FCC Test Report

Report No.:	RF170508C09
FCC ID:	2AG6R-AN700APOAC
Model:	AN-700-AP-O-AC
Received Date:	May 08, 2017
Test Date:	May 27 ~ Jun. 02, 2017
Issued Date:	Jun. 23, 2017
Applicant:	Araknis Networks
Address:	1800 Continental Blvd. Ste 200, Charlotte, North Carolina, United States 28273
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.
Test Location:	No.19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
RF170508C09	Original release	Jun. 23, 2017

1 Certificate of Conformity

Product:	Araknis Networks Dual-Band Wireless-AC 1750 Outdoor Access Point
Brand:	Araknis Networks
Model:	AN-700-AP-O-AC
Sample Status:	Engineering sample
Applicant:	Araknis Networks
Test Date:	May 27 ~ Jun. 02, 2017
Standards:	47 CFR FCC Part 15, Subpart C (Section 15.247) ANSI C63.10:2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : _____ , **Date:** Jun. 23, 2017

Pettie Chen / Senior Specialist

Approved by : _____ , **Date:** Jun. 23, 2017

Ken Liu / Senior Manager

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (Section 15.247)			
FCC Clause	Test Item	Result	Remarks
15.207	AC Power Conducted Emission	Pass	Meet the requirement of limit. Minimum passing margin is -7.61dB at 0.46936MHz
15.205 / 15.209 / 15.247(d)	Radiated Emissions and Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -2.0dB at 39.62MHz.
15.247(d)	Antenna Port Emission	Pass	Meet the requirement of limit.
15.247(a)(2)	6dB bandwidth	Pass	Meet the requirement of limit.
15.247(b)	Conducted power	Pass	Meet the requirement of limit.
15.247(e)	Power Spectral Density	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is IPEX not a standard connector.

2.1 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:

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.94 dB
Radiated Emissions up to 1 GHz	30MHz ~ 200MHz	3.86 dB
	200MHz ~1000MHz	3.87 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Araknis Networks Dual-Band Wireless-AC 1750 Outdoor Access Point
Brand	Araknis Networks
Model	AN-700-AP-O-AC
Sample Status	Engineering sample
Power Supply Rating	54Vdc (PoE)
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	DSSS, OFDM
Transfer Rate	802.11b:11.0/ 5.5/ 2.0/ 1.0Mbps 802.11g: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 450Mbps
Operating Frequency	2412 ~ 2462MHz
Number of Channel	11 for 802.11b, 802.11g, 802.11n (HT20) 7 for 802.11n (HT40)
Output Power	565.328mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Data Cable Supplied	NA

Note:

1. The EUT incorporates a MIMO function. Physically, the EUT provides 3 completed transmitters and 3 receivers.

Modulation Mode	TX Function
802.11b	3TX
802.11g	3TX
802.11n (HT20)	3TX
802.11n (HT40)	3TX

2. The EUT consumes power from the following PoE. (Support unit only)

Brand	EnGenius
Model	EAP5006GP
Input Power	100-240Vac~10.8A, 50-60Hz
Output Power	54Vdc, 0.6A
Power Line	0.5m non-shielded power cable without core

3. The EUT with follow antennas gain is listed as table below.

Ant. Type	Dipole							
Connector	IPEX							
Frequency (MHz)	2400			2450			2500	
Ant. 1	3.54			3.34			2.99	
Ant. 2	4.96			5.02			4.90	
Ant. 3	3.55			3.01			3.17	
Frequency (MHz)	5150	5250	5350	5450	5550	5650	5750	5850
Ant. 4	4.54	5.28	5.57	5.51	4.56	4.44	4.48	4.85
Ant. 5	5.46	5.65	6.12	5.57	5.83	5.13	5.02	5.82
Ant. 6	4.98	5.70	6.26	5.98	4.27	4.20	4.46	4.38

4. 2.4GHz, 5GHz technology can transmit at same time.
5. Spurious emission of the simultaneous operation (2.4GHz and 5GHz) has been evaluated and no non-compliance was found.

3.2 Description of Test Modes

11 channels are provided for 802.11b, 802.11g and 802.11n (HT20):

Channel	Frequency	Channel	Frequency
1	2412MHz	7	2442MHz
2	2417MHz	8	2447MHz
3	2422MHz	9	2452MHz
4	2427MHz	10	2457MHz
5	2432MHz	11	2462MHz
6	2437MHz		

7 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
3	2422MHz	7	2442MHz
4	2427MHz	8	2447MHz
5	2432MHz	9	2452MHz
6	2437MHz		

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
-	√	√	√	√	-

Where **RE≥1G:** Radiated Emission above 1GHz & Bandedge Measurement **RE<1G:** Radiated Emission below 1GHz

PLC: Power Line Conducted Emission **APCM:** Antenna Port Conducted Measurement

Note: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Z-plane.**

Radiated Emission Test (Above 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
-	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
-	802.11n (HT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
-	802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	13.5

Radiated Emission Test (Below 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11b	1 to 11	1	DSSS	DBPSK	1.0

Power Line Conducted Emission Test:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11b	1 to 11	1	DSSS	DBPSK	1.0

Antenna Port Conducted Measurement:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
-	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
-	802.11n (HT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
-	802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	13.5

Test Condition:

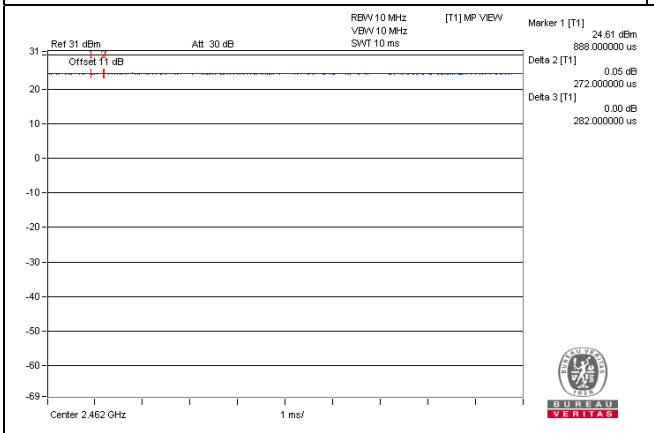
APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	19deg. C, 64%RH	120Vac, 60Hz	Jones Chang
RE<1G	25deg. C, 66%RH	120Vac, 60Hz	James Yang
PLC	25deg. C, 67%RH	120Vac, 60Hz	Jones Chang
APCM	25deg. C, 60%RH	120Vac, 60Hz	Ted Chang

3.3 Duty Cycle of Test Signal

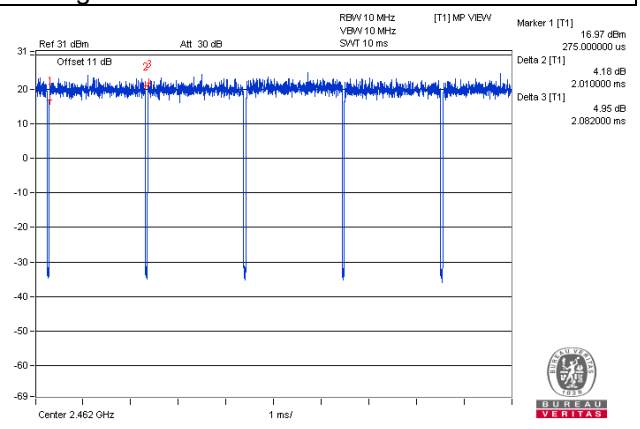
Duty cycle of test signal is 100 %, duty factor is not required.
Duty cycle of test signal is < 98%, duty factor shall be considered.

802.11b: Duty cycle = 100%
802.11g: Duty cycle = 2.01/2.082 = 0.965, Duty factor = 10 * log(1/0.965) = 0.15
802.11n (HT20): Duty cycle = 1.879/1.949 = 0.964, Duty factor = 10 * log(1/0.964) = 0.16
802.11n (HT40): Duty cycle = 0.925/0.985 = 0.939, Duty factor = 10 * log(1/0.939) = 0.27

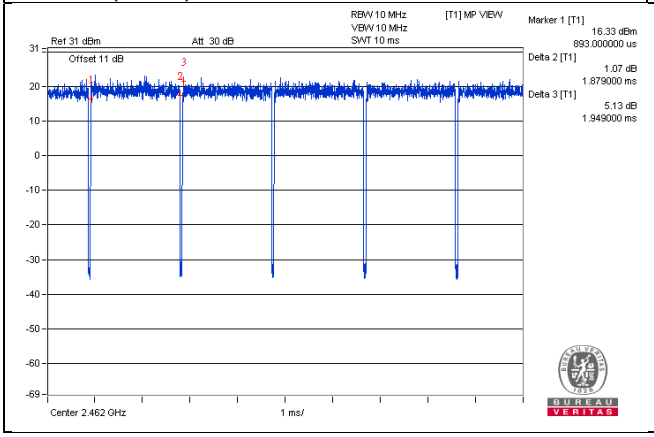
802.11b



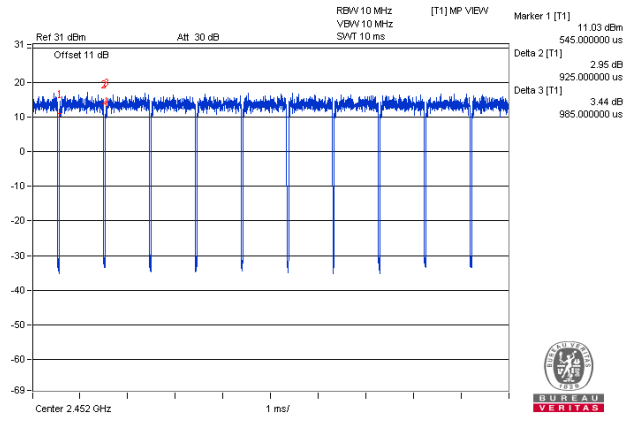
802.11g



802.11n (HT20)



802.11n (HT40)



3.4 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.

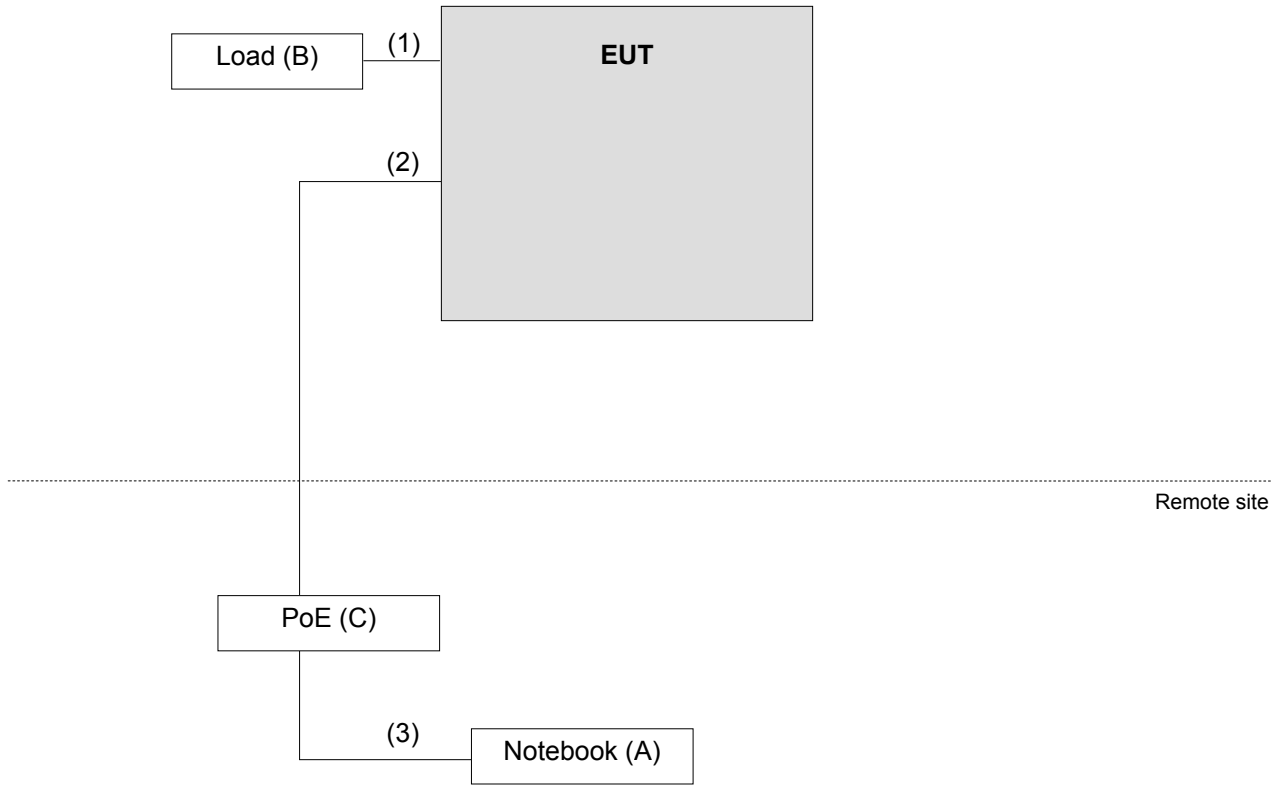
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	E5410	1HC2XM1	FCC DoC Approved	-
B.	Load	N/A	N/A	N/A	N/A	-
C.	PoE	EnGenius	EAP5006GP	N/A	N/A	Provided by manufacturer

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as communication partner to transfer data.

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ45 Cable	1	1.8	N	0	Cat5e
2.	RJ45 Cable	1	10	N	0	Cat5e
3.	RJ45 Cable	1	1.8	N	0	Cat5e

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C (15.247)

KDB 558074 D01 DTS Meas Guidance v04

KDB 662911 D01 Multiple Transmitter Output v02r01

ANSI C63.10-2013

All test items have been performed and recorded as per the above standards.

Note: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 30dB below the highest level of the desired power:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Note:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 30dB under any condition of modulation.

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESIB7	100187	May 02, 2017	May 01, 2018
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100041	Nov. 16, 2016	Nov. 15, 2017
BILOG Antenna SCHWARZBECK	VULB9168	9168-171	Dec. 28, 2016	Dec. 27, 2017
HORN Antenna SCHWARZBECK	9120D	209	Dec. 27, 2016	Dec. 26, 2017
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Dec. 14, 2016	Dec. 13, 2017
Loop Antenna	EM-6879	269	Aug. 11, 2016	Aug. 10, 2017
Preamplifier Agilent	8447D	2944A10738	Aug. 22, 2016	Aug. 21, 2017
Preamplifier Agilent	8449B	3008A01922	Sep. 18, 2016	Sep. 17, 2017
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH3-03 (214378)	Aug. 22, 2016	Aug. 21, 2017
RF signal cable HUBER+SUHNER	SUCOFLEX 106	Cable-CH3-03 (309224+12738)	Aug. 22, 2016	Aug. 21, 2017
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021702	NA	NA
Turn Table BV ADT	TT100	TT93021702	NA	NA
Turn Table Controller BV ADT	SC100	SC93021702	NA	NA
High Speed Peak Power Meter	ML2495A	0824012	Aug. 11, 2016	Aug. 10, 2017
Power Sensor	MA2411B	0738171	Aug. 11, 2016	Aug. 10, 2017

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. The test was performed in HwaYa Chamber 3.
3. The horn antenna and preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 988962.
5. The IC Site Registration No. is IC 7450F-3.

