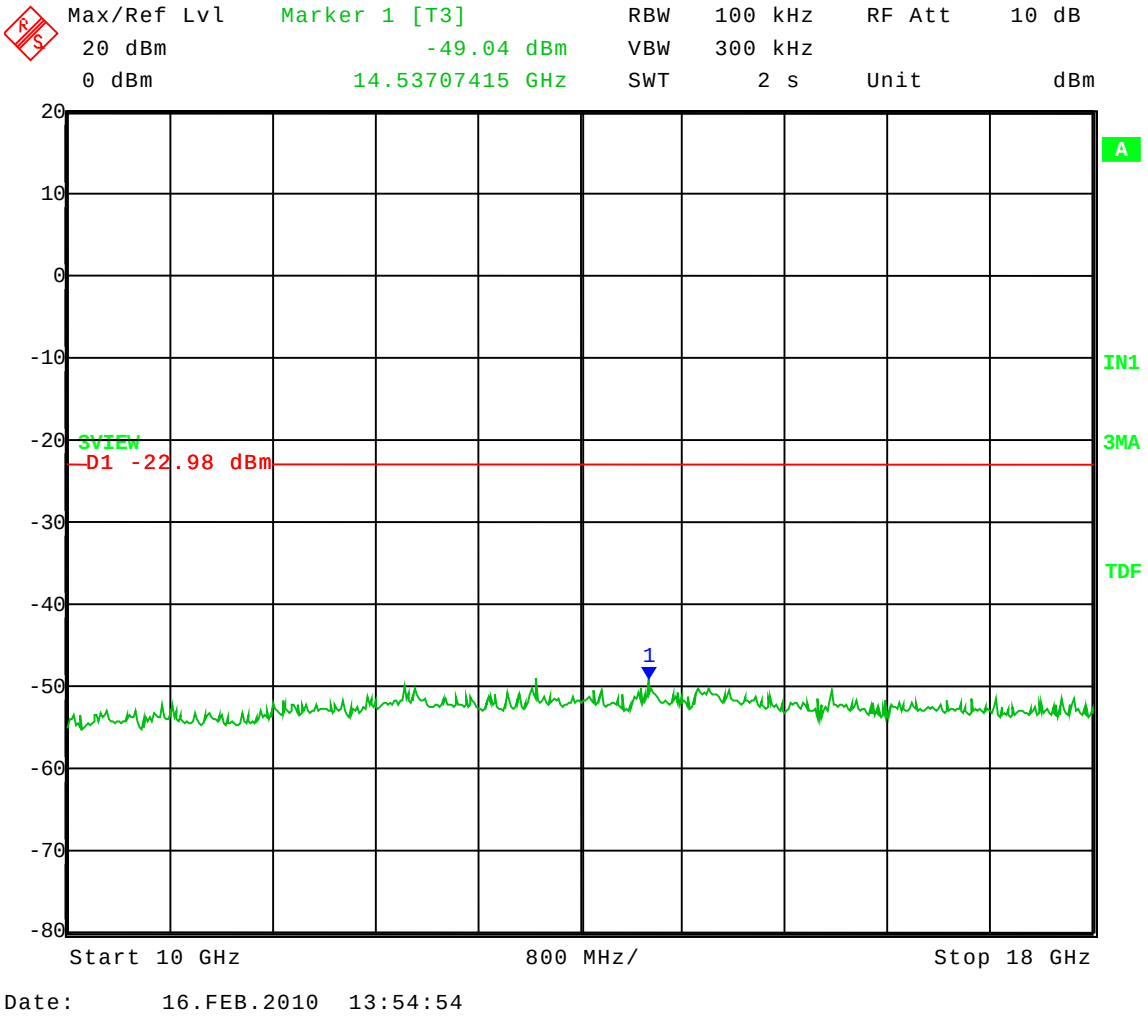


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 256QAM

Frequency Range: 10 to 18 GHz
Limit = -22.98 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

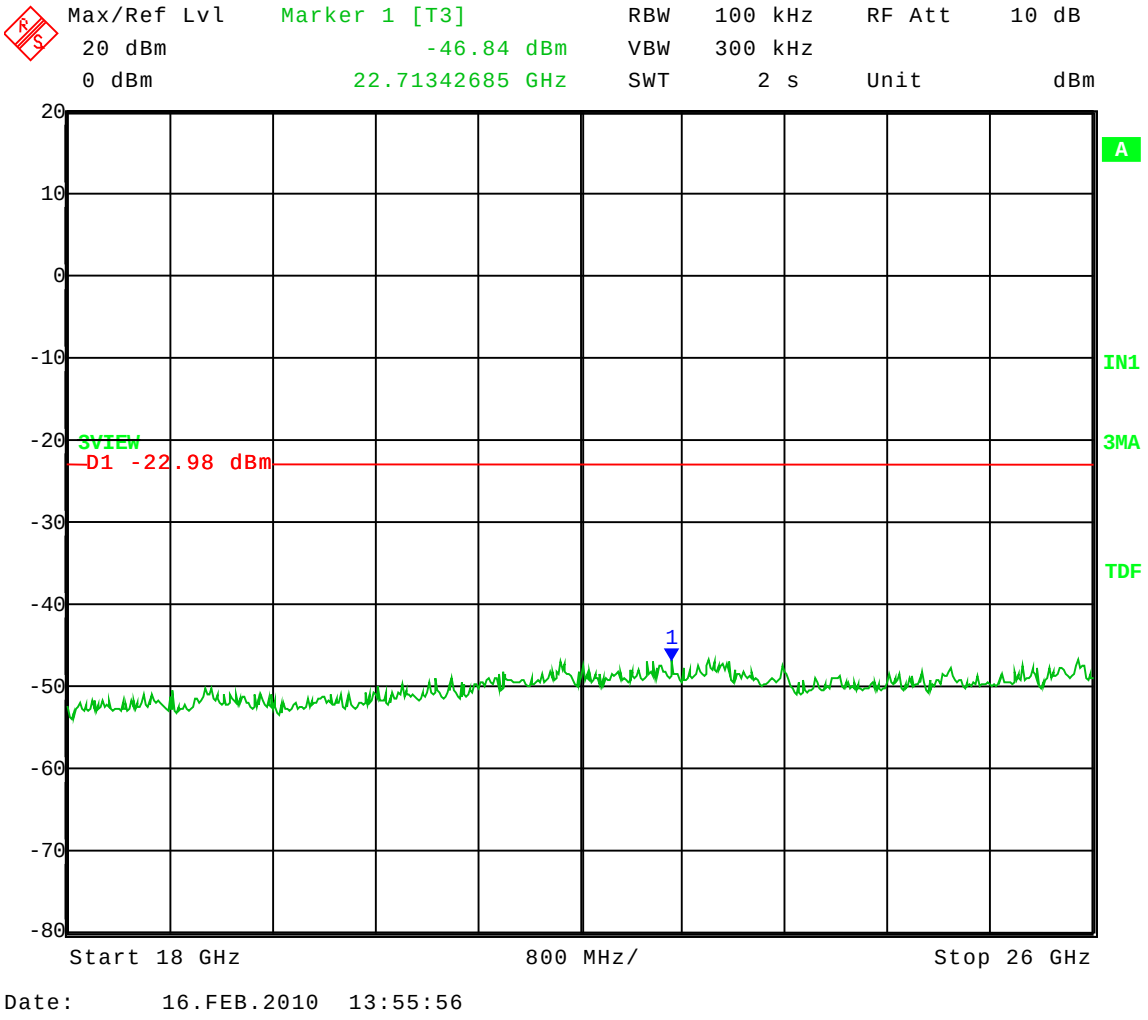


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 256QAM

Frequency Range: 18 to 26 GHz
Limit = -22.98 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

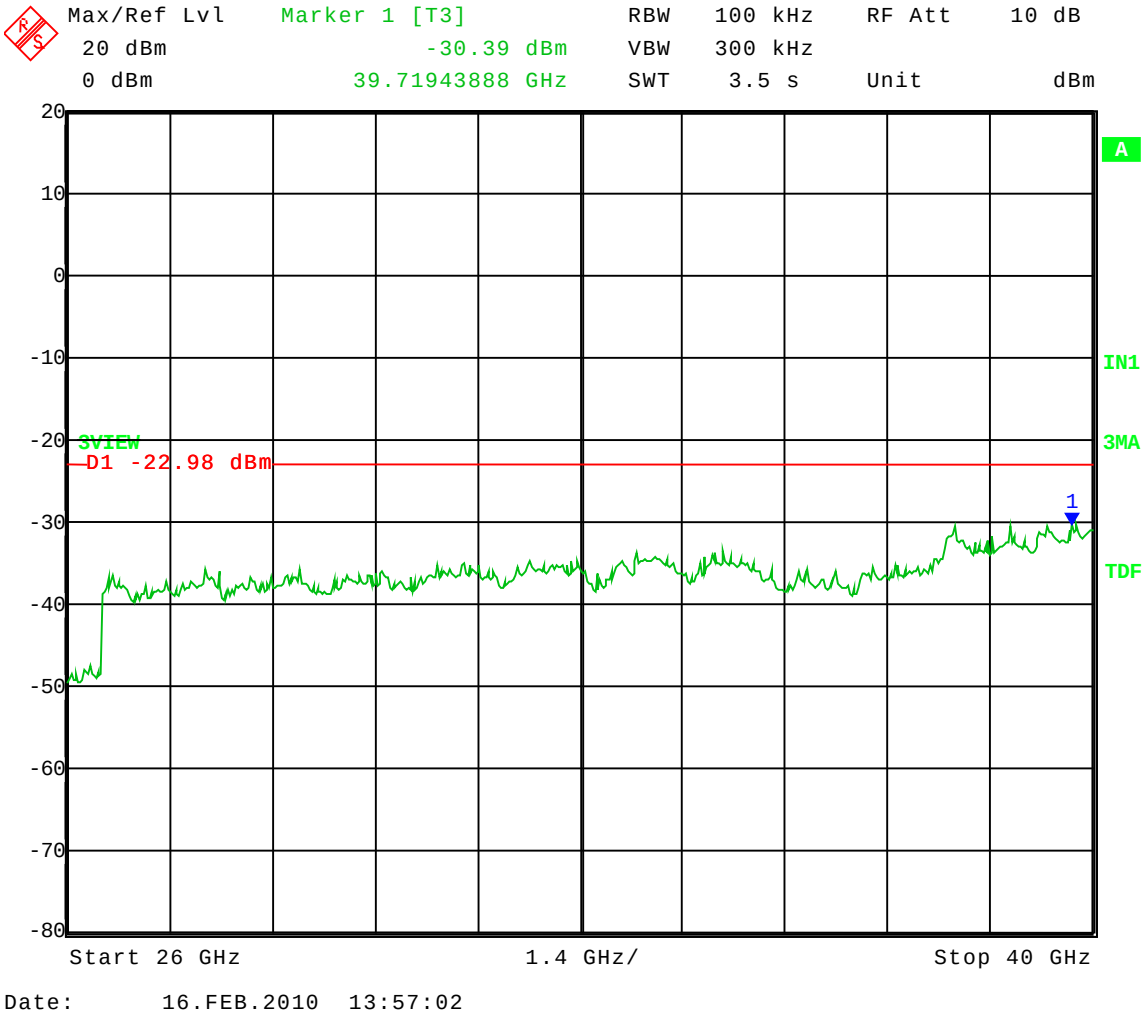


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 256QAM

Frequency Range: 26 to 40 GHz
Limit = -22.98 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

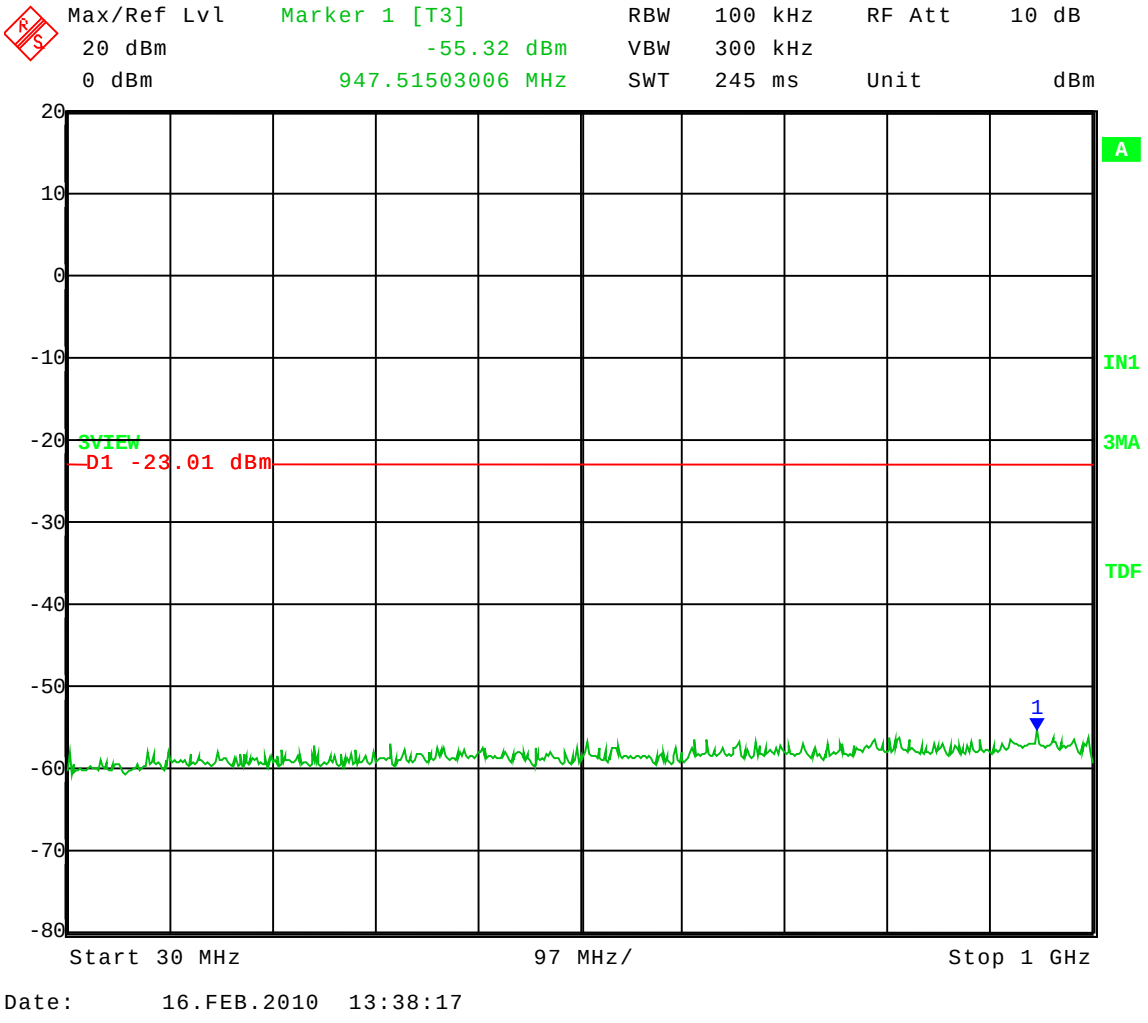


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 62
Modulation: QPSK

Frequency Range: 30 to 1000 MHz
Limit = -23.01 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

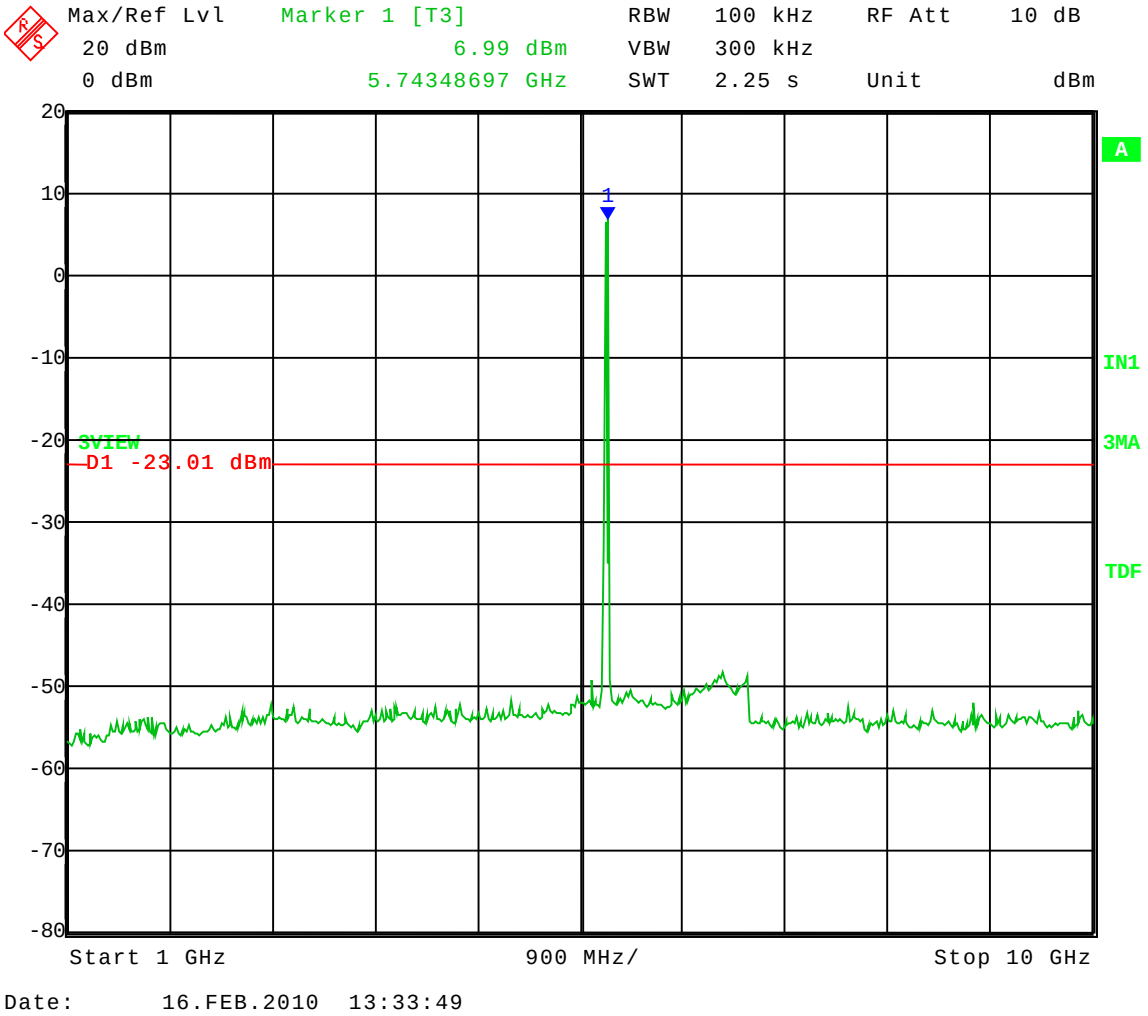


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 62
Modulation: QPSK

Frequency Range: 1 to 10 GHz
Limit = -23.01 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

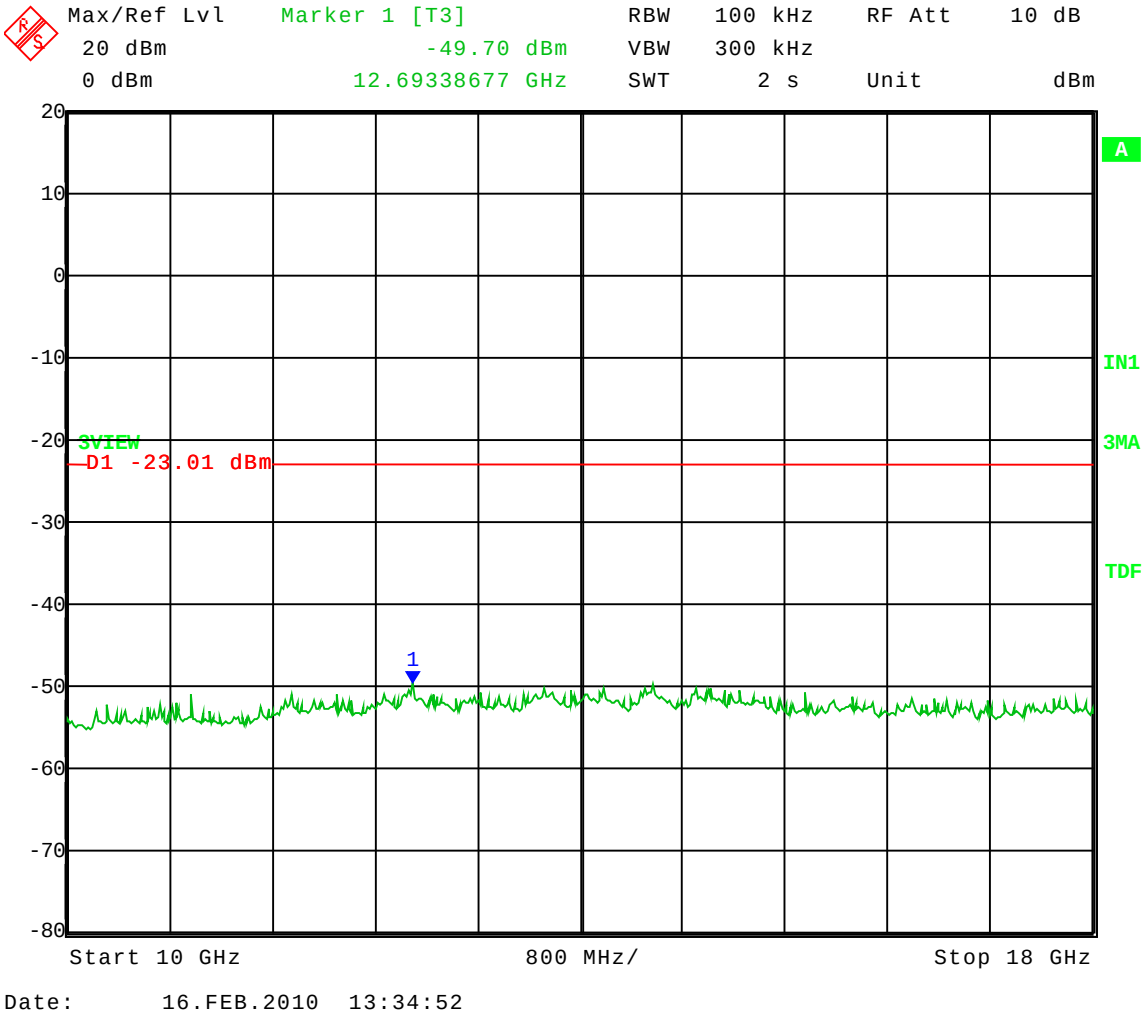


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 62
Modulation: QPSK

Frequency Range: 10 to 18 GHz
Limit = -23.01 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

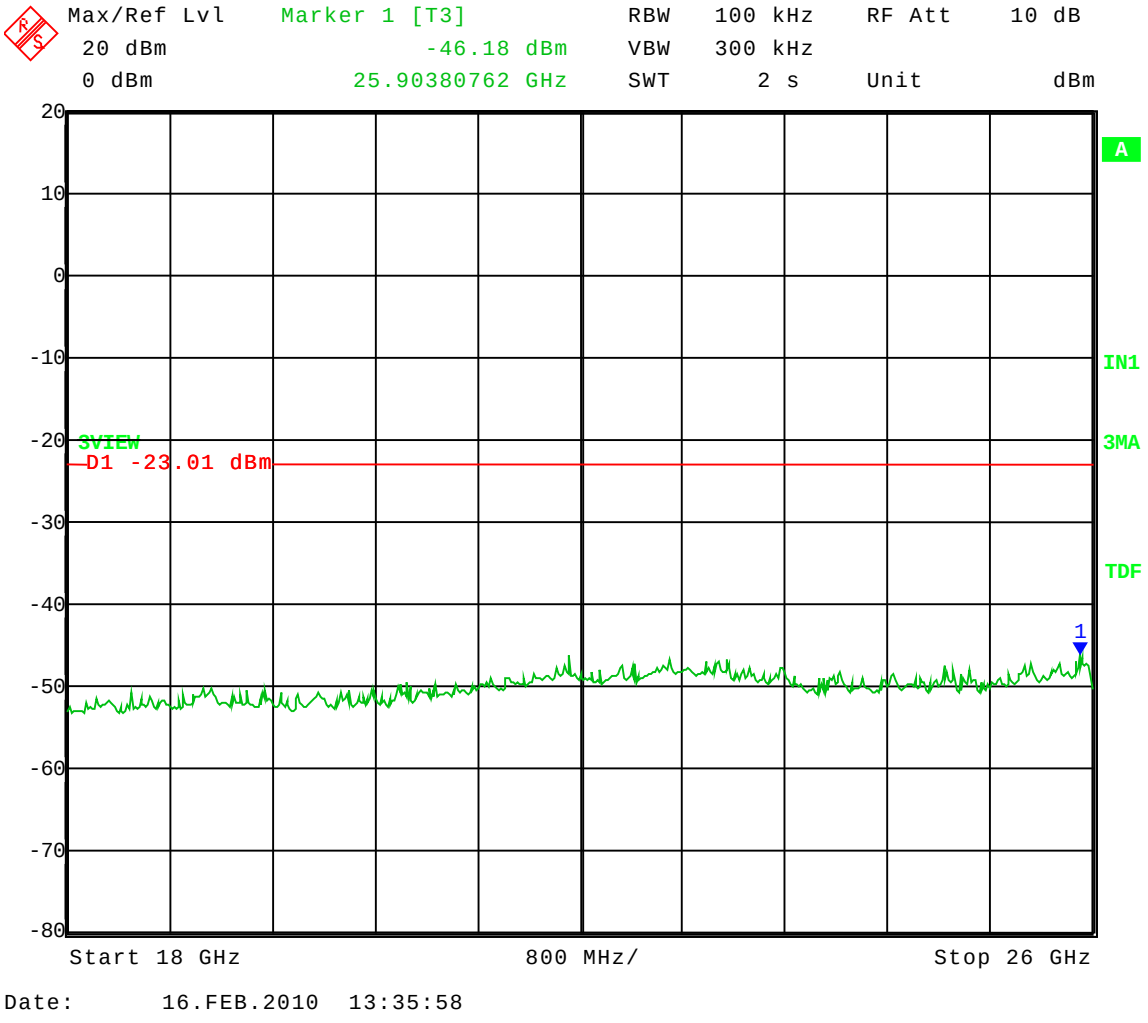


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 62
Modulation: QPSK

Frequency Range: 18 to 26 GHz
Limit = -23.01 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

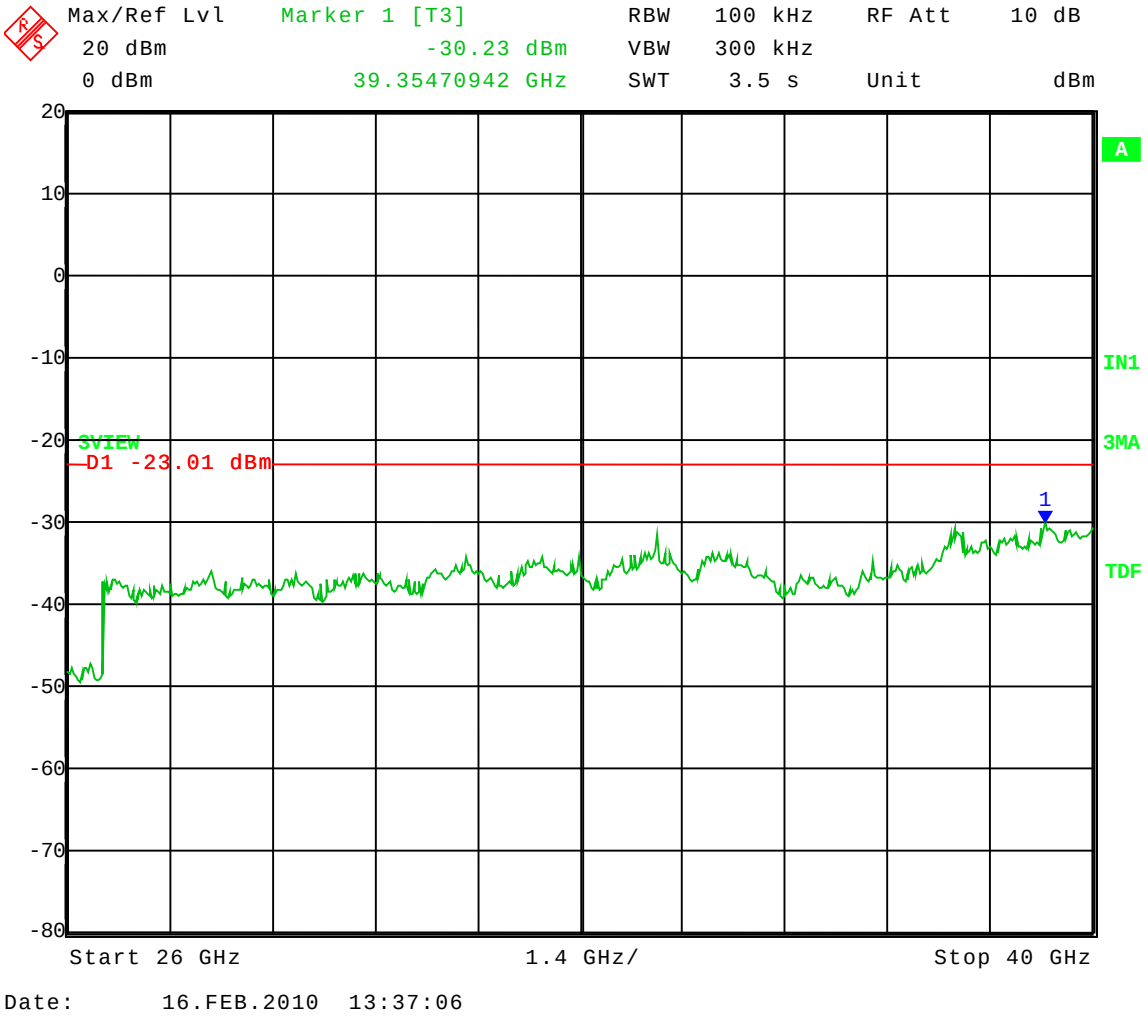


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Low Channel: Frequency – 5.735 GHz
Channel BW: 20 MHz
Power setting: 62
Modulation: QPSK

