

FCC TEST REPORT

(WIFI 5G)

Product: LTE Digital Mobile Phone

Model No.: NX529J/ nubia Z11 mini

FCC ID: SRQ-NX529J-US

Applicant: ZTE Corporation

Address: ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park,
Nanshan District, Shenzhen, Guangdong, P.R.China

Manufacturer: ZTE Corporation

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Test Report No.: RF160614W011-7

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF160614W011-7	Original release	July 06, 2016



1 CERTIFICATION

PRODUCT: LTE Digital Mobile Phone
BRAND NAME: ZTE
MODEL NO.: NX529J/ nubia Z11 mini
APPLICANT: ZTE Corporation
TESTED: Jun. 15, 2016 ~ July 05, 2016
TEST SAMPLE: Identical Prototype
STANDARDS: **FCC Part 15, Subpart E (15.407), Section 15.407**
ANSI C63.10-2013

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

PREPARED BY : Anna , **DATE:** July 06, 2016
(Anna Du / Engineer)

APPROVED BY : Bill , **DATE:** July 06, 2016
(Bill Yao / Manager)

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407)			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
15.407(b)(5)	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is 6.70dB at 12.600000MHz.
15.407(b)(1/2/3) (b)(5)	Electric Field Strength Spurious Emissions, 30MHz ~ 40000MHz	PASS	Meet the requirement of limit. Minimum passing margin is -1.23dB at 5470.00MHz.
15.407(a)(1/2/3)	Maximum conducted output Power	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	No antenna connector is used.

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	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.66dB
Radiated emissions	9KHz ~ 30MHz	2.74dB
	30MHz ~ 1GMHz	3.55dB
	1GHz ~ 18GHz	4.84dB
	18GHz ~ 40GHz	1.94dB

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



3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	LTE Digital Mobile Phone
MODEL NO.	NX529J/ nubia Z11 mini
POWER SUPPLY	5.0Vdc (adapter or host equipment) 3.85Vdc (battery)
MODULATION TYPE	64QAM, 16QAM, QPSK, BPSK
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to MCS7 802.11ac: up to 390.0Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz 5500 ~ 5700MHz, 5745 ~ 5825MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 1 for 802.11ac (80MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 1 for 802.11ac (80MHz) 5500 ~ 5700MHz: 8 for 802.11a, 802.11n (20MHz) 3 for 802.11n (40MHz) 1 for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 1 for 802.11ac (80MHz)
AVERAGE POWER	28.184mW for 5180 ~ 5240MHz 26.546mW for 5260 ~ 5320MHz 27.733mW for 5500 ~ 5700MHz 27.227mW for 5745 ~ 5825MHz
ANTENNA TYPE	5180 ~ 5240MHz: PIFA Antenna with 2dBi gain 5260 ~ 5320MHz: PIFA Antenna with 2dBi gain 5500 ~ 5700MHz: PIFA Antenna with 2dBi gain 5745 ~ 5825MHz: PIFA Antenna with 2dBi gain
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	USB cable: non-shielded, detachable, 1.0m

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's



manual.

2. The EUT was powered by the following adapters:

ADAPTER 1	
BRAND:	RUIDE
MODEL:	STC-A515A-Z
INPUT:	AC 100-240V, 600mA
OUTPUT:	DC 5V, 1500mA

ADAPTER 2	
BRAND:	DOKOCOM
MODEL:	STC-A515A-Z
INPUT:	AC 100-240V, 600mA
OUTPUT:	DC 5V, 1500mA

ADAPTER 3	
BRAND:	Salcomp
MODEL:	STC-A515A-Z
INPUT:	AC 100-240V, 600mA
OUTPUT:	DC 5V, 1500mA

3. The EUT matched the following USB cable:

USB CABLE	
BRAND:	LIXUN
MODEL:	ZXMT1511003
SIGNAL LINE:	1.0 METER

4. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

MODULATION MODE	TX FUNCTION
802.11a	1TX/1RX
802.11n (20MHz)	1TX/1RX
802.11n (40MHz)	1TX/1RX
802.11ac (80MHz)	1TX/1RX

5. The above models are identical except the model name for marketing purpose.
6. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

3.2 DESCRIPTION OF TEST MODES

FOR 5150 ~ 5250MHz

4 channels are provided for 802.11a, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210 MHz		

FOR 5250 ~ 5350MHz

4 channels are provided for 802.11a, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

2 channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
58	5290 MHz		

**FOR 5470 ~ 5725MHz**

8 channels are provided for 802.11a, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	116	5580 MHz
104	5520 MHz	132	5660 MHz
108	5540 MHz	136	5680 MHz
112	5560 MHz	140	5700 MHz

3 channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	134	5670 MHz
110	5550 MHz		

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530 MHz		

FOR 5725 ~ 5825MHz

4 channels are provided for 802.11a, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745 MHz	161	5805 MHz
153	5765 MHz	165	5825 MHz
157	5785 MHz		

2 channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
155	5775 MHz		



3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE $\geq$ 1G	RE<1G	PLC	APCM	
A	√	√	√	-	Powered by Adapter with wifi(5G) link
B	-	-	-	√	Powered by Battery with wifi(5G) link
C	-	-	-	-	Powered by USB with wifi(5G) link

Where **RE $\geq$ 1G**: Radiated Emission above 1GHz**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 **X-plane**.**NOTE:** "-" 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	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 44, 48	OFDM	BPSK	6.0
A	802.11n (20MHz)		36 to 48	36, 44, 48	OFDM	BPSK	MCS0
A	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	MCS0
A	802.11ac (80MHz)		42	42	OFDM	BPSK	V0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
A	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
A	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	MCS0
A	802.11ac (80MHz)		58	58	OFDM	BPSK	V0
A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
A	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	MCS0
A	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
A	802.11ac (80MHz)		106	106	OFDM	BPSK	V0
A	802.11a	5725-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.0
A	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	MCS0
A	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	MCS0
A	802.11ac (80MHz)		155	155	OFDM	BPSK	V0

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	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5180-5320	36 to 64	36	OFDM	BPSK	6.0

POWER LINE CONDUCTED EMISSION TEST:

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5180-5320	36 to 64	36	OFDM	BPSK	6.0

BANDEDGE MEASUREMENT:

☒ 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	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 48	OFDM	BPSK	6.0
A	802.11n (20MHz)		36 to 48	36, 48	OFDM	BPSK	MCS0
A	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	MCS0
A	802.11ac (80MHz)		42	42	OFDM	BPSK	V0
A	802.11a	5260-5320	52 to 64	52, 64	OFDM	BPSK	6.0
A	802.11n (20MHz)		52 to 64	52, 64	OFDM	BPSK	MCS0
A	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	MCS0
A	802.11ac (80MHz)		58	58	OFDM	BPSK	V0
A	802.11a	5500-5700	100 to 140	100, 140	OFDM	BPSK	6.0
A	802.11n (20MHz)		100 to 140	100, 140	OFDM	BPSK	MCS0
A	802.11n (40MHz)		102 to 134	102, 134	OFDM	BPSK	MCS0
A	802.11ac (80MHz)		106	106	OFDM	BPSK	V0
A	802.11a	5725-5825	149 to 165	149, 165	OFDM	BPSK	6.0
A	802.11n (20MHz)		149 to 165	149, 165	OFDM	BPSK	MCS0
A	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	MCS0
A	802.11ac (80MHz)		155	155	OFDM	BPSK	V0



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	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
B	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
B	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	MCS0
B	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	MCS0
B	802.11ac (80MHz)		42	42	OFDM	BPSK	V0
B	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
B	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
B	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	MCS0
B	802.11ac (80MHz)		58	58	OFDM	BPSK	V0
B	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
B	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	MCS0
B	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
B	802.11ac (80MHz)		106	106	OFDM	BPSK	V0
B	802.11a	5725-5825	149 to 165	149, 165	OFDM	BPSK	6.0
B	802.11n (20MHz)		149 to 165	149, 165	OFDM	BPSK	MCS0
B	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	MCS0
B	802.11ac (80MHz)		155	155	OFDM	BPSK	V0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	23deg. C, 62%RH	DC 5V By Adapter	Alex Chen
RE≥1G	23deg. C, 62%RH	DC 5V By Adapter	Alex Chen
PLC	24deg. C, 61%RH	DC 5V By Adapter	Yuqiang Yin
APCM	23.5deg. C, 60%RH	DC 3.85V By battery	Yuqiang Yin



3.3 DUTY CYCLE OF TEST SIGNAL

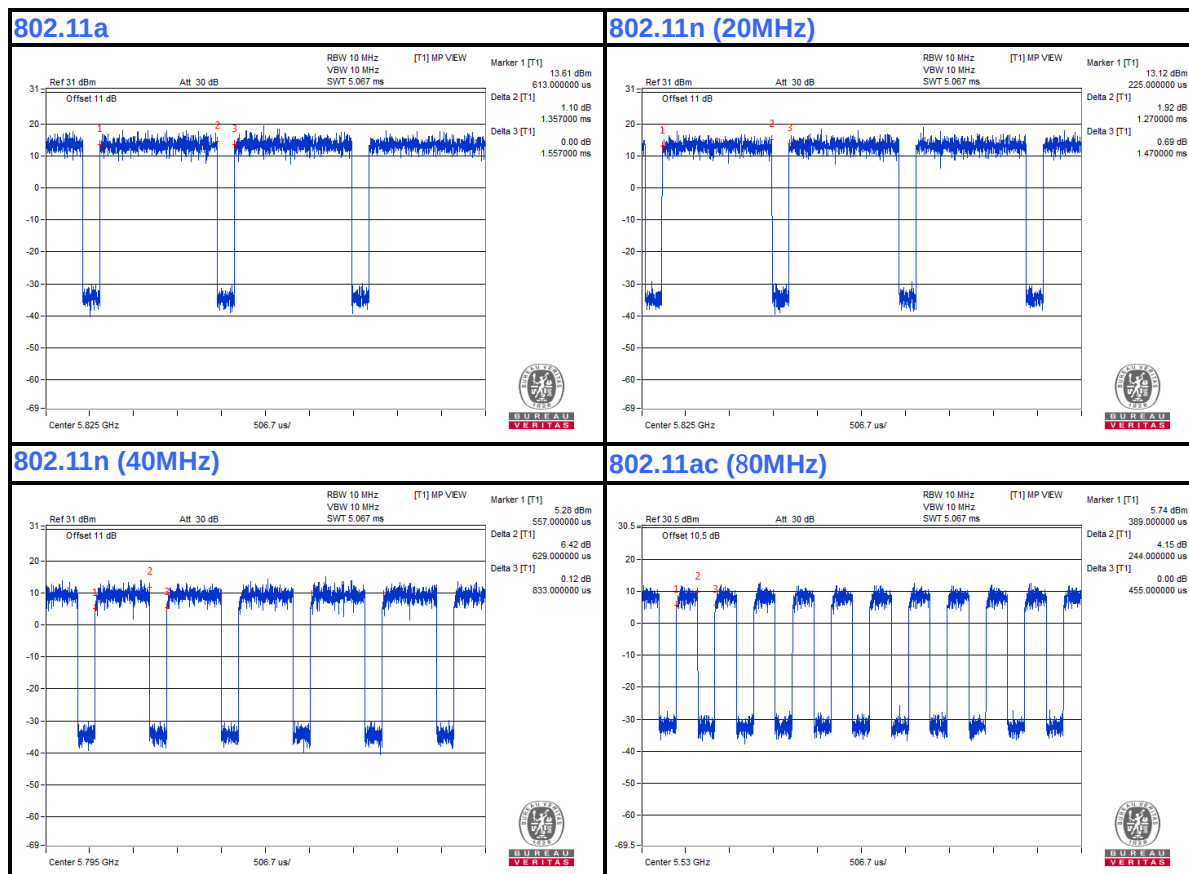
Duty cycle of test signal is < 98%, duty factor shall be considered.

802.11a: Duty cycle = $1.357/1.557 = 0.872$, Duty factor = $10 * \log(1/0.872) = 0.60$

802.11n (20MHz): Duty cycle = $1.270/1.470 = 0.864$, Duty factor = $10 * \log(1/0.864) = 0.64$

802.11n (40MHz): Duty cycle = $0.629/0.833 = 0.755$, Duty factor = $10 * \log(1/0.755) = 1.22$

802.11ac (80MHz): Duty cycle = $0.244/0.455 = 0.536$, Duty factor = $10 * \log(1/0.536) = 2.71$





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.

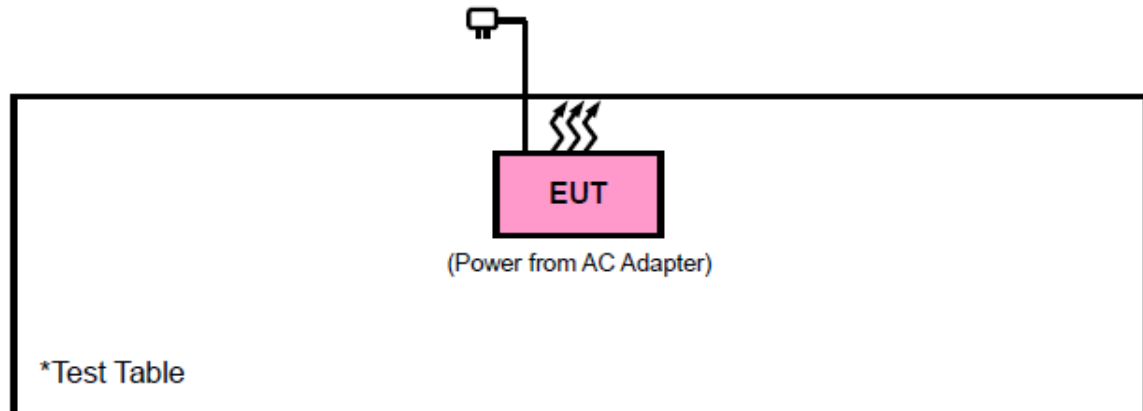
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	DC source	LONG WEI	PS-6403D	010934269	N/A
2	PC	HP	A6608CN	3CR83825X3	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	DC Line: Unshielded, Detachable 1.0m
2	AC Line: Unshielded, Detachable 1.5m

NOTE:

1. All power cords of the above support units are non shielded (1.8m).

3.4.1 CONFIGURATION OF SYSTEM UNDER TEST



3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart E (15.407)

KDB 789033 D02_v01_General UNII Test Procedures New Rules

ANSI C63.10-2013

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

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

4 TEST TYPES AND RESULTS

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

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 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT	
	FIELD STRENGTH AT 3m (dBμV/m)	
	PK	AV
	74	54
√	EIRP LIMIT (dBm)	EQUIVALENT FIELD STRENGTH AT 3m (dBμV/m)
	PK	PK
	-27	68.3

NOTE: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts).}$$



4.1.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Apr. 05,16	Apr. 04,17
Bilog Antenna	Teseq	CBL 6111D	30643	Jul. 16, 15	Jul. 15, 16
Loop Antenna	Daze	ZN30900A	0708	Dec. 30, 15	Dec. 29, 16
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	00062558	May 30, 15	May 29, 17
Amplifier	Burgeon	BPA-530	100220	Apr. 05,16	Apr. 04,17
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Nov. 20,15	Nov. 19,17
Pre-Amplifier	HP	8449B	3008A00409	Apr. 25,15	Apr. 24,17
GPS Generator+ Antenna	TOJOIN	GNSS-5000A	E1-010119	Aug. 08, 14	Aug. 07, 16
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	Mar. 12,16	Mar. 11,18
Test Software	ADT	ADT_Radiated _V7.6.15.9.2	N/A	N/A	N/A

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in 966 Chamber.
3. The FCC Site Registration No. is 502831.

4.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters (for below 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 antenna is a broadband antenna, and its height 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 Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

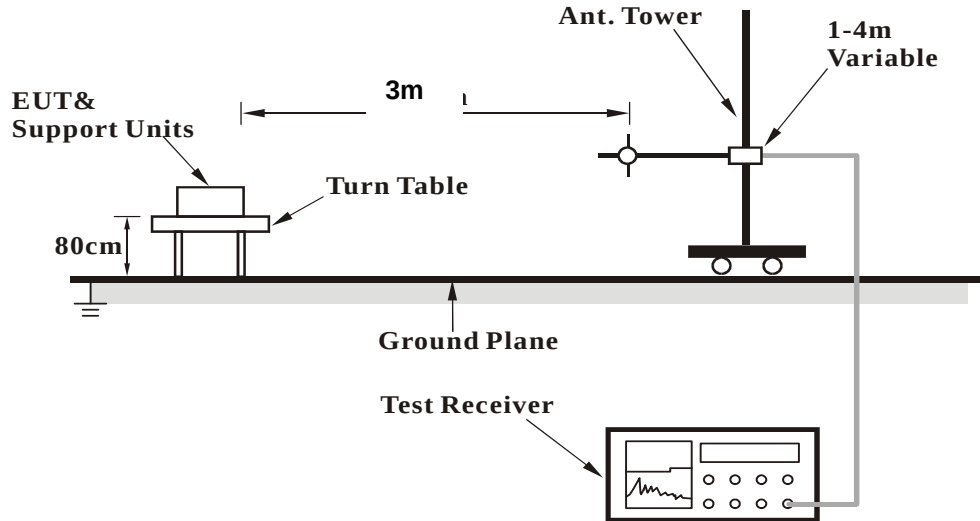
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.5 DEVIATION FROM TEST STANDARD

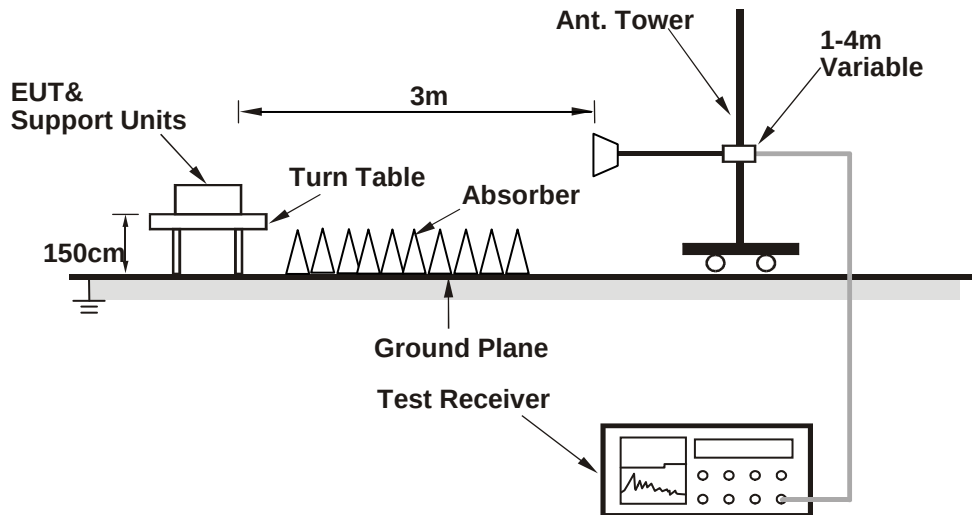
No deviation.

4.1.6 TEST SETUP

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



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

4.1.7 EUT OPERATING CONDITION

- a. Set the EUT under full load condition and placed them on a testing table.
- b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.
- c. The necessary accessories enable the EUT in full functions.



