MOTOROLA SOLUTIONS

CERTIFICATE 2518.08

SAMM 825

MOTOROLA PENANG ADV. COMM. LABORATORY
Motorola Solutions Malaysia Sdn. Bhd.
Plot 2A Medan Bayan Lepas,
Mukim 12, S.W.D. 11900 Bayan Lepas,
Penang, Malaysia.

FCC / IC TEST REPORT

Report Revision : Rev.C

Date/s Tested	:	03-May-2024 - 01-August-2024
Manufacturer/Location	:	Motorola Solutions Malaysia SDN BHD
Manufacturer Address	:	Plot 2A Medan Bayan Lepas, Mukim 12 SWD, 11900 Bayan Lepas, Penang, Malaysia
Requestor	:	CADOGAN SEAN
Product Type	:	Hand-held
Product Marketing Name (PMN)	:	APX N70
Hardware Version Identification Number (HVIN)	:	H35KET9PW8AN & H35KET9PW8AN-H
Frequency Band	:	5180-5825 MHz
Firmware Version Identification Number (FVIN)	:	D03.75.58
Applicant Name	:	Motorola Solutions Inc
Applicant Address	:	Plot 2A, Medan Bayan Lepas, Mukim 12 SWD, 11900 Bayan Lepas, Penang, Malaysia
FCC Registrations	:	461337

The equipment was tested accordance to the requirement listed below:

(5GHz Wi-Fi) **FCC 47 CFR Part 15 Subpart E**	**PASS**

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Revision History	Description	Date	Originator
Rev. A	Initial Report	**01-August-2024**	**Alieya**
Rev. B	Updated summary table	**16-August-2024**	**Alieya**
Rev. C	Rectified equipment type on power, psd and bandwidth heading on straddle	**11-September-2024**	**Vincent**

1.0. Summary of Test Results

FCC Clause	IC Clause	Test Item	Result	Remarks	Serial Number tested	Tested by
15.407 (a)(1/2/3)	RSS 247 6.2	Maximum Conducted Output Power (Average)	Pass	Highest output power: 802.11a: 18.059 dBm (63.96mW) 802.11n20/ac20: 18.293 dBm (67.50mW) 802.11n40/ac40: 18.241 dBm (66.70mW) 802.11ac80: 18.162 dBm (65.49mW)	022TAD0722	Alieya
15.407(a) (1/2/3)	RSS 247 6.2	Maximum Power Spectral Density	Pass	Meet the requirement limit.	022TAD0722	Alieya
15.407 (e)	RSS 247 6.2.4	6dB Bandwidth	Pass	a20: 16.765MHz (16M8D1D) n20/ac20: 17.940MHz (17M9D1D) n40/ac40: 36.427MHz (36M4D1D) ac80: 75.716MHz (75M7D1D)	022TAD0722	Alieya
15.407 (g)	RSS Gen 6.11	Frequency Stability	Pass	Meet the requirement limit.	022TAD0722	Alieya
15.407 (b) (1/2/3/4/6)	RSS 247 6.2	Band Edge Radiated Spurious Emission Measurement	Pass	Worst case emission: 50.7358dBuV/m (margin: 3.2642dB)	022TAF1508	Nazrin & Rezza
15.407 (b) (1/2/3/4/6)	RSS 247 6.2	Radiated Spurious Emission Measurement	Pass	Worst case emission: 53.886dBuV/m (margin: 0.114dB, noise floor)	022TAF1508	Nazrin & Rezza
15.207 15.407 (b)(6)	RSS Gen 8.8	AC Powerline Conducted Emission	Pass	Meet the requirement limit.	022TAF1508	Shidee
15.203	-	Antenna requirement	Pass	Internal antenna is not accessible to the end-user	NA	NA

2.0. Measurement Uncertainty

Measurement	**Frequency**	**Expended Uncertainty (k=1.96) (±dB)**
AC Power Line Conducted Spurious Emission	150KHz ~ 30MHz	3.43
Radiated Emissions up to 1 GHz	30MHz ~ 200MHz	5.88
	200MHz ~ 1000MHz	5.88
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	5.84
	18GHz ~ 25GHz	6.02
Conducted Spurious Emissions	9kHz ~ 12.75GHz	2.82

3.0. Equipment List

Bluetooth ATE # 1 (SW Version: Ate Main_3.1.12_R1)

Description	Model	Serial Number	Calibration Date	Calibration Due Date
CHAMBER	SH-641	92005573	1-April-24	1-April-25
POWER SUPPLY	6652A	3541A02371	18-Jul-23	18-Jul-24
PULSE SENSOR	MA2411B	1726287	22-Aug-23	22-Aug-24
PULSE POWER METER	ML2495A	1845014	16-Aug-23	16-Aug-24
SPECTRUM ANALYZER	E4440A	MY46185415	5-Jan-24	5-Jan-25

Radiated Emission Station (SW Version: EMC FCC RE v1.6.5)

Description	Model	Serial Number	Calibration Date	Calibration Due Date
DRG HORN FREQ.	SAS-571	1143	8-Mar-23	8-Mar-25
DRG HORN FREQ.	SAS-571	720	18-Apr-23	18-Apr-25
DC Power Supply	NR973A	MY54180189	30-Aug-23	30-Aug-24
SIGNAL GENERATOR	SMB 100A	182511	4-Sep-21	4-Sep-24
EMI TEST RECEIVER	ESW44	101731	11-Aug-23	11-Aug-24
BILOG ANTENNA	CBL6112B	2950	14-Dec-23	14-Dec-24
BILOG ANTENNA	CBL6112B	2964	25-Sep-23	25-Sep-24
DATA LOGGER THERMOHYGROMETER	SDL500	A.016800	26-Jun-24	26-Jun-25
BROAD-BAND HORN ANTENNA	BBHA9170	BBHA9170143	28-Aug-23	28-Aug-24
PREAMPLIFIER	PAM-0118P	574	19-Mar-24	19-Mar-25
LOOP ANTENNA	6502	00208416	26-Oct-23	26-Oct-24
5m SEMI-ANECHOIC CHAMBER	S800-HX	J2308	Not required	Not required
SYSTEM CONTROLLER	SC104V	050806-1	Not required	Not required
TURNTABLE FLUSH MOUNT 2M	FM2011	NA	Not required	Not required
ANTENNA POSITIONING TOWER	TLT2	NA	Not required	Not required
PREAMPLIFIER 18-40GHz	Miteq Hi Gain Sucoflex	002	Not required	Not required

AC Powerline Station (SW Version: EMC32 Ver.10.60.10)

