



FCC 47 CFR PART 15 SUBPART C

for

Digital Projector

Model: GS1, GS1+, GS541, GS3041, G310, G310T, G310JD,
G310P, G310E, G310H, G310F, G310N, G310J, GS1T,
GS1JD, GS1AM, GS1A, TS1, TS541, S3041

Brand: BenQ

Test Report Number:

C160622Z04-RP1-1

Issued Date: July 4, 2016

Issued for

BENQ Corporation

16 Jihu Road, Neihu, Taipei 114, Taiwan

Issued by:

Compliance Certification Services (Shenzhen) Inc.

No.10-1 Mingkeda Logistics park, No.18, Huanguan South Rd.,
Guan Lan Town, Baoan District, Shenzhen, China

TEL: 86-755-28055000

FAX: 86-755-28055221



TESTING CERT #2861.01

Note: This report shall not be reproduced except in full, without the written approval of Compliance Certification Services (Shenzhen) Inc. This document may be altered or revised by Compliance Certification Services (Shenzhen) Inc. personnel only, and shall be noted in the revision section of the document. The client should not use it to claim product endorsement by TAF, A2LA, NVLAP, NIST or any government agencies. The test results in the report only apply to the tested sample.



Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	July 4, 2016	Initial Issue	ALL	Sabrina Wang



TABLE OF CONTENTS

1 TEST CERTIFICATION	4
2 TEST RESULT SUMMARY	5
3 EUT DESCRIPTION	6
4 TEST METHODOLOGY	8
4.1. DESCRIPTION OF TEST MODES	8
5 SETUP OF EQUIPMENT UNDER TEST	9
5.1. DESCRIPTION OF SUPPORT UNITS	9
5.2. CONFIGURATION OF SYSTEM UNDER TEST	9
6 FACILITIES AND ACCREDITATIONS	10
6.1. FACILITIES	10
6.2. ACCREDITATIONS	10
6.3. MEASUREMENT UNCERTAINTY	10
7 FCC PART 15.247 REQUIREMENTS	11
7.1. POWER LINE CONDUCTED EMISSIONS MEASUREMENT	11
7.2. SPURIOUS EMISSIONS MEASUREMENT	18
7.3. 6dB BANDWIDTH MEASUREMENT	69
7.4. ANTENNA GAIN	83
7.5. PEAK OUTPUT POWER	84
7.6. BAND EDGES MEASUREMENT	89
7.7. PEAK POWER SPECTRAL DENSITY MEASUREMENT	115



1 TEST CERTIFICATION

Product	Digital Projector
Model	GS1, GS1+, GS541, GS3041, G310, G310T, G310JD, G310P, G310E, G310H, G310F, G310N, G310J, GS1T, GS1JD, GS1AM, GS1A, TS1, TS541, S3041
Brand	BenQ
Tested	June 22~August 10, 2016
Applicant	BENQ Corporation 16 Jihu Road, Neihu, Taipei 114, Taiwan
Manufacturer	BENQ Corporation 16 Jihu Road, Neihu, Taipei 114, Taiwan

APPLICABLE STANDARDS			
Standard	Test Type	Standard	Test Type
15.207(a)	Power Line Conducted Emissions	15.247(d) 15.209(a)	● Spurious Emissions ● Conducted Measurement ● Radiated Emissions
15.247(a)(2)	6dB Bandwidth Measurement	15.247(b)(3) 15.247(b)(4)	Peak Power Measurement
15.247(d)	Band Edges Measurement	15.247(e)	Peak Power Spectral Density

We hereby certify that:

The above equipment was tested by Compliance Certification Services (Shenzhen) Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in **ANSI C63.10: 2013** and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.247.

The test results of this report relate only to the tested sample EUT identified in this report.

Approved by:

Sunday Hu
Supervisor of EMC Dept.
Compliance Certification Services (Shenzhen) Inc.

Reviewed by:

Ruby Zhang
Supervisor of Report Dept.
Compliance Certification Services (Shenzhen) Inc.



2 TEST RESULT SUMMARY

APPLICABLE STANDARDS			
Standard	Test Type	Result	Remark
15.247(a)(2)	6dB Bandwidth Measurement	Pass	Meet the requirement of limit.
15.247(b)(3) 15.247(b)(4)	Peak Power Measurement	Pass	Meet the requirement of limit.
15.247(d)	Band Edges Measurement	Pass	Meet the requirement of limit.
15.247(e)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.247(d) 15.209(a)	● Spurious Emissions ● Conducted Measurement ● Radiated Emissions	Pass	Meet the requirement of limit.
15.207(a)	Power line Conducted Emissions	Pass	Meet the requirement of limit.

Note: 1. The statements of test result on the above are decided by the request of test standard only; the measurement uncertainties are not factored into this compliance determination.

2. The information of measurement uncertainty is available upon the customer's request.



3 EUT DESCRIPTION

Product	Digital Projector
Model Number	GS1, GS1+, GS541, GS3041, G310, G310T, G310JD, G310P, G310E, G310H, G310F, G310N, G310J, GS1T, GS1JD, GS1AM, GS1A, TS1, TS541, S3041
Brand	BenQ
Model Discrepancy	All models are identical with each other except for model designation and trading purpose.
Identify Number	C160622Z04-RP1-1
Received Date	June 22, 2016
Power Supply	DC19V supply by the adapter
Adapter Manufacturer Model No.	JQH / NSA60ED-190300 Input: 100-240V ~ 50/60Hz 1.5A Output: DC19V 3A Max. AC Input Cable: Unshielded 1.50m DC Output Cable: Unshielded 1.50m
Battery Spec.	BP11 DC7.4V 59.2Wh 8000mAh
Transmit Power	IEEE 802.11b mode: 20.98dBm (Antenna 0) IEEE 802.11b mode: 21.12dBm (Antenna 1) IEEE 802.11g mode: 21.69dBm (Antenna 0) IEEE 802.11g mode: 22.18dBm (Antenna 1) IEEE 802.11n HT20 MHz mode: 24.86dBm(Combine with Antenna 0 and Antenna 1) IEEE 802.11n HT40 MHz mode: 24.85dBm(Combine with Antenna 0 and Antenna 1)
Modulation Technique	IEEE 802.11b mode: DSSS(CCK,QPSK, BPSK) IEEE 802.11g mode: OFDM (BPSK/QPSK/16QAM/64QAM) IEEE 802.11n HT20 MHz mode: OFDM (BPSK/QPSK/16QAM/64QAM) IEEE 802.11n HT40 MHz mode: OFDM (BPSK/QPSK/16QAM/64QAM)
Transmit Data Rate	IEEE 802.11b: 11Mbps(CCK) with fall back rates of 5.5/2/1Mbps IEEE 802.11g: 54Mbps with fall back rates of 48/36/24/18/12/9 /6Mbps IEEE 802.11n HT20: 130Mbps with fall back rates of 130/117/104/78/52/39/26/13Mbps IEEE 802.11n HT40: 270Mbps with fall back rates of 270/243/216/162/108/81/54/27Mbps
Number of Channels	IEEE 802.11b mode: 11 Channels IEEE 802.11g mode: 11 Channels IEEE 802.11n HT20 MHz mode: 11 Channels IEEE 802.11n HT40 MHz mode: 7 Channels
Antenna Specification	Embedded Antenna 0 with 3.2dBi gain (Max) Embedded Antenna 1 with 2.8dBi gain (Max)
Directional Gain	Directional Gain=Gain _{Ant} + Array Gain=3.2+10log(2)=6.21dBi
Channels Spacing	IEEE 802.11b/g ,802.11n HT20/HT40 : 5MHz
Temperature Range	0°C ~ +40°C



Note: 1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.

2. This submittal(s) (test report) is intended for FCC ID: **JVPGS1** filing to comply with Section 15.207, 15.209 and 15.247 of the FCC Part 15, Subpart C Rules.

	Hardware Version	Software Version
Product	9344C,V5.0	v0.0.0.18_ww
Radio	JEDI.L0.MP1.mt76x2u.wifi.v2.1	zk-7662M v1.40
Test	N/A	LZ-RF / CCS-SZ-3A2
RF power setting in TEST	N/A	MT7662U_QA_ATE_Tool_v1.0.3.4



4 TEST METHODOLOGY

4.1. DESCRIPTION OF TEST MODES

The EUT has been tested under operating condition.

Software used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

Test Item	Test mode	Worse mode
Conducted Emission	Mode 1: Charge with adapter (120V/60Hz)	☒
	Mode 2: Charge with adapter (240V/50Hz)	☒
Radiated Emission	Mode 1: TX	☒

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz, which worst case was in normal link mode only, and power line conducted emission below 30MHz, which worst case was in normal link mode.

IEEE802.11b mode: Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 1Mbps data rate were chosen for full testing.

IEEE802.11g mode: Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 6Mbps data rate were chosen for full testing.

IEEE 802.11n HT20 MHz mode: Channel Low (2412MHz), Channel Mid(2437MHz) and Channel High (2462MHz) with 13Mbps data rate were chosen for full testing.

IEEE 802.11n HT40 MHz mode: Channel Low (2422MHz), Channel Mid (2437MHz) and Channel High (2452MHz) with 27Mbps data rate were chosen for full testing.



5 SETUP OF EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Equipment	Model No.	Serial No.	FCC ID	Brand	Data Cable	Power Cord
1	Notebook	E335	R9-WN1EF	DoC	Thinkpad	Unshielded 1.50m	Shielded 1.60m (AC Cable) Unshielded 1.80m (DC Cable)

Note:

Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

5.2. CONFIGURATION OF SYSTEM UNDER TEST

See test photographs attached in Appendix II for the actual connections between EUT and support equipment.



6 FACILITIES AND ACCREDITATIONS

6.1. FACILITIES

All measurement facilities used to collect the measurement data are located at **No.10-1 Mingkeda Logistics park, No.18, Huanguan South Rd., Guan Lan Town, Baoan District, Shenzhen, China**

The sites are constructed in conformance with the requirements of ANSI C63.10, ANSI C63.7 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

6.2. ACCREDITATIONS

Our laboratories are accredited and approved by the following accreditation body according to ISO/IEC 17025.

USA	A2LA
China	CNAS

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

USA	FCC
Japan	VCCI (C-4815,R-4320,T-2317, G-10624)
Canada	INDUSTRY CANADA

Copies of granted accreditation certificates are available for downloading from our web site, <http://www.ccssz.com>

6.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Parameter	Uncertainty
Radiated Emission, 30 to 200 MHz Test Site : 966(2)	+/-3.6880dB
Radiated Emission, 200 to 1000 MHz Test Site : 966(2)	+/-3.6695dB
Radiated Emission, 1 to 8 GHz	+/-5.1782dB
Radiated Emission, 8 to 18 GHz	+/-5.2173dB
Conducted Emissions	+/-3.6836dB
Band Width	178kHz
Peak Output Power MU	+/-1.906dB
Band Edge MU	+/-0.182dB
Channel Separation MU	416.178Hz
Duty Cycle MU	0.054ms
Frequency Stability MU	226Hz

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

The measured result is above (below) the specification limit by a margin less than the measurement uncertainty; it is therefore not possible to state compliance based on the 95% level of confidence. However, the result indicates that compliance (non-compliance) is more probable than non-compliance (with the specification limit).



7 FCC PART 15.247 REQUIREMENTS

7.1. POWER LINE CONDUCTED EMISSIONS MEASUREMENT

7.1.1. LIMITS OF CONDUCTED EMISSIONS MEASUREMENT

According to §15.207(a), except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency Range (MHz)	Limits (dB μ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

NOTE:

- (1) The lower limit shall apply at the transition frequencies.
- (2) The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
- (3) All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

7.1.2. TEST INSTRUMENTS

Conducted Emission Test Site					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100783	02/21/2016	02/20/2017
LISN(EUT)	ROHDE&SCHWARZ	ENV216	101543-WX	02/21/2016	02/20/2017
LISN	EMCO	3825/2	8901-1459	02/21/2016	02/20/2017
Temp. / Humidity Meter	VICTOR	HTC-1	N/A	02/21/2016	02/20/2017
Test S/W	FARAD	EZ-EMC/ CCS-3A1-CE			

- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. N.C.R = No Calibration Request.