4.1.8 TEST RESULTS

BELOW 1GHz WORST-CASE DATA:

9 KHz – 30 MHz data: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

30 MHz – 1GHz data:

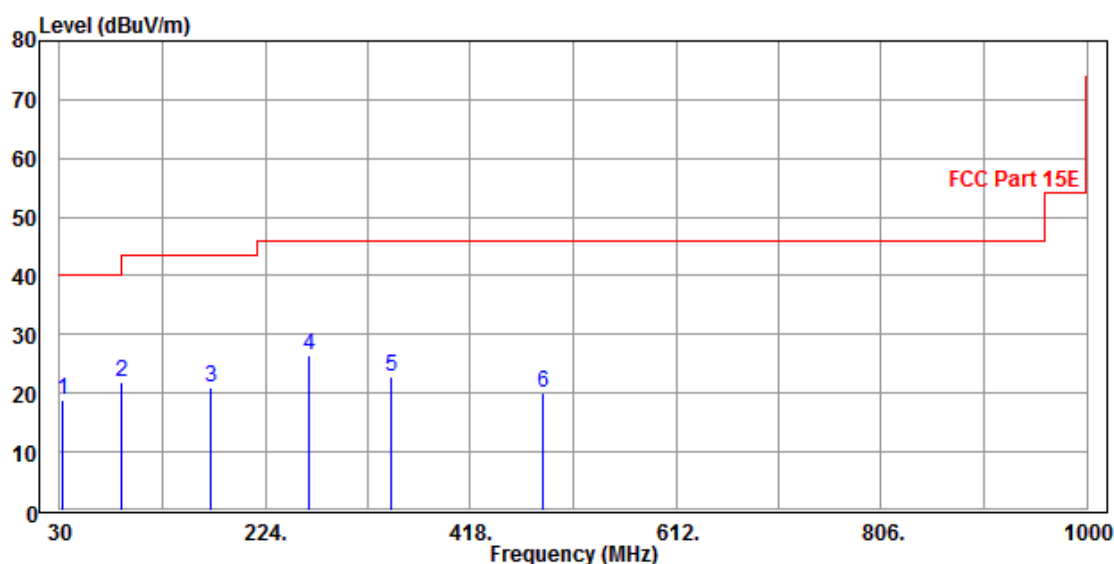
802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
32.91	18.89	40.50	-21.11	40.00	15.09	0.84	37.54	101	72	QP
88.20	21.90	50.66	-21.60	43.50	6.85	1.45	37.06	101	158	QP
172.59	20.89	45.58	-22.61	43.50	10.01	2.01	36.71	101	256	QP
264.74	26.44	47.84	-19.56	46.00	12.58	2.53	36.51	101	320	QP
343.31	22.86	41.73	-23.14	46.00	14.82	2.91	36.60	101	114	QP
486.87	20.18	35.45	-25.82	46.00	18.24	3.42	36.93	101	268	QP

REMARKS:

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



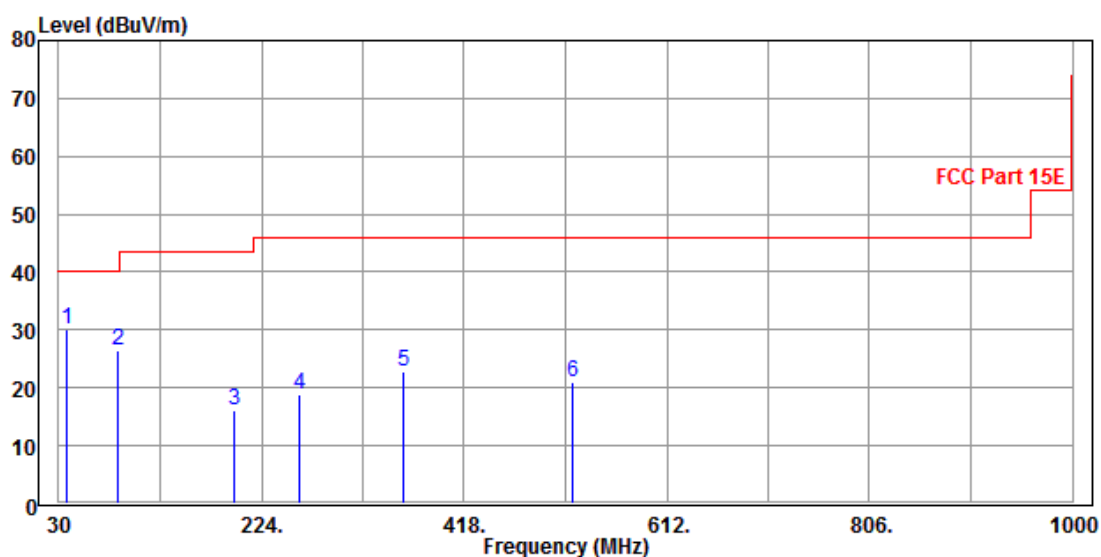


CHANNEL	Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
37.76	30.19	55.03	-9.81	40.00	11.75	0.91	37.50	101	250	QP
86.26	26.54	55.40	-13.46	40.00	6.79	1.43	37.08	101	120	QP
197.81	16.24	40.56	-27.26	43.50	10.08	2.16	36.56	101	48	QP
260.86	18.89	40.37	-27.11	46.00	12.53	2.51	36.52	101	320	QP
359.80	22.84	40.98	-23.16	46.00	15.51	2.98	36.63	101	158	QP
521.79	20.84	35.47	-25.16	46.00	18.81	3.58	37.02	101	72	QP

REMARKS:

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





**ABOVE 1GHz WORST-CASE DATA: Band 1
802.11a**

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5127	46.33	47.25	-7.67	54.00	34.45	13.64	49.01	100	228	Average
5127	54.33	55.25	-19.67	74.00	34.45	13.64	49.01	100	228	Peak
5180	97.28	97.99			34.52	13.79	49.02	100	228	Average
5180	105.07	105.78			34.52	13.79	49.02	100	228	Peak
5369	42.89	42.89	-11.11	54.00	34.74	14.34	49.08	100	228	Average
5369	52.57	52.57	-21.43	74.00	34.74	14.34	49.08	100	228	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5127	46.25	47.17	-7.75	54.00	34.45	13.64	49.01	100	150	Average
5127	53.44	54.36	-20.56	74.00	34.45	13.64	49.01	100	150	Peak
5180	98.68	99.39			34.52	13.79	49.02	100	150	Average
5180	106.76	107.47			34.52	13.79	49.02	100	150	Peak
5350	42.43	42.51	-11.57	54.00	34.72	14.28	49.08	100	150	Average
5350	52.46	52.54	-21.54	74.00	34.72	14.28	49.08	100	150	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5180MHz: Fundamental frequency.



CHANNEL	TX Channel 44	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5122	42.96	43.89	-11.04	54.00	34.45	13.63	49.01	100	235	Average
5122	53.87	54.8	-20.13	74.00	34.45	13.63	49.01	100	235	Peak
5220	98.6	99.17			34.56	13.91	49.04	100	235	Average
5220	106.64	107.21			34.56	13.91	49.04	100	235	Peak
5350	43.06	43.14	-10.94	54.00	34.72	14.28	49.08	100	235	Average
5350	52.16	52.24	-21.84	74.00	34.72	14.28	49.08	100	235	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5128	42.96	43.87	-11.04	54.00	34.45	13.65	49.01	100	149	Average
5128	54.55	55.46	-19.45	74.00	34.45	13.65	49.01	100	149	Peak
5220	100.00	100.57			34.56	13.91	49.04	100	149	Average
5220	108.07	108.64			34.56	13.91	49.04	100	149	Peak
5350	42.98	43.06	-11.02	54.00	34.72	14.28	49.08	100	149	Average
5350	52.64	52.72	-21.36	74.00	34.72	14.28	49.08	100	149	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5220MHz: Fundamental frequency.



CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5147	43.17	44.00	-10.83	54.00	34.48	13.70	49.01	239	100	Average
5147	53.01	53.84	-20.99	74.00	34.48	13.70	49.01	239	100	Peak
5240	98.15	98.63			34.59	13.97	49.04	239	100	Average
5240	106.71	107.19			34.59	13.97	49.04	239	100	Peak
5350	43.19	43.27	-10.81	54.00	34.72	14.28	49.08	239	100	Average
5350	52.64	52.72	-21.36	74.00	34.72	14.28	49.08	239	100	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	43.00	43.82	-11.00	54.00	34.48	13.71	49.01	100	160	Average
5150	52.44	53.26	-21.56	74.00	34.48	13.71	49.01	100	160	Peak
5240	99.80	100.28			34.59	13.97	49.04	100	160	Average
5240	107.68	108.16			34.59	13.97	49.04	100	160	Peak
5350	42.90	42.98	-11.10	54.00	34.72	14.28	49.08	100	160	Average
5350	52.16	52.24	-21.84	74.00	34.72	14.28	49.08	100	160	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.



802.11n (20MHz)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5128	46.64	47.55	-7.36	54.00	34.45	13.65	49.01	115	243	Average
5128	54.43	55.34	-19.57	74.00	34.45	13.65	49.01	115	243	Peak
5180	97.98	98.69			34.52	13.79	49.02	115	243	Average
5180	106.07	106.78			34.52	13.79	49.02	115	243	Peak
5368	42.85	42.86	-11.15	54.00	34.74	14.33	49.08	115	243	Average
5368	52.40	52.41	-21.60	74.00	34.74	14.33	49.08	115	243	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5128	47.67	48.58	-6.33	54.00	34.45	13.65	49.01	114	100	Average
5128	56.06	56.97	-17.94	74.00	34.45	13.65	49.01	114	100	Peak
5180	100.19	100.9			34.52	13.79	49.02	114	100	Average
5180	107.40	108.11			34.52	13.79	49.02	114	100	Peak
5369	43.09	43.09	-10.91	54.00	34.74	14.34	49.08	114	100	Average
5369	52.77	52.77	-21.23	74.00	34.74	14.34	49.08	114	100	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5180MHz: Fundamental frequency.



CHANNEL	TX Channel 44	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5125	43.16	44.08	-10.84	54.00	34.45	13.64	49.01	100	230	Average
5125	53.54	54.46	-20.46	74.00	34.45	13.64	49.01	100	230	Peak
5220	98.41	98.98			34.56	13.91	49.04	100	230	Average
5220	106.48	107.05			34.56	13.91	49.04	100	230	Peak
5350	43.24	43.32	-10.76	54.00	34.72	14.28	49.08	100	230	Average
5350	52.29	52.37	-21.71	74.00	34.72	14.28	49.08	100	230	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5119	43.04	43.99	-10.96	54.00	34.44	13.62	49.01	116	100	Average
5119	54.36	55.31	-19.64	74.00	34.44	13.62	49.01	116	100	Peak
5220	100.42	100.99			34.56	13.91	49.04	116	100	Average
5220	107.71	108.28			34.56	13.91	49.04	116	100	Peak
5350	43.12	43.20	-10.88	54.00	34.72	14.28	49.08	116	100	Average
5350	52.38	52.46	-21.62	74.00	34.72	14.28	49.08	116	100	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5220MHz: Fundamental frequency.



CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5136	43.20	44.08	-10.80	54.00	34.46	13.67	49.01	120	240	Average
5136	53.05	53.93	-20.95	74.00	34.46	13.67	49.01	120	240	Peak
5240	97.91	98.39			34.59	13.97	49.04	120	240	Average
5240	105.85	106.33			34.59	13.97	49.04	120	240	Peak
5350	43.26	43.34	-10.74	54.00	34.72	14.28	49.08	120	240	Average
5350	52.02	52.10	-21.98	74.00	34.72	14.28	49.08	120	240	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	43.18	44.00	-10.82	54.00	34.48	13.71	49.01	100	105	Average
5150	53.01	53.83	-20.99	74.00	34.48	13.71	49.01	100	105	Peak
5240	99.99	100.47			34.59	13.97	49.04	100	105	Average
5240	108.10	108.58			34.59	13.97	49.04	100	105	Peak
5350	43.21	43.29	-10.79	54.00	34.72	14.28	49.08	100	105	Average
5350	53.10	53.18	-20.90	74.00	34.72	14.28	49.08	100	105	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5240MHz: Fundamental frequency.



802.11n (40MHz)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	49.53	50.35	-4.47	54.00	34.48	13.71	49.01	100	235	Average
5150	60.34	61.16	-13.66	74.00	34.48	13.71	49.01	100	235	Peak
5190	94.39	95.07			34.53	13.82	49.03	100	235	Average
5190	102.87	103.55			34.53	13.82	49.03	100	235	Peak
5350	43.28	43.36	-10.72	54.00	34.72	14.28	49.08	100	235	Average
5350	53.70	53.78	-20.30	74.00	34.72	14.28	49.08	100	235	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	51.91	52.73	-2.09	54.00	34.48	13.71	49.01	110	106	Average
5150	63.37	64.19	-10.63	74.00	34.48	13.71	49.01	110	106	Peak
5190	-0.68	0.00			34.53	13.82	49.03	110	106	Average
5190	104.93	105.61			34.53	13.82	49.03	110	106	Peak
5350	43.25	43.33	-10.75	54.00	34.72	14.28	49.08	110	106	Average
5350	52.45	52.53	-21.55	74.00	34.72	14.28	49.08	110	106	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5190MHz: Fundamental frequency.



CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5128	44.13	45.04	-9.87	54.00	34.45	13.65	49.01	100	240	Average
5128	53.87	54.78	-20.13	74.00	34.45	13.65	49.01	100	240	Peak
5230	93.84	94.36			34.58	13.94	49.04	100	240	Average
5230	103.07	103.59			34.58	13.94	49.04	100	240	Peak
5350	43.24	43.32	-10.76	54.00	34.72	14.28	49.08	100	240	Average
5350	53.00	53.08	-21.00	74.00	34.72	14.28	49.08	100	240	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5127	44.28	45.20	-9.72	54.00	34.45	13.64	49.01	101	160	Average
5127	53.79	54.71	-20.21	74.00	34.45	13.64	49.01	101	160	Peak
5230	95.79	96.31			34.58	13.94	49.04	101	160	Average
5230	104.69	105.21			34.58	13.94	49.04	101	160	Peak
5350	43.20	43.28	-10.80	54.00	34.72	14.28	49.08	101	160	Average
5350	52.88	52.96	-21.12	74.00	34.72	14.28	49.08	101	160	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5230MHz: Fundamental frequency.



802.11ac (80MHz)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5147	44.49	45.32	54.00	-9.51	34.48	13.70	49.01	100	45	Average
5147	57.53	58.36	74.00	-16.47	34.48	13.70	49.01	100	45	Peak
5210	84.00	84.60			34.55	13.88	49.03	100	45	Average
5210	98.00	98.60			34.55	13.88	49.03	100	45	Peak
5350	41.88	41.96	54.00	-12.12	34.72	14.28	49.08	100	45	Average
5350	52.41	52.49	74.00	-21.59	34.72	14.28	49.08	100	45	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5147	50.91	51.74	54.00	-3.09	34.48	13.70	49.01	150	310	Average
5147	64.92	65.75	74.00	-9.08	34.48	13.70	49.01	150	310	Peak
5210	88.48	89.08			34.55	13.88	49.03	150	310	Average
5210	102.33	102.93			34.55	13.88	49.03	150	310	Peak
5350	41.31	41.39	54.00	-12.69	34.72	14.28	49.08	150	310	Average
5350	53.43	53.51	74.00	-20.57	34.72	14.28	49.08	150	310	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5210MHz: Fundamental frequency.



ABOVE 1GHz WORST-CASE DATA: Band 2

802.11a

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	43.15	43.97	-10.85	54.00	34.48	13.71	49.01	115	240	Average
5150	53.03	53.85	-20.97	74.00	34.48	13.71	49.01	115	240	Peak
5260	98.82	99.24			34.61	14.02	49.05	115	240	Average
5260	106.32	106.74			34.61	14.02	49.05	115	240	Peak
5350	43.31	43.39	-10.69	54.00	34.72	14.28	49.08	115	240	Average
5350	52.97	53.05	-21.03	74.00	34.72	14.28	49.08	115	240	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	43.12	43.94	-10.88	54.00	34.48	13.71	49.01	101	160	Average
5150	53.75	54.57	-20.25	74.00	34.48	13.71	49.01	101	160	Peak
5260	99.90	100.32			34.61	14.02	49.05	101	160	Average
5260	107.75	108.17			34.61	14.02	49.05	101	160	Peak
5350	43.26	43.34	-10.74	54.00	34.72	14.28	49.08	101	160	Average
5350	52.52	52.60	-21.48	74.00	34.72	14.28	49.08	101	160	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5260MHz: Fundamental frequency.



CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	43.38	44.20	-10.62	54.00	34.48	13.71	49.01	114	240	Average
5150	53.79	54.61	-20.21	74.00	34.48	13.71	49.01	114	240	Peak
5300	98.25	98.51			34.66	14.14	49.06	114	240	Average
5300	106.27	106.53			34.66	14.14	49.06	114	240	Peak
5352	46.74	46.81	-7.26	54.00	34.72	14.29	49.08	114	240	Average
5352	54.53	54.60	-19.47	74.00	34.72	14.29	49.08	114	240	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	43.46	44.28	-10.54	54.00	34.48	13.71	49.01	110	100	Average
5150	53.43	54.25	-20.57	74.00	34.48	13.71	49.01	110	100	Peak
5300	101.10	101.36			34.66	14.14	49.06	110	100	Average
5300	108.08	108.34			34.66	14.14	49.06	110	100	Peak
5352	48.23	48.30	-5.77	54.00	34.72	14.29	49.08	110	100	Average
5352	55.03	55.10	-18.97	74.00	34.72	14.29	49.08	110	100	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5300MHz: Fundamental frequency.



CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5135	43.48	44.36	-10.52	54.00	34.46	13.67	49.01	100	268	Average
5135	53.41	54.29	-20.59	74.00	34.46	13.67	49.01	100	268	Peak
5320	98.14	98.33			34.68	14.20	49.07	100	268	Average
5320	106.91	107.10			34.68	14.20	49.07	100	268	Peak
5372	46.59	46.58	-7.41	54.00	34.75	14.34	49.08	100	268	Average
5372	54.69	54.68	-19.31	74.00	34.75	14.34	49.08	100	268	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5132	43.50	44.39	-10.50	54.00	34.46	13.66	49.01	110	101	5132
5132	53.04	53.93	-20.96	74.00	34.46	13.66	49.01	110	101	5132
5320	100.48	100.67			34.68	14.20	49.07	110	101	5320
5320	107.64	107.83			34.68	14.20	49.07	110	101	5320
5372	47.96	47.95	-6.04	54.00	34.75	14.34	49.08	110	101	5372
5372	55.90	55.89	-18.10	74.00	34.75	14.34	49.08	110	101	5372

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5320MHz: Fundamental frequency.



802.11n (20MHz)

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	43.16	43.98	-10.84	54.00	34.48	13.71	49.01	100	240	Average
5150	54.25	55.07	-19.75	74.00	34.48	13.71	49.01	100	240	Peak
5260	97.60	98.02			34.61	14.02	49.05	100	240	Average
5260	106.33	106.75			34.61	14.02	49.05	100	240	Peak
5350	43.36	43.44	-10.64	54.00	34.72	14.28	49.08	100	240	Average
5350	52.53	52.61	-21.47	74.00	34.72	14.28	49.08	100	240	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	43.09	43.91	-10.91	54.00	34.48	13.71	49.01	101	160	Average
5150	53.64	54.46	-20.36	74.00	34.48	13.71	49.01	101	160	Peak
5260	99.60	100.02			34.61	14.02	49.05	101	160	Average
5260	107.35	107.77			34.61	14.02	49.05	101	160	Peak
5350	43.28	43.36	-10.72	54.00	34.72	14.28	49.08	101	160	Average
5350	52.74	52.82	-21.26	74.00	34.72	14.28	49.08	101	160	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5260MHz: Fundamental frequency.



CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	43.41	44.23	-10.59	54.00	34.48	13.71	49.01	103	235	Average
5150	53.22	54.04	-20.78	74.00	34.48	13.71	49.01	103	235	Peak
5300	98.72	98.98			34.66	14.14	49.06	103	235	Average
5300	105.92	106.18			34.66	14.14	49.06	103	235	Peak
5351	47.45	47.53	-6.55	54.00	34.72	14.28	49.08	103	235	Average
5351	54.64	54.72	-19.36	74.00	34.72	14.28	49.08	103	235	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5115	43.26	44.21	-10.74	54.00	34.44	13.61	49.00	101	156	Average
5115	53.32	54.27	-20.68	74.00	34.44	13.61	49.00	101	156	Peak
5300	100.07	100.33			34.66	14.14	49.06	101	156	Average
5300	108.23	108.49			34.66	14.14	49.06	101	156	Peak
5351	46.94	47.02	-7.06	54.00	34.72	14.28	49.08	101	156	Average
5351	55.55	55.63	-18.45	74.00	34.72	14.28	49.08	101	156	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5300MHz: Fundamental frequency.



CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5133	43.54	44.43	-10.46	54.00	34.46	13.66	49.01	101	234	Average
5133	54.15	55.04	-19.85	74.00	34.46	13.66	49.01	101	234	Peak
5320	97.71	97.90			34.68	14.20	49.07	101	234	Average
5320	106.79	106.98			34.68	14.20	49.07	101	234	Peak
5371	46.91	46.90	-7.09	54.00	34.75	14.34	49.08	101	234	Average
5371	54.22	54.21	-19.78	74.00	34.75	14.34	49.08	101	234	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5135	43.51	44.39	-10.49	54.00	34.46	13.67	49.01	101	100	Average
5135	54.79	55.67	-19.21	74.00	34.46	13.67	49.01	101	100	Peak
5320	99.83	100.02			34.68	14.20	49.07	101	100	Average
5320	107.84	108.03			34.68	14.20	49.07	101	100	Peak
5371	47.71	47.70	-6.29	54.00	34.75	14.34	49.08	101	100	Average
5371	54.29	54.28	-19.71	74.00	34.75	14.34	49.08	101	100	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5320MHz: Fundamental frequency.



802.11n (40MHz)

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5134	43.09	43.98	-10.91	54.00	34.46	13.66	49.01	115	241	Average
5134	52.89	53.78	-21.11	74.00	34.46	13.66	49.01	115	241	Peak
5270	94.35	94.73			34.62	14.05	49.05	115	241	Average
5270	101.78	102.16			34.62	14.05	49.05	115	241	Peak
5372	44.11	44.10	-9.89	54.00	34.75	14.34	49.08	115	241	Average
5372	53.42	53.41	-20.58	74.00	34.75	14.34	49.08	115	241	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5136	43.07	43.95	-10.93	54.00	34.46	13.67	49.01	101	156	Average
5136	53.62	54.50	-20.38	74.00	34.46	13.67	49.01	101	156	Peak
5270	95.65	96.03			34.62	14.05	49.05	101	156	Average
5270	104.97	105.35			34.62	14.05	49.05	101	156	Peak
5372	43.71	43.70	-10.29	54.00	34.75	14.34	49.08	101	156	Average
5372	52.52	52.51	-21.48	74.00	34.75	14.34	49.08	101	156	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5270MHz: Fundamental frequency.



CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5123	43.06	43.99	-10.94	54.00	34.45	13.63	49.01	101	238	Average
5123	54.13	55.06	-19.87	74.00	34.45	13.63	49.01	101	238	Peak
5310	93.58	93.80			34.67	14.17	49.06	101	238	Average
5310	102.88	103.10			34.67	14.17	49.06	101	238	Peak
5350	50.24	50.32	-3.76	54.00	34.72	14.28	49.08	101	238	Average
5350	60.79	60.87	-13.21	74.00	34.72	14.28	49.08	101	238	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5131	43.16	44.06	-10.84	54.00	34.46	13.65	49.01	109	100	Average
5131	53.57	54.47	-20.43	74.00	34.46	13.65	49.01	109	100	Peak
5310	94.93	95.15			34.67	14.17	49.06	109	100	Average
5310	103.35	103.57			34.67	14.17	49.06	109	100	Peak
5350	50.94	51.02	-3.06	54.00	34.72	14.28	49.08	109	100	Average
5350	62.76	62.84	-11.24	74.00	34.72	14.28	49.08	109	100	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5310MHz: Fundamental frequency.



802.11ac (80MHz)

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5136	41.19	42.07	54.00	-12.81	34.46	13.67	49.01	100	226	Average
5136	51.82	52.7	74.00	-22.18	34.46	13.67	49.01	100	226	Peak
5290	80.06	80.36			34.65	14.11	49.06	100	145	Average
5290	94.62	94.92			34.65	14.11	49.06	100	158	Peak
5350	42.21	42.29	54.00	-11.79	34.72	14.28	49.08	100	132	Average
5350	53.06	53.14	74.00	-20.94	34.72	14.28	49.08	100	179	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5133	41.85	42.74	54.00	-12.15	34.46	13.66	49.01	311	150	Average
5133	53.36	54.25	74.00	-20.64	34.46	13.66	49.01	311	150	Peak
5290	87.82	88.12			34.65	14.11	49.06	311	150	Average
5290	101.14	101.44			34.65	14.11	49.06	311	150	Peak
5350	50.79	50.87	54.00	-3.21	34.72	14.28	49.08	311	150	Average
5350	64.31	64.39	74.00	-9.69	34.72	14.28	49.08	311	150	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5290MHz: Fundamental frequency.



ABOVE 1GHz WORST-CASE DATA: Band 3

802.11a

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5447	46.09	45.79	-7.91	54.00	34.84	14.56	49.10	112	240	Average
5447	52.01	51.71	-21.99	74.00	34.84	14.56	49.10	112	240	Peak
#5470	52.45	52.08	-15.85	68.30	34.86	14.62	49.11	112	240	Peak
5500	97.32	96.83			34.90	14.71	49.12	112	240	Average
5500	106.07	105.58			34.90	14.71	49.12	112	240	Peak
#5725	52.33	50.12	-15.97	68.30	35.17	16.18	49.14	112	240	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5447	46.74	46.44	-7.26	54.00	34.84	14.56	49.10	110	120	Average
5447	53.61	53.31	-20.39	74.00	34.84	14.56	49.10	110	120	Peak
#5470	50.59	50.22	-17.71	68.30	34.86	14.62	49.11	110	120	Peak
5500	99.24	98.75			34.90	14.71	49.12	110	120	Average
5500	106.73	106.24			34.90	14.71	49.12	110	120	Peak
#5725	51.42	49.21	-16.88	68.30	35.17	16.18	49.14	110	120	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.



CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	42.54	42.20	-11.46	54.00	34.85	14.60	49.11	101	240	Average
5460	51.94	51.60	-22.06	74.00	34.85	14.60	49.11	101	240	Peak
#5470	50.25	49.88	-18.05	68.30	34.86	14.62	49.11	101	240	Peak
5580	98.86	97.76			35.00	15.23	49.13	101	240	Average
5580	104.87	103.77			35.00	15.23	49.13	101	240	Peak
#5725	51.61	49.40	-16.09	68.30	35.17	16.18	49.14	101	240	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	42.45	42.11	-11.55	54.00	34.85	14.6	49.11	111	121	Average
5460	52.61	52.27	-21.39	74.00	34.85	14.6	49.11	111	121	Peak
#5470	49.84	49.47	-18.46	68.30	34.86	14.62	49.11	111	121	Peak
5580	100.01	98.91			35.00	15.23	49.13	111	121	Average
5580	106.59	105.49			35.00	15.23	49.13	111	121	Peak
#5725	53.27	51.06	-15.03	68.30	35.17	16.18	49.14	111	121	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5580MHz: Fundamental frequency.
- #: Out of restricted band.



CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	42.78	42.44	-11.22	54.00	34.85	14.60	49.11	100	239	Average
5460	51.75	51.41	-22.25	74.00	34.85	14.60	49.11	100	239	Peak
#5470	49.11	48.74	-19.19	68.30	34.86	14.62	49.11	100	239	Peak
5700	100.59	98.58			35.14	16.01	49.14	100	239	Average
5700	107.29	105.28			35.14	16.01	49.14	100	239	Peak
#5725	62.18	59.97	-6.12	68.30	35.17	16.18	49.14	100	239	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5452	42.44	42.14	-11.56	54.00	34.84	14.57	49.11	101	90	Average
5452	51.78	51.48	-22.22	74.00	34.84	14.57	49.11	101	90	Peak
#5470	51.57	51.20	-16.73	68.30	34.86	14.62	49.11	101	90	Peak
5700	101.13	99.12			35.14	16.01	49.14	101	90	Average
5700	108.92	106.91			35.14	16.01	49.14	101	90	Peak
#5725	55.66	53.45	-12.64	68.30	35.17	16.18	49.14	101	90	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5700MHz: Fundamental frequency.
3. #: Out of restricted band.



802.11n (20MHz)

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5448	46.77	46.47	-7.23	54.00	34.84	14.56	49.10	110	240	Average
5448	54.05	53.75	-19.95	74.00	34.84	14.56	49.10	110	240	Peak
#5470	52.93	52.56	-15.37	68.30	34.86	14.62	49.11	110	240	Peak
5500	97.53	97.04			34.90	14.71	49.12	110	240	Average
5500	103.72	103.23			34.90	14.71	49.12	110	240	Peak
#5725	54.81	52.60	-13.49	68.30	35.17	16.18	49.14	110	240	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5448	47.10	46.80	-6.90	54.00	34.84	14.56	49.10	101	125	Average
5448	53.31	53.01	-20.69	74.00	34.84	14.56	49.10	101	125	Peak
#5470	50.25	49.88	-18.05	68.30	34.86	14.62	49.11	101	125	Peak
5500	97.88	97.39			34.90	14.71	49.12	101	125	Average
5500	104.00	103.51			34.90	14.71	49.12	101	125	Peak
#5725	54.65	52.44	-13.65	68.30	35.17	16.18	49.14	101	125	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5500MHz: Fundamental frequency.
- #: Out of restricted band.



CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	42.49	42.15	-11.51	54.00	34.85	14.60	49.11	100	239	Average
5460	51.88	51.54	-22.12	74.00	34.85	14.60	49.11	100	239	Peak
#5470	50.54	50.17	-17.76	68.30	34.86	14.62	49.11	100	239	Peak
5580	98.60	97.50			35.00	15.23	49.13	100	239	Average
5580	104.99	103.89			35.00	15.23	49.13	100	239	Peak
#5725	56.63	54.42	-11.67	68.30	35.17	16.18	49.14	100	239	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	42.24	41.90	-11.76	54.00	34.85	14.60	49.11	101	124	Average
5460	51.84	51.50	-22.16	74.00	34.85	14.60	49.11	101	124	Peak
#5470	48.57	48.20	-19.73	68.30	34.86	14.62	49.11	101	124	Peak
5580	99.19	98.09			35.00	15.23	49.13	101	124	Average
5580	105.88	104.78			35.00	15.23	49.13	101	124	Peak
#5725	56.37	54.16	-11.93	68.30	35.17	16.18	49.14	101	124	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5580MHz: Fundamental frequency.
3. #: Out of restricted band.



CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5449	42.53	42.23	-11.47	54.00	34.84	14.56	49.10	238	101	Average
5449	52.13	51.83	-21.87	74.00	34.84	14.56	49.10	238	101	Peak
#5470	49.75	49.38	-18.55	68.30	34.86	14.62	49.11	238	101	Peak
5700	100.22	98.21			35.14	16.01	49.14	238	101	Average
5700	106.53	104.52			35.14	16.01	49.14	238	101	Peak
#5725	66.97	64.76	-1.33	68.30	35.17	16.18	49.14	238	101	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5457	42.69	42.36	-11.31	54.00	34.85	14.59	49.11	100	90	Average
5457	52.31	51.98	-21.69	74.00	34.85	14.59	49.11	100	90	Peak
#5470	50.13	49.76	-18.17	68.30	34.86	14.62	49.11	100	90	Peak
5700	101.37	99.36			35.14	16.01	49.14	100	90	Average
5700	108.09	106.08			35.14	16.01	49.14	100	90	Peak
#5725	64.24	62.03	-4.06	68.30	35.17	16.18	49.14	100	90	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5700MHz: Fundamental frequency.
- #: Out of restricted band.



802.11n (40MHz)

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	43.77	43.43	-10.23	54.00	34.85	14.60	49.11	101	239	Average
5460	52.80	52.46	-21.20	74.00	34.85	14.60	49.11	101	239	Peak
#5470	62.01	61.64	-6.29	68.30	34.86	14.62	49.11	101	239	Peak
5510	93.69	93.12			34.91	14.78	49.12	101	239	Average
5510	101.25	100.68			34.91	14.78	49.12	101	239	Peak
#5725	54.14	51.93	-14.16	68.30	35.17	16.18	49.14	101	239	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	45.04	44.70	-8.96	54.00	34.85	14.60	49.11	101	120	Average
5460	53.81	53.47	-20.19	74.00	34.85	14.60	49.11	101	120	Peak
#5470	64.59	64.22	-3.71	68.30	34.86	14.62	49.11	101	120	Peak
5510	94.99	94.42			34.91	14.78	49.12	101	120	Average
5510	102.25	101.68			34.91	14.78	49.12	101	120	Peak
#5725	56.40	54.19	-11.90	68.30	35.17	16.18	49.14	101	120	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5510MHz: Fundamental frequency.
- #: Out of restricted band.



CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5447	43.55	43.25	-10.45	54.00	34.84	14.56	49.10	101	240	Average
5447	51.62	51.32	-22.38	74.00	34.84	14.56	49.10	101	240	Peak
#5470	47.86	47.49	-20.44	68.30	34.86	14.62	49.11	101	240	Peak
5550	94.48	93.60			34.96	15.04	49.12	101	240	Average
5550	101.79	100.91			34.96	15.04	49.12	101	240	Peak
#5725	51.05	48.84	-17.25	68.30	35.17	16.18	49.14	101	240	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5447	42.85	42.55	-11.15	54.00	34.84	14.56	49.10	100	99	Average
5447	51.60	51.30	-22.40	74.00	34.84	14.56	49.10	100	99	Peak
#5470	47.02	46.65	-21.28	68.30	34.86	14.62	49.11	100	99	Peak
5550	94.33	93.45			34.96	15.04	49.12	100	99	Average
5550	102.89	102.01			34.96	15.04	49.12	100	99	Peak
#5725	50.60	48.39	-17.70	68.30	35.17	16.18	49.14	100	99	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5500MHz: Fundamental frequency.
- #: Out of restricted band.



CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	41.50	41.16	-12.50	54.00	34.85	14.60	49.11	101	238	Average
5460	51.58	51.24	-22.42	74.00	34.85	14.60	49.11	101	238	Peak
#5470	47.94	47.57	-20.36	68.30	34.86	14.62	49.11	101	238	Peak
5670	95.81	94.03			35.10	15.82	49.14	101	238	Average
5670	102.72	100.94			35.10	15.82	49.14	101	238	Peak
#5725	54.08	51.87	-14.22	68.30	35.17	16.18	49.14	101	238	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5450	41.55	41.24	-12.45	54.00	34.84	14.57	49.10	101	95	Average
5450	50.94	50.63	-23.06	74.00	34.84	14.57	49.10	101	95	Peak
#5470	48.54	48.17	-19.76	68.30	34.86	14.62	49.11	101	95	Peak
5670	96.19	94.41			35.10	15.82	49.14	101	95	Average
5670	104.34	102.56			35.10	15.82	49.14	101	95	Peak
#5725	53.29	51.08	-15.01	68.30	35.17	16.18	49.14	101	95	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5670MHz: Fundamental frequency.
3. #: Out of restricted band.



802.11ac (80MHz)

CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	47.46	47.12	54.00	-6.54	34.85	14.6	49.11	100	360	Average
5460	60.25	59.91	74.00	-13.75	34.85	14.6	49.11	100	360	Peak
#5470	55.72	55.68	68.30	-12.58	34.86	14.62	49.11	100	360	Peak
5530	84.06	83.33			34.94	14.91	49.12	100	360	Average
5530	97.38	96.65			34.94	14.91	49.12	100	360	Peak
#5725	52.68	50.47	68.30	-15.62	35.17	16.18	49.14	100	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5458	51.30	50.97	54.00	-2.70	34.85	14.59	49.11	150	308	Average
5458	63.95	63.62	74.00	-10.05	34.85	14.59	49.11	150	308	Peak
#5470	67.07	66.70	68.30	-1.23	34.86	14.62	49.11	150	308	Peak
5530	90.01	89.28			34.94	14.91	49.12	150	308	Average
5530	102.93	102.20			34.94	14.91	49.12	150	308	Peak
#5725	53.03	50.82	68.30	-15.27	35.17	16.18	49.14	150	308	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5530MHz: Fundamental frequency.
- #: Out of restricted band.



ABOVE 1GHz WORST-CASE DATA: Band 4

802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	100.92	98.56			35.19	16.31	49.14	101	241	Average
5745	106.93	104.57			35.19	16.31	49.14	101	241	Peak
11490	48.20	38.18	-5.80	54.00	39.10	19.08	48.16	101	60	Average
11490	59.56	49.54	-14.44	74.00	39.10	19.08	48.16	101	60	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	100.15	97.79			35.19	16.31	49.14	101	100	Average
5745	109.00	106.64			35.19	16.31	49.14	101	100	Peak
11490	47.30	37.28	-6.70	54.00	39.10	19.08	48.16	101	72	Average
11490	58.14	48.12	-15.86	74.00	39.10	19.08	48.16	101	72	Peak

REMARKS:

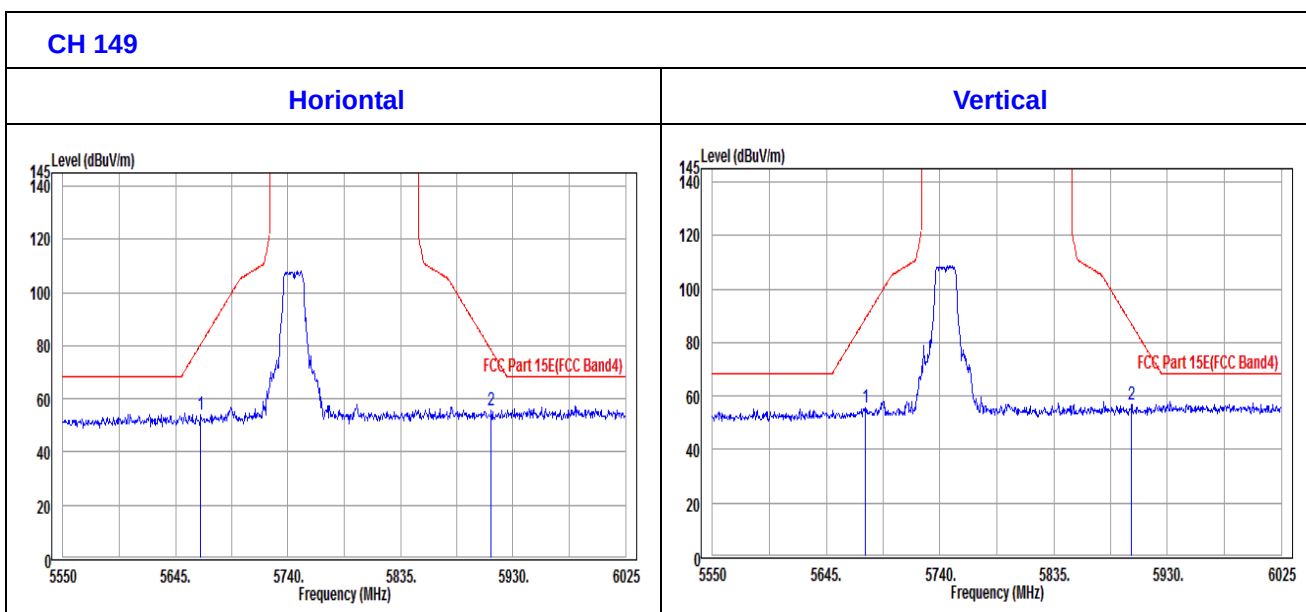
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5745MHz: Fundamental frequency.



