

FCC Test Report

Report No.: RF191111C01

FCC ID: TVE-4617T06785

Test Model: FAP-431F, FAP-433F (refer to item 3.1 for more details)

Series Model: FortiAP 431Fxxxxxx, FAP-431Fxxxxxx, FORTIAP-431Fxxxxxx, FortiAP 433Fxxxxxx, FAP-433Fxxxxxx, FORTIAP-433Fxxxxxx (where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only) (refer to item 3.1 for more details)

Received Date: Nov. 11, 2019

Test Date: Jan. 04 ~ Mar. 02, 2020

Issued Date: Mar. 20, 2020

Applicant: Fortinet Inc.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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**FCC Registration /
Designation Number:** 788550 / TW0003



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Release Control Record

Issue No.	Description	Date Issued
RF191111C01	Original release	Mar. 20, 2020

1 Certificate of Conformity

Product: Secured Wireless Access Point

Brand: Fortinet

Test Model: FAP-431F, FAP-433F (refer to item 3.1 for more details)

Series Model: FortiAP 431Fxxxxxx, FAP-431Fxxxxxx, FORTIAP-431Fxxxxxx, FortiAP 433Fxxxxxx, FAP-433Fxxxxxx, FORTIAP-433Fxxxxxx (where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only) (refer to item 3.1 for more details)

Sample Status: Engineering sample

Applicant: Fortinet Inc.

Test Date: Jan. 04 ~ Mar. 02, 2020

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 RF characteristics under the conditions specified in this report.

Prepared by : Pettie Chen , **Date:** Mar. 20, 2020
Pettie Chen / Senior Specialist

Approved by : Bruce Chen , **Date:** Mar. 20, 2020
Bruce Chen / Senior Project Engineer

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 -6.41dB at 0.52153MHz.
15.205 / 15.209 / 15.247(d)	Radiated Emissions and Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1.1dB at 2483.50MHz and 4924.00MHz.
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	For internal antenna: Antenna connector is IPEX not a standard connector. For external antenna: Antenna connector is SMA. (The device is professionally installed)

Note:

- For 2.4G band compliance with rule 15.247(d) of the band-edge items, the test plots were recorded in Annex A. Test Procedures refer to report 4.1.3.
- Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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) (\pm)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.94 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	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	Secured Wireless Access Point
Brand	Fortinet
Test Model	FAP-431F, FAP-433F
Series Model	FortiAP 431Fxxxxxx, FAP-431Fxxxxxx, FORTIAP-431Fxxxxxx, FortiAP 433Fxxxxxx, FAP-433Fxxxxxx, FORTIAP-433Fxxxxxx (where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)
Model Difference	Refer to note
Sample Status	Engineering sample
Power Supply Rating	12Vdc from Adapter 54Vdc from PoE
Modulation Type	802.11b: BPSK, QPSK, CCK 802.11g/n: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Modulation Technology	DSSS, OFDM, OFDMA
Transfer Rate	802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps 802.11n (HT20/40): 6.5 to 600Mbps (MCS0 to MCS31) 802.11ac (VHT20/40): 6.5 to 1733Mbps (MCS0 to MCS9, NSS=1 to 4) 802.11ax: 9 to 1148Mbps (MCS0 to MCS11, NSS=1 to 4)
Operating Frequency	2412~2462MHz
Number of Channel	<u>2GHz traffic radio:</u> 802.11b, 802.11g, 802.11n (HT20), 802.11ac (VHT20) , 802.11ax (HE20): 11 802.11n (HT40), 802.11ac (VHT40), 802.11ax (HE40): 7 <u>Scanning radio:</u> 802.11b, 802.11g, 802.11n (HT20): 11 802.11n (HT40): 7
Output Power	Model: FAP-431F 2G traffic radio: CDD Mode: 982.103mW 2G traffic radio: Beamforming Mode: 296.049mW Scanning radio: CDD Mode: 17.179mW Model: FAP-433F 2G traffic radio: CDD Mode: 810.142mW 2G traffic radio: Beamforming Mode: 389.091mW Scanning radio: CDD Mode: 16.634mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Cable Supplied	NA

Note:

1. The following models are provided to this EUT. The model FAP-433F, FAP-431F were chosen for final test.

Brand	Test Model	Series Model	Difference
Fortinet	FAP-431F	FortiAP 431Fxxxxxx, FAP-431Fxxxxxx, FORTIAP-431Fxxxxxx (where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)	internal antenna
	FAP-433F	FortiAP 433Fxxxxxx, FAP-433Fxxxxxx, FORTIAP-433Fxxxxxx (where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)	external antenna

2. The EUT incorporates a MIMO function. Physically, the EUT provides 4 completed transmitters and 4 receivers.

Modulation Mode	CDD Mode	Beamforming Mode	TX Function	Radio
802.11b	Support	Not Support	4TX	2G traffic radio
802.11g	Support	Not Support	4TX	
802.11n (HT20)	Support	Not Support	4TX	
802.11n (HT40)	Support	Not Support	4TX	
802.11ac (VHT20)	Support	Support	4TX	
802.11ac (VHT40)	Support	Support	4TX	
802.11ax (HE20)	Support	Support	4TX	
802.11ax (HE40)	Support	Support	4TX	
802.11b	Support	Not Support	1TX	Scanning radio
802.11g	Support	Not Support	1TX	
802.11n (HT20)	Support	Not Support	1TX	
802.11n (HT40)	Support	Not Support	1TX	

* The bandwidth and modulation are similar for HT20/HT40 on 802.11n mode and VHT20/VHT40 on 802.11ac mode and HE20/HE40 on 802.11ax mode. Therefore the investigated worst case is the representative mode in test report. (Final test mode refer section 3.2.1)

* For 802.11n/ax, CDD mode and Beamforming mode are presented in power output test item. For other test items, CDD mode is the worst case for final tests after pretesting.

3. The EUT consumes power from the following adapter and POE.

Adapter (support units only)	
Brand	Asian Power Devices Inc.
Model	WA-30J12R
Input Power	100-240Vac, 50-60Hz, 0.9A MAX
Output Power	12Vdc, 2.5A
Power Line	1.5m cable without core attached on adapter

POE (support units only)	
Brand	EnGenius
Model	EPA5006GAT
Input Power	100-240Vac, 50-60Hz, 0.8A
Output Power	54Vdc, 0.6A PIN 4,5:54Vdc PIN 7,8:RETURN

4. The following antennas were provided to the EUT.

For Internal Antenna

Antenna Type	PIFA					
Antenna Connector	IPEX					
Antenna No.	Gain (dBi)					
	2400MHz	2450MHz	2500MHz	5150MHz	5500MHz	5850MHz
DL1	4.04	4.36	4.79	6.21	6.33	5.25
DL2	5.52	5.29	5.19	5.07	5.99	5.03
DL3	4.34	5.06	5.05	5.30	5.15	5.18
DL4	4.72	4.66	5.62	5.34	6.37	5.85
Scanning	4.93	4.60	5.22	5.06	5.09	5.14
BT	4.23	4.66	4.71	-	-	-

For External Antenna

Antenna Type	Dipole					
Antenna Connector	SMA					
Gain (dBi)	Frequency					
	2400MHz	2450MHz	2500MHz	5150MHz	5500MHz	5850MHz
Ext. Ant.	3.88	3.33	4	6.01	6.18	6.2
BT	4.23	4.66	4.71	-	-	-

5. 2G traffic radio, 5GHz traffic radio, Scanning radio (5G) and BT technologies can transmit at same time. But 5GHz traffic radio and Scanning radio (5G) cannot transmit in the same band at same time. 2G traffic radio and Scanning radio (2.4G) cannot transmit at same time.

3.2 Description of Test Modes

11 channels are provided for 802.11b, 802.11g, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20):

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), 802.11ac (VHT40), 802.11ax (HE40):

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 \geq 1G	RE<1G	PLC	APCM	EUT Model	Power
A	√	√	√	√	FAP-431F	Power from adapter
B	-	√	√	-		Power from PoE
C	√	√	√	√	FAP-433F	Power from adapter
D	-	√	√	-		Power from PoE

Where RE \geq 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 (For Model: FAP-431F_2G traffic radio), X-plane (For Model: FAP-431F_Scanning radio), X-plane (For Model: FAP-433F_2G traffic radio), Z-plane (For Model: FAP-433F_Scanning radio)**.
- Radiated emission test (below 1GHz) and power line conducted emission test items chosen the worst maximum power.
- "-": Means no effect.

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)	Remark
CDD Mode							
A, C	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0	2G traffic radio
	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0	
	802.11ax (HE20)	1 to 11	1, 6, 11	OFDMA	BPSK	MCS0	
	802.11ax (HE40)	3 to 9	3, 6, 9	OFDMA	BPSK	MCS0	
	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0	Scanning radio
	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	
Beamforming Mode							
A, C	802.11ax (HE20)	1 to 11	1, 6, 11	OFDMA	BPSK	MCS0	2G traffic radio
	802.11ax (HE40)	3 to 9	3, 6, 9	OFDMA	BPSK	MCS0	

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)	Remark
CDD Mode							
A, B, C, D	802.11ax (HE20)	1 to 11	6	OFDMA	BPSK	MCS0	2G traffic radio
A, B, C, D	802.11b	1 to 11	6	DSSS	DBPSK	1.0	Scanning radio

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)	Remark
CDD Mode							
A, B, C, D	802.11ax (HE20)	1 to 11	6	OFDMA	BPSK	MCS0	2G traffic radio
A, B, C, D	802.11b	1 to 11	6	DSSS	DBPSK	1.0	Scanning radio

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)	Remark
CDD Mode							
A, C	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0	2G traffic radio
	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0	
	802.11ac (VHT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5	
	802.11ac (VHT40)	3 to 9	3, 6, 9	OFDM	BPSK	13.5	
	802.11ax (HE20)	1 to 11	1, 6, 11	OFDMA	BPSK	MCS0	
	802.11ax (HE40)	3 to 9	3, 6, 9	OFDMA	BPSK	MCS0	
	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0	Scanning radio
	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	
Beamforming Mode							
A, C	802.11ac (VHT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5	2G traffic radio
	802.11ac (VHT40)	3 to 9	3, 6, 9	OFDM	BPSK	13.5	
	802.11ax (HE20)	1 to 11	1, 6, 11	OFDMA	BPSK	MCS0	
	802.11ax (HE40)	3 to 9	3, 6, 9	OFDMA	BPSK	MCS0	

*802.11ac (VHT20), 802.11ac (VHT40) are for Conducted Power Measurement only.

Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE \geq 1G	23 deg. C, 66% RH	120Vac, 60Hz	Titan Hsu
RE<1G	23 deg. C, 66% RH	120Vac, 60Hz	Titan Hsu
PLC	23 deg. C, 66% RH	120Vac, 60Hz	Greg Lin
APCM	25 deg. C, 60% RH	120Vac, 60Hz	Jisyong Wang

3.3 Duty Cycle of Test Signal

Duty cycle of test signal is > 98%, duty factor is not required.

Duty cycle of test signal is < 98%, duty factor is required.

Test Mode A

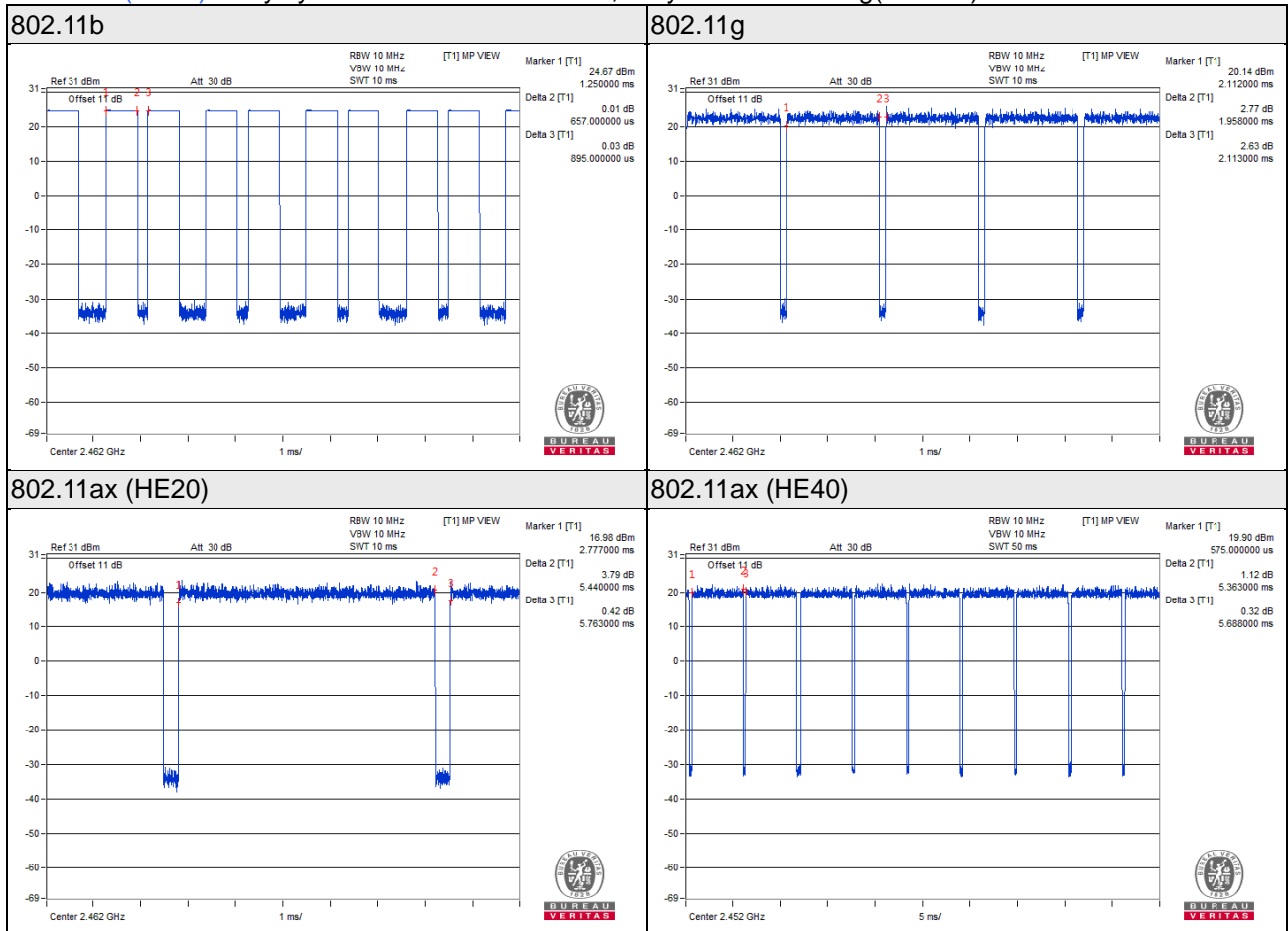
2G traffic radio

802.11b: Duty cycle = $0.657/0.895 = 0.734$, Duty factor = $10 * \log(1/0.734) = 1.34$

802.11g: Duty cycle = $1.958/2.113 = 0.927$, Duty factor = $10 * \log(1/0.927) = 0.33$

802.11ax (HE20): Duty cycle = $5.44/5.763 = 0.944$, Duty factor = $10 * \log(1/0.944) = 0.25$

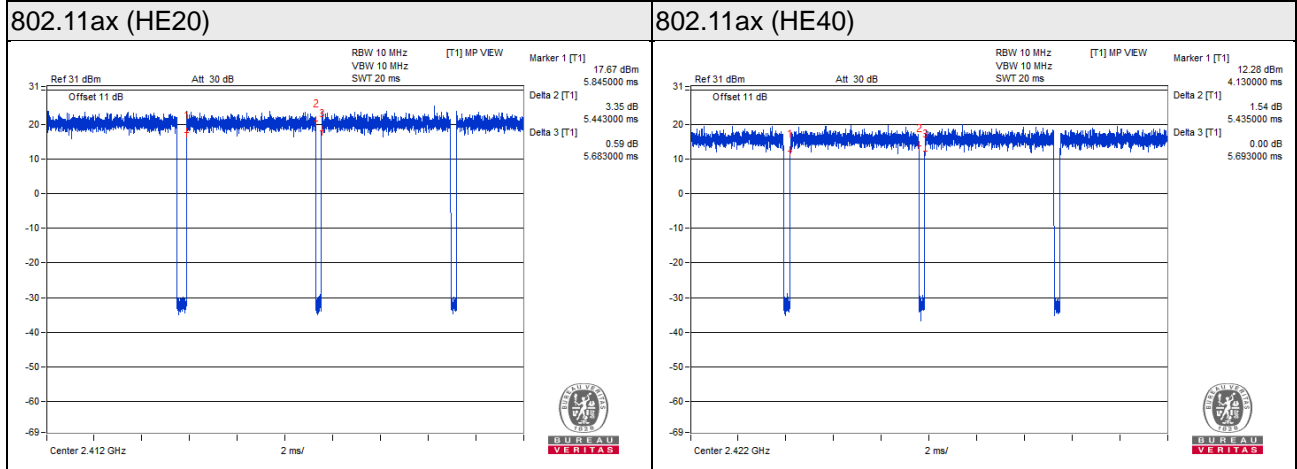
802.11ax (HE40): Duty cycle = $5.363/5.688 = 0.943$, Duty factor = $10 * \log(1/0.943) = 0.26$



2G traffic radio: Beamforming Mode

802.11ax (HE20): Duty cycle = $5.443/5.683 = 0.958$, Duty factor = $10 * \log(1/0.958) = 0.19$

802.11ax (HE40): Duty cycle = $5.435/5.693 = 0.955$, Duty factor = $10 * \log(1/0.955) = 0.20$



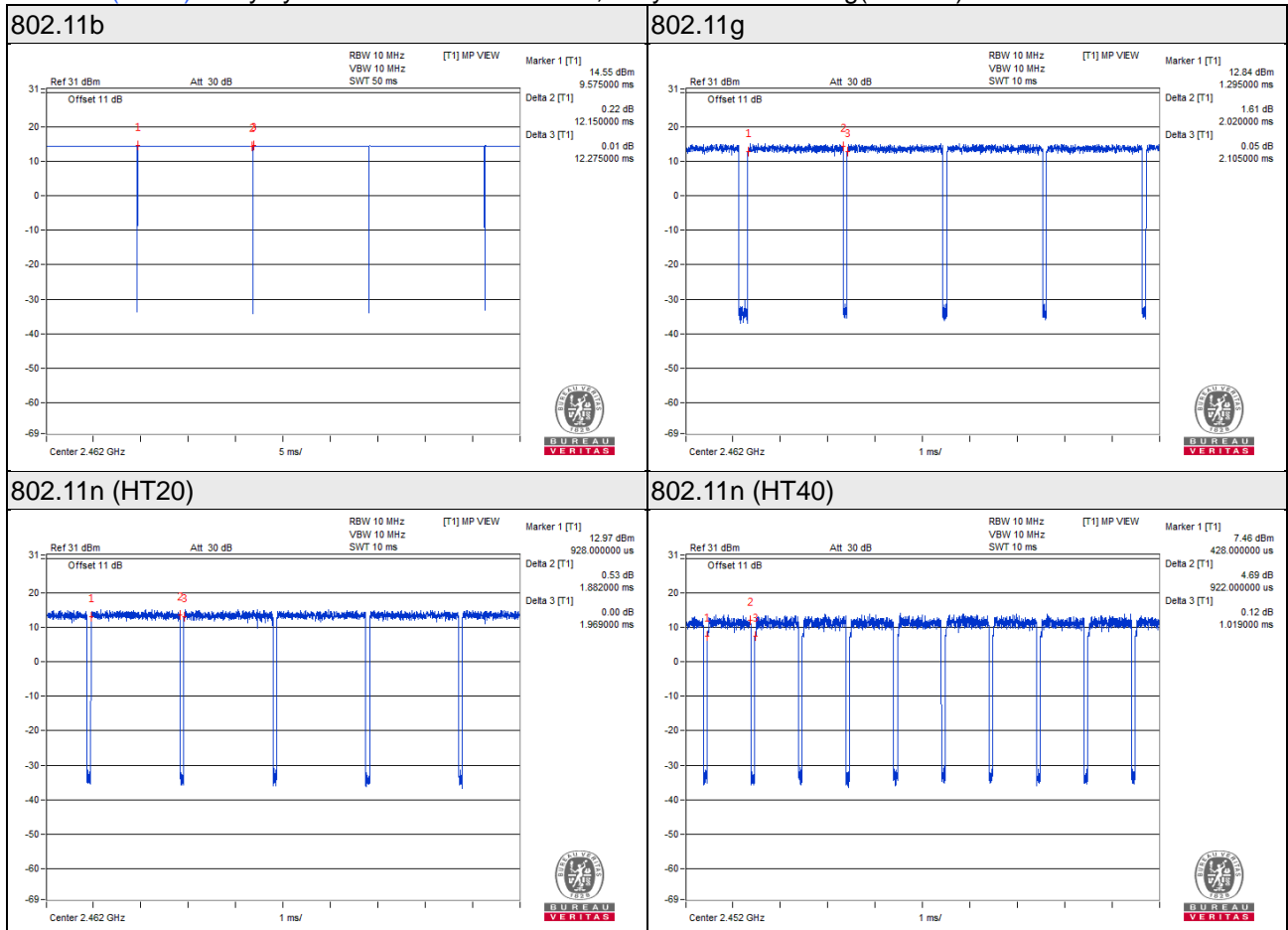
Scanning radio

802.11b: Duty cycle = $12.15/12.275 = 0.99$

802.11g: Duty cycle = $2.02/2.105 = 0.96$, Duty factor = $10 * \log(1/0.96) = 0.18$

802.11n (HT20): Duty cycle = $1.882/1.969 = 0.956$, Duty factor = $10 * \log(1/0.956) = 0.20$

802.11n (HT40): Duty cycle = $0.922/1.019 = 0.905$, Duty factor = $10 * \log(1/0.905) = 0.43$



Test Mode C

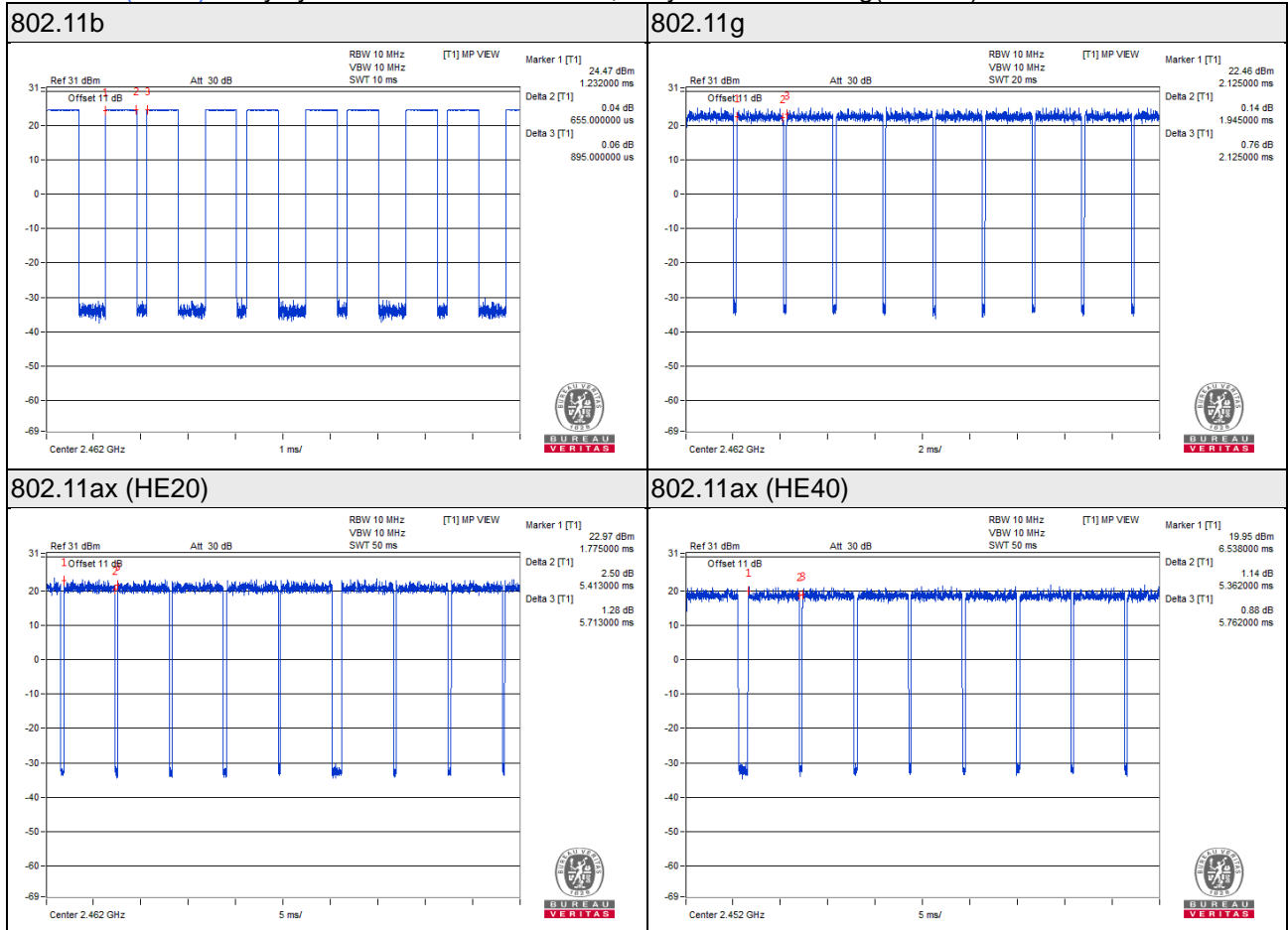
2G traffic radio: CDD Mode

802.11b: Duty cycle = $0.655/0.895 = 0.732$, Duty factor = $10 * \log(1/0.732) = 1.36$

802.11g: Duty cycle = $1.945/2.125 = 0.915$, Duty factor = $10 * \log(1/0.915) = 0.38$

802.11ax (HE20): Duty cycle = $5.413/5.713 = 0.947$, Duty factor = $10 * \log(1/0.947) = 0.23$

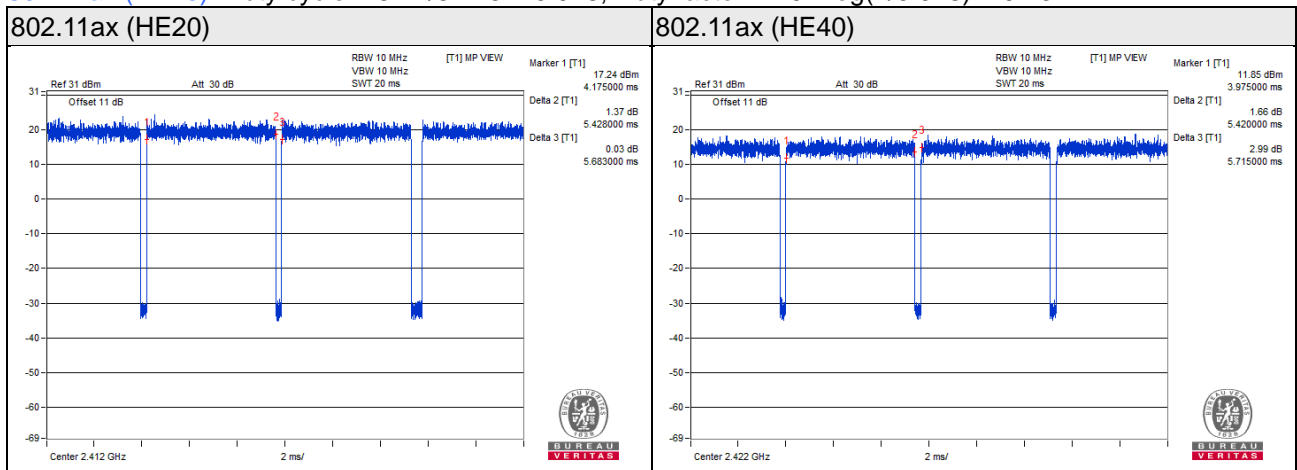
802.11ax (HE40): Duty cycle = $5.362/5.762 = 0.931$, Duty factor = $10 * \log(1/0.931) = 0.31$



2G traffic radio: Beamforming Mode

802.11ax (HE20): Duty cycle = $5.428/5.683 = 0.955$, Duty factor = $10 * \log(1/0.955) = 0.20$

802.11ax (HE40): Duty cycle = $5.42/5.715 = 0.948$, Duty factor = $10 * \log(1/0.948) = 0.23$



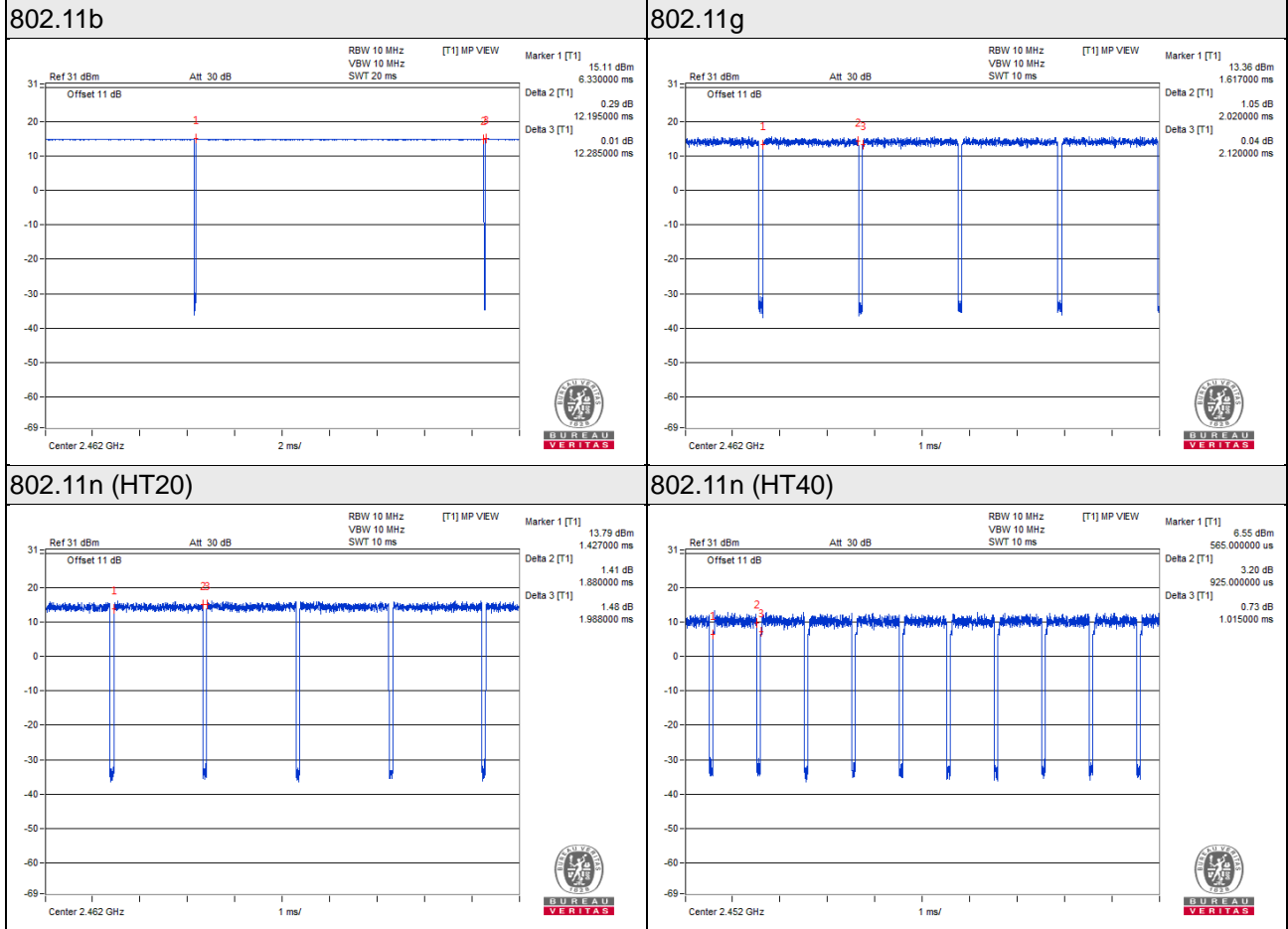
Scanning radio

802.11b: Duty cycle = $12.195/12.285 = 0.993$

802.11g: Duty cycle = $2.02/2.12 = 0.953$, Duty factor = $10 * \log(1/0.953) = 0.21$

802.11n (HT20): Duty cycle = $1.88/1.988 = 0.946$, Duty factor = $10 * \log(1/0.946) = 0.24$

802.11n (HT40): Duty cycle = $0.925/1.015 = 0.911$, Duty factor = $10 * \log(1/0.911) = 0.40$



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	NA	NA	NA	NA	-
C.	Adapter	Asian Power Devices Inc.	WA-30J12R	NA	NA	Provided by client
D.	USB Flash	HP	v250W	09	NA	-
E.	POE	EnGenius	EPA5006GAT	NA	NA	Provided by client

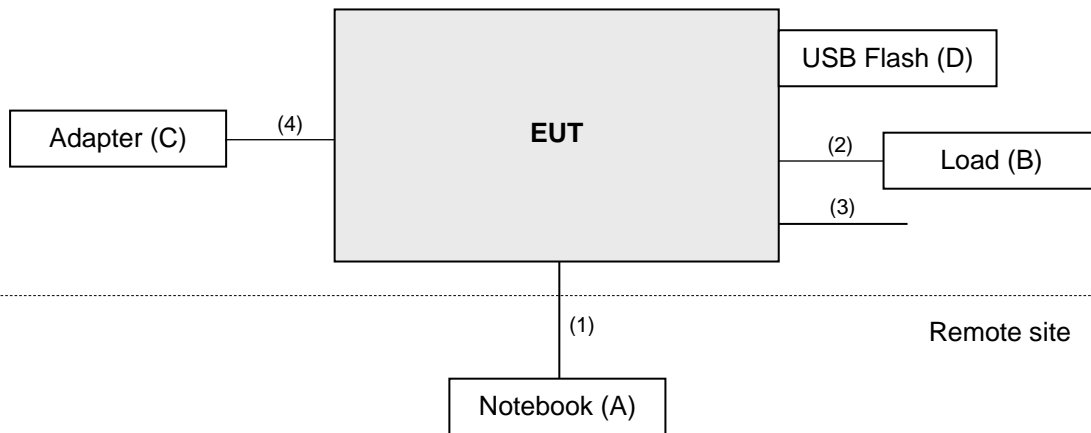
Note:

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

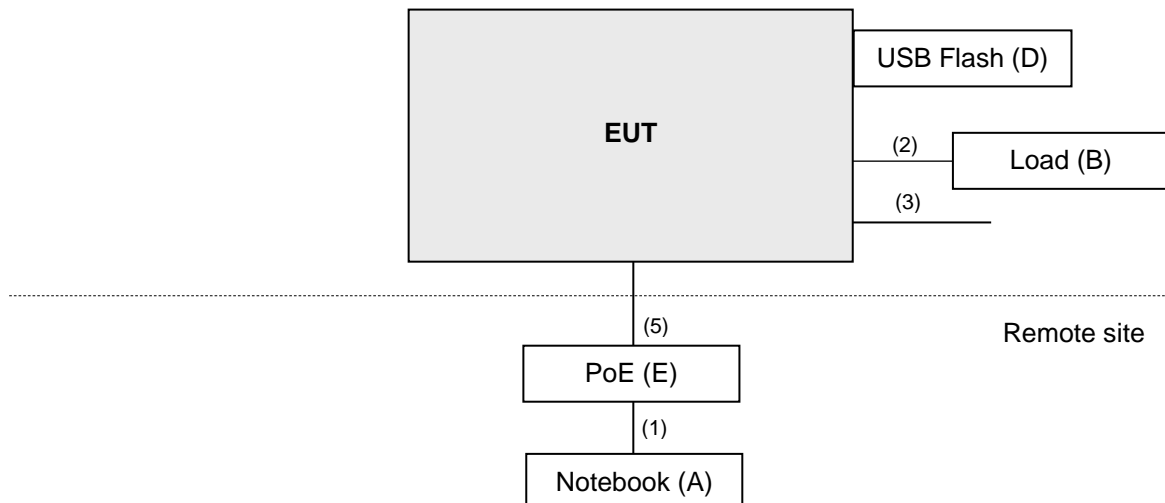
ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	LAN	1	7.0	N	0	RJ45, Cat5e
2.	LAN	1	1.5	N	0	RJ45, Cat5e
3.	Console	1	1.0	Y	1	-
4.	Power cable	1	1.5	-	0	Provided by client
5.	LAN	1	1.5	N	0	RJ45, Cat5e

3.4.1 Configuration of System under Test

Mode A, C



Mode B, D



3.5 General Description of Applied Standards and References

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

Test standard:

FCC Part 15, Subpart C (15.247)

ANSI C63.10-2013

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

References Test Guidance:

KDB 558074 D01 15.247 Meas Guidance v05r02

KDB 662911 D01 Multiple Transmitter Output v02r01

All test items have been performed as a reference to the above KDB test guidance.

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 20dB 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 30, 2019	May 29, 2020
BILOG Antenna SCHWARZBECK	VULB9168	9168-171	Nov. 11, 2019	Nov. 10, 2020
HORN Antenna SCHWARZBECK	9120D	209	Nov. 24, 2019	Nov. 23, 2020
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 24, 2019	Nov. 23, 2020
Loop Antenna TESEQ	HLA 6121	45745	Jul. 01, 2019	Jun. 30, 2020
Preamplifier Agilent (Below 1GHz)	8447D	2944A10738	Aug. 20, 2019	Aug. 19, 2020
Preamplifier Agilent (Above 1GHz)	8449B	3008A02465	Mar. 27, 2019	Mar. 26, 2020
RF Coaxial Cable WOKEN With 5dB PAD	8D-FB	Cable-CH3-01	Aug. 20, 2019	Aug. 19, 2020
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH3-03 (223653/4)	Aug. 20, 2019	Aug. 19, 2020
RF signal cable HUBER+SUHNER& EMCI	SUCOFLEX 104&EMC104-SM-S M-8000	Cable-CH3-03 (309224+170907)	Aug. 20, 2019	Aug. 19, 2020
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	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
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Pre-amplifier (18GHz-40GHz) EMC	EMC184045B	980175	Sep. 05, 2019	Sep. 04, 2020
USB Wideband Power Sensor KEYSIGHT	U2021XA	MY55050005/MY5519 0004/MY55190007/MY 55210005	Jul. 15, 2019	Jul. 14, 2020

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.

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. Parallel, perpendicular, and ground-parallel orientations 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:

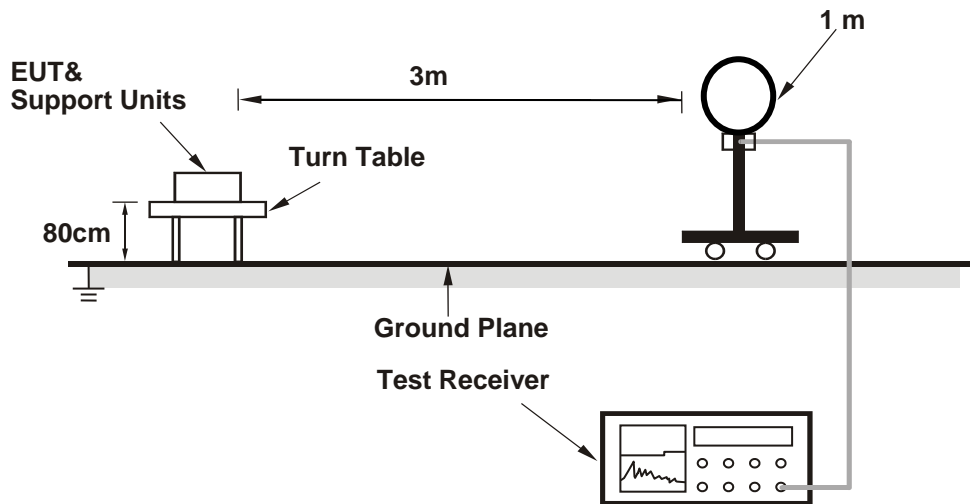
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
(2G traffic radio: 802.11b: RBW = 1MHz, VBW = 3kHz; 802.11g: RBW = 1MHz, VBW = 1kHz; 802.11ax (HE20): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE40): RBW = 1MHz, VBW = 1kHz;
2G traffic radio: Beamforming Mode:
802.11ax (HE20): RBW = 1MHz, VBW = 1kHz; 802.11ax (HE40): RBW = 1MHz, VBW = 1kHz;
Scanning radio: 802.11b: RBW = 1MHz, VBW = 10Hz; 802.11g: RBW = 1MHz, VBW = 1kHz; 802.11n (HT20): RBW = 1MHz, VBW = 1kHz; 802.11n (HT40): RBW = 1MHz, VBW = 3kHz)
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

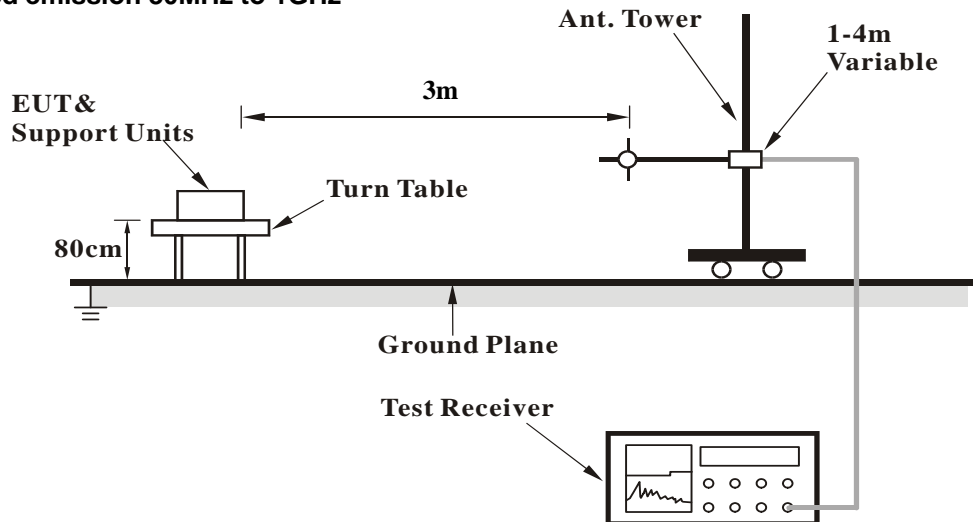
No deviation.

4.1.5 Test Setup

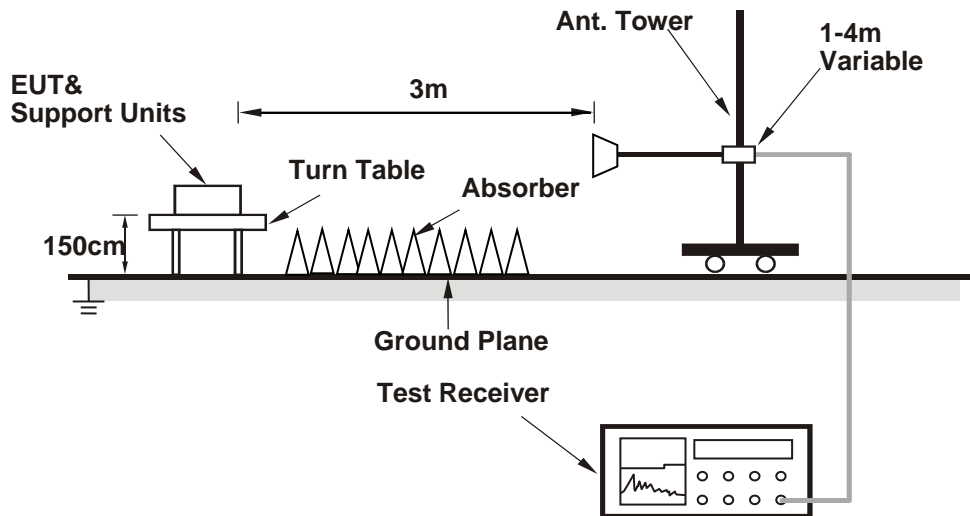
For Radiated emission below 30MHz



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 (provided by manufacturer) 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:

Test Mode A

2G traffic radio: CDD Mode

802.11b

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

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	2387.00	57.3 PK	74.0	-16.7	1.67 H	274	25.0	32.3
2	2387.00	45.8 AV	54.0	-8.2	1.67 H	274	13.5	32.3
3	*2412.00	114.9 PK			1.80 H	279	82.6	32.3
4	*2412.00	111.6 AV			1.80 H	279	79.3	32.3
5	4824.00	52.2 PK	74.0	-21.8	1.31 H	308	48.8	3.4
6	4824.00	49.0 AV	54.0	-5.0	1.31 H	308	45.6	3.4
7	14472.00	61.4 PK	74.0	-12.6	2.21 H	297	37.2	24.2
8	14472.00	52.8 AV	54.0	-1.2	2.21 H	297	28.6	24.2
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	2387.00	57.3 PK	74.0	-16.7	2.36 V	21	25.0	32.3
2	2387.00	45.4 AV	54.0	-8.6	2.36 V	21	13.1	32.3
3	*2412.00	108.9 PK			2.33 V	17	76.6	32.3
4	*2412.00	105.8 AV			2.33 V	17	73.5	32.3
5	4824.00	51.7 PK	74.0	-22.3	2.30 V	333	48.3	3.4
6	4824.00	48.1 AV	54.0	-5.9	2.30 V	333	44.7	3.4
7	14472.00	60.7 PK	74.0	-13.3	1.43 V	336	36.5	24.2
8	14472.00	52.2 AV	54.0	-1.8	1.43 V	336	28.0	24.2

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	116.2 PK			1.57 H	278	83.9	32.3
2	*2437.00	112.8 AV			1.57 H	278	80.5	32.3
3	4874.00	52.1 PK	74.0	-21.9	2.02 H	278	48.4	3.7
4	4874.00	48.9 AV	54.0	-5.1	2.02 H	278	45.2	3.7
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	107.1 PK			2.92 V	75	74.8	32.3
2	*2437.00	103.8 AV			2.92 V	75	71.5	32.3
3	4874.00	51.1 PK	74.0	-22.9	2.39 V	274	47.4	3.7
4	4874.00	47.6 AV	54.0	-6.4	2.39 V	274	43.9	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	114.0 PK			2.14 H	315	81.6	32.4
2	*2462.00	110.5 AV			2.14 H	315	78.1	32.4
3	2483.50	57.5 PK	74.0	-16.5	2.17 H	313	25.1	32.4
4	2483.50	46.7 AV	54.0	-7.3	2.17 H	313	14.3	32.4
5	4924.00	53.1 PK	74.0	-20.9	1.55 H	282	49.3	3.8
6	4924.00	50.1 AV	54.0	-3.9	1.55 H	282	46.3	3.8

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	108.7 PK			3.33 V	34	76.3	32.4
2	*2462.00	105.5 AV			3.33 V	34	73.1	32.4
3	2483.50	56.7 PK	74.0	-17.3	3.35 V	36	24.3	32.4
4	2483.50	45.4 AV	54.0	-8.6	3.35 V	36	13.0	32.4
5	4924.00	54.8 PK	74.0	-19.2	1.55 V	325	51.0	3.8
6	4924.00	52.5 AV	54.0	-1.5	1.55 V	325	48.7	3.8

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11g

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

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	69.7 PK	74.0	-4.3	2.28 H	333	37.4	32.3
2	2390.00	52.6 AV	54.0	-1.4	2.28 H	333	20.3	32.3
3	*2412.00	118.6 PK			1.20 H	296	86.3	32.3
4	*2412.00	108.8 AV			1.20 H	296	76.5	32.3
5	4824.00	58.9 PK	74.0	-15.1	1.19 H	303	55.5	3.4
6	4824.00	42.7 AV	54.0	-11.3	1.19 H	303	39.3	3.4
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	65.6 PK	74.0	-8.4	3.52 V	352	33.3	32.3
2	2390.00	49.9 AV	54.0	-4.1	3.52 V	352	17.6	32.3
3	*2412.00	113.5 PK			3.77 V	311	81.2	32.3
4	*2412.00	104.0 AV			3.77 V	311	71.7	32.3
5	4824.00	57.1 PK	74.0	-16.9	1.45 V	315	53.7	3.4
6	4824.00	41.6 AV	54.0	-12.4	1.45 V	315	38.2	3.4

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	118.4 PK			1.11 H	297	86.1	32.3
2	*2437.00	108.6 AV			1.11 H	297	76.3	32.3
3	4874.00	57.9 PK	74.0	-16.1	1.24 H	311	54.2	3.7
4	4874.00	43.9 AV	54.0	-10.1	1.24 H	311	40.2	3.7

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	116.0 PK			3.78 V	345	83.7	32.3
2	*2437.00	106.2 AV			3.78 V	345	73.9	32.3
3	4874.00	57.9 PK	74.0	-16.1	1.44 V	322	54.2	3.7
4	4874.00	42.3 AV	54.0	-11.7	1.44 V	322	38.6	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	115.8 PK			2.77 H	297	83.4	32.4
2	*2462.00	106.3 AV			2.77 H	297	73.9	32.4
3	2483.50	68.2 PK	74.0	-5.8	1.65 H	295	35.8	32.4
4	2483.50	52.9 AV	54.0	-1.1	1.65 H	295	20.5	32.4
5	4924.00	52.5 PK	74.0	-21.5	2.64 H	290	48.7	3.8
6	4924.00	37.3 AV	54.0	-16.7	2.64 H	290	33.5	3.8

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	115.9 PK			3.45 V	328	83.5	32.4
2	*2462.00	106.2 AV			3.45 V	328	73.8	32.4
3	2483.50	63.4 PK	74.0	-10.6	3.31 V	325	31.0	32.4
4	2483.50	49.3 AV	54.0	-4.7	3.31 V	325	16.9	32.4
5	4924.00	53.8 PK	74.0	-20.2	1.15 V	324	50.0	3.8
6	4924.00	40.0 AV	54.0	-14.0	1.15 V	324	36.2	3.8

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11ax (HE20)

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

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	65.5 PK	74.0	-8.5	2.56 H	301	33.2	32.3
2	2390.00	52.6 AV	54.0	-1.4	2.56 H	301	20.3	32.3
3	*2412.00	120.2 PK			2.82 H	302	87.9	32.3
4	*2412.00	107.1 AV			2.82 H	302	74.8	32.3
5	4824.00	55.6 PK	74.0	-18.4	2.71 H	325	52.2	3.4
6	4824.00	37.1 AV	54.0	-16.9	2.71 H	325	33.7	3.4