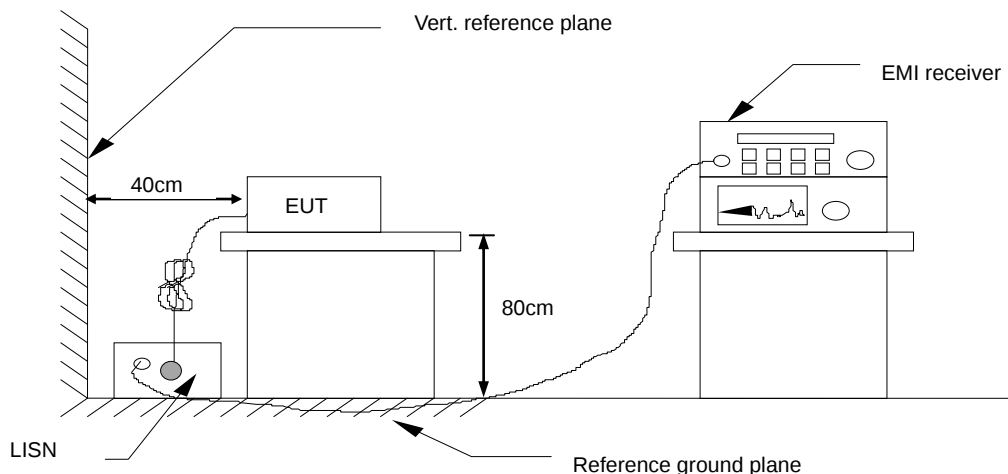


7.1.3. TEST PROCEDURES (please refer to measurement standard)

- The EUT and Support equipment, if needed, was placed on a non-conducted table, which is 0.8m above the ground plane and 0.4m away from the conducted wall.
- The test equipment EUT installed received AC main power, through a Line Impedance Stabilization Network (LISN), which supplied power source and was grounded to the ground plane. All support equipment power received from a second LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- The EUT test program was started. Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.
- The frequency range from 150 kHz to 30 MHz was searched. The test data of the worst-case condition(s) was recorded. Emission levels under limit 20dB were not recorded.



7.1.4. TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

7.1.5. DATA SAMPLE

Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
X.XXXX	32.69	25.65	11.52	44.21	37.17	65.78	55.79	-21.57	-18.62	Pass

Factor = Insertion loss of LISN + Cable Loss

Result = Quasi-peak Reading/ Average Reading + Factor

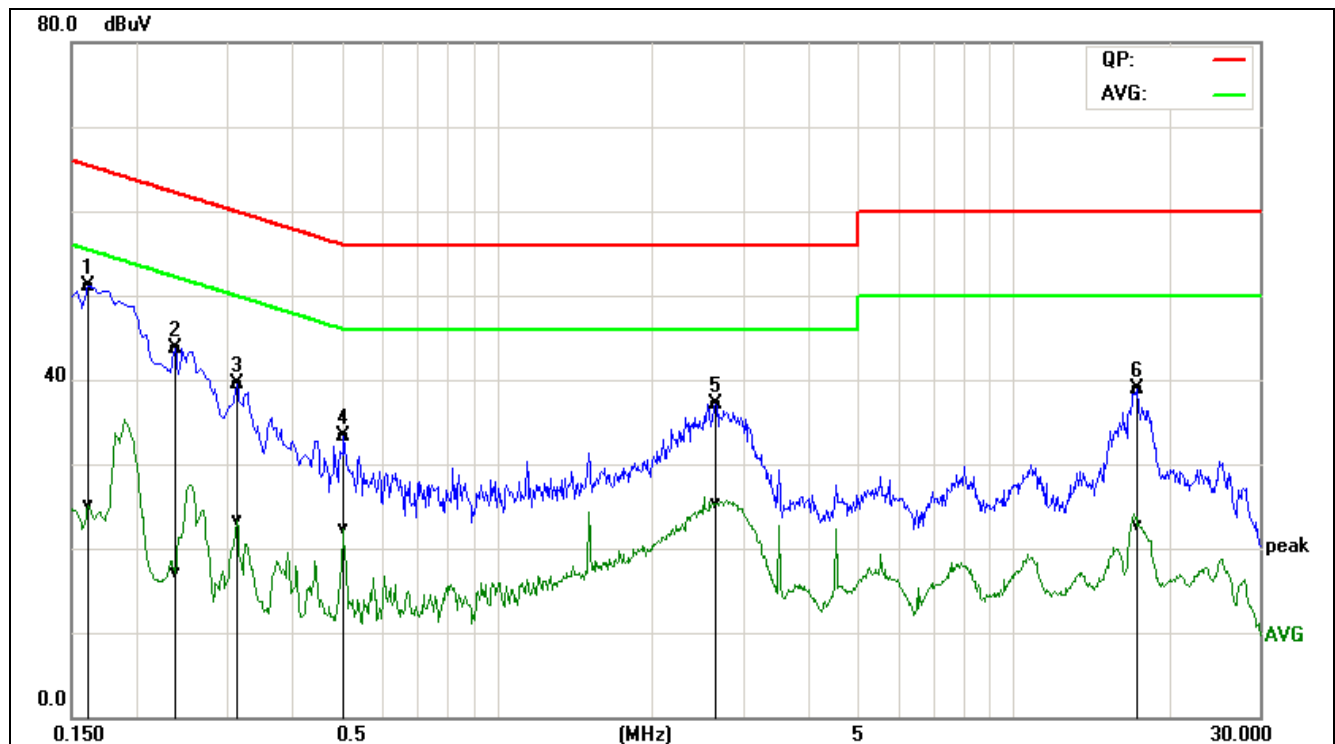
Limit = Limit stated in standard

Margin = Result (dBuV) – Limit (dBuV)



7.1.6. TEST RESULTS

Model No.	GS1	RBW,VBW	9 kHz
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 1
Tested by	Eve Wang	Line	L1
Test Date	August 10, 2016		

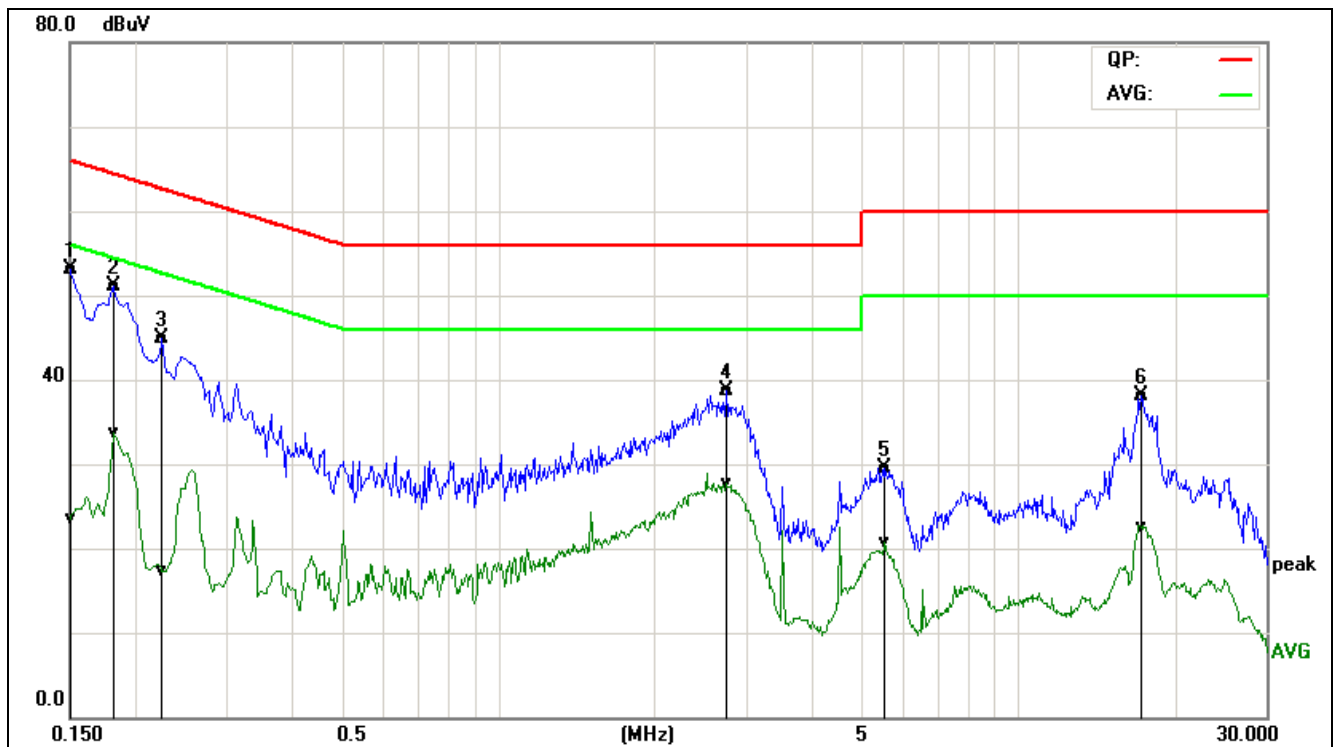


Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)	Line (L1/L2)
0.1620	41.63	15.59	9.54	51.17	25.13	65.36	55.36	-14.19	-30.23	Pass	L1
0.2380	34.08	7.52	9.64	43.72	17.16	62.16	52.17	-18.44	-35.01	Pass	L1
0.3140	29.82	13.57	9.64	39.46	23.21	59.86	49.86	-20.40	-26.65	Pass	L1
0.5060	23.71	12.65	9.63	33.34	22.28	56.00	46.00	-22.66	-23.72	Pass	L1
2.6500	27.32	15.57	9.70	37.02	25.27	56.00	46.00	-18.98	-20.73	Pass	L1
17.4300	29.04	12.88	9.91	38.95	22.79	60.00	50.00	-21.05	-27.21	Pass	L1

REMARKS: L1 = Line One (Live Line)



Model No.	GS1	RBW,VBW	9 kHz
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 1
Tested by	Eve Wang	Line	L2
Test Date	August 10, 2016		