OUBE DATA

802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5666.38	53.9	52.15	-26.55	80.45	35.1	15.79	49.14	101	241	Peak
5911.48	55.8	52.18	-22.48	78.28	35.39	17.39	49.16	101	241	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5677.3	55.71	53.87	-32.83	88.54	35.11	15.87	49.14	101	100	Peak
5900.08	56.78	53.24	-29.93	86.71	35.38	17.32	49.16	101	100	Peak





CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	100.62	97.96			35.24	16.57	49.15	101	240	Average
5785	108.17	105.51			35.24	16.57	49.15	101	240	Peak
11570	48.48	38.37	-5.52	54.00	39.16	19.12	48.17	101	256	Average
11570	59.74	49.63	-14.26	74.00	39.16	19.12	48.17	101	256	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	100.75	98.09			35.24	16.57	49.15	101	100	Average
5785	108.19	105.53			35.24	16.57	49.15	101	100	Peak
11570	48.76	38.65	-5.24	54.00	39.16	19.12	48.17	101	100	Average
11570	58.67	48.56	-15.33	74.00	39.16	19.12	48.17	101	100	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5785MHz: Fundamental frequency.

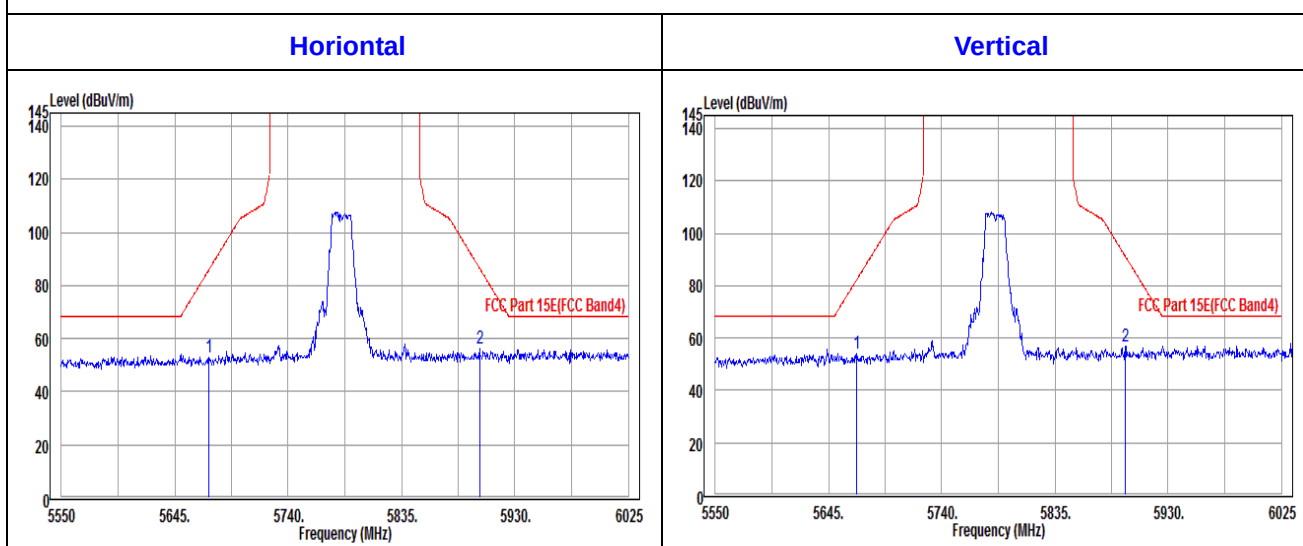


OUBE DATA

802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5673.5	53.14	51.33	-32.59	85.73	35.11	15.84	49.14	101	240	Peak
5900.55	56.04	52.5	-30.31	86.35	35.38	17.32	49.16	101	240	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5668.5	53.96	52.19	-28.07	82.03	35.1	15.81	49.14	101	100	Peak
5894	56.99	53.5	-34.21	91.2	35.37	17.28	49.16	101	100	Peak

CH 157





CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	100.80	97.83			35.29	16.83	49.15	101	239	Average
5825	109.40	106.43			35.29	16.83	49.15	101	239	Peak
11650	48.15	37.95	-5.85	54.00	39.22	19.16	48.18	101	200	Average
11650	59.88	49.68	-14.12	74.00	39.22	19.16	48.18	101	200	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	100.30	97.33			35.29	16.83	49.15	100	145	Average
5825	107.63	104.66			35.29	16.83	49.15	100	145	Peak
11650	48.14	37.94	-5.86	54.00	39.22	19.16	48.18	100	100	Average
11650	59.58	49.38	-14.42	74.00	39.22	19.16	48.18	100	100	Peak

REMARKS:

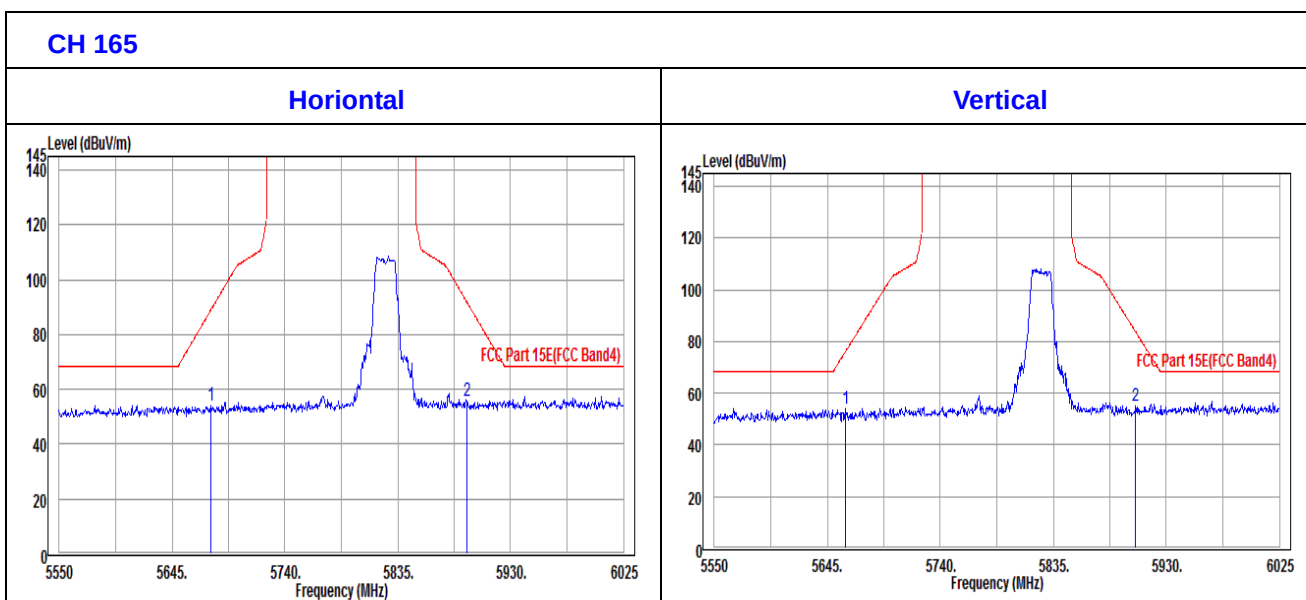
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5825MHz: Fundamental frequency.



OUBE DATA

802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5677.3	53.93	52.09	-34.61	88.54	35.11	15.87	49.14	101	239	Peak
5892.95	55.92	52.44	-36.06	91.98	35.37	17.27	49.16	101	239	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5660.68	54.07	52.36	-22.16	76.23	35.09	15.76	49.14	100	145	Peak
5904.35	55.19	51.61	-28.35	83.54	35.39	17.35	49.16	100	145	Peak





802.11n (20MHz)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	100.83	98.47			35.19	16.31	49.14	101	238	Average
5745	108.05	105.69			35.19	16.31	49.14	101	238	Peak
11490	48.11	38.09	-5.89	54.00	39.10	19.08	48.16	101	235	Average
11490	59.65	49.63	-14.35	74.00	39.10	19.08	48.16	101	235	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	101.25	98.89			35.19	16.31	49.14	101	96	Average
5745	109.33	106.97			35.19	16.31	49.14	101	96	Peak
11490	47.89	37.87	-6.11	54.00	39.10	19.08	48.16	101	100	Average
11490	60.04	50.02	-13.96	74.00	39.10	19.08	48.16	101	100	Peak

REMARKS:

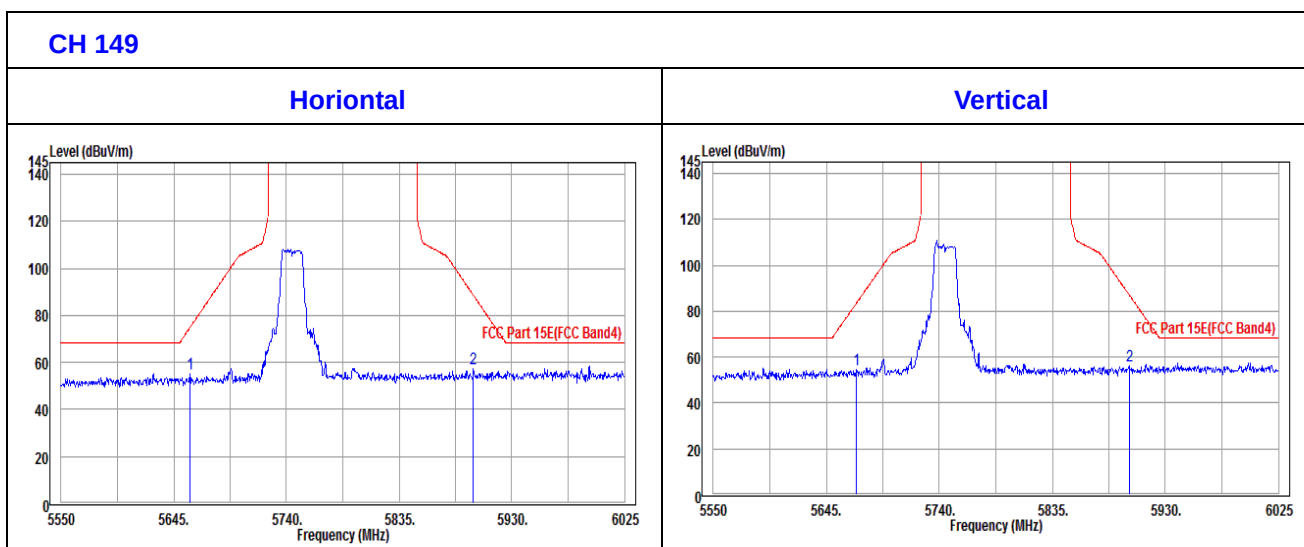
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5745MHz: Fundamental frequency.



Oobe Data

802.11n (20MHz)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5658.3	54.98	53.29	-19.48	74.46	35.09	15.74	49.14	101	240	Peak
5897.7	57.13	53.61	-31.33	88.46	35.38	17.3	49.16	101	240	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670.18	54.37	52.59	-28.9	83.27	35.1	15.82	49.14	101	96	Peak
5899.6	56.25	52.71	-30.81	87.06	35.38	17.32	49.16	101	96	Peak





CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	100.79	98.13			35.24	16.57	49.15	100	236	Average
5785	108.13	105.47			35.24	16.57	49.15	100	236	Peak
11570	48.32	38.21	-5.68	54.00	39.16	19.12	48.17	100	200	Average
11570	59.67	49.56	-14.33	74.00	39.16	19.12	48.17	100	200	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	100.96	98.30			35.24	16.57	49.15	101	99	Average
5785	108.09	105.43			35.24	16.57	49.15	101	99	Peak
11570	47.63	37.52	-6.37	54.00	39.16	19.12	48.17	101	110	Average
11570	60.32	50.21	-13.68	74.00	39.16	19.12	48.17	101	110	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5785MHz: Fundamental frequency.



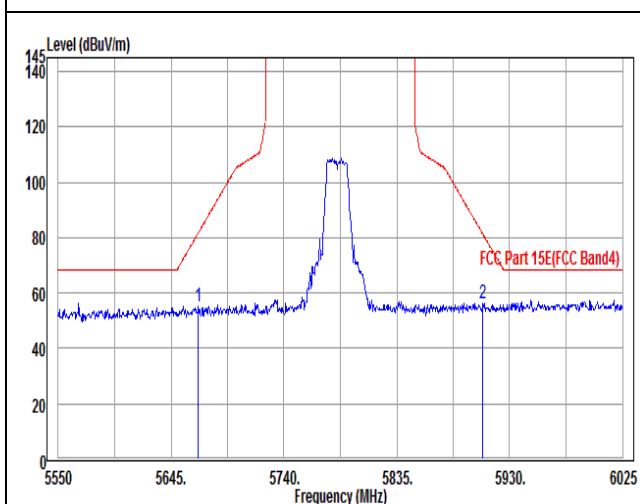
OUBE DATA

802.11n (20MHZ)

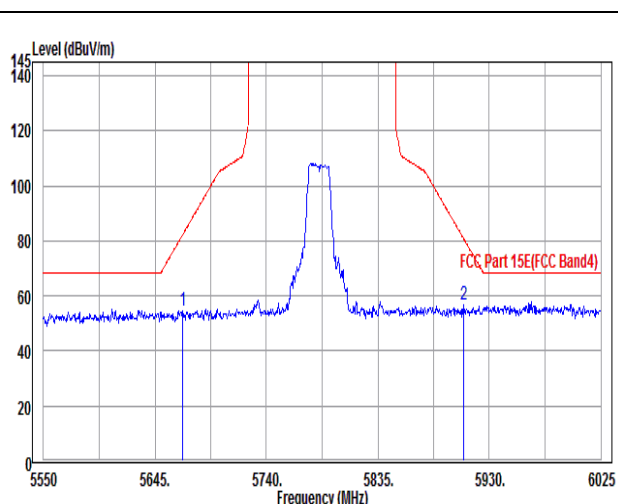
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5667.8	55.25	53.49	-26.26	81.51	35.10	15.81	49.14	100	236	Peak
5907.68	56.21	52.61	-24.88	81.09	35.39	17.37	49.16	100	236	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5668.28	54.82	53.05	-27.04	81.86	35.1	15.81	49.14	101	99	Peak
5908.15	56.73	53.13	-24.00	80.73	35.39	17.37	49.16	101	99	Peak

CH 157

Horizontal



Vertical





CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	100.04	97.07			35.29	16.83	49.15	101	242	Average
5825	107.34	104.37			35.29	16.83	49.15	101	242	Peak
11650	47.72	37.52	-6.28	54.00	39.22	19.16	48.18	101	230	Average
11650	59.42	49.22	-14.58	74.00	39.22	19.16	48.18	101	230	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	99.71	96.74			35.29	16.83	49.15	101	96	Average
5825	108.01	105.04			35.29	16.83	49.15	101	96	Peak
11650	48.56	38.36	-5.44	54.00	39.22	19.16	48.18	101	120	Average
11650	60.22	50.02	-13.78	74.00	39.22	19.16	48.18	101	120	Peak

REMARKS:

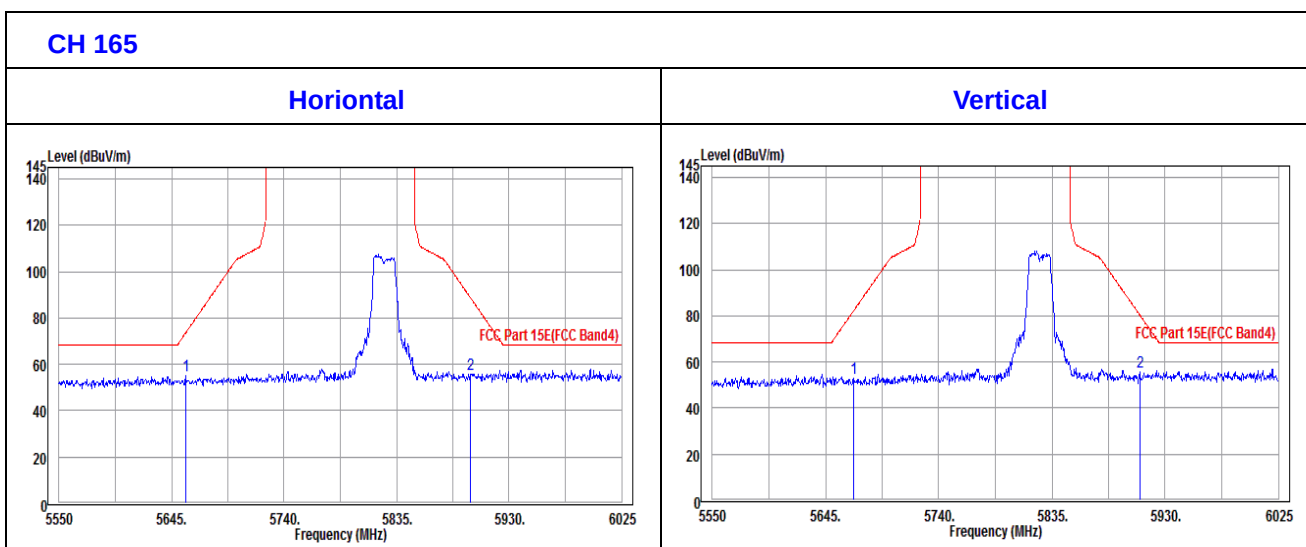
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5825MHz: Fundamental frequency.