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	62.9 PK	74.0	-11.1	3.52 V	315	30.6	32.3
2	2390.00	48.6 AV	54.0	-5.4	3.52 V	315	16.3	32.3
3	*2412.00	116.0 PK			3.48 V	312	83.7	32.3
4	*2412.00	102.8 AV			3.48 V	312	70.5	32.3
5	4824.00	59.0 PK	74.0	-15.0	1.65 V	340	55.6	3.4
6	4824.00	38.3 AV	54.0	-15.7	1.65 V	340	34.9	3.4

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) – Pre-Amplifier 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	121.4 PK			2.56 H	308	89.1	32.3
2	*2437.00	108.7 AV			2.56 H	308	76.4	32.3
3	4874.00	58.5 PK	74.0	-15.5	2.69 H	292	54.8	3.7
4	4874.00	42.7 AV	54.0	-11.3	2.69 H	292	39.0	3.7
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	119.9 PK			3.42 V	309	87.6	32.3
2	*2437.00	107.1 AV			3.42 V	309	74.8	32.3
3	4874.00	67.1 PK	74.0	-6.9	2.40 V	335	63.4	3.7
4	4874.00	45.6 AV	54.0	-8.4	2.40 V	335	41.9	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	117.3 PK			1.40 H	293	84.9	32.4
2	*2462.00	104.2 AV			1.40 H	293	71.8	32.4
3	2483.50	67.1 PK	74.0	-6.9	1.41 H	287	34.7	32.4
4	2483.50	52.6 AV	54.0	-1.4	1.41 H	287	20.2	32.4
5	4924.00	50.3 PK	74.0	-23.7	2.37 H	279	46.5	3.8
6	4924.00	34.4 AV	54.0	-19.6	2.37 H	279	30.6	3.8

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	114.2 PK			3.40 V	328	81.8	32.4
2	*2462.00	102.0 AV			3.40 V	328	69.6	32.4
3	2483.50	64.7 PK	74.0	-9.3	3.67 V	3	32.3	32.4
4	2483.50	50.1 AV	54.0	-3.9	3.67 V	3	17.7	32.4
5	4924.00	52.6 PK	74.0	-21.4	1.20 V	326	48.8	3.8
6	4924.00	35.9 AV	54.0	-18.1	1.20 V	326	32.1	3.8

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11ax (HE40)

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

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	65.5 PK	74.0	-8.5	2.12 H	48	33.2	32.3
2	2390.00	52.7 AV	54.0	-1.3	2.12 H	48	20.4	32.3
3	*2422.00	113.3 PK			2.55 H	309	81.0	32.3
4	*2422.00	100.0 AV			2.55 H	309	67.7	32.3
5	4844.00	45.6 PK	74.0	-28.4	2.46 H	289	42.1	3.5
6	4844.00	32.7 AV	54.0	-21.3	2.46 H	289	29.2	3.5

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	61.5 PK	74.0	-12.5	3.46 V	21	29.2	32.3
2	2390.00	48.8 AV	54.0	-5.2	3.46 V	21	16.5	32.3
3	*2422.00	109.3 PK			3.48 V	351	77.0	32.3
4	*2422.00	96.8 AV			3.48 V	351	64.5	32.3
5	4844.00	50.3 PK	74.0	-23.7	1.64 V	345	46.8	3.5
6	4844.00	34.3 AV	54.0	-19.7	1.64 V	345	30.8	3.5

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	66.3 PK	74.0	-7.7	2.45 H	47	34.0	32.3
2	2390.00	52.7 AV	54.0	-1.3	2.45 H	47	20.4	32.3
3	*2437.00	116.6 PK			1.51 H	311	84.3	32.3
4	*2437.00	104.5 AV			1.51 H	311	72.2	32.3
5	4874.00	51.1 PK	74.0	-22.9	2.60 H	278	47.4	3.7
6	4874.00	36.6 AV	54.0	-17.4	2.60 H	278	32.9	3.7

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	64.1 PK	74.0	-9.9	3.47 V	351	31.8	32.3
2	2390.00	50.2 AV	54.0	-3.8	3.47 V	351	17.9	32.3
3	*2437.00	113.3 PK			3.38 V	26	81.0	32.3
4	*2437.00	101.5 AV			3.38 V	26	69.2	32.3
5	4874.00	54.2 PK	74.0	-19.8	2.16 V	336	50.5	3.7
6	4874.00	36.5 AV	54.0	-17.5	2.16 V	336	32.8	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	116.0 PK			2.52 H	309	83.6	32.4
2	*2452.00	103.7 AV			2.52 H	309	71.3	32.4
3	2483.50	70.0 PK	74.0	-4.0	2.44 H	308	37.6	32.4
4	2483.50	52.8 AV	54.0	-1.2	2.44 H	308	20.4	32.4
5	4904.00	45.8 PK	74.0	-28.2	2.43 H	283	42.1	3.7
6	4904.00	33.7 AV	54.0	-20.3	2.43 H	283	30.0	3.7

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	113.6 PK			3.44 V	329	81.2	32.4
2	*2452.00	101.3 AV			3.44 V	329	68.9	32.4
3	2483.50	63.0 PK	74.0	-11.0	3.38 V	309	30.6	32.4
4	2483.50	49.8 AV	54.0	-4.2	3.38 V	309	17.4	32.4
5	4904.00	51.0 PK	74.0	-23.0	2.27 V	322	47.3	3.7
6	4904.00	35.4 AV	54.0	-18.6	2.27 V	322	31.7	3.7

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

Test Mode A

2G traffic radio: Beamforming Mode

802.11ax (HE20)

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

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	72.2 PK	74.0	-1.8	2.85 H	57	39.9	32.3
2	2390.00	52.2 AV	54.0	-1.8	2.85 H	57	19.9	32.3
3	*2412.00	115.8 PK			2.68 H	70	83.5	32.3
4	*2412.00	103.5 AV			2.68 H	70	71.2	32.3
5	4824.00	57.9 PK	74.0	-16.1	2.28 H	21	54.5	3.4
6	4824.00	43.7 AV	54.0	-10.3	2.28 H	21	40.3	3.4

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	1.54 V	335	30.3	32.3
2	2390.00	49.1 AV	54.0	-4.9	1.54 V	335	16.8	32.3
3	*2412.00	112.3 PK			1.53 V	341	80.0	32.3
4	*2412.00	100.9 AV			1.53 V	341	68.6	32.3
5	4824.00	50.0 PK	74.0	-24.0	1.49 V	172	46.6	3.4
6	4824.00	36.5 AV	54.0	-17.5	1.49 V	172	33.1	3.4

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) – Pre-Amplifier 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	121.5 PK			2.08 H	54	89.2	32.3
2	*2437.00	110.9 AV			2.08 H	54	78.6	32.3
3	2483.50	63.5 PK	74.0	-10.5	2.20 H	50	31.1	32.4
4	2483.50	50.4 AV	54.0	-3.6	2.20 H	50	18.0	32.4
5	4874.00	61.5 PK	74.0	-12.5	1.63 H	345	57.8	3.7
6	4874.00	48.7 AV	54.0	-5.3	1.63 H	345	45.0	3.7

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	118.3 PK			1.77 V	350	86.0	32.3
2	*2437.00	107.1 AV			1.77 V	350	74.8	32.3
3	2483.50	59.4 PK	74.0	-14.6	1.63 V	349	27.0	32.4
4	2483.50	47.4 AV	54.0	-6.6	1.63 V	349	15.0	32.4
5	4874.00	54.0 PK	74.0	-20.0	1.58 V	188	50.3	3.7
6	4874.00	41.6 AV	54.0	-12.4	1.58 V	188	37.9	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	115.7 PK			1.46 H	31	83.3	32.4
2	*2462.00	104.3 AV			1.46 H	31	71.9	32.4
3	2483.50	66.2 PK	74.0	-7.8	1.23 H	60	33.8	32.4
4	2483.50	52.6 AV	54.0	-1.4	1.23 H	60	20.2	32.4
5	4924.00	55.5 PK	74.0	-18.5	1.60 H	336	51.7	3.8
6	4924.00	41.8 AV	54.0	-12.2	1.60 H	336	38.0	3.8

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	112.4 PK			1.58 V	337	80.0	32.4
2	*2462.00	100.8 AV			1.58 V	337	68.4	32.4
3	2483.50	63.0 PK	74.0	-11.0	1.65 V	347	30.6	32.4
4	2483.50	49.8 AV	54.0	-4.2	1.65 V	347	17.4	32.4
5	4924.00	48.1 PK	74.0	-25.9	1.68 V	169	44.3	3.8
6	4924.00	35.1 AV	54.0	-18.9	1.68 V	169	31.3	3.8

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11ax (HE40)

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

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	65.6 PK	74.0	-8.4	1.22 H	52	33.3	32.3
2	2390.00	52.2 AV	54.0	-1.8	1.22 H	52	19.9	32.3
3	*2422.00	114.0 PK			1.42 H	53	81.7	32.3
4	*2422.00	101.6 AV			1.42 H	53	69.3	32.3
5	4844.00	49.8 PK	74.0	-24.2	1.52 H	325	46.3	3.5
6	4844.00	36.0 AV	54.0	-18.0	1.52 H	325	32.5	3.5

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	63.6 PK	74.0	-10.4	1.45 V	334	31.3	32.3
2	2390.00	50.7 AV	54.0	-3.3	1.45 V	334	18.4	32.3
3	*2422.00	110.5 PK			1.68 V	350	78.2	32.3
4	*2422.00	98.3 AV			1.68 V	350	66.0	32.3
5	4844.00	47.3 PK	74.0	-26.7	1.52 V	177	43.8	3.5
6	4844.00	33.4 AV	54.0	-20.6	1.52 V	177	29.9	3.5

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	116.1 PK			1.24 H	25	83.8	32.3
2	*2437.00	103.4 AV			1.24 H	25	71.1	32.3
3	2483.50	67.8 PK	74.0	-6.2	1.20 H	28	35.4	32.4
4	2483.50	52.3 AV	54.0	-1.7	1.20 H	28	19.9	32.4
5	4874.00	56.7 PK	74.0	-17.3	1.75 H	285	53.0	3.7
6	4874.00	42.0 AV	54.0	-12.0	1.75 H	285	38.3	3.7

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	112.7 PK			1.58 V	340	80.4	32.3
2	*2437.00	100.1 AV			1.58 V	340	67.8	32.3
3	2483.50	64.1 PK	74.0	-9.9	1.44 V	350	31.7	32.4
4	2483.50	50.4 AV	54.0	-3.6	1.44 V	350	18.0	32.4
5	4874.00	49.2 PK	74.0	-24.8	1.53 V	185	45.5	3.7
6	4874.00	35.1 AV	54.0	-18.9	1.53 V	185	31.4	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	113.2 PK			1.42 H	43	80.8	32.4
2	*2452.00	100.3 AV			1.42 H	43	67.9	32.4
3	2483.50	66.8 PK	74.0	-7.2	1.39 H	58	34.4	32.4
4	2483.50	52.4 AV	54.0	-1.6	1.39 H	58	20.0	32.4
5	4904.00	54.8 PK	74.0	-19.2	1.40 H	326	51.1	3.7
6	4904.00	40.0 AV	54.0	-14.0	1.40 H	326	36.3	3.7

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	110.0 PK			1.66 V	348	77.6	32.4
2	*2452.00	96.9 AV			1.66 V	348	64.5	32.4
3	2483.50	64.9 PK	74.0	-9.1	1.70 V	339	32.5	32.4
4	2483.50	50.4 AV	54.0	-3.6	1.70 V	339	18.0	32.4
5	4904.00	48.0 PK	74.0	-26.0	1.61 V	166	44.3	3.7
6	4904.00	33.6 AV	54.0	-20.4	1.61 V	166	29.9	3.7

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

Test Mode A

Scanning radio: CDD Mode

802.11b

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

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	3.47 H	351	24.4	32.5
2	2390.00	46.3 AV	54.0	-7.7	3.47 H	351	13.8	32.5
3	*2412.00	93.2 PK			3.57 H	349	60.7	32.5
4	*2412.00	89.7 AV			3.57 H	349	57.2	32.5
5	4824.00	49.6 PK	74.0	-24.4	3.61 H	262	46.2	3.4
6	4824.00	45.7 AV	54.0	-8.3	3.61 H	262	42.3	3.4
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	57.1 PK	74.0	-16.9	3.62 V	12	24.6	32.5
2	2390.00	46.5 AV	54.0	-7.5	3.62 V	12	14.0	32.5
3	*2412.00	102.9 PK			3.60 V	8	70.4	32.5
4	*2412.00	99.4 AV			3.60 V	8	66.9	32.5
5	4824.00	52.5 PK	74.0	-21.5	3.26 V	207	49.1	3.4
6	4824.00	48.6 AV	54.0	-5.4	3.26 V	207	45.2	3.4

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	93.8 PK			3.59 H	351	61.4	32.4
2	*2437.00	89.9 AV			3.59 H	351	57.5	32.4
3	4874.00	51.4 PK	74.0	-22.6	3.69 H	254	47.7	3.7
4	4874.00	47.0 AV	54.0	-7.0	3.69 H	254	43.3	3.7
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	103.5 PK			3.56 V	11	71.1	32.4
2	*2437.00	99.6 AV			3.56 V	11	67.2	32.4
3	4874.00	54.6 PK	74.0	-19.4	3.66 V	205	50.9	3.7
4	4874.00	51.1 AV	54.0	-2.9	3.66 V	205	47.4	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	93.6 PK			3.49 H	347	61.1	32.5
2	*2462.00	89.5 AV			3.49 H	347	57.0	32.5
3	2483.50	56.0 PK	74.0	-18.0	3.60 H	350	23.4	32.6
4	2483.50	45.7 AV	54.0	-8.3	3.60 H	350	13.1	32.6
5	4924.00	50.0 PK	74.0	-24.0	3.59 H	259	46.2	3.8
6	4924.00	46.3 AV	54.0	-7.7	3.59 H	259	42.5	3.8

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	103.4 PK			3.03 V	9	70.9	32.5
2	*2462.00	99.4 AV			3.03 V	9	66.9	32.5
3	2483.50	56.1 PK	74.0	-17.9	3.06 V	13	23.5	32.6
4	2483.50	45.8 AV	54.0	-8.2	3.06 V	13	13.2	32.6
5	4924.00	53.1 PK	74.0	-20.9	3.80 V	206	49.3	3.8
6	4924.00	49.5 AV	54.0	-4.5	3.80 V	206	45.7	3.8

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11g

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

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	58.2 PK	74.0	-15.8	3.59 H	352	25.7	32.5
2	2390.00	45.7 AV	54.0	-8.3	3.59 H	352	13.2	32.5
3	*2412.00	91.8 PK			3.60 H	349	59.3	32.5
4	*2412.00	82.0 AV			3.60 H	349	49.5	32.5
5	4824.00	46.4 PK	74.0	-27.6	3.52 H	253	43.0	3.4
6	4824.00	32.9 AV	54.0	-21.1	3.52 H	253	29.5	3.4
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	58.5 PK	74.0	-15.5	3.61 V	6	26.0	32.5
2	2390.00	46.5 AV	54.0	-7.5	3.61 V	6	14.0	32.5
3	*2412.00	101.7 PK			3.61 V	6	69.2	32.5
4	*2412.00	91.9 AV			3.61 V	6	59.4	32.5
5	4824.00	49.6 PK	74.0	-24.4	3.53 V	207	46.2	3.4
6	4824.00	36.1 AV	54.0	-17.9	3.53 V	207	32.7	3.4

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	93.6 PK			3.70 H	358	61.2	32.4
2	*2437.00	83.4 AV			3.70 H	358	51.0	32.4
3	4874.00	48.4 PK	74.0	-25.6	3.62 H	249	44.7	3.7
4	4874.00	34.5 AV	54.0	-19.5	3.62 H	249	30.8	3.7

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	103.4 PK			3.55 V	9	71.0	32.4
2	*2437.00	93.2 AV			3.55 V	9	60.8	32.4
3	4874.00	51.6 PK	74.0	-22.4	3.21 V	208	47.9	3.7
4	4874.00	37.4 AV	54.0	-16.6	3.21 V	208	33.7	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	93.7 PK			3.59 H	351	61.3	32.4
2	*2462.00	83.6 AV			3.59 H	351	51.2	32.4
3	2483.50	58.1 PK	74.0	-15.9	2.65 H	344	25.7	32.4
4	2483.50	46.2 AV	54.0	-7.8	2.65 H	344	13.8	32.4
5	4924.00	47.3 PK	74.0	-26.7	3.80 H	255	43.5	3.8
6	4924.00	33.6 AV	54.0	-20.4	3.80 H	255	29.8	3.8

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	103.4 PK			3.40 V	7	70.9	32.5
2	*2462.00	93.3 AV			3.40 V	7	60.8	32.5
3	2483.50	58.3 PK	74.0	-15.7	3.40 V	16	25.7	32.6
4	2483.50	46.6 AV	54.0	-7.4	3.40 V	16	14.0	32.6
5	4924.00	50.4 PK	74.0	-23.6	3.38 V	209	46.6	3.8
6	4924.00	36.6 AV	54.0	-17.4	3.38 V	209	32.8	3.8

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	57.8 PK	74.0	-16.2	3.66 H	355	25.5	32.3
2	2390.00	46.1 AV	54.0	-7.9	3.66 H	355	13.8	32.3
3	*2412.00	92.7 PK			3.69 H	350	60.4	32.3
4	*2412.00	83.0 AV			3.69 H	350	50.7	32.3
5	4824.00	47.4 PK	74.0	-26.6	3.77 H	245	44.0	3.4
6	4824.00	33.2 AV	54.0	-20.8	3.77 H	245	29.8	3.4

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	58.2 PK	74.0	-15.8	3.35 V	13	25.7	32.5
2	2390.00	46.4 AV	54.0	-7.6	3.35 V	13	13.9	32.5
3	*2412.00	102.7 PK			3.39 V	7	70.2	32.5
4	*2412.00	92.9 AV			3.39 V	7	60.4	32.5
5	4824.00	50.4 PK	74.0	-23.6	3.56 V	204	47.0	3.4
6	4824.00	36.1 AV	54.0	-17.9	3.56 V	204	32.7	3.4

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) – Pre-Amplifier 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	92.5 PK			3.78 H	349	60.2	32.3
2	*2437.00	82.6 AV			3.78 H	349	50.3	32.3
3	4874.00	50.0 PK	74.0	-24.0	3.60 H	261	46.3	3.7
4	4874.00	34.7 AV	54.0	-19.3	3.60 H	261	31.0	3.7
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	102.4 PK			3.17 V	15	70.0	32.4
2	*2437.00	92.5 AV			3.17 V	15	60.1	32.4
3	4874.00	52.8 PK	74.0	-21.2	3.72 V	207	49.1	3.7
4	4874.00	37.6 AV	54.0	-16.4	3.72 V	207	33.9	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	92.8 PK			3.71 H	355	60.4	32.4
2	*2462.00	82.8 AV			3.71 H	355	50.4	32.4
3	2483.50	57.4 PK	74.0	-16.6	3.60 H	359	25.0	32.4
4	2483.50	46.5 AV	54.0	-7.5	3.60 H	359	14.1	32.4
5	4924.00	48.3 PK	74.0	-25.7	3.52 H	241	44.5	3.8
6	4924.00	33.4 AV	54.0	-20.6	3.52 H	241	29.6	3.8

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	102.7 PK			3.38 V	5	70.2	32.5
2	*2462.00	92.8 AV			3.38 V	5	60.3	32.5
3	2483.50	57.8 PK	74.0	-16.2	3.41 V	7	25.2	32.6
4	2483.50	47.1 AV	54.0	-6.9	3.41 V	7	14.5	32.6
5	4924.00	51.5 PK	74.0	-22.5	3.74 V	207	47.7	3.8
6	4924.00	36.2 AV	54.0	-17.8	3.74 V	207	32.4	3.8

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	60.4 PK	74.0	-13.6	3.57 H	352	28.1	32.3
2	2390.00	48.6 AV	54.0	-5.4	3.57 H	352	16.3	32.3
3	*2422.00	89.5 PK			3.66 H	348	57.2	32.3
4	*2422.00	79.3 AV			3.66 H	348	47.0	32.3
5	4844.00	45.2 PK	74.0	-28.8	3.55 H	252	41.7	3.5
6	4844.00	32.2 AV	54.0	-21.8	3.55 H	252	28.7	3.5

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	62.0 PK	74.0	-12.0	3.17 V	12	29.5	32.5
2	2390.00	50.2 AV	54.0	-3.8	3.17 V	12	17.7	32.5
3	*2422.00	99.3 PK			3.26 V	19	66.9	32.4
4	*2422.00	89.1 AV			3.26 V	19	56.7	32.4
5	4844.00	48.1 PK	74.0	-25.9	3.75 V	209	44.5	3.6
6	4844.00	35.3 AV	54.0	-18.7	3.75 V	209	31.7	3.6

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	56.6 PK	74.0	-17.4	3.77 H	3	24.3	32.3
2	2390.00	44.8 AV	54.0	-9.2	3.77 H	3	12.5	32.3
3	*2437.00	90.5 PK			3.79 H	1	58.2	32.3
4	*2437.00	80.8 AV			3.79 H	1	48.5	32.3
5	4874.00	46.0 PK	74.0	-28.0	3.64 H	246	42.3	3.7
6	4874.00	33.4 AV	54.0	-20.6	3.64 H	246	29.7	3.7

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	57.9 PK	74.0	-16.1	3.55 V	15	25.4	32.5
2	2390.00	46.0 AV	54.0	-8.0	3.55 V	15	13.5	32.5
3	*2437.00	99.7 PK			3.52 V	13	67.3	32.4
4	*2437.00	89.9 AV			3.52 V	13	57.5	32.4
5	4874.00	49.8 PK	74.0	-24.2	3.66 V	206	46.1	3.7
6	4874.00	36.2 AV	54.0	-17.8	3.66 V	206	32.5	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	90.6 PK			3.76 H	356	58.2	32.4
2	*2452.00	81.1 AV			3.76 H	356	48.7	32.4
3	2483.50	57.8 PK	74.0	-16.2	3.78 H	358	25.4	32.4
4	2483.50	46.1 AV	54.0	-7.9	3.78 H	358	13.7	32.4
5	4904.00	47.3 PK	74.0	-26.7	3.72 H	240	43.6	3.7
6	4904.00	33.4 AV	54.0	-20.6	3.72 H	240	29.7	3.7

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	100.3 PK			3.53 V	7	67.8	32.5
2	*2452.00	90.1 AV			3.53 V	7	57.6	32.5
3	2483.50	62.0 PK	74.0	-12.0	3.47 V	5	29.4	32.6
4	2483.50	51.8 AV	54.0	-2.2	3.47 V	5	19.2	32.6
5	4904.00	49.5 PK	74.0	-24.5	3.81 V	207	45.7	3.8
6	4904.00	36.2 AV	54.0	-17.8	3.81 V	207	32.4	3.8

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

Test Mode C

2G traffic radio: CDD mode

802.11b

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

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	2387.00	56.6 PK	74.0	-17.4	2.57 H	255	24.3	32.3
2	2387.00	45.0 AV	54.0	-9.0	2.57 H	255	12.7	32.3
3	*2412.00	109.2 PK			2.55 H	253	76.9	32.3
4	*2412.00	105.8 AV			2.55 H	253	73.5	32.3
5	4824.00	48.8 PK	74.0	-25.2	3.11 H	281	45.4	3.4
6	4824.00	49.0 AV	54.0	-5.0	1.31 H	308	45.6	3.4
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	2387.00	58.6 PK	74.0	-15.4	2.34 V	238	26.3	32.3
2	2387.00	48.0 AV	54.0	-6.0	2.34 V	238	15.7	32.3
3	*2412.00	121.8 PK			2.42 V	275	89.5	32.3
4	*2412.00	118.4 AV			2.42 V	275	86.1	32.3
5	4824.00	50.3 PK	74.0	-23.7	2.63 V	62	46.9	3.4
6	4824.00	45.3 AV	54.0	-8.7	2.63 V	62	41.9	3.4

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	109.8 PK			2.21 H	256	77.5	32.3
2	*2437.00	106.4 AV			2.21 H	256	74.1	32.3
3	4874.00	53.1 PK	74.0	-20.9	2.75 H	278	49.4	3.7
4	4874.00	48.9 AV	54.0	-5.1	2.75 H	278	45.2	3.7
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	121.0 PK			2.36 V	278	88.7	32.3
2	*2437.00	117.8 AV			2.36 V	278	85.5	32.3
3	4874.00	54.6 PK	74.0	-19.4	2.69 V	162	50.9	3.7
4	4874.00	51.6 AV	54.0	-2.4	2.69 V	162	47.9	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	107.5 PK			2.12 H	278	75.1	32.4
2	*2462.00	104.1 AV			2.12 H	278	71.7	32.4
3	2487.00	56.7 PK	74.0	-17.3	2.16 H	281	24.3	32.4
4	2487.00	45.4 AV	54.0	-8.6	2.16 H	281	13.0	32.4
5	4924.00	50.3 PK	74.0	-23.7	2.22 H	144	46.5	3.8
6	4924.00	45.5 AV	54.0	-8.5	2.22 H	144	41.7	3.8

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	121.3 PK			2.39 V	239	88.9	32.4
2	*2462.00	118.1 AV			2.39 V	239	85.7	32.4
3	2487.00	60.7 PK	74.0	-13.3	2.12 V	272	28.3	32.4
4	2487.00	52.6 AV	54.0	-1.4	2.12 V	272	20.2	32.4
5	4924.00	55.6 PK	74.0	-18.4	2.98 V	63	51.8	3.8
6	4924.00	52.9 AV	54.0	-1.1	2.98 V	63	49.1	3.8

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11g

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

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	56.6 PK	74.0	-17.4	2.27 H	175	24.3	32.3
2	2390.00	44.8 AV	54.0	-9.2	2.27 H	175	12.5	32.3
3	*2412.00	107.3 PK			2.25 H	173	75.0	32.3
4	*2412.00	97.5 AV			2.25 H	173	65.2	32.3
5	4824.00	44.9 PK	74.0	-29.1	3.03 H	246	41.5	3.4
6	4824.00	31.7 AV	54.0	-22.3	3.03 H	246	28.3	3.4

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	63.1 PK	74.0	-10.9	2.44 V	281	30.8	32.3
2	2390.00	52.5 AV	54.0	-1.5	2.44 V	281	20.2	32.3
3	*2412.00	117.7 PK			2.25 V	245	85.4	32.3
4	*2412.00	108.2 AV			2.25 V	245	75.9	32.3
5	4824.00	46.2 PK	74.0	-27.8	2.56 V	92	42.8	3.4
6	4824.00	32.7 AV	54.0	-21.3	2.56 V	92	29.3	3.4

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	112.4 PK			1.72 H	172	80.1	32.3
2	*2437.00	102.6 AV			1.72 H	172	70.3	32.3
3	4874.00	48.7 PK	74.0	-25.3	2.52 H	86	45.0	3.7
4	4874.00	36.1 AV	54.0	-17.9	2.52 H	86	32.4	3.7

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	120.7 PK			2.57 V	240	88.4	32.3
2	*2437.00	111.4 AV			2.57 V	240	79.1	32.3
3	4874.00	50.1 PK	74.0	-23.9	2.64 V	94	46.4	3.7
4	4874.00	37.1 AV	54.0	-16.9	2.64 V	94	33.4	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	107.7 PK			1.74 H	287	75.3	32.4
2	*2462.00	97.7 AV			1.74 H	287	65.3	32.4
3	2483.50	56.7 PK	74.0	-17.3	1.76 H	290	24.3	32.4
4	2483.50	45.4 AV	54.0	-8.6	1.76 H	290	13.0	32.4
5	4924.00	45.6 PK	74.0	-28.4	3.05 H	238	41.8	3.8
6	4924.00	32.5 AV	54.0	-21.5	3.05 H	238	28.7	3.8

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	118.4 PK			2.77 V	180	86.0	32.4
2	*2462.00	108.9 AV			2.77 V	180	76.5	32.4
3	2483.50	66.9 PK	74.0	-7.1	2.56 V	258	34.5	32.4
4	2483.50	52.6 AV	54.0	-1.4	2.56 V	258	20.2	32.4
5	4924.00	47.8 PK	74.0	-26.2	2.57 V	94	44.0	3.8
6	4924.00	34.7 AV	54.0	-19.3	2.57 V	94	30.9	3.8

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11ax (HE20)

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

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	56.8 PK	74.0	-17.2	1.99 H	78	24.5	32.3
2	2390.00	44.9 AV	54.0	-9.1	1.99 H	78	12.6	32.3
3	*2412.00	109.1 PK			1.97 H	75	76.8	32.3
4	*2412.00	95.4 AV			1.97 H	75	63.1	32.3
5	4824.00	45.4 PK	74.0	-28.6	3.02 H	132	42.0	3.4
6	4824.00	31.6 AV	54.0	-22.4	3.02 H	132	28.2	3.4

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	64.1 PK	74.0	-9.9	1.78 V	303	31.8	32.3
2	2390.00	52.5 AV	54.0	-1.5	1.78 V	303	20.2	32.3
3	*2412.00	121.3 PK			2.41 V	307	89.0	32.3
4	*2412.00	107.6 AV			2.41 V	307	75.3	32.3
5	4824.00	46.1 PK	74.0	-27.9	2.76 V	98	42.7	3.4
6	4824.00	32.4 AV	54.0	-21.6	2.76 V	98	29.0	3.4

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) – Pre-Amplifier 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	113.5 PK			2.25 H	75	81.2	32.3
2	*2437.00	101.3 AV			2.25 H	75	69.0	32.3
3	4874.00	48.5 PK	74.0	-25.5	2.41 H	88	44.8	3.7
4	4874.00	35.4 AV	54.0	-18.6	2.41 H	88	31.7	3.7
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	123.3 PK			2.15 V	307	91.0	32.3
2	*2437.00	110.5 AV			2.15 V	307	78.2	32.3
3	4874.00	49.8 PK	74.0	-24.2	2.31 V	91	46.1	3.7
4	4874.00	36.6 AV	54.0	-17.4	2.31 V	91	32.9	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	107.7 PK			2.28 H	69	75.3	32.4
2	*2462.00	94.6 AV			2.28 H	69	62.2	32.4
3	2483.50	58.1 PK	74.0	-15.9	2.30 H	72	25.7	32.4
4	2483.50	46.1 AV	54.0	-7.9	2.30 H	72	13.7	32.4
5	4924.00	45.6 PK	74.0	-28.4	2.36 H	67	41.8	3.8
6	4924.00	32.3 AV	54.0	-21.7	2.36 H	67	28.5	3.8

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	118.9 PK			2.31 V	329	86.5	32.4
2	*2462.00	106.0 AV			2.31 V	329	73.6	32.4
3	2483.50	66.1 PK	74.0	-7.9	2.28 V	300	33.7	32.4
4	2483.50	52.8 AV	54.0	-1.2	2.28 V	300	20.4	32.4
5	4924.00	46.4 PK	74.0	-27.6	2.56 V	95	42.6	3.8
6	4924.00	33.5 AV	54.0	-20.5	2.56 V	95	29.7	3.8

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11ax (HE40)

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

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	56.7 PK	74.0	-17.3	2.75 H	80	24.4	32.3
2	2390.00	45.4 AV	54.0	-8.6	2.75 H	80	13.1	32.3
3	*2422.00	102.4 PK			2.72 H	77	70.1	32.3
4	*2422.00	89.8 AV			2.72 H	77	57.5	32.3
5	4844.00	46.1 PK	74.0	-27.9	2.69 H	88	42.6	3.5
6	4844.00	31.7 AV	54.0	-22.3	2.69 H	88	28.2	3.5

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	1.99 V	114	33.0	32.3
2	2390.00	52.6 AV	54.0	-1.4	1.99 V	114	20.3	32.3
3	*2422.00	114.8 PK			1.83 V	174	82.5	32.3
4	*2422.00	101.8 AV			1.83 V	174	69.5	32.3
5	4844.00	45.8 PK	74.0	-28.2	2.40 V	100	42.3	3.5
6	4844.00	32.5 AV	54.0	-21.5	2.40 V	100	29.0	3.5

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	56.5 PK	74.0	-17.5	2.25 H	79	24.2	32.3
2	2390.00	44.8 AV	54.0	-9.2	2.25 H	79	12.5	32.3
3	*2437.00	107.0 PK			2.23 H	76	74.7	32.3
4	*2437.00	95.1 AV			2.23 H	76	62.8	32.3
5	4874.00	45.9 PK	74.0	-28.1	2.65 H	90	42.2	3.7
6	4874.00	32.9 AV	54.0	-21.1	2.65 H	90	29.2	3.7

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	66.7 PK	74.0	-7.3	2.01 V	254	34.4	32.3
2	2390.00	52.5 AV	54.0	-1.5	2.01 V	254	20.2	32.3
3	*2437.00	117.8 PK			2.34 V	276	85.5	32.3
4	*2437.00	104.8 AV			2.34 V	276	72.5	32.3
5	4874.00	46.3 PK	74.0	-27.7	2.16 V	97	42.6	3.7
6	4874.00	33.7 AV	54.0	-20.3	2.16 V	97	30.0	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	105.6 PK			2.22 H	75	73.2	32.4
2	*2452.00	93.0 AV			2.22 H	75	60.6	32.4
3	2483.50	56.9 PK	74.0	-17.1	2.25 H	78	24.5	32.4
4	2483.50	45.4 AV	54.0	-8.6	2.25 H	78	13.0	32.4
5	4904.00	46.0 PK	74.0	-28.0	2.55 H	92	42.3	3.7
6	4904.00	32.2 AV	54.0	-21.8	2.55 H	92	28.5	3.7

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	115.9 PK			2.49 V	306	83.5	32.4
2	*2452.00	103.4 AV			2.49 V	306	71.0	32.4
3	2483.50	65.4 PK	74.0	-8.6	2.47 V	308	33.0	32.4
4	2483.50	52.7 AV	54.0	-1.3	2.47 V	308	20.3	32.4
5	4904.00	46.8 PK	74.0	-27.2	2.95 V	95	43.1	3.7
6	4904.00	33.3 AV	54.0	-20.7	2.95 V	95	29.6	3.7

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

Test Mode C

2G traffic radio: Beamforming Mode

802.11ax (HE20)

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

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	59.3 PK	74.0	-14.7	1.79 H	150	27.0	32.3
2	2390.00	46.6 AV	54.0	-7.4	1.79 H	150	14.3	32.3
3	*2412.00	105.3 PK			1.80 H	142	73.0	32.3
4	*2412.00	92.8 AV			1.80 H	142	60.5	32.3
5	4824.00	46.6 PK	74.0	-27.4	1.75 H	342	43.2	3.4
6	4824.00	35.9 AV	54.0	-18.1	1.75 H	342	32.5	3.4

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	16	32.4	32.3
2	2390.00	52.1 AV	54.0	-1.9	1.92 V	16	19.8	32.3
3	*2412.00	116.3 PK			2.03 V	29	84.0	32.3
4	*2412.00	103.8 AV			2.03 V	29	71.5	32.3
5	4824.00	46.3 PK	74.0	-27.7	1.79 V	103	42.9	3.4
6	4824.00	35.6 AV	54.0	-18.4	1.79 V	103	32.2	3.4

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) – Pre-Amplifier 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	111.5 PK			1.93 H	304	79.2	32.3
2	*2437.00	98.4 AV			1.93 H	304	66.1	32.3
3	2483.50	59.1 PK	74.0	-14.9	1.87 H	315	26.7	32.4
4	2483.50	47.0 AV	54.0	-7.0	1.87 H	315	14.6	32.4
5	4874.00	56.7 PK	74.0	-17.3	1.89 H	323	53.0	3.7
6	4874.00	45.2 AV	54.0	-8.8	1.89 H	323	41.5	3.7

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	121.8 PK			2.02 V	34	89.5	32.3
2	*2437.00	108.7 AV			2.02 V	34	76.4	32.3
3	2483.50	63.8 PK	74.0	-10.2	1.91 V	15	31.4	32.4
4	2483.50	49.7 AV	54.0	-4.3	1.91 V	15	17.3	32.4
5	4874.00	56.4 PK	74.0	-17.6	1.95 V	116	52.7	3.7
6	4874.00	44.9 AV	54.0	-9.1	1.95 V	116	41.2	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	105.5 PK			1.97 H	301	73.1	32.4
2	*2462.00	93.6 AV			1.97 H	301	61.2	32.4
3	2483.50	59.1 PK	74.0	-14.9	2.05 H	311	26.7	32.4
4	2483.50	46.8 AV	54.0	-7.2	2.05 H	311	14.4	32.4
5	4924.00	51.7 PK	74.0	-22.3	1.83 H	297	47.9	3.8
6	4924.00	37.4 AV	54.0	-16.6	1.83 H	297	33.6	3.8

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	116.0 PK			1.85 V	28	83.6	32.4
2	*2462.00	104.0 AV			1.85 V	28	71.6	32.4
3	2483.50	66.5 PK	74.0	-7.5	1.94 V	37	34.1	32.4
4	2483.50	52.4 AV	54.0	-1.6	1.94 V	37	20.0	32.4
5	4924.00	51.3 PK	74.0	-22.7	2.02 V	123	47.5	3.8
6	4924.00	37.1 AV	54.0	-16.9	2.02 V	123	33.3	3.8

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11ax (HE40)

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

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	58.8 PK	74.0	-15.2	1.99 H	309	26.5	32.3
2	2390.00	46.7 AV	54.0	-7.3	1.99 H	309	14.4	32.3
3	*2422.00	102.5 PK			2.03 H	322	70.2	32.3
4	*2422.00	89.8 AV			2.03 H	322	57.5	32.3
5	4844.00	46.0 PK	74.0	-28.0	1.81 H	320	42.5	3.5
6	4844.00	33.5 AV	54.0	-20.5	1.81 H	320	30.0	3.5

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	65.6 PK	74.0	-8.4	1.91 V	168	33.3	32.3
2	2390.00	52.2 AV	54.0	-1.8	1.91 V	168	19.9	32.3
3	*2422.00	113.0 PK			1.88 V	173	80.7	32.3
4	*2422.00	99.9 AV			1.88 V	173	67.6	32.3
5	4844.00	45.8 PK	74.0	-28.2	1.92 V	107	42.3	3.5
6	4844.00	33.0 AV	54.0	-21.0	1.92 V	107	29.5	3.5

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	59.0 PK	74.0	-15.0	2.02 H	305	26.7	32.3
2	2390.00	46.6 AV	54.0	-7.4	2.02 H	305	14.3	32.3
3	*2437.00	106.2 PK			1.97 H	311	73.9	32.3
4	*2437.00	93.6 AV			1.97 H	311	61.3	32.3
5	4874.00	46.7 PK	74.0	-27.3	1.63 H	330	43.0	3.7
6	4874.00	34.0 AV	54.0	-20.0	1.63 H	330	30.3	3.7

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	68.0 PK	74.0	-6.0	2.16 V	218	35.7	32.3
2	2390.00	52.3 AV	54.0	-1.7	2.16 V	218	20.0	32.3
3	*2437.00	116.4 PK			2.13 V	219	84.1	32.3
4	*2437.00	103.5 AV			2.13 V	219	71.2	32.3
5	4874.00	46.5 PK	74.0	-27.5	1.88 V	120	42.8	3.7
6	4874.00	33.7 AV	54.0	-20.3	1.88 V	120	30.0	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	104.4 PK			2.12 H	317	72.0	32.4
2	*2452.00	91.9 AV			2.12 H	317	59.5	32.4
3	2483.50	60.0 PK	74.0	-14.0	2.03 H	333	27.6	32.4
4	2483.50	47.3 AV	54.0	-6.7	2.03 H	333	14.9	32.4
5	4904.00	46.7 PK	74.0	-27.3	1.77 H	333	43.0	3.7
6	4904.00	34.9 AV	54.0	-19.1	1.77 H	333	31.2	3.7

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	114.7 PK			2.10 V	218	82.3	32.4
2	*2452.00	102.0 AV			2.10 V	218	69.6	32.4
3	2483.50	66.9 PK	74.0	-7.1	2.08 V	214	34.5	32.4
4	2483.50	52.8 AV	54.0	-1.2	2.08 V	214	20.4	32.4
5	4904.00	46.2 PK	74.0	-27.8	1.93 V	110	42.5	3.7
6	4904.00	33.8 AV	54.0	-20.2	1.93 V	110	30.1	3.7

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

Test Mode C

Scanning radio: CDD Mode

802.11b

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

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	58.5 PK	74.0	-15.5	1.78 H	226	26.2	32.3
2	2390.00	46.9 AV	54.0	-7.1	1.78 H	226	14.6	32.3
3	*2412.00	95.5 PK			1.75 H	223	63.2	32.3
4	*2412.00	91.7 AV			1.75 H	223	59.4	32.3
5	4824.00	46.4 PK	74.0	-27.6	1.12 H	316	43.0	3.4
6	4824.00	36.9 AV	54.0	-17.1	1.12 H	316	33.5	3.4

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	58.4 PK	74.0	-15.6	1.48 V	290	26.1	32.3
2	2390.00	47.1 AV	54.0	-6.9	1.48 V	290	14.8	32.3
3	*2412.00	104.3 PK			1.46 V	288	72.0	32.3
4	*2412.00	100.6 AV			1.46 V	288	68.3	32.3
5	4824.00	48.1 PK	74.0	-25.9	1.62 V	347	44.7	3.4
6	4824.00	39.4 AV	54.0	-14.6	1.62 V	347	36.0	3.4

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	97.0 PK			1.76 H	219	64.7	32.3
2	*2437.00	93.0 AV			1.76 H	219	60.7	32.3
3	4874.00	49.0 PK	74.0	-25.0	1.08 H	339	45.3	3.7
4	4874.00	41.8 AV	54.0	-12.2	1.08 H	339	38.1	3.7
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	104.7 PK			1.28 V	291	72.4	32.3
2	*2437.00	100.9 AV			1.28 V	291	68.6	32.3
3	4874.00	48.9 PK	74.0	-25.1	1.59 V	344	45.2	3.7
4	4874.00	42.5 AV	54.0	-11.5	1.59 V	344	38.8	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	97.4 PK			2.54 H	209	65.0	32.4
2	*2462.00	93.8 AV			2.54 H	209	61.4	32.4
3	2483.50	59.4 PK	74.0	-14.6	2.56 H	213	27.0	32.4
4	2483.50	47.4 AV	54.0	-6.6	2.56 H	213	15.0	32.4
5	4924.00	50.4 PK	74.0	-23.6	1.08 H	322	46.6	3.8
6	4924.00	44.3 AV	54.0	-9.7	1.08 H	322	40.5	3.8

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	104.2 PK			1.64 V	252	71.8	32.4
2	*2462.00	100.5 AV			1.64 V	252	68.1	32.4
3	2483.50	58.6 PK	74.0	-15.4	1.67 V	255	26.2	32.4
4	2483.50	47.1 AV	54.0	-6.9	1.67 V	255	14.7	32.4
5	4924.00	52.6 PK	74.0	-21.4	1.64 V	349	48.8	3.8
6	4924.00	46.6 AV	54.0	-7.4	1.64 V	349	42.8	3.8

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11g

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

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	59.0 PK	74.0	-15.0	2.52 H	223	26.7	32.3
2	2390.00	46.8 AV	54.0	-7.2	2.52 H	223	14.5	32.3
3	*2412.00	96.3 PK			2.50 H	218	64.0	32.3
4	*2412.00	86.1 AV			2.50 H	218	53.8	32.3
5	4824.00	46.6 PK	74.0	-27.4	2.31 H	43	43.2	3.4
6	4824.00	32.7 AV	54.0	-21.3	2.31 H	43	29.3	3.4

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	60.1 PK	74.0	-13.9	1.33 V	230	27.8	32.3
2	2390.00	48.5 AV	54.0	-5.5	1.33 V	230	16.2	32.3
3	*2412.00	105.4 PK			1.31 V	226	73.1	32.3
4	*2412.00	94.8 AV			1.31 V	226	62.5	32.3
5	4824.00	46.0 PK	74.0	-28.0	1.12 V	34	42.6	3.4
6	4824.00	33.4 AV	54.0	-20.6	1.12 V	34	30.0	3.4

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	96.3 PK			2.55 H	206	64.0	32.3
2	*2437.00	86.3 AV			2.55 H	206	54.0	32.3
3	4874.00	46.6 PK	74.0	-27.4	2.27 H	43	42.9	3.7
4	4874.00	32.9 AV	54.0	-21.1	2.27 H	43	29.2	3.7

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	105.0 PK			1.49 V	284	72.7	32.3
2	*2437.00	94.3 AV			1.49 V	284	62.0	32.3
3	4874.00	46.7 PK	74.0	-27.3	1.53 V	46	43.0	3.7
4	4874.00	33.5 AV	54.0	-20.5	1.53 V	46	29.8	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	99.2 PK			2.52 H	207	66.8	32.4
2	*2462.00	88.5 AV			2.52 H	207	56.1	32.4
3	2483.50	58.7 PK	74.0	-15.3	2.53 H	210	26.3	32.4
4	2483.50	47.5 AV	54.0	-6.5	2.53 H	210	15.1	32.4
5	4924.00	47.0 PK	74.0	-27.0	2.25 H	38	43.2	3.8
6	4924.00	33.4 AV	54.0	-20.6	2.25 H	38	29.6	3.8

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	105.2 PK			1.38 V	283	72.8	32.4
2	*2462.00	94.9 AV			1.38 V	283	62.5	32.4
3	2483.50	61.0 PK	74.0	-13.0	1.08 V	308	28.6	32.4
4	2483.50	49.3 AV	54.0	-4.7	1.08 V	308	16.9	32.4
5	4924.00	47.5 PK	74.0	-26.5	1.41 V	40	43.7	3.8
6	4924.00	34.5 AV	54.0	-19.5	1.41 V	40	30.7	3.8

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	58.4 PK	74.0	-15.6	2.55 H	222	26.1	32.3
2	2390.00	46.8 AV	54.0	-7.2	2.55 H	222	14.5	32.3
3	*2412.00	96.2 PK			2.52 H	217	63.9	32.3
4	*2412.00	85.9 AV			2.52 H	217	53.6	32.3
5	4824.00	46.5 PK	74.0	-27.5	2.32 H	44	43.1	3.4
6	4824.00	32.7 AV	54.0	-21.3	2.32 H	44	29.3	3.4
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	61.0 PK	74.0	-13.0	1.10 V	298	28.7	32.3
2	2390.00	48.5 AV	54.0	-5.5	1.10 V	298	16.2	32.3
3	*2412.00	104.6 PK			1.08 V	296	72.3	32.3
4	*2412.00	94.2 AV			1.08 V	296	61.9	32.3
5	4824.00	47.3 PK	74.0	-26.7	1.20 V	30	43.9	3.4
6	4824.00	33.3 AV	54.0	-20.7	1.20 V	30	29.9	3.4

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) – Pre-Amplifier 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	96.1 PK			2.46 H	224	63.8	32.3
2	*2437.00	85.9 AV			2.46 H	224	53.6	32.3
3	4874.00	46.8 PK	74.0	-27.2	2.29 H	43	43.1	3.7
4	4874.00	32.9 AV	54.0	-21.1	2.29 H	43	29.2	3.7

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	105.6 PK			1.33 V	290	73.3	32.3
2	*2437.00	94.8 AV			1.33 V	290	62.5	32.3
3	4874.00	50.0 PK	74.0	-24.0	1.11 V	26	46.3	3.7
4	4874.00	35.1 AV	54.0	-18.9	1.11 V	26	31.4	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	98.7 PK			2.42 H	216	66.3	32.4
2	*2462.00	88.3 AV			2.42 H	216	55.9	32.4
3	2483.50	58.9 PK	74.0	-15.1	2.45 H	220	26.5	32.4
4	2483.50	47.8 AV	54.0	-6.2	2.45 H	220	15.4	32.4
5	4924.00	46.9 PK	74.0	-27.1	2.25 H	39	43.1	3.8
6	4924.00	33.1 AV	54.0	-20.9	2.25 H	39	29.3	3.8

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	104.7 PK			1.34 V	286	72.3	32.4
2	*2462.00	94.2 AV			1.34 V	286	61.8	32.4
3	2483.50	61.1 PK	74.0	-12.9	1.11 V	318	28.7	32.4
4	2483.50	49.1 AV	54.0	-4.9	1.11 V	318	16.7	32.4
5	4924.00	49.5 PK	74.0	-24.5	1.15 V	28	45.7	3.8
6	4924.00	35.5 AV	54.0	-18.5	1.15 V	28	31.7	3.8

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) – Pre-Amplifier 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	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz	FUNCTION	Average (AV)

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	58.8 PK	74.0	-15.2	2.52 H	223	26.5	32.3
2	2390.00	46.9 AV	54.0	-7.1	2.52 H	223	14.6	32.3
3	*2422.00	92.6 PK			2.49 H	219	60.3	32.3
4	*2422.00	82.5 AV			2.49 H	219	50.2	32.3
5	4844.00	46.5 PK	74.0	-27.5	2.31 H	43	43.0	3.5
6	4844.00	32.8 AV	54.0	-21.2	2.31 H	43	29.3	3.5

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	64.2 PK	74.0	-9.8	1.61 V	263	31.9	32.3
2	2390.00	51.5 AV	54.0	-2.5	1.61 V	263	19.2	32.3
3	*2422.00	101.8 PK			1.27 V	291	69.5	32.3
4	*2422.00	91.1 AV			1.27 V	291	58.8	32.3
5	4844.00	45.5 PK	74.0	-28.5	1.32 V	45	42.0	3.5
6	4844.00	32.6 AV	54.0	-21.4	1.32 V	45	29.1	3.5

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	58.7 PK	74.0	-15.3	3.05 H	216	26.4	32.3
2	2390.00	46.7 AV	54.0	-7.3	3.05 H	216	14.4	32.3
3	*2437.00	93.0 PK			3.02 H	215	60.7	32.3
4	*2437.00	82.2 AV			3.02 H	215	49.9	32.3
5	4874.00	46.5 PK	74.0	-27.5	2.23 H	39	42.8	3.7
6	4874.00	33.0 AV	54.0	-21.0	2.23 H	39	29.3	3.7

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	59.9 PK	74.0	-14.1	1.28 V	292	27.6	32.3
2	2390.00	47.6 AV	54.0	-6.4	1.28 V	292	15.3	32.3
3	*2437.00	101.7 PK			1.26 V	290	69.4	32.3
4	*2437.00	91.2 AV			1.26 V	290	58.9	32.3
5	4874.00	47.0 PK	74.0	-27.0	1.18 V	32	43.3	3.7
6	4874.00	33.9 AV	54.0	-20.1	1.18 V	32	30.2	3.7

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) – Pre-Amplifier 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)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	92.7 PK			2.82 H	231	60.3	32.4
2	*2452.00	82.4 AV			2.82 H	231	50.0	32.4
3	2483.50	59.9 PK	74.0	-14.1	3.06 H	231	27.5	32.4
4	2483.50	47.8 AV	54.0	-6.2	3.06 H	231	15.4	32.4
5	4904.00	46.6 PK	74.0	-27.4	2.16 H	36	42.9	3.7
6	4904.00	32.8 AV	54.0	-21.2	2.16 H	36	29.1	3.7
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	100.5 PK			1.29 V	290	68.1	32.4
2	*2452.00	90.1 AV			1.29 V	290	57.7	32.4
3	2483.50	65.9 PK	74.0	-8.1	1.34 V	312	33.5	32.4
4	2483.50	52.6 AV	54.0	-1.4	1.34 V	312	20.2	32.4
5	4904.00	46.4 PK	74.0	-27.6	1.31 V	29	42.7	3.7
6	4904.00	33.6 AV	54.0	-20.4	1.31 V	29	29.9	3.7

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) – Pre-Amplifier 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:

Test Mode A

2G traffic radio: CDD Mode

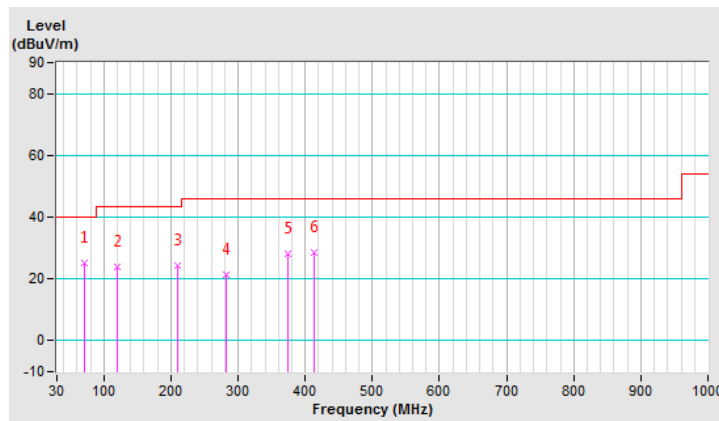
802.11ax (HE20)

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 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	70.77	25.2 QP	40.0	-14.8	2.00 H	190	36.1	-10.9
2	119.97	23.7 QP	43.5	-19.8	1.00 H	81	34.6	-10.9
3	209.94	24.4 QP	43.5	-19.1	1.50 H	272	35.9	-11.5
4	283.04	21.4 QP	46.0	-24.6	1.00 H	127	29.3	-7.9
5	374.42	28.1 QP	46.0	-17.9	1.50 H	251	33.2	-5.1
6	412.38	28.4 QP	46.0	-17.6	1.00 H	245	32.6	-4.2

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.