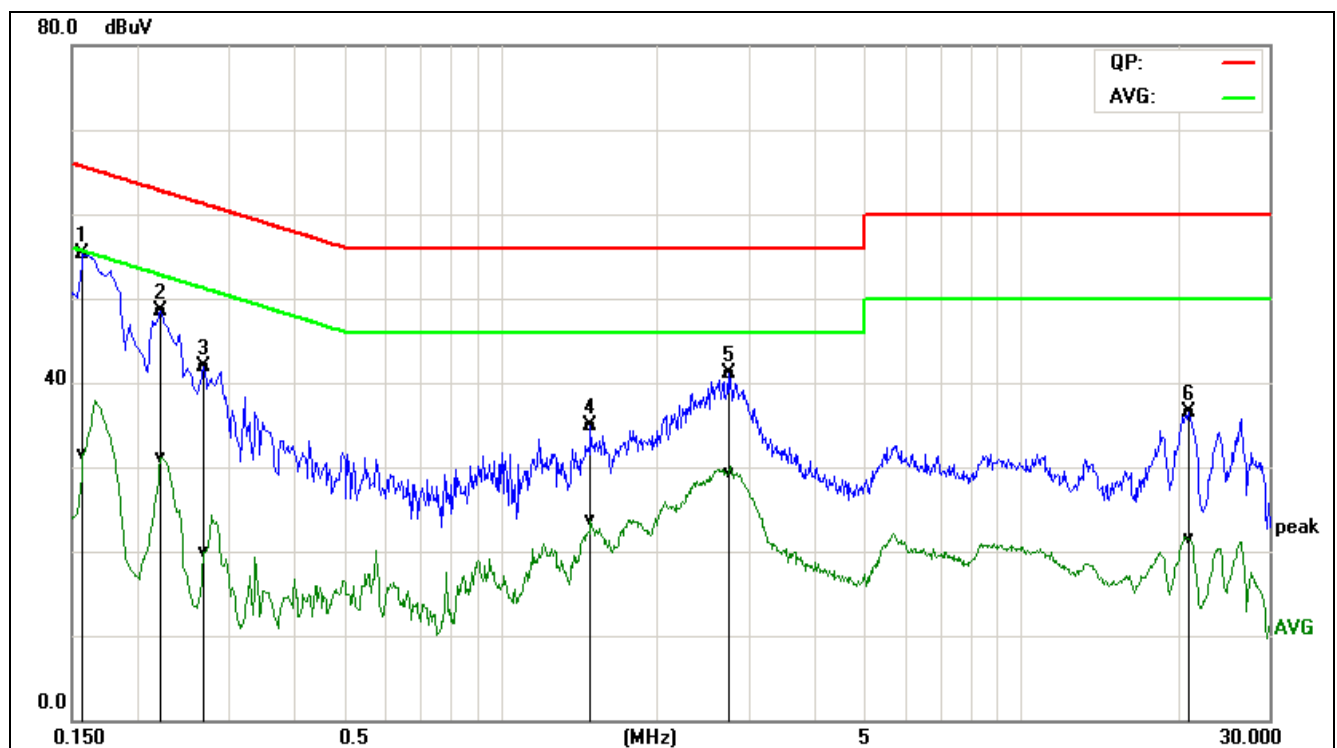


Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)	Line (L1/L2)
0.1500	43.37	13.82	9.72	53.09	23.54	65.99	56.00	-12.90	-32.46	Pass	L2
0.1819	41.42	24.04	9.73	51.15	33.77	64.39	54.40	-13.24	-20.63	Pass	L2
0.2260	35.21	7.62	9.73	44.94	17.35	62.59	52.60	-17.65	-35.25	Pass	L2
2.7620	28.90	17.93	9.72	38.62	27.65	56.00	46.00	-17.38	-18.35	Pass	L2
5.5380	19.81	11.05	9.73	29.54	20.78	60.00	50.00	-30.46	-29.22	Pass	L2
17.2300	28.43	12.75	9.76	38.19	22.51	60.00	50.00	-21.81	-27.49	Pass	L2

REMARKS: L2 = Line Two (Neutral Line)



Model No.	GS1	RBW,VBW	9 kHz
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 2
Tested by	Eve Wang	Line	L1
Test Date	August 10, 2016		

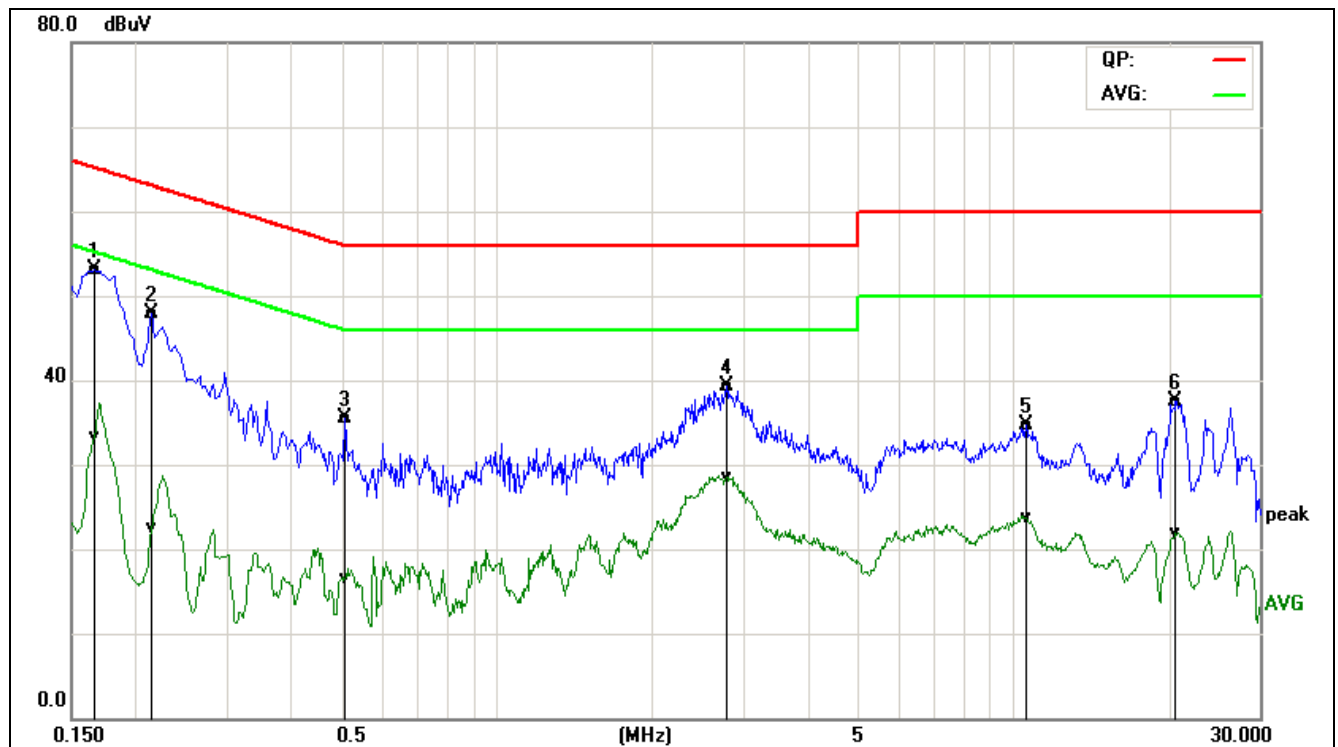


Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)	Line (L1/L2)
0.1580	45.44	21.70	9.78	55.22	31.48	65.56	55.57	-10.34	-24.09	Pass	L1
0.2220	38.74	21.31	9.78	48.52	31.09	62.74	52.74	-14.22	-21.65	Pass	L1
0.2700	32.12	10.19	9.77	41.89	19.96	61.12	51.12	-19.23	-31.16	Pass	L1
1.4900	25.15	13.90	9.77	34.92	23.67	56.00	46.00	-21.08	-22.33	Pass	L1
2.7380	31.42	19.59	9.74	41.16	29.33	56.00	46.00	-14.84	-16.67	Pass	L1
21.0220	26.82	11.76	9.74	36.56	21.50	60.00	50.00	-23.44	-28.50	Pass	L1

REMARKS: L1 = Line One (Live Line)



Model No.	GS1	RBW,VBW	9 kHz
Environmental Conditions	22°C, 45% RH	Test Mode	Mode 2
Tested by	Eve Wang	Line	L2
Test Date	August 10, 2016		



Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)	Line (L1/L2)
0.1660	43.23	23.55	9.78	53.01	33.33	65.15	55.16	-12.14	-21.83	Pass	L2
0.2140	38.14	12.70	9.79	47.93	22.49	63.04	53.05	-15.11	-30.56	Pass	L2
0.5100	25.78	6.92	9.68	35.46	16.60	56.00	46.00	-20.54	-29.40	Pass	L2
2.7940	29.62	18.73	9.74	39.36	28.47	56.00	46.00	-16.64	-17.53	Pass	L2
10.5780	24.83	13.79	9.85	34.68	23.64	60.00	50.00	-25.32	-26.36	Pass	L2
20.6700	27.70	12.08	9.74	37.44	21.82	60.00	50.00	-22.56	-28.18	Pass	L2

REMARKS: L2 = Line Two (Neutral Line)



7.2. SPURIOUS EMISSIONS MEASUREMENT

7.2.1. CONDUCTED EMISSIONS MEASUREMENT

7.2.1.1. LIMITS OF CONDUCTED EMISSIONS MEASUREMENT

§15.247(d) specifies that in any 100 kHz bandwidth outside of the authorized frequency band, the power shall be attenuated according to the following conditions:

If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to 15.247(b)(3) requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.

If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to 15.247(b)(3) requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a) (see Section 15.205(c)).

7.2.1.2. TEST INSTRUMENTS

Name of Equipment	Manufacturer	Model	Serial Number	Last Calibration	Due Calibration
Spectrum Analyzer	Agilent	N9010A	MY55370330	02/21/2016	02/20/2017

7.2.1.3. TEST PROCEDURE (please refer to measurement standard)

Conducted RF measurements of the transmitter output were made to confirm that the EUT antenna port conducted emissions meet the specified limit and to identify any spurious signals that require further investigation or measurements on the radiated emissions site.

The transmitter output is connected to the spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

Measurements are made over the 10MHz to 26GHz range with the transmitter set to the lowest, middle, and highest channels. No emission found between lowest internal used/generated frequency to 10MHz, it is only recorded 10MHz to 26GHz.