Frequency Range: 26 to 40 GHz
Limit = -23.01 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

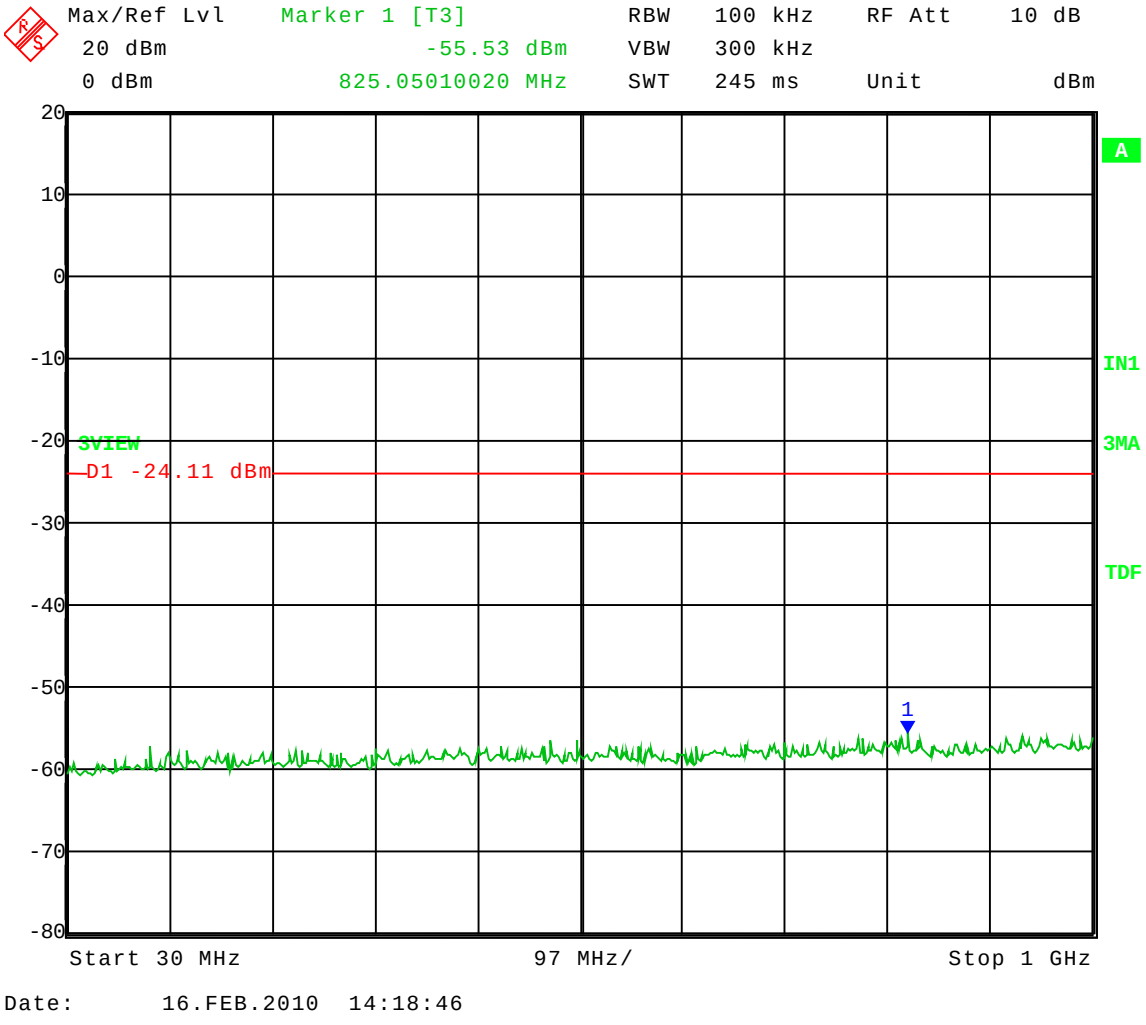


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 16QAM

Frequency Range: 30 to 1000 MHz
Limit = -24.11 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

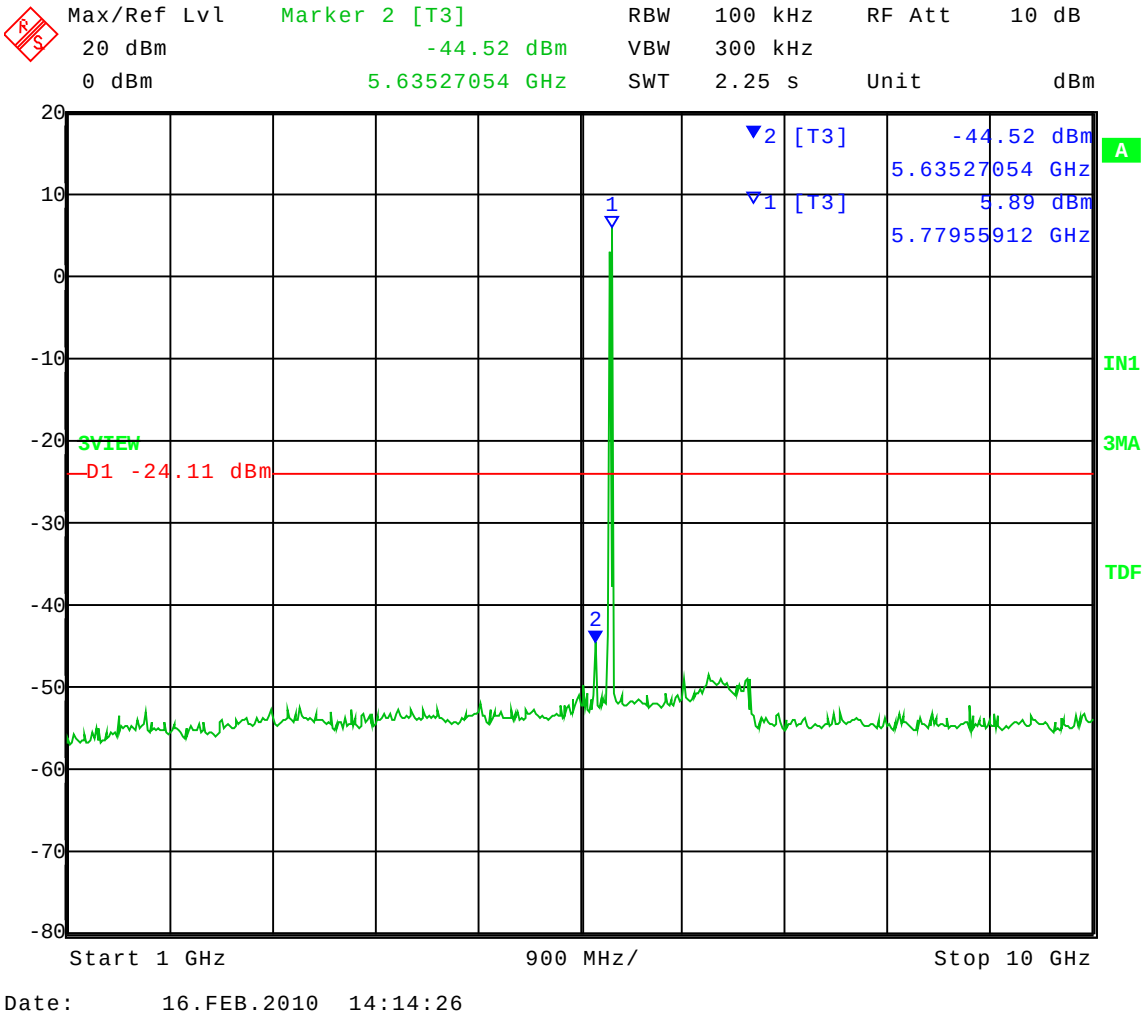


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 16QAM

Frequency Range: 1 to 10 GHz
Limit = -24.11 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

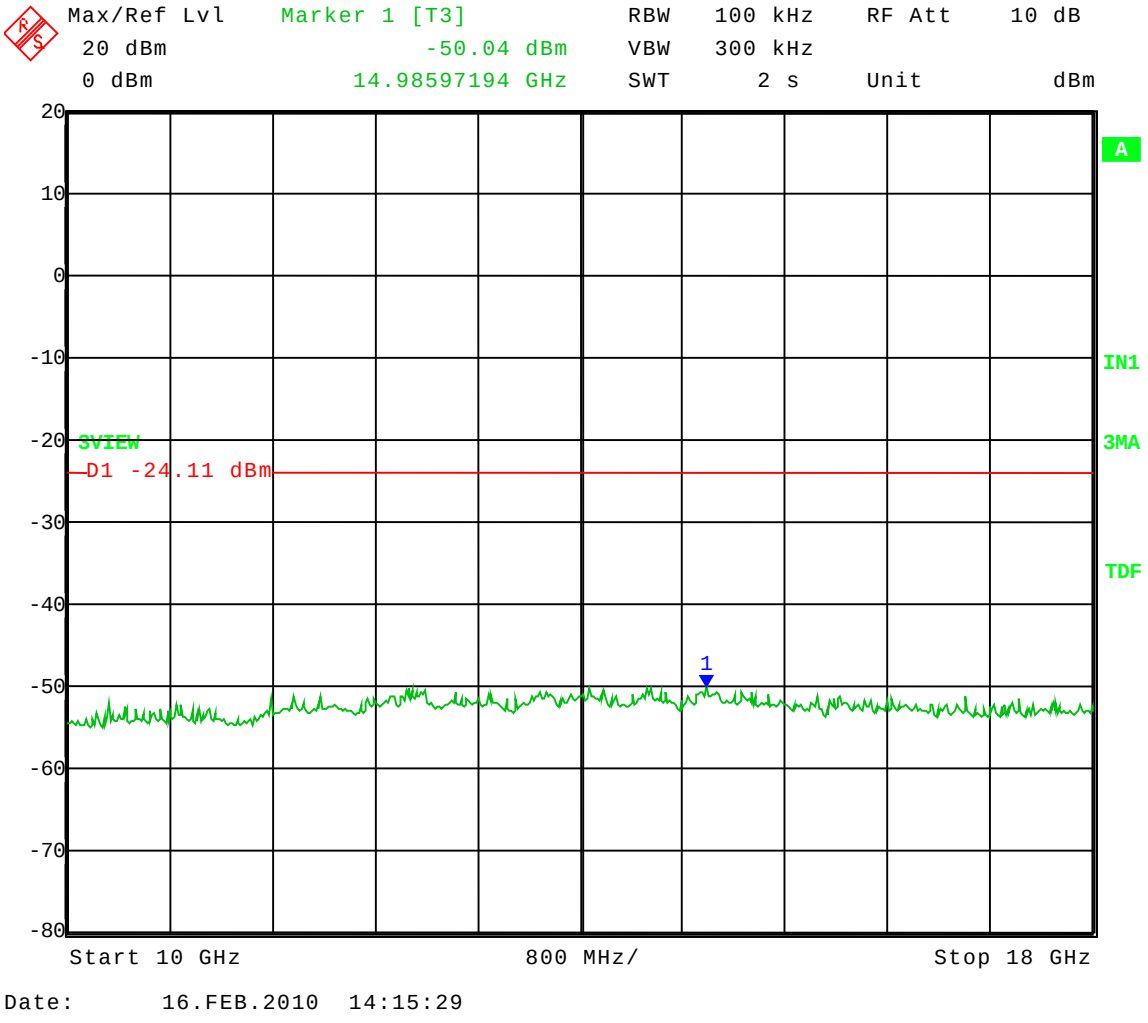


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 16QAM

Frequency Range: 10 to 18 GHz
Limit = -24.11 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

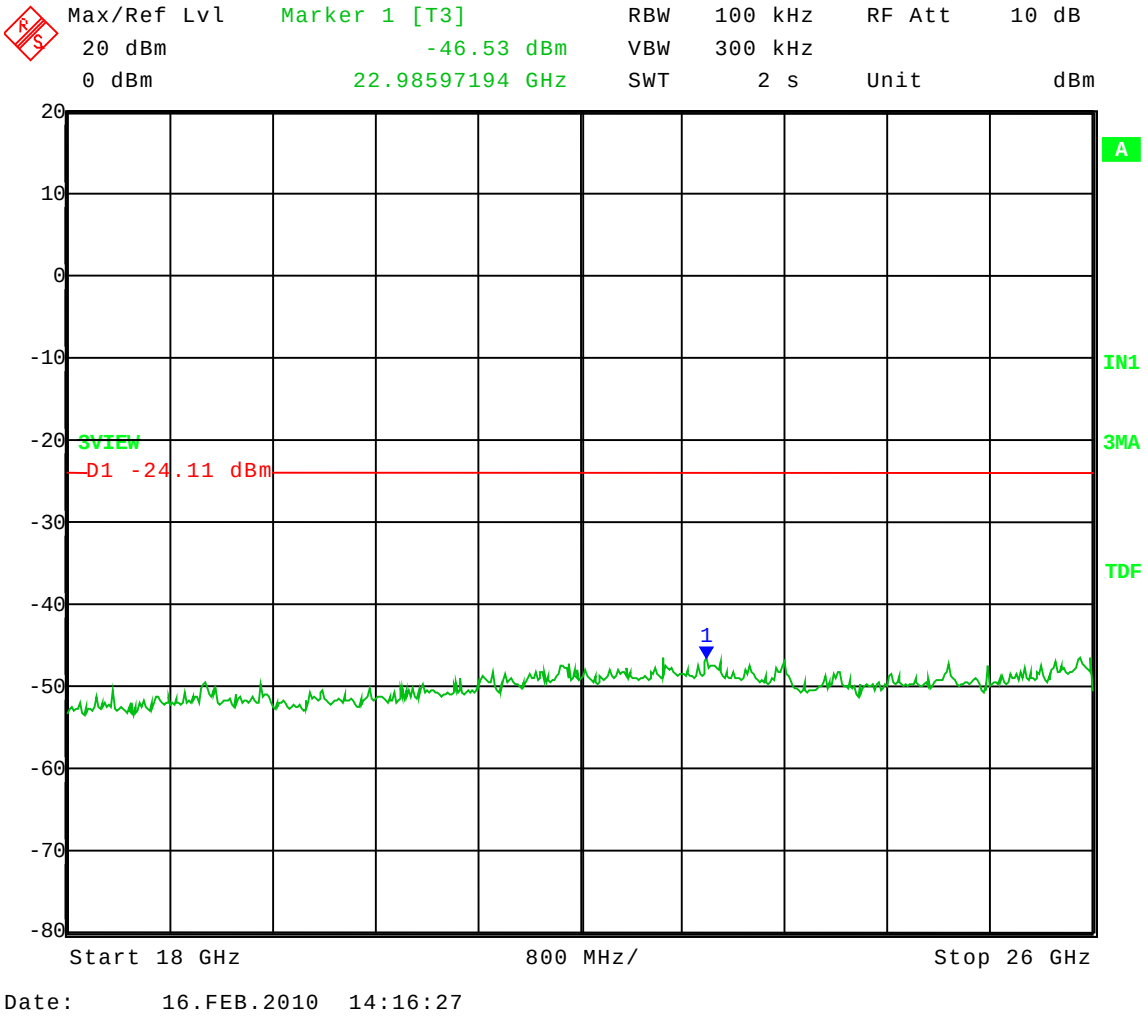


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 16QAM

Frequency Range: 18 to 26 GHz
Limit = -24.11 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

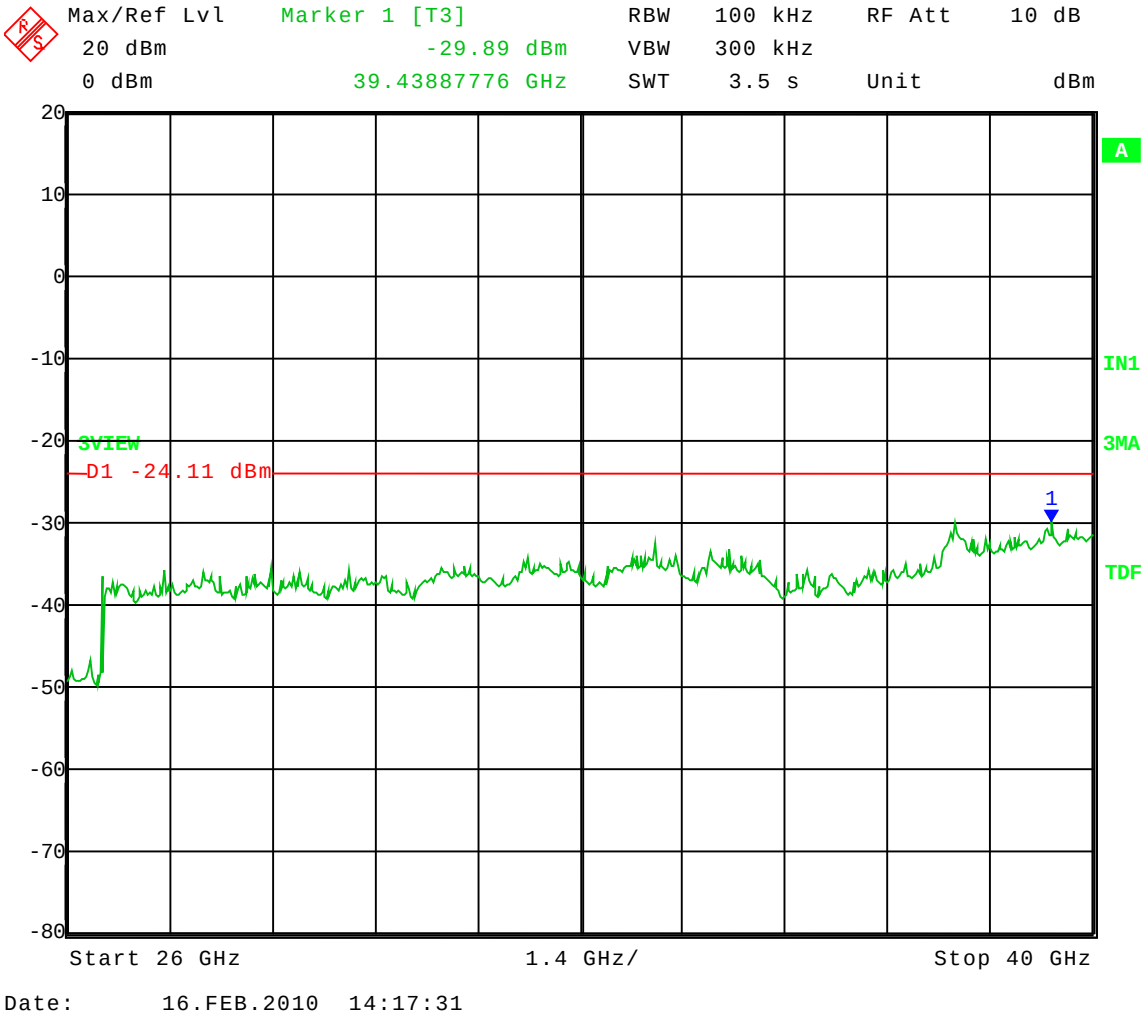


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 16QAM

Frequency Range: 26 to 40 GHz
Limit = -24.11 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

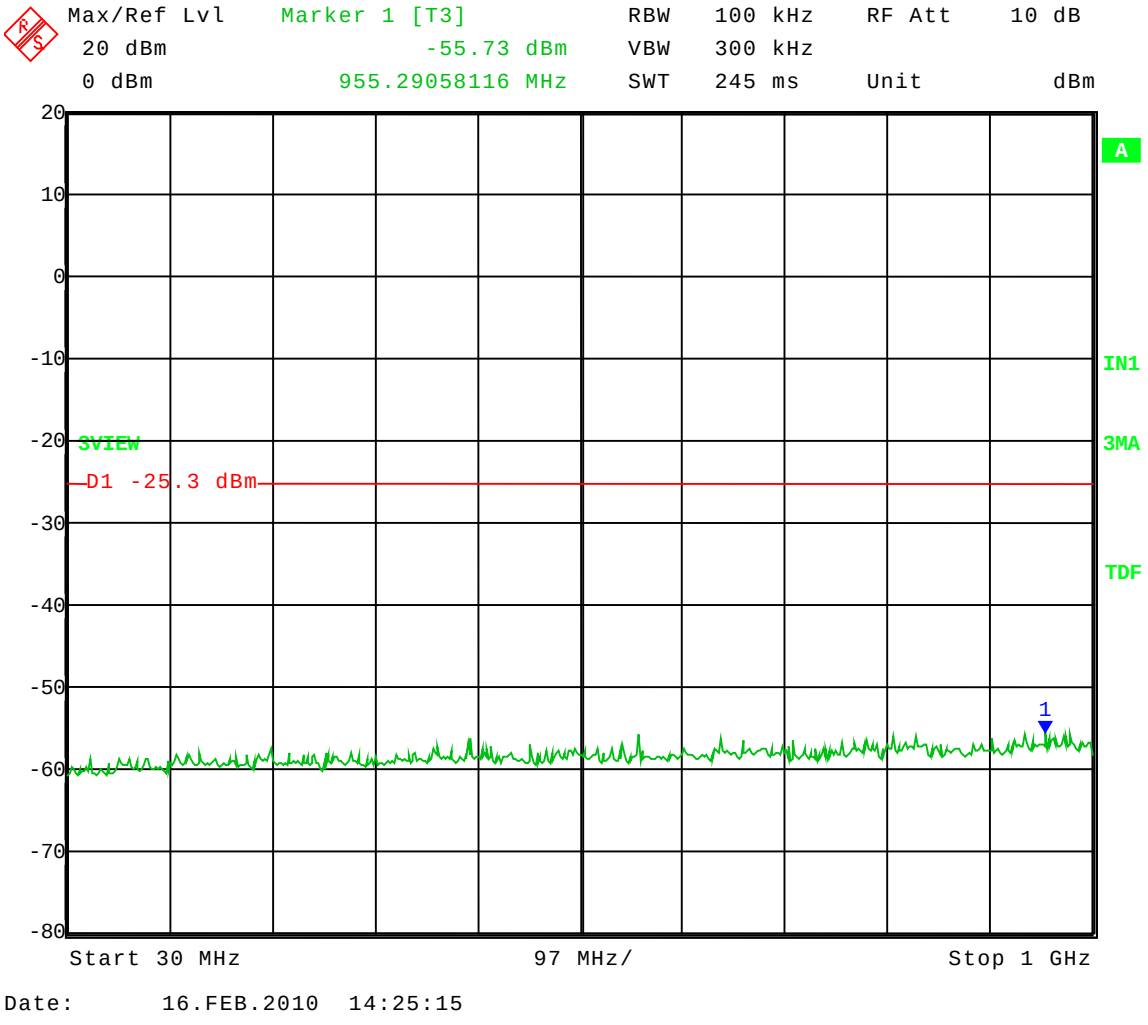


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 64QAM

Frequency Range: 30 to 1000 MHz
Limit = -25.30 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

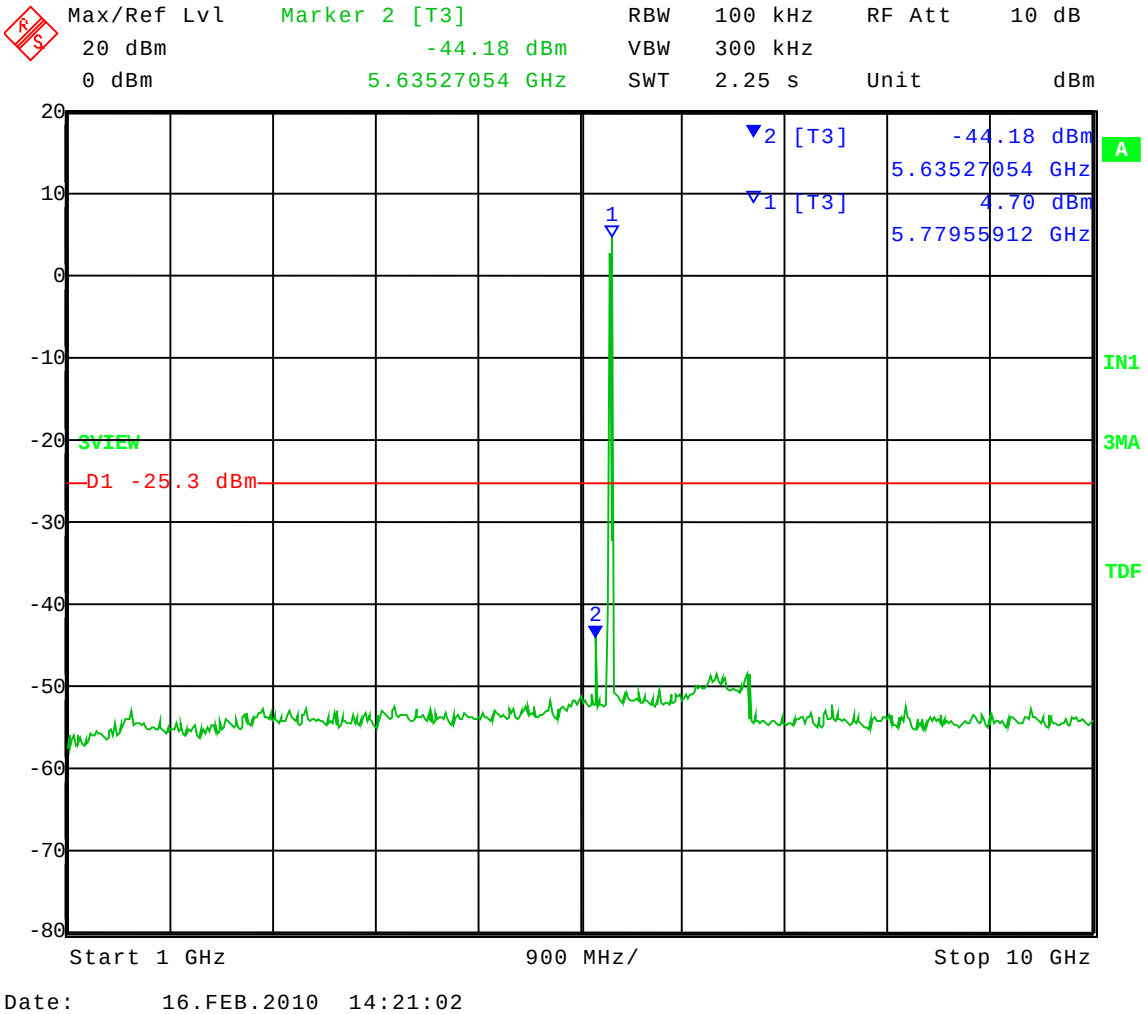


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 64QAM

Frequency Range: 1 to 10 GHz
Limit = -25.30 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