Description	Model	Serial Number	Calibration Date	Calibration Due Date
DATA LOGGER	DSB	16344143	21-Jun-23	21-Jun-24
V-NETWORK 2-LINE	ENV216V	101039	13-Dec-23	13-Dec-24
EMI TEST RECEIVER	ESIB26	100017	4-Dec-23	4-Dec-24
PROGRAMMABLE AC SOURCE	61604	ABR000000926	25-Jul-23	25-Jul-24

4.0. General Information

General Description of EUT:

Product	Hand-held
Brand	Motorola Solutions
Test Model	APX N70
Power Supply Rating	7.5Vdc (Battery)
Mode of operation	WLAN 5GHz
Modulation Type	QPSK, BPSK, 16QAM, 64QAM, 256QAM
Modulation Technology	OFDM
Transfer Rate	802.11a: 6.0/9.0/12.0/18.0/24.0/36.0/48.0/54.0 Mbps 802.11n: up to MCS7 802.11ac: up to MCS9
Operating Frequency	5.180 ~ 5.240 GHz, 5.260 ~ 5.320 GHz, 5.50 ~ 5.720 GHz, 5.745 ~ 5.825 GHz
Output Power (26 EBW or 99% OBW)	79.43 mW for 5.180 ~ 5.240 GHz 79.43 mW for 5.260 ~ 5.320 GHz 79.43 mW for 5.50 ~ 5.720 GHz 79.43 mW for 5.745 ~ 5.825 GHz
Antenna Type	Stamped metal
SW Version	D03.75.58

Note:

The EUT contains following accessory devices and data cable:

Item	Brand	Model or P/N
UL 3650mAH (using RN 2170 Li-Ion cell)	MOTOROLA	PMNN4818A
VHF ¼ wave antenna 136-174MHz	MOTOROLA	AN000414A01
CHARGER, CHGR DEKSTOP SINGLE UNIT IMPRES 2 EXT PS BASE ONLY	MOTOROLA	PMPN4590A
CHARGER DEKSTOP MULTI UNIT IMPRES 2 6 DISPLAY INT PS US	MOTOROLA	PMPN4591A

Description of Test Modes:

For 5180 to 5240 MHz:

Channels for 802.11a, 802.11n, 802.11ac (HT20, VHT20)

Channel	Frequency (MHz)
36	5180
40	5200
44	5220
48	5240

Channels for 802.11n, 802.11ac (HT40, VHT40)

Channel	Frequency (MHz)
38	5190
46	5230

Channels for 802.11ac (VHT80)

Channel	Frequency (MHz)
42	5210

For 5260 to 5320 MHz:

Channels for 802.11a, 802.11n, 802.11ac (HT20, VHT20)

Channel	Frequency (MHz)
52	5260
56	5280
60	5300
64	5320

Channels for 802.11n, 802.11ac (HT40, VHT40)

Channel	Frequency (MHz)
54	5270
62	5310

Channels for 802.11ac (VHT80)

Channel	Frequency (MHz)
58	5290

For 5500 to 5720 MHz:

Channels for 802.11a, 802.11n, 802.11ac (HT20, VHT20)

Channel	Frequency (MHz)
100	5500
104	5520
108	5540
112	5560
116	5580
120	5600
124	5620
128	5640
132	5660
136	5680
140	5700
144	5720

Channels for 802.11n, 802.11ac (HT40, VHT40)

Channel	Frequency (MHz)
102	5510
110	5550
118	5590
126	5630
134	5670
142	5710

Channels for 802.11ac (VHT80)

Channel	Frequency (MHz)
106	5530
122	5610
138	5690

For 5745 to 5825 MHz:

Channels for 802.11a, 802.11n, 802.11ac (HT20, VHT40)

Channel	Frequency(MHz)
149	5745
153	5765
157	5785
161	5805
165	5825

Channels for 802.11n, 802.11ac (HT40, VHT40)

Channel	Frequency(MHz)
151	5755
159	5795

Channels for 802.11ac (VHT80)

Channel	Frequency (MHz)
155	5775

General Description of Applied Standards
The EUT is a RF Product. According to the specifications of the manufacturer, the EUT is to comply with the requirements of the following standards:

FCC Part15, Subpart E (15.407)
789033 D02 General UNII Test Procedures New Rules v01r04
644545 D03 Guidance for IEEE 802 11ac New Rules v01
ANSI C63.10-2013

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

Deviation from standard
Not applicable as no deviation from standard test method

Modifications to EUT
No modifications were done to the UUT to facilitate the tests in this report.

Antenna gain disclaimer
Antenna gain information is provided by customer. The validity of the results is dependent upon this information. The lab will not be held accountable in the event the supplied information affects compliance

5.0. Test Mode Applicability and Test Channel Detail

EUT Configure Mode	Applicable to				Description
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	Power from adapter
B	x	√	x	x	Power from carcharger (12Vdc)
C	x	√	x	x	Power from carcharger (24Vdc)

Where:

RE≥1G: Radiated Emission above 1GHz & Band edge Measurement

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

Note: The EUT had been pre-scanned on the position of each 3 axis planes. The worst case was found when positioned on **Y-plane.**

Radiated Emission Test (Above 1GHz)

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

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

EUT Configure Mode	Frequency Band	MODE	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	5180-5240	802.11a	36-48	36,44,48	OFDM	BPSK	6.0
-	5180-5240	802.11n/ac (HT20, VHT20)	36-48	36,44,48	OFDM	BPSK	6.5
-	5180-5240	802.11n/ac (HT40,VHT40)	38-46	38,46	OFDM	BPSK	13.5
-	5180-5240	802.11ac (VHT80)	42	42	OFDM	BPSK	29.3
-	5260-5320	802.11a	52-64	52,60,64	OFDM	BPSK	6.0
-	5260-5320	802.11n/ac (HT20, VHT20)	52-46	52,60,64	OFDM	BPSK	6.5
-	5260-5320	802.11n/ac (HT40,VHT40)	54-62	54,62	OFDM	BPSK	13.5
-	5260-5320	802.11ac (VHT80)	58	58	OFDM	BPSK	29.3
-	5500-5700	802.11a	100-140	100,116,140	OFDM	BPSK	6.0
-	5500-5720	802.11n/ac (HT20, VHT20)	100-144	100,116,144	OFDM	BPSK	6.5
-	5500-5720	802.11n/ac (HT40,VHT40)	102-142	102,110,142	OFDM	BPSK	13.5
-	5500-5720	802.11ac (VHT80)	106-138	106,122,138	OFDM	BPSK	29.3
-	5745-5825	802.11a	149-165	149,157,165	OFDM	BPSK	6.0
-	5745-5825	802.11n/ac (HT20, VHT20)	149-165	149,157,165	OFDM	BPSK	6.5
-	5745-5825	802.11n/ac (HT40,VHT40)	151-159	151,159	OFDM	BPSK	13.5
-	5745-5825	802.11ac (VHT80)	155	155	OFDM	BPSK	29.3