4.1.3 Test Procedures

For Radiated emission below 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. Both X and Y axes of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission above 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

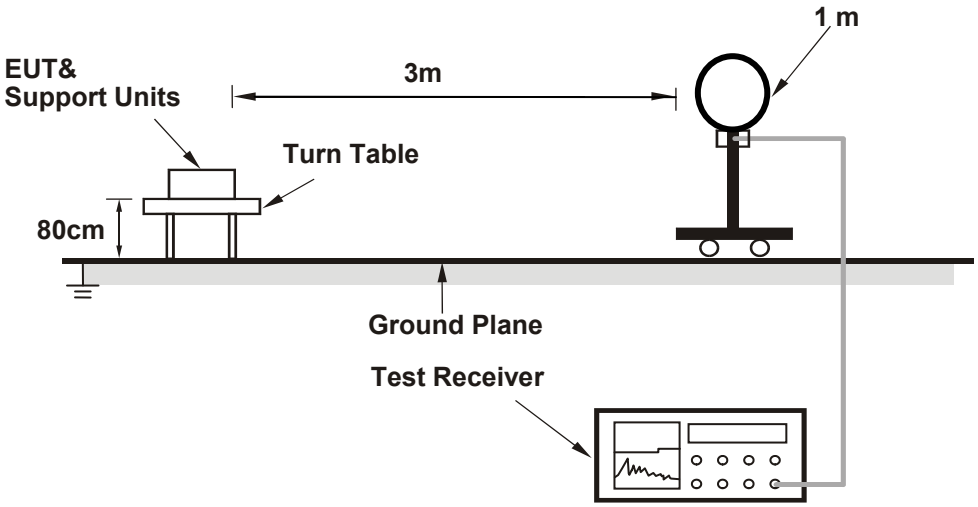
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 3 x RBW (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

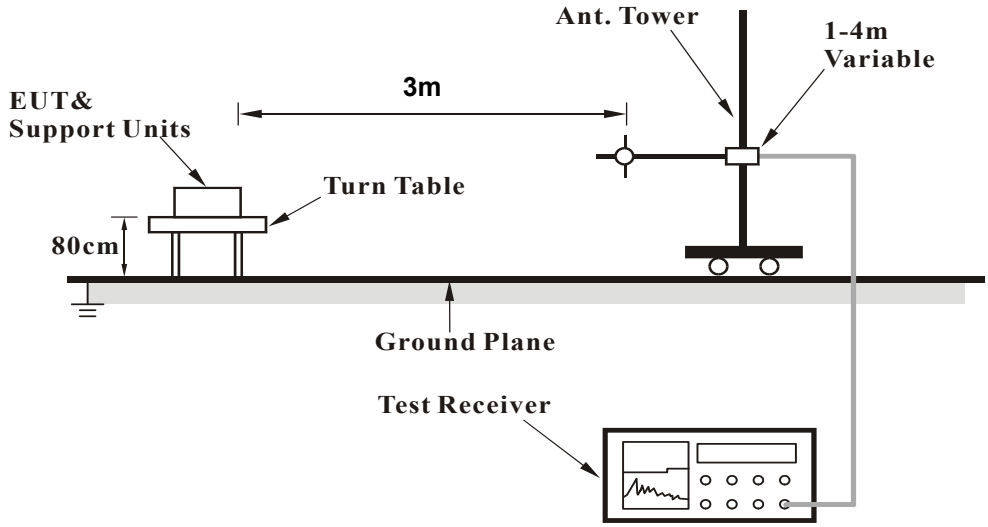
No deviation.

4.1.5 Test Set Up

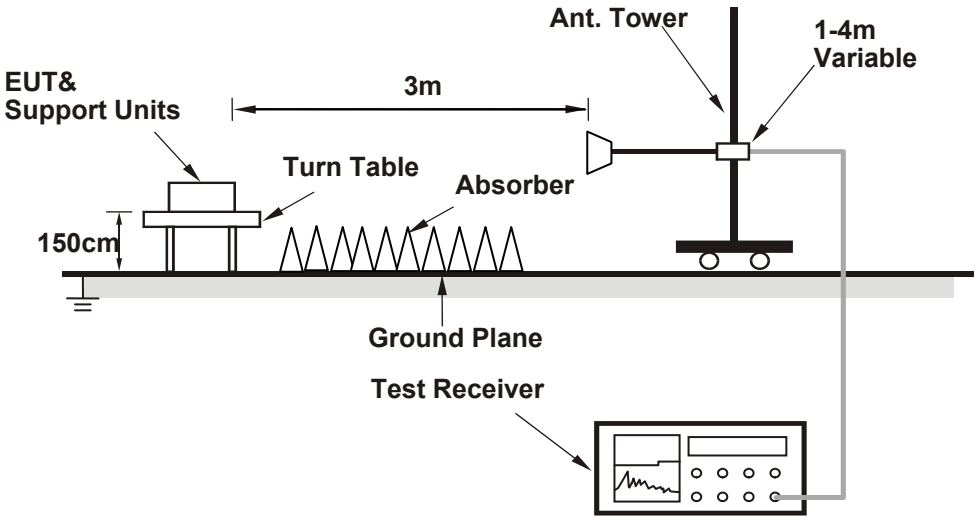
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT Operating Conditions

a. Placed the EUT on the testing table.
b. Prepared a notebook to act as a communication partner and placed it outside of testing area.
c. The communication partner connected with EUT via a RJ45 cable and ran a test program (QRCT) to enable EUT under transmission condition continuously at specific channel frequency.
d. The communication partner sent data to EUT by command "PING".

4.1.7 Test Results

Above 1GHz worst-Case data:

802.11b

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	63.2 PK	74.0	-10.8	1.61 H	180	32.20	31.00
2	2390.00	51.8 AV	54.0	-2.2	1.61 H	180	20.80	31.00
3	*2412.00	109.0 PK			1.61 H	183	77.80	31.20
4	*2412.00	105.8 AV			1.61 H	183	74.60	31.20
5	4824.00	44.8 PK	74.0	-29.2	1.66 H	10	44.30	0.50
6	4824.00	33.8 AV	54.0	-20.2	1.66 H	10	33.30	0.50
7	#7236.00	51.6 PK	79.0	-27.4	1.82 H	197	44.50	7.10
8	#7236.00	41.6 AV	75.8	-34.2	1.82 H	197	34.50	7.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	62.1 PK	74.0	-11.9	1.63 V	313	31.10	31.00
2	2390.00	49.8 AV	54.0	-4.2	1.63 V	313	18.80	31.00
3	*2412.00	112.8 PK			1.77 V	333	81.60	31.20
4	*2412.00	109.1 AV			1.77 V	333	77.90	31.20
5	4824.00	44.1 PK	74.0	-29.9	1.77 V	359	43.60	0.50
6	4824.00	32.5 AV	54.0	-21.5	1.77 V	359	32.00	0.50
7	#7236.00	49.4 PK	82.8	-33.4	1.90 V	20	42.30	7.10
8	#7236.00	37.9 AV	79.1	-41.2	1.90 V	20	30.80	7.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	112.5 PK			1.73 H	165	81.20	31.30
2	*2437.00	109.1 AV			1.73 H	165	77.80	31.30
3	4874.00	45.7 PK	74.0	-28.3	1.69 H	63	45.10	0.60
4	4874.00	35.7 AV	54.0	-18.3	1.69 H	63	35.10	0.60
5	7311.00	52.8 PK	74.0	-21.2	1.70 H	188	45.70	7.10
6	7311.00	44.8 AV	54.0	-9.2	1.70 H	188	37.70	7.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	114.8 PK			1.92 V	327	83.50	31.30
2	*2437.00	111.6 AV			1.92 V	327	80.30	31.30
3	4874.00	45.5 PK	74.0	-28.5	1.86 V	0	44.90	0.60
4	4874.00	33.6 AV	54.0	-20.4	1.86 V	0	33.00	0.60
5	7311.00	55.4 PK	74.0	-18.6	1.86 V	22	48.30	7.10
6	7311.00	47.6 AV	54.0	-6.4	1.86 V	22	40.50	7.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	112.8 PK			1.72 H	162	81.40	31.40
2	*2462.00	109.4 AV			1.72 H	162	78.00	31.40
3	2483.50	58.6 PK	74.0	-15.4	1.72 H	162	27.10	31.50
4	2483.50	49.0 AV	54.0	-5.0	1.72 H	162	17.50	31.50
5	4924.00	45.9 PK	74.0	-28.1	1.71 H	59	45.30	0.60
6	4924.00	35.5 AV	54.0	-18.5	1.71 H	59	34.90	0.60
7	7386.00	51.5 PK	74.0	-22.5	1.42 H	176	44.40	7.10
8	7386.00	40.2 AV	54.0	-13.8	1.42 H	176	33.10	7.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	116.2 PK			1.87 V	324	84.80	31.40
2	*2462.00	112.3 AV			1.87 V	324	80.90	31.40
3	2483.50	61.1 PK	74.0	-12.9	1.69 V	329	29.60	31.50
4	2483.50	51.1 AV	54.0	-2.9	1.69 V	329	19.60	31.50
5	4924.00	46.4 PK	74.0	-27.6	1.86 V	26	45.80	0.60
6	4924.00	34.4 AV	54.0	-19.6	1.86 V	26	33.80	0.60
7	7386.00	53.8 PK	74.0	-20.2	1.86 V	27	46.70	7.10
8	7386.00	40.8 AV	54.0	-13.2	1.86 V	27	33.70	7.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

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CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	62.3 PK	74.0	-11.7	2.30 H	359	31.30	31.00
2	2390.00	50.7 AV	54.0	-3.3	2.30 H	359	19.70	31.00
3	*2412.00	109.4 PK			2.31 H	357	78.20	31.20
4	*2412.00	95.6 AV			2.31 H	357	64.40	31.20
5	4824.00	41.0 PK	74.0	-33.0	1.60 H	220	40.50	0.50
6	4824.00	30.3 AV	54.0	-23.7	1.60 H	220	29.80	0.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	58.3 PK	74.0	-15.7	1.78 V	0	27.30	31.00
2	2390.00	48.3 AV	54.0	-5.7	1.78 V	0	17.30	31.00
3	*2412.00	111.1 PK			1.73 V	330	79.90	31.20
4	*2412.00	96.8 AV			1.73 V	330	65.60	31.20
5	4824.00	41.5 PK	74.0	-32.5	2.12 V	279	41.00	0.50
6	4824.00	31.2 AV	54.0	-22.8	2.12 V	279	30.70	0.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2288.00	44.5 PK	74.0	-29.5	1.65 H	233	49.10	-4.60
2	2288.00	37.1 AV	54.0	-16.9	1.65 H	233	41.70	-4.60
3	*2437.00	114.4 PK			1.48 H	175	83.10	31.30
4	*2437.00	105.4 AV			1.48 H	175	74.10	31.30
5	4874.00	46.3 PK	74.0	-27.7	2.08 H	179	45.70	0.60
6	4874.00	33.9 AV	54.0	-20.1	2.08 H	179	33.30	0.60
7	7311.00	66.4 PK	74.0	-7.6	2.35 H	187	59.30	7.10
8	7311.00	42.4 AV	54.0	-11.6	2.35 H	187	35.30	7.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2288.00	53.9 PK	74.0	-20.1	1.74 V	213	58.50	-4.60
2	2288.00	47.6 AV	54.0	-6.4	1.74 V	213	52.20	-4.60
3	*2437.00	116.7 PK			2.07 V	332	85.40	31.30
4	*2437.00	107.2 AV			2.07 V	332	75.90	31.30
5	4874.00	48.7 PK	74.0	-25.3	1.82 V	294	48.10	0.60
6	4874.00	37.3 AV	54.0	-16.7	1.82 V	294	36.70	0.60
7	7311.00	66.0 PK	74.0	-8.0	2.24 V	316	58.90	7.10
8	7311.00	42.4 AV	54.0	-11.6	2.24 V	316	35.30	7.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	110.1 PK			2.22 H	359	78.70	31.40
2	*2462.00	100.6 AV			2.22 H	359	69.20	31.40
3	2483.50	64.3 PK	74.0	-9.7	2.01 H	355	32.80	31.50
4	2483.50	50.3 AV	54.0	-3.7	2.01 H	355	18.80	31.50
5	4924.00	44.4 PK	74.0	-29.6	1.77 H	212	43.80	0.60
6	4924.00	32.6 AV	54.0	-21.4	1.77 H	212	32.00	0.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	111.6 PK			1.80 V	329	80.20	31.40
2	*2462.00	102.5 AV			1.80 V	329	71.10	31.40
3	2483.50	63.4 PK	74.0	-10.6	1.80 V	329	31.90	31.50
4	2483.50	51.6 AV	54.0	-2.4	1.80 V	329	20.10	31.50
5	4924.00	47.1 PK	74.0	-26.9	2.05 V	315	46.50	0.60
6	4924.00	34.9 AV	54.0	-19.1	2.05 V	315	34.30	0.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11n (HT20)

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	62.7 PK	74.0	-11.3	2.00 H	259	31.70	31.00
2	2390.00	50.8 AV	54.0	-3.2	2.00 H	259	19.80	31.00
3	*2412.00	108.5 PK			2.09 H	354	77.30	31.20
4	*2412.00	99.3 AV			2.09 H	354	68.10	31.20
5	4824.00	41.4 PK	74.0	-32.6	1.90 H	222	40.90	0.50
6	4824.00	30.9 AV	54.0	-23.1	1.90 H	222	30.40	0.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	64.7 PK	74.0	-9.3	1.92 V	123	33.70	31.00
2	2390.00	49.9 AV	54.0	-4.1	1.92 V	123	18.90	31.00
3	*2412.00	108.3 PK			2.10 V	144	77.10	31.20
4	*2412.00	98.6 AV			2.10 V	144	67.40	31.20
5	4824.00	43.1 PK	74.0	-30.9	1.86 V	314	42.60	0.50
6	4824.00	31.3 AV	54.0	-22.7	1.86 V	314	30.80	0.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	114.6 PK			2.30 H	158	83.30	31.30
2	*2437.00	105.7 AV			2.30 H	158	74.40	31.30
3	4874.00	43.0 PK	74.0	-31.0	2.20 H	190	42.40	0.60
4	4874.00	32.1 AV	54.0	-21.9	2.20 H	190	31.50	0.60
5	7311.00	67.0 PK	74.0	-7.0	2.52 H	192	59.90	7.10
6	7311.00	46.4 AV	54.0	-7.6	2.52 H	192	39.30	7.10
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	118.0 PK			1.70 V	345	86.70	31.30
2	*2437.00	108.6 AV			1.70 V	345	77.30	31.30
3	4874.00	43.4 PK	74.0	-30.6	2.00 V	300	42.80	0.60
4	4874.00	30.8 AV	54.0	-23.2	2.00 V	300	30.20	0.60
5	7311.00	67.8 PK	74.0	-6.2	2.27 V	211	60.70	7.10
6	7311.00	47.6 AV	54.0	-6.4	2.27 V	211	40.50	7.10

