FCC ID: 2AWI6-G2BCC

FCC RADIO TEST REPORT

Report Reference No.....:	AAEMT/EMC/200213-03-04
Date of issue.....:	2020-06-15
TestingLaboratory.....:	AA Electro Magnetic Test Laboratory Private Limited
Address.....:	Plot No 174, Udyog Vihar - Phase 4, Sector 18, Gurgaon, Haryana, India
Applicant's name.....:	Cherry Labs
Address.....:	550 Hamilton Ave, Suite 125, Palo Alto, CA 94301,UnitedStates
Manufacturer.....:	VVDN Technologies Pvt. Ltd.
Test specification:	1st-2nd Floor, Plot no- 441, Sector-8,IMT Manesar, Gurgaon-122050, INDIA
Test item description.....:	Cherry Gen2 Basic Care (Home Camera)
Trade Mark.....:	CHERRY HOME
Model/Type reference .....:	GEN 2 BASICCARE
Ratings.....:	DC 5V 2.5A from adapter, AC 120V/60Hz for adapter

Prepared By:

(Abhinav Kumar)

Approved by:

(Steven Wu)

Reviewedby:

(Dr R Lenin Raja)
(Authorized Representative) (/ lenin83/)

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TEST REPORT DECLARE

Applicant	:	Cherry Labs
Address	:	550 Hamilton Ave, Suite 125, Palo Alto, CA 94301,United States
Equipment under Test	:	Cherry Gen2 Basic Care (Home Camera)
Model No	:	GEN 2 BASIC CARE
Trade Mark	:	CHERRY HOME
Manufacturer	:	VVDN Technologies Pvt. Ltd.
Address	:	1st-2nd Floor, Plot no- 441, Sector-8,IMT Manesar, Gurgaon-122050, INDIA

Test Standard Used: FCC Part 15E 15.407

Test procedure used: ANSI C63.10-2013 and KDB 789033 D02 General UNII Test Procedures New Rules v02r01 .

We Declare:

The equipment described above is tested by AA Electro Magnetic Test Laboratory Private Limited and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and AA Electro Magnetic Test Laboratory Private Limited is assumed of full responsibility for the accuracy and completeness of these tests.

After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above FCC standards.

Report No:	AAEMT/EMC/200213-03-03		
Date of Test:	May. 29~ Jun. 11, 2020	**Date of Report**:	Jun. 15, 2020

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of AA Electro Magnetic Test Laboratory Private Limited

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1. SUMMARY OF TESTRESULTS

The EUT have been tested according to the applicable standards as referenced below.		
FCC Part15 (15.407) , Subpart E		
Description of Test Item	**Standard**	**Results**
AC Power Line Conducted Emissions	FCC §15.207/ RSS-Gen	PASS
Spurious Radiated Emissions	FCC §15.209(a), 15.407(b)	PASS
26 dB and 99% Emission Bandwidth	FCC §15.407(a)	PASS
Maximum Conducted Output Power	FCC §407(a)(1)	PASS
Band Edges	FCC §2.1051, §15.407(b)	PASS
Power Spectral Density	FCC §15.407(a)(1)	PASS
Spurious Emissions at Antenna Terminals	FCC §2.1051, §15.407(b)	PASS
Antenna Requirement	FCC §15.203	PASS

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2. GENERAL TESTINFORMATION

2.1. DESCRIPTION OFEUT

EUT* Name	:	Cherry Gen2 Basic Care (Home Camera)
Model Number	:	GEN 2 BASIC CARE
EUT function description	:	Cherry Gen2 Basic Care (Home Camera) with WiFi function.
Power supply	:	Adapter:A122-0502500UD INPUT: 100-240V~ 50/60Hz 0.4A, Output: DC5V 2.5A
Adaptor		A122-0502500UD
Operation frequency	:	WiFi: 802.11a/802.11n(HT20): 5180MHz~5240MHz; 5745MHz~5825MHz 802.11n(HT40): 5190MHz~5230MHz; 5755MHz~5795MHz
Modulation	:	OFDM with OFDM, BPSK, QPSK, 16QAM, 64QAM for 802.11a/n;
Data Rate	:	802.11 a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20):MCS0-MCS7; 802.11n(HT40): MCS0-MCS7;
Polarization:	:	Linear
Impedance (Ohms):	:	50 Ohm
VSWR:	:	<2
Antenna Type	:	PCB Antenna
Antenna gain	:	3.2dBi
Efficiency (%)	:	46%
Radiation Properties	:	Omni-directional
H/W No.	:	PPR (Rev B)
S/W No.	:	PPR_1.1.3_IT3
Battery	:	N/A
Date of Receipt	:	Feb. 13, 2020
Sample Type	:	N/A

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Channel List							
802.11a/n (20MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	40	5200	44	5220	48	5240
149	5745	153	5765	157	5785	161	5805
165	5825	--	--	--	--	--	--
802.11n (40MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	46	5230	151	5755	159	5795

2.2. ACCESSORIES OFEUT

Description of Accessories	Shielded Type	Ferrite Core	Length
Adapter	ShenZhen XinsPower Technology Co. Ltd	A122-0502500UD	1.5 m unshielded

2.3. ASSISTANT EQUIPMENT USED FORTEST

Description of Assistant equipment	Manufacturer	Model number or Type	EMC Compliance	SN
Laptop	DELL	Latitude E7240	N/A	6SJ2T02

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3. EQUIPMENTS LIST FOR ALL TESTITEMS

No	Test Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date
1	EMI TEST Receiver	Rohde and Schwarz	ESIB26	838786/010	2020/01/28	2021/01/27
2	Loop antenna	DAZE Beijing	ZN30900C	18052	2020/01/29	2021/01/28
3	Hi power horn antenna	DAZE Beijing	ZN30700	18012	2020/01/30	2021/01/29
4	Horn antenna	DAZE Beijing	ZN30702	18006	2020/01/30	2021/01/29
5	Horn antenna	DAZE Beijing	ZN30703	18005	2020/01/30	2021/01/29
6	Preamplifier	KELIANDA	LNA-0009295	-	2020/01/28	2021/01/29
7	Preamplifier	KELIANDA	CF-00218	-	2020/01/28	2021/01/27
8	Bi conical Antenna	DAZE Beijing	ZN30505C	17038	2020/01/28	2021/01/29
9	EMI-RECEIVER	Schwarzbeck	FCKL	1528194	2020/01/28	2021/01/27
10	Spectrum Analyzer	ADVANTEST	R3361	-	2019/05/15	2021/05/14
11	LISN	Kyoritsu	KNW-407	8-1789-5	2020/01/28	2021/01/27
12	Network-LISN	Schwarzbeck	NNBM8125	81251314	2020/01/28	2021/01/27
13	Network-LISN	Schwarzbeck	NNBM8125	81251315	2020/01/28	2021/01/27
14	PULSELIMITER	Rohde and Schwarz	ESH3-Z2	100681	2019/05/13	2021/05/12
15	50ΩCoaxialSwitch	DAIWA	1565157	-	2019/05/13	2021/05/12
16	50ΩCoaxialSwitch	-	-	-	2019/05/13	2021/05/12
17	Wireless signal power meter	DARE!!	RPR3006W	RFSW190220	2020/01/29	2021/01/28
18	Signal Generator	KEYSIGHT	N5181A	512071	2020/01/29	2021/01/28
19	RF Vector Signal Generator	Keysight	N5182B	512094	2020/01/29	2021/01/28
20	Spectrum analyzer	R&S	FSV-40N	101385	2020/01/29	2021/01/28

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No	Test Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date
21	Radio Communication Tester	R&S	CMW 500	124589	2019/5/15	2021/5/14
22	Signal Generator	R&S	SMP02	837017/004 836593/005	2019/5/15	2021/5/14
23	DC Power Supply	Guanker	JK15040K	TNC/ET/C/0 01/15	2020/2/2	2021/2/1
24	Pro. Temp & Humi. chamber	MENTEK	MHP-150-1C	MAA081125 01	2020/2/2	2021/2/1
25	Attenuators	AGILENT	8494B	-	-	-
26	Attenuators	AGILENT	8495B	-	-	-

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3.1. BLOCK DIAGRAM OF EUT CONFIGURATION FORTEST

3.2. TEST ENVIRONMENTCONDITIONS

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible haveeffectonEMIemissionlevel.EachoftheseEUToperationmode(s)ortestconfigurationmode(s)mentioned above was evaluatedrespectively.

Pretest Mode	Description
Mode 1	Link Mode
Mode 2	802.11a / n 20 CH36/ CH44/ CH48 802.11a / n 20 CH149/ CH157/ CH165
Mode 3	802.11n40 CH38/ CH46 802.11 n40 CH151/ CH159

For Radiated Emission	
Final Test Mode	Description
Mode 1	Link Mode
Mode 2	802.11a / n 20 CH36/ CH44/ CH48 802.11a / n 20 CH149/ CH157/ CH165
Mode 3	802.11n40 CH38/ CH46 802.11 n40 CH151/ CH159

Note:

(1) The measurements are performed at the highest, middle, lowest availablechannels.

(2) The measurements are performed at all Bit Rate of Transmitter, the worst data wasreported

(3) TheEUTwasusedfully-chargedbatteryandprogrammedtobeincontinuouslytransmittingmodeandthe transmit duty cycle is not less than98%.

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3.3. TEST ENVIRONMENTCONDITIONS

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	21-25℃
Humidity range:	40-75%
Pressure range:	86-106kPa

3.4. MEASUREMENTUNCERTAINTY

No.	Item	Uncertainty
1	Conducted Emission Test	2.70dB
2	Radiated Emission Test	3.30dB
3	RF power, conducted	0.16dB
4	RF power density, conducted	0.24dB
5	Spurious emissions, conducted	0.21dB
6	All emissions, radiated(<1G)	4.68dB
7	All emissions, radiated(>1G)	4.89dB

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

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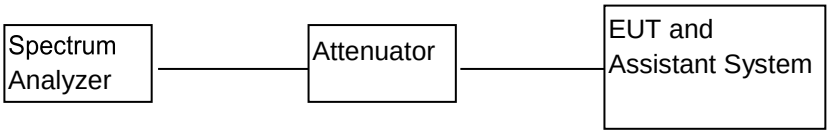
4. POWER SPECTRAL DENSITYTEST

4.1. BLOCK DIAGRAM OF TESTSETUP



4.2. APPLIED PROCEDURES / LIMIT

According to FCC §15.407(a)(3)

For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB thatthedirectionalgainoftheantennaexceeds6dBi.Themaximume.i.r.p.atanyelevationangleabove30degreesas measured from the horizon must not exceed 125 mW (21dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed17dBminany1megahertzband.Iftransmittingantennasofdirectionalgaingreaterthan6dBiareused,both themaximumconductedoutputpowerandthemaximumpowerspectraldensityshallbereducedbytheamountindB that the directional gain of the antenna exceeds 6dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than23dBi,a1dBreductioninmaximumconductedoutputpowerandmaximumpowerspectraldensityisrequiredfor each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operatoroftheU-NIIdevice,oriftheequipmentisprofessionallyinstalled,theinstaller,isresponsibleforensuringthat systems employing high gain directional antennas are used exclusively for fixed, point-to-pointoperations.

(iv) Formobileandportableclientdevicesinthe5.15-5.25GHzband,themaximumpowerspectraldensityshallnot exceed 11 dBm in any 1 megahertz band. If transmitting antennas ofdirectional
gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna
exceeds 6 dBi.

For the band 5.725-5.85 GHz

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi..

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4.3. TESTPROCEDURE

（For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzersdonothave500kHzRBW,thusanarrowerRBWmayneedtobeused.TherulespermittheuseofaRBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the proceduresapply:

a) Set RBW ≥ 1/T, where T is defined in sectionII.B.l.a).

b) Set VBW ≥ 3RBW.

c) IfmeasurementbandwidthofMaximumPSDisspecifiedin500kHz,add10log(500kHz/RBW)tothemeasured result, whereas RBW (< 500 KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add 10log(1MHz/RBW) to the measured result,whereasRBW(<1MHz)isthereducedresolutionbandwidthofspectrumanalyzersetduringmeasurement.

e) Caremustbetakentoensurethatthemeasurementsareperformedduringaperiodofcontinuoustransmissionor are corrected upward for dutycycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since RBW=100 KHZ is available on nearly all spectrum analyzers.

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4.4. TEST RESULT

CH. No.	Frequency	power density (dBm/MHz)	Limit (dBm/MHz)	Result
TX 802.11a Mode				
CH36	5180	5.53	11	Pass
CH44	5220	6.03	11	Pass
CH48	5240	5.64	11	Pass
CH 149	5745	5.08	30	Pass
CH 157	5785	4.53	30	Pass
CH 165	5825	5.36	30	Pass
TX 802.11n20 Mode				
CH36	5180	5.51	11	Pass
CH44	5220	2.91	11	Pass
CH48	5240	5.62	11	Pass
CH 149	5745	4.47	30	Pass
CH 157	5785	4.12	30	Pass
CH 165	5825	5.04	30	Pass

CH. No.	Frequency	power density (dBm/MHz)	Limit (dBm/MHz)	Result
TX 802.11n40 Mode				
CH38	5190	-1.55	11	Pass
CH46	5230	-1.23	11	Pass
CH151	5755	-8.51	30	Pass
CH159	5795	-4.38	30	Pass

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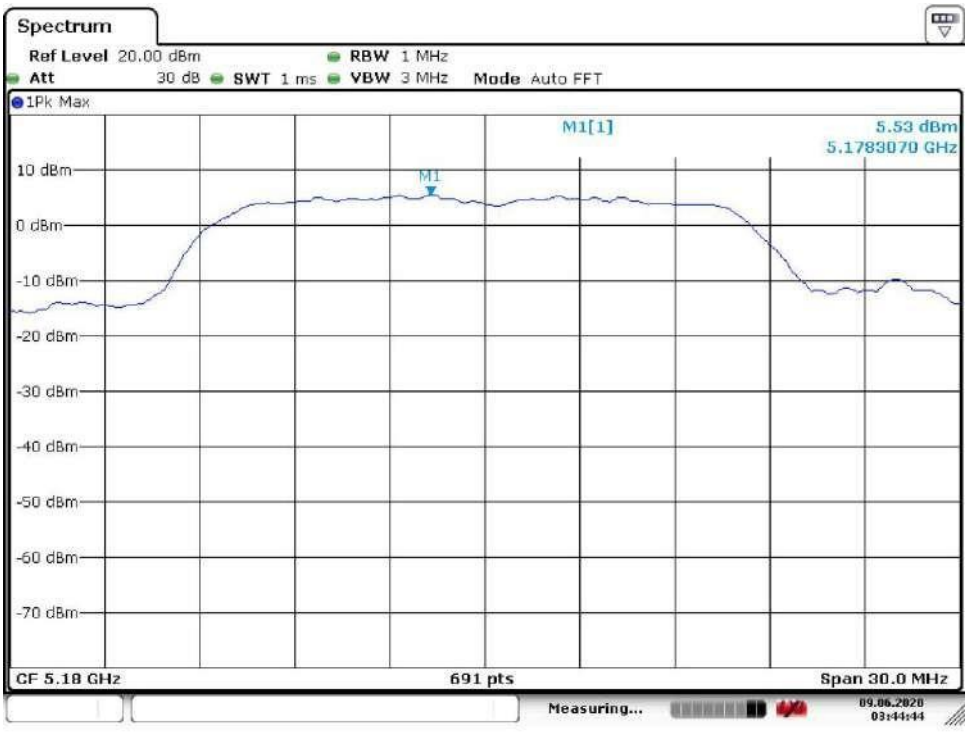
Test plots as followed:

802.11a

Channel:36



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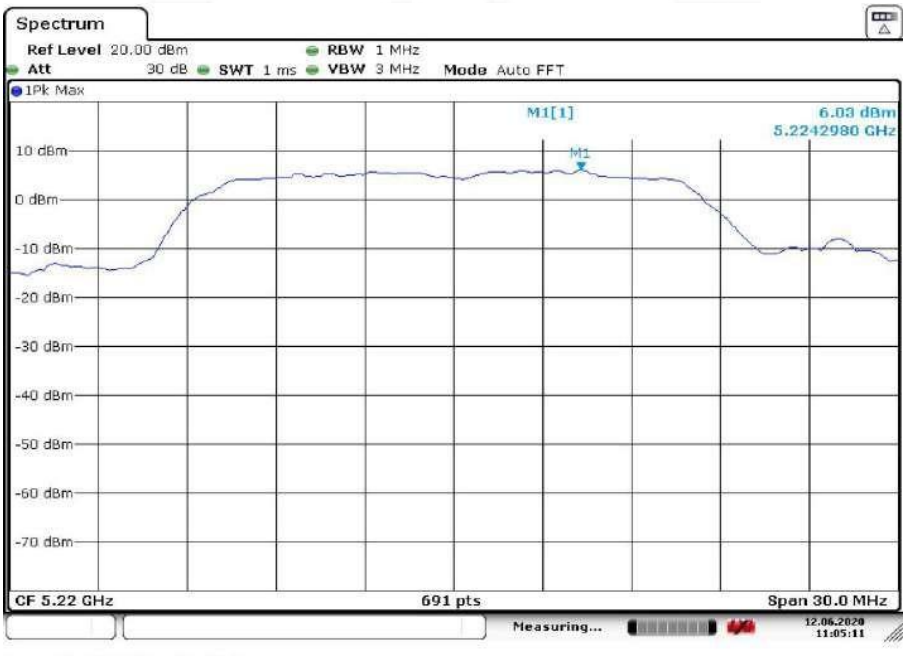

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Channel: 48

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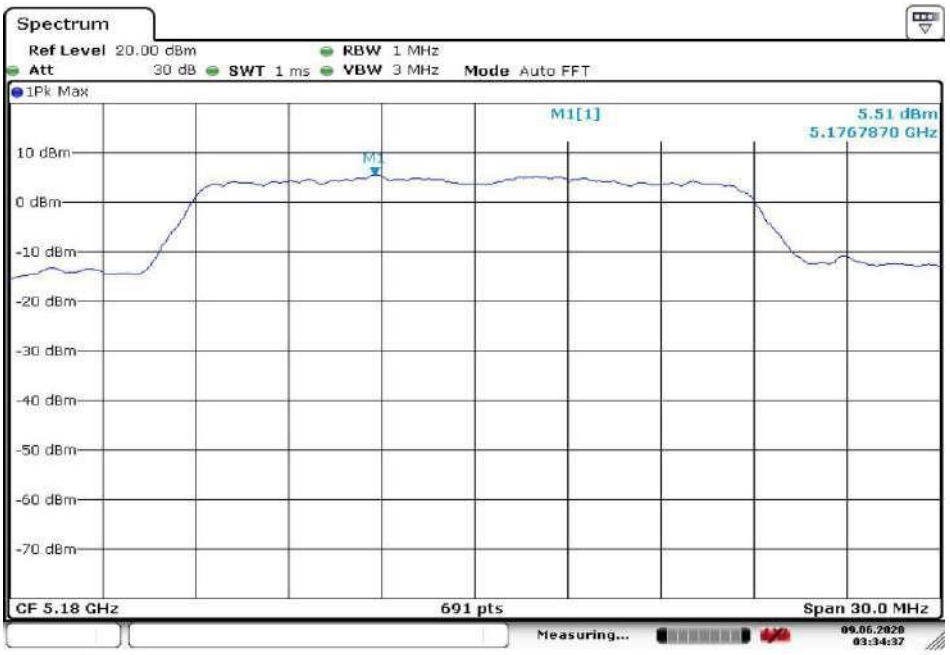
802.11n20

Channel:36



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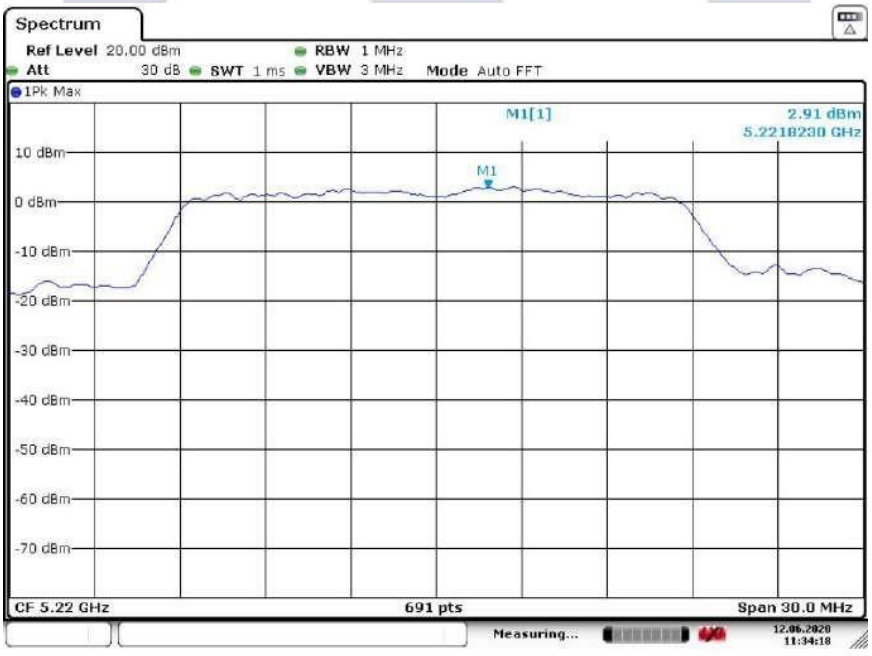
Channel:44