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	Frequency band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36	OFDM	BPSK	6.0
-	802.11a	5260-5320	52 to 64		OFDM	BPSK	6.0
-	802.11a	5500-5700	100 to 140		OFDM	BPSK	6.0
-	802.11a	5745-5825	149 to 165		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	Frequency band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36	OFDM	BPSK	6.0
-	802.11a	5260-5320	52 to 64		OFDM	BPSK	6.0
-	802.11a	5500-5700	100 to 140		OFDM	BPSK	6.0
-	802.11a	5745-5825	149 to 165		OFDM	BPSK	6.0

Antenna Port Conducted Measurement:

☒This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
☒Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
☒Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Frequency Band	MODE	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
-	5180-5240	802.11a	36-48	36,44,48	OFDM	BPSK	6.0
-	5180-5240	802.11n/ac (HT20, VHT20)	36-48	36,44,48	OFDM	BPSK	6.5
-	5180-5240	802.11n/ac (HT40,VHT40)	38-46	38,46	OFDM	BPSK	13.5
-	5180-5240	802.11ac (VHT80)	42	42	OFDM	BPSK	29.3
-	5260-5320	802.11a	52-64	52,60,64	OFDM	BPSK	6.0
-	5260-5320	802.11n/ac (HT20, VHT20)	52-46	52,60,64	OFDM	BPSK	6.5
-	5260-5320	802.11n/ac (HT40,VHT40)	54-62	54,62	OFDM	BPSK	13.5
-	5260-5320	802.11ac (VHT80)	58	58	OFDM	BPSK	29.3
-	5500-5700	802.11a	100-140	100,116,140	OFDM	BPSK	6.0
-	5500-5720	802.11n/ac (HT20, VHT20)	100-144	100,116,144	OFDM	BPSK	6.5
-	5500-5720	802.11n/ac (HT40,VHT40)	102-142	102,110,142	OFDM	BPSK	13.5
-	5500-5720	802.11ac (VHT80)	106-138	106,122,138	OFDM	BPSK	29.3
-	5745-5825	802.11a	149-165	149,157,165	OFDM	BPSK	6.0
-	5745-5825	802.11n/ac (HT20, VHT20)	149-165	149,157,165	OFDM	BPSK	6.5
-	5745-5825	802.11n/ac (HT40,VHT40)	151-159	151,159	OFDM	BPSK	13.5
-	5745-5825	802.11ac (VHT80)	155	155	OFDM	BPSK	29.3

Test Condition:

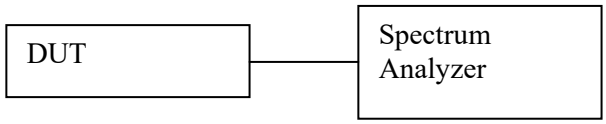
Applicable To	Environmental Conditions	Input Power	Tested By
RE≥1G	23.1°C, 67.4% RH	7.5V DC	Nazrin & Rezza
RE<1G	23.1°C, 67.4% RH	7.5V DC	Nazrin & Rezza
PLC	22.1°C, 63.2% RH	120V AC,240V AC	Shidee
APCM	25°C, 50% RH	7.5V DC	Alieya

Duty Cycle of Test Signal

802.11a, 802.11n and 802.11ac (HT20, VHT20): Duty cycle of test signal is 100%.
If Duty cycle of test signal is <98%, duty cycle factor shall be considered. (Refer to section 6.0 for duty cycle measurement)

6.0. Duty Cycle of Test Signal

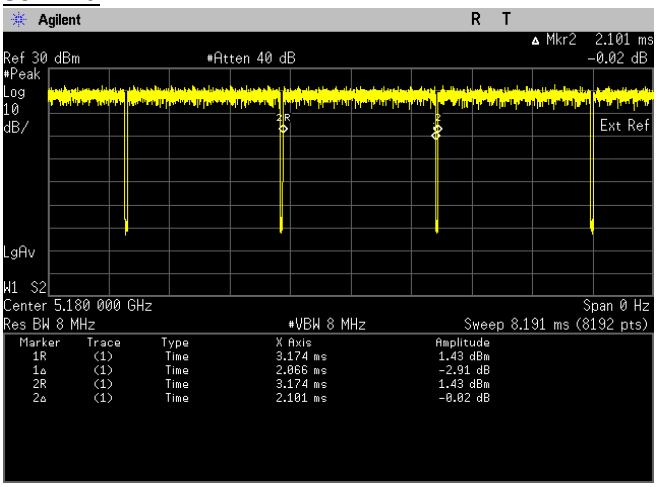
6.0.1. Test Setup



1) Set DUT to desire transmit frequency and transmit with maximum power.
2) Connect DUT's antenna terminal to spectrum analyzer with a low loss cable.
3) Setting of Spectrum analyzer :
    a. Set the RBW = 10 MHz or the highest RBW available on spectrum analyzer.
    b. Set the VBW ≥ RBW.
    c. Set to Zero Span.
    d. Detector = Peak.
    e. Sweep time = 10ms or others that allow to measure accurate duty cycle.
    f. Trace mode = Max hold.
4) Record the duty cycle as X and save the plot.

6.0.2. Test Data

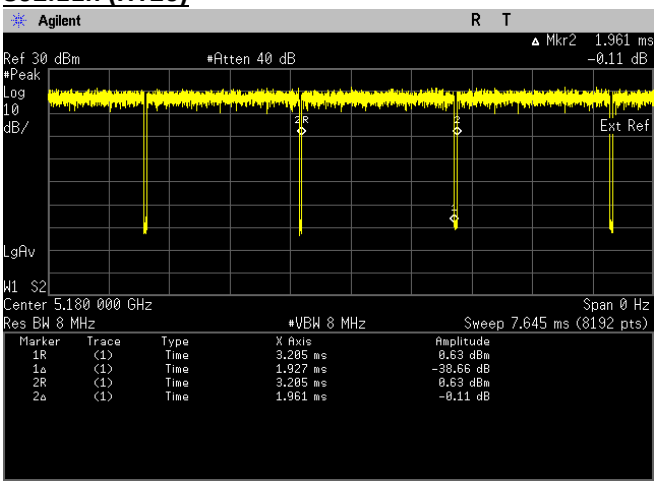
802.11a



On time	2.066	ms
On + off time	2.101	ms
Duty Cycle	0.9833	
Duty Cycle Factor	0.073	