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	108.2 PK			2.43 H	348	76.80	31.40
2	*2462.00	98.8 AV			2.43 H	348	67.40	31.40
3	2483.50	65.0 PK	74.0	-9.0	2.12 H	351	33.50	31.50
4	2483.50	50.2 AV	54.0	-3.8	2.12 H	351	18.70	31.50
5	4924.00	41.4 PK	74.0	-32.6	1.98 H	199	40.80	0.60
6	4924.00	30.5 AV	54.0	-23.5	1.98 H	199	29.90	0.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	109.9 PK			1.68 V	350	78.50	31.40
2	*2462.00	100.7 AV			1.68 V	350	69.30	31.40
3	2483.50	61.8 PK	74.0	-12.2	1.80 V	302	30.30	31.50
4	2483.50	49.7 AV	54.0	-4.3	1.80 V	302	18.20	31.50
5	4924.00	44.4 PK	74.0	-29.6	2.01 V	35	43.80	0.60
6	4924.00	32.1 AV	54.0	-21.9	2.01 V	35	31.50	0.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11n (HT40)

CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	66.4 PK	74.0	-7.6	2.28 H	0	35.40	31.00
2	2390.00	49.1 AV	54.0	-4.9	2.28 H	0	18.10	31.00
3	*2422.00	100.7 PK			2.31 H	349	69.50	31.20
4	*2422.00	91.2 AV			2.31 H	349	60.00	31.20
5	4844.00	43.3 PK	74.0	-30.7	1.77 H	202	42.90	0.40
6	4844.00	30.6 AV	54.0	-23.4	1.77 H	202	30.20	0.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	65.3 PK	74.0	-8.7	1.88 V	350	34.30	31.00
2	2390.00	50.7 AV	54.0	-3.3	1.88 V	350	19.70	31.00
3	*2422.00	104.3 PK			1.91 V	330	73.10	31.20
4	*2422.00	94.4 AV			1.91 V	330	63.20	31.20
5	4844.00	45.1 PK	74.0	-28.9	2.01 V	212	44.70	0.40
6	4844.00	31.7 AV	54.0	-22.3	2.01 V	212	31.30	0.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	56.9 PK	74.0	-17.1	2.00 H	333	25.90	31.00
2	2390.00	46.4 AV	54.0	-7.6	2.00 H	333	15.40	31.00
3	*2437.00	103.6 PK			2.08 H	337	72.30	31.30
4	*2437.00	94.8 AV			2.08 H	337	63.50	31.30
5	4874.00	42.9 PK	74.0	-31.1	1.57 H	21	42.30	0.60
6	4874.00	30.9 AV	54.0	-23.1	1.57 H	21	30.30	0.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	62.6 PK	74.0	-11.4	1.77 V	306	31.60	31.00
2	2390.00	50.3 AV	54.0	-3.7	1.77 V	306	19.30	31.00
3	*2437.00	107.6 PK			1.82 V	327	76.30	31.30
4	*2437.00	97.9 AV			1.82 V	327	66.60	31.30
5	4874.00	43.1 PK	74.0	-30.9	1.77 V	220	42.50	0.60
6	4874.00	31.7 AV	54.0	-22.3	1.77 V	220	31.10	0.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	102.2 PK			2.29 H	0	70.80	31.40
2	*2452.00	93.4 AV			2.29 H	0	62.00	31.40
3	2483.50	62.3 PK	74.0	-11.7	2.25 H	355	30.80	31.50
4	2483.50	49.1 AV	54.0	-4.9	2.25 H	355	17.60	31.50
5	4904.00	43.2 PK	74.0	-30.8	1.90 H	221	42.70	0.50
6	4904.00	32.0 AV	54.0	-22.0	1.90 H	221	31.50	0.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	106.3 PK			1.82 V	332	74.90	31.40
2	*2452.00	96.9 AV			1.82 V	332	65.50	31.40
3	2483.50	65.2 PK	74.0	-8.8	1.66 V	359	33.70	31.50
4	2483.50	50.2 AV	54.0	-3.8	1.66 V	359	18.70	31.50
5	4904.00	41.7 PK	74.0	-32.3	1.50 V	169	41.20	0.50
6	4904.00	31.2 AV	54.0	-22.8	1.50 V	169	30.70	0.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

Below 1GHz worst-case data:

802.11b

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	57.12	26.9 QP	40.0	-13.1	1.99 H	315	41.50	-14.60
2	239.88	37.1 QP	46.0	-8.9	1.00 H	118	51.60	-14.50
3	350.71	35.4 QP	46.0	-10.6	1.00 H	199	46.50	-11.10
4	729.84	37.9 QP	46.0	-8.1	1.00 H	141	40.70	-2.80
5	834.84	37.3 QP	46.0	-8.7	1.00 H	91	38.20	-0.90
6	900.94	38.0 QP	46.0	-8.0	1.49 H	104	37.80	0.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	**39.62**	**38.0 QP**	**40.0**	**-2.0**	**1.49 V**	**138**	**53.20**	**-15.20**
2	234.05	38.9 QP	46.0	-7.1	1.99 V	138	54.10	-15.20
3	729.84	39.5 QP	46.0	-6.5	1.00 V	138	42.30	-2.80
4	827.06	42.9 QP	46.0	-3.1	1.49 V	14	44.00	-1.10
5	832.59	28.8 QP	46.0	-17.2	1.48 V	21	29.80	-1.00
6	900.94	40.6 QP	46.0	-5.4	1.49 V	14	40.40	0.20

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	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 0.50MHz.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Nov. 21, 2016	Nov. 20, 2017
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond1-01	Dec. 22, 2016	Dec. 21, 2017
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Mar. 10, 2017	Mar. 09, 2018
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 28, 2016	Jul. 27, 2017
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

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. The test was performed in HwaYa Shielded Room 1.
3. The VCCI Site Registration No. is C-2040.

4.2.3 Test Procedures

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

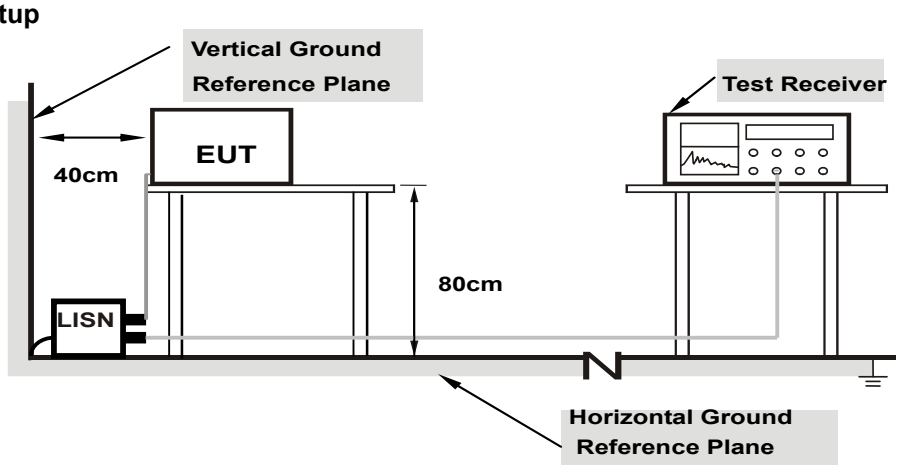
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT Operating Conditions

Same as 4.1.6.

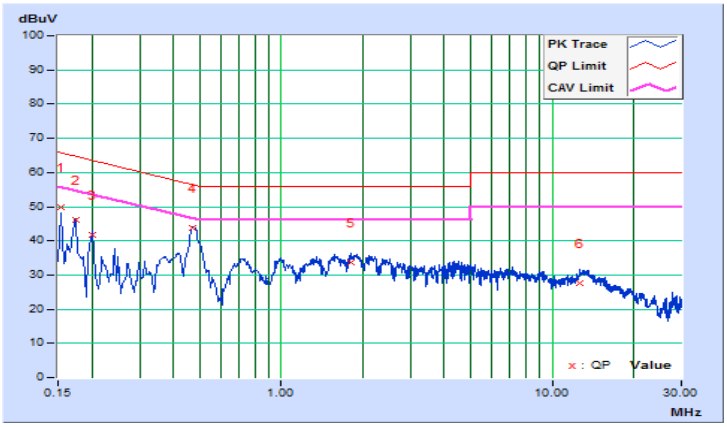
4.2.7 Test Results

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15400	10.41	39.27	25.67	49.68	36.08	65.78	55.78	-16.10	-19.70
2	0.17384	10.42	35.77	22.06	46.19	32.48	64.77	54.77	-18.58	-22.29
3	0.20201	10.43	31.26	16.72	41.69	27.15	63.53	53.53	-21.84	-26.38
4	**0.46936**	**10.50**	**33.14**	**28.42**	**43.64**	**38.92**	**56.53**	**46.53**	**-12.89**	**-7.61**
5	1.80600	10.51	23.03	18.27	33.54	28.78	56.00	46.00	-22.46	-17.22
6	12.67400	11.04	16.54	11.58	27.58	22.62	60.00	50.00	-32.42	-27.38

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

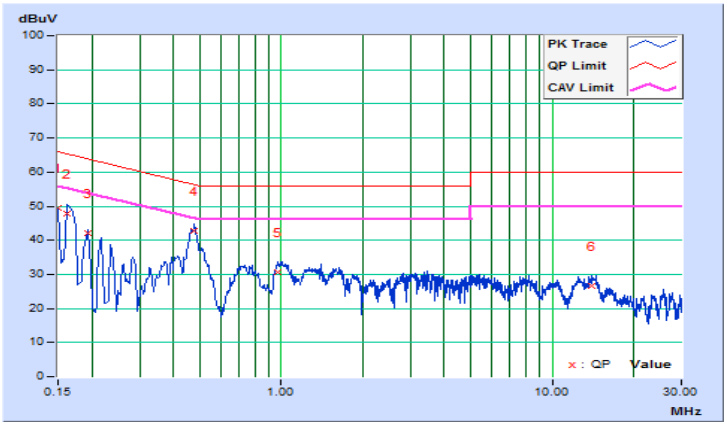


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.15	39.44	24.25	49.59	34.40	66.00	56.00	-16.41	-21.60
2	0.16200	10.17	37.51	22.46	47.68	32.63	65.36	55.36	-17.68	-22.73
3	0.19400	10.19	31.94	17.13	42.13	27.32	63.86	53.86	-21.73	-26.54
4	0.47810	10.23	32.64	26.44	42.87	36.67	56.37	46.37	-13.50	-9.70
5	0.97000	10.24	20.50	17.23	30.74	27.47	56.00	46.00	-25.26	-18.53
6	13.94600	10.80	15.69	10.53	26.49	21.33	60.00	50.00	-33.51	-28.67

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

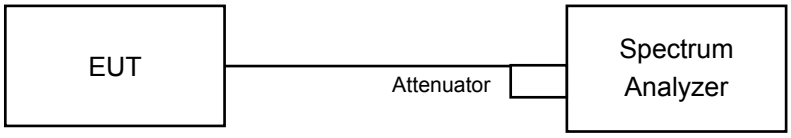


4.3 6dB Bandwidth Measurement

4.3.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 Test Setup



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

a. Set resolution bandwidth (RBW) = 100kHz

b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = average.

c. Trace mode = max hold.

d. Sweep = auto couple.

e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.3.5 Deviation fromTest Standard

No deviation.

4.3.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 Test Result

802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)			Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2		
1	2412	10.11	10.12	10.12	0.5	Pass
6	2437	10.11	10.11	10.11	0.5	Pass
11	2462	10.12	10.13	10.12	0.5	Pass

802.11g

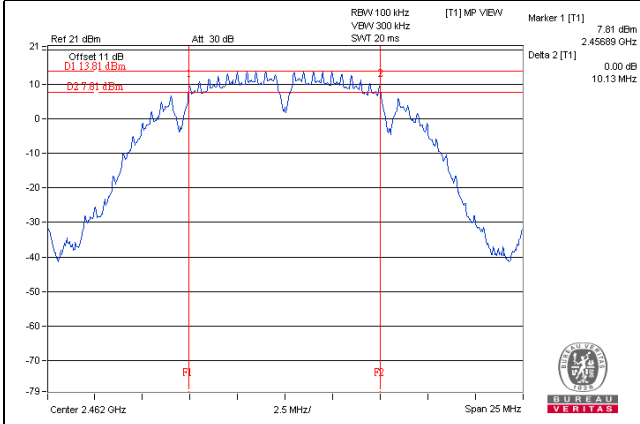
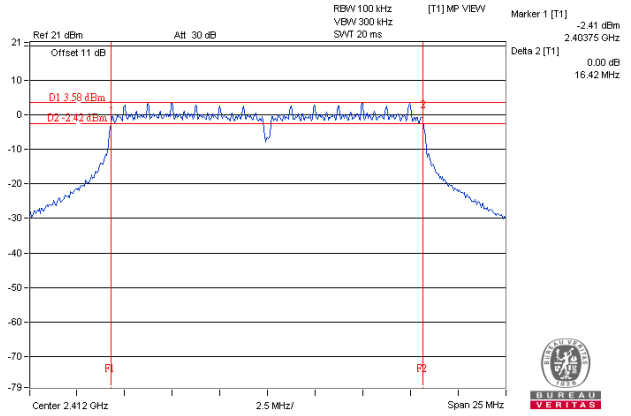
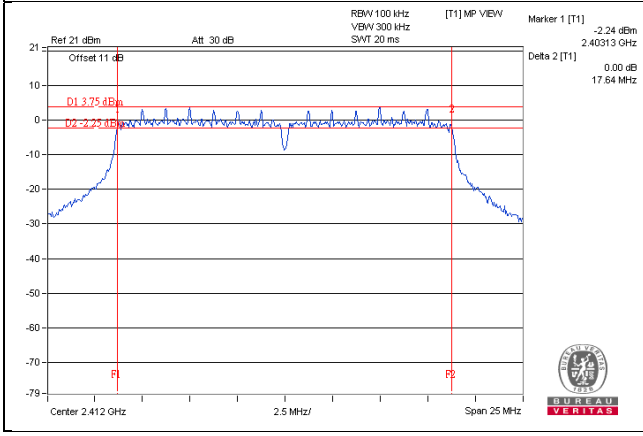
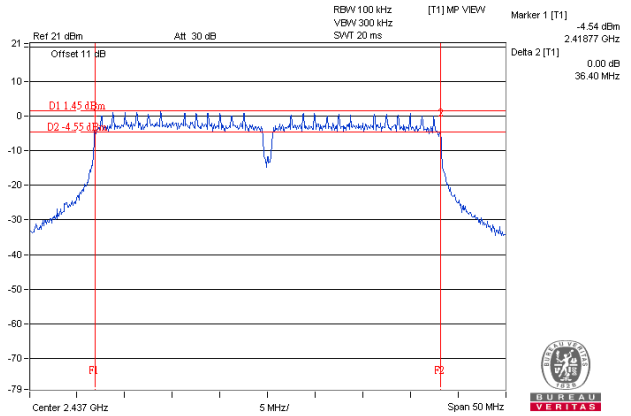
Channel	Frequency (MHz)	6dB Bandwidth (MHz)			Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2		
1	2412	16.40	16.39	16.42	0.5	Pass
6	2437	16.38	16.37	16.40	0.5	Pass
11	2462	16.37	16.40	16.41	0.5	Pass

802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)			Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2		
1	2412	17.61	17.61	17.64	0.5	Pass
6	2437	17.60	17.60	17.62	0.5	Pass
11	2462	17.62	17.61	17.63	0.5	Pass

802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)			Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2		
3	2422	36.36	36.36	36.34	0.5	Pass
6	2437	36.39	36.40	36.21	0.5	Pass
9	2452	36.24	36.15	36.20	0.5	Pass

Spectrum Plot of Worst Value	
802.11b	802.11g
	
802.11n (HT20)	802.11n (HT40)
	

4.4 Conducted Output Power Measurement

4.4.1 Limits of Conducted Output Power Measurement

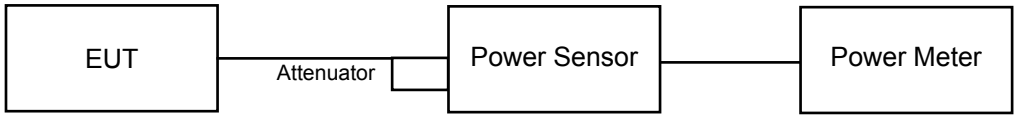
For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30dBm)

Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.4.2 Test Setup



4.4.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.4 Test Procedures

An average power sensor was used on the output port of the EUT. A power meter was used to read the response of the average power sensor. Record the power level.