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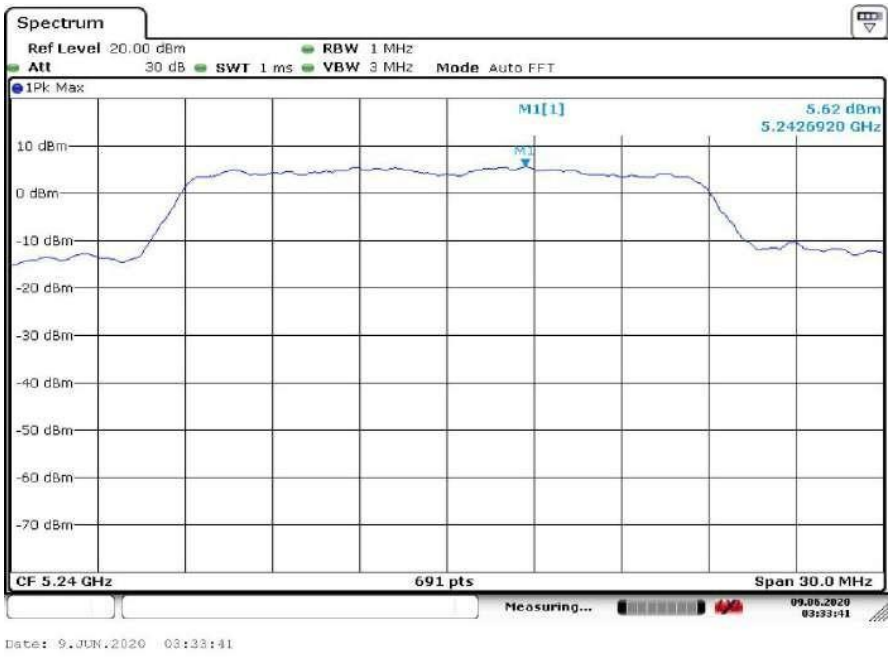
Channel: 48



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802.11a

Channel:149

Date: 9.JUN.2020 03:46:37

Channel:157

Date: 12.JUN.2020 11:07:06

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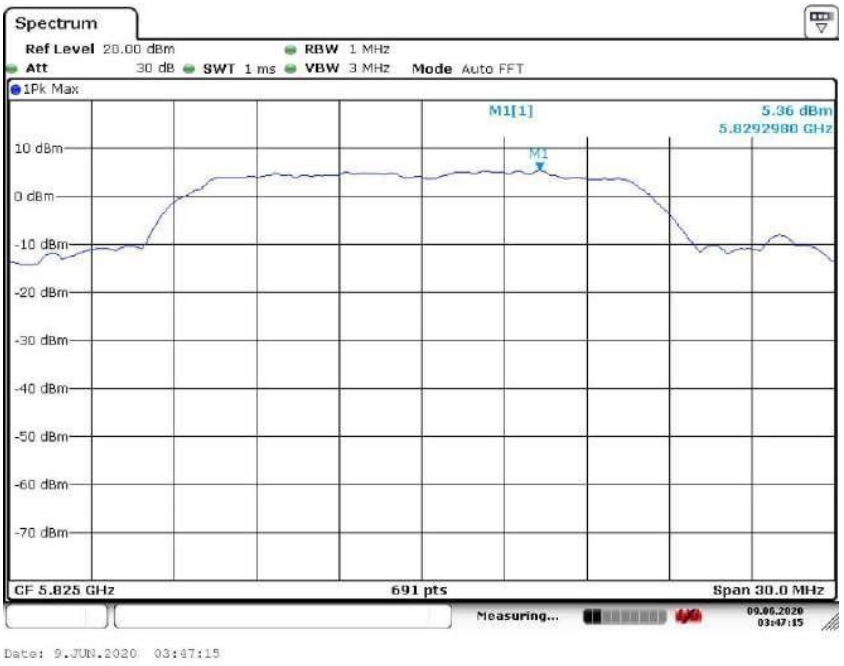
Channel: 165



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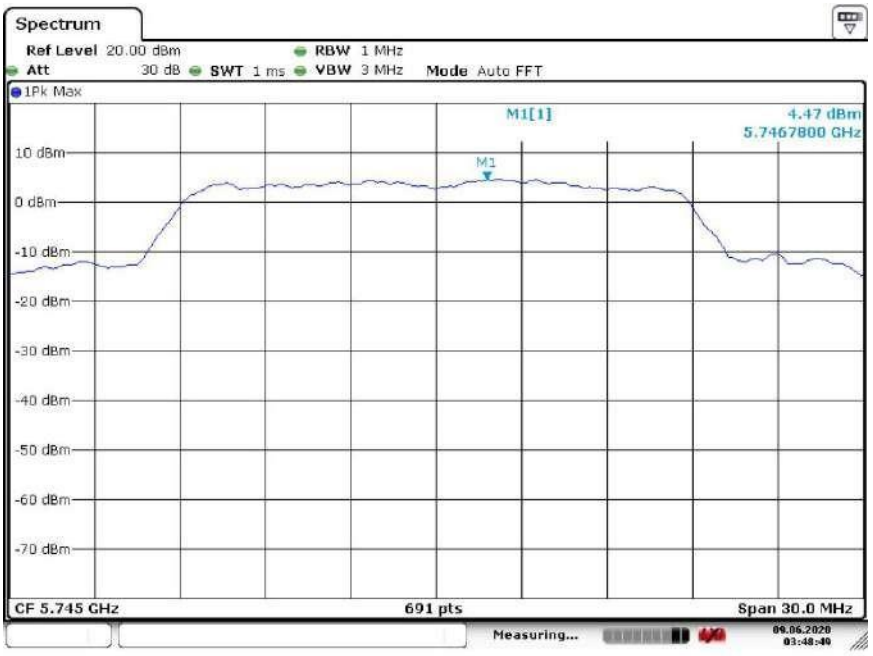
802.11n20

Channel:149



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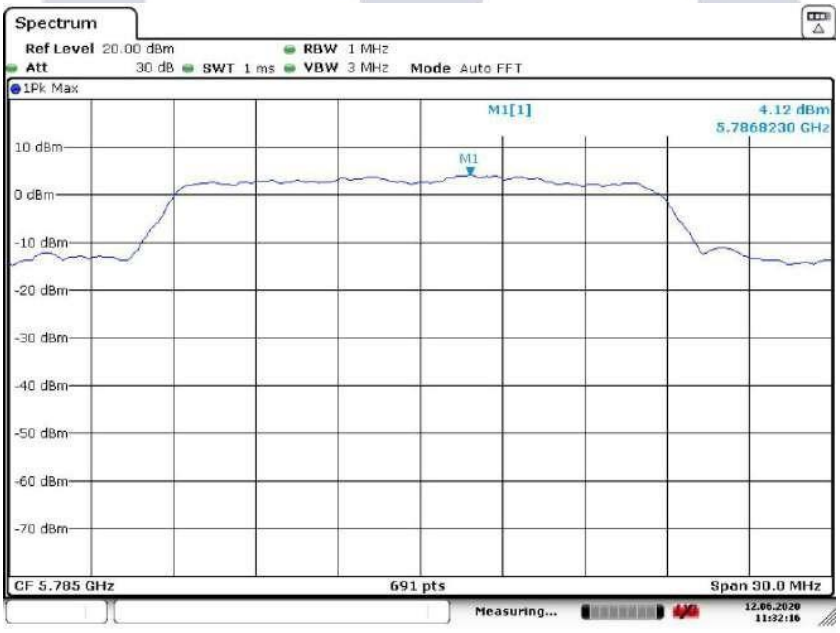

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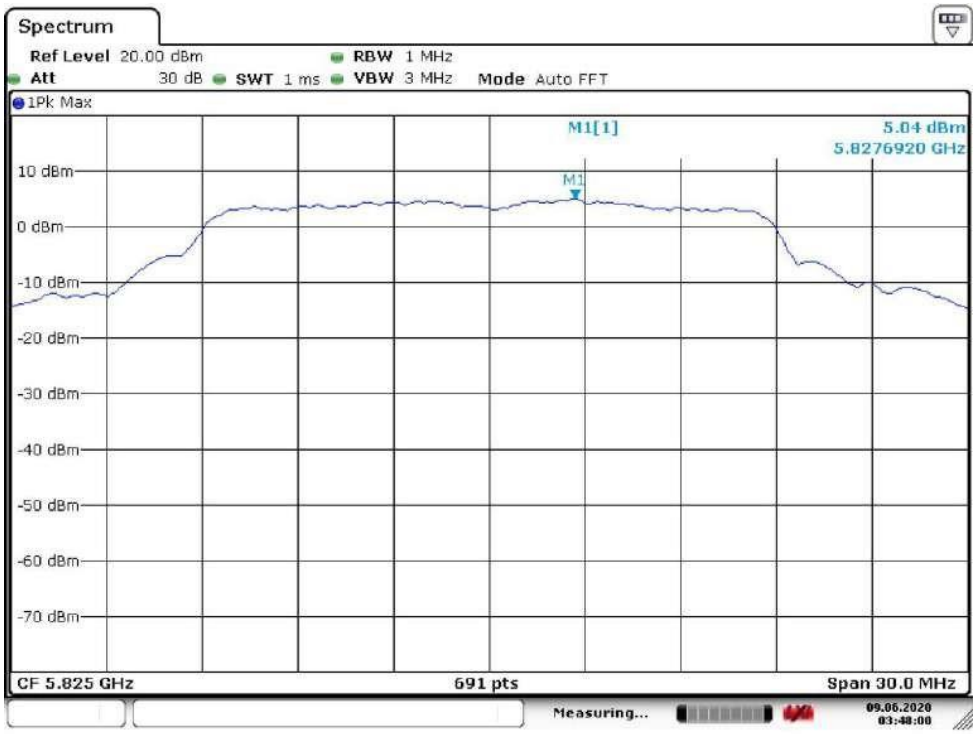
Channel: 165

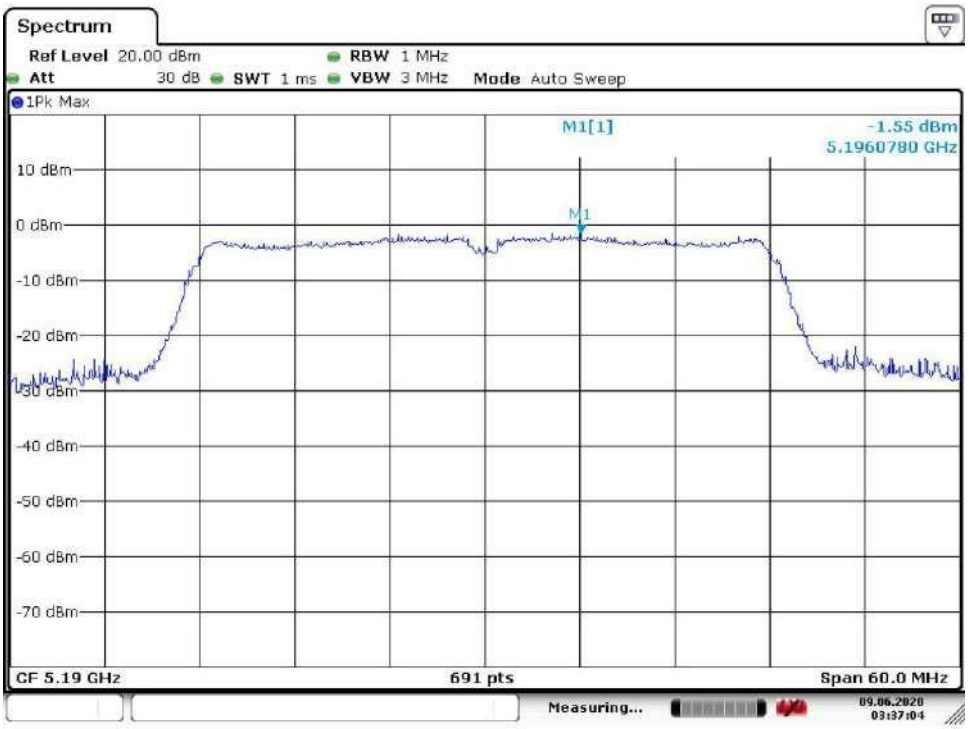


Date: 9.JUN.2020 03:48:00

Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
Contact:0124-4235350,4145343;e-mail:info@aaemtlabs.com;Website: www.aaemtlabs.com
An ISO 17025: 2017, Accredited Laboratory ,VCCI (support member – #4053),ISED#: 26046, FCC #137777CE #800058_00

802.11n40

Channel:38



Date: 9.JUN.2020 03:37:04

Channel:46

Date: 9.JUN.2020 03:38:20

Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
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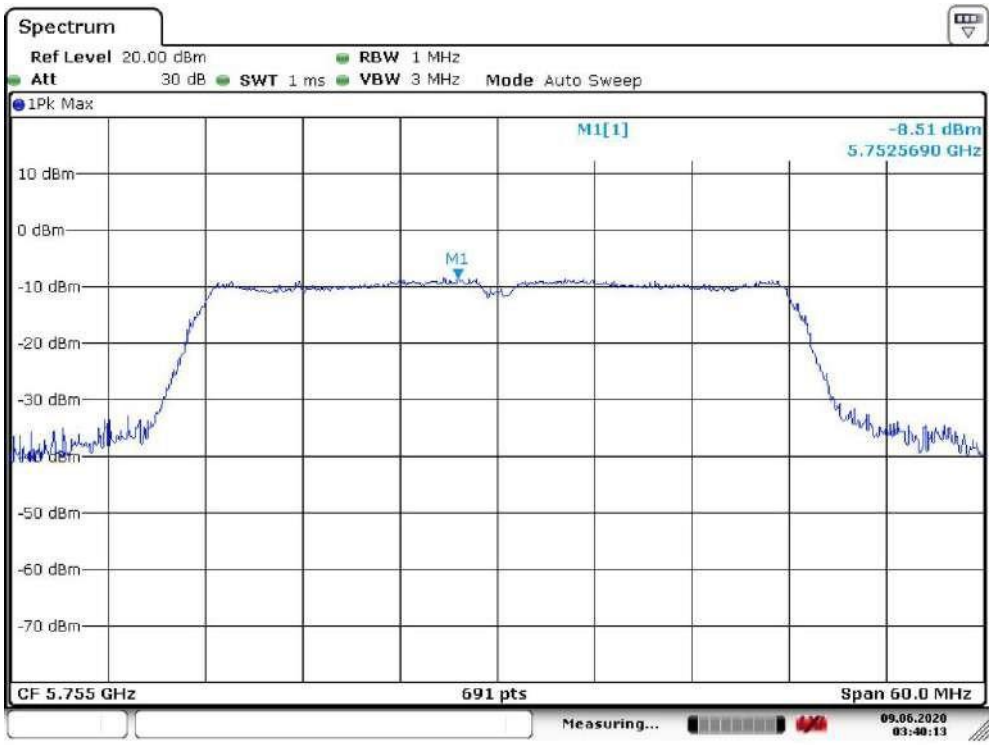
802.11n40

Channel:151



Date: 9.JUN.2020 03:40:13

Channel:159

Date: 9.JUN.2020 03:42:59

Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
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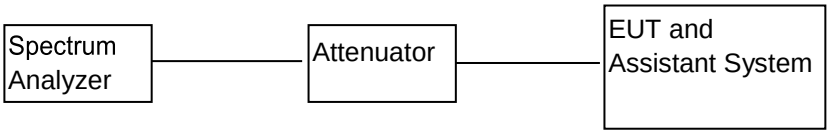
5. 26 dB & 99% Emission Bandwidth BLOCK DIAGRAM OF TESTSETUP



5.1. APPLIED PROCEDURES /LIMIT

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

5.2. TESTPROCEDURE

a) Set RBW = approximately 1% of the emissionbandwidth.

b) Set the VBW >RBW.

c) Detector =Peak.

d) Trace mode = maxhold.

e) Measure the maximum width of the emission that is 26 dB down from the maximum 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 approximately1%.

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

1. Set center frequency to the nominal EUT channel centerfrequency.
2. Set span = 1.5 times to 5.0 times theOBW.
3. Set RBW = 1 % to 5 % of theOBW
4. Set VBW ≥ 3 ·RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep modeshallbeused.Otherwise,peakdetectionandmaxholdmode(untilthetracestabilizes) shall beused.
6. Use the 99 % power bandwidth function of the instrument (ifavailable).
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,areplacedinarunningsumuntil0.5%ofthetotalisreached;thatfrequencyisrecordedas 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.

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5.3. TEST RESULT

CH. No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)		99% Occupied Bandwidth (MHz)	
		802.11a	802.11n (HT20)	802.11a	802.11n (HT20)
36	5180.00	29.349	27.612	18.798	17.973
44	5220.00	39.247	39.595	19.189	18.277
48	5240.00	24.747	27.178	19.059	18.321
CH. No.	Frequency (MHz)	6dB Occupied Bandwidth (MHz)		99% Occupied Bandwidth (MHz)	
		802.11a	802.11n (HT20)	802.11a	802.11n (HT20)
149	5745.00	16.454	17.800	19.623	18.668
157	5785.00	16.498	17.772	19.059	19.363
165	5825.00	16.498	17.800	19.015	19.580

CH. No.	Frequency (MHz)	26dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
		802.11n(HT40)	802.11n(HT40)
38	5190.00	67.730	36.295
46	5230.00	54.880	36.382
CH. No.	Frequency (MHz)	6B Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
		802.11n(HT40)	802.11n(HT40)
151	5755.00	36.468	36.295
159	5795.00	36.468	36.295

Note: N/A

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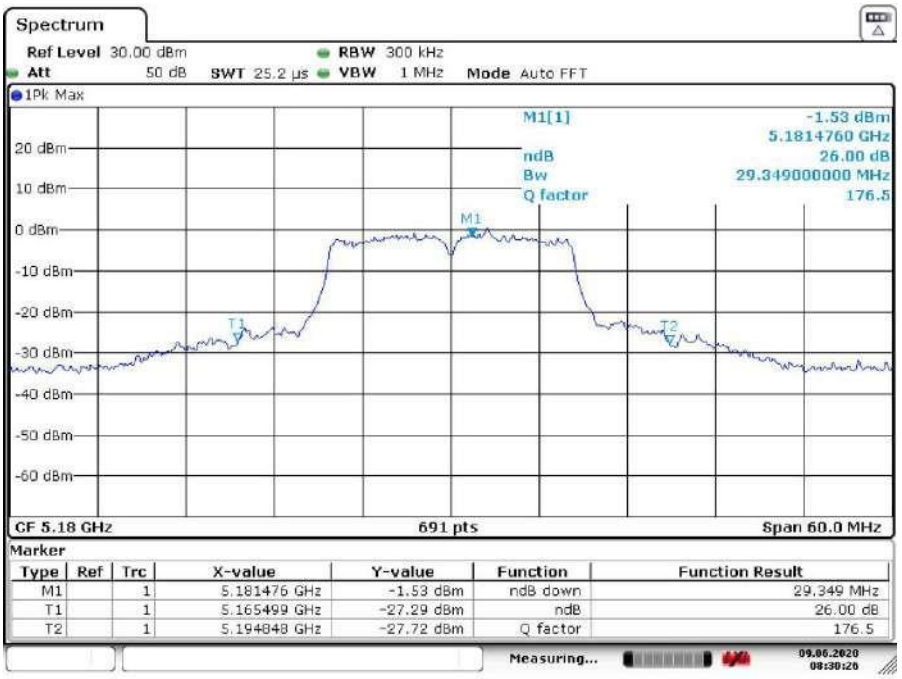
Test plots as followed:

26dB BW 802.11a

Channel: 36



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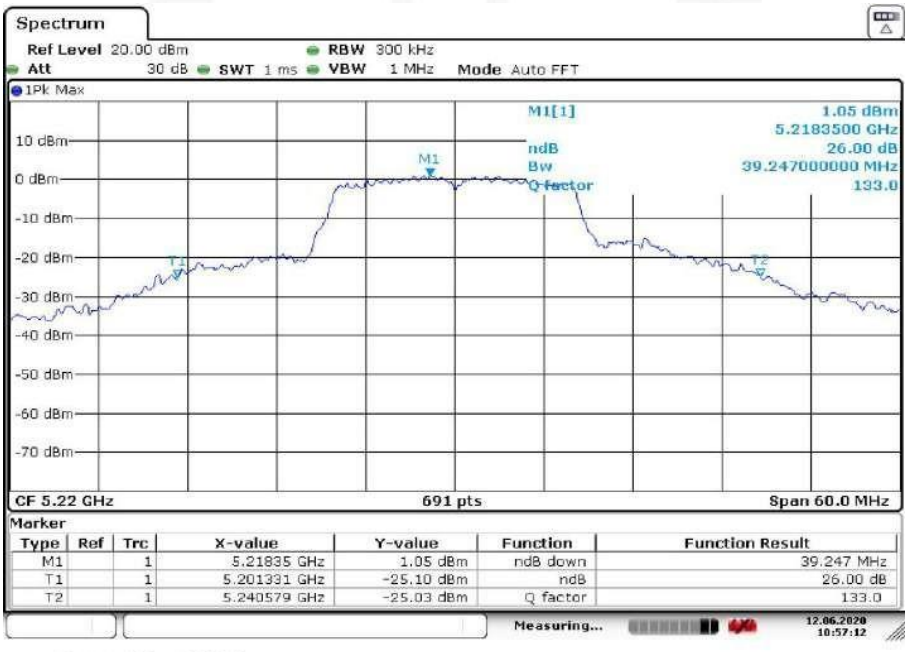

Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
Contact:0124-4235350,4145343;e-mail:info@aaemtlabs.com;Website: www.aaemtlabs.com
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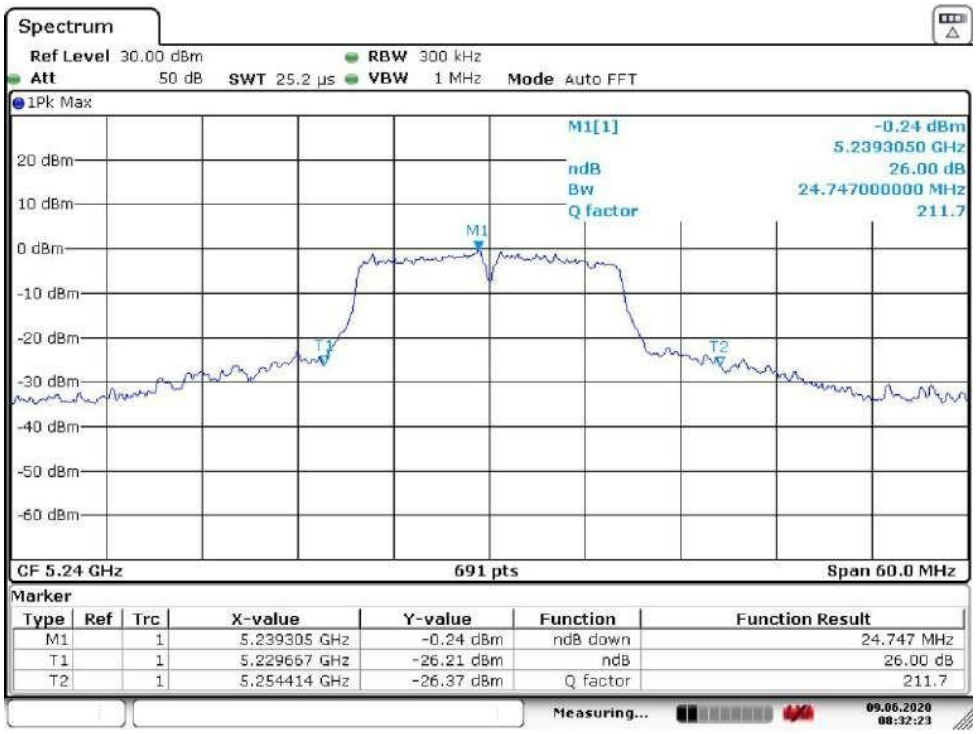
Channel: 48



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Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
Contact:0124-4235350,4145343;e-mail:info@aaemtlabs.com;Website: www.aaemtlabs.com
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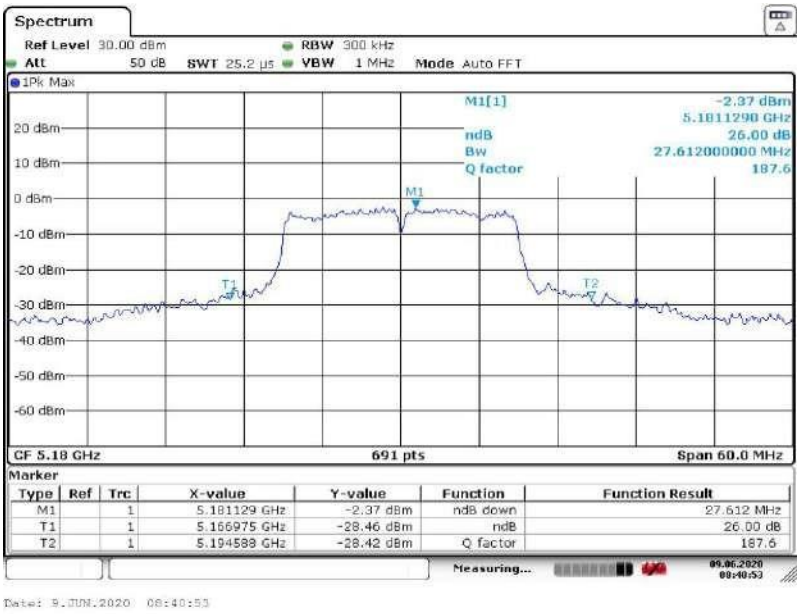
26dB BW 802.11n20

Channel:36



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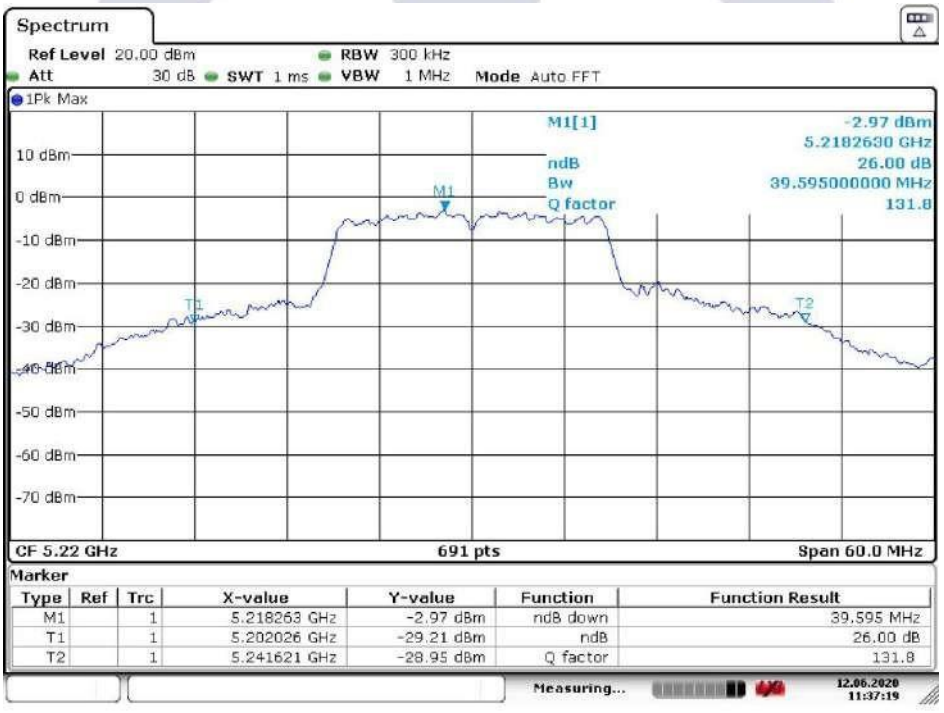

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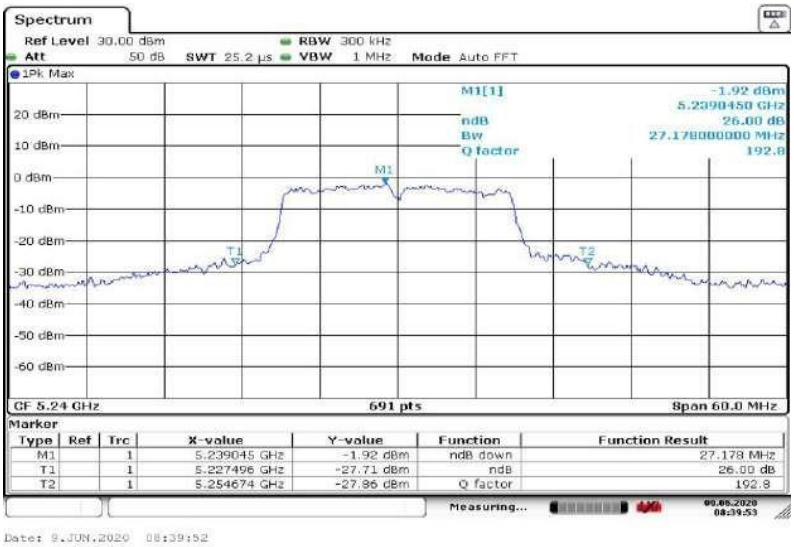
Channel: 48



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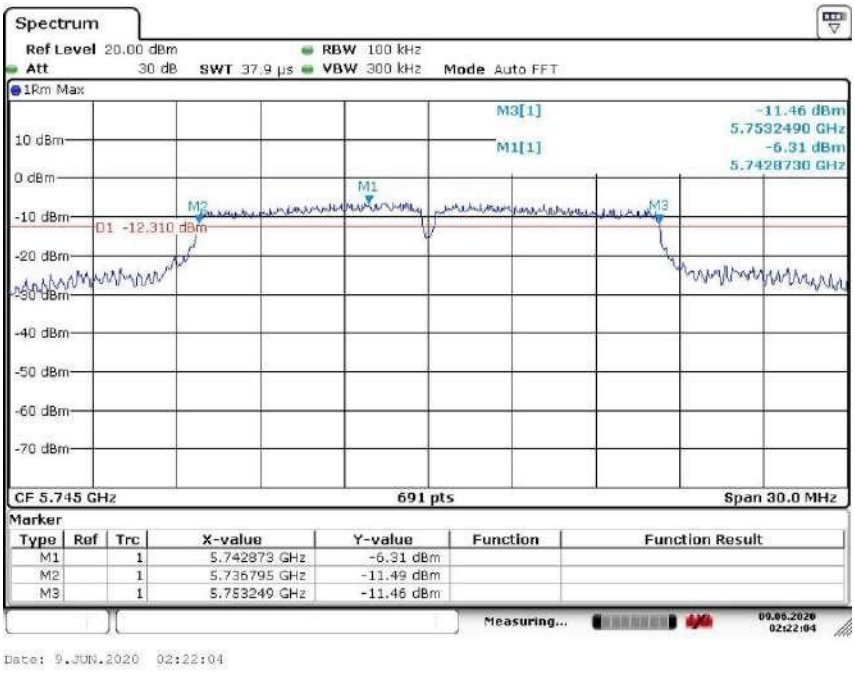
6dB BW 802.11a

Channel:149



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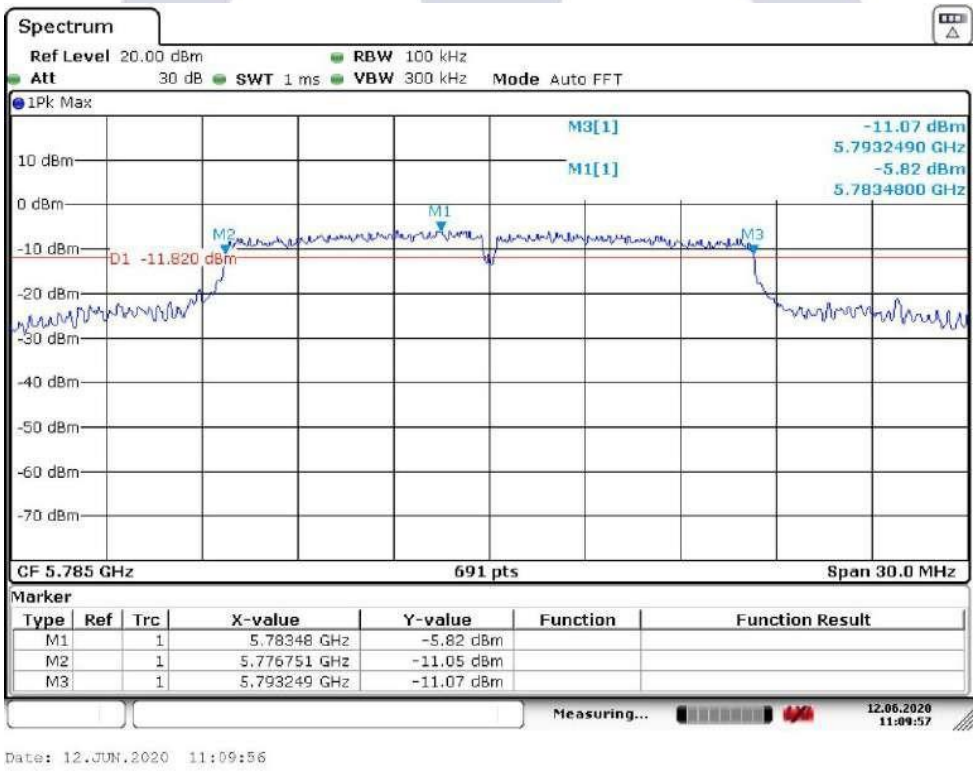

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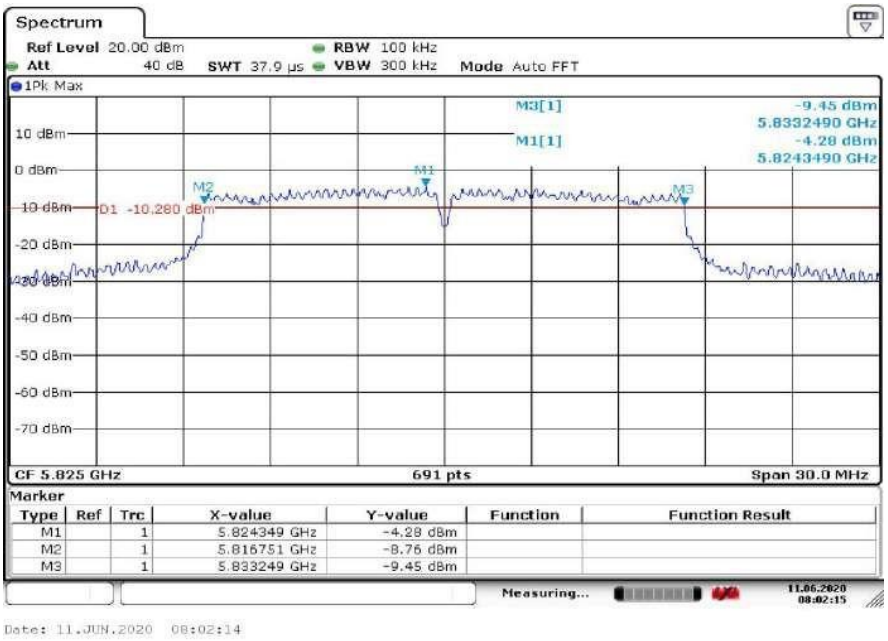
Channel: 165



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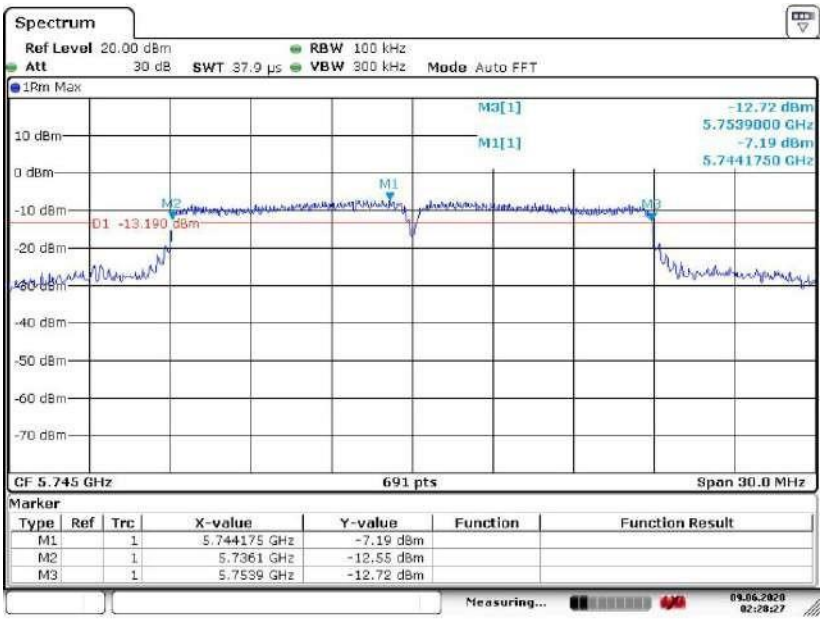
6dB BW 802.11n20

Channel:149



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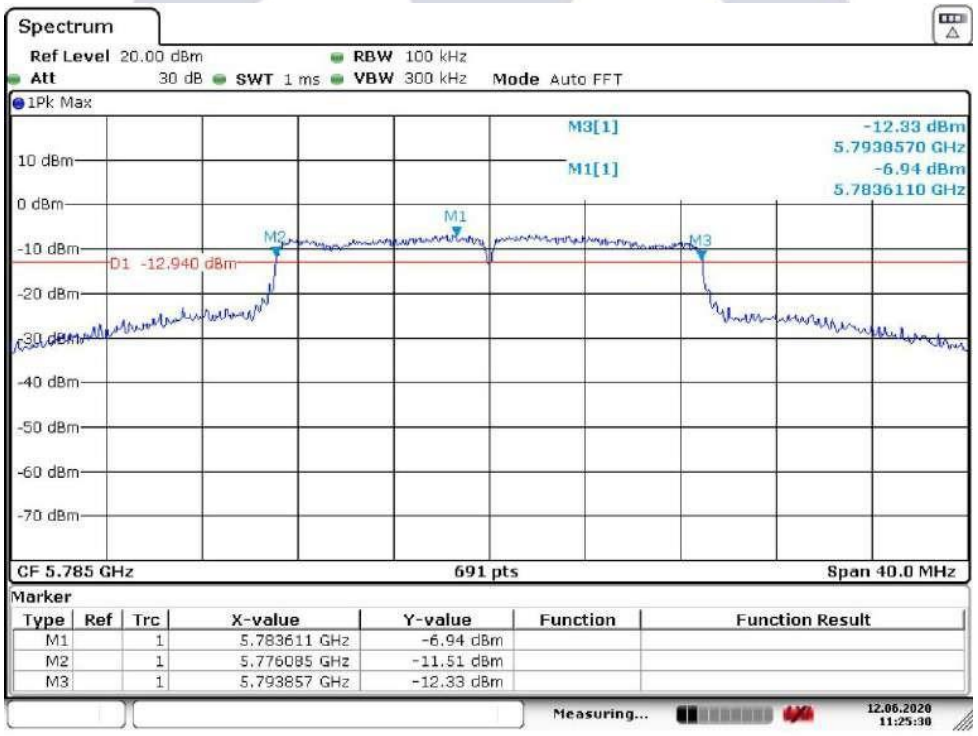

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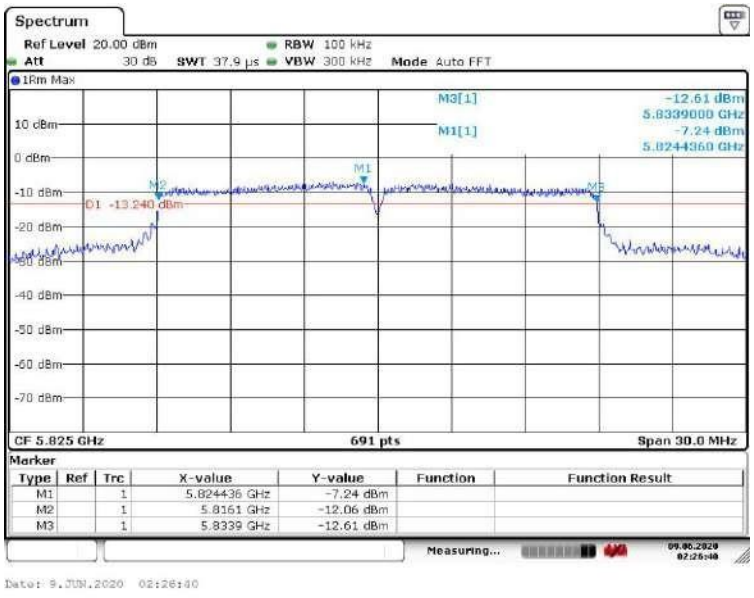
Channel: 165