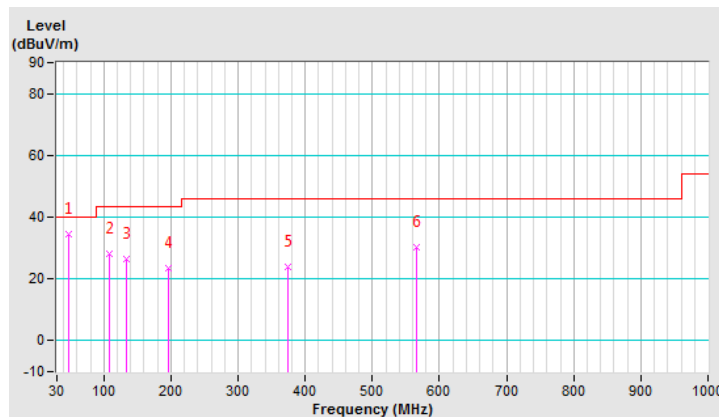


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

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	46.87	34.7 QP	40.0	-5.3	1.50 V	286	43.6	-8.9
2	107.32	28.2 QP	43.5	-15.3	1.00 V	87	40.3	-12.1
3	134.03	26.5 QP	43.5	-17.0	1.00 V	3	36.0	-9.5
4	195.88	23.3 QP	43.5	-20.2	1.50 V	67	34.9	-11.6
5	374.42	24.0 QP	46.0	-22.0	1.00 V	197	29.1	-5.1
6	565.61	30.4 QP	46.0	-15.6	2.00 V	73	30.3	0.1

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.



Test Mode A

Scanning radio: CDD Mode

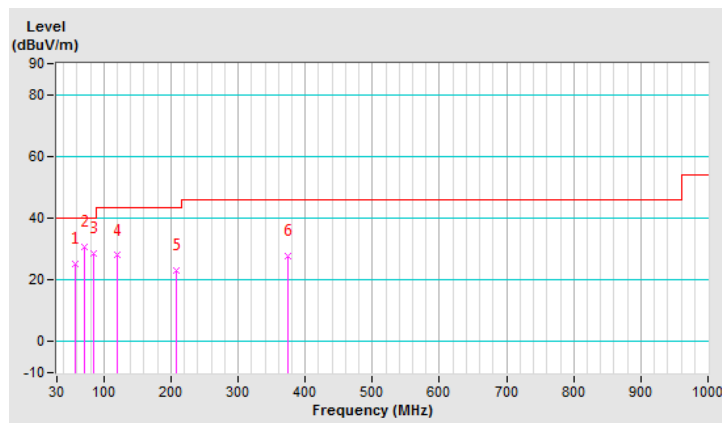
802.11b

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 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	56.71	25.2 QP	40.0	-14.8	2.00 H	207	34.3	-9.1
2	70.77	30.6 QP	40.0	-9.4	2.00 H	85	41.5	-10.9
3	84.83	28.7 QP	40.0	-11.3	2.00 H	56	42.6	-13.9
4	119.97	27.9 QP	43.5	-15.6	1.51 H	75	38.8	-10.9
5	207.13	23.1 QP	43.5	-20.4	1.51 H	254	34.7	-11.6
6	374.42	27.6 QP	46.0	-18.4	1.00 H	260	32.7	-5.1

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.

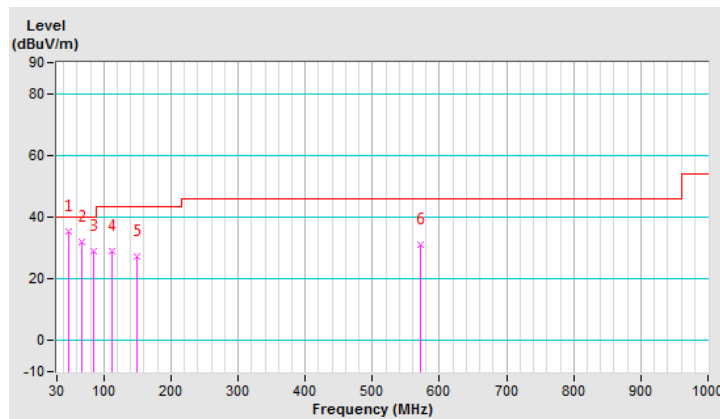


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

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	46.87	35.2 QP	40.0	-4.8	1.00 V	293	44.1	-8.9
2	66.55	31.8 QP	40.0	-8.2	1.49 V	23	41.8	-10.0
3	84.83	29.1 QP	40.0	-10.9	1.00 V	106	43.0	-13.9
4	111.54	29.0 QP	43.5	-14.5	1.00 V	7	40.8	-11.8
5	149.49	27.2 QP	43.5	-16.3	1.00 V	248	35.7	-8.5
6	572.64	30.9 QP	46.0	-15.1	1.00 V	85	30.6	0.3

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.



Test Mode B

2G traffic radio: CDD Mode

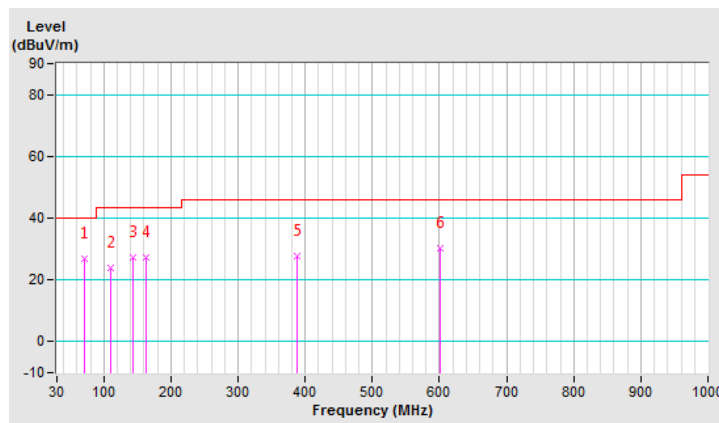
802.11ax (HE20)

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 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	70.77	26.7 QP	40.0	-13.3	2.00 H	229	37.6	-10.9
2	110.13	24.1 QP	43.5	-19.4	1.00 H	10	35.9	-11.8
3	143.87	27.4 QP	43.5	-16.1	1.00 H	229	36.2	-8.8
4	162.14	27.3 QP	43.5	-16.2	1.50 H	246	35.9	-8.6
5	388.48	27.8 QP	46.0	-18.2	1.00 H	127	32.6	-4.8
6	600.75	30.4 QP	46.0	-15.6	1.50 H	213	29.3	1.1

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.

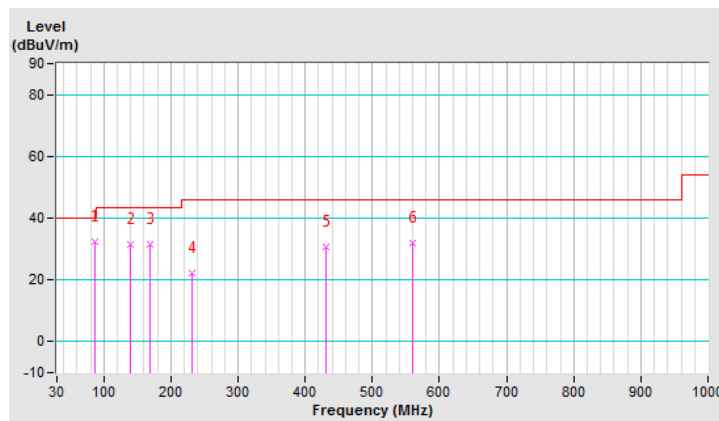


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

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	87.64	32.5 QP	40.0	-7.5	1.50 V	101	46.7	-14.2
2	139.65	31.6 QP	43.5	-11.9	1.00 V	219	40.7	-9.1
3	169.17	31.6 QP	43.5	-11.9	1.00 V	97	40.5	-8.9
4	231.03	22.3 QP	46.0	-23.7	1.50 V	80	33.3	-11.0
5	430.65	30.6 QP	46.0	-15.4	1.00 V	167	33.8	-3.2
6	559.99	31.9 QP	46.0	-14.1	1.50 V	77	32.2	-0.3

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.



Test Mode B

Scanning radio: CDD Mode

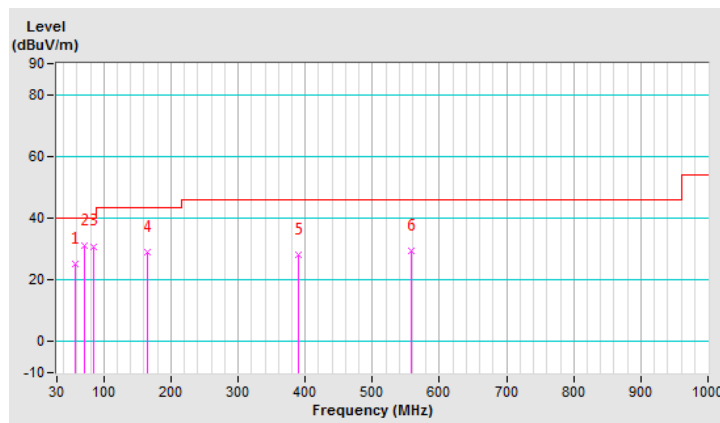
802.11b

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 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	56.71	25.3 QP	40.0	-14.7	2.00 H	304	34.4	-9.1
2	70.77	30.9 QP	40.0	-9.1	2.00 H	48	41.8	-10.9
3	84.83	30.9 QP	40.0	-9.1	2.00 H	61	44.8	-13.9
4	164.96	29.0 QP	43.5	-14.5	1.49 H	216	37.7	-8.7
5	389.88	28.1 QP	46.0	-17.9	1.00 H	109	32.8	-4.7
6	557.17	29.5 QP	46.0	-16.5	1.49 H	216	29.8	-0.3

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.

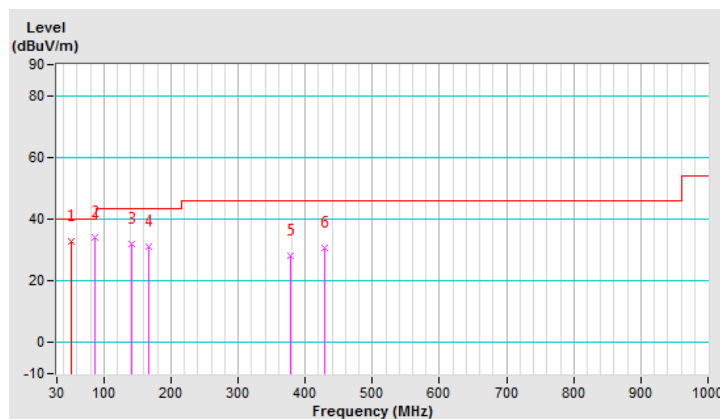


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

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	52.47	32.9 QP	40.0	-7.1	1.00 V	0	41.7	-8.8
2	87.64	34.2 QP	40.0	-5.8	1.00 V	117	48.4	-14.2
3	141.06	32.0 QP	43.5	-11.5	1.00 V	203	41.0	-9.0
4	167.77	31.0 QP	43.5	-12.5	1.00 V	112	39.7	-8.7
5	377.23	28.3 QP	46.0	-17.7	1.00 V	190	33.4	-5.1
6	429.25	30.7 QP	46.0	-15.3	1.00 V	185	34.0	-3.3

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.



Test Mode C

2G traffic radio: CDD Mode

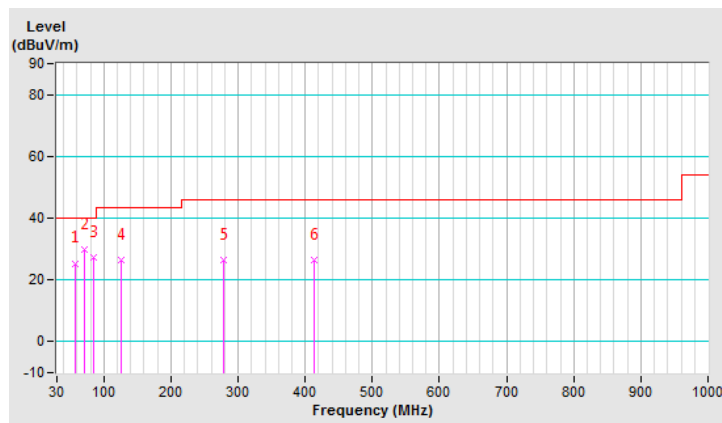
802.11ax (HE20)

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 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	56.71	25.4 QP	40.0	-14.6	2.00 H	164	34.5	-9.1
2	70.77	29.8 QP	40.0	-10.2	2.00 H	54	40.7	-10.9
3	84.83	27.2 QP	40.0	-12.8	2.00 H	16	41.1	-13.9
4	125.59	26.3 QP	43.5	-17.2	1.51 H	57	36.7	-10.4
5	277.42	26.5 QP	46.0	-19.5	1.01 H	130	34.6	-8.1
6	412.38	26.6 QP	46.0	-19.4	1.01 H	210	30.8	-4.2

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.

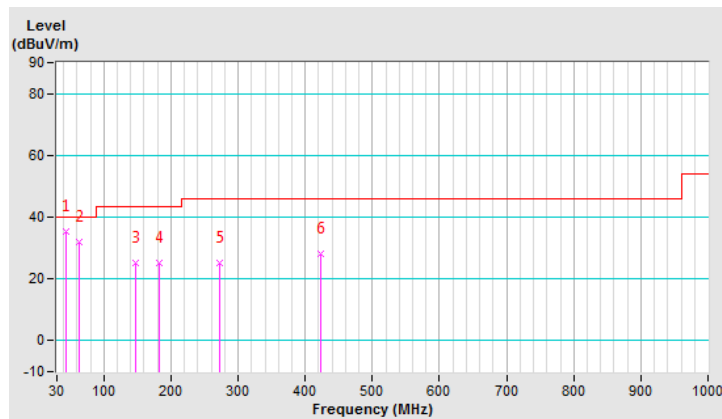


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

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	44.06	35.5 QP	40.0	-4.5	1.00 V	5	44.5	-9.0
2	63.74	31.8 QP	40.0	-8.2	1.00 V	5	41.3	-9.5
3	148.09	25.0 QP	43.5	-18.5	1.00 V	274	33.7	-8.7
4	181.83	25.3 QP	43.5	-18.2	1.00 V	51	35.4	-10.1
5	271.80	25.2 QP	46.0	-20.8	1.49 V	195	33.5	-8.3
6	422.22	28.0 QP	46.0	-18.0	1.00 V	178	31.5	-3.5

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.



Test Mode C

Scanning radio: CDD Mode

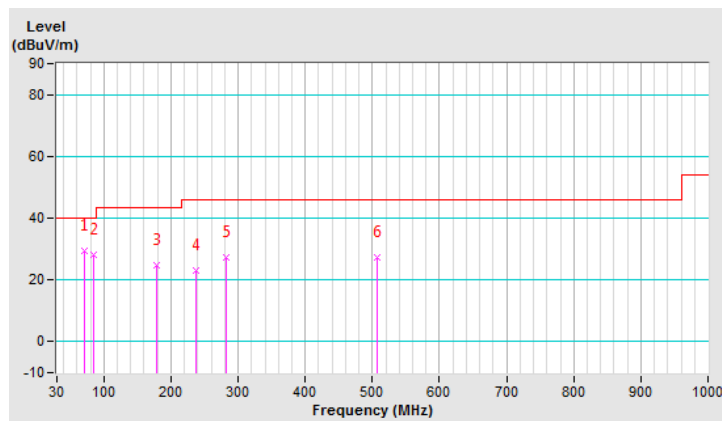
802.11b

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 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	70.77	29.4 QP	40.0	-10.6	2.00 H	207	40.3	-10.9
2	84.83	28.0 QP	40.0	-12.0	2.00 H	227	41.9	-13.9
3	179.01	24.8 QP	43.5	-18.7	2.00 H	237	34.6	-9.8
4	236.65	23.2 QP	46.0	-22.8	1.51 H	323	33.5	-10.3
5	281.64	27.2 QP	46.0	-18.8	1.01 H	151	35.2	-8.0
6	506.57	27.1 QP	46.0	-18.9	1.51 H	265	28.4	-1.3

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.

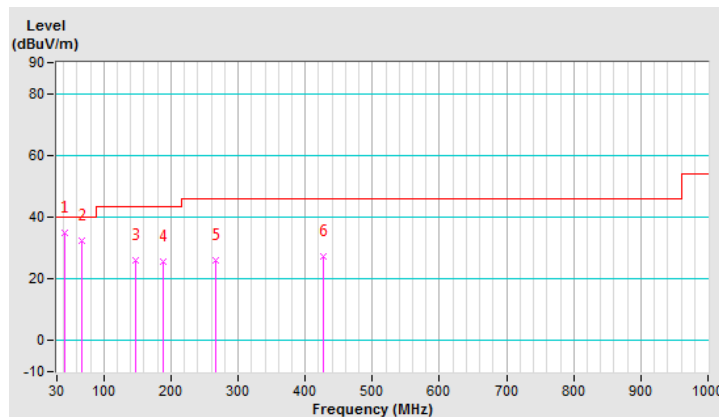


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

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	42.65	34.8 QP	40.0	-5.2	1.49 V	348	43.9	-9.1
2	66.55	32.3 QP	40.0	-7.7	1.00 V	320	42.3	-10.0
3	148.09	26.2 QP	43.5	-17.3	1.49 V	288	34.9	-8.7
4	188.86	25.4 QP	43.5	-18.1	1.00 V	181	36.3	-10.9
5	266.17	26.2 QP	46.0	-19.8	1.49 V	195	34.9	-8.7
6	426.43	27.2 QP	46.0	-18.8	1.00 V	159	30.6	-3.4

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.



Test Mode D

2G traffic radio: CDD Mode

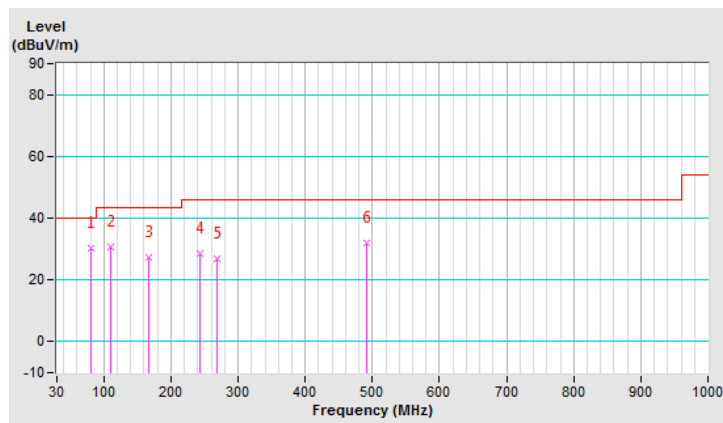
802.11ax (HE20)

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 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	80.61	30.2 QP	40.0	-9.8	1.00 H	271	43.5	-13.3
2	110.13	30.6 QP	43.5	-12.9	1.50 H	63	42.4	-11.8
3	166.36	27.1 QP	43.5	-16.4	1.50 H	241	35.8	-8.7
4	243.68	28.4 QP	46.0	-17.6	1.50 H	164	38.1	-9.7
5	268.99	27.0 QP	46.0	-19.0	1.00 H	117	35.5	-8.5
6	492.51	32.1 QP	46.0	-13.9	1.50 H	115	33.7	-1.6

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.

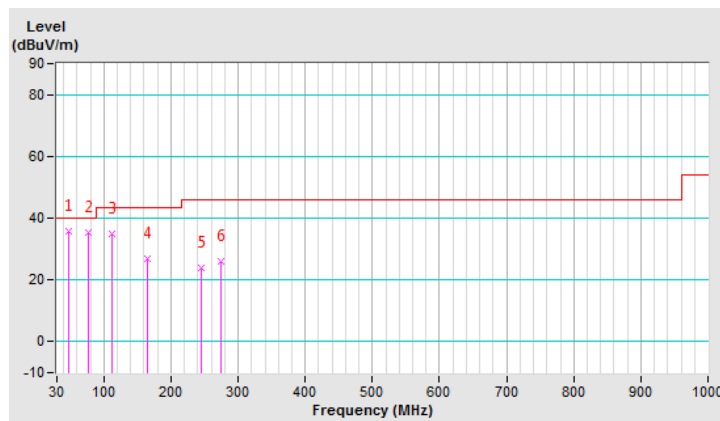


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

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	48.28	35.6 QP	40.0	-4.4	2.00 V	280	44.3	-8.7
2	77.80	35.4 QP	40.0	-4.6	1.50 V	262	48.1	-12.7
3	111.54	34.8 QP	43.5	-8.7	1.50 V	60	46.6	-11.8
4	164.96	27.0 QP	43.5	-16.5	1.50 V	277	35.7	-8.7
5	245.09	23.9 QP	46.0	-22.1	1.00 V	258	33.5	-9.6
6	274.61	25.9 QP	46.0	-20.1	1.50 V	191	34.1	-8.2

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.



Test Mode D

Scanning radio: CDD Mode

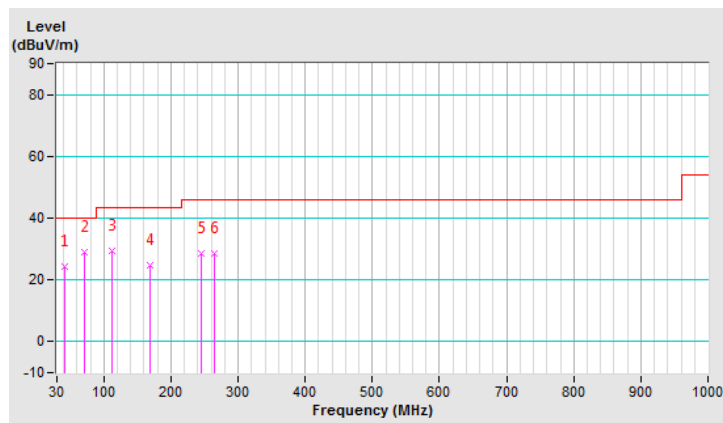
802.11b

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 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	41.25	24.3 QP	40.0	-15.7	1.50 H	139	33.5	-9.2
2	70.77	29.0 QP	40.0	-11.0	1.00 H	223	39.9	-10.9
3	112.94	29.4 QP	43.5	-14.1	2.00 H	248	41.0	-11.6
4	169.17	24.8 QP	43.5	-18.7	1.00 H	61	33.7	-8.9
5	245.09	28.7 QP	46.0	-17.3	1.50 H	145	38.3	-9.6
6	264.77	28.5 QP	46.0	-17.5	1.00 H	121	37.3	-8.8

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.

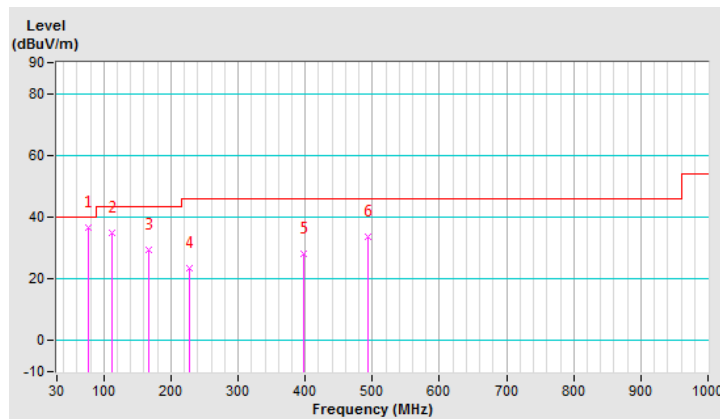


CHANNEL	TX Channel 6	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

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	77.80	36.4 QP	40.0	-3.6	1.50 V	68	49.1	-12.7
2	111.54	34.9 QP	43.5	-8.6	1.00 V	40	46.7	-11.8
3	167.77	29.6 QP	43.5	-13.9	1.50 V	274	38.3	-8.7
4	226.81	23.5 QP	46.0	-22.5	1.00 V	173	34.7	-11.2
5	396.91	28.2 QP	46.0	-17.8	2.00 V	123	32.8	-4.6
6	493.91	33.6 QP	46.0	-12.4	1.00 V	93	35.2	-1.6

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
4. Margin value = Emission Level – Limit value
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.



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

Test Date: Jan. 04 ~ Jan. 18, 2020

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Dec. 11, 2019	Dec. 10, 2020
RF signal cable Woken	5D-FB	Cable-cond1-01	Sep. 05, 2019	Sep. 04, 2020
LISN ROHDE & SCHWARZ (EUT)	ENV216	101826	Feb. 21, 2019	Feb. 20, 2020
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 22, 2019	Aug. 21, 2020
Software ADT	BV ADT_Cond_ V7.3.7.4	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-12040.

4.2.3 Test Procedures

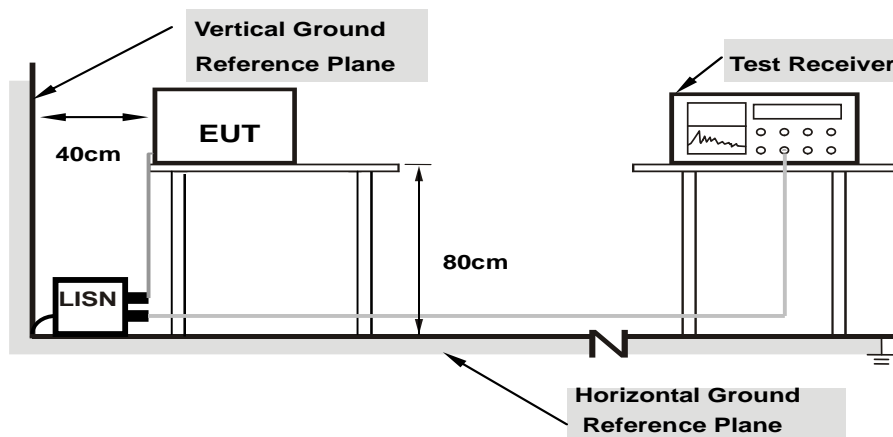
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

Worst-case data:

Test Mode A

2G traffic radio: CDD Mode

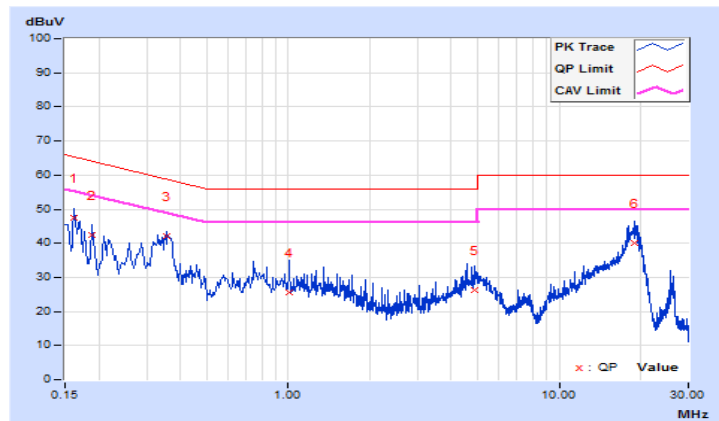
802.11ax (HE20)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.16173	9.67	37.92	25.80	47.59	35.47	65.37
2	0.18903	9.66	32.68	21.26	42.34	30.92	64.08	54.08	-21.74	-23.16
3	0.35723	9.68	32.43	25.33	42.11	35.01	58.79	48.79	-16.68	-13.78
4	1.00629	9.73	15.70	9.27	25.43	19.00	56.00	46.00	-30.57	-27.00
5	4.86546	9.85	16.33	9.51	26.18	19.36	56.00	46.00	-29.82	-26.64
6	18.94146	9.98	29.92	23.25	39.90	33.23	60.00	50.00	-20.10	-16.77

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.

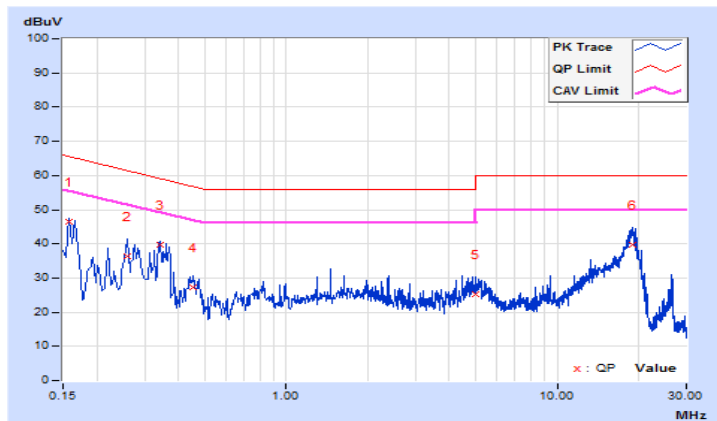


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15782	9.64	36.90	25.13	46.54	34.77	65.58
2	0.25948	9.65	26.88	15.53	36.53	25.18	61.45	51.45	-24.92	-26.27
3	0.34108	9.65	30.01	22.58	39.66	32.23	59.18	49.18	-19.52	-16.95
4	0.45498	9.66	17.70	9.83	27.36	19.49	56.78	46.78	-29.42	-27.29
5	4.99840	9.83	15.29	9.06	25.12	18.89	56.00	46.00	-30.88	-27.11
6	18.99620	10.04	29.67	23.42	39.71	33.46	60.00	50.00	-20.29	-16.54

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.



Test Mode A

Scanning radio: CDD Mode

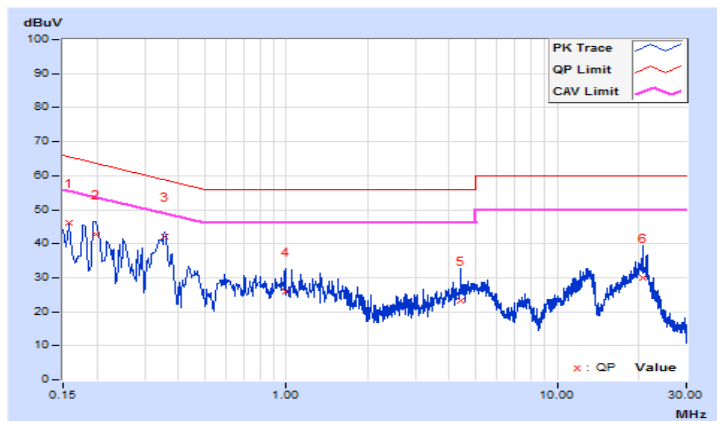
802.11b

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15800	9.63	36.59	27.15	46.22	36.78	65.57
2	0.19800	9.62	33.20	20.22	42.82	29.84	63.69	53.69	-20.87	-23.85
3	0.35400	9.64	32.60	25.24	42.24	34.88	58.87	48.87	-16.63	-13.99
4	0.99000	9.68	16.32	11.23	26.00	20.91	56.00	46.00	-30.00	-25.09
5	4.38600	9.80	13.30	7.42	23.10	17.22	56.00	46.00	-32.90	-28.78
6	20.71000	9.91	20.08	12.92	29.99	22.83	60.00	50.00	-30.01	-27.17

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.

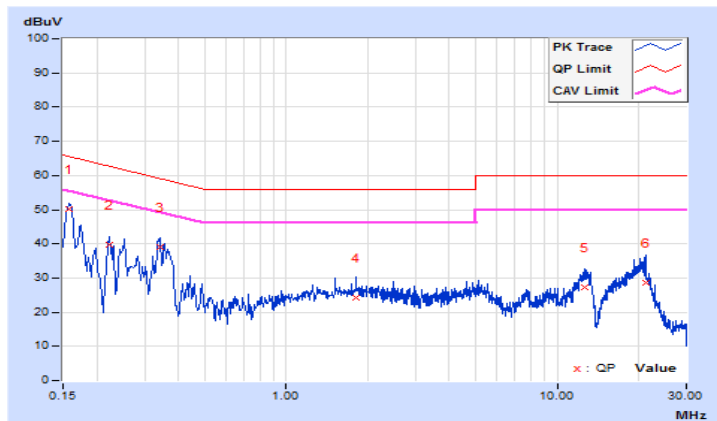


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15800	9.64	40.65	27.11	50.29	36.75	65.57
2	0.22200	9.64	30.01	16.44	39.65	26.08	62.74	52.74	-23.09	-26.66
3	0.34124	9.65	29.33	21.06	38.98	30.71	59.17	49.17	-20.19	-18.46
4	1.80200	9.74	14.36	9.86	24.10	19.60	56.00	46.00	-31.90	-26.40
5	12.57800	9.95	17.28	10.36	27.23	20.31	60.00	50.00	-32.77	-29.69
6	21.24200	10.06	18.63	11.39	28.69	21.45	60.00	50.00	-31.31	-28.55

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.



Test Mode B

2G traffic radio: CDD Mode

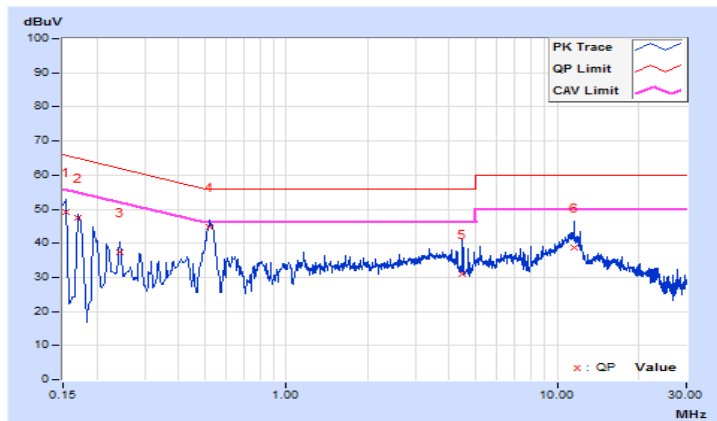
802.11ax (HE20)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15400	9.67	39.51	23.68	49.18	33.35	65.78
2	0.17000	9.67	37.67	22.09	47.34	31.76	64.96	54.96	-17.62	-23.20
3	0.24200	9.67	27.56	17.07	37.23	26.74	62.03	52.03	-24.80	-25.29
4	0.52200	9.70	35.16	29.56	44.86	39.26	56.00	46.00	-11.14	-6.74
5	4.47400	9.85	21.11	14.03	30.96	23.88	56.00	46.00	-25.04	-22.12
6	11.60200	9.94	28.70	23.82	38.64	33.76	60.00	50.00	-21.36	-16.24

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.

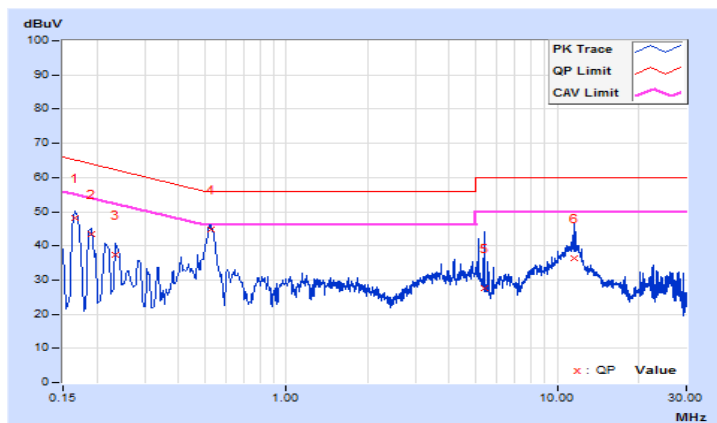


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.16600	9.64	38.60	23.26	48.24	32.90	65.16
2	0.19000	9.64	33.77	18.31	43.41	27.95	64.04	54.04	-20.63	-26.09
3	0.23400	9.64	27.81	14.37	37.45	24.01	62.31	52.31	-24.86	-28.30
4	0.52567	9.67	35.22	29.66	44.89	39.33	56.00	46.00	-11.11	-6.67
5	5.37400	9.83	17.91	9.53	27.74	19.36	60.00	50.00	-32.26	-30.64
6	11.50200	9.93	26.44	21.22	36.37	31.15	60.00	50.00	-23.63	-18.85

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.



Test Mode B

Scanning radio: CDD Mode

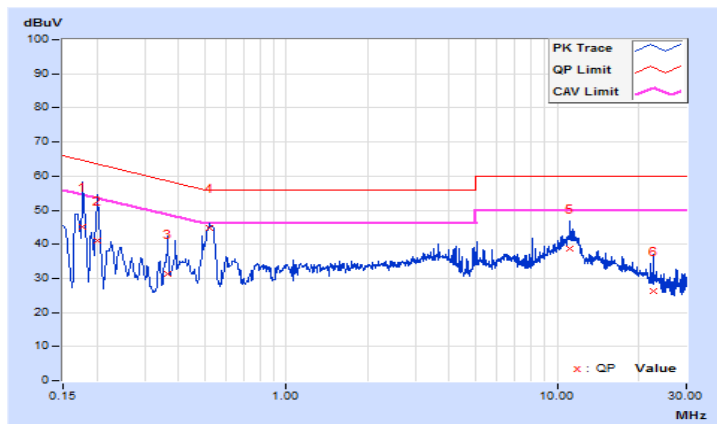
802.11b

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.17800	9.66	35.47	21.08	45.13	30.74	64.58
2	0.20200	9.66	31.51	18.69	41.17	28.35	63.53	53.53	-22.36	-25.18
3	0.36600	9.68	21.70	12.88	31.38	22.56	58.59	48.59	-27.21	-26.03
4	0.52153	9.70	35.20	29.89	44.90	39.59	56.00	46.00	-11.10	-6.41
5	11.17800	9.94	28.65	23.66	38.59	33.60	60.00	50.00	-21.41	-16.40
6	22.69400	10.00	16.41	11.89	26.41	21.89	60.00	50.00	-33.59	-28.11

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.

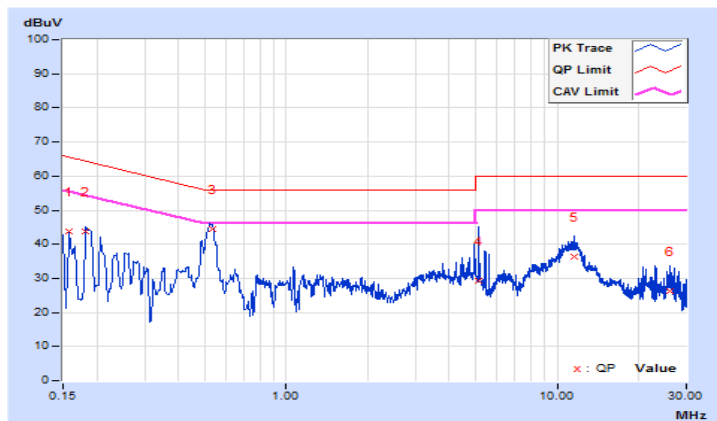


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15800	9.64	34.13	22.80	43.77	32.44	65.57
2	0.18200	9.64	34.17	19.23	43.81	28.87	64.39	54.39	-20.58	-25.52
3	0.53124	9.67	34.81	29.34	44.48	39.01	56.00	46.00	-11.52	-6.99
4	5.15000	9.83	19.40	11.43	29.23	21.26	60.00	50.00	-30.77	-28.74
5	11.51800	9.93	26.52	21.41	36.45	31.34	60.00	50.00	-23.55	-18.66
6	26.05800	10.09	16.08	11.64	26.17	21.73	60.00	50.00	-33.83	-28.27

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.



Test Mode C

2G traffic radio: CDD Mode

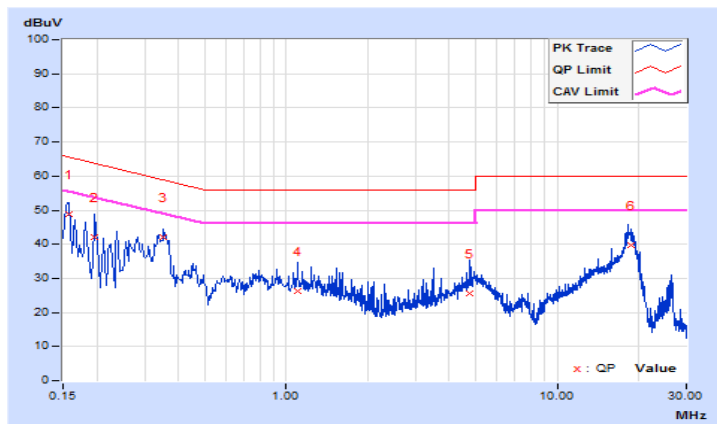
802.11ax (HE20)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15719	9.67	39.15	25.78	48.82	35.45	65.61
2	0.19692	9.66	32.35	20.11	42.01	29.77	63.74	53.74	-21.73	-23.97
3	0.35332	9.68	32.31	23.99	41.99	33.67	58.88	48.88	-16.89	-15.21
4	1.10013	9.74	16.68	11.33	26.42	21.07	56.00	46.00	-29.58	-24.93
5	4.76771	9.85	15.70	9.24	25.55	19.09	56.00	46.00	-30.45	-26.91
6	18.64821	9.98	29.63	22.59	39.61	32.57	60.00	50.00	-20.39	-17.43

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.

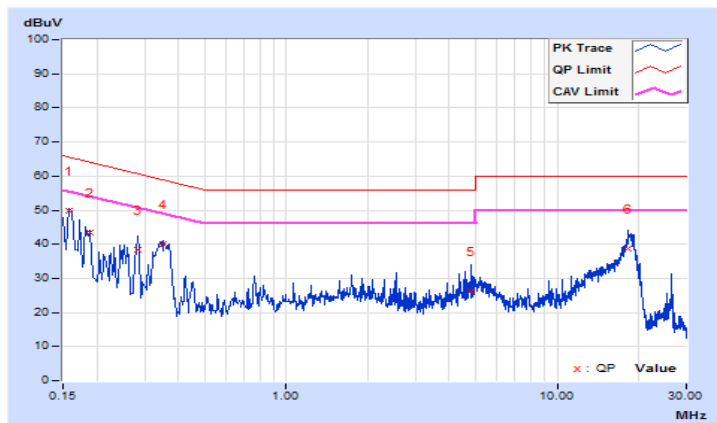


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
-------	-------------	-------------------	--------------------------------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15782	9.64	40.08	26.44	49.72	36.08	65.58
2	0.18903	9.64	33.84	20.40	43.48	30.04	64.08	54.08	-20.60	-24.04
3	0.28294	9.65	28.88	18.95	38.53	28.60	60.73	50.73	-22.20	-22.13
4	0.35332	9.66	30.44	22.01	40.10	31.67	58.88	48.88	-18.78	-17.21
5	4.83027	9.82	16.36	9.60	26.18	19.42	56.00	46.00	-29.82	-26.58
6	18.34714	10.03	28.66	21.29	38.69	31.32	60.00	50.00	-21.31	-18.68

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.



Test Mode C

Scanning radio: CDD Mode

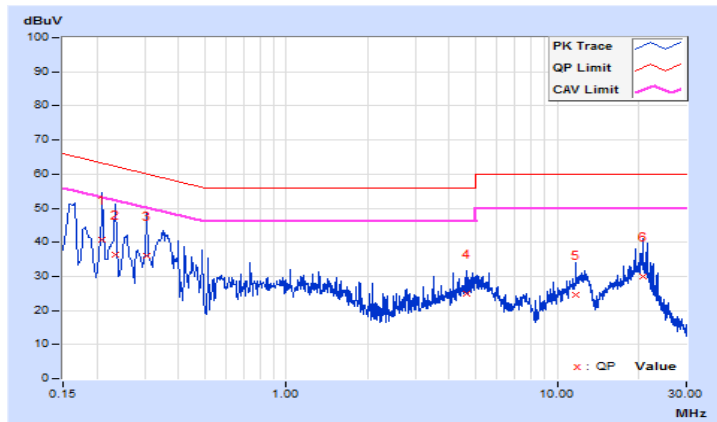
802.11b

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.21000	9.66	31.22	18.84	40.88	28.50	63.21
2	0.23400	9.67	26.83	14.61	36.50	24.28	62.31	52.31	-25.81	-28.03
3	0.30600	9.68	26.21	17.94	35.89	27.62	60.08	50.08	-24.19	-22.46
4	4.60600	9.85	15.05	8.77	24.90	18.62	56.00	46.00	-31.10	-27.38
5	11.69400	9.94	14.49	7.82	24.43	17.76	60.00	50.00	-35.57	-32.24
6	20.68600	9.98	19.87	12.28	29.85	22.26	60.00	50.00	-30.15	-27.74

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.

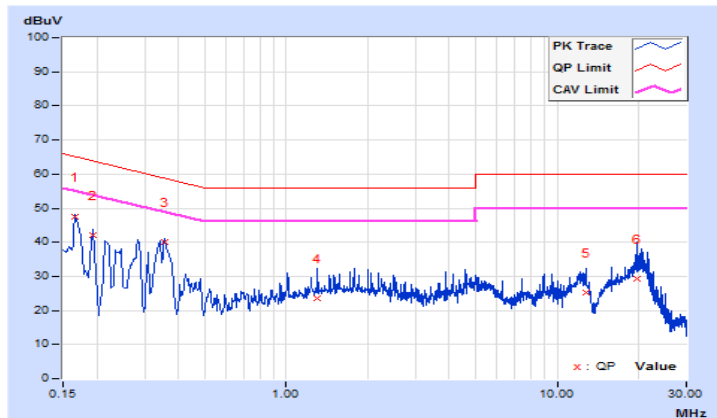


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.16600	9.64	37.84	24.85	47.48	34.49	65.16
2	0.19400	9.64	32.58	18.88	42.22	28.52	63.86	53.86	-21.64	-25.34
3	0.35400	9.66	30.46	22.49	40.12	32.15	58.87	48.87	-18.75	-16.72
4	1.30200	9.72	13.74	9.08	23.46	18.80	56.00	46.00	-32.54	-27.20
5	12.79000	9.95	15.16	8.46	25.11	18.41	60.00	50.00	-34.89	-31.59
6	19.83800	10.05	19.25	12.49	29.30	22.54	60.00	50.00	-30.70	-27.46

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.



Test Mode D

2G traffic radio: CDD Mode

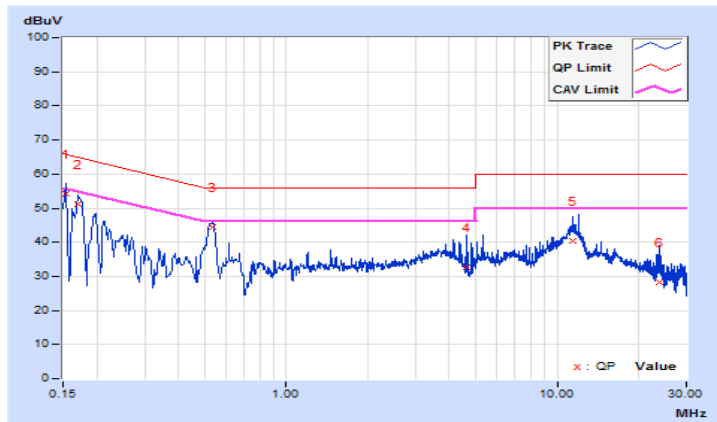
802.11ax (HE20)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15400	9.67	44.43	27.73	54.10	37.40	65.78
2	0.17000	9.67	41.47	25.59	51.14	35.26	64.96	54.96	-13.82	-19.70
3	0.53400	9.70	34.58	29.14	44.28	38.84	56.00	46.00	-11.72	-7.16
4	4.65800	9.85	22.77	13.19	32.62	23.04	56.00	46.00	-23.38	-22.96
5	11.49000	9.94	30.52	25.56	40.46	35.50	60.00	50.00	-19.54	-14.50
6	24.01800	10.00	18.30	13.83	28.30	23.83	60.00	50.00	-31.70	-26.17

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.