4.4.5 Deviation from Test Standard

No deviation.

4.4.6 EUT Operating Conditions

Same as Item 4.3.6.

4.4.7 Test Results

802.11b

Channel	Frequency (MHz)	Average Power (dBm)			Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
1	2412	20.54	20.37	19.63	313.966	24.97	30	Pass
6	2437	22.64	22.56	23.04	**565.328**	27.52	30	Pass
11	2462	22.33	22.51	22.29	518.674	27.15	30	Pass

802.11g

Channel	Frequency (MHz)	Average Power (dBm)			Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
1	2412	14.04	14.26	13.61	74.981	18.75	30	Pass
6	2437	21.80	21.73	22.08	461.728	26.64	30	Pass
11	2462	15.68	16.07	15.75	115.025	20.61	30	Pass

802.11n (HT20)

Channel	Frequency (MHz)	Average Power (dBm)			Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
1	2412	14.12	14.64	14.12	80.753	19.07	30	Pass
6	2437	22.70	22.36	22.74	546.328	27.37	30	Pass
11	2462	14.04	14.63	14.17	80.513	19.06	30	Pass

802.11n (HT40)

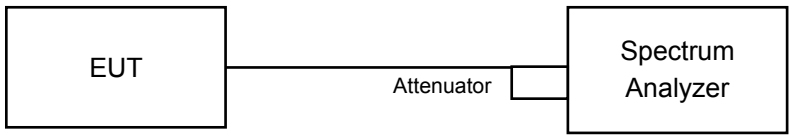
Channel	Frequency (MHz)	Average Power (dBm)			Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
3	2422	10.92	11.43	10.71	38.035	15.80	30	Pass
6	2437	14.99	15.08	15.19	96.798	19.86	30	Pass
9	2452	11.88	12.75	12.49	51.995	17.16	30	Pass

4.5 Power Spectral Density Measurement

4.5.1 Limits of Power Spectral Density Measurement

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedure

For duty cycle ≥ 98%

a. Set instrument center frequency to DTS channel center frequency.
b. Set span to at least 1.5 times the OBW.
c. Set RBW to: 3 kHz ≤ RBW ≤ 100 kHz. .
d. Set VBW ≥3 x RBW.
e. Detector = power averaging (RMS) or sample detector (when RMS not available).
f. Ensure that the number of measurement points in the sweep ≥ 2 x span/RBW.
g. Sweep time = auto couple.
h. Employ trace averaging (RMS) mode over a minimum of 100 traces.
i. Use the peak marker function to determine the maximum amplitude level.

For duty cycle < 98%

a. Measure the duty cycle (x).
b. Set instrument center frequency to DTS channel center frequency.
c. Set span to at least 1.5 times the OBW.
d. Set RBW to: 3 kHz ≤ RBW ≤ 100 kHz..
e. Set VBW ≥3 x RBW.
f. Detector = power averaging (RMS) or sample detector (when RMS not available).
g. Ensure that the number of measurement points in the sweep ≥ 2 x span/RBW.
h. Sweep time = auto couple.
i. Do not use sweep triggering. Allow sweep to “free run”.
j. Employ trace averaging (RMS) mode over a minimum of 100 traces.
k. Use the peak marker function to determine the maximum amplitude level.
l. Add 10 log (1/x), where x is the duty cycle measured in step (a, to the measured PSD to compute the average PSD during the actual transmission time.

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Condition

Same as Item 4.3.6

4.5.7 Test Results

802.11b

TX chain	Channel	Frequency (MHz)	PSD (dBm)	10 log (N=3) dB	Total PSD (dBm)	Limit (dBm)	Pass / Fail
0	1	2412	-7.84	4.77	-3.07	5.16	Pass
	6	2437	-5.62	4.77	-0.85	5.16	Pass
	11	2462	-5.92	4.77	-1.15	5.16	Pass
1	1	2412	-8.10	4.77	-3.33	5.16	Pass
	6	2437	-5.61	4.77	-0.84	5.16	Pass
	11	2462	-5.45	4.77	-0.68	5.16	Pass
2	1	2412	-8.10	4.77	-3.33	5.16	Pass
	6	2437	-5.31	4.77	-0.54	5.16	Pass
	11	2462	-5.97	4.77	-1.20	5.16	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$]= 8.84dBi > 6dBi , so the power density limit shall be reduced to 8-(8.84-6) = 5.16dBm.

802.11g

TX chain	Channel	Frequency (MHz)	PSD (dBm)	10 log (N=3) dB	Duty Factor	Total PSD with Duty Factor (dBm)	Limit (dBm)	Pass / Fail
0	1	2412	-8.92	4.77	0.15	-4.00	5.16	Pass
	6	2437	-8.13	4.77	0.15	-3.21	5.16	Pass
	11	2462	-14.52	4.77	0.15	-9.60	5.16	Pass
1	1	2412	-15.47	4.77	0.15	-10.55	5.16	Pass
	6	2437	-8.11	4.77	0.15	-3.19	5.16	Pass
	11	2462	-15.69	4.77	0.15	-10.77	5.16	Pass
2	1	2412	-16.05	4.77	0.15	-11.13	5.16	Pass
	6	2437	-8.18	4.77	0.15	-3.26	5.16	Pass
	11	2462	-14.20	4.77	0.15	-9.28	5.16	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$]= 8.84dBi > 6dBi , so the power density limit shall be reduced to 8-(8.84-6) = 5.16dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

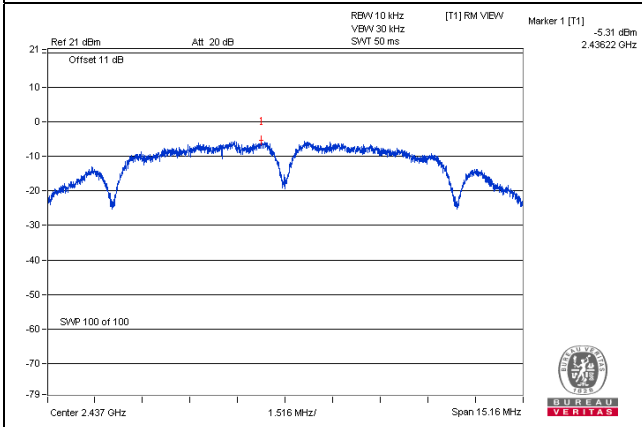
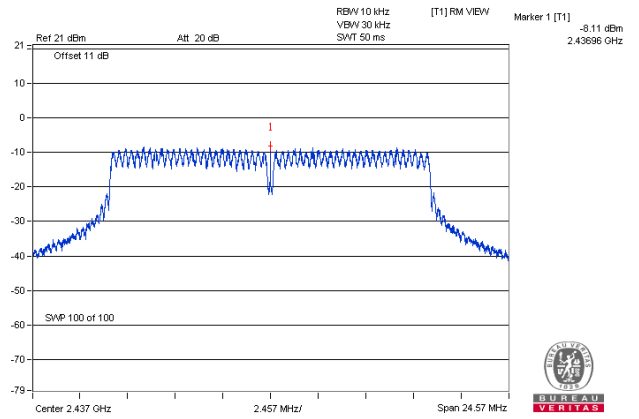
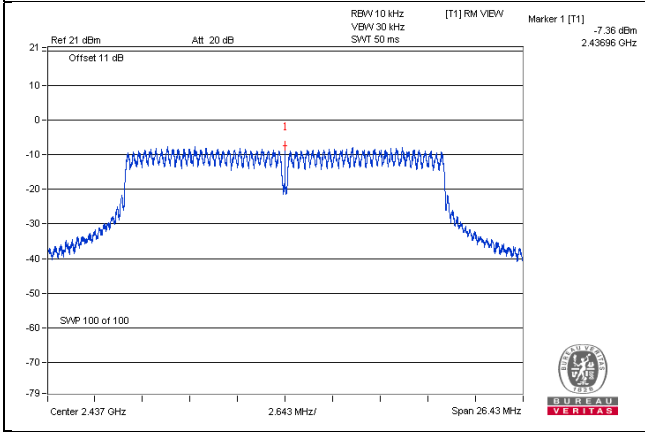
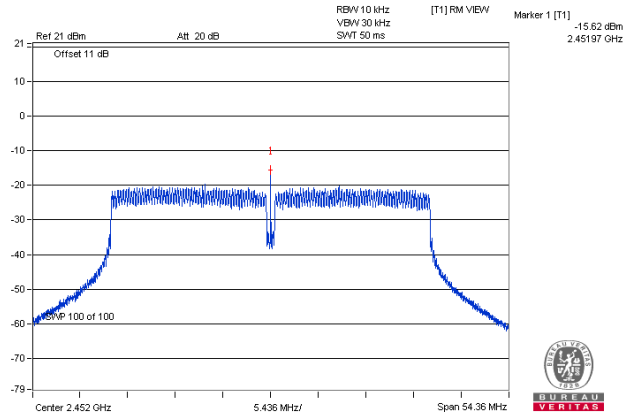
TX chain	Channel	Frequency (MHz)	PSD (dBm)	10 log (N=3) dB	Duty Factor	Total PSD with Duty Factor (dBm)	Limit (dBm)	Pass / Fail
0	1	2412	-14.24	4.77	0.16	-9.31	5.16	Pass
	6	2437	-7.87	4.77	0.16	-2.94	5.16	Pass
	11	2462	-12.40	4.77	0.16	-7.47	5.16	Pass
1	1	2412	-16.50	4.77	0.16	-11.57	5.16	Pass
	6	2437	-8.39	4.77	0.16	-3.46	5.16	Pass
	11	2462	-16.03	4.77	0.16	-11.10	5.16	Pass
2	1	2412	-16.51	4.77	0.16	-11.58	5.16	Pass
	6	2437	-7.36	4.77	0.16	-2.43	5.16	Pass
	11	2462	-16.08	4.77	0.16	-11.15	5.16	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$]= 8.84dBi > 6dBi , so the power density limit shall be reduced to 8-(8.84-6) = 5.16dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

TX chain	Channel	Frequency (MHz)	PSD (dBm)	10 log (N=3) dB	Duty Factor	Total PSD with Duty Factor (dBm)	Limit (dBm)	Pass / Fail
0	3	2422	-21.90	4.77	0.27	-16.86	5.16	Pass
	6	2437	-17.62	4.77	0.27	-12.58	5.16	Pass
	9	2452	-15.62	4.77	0.27	-10.58	5.16	Pass
1	3	2422	-22.08	4.77	0.27	-17.04	5.16	Pass
	6	2437	-18.01	4.77	0.27	-12.97	5.16	Pass
	9	2452	-19.93	4.77	0.27	-14.89	5.16	Pass
2	3	2422	-22.12	4.77	0.27	-17.08	5.16	Pass
	6	2437	-18.15	4.77	0.27	-13.11	5.16	Pass
	9	2452	-19.92	4.77	0.27	-14.88	5.16	Pass

Note:
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/3$]= 8.84dBi > 6dBi , so the power density limit shall be reduced to 8-(8.84-6) = 5.16dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

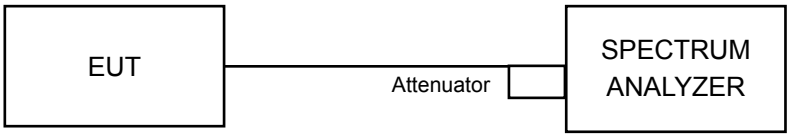
Spectrum Plot of Worst Value	
802.11b	802.11g
	
802.11n (HT20)	802.11n (HT40)
	

4.6 Conducted Out of Band Emission Measurement

4.6.1 Limits of Conducted Out of Band Emission Measurement

Below 30dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

4.6.2 Test Setup



4.6.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.6.4 Test Procedure

MEASUREMENT PROCEDURE REF

a. Set the RBW = 100 kHz.

b. Set the VBW ≥ 300 kHz.

c. Detector = average.

d. Sweep time = auto couple.

e. Trace mode = max hold.

f. Allow trace to fully stabilize.

g. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOBE

a. Set RBW = 100 kHz.

b. Set VBW ≥ 300 kHz.

c. Ensure that the number of measurement points ≥ span/RBW

d. According to measurement points to set differ measurement span.

e. Detector = average.

f. Trace Mode = max hold.

g. Sweep = auto couple.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

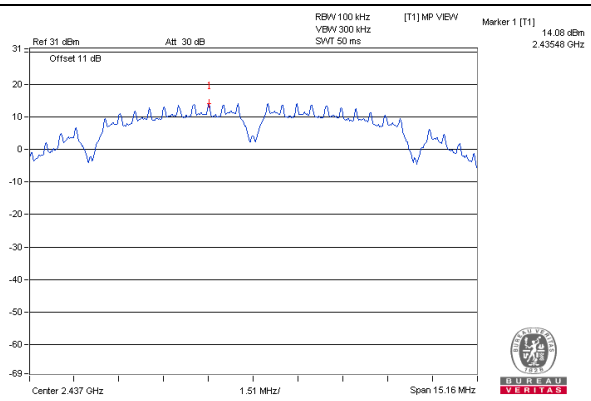
Same as Item 4.3.6

4.6.7 Test Results

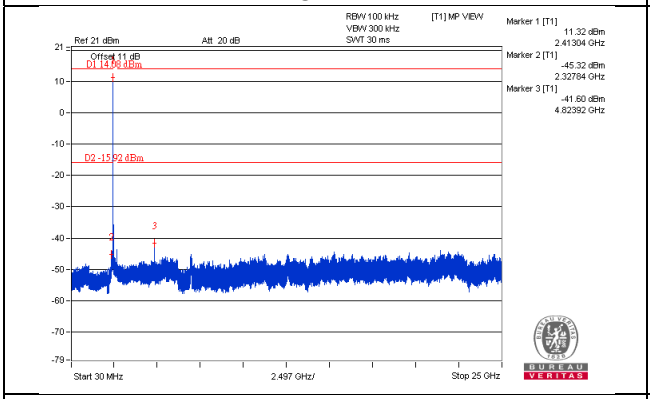
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 30dB offset below D1. It shows compliance with the requirement.