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26dB BW 802.11n40

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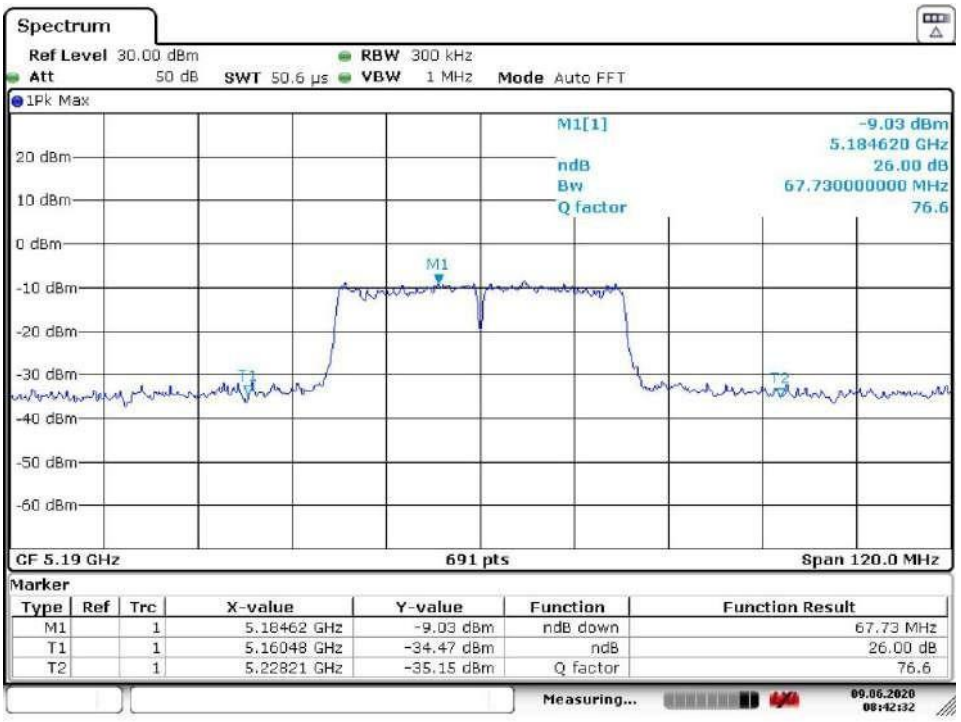

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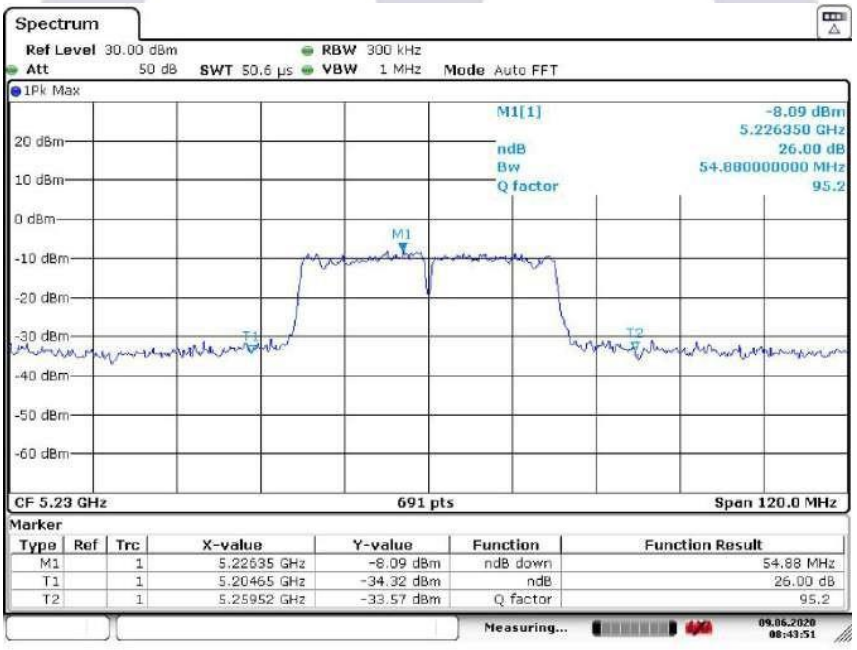

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Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.

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6dB BW 802.11n40

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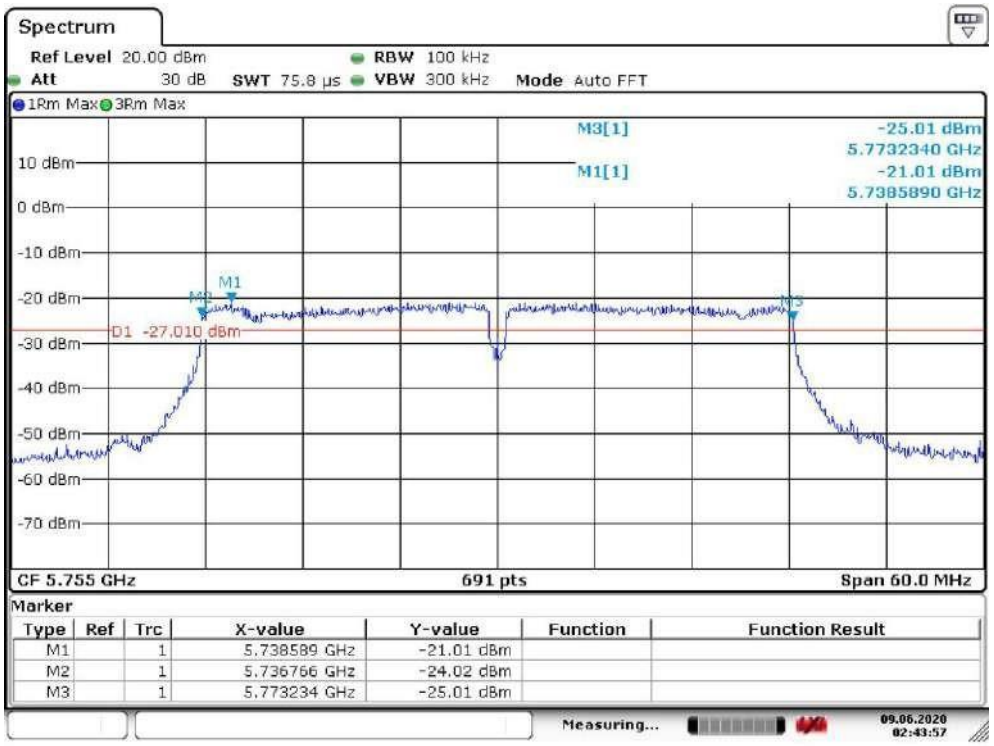

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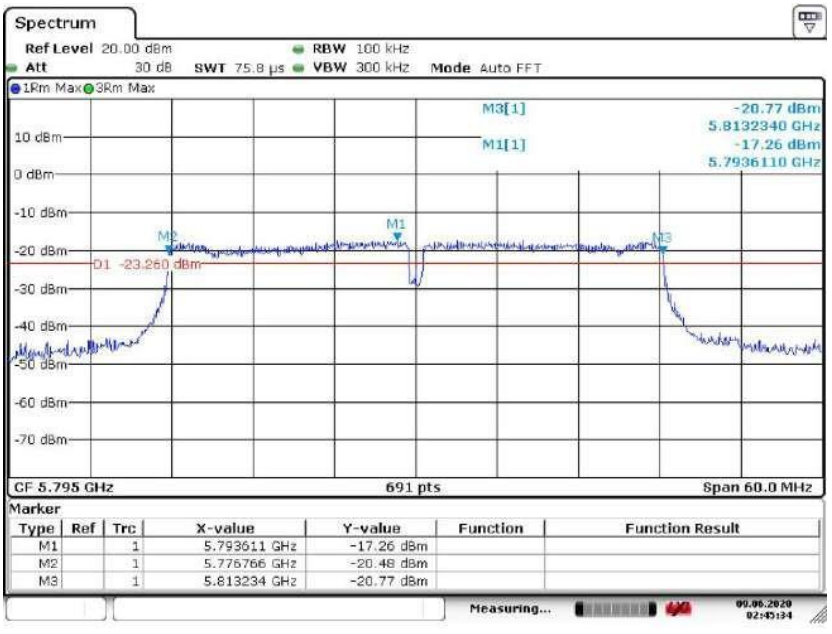

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Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
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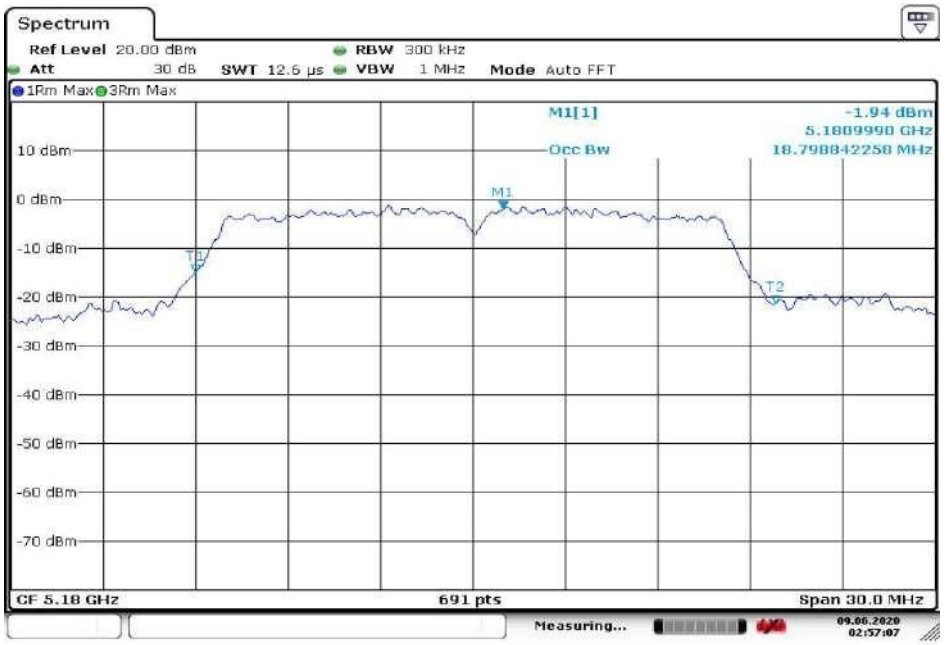
99% OBW 802.11a

Channel:36



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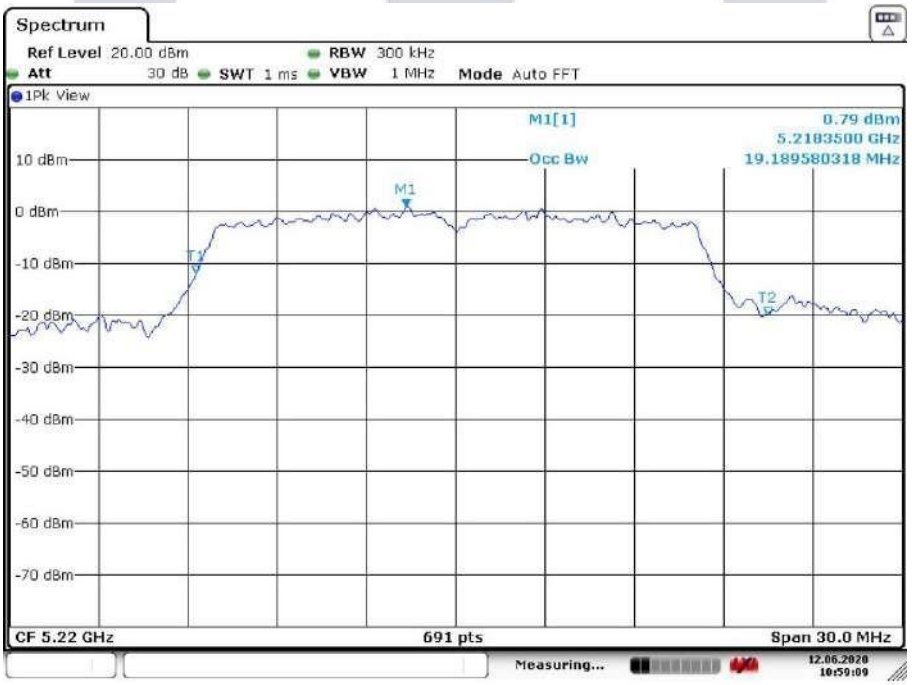

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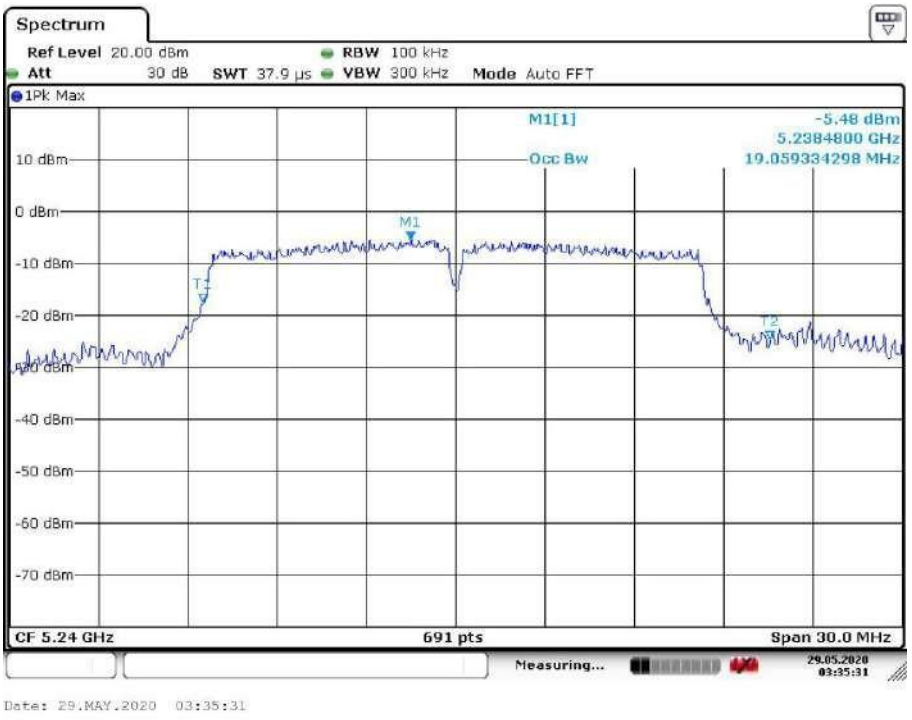
Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
Contact:0124-4235350,4145343;e-mail:info@aaemtlabs.com;Website: www.aaemtlabs.com
An ISO 17025: 2017, Accredited Laboratory ,VCCI (support member – #4053),ISED#: 26046, FCC #137777CE #800058_00

Channel: 48



Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
Contact:0124-4235350,4145343;e-mail:info@aaemtlabs.com;Website: www.aaemtlabs.com
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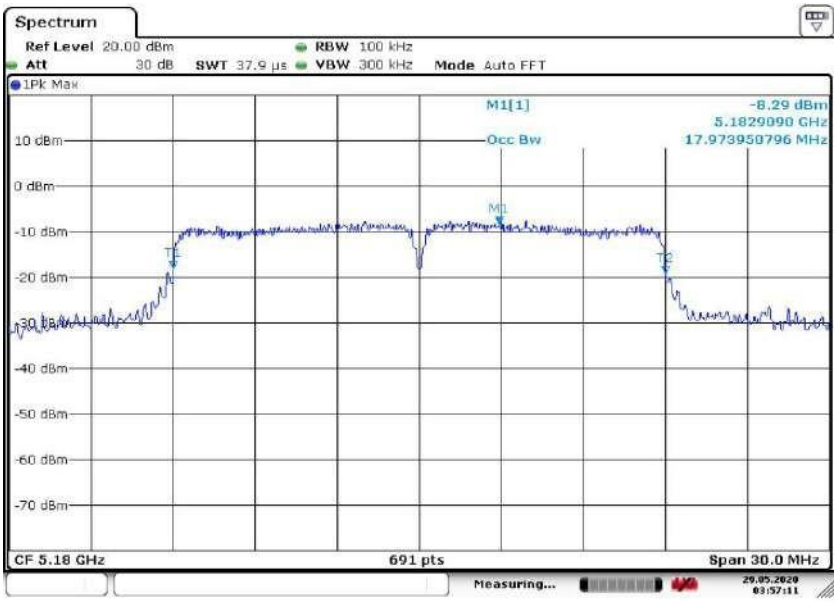
99% OBW 802.11n20

Channel:36



Date: 29.MAY.2020 03:57:12

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Date: 12.JUN.2020 11:36:14

Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
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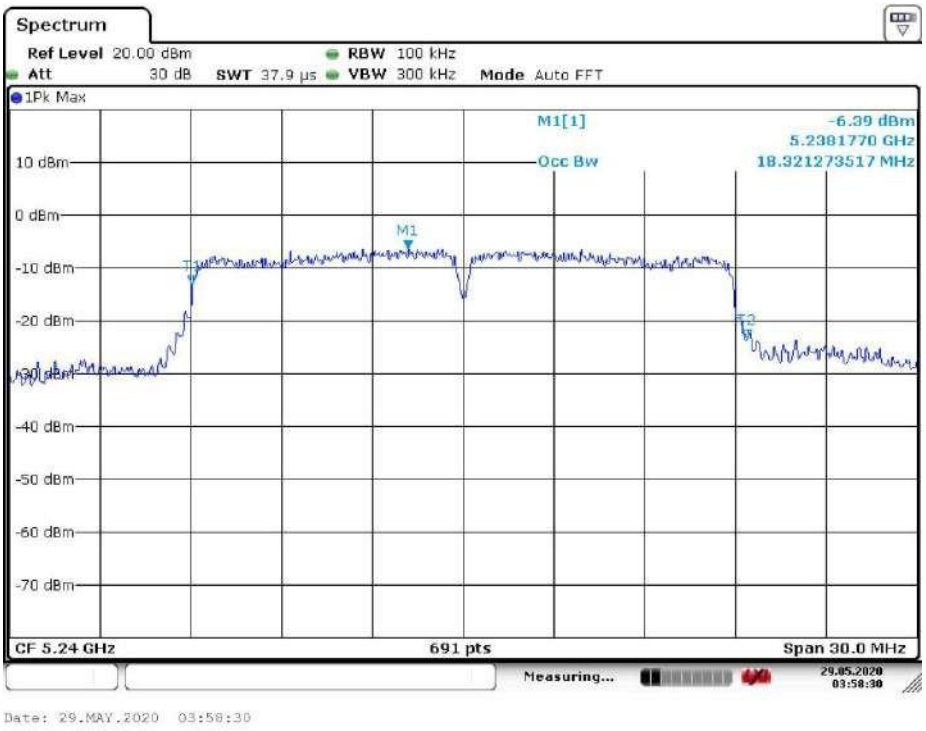
An ISO 17025: 2017, Accredited Laboratory ,VCCI (support member – #4053),ISED#: 26046, FCC #137777CE #800058_00

Channel: 48



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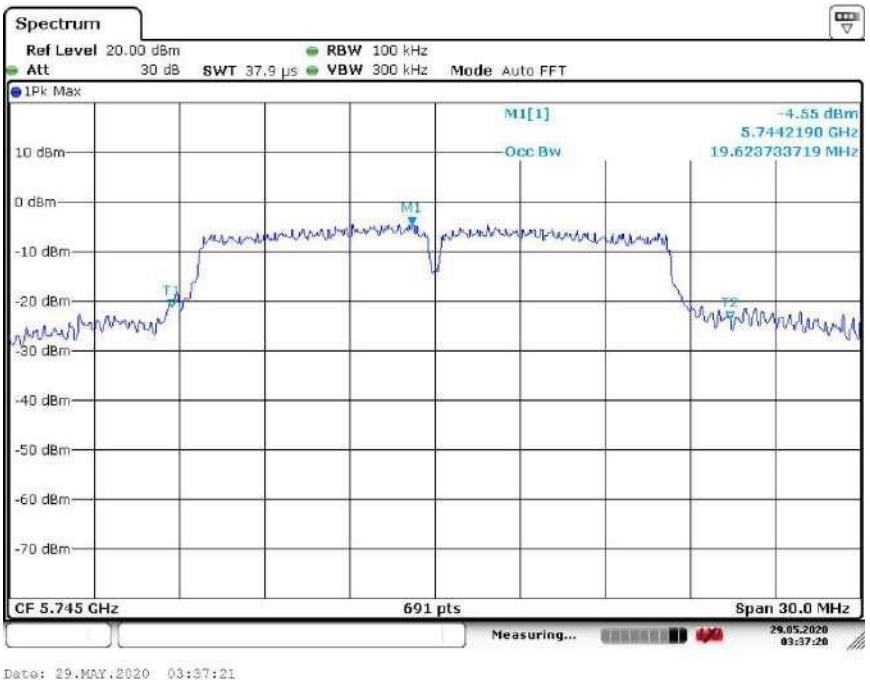
Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
Contact:0124-4235350,4145343;e-mail:info@aaemtlabs.com;Website: www.aaemtlabs.com
An ISO 17025: 2017, Accredited Laboratory ,VCCI (support member – #4053),ISED#: 26046, FCC #137777CE #800058_00