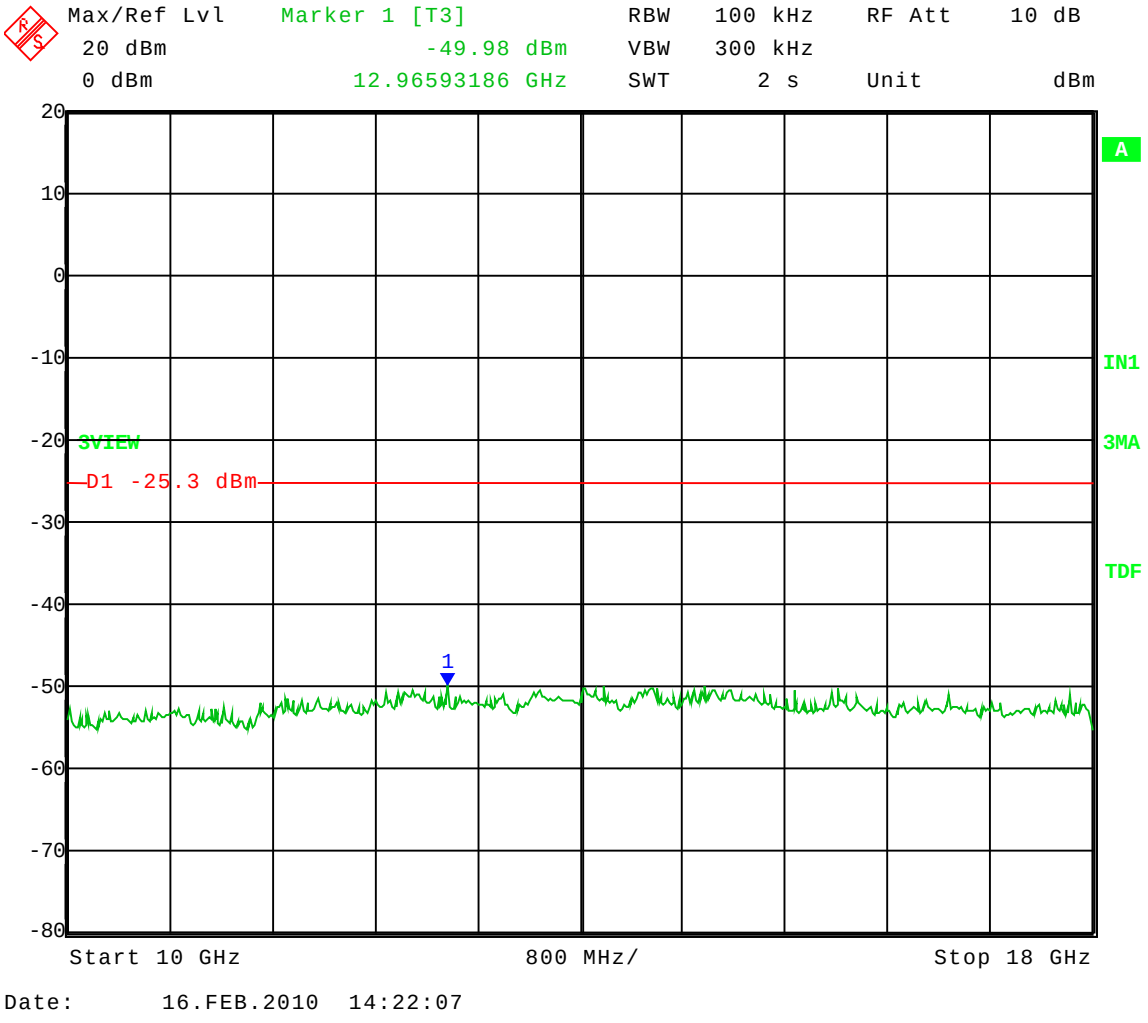


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 64QAM

Frequency Range: 10 to 18 GHz
Limit = -25.30 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

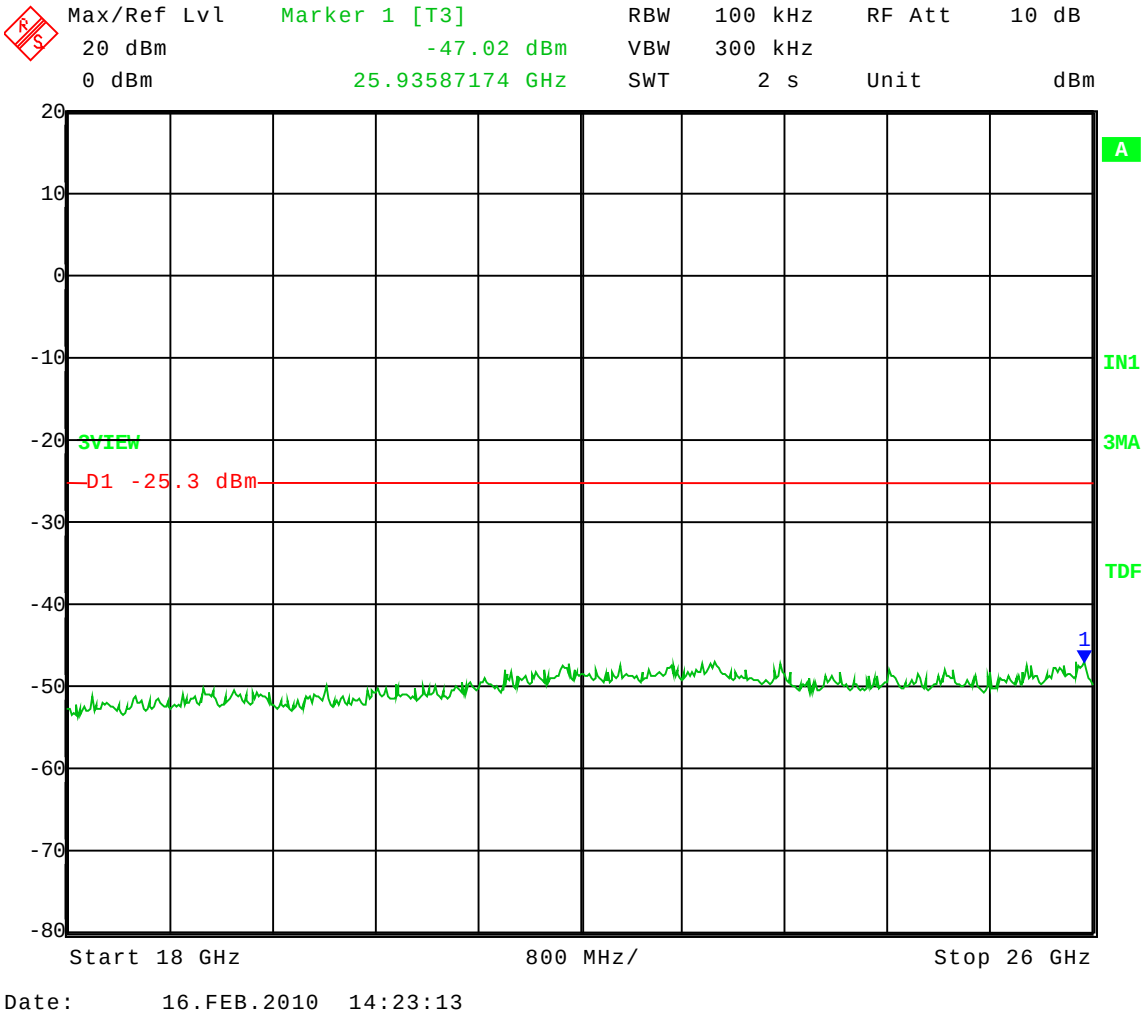


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 64QAM

Frequency Range: 18 to 26 GHz
Limit = -25.30 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

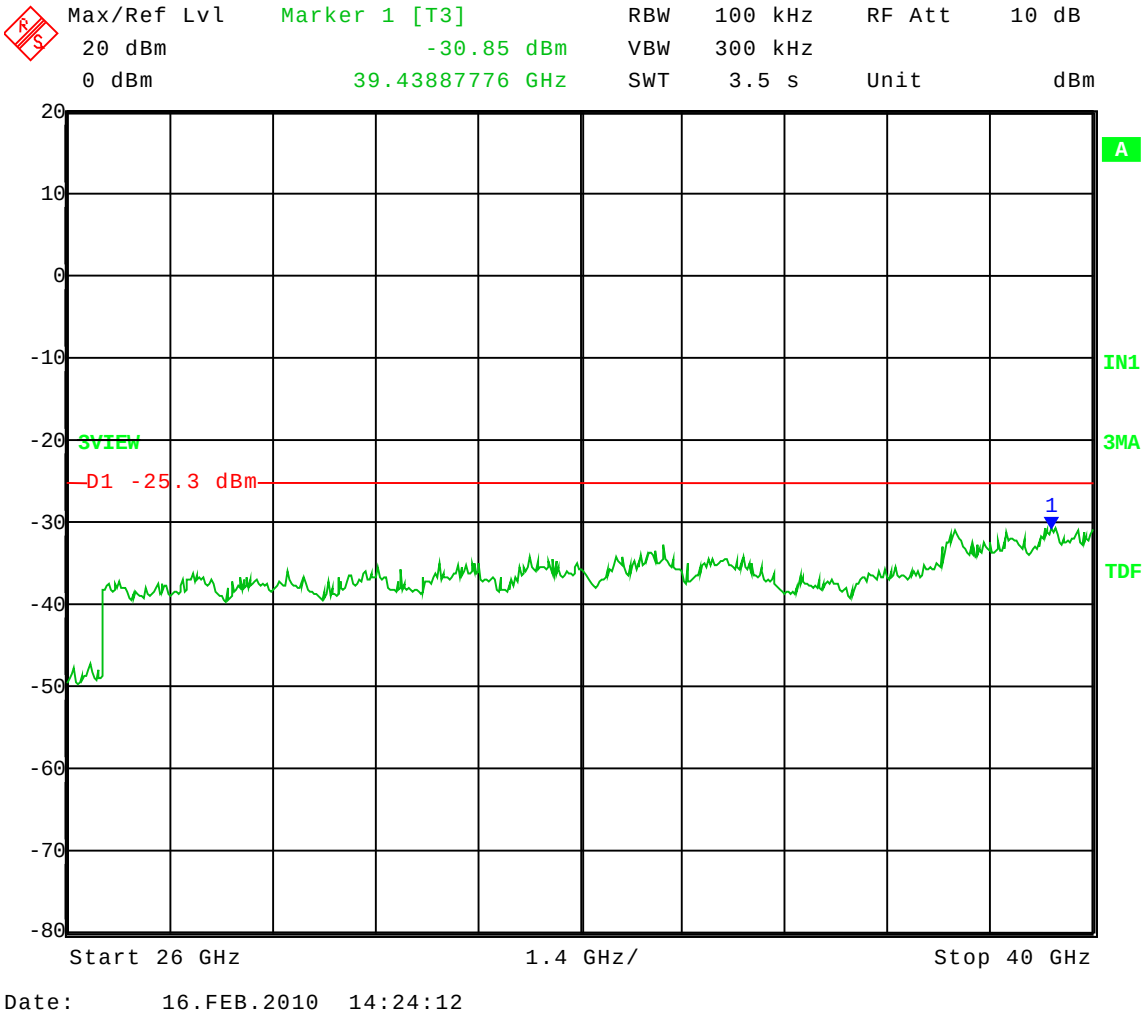


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 64QAM

Frequency Range: 26 to 40 GHz
Limit = -25.30 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

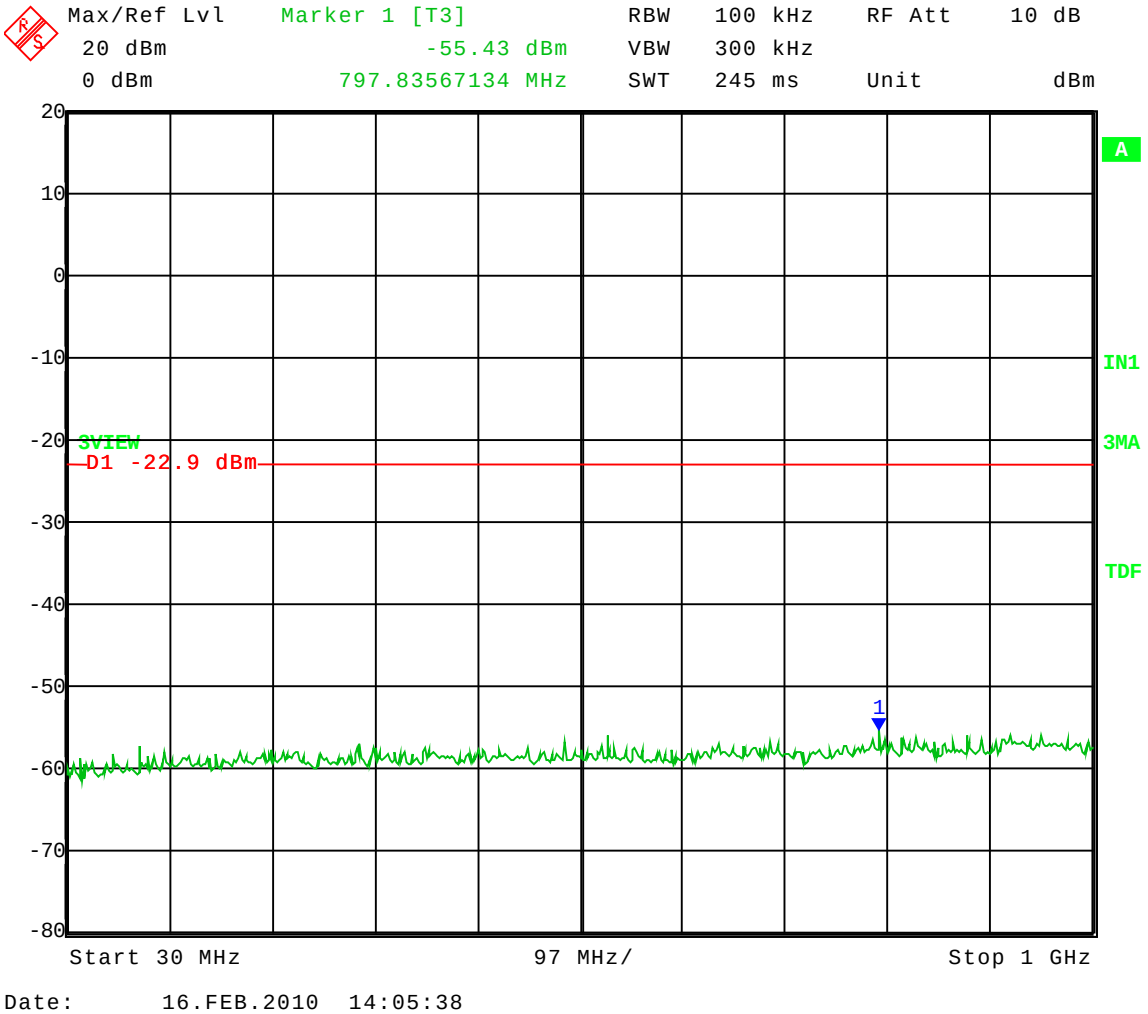


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 256QAM

Frequency Range: 30 to 1000 MHz
Limit = -22.90 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

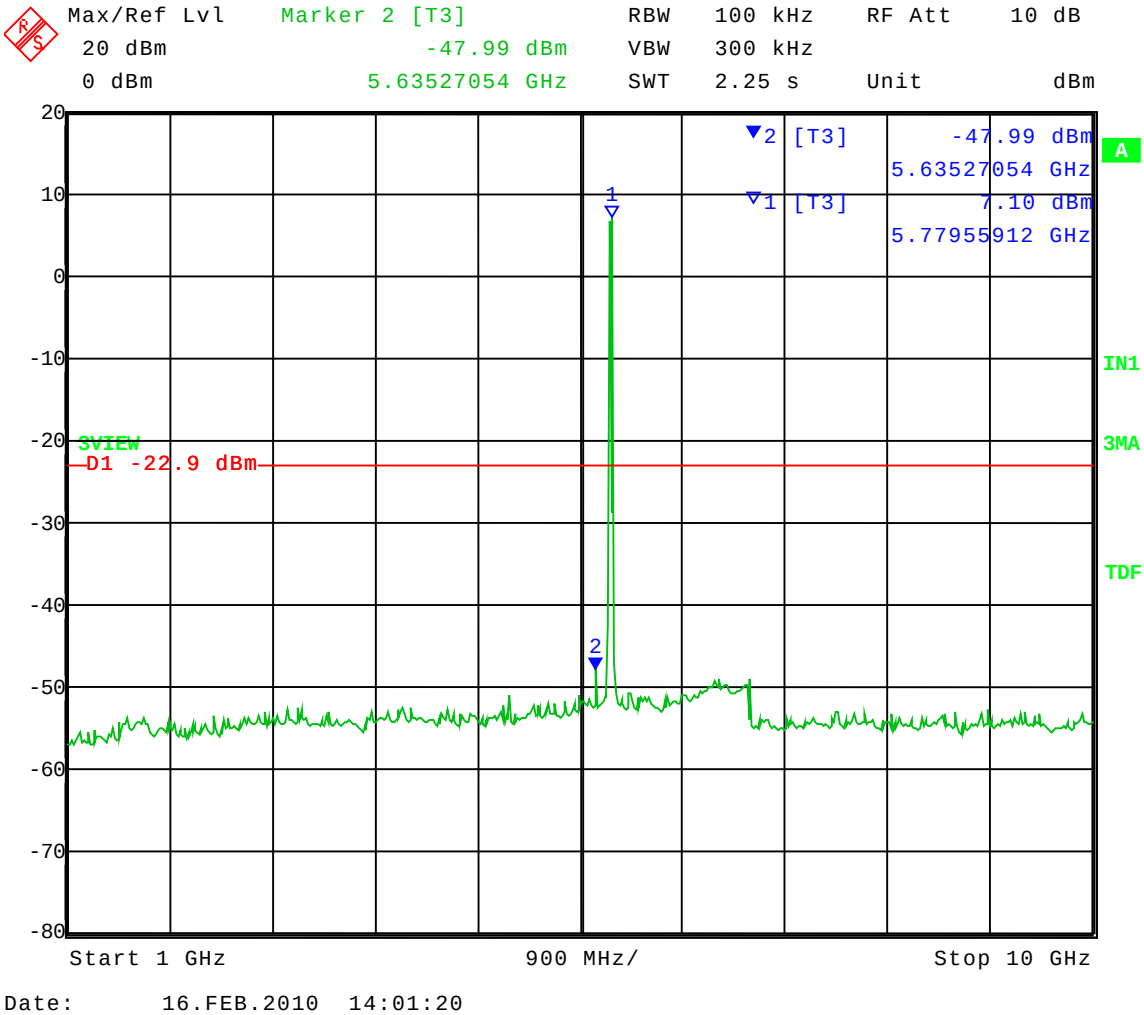


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 256QAM

Frequency Range: 1 to 10 GHz
Limit = -22.90 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)



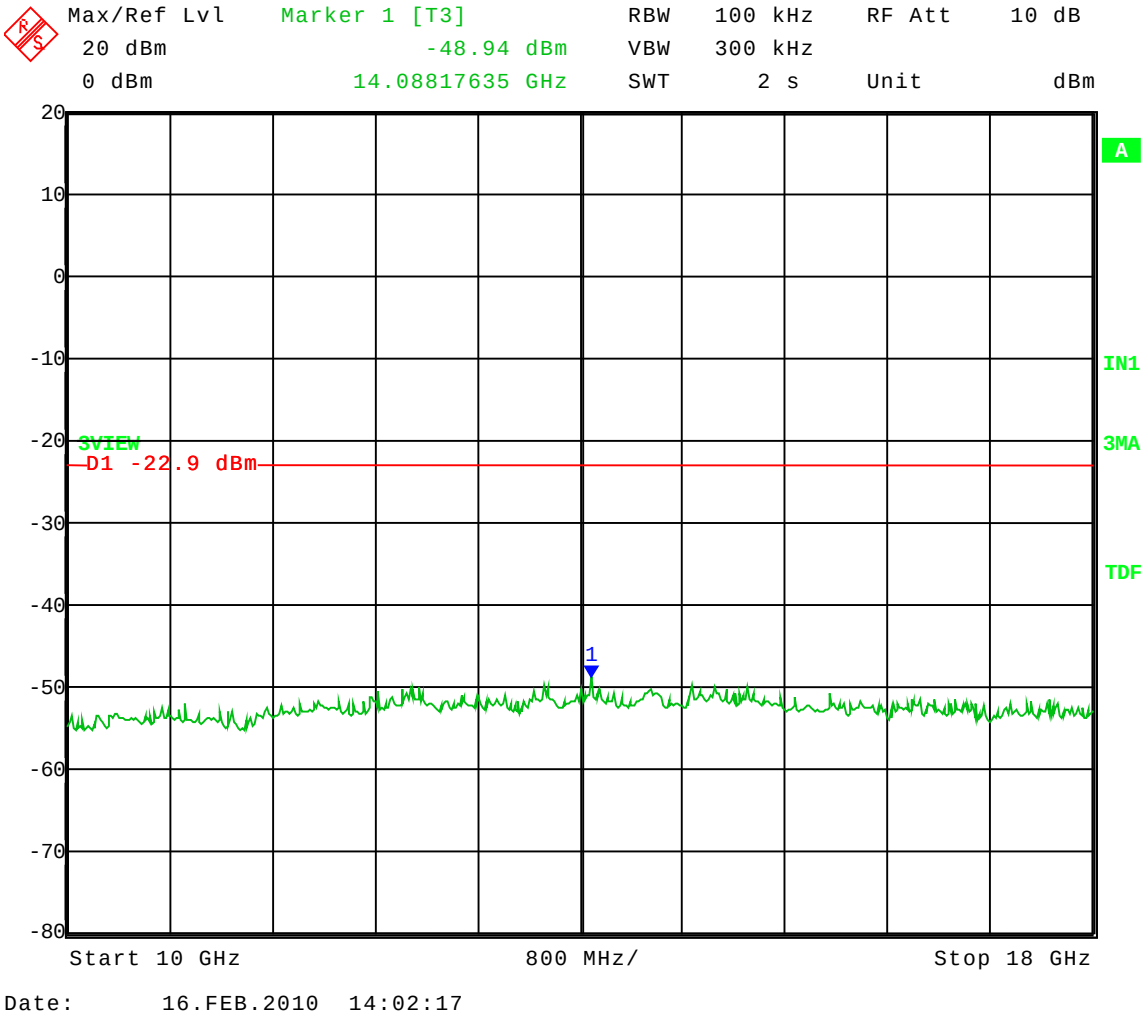
Date: 16.FEB.2010 14:01:20

1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 256QAM

Frequency Range: 10 to 18 GHz
Limit = -22.90 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

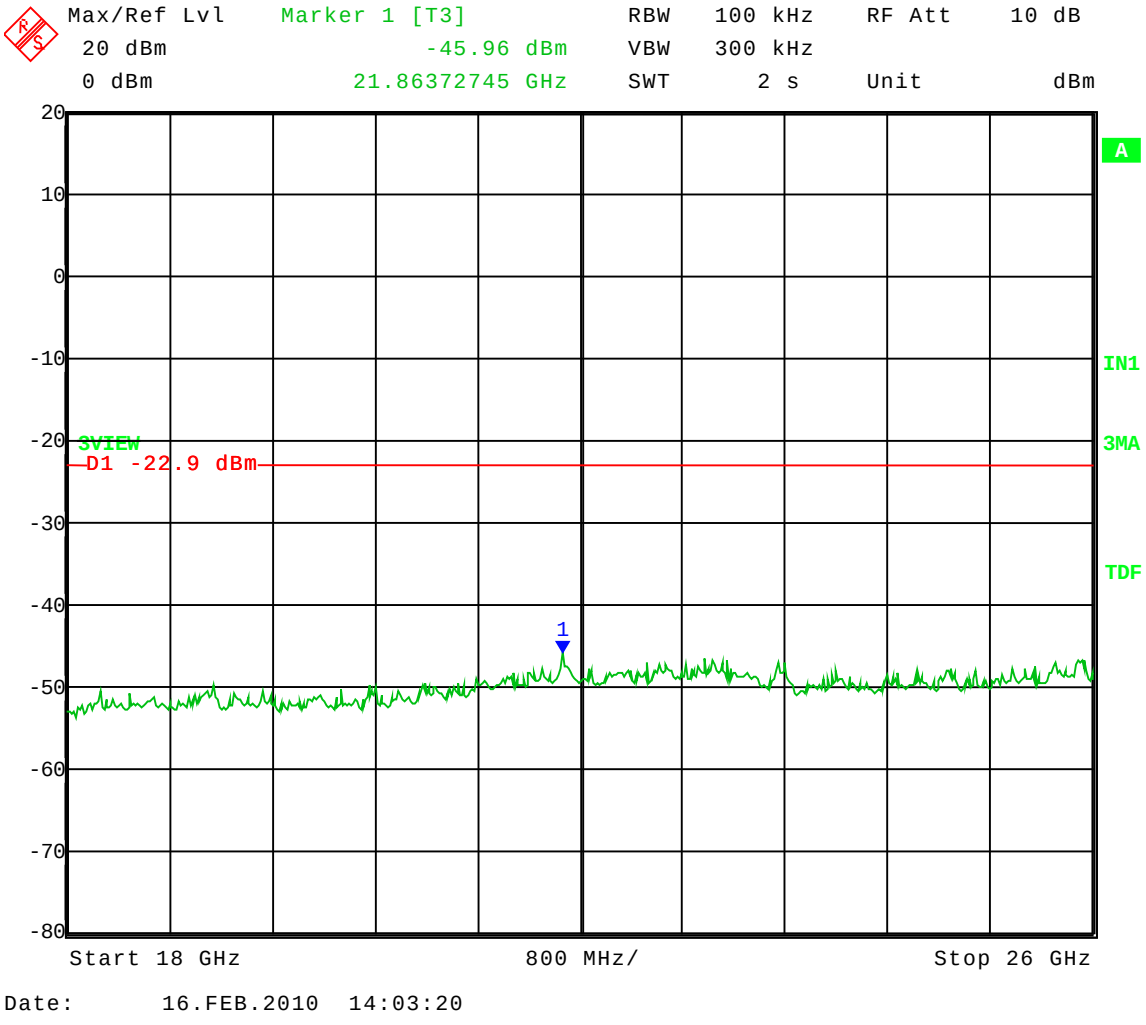


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 256QAM

Frequency Range: 18 to 26 GHz
Limit = -22.90 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

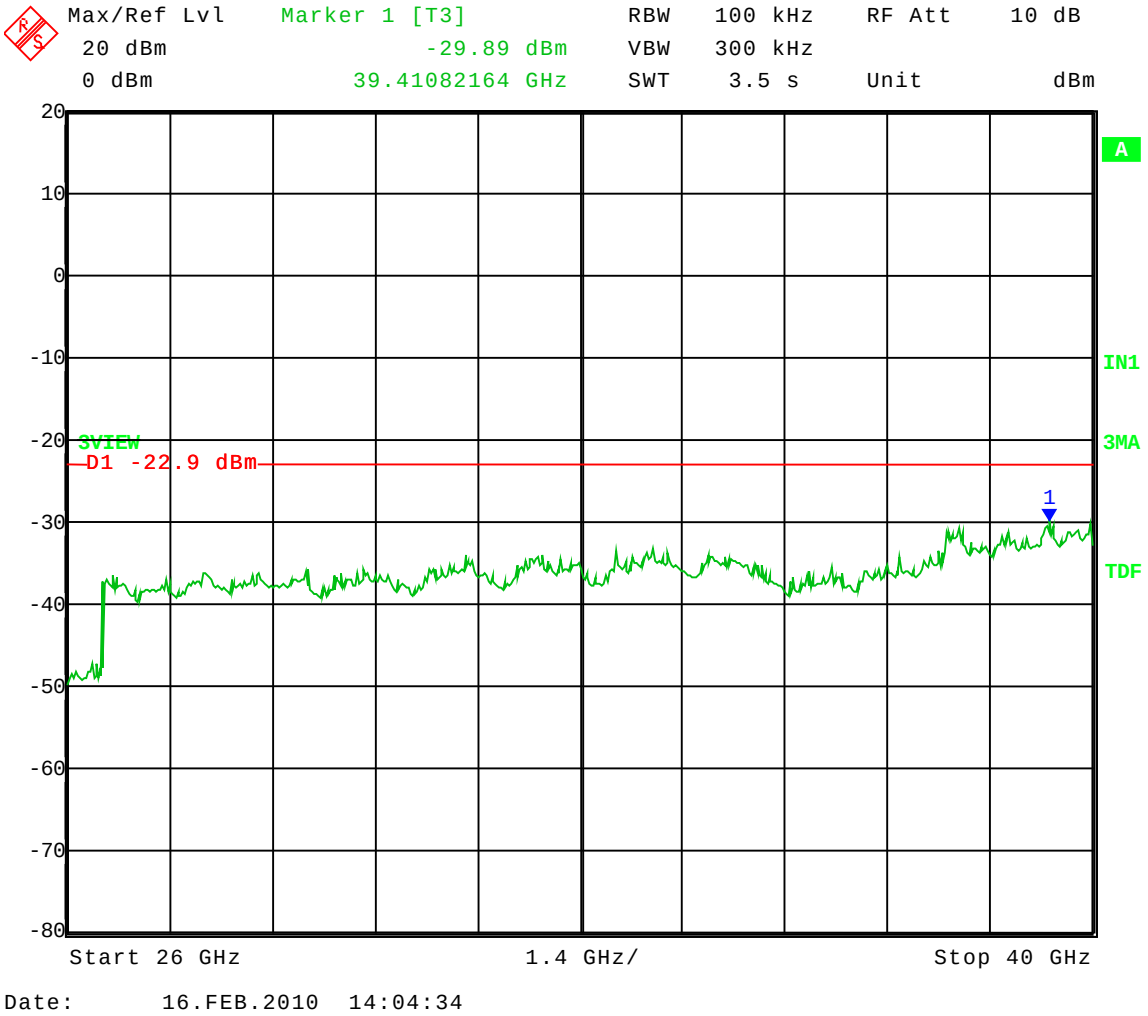


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: 256QAM

Frequency Range: 26 to 40 GHz
Limit = -22.90 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