Oobe Data

802.11n (20MHz)

Antenna Polarity & Test Distance: Horizontal at 3 m										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5656.88	55.21	53.53	-18.20	73.41	35.09	15.73	49.14	101	96	Peak
5897.7	55.79	52.27	-32.67	88.46	35.38	17.30	49.16	101	96	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5668.28	53.06	51.29	-28.80	81.86	35.10	15.81	49.14	101	242	Peak
5908.63	55.60	52.00	-24.78	80.38	35.39	17.37	49.16	101	242	Peak





802.11n (40MHz)

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5755	96.44	94.01			35.21	16.37	49.15	101	230	Average
5755	104.40	101.97			35.21	16.37	49.15	101	230	Peak
11510	47.63	37.59	-6.37	54.00	39.11	19.09	48.16	101	247	Average
11510	60.27	50.23	-13.73	74.00	39.11	19.09	48.16	101	247	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5755	96.67	94.24			35.21	16.37	49.15	101	60	Average
5755	104.81	102.38			35.21	16.37	49.15	101	60	Peak
11510	47.46	37.42	-6.54	54.00	39.11	19.09	48.16	101	100	Average
11510	59.73	49.69	-14.27	74.00	39.11	19.09	48.16	101	100	Peak

REMARKS:

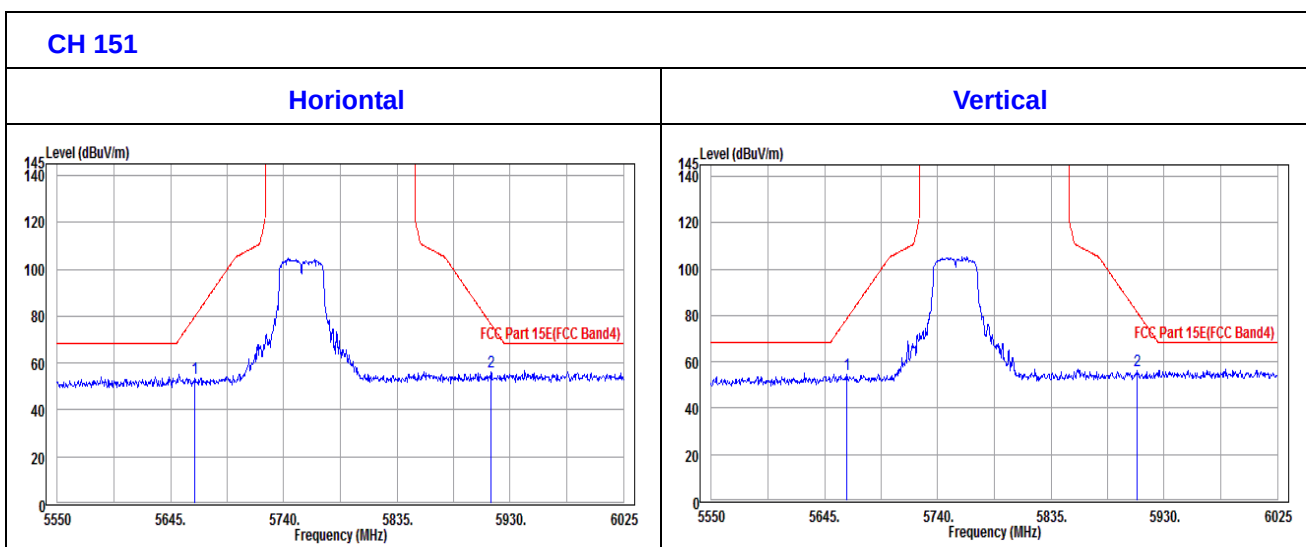
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5755MHz: Fundamental frequency.



OUBE DATA

802.11n (40MHZ)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5664.95	53.31	51.56	-26.09	79.40	35.10	15.79	49.14	101	230	Peak
5913.85	56.14	52.49	-20.38	76.52	35.40	17.41	49.16	101	230	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5663.53	54.73	52.99	-23.61	78.34	35.10	15.78	49.14	101	60	Peak
5907.68	56.18	52.58	-24.91	81.09	35.39	17.37	49.16	101	60	Peak





CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5795	96.76	94.03			35.25	16.63	49.15	101	238	Average
5795	104.30	101.57			35.25	16.63	49.15	101	238	Peak
11590	48.02	37.89	-5.98	54.00	39.17	19.13	48.17	101	200	Average
11590	60.15	50.02	-13.85	74.00	39.17	19.13	48.17	101	200	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5795	97.54	94.81			35.25	16.63	49.15	101	78	Average
5795	106.04	103.31			35.25	16.63	49.15	101	78	Peak
11590	48.39	38.26	-5.61	54.00	39.17	19.13	48.17	101	96	Average
11590	59.39	49.26	-14.61	74.00	39.17	19.13	48.17	101	96	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 5795MHz: Fundamental frequency.

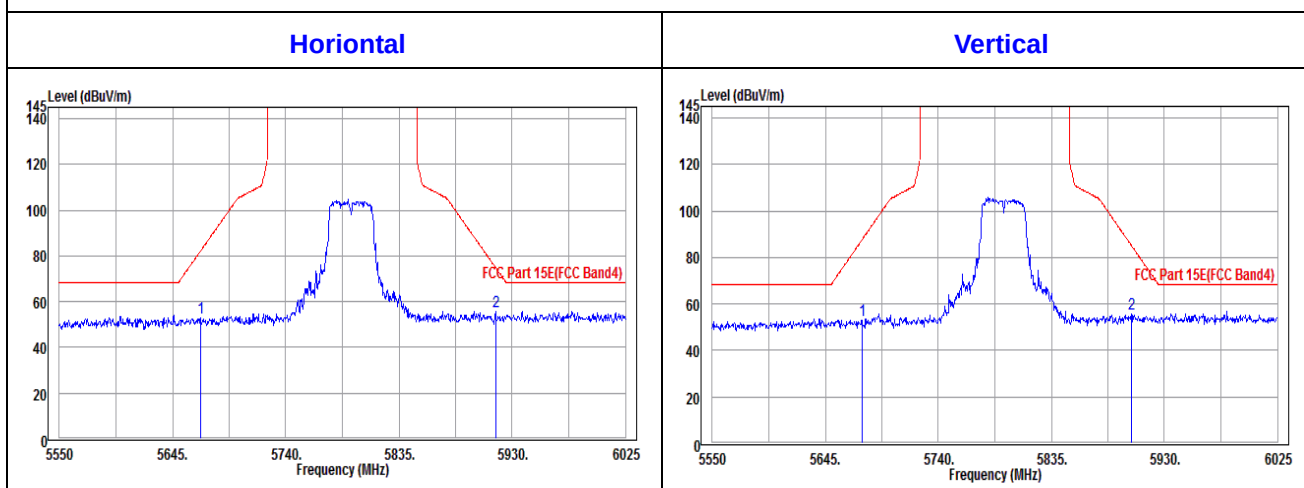


Oobe Data

802.11n (40MHz)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5668.28	52.98	51.21	-28.88	81.86	35.1	15.81	49.14	101	238	Peak
5916.23	55.49	51.83	-19.28	74.77	35.4	17.42	49.16	101	238	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	MARGIN (dB)	LIMIT (dBuV/m)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5675.88	53.16	51.33	-34.33	87.49	35.11	15.86	49.14	101	78	Peak
5901.98	55.75	52.2	-29.55	85.3	35.38	17.33	49.16	101	78	Peak

CH 159





802.11ac (80MHz)

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5775	86.44	83.86			35.23	16.5	49.15	102	360	Average
5775	100.01	97.43			35.23	16.5	49.15	102	360	Peak
11550	49.25	39.17	54.00	-4.75	39.14	19.11	48.17	102	345	Average
11550	59.69	49.61	74.00	-14.31	39.14	19.11	48.17	102	345	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5775	92.32	89.74			35.23	16.5	49.15	149	305	Average
5775	104.74	102.16			35.23	16.5	49.15	149	305	Peak
11550	49.76	39.68	54.00	-4.24	39.14	19.11	48.17	149	315	Average
11550	60.29	50.21	74.00	-13.71	39.14	19.11	48.17	149	315	Peak

REMARKS:

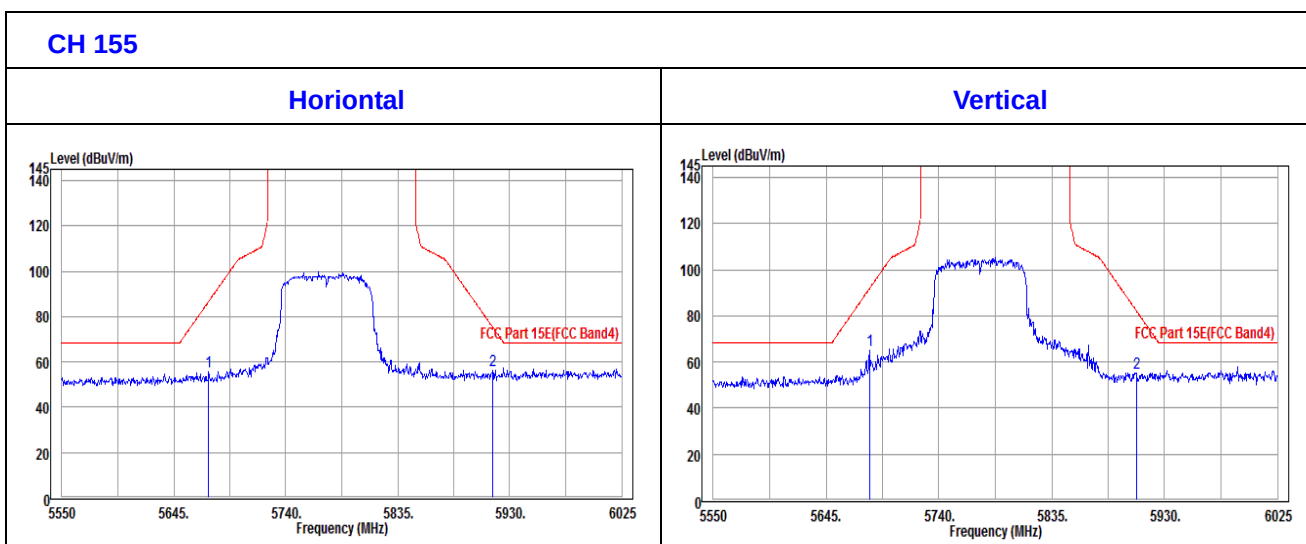
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 5775MHz: Fundamental frequency.



Oobe Data

802.11ac (80MHz)

Antenna Polarity & Test Distance: Horizontal at 3 m										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5674.45	55.56	53.74	86.43	-30.87	35.11	15.85	49.14	102	360	Peak
5915.75	56.48	52.82	75.12	-18.64	35.4	17.42	49.16	102	360	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5681.58	64.80	62.93	91.70	-26.90	35.12	15.89	49.14	149	305	Peak
5906.25	55.39	51.80	82.14	-26.75	35.39	17.36	49.16	149	305	Peak



4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

NOTE: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESCS30	100340	May 11,15	May 10,17
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Mar. 04,16	Mar. 03,17
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Apr. 05,16	Apr. 04,17
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Jan. 08,16	Jan. 07,17
Test software	ADT	ADT_Cond_V7.3.7	N/A	N/A	N/A

NOTE:

1. The test was performed in shielded room 553.

2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

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.

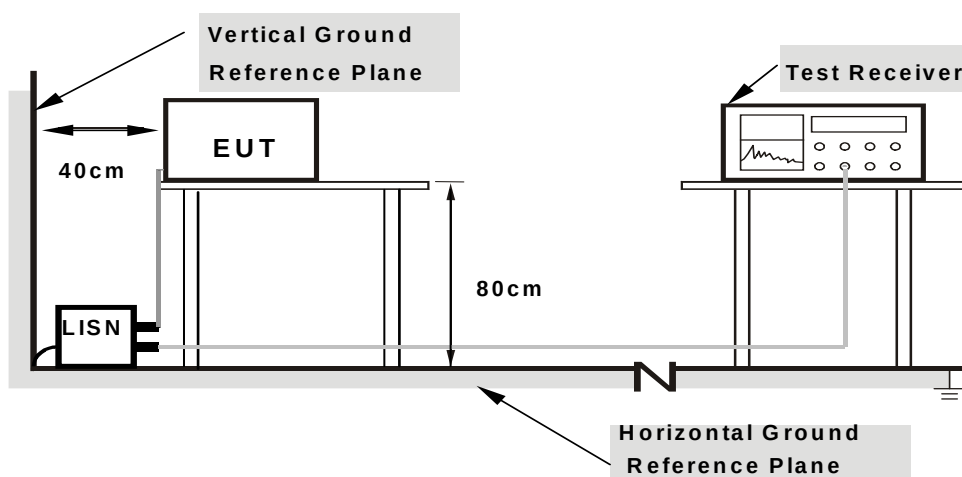
NOTE: All modes of operation were investigated and the worst-case emissions are reported.



4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



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

**2.Both of LISNs (AMN) are 80 cm from EUT and at least 80
from other units and other metal planes**

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

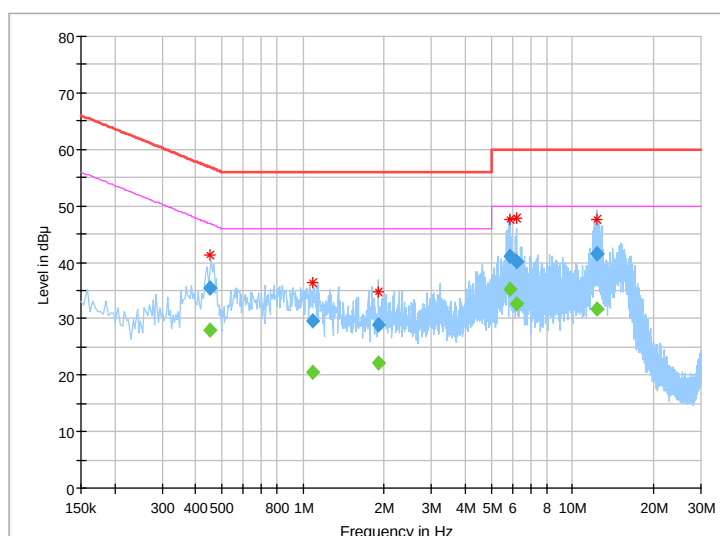
CONDUCTED WORST-CASE DATA :

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

Frequency (MHz)	QuasiPeak (dB μ V)	CAverage (dB μ V)	Limit (dB μ V)	Margin (dB)	Line	Filter	Corr. (dB)
0.452000	---	27.94	46.84	18.90	L	ON	9.7
0.452000	35.36	---	56.84	21.48	L	ON	9.7
1.088000	---	20.57	46.00	25.43	L	ON	9.7
1.088000	29.65	---	56.00	26.35	L	ON	9.7
1.900000	---	22.13	46.00	23.87	L	ON	9.7
1.900000	29.01	---	56.00	26.99	L	ON	9.7
5.856000	---	35.12	50.00	14.88	L	ON	9.8
5.856000	41.13	---	60.00	18.87	L	ON	9.8
6.236000	---	32.55	50.00	17.45	L	ON	9.8
6.236000	40.11	---	60.00	19.89	L	ON	9.8
12.392000	---	31.61	50.00	18.39	L	ON	9.9
12.392000	41.50	---	60.00	18.50	L	ON	9.9

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

Full Spectrum





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

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.460000	---	34.82	46.69	11.87	N	ON	10.1
0.460000	44.29	---	56.69	12.40	N	ON	10.1
0.464000	---	34.68	46.62	11.94	N	ON	10.1
0.464000	44.17	---	56.62	12.45	N	ON	10.1
5.844000	---	40.50	50.00	9.50	N	ON	9.8
5.844000	47.33	---	60.00	12.67	N	ON	9.8
6.148000	---	38.29	50.00	11.71	N	ON	9.8
6.148000	45.46	---	60.00	14.54	N	ON	9.8
12.600000	---	40.25	50.00	9.75	N	ON	9.9
12.600000	53.30	---	60.00	6.70	N	ON	9.9
19.360000	---	29.37	50.00	20.63	N	ON	10.0
19.360000	45.64	---	60.00	14.36	N	ON	10.0

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.

2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.

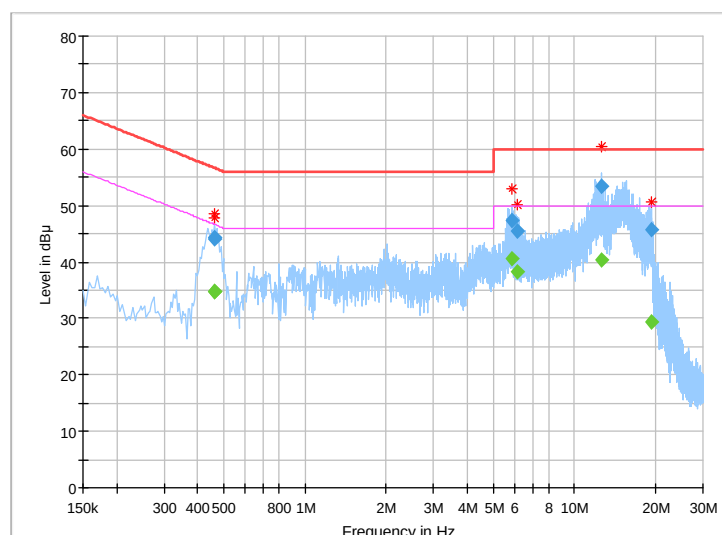
3. The emission levels of other frequencies were very low against the limit.

4. Margin value = Emission level - Limit value

5. Correction factor = Insertion loss + Cable loss

6. Emission Level = Correction Factor + Reading Value.

Full Spectrum



4.3 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

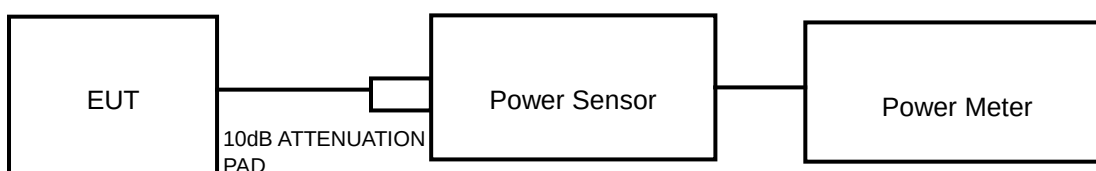
4.3.1 LIMITS OF MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Client devices	250mW (24 dBm)
U-NII-2A	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√		1 Watt (30 dBm)

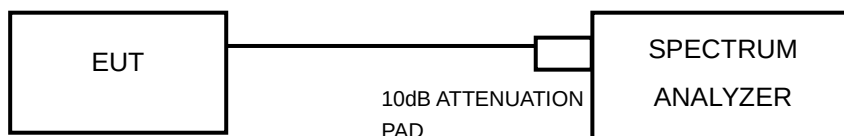
NOTE: Where B is the 26dB emission bandwidth in MHz.

4.3.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT



FOR 26dB BANDWIDTH



4.3.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.3.4 TEST PROCEDURE

FOR POWER MEASUREMENT

Method PM is 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.

FOR 99 PERCENT OCCUPIED BANDWIDTH

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW $\geq 3 \cdot$ RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.



FOR 26dB BANDWIDTH

- 1) Set RBW = approximately 1% of the emission bandwidth.
- 2) Set the VBW > RBW.
- 3) Detector = Peak.
- 4) Trace mode = max hold.
- 5) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

FOR 6dB BANDWIDTH

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) 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 specific channel frequencies individually.