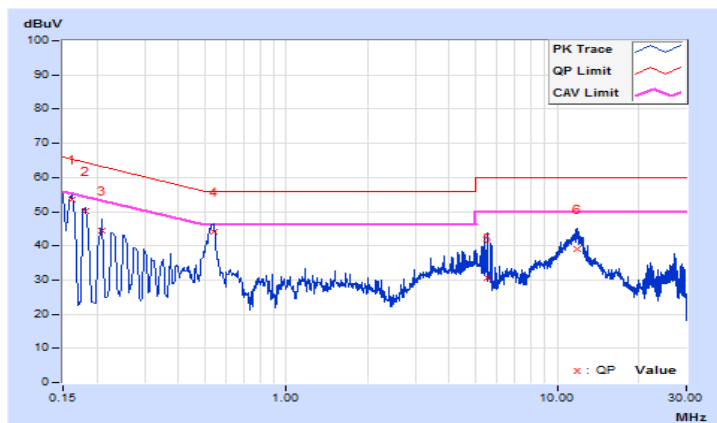


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.16105	9.64	43.78	27.75	53.42	37.39	65.41
2	0.18085	9.64	40.38	24.49	50.02	34.13	64.45	54.45	-14.43	-20.32
3	0.21000	9.64	34.92	20.74	44.56	30.38	63.21	53.21	-18.65	-22.83
4	0.53800	9.67	34.37	29.18	44.04	38.85	56.00	46.00	-11.96	-7.15
5	5.53000	9.84	20.89	12.19	30.73	22.03	60.00	50.00	-29.27	-27.97
6	11.90600	9.94	28.98	23.76	38.92	33.70	60.00	50.00	-21.08	-16.30

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.



Test Mode D

Scanning radio: CDD Mode

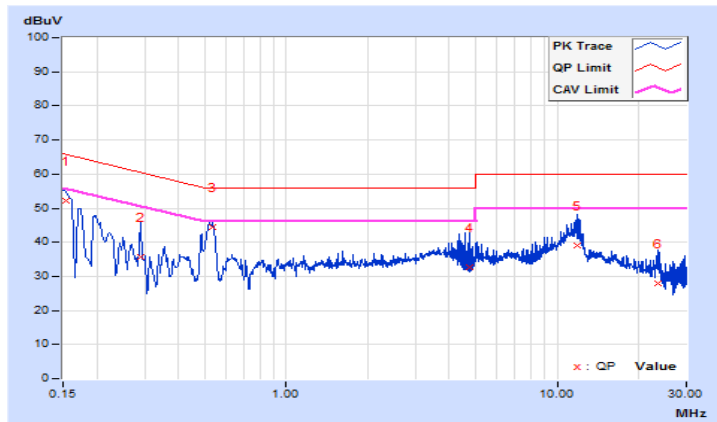
802.11b

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15400	9.67	42.49	25.82	52.16	35.49	65.78
2	0.29000	9.67	26.18	15.09	35.85	24.76	60.52	50.52	-24.67	-25.76
3	0.53400	9.70	34.71	29.13	44.41	38.83	56.00	46.00	-11.59	-7.17
4	4.75800	9.85	22.69	13.40	32.54	23.25	56.00	46.00	-23.46	-22.75
5	11.87800	9.94	29.00	23.93	38.94	33.87	60.00	50.00	-21.06	-16.13
6	23.60600	10.00	17.84	13.30	27.84	23.30	60.00	50.00	-32.16	-26.70

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.

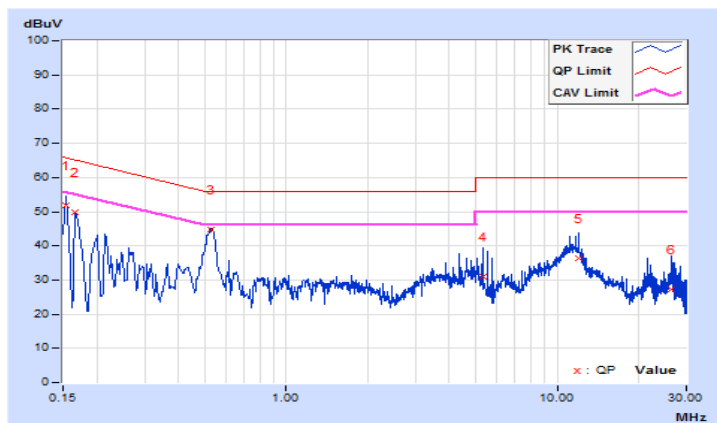


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15400	9.64	42.26	25.71	51.90	35.35	65.78
2	0.16600	9.64	40.27	25.05	49.91	34.69	65.16	55.16	-15.25	-20.47
3	0.52984	9.67	34.96	29.48	44.63	39.15	56.00	46.00	-11.37	-6.85
4	5.31000	9.83	21.08	11.60	30.91	21.43	60.00	50.00	-29.09	-28.57
5	11.97800	9.94	26.58	21.48	36.52	31.42	60.00	50.00	-23.48	-18.58
6	26.47000	10.09	17.06	12.38	27.15	22.47	60.00	50.00	-32.85	-27.53

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.

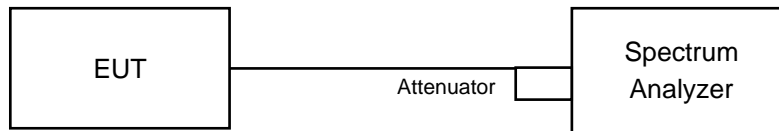


4.3 6dB Bandwidth Measurement

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

- Set resolution bandwidth (RBW) = 100kHz.
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = peak.
- Trace mode = max hold.
- Sweep = auto couple.
- 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 from Test 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

Test Mode A

2G traffic radio: CDD Mode

802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	8.08	8.09	7.56	8.06	0.5	Pass
6	2437	7.59	7.59	8.09	8.56	0.5	Pass
11	2462	7.60	7.55	8.08	7.60	0.5	Pass

802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	16.31	15.96	15.98	16.11	0.5	Pass
6	2437	16.09	16.32	15.97	15.98	0.5	Pass
11	2462	16.37	15.99	16.13	16.38	0.5	Pass

802.11ax (HE20)

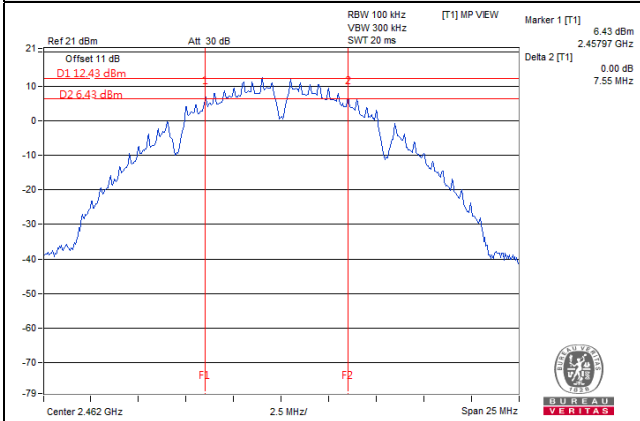
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	18.59	18.78	18.78	18.58	0.5	Pass
6	2437	18.68	18.75	18.63	18.83	0.5	Pass
11	2462	18.84	19.01	19.02	18.64	0.5	Pass

802.11ax (HE40)

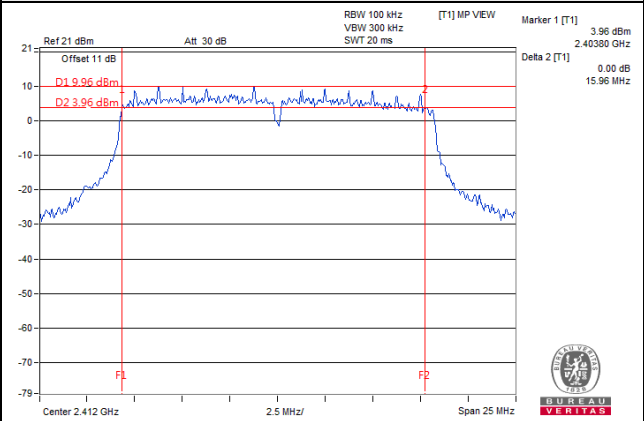
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
3	2422	38.19	38.10	38.23	38.04	0.5	Pass
6	2437	37.84	37.63	37.84	37.99	0.5	Pass
9	2452	36.61	37.31	37.53	35.84	0.5	Pass

Spectrum Plot of Worst Value

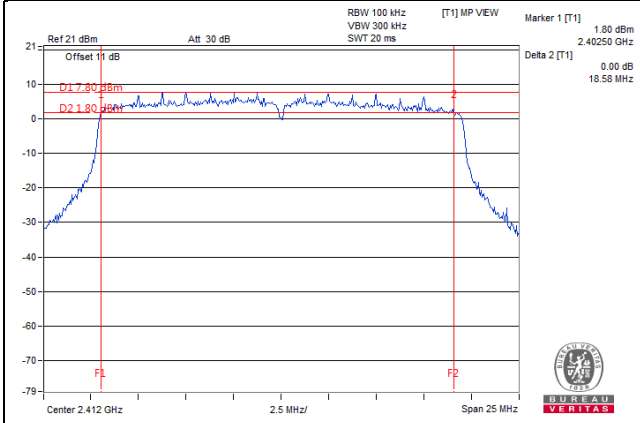
802.11b



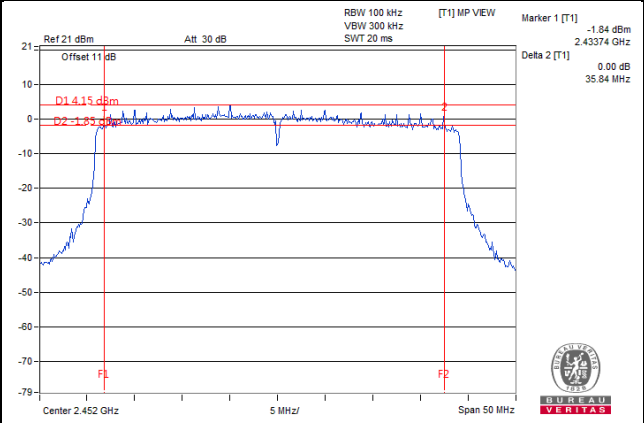
802.11g



802.11ax (HE20)



802.11ax (HE40)



Test Mode A

2G traffic radio: Beamforming Mode

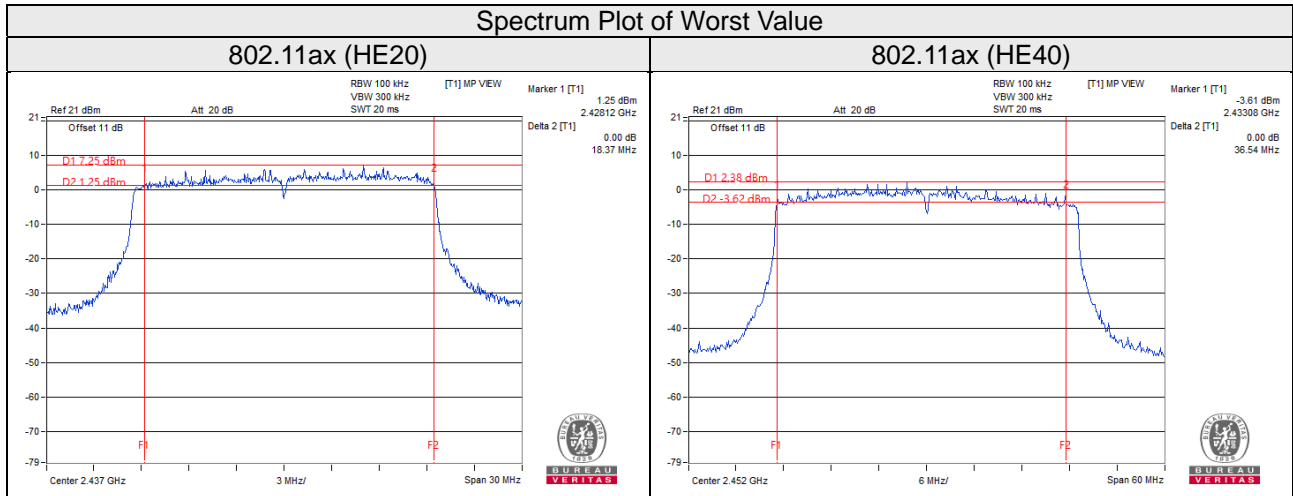
802.11ax (HE20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	18.64	18.91	18.77	18.87	0.5	Pass
6	2437	18.70	18.37	18.59	18.71	0.5	Pass
11	2462	18.60	18.92	18.85	18.77	0.5	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
3	2422	38.15	38.34	38.14	38.17	0.5	Pass
6	2437	37.72	37.62	38.03	37.92	0.5	Pass
9	2452	36.83	36.54	36.87	36.55	0.5	Pass

Spectrum Plot of Worst Value



Test Mode A

Scanning radio: CDD Mode

802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	7.09	0.5	Pass
6	2437	7.10	0.5	Pass
11	2462	7.11	0.5	Pass

802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	16.32	0.5	Pass
6	2437	16.34	0.5	Pass
11	2462	16.34	0.5	Pass

802.11n (HT20)

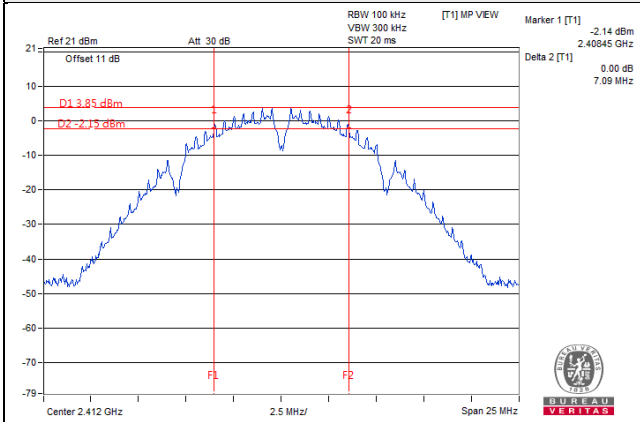
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	16.92	0.5	Pass
6	2437	16.93	0.5	Pass
11	2462	16.72	0.5	Pass

802.11n (HT40)

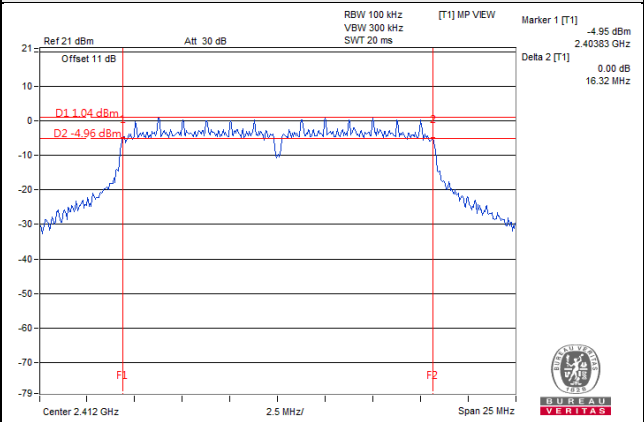
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
3	2422	35.88	0.5	Pass
6	2437	35.35	0.5	Pass
9	2452	35.61	0.5	Pass

Spectrum Plot of Worst Value

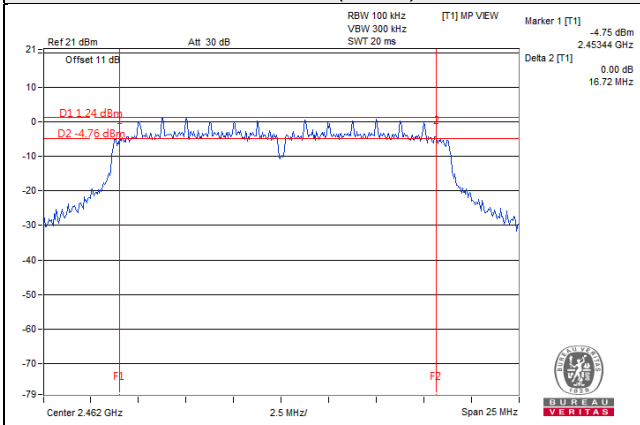
802.11b



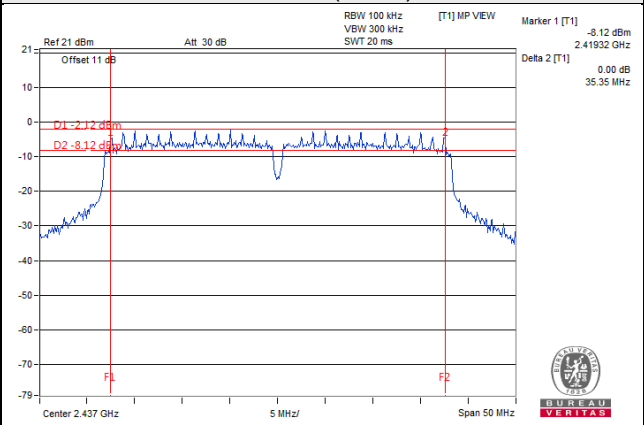
802.11g



802.11n (HT20)



802.11n (HT40)



Test Mode C

2G traffic radio: CDD Mode

802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	7.60	8.04	8.09	7.60	0.5	Pass
6	2437	7.55	7.58	7.61	7.57	0.5	Pass
11	2462	7.13	7.57	7.60	8.07	0.5	Pass

802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	16.12	15.97	16.36	16.34	0.5	Pass
6	2437	16.10	16.33	15.99	15.98	0.5	Pass
11	2462	16.12	16.15	16.10	16.38	0.5	Pass

802.11ax (HE20)

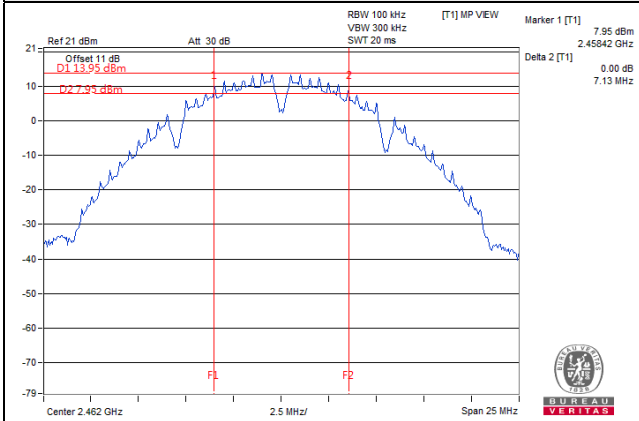
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	18.62	18.76	18.57	18.69	0.5	Pass
6	2437	18.57	18.60	18.82	18.90	0.5	Pass
11	2462	18.99	19.00	18.96	18.98	0.5	Pass

802.11ax (HE40)

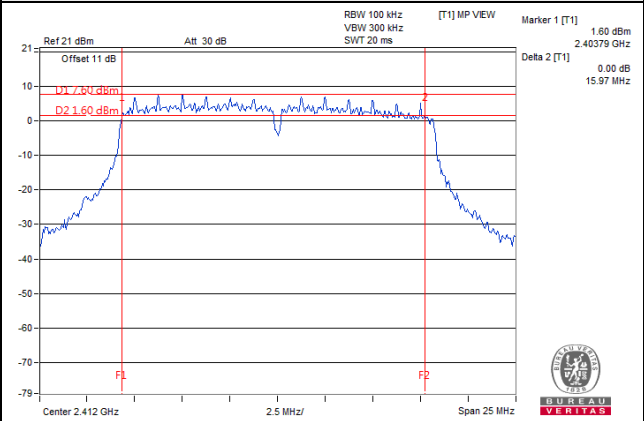
Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
3	2422	38.25	38.09	38.23	38.21	0.5	Pass
6	2437	37.98	37.77	38.03	37.57	0.5	Pass
9	2452	36.72	36.79	36.49	36.44	0.5	Pass

Spectrum Plot of Worst Value

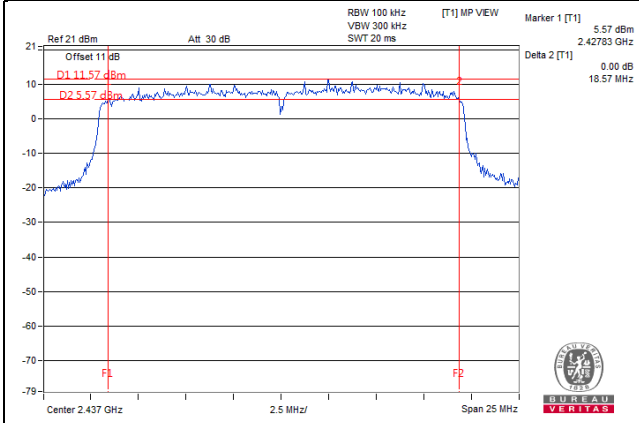
802.11b



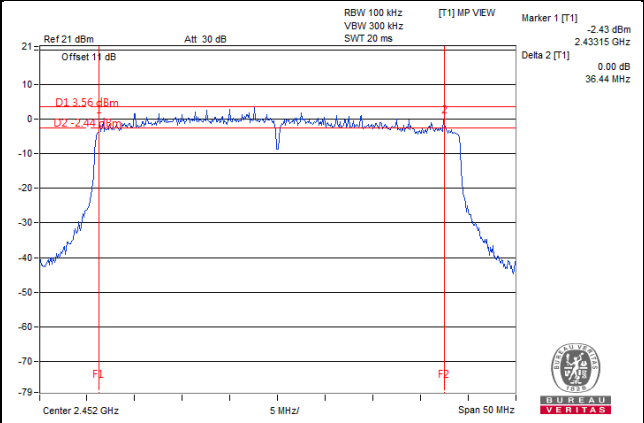
802.11g



802.11ax (HE20)



802.11ax (HE40)



Test Mode C

2G traffic radio: Beamforming Mode

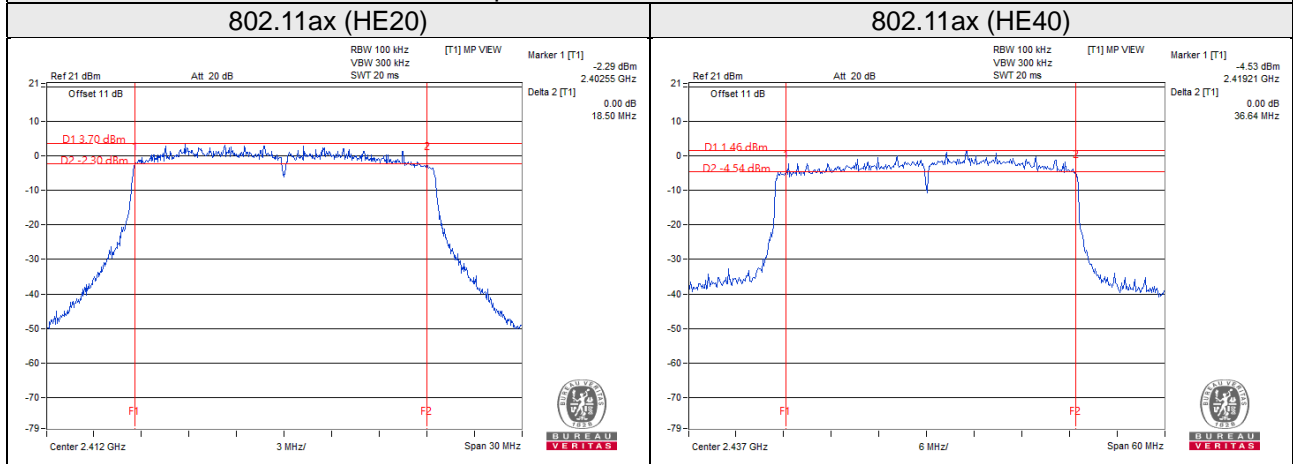
802.11ax (HE20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
1	2412	18.80	18.50	18.71	18.84	0.5	Pass
6	2437	18.75	18.63	18.69	18.57	0.5	Pass
11	2462	19.07	18.81	18.87	19.06	0.5	Pass

802.11ax (HE40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)				Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3		
3	2422	38.10	38.21	38.13	38.20	0.5	Pass
6	2437	37.90	37.10	37.92	36.64	0.5	Pass
9	2452	36.71	36.85	37.35	37.34	0.5	Pass

Spectrum Plot of Worst Value



Test Mode C

Scanning radio: CDD Mode

802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	7.09	0.5	Pass
6	2437	7.11	0.5	Pass
11	2462	7.10	0.5	Pass

802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	16.34	0.5	Pass
6	2437	16.36	0.5	Pass
11	2462	16.34	0.5	Pass

802.11n (HT20)

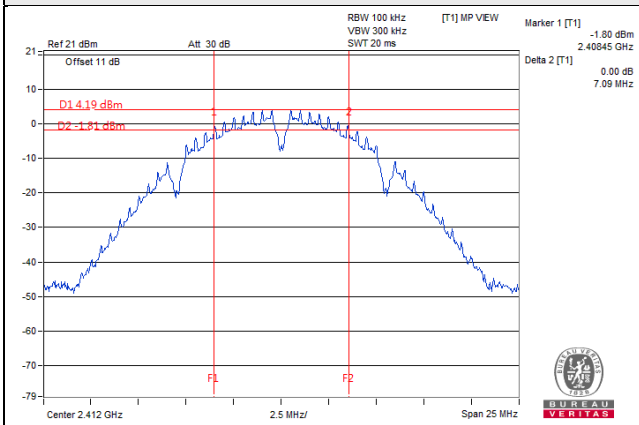
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	16.69	0.5	Pass
6	2437	16.95	0.5	Pass
11	2462	16.98	0.5	Pass

802.11n (HT40)

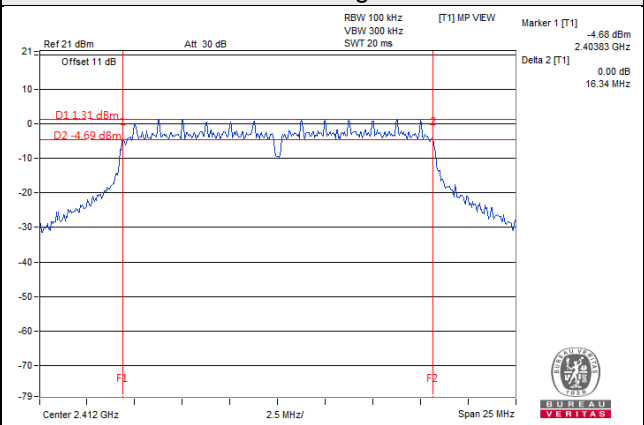
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
3	2422	36.12	0.5	Pass
6	2437	35.89	0.5	Pass
9	2452	35.77	0.5	Pass

Spectrum Plot of Worst Value

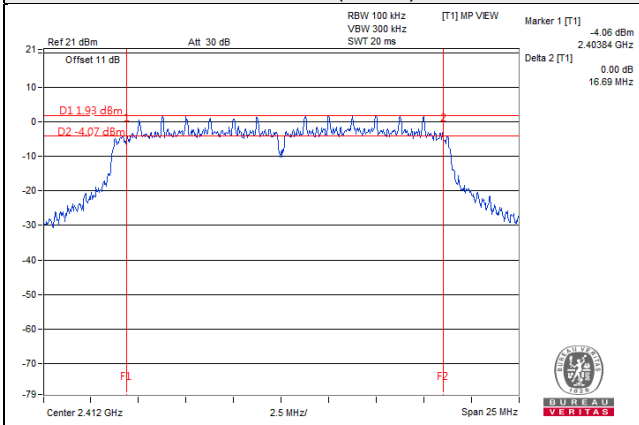
802.11b



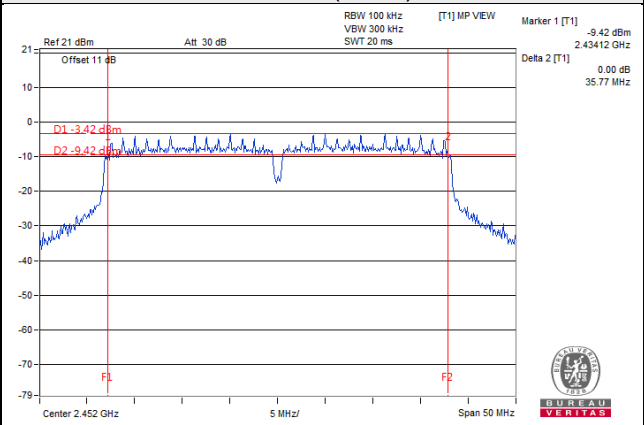
802.11g



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,

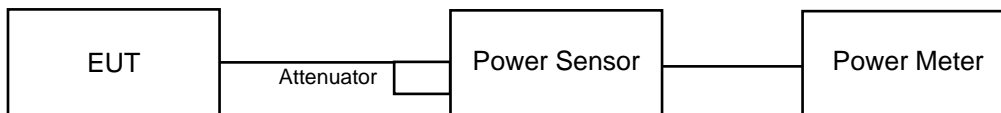
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

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

Average power sensor was used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

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

Test Mode A

2G traffic radio: CDD Mode

802.11b

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	21.60	21.90	22.08	21.64	606.743	27.83	30	Pass
6	2437	23.65	23.98	24.12	23.84	982.103	29.92	30	Pass
11	2462	21.70	21.87	21.96	21.61	603.639	27.81	30	Pass

802.11g

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	22.09	22.28	22.42	22.37	678.018	28.31	30	Pass
6	2437	23.36	23.76	24.09	23.62	941.046	29.74	30	Pass
11	2462	20.62	20.94	21.18	21.05	498.080	26.97	30	Pass

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	19.35	19.12	19.55	19.39	344.810	25.38	30	Pass
6	2437	22.99	22.96	23.01	22.83	788.617	28.97	30	Pass
11	2462	17.31	17.27	17.31	17.51	217.351	23.37	30	Pass

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	15.71	15.98	16.01	16.09	157.413	21.97	30	Pass
6	2437	20.59	20.51	20.42	19.92	435.340	26.39	30	Pass
9	2452	18.41	18.46	18.52	18.32	278.530	24.45	30	Pass

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	19.48	19.33	19.60	19.51	354.952	25.50	30	Pass
6	2437	23.02	23.15	23.21	22.87	810.038	29.09	30	Pass
11	2462	17.43	17.36	17.41	17.62	222.676	23.48	30	Pass

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	15.82	16.09	16.11	16.23	161.646	22.09	30	Pass
6	2437	20.67	20.61	20.51	20.12	447.023	26.50	30	Pass
9	2452	18.62	18.77	18.72	18.75	297.576	24.74	30	Pass

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	20.33	20.45	20.60	20.52	446.347	26.50	30	Pass
6	2437	23.48	23.82	23.92	23.62	940.583	29.73	30	Pass
11	2462	18.13	18.20	18.36	18.12	264.494	24.22	30	Pass

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	16.59	16.83	17.05	16.84	192.804	22.85	30	Pass
6	2437	21.22	21.19	21.48	21.16	535.178	27.28	30	Pass
9	2452	19.21	19.30	19.40	19.20	338.754	25.30	30	Pass

Test Mode A

2G traffic radio: Beamforming Mode

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	17.82	17.90	18.08	17.99	249.414	23.97	24.73	Pass
6	2437	18.37	18.75	18.79	18.71	293.681	24.68	24.73	Pass
11	2462	15.89	16.01	16.09	15.90	158.266	21.99	24.73	Pass

*Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.27\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(11.27-6) = 24.73\text{dBm}$

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	15.99	16.19	16.48	16.21	167.556	22.24	24.73	Pass
6	2437	17.06	18.05	18.42	18.60	256.588	24.09	24.73	Pass
9	2452	15.85	15.89	16.14	15.93	157.563	21.97	24.73	Pass

*Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.27\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(11.27-6) = 24.73\text{dBm}$

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	17.88	17.93	18.11	18.03	251.710	24.01	24.73	Pass
6	2437	18.42	18.73	18.86	18.75	296.049	24.71	24.73	Pass
11	2462	15.92	16.02	16.11	15.93	159.084	22.02	24.73	Pass

*Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.27\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(11.27-6) = 24.73\text{dBm}$

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	16.10	16.23	16.55	16.23	169.876	22.30	24.73	Pass
6	2437	17.12	18.12	18.44	18.62	258.987	24.13	24.73	Pass
9	2452	15.88	15.92	16.20	16.02	159.491	22.03	24.73	Pass

*Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.27\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30-(11.27-6) = 24.73\text{dBm}$

Test Mode A

Scanning radio: CDD Mode

802.11b

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	16.904	12.28	30	Pass
6	2437	17.179	12.35	30	Pass
11	2462	17.061	12.32	30	Pass

802.11g

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	16.406	12.15	30	Pass
6	2437	16.788	12.25	30	Pass
11	2462	16.331	12.13	30	Pass

802.11n (HT20)

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	16.711	12.23	30	Pass
6	2437	16.482	12.17	30	Pass
11	2462	16.293	12.12	30	Pass

802.11n (HT40)

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
3	2422	16.144	12.08	30	Pass
6	2437	16.293	12.12	30	Pass
9	2452	16.218	12.10	30	Pass

Test Mode C

2G traffic radio: CDD Mode

802.11b

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	22.85	23.13	22.70	22.83	776.417	28.90	30	Pass
6	2437	23.12	23.56	22.97	22.55	810.142	29.09	30	Pass
11	2462	22.84	22.94	22.20	22.92	750.941	28.76	30	Pass

802.11g

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	19.00	19.26	18.64	18.57	308.825	24.90	30	Pass
6	2437	23.07	23.31	22.70	22.97	801.419	29.04	30	Pass
11	2462	19.55	19.45	18.86	19.18	337.969	25.29	30	Pass

802.11n (HT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	17.87	17.70	17.21	16.64	218.853	23.40	30	Pass
6	2437	22.78	22.89	22.57	22.31	735.140	28.66	30	Pass
11	2462	16.91	16.87	16.20	15.98	179.047	22.53	30	Pass

802.11n (HT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	14.68	15.12	14.39	13.77	113.187	20.54	30	Pass
6	2437	18.92	19.01	18.61	18.48	300.679	24.78	30	Pass
9	2452	16.98	17.22	16.88	16.32	194.219	22.88	30	Pass

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	17.91	17.73	17.34	16.86	223.824	23.50	30	Pass
6	2437	22.82	22.91	22.61	22.49	746.669	28.73	30	Pass
11	2462	17.01	17.02	16.31	16.00	183.151	22.63	30	Pass

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	14.86	15.17	14.41	13.91	115.715	20.63	30	Pass
6	2437	19.12	19.16	18.67	18.62	310.471	24.92	30	Pass
9	2452	17.11	17.59	17.16	16.51	205.587	23.13	30	Pass

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	18.02	18.23	17.44	17.33	239.452	23.79	30	Pass
6	2437	23.01	23.37	22.72	22.82	795.750	29.01	30	Pass
11	2462	17.15	17.20	16.48	16.07	189.282	22.77	30	Pass

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	14.93	15.27	14.63	14.21	120.171	20.80	30	Pass
6	2437	19.19	19.22	18.80	18.76	317.565	25.02	30	Pass
9	2452	17.27	17.74	17.08	16.66	210.157	23.23	30	Pass

Test Mode C

2G traffic radio: Beamforming Mode

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	14.82	15.00	14.38	14.02	114.613	20.59	25.98	Pass
6	2437	19.95	20.27	19.65	19.54	387.476	25.88	25.98	Pass
11	2462	13.78	13.97	13.70	13.28	93.547	19.71	25.98	Pass

*Directional gain = $4\text{dBi} + 10\log(4) = 10.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (10.02 - 6) = 25.98\text{dBm}$.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	13.20	13.57	13.11	12.89	83.562	19.22	25.98	Pass
6	2437	15.81	15.92	15.72	15.38	149.030	21.73	25.98	Pass
9	2452	13.79	13.89	13.69	13.42	93.791	19.72	25.98	Pass

*Directional gain = $4\text{dBi} + 10\log(4) = 10.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (10.02 - 6) = 25.98\text{dBm}$.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
1	2412	14.88	15.03	14.44	14.11	116.163	20.65	25.98	Pass
6	2437	20.01	20.21	19.71	19.56	389.091	25.90	25.98	Pass
11	2462	13.89	14.04	13.76	13.35	95.237	19.79	25.98	Pass

*Directional gain = $4\text{dBi} + 10\log(4) = 10.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (10.02 - 6) = 25.98\text{dBm}$.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)				Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
3	2422	13.22	13.63	13.12	12.93	84.202	19.25	25.98	Pass
6	2437	15.87	15.98	15.77	15.43	150.936	21.79	25.98	Pass
9	2452	13.88	13.93	13.78	13.45	95.160	19.78	25.98	Pass

*Directional gain = $4\text{dBi} + 10\log(4) = 10.02\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (10.02 - 6) = 25.98\text{dBm}$.

Test Mode C

Scanning radio: CDD Mode

802.11b

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	15.885	12.01	30	Pass
6	2437	15.959	12.03	30	Pass
11	2462	16.406	12.15	30	Pass

802.11g

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	16.144	12.08	30	Pass
6	2437	15.885	12.01	30	Pass
11	2462	15.922	12.02	30	Pass

802.11n (HT20)

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	16.520	12.18	30	Pass
6	2437	16.032	12.05	30	Pass
11	2462	16.255	12.11	30	Pass

802.11n (HT40)

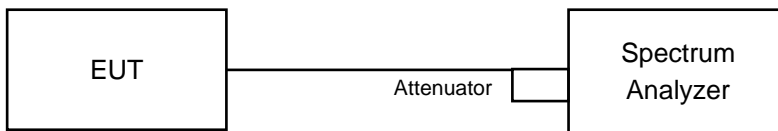
Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
3	2422	16.634	12.21	30	Pass
6	2437	16.520	12.18	30	Pass
9	2452	11.298	10.53	30	Pass

4.5 Power Spectral Density Measurement

4.5.1 Limits of Power Spectral Density Measurement

The Maximum of Power Spectral Density Measurement is 8dBm/3kHz.

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 Average Power (Duty cycle $\geq 98\%$)

- Set instrument center frequency to DTS channel center frequency.
- Set span to at least 1.5 times the OBW.
- Set RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- Set VBW $\geq 3 \times \text{RBW}$.
- Detector = power averaging (RMS) or sample detector (when RMS not available).
- Ensure that the number of measurement points in the sweep $\geq 2 \times \text{span}/\text{RBW}$.
- Sweep time = auto couple.
- Employ trace averaging (RMS) mode over a minimum of 100 traces.
- Use the peak marker function to determine the maximum amplitude level.

For Average Power (Duty cycle $< 98\%$)

- Measure the duty cycle (x).
- Set instrument center frequency to DTS channel center frequency.
- Set span to at least 1.5 times the OBW.
- Set RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- Set VBW $\geq 3 \times \text{RBW}$.
- Detector = power averaging (RMS) or sample detector (when RMS not available).
- Ensure that the number of measurement points in the sweep $\geq 2 \times \text{span}/\text{RBW}$.
- Sweep time = auto couple.
- Do not use sweep triggering. Allow sweep to "free run".
- Employ trace averaging (RMS) mode over a minimum of 100 traces.
- Use the peak marker function to determine the maximum amplitude level.
- 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

Test Mode A

2G traffic radio: CDD Mode

802.11b

TX chain	Channel	Freq. (MHz)	PSD w/o Duty Factor (dBm/10kHz)	10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
0	1	2412	-18.02	6.02	1.34	-10.66	2.73	Pass
	6	2437	-14.88	6.02	1.34	-7.52	2.73	Pass
	11	2462	-18.40	6.02	1.34	-11.04	2.73	Pass
1	1	2412	-18.76	6.02	1.34	-11.40	2.73	Pass
	6	2437	-15.18	6.02	1.34	-7.82	2.73	Pass
	11	2462	-16.18	6.02	1.34	-8.82	2.73	Pass
2	1	2412	-18.39	6.02	1.34	-11.03	2.73	Pass
	6	2437	-15.84	6.02	1.34	-8.48	2.73	Pass
	11	2462	-17.10	6.02	1.34	-9.74	2.73	Pass
3	1	2412	-18.48	6.02	1.34	-11.12	2.73	Pass
	6	2437	-13.55	6.02	1.34	-6.19	2.73	Pass
	11	2462	-17.87	6.02	1.34	-10.51	2.73	Pass

Note:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
2. Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.27\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (11.27 - 6) = 2.73\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11g

TX chain	Channel	Freq. (MHz)	PSD w/o Duty Factor (dBm/10kHz)	10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
0	1	2412	-16.12	6.02	0.33	-9.77	2.73	Pass
	6	2437	-13.93	6.02	0.33	-7.58	2.73	Pass
	11	2462	-16.78	6.02	0.33	-10.43	2.73	Pass
1	1	2412	-15.25	6.02	0.33	-8.90	2.73	Pass
	6	2437	-14.19	6.02	0.33	-7.84	2.73	Pass
	11	2462	-16.36	6.02	0.33	-10.01	2.73	Pass
2	1	2412	-15.54	6.02	0.33	-9.19	2.73	Pass
	6	2437	-14.23	6.02	0.33	-7.88	2.73	Pass
	11	2462	-16.82	6.02	0.33	-10.47	2.73	Pass
3	1	2412	-15.56	6.02	0.33	-9.21	2.73	Pass
	6	2437	-13.94	6.02	0.33	-7.59	2.73	Pass
	11	2462	-16.87	6.02	0.33	-10.52	2.73	Pass

Note:

- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.27\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8-(11.27-6) = 2.73\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

TX chain	Channel	Freq. (MHz)	PSD w/o Duty Factor (dBm/10kHz)	10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
0	1	2412	-19.39	6.02	0.25	-13.12	2.73	Pass
	6	2437	-16.48	6.02	0.25	-10.21	2.73	Pass
	11	2462	-21.66	6.02	0.25	-15.39	2.73	Pass
1	1	2412	-19.46	6.02	0.25	-13.19	2.73	Pass
	6	2437	-15.40	6.02	0.25	-9.13	2.73	Pass
	11	2462	-21.63	6.02	0.25	-15.36	2.73	Pass
2	1	2412	-19.09	6.02	0.25	-12.82	2.73	Pass
	6	2437	-15.53	6.02	0.25	-9.26	2.73	Pass
	11	2462	-21.83	6.02	0.25	-15.56	2.73	Pass
3	1	2412	-18.76	6.02	0.25	-12.49	2.73	Pass
	6	2437	-15.86	6.02	0.25	-9.59	2.73	Pass
	11	2462	-21.54	6.02	0.25	-15.27	2.73	Pass

Note:

- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.27\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8-(11.27-6) = 2.73\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

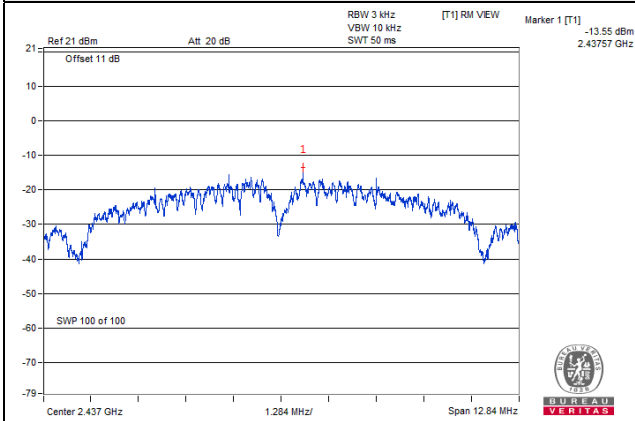
TX chain	Channel	Freq. (MHz)	PSD w/o Duty Factor (dBm/10kHz)	10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
0	3	2422	-26.21	6.02	0.26	-19.93	2.73	Pass
	6	2437	-20.73	6.02	0.26	-14.45	2.73	Pass
	9	2452	-23.17	6.02	0.26	-16.89	2.73	Pass
1	3	2422	-25.87	6.02	0.26	-19.59	2.73	Pass
	6	2437	-20.92	6.02	0.26	-14.64	2.73	Pass
	9	2452	-22.25	6.02	0.26	-15.97	2.73	Pass
2	3	2422	-25.53	6.02	0.26	-19.25	2.73	Pass
	6	2437	-20.73	6.02	0.26	-14.45	2.73	Pass
	9	2452	-22.99	6.02	0.26	-16.71	2.73	Pass
3	3	2422	-25.89	6.02	0.26	-19.61	2.73	Pass
	6	2437	-21.00	6.02	0.26	-14.72	2.73	Pass
	9	2452	-22.48	6.02	0.26	-16.20	2.73	Pass

Note:

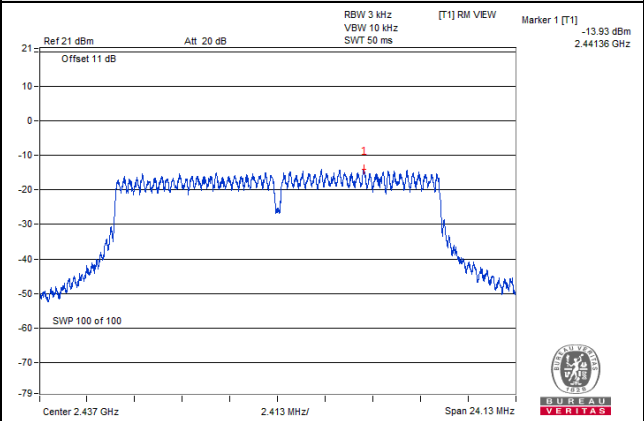
- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.27\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (11.27 - 6) = 2.73\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

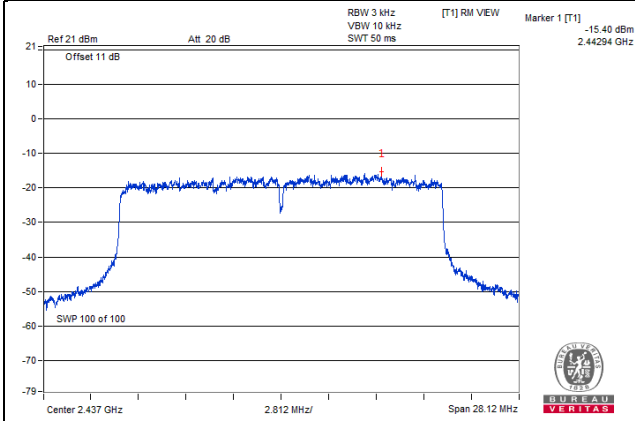
802.11b



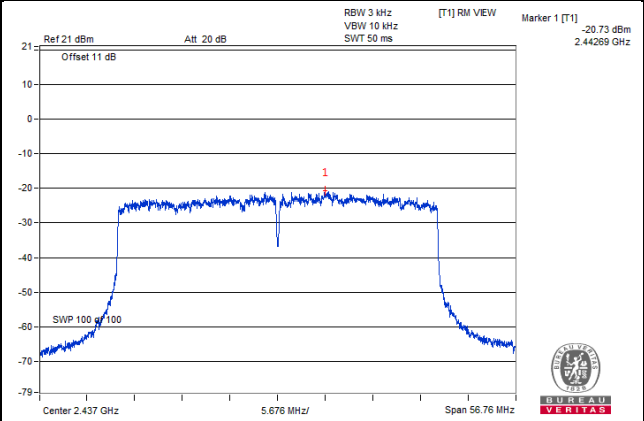
802.11g



802.11ax (HE20)



802.11ax (HE40)



Test Mode A

2G traffic radio: Beamforming Mode

802.11ax (HE20)

TX chain	Channel	Freq. (MHz)	PSD w/o Duty Factor (dBm/10kHz)	10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
0	1	2412	-20.64	6.02	0.19	-14.43	2.73	Pass
	6	2437	-19.21	6.02	0.19	-13.00	2.73	Pass
	11	2462	-22.20	6.02	0.19	-15.99	2.73	Pass
1	1	2412	-20.15	6.02	0.19	-13.94	2.73	Pass
	6	2437	-19.31	6.02	0.19	-13.10	2.73	Pass
	11	2462	-21.82	6.02	0.19	-15.61	2.73	Pass
2	1	2412	-19.97	6.02	0.19	-13.76	2.73	Pass
	6	2437	-18.88	6.02	0.19	-12.67	2.73	Pass
	11	2462	-22.00	6.02	0.19	-15.79	2.73	Pass
3	1	2412	-20.03	6.02	0.19	-13.82	2.73	Pass
	6	2437	-18.99	6.02	0.19	-12.78	2.73	Pass
	11	2462	-21.94	6.02	0.19	-15.73	2.73	Pass

Note:

- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.27\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (11.27 - 6) = 2.73\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

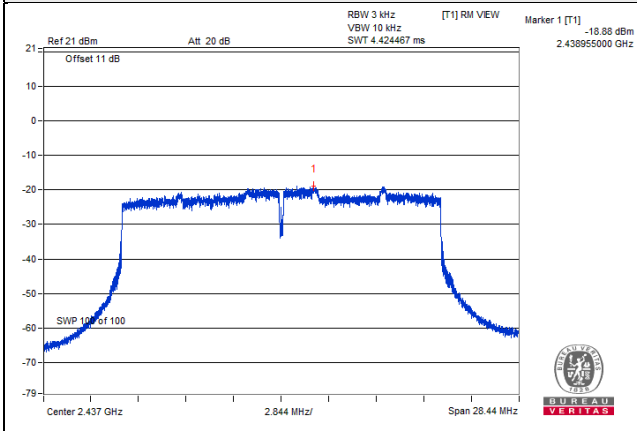
TX chain	Channel	Freq. (MHz)	PSD w/o Duty Factor (dBm/10kHz)	10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
0	3	2422	-24.93	6.02	0.20	-18.71	2.73	Pass
	6	2437	-22.61	6.02	0.20	-16.39	2.73	Pass
	9	2452	-23.86	6.02	0.20	-17.64	2.73	Pass
1	3	2422	-24.34	6.02	0.20	-18.12	2.73	Pass
	6	2437	-21.97	6.02	0.20	-15.75	2.73	Pass
	9	2452	-23.84	6.02	0.20	-17.62	2.73	Pass
2	3	2422	-24.51	6.02	0.20	-18.29	2.73	Pass
	6	2437	-21.79	6.02	0.20	-15.57	2.73	Pass
	9	2452	-24.01	6.02	0.20	-17.79	2.73	Pass
3	3	2422	-24.53	6.02	0.20	-18.31	2.73	Pass
	6	2437	-22.28	6.02	0.20	-16.06	2.73	Pass
	9	2452	-23.86	6.02	0.20	-17.64	2.73	Pass

Note:

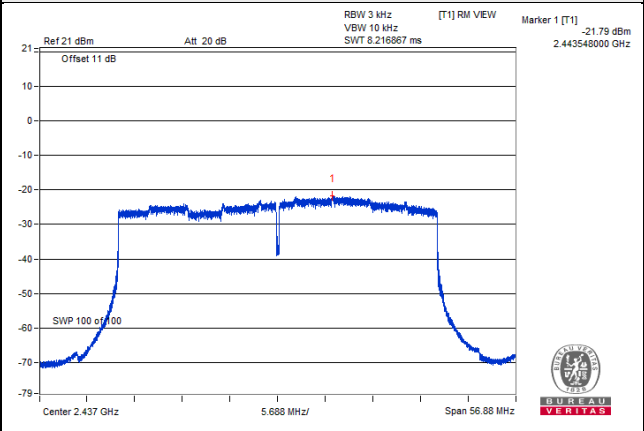
- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
- Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/4] = 11.27\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (11.27 - 6) = 2.73\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