99% OBW 802.11a

Channel:149



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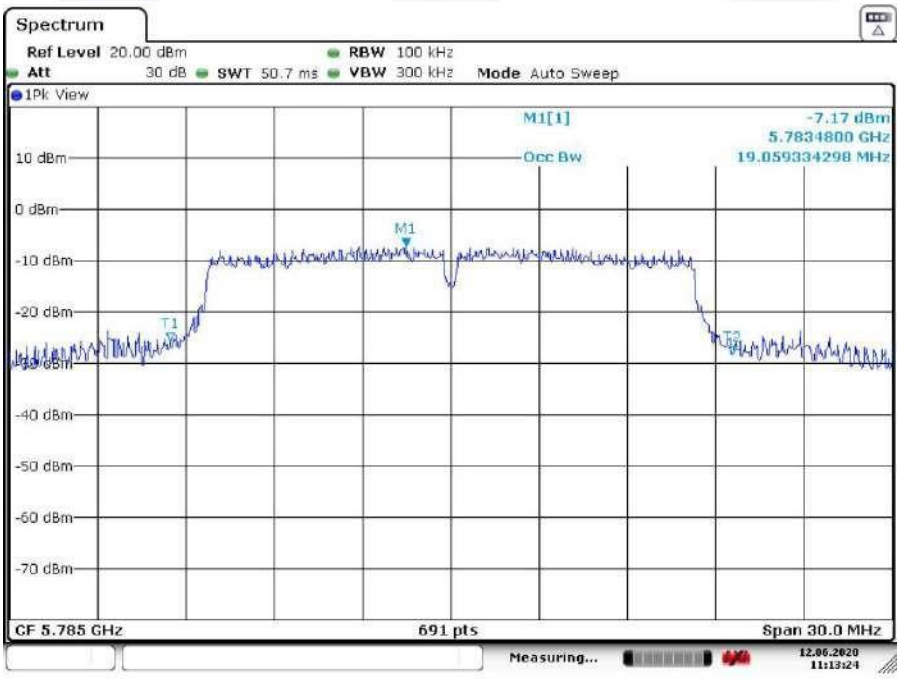

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Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
Contact:0124-4235350,4145343;e-mail:info@aaemtlabs.com;Website: www.aaemtlabs.com
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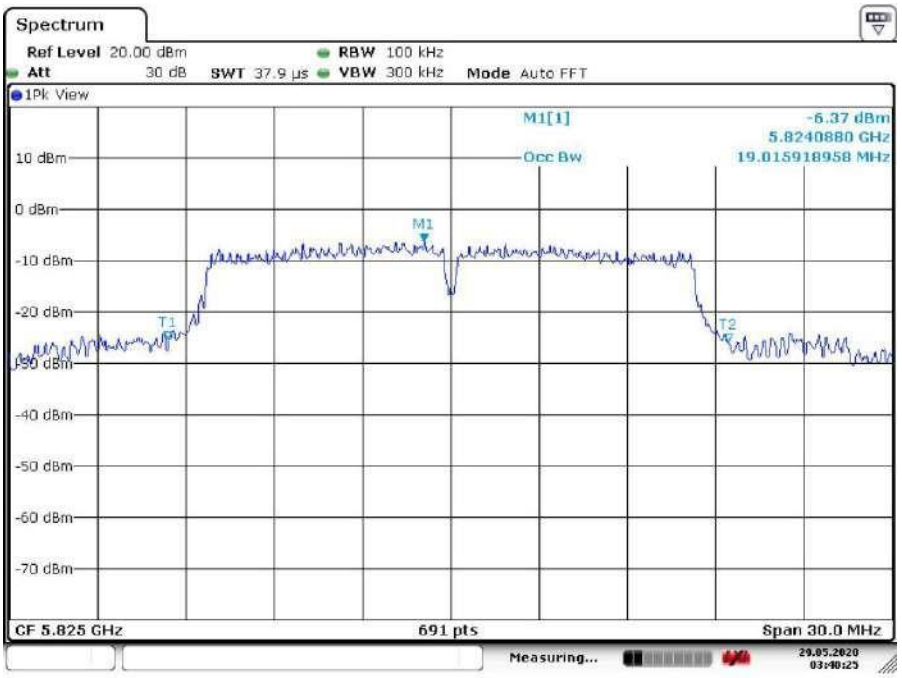
Channel: 165



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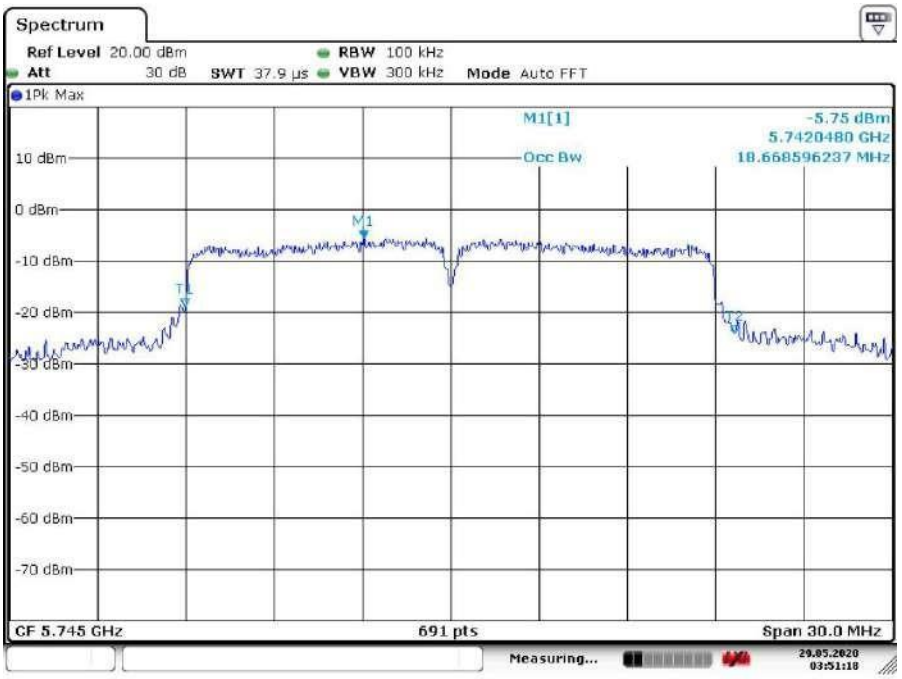
Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
Contact:0124-4235350,4145343;e-mail:info@aaemtlabs.com;Website: www.aaemtlabs.com
An ISO 17025: 2017, Accredited Laboratory ,VCCI (support member – #4053),ISED#: 26046, FCC #137777CE #800058_00

99% OBW 802.11n20

Channel:149



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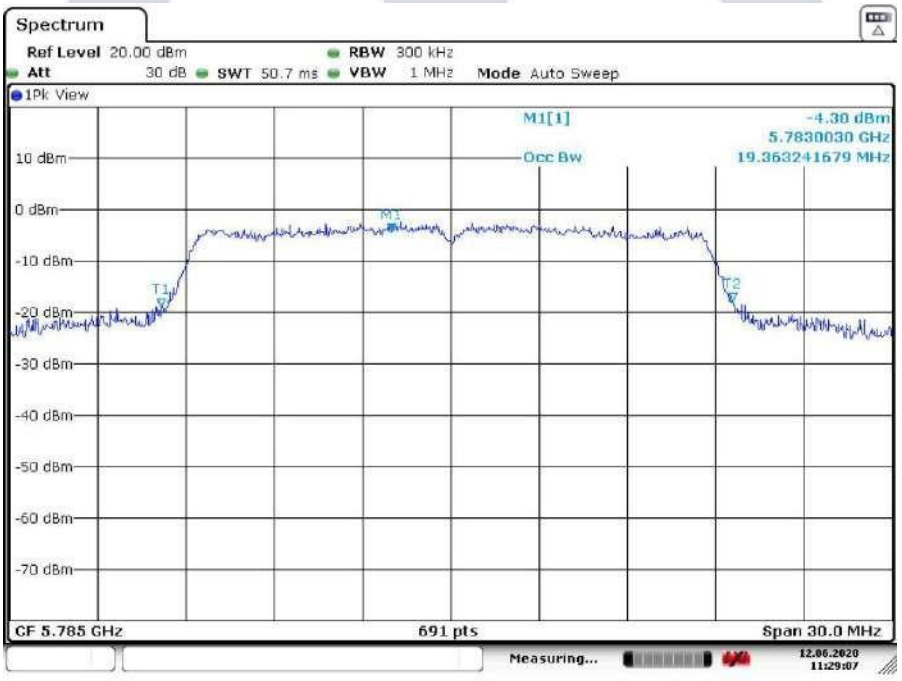

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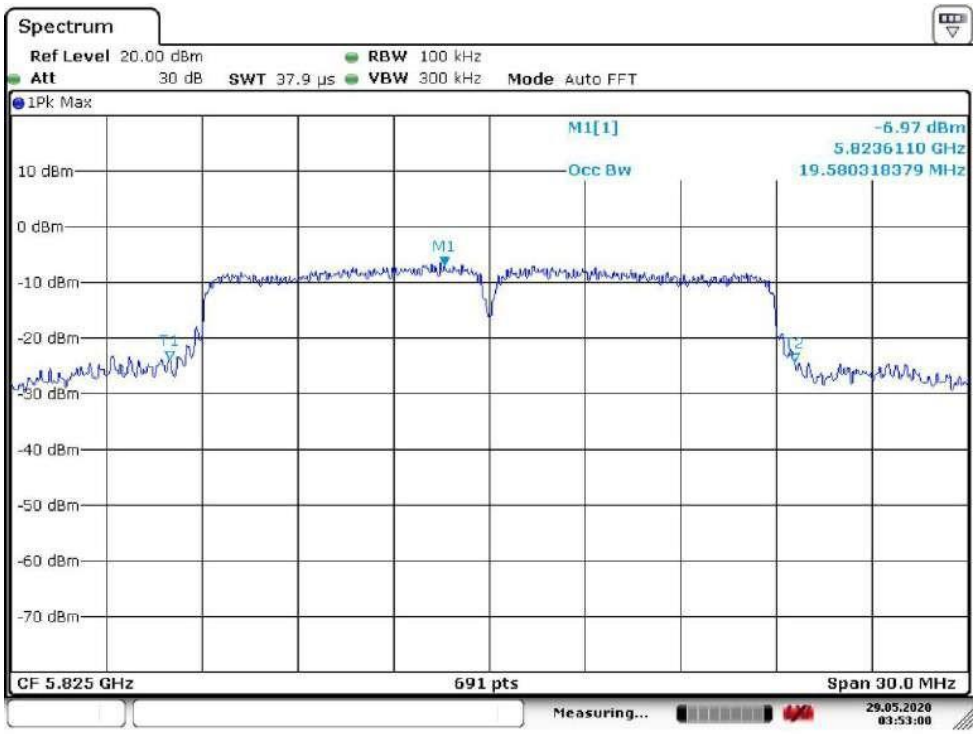
Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
Contact:0124-4235350,4145343;e-mail:info@aaemtlabs.com;Website: www.aaemtlabs.com
An ISO 17025: 2017, Accredited Laboratory ,VCCI (support member – #4053),ISED#: 26046, FCC #137777CE #800058_00

Channel: 165



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Plot 174, Udyog Vihar Phase 4, Sector -18, Gurgoan, Haryana, India.
Contact:0124-4235350,4145343;e-mail:info@aaemtlabs.com;Website: www.aaemtlabs.com
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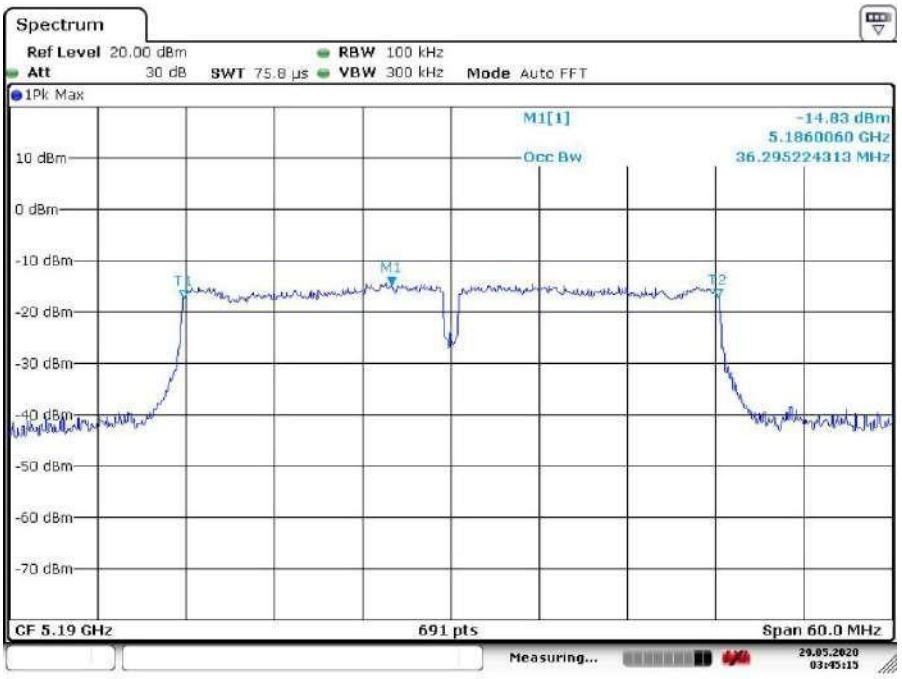
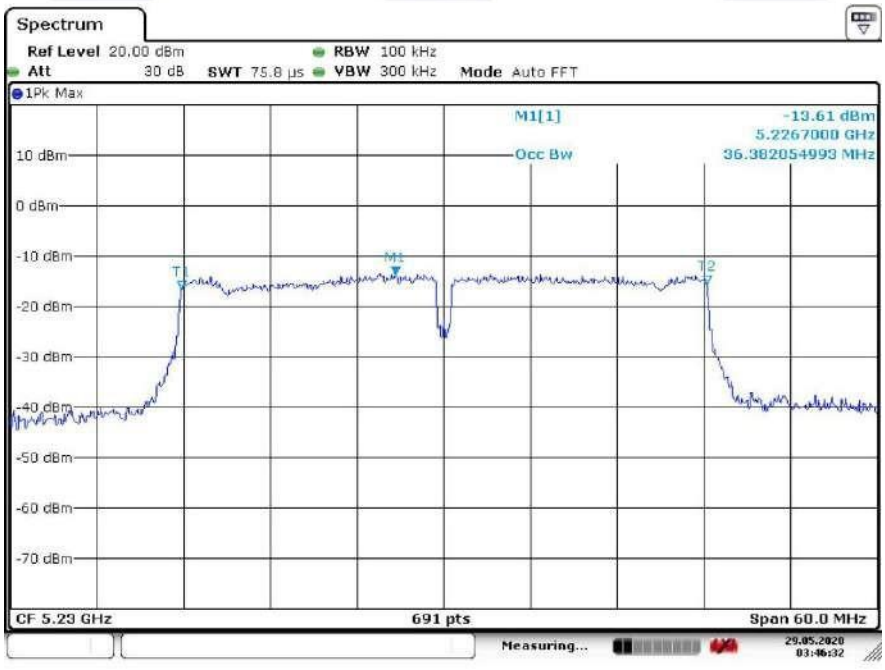
99% OBW 802.11n40

Channel:38



Date: 29.MAY.2020 03:45:15

Channel:46



Date: 29.MAY.2020 03:46:32

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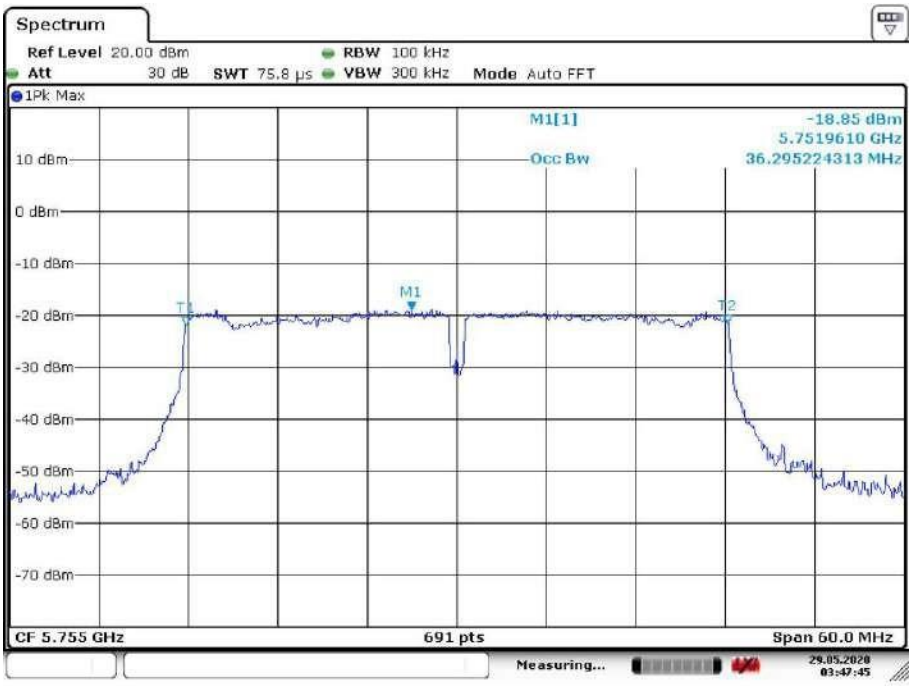
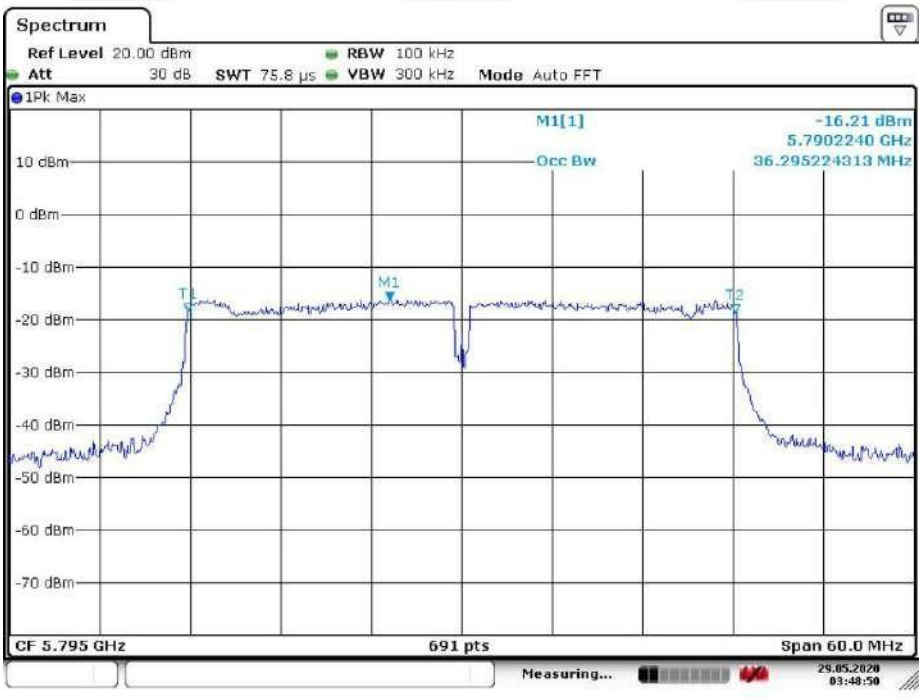
99% OBW 802.11n40

Channel:151



Date: 29.MAY.2020 03:47:46

Channel:159



Date: 29.MAY.2020 03:48:51

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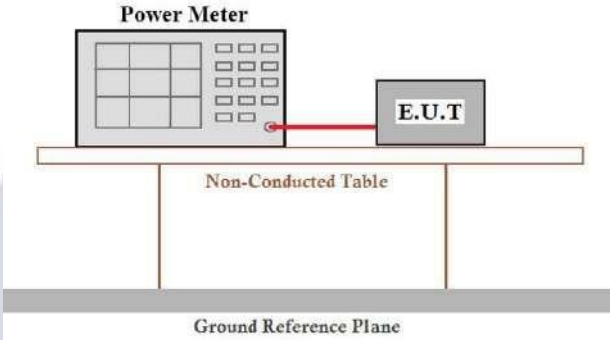
6. MAXIMUM CONDUCTED OUTPUTPOWER