*Duty cycle = On time/ On +off time
*Duty Cycle factor = 10*log (1/Duty Cycle)

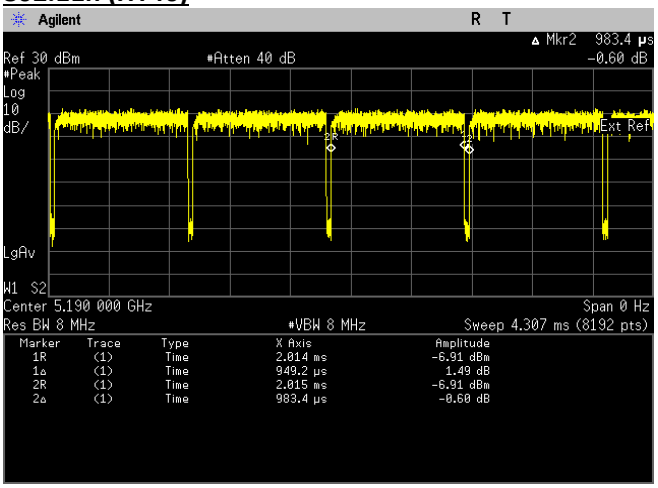
802.11n (HT20)



On time	1.927	ms
On + off time	1.961	ms
Duty Cycle	0.9827	
Duty Cycle Factor	0.076	

*Duty cycle = On time/ On +off time
*Duty Cycle factor = 10*log (1/Duty Cycle)

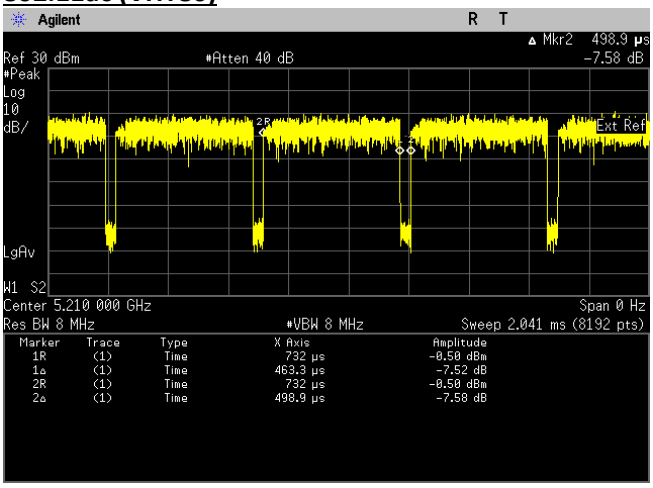
802.11n (HT40)



On time	0.9492	ms
On + off time	0.9834	ms
Duty cycle	0.9652	
Duty Cycle factor	0.154	

*Duty cycle = On time/ On +off time
*Duty Cycle factor = 10*log (1/Duty Cycle)

802.11ac (VHT80)



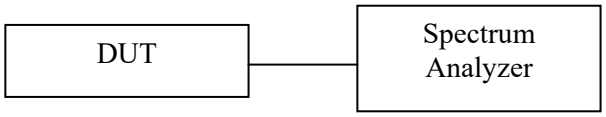
On time	0.4633	ms
On + off time	0.4989	ms
Duty cycle	0.9286	
Duty Cycle factor	0.322	

*Duty cycle = On time/ On +off time
*Duty Cycle factor = 10*log (1/Duty Cycle)

7.0. Transmitter Test Parameters

7.1. Bandwidth measurements

7.1.1. Test Setup



a) Test Setup as per illustrated above.
b) Set DUT to transmit at desire transmit frequency.
c) Connect DUT's antenna terminal to spectrum analyzer with a low loss cable.
d) Setting of Spectrum analyzer for 26dB EBW:
   - RBW = approximate 1% of emission bandwidth
   - VBW > RBW
   - Detector = Peak
   - Trace =Max hold
   - 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 approximately 1%.

e) Setting of Spectrum analyzer for 99% Occupied bandwidth:
   - Span = 1.5 times to 5.0 times the OBW
   - RBW = 1% to 5 % of the OBW
   - VBW ≥ 3·RBW
   - Detector = Peak
   - Trace = Max Hold
   - Use the 99% power bandwidth function of the instrument
f) The measurement method follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04 under clause C.1) & D).

7.1.2. Test Limits

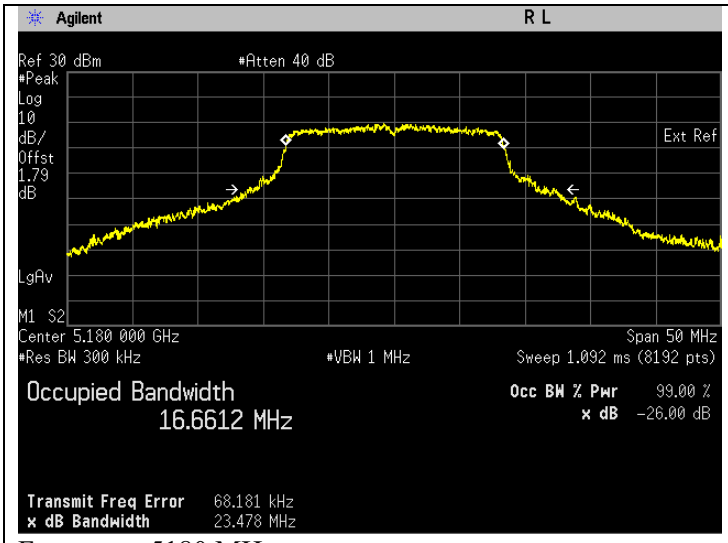
Not applicable.