802.11ax (HE20)



802.11ax (HE40)



Test Mode A

Scanning radio: CDD Mode

802.11b

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
1	2412	-22.09	8.00	Pass
6	2437	-20.61	8.00	Pass
11	2462	-21.48	8.00	Pass

802.11g

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/10kHz)	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
1	2412	-26.84	0.18	-26.66	8.00	Pass
6	2437	-25.37	0.18	-25.19	8.00	Pass
11	2462	-25.61	0.18	-25.43	8.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/10kHz)	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
1	2412	-25.74	0.20	-25.54	8.00	Pass
6	2437	-25.34	0.20	-25.14	8.00	Pass
11	2462	-25.88	0.20	-25.68	8.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

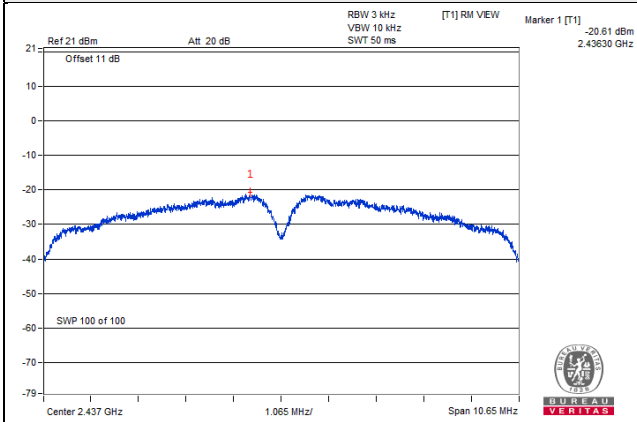
802.11n (HT40)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/10kHz)	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
3	2422	-30.68	0.43	-30.25	8.00	Pass
6	2437	-28.51	0.43	-28.08	8.00	Pass
9	2452	-28.49	0.43	-28.06	8.00	Pass

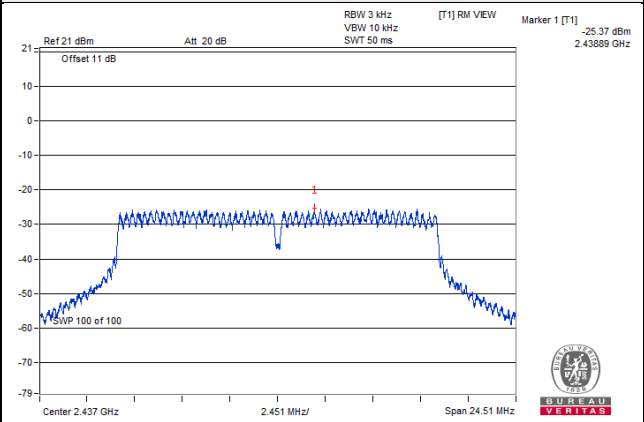
Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

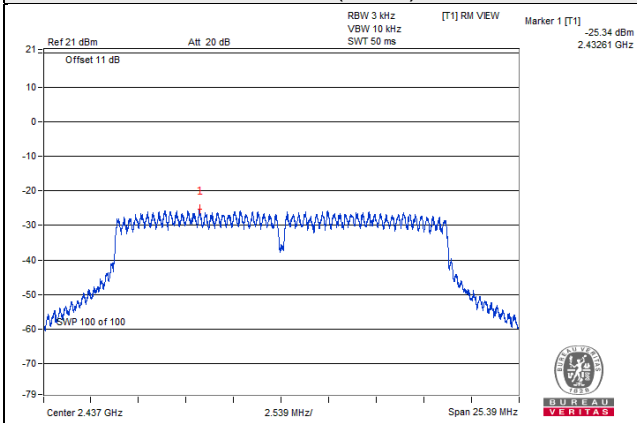
802.11b



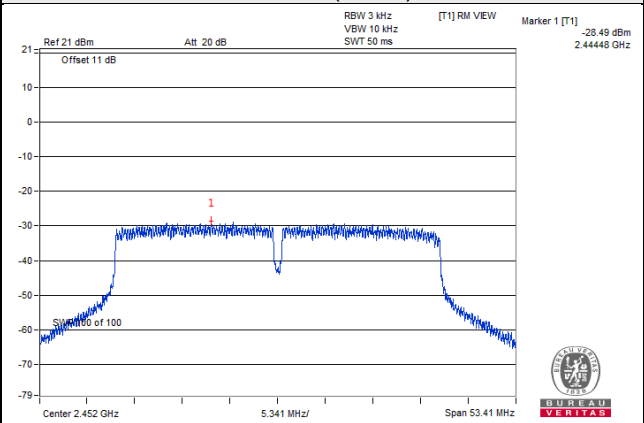
802.11g



802.11n (HT20)



802.11n (HT40)



Test Mode C

2G traffic radio: CDD Mode

802.11b

TX chain	Channel	Freq. (MHz)	PSD w/o Duty Factor (dBm/10kHz)	10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
0	1	2412	-14.90	6.02	1.36	-7.52	3.98	Pass
	6	2437	-14.57	6.02	1.36	-7.19	3.98	Pass
	11	2462	-16.74	6.02	1.36	-9.36	3.98	Pass
1	1	2412	-14.49	6.02	1.36	-7.11	3.98	Pass
	6	2437	-15.97	6.02	1.36	-8.59	3.98	Pass
	11	2462	-14.53	6.02	1.36	-7.15	3.98	Pass
2	1	2412	-17.48	6.02	1.36	-10.10	3.98	Pass
	6	2437	-15.59	6.02	1.36	-8.21	3.98	Pass
	11	2462	-16.95	6.02	1.36	-9.57	3.98	Pass
3	1	2412	-16.15	6.02	1.36	-8.77	3.98	Pass
	6	2437	-13.71	6.02	1.36	-6.33	3.98	Pass
	11	2462	-15.38	6.02	1.36	-8.00	3.98	Pass

Note:

- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
- Directional gain = $4\text{dBi} + 10\log(4) = 10.02\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (10.02 - 6) = 3.98\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11g

TX chain	Channel	Freq. (MHz)	PSD w/o Duty Factor (dBm/10kHz)	10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
0	1	2412	-18.12	6.02	0.38	-11.72	3.98	Pass
	6	2437	-13.99	6.02	0.38	-7.59	3.98	Pass
	11	2462	-17.15	6.02	0.38	-10.75	3.98	Pass
1	1	2412	-17.73	6.02	0.38	-11.33	3.98	Pass
	6	2437	-14.53	6.02	0.38	-8.13	3.98	Pass
	11	2462	-17.39	6.02	0.38	-10.99	3.98	Pass
2	1	2412	-18.08	6.02	0.38	-11.68	3.98	Pass
	6	2437	-14.33	6.02	0.38	-7.93	3.98	Pass
	11	2462	-18.05	6.02	0.38	-11.65	3.98	Pass
3	1	2412	-18.07	6.02	0.38	-11.67	3.98	Pass
	6	2437	-14.12	6.02	0.38	-7.72	3.98	Pass
	11	2462	-17.69	6.02	0.38	-11.29	3.98	Pass

Note:

- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
- Directional gain = $4\text{dBi} + 10\log(4) = 10.02\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (10.02 - 6) = 3.98\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

TX chain	Channel	Freq. (MHz)	PSD w/o Duty Factor (dBm/10kHz)	10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
0	1	2412	-20.27	6.02	0.23	-14.02	3.98	Pass
	6	2437	-15.92	6.02	0.23	-9.67	3.98	Pass
	11	2462	-21.63	6.02	0.23	-15.38	3.98	Pass
1	1	2412	-20.72	6.02	0.23	-14.47	3.98	Pass
	6	2437	-15.54	6.02	0.23	-9.29	3.98	Pass
	11	2462	-21.33	6.02	0.23	-15.08	3.98	Pass
2	1	2412	-21.55	6.02	0.23	-15.30	3.98	Pass
	6	2437	-16.21	6.02	0.23	-9.96	3.98	Pass
	11	2462	-22.42	6.02	0.23	-16.17	3.98	Pass
3	1	2412	-20.60	6.02	0.23	-14.35	3.98	Pass
	6	2437	-15.87	6.02	0.23	-9.62	3.98	Pass
	11	2462	-21.13	6.02	0.23	-14.88	3.98	Pass

Note:

- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
- Directional gain = $4\text{dBi} + 10\log(4) = 10.02\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (10.02 - 6) = 3.98\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

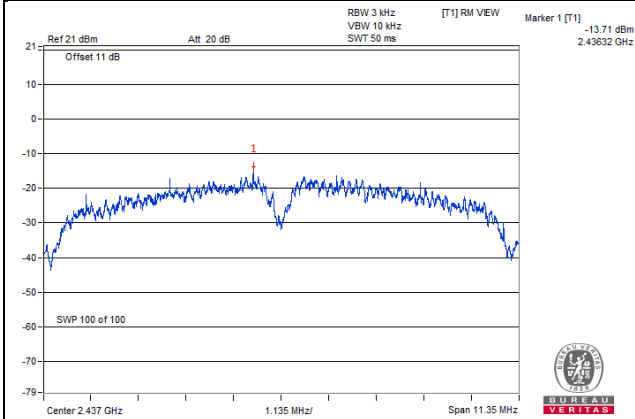
TX chain	Channel	Freq. (MHz)	PSD w/o Duty Factor (dBm/10kHz)	10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
0	3	2422	-27.06	6.02	0.31	-20.73	3.98	Pass
	6	2437	-22.01	6.02	0.31	-15.68	3.98	Pass
	9	2452	-23.54	6.02	0.31	-17.21	3.98	Pass
1	3	2422	-26.50	6.02	0.31	-20.17	3.98	Pass
	6	2437	-22.21	6.02	0.31	-15.88	3.98	Pass
	9	2452	-23.61	6.02	0.31	-17.28	3.98	Pass
2	3	2422	-27.34	6.02	0.31	-21.01	3.98	Pass
	6	2437	-22.81	6.02	0.31	-16.48	3.98	Pass
	9	2452	-24.44	6.02	0.31	-18.11	3.98	Pass
3	3	2422	-26.56	6.02	0.31	-20.23	3.98	Pass
	6	2437	-22.18	6.02	0.31	-15.85	3.98	Pass
	9	2452	-23.81	6.02	0.31	-17.48	3.98	Pass

Note:

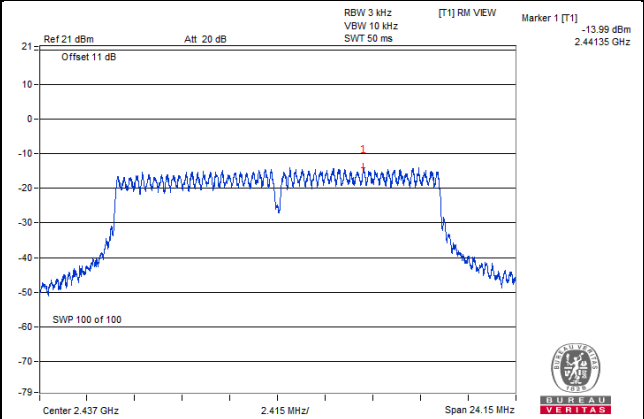
- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
- Directional gain = $4\text{dBi} + 10\log(4) = 10.02\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8 - (10.02 - 6) = 3.98\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

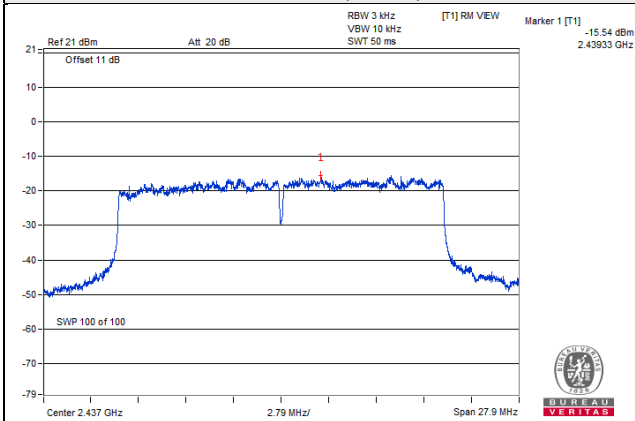
802.11b



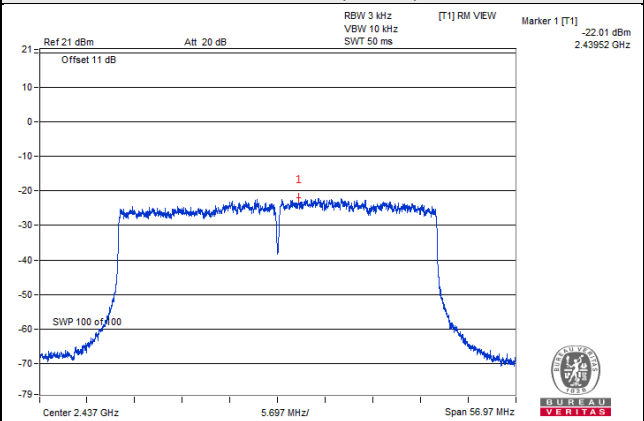
802.11g



802.11ax (HE20)



802.11ax (HE40)



Test Mode C

2G traffic radio: Beamforming Mode

802.11ax (HE20)

TX chain	Channel	Freq. (MHz)	PSD w/o Duty Factor (dBm/10kHz)	10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
0	1	2412	-21.80	6.02	0.20	-15.58	3.98	Pass
	6	2437	-16.39	6.02	0.20	-10.17	3.98	Pass
	11	2462	-22.65	6.02	0.20	-16.43	3.98	Pass
1	1	2412	-22.01	6.02	0.20	-15.79	3.98	Pass
	6	2437	-17.23	6.02	0.20	-11.01	3.98	Pass
	11	2462	-22.93	6.02	0.20	-16.71	3.98	Pass
2	1	2412	-22.42	6.02	0.20	-16.20	3.98	Pass
	6	2437	-17.12	6.02	0.20	-10.90	3.98	Pass
	11	2462	-23.81	6.02	0.20	-17.59	3.98	Pass
3	1	2412	-24.24	6.02	0.20	-18.02	3.98	Pass
	6	2437	-19.34	6.02	0.20	-13.12	3.98	Pass
	11	2462	-25.18	6.02	0.20	-18.96	3.98	Pass

Note:

- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
- Directional gain = 4dBi + 10log(4) = 10.02dBi > 6dBi, so the power density limit shall be reduced to 8-(10.02-6) = 3.98dBm.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

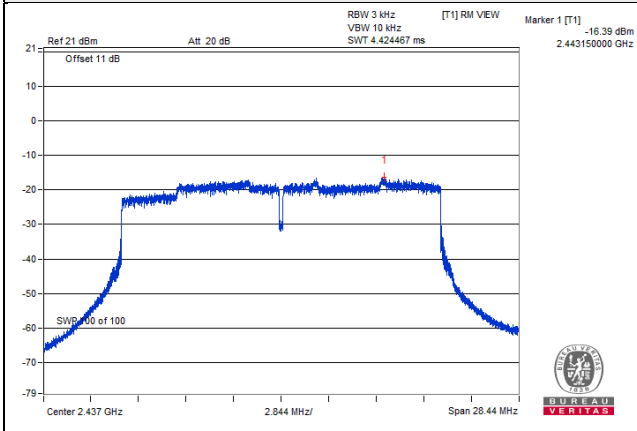
TX chain	Channel	Freq. (MHz)	PSD w/o Duty Factor (dBm/10kHz)	10 log (N=4) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
0	3	2422	-25.66	6.02	0.23	-19.41	3.98	Pass
	6	2437	-22.30	6.02	0.23	-16.05	3.98	Pass
	9	2452	-24.54	6.02	0.23	-18.29	3.98	Pass
1	3	2422	-26.62	6.02	0.23	-20.37	3.98	Pass
	6	2437	-23.03	6.02	0.23	-16.78	3.98	Pass
	9	2452	-24.75	6.02	0.23	-18.50	3.98	Pass
2	3	2422	-26.92	6.02	0.23	-20.67	3.98	Pass
	6	2437	-23.12	6.02	0.23	-16.87	3.98	Pass
	9	2452	-25.23	6.02	0.23	-18.98	3.98	Pass
3	3	2422	-29.04	6.02	0.23	-22.79	3.98	Pass
	6	2437	-24.47	6.02	0.23	-18.22	3.98	Pass
	9	2452	-26.45	6.02	0.23	-20.20	3.98	Pass

Note:

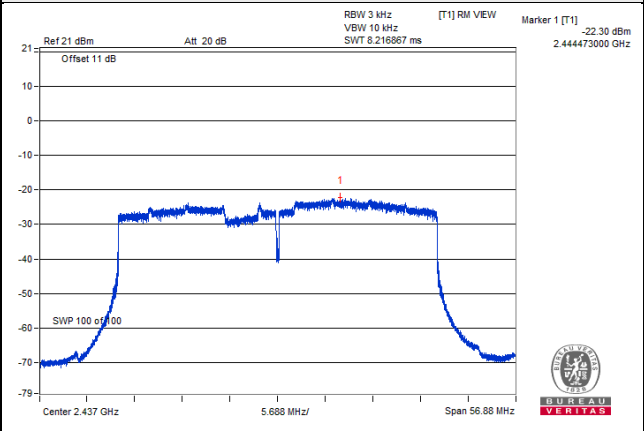
- Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density.
- Directional gain = 4dBi + 10log(4) = 10.02dBi > 6dBi, so the power density limit shall be reduced to 8-(10.02-6) = 3.98dBm.
- Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

802.11ax (HE20)



802.11ax (HE40)



Test Mode C

Scanning radio: CDD Mode

802.11b

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
1	2412	-20.80	8.00	Pass
6	2437	-20.93	8.00	Pass
11	2462	-20.84	8.00	Pass

802.11g

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/10kHz)	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
1	2412	-24.91	0.21	-24.70	8.00	Pass
6	2437	-24.95	0.21	-24.74	8.00	Pass
11	2462	-24.70	0.21	-24.49	8.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/10kHz)	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
1	2412	-24.67	0.24	-24.43	8.00	Pass
6	2437	-25.13	0.24	-24.89	8.00	Pass
11	2462	-24.71	0.24	-24.47	8.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

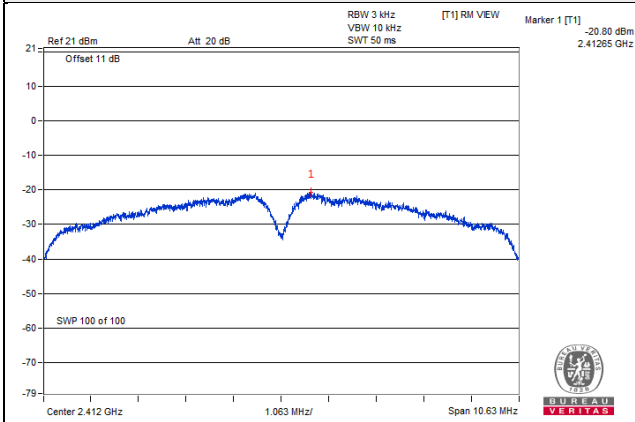
802.11n (HT40)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm/10kHz)	Duty Factor (dB)	Total PSD With Duty Factor (dBm/10kHz)	Limit (dBm/3kHz)	Pass / Fail
3	2422	-28.27	0.40	-27.87	8.00	Pass
6	2437	-28.13	0.40	-27.73	8.00	Pass
9	2452	-29.85	0.40	-29.45	8.00	Pass

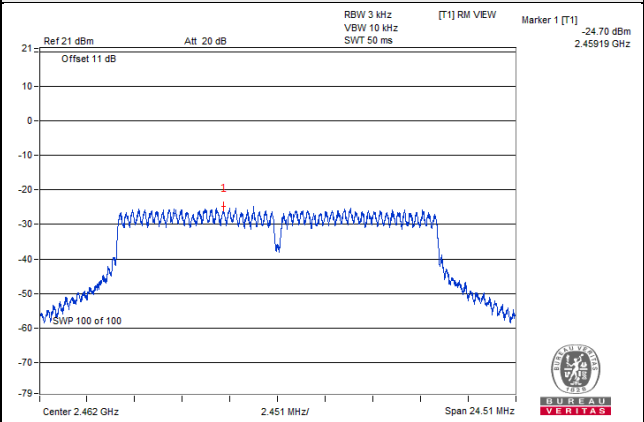
Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

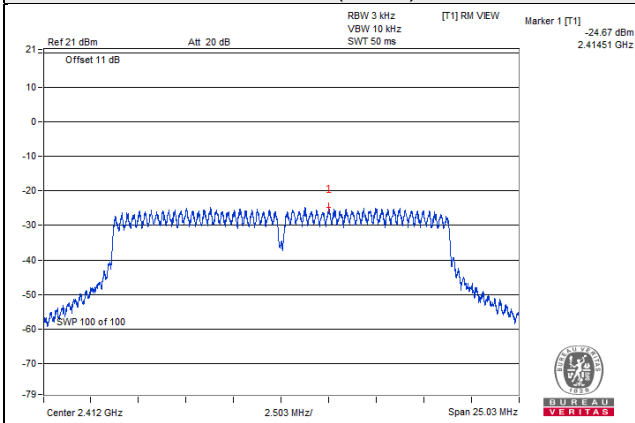
802.11b



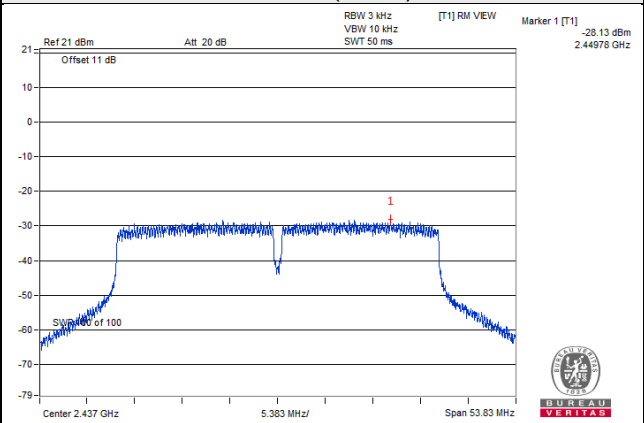
802.11g



802.11n (HT20)



802.11n (HT40)

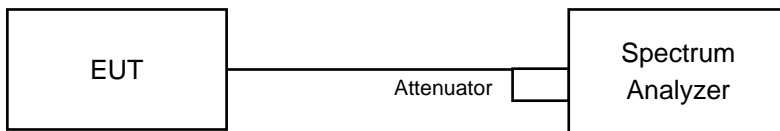


4.6 Conducted Out of Band Emission Measurement

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

1. Set the RBW = 100 kHz.
2. Set the VBW \geq 300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz.
2. Set VBW \geq 300 kHz.
3. Detector = peak.
4. Sweep = auto couple.
5. Trace Mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum amplitude level.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

Same as item 4.3.6.

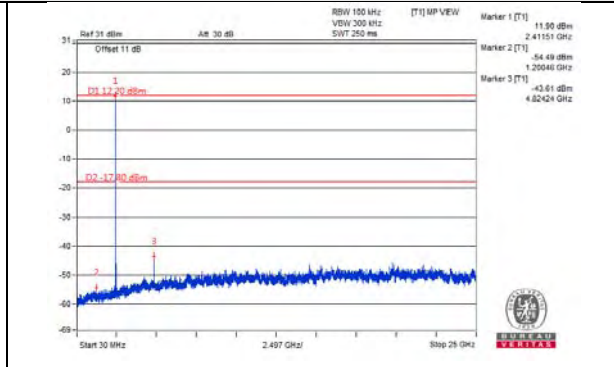
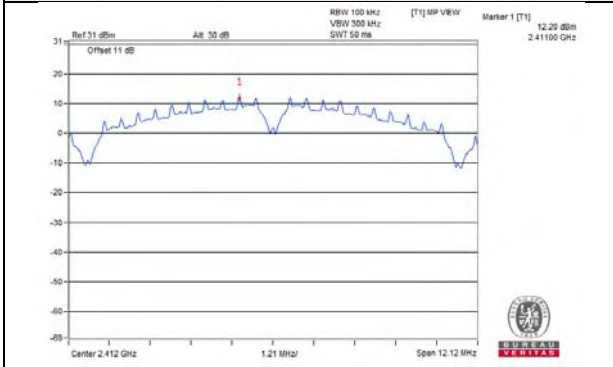
4.6.7 Test Results

The conducted emission test is performed on each TX port of operating mode without summing or adding $10\log(N)$ since the limit is relative emission limit.

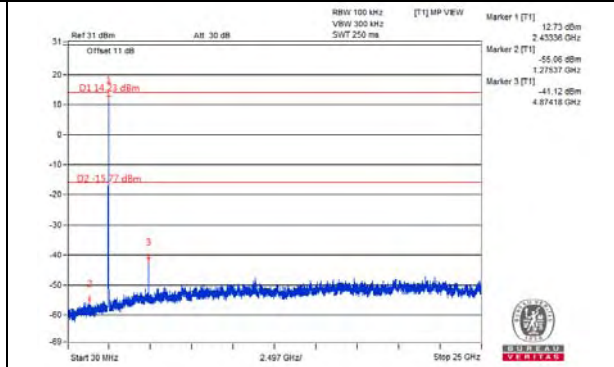
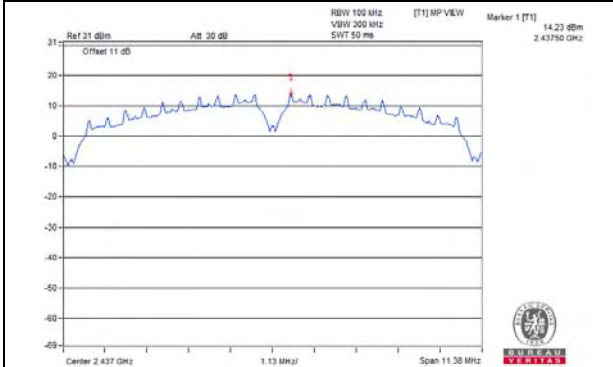
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 30dB offset below D1. It shows compliance with the requirement.

Test Mode A
2G traffic radio: CDD Mode
802.11b_Chain 0

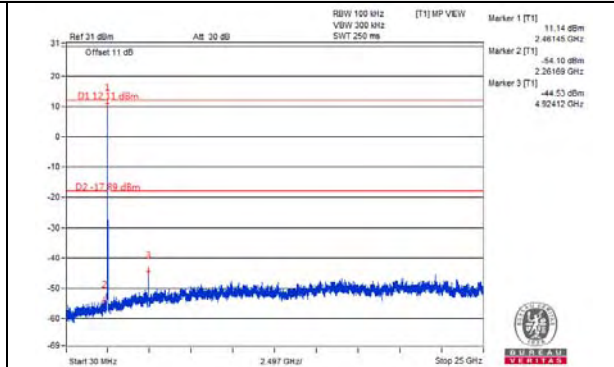
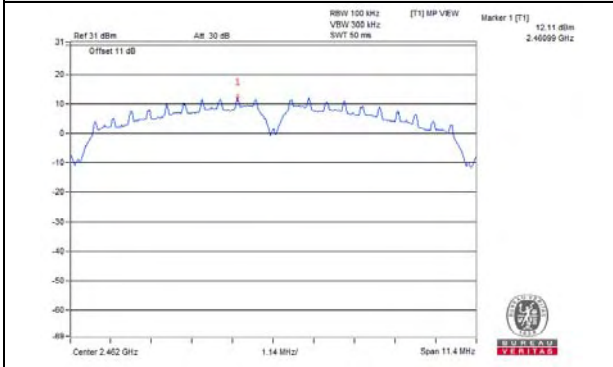
CH 1



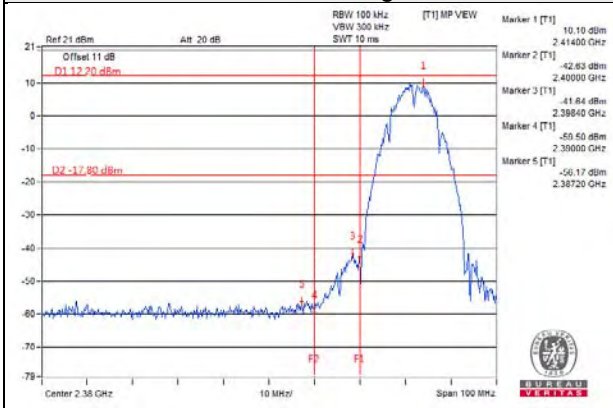
CH 6



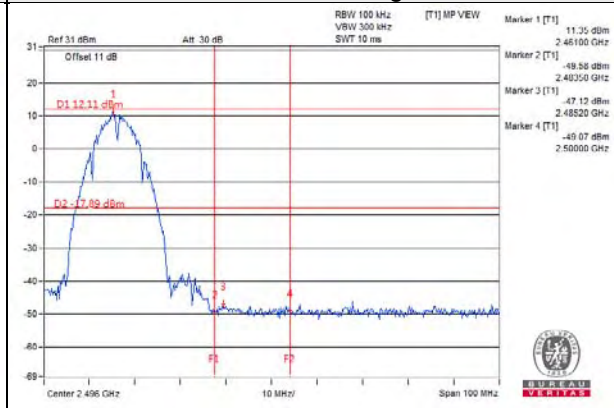
CH 11



CH 1 Band edge

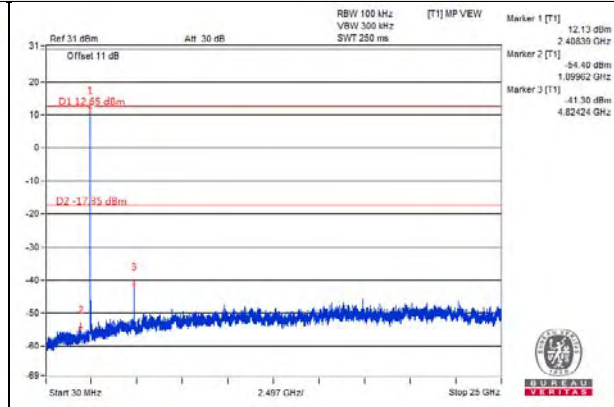
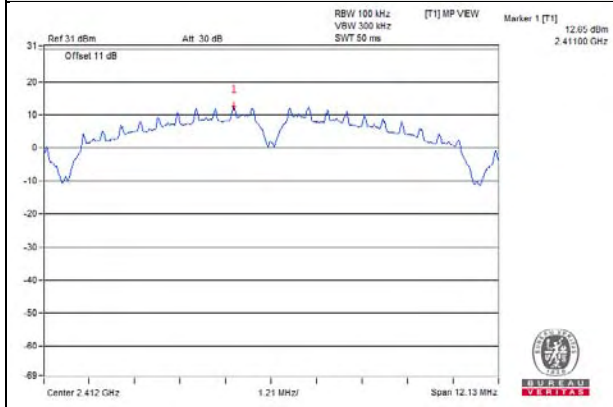


CH 11 Band edge

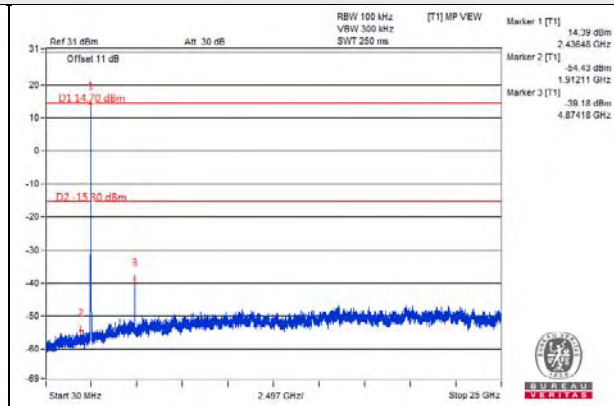
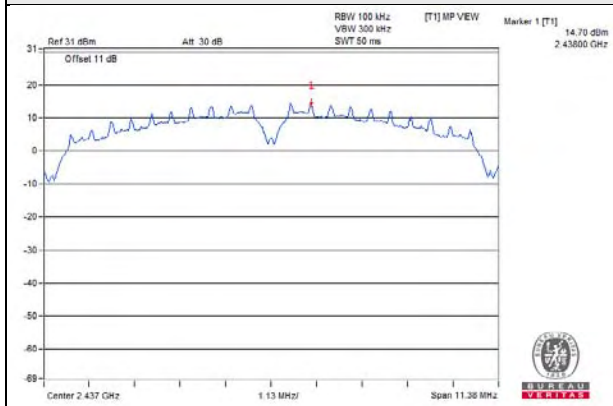


802.11b_Chain 1

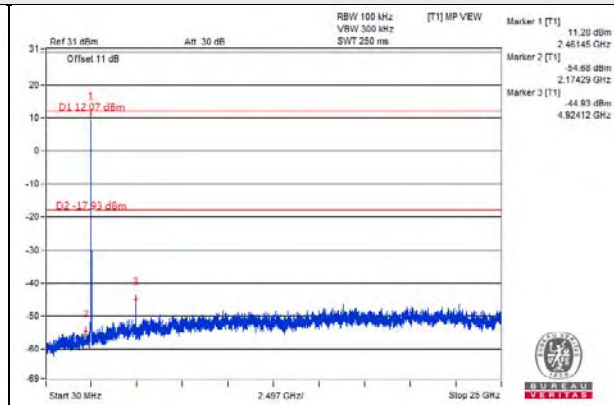
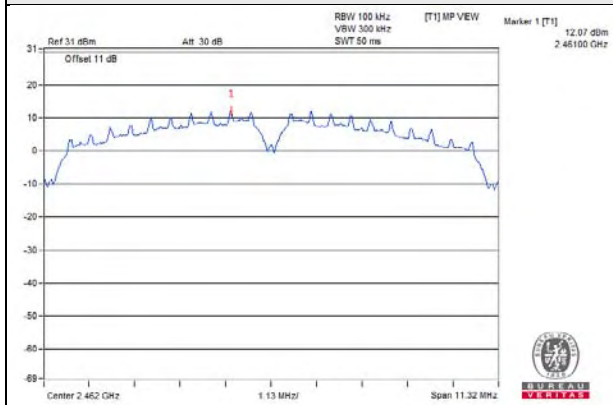
CH 1



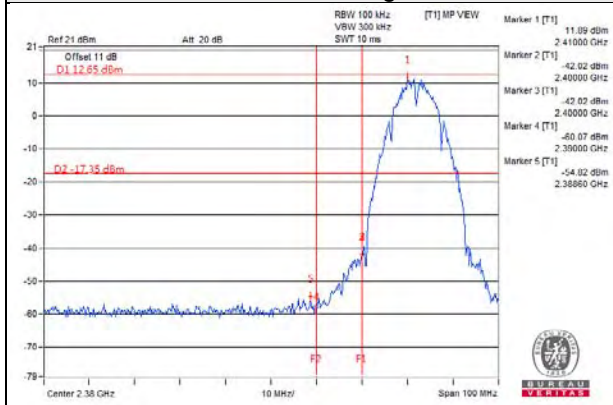
CH 6



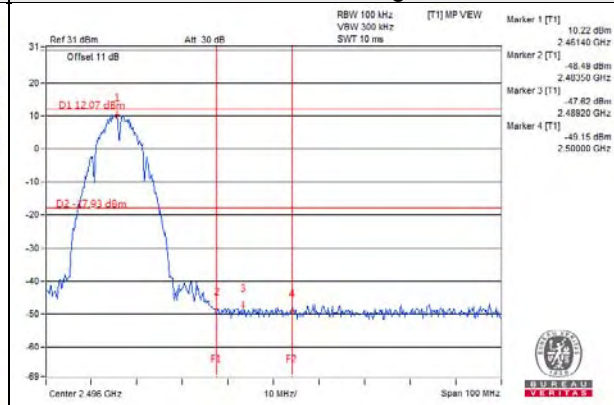
CH 11



CH 1 Band edge

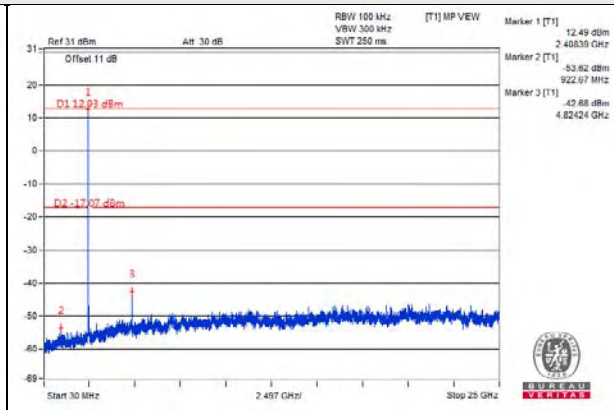
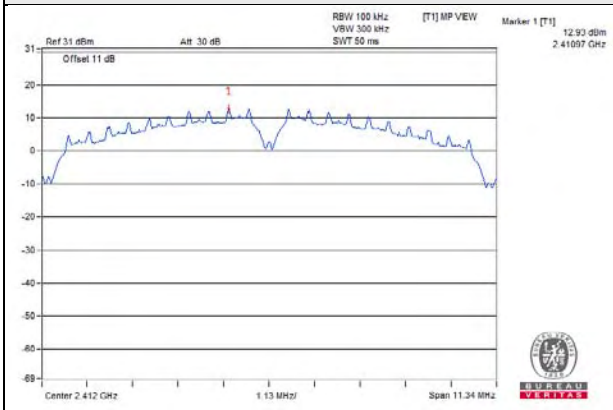


CH 11 Band edge

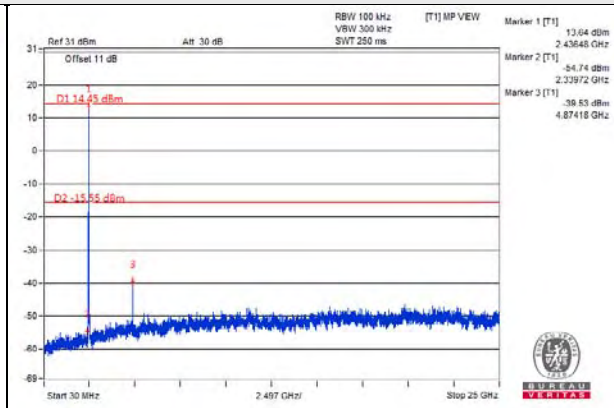
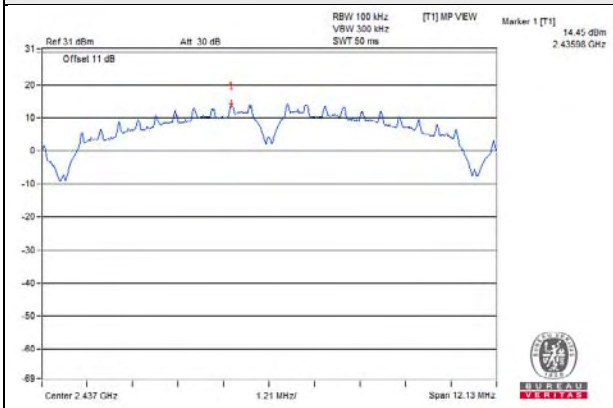


802.11b_Chain 2

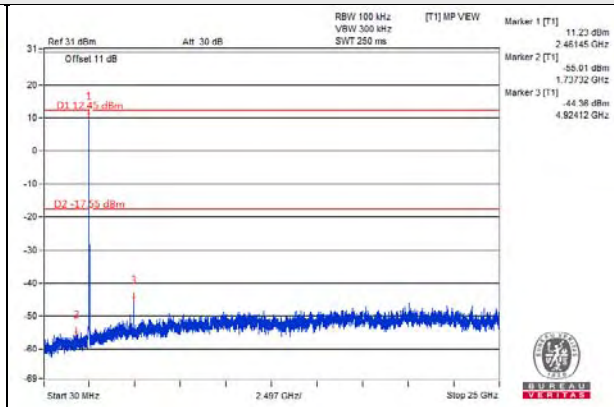
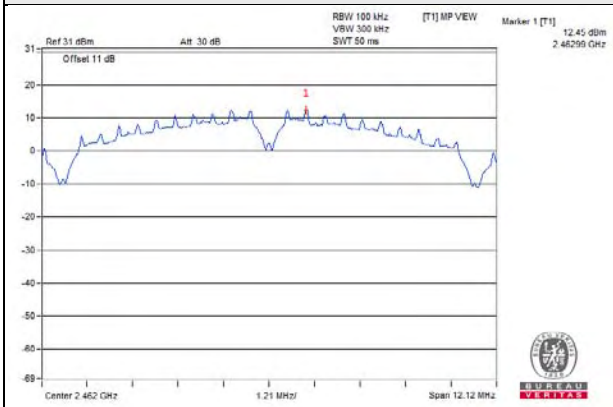
CH 1



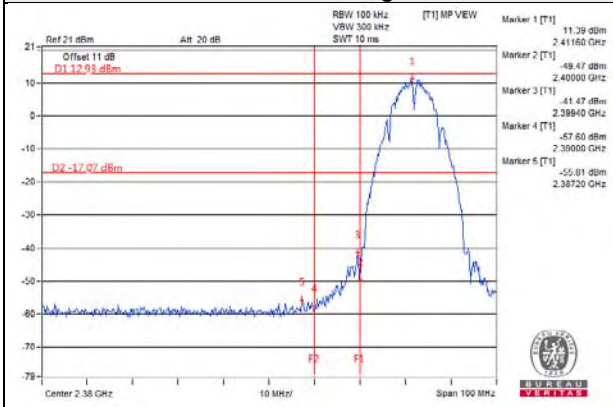
CH 6



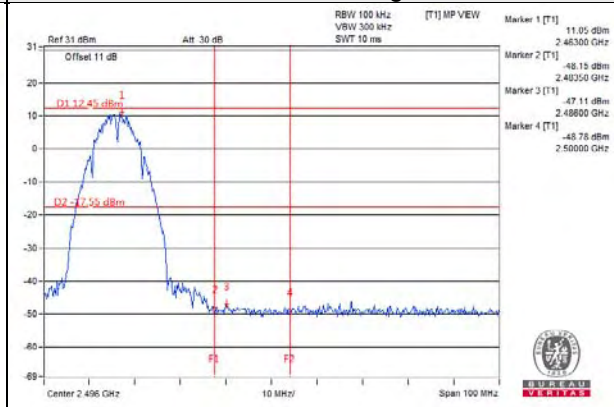
CH 11



CH 1 Band edge

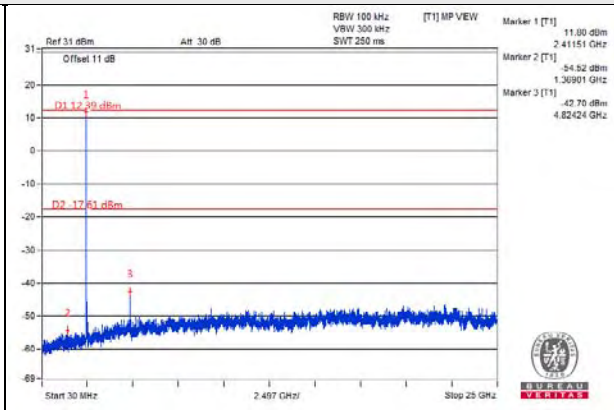
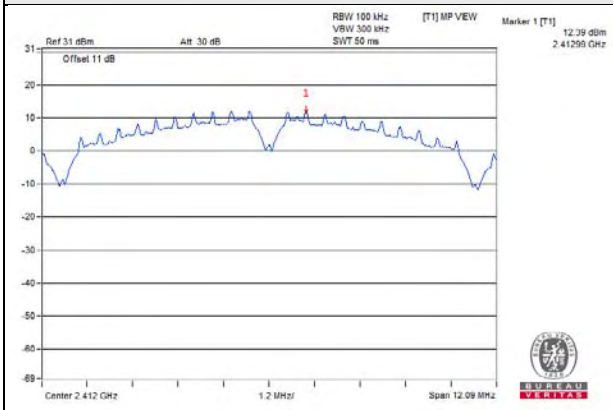


CH 11 Band edge

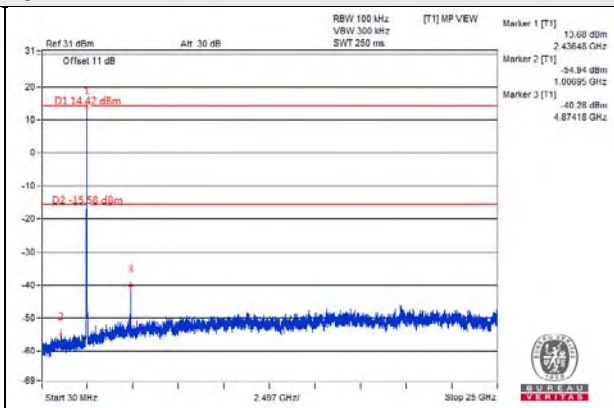
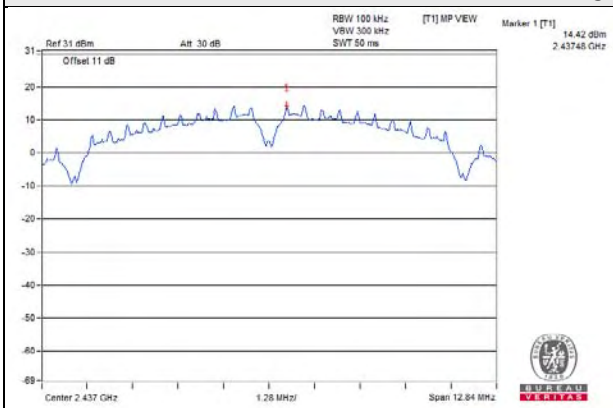


802.11b_Chain 3

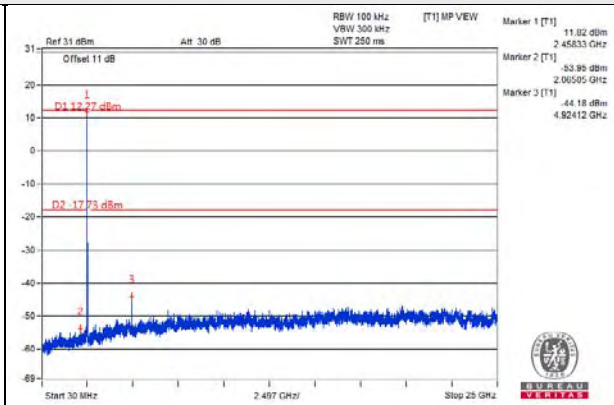
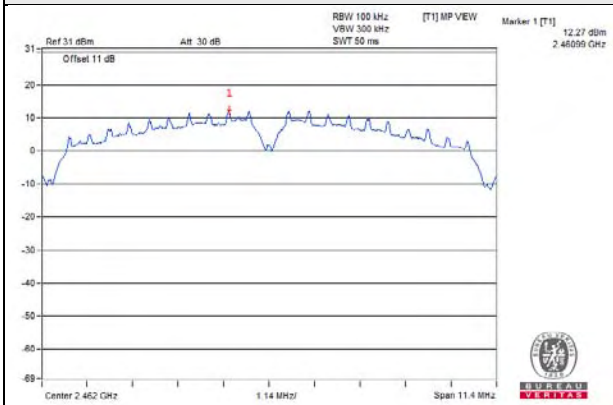
CH 1



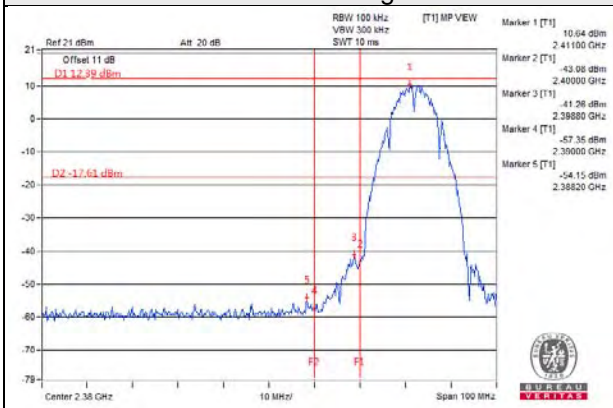
CH 6



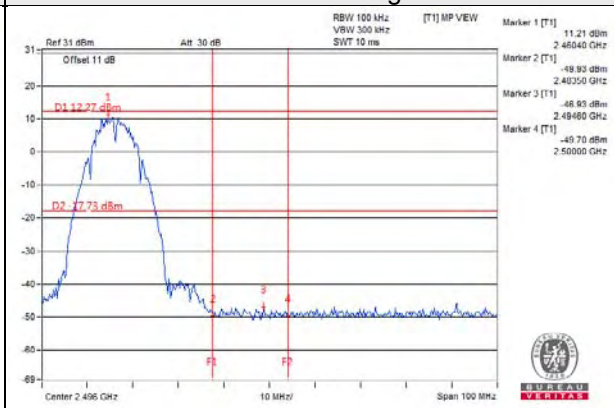
CH 11



CH 1 Band edge

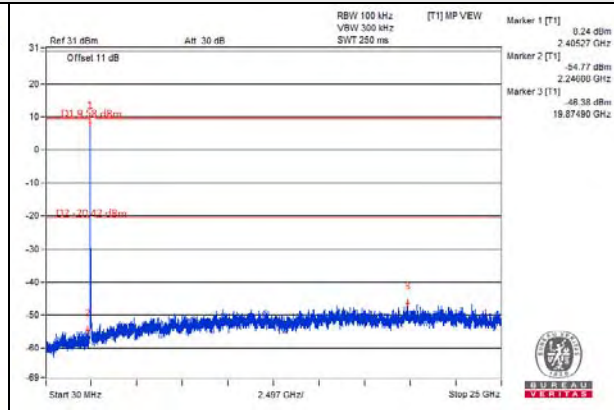
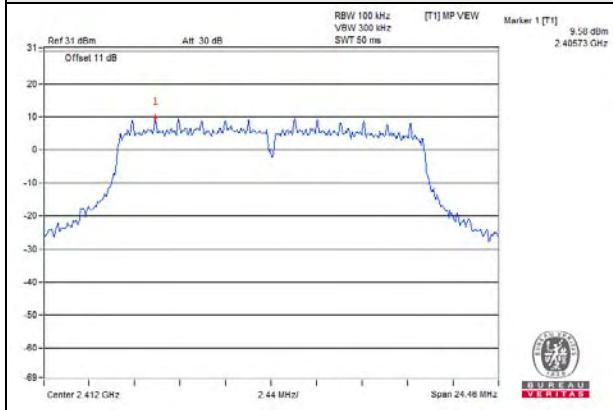