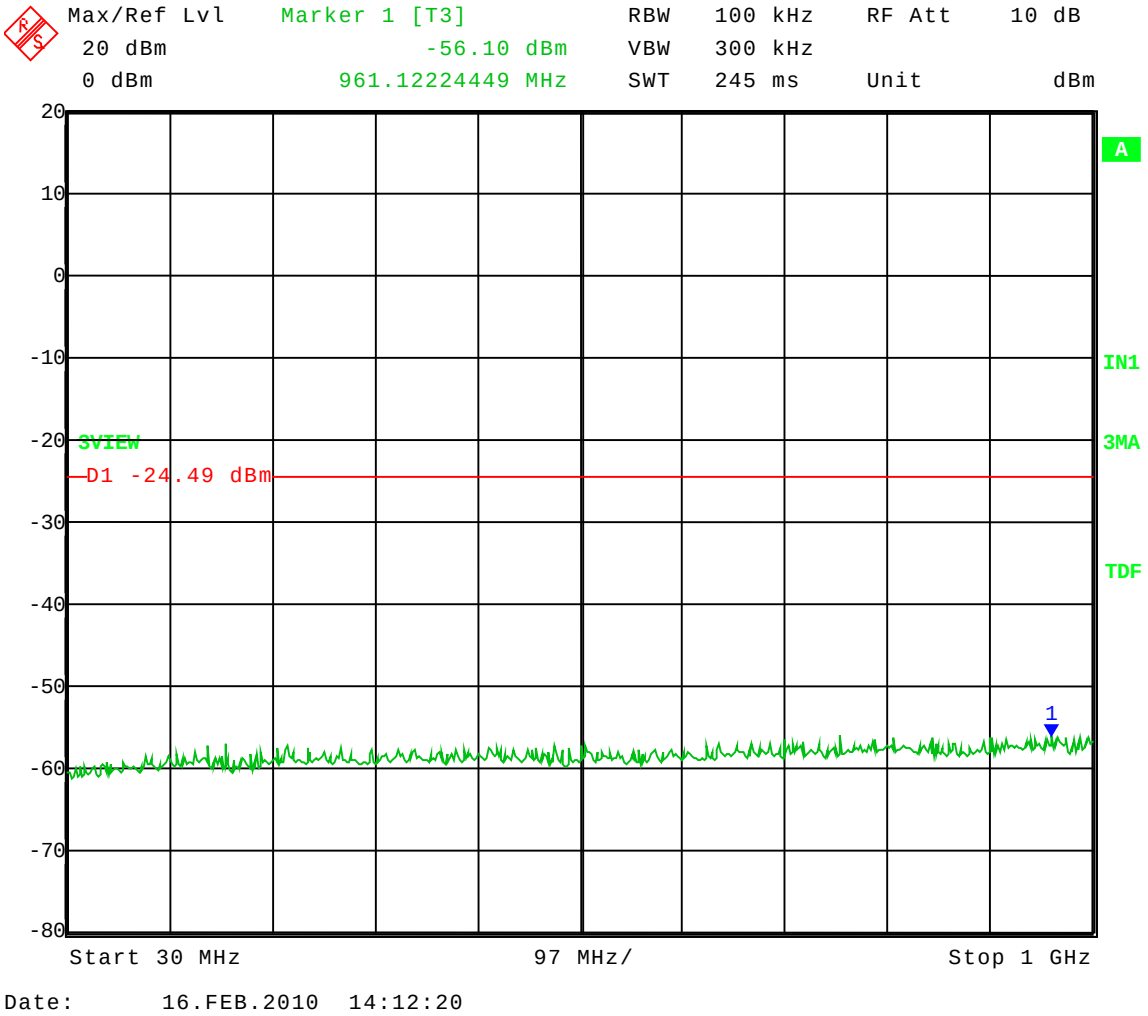


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: QPSK

Frequency Range: 30 to 1000 MHz
Limit = -24.49 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

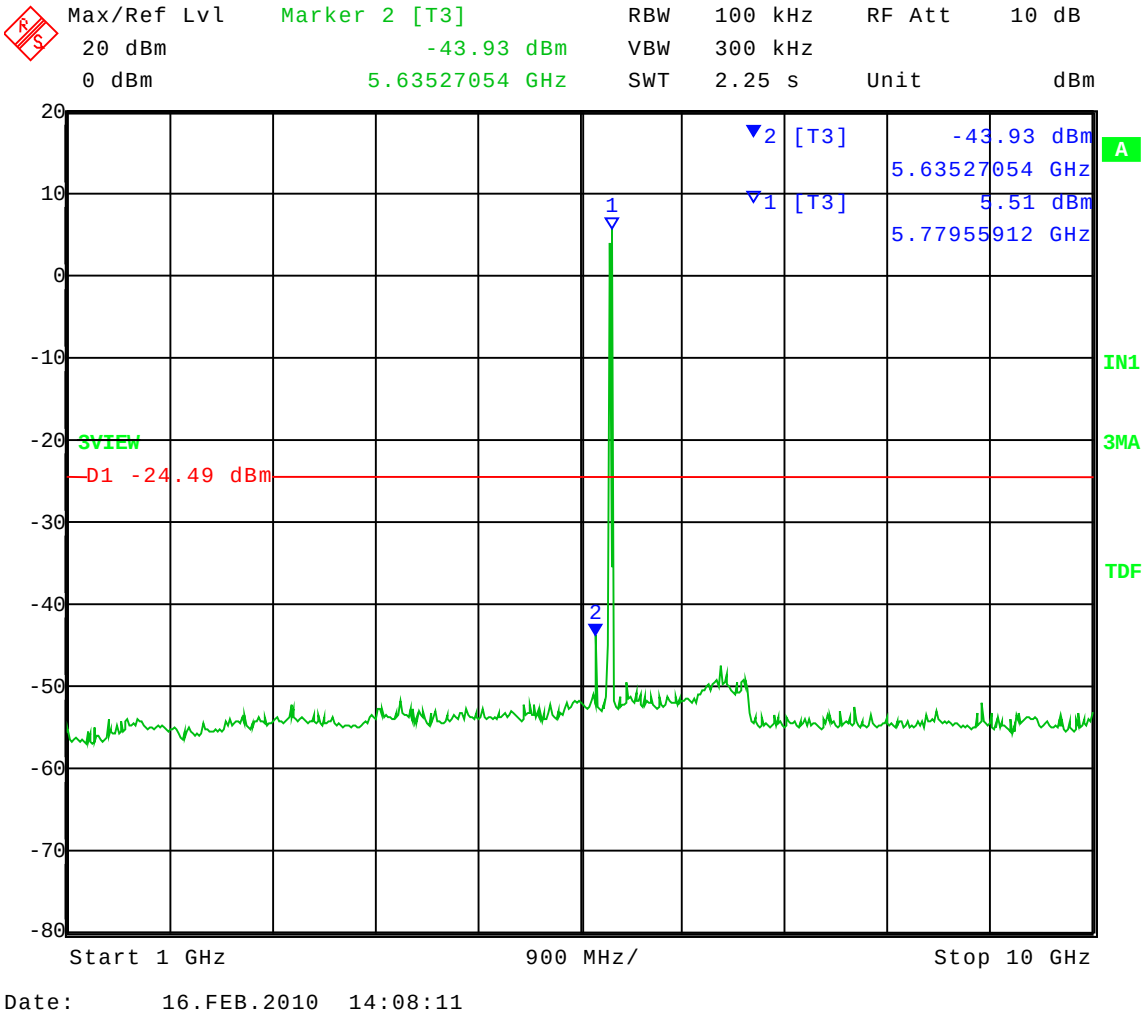


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: QPSK

Frequency Range: 1 to 10 GHz
Limit = -24.49 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

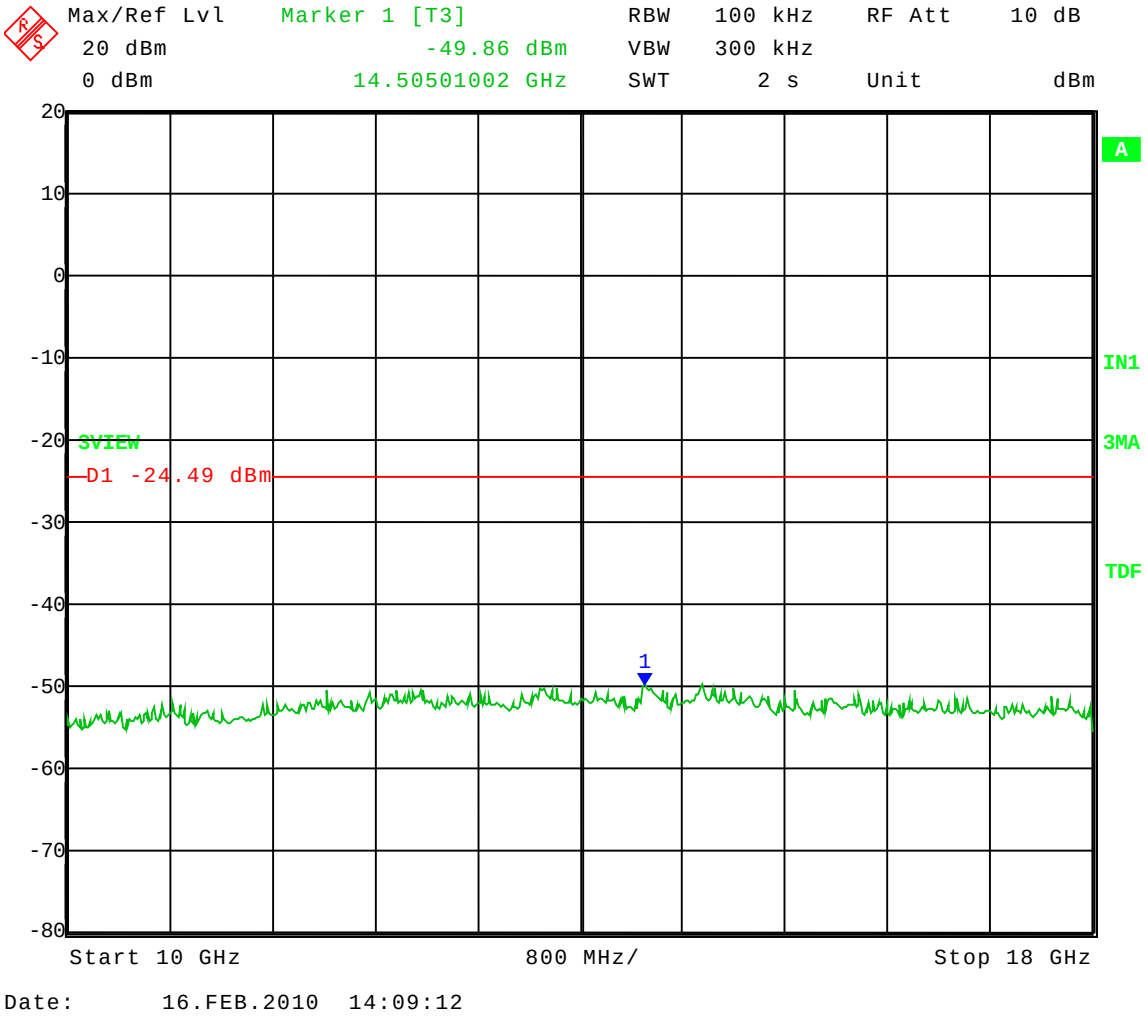


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: QPSK

Frequency Range: 10 to 18 GHz
Limit = -24.49 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

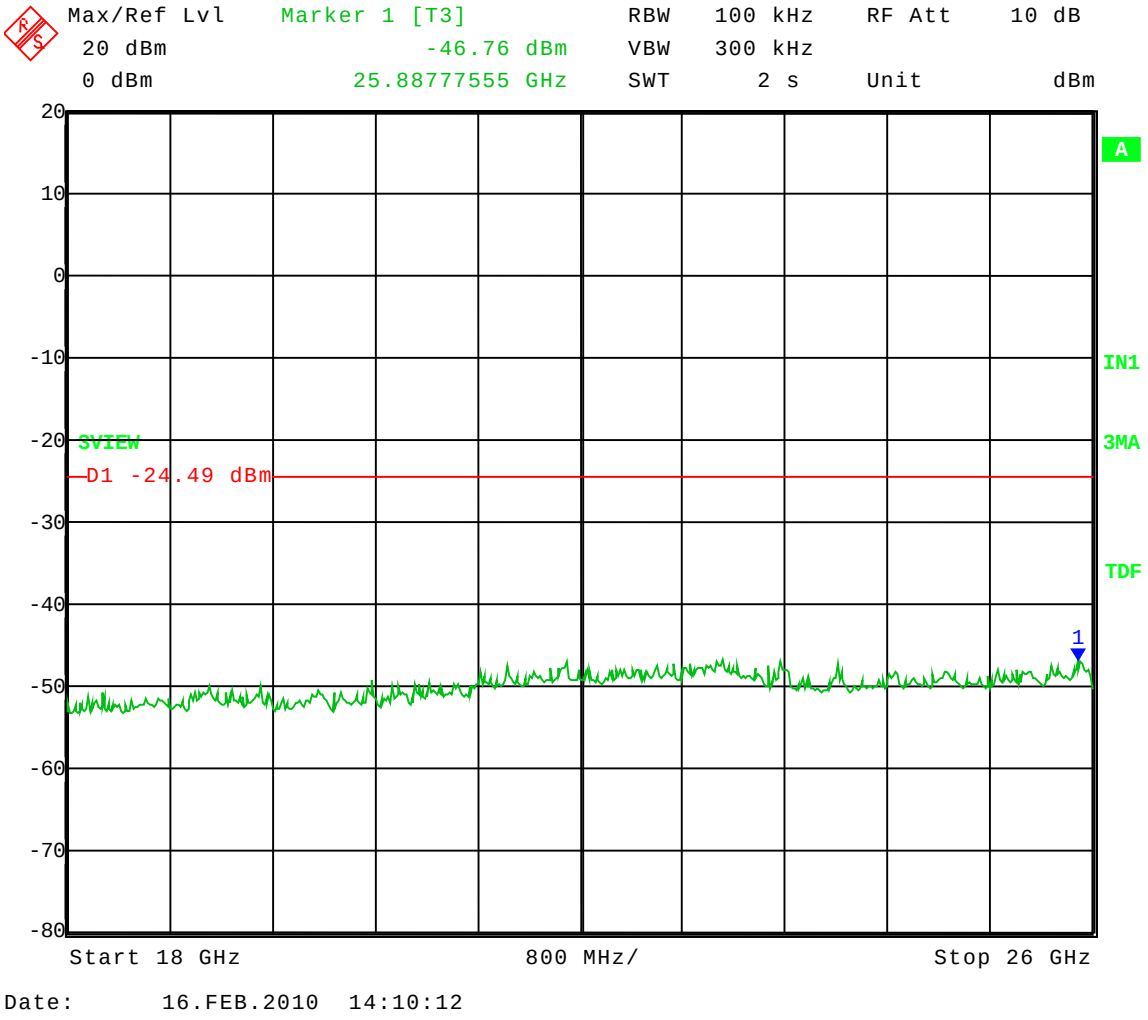


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: QPSK

Frequency Range: 18 to 26 GHz
Limit = -24.49 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

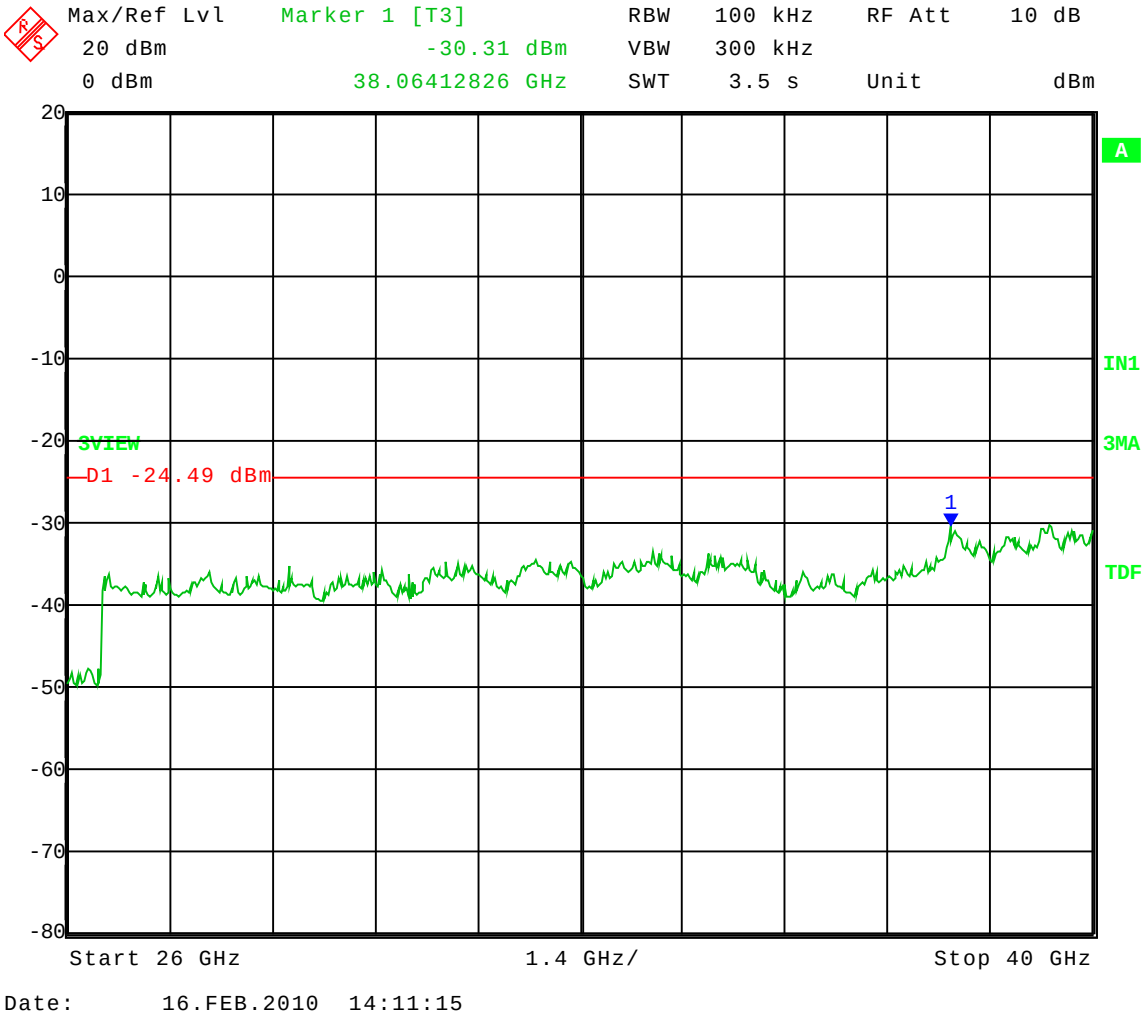


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: Middle Channel: Frequency – 5.775 GHz
Channel BW: 20 MHz
Power setting: 61
Modulation: QPSK

Frequency Range: 26 to 40 GHz
Limit = -24.49 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

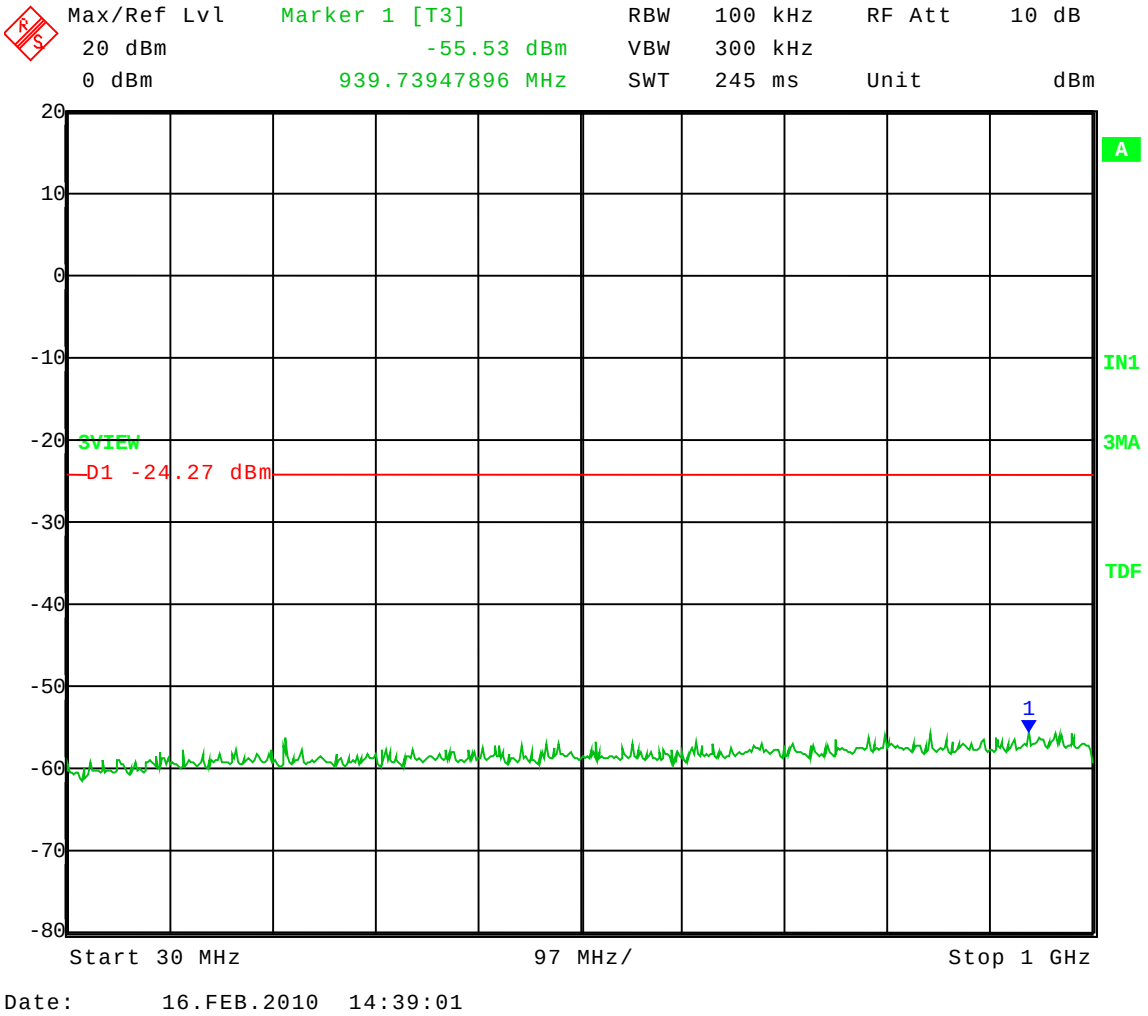


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 64
Modulation: 16QAM

Frequency Range: 30 to 1000 MHz
Limit = -24.27 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

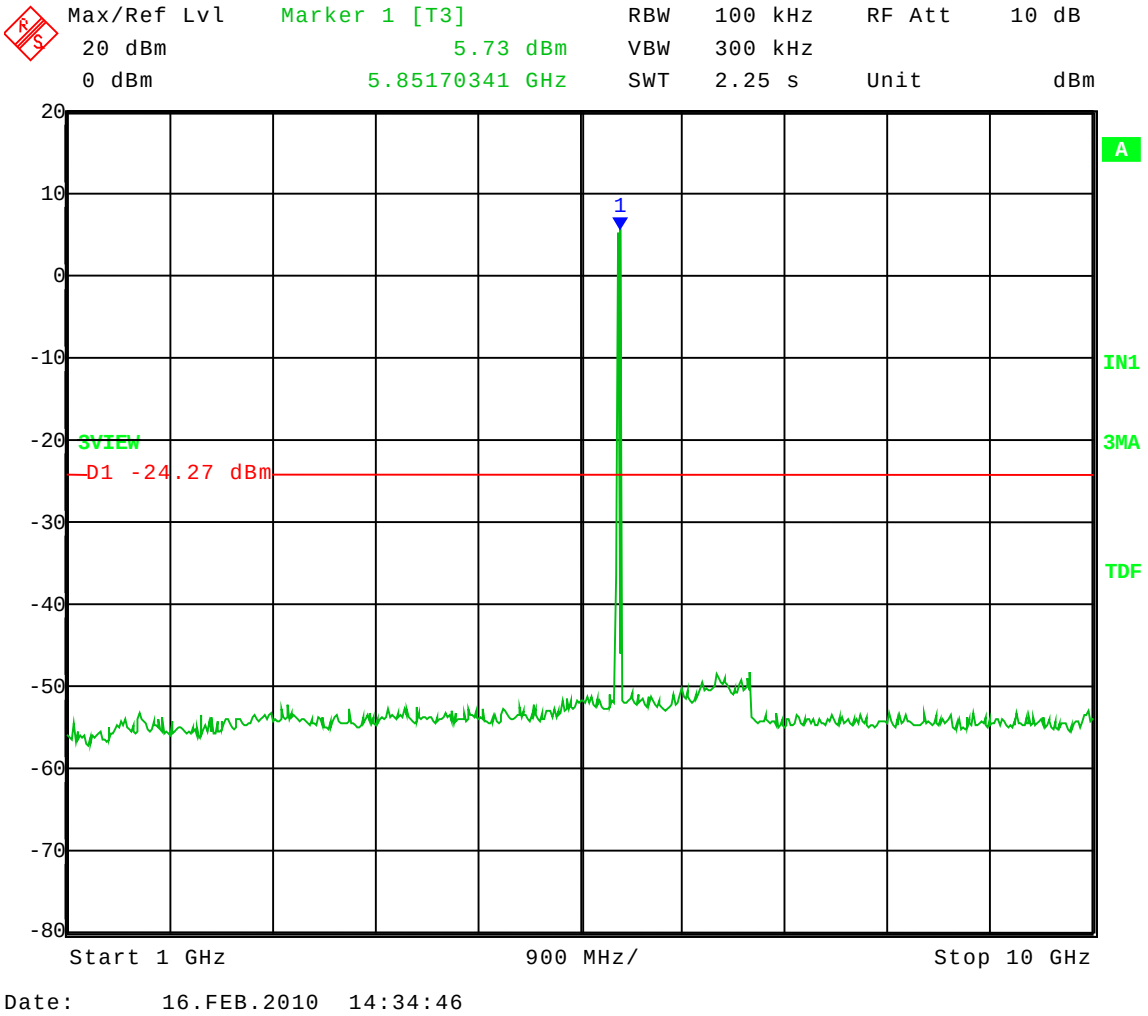


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 64
Modulation: 16QAM

Frequency Range: 1 to 10 GHz
Limit = -24.27 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