7.1.3. Test Data

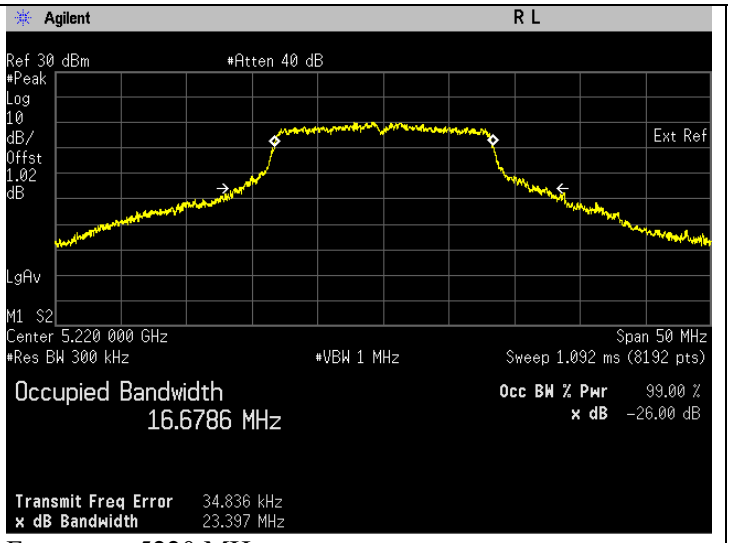
802.11a

Frequency (MHz)	Test Configuration	Results			
		26 dB Bandwidth(MHz)	Status	99% Bandwidth(MHz)	Status
5180	Mod Type: BPSK, Data Rate: 6	23.478	Pass	16.661	Pass
5220	Mod Type: BPSK, Data Rate: 6	23.397	Pass	16.679	Pass
5240	Mod Type: BPSK, Data Rate: 6	23.428	Pass	16.705	Pass
5260	Mod Type: BPSK, Data Rate: 6	23.541	Pass	16.731	Pass
5300	Mod Type: BPSK, Data Rate: 6	23.990	Pass	16.760	Pass
5320	Mod Type: BPSK, Data Rate: 6	23.842	Pass	16.765	Pass
5500	Mod Type: BPSK, Data Rate: 6	22.168	Pass	16.634	Pass
5580	Mod Type: BPSK, Data Rate: 6	21.609	Pass	16.637	Pass
5700	Mod Type: BPSK, Data Rate: 6	22.077	Pass	16.612	Pass
5720	Mod Type: BPSK, Data Rate: 6, UNII-2C	15.911	Pass	13.319	Pass
5720	Mod Type: BPSK, Data Rate: 6, UNII-3	5.911	Pass	3.319	Pass
5745	Mod Type: BPSK, Data Rate: 6	22.323	Pass	16.597	Pass
5785	Mod Type: BPSK, Data Rate: 6	21.597	Pass	16.624	Pass
5825	Mod Type: BPSK, Data Rate: 6	21.146	Pass	16.584	Pass