802.11b_Chain 0

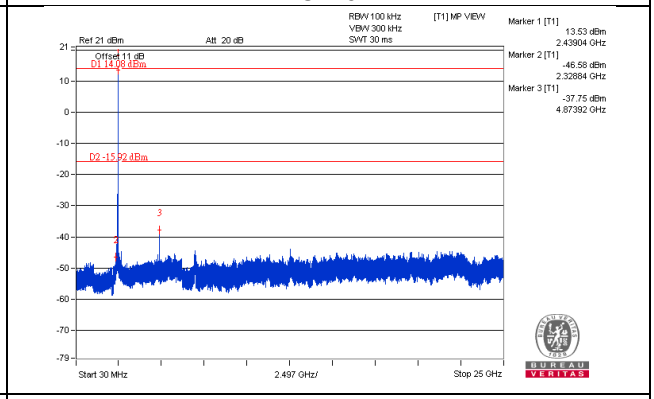
Maximum REF



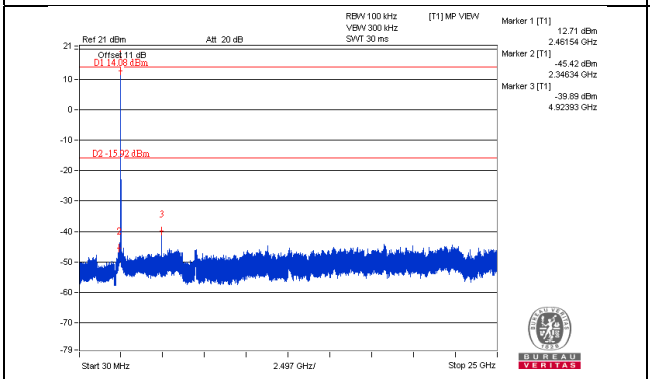
CH 1



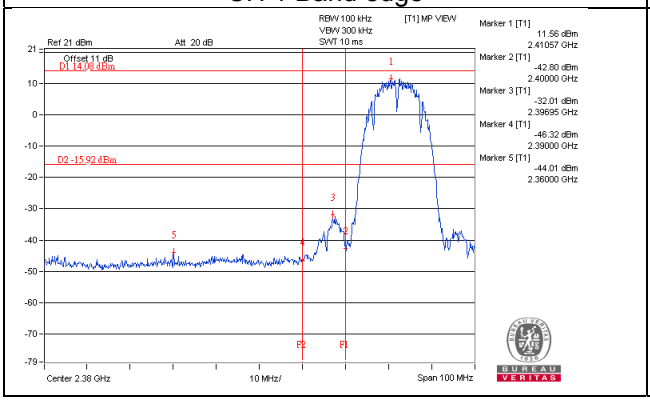
CH 6



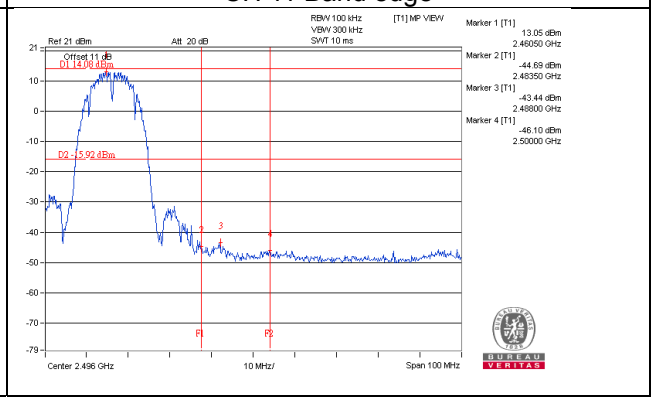
CH 11



CH 1 Band edge

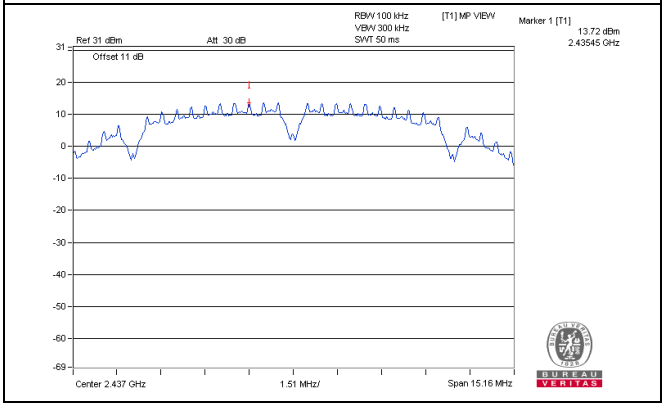


CH 11 Band edge

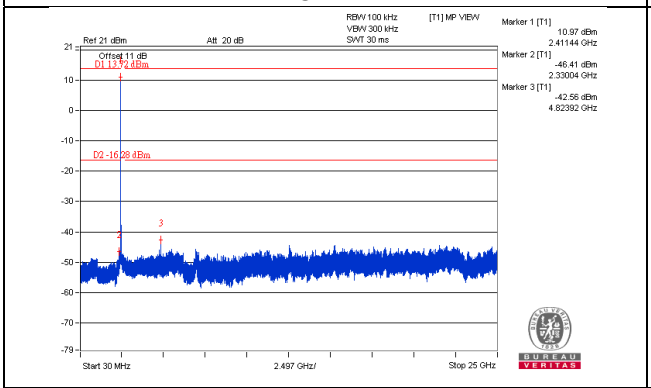


802.11b_Chain 1

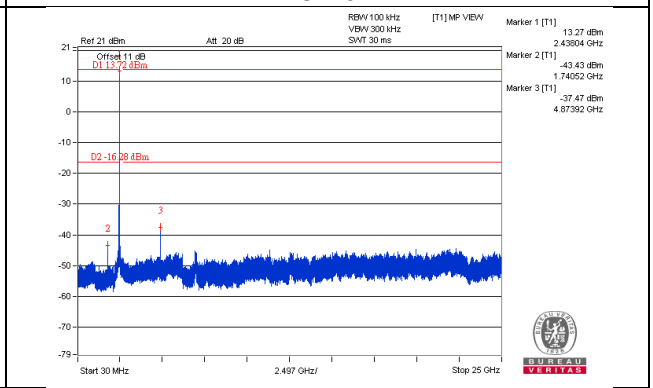
Maximum REF



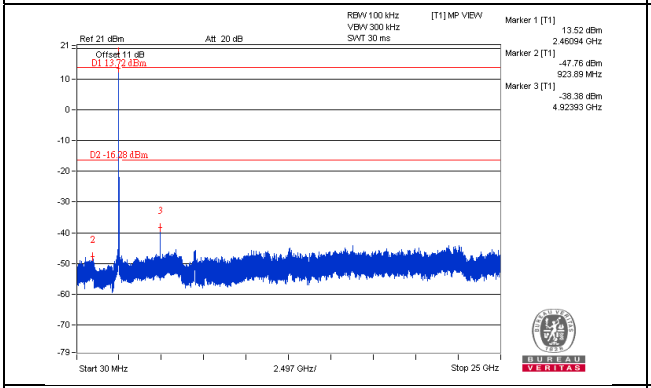
CH 1



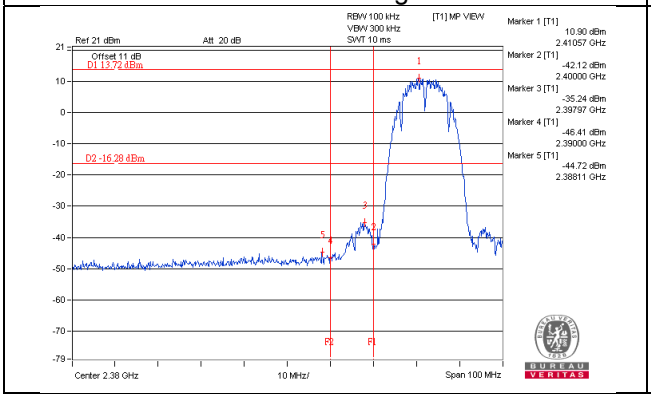
CH 6



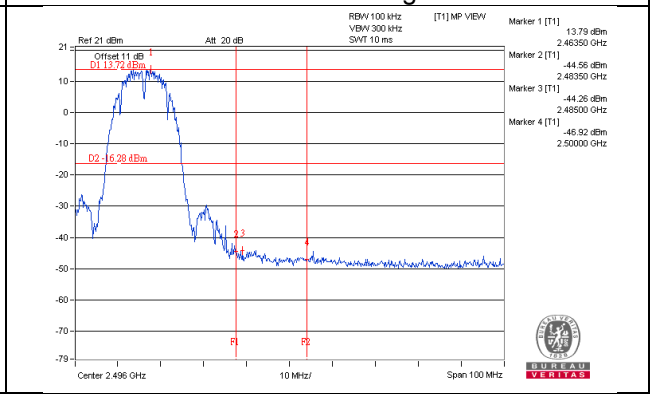
CH 11



CH 1 Band edge

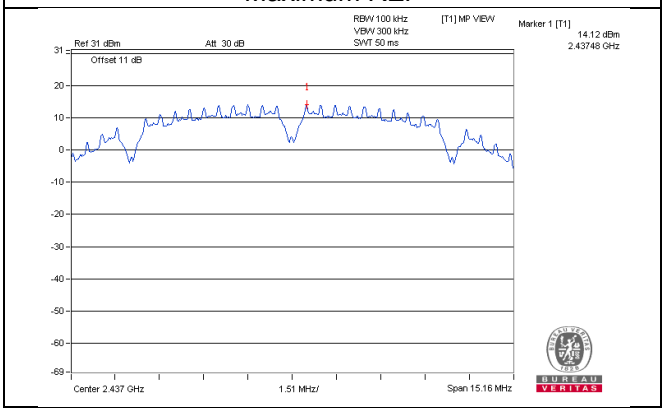


CH 11 Band edge

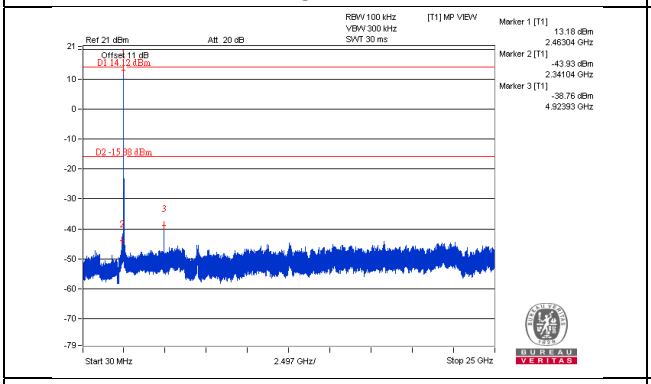


802.11b_Chain 2

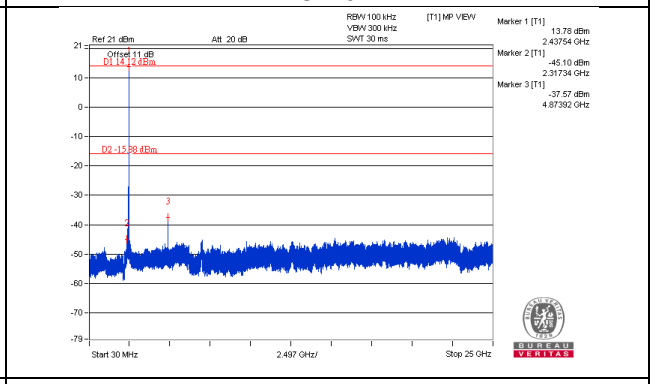
Maximum REF



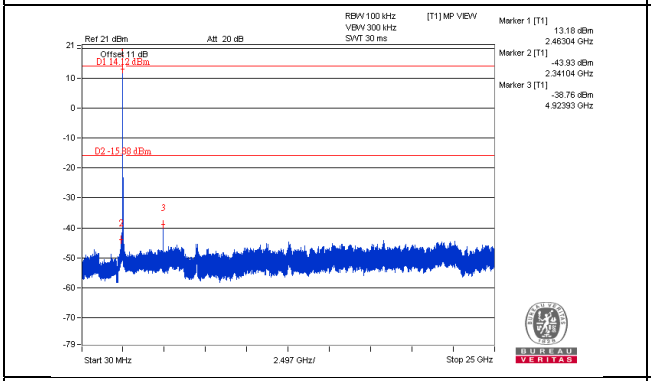
CH 1



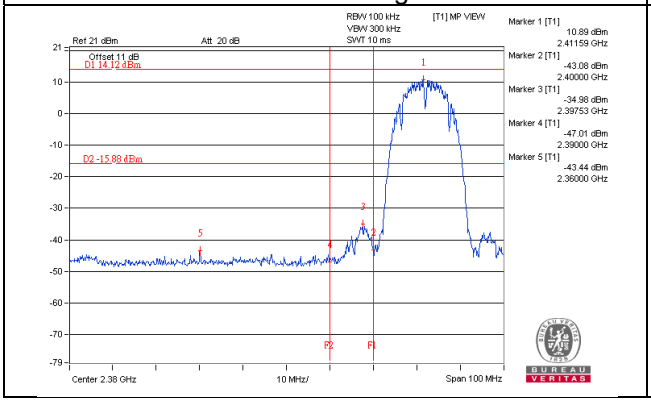
CH 6



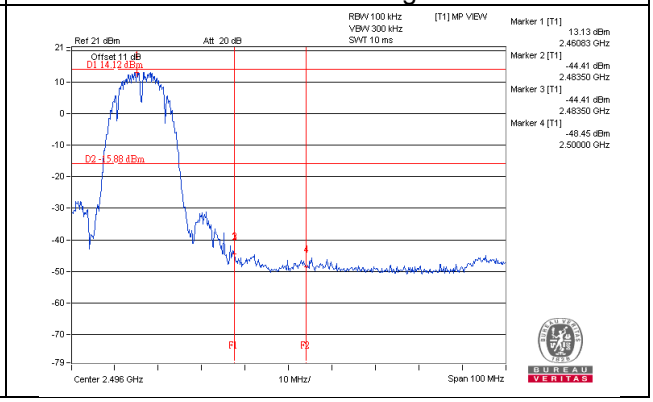
CH 11



CH 1 Band edge

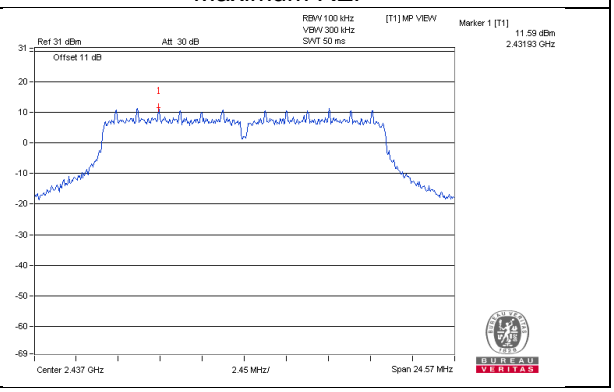


CH 11 Band edge

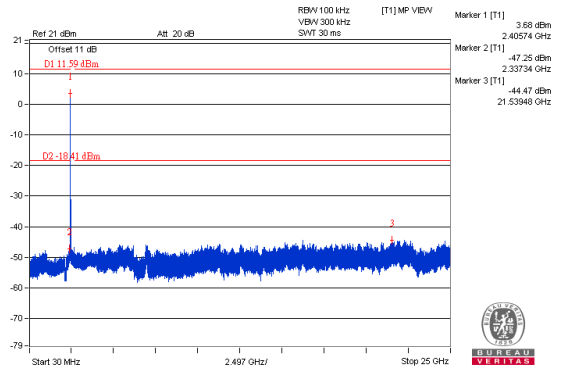


802.11g_Chain 0

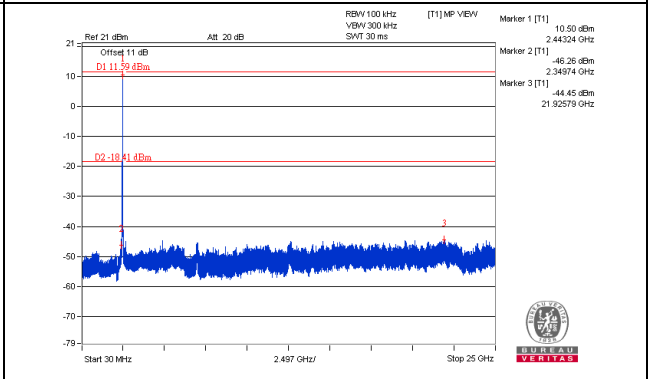