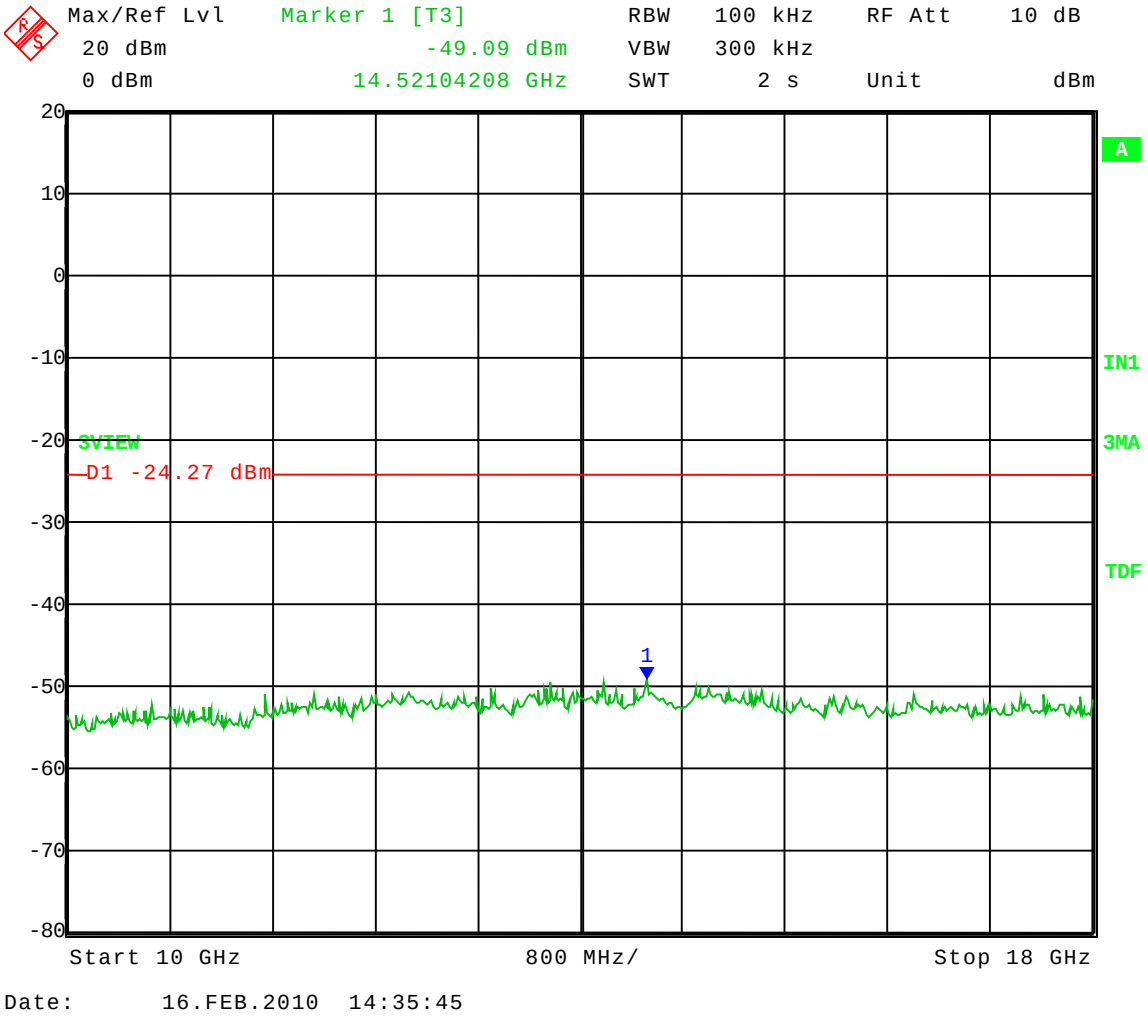


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 64
Modulation: 16QAM

Frequency Range: 10 to 18 GHz
Limit = -24.27 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

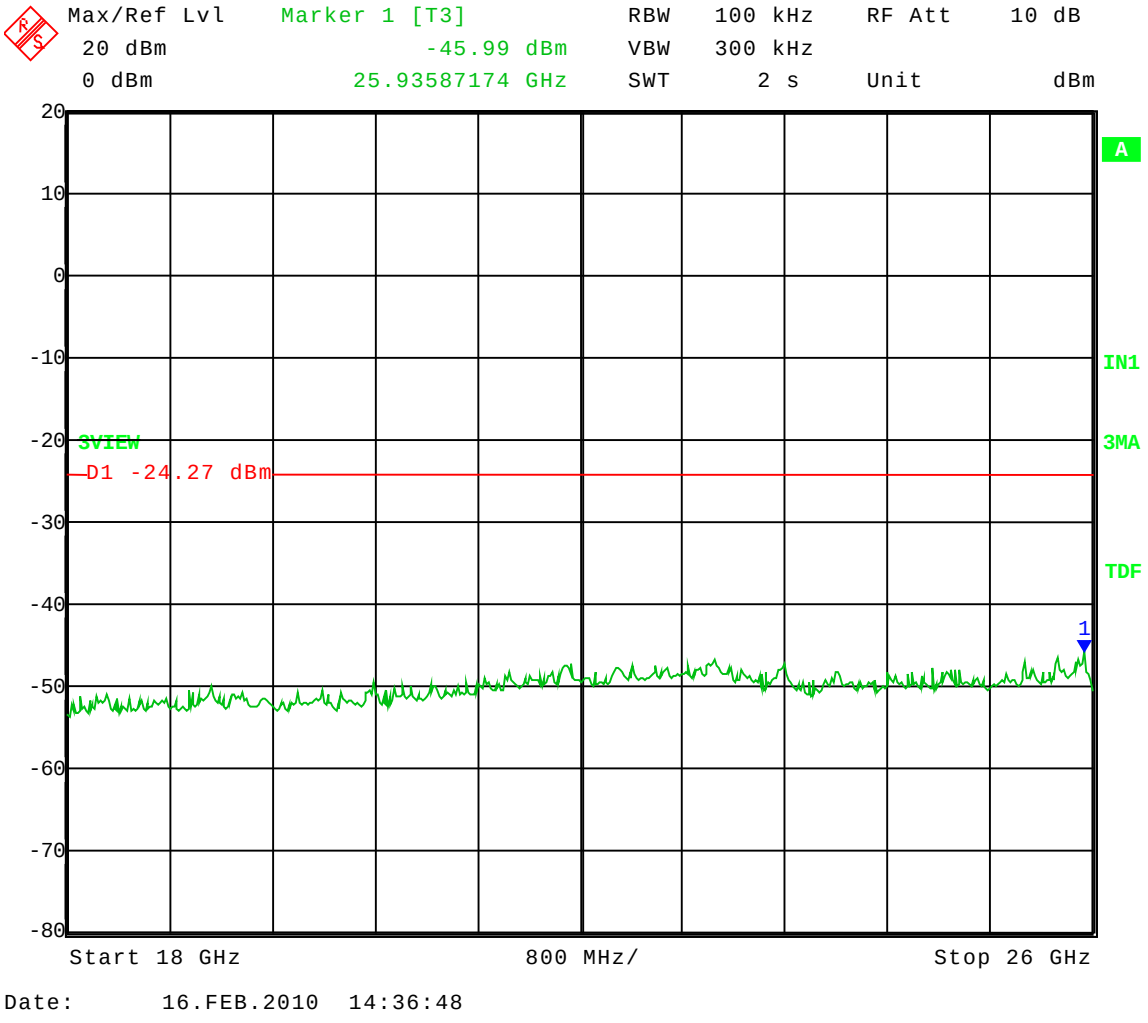


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 64
Modulation: 16QAM

Frequency Range: 18 to 26 GHz
Limit = -24.27 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

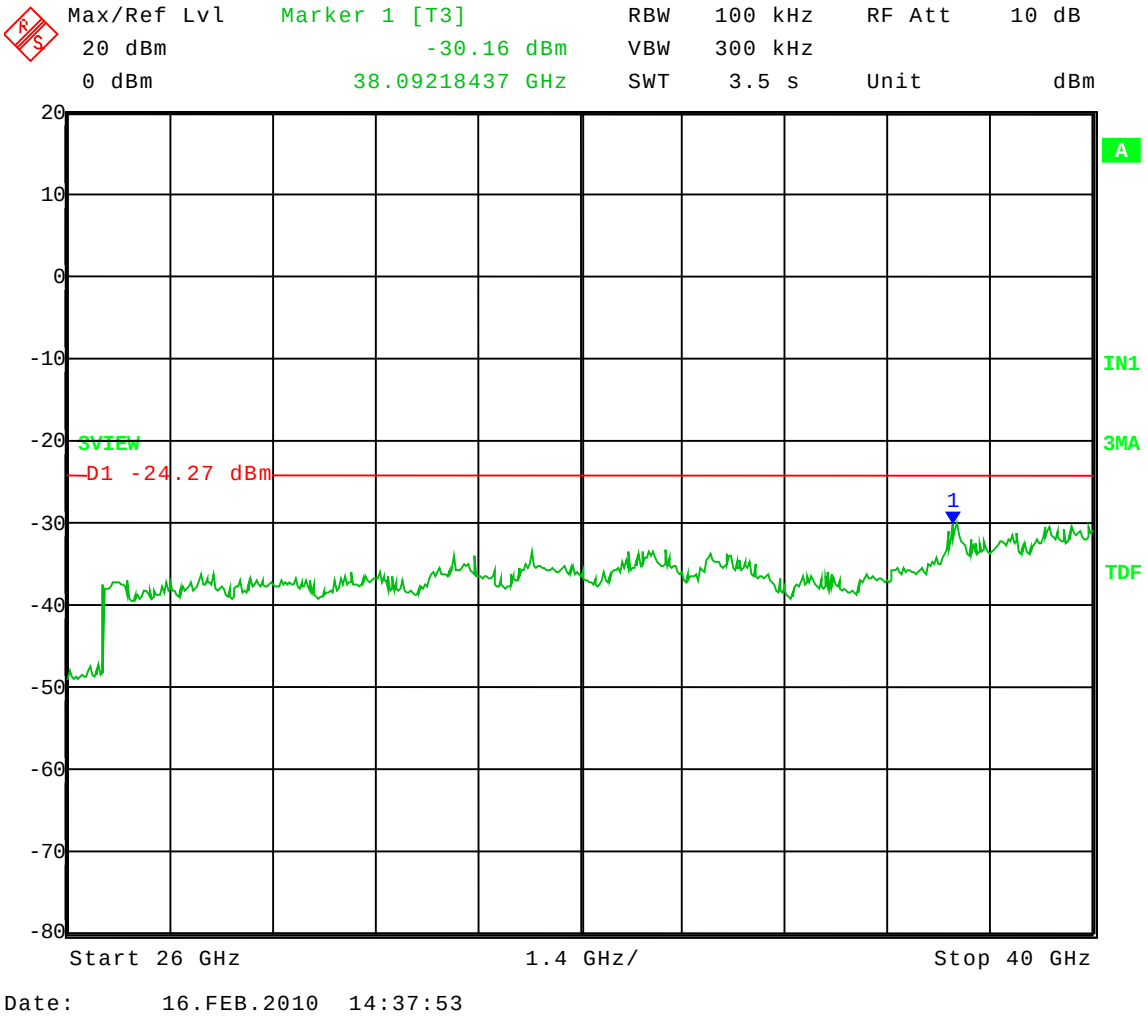


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 64
Modulation: 16QAM

Frequency Range: 26 to 40 GHz
Limit = -24.27 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

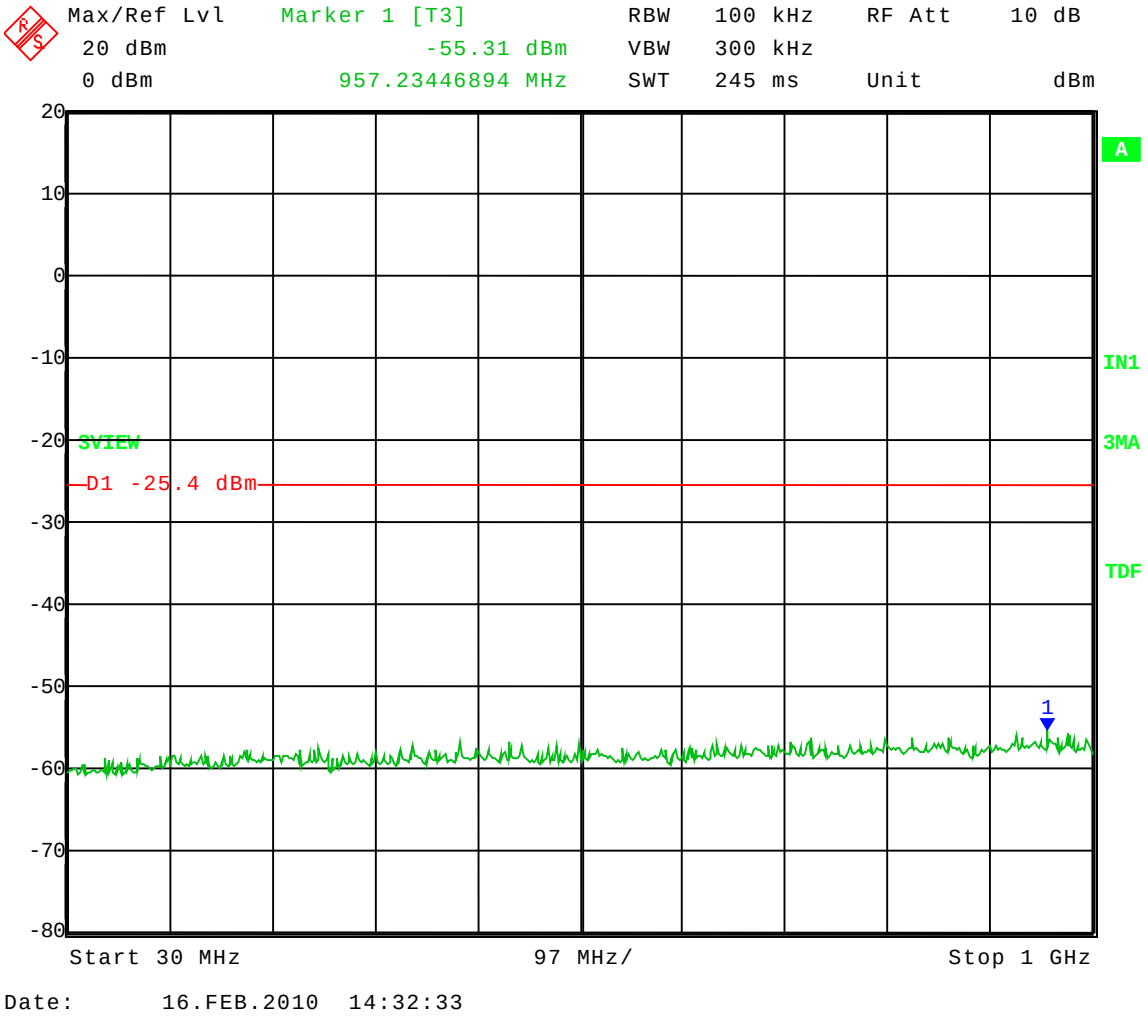


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 64
Modulation: 64QAM

Frequency Range: 30 to 1000 MHz
Limit = -25.40 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

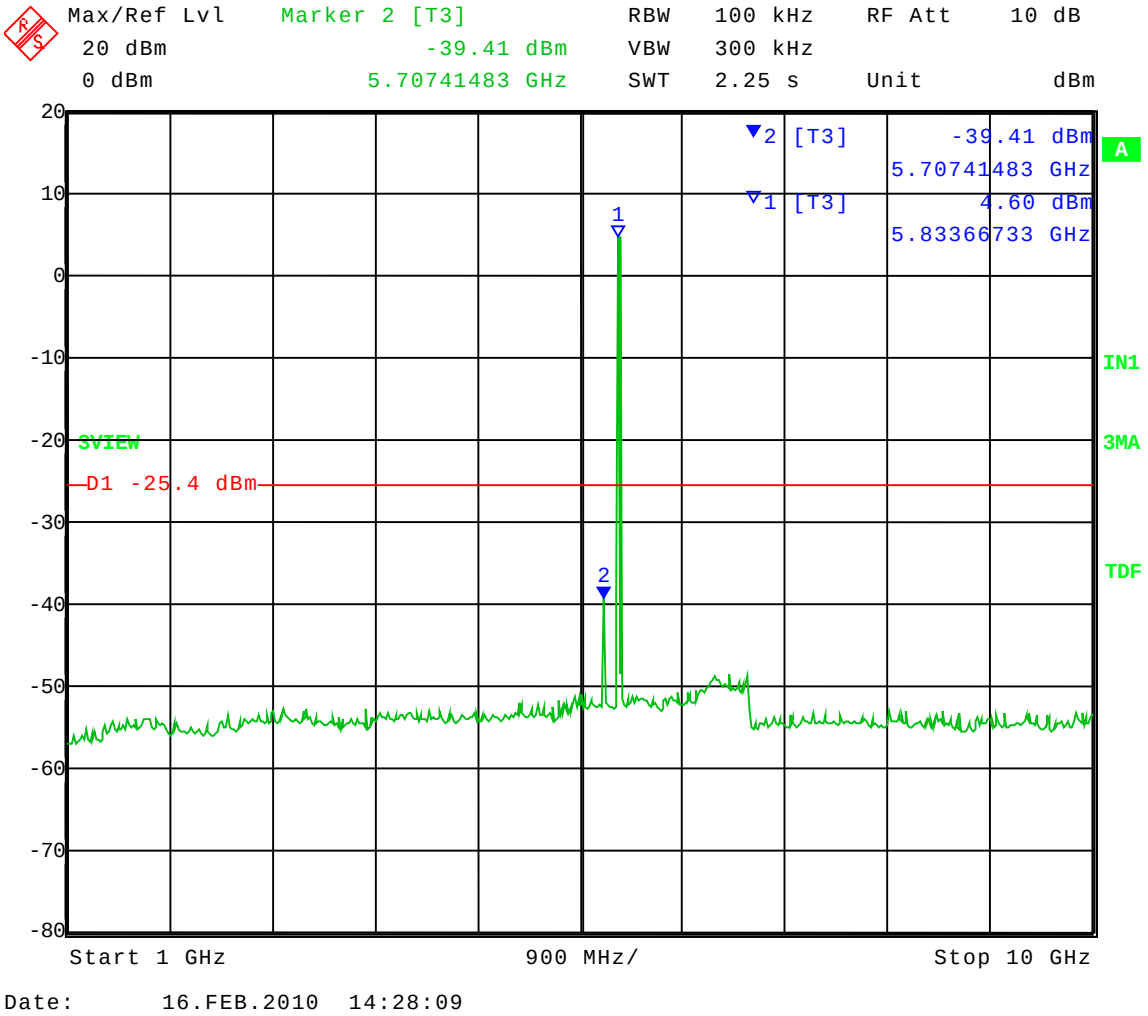


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 64
Modulation: 64QAM

Frequency Range: 1 to 10 GHz
Limit = -25.40 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

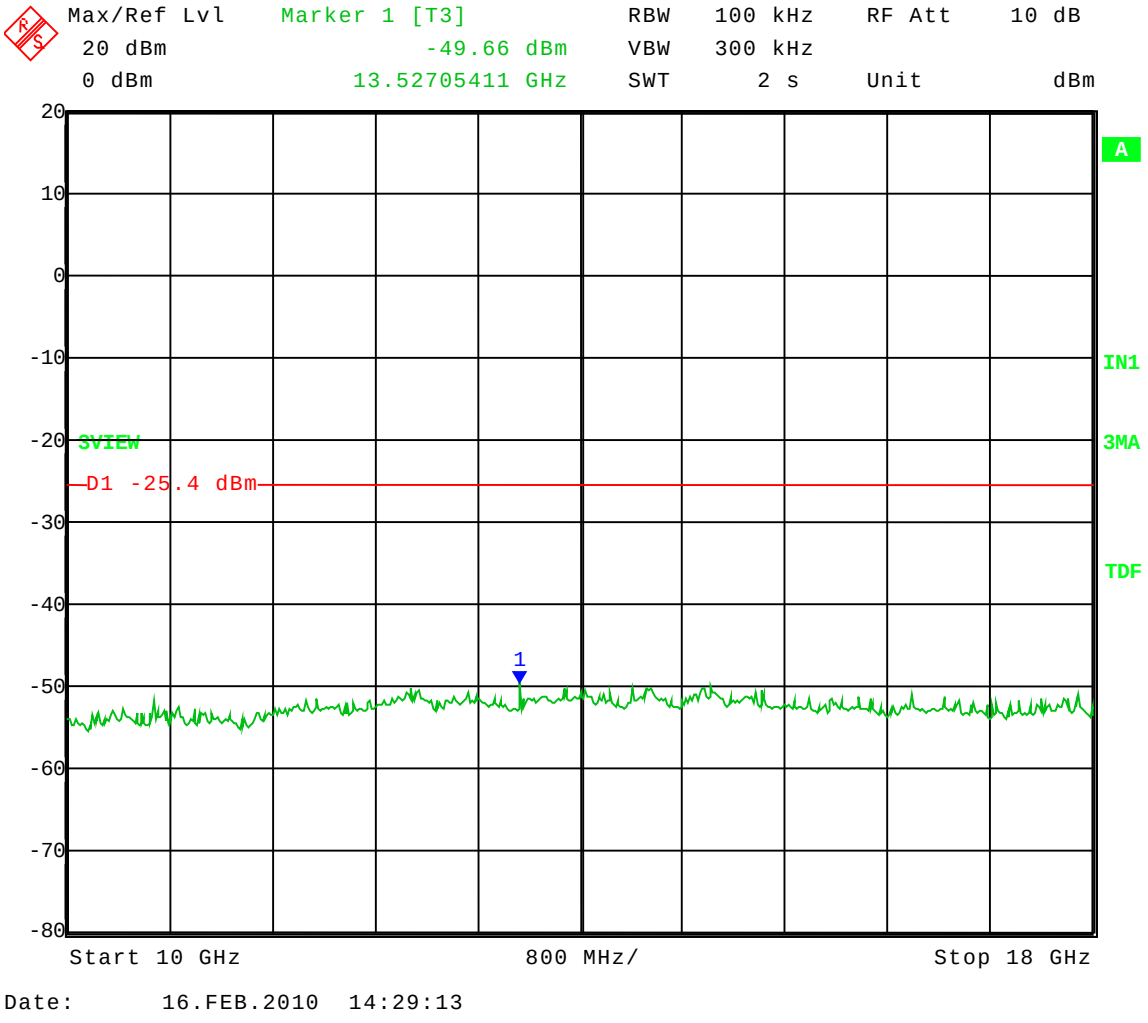


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 64
Modulation: 64QAM

Frequency Range: 10 to 18 GHz
Limit = -25.40 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

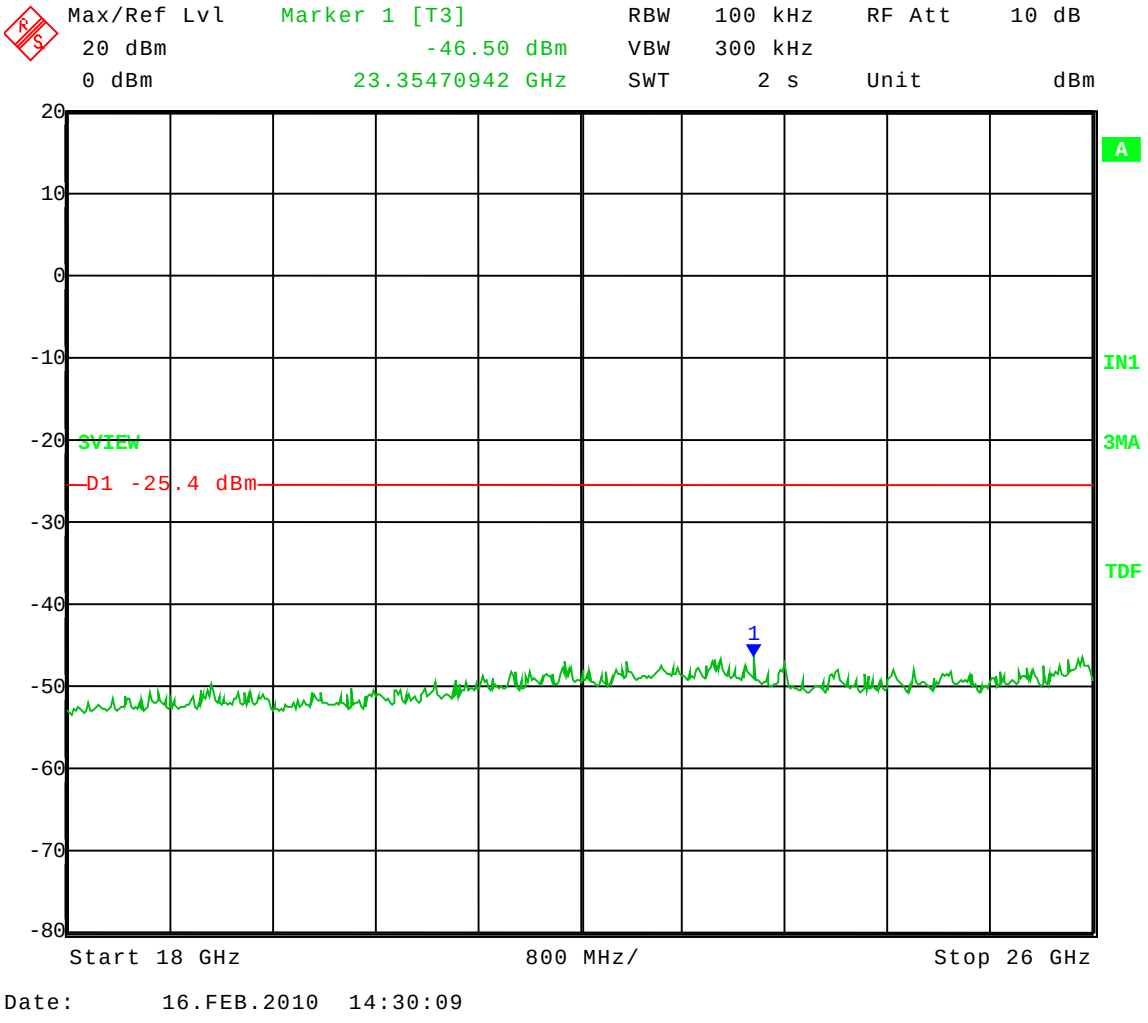


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 64
Modulation: 64QAM

Frequency Range: 18 to 26 GHz
Limit = -25.40 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

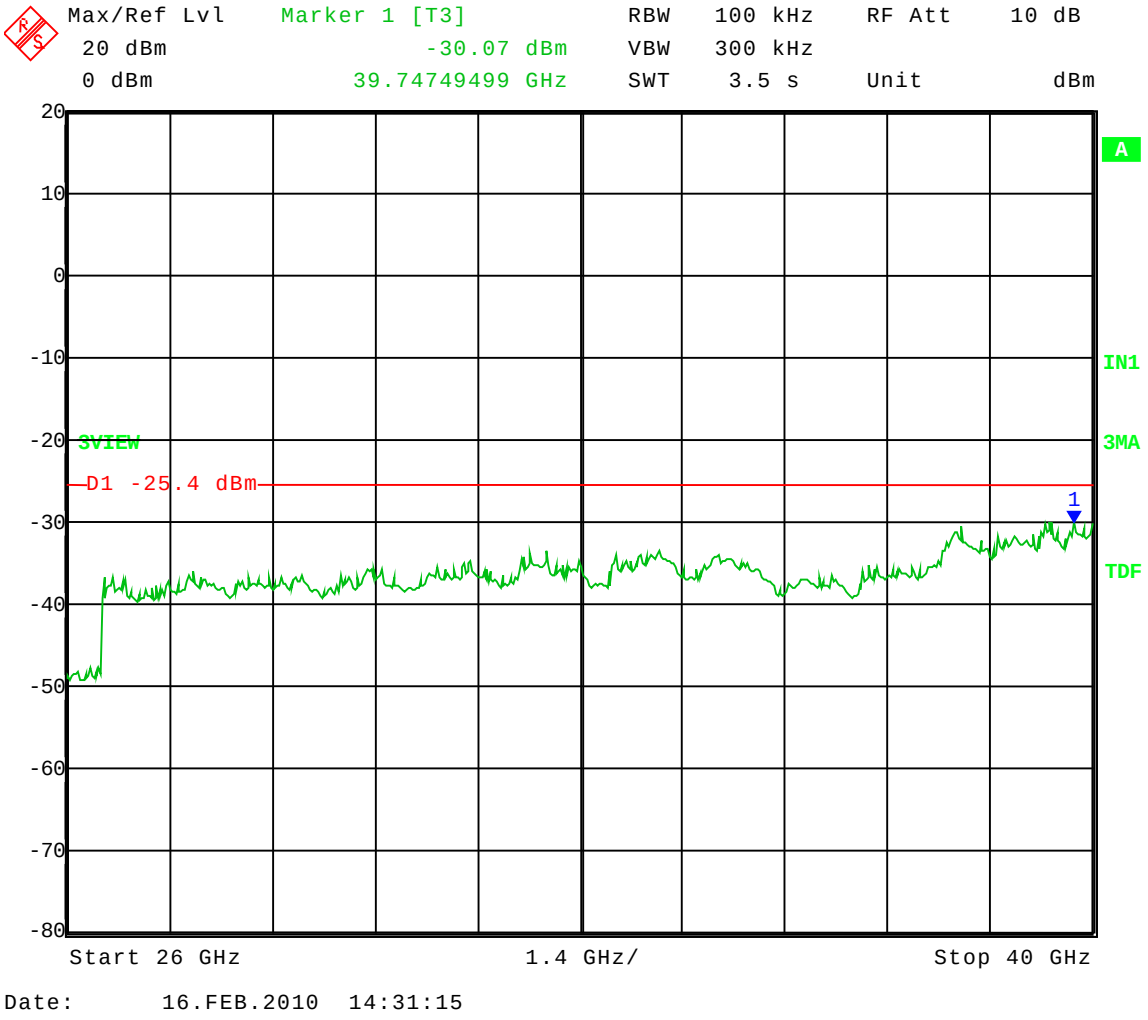


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 64
Modulation: 64QAM

Frequency Range: 26 to 40 GHz
Limit = -25.40 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