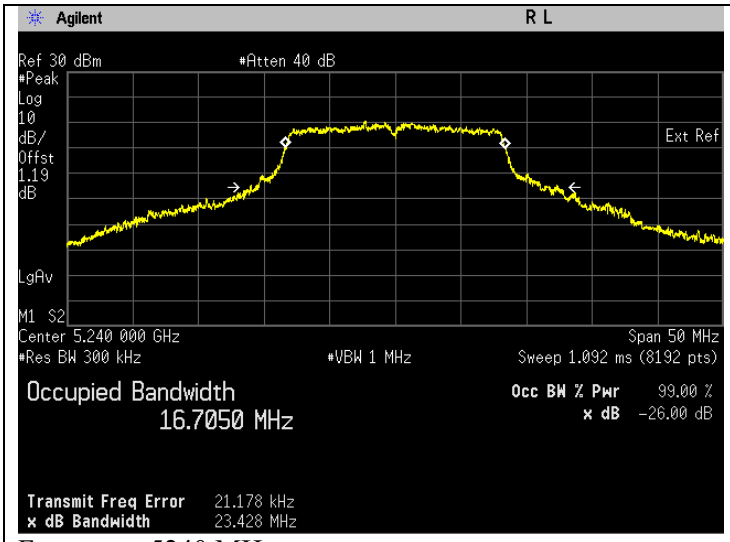
26 dB Bandwidth/ 99% Bandwidth



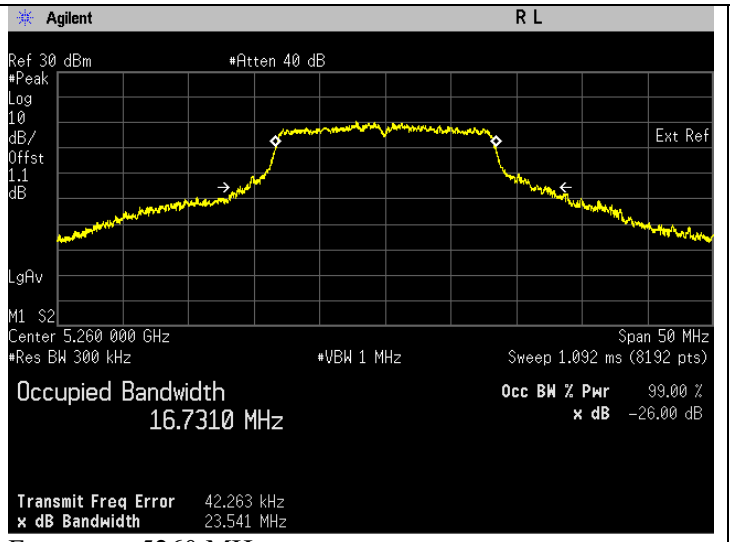
Frequency 5180 MHz



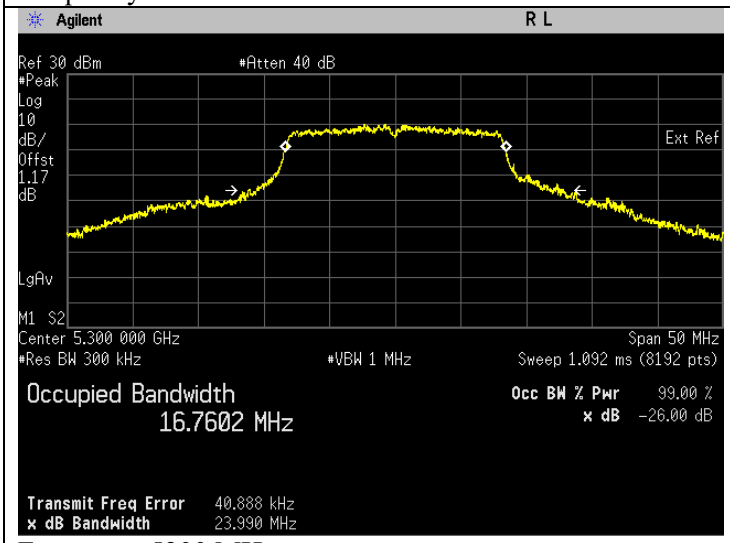
Frequency 5220 MHz



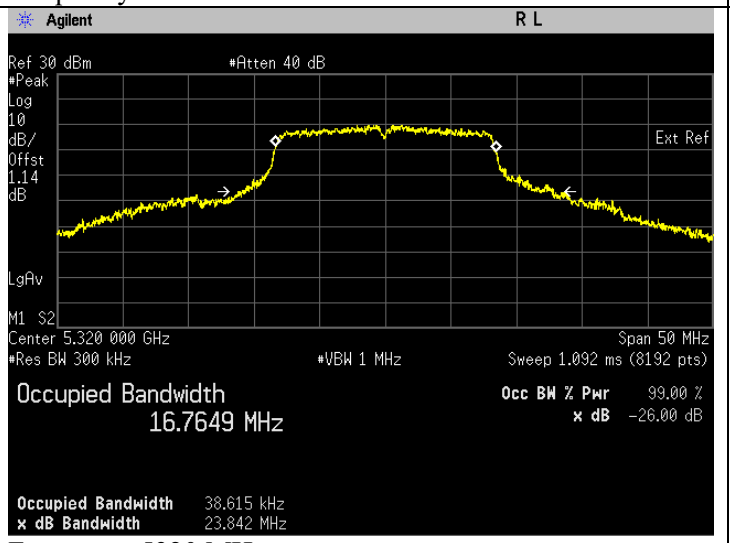
Frequency 5240 MHz



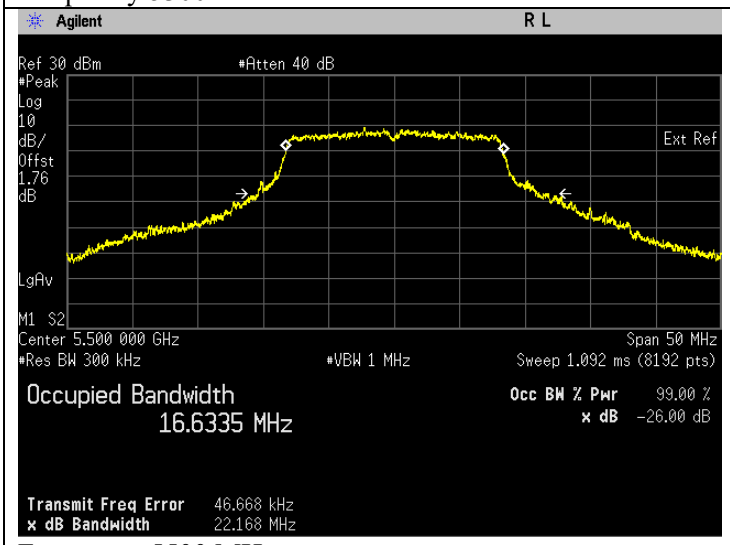
Frequency 5260 MHz



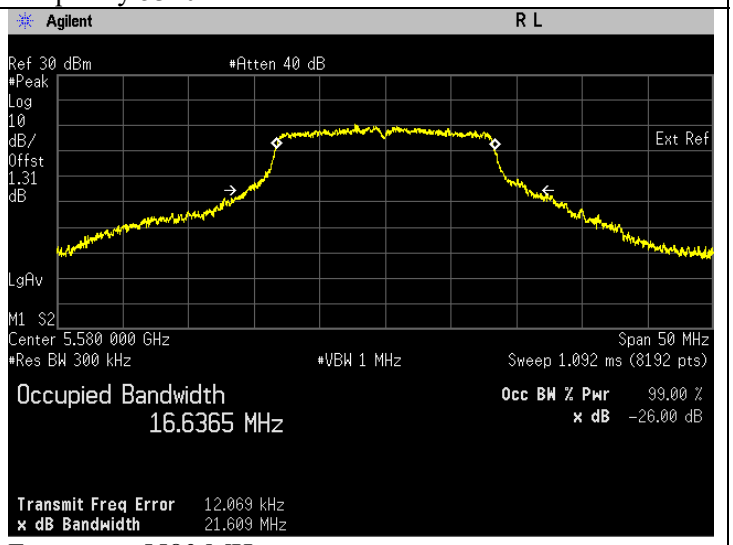
Frequency 5300 MHz



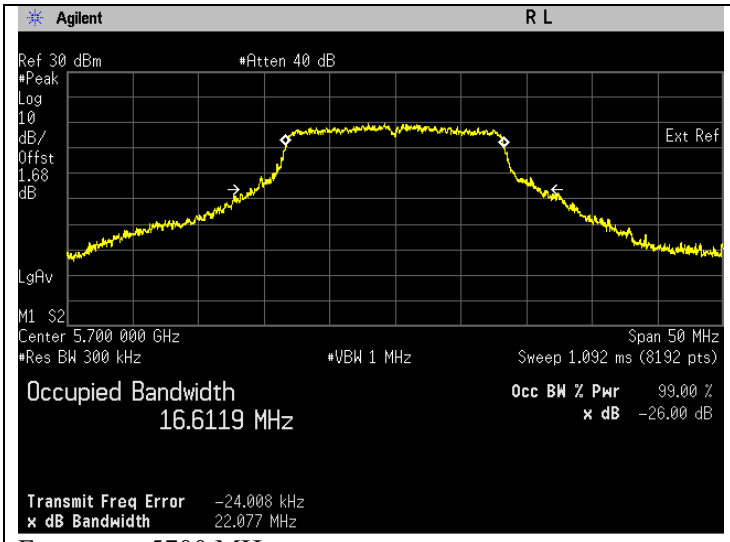
Frequency 5320 MHz



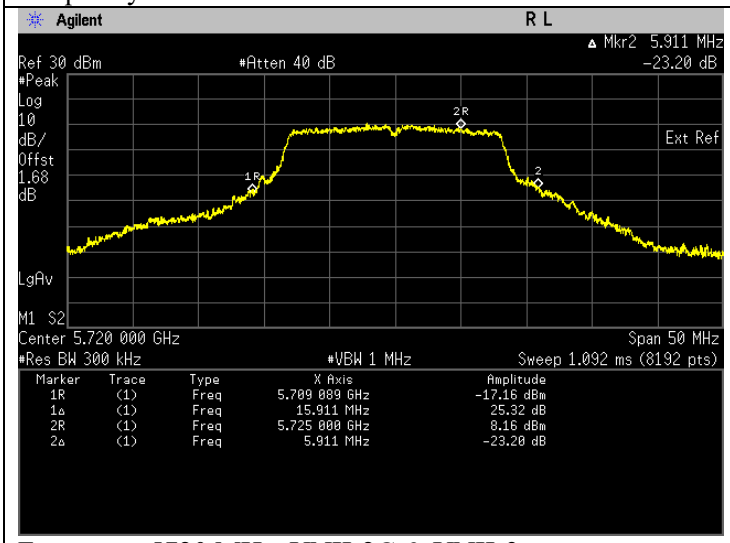
Frequency 5500 MHz



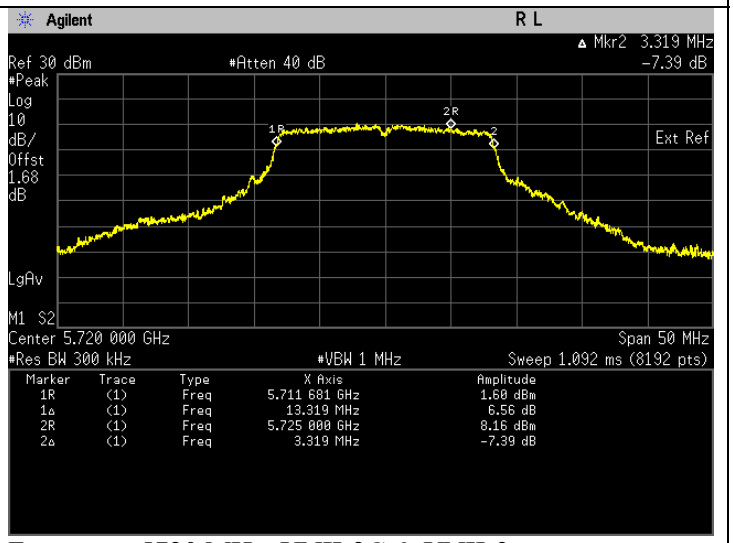
Frequency 5580 MHz



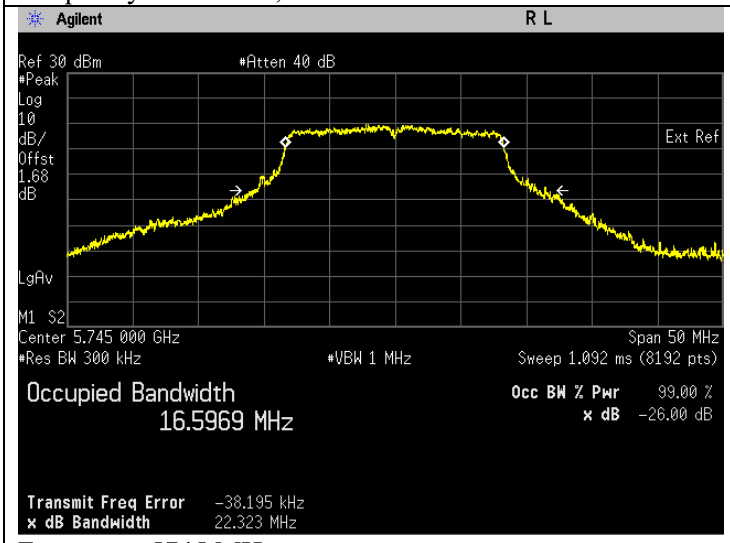
Frequency 5700 MHz



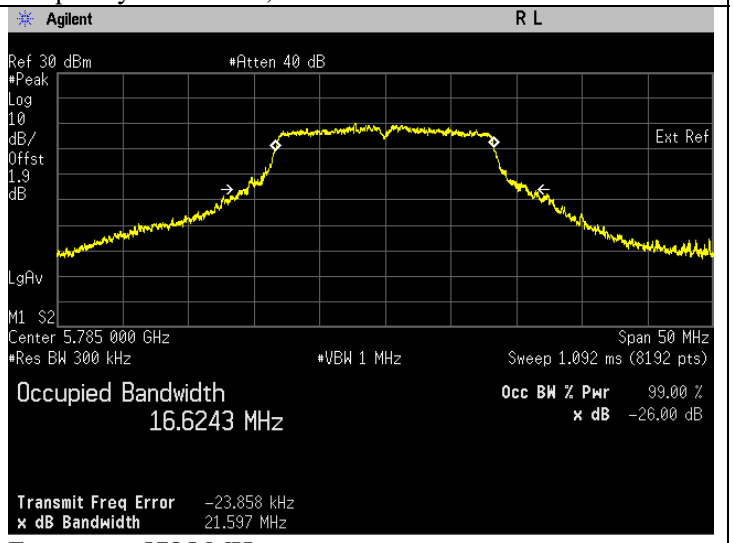
Frequency 5720 MHz, UNII-2C & UNII-3