**4.3.7 TEST RESULTS****OUTPUT POWER:****802.11a**

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	24.831	13.95	24	PASS
40	5200	26.607	14.25	24	PASS
48	5240	25.177	14.01	24	PASS
52	5260	26.546	14.24	24	PASS
60	5300	24.044	13.81	24	PASS
64	5320	25.293	14.03	24	PASS
100	5500	23.768	13.76	24	PASS
116	5580	26.669	14.26	24	PASS
132	5660	26.062	14.16	24	PASS
140	5700	27.733	14.43	24	PASS
149	5745	26.977	14.31	30	PASS
157	5785	27.227	14.35	30	PASS
165	5825	26.363	14.21	30	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	28.184	14.50	24	PASS
40	5200	25.177	14.01	24	PASS
48	5240	25.410	14.05	24	PASS
52	5260	24.946	13.97	24	PASS
60	5300	25.942	14.14	24	PASS
64	5320	24.099	13.82	24	PASS
100	5500	25.468	14.06	24	PASS
116	5580	26.002	14.15	24	PASS
132	5660	27.416	14.38	24	PASS
140	5700	26.002	14.15	24	PASS
149	5745	25.527	14.07	30	PASS
157	5785	24.210	13.84	30	PASS
165	5825	24.378	13.87	30	PASS

**802.11n (40MHz)**

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	23.121	13.64	24	PASS
46	5230	25.704	14.10	24	PASS
54	5270	16.634	12.21	24	PASS
62	5310	15.596	11.93	24	PASS
102	5510	24.831	13.95	24	PASS
110	5550	24.774	13.94	24	PASS
134	5670	25.882	14.13	24	PASS
151	5755	23.878	13.78	30	PASS
165	5825	26.242	14.19	30	PASS

802.11ac (80MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	MAX. OUTPUT POWER (mW)	MAX. OUTPUT POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
42	5210	22.029	13.43	24	PASS
58	5290	20.941	13.21	24	PASS
106	5530	20.512	13.12	24	PASS
155	5775	20.137	13.04	30	PASS

**99% OCCUPIED BANDWIDTH & 26dB BANDWIDTH/6dB BANDWIDTH:****802.11a**

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
36	5180	16.80	21.82	PASS
40	5200	16.62	21.74	PASS
48	5240	16.86	21.87	PASS
52	5260	16.86	21.54	PASS
60	5300	16.98	22.09	PASS
64	5320	16.86	22.16	PASS
100	5500	16.92	22.05	PASS
116	5580	16.92	21.73	PASS
132	5660	16.86	22.05	PASS
140	5700	16.80	22.23	PASS
CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH (MHz)	PASS/FAIL
149	5745	16.86	16.35	PASS
157	5785	16.74	16.34	PASS
165	5825	16.92	16.35	PASS



802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
36	5180	17.94	22.34	PASS
40	5200	18.00	22.53	PASS
48	5240	17.94	22.15	PASS
52	5260	17.88	22.47	PASS
60	5300	17.94	22.07	PASS
64	5320	17.88	22.14	PASS
100	5500	17.88	22.48	PASS
116	5580	17.94	22.39	PASS
132	5660	17.94	21.96	PASS
140	5700	17.94	22.36	PASS
CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH (MHz)	PASS/FAIL
149	5745	17.88	17.58	PASS
157	5785	17.94	17.59	PASS
165	5825	17.94	17.57	PASS

**802.11n (40MHz)**

CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
38	5190	36.24	45.33	PASS
46	5230	36.30	44.44	PASS
54	5270	36.30	44.56	PASS
62	5310	36.30	44.24	PASS
102	5510	36.24	44.58	PASS
110	5550	36.42	43.69	PASS
134	5670	36.36	44.75	PASS
CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH (MHz)	PASS/FAIL
151	5755	36.24	35.11	PASS
159	5795	36.30	34.15	PASS

802.11ac (80MHz)

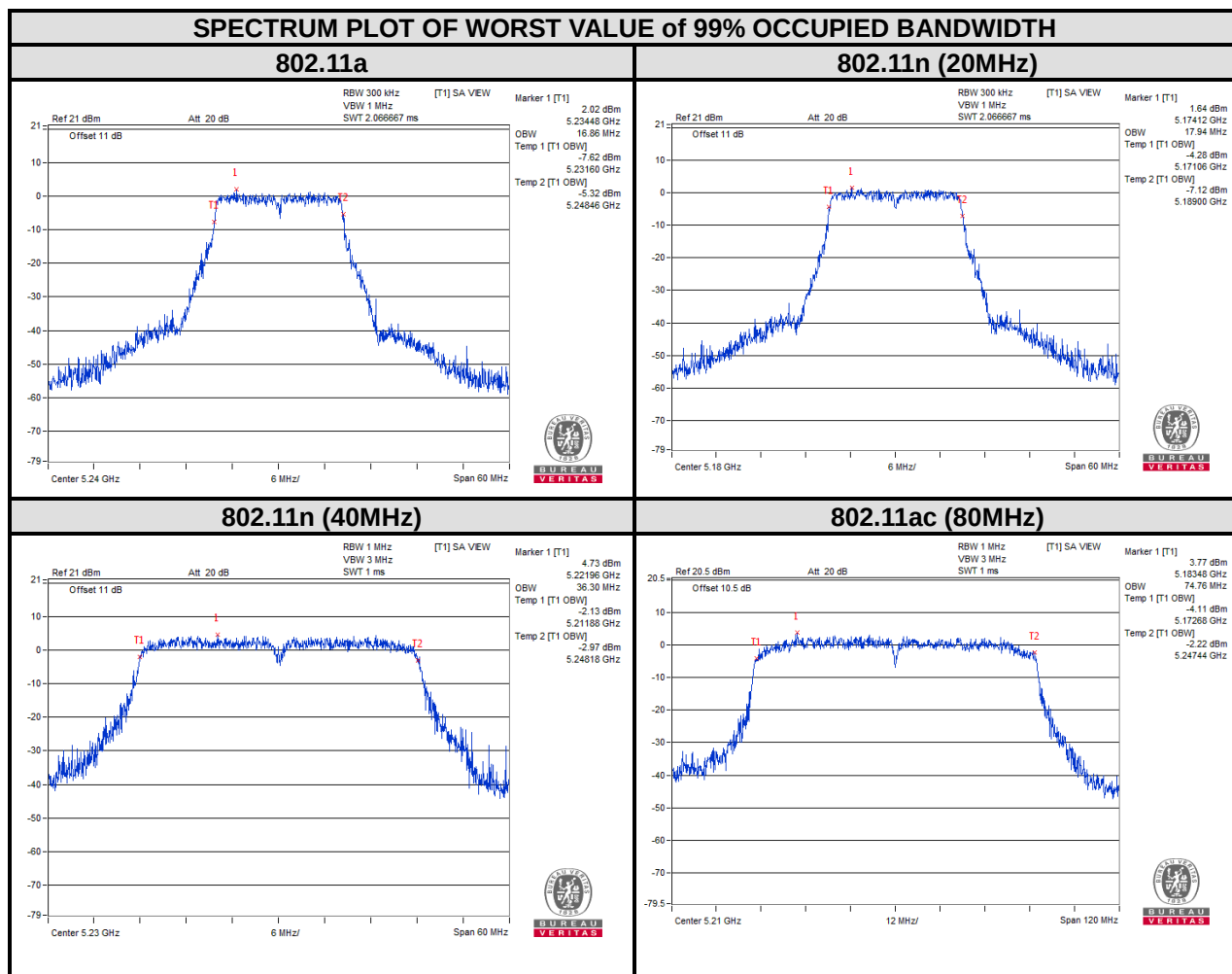
CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	26dB BANDWIDTH (MHz)	PASS/FAIL
42	5210	74.76	83.98	PASS
58	5290	74.76	83.10	PASS
106	5530	74.76	84.39	PASS
CHANNEL	CHANNEL FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH	6dB BANDWIDTH (MHz)	PASS/FAIL
155	5775	74.64	75.10	PASS



BUREAU
VERITAS

Test Report No.: RF160614W011-7

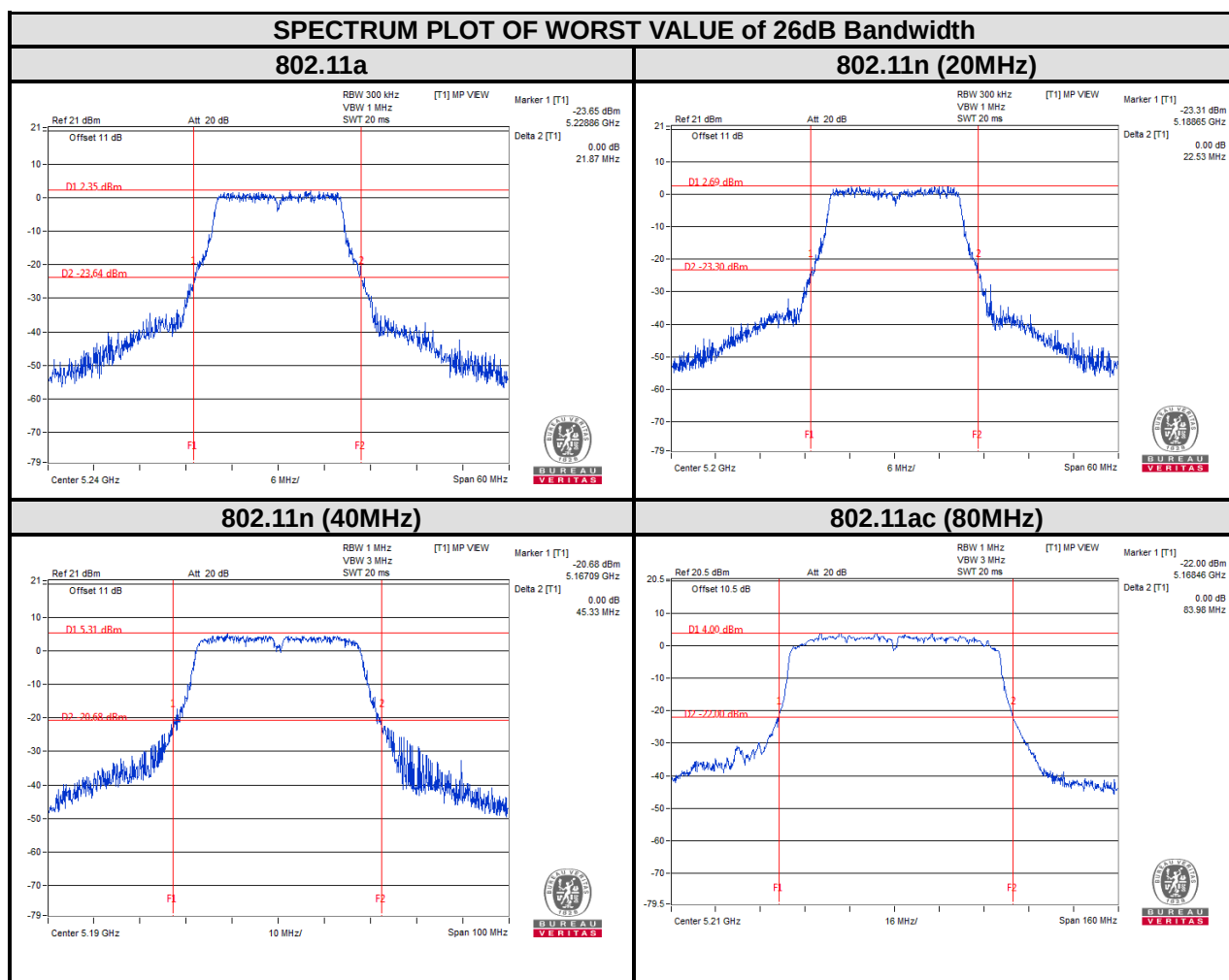
For U-NII-1:





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VERITAS

Test Report No.: RF160614W011-7

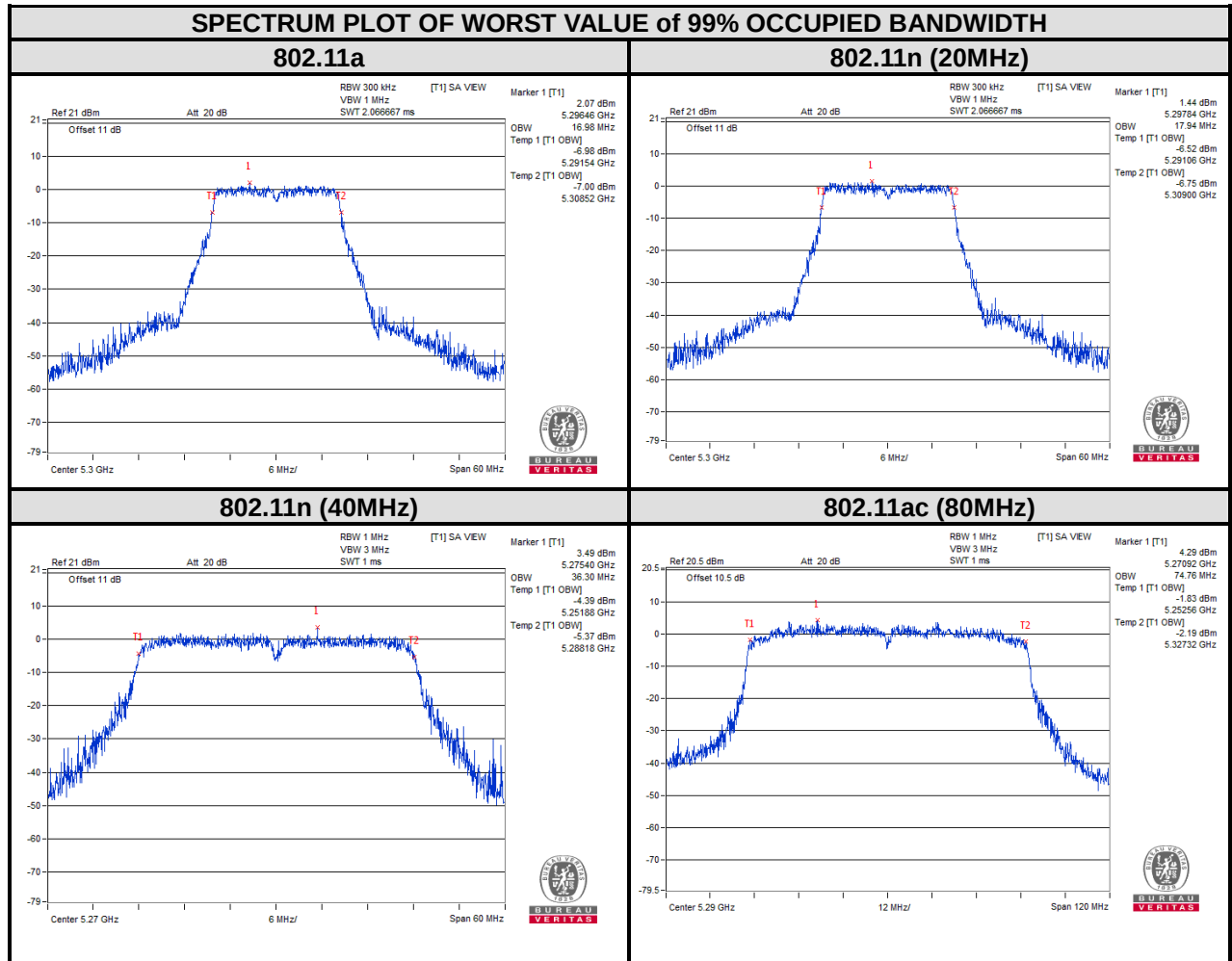




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VERITAS

Test Report No.: RF160614W011-7

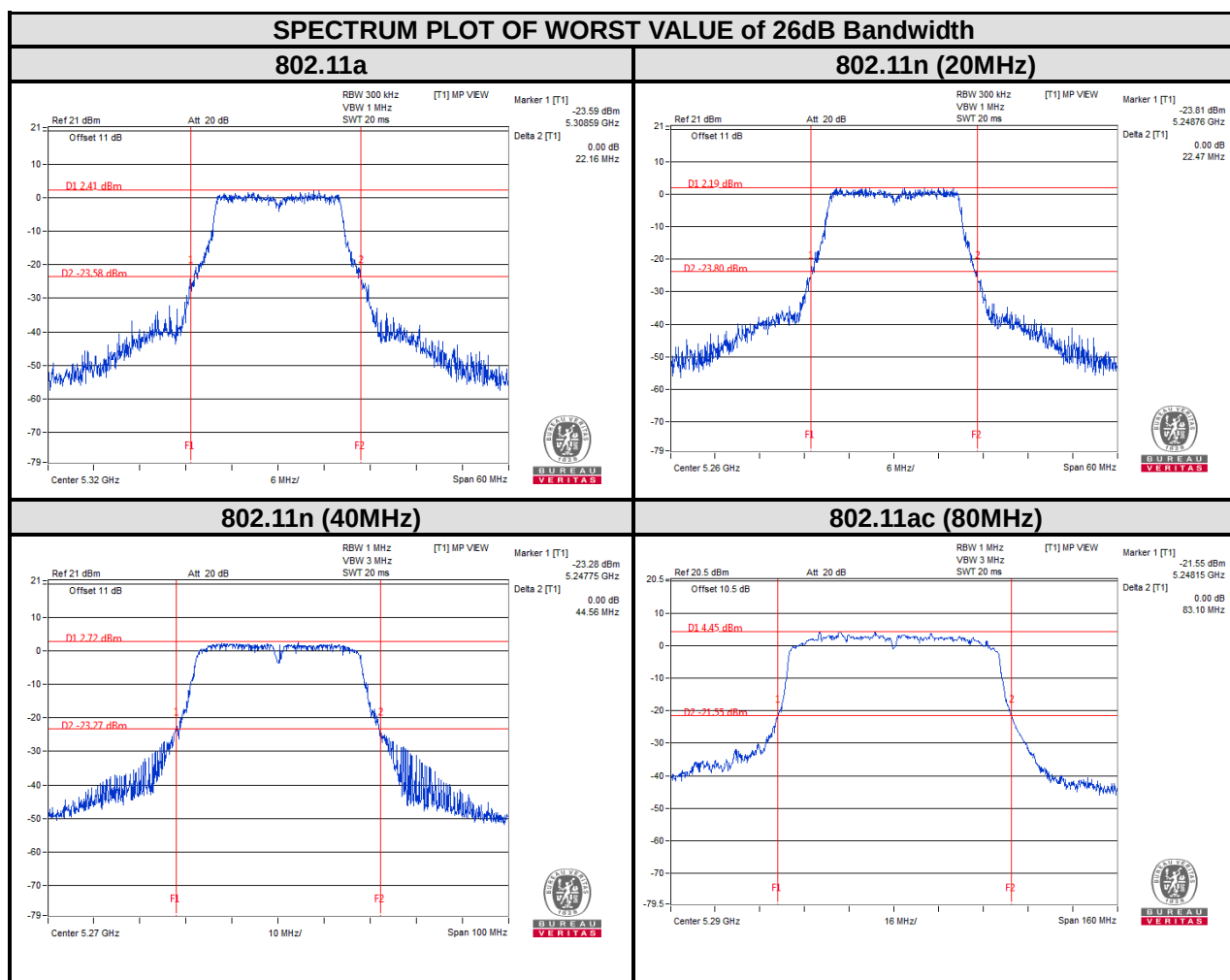
For U-NII-2A:





BUREAU
VERITAS

Test Report No.: RF160614W011-7

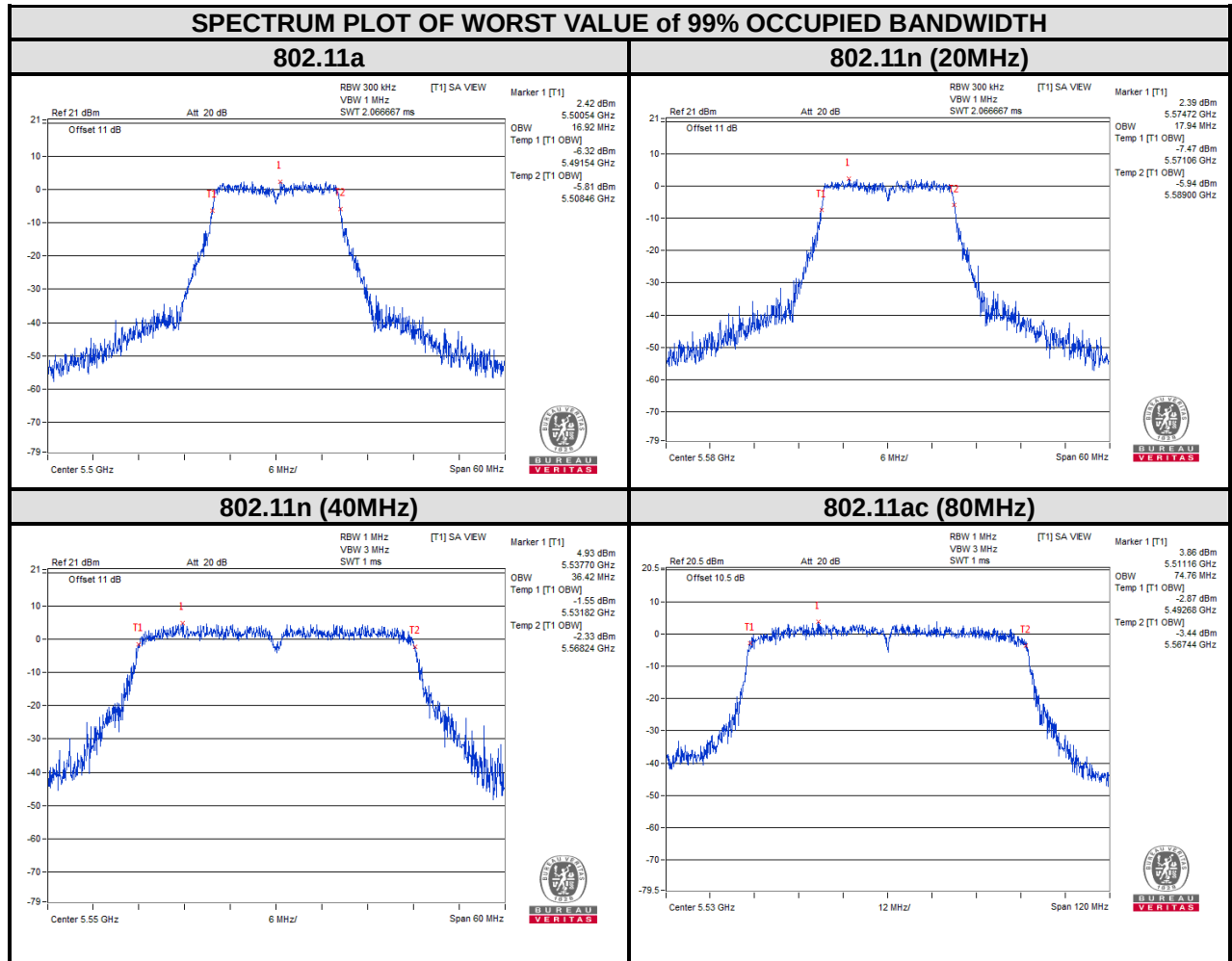




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VERITAS

Test Report No.: RF160614W011-7

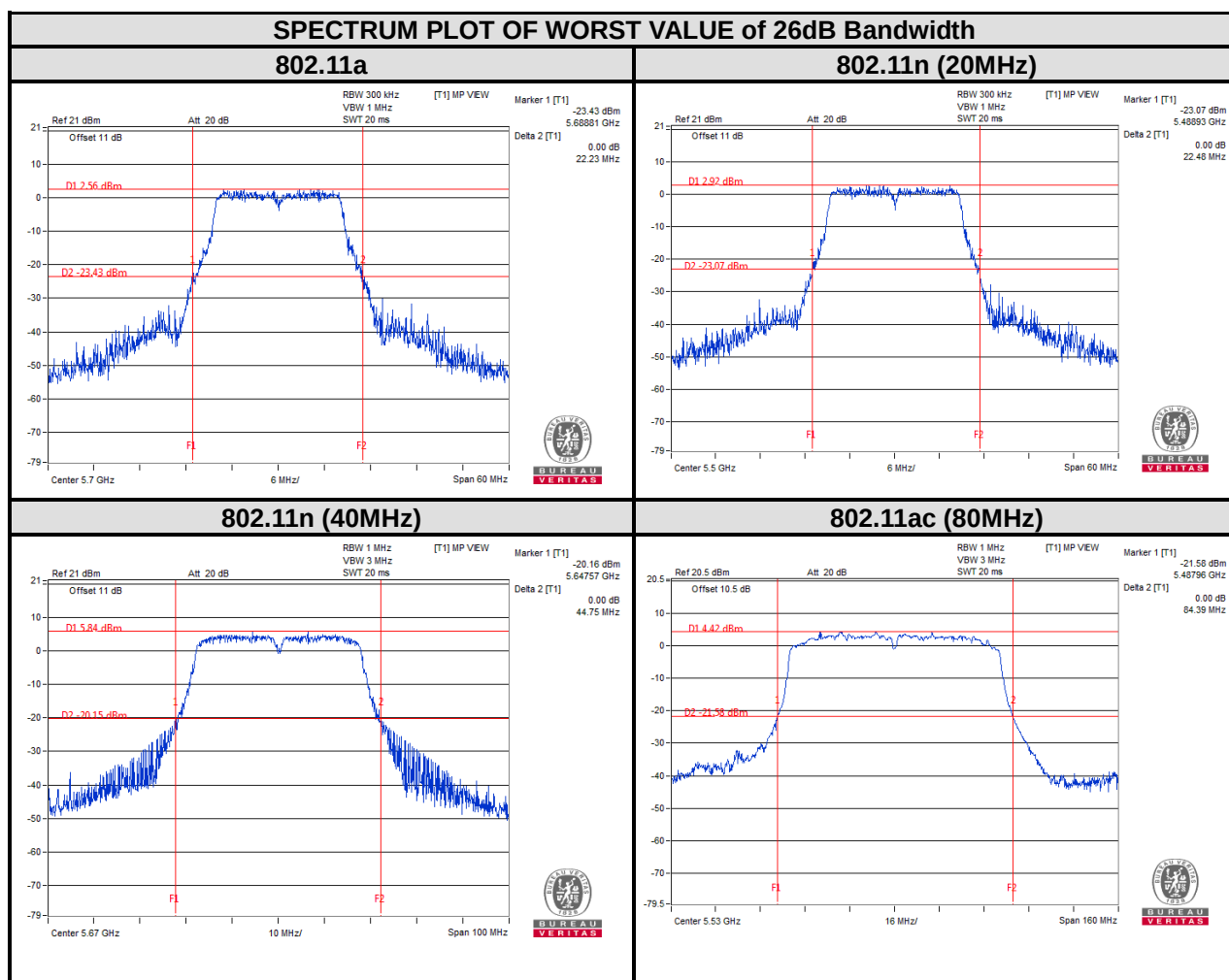
For U-NII-2C:





BUREAU
VERITAS

Test Report No.: RF160614W011-7

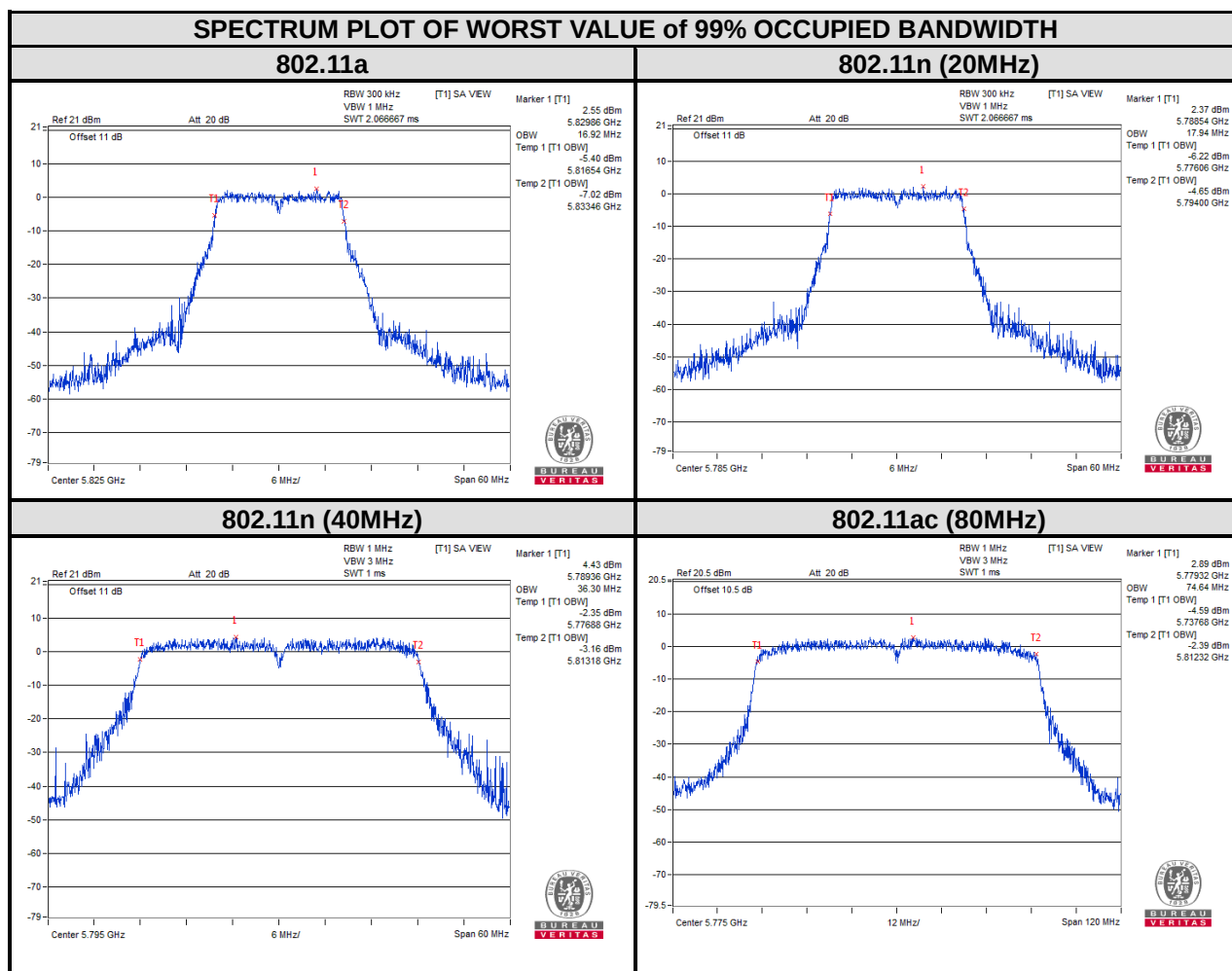




BUREAU
VERITAS

Test Report No.: RF160614W011-7

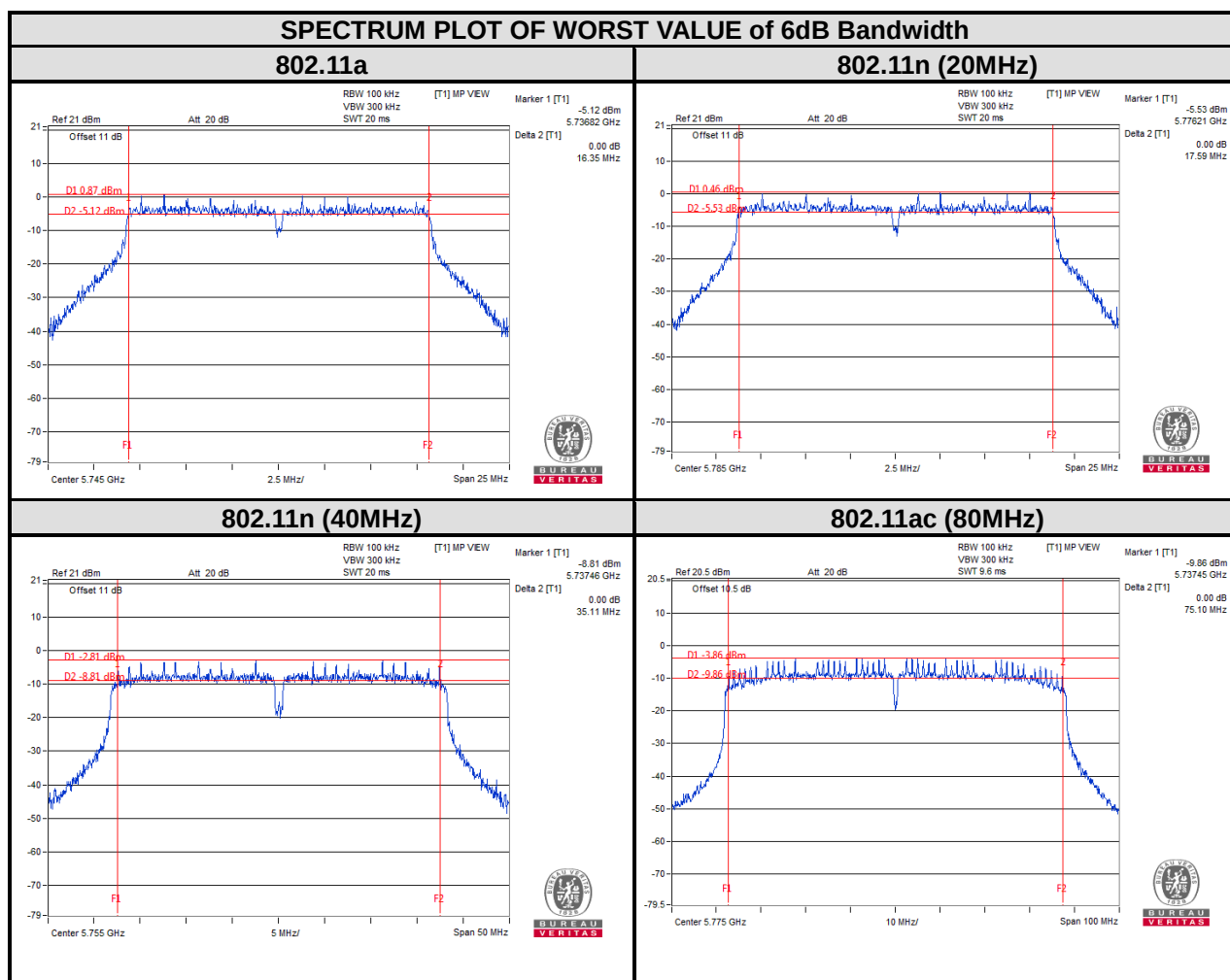
For U-NII-3:





BUREAU
VERITAS

Test Report No.: RF160614W011-7

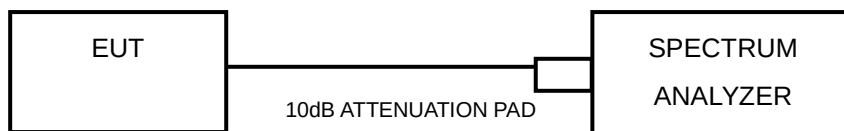


4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Client devices	11dBm/ MHz
U-NII-2A	√		11dBm/ MHz
U-NII-2C	√		11dBm/ MHz
U-NII-3	√		30dBm/ 500kHz

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.4.4 TEST PROCEDURES

Using method SA-1

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 30 KHz, Set VBW $\geq$ 1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to "free run".
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

Same as 4.1.6.



4.4.7 TEST RESULTS

For U-NII-1, U-NII-2A & U-NII-2C:

802.11a

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
36	5180	4.85	0.60	5.45	11	PASS
40	5200	4.29	0.60	4.89	11	PASS
48	5240	3.80	0.60	4.4	11	PASS
52	5260	5.69	0.60	6.29	11	PASS
60	5300	4.12	0.60	4.72	11	PASS
64	5320	3.88	0.60	4.48	11	PASS
100	5500	5.63	0.60	6.23	11	PASS
116	5580	3.82	0.60	4.42	11	PASS
132	5660	5.07	0.60	5.67	11	PASS
140	5700	6.68	0.60	7.28	11	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
36	5180	5.03	0.64	5.67	11	PASS
40	5200	6.48	0.64	7.12	11	PASS
48	5240	4.06	0.64	4.7	11	PASS
52	5260	4.37	0.64	5.01	11	PASS
60	5300	4.18	0.64	4.82	11	PASS
64	5320	3.64	0.64	4.28	11	PASS
100	5500	4.73	0.64	5.37	11	PASS
116	5580	5.95	0.64	6.59	11	PASS
132	5660	4.81	0.64	5.45	11	PASS
140	5700	5.87	0.64	6.51	11	PASS

**802.11n (40MHz)**

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
38	5190	1.07	1.22	2.29	11	PASS
46	5230	1.06	1.22	2.28	11	PASS
54	5270	-1.80	1.22	-0.58	11	PASS
62	5310	-0.53	1.22	0.69	11	PASS
102	5510	-0.73	1.22	0.49	11	PASS
110	5550	2.04	1.22	3.26	11	PASS
134	5670	2.38	1.22	3.60	11	PASS

802.11ac (80MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor	PSD with Duty Factor (dBm/MHz)	MAXIMUM LIMIT (dBm/MHz)	PASS/FAIL
42	5210	0.78	2.71	3.49	11	PASS
58	5290	1.49	2.71	4.2	11	PASS
106	5530	1.25	2.71	3.96	11	PASS



For U-NII-3:

802.11a

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
149	5745	6.87	0.60	7.47	30	PASS
157	5785	6.33	0.60	6.93	30	PASS
165	5825	6.73	0.60	7.33	30	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
149	5745	6.33	0.64	6.97	30	PASS
157	5785	6.62	0.64	7.26	30	PASS
165	5825	6.37	0.64	7.01	30	PASS

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
151	5755	3.02	1.22	4.24	30	PASS
159	5795	2.50	1.22	3.72	30	PASS

802.11ac (80MHz)