CH 11 Band edge

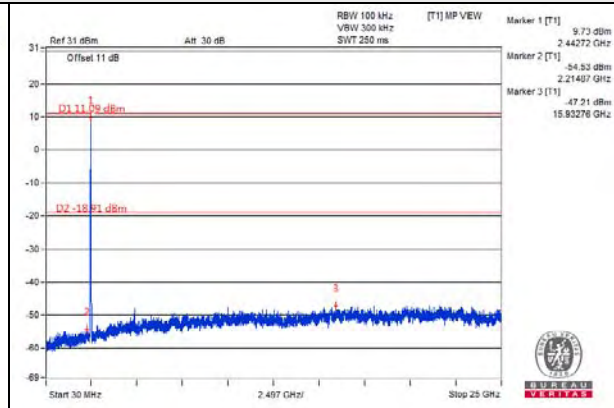
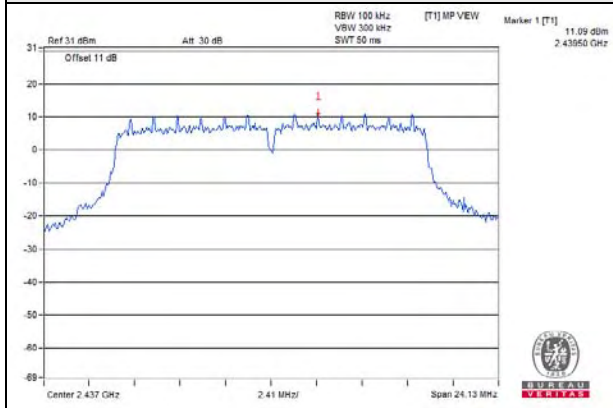


802.11g_Chain 0

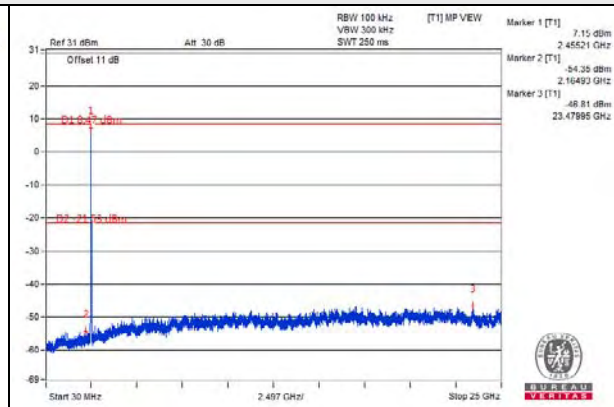
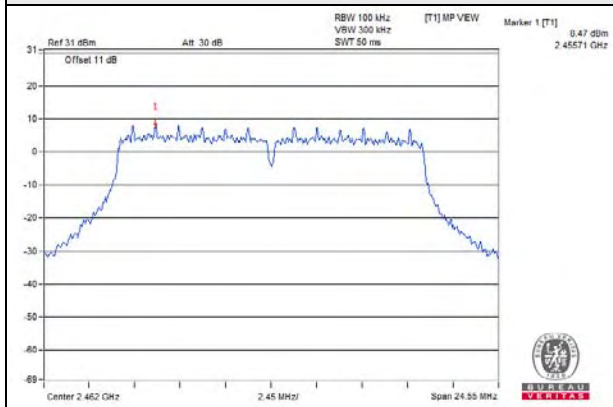
CH 1



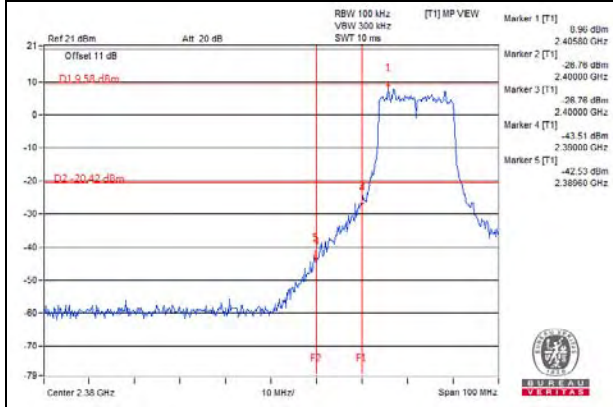
CH 6



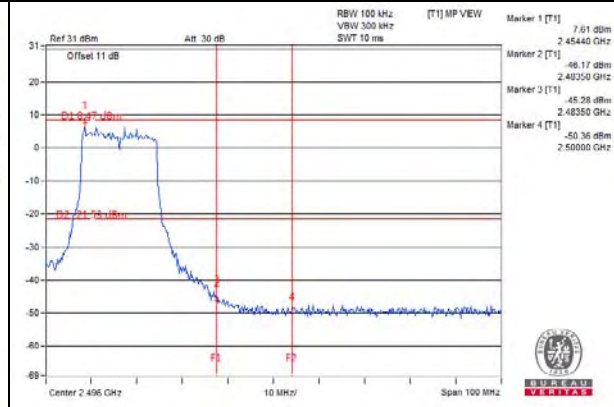
CH 11



CH 1 Band edge

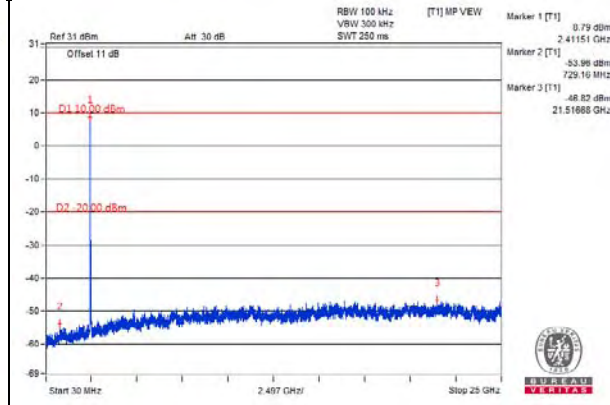
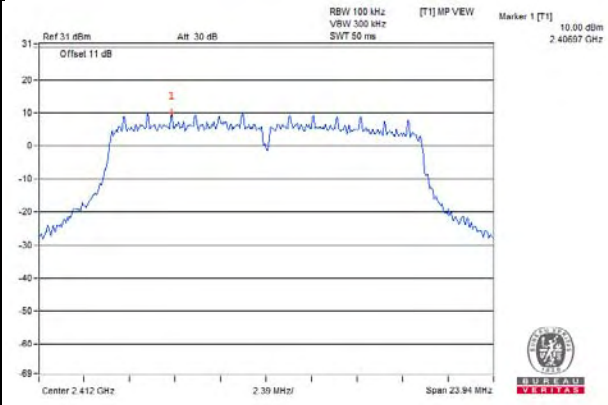


CH 11 Band edge

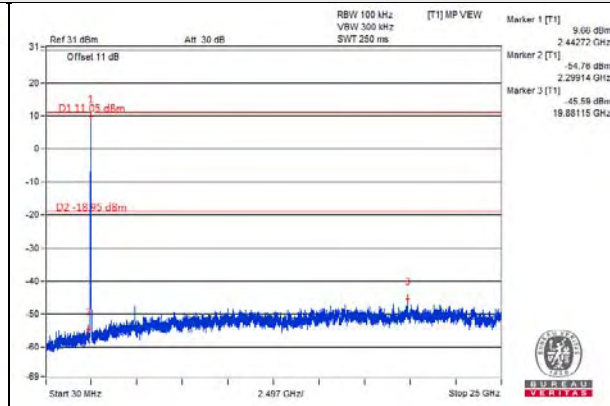
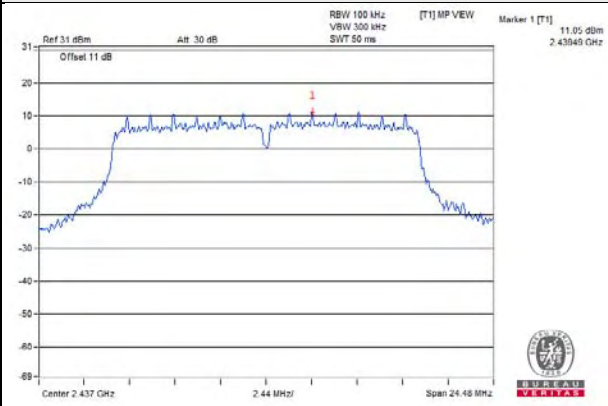


802.11g_Chain 1

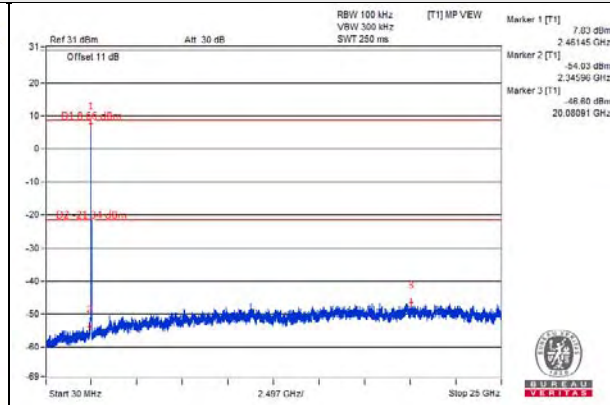
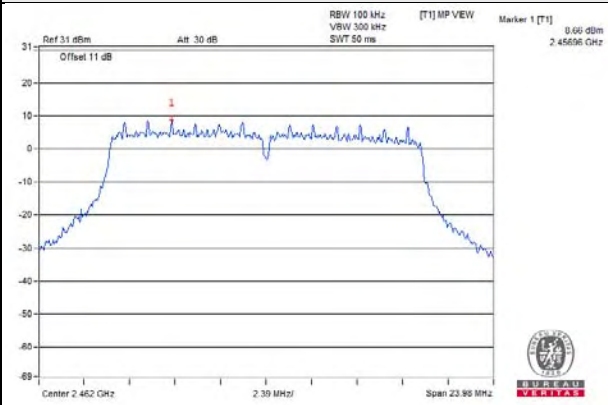
CH 1



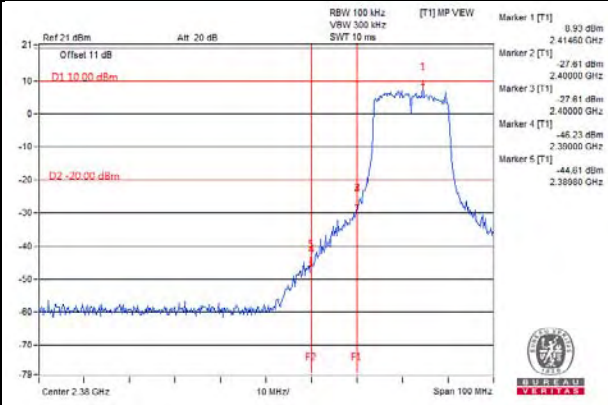
CH 6



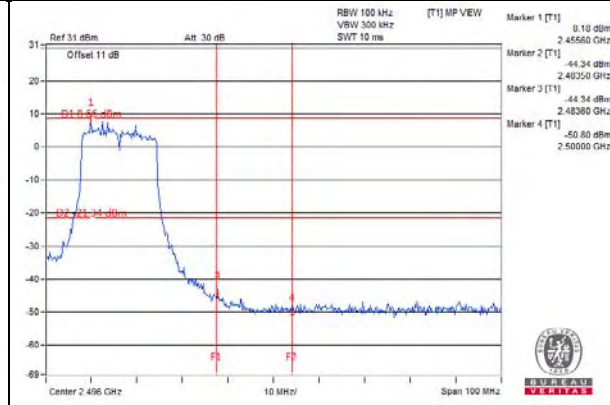
CH 11



CH 1 Band edge

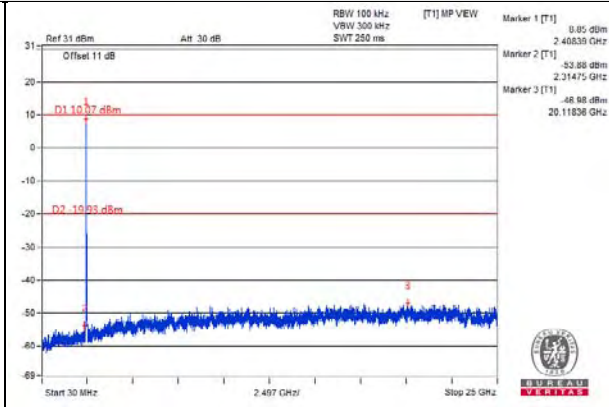
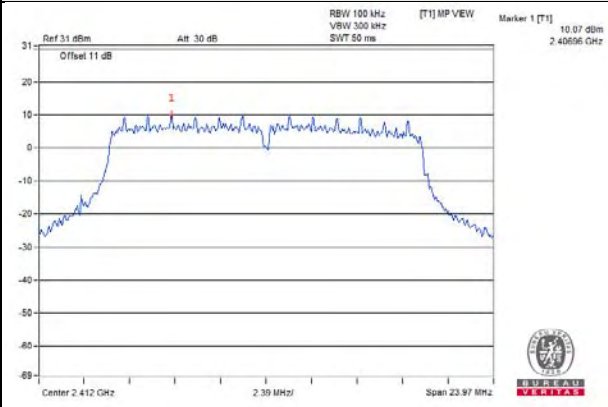


CH 11 Band edge

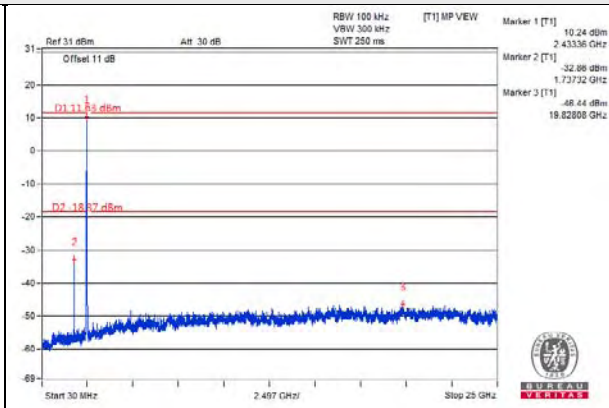
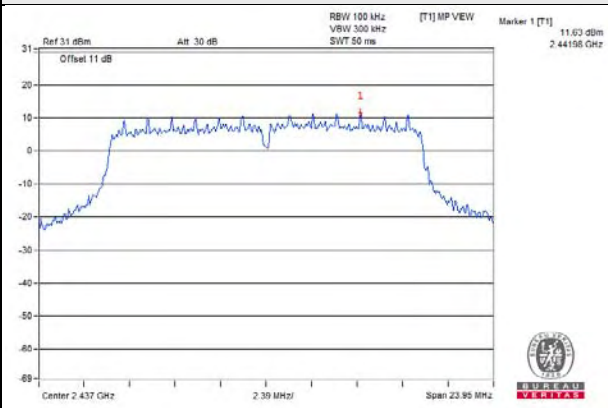


802.11g_Chain 2

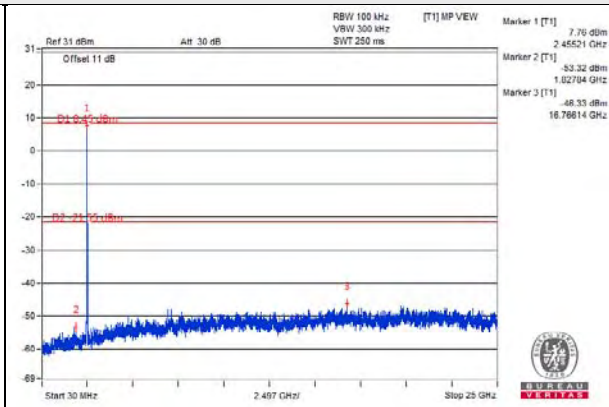
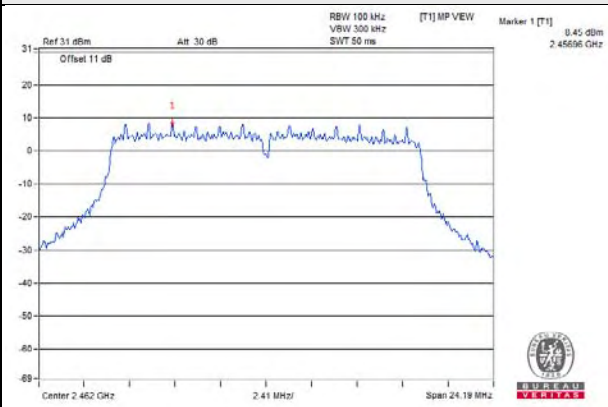
CH 1



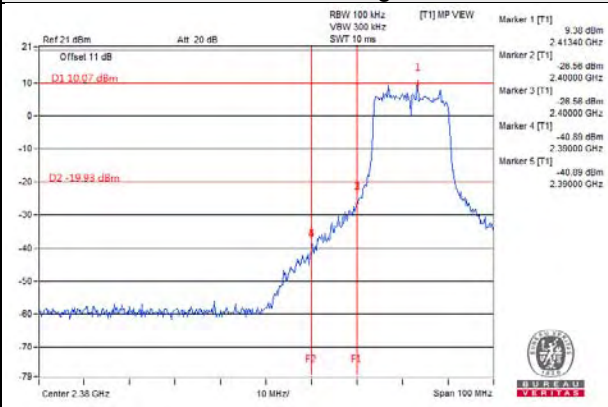
CH 6



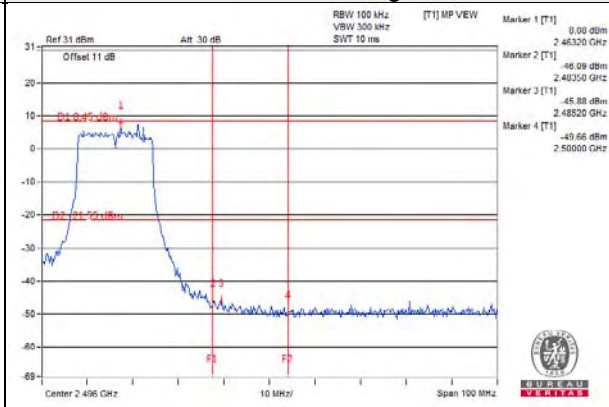
CH 11



CH 1 Band edge

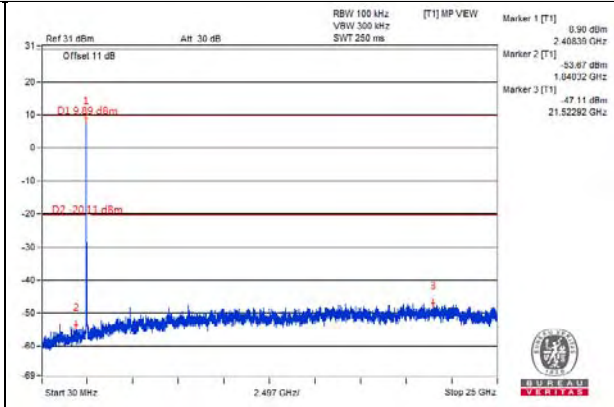
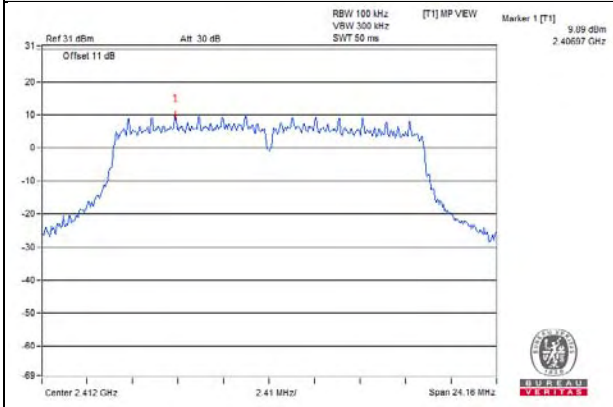


CH 11 Band edge

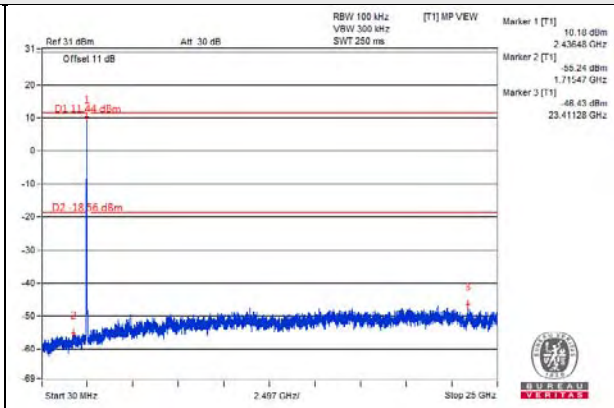
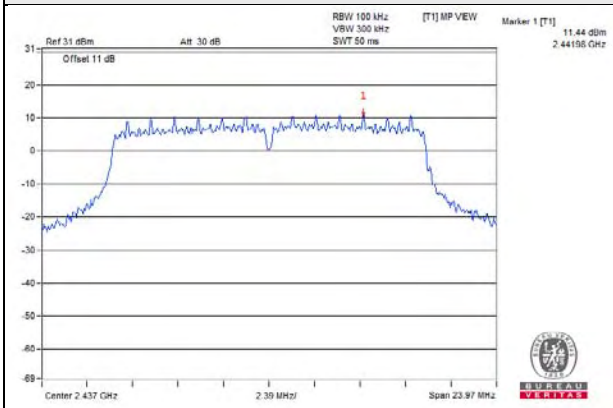


802.11g_Chain 3

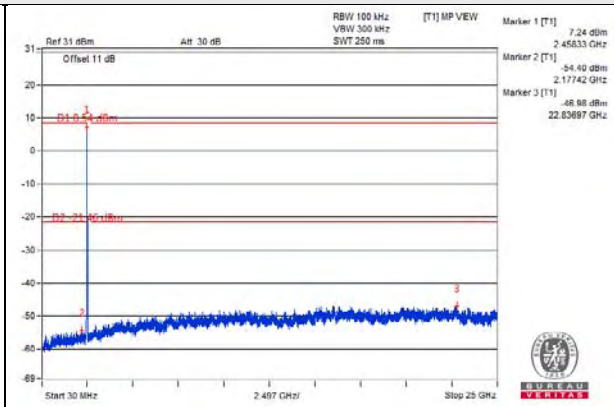
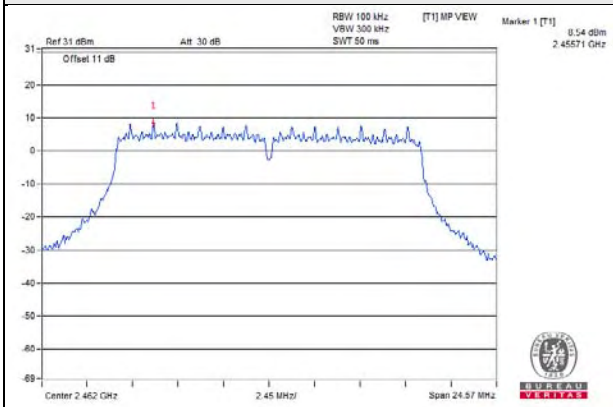
CH 1



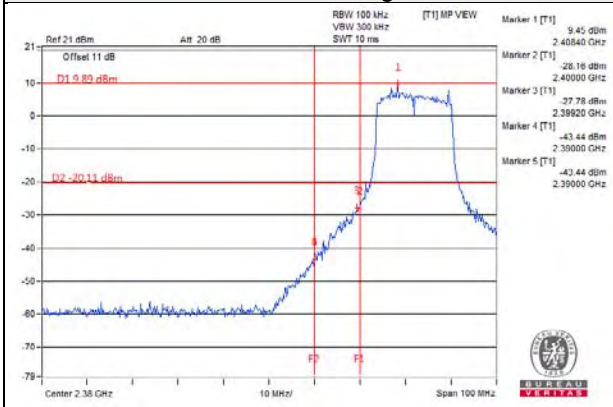
CH 6



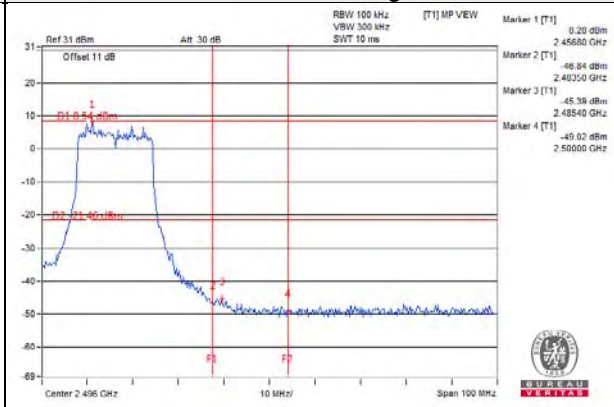
CH 11



CH 1 Band edge

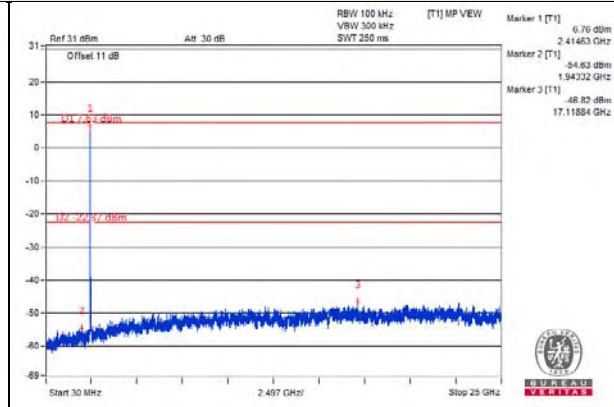
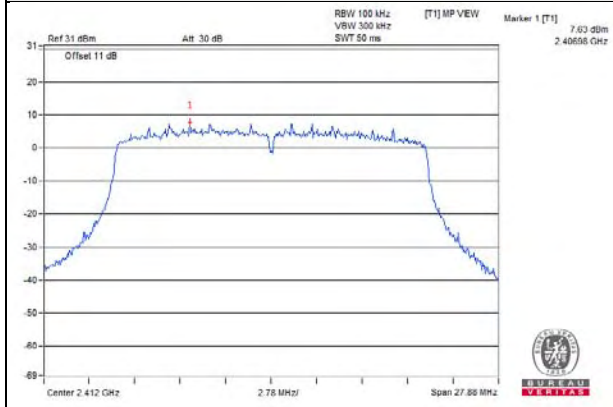


CH 11 Band edge

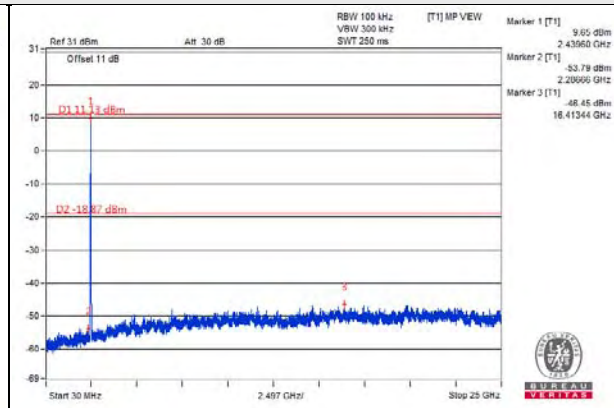
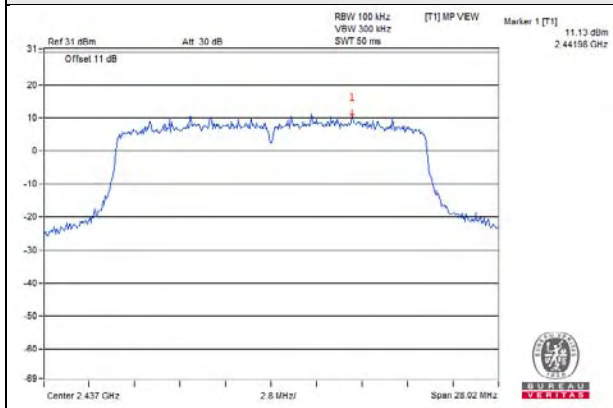


802.11ax (HE20)_Chain 0

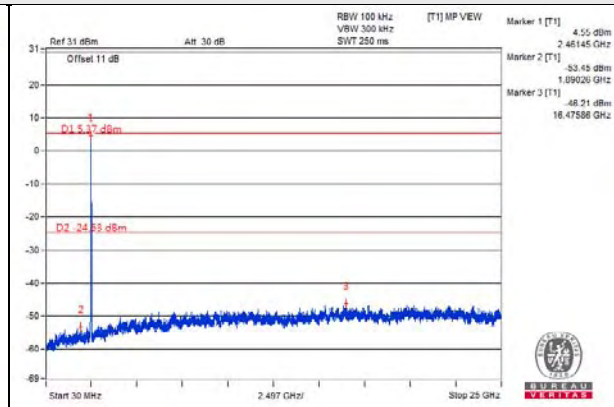
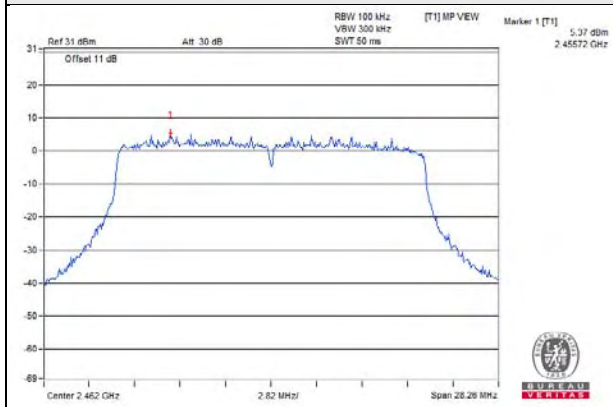
CH 1



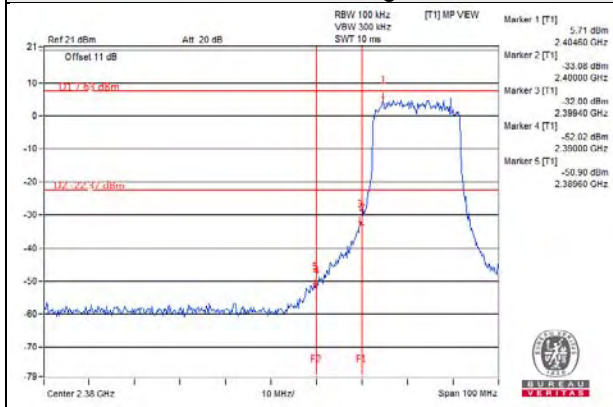
CH 6



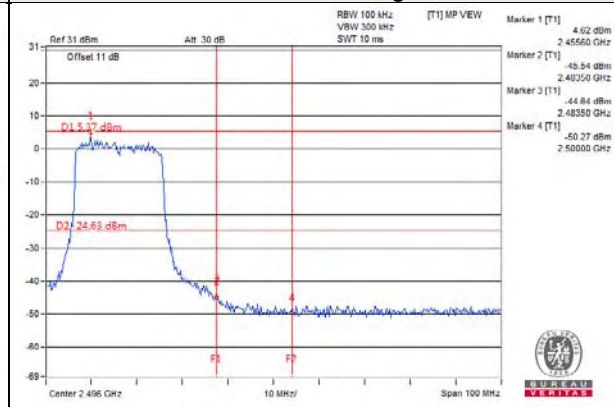
CH 11



CH 1 Band edge

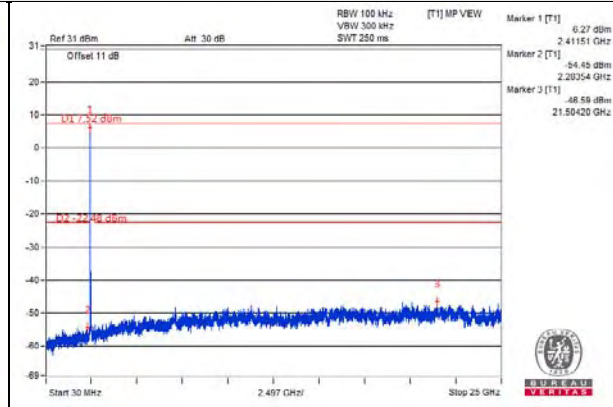
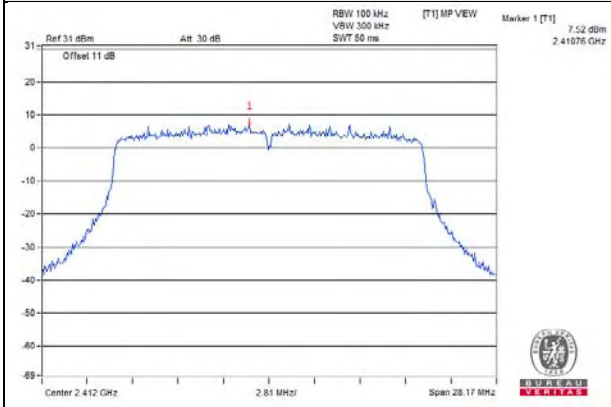


CH 11 Band edge

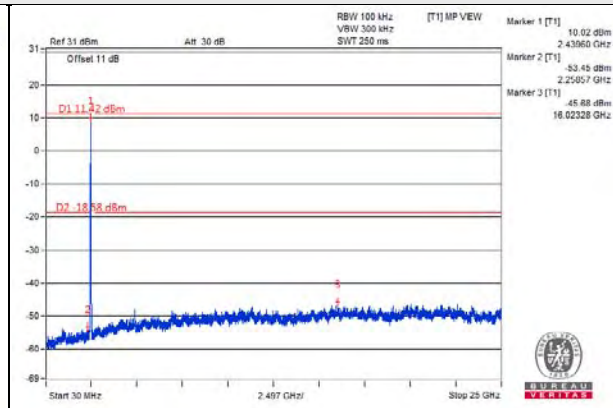
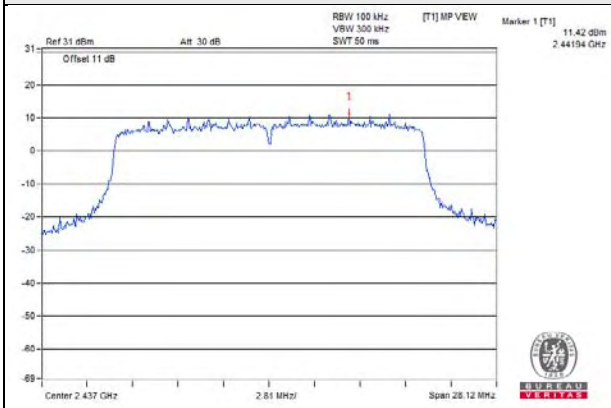


802.11ax (HE20)_Chain 1

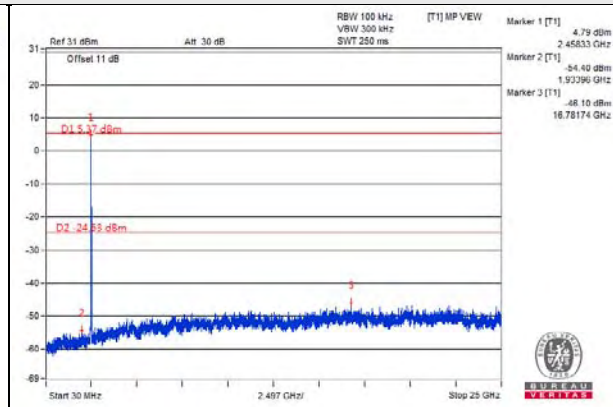
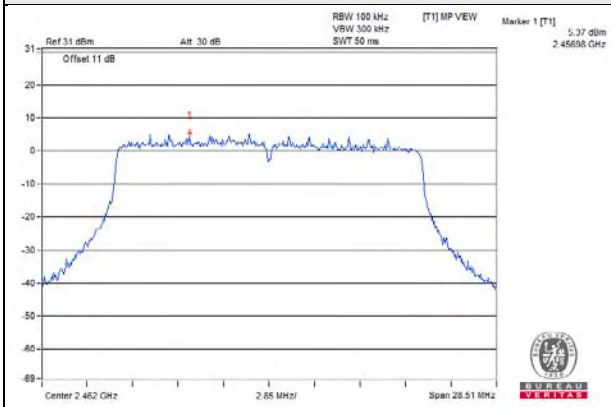
CH 1



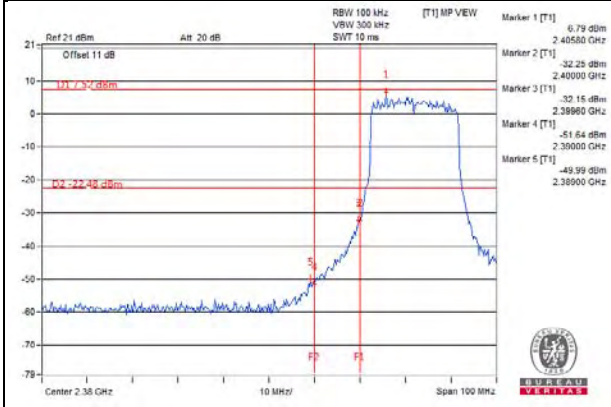
CH 6



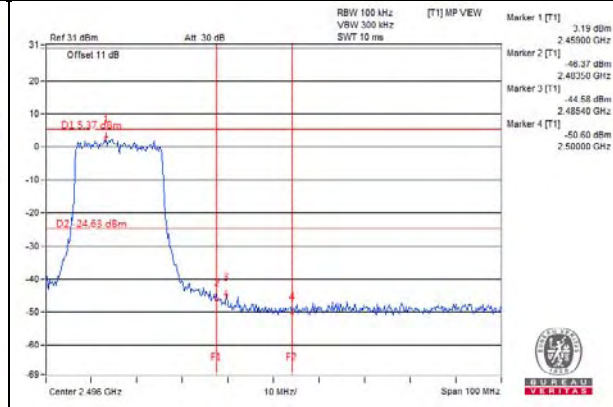
CH 11



CH 1 Band edge

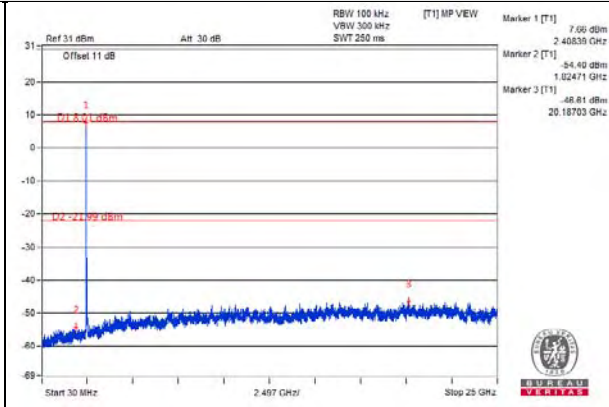
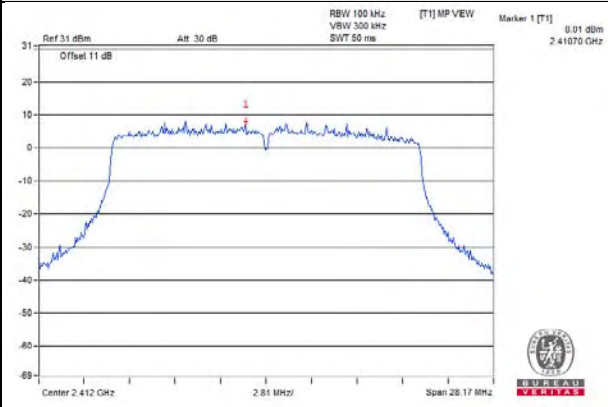


CH 11 Band edge

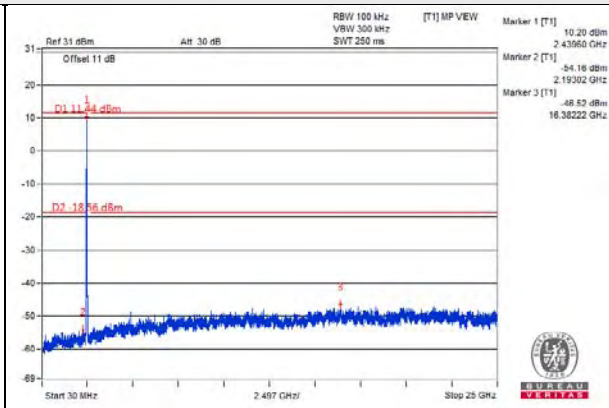
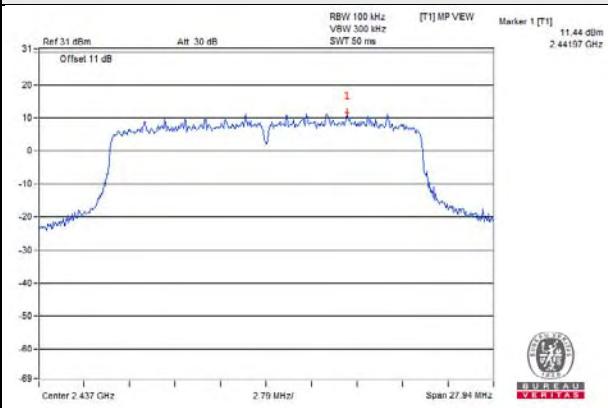


802.11ax (HE20)_Chain 2

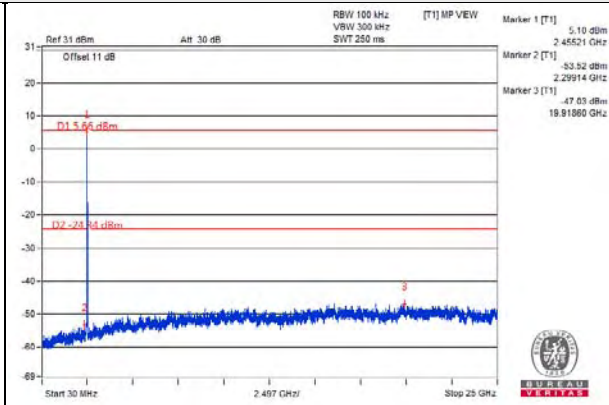
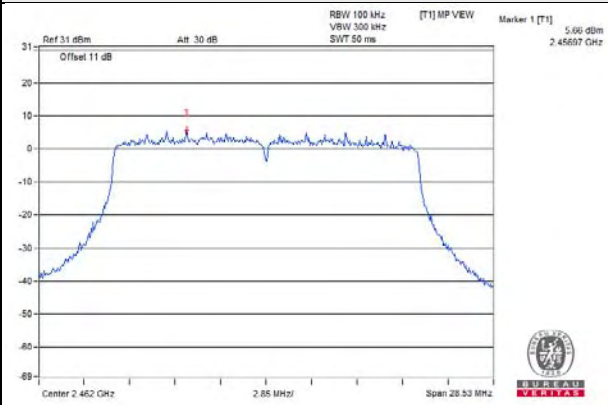
CH 1



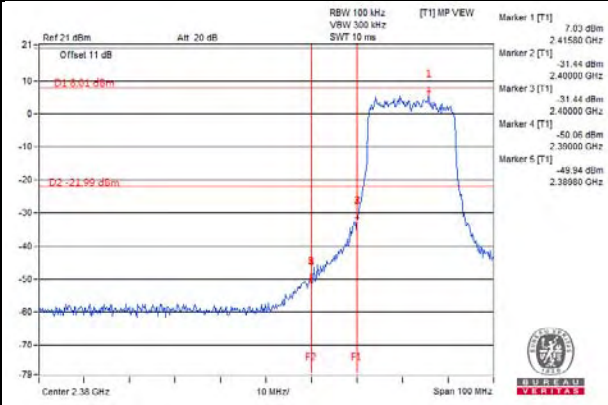
CH 6



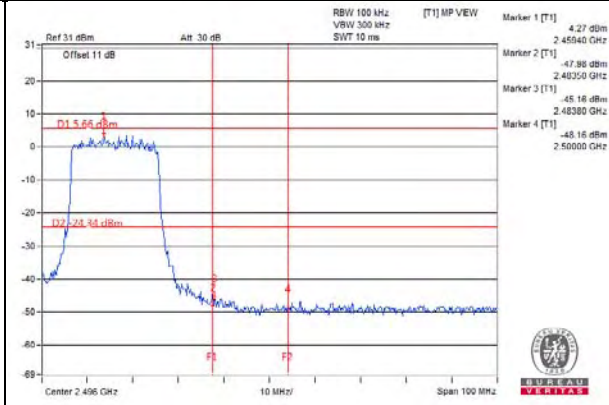
CH 11



CH 1 Band edge

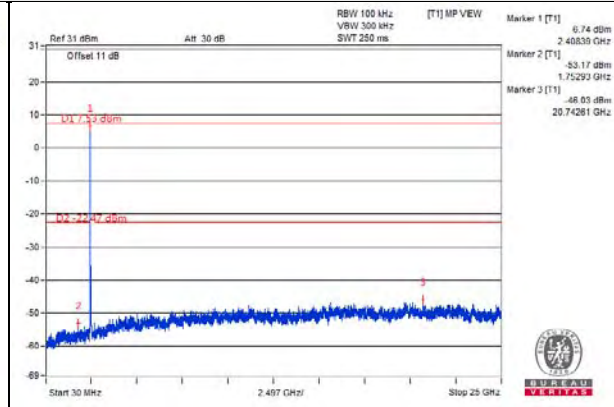
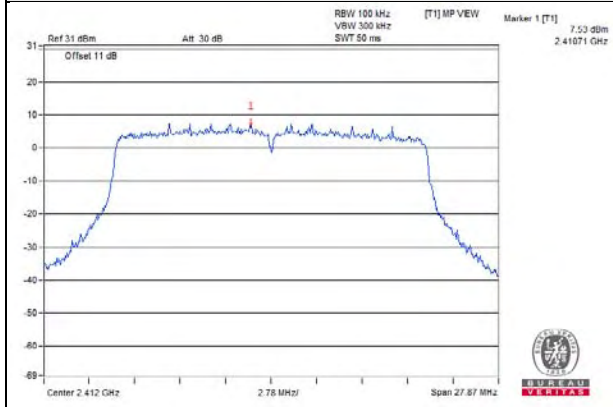


CH 11 Band edge

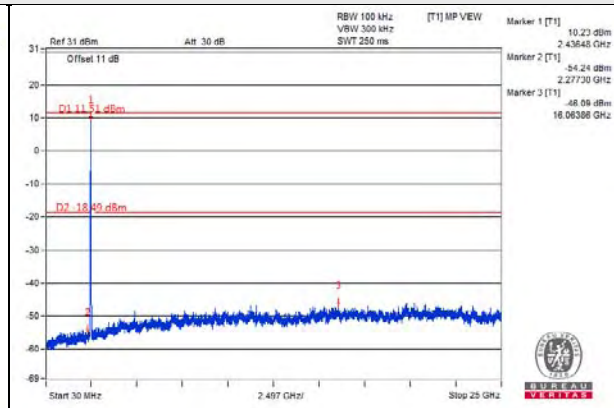
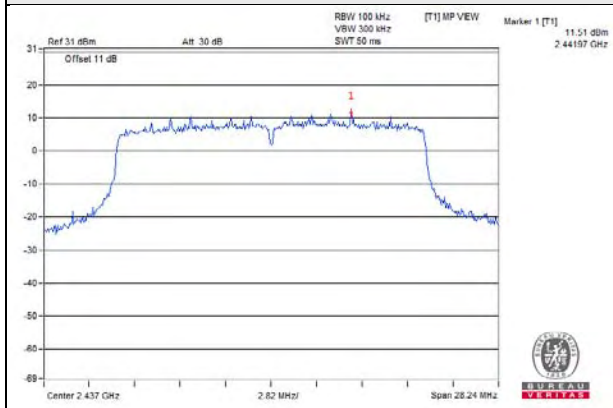


802.11ax (HE20)_Chain 3

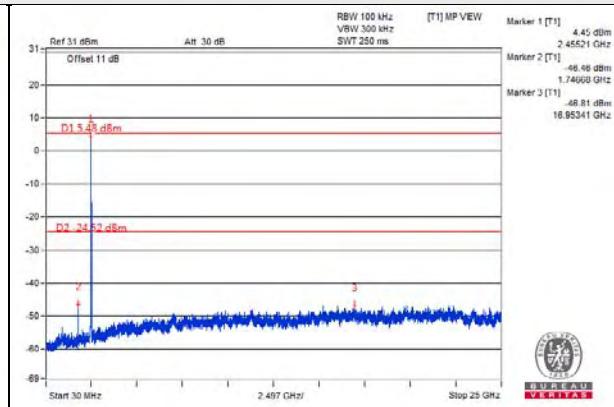
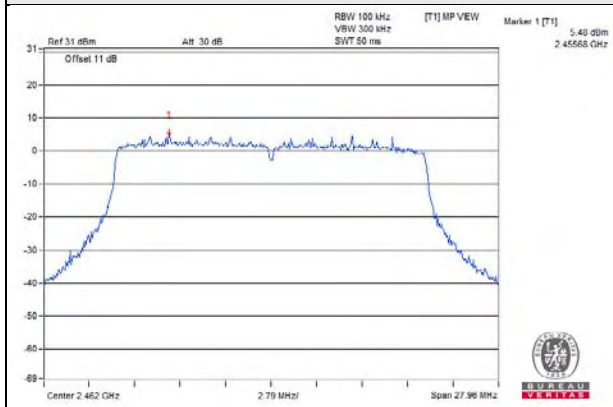
CH 1