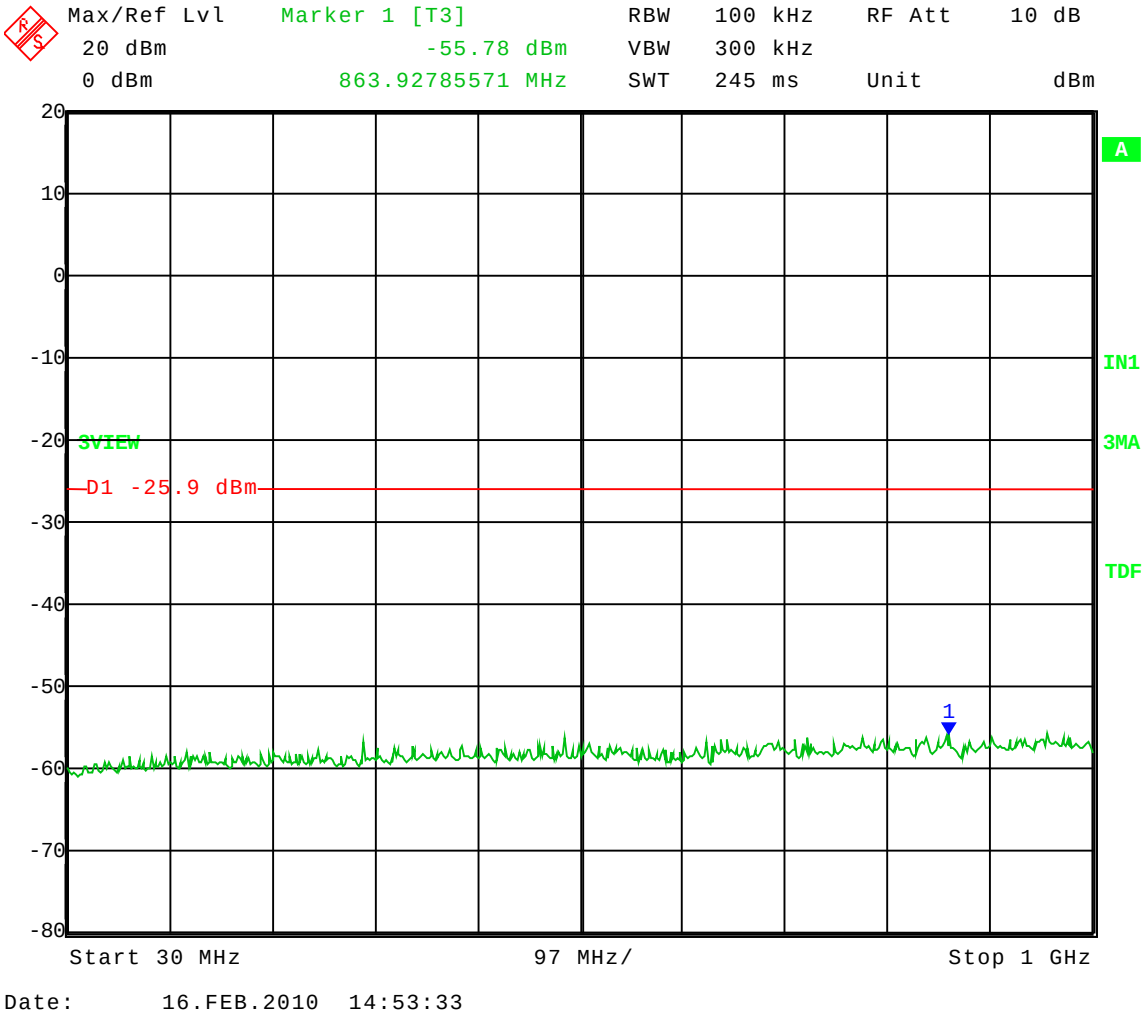


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 5F
Modulation: 256QAM

Frequency Range: 30 to 1000 MHz
Limit = -25.90 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

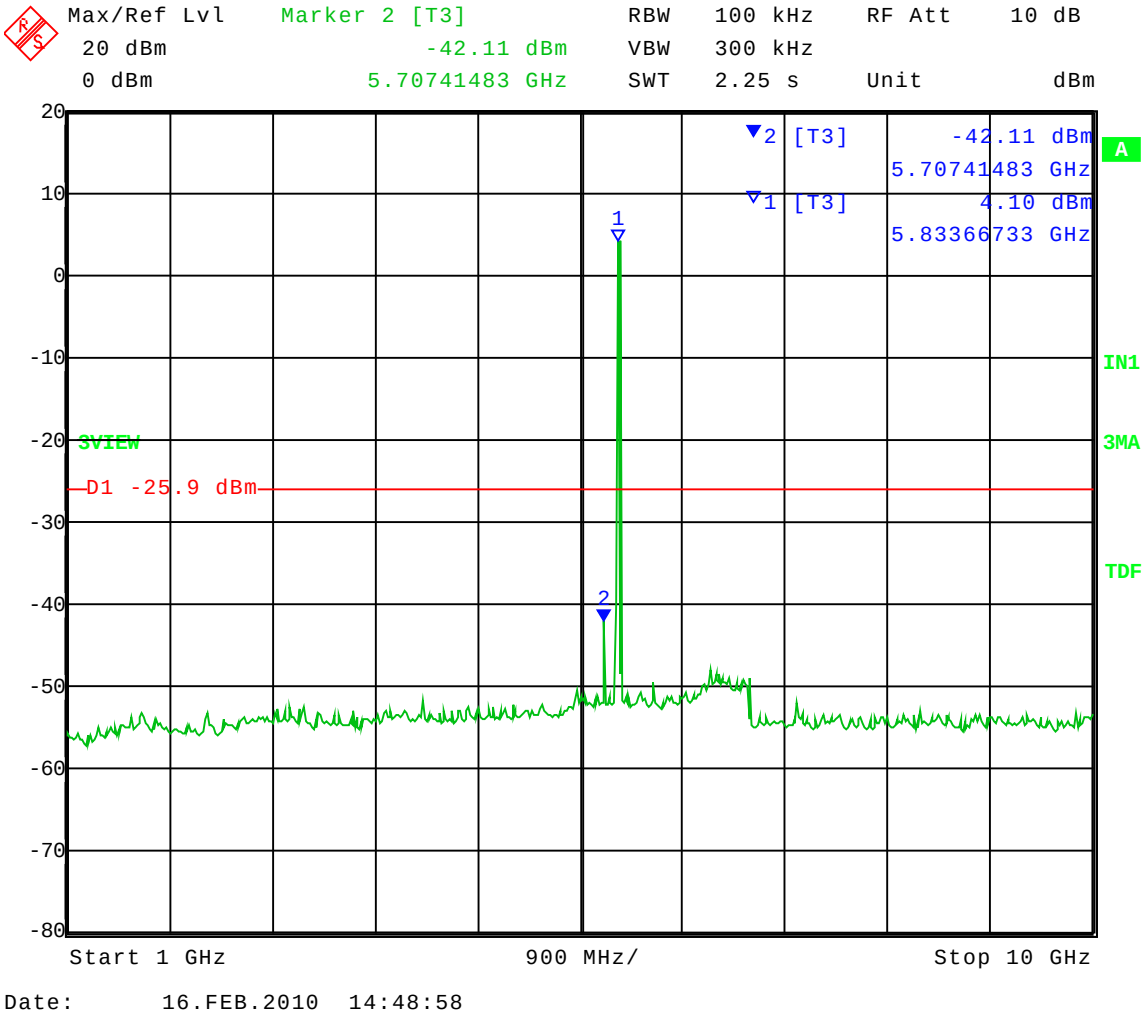


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 5F
Modulation: 256QAM

Frequency Range: 1 to 10 GHz
Limit = -25.90 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

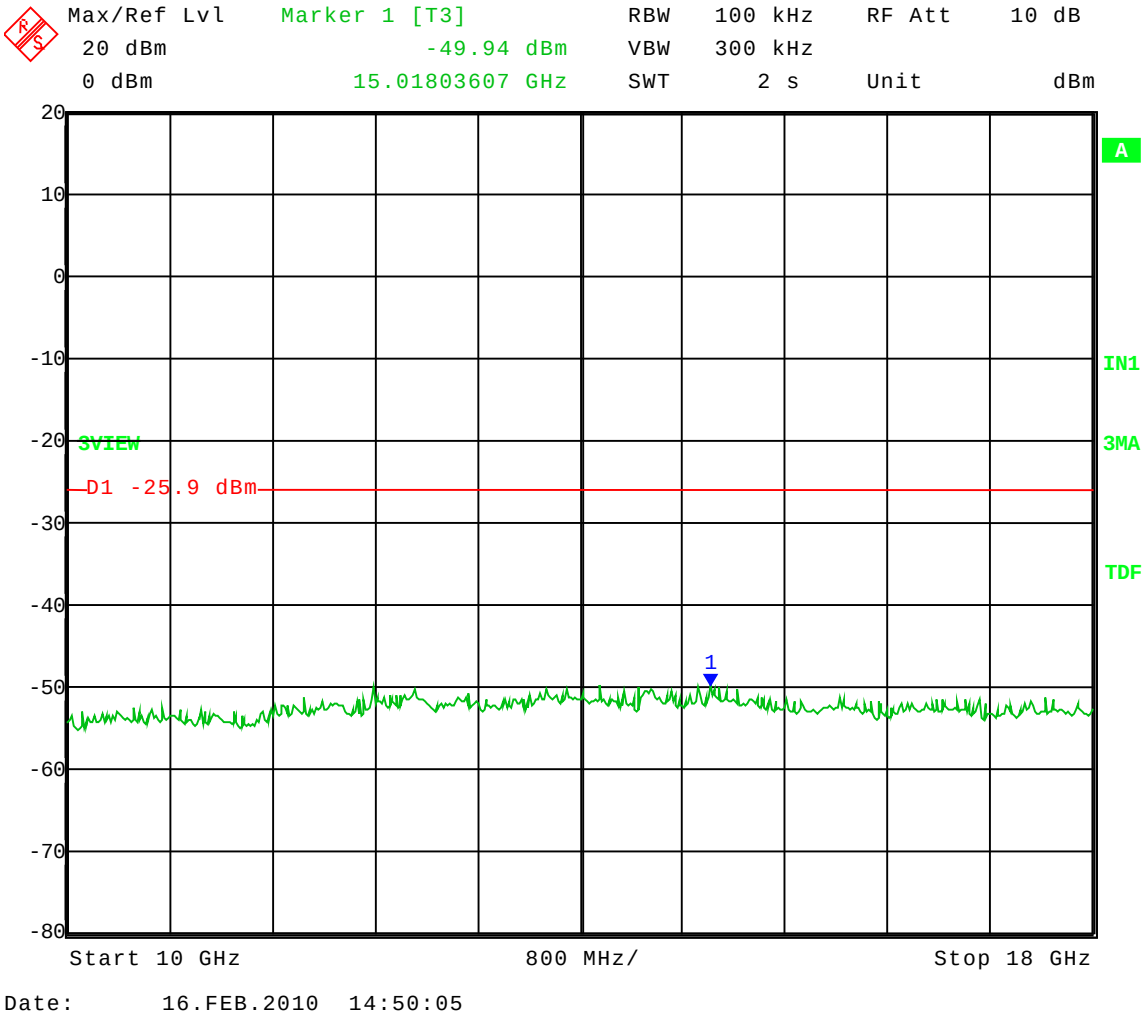


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 5F
Modulation: 256QAM

Frequency Range: 10 to 18 GHz
Limit = -25.90 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

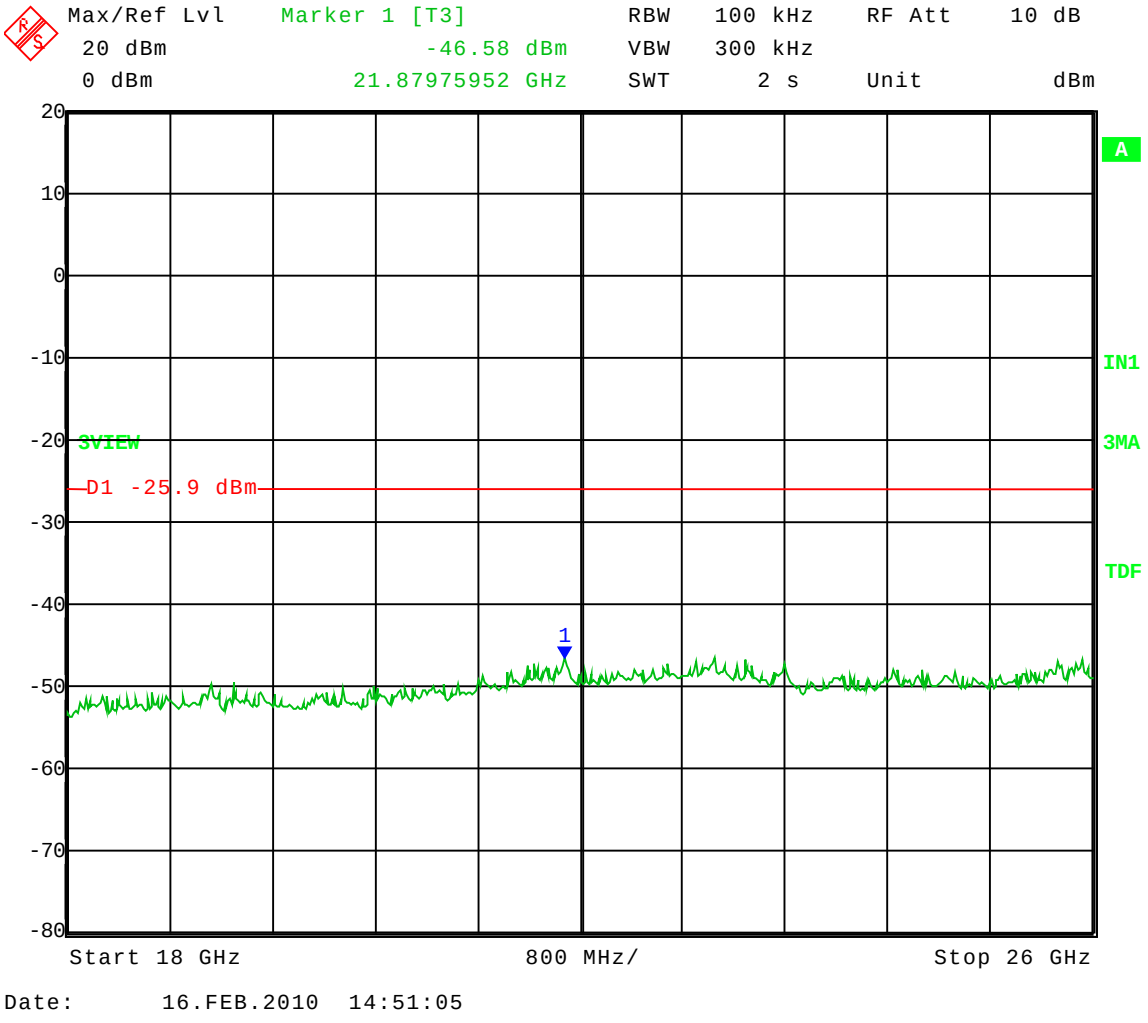


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 5F
Modulation: 256QAM

Frequency Range: 18 to 26 GHz
Limit = -25.90 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

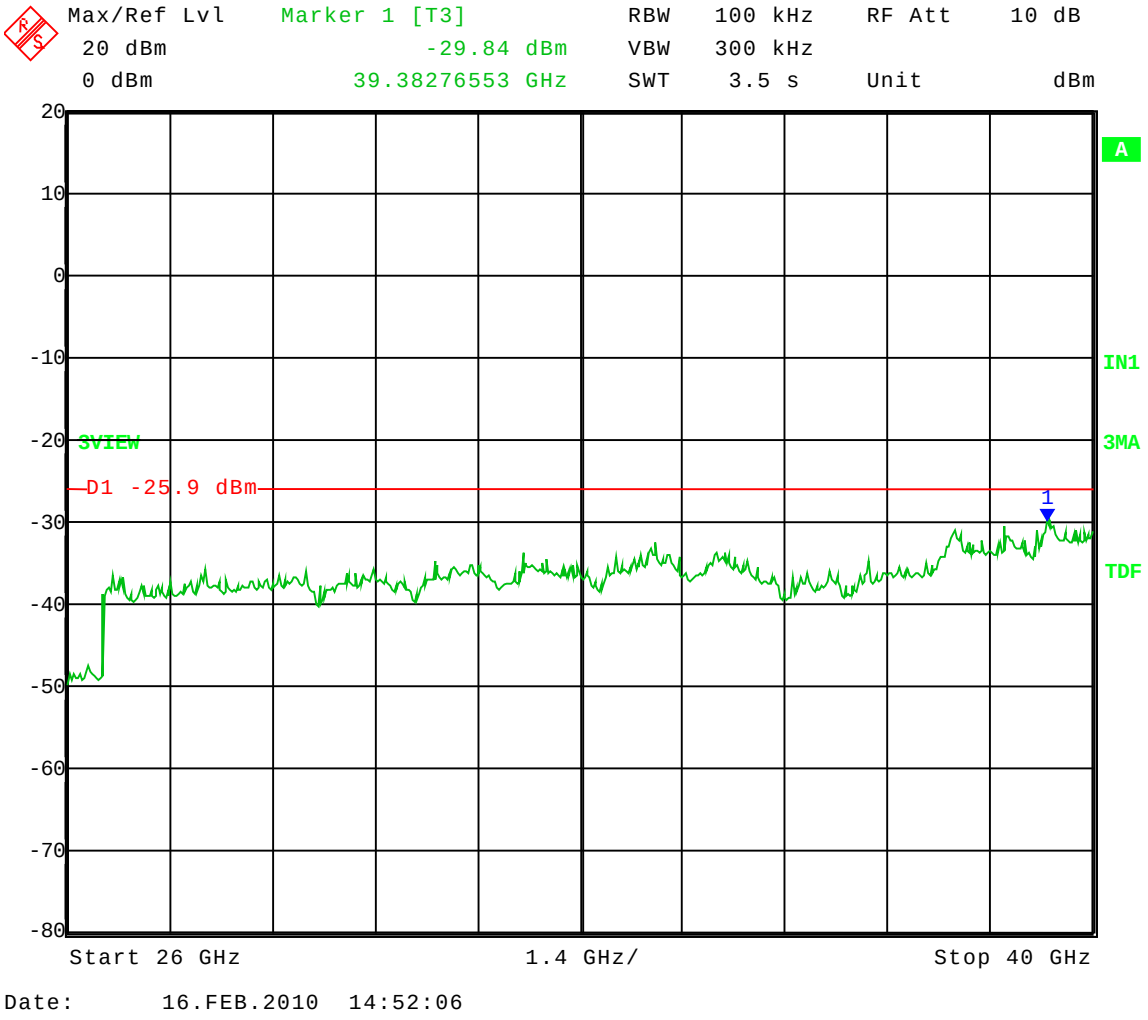


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 5F
Modulation: 256QAM

Frequency Range: 26 to 40 GHz
Limit = -25.90 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

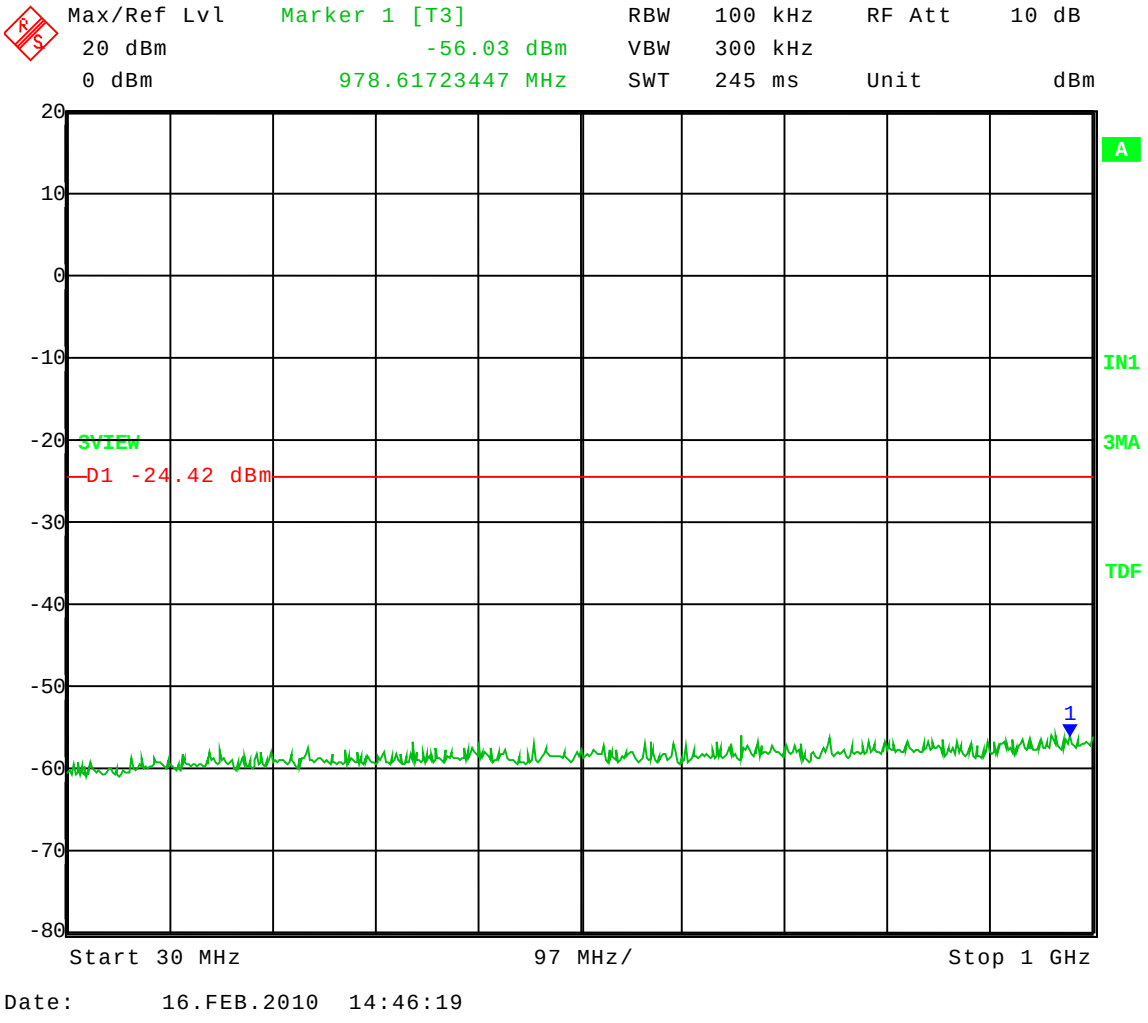


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 65
Modulation: QPSK

Frequency Range: 30 to 1000 MHz
Limit = -24.42 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

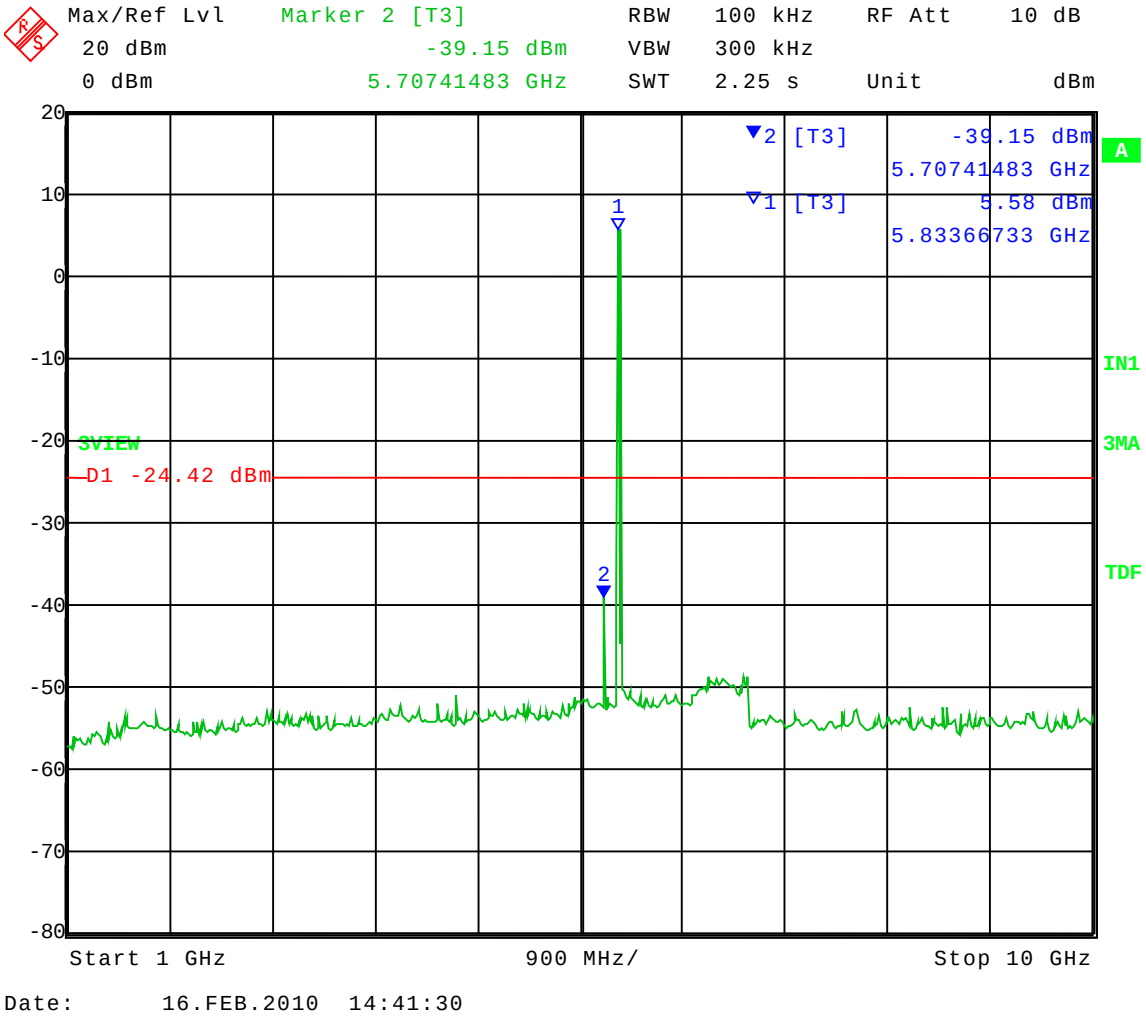


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 65
Modulation: QPSK

Frequency Range: 1 to 10 GHz
Limit = -24.42 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