Test Requirement:	FCC Part15 E Section 15.407
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	For the band 5.15-5.25 GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 250mW. For the band 5.745-5.850 GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 30dBm
Test setup:	
Test procedure:	**Measurement using an RF average power meter** (i) MeasurementsmaybeperformedusingawidebandRFpowermeterwitha thermocouple detector or equivalent if all of the conditions listed beloware satisfied a) TheEUTisconfiguredtotransmitcontinuouslyortotransmitwitha constant dutycycle. b) AtalltimeswhentheEUTistransmitting,itmustbetransmittingatits maximum power controllevel. c) The integration period of the power meter exceeds the repetitionperiod of the transmitted signal by at least a factor offive. (ii) Ifthetransmitterdoesnottransmitcontinuously,measurethedutycycle,x, of the transmitter output signal as described in sectionB). (iii) Measuretheaveragepowerofthetransmitter.Thismeasurementisan average over both the on and off periods of thetransmitter. (iv) AdjustthemeasurementindBmbyadding10log(1/x)wherexistheduty cycle (e.g., 10log(1/0.25) if the duty cycle is 25percent).
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details

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6.1. TEST RESULT

CH. No.	Frequency (MHz)	Output Power (dBm)		Limit(dBm)	Result
		802.11a	802.11n (HT20)		
36	5180.00	15.52	14.26	23.98	Pass
44	5220.00	17.42	13.33	23.98	Pass
48	5240.00	15.12	14.79	23.98	Pass
149	5745.00	16.45	14.26	30	Pass
157	5785.00	15.38	13.33	30	Pass
165	5825.00	16.22	14.79	30	Pass

CH. No.	Frequency (MHz)	Output Power (dBm)	Limit(dBm)	Result
		802.11n(HT40)		
38	5190.00	10.48	23.98	Pass
46	5230.00	10.51	23.98	Pass
151	5755.00	6.00	30	Pass
159	5795.00	9.44	30	Pass

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7. Band Edges Measurement

Test Requirement:	FCC Part15 E Section 15.407 and 5.205
Test Method:	ANSI C63.10:2013
Limit:	Undesirable emission limits: (1) For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27dBm/MHz. (2) For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band. (3) For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of −27dBm/MHz. (4) For transmitters operating in the 5.725–5.85 GHz band: (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. (ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.
Test Procedure:	a. The Transmitter output of EUT was connected to the spectrum analyzer. Equipment mode: Spectrum analyzer Detector function: Peak mode SPAN: 100MHz RBW: 1MHz VBW: 1MHz Sweep time= Auto. b. Using Peak Search to read the peak power of Carrier frequencies after Maximum Hold function is completed. c. Find the next peak frequency outside the operation frequency band.
Test setup:	
Test results:	Pass

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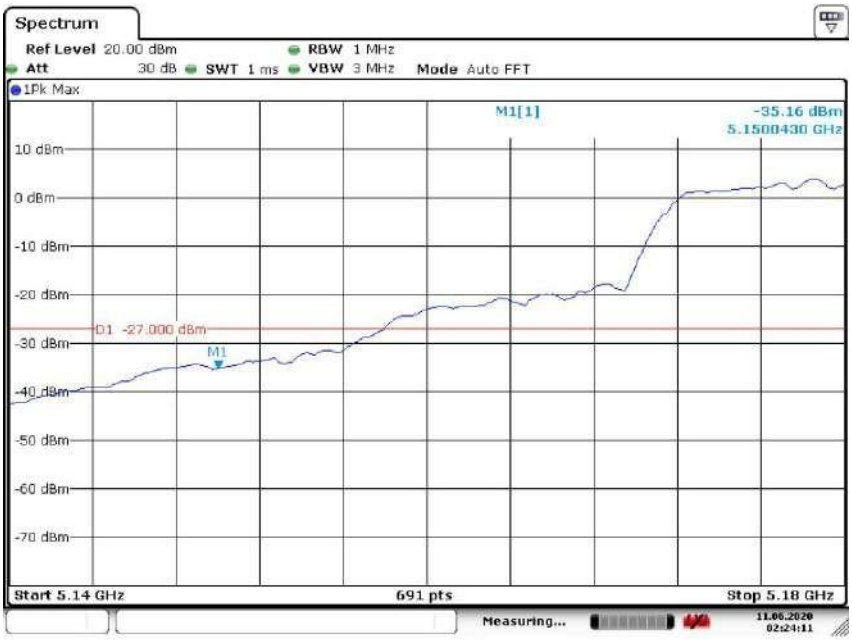
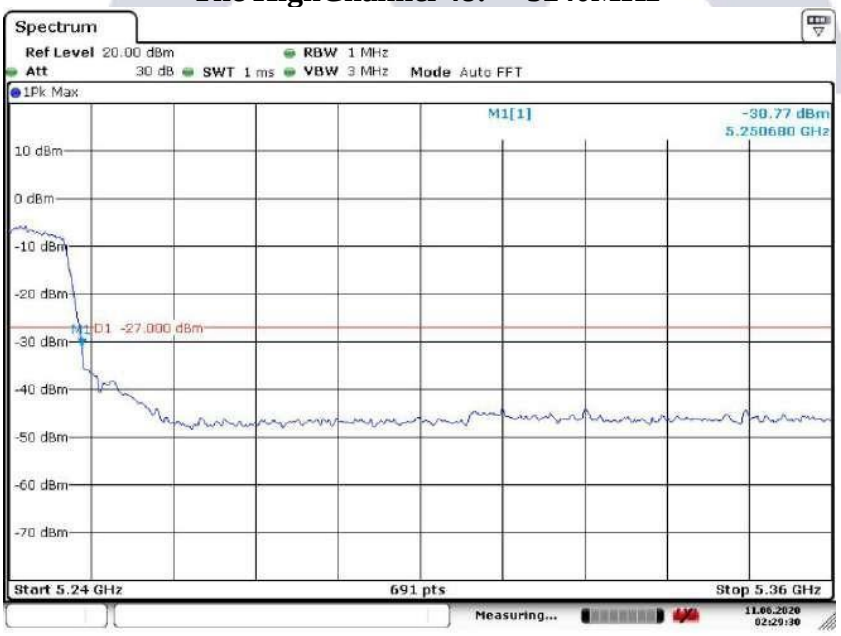
7.2. TESTRESULT

802.11a (5.15GHz-5.25GHz)
The LowChannel 36: 5180MHz



Date: 11.JUN.2020 02:24:10

802.11a (5.15GHz-5.25GHz)
The HighChannel 48: 5240MHz



Date: 11.JUN.2020 02:29:31

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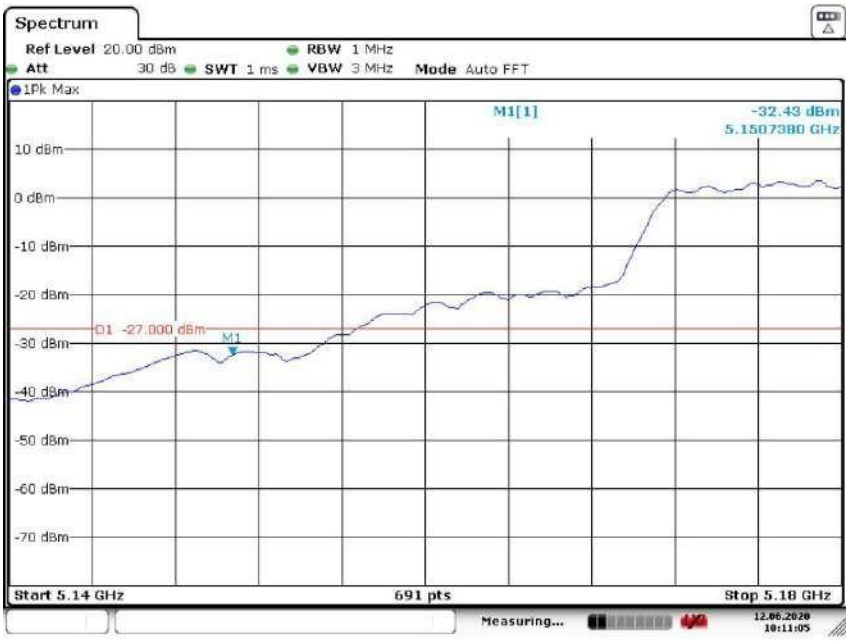
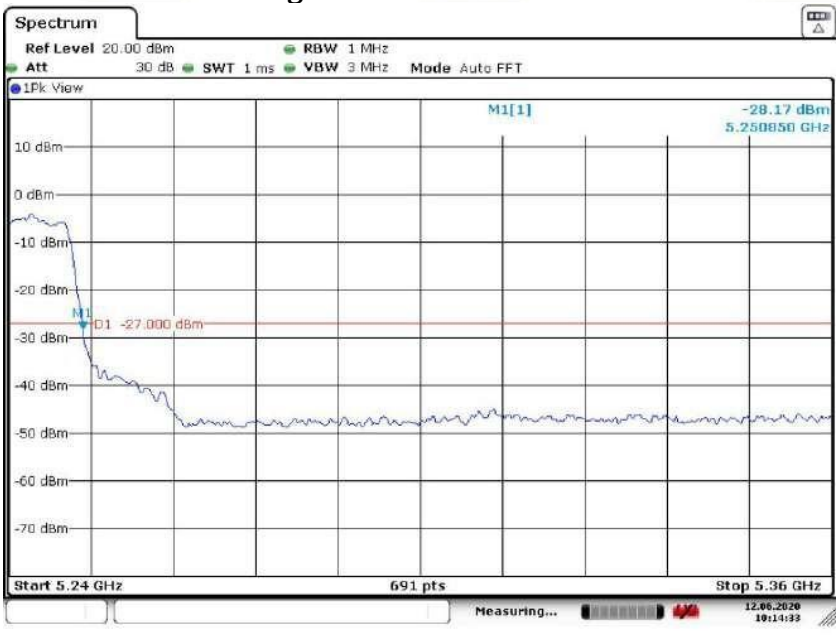
802.11n(20M) (5.15GHz-5.25GHz)
The LowestChannel36: 5180MHz



Date: 12.JUN.2020 10:11:04

802.11n(20M)(5.15GHz-5.25GHz)
The HighChannel48: 5240MHz



Date: 12.JUN.2020 10:14:32

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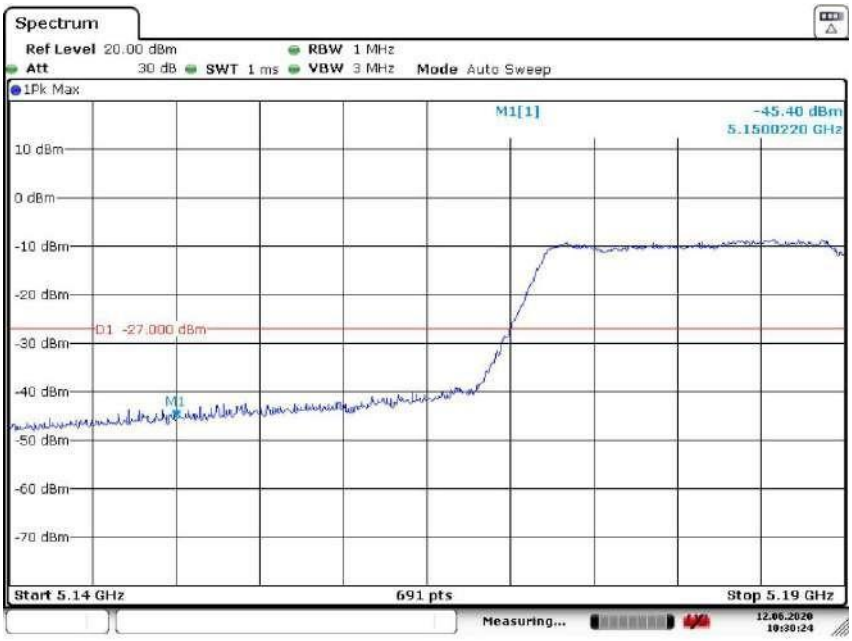
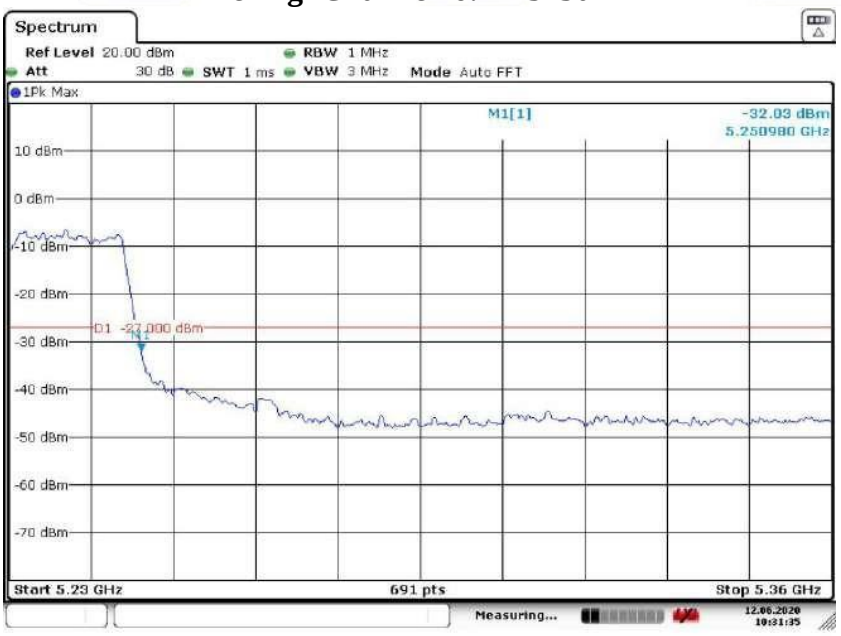
802.11n(40M) (5.15GHz-5.25GHz)
The LowestChannel38: 5190MHz



Date: 12.JUN.2020 10:30:23

802.11n(40M)(5.15GHz-5.25GHz)
The HighChannel46: 5230MHz



Date: 12.JUN.2020 10:31:35

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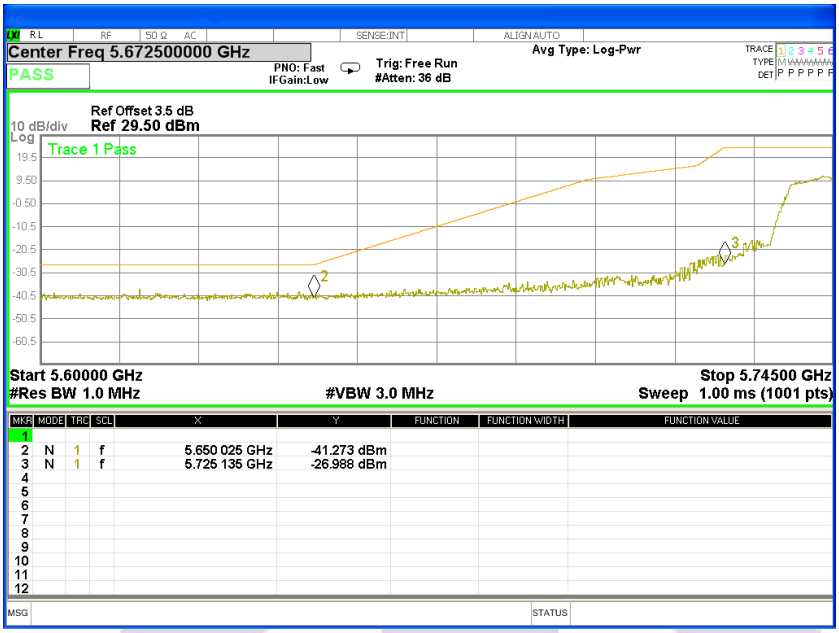
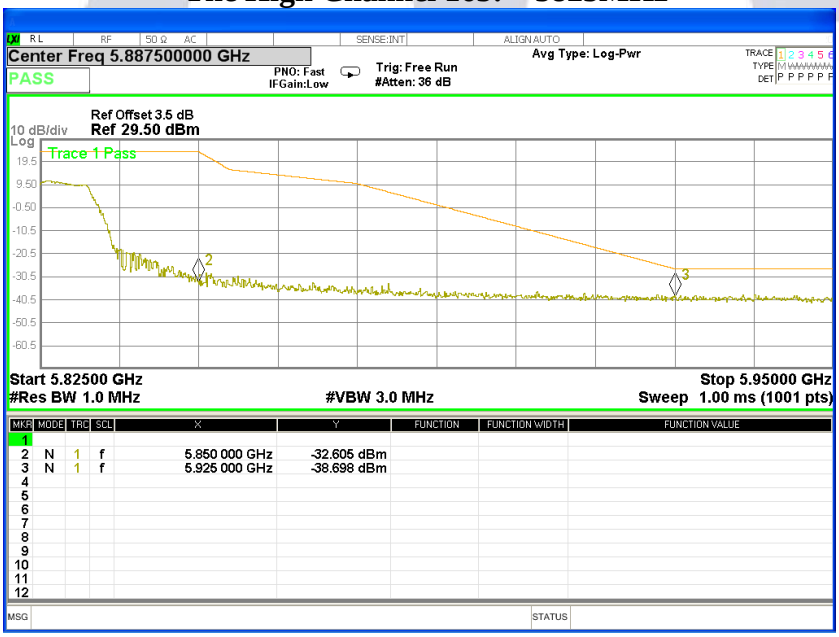
802.11a (5.725GHz-5.85GHz)
The Low Channel149: 5745MHz



802.11a (5.725GHz-5.85GHz)
The High Channel 165: 5825MHz



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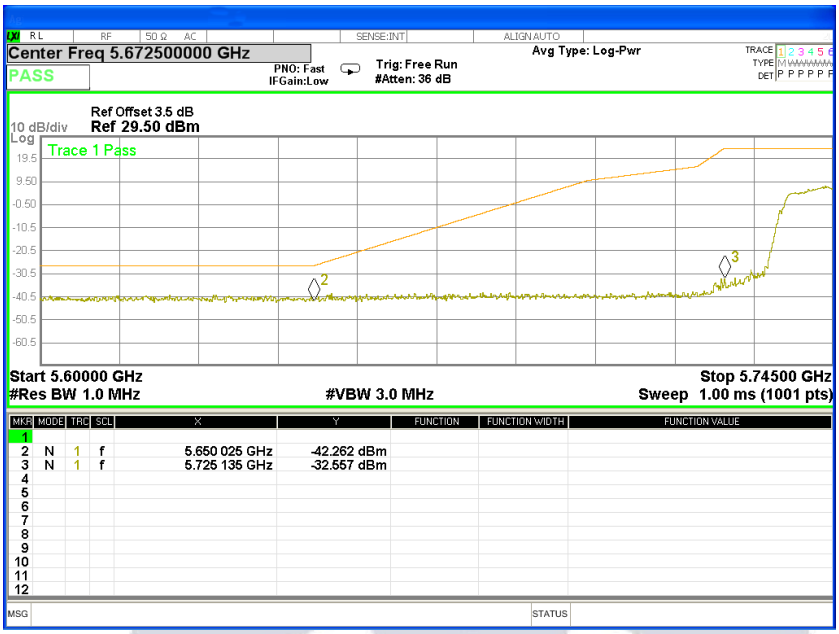
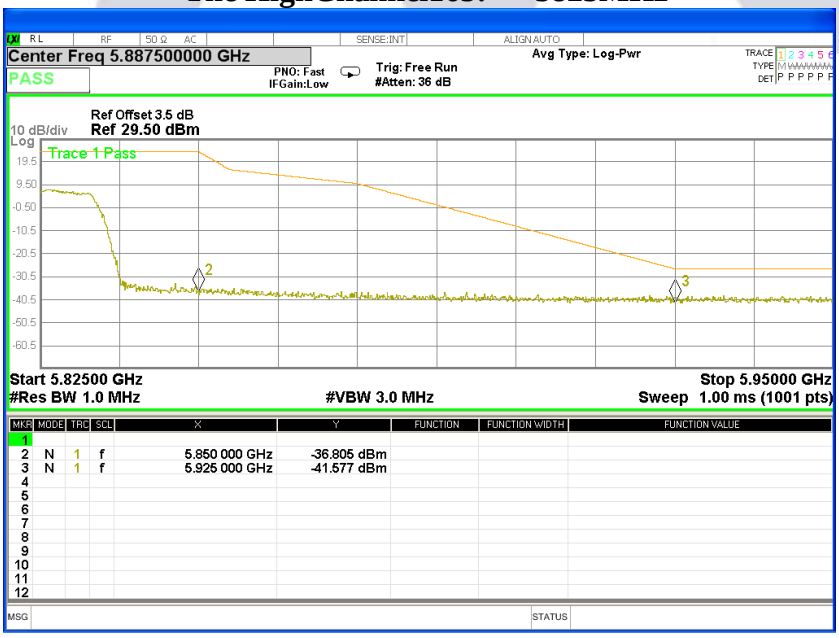
802.11n(20M) (5.725GHz-5.85GHz)
The LowestChannel149: 5745MHz