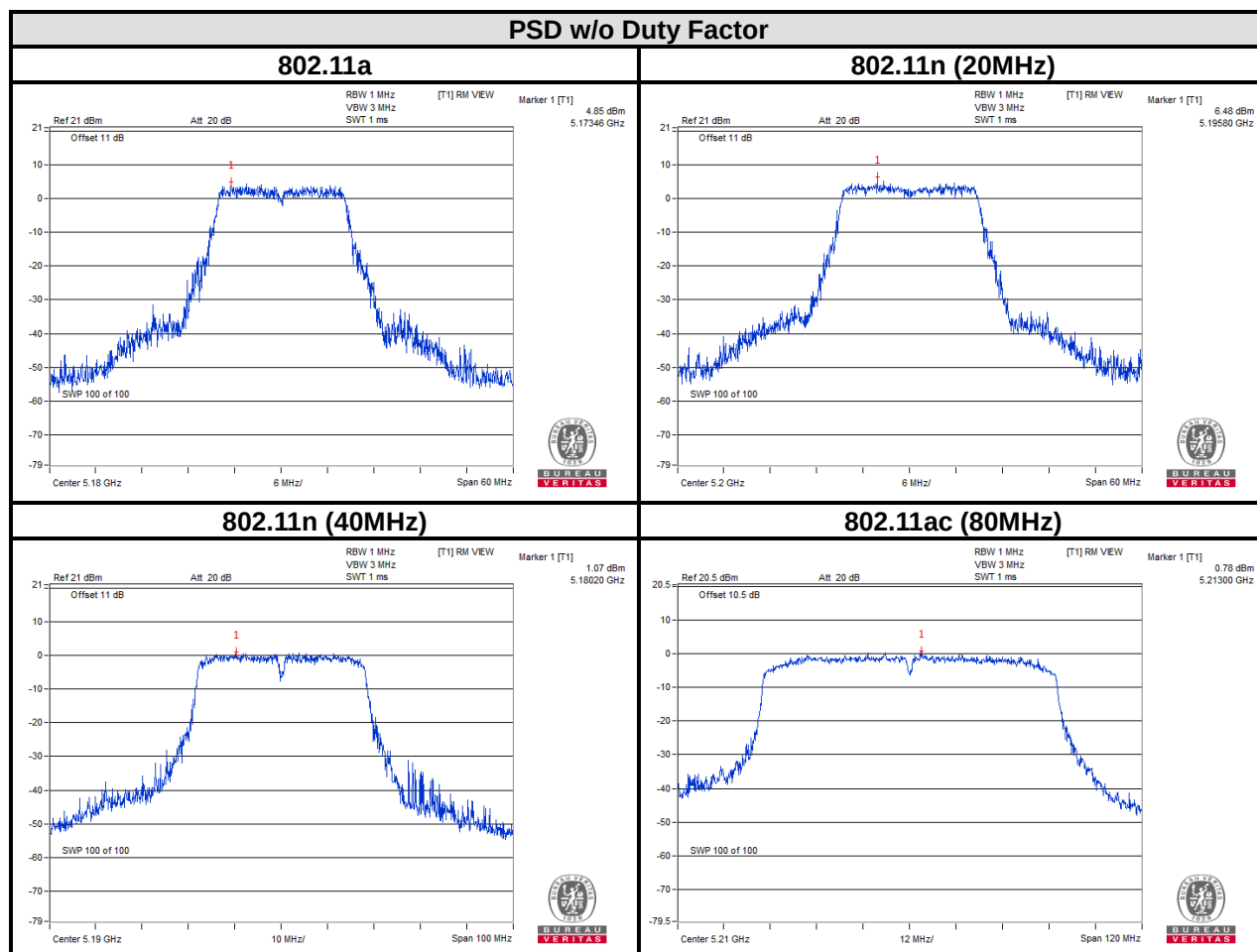
CHANNEL	FREQUENCY (MHz)	PSD w/o Duty Factor (dBm/500kHz)	Duty Factor	PSD with Duty Factor (dBm/500kHz)	LIMIT (dBm/500kHz)	PASS /FAIL
155	5775	1.04	2.71	3.75	30	PASS



BUREAU
VERITAS

Test Report No.: RF160614W011-7

For 5180~5240MHz

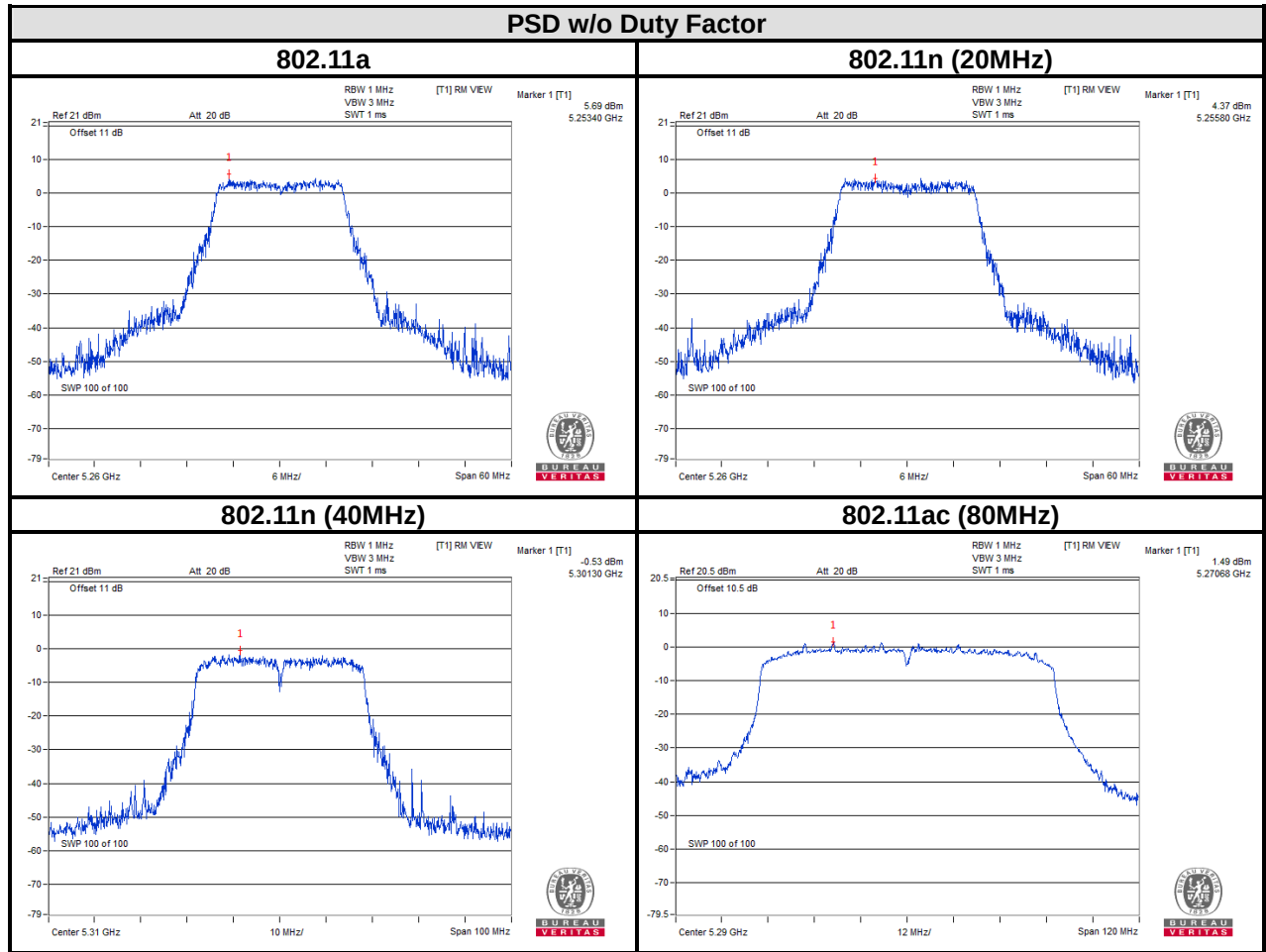




BUREAU
VERITAS

Test Report No.: RF160614W011-7

For 5260~5320MHz

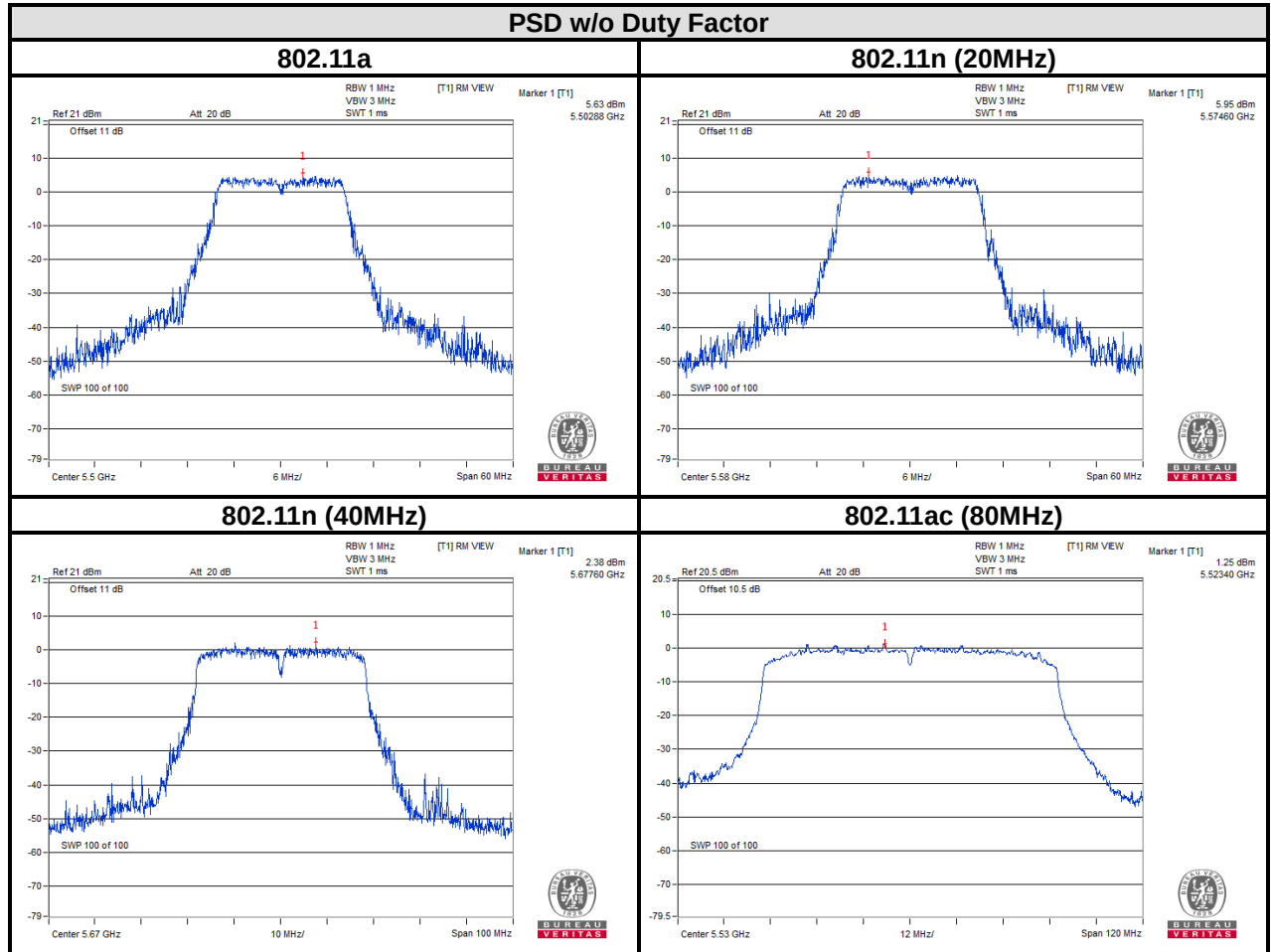




BUREAU
VERITAS

Test Report No.: RF160614W011-7

For 5500~5700MHz

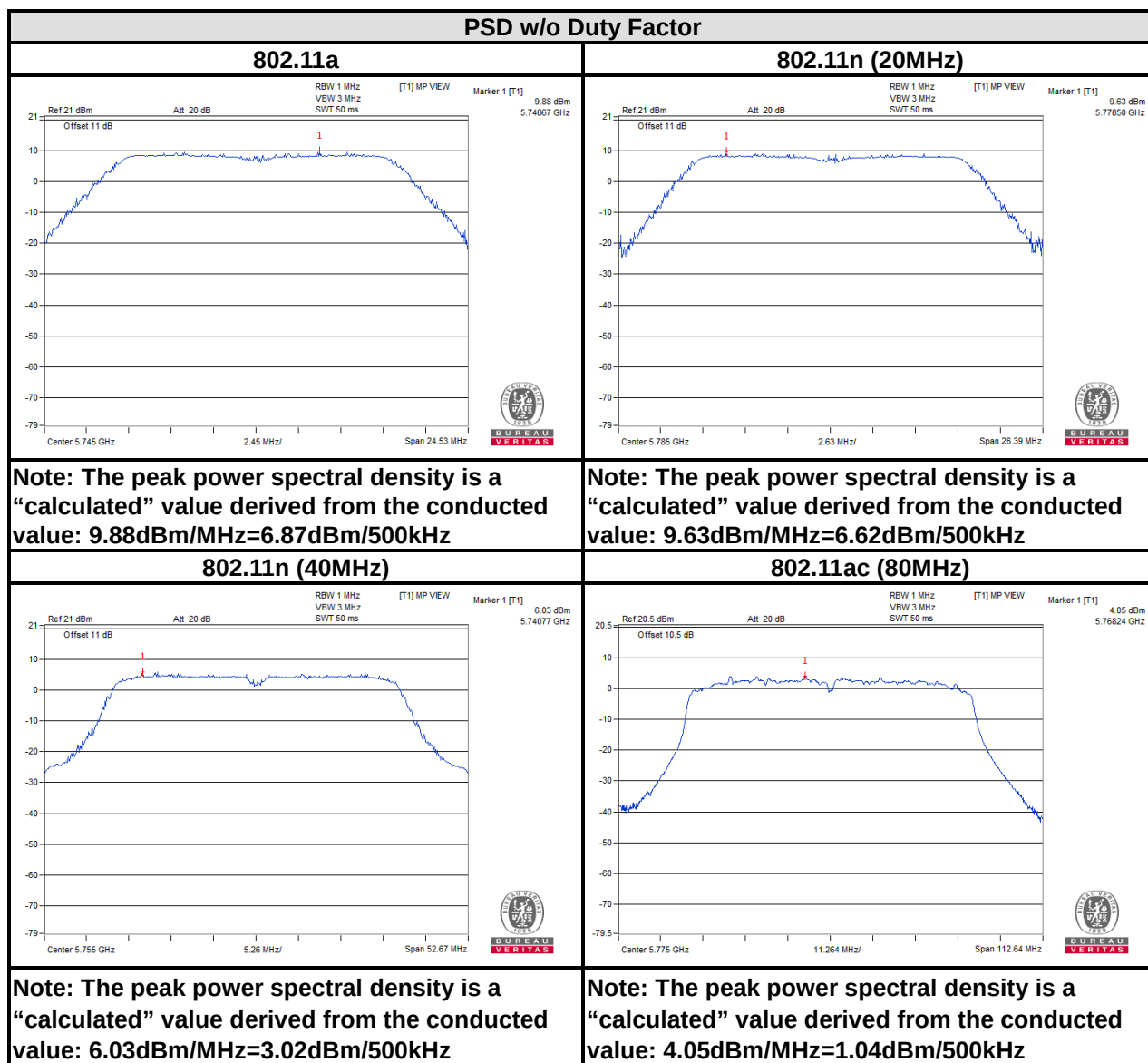




BUREAU
VERITAS

Test Report No.: RF160614W011-7

For 5745~5825MHz

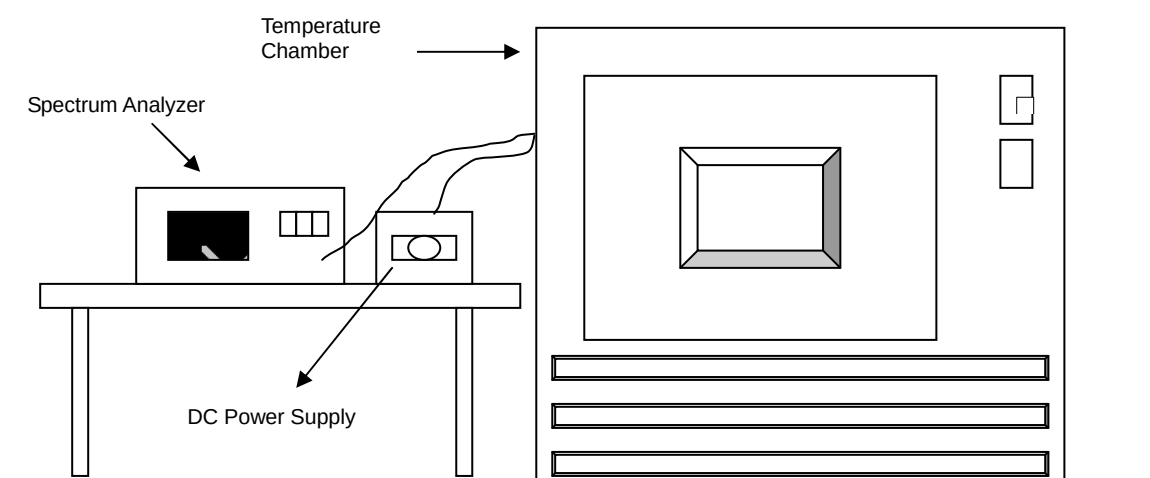


4.5 FREQUENCY STABILITY

4.5.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency of the carrier signal shall be maintained within band of operation

4.5.2 TEST SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.5.4 TEST PROCEDURE

- a. The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
- b. Turn the EUT on and couple its output to a spectrum analyzer.
- c. Turn the EUT off and set the chamber to the highest temperature specified.
- d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
- e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

Set the EUT transmit at un-modulation mode to test frequency stability.



4.5.7 TEST RESULTS

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	POWER SUPPLY (Vdc)	0 MINUTE		2 MINUTES		5 MINUTES		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
50	3.85	5180.02	3.861	5180.0197	3.803	5180.0169	3.263	5180.0234	4.517
40	3.85	5179.9823	-3.417	5179.989	-2.124	5179.9865	-2.606	5179.9832	-3.243
30	3.85	5179.9818	-3.514	5179.9819	-3.494	5179.989	-2.124	5179.9889	-2.143
20	3.85	5180.0207	3.996	5180.0205	3.958	5180.0201	3.880	5180.0149	2.876
10	3.85	5180.0189	3.649	5180.0196	3.784	5180.0155	2.992	5180.0188	3.629
0	3.85	5179.972	-5.405	5179.9799	-3.880	5179.9702	-5.753	5179.9714	-5.521
-10	3.85	5180.0214	4.131	5180.02	3.861	5180.0219	4.228	5180.0296	5.714
-20	3.85	5180.0031	0.598	5180.0046	0.888	5180.0016	0.309	5180.0057	1.100
-30	3.85	5180.021	4.054	5180.021	4.054	5180.0208	4.015	5180.0178	3.436

FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5180MHz									
TEMP. (°C)	POWER SUPPLY (Vdc)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
20	4.4	5180.0213	4.112	5180.0207	3.996	5180.0207	3.996	5180.0152	2.934
	3.85	5180.0207	3.996	5180.0205	3.958	5180.0201	3.880	5180.0149	2.876
	3.3	5180.0218	4.208	5180.0209	4.035	5180.0202	3.900	5180.0149	2.876



FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5825MHz									
TEMP. (°C)	POWER SUPPLY (Vdc)	0 MINUTE		2 MINUTES		5 MINUTES		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
50	3.85	5825.0288	4.944	5825.0255	4.378	5825.021	3.605	5825.0289	4.961
40	3.85	5825.0122	2.094	5825.0181	3.107	5825.0219	3.760	5825.012	2.060
30	3.85	5825.0198	3.399	5825.0205	3.519	5825.0177	3.039	5825.0167	2.867
20	3.85	5824.9901	-1.700	5824.9882	-2.026	5824.9913	-1.494	5824.9866	-2.300
10	3.85	5825.0137	2.352	5825.0122	2.094	5825.0151	2.592	5825.0163	2.798
0	3.85	5825.0229	3.931	5825.0289	4.961	5825.0241	4.137	5825.0313	5.373
-10	3.85	5825.0036	0.618	5825.0015	0.258	5825.0024	0.412	5825.0028	0.481
-20	3.85	5824.9811	-3.245	5824.9856	-2.472	5824.9855	-2.489	5824.9879	-2.077
-30	3.85	5824.975	-4.292	5824.978	-3.777	5824.9778	-3.811	5824.9716	-4.876

FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5825MHz									
TEMP. (°C)	POWER SUPPLY (Vdc)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
20	4.4	5824.9901	-1.700	5824.9884	-1.991	5824.9914	-1.476	5824.9867	-2.283
	3.85	5824.9901	-1.700	5824.9882	-2.026	5824.9913	-1.494	5824.9866	-2.300
	3.3	5824.9884	-1.991	5824.9893	-1.837	5824.9898	-1.751	5824.987	-2.232



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5 PHOTOGRAPHS OF THE TEST CONFIGURATION

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



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6 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

---END---