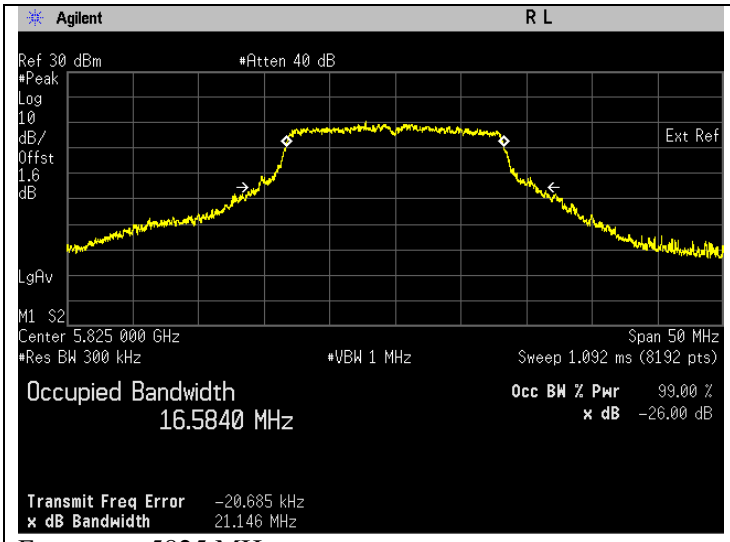
Frequency 5720 MHz, UNII-2C & UNII-3



Frequency 5745 MHz



Frequency 5785 MHz

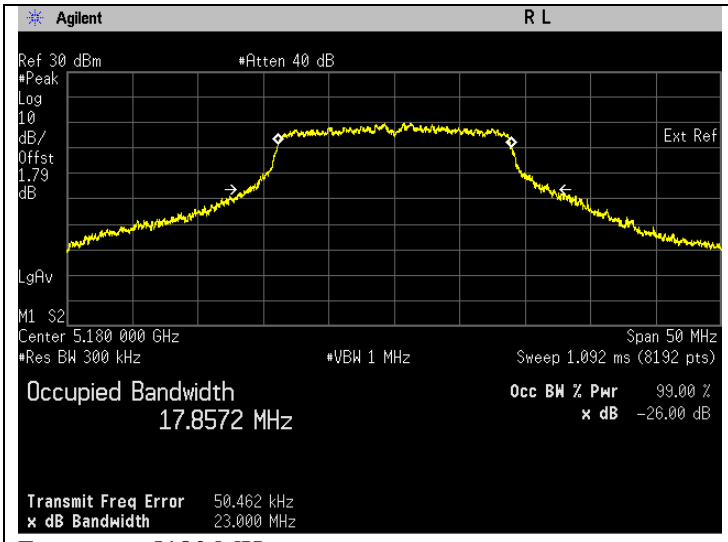


Frequency 5825 MHz

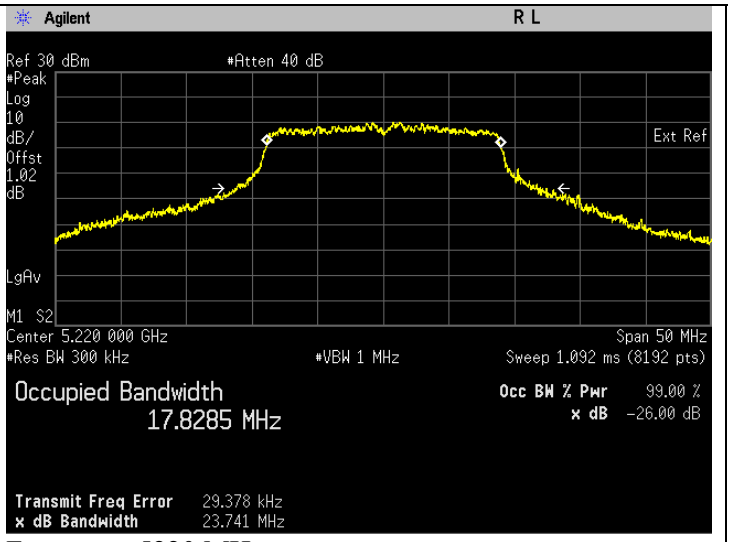
802.11n (HT20)

Frequency (MHz)	Test Configuration	Results			
		26 dB Bandwidth(MHz)	Status	99% Bandwidth(MHz)	Status
5180	Mod Type: BPSK, Data Rate: MCS0 (6.5)	23.000	Pass	17.857	Pass
5220	Mod Type: BPSK, Data Rate: MCS0 (6.5)	23.741	Pass	17.829	Pass
5240	Mod Type: BPSK, Data Rate: MCS0 (6.5)	24.588	Pass	17.867	Pass
5260	Mod Type: BPSK, Data Rate: MCS0 (6.5)	24.328	Pass	17.887	Pass
5300	Mod Type: BPSK, Data Rate: MCS0 (6.5)	24.230	Pass	17.924	Pass
5320	Mod Type: BPSK, Data Rate: MCS0 (6.5)	24.542	Pass	17.940	Pass