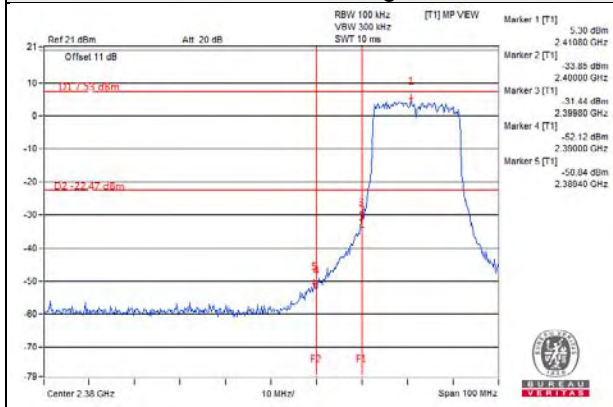
CH 6



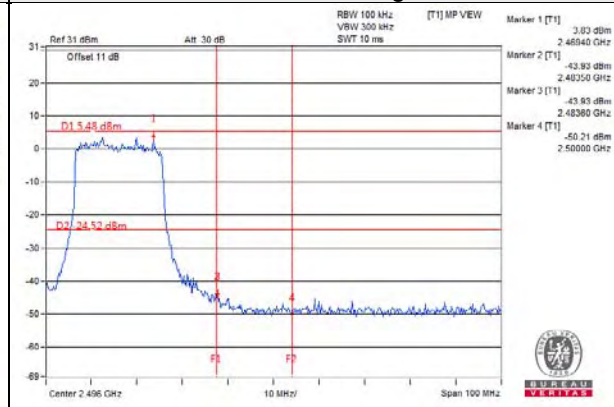
CH 11



CH 1 Band edge

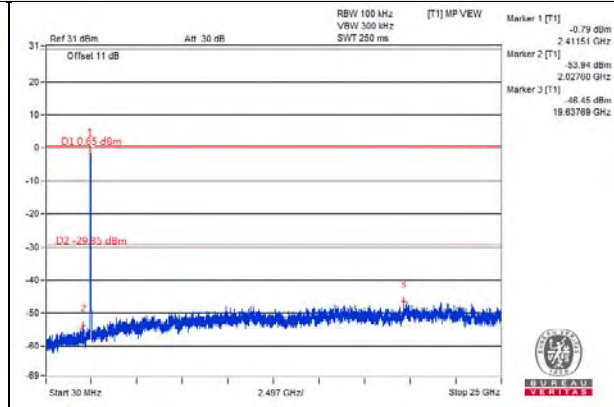
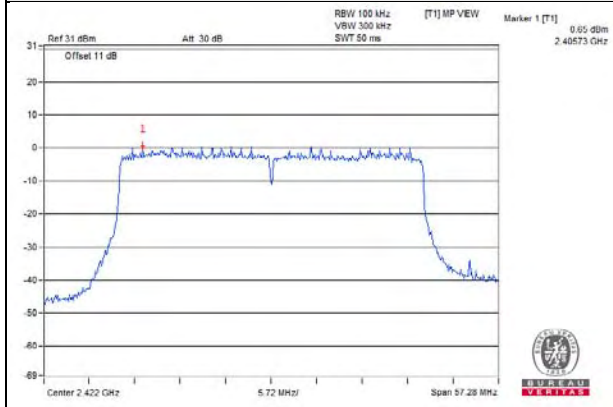


CH 11 Band edge

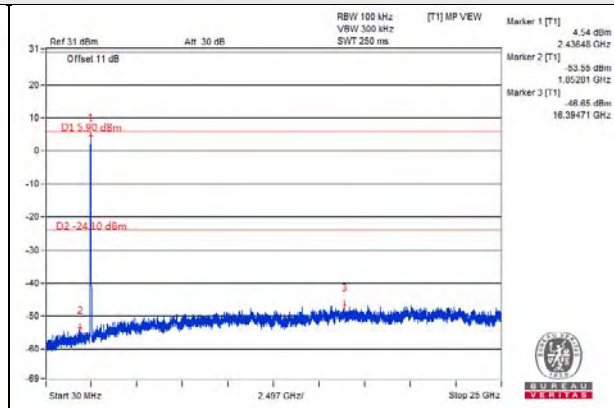
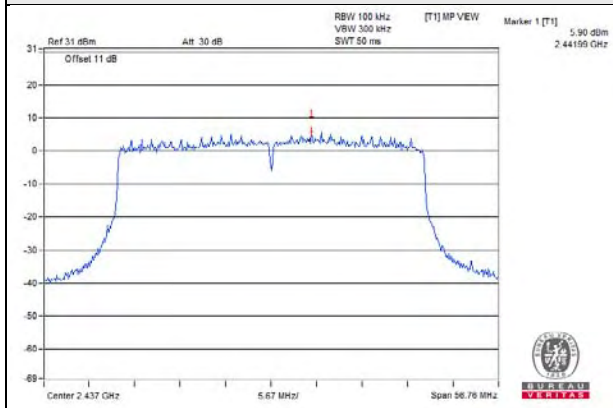


802.11ax (HE40)_Chain 0

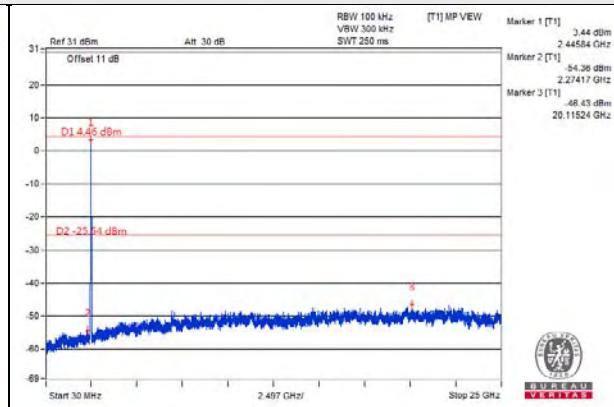
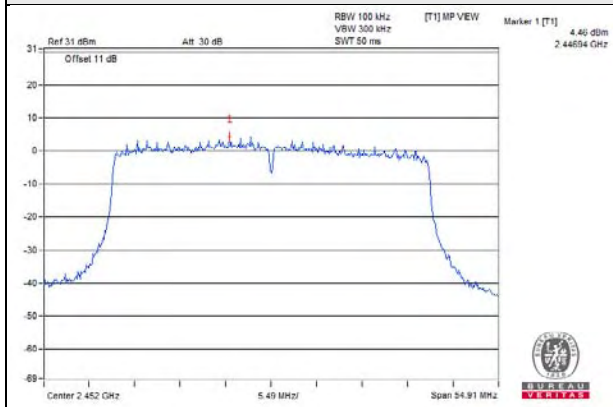
CH 3



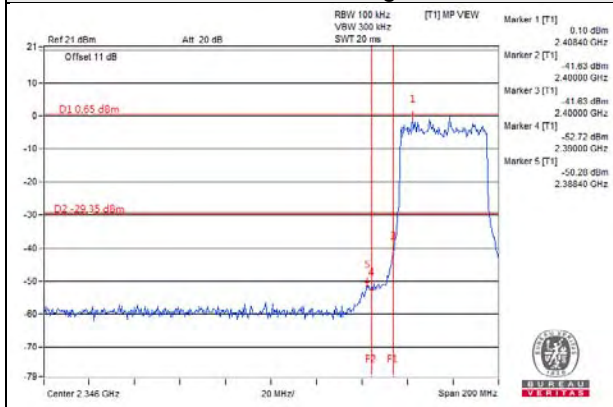
CH 6



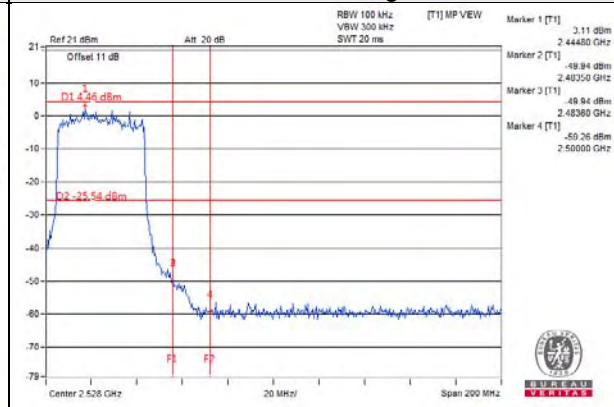
CH 9



CH 3 Band edge

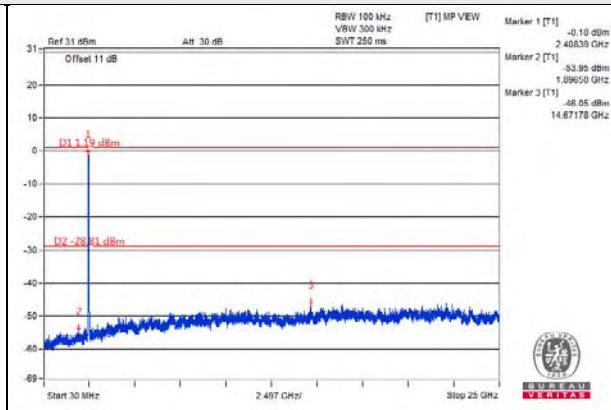
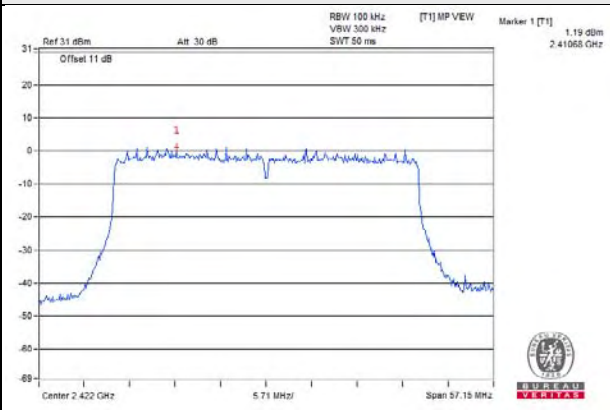


CH 9 Band edge

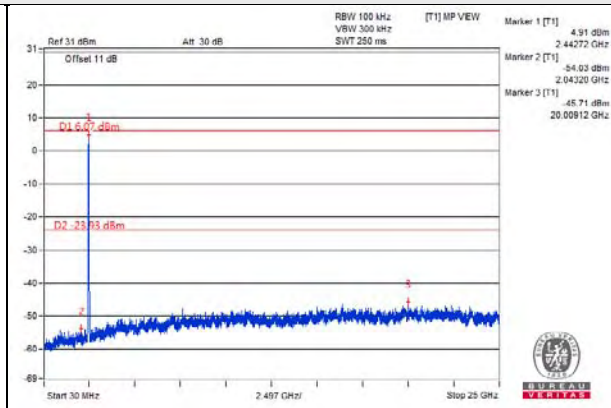
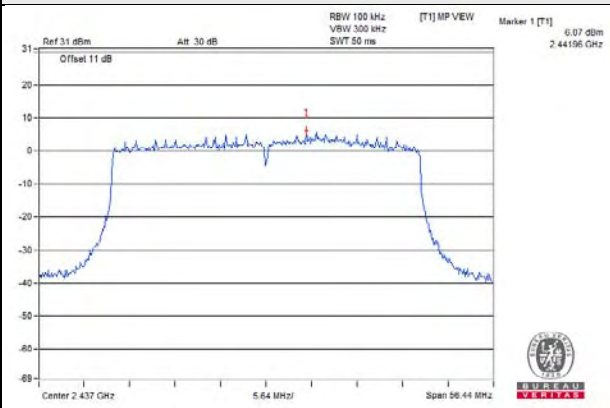


802.11ax (HE40)_Chain 1

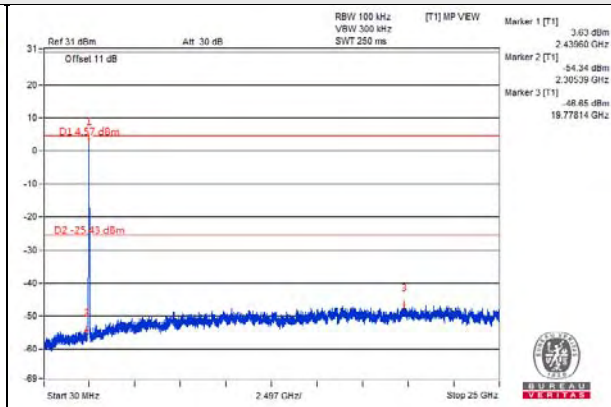
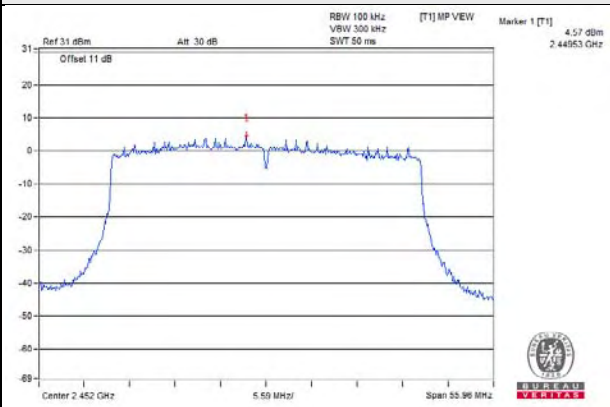
CH 3



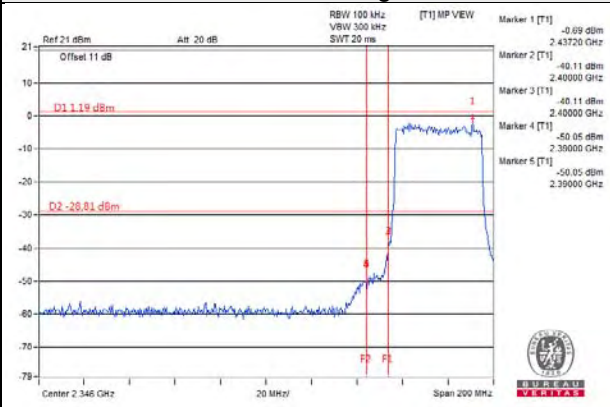
CH 6



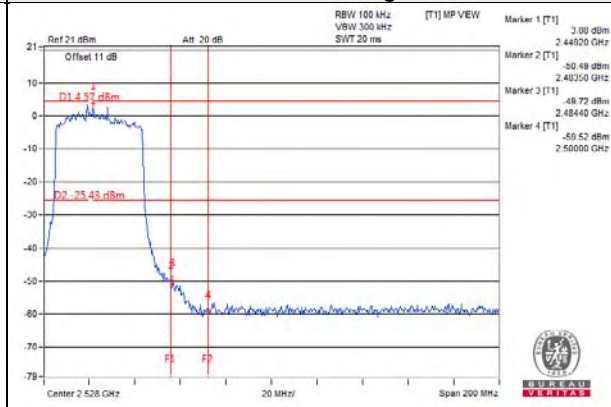
CH 9



CH 3 Band edge

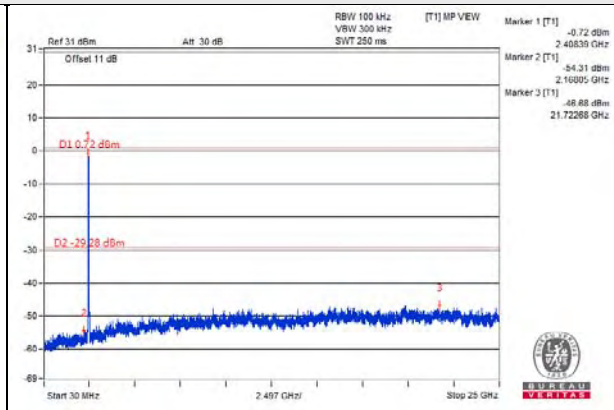
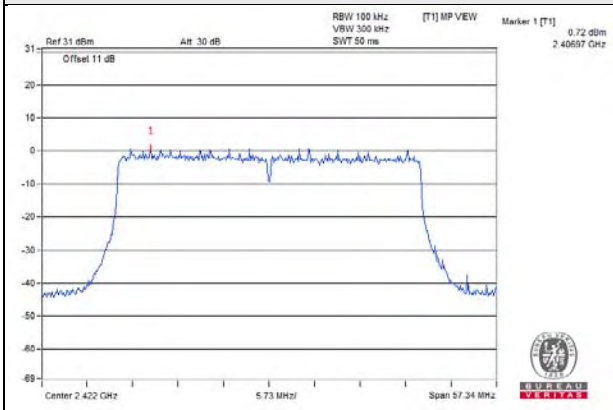


CH 9 Band edge

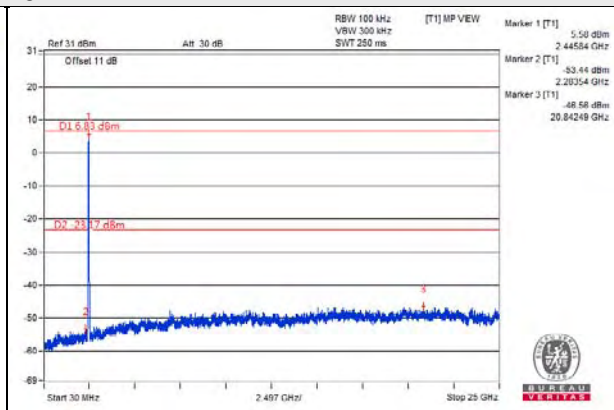
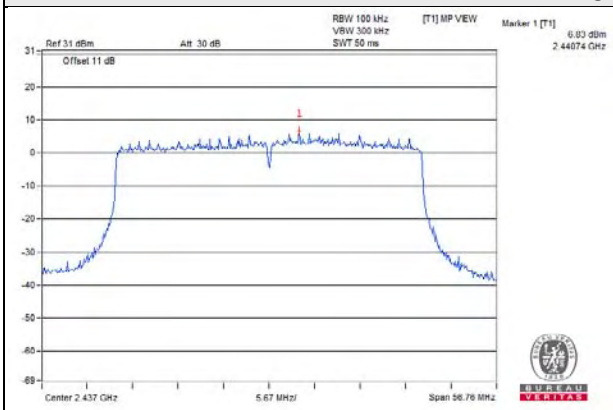


802.11ax (HE40)_Chain 2

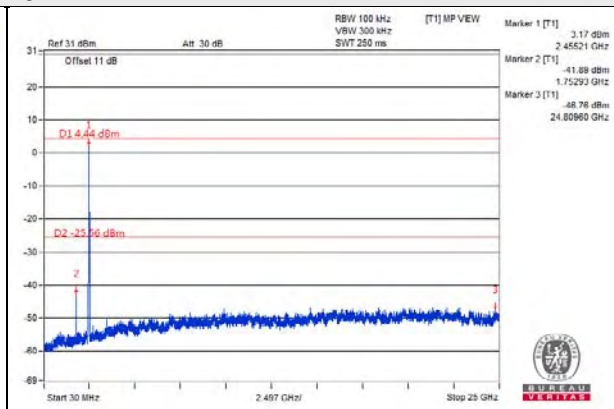
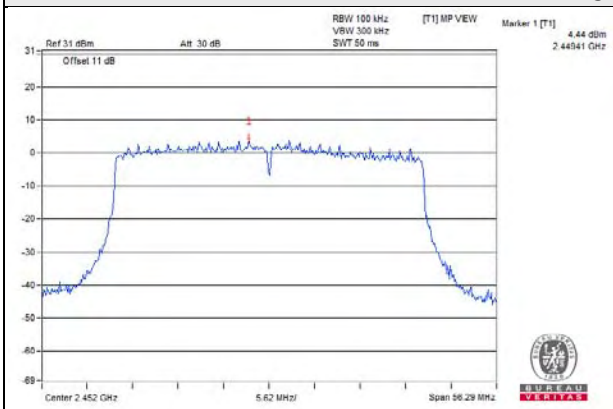
CH 3



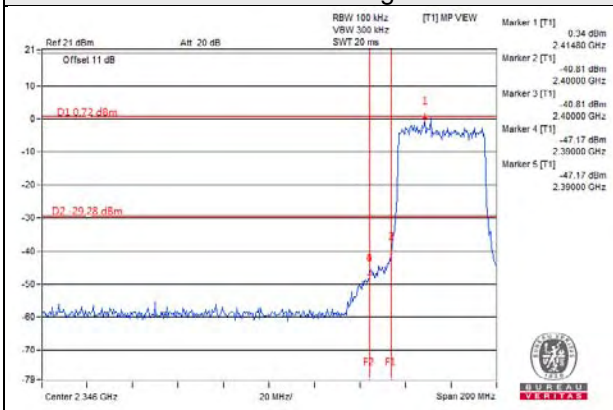
CH 6



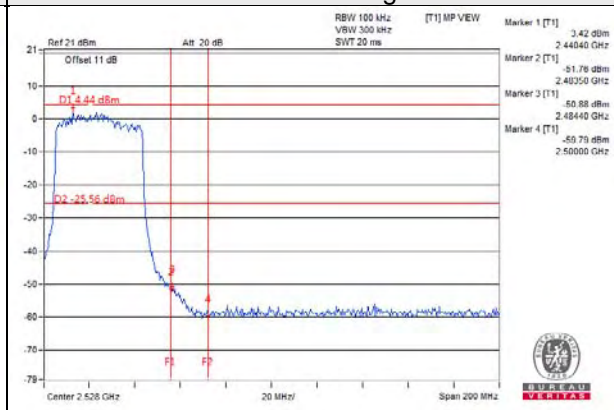
CH 9



CH 3 Band edge

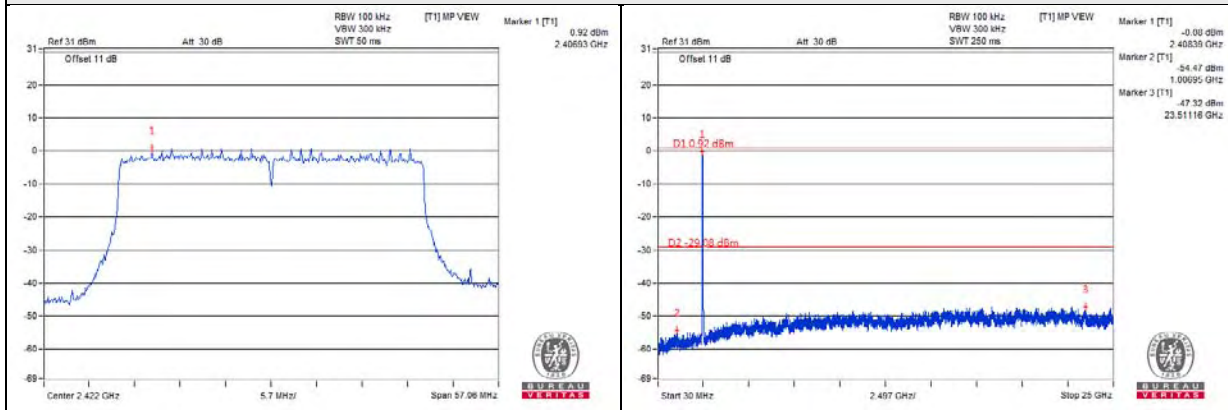


CH 9 Band edge

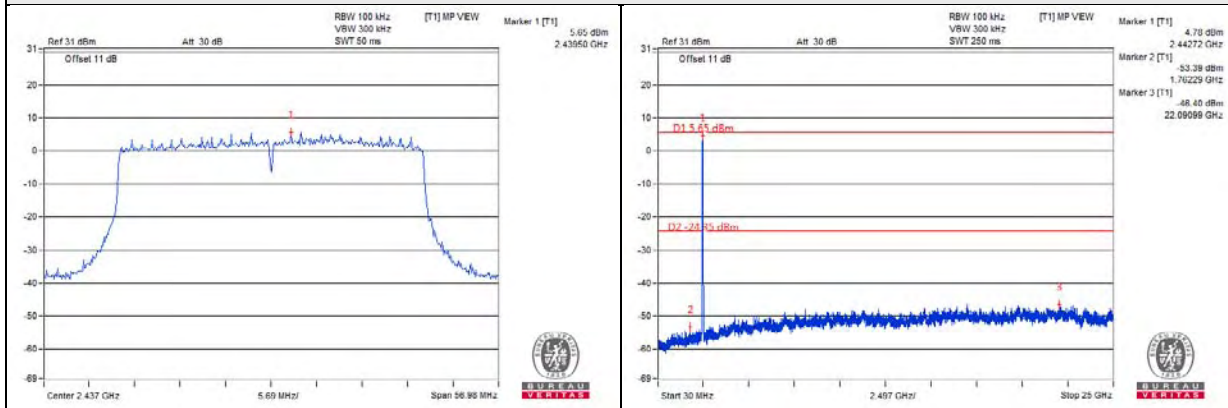


802.11ax (HE40)_Chain 3

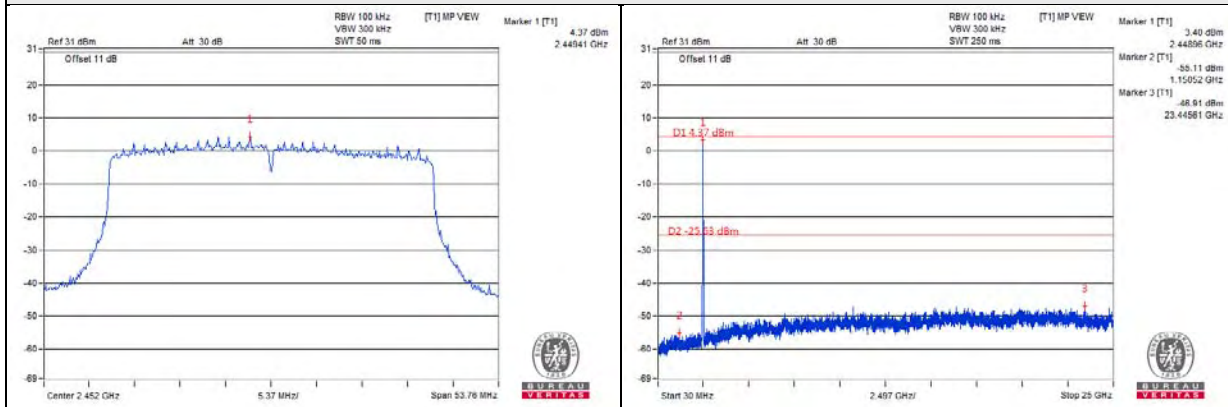
CH 3



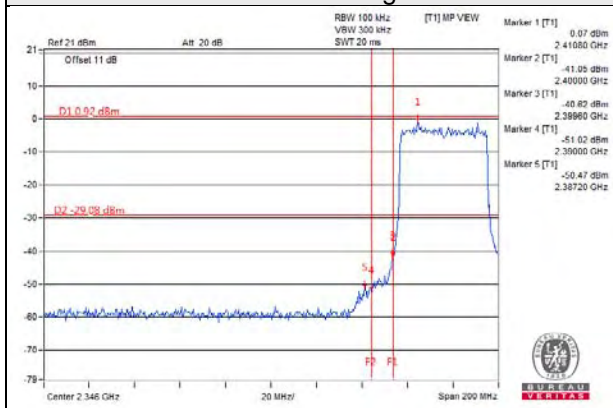
CH 6



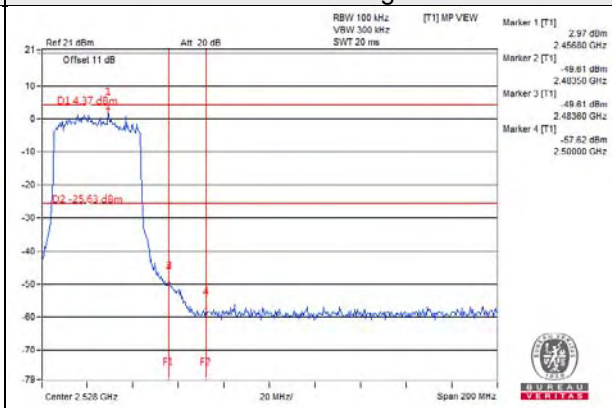
CH 9



CH 3 Band edge



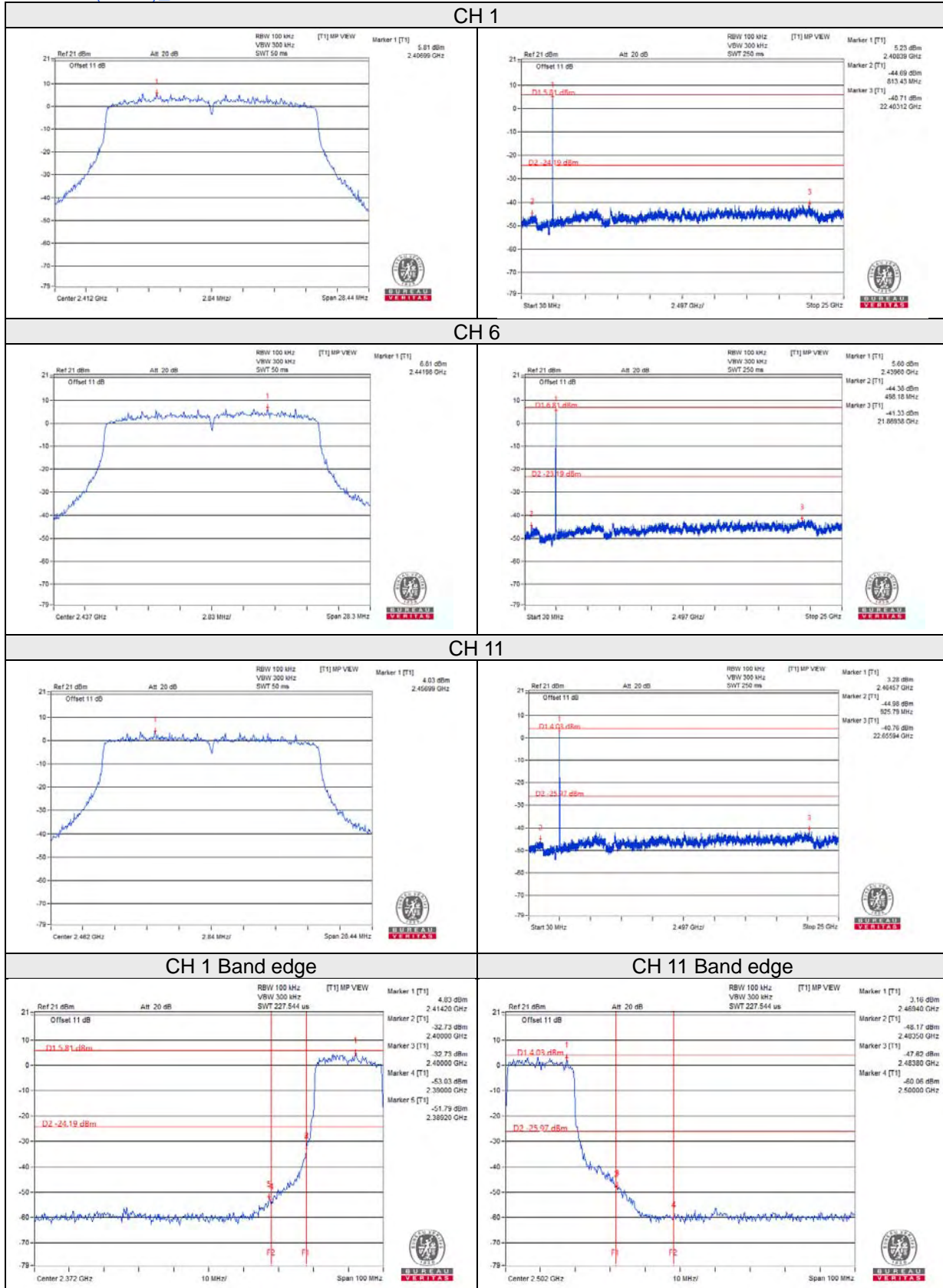
CH 9 Band edge



Test Mode C

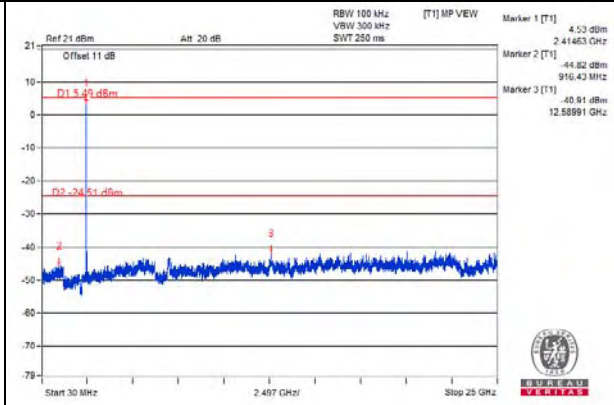
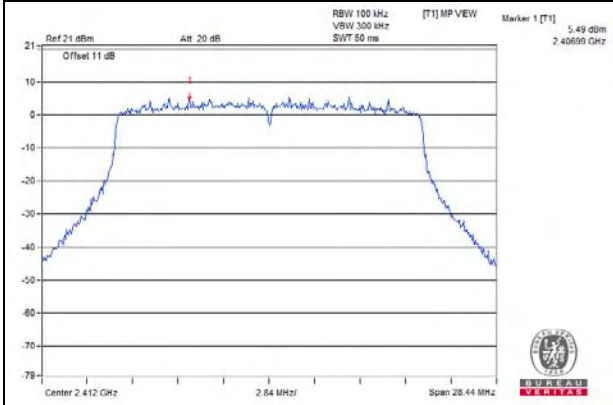
2G traffic radio: Beamforming Mode

802.11ax (HE20)_Chain 0

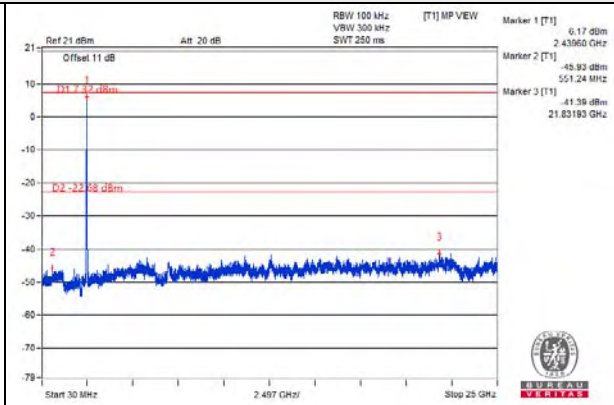
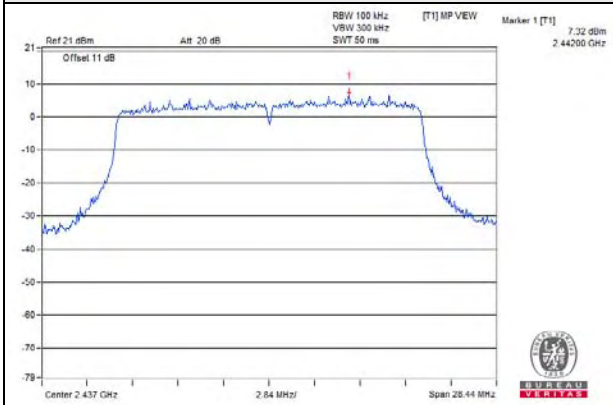


802.11ax (HE20)_Chain 1

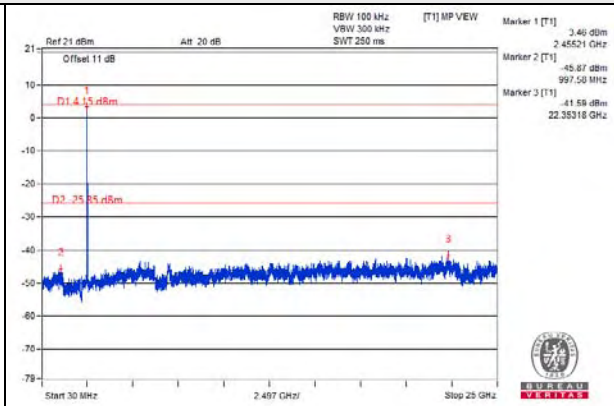
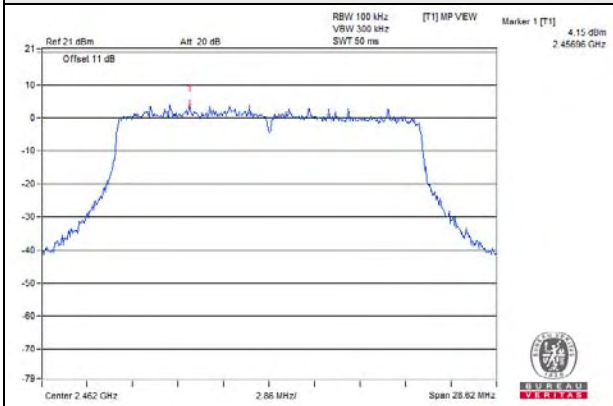
CH 1



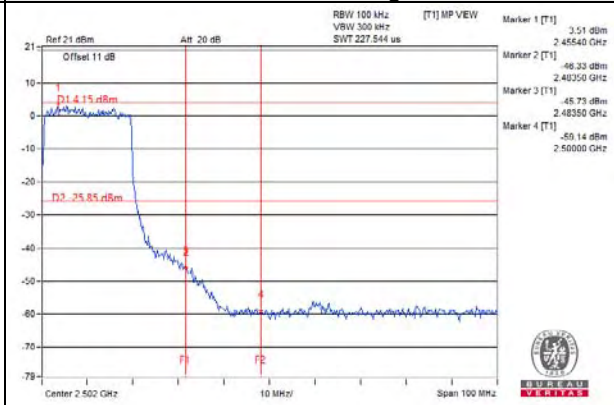
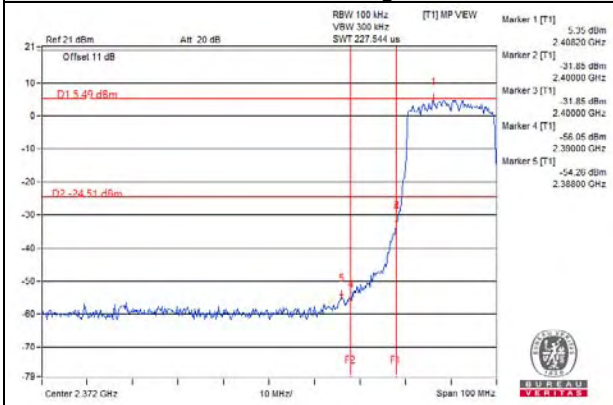
CH 6



CH 11

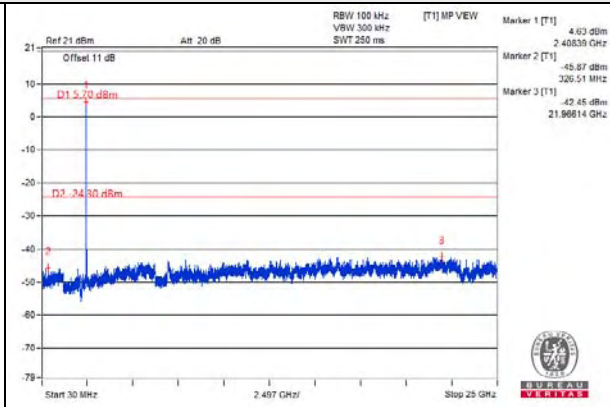
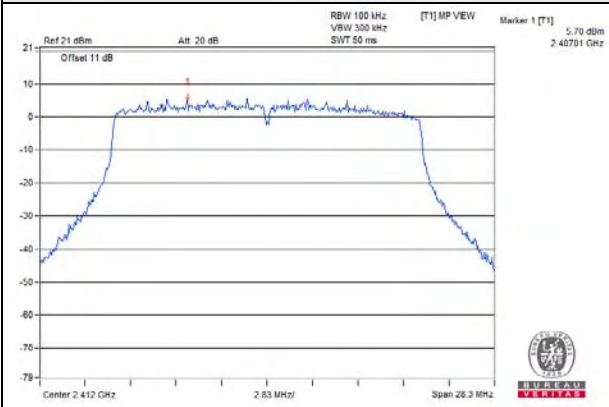


CH 1 Band edge

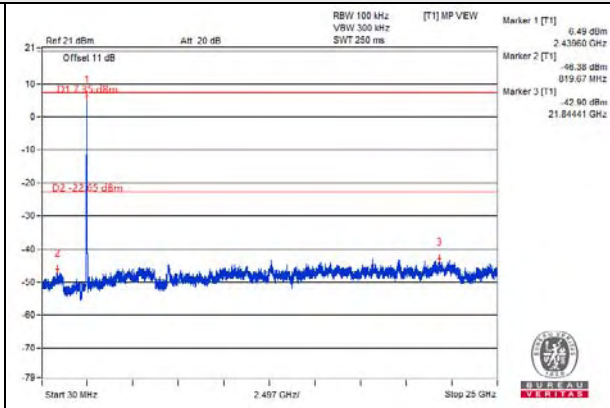
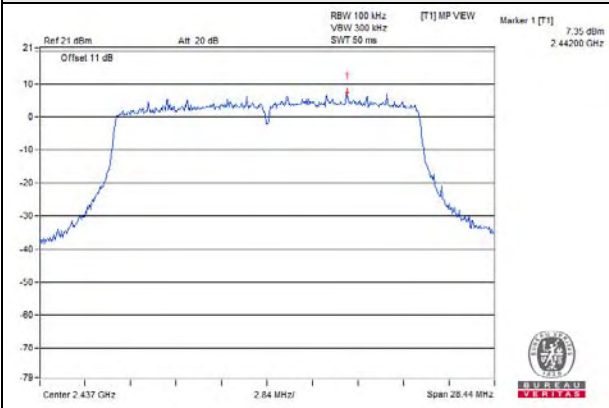


802.11ax (HE20)_Chain 2

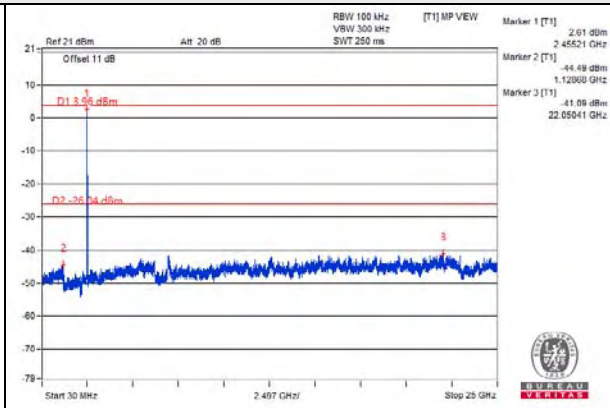
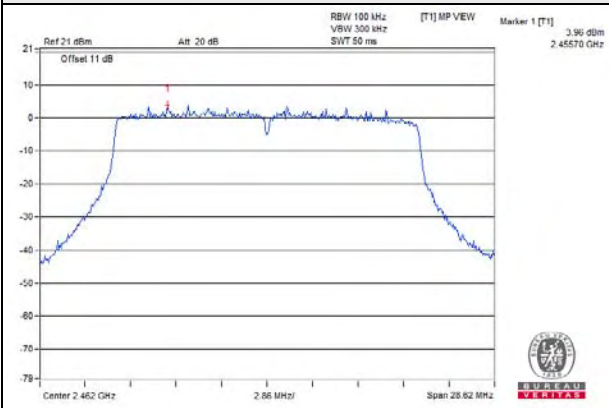
CH 1



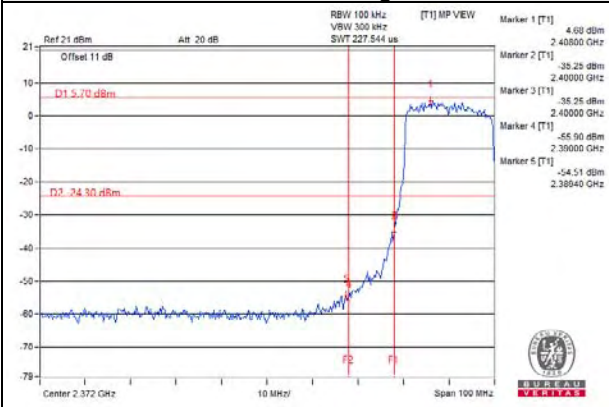
CH 6



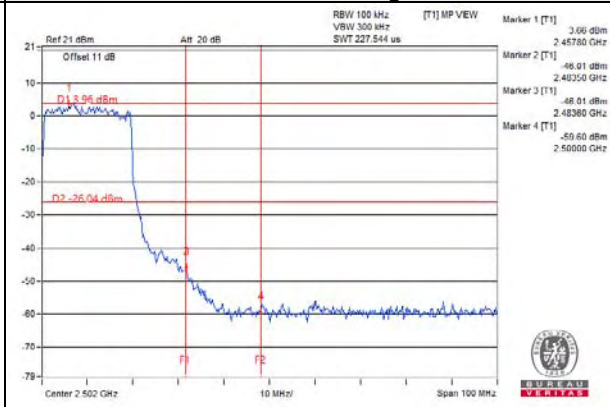
CH 11



CH 1 Band edge

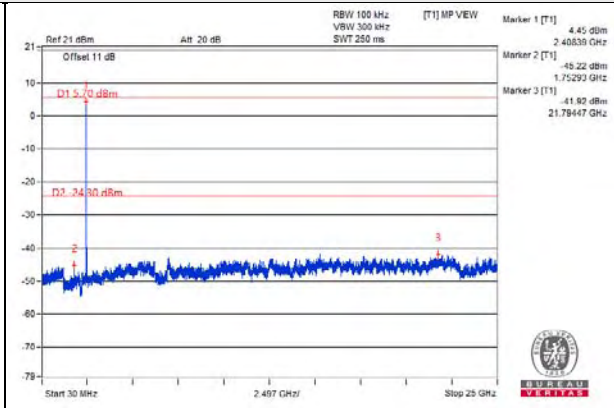
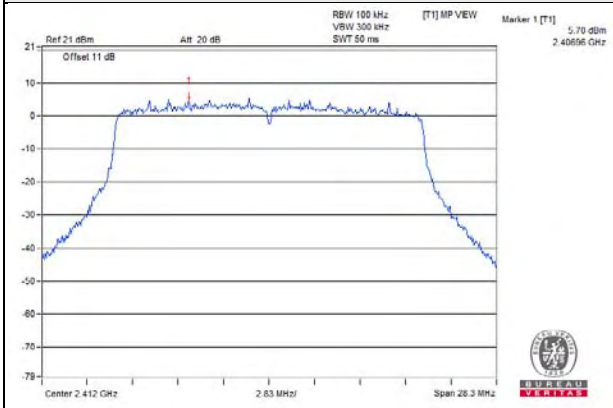


CH 11 Band edge

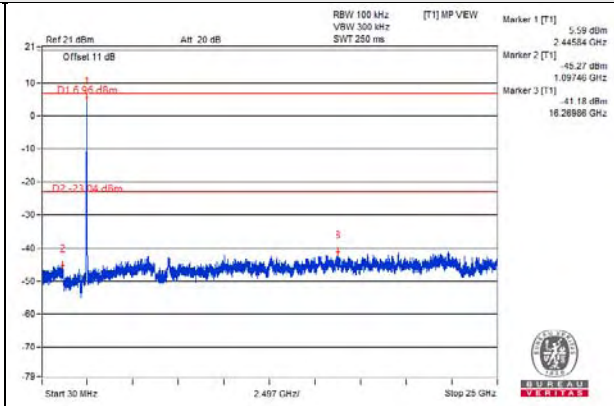
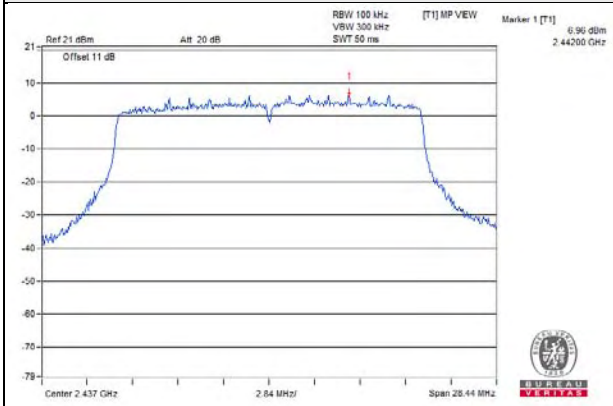


802.11ax (HE20)_Chain 3

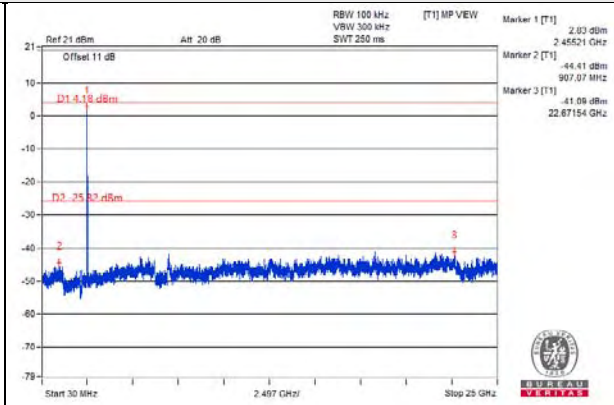
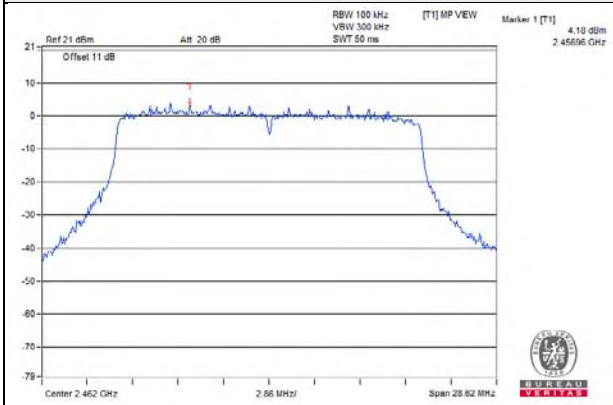
CH 1



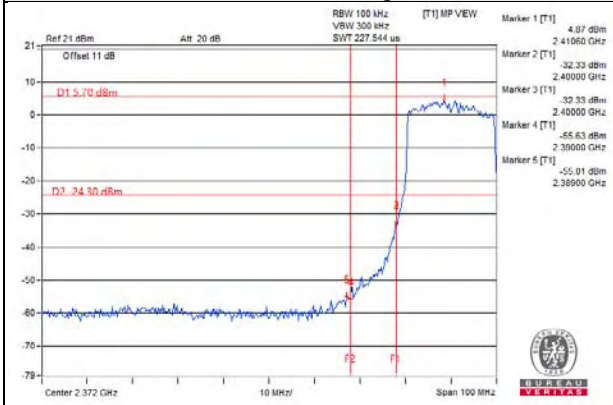
CH 6



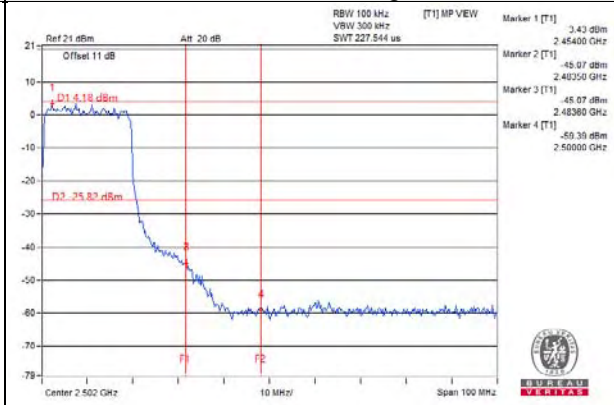
CH 11



CH 1 Band edge

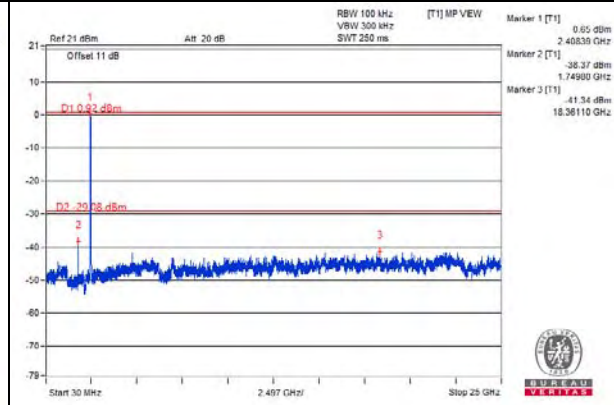
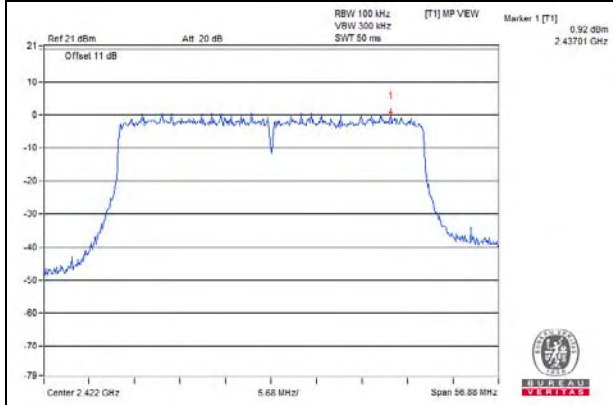