Maximum REF



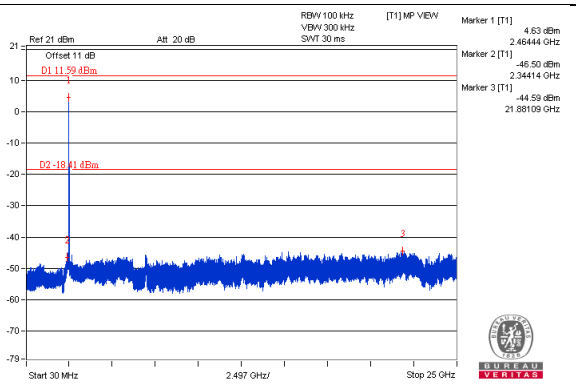
CH 1



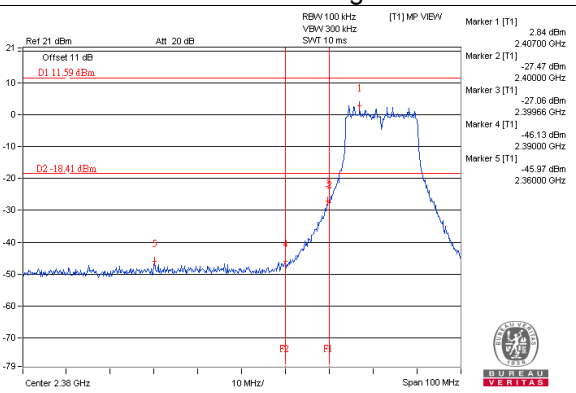
CH 6



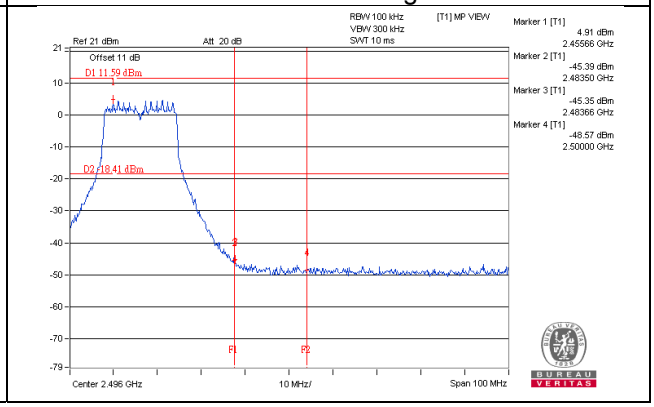
CH 11



CH 1 Band edge

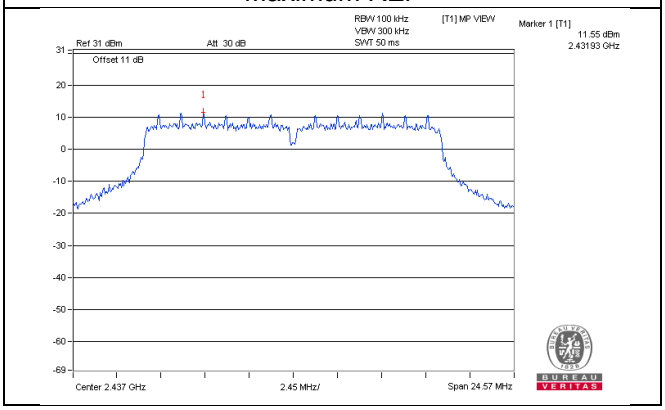


CH 11 Band edge

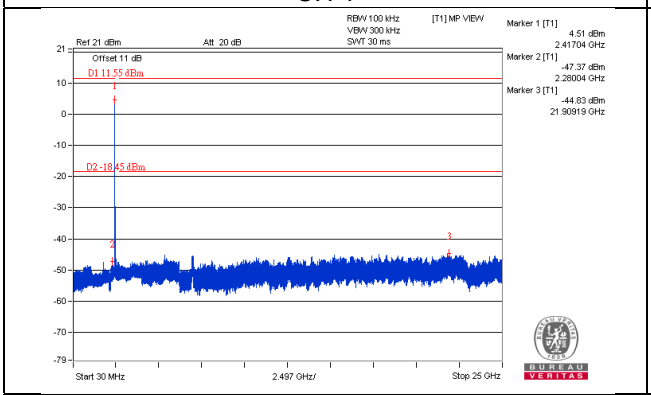


802.11g_Chain 1

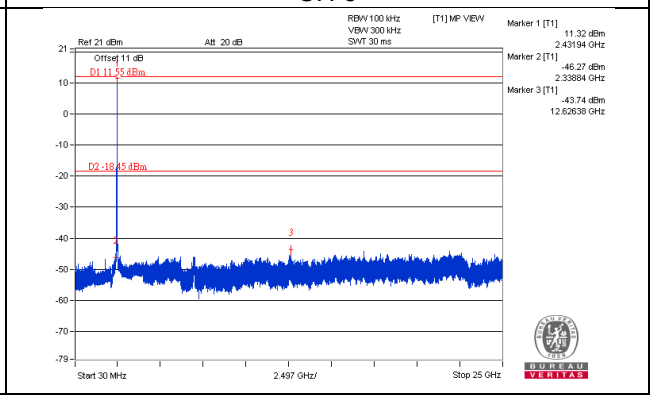
Maximum REF



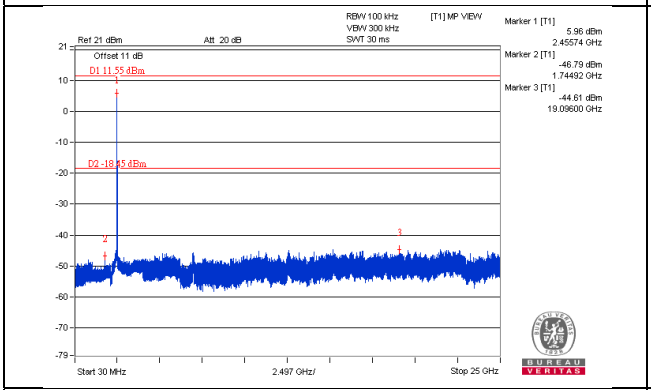
CH 1



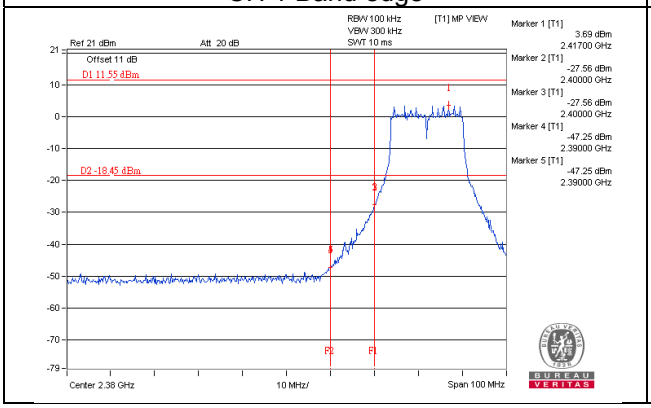
CH 6



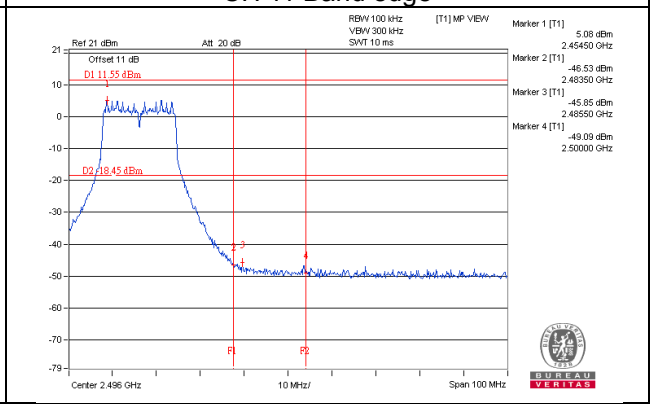
CH 11



CH 1 Band edge

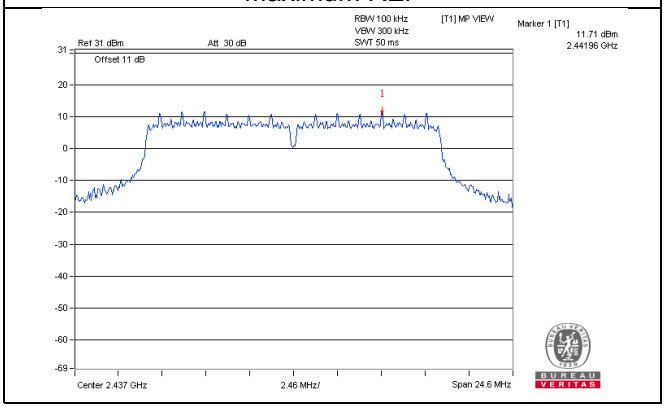


CH 11 Band edge

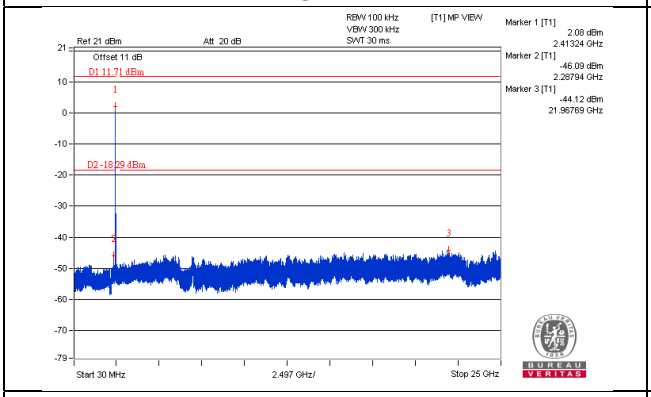


802.11g_Chain 2

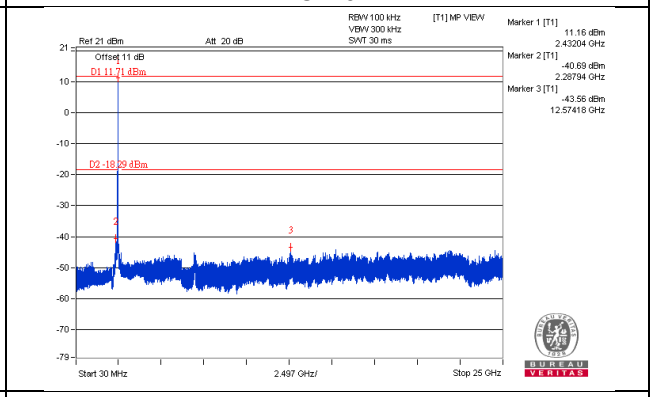
Maximum REF



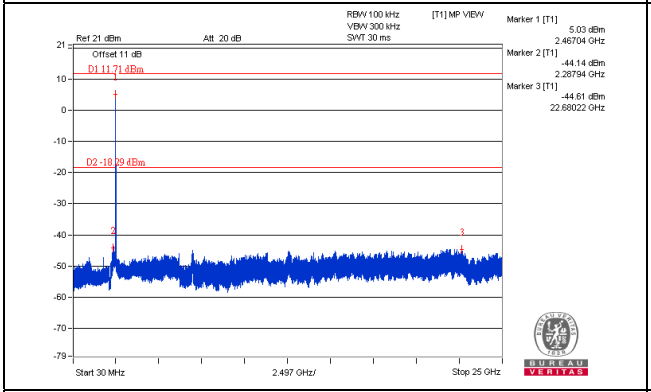
CH 1



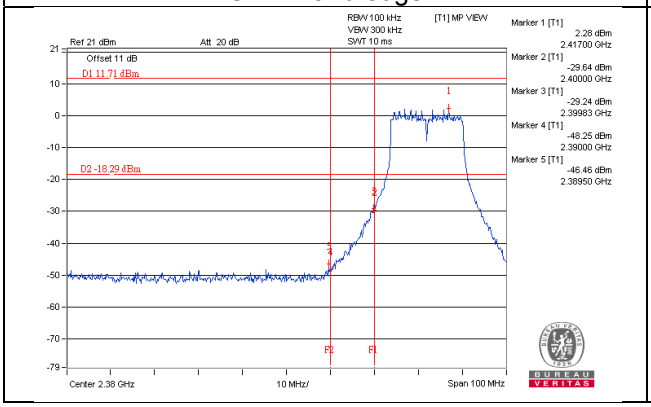
CH 6



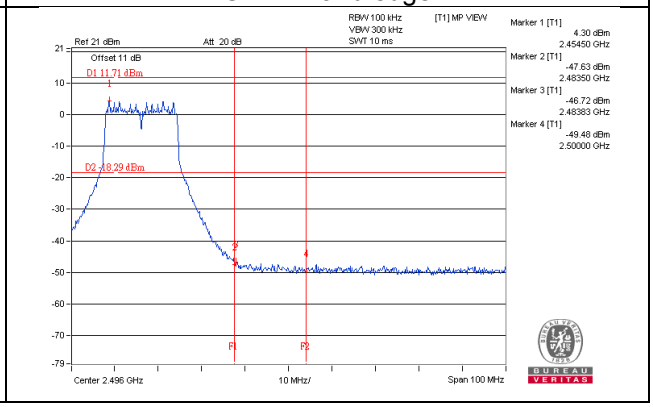
CH 11



CH 1 Band edge

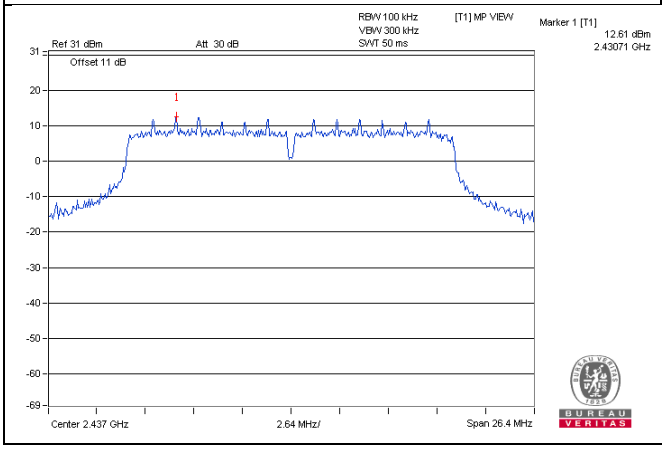


CH 11 Band edge

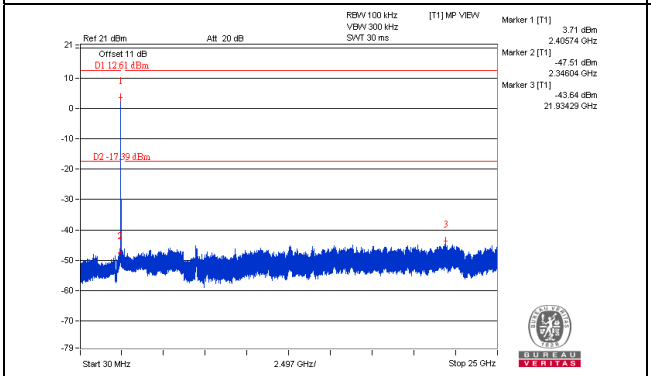


802.11n (HT20)_Chain 0

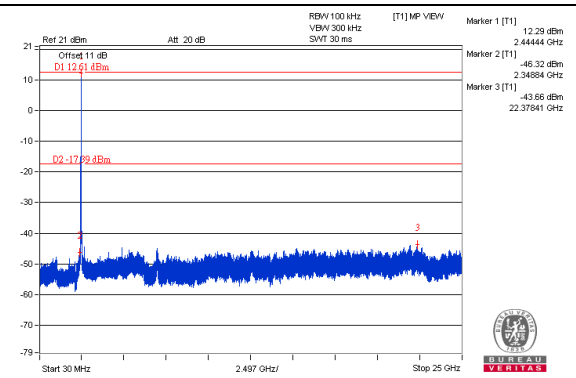
Maximum REF



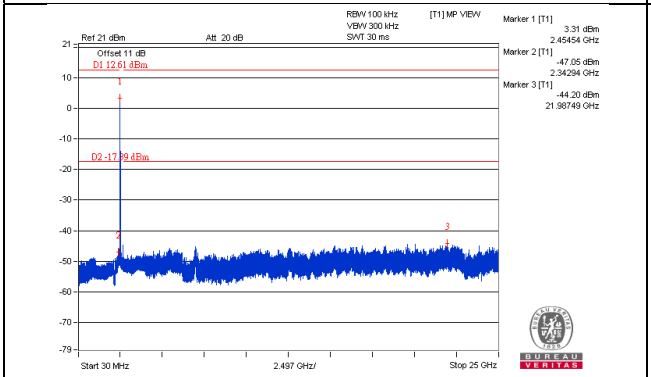