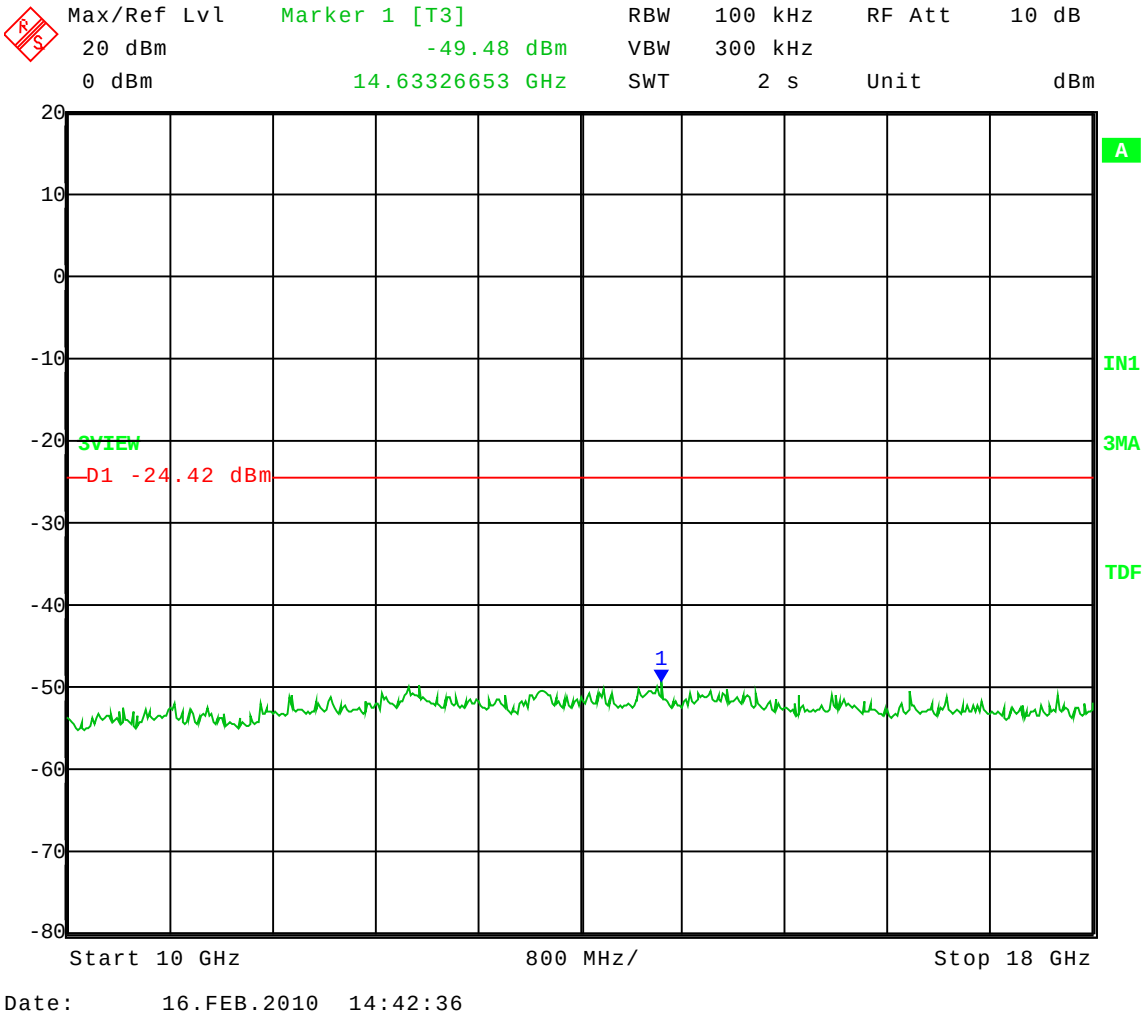


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 65
Modulation: QPSK

Frequency Range: 10 to 18 GHz
Limit = -24.42 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

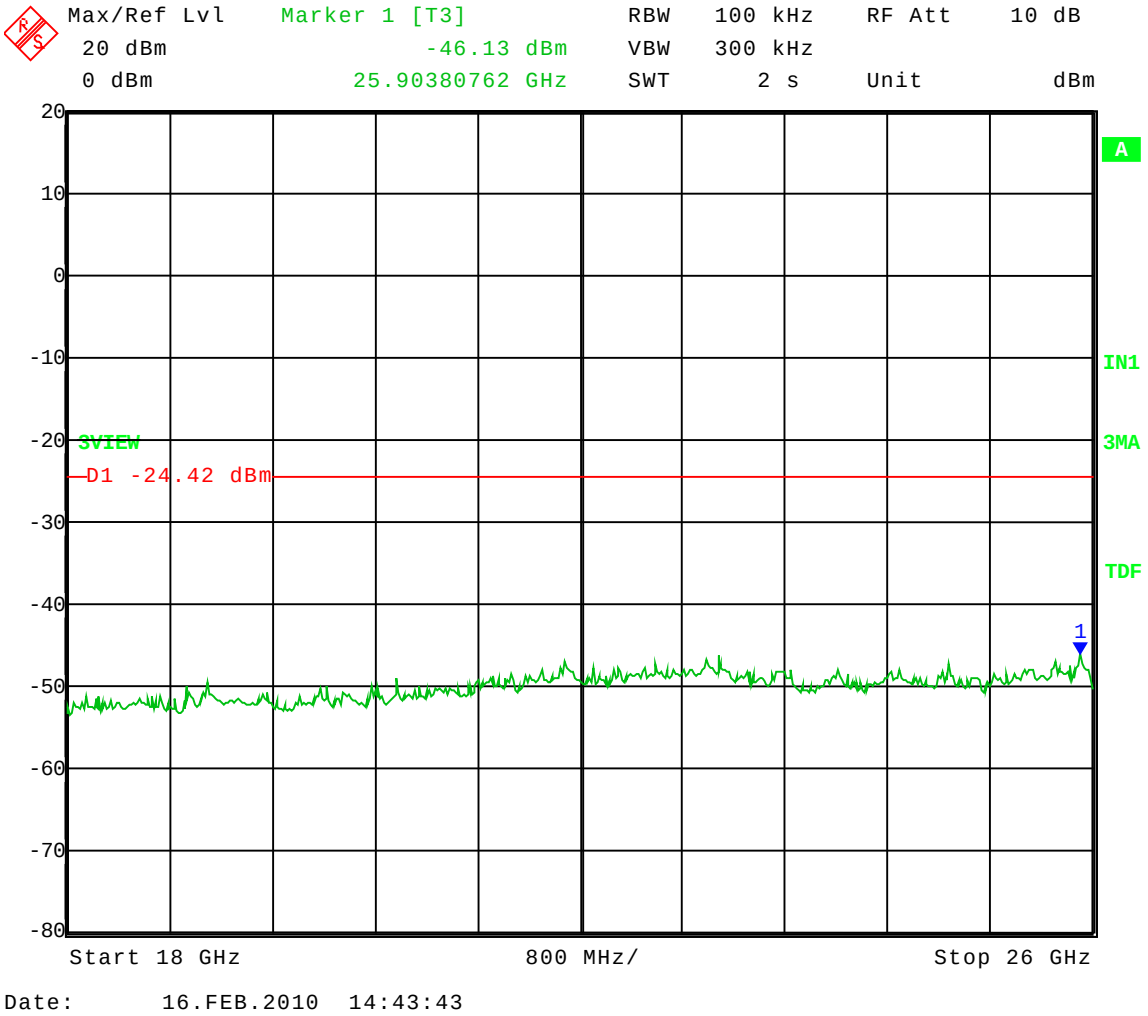


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 65
Modulation: QPSK

Frequency Range: 18 to 26 GHz
Limit = -24.42 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)

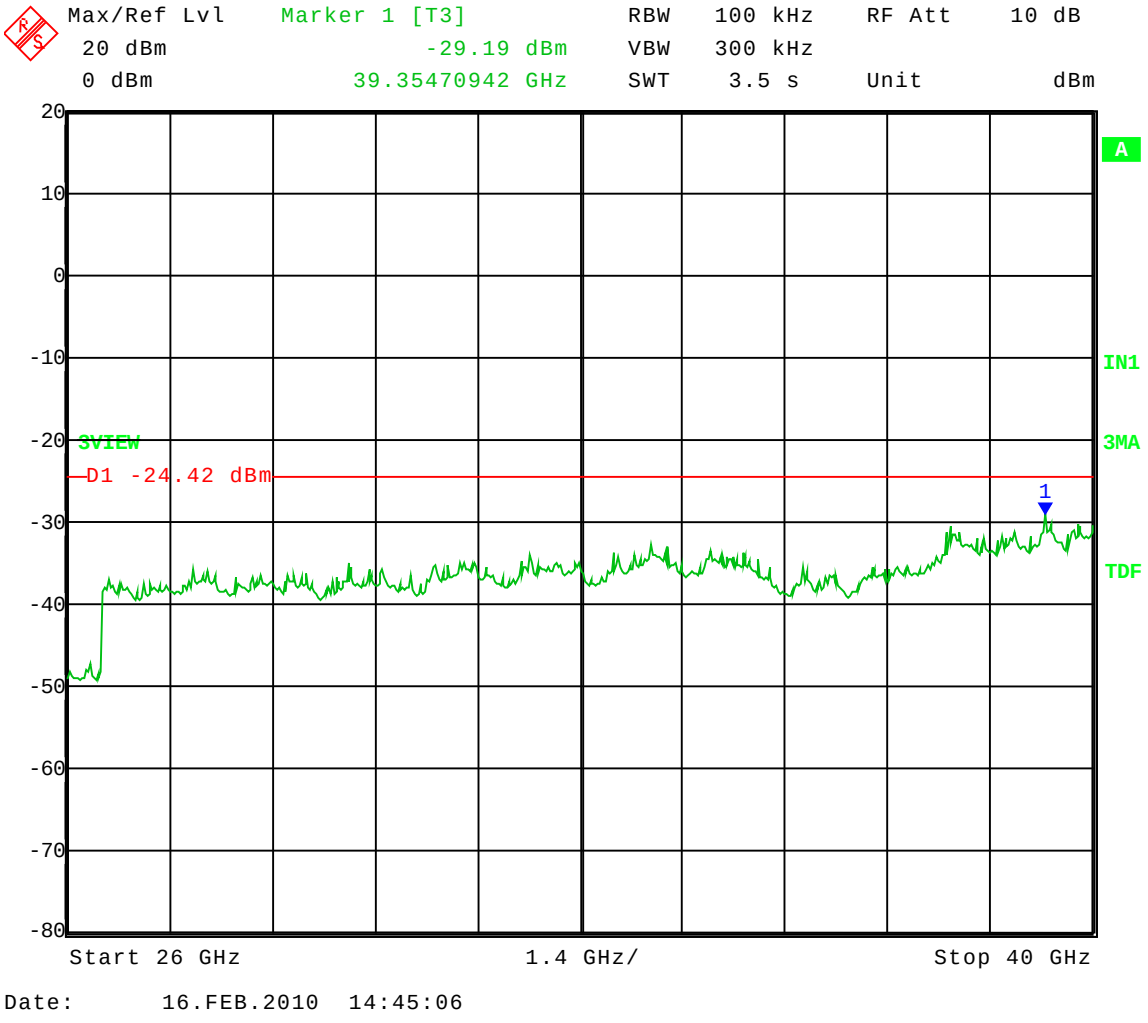


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-16-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Spurious Emissions - Conducted
Operator: Craig B
Comment: High Channel: Frequency – 5.840 GHz
Channel BW: 20 MHz
Power setting: 65
Modulation: QPSK

Frequency Range: 26 to 40 GHz
Limit = -24.42 dBm

All Spurious Emissions at Least 30 dB below Peak Level of In Band Frequency (used power option 2)



1250 Peterson Dr., Wheeling, IL 60090

5.0 Test Run: Power Spectral Density (PSD)

Rule Section: Section 15.247(e)

Test Procedure: FCC KDB Publication No. 558074: *Measurement of Digital Transmission Systems Operating under Section 15.247, March 23, 2005*

Description: The EUT was set to transmit at the lowest, middle, and highest channel of operation. The channel bandwidth of the EUT was changed from 5 MHz to 10 MHz and 20 MHz, and the modulation of the EUT was changed from QPSK to 16-QAM, 64-QAM, and 256-QAM. Since Power Output Option 2 was used, Option 2 for measuring PSD was also used. A peak detector was used. Since the device was transmitting at less than 100% duty cycle, video triggering and gating were set so that the entire sweep occurred while the transmitter was transmitting on full power pulses. The analyzer was set to trace average 100 traces in power averaging mode. The Power Spectral Density was measured and recorded for each condition.

Limit: The peak level measured must be no greater than +8 dBm.

Results: Passed

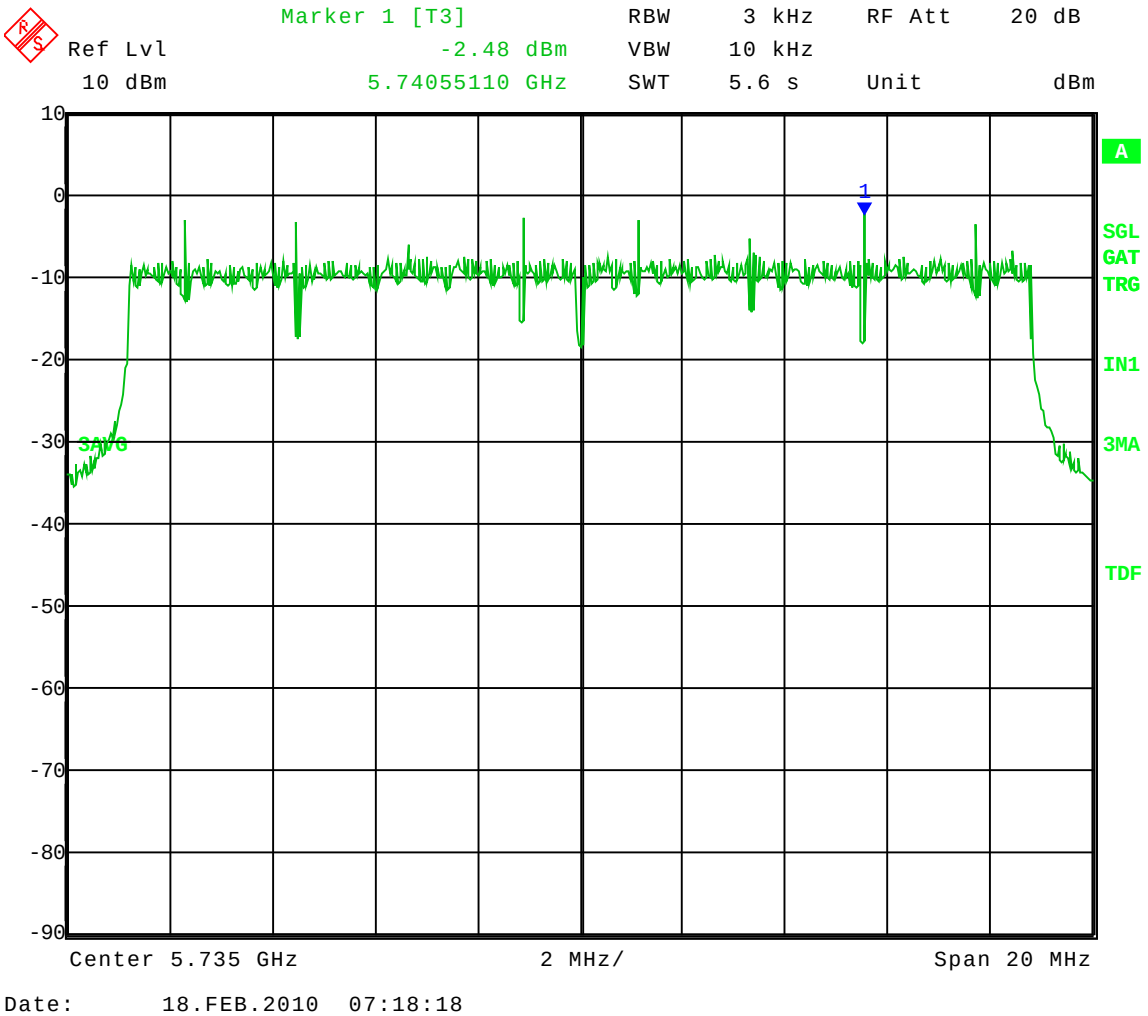
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Low Channel: Frequency – 5.735 GHz
Power setting: 62
Modulation: 16QAM
Channel BW: 20 MHz

Limit: +8 dBm

Power Spectral Density = -2.48 dBm



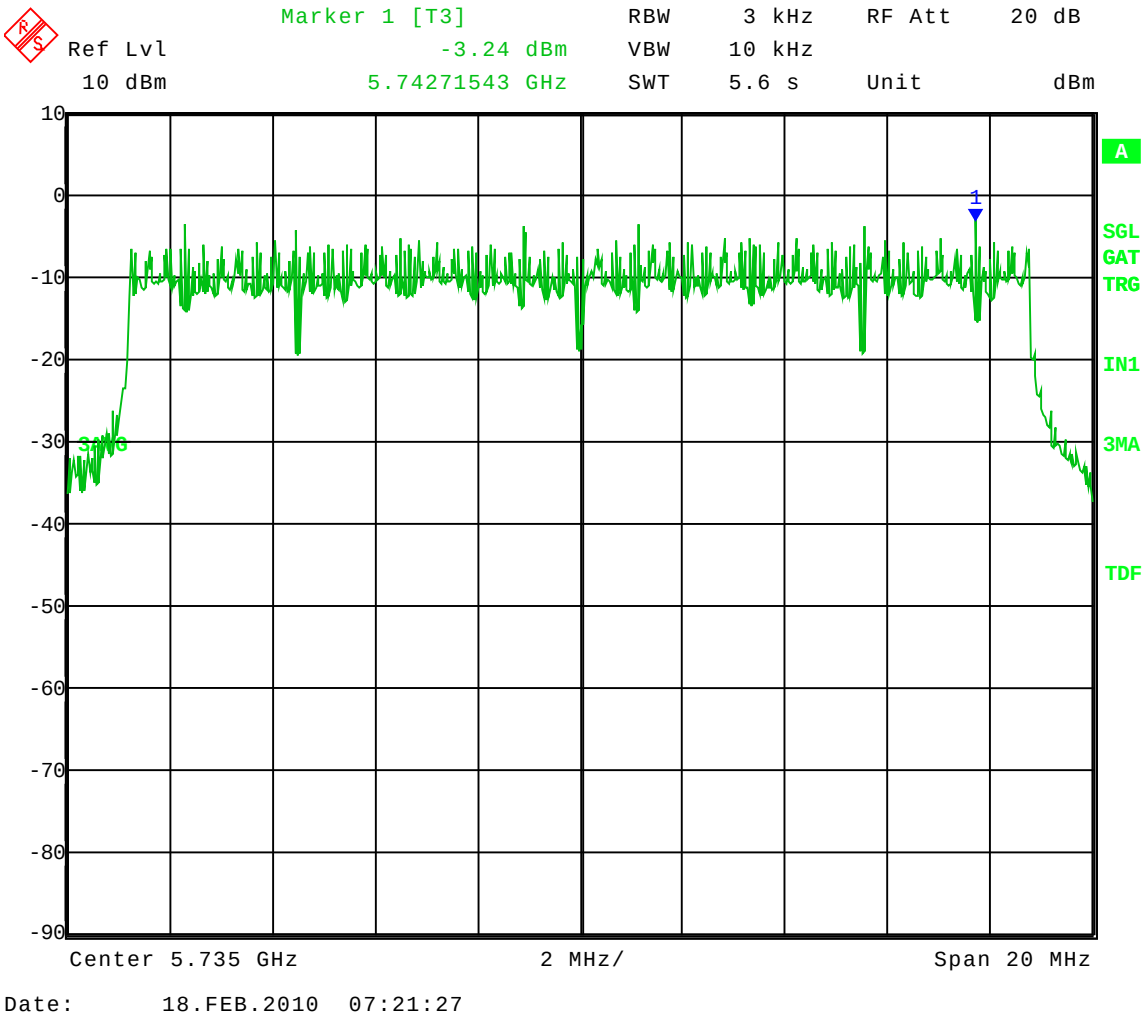
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Low Channel: Frequency – 5.735 GHz
Power setting: 63
Modulation: 64QAM
Channel BW: 20 MHz

Limit: +8 dBm

Power Spectral Density = -3.24 dBm



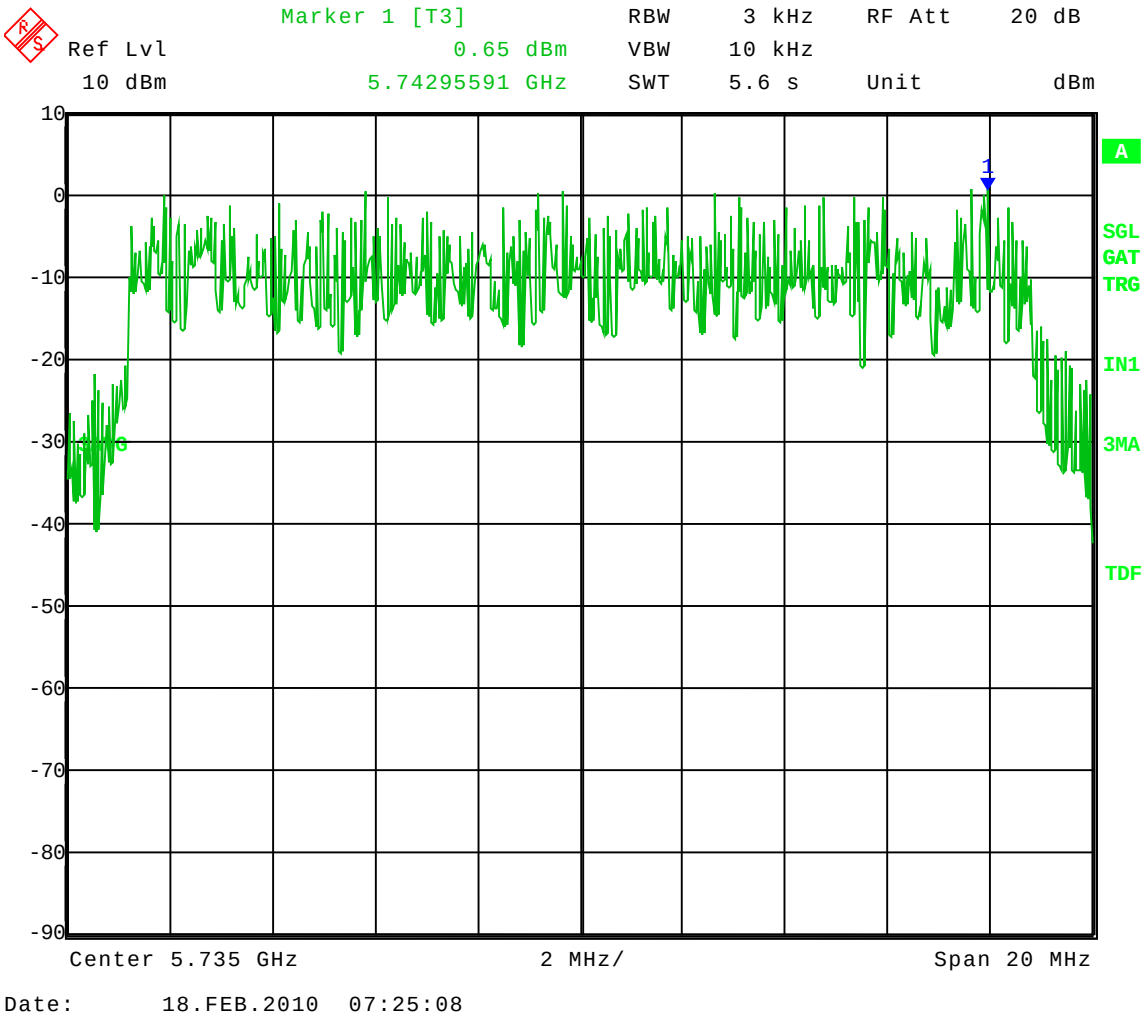
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Low Channel: Frequency – 5.735 GHz
Power setting: 61
Modulation: 256QAM
Channel BW: 20 MHz

Limit: +8 dBm

Power Spectral Density = 0.65 dBm



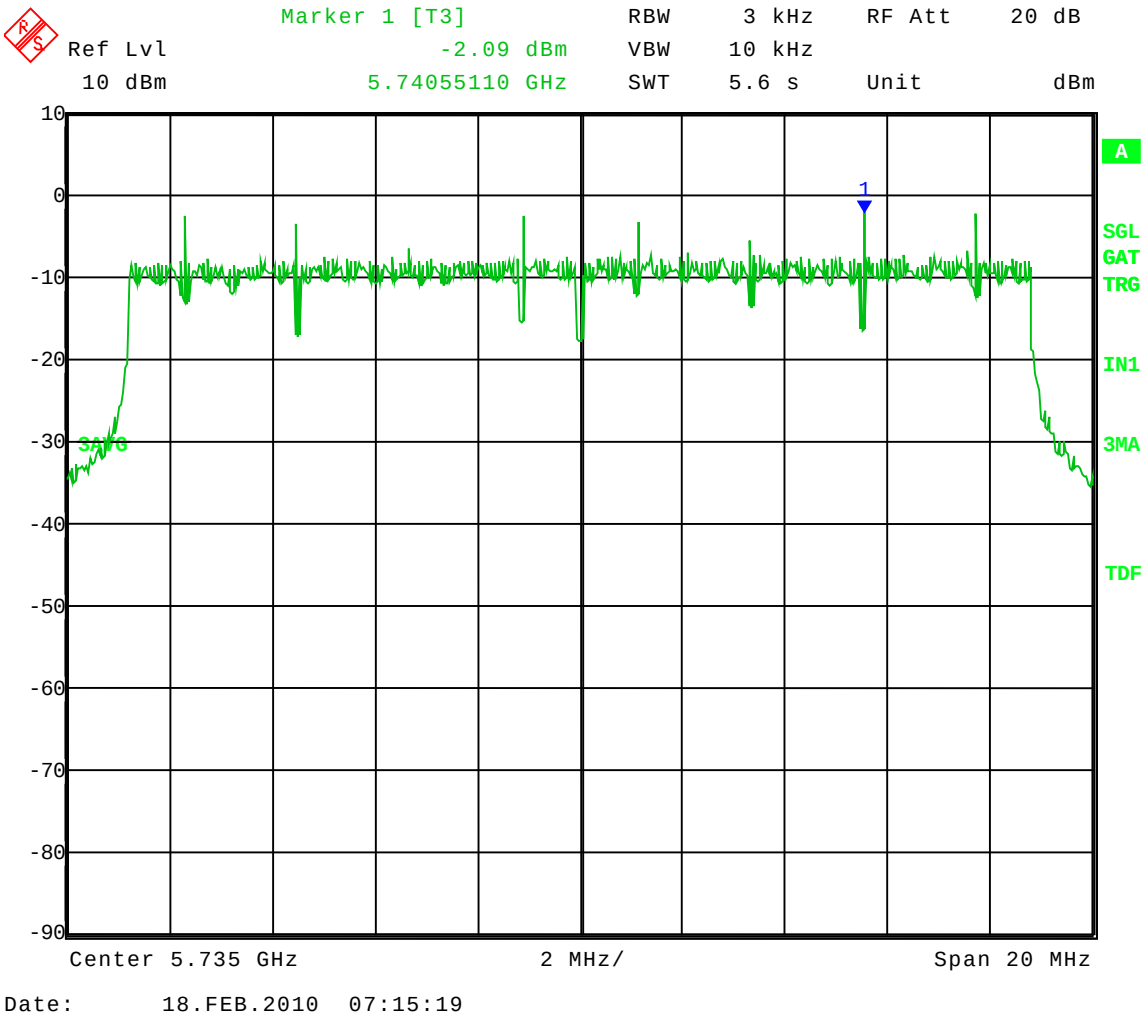
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Low Channel: Frequency – 5.735 GHz
Power setting: 62
Modulation: QPSK
Channel BW: 20 MHz

Limit: +8 dBm

Power Spectral Density = -2.09 dBm



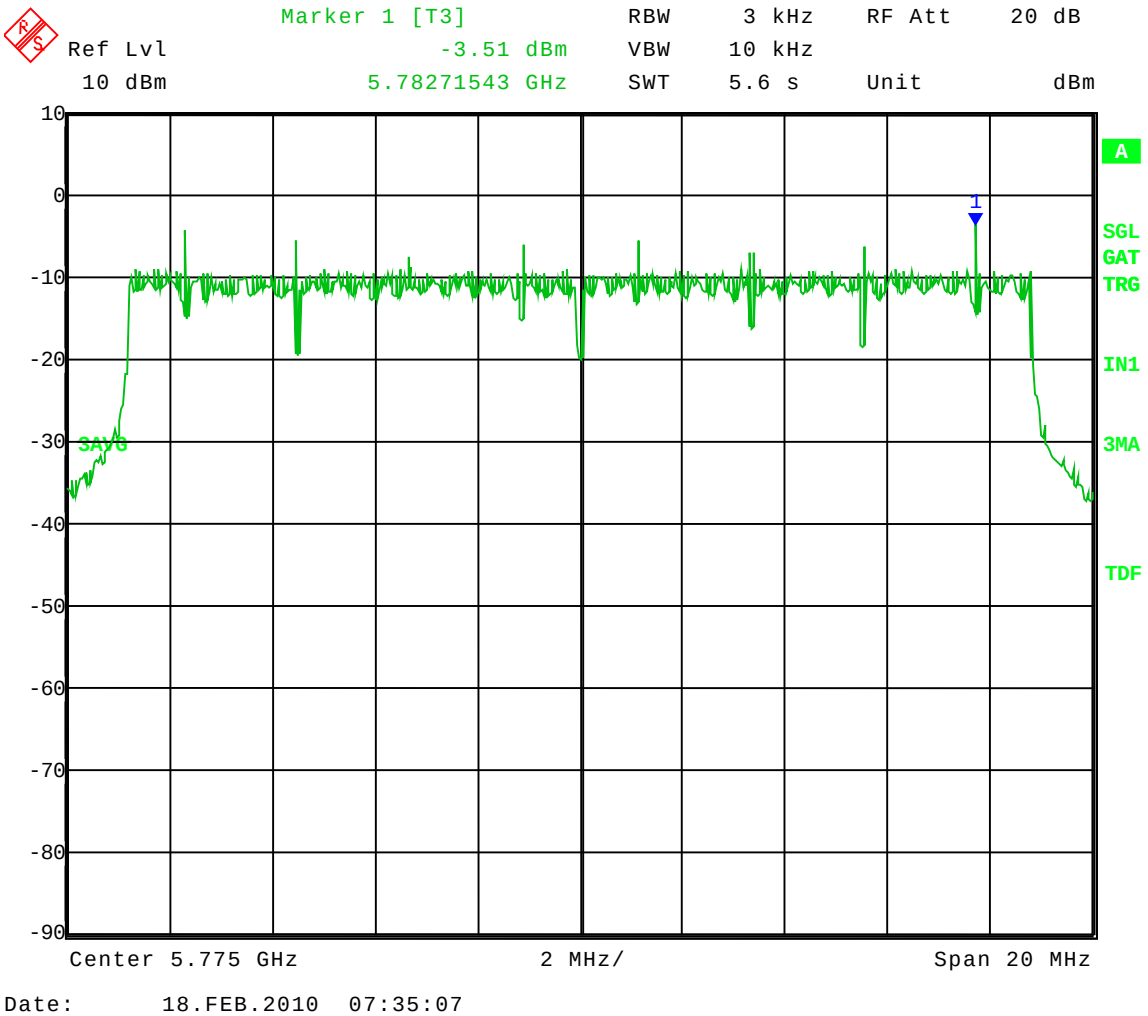
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 16QAM
Channel BW: 20 MHz