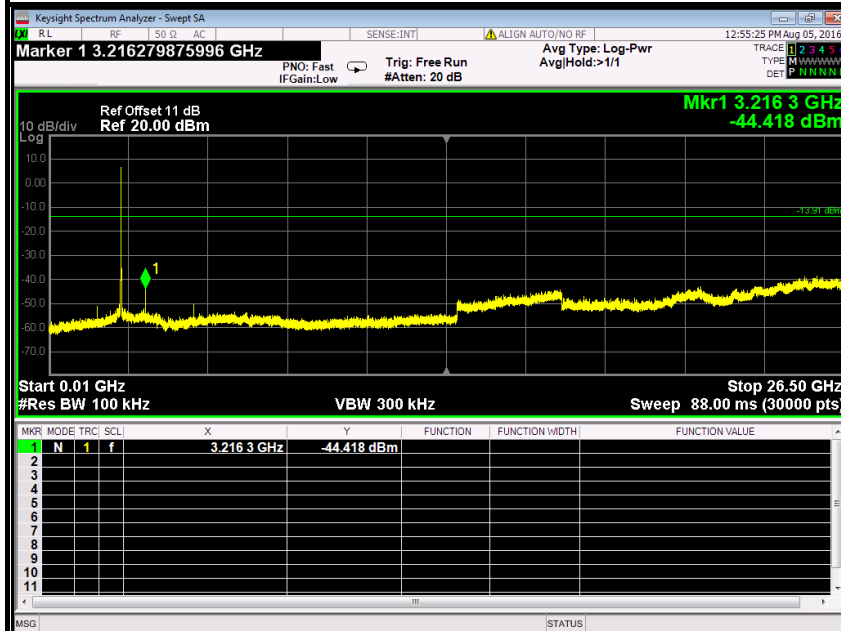


7.2.1.4. TEST RESULTS

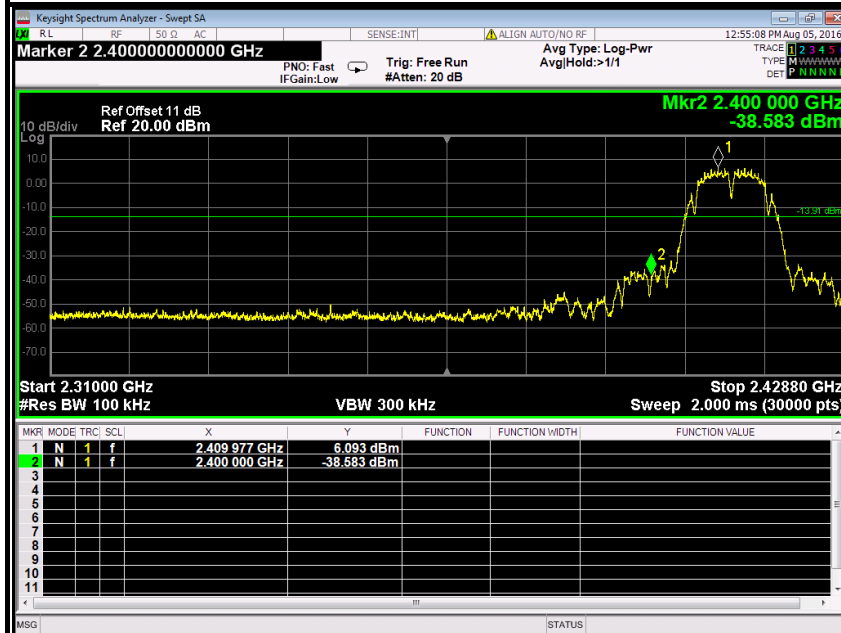
Test Plot

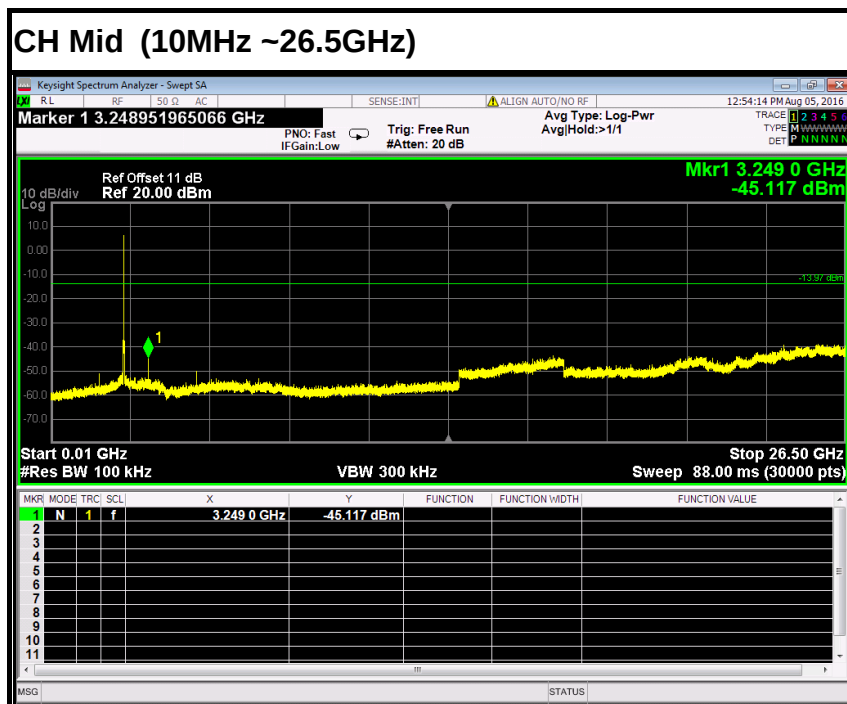
IEEE 802.11b mode (Antenna 0)

CH Low (10MHz ~26.5GHz)



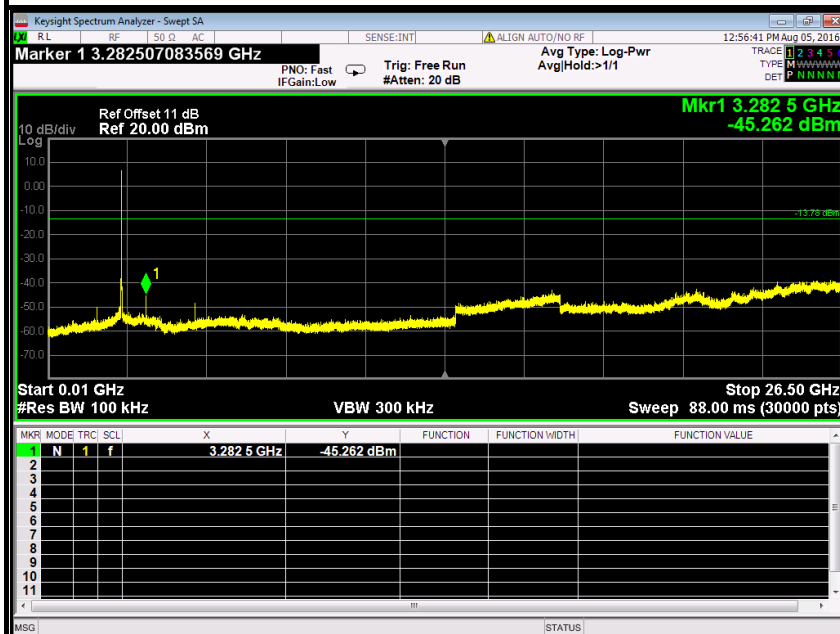
CH Low (2.31GHz ~2.43GHz)



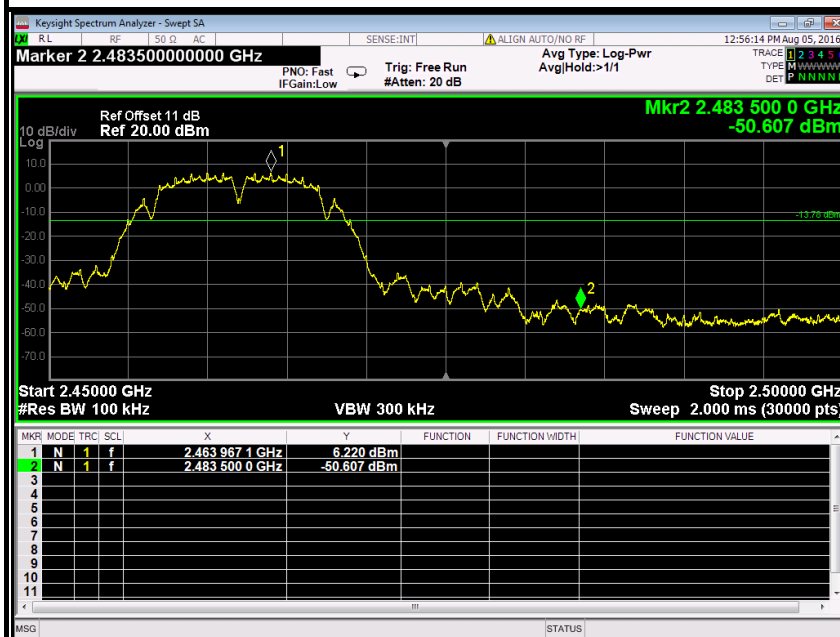




CH High (10MHz ~26.5GHz)



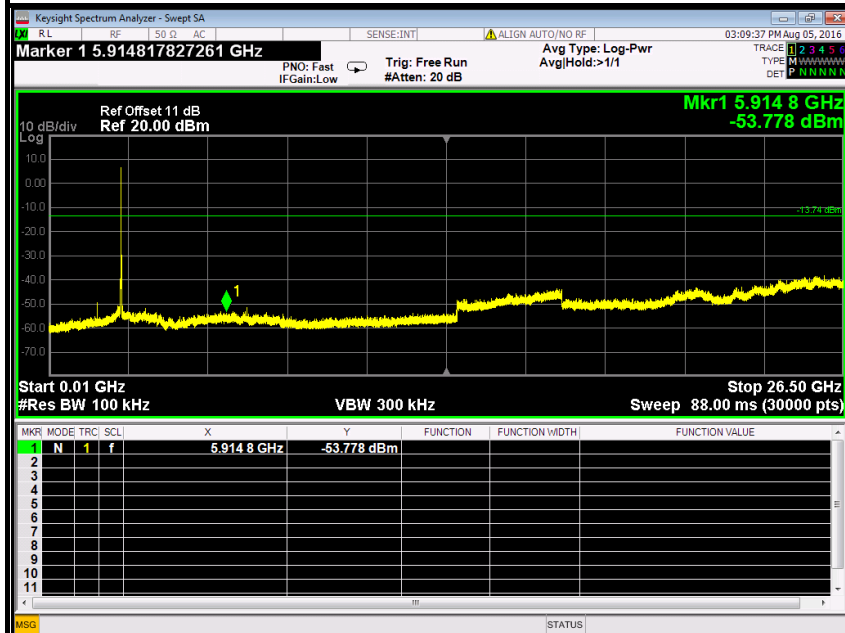
CH High (2.45GHz ~2.5GHz)



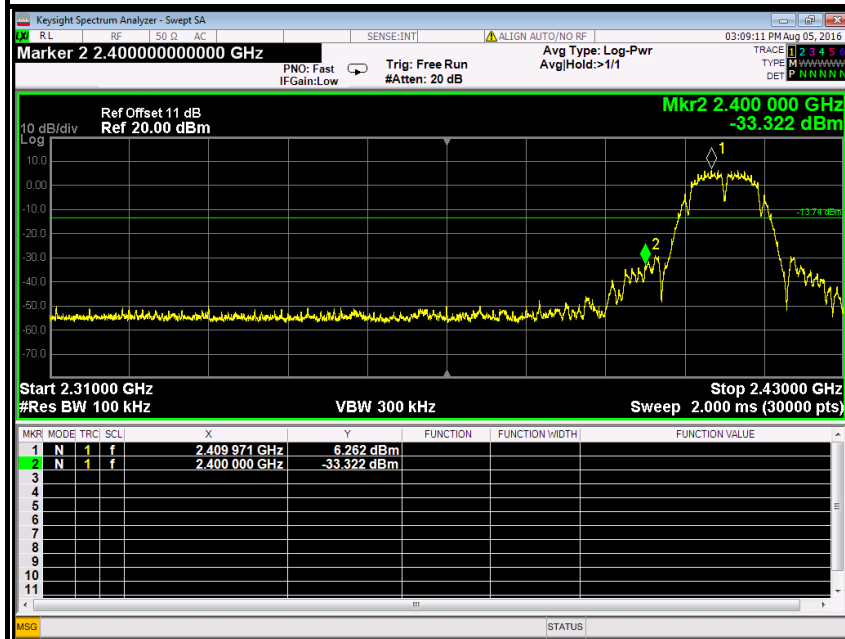


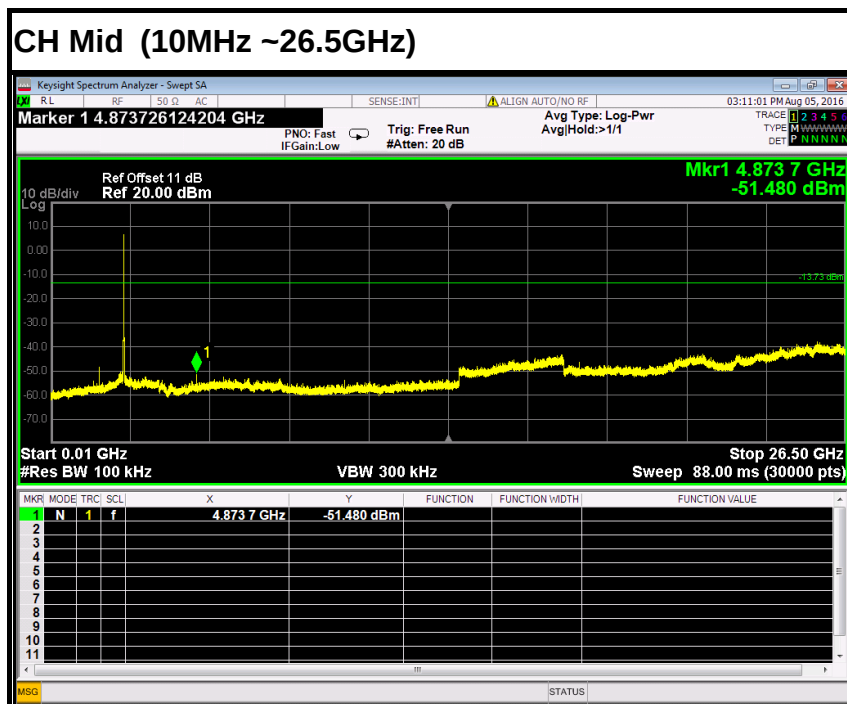
IEEE 802.11b mode (Antenna 1)

CH Low (10MHz ~26.5GHz)