802.11n(20M) (5.725GHz-5.85GHz)
The HighChannel165: 5825MHz



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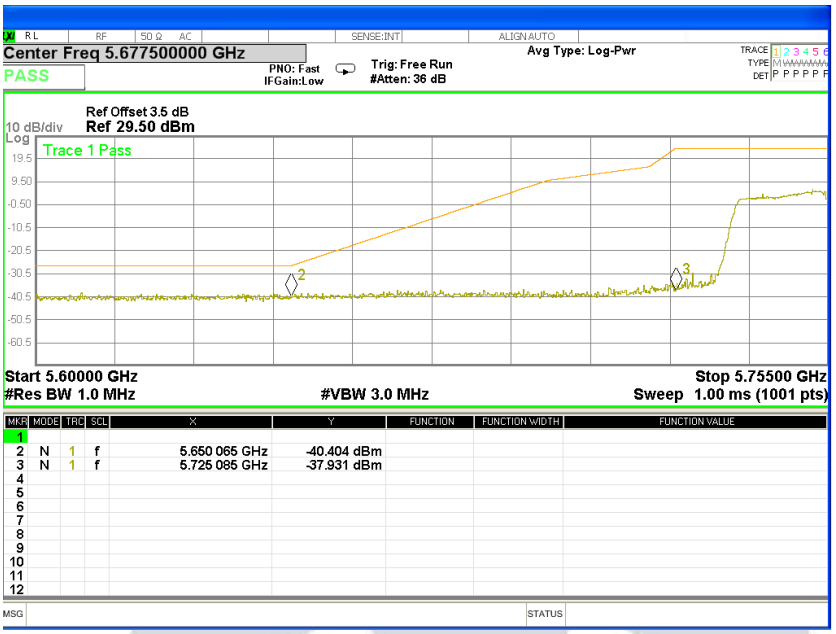
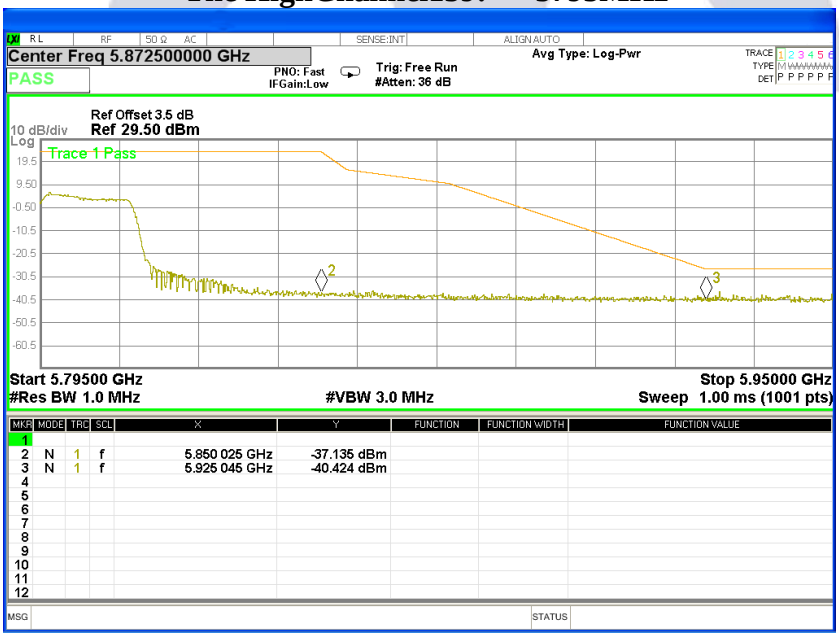
802.11n(40M) (5.725GHz-5.85GHz)
The LowestChannel151: 5755MHz



802.11n(40M) (5.725GHz-5.85GHz)
The HighChannel159: 5795MHz



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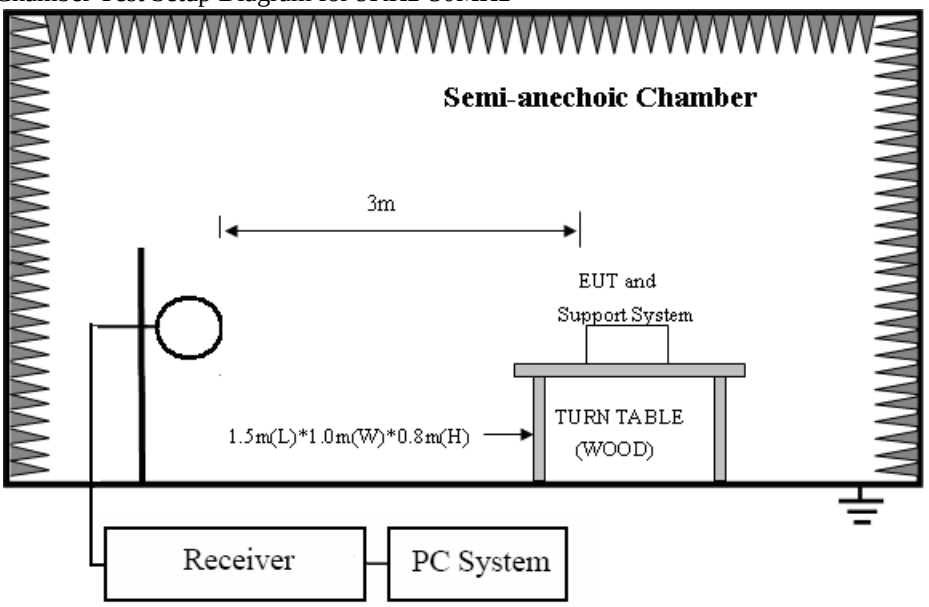
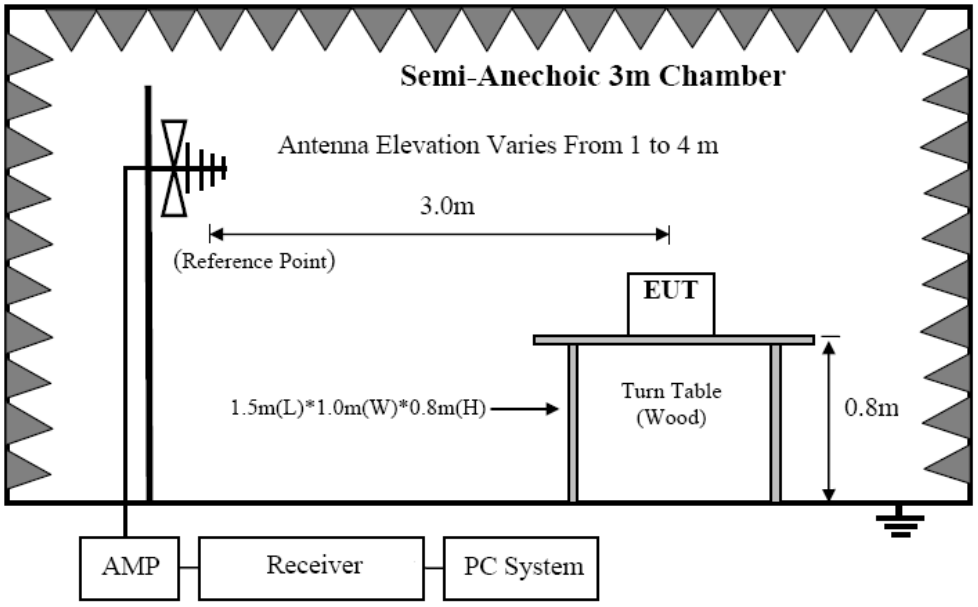
8. RADIATED EMISSION AND (BANDEDGE)MEASUREMENT

8.1. Block diagram of testsetup

In 3m Anechoic Chamber Test Setup Diagram for 9KHz-30MHz



In 3m Anechoic Chamber Test Setup Diagram for 30MHz-1GHz



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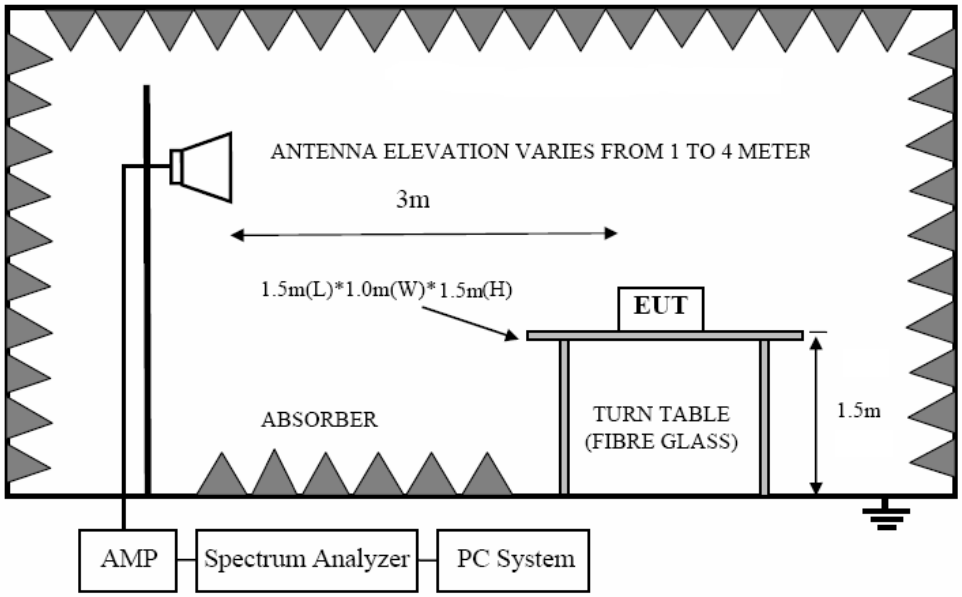
In 3m Anechoic Chamber Test Setup Diagram for frequency above 1GHz



Note: For harmonic emissions test a appropriate high pass filter was inserted in the input port of AMP.

8.2. Limit

9.3.1 FCC 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])

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9.3.2. FCC 15.209Limit.

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
0.009 ~ 0.490	300	2400/F(KHz)	67.6-20log(F)
0.490 ~ 1.705	30	24000/F(KHz)	87.6-20log(F)
1.705 ~ 30.0	30	30	29.54
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Note: (1) The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9-90KHz, 110-490KHz and above 1000MHz. Radiated emissions limits in these three bands are based on measurements employing an average detector.

(2) At frequencies below 30MHz, measurement may be performed at a distance closer then that specified, and the limit at closer measurement distance can be extrapolated by below formula:

$Limit_{3m}(dBuV/m) = Limit_{30m}(dBuV/m) + 40Log(30m/3m)$

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9.3.3. Limit for thisEUT

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 30dB below the fundamental emissions, or comply with 15.209 limits.

8.3. TestProcedure

(1) EUTwasplacedonanon-metallictable,80cmabovethegroundplaneinsideasemi-anechoic chamber.

(2) Setup EUT and assistant system according clause 2.4 and7.2

(3) Test antenna was located 3m(except 18GHz-40GHz was 1m) from the EUT on an adjustable mast, and the antenna used asbelow table.

Test frequency range	Test antenna used
9KHz-30MHz	Active Loop antenna
30MHz-1GHz	Trilog Broadband Antenna
1GHz-18GHz	Double Ridged Horn Antenna(1GHz-18GHz)
18GHz-40GHz	Horn Antenna(18GHz-40GHz)

According ANSI C63.10:2013 clause 6.4.4.2 and 6,5.3, for measurements below 30 MHz, the loop antenna was positioned with its plane vertical from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. And the loop antenna also be positioned with its plane horizontal at the specified distance from the EUT. The center of the loop is 1 m above the ground. for measurement above 30MHz, the Trilog Broadband Antenna or Horn Antenna was located 3m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

(4) Belowpre-scanprocedurewasfirstperformedinordertofindprominentfrequencyspectrumradiated emissions from 9KHz to25GHz:

(a) Scanningthepeakfrequencyspectrumwiththeantennaspecifiedinstep(3),andtheEUTwasrotated 360 degree, the antenna height was varied from 1m to 4m(Except loop antenna, it's fixed 1m above ground.)

(b) Change work frequency or channel of device ifpracticable.

(c) Change modulation type of device ifpracticable.

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(d) new battery is used duringtesting

(e) RotatedEUTthoughthreeorthogonalaxestodeterminetheattitudeofEUTarrangementproduces highestemissions.

Spectrum frequency from 9KHz to 25GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 18GHz to 25GHz, so below final test was performed with frequency range from 9KHz to 18GHz.

(5) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission,therelativepositionsofequipmentsandalloftheinterfacecableswerechangedaccordingto ANSI C63.10 2013 on Radiated Emissiontest.

(6) The emissions from 9KHz to 1GHz were measured based on CISPR QP detector except for the frequency bands 9-90KHz, 110-490KHz, for emissions from 9KHz-90KHz,110KHz-490KHz andabove 1GHz were measured based on average detector, for emissions above 1GHz, peak emissions also be measured and need comply with Peaklimit.

(7) Theemissionsfrom9KHzto1GHz,QPoraveragevalueswereme asuredwithEMIreceiverwithbelow RBW

Frequency band	RBW
9KHz-150KHz	200Hz
150KHz-30MHz	9KHz
30MHz-1GHz	120KHz

（8）For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1MHz, VBW is set at 3MHz for Peak measure; RBW is set at 1MHz, VBW is set at 10Hz for Average measure(according ANSI C63.10:2013 clause 4.2.3.2.3 procedure for average measure). Peak detector is used for Peak and AV measurement both.

According to KDB 789033 v02r01 section G) 1) (d), for For measurements above 1000 MHz @ 3m distance, the limit of field strength is computed as follows:

E[dBuV/m] = EIRP[dBm] + 95.2;

For example, if EIRP = -27dBm

E[dBuV/m] = -27 + 95.2 = 68.2dBuV/m.

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8.4. Test result(Below30MHz)

EUT:	Cherry Gen2 Basic Care (Home Camera)	**Model No.:**	GEN 2 BASIC CARE
Temperature:	24℃	**Relative Humidity:**	55%
Distance:	3m	**Test Power:**	120V 60Hz
Polarization:	--	**Test Result:**	Pass
Test Mode:	Keeping TX mode	**Test By:**	Abhinav

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	P
--	--	--	--	P

Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =20 log (specific distance/test distance)(dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.

Note: N/A

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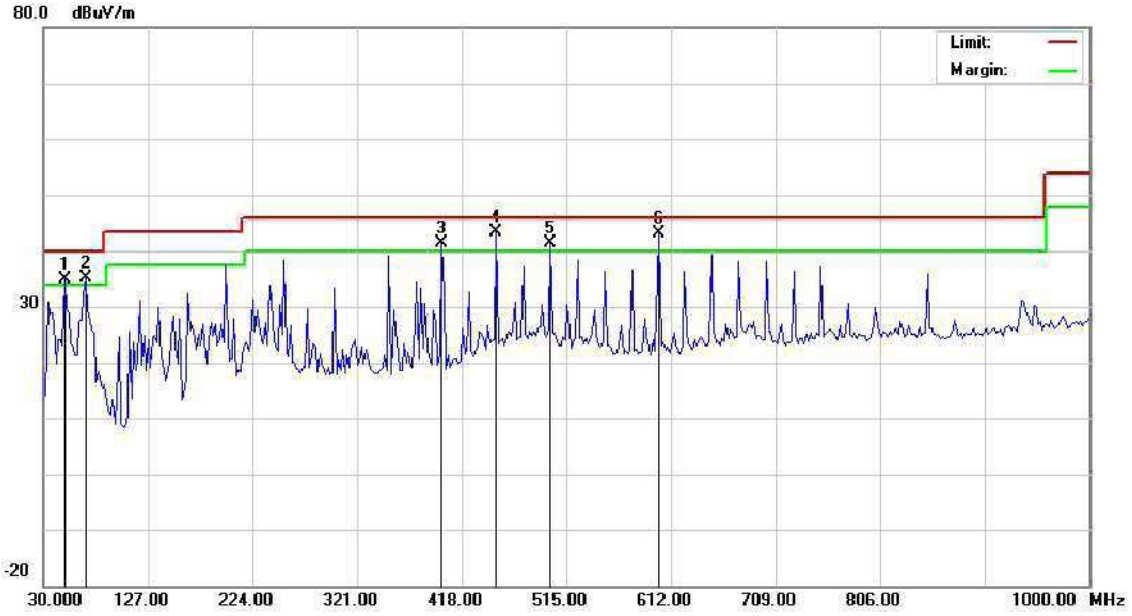
TEST RESULTS (Between 30M – 1000 MHz)

EUT:	Cherry Gen2 Basic Care (Home Camera)	**Model No.:**	GEN 2 BASIC CARE
Temperature:	24	**Relative Humidity:**	55%
Distance:	3m	**Test Power:**	AC120V/60Hz
Polarization:	Vertical	**Test Result:**	Pass
Standard:	(RE)FCC PART 15	**Test By:**	Abhinav
Test Mode:	Keeping TX mode		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	!	49.4388	64.88	-30.07	34.81	40.00	-5.19	QP
2	!	68.8777	64.15	-29.03	35.12	40.00	-4.88	QP
3	!	399.3387	53.84	-12.48	41.36	46.00	-4.64	QP
4	*	449.8798	53.67	-10.30	43.37	46.00	-2.63	QP
5	!	500.4208	51.17	-9.67	41.50	46.00	-4.50	QP
6	!	601.5030	50.31	-7.20	43.11	46.00	-2.89	QP

The test result is calculated as the following:

(1) Result = Reading + CorrectFactor

(2) Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain +Attenuator

(3) Margin = Result -Limit

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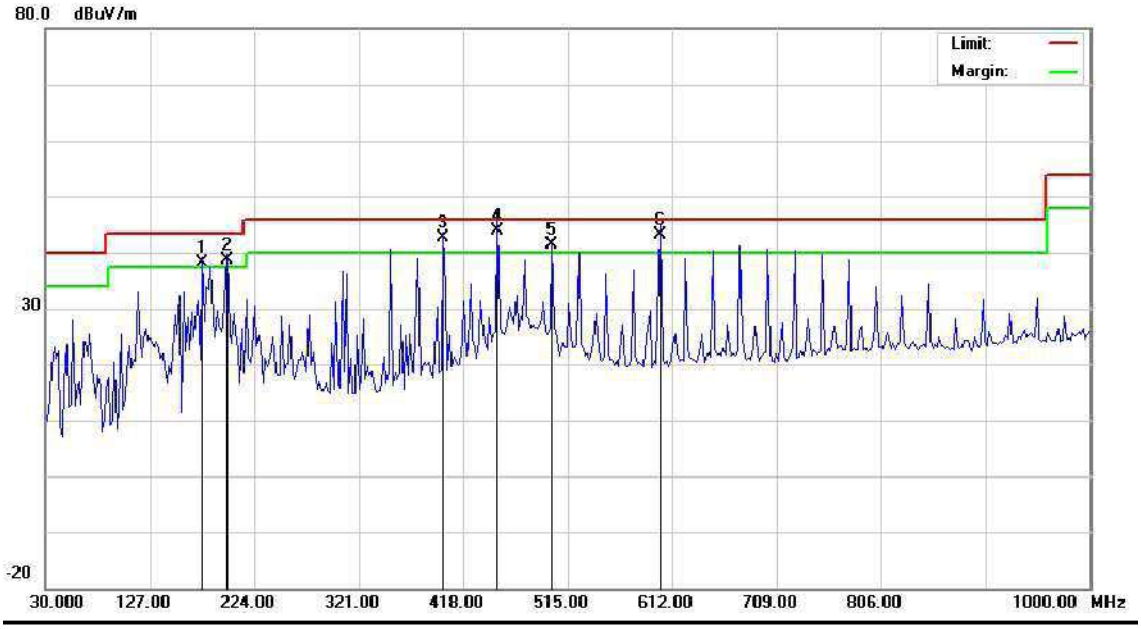
EUT:	Cherry Gen2 Basic Care (Home Camera)	Model No.:	GEN 2 BASIC CARE
Temperature:	24	Relative Humidity:	55%
Distance:	3m	Test Power:	AC120V/60Hz
Polarization:	**Horizontal**	Test Result:	Pass
Standard:	(RE)FCC PART 15	Test By:	Abhinav
Test Mode:	Keeping TX mode		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	!	175.7916	59.01	-20.82	38.19	43.50	-5.31	QP
2	!	199.1182	57.90	-19.17	38.73	43.50	-4.77	QP
3	!	399.3387	55.09	-12.48	42.61	46.00	-3.39	QP
4	*	449.8798	54.19	-10.30	43.89	46.00	-2.11	QP
5	!	500.4208	51.10	-9.67	41.43	46.00	-4.57	QP
6	!	601.5030	50.28	-7.20	43.08	46.00	-2.92	QP

The test result is calculated as the following:

(4) Result = Reading + CorrectFactor

(5) Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain +Attenuator

(6) Margin = Result -Limit

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TEST RESULTS (Above 1000 MHz)

EUT:	Cherry Gen2 Basic Care (Home Camera)	Model No.:	GEN 2 BASIC CARE
Temperature:	24 ℃	Relative Humidity:	55%
Distance:	3m	Test Power:	120V 60Hz
Polarization:		Test Result:	Pass
Test Mode:	TX-802.11a/n20/n40	Test By:	Abhinav

Above 1GHz:

Mode	Polar (H/V)	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV/m)	Margin (dB)	Detector (PK/AV)
802.11a-5180MHz	H	10360	33.99	12.56	46.55	74.00	-27.45	PEAK
	H	15540	35.96	16.45	52.41	74.00	-21.59	PEAK
	V	10360	35.61	12.56	48.17	74.00	-25.83	PEAK
	V	15540	36.23	16.45	52.68	74.00	-21.32	PEAK
802.11a-5220 MHz	H	10440	35.91	12.64	48.55	74.00	-25.45	PEAK
	H	15660	36.04	16.53	52.57	74.00	-21.43	PEAK
	V	10440	37.36	12.64	50.00	74.00	-24.00	PEAK
	V	15660	34.96	16.53	51.49	74.00	-22.51	PEAK
802.11a-5240 MHz	H	10480	33.56	12.68	46.24	74.00	-27.76	PEAK
	H	15720	34.37	16.54	50.91	74.00	-23.09	PEAK
	V	10480	35.69	12.68	48.37	74.00	-25.63	PEAK
	V	15720	34.39	16.54	50.93	74.00	-23.07	PEAK
802.11a-5745 MHz	H	11490	32.60	16.82	49.42	74.00	-24.58	PEAK
	H	17235	30.12	22.93	53.05	74.00	-20.95	PEAK
	V	11490	31.19	16.82	48.01	74.00	-25.99	PEAK
	V	17235	29.54	22.93	52.47	74.00	-21.53	PEAK
802.11a-5785 MHz	H	11570	31.51	16.71	48.22	74.00	-25.78	PEAK
	H	17355	28.09	24.37	52.46	74.00	-21.54	PEAK
	V	11570	30.49	16.71	47.20	74.00	-26.80	PEAK
	V	17355	28.56	24.37	52.93	74.00	-21.07	PEAK
802.11a-5825 MHz	H	11650	33.86	16.61	50.47	74.00	-23.53	PEAK
	H	17475	27.19	25.01	52.20	74.00	-21.80	PEAK
	V	11650	32.14	16.61	48.75	74.00	-25.25	PEAK
	V	17475	28.66	25.01	53.67	74.00	-20.33	PEAK

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Mode	Polar (H/V)	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV/m)	Margin (dB)	Detector (PK/AV)
802.11n HT20-5180MHz	H	10360	32.58	12.56	45.14	74.00	-28.86	PEAK
	H	15540	35.20	16.45	51.65	74.00	-22.35	PEAK
	V	10360	35.34	12.56	47.90	74.00	-26.10	PEAK
	V	15540	36.42	16.45	52.87	74.00	-21.13	PEAK
802.11n HT20-5220MHz	H	10440	35.16	12.64	47.80	74.00	-26.20	PEAK
	H	15660	33.11	16.53	49.64	74.00	-24.36	PEAK
	V	10440	36.10	12.64	48.74	74.00	-25.26	PEAK
	V	15660	35.33	16.53	51.86	74.00	-22.14	PEAK
802.11n HT20-5240MHz	H	10480	35.17	12.68	47.85	74.00	-26.15	PEAK
	H	15720	32.48	16.54	49.02	74.00	-24.98	PEAK
	V	10480	33.75	12.68	46.43	74.00	-27.57	PEAK
	V	15720	33.80	16.54	50.34	74.00	-23.66	PEAK
802.11n HT20-5745MHz	H	11490	31.10	16.82	47.92	74.00	-26.08	PEAK
	H	17235	29.96	22.93	52.89	74.00	-21.11	PEAK
	V	11570	32.20	16.71	48.91	74.00	-25.09	PEAK
	V	17235	27.74	22.93	50.67	74.00	-23.33	PEAK
802.11n HT20-5785MHz	H	11570	29.65	16.71	46.36	74.00	-27.64	PEAK
	H	17355	28.04	24.37	52.41	74.00	-21.59	PEAK
	V	11570	33.26	16.71	49.97	74.00	-24.03	PEAK
	V	17355	29.04	24.37	53.41	74.00	-20.59	PEAK
802.11n HT20-5825MHz	H	11650	32.65	16.61	49.26	74.00	-24.74	PEAK
	H	17475	27.11	25.01	52.12	74.00	-21.88	PEAK
	V	11650	34.86	16.61	51.47	74.00	-22.53	PEAK
	V	17475	27.86	25.01	52.87	74.00	-21.13	PEAK
802.11n HT40-5190MHz	H	10380	36.09	12.58	48.67	74.00	-25.33	PEAK
	H	15570	34.56	16.48	51.04	74.00	-22.96	PEAK
	V	10380	36.54	12.58	49.12	74.00	-24.88	PEAK
	V	15570	33.08	16.48	49.56	74.00	-24.44	PEAK

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Mode	Polar (H/V)	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV/m)	Margin (dB)	Detector (PK/AV)
802.11n HT40-5230MHz	H	10460	36.90	12.66	49.56	74.00	-24.44	PEAK
	H	15690	34.29	16.53	50.82	74.00	-23.18	PEAK
	V	10460	36.17	12.66	48.83	74.00	-25.17	PEAK
	V	15690	33.71	16.53	50.24	74.00	-23.76	PEAK
802.11n HT40-5755MHz	H	11510	32.44	16.78	49.22	74.00	-24.78	PEAK
	H	17265	28.25	23.29	51.54	74.00	-22.46	PEAK
	V	11510	33.22	16.78	50.00	74.00	-24.00	PEAK
	V	17265	29.20	23.29	52.49	74.00	-21.51	PEAK
802.11n HT40-5795MHz	H	11590	31.06	16.69	47.75	74.00	-26.25	PEAK
	H	17385	26.92	24.73	51.65	74.00	-22.35	PEAK
	V	11590	32.29	16.69	48.98	74.00	-25.02	PEAK
	V	17385	27.93	24.73	52.66	74.00	-21.34	PEAK

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor –Preamplifier Factor.

Average measurement was not performed if peak level lower than average limit.

No any other emissions level very low which are attenuated less than 20dB below the limit.

According to 15.31(o), The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this Part.

Hence there no other emissions have been reported.

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8.5. BANDEDGE

Peak value:

Test mode:		802.11a		Test channel:		Lowest	
Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector	Antenna Pol.
5150	46.02	7.18	53.20	68.2	-15.00	PK	H
5150	44.16	7.18	51.34	68.2	-16.86	PK	V
Test mode:		802.11a		Test channel:		Highest	
Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector	Antenna Pol.
5350	44.89	7.2	52.09	68.2	-16.11	PK	H
5350	50.69	7.2	57.89	68.2	-10.31	PK	V

Peak value:

Test mode:		802.11n(HT20)		Test channel:		Lowest	
Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector	Antenna Pol.
5150	48.00	7.18	55.18	68.2	-13.02	PK	H
5150	55.59	7.18	62.77	68.2	-5.43	PK	V
Test mode:		802.11n(HT20)		Test channel:		Highest	
Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector	Antenna Pol.
5350	44.76	7.2	51.96	68.2	-16.24	PK	H
5350	50.83	7.2	58.03	68.2	-10.17	PK	V

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Peak value:

Test mode:		802.11n(HT40)		Test channel:		Lowest	
Frequency (MHz)	Reading Level	Factor	Measure Level	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Pol.
5150	43.69	7.18	50.87	68.2	-17.33	PK	H
5150	43.76	7.18	50.94	68.2	-17.26	PK	V
Test mode:		802.11n(HT40)		Test channel:		Highest	
Frequency (MHz)	Reading Level	Factor	Measure Level	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Pol.
5350	44.94	7.2	52.14	68.2	-16.06	PK	H
5350	47.26	7.2	54.46	68.2	-13.74	PK	V

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Testmode:	802.11a	Test channel:	Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725	40.64	8.79	49.43	74	-24.57	Horizontal
5741.35	83.37	8.57	91.94	N/A	N/A	Horizontal
5725	42.02	8.79	50.81	74	-23.19	Vertical
5741.35	85.36	8.57	93.93	N/A	N/A	Vertical

Average

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725	30.38	8.79	39.17	54	-14.83	Horizontal
5741.35	73.26	8.57	81.83	N/A	N/A	Horizontal
5725	31.08	8.79	39.87	54	-14.13	Vertical
5741.35	75.73	8.57	84.30	N/A	N/A	Vertical

Testmode:	802.11a	Test channel:	Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5826.2	78.96	8.79	87.75	N/A	N/A	Horizontal
5850	38.41	8.82	47.23	74.00	-26.77	Horizontal
5826.2	86.18	8.79	94.97	N/A	N/A	Vertical
5850	40.16	8.82	48.98	74.00	-25.02	Vertical

Average

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5826.2	70.58	8.79	79.37	N/A	N/A	Horizontal
5850	28.49	8.82	37.31	54.00	-16.69	Horizontal
5826.2	76.66	8.79	85.45	N/A	N/A	Vertical
5850	29.36	8.82	38.18	54.00	-15.82	Vertical

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Testmode: 802.11n(HT20) Test channel: Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725	38.31	8.79	47.10	74.00	-26.90	Horizontal
5742.19	77.96	8.57	86.53	N/A	N/A	Horizontal
5725	40.06	8.79	48.85	74.00	-25.15	Vertical
5742.19	85.24	8.57	93.81	N/A	N/A	Vertical

Average

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725	29.37	8.79	38.16	54.00	-15.84	Horizontal
5742.19	69.02	8.57	77.59	N/A	N/A	Horizontal
5725	30.36	8.79	39.15	54.00	-14.85	Vertical
5742.19	76.22	8.57	84.79	N/A	N/A	Vertical

Testmode: 802.11n(HT20) Test channel: Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5826.2	78.32	8.79	87.11	N/A	N/A	Horizontal
5850	38.57	8.82	47.39	74.00	-26.61	Horizontal
5826.2	36.18	8.79	44.97	N/A	N/A	Vertical
5850	41.31	8.82	50.13	74.00	-23.87	Vertical

Average

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5826.2	69.04	8.79	77.83	N/A	N/A	Horizontal
5850	29.99	8.82	38.81	54.00	-15.19	Horizontal
5826.2	74.38	8.79	83.17	N/A	N/A	Vertical
5850	30.33	8.82	39.15	54.00	-14.85	Vertical

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Testmode: 802.11n(HT40) Test channel: Lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725	38.44	8.52	46.96	74.00	-27.04	Horizontal
5745	75.71	8.57	84.28	N/A	N/A	Horizontal
5725	37.91	8.52	46.43	74.00	-27.57	Vertical
5745	84.60	8.57	93.17	N/A	N/A	Vertical

Average

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725	31.43	8.52	39.95	54.00	-14.05	Horizontal
5745	69.72	8.57	78.29	N/A	N/A	Horizontal
5725	29.24	8.52	37.76	54.00	-16.24	Vertical
5745	75.56	8.57	84.13	N/A	N/A	Vertical

Testmode: 802.11n(HT40) Test channel: Highest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5784.88	79.09	8.68	87.77	N/A	N/A	Horizontal
5850	39.47	8.82	48.29	74.00	-25.71	Horizontal
5784.88	85.16	8.68	93.84	N/A	N/A	Vertical
5850	43.42	8.82	52.24	74.00	-21.76	Vertical

Average

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5784.88	71.92	8.68	80.60	N/A	N/A	Horizontal
5850	29.54	8.82	38.36	54.00	-15.64	Horizontal
5784.88	74.37	8.68	83.05	N/A	N/A	Vertical
5850	28.54	8.82	37.36	54.00	-16.64	Vertical

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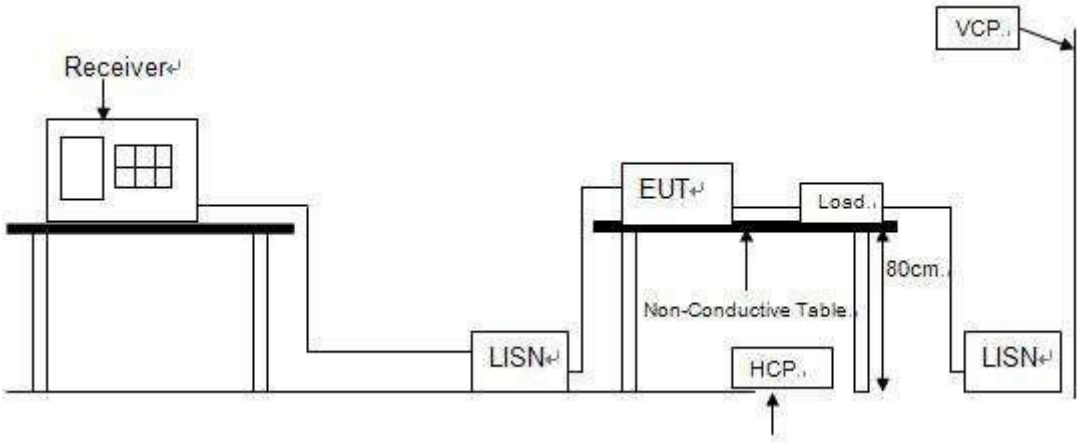
9. POWER LINE CONDUCTEDEMISSION

9.1. Block diagram of testsetup



9.2. Power Line Conducted Emission Limits(ClassB)

Frequency	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Note 1: * Decreasing linearly with logarithm of frequency.

Note2:Thelowerlimitshallapplyatthetransitionfrequencies.

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9.3. TestProcedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 10.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 KHz.

9.4. TestResult

PASS. (See below detailed test result)

Note1: All emissions not reported below are too low against the prescribed limits.

Note2:“----- ” means peakdetection;“------” mans averagedetection

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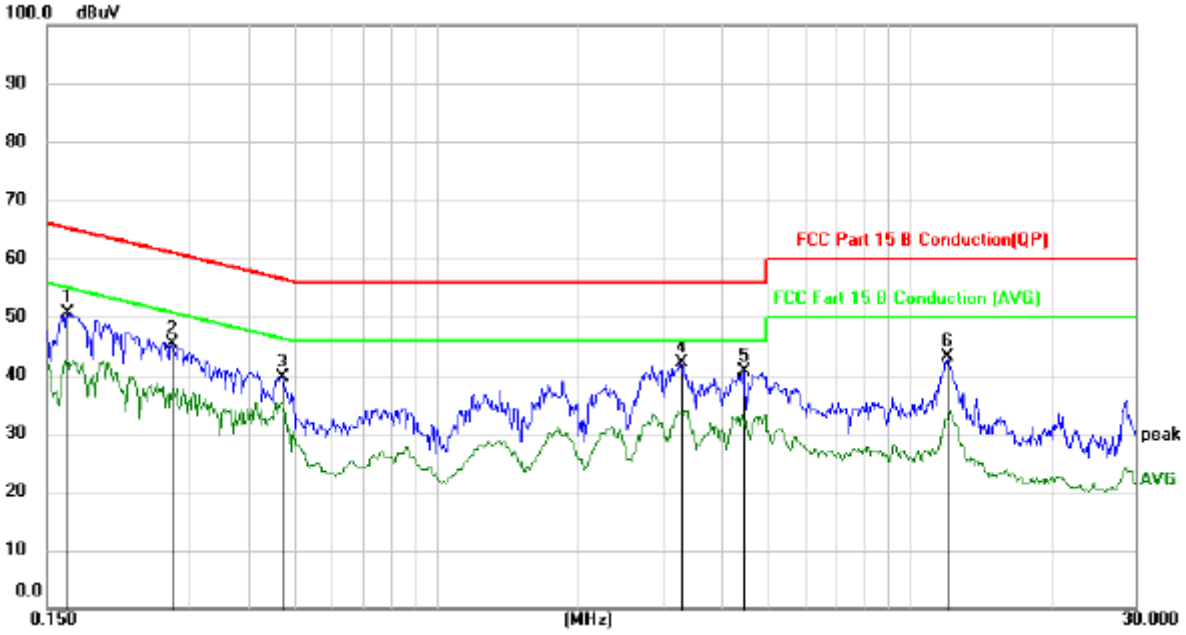
EUT:	Cherry Gen2 Basic Care (Home Camera)	Model No.:	GEN 2 BASIC CARE
Temperature:	23℃	Relative Humidity:	52%
Probe:	N	Test Power:	AC 120V/60Hz
Test Time:	2020-06-08	Test Result:	Pass
Standard:	(CE)FCC PART 15 class B_QP		
Test Mode:	TX		
Note:			



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1657	35.06	15.47	50.53	65.17	-14.64	peak
2		0.2748	29.81	15.45	45.26	60.97	-15.71	peak
3		0.4713	24.24	15.41	39.65	56.49	-16.84	peak
4	*	3.2764	26.70	15.41	42.11	56.00	-13.89	peak
5		4.4555	25.29	15.41	40.70	56.00	-15.30	peak
6		11.9750	27.73	15.36	43.09	60.00	-16.91	peak

The test result is calculated as the following:

(1) Result = Reading + CorrectFactor

(2) Correct Factor = (LISN, ISN, PLC or Current Probe) Factor + Cable Loss+Attenuator

(3) Margin = Result -Limit

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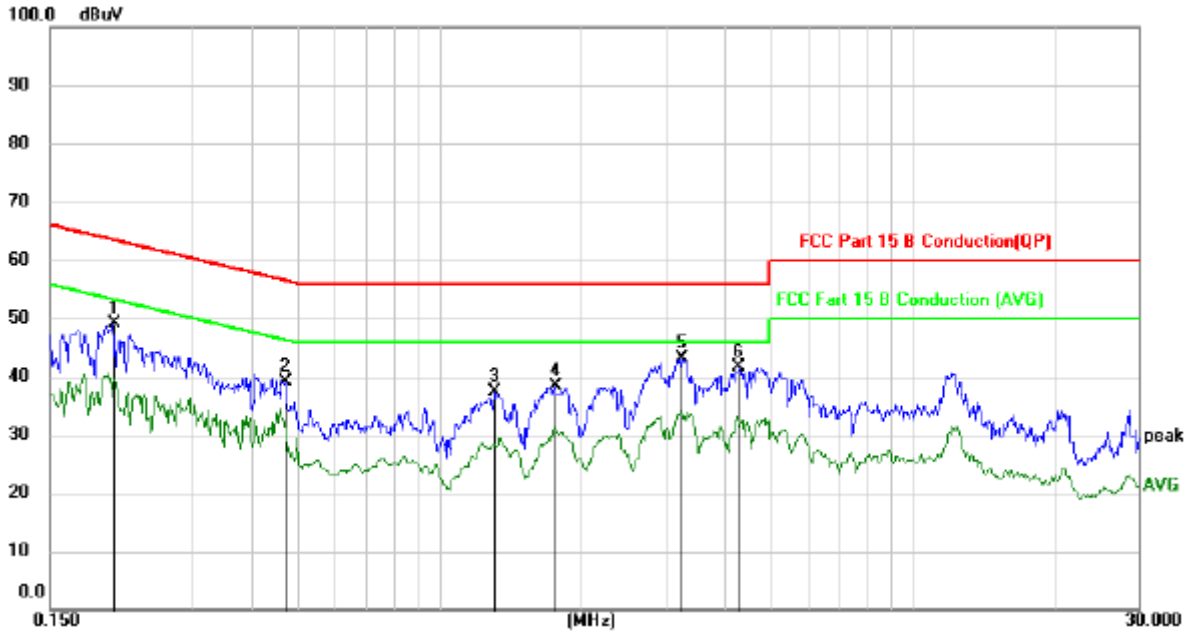
EUT:	Cherry Gen2 Basic Care (Home Camera)	Model No.:	GEN 2 BASIC CARE
Temperature:	23℃	Relative Humidity:	52%
Probe:	L1	Test Power:	AC 120V/60Hz
Test Time:	2020-06-08	Test Result:	Pass
Standard:	(CE)FCC PART 15 class B_QP		
Test Mode:	TX		
Note:			



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2042	33.62	15.47	49.09	63.43	-14.34	peak
2		0.4713	23.82	15.41	39.23	56.49	-17.26	peak
3		1.3010	21.96	15.40	37.36	56.00	-18.64	peak
4		1.7465	23.09	15.41	38.50	56.00	-17.50	peak
5	*	3.2449	27.81	15.41	43.22	56.00	-12.78	peak
6		4.2800	26.25	15.41	41.66	56.00	-14.34	peak

The test result is calculated as the following:

(1) Result = Reading + CorrectFactor

(2) Correct Factor = (LISN, ISN, PLC or Current Probe) Factor + Cable Loss+Attenuator

(3) Margin = Result -Limit

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10. ANTENNAREQUIREMENTS

10.1. Limit

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

10.2. EUTANTENNA

The antennas used for this product are built-in undetachable PCB antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 3.2 dBi. and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

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11. PHOTOGRAPHS

11.1. RADIATED SPURIOUS EMISSION TESTSETUP

Below1GHz:

Above1GHz:

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11.2. CONDUCTED EMISSION TESTSETUP

12. APPENDIX-PHOTOGRAPHS OF EUT CONSTRUCTIONALDETAILS

*** Constructional Details is not applicable ***

****End of report****