Limit: +8 dBm

Power Spectral Density = -3.51 dBm



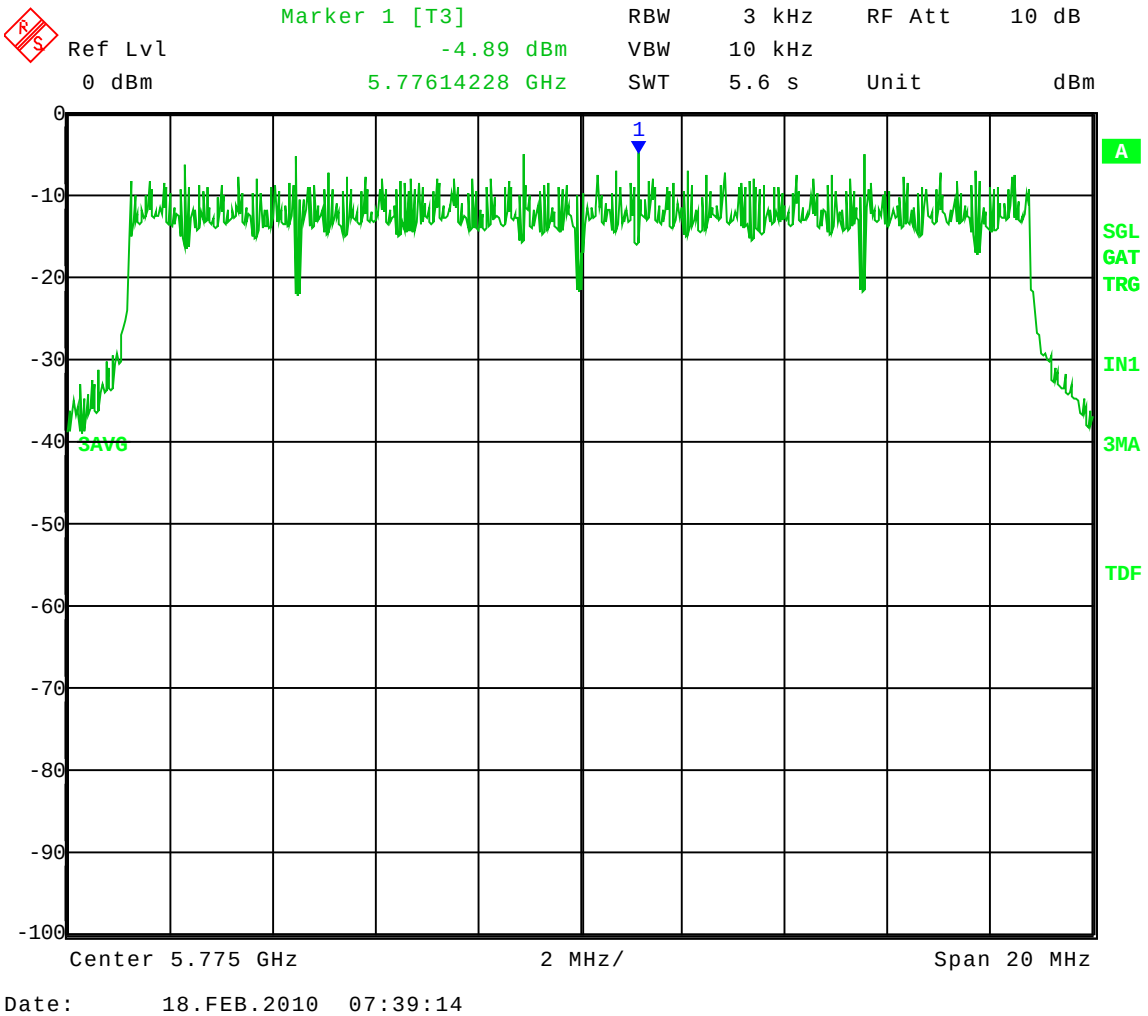
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 64QAM
Channel BW: 20 MHz

Limit: +8 dBm

Power Spectral Density = -4.89 dBm



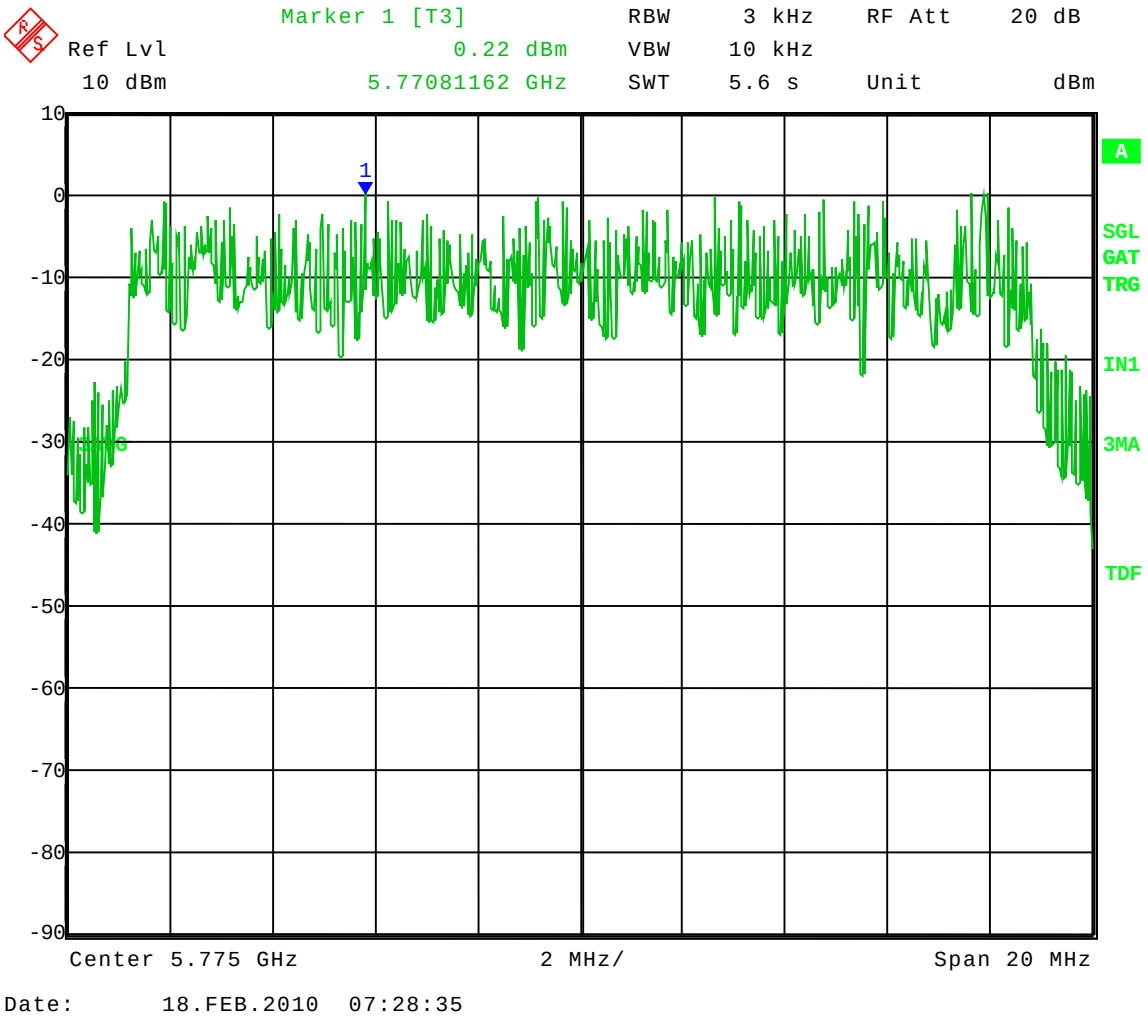
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: 256QAM
Channel BW: 20 MHz

Limit: +8 dBm

Power Spectral Density = 0.22 dBm



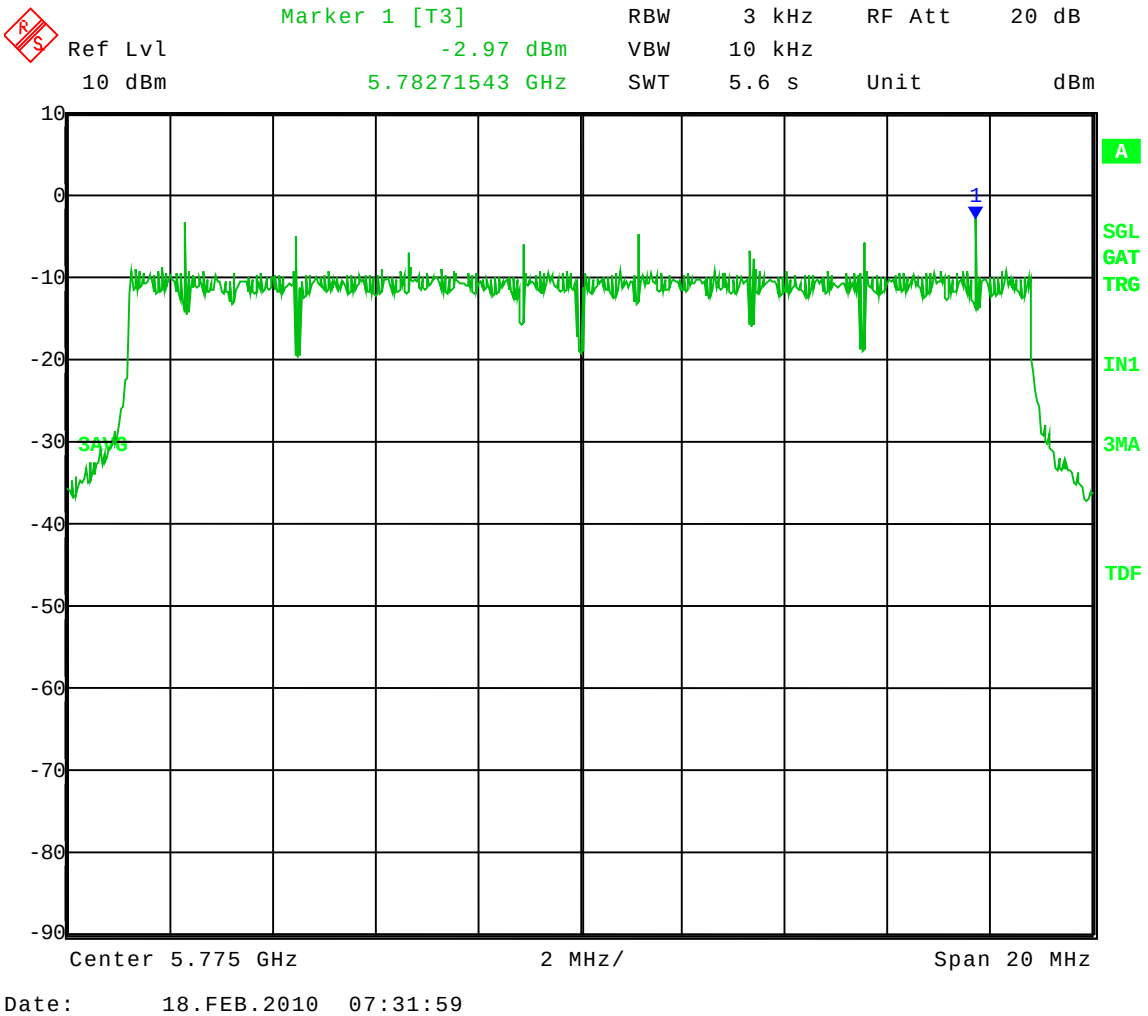
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
Middle Channel: Frequency – 5.775 GHz
Power setting: 61
Modulation: QPSK
Channel BW: 20 MHz

Limit: +8 dBm

Power Spectral Density = -2.97 dBm



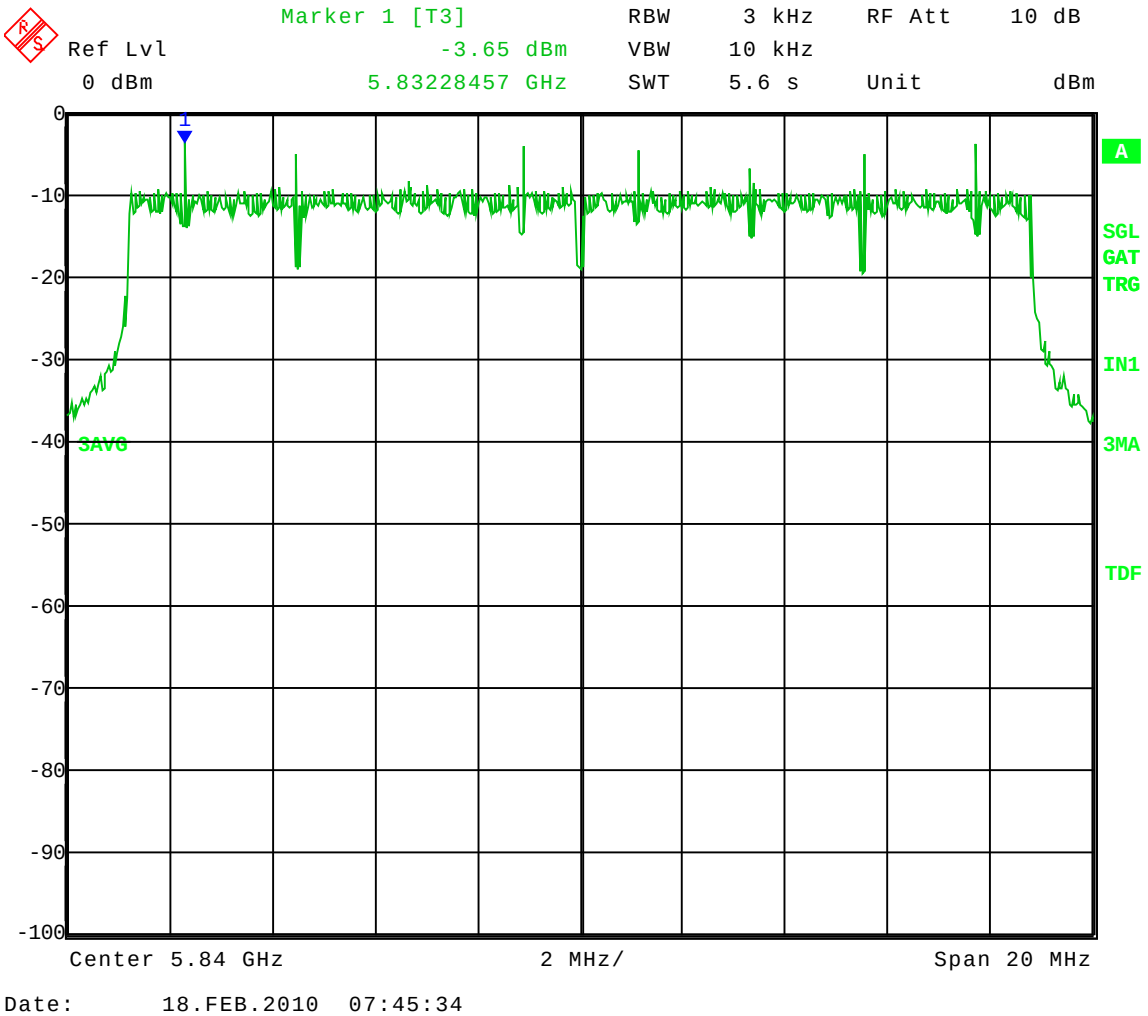
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
High Channel: Frequency – 5.840 GHz
Power setting: 64
Modulation: 16QAM
Channel BW: 20 MHz

Limit: +8 dBm

Power Spectral Density = -3.65 dBm



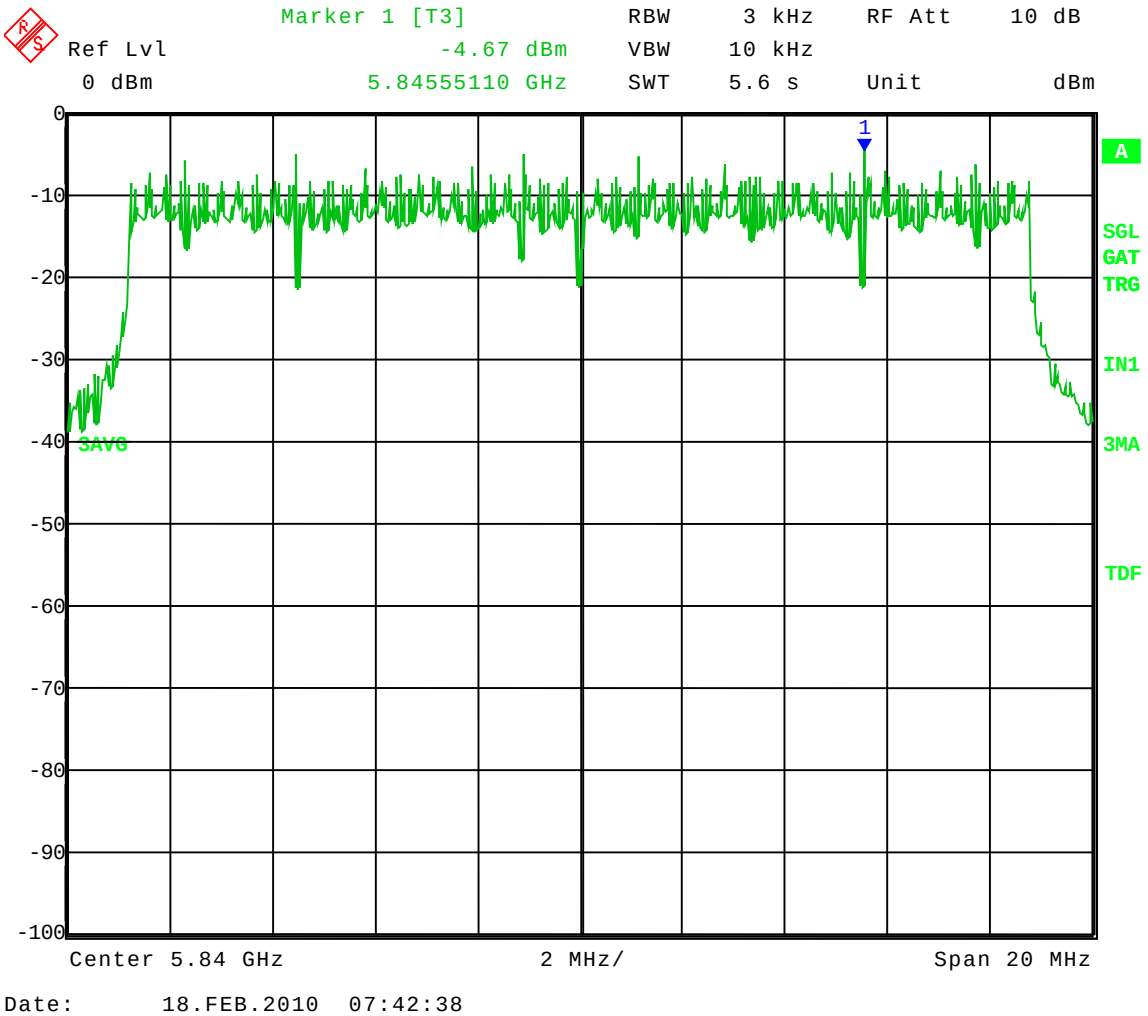
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
High Channel: Frequency – 5.840 GHz
Power setting: 64
Modulation: 64QAM
Channel BW: 20 MHz

Limit: +8 dBm

Power Spectral Density = -4.67 dBm



Date: 18.FEB.2010 07:42:38

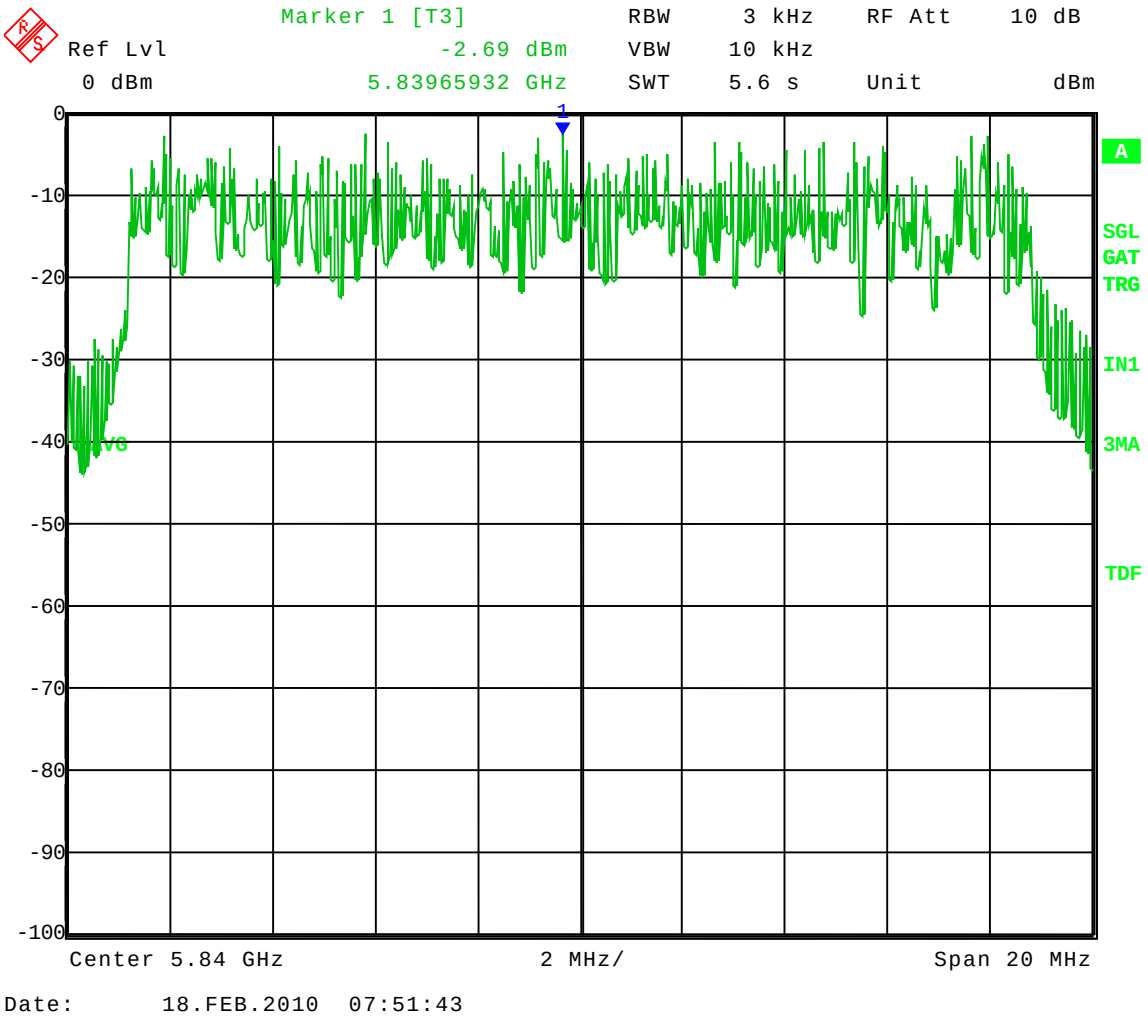
1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
High Channel: Frequency – 5.840 GHz
Power setting: 5F
Modulation: 256QAM
Channel BW: 20 MHz

Limit: +8 dBm

Power Spectral Density = -2.69 dBm

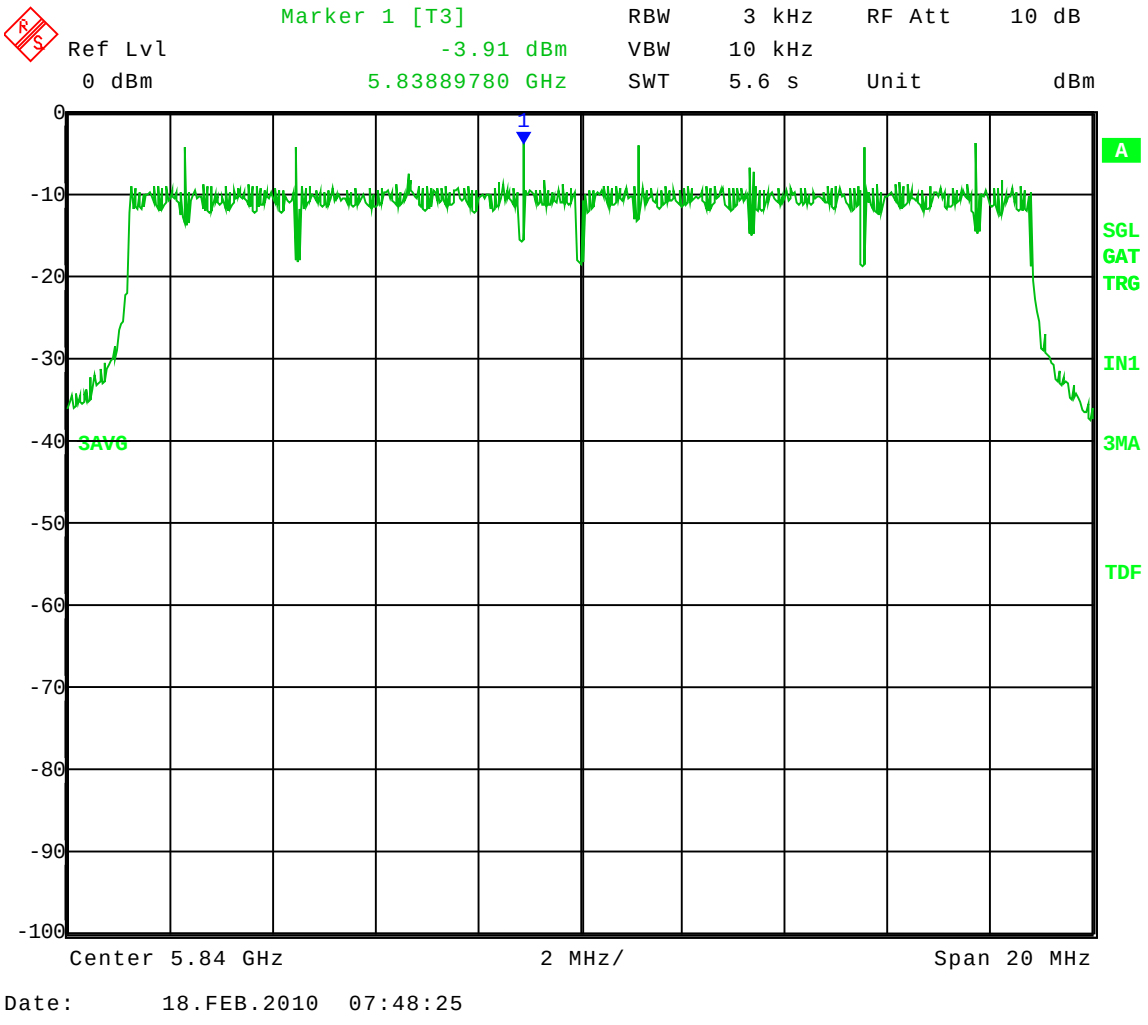


1250 Peterson Dr., Wheeling, IL 60090

Test Date: 02-18-2010
Company: Motorola
EUT: OFDM Access Point CAP58430US
Test: Power Spectral Density - Conducted
Operator: Craig B

Comment: PSD Option 2 with Peak Detector
High Channel: Frequency – 5.840 GHz
Power setting: 65
Modulation: QPSK
Channel BW: 20 MHz
Limit: +8 dBm

Power Spectral Density = -3.91 dBm



END OF REPORT