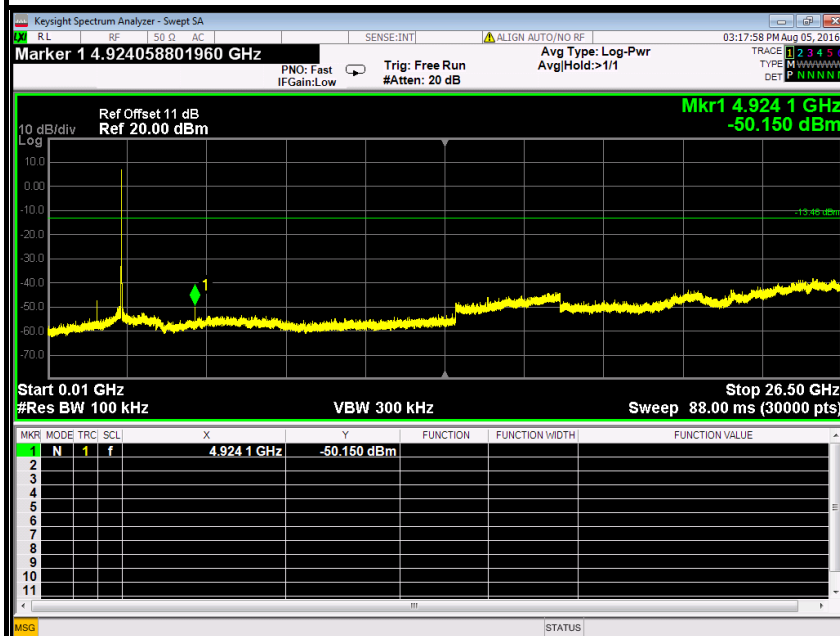
CH Low (2.31GHz ~2.43GHz)







CH High (10MHz ~26.5GHz)



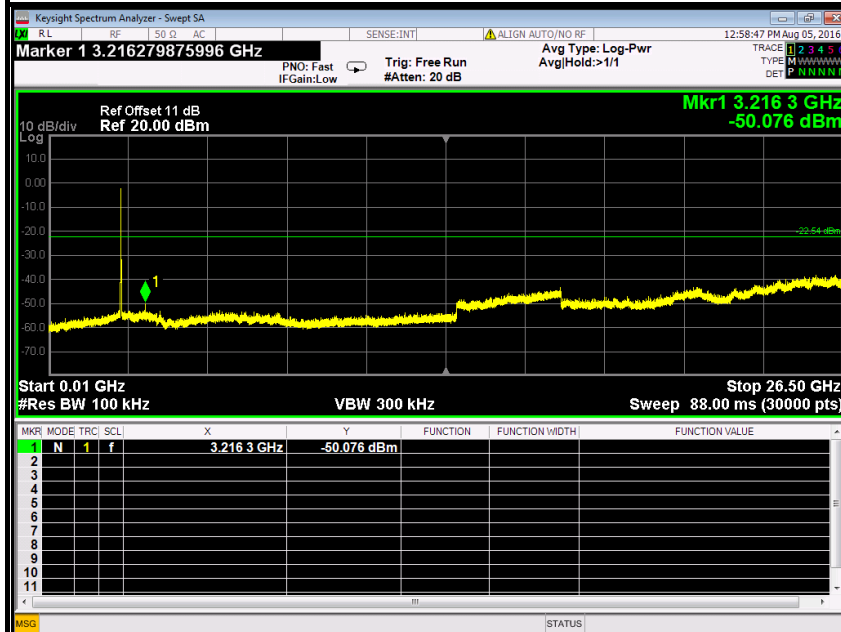
CH High (2.45GHz ~2.5GHz)



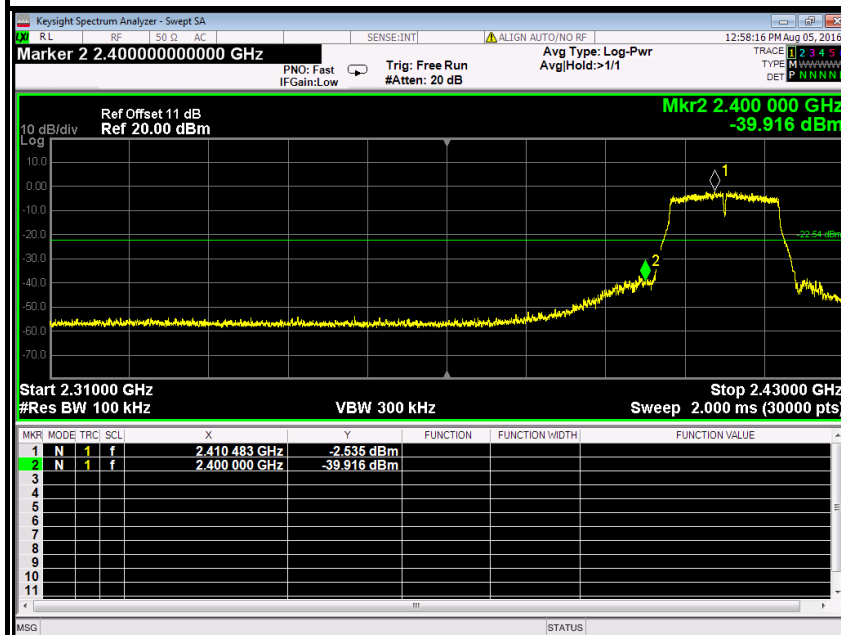


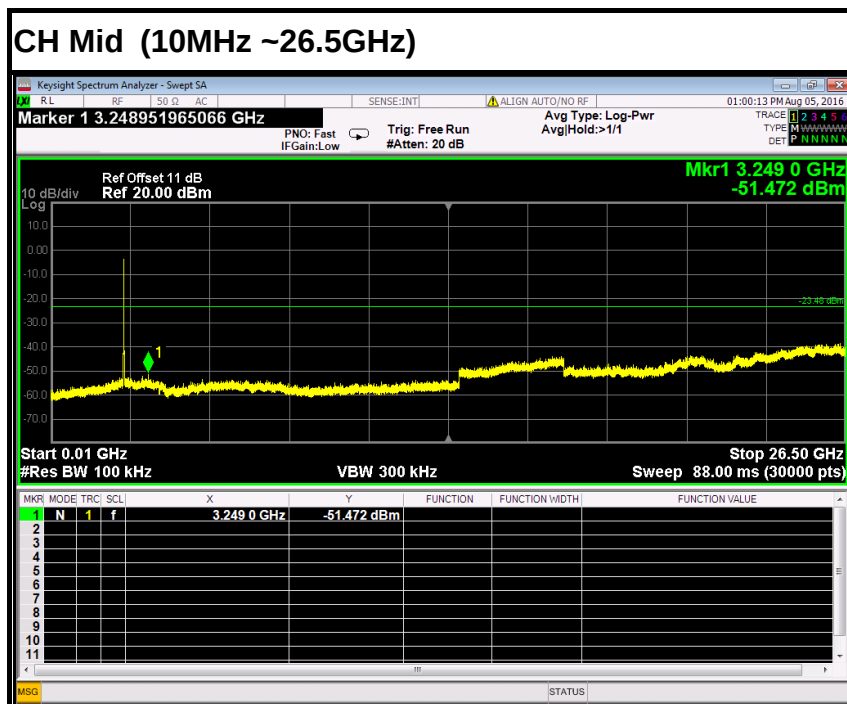
IEEE 802.11g mode (Antenna 0)

CH Low (10MHz ~26.5GHz)



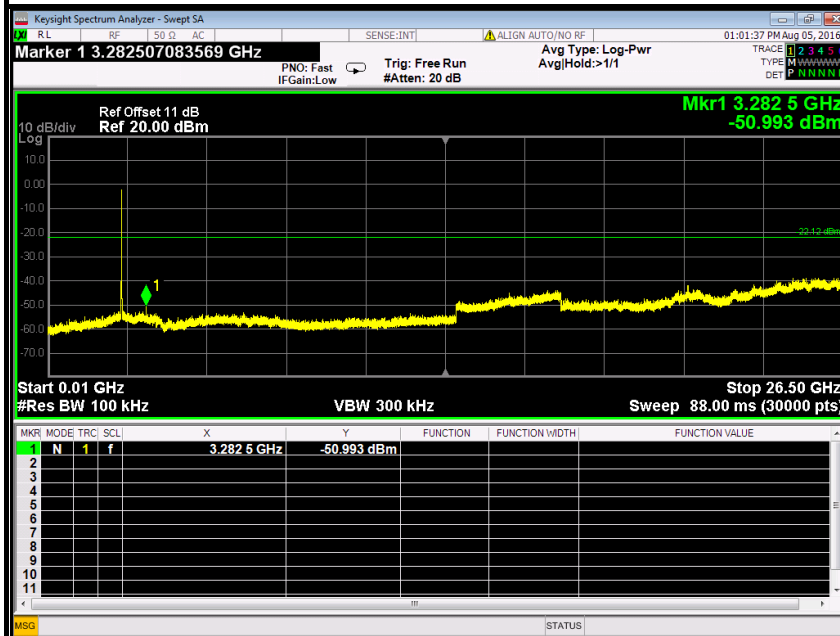
CH Low (2.31GHz ~2.43GHz)



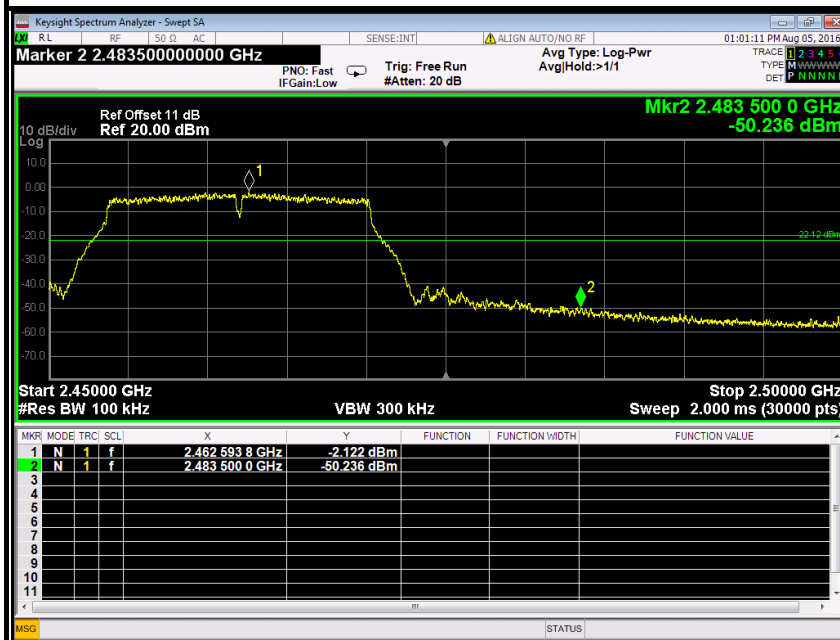




CH High (10MHz ~26.5GHz)



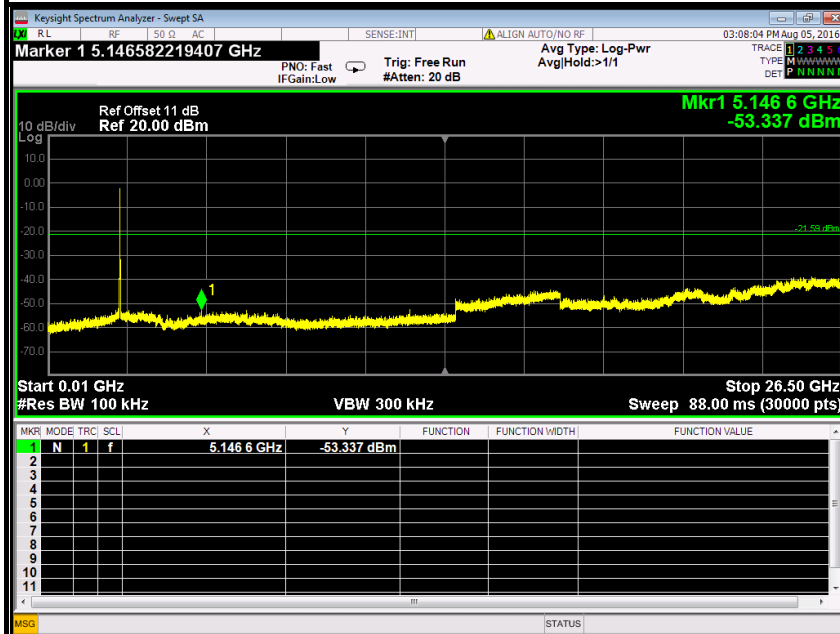
CH High (2.45GHz ~2.5GHz)