CH 1



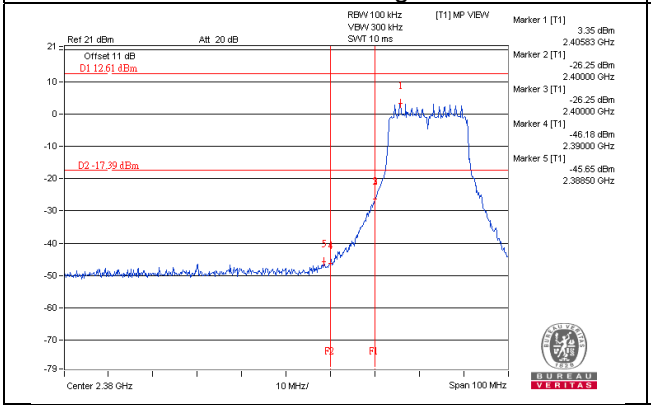
CH 6



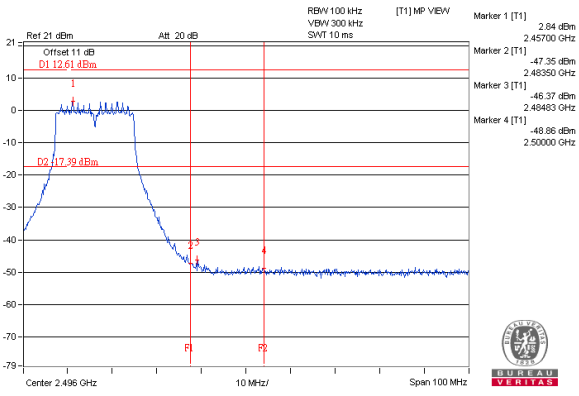
CH 11



CH 1 Band edge

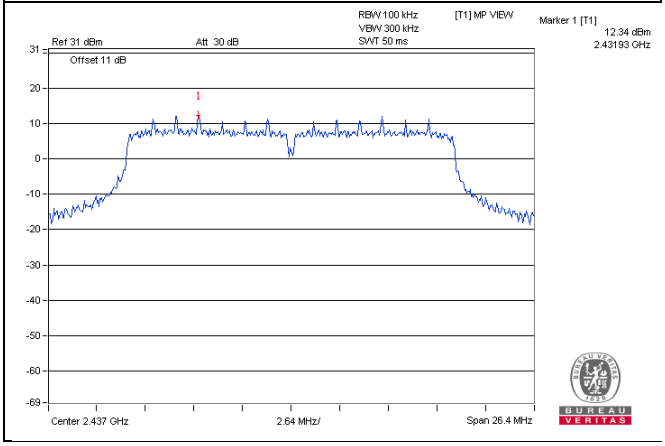


CH 11 Band edge

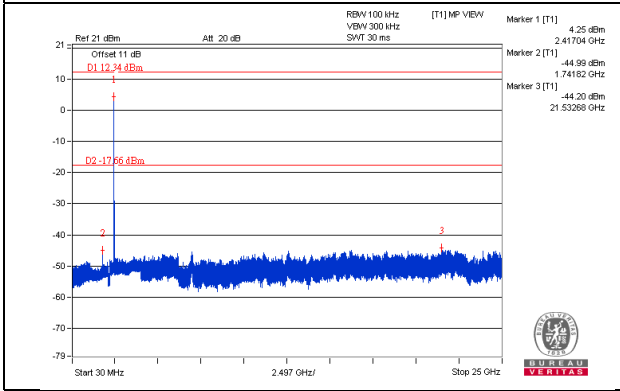


802.11n (HT20)_Chain 1

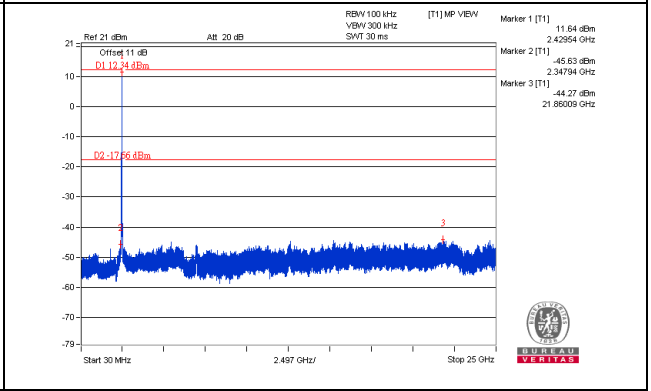
Maximum REF



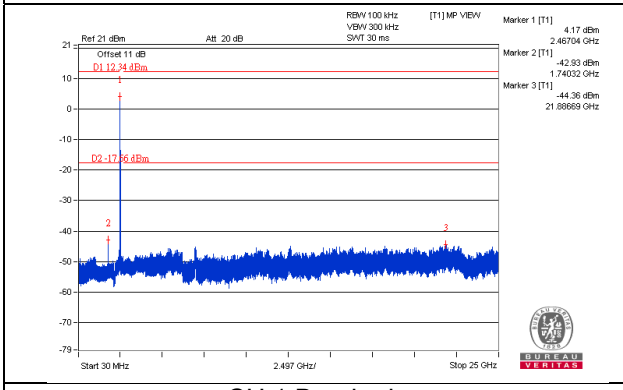
CH 1



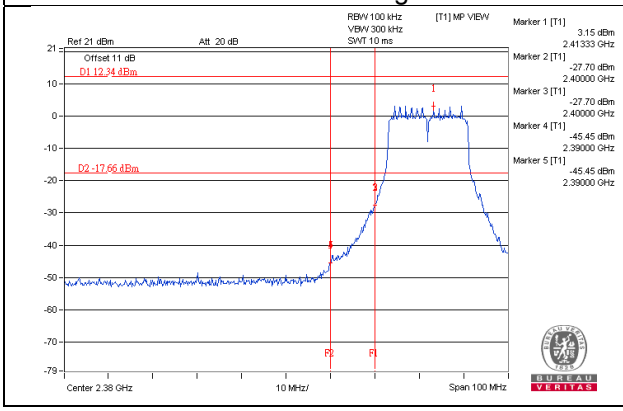
CH 6



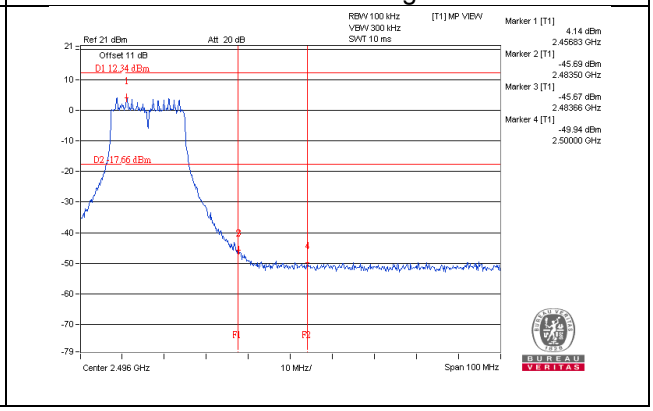
CH 11



CH 1 Band edge

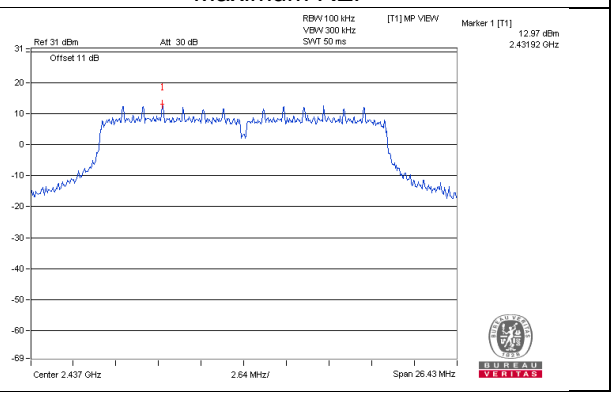


CH 11 Band edge

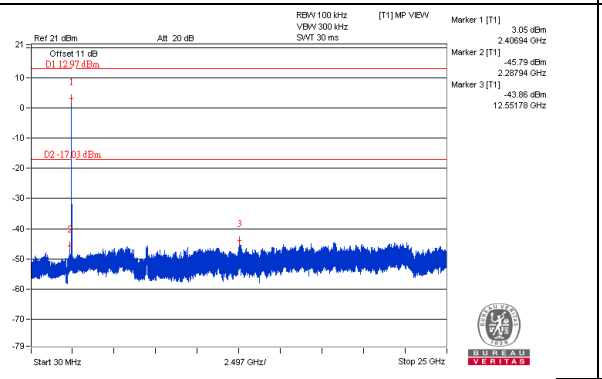


802.11n (HT20)_Chain 2

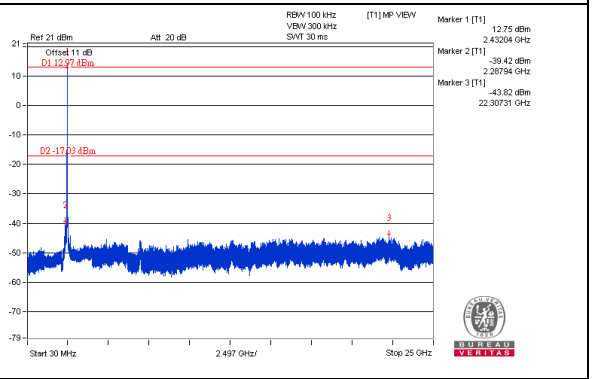
Maximum REF



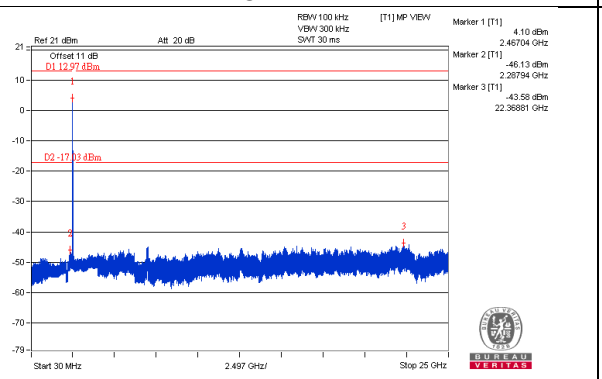
CH 1



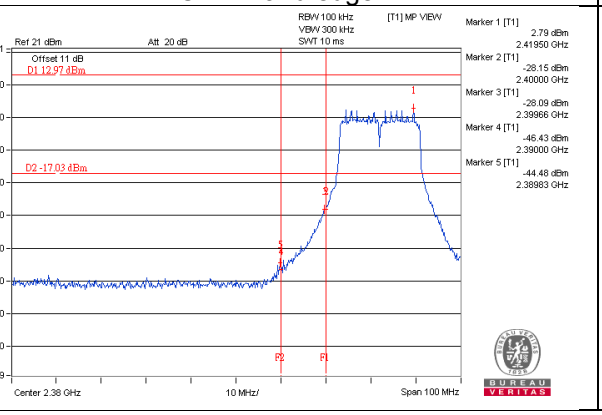
CH 6



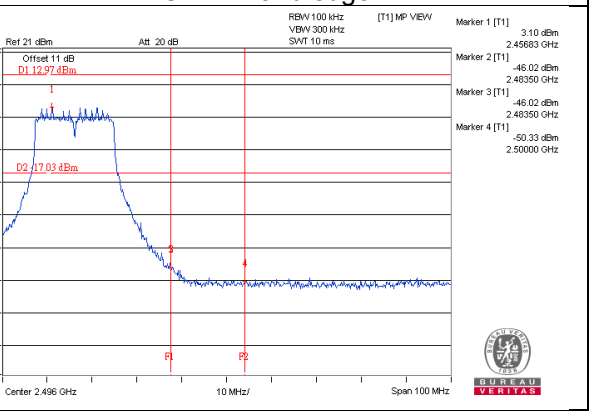
CH 11



CH 1 Band edge

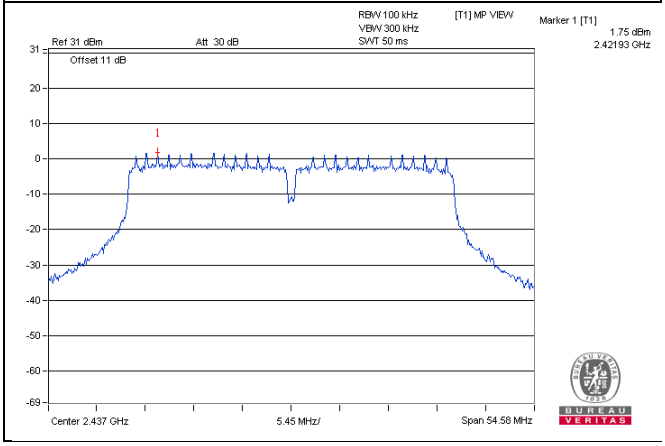


CH 11 Band edge

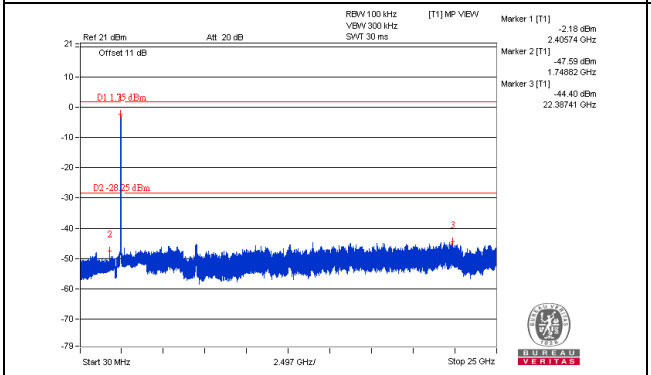


802.11n (HT40)_Chain 0

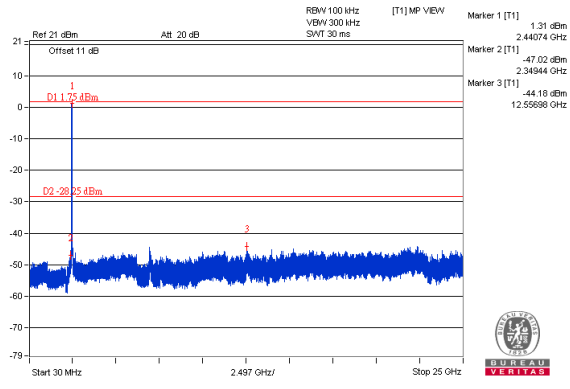
Maximum REF



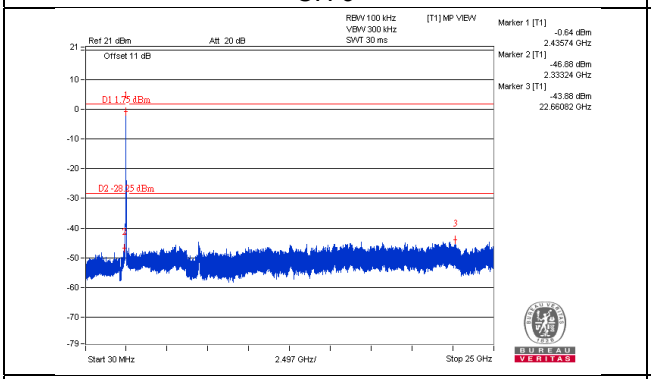
CH 3