CH 11 Band edge

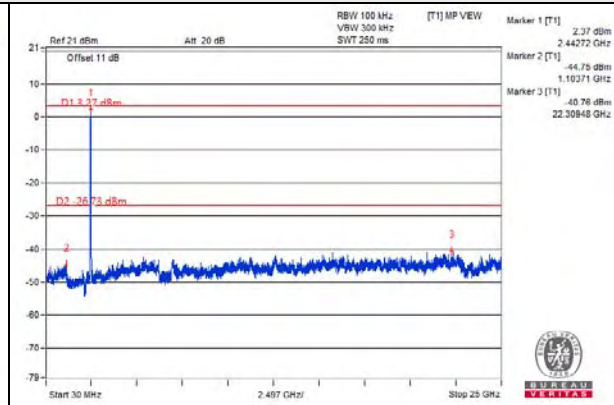
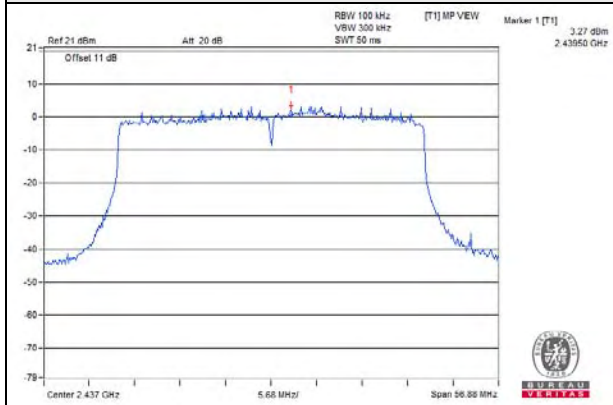


802.11ax (HE40)_Chain 0

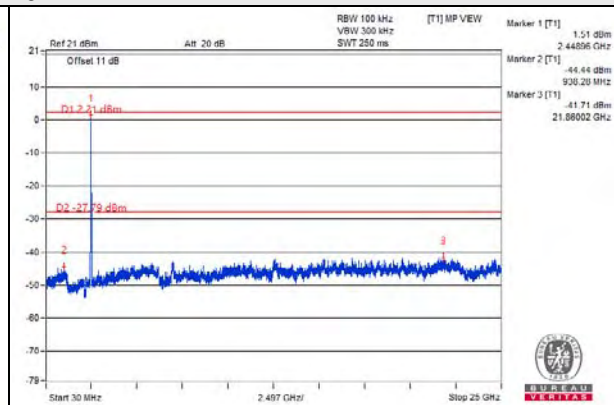
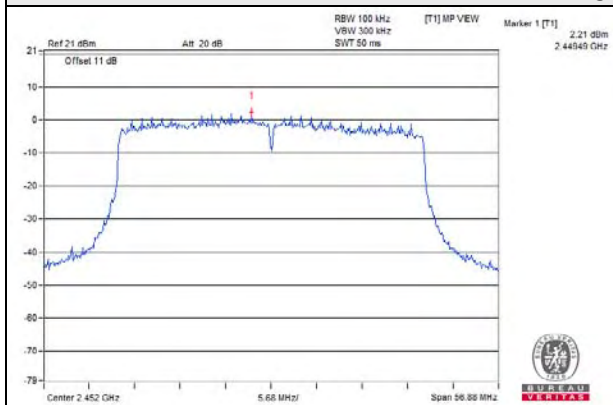
CH 3



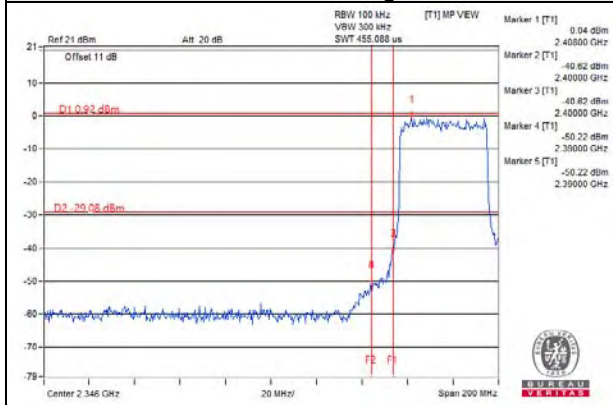
CH 6



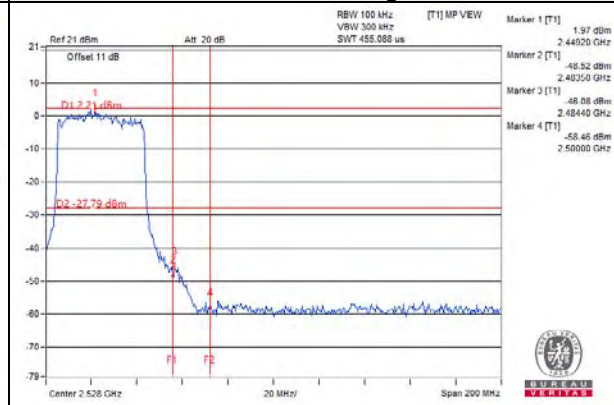
CH 9



CH 3 Band edge

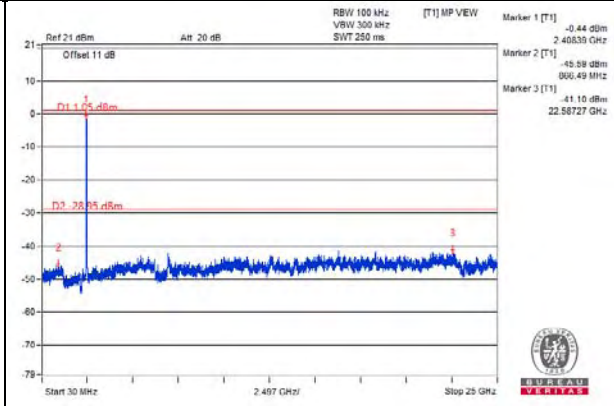
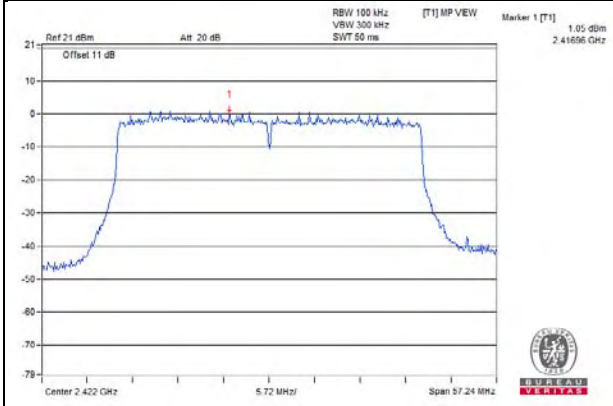


CH 9 Band edge

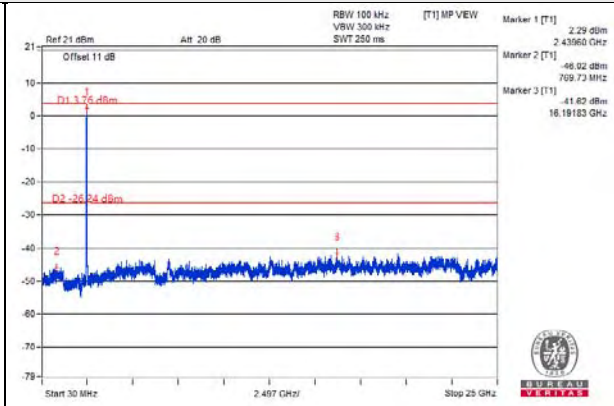
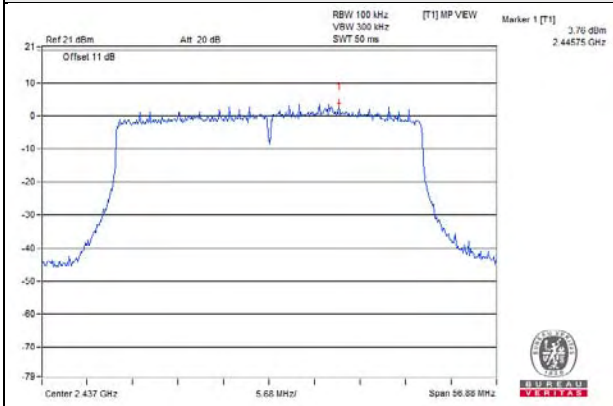


802.11ax (HE40)_Chain 1

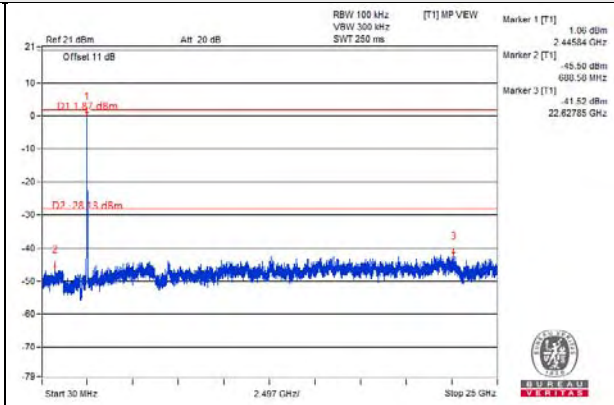
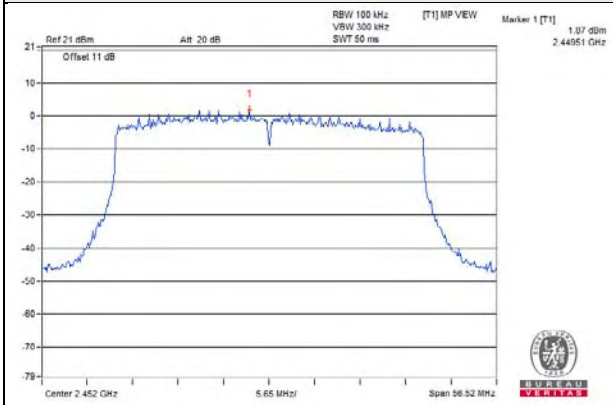
CH 3



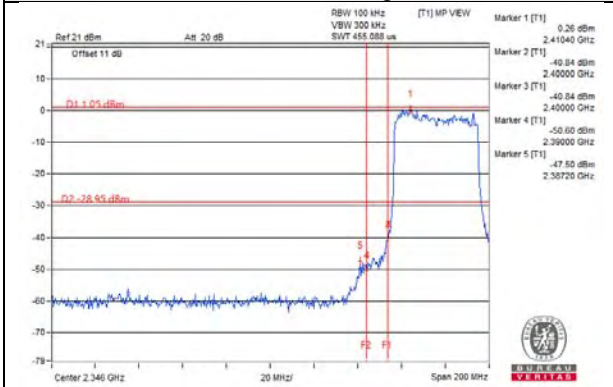
CH 6



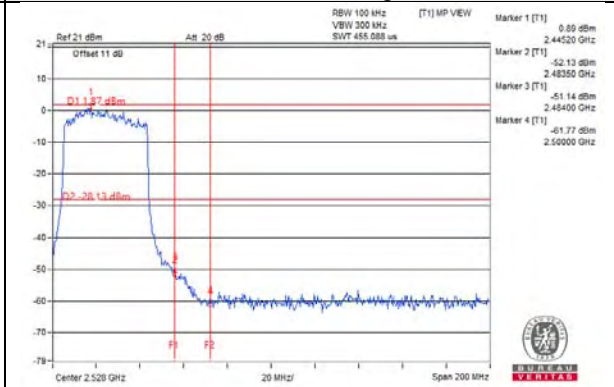
CH 9



CH 3 Band edge

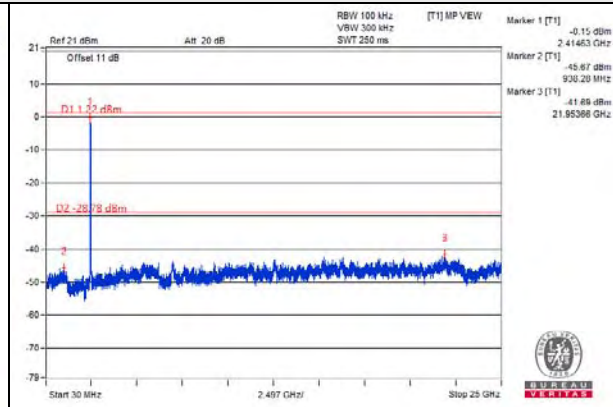
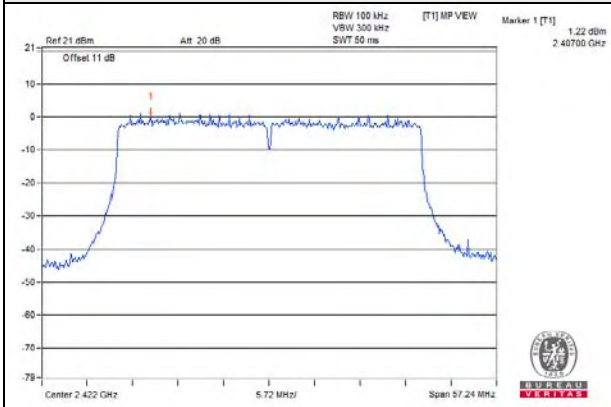


CH 9 Band edge

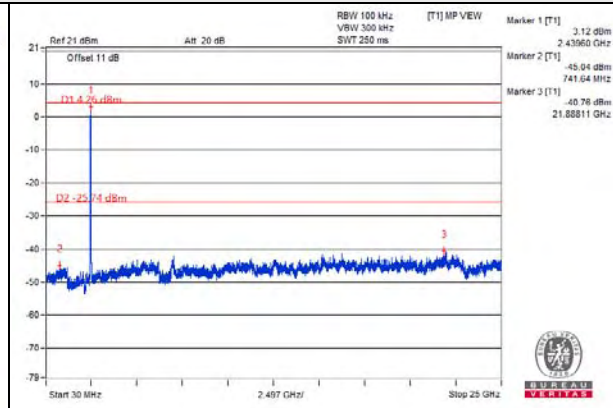
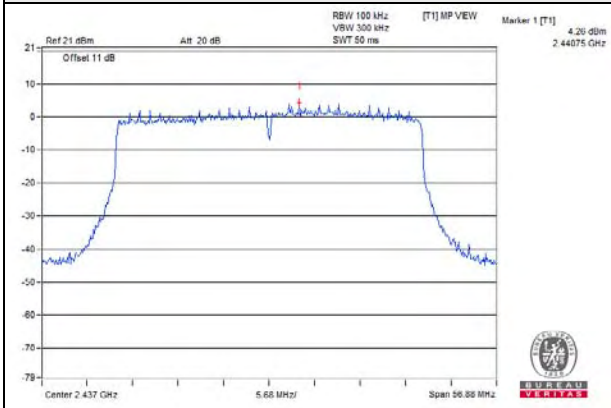


802.11ax (HE40)_Chain 2

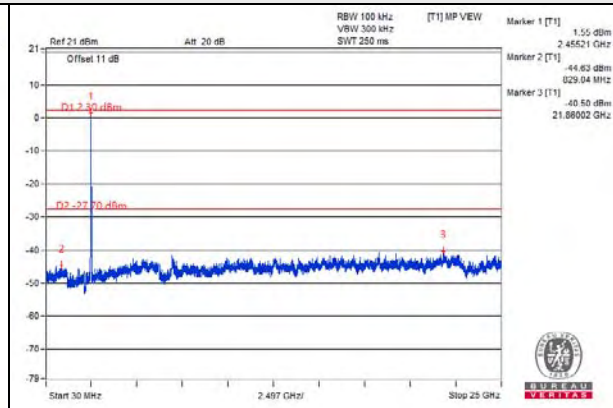
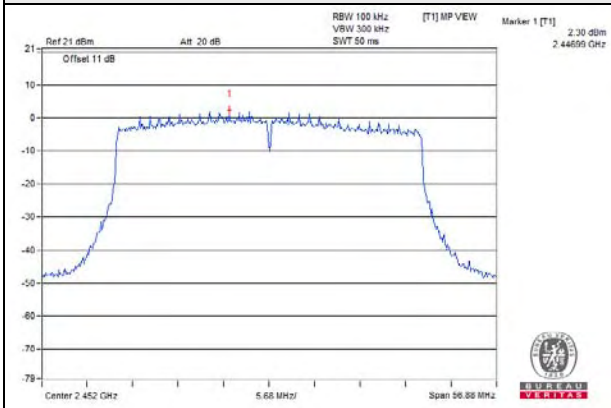
CH 3



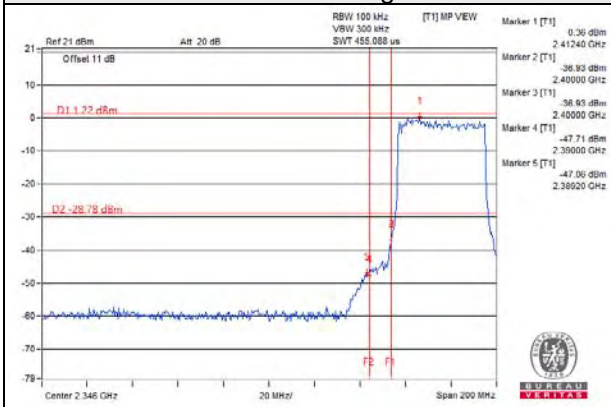
CH 6



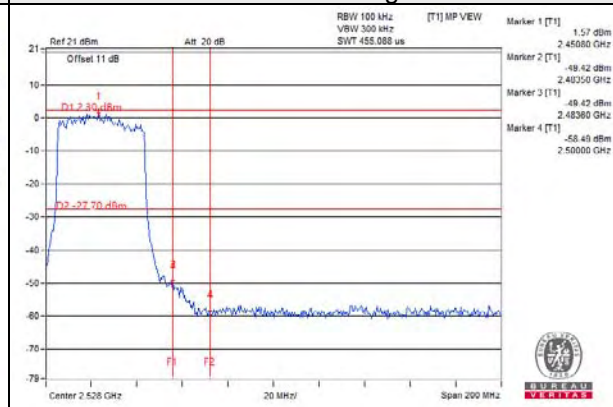
CH 9



CH 3 Band edge

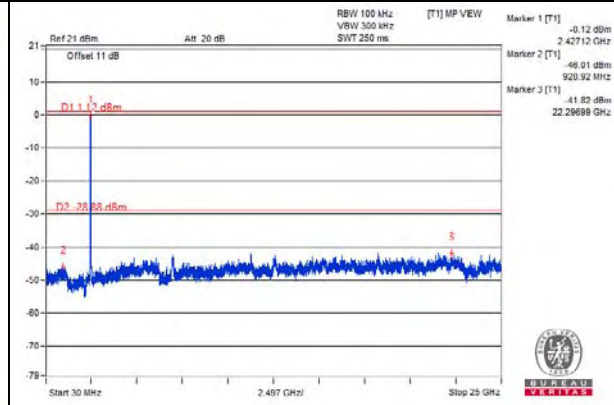
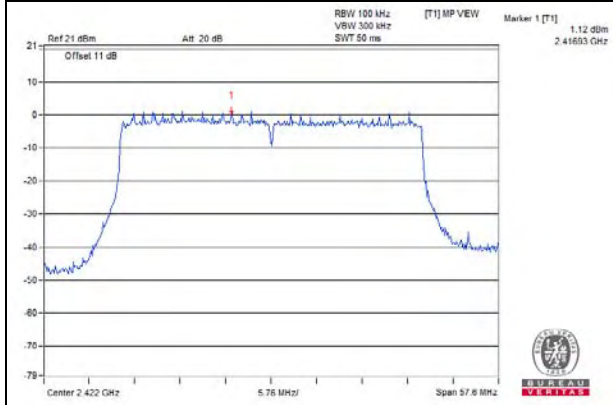


CH 9 Band edge

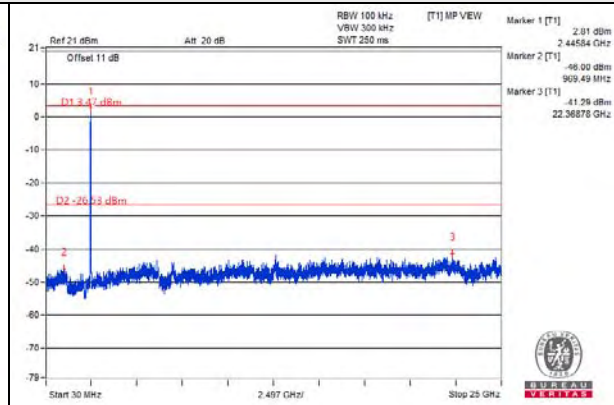
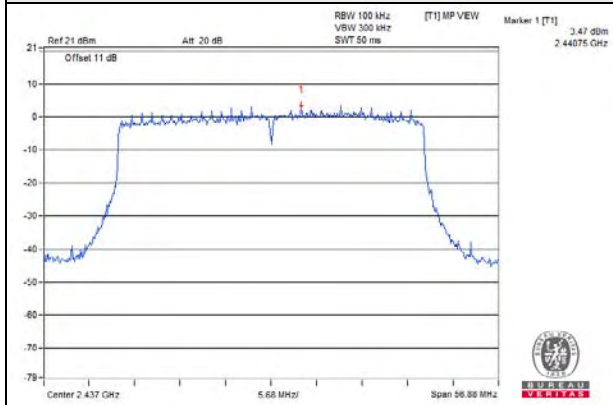


802.11ax (HE40)_Chain 3

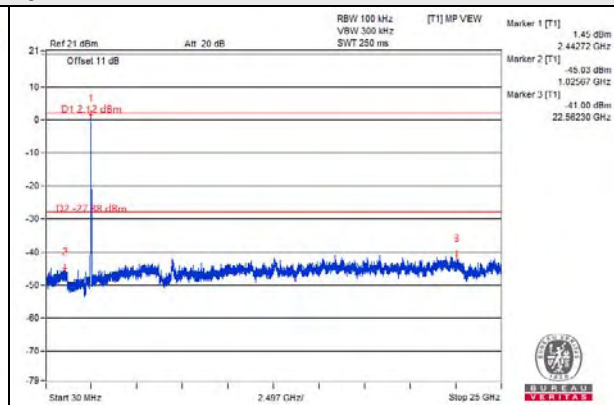
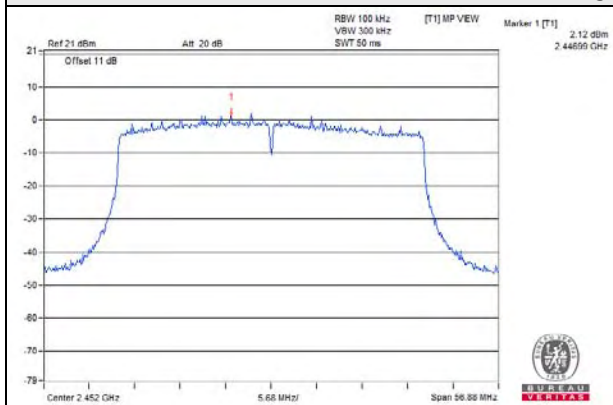
CH 3



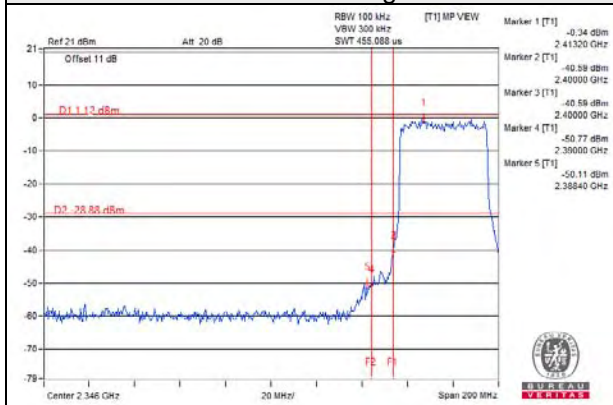
CH 6



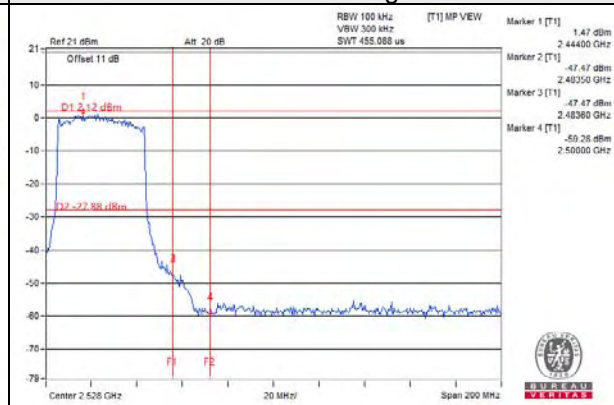
CH 9



CH 3 Band edge



CH 9 Band edge

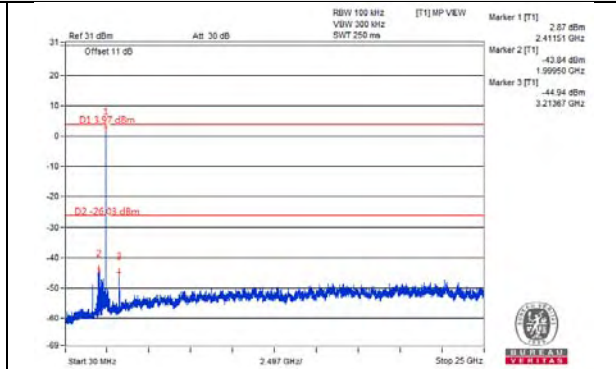
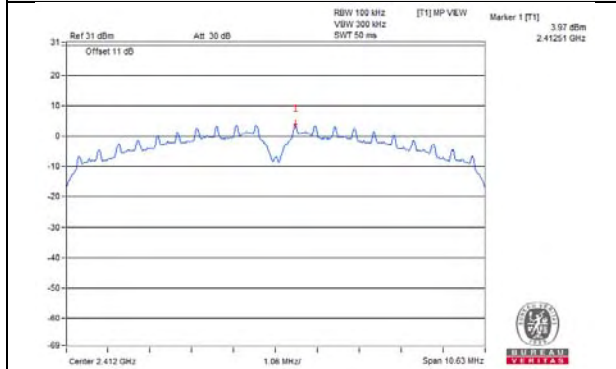


Test Mode A

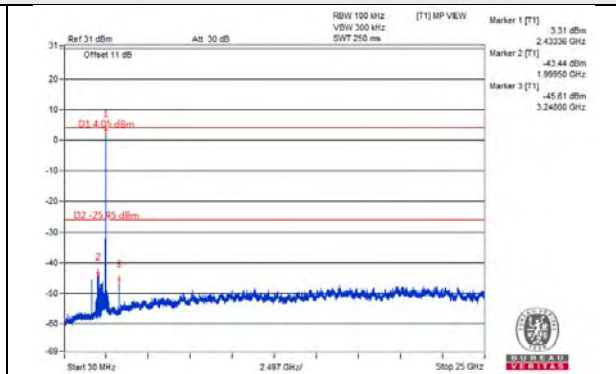
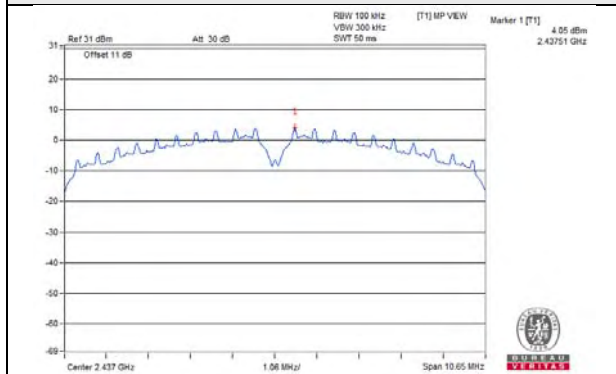
Scanning radio: CDD Mode

802.11b

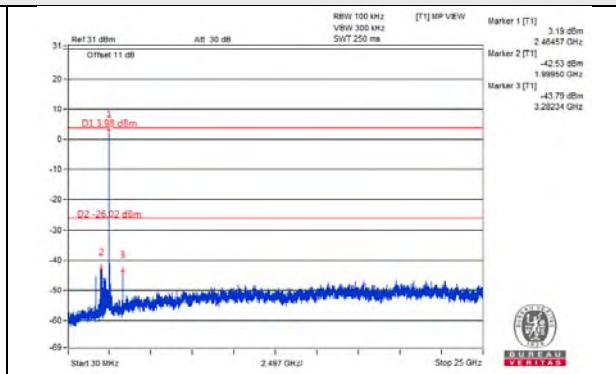
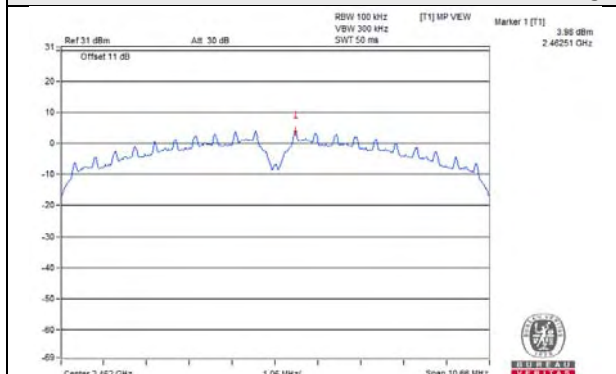
CH 1



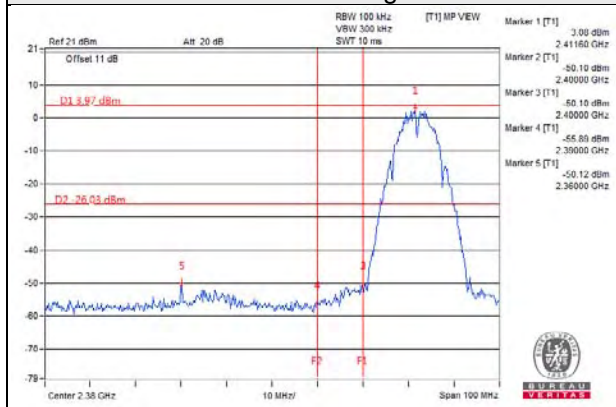
CH 6



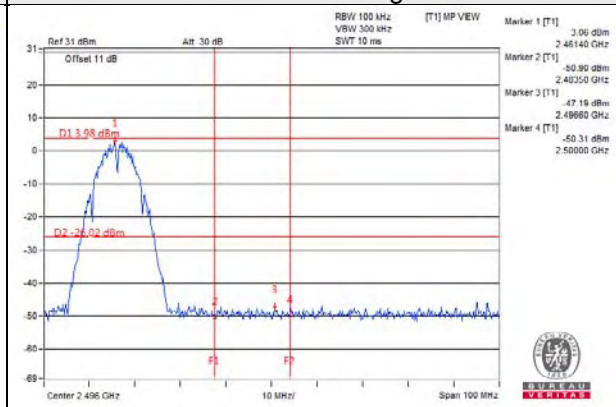
CH 11



CH 1 Band edge

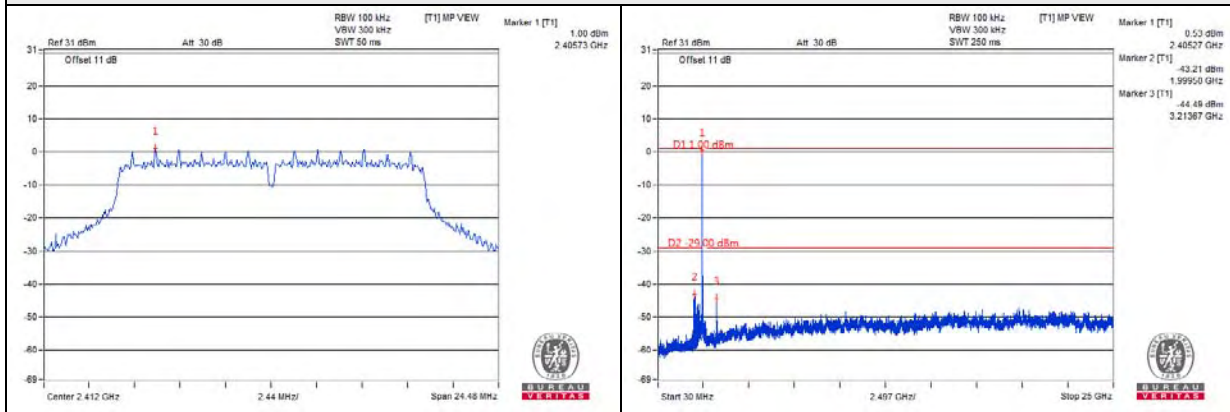


CH 11 Band edge

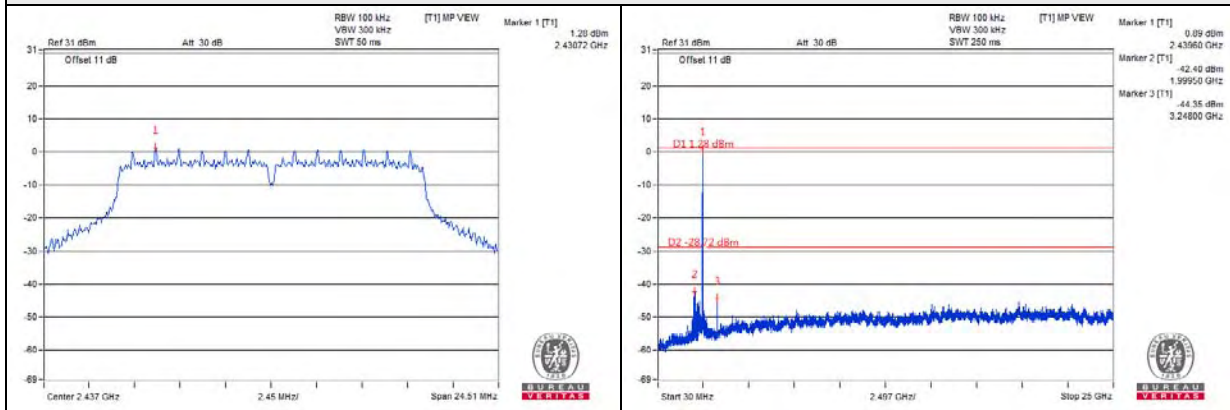


802.11g

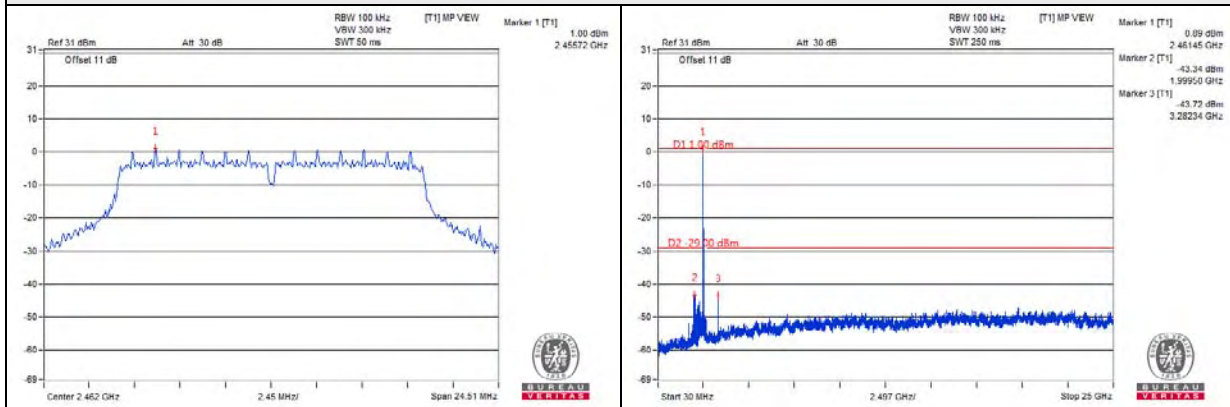
CH 1



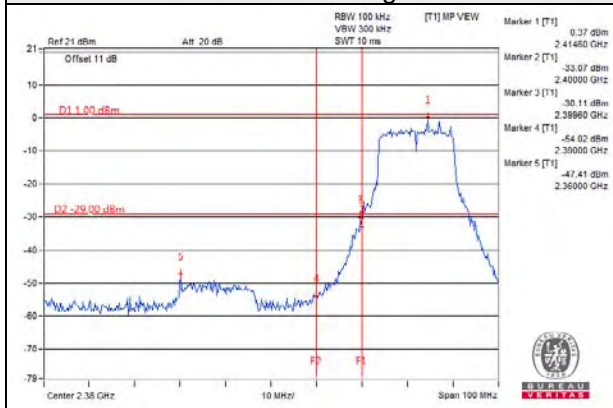
CH 6



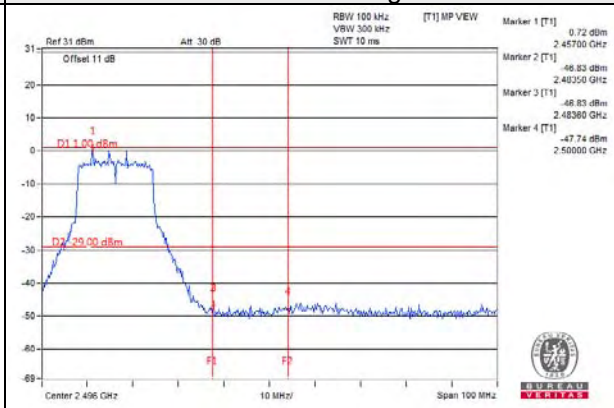
CH 11



CH 1 Band edge

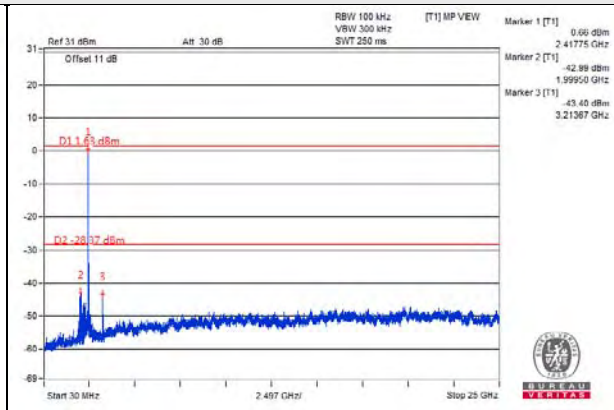
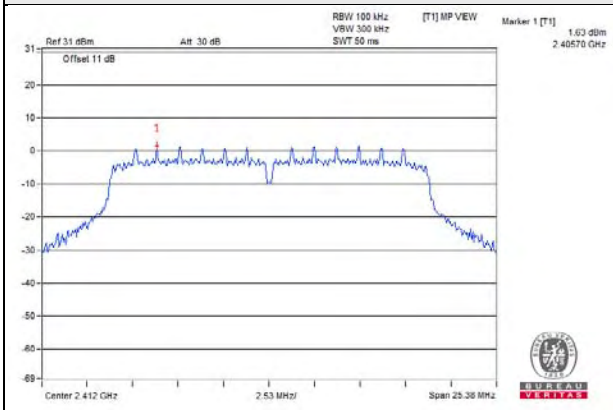


CH 11 Band edge

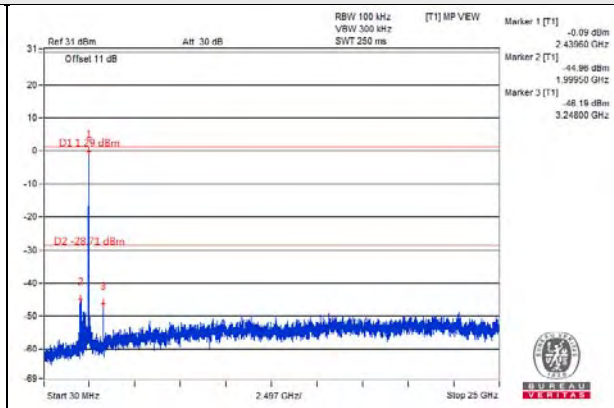
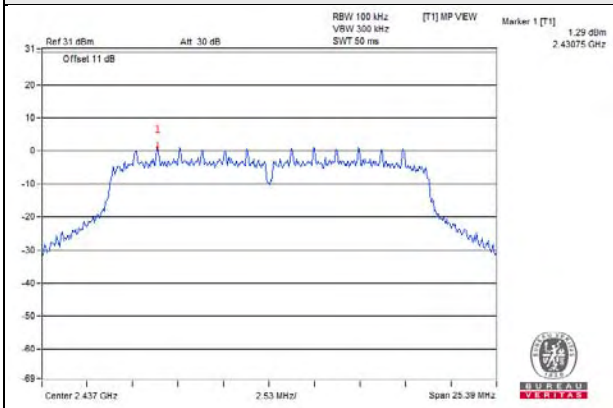


802.11n (HT20)

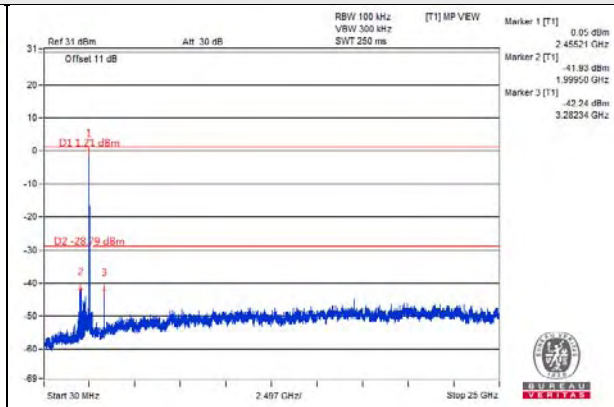
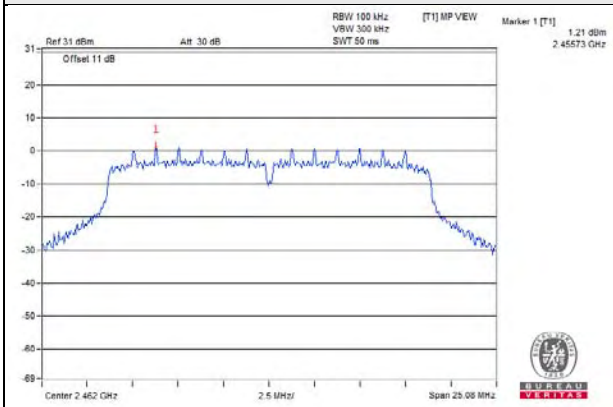
CH 1



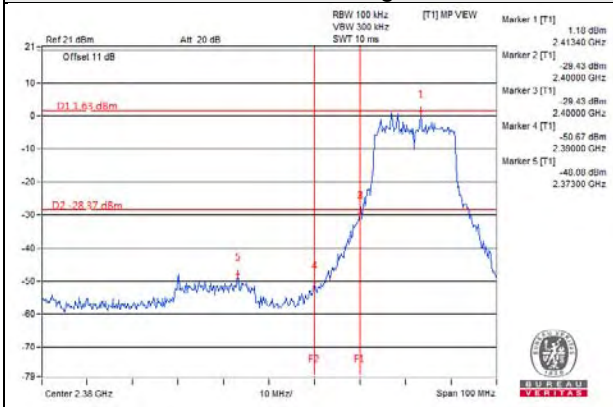
CH 6



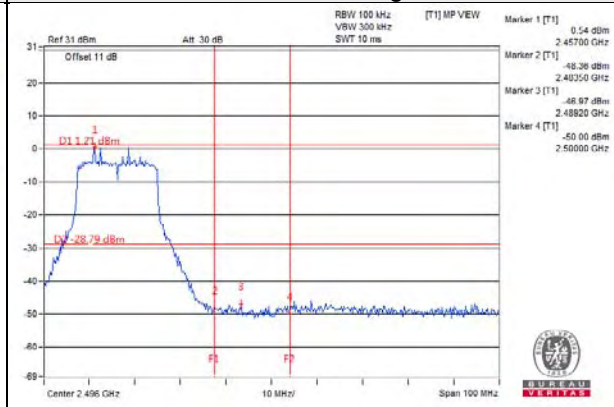
CH 11



CH 1 Band edge

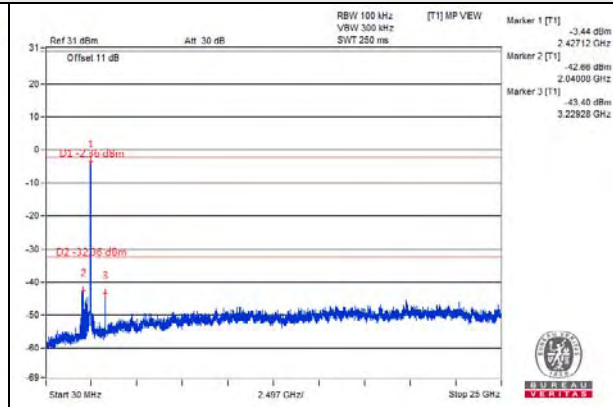
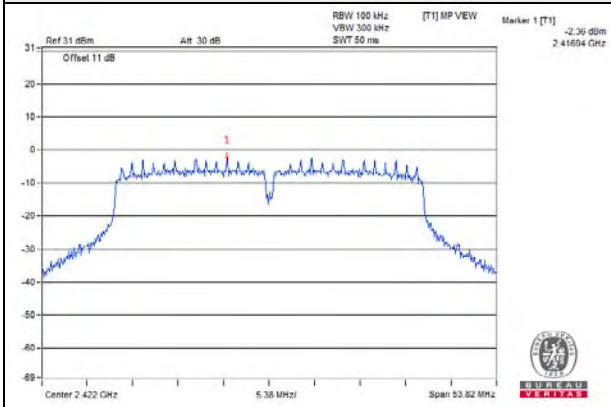


CH 11 Band edge

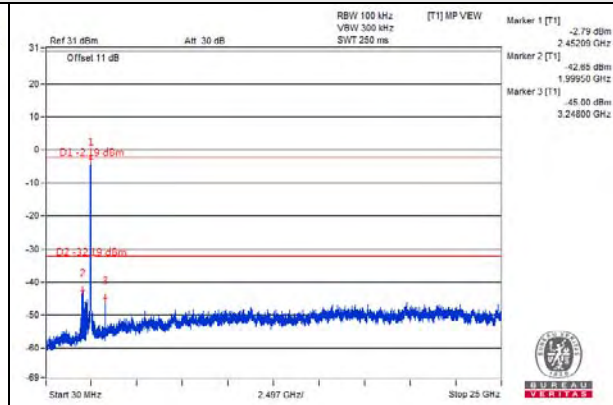
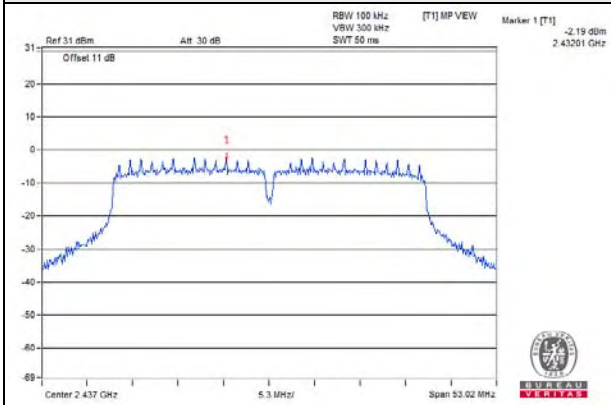


802.11n (HT40)

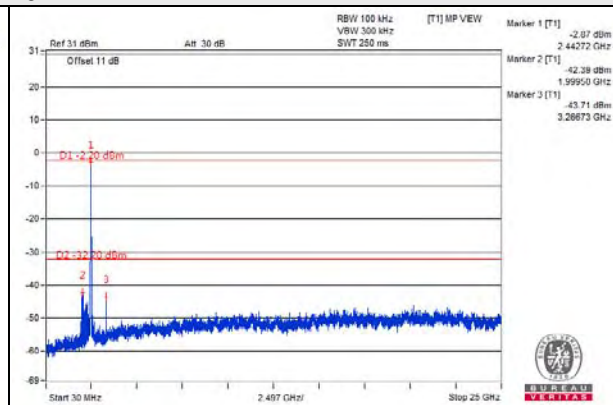
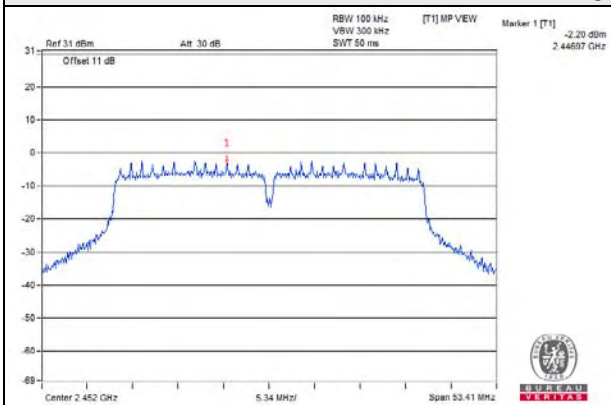
CH 3



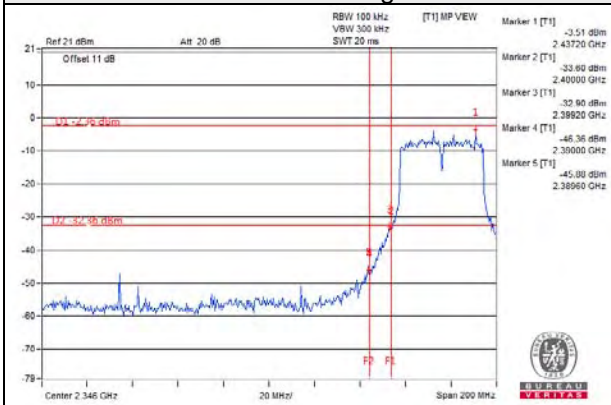
CH 6



CH 9



CH 3 Band edge



CH 9 Band edge