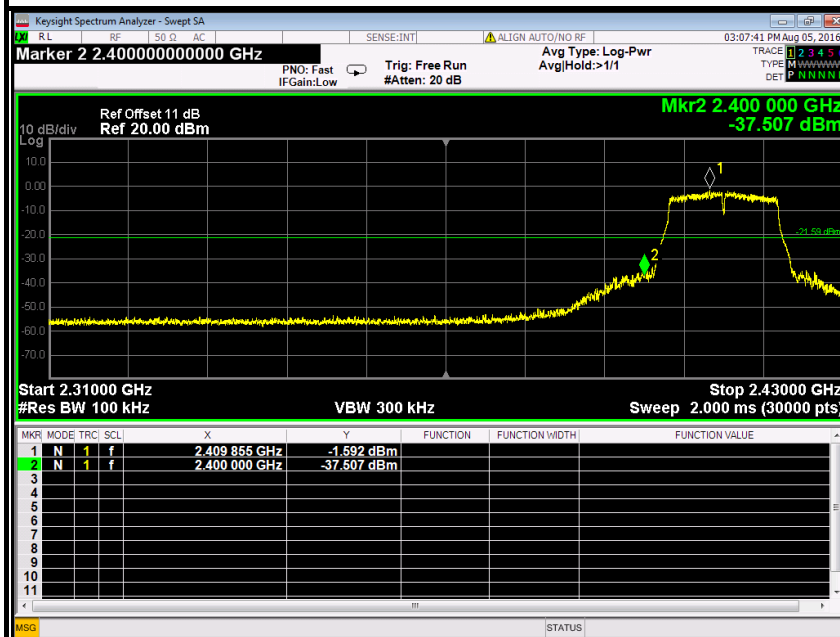


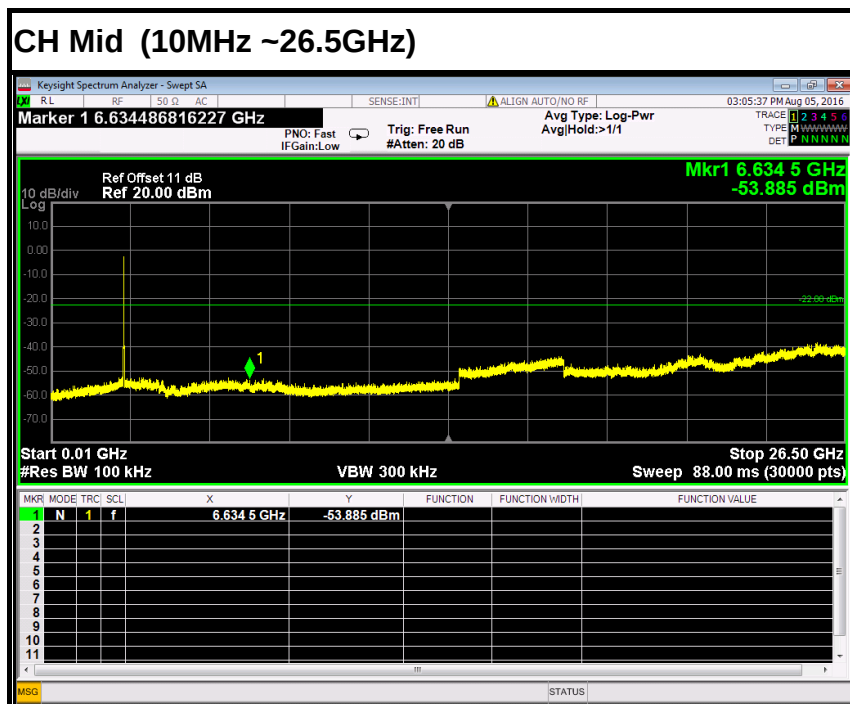
IEEE 802.11g mode (Antenna 1)

CH Low (10MHz ~26.5GHz)



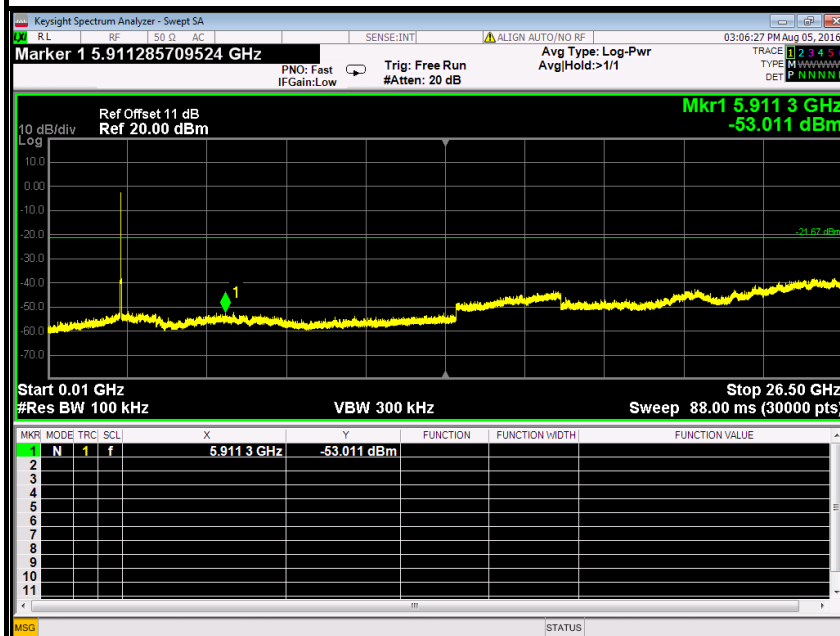
CH Low (2.31GHz ~2.43GHz)







CH High (10MHz ~26.5GHz)



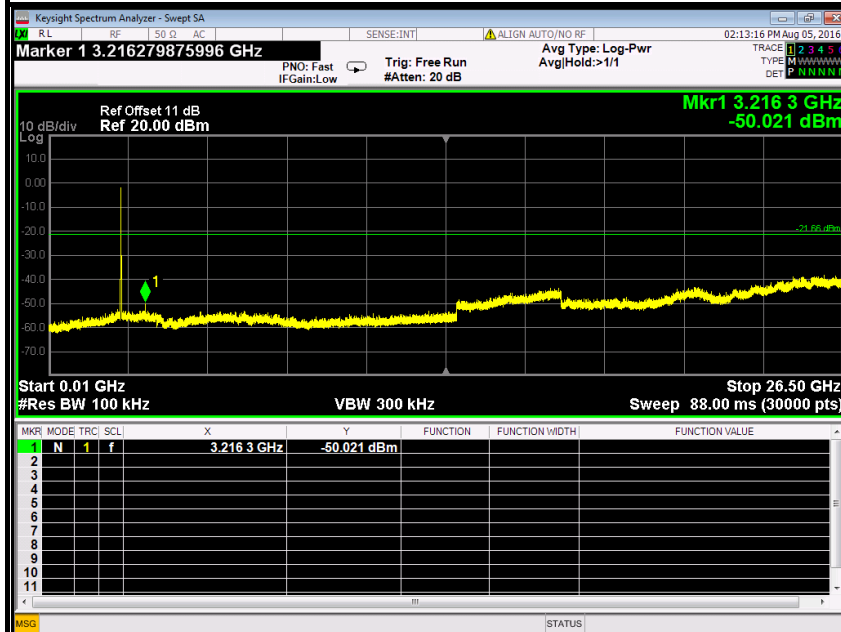
CH High (2.45GHz ~2.5GHz)



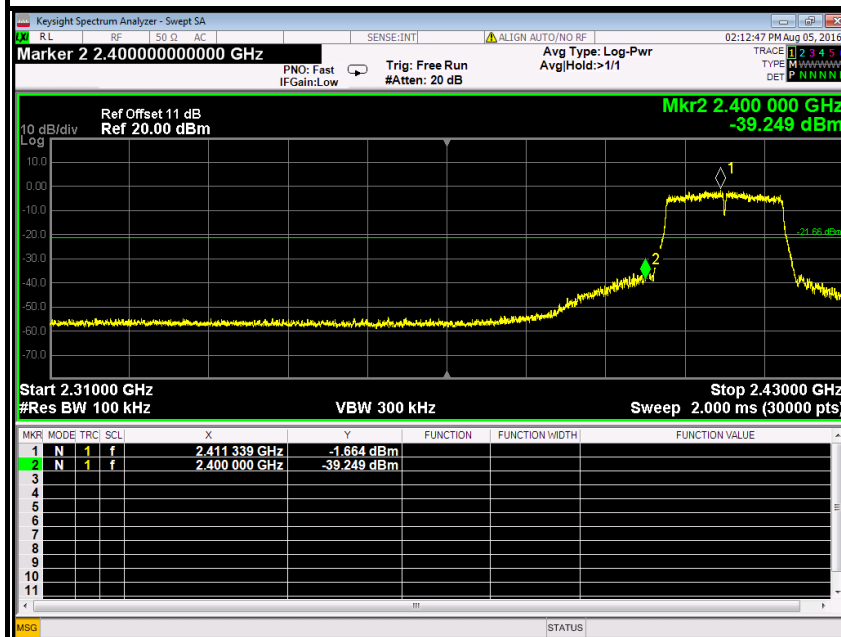


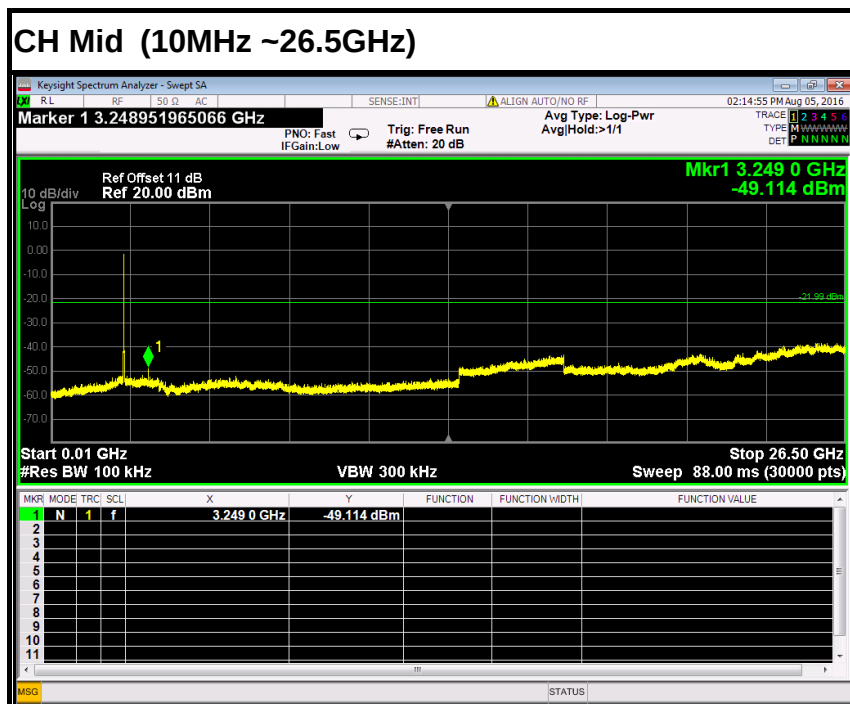
IEEE 802.11n HT20 MHz mode (Antenna 0)