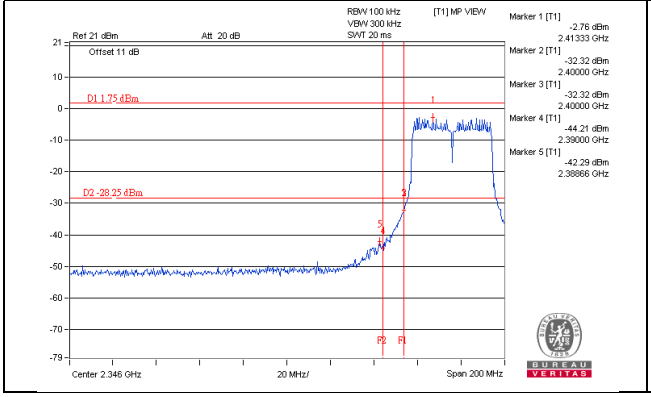
CH 6



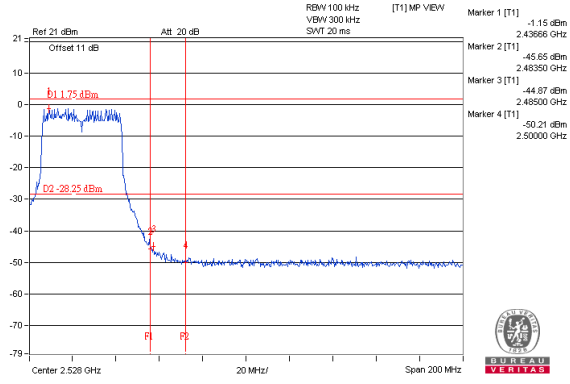
CH 9



CH 3 Band edge

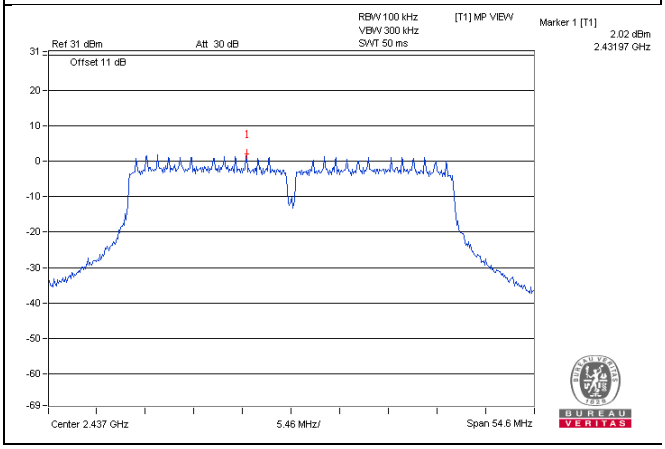


CH 9 Band edge

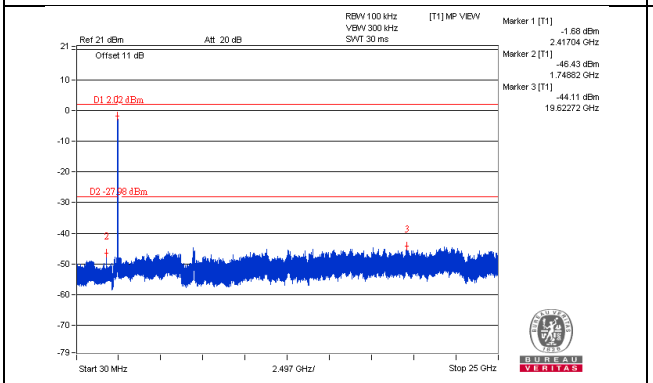


802.11n (HT40)_Chain 1

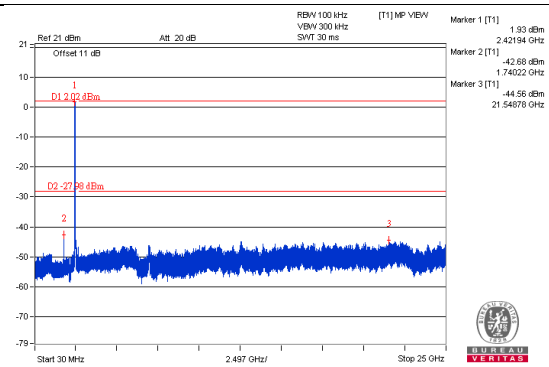
Maximum REF



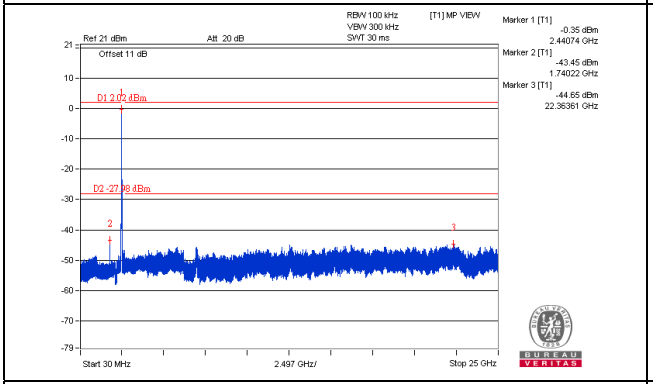
CH 3



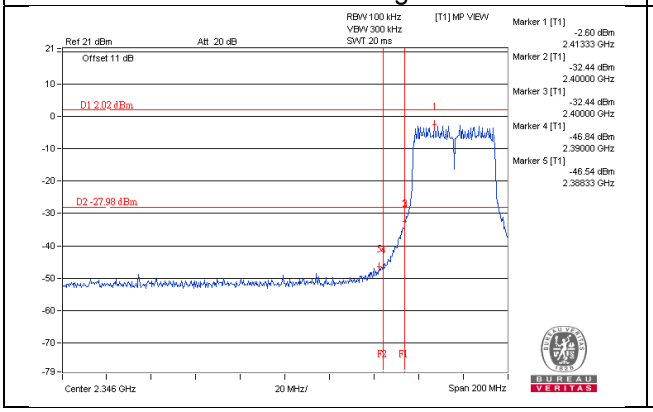
CH 6



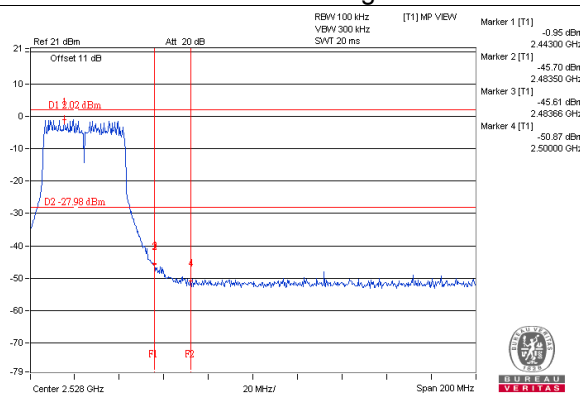
CH 9



CH 3 Band edge

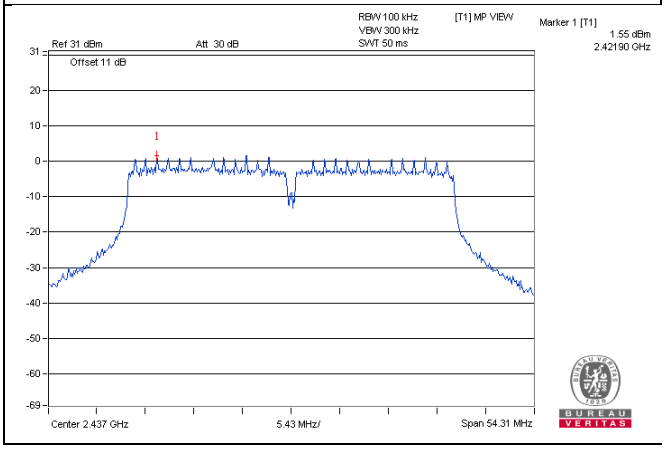


CH 9 Band edge

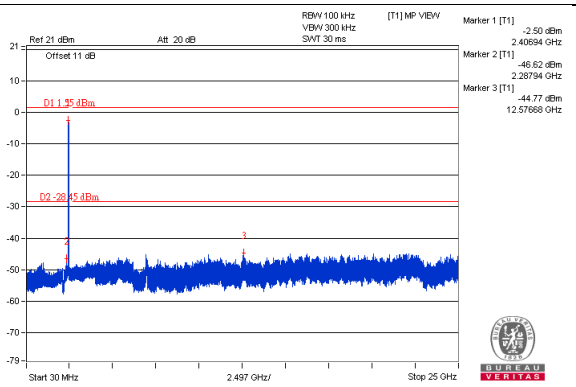


802.11n (HT40)_Chain 2

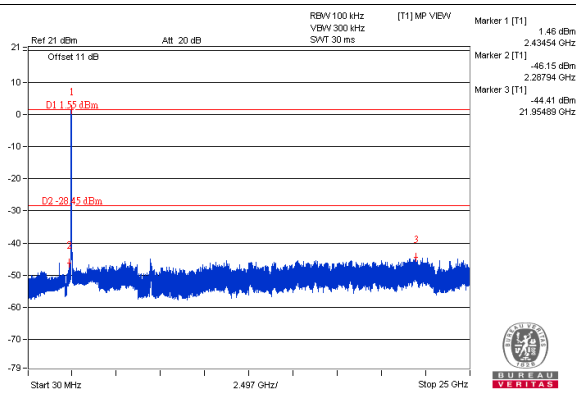
Maximum REF



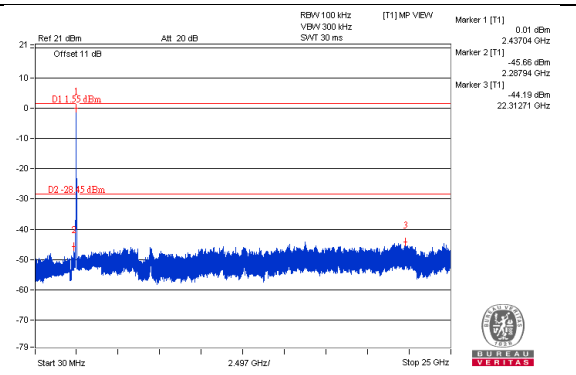
CH 3



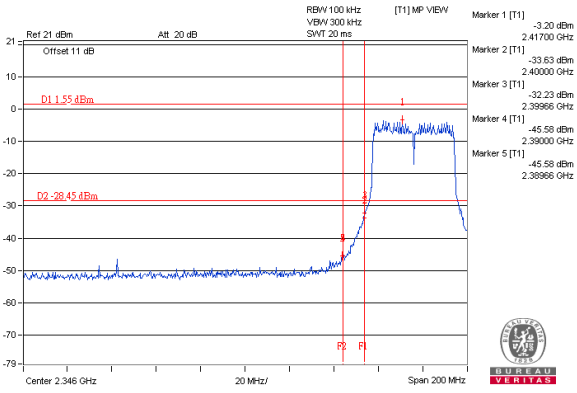
CH 6



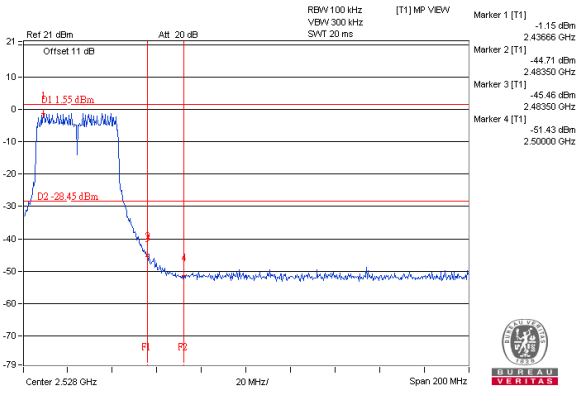
CH 9



CH 3 Band edge



CH 9 Band edge



5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
Tel: 886-3-6668565
Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab
Tel: 886-3-3183232
Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

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