CH Low (10MHz ~26.5GHz)



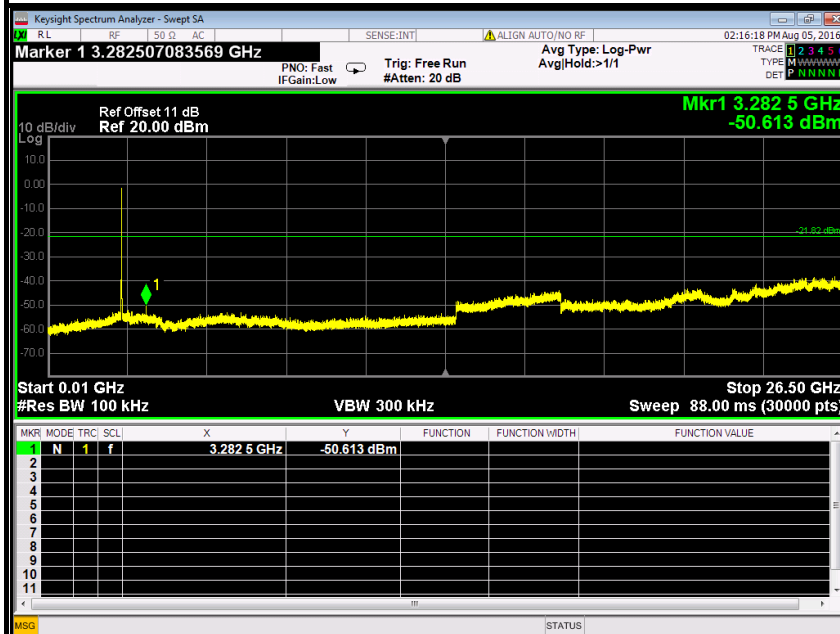
CH Low (2.31GHz ~2.43GHz)



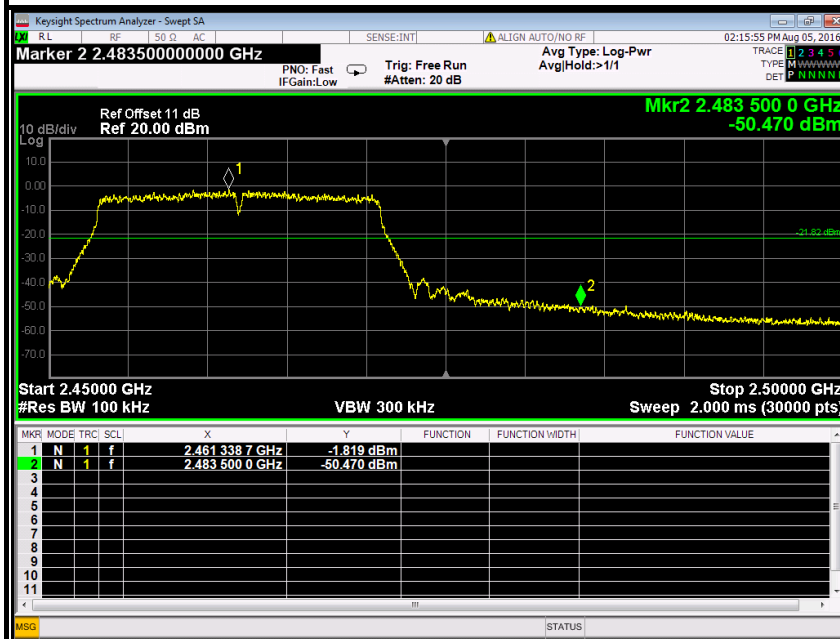




CH High (10MHz ~26.5GHz)



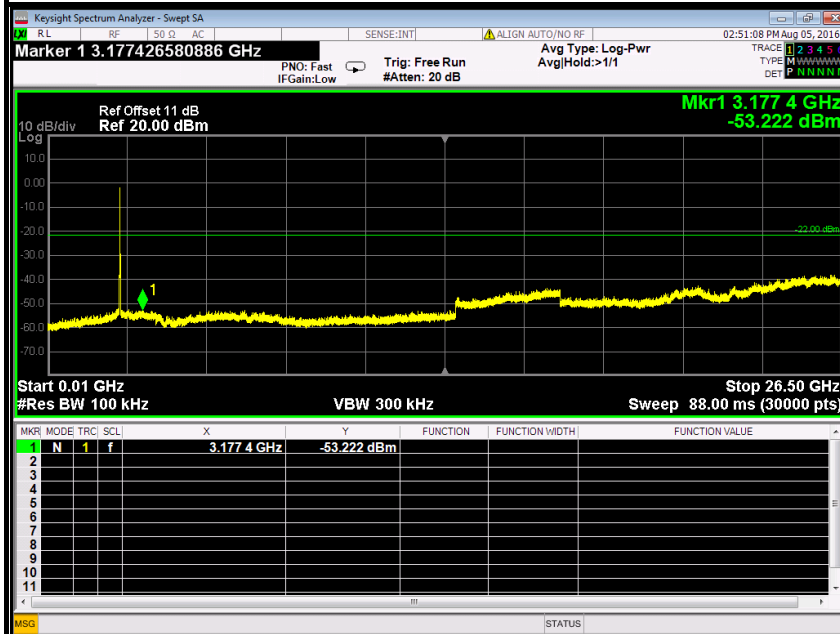
CH High (2.45GHz ~2.5GHz)



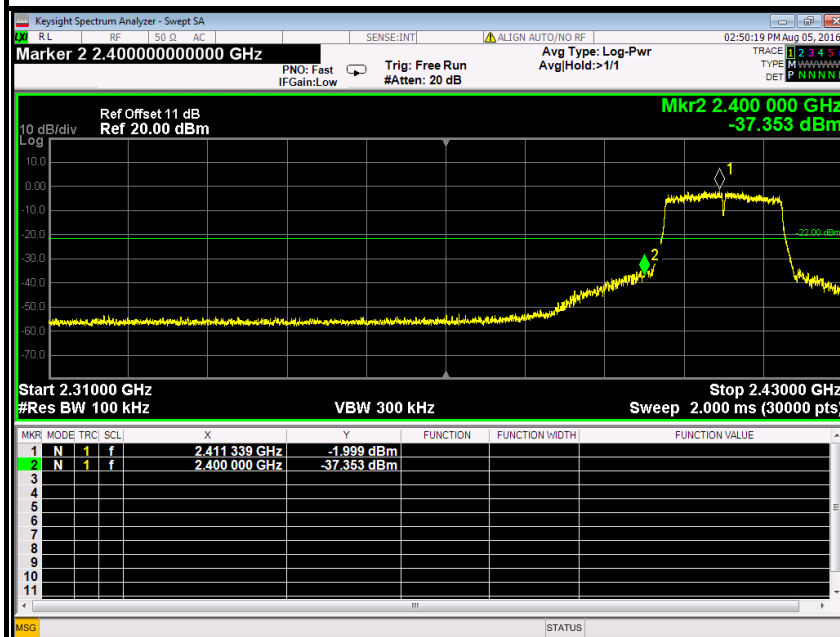


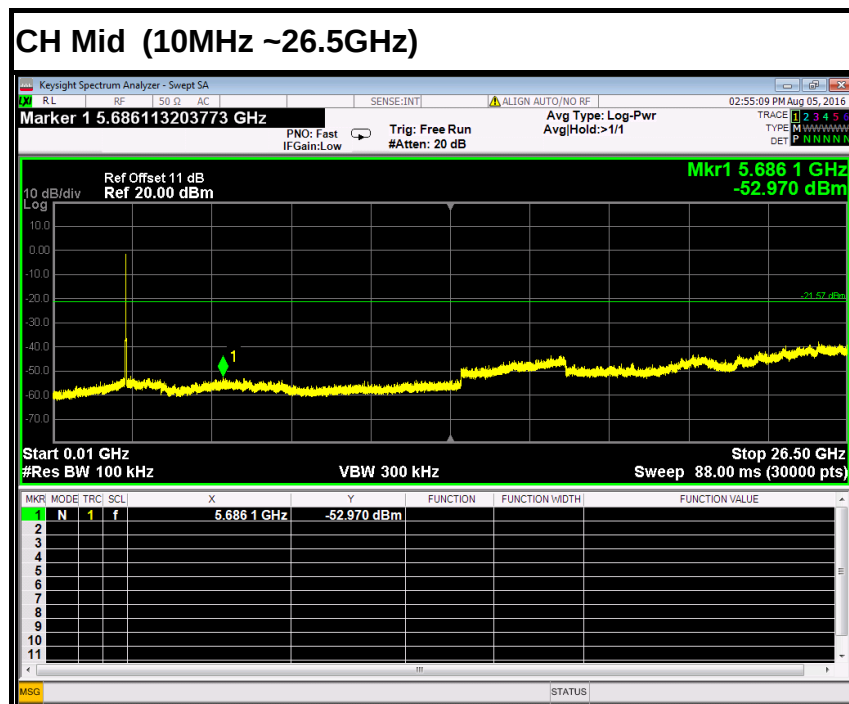
IEEE 802.11n HT20 MHz mode (Antenna 1)

CH Low (10MHz ~26.5GHz)



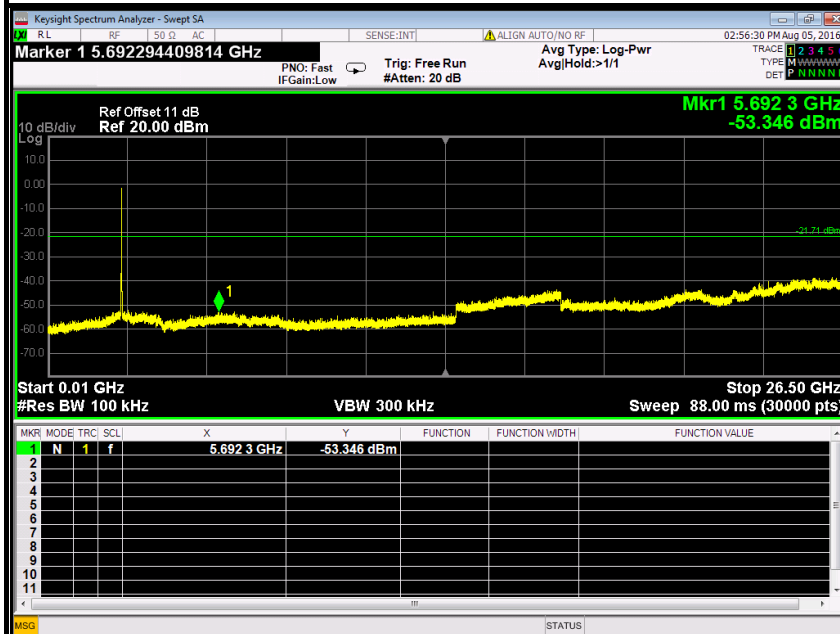
CH Low (2.31GHz ~2.43GHz)



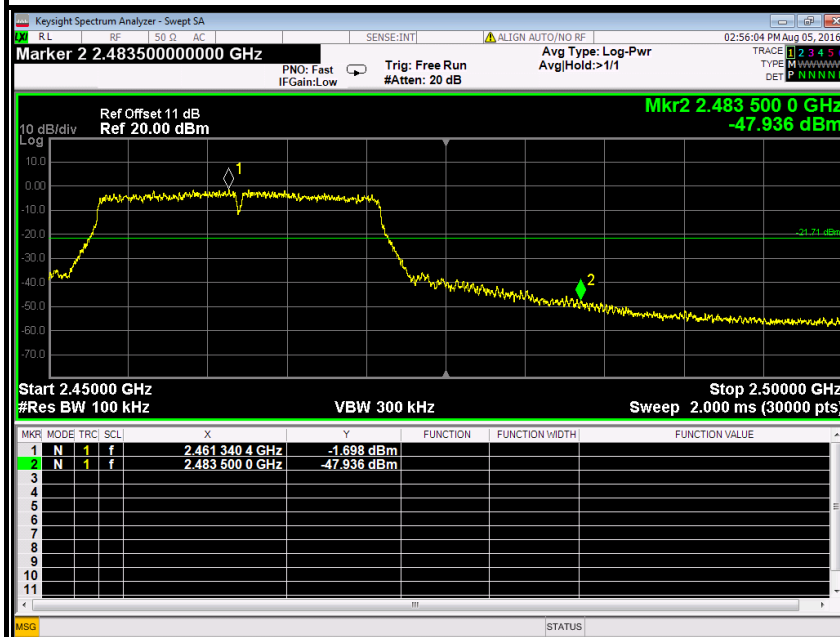




CH High (10MHz ~26.5GHz)



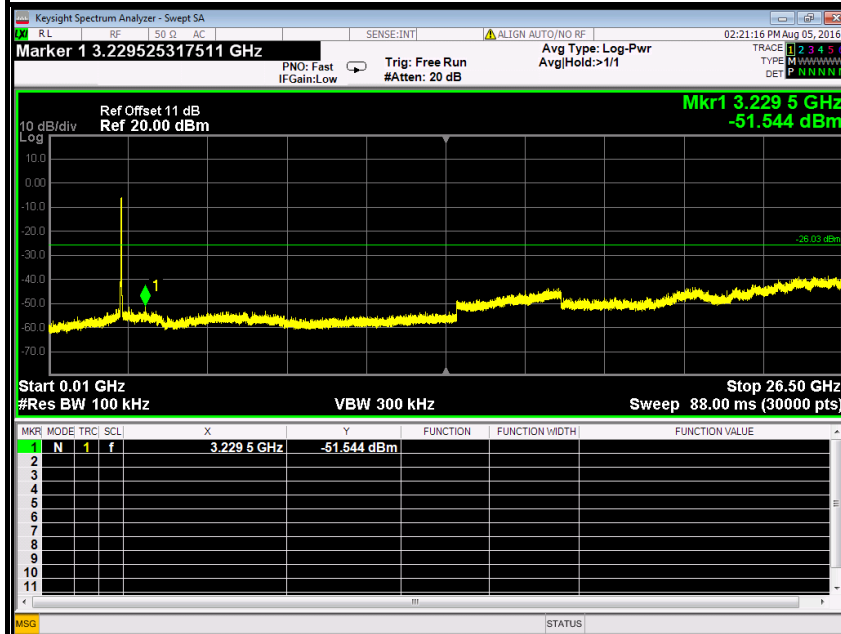
CH High (2.45GHz ~2.5GHz)



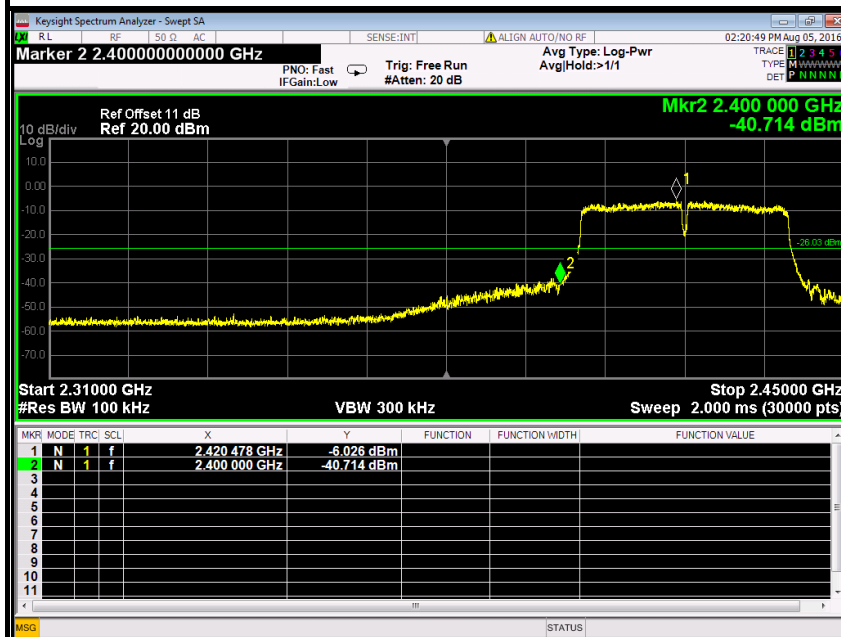


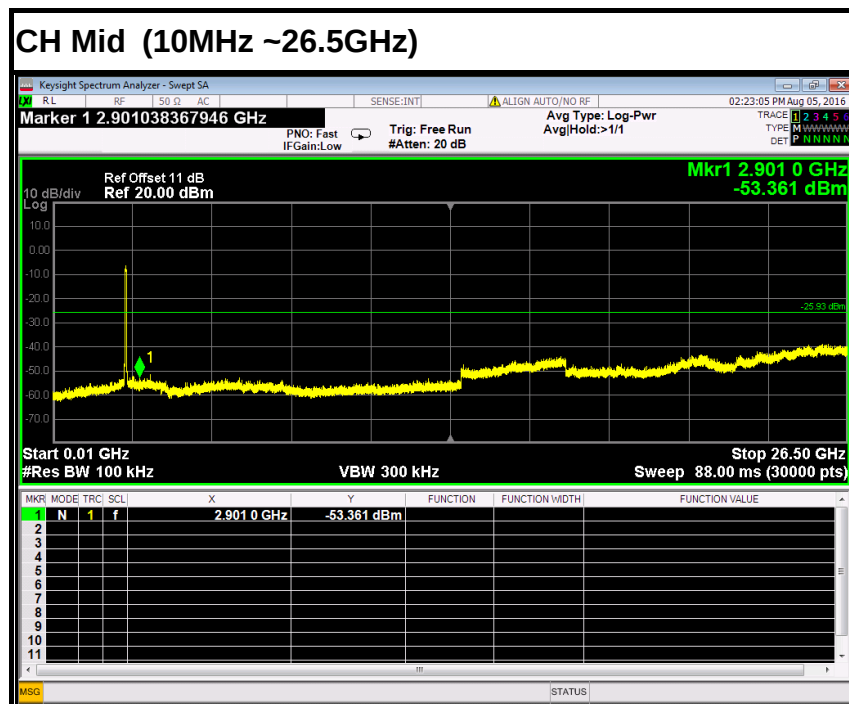
IEEE 802.11n HT40 MHz mode (Antenna 0)

CH Low (10MHz ~26.5GHz)



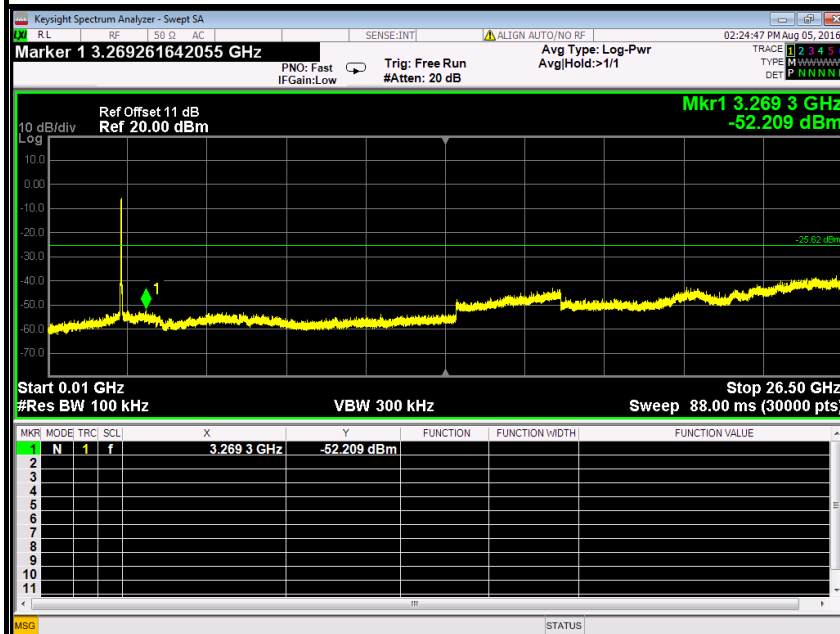
CH Low (2.31GHz ~2.45GHz)



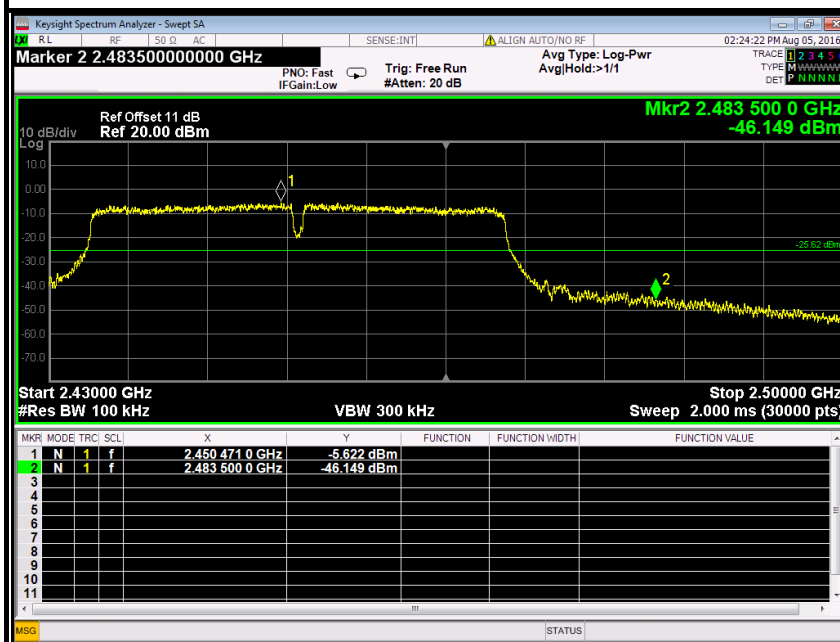




CH High (10MHz ~26.5GHz)



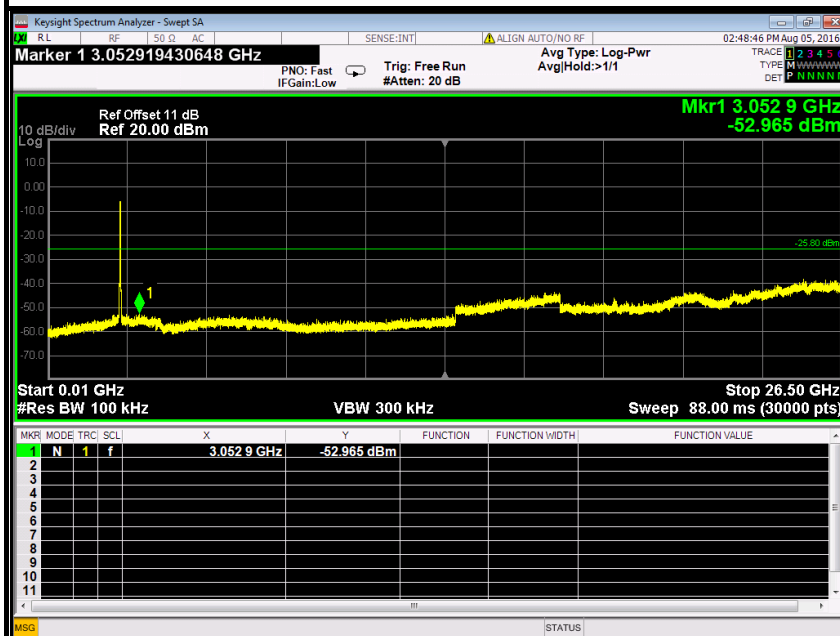
CH High (2.43GHz ~2.5GHz)





IEEE 802.11n HT40 MHz mode (Antenna 1)

CH Low (10MHz ~26.5GHz)



CH Low (2.31GHz ~2.45GHz)