5500	Mod Type: BPSK, Data Rate: MCS0 (6.5)	24.056	Pass	17.886	Pass
5580	Mod Type: BPSK, Data Rate: MCS0 (6.5)	22.924	Pass	17.794	Pass
5700	Mod Type: BPSK, Data Rate: MCS0 (6.5)	22.581	Pass	17.816	Pass
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5), UNII-2C	16.579	Pass	13.904	Pass
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5), UNII-3	6.579	Pass	3.904	Pass
5745	Mod Type: BPSK, Data Rate: 6.5	22.680	Pass	17.780	Pass
5785	Mod Type: BPSK, Data Rate: 6.5	23.023	Pass	17.806	Pass
5825	Mod Type: BPSK, Data Rate: 6.5	22.158	Pass	17.791	Pass

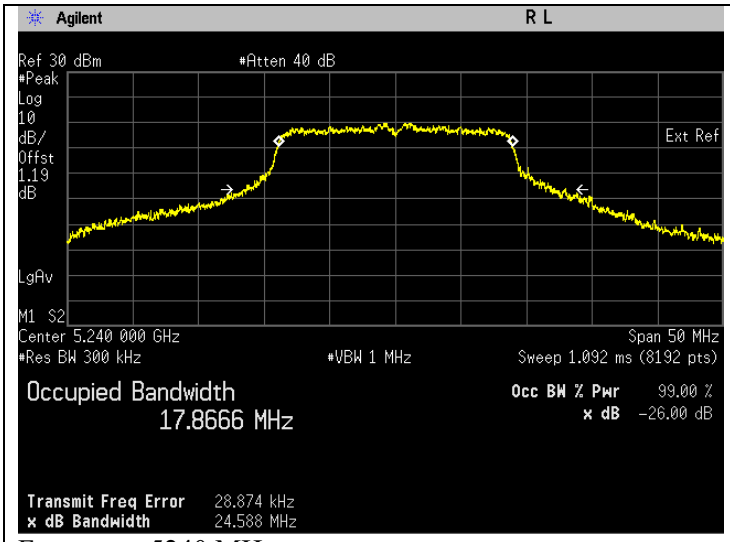
26 dB Bandwidth/ 99% Bandwidth



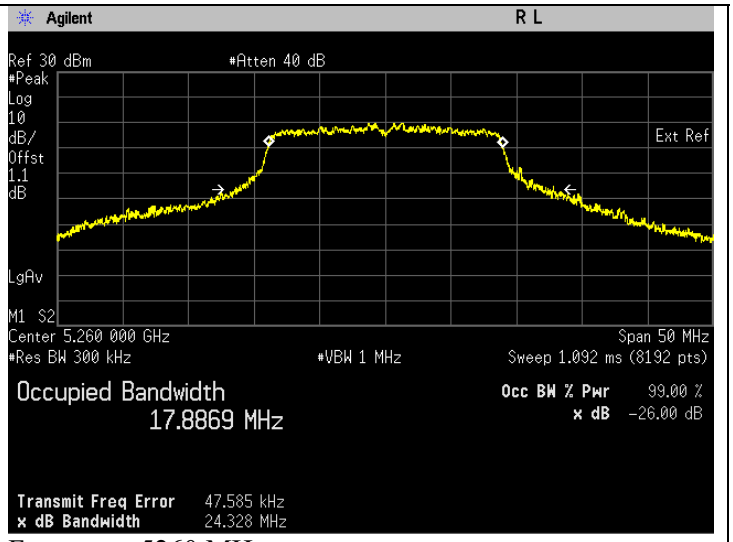
Frequency 5180 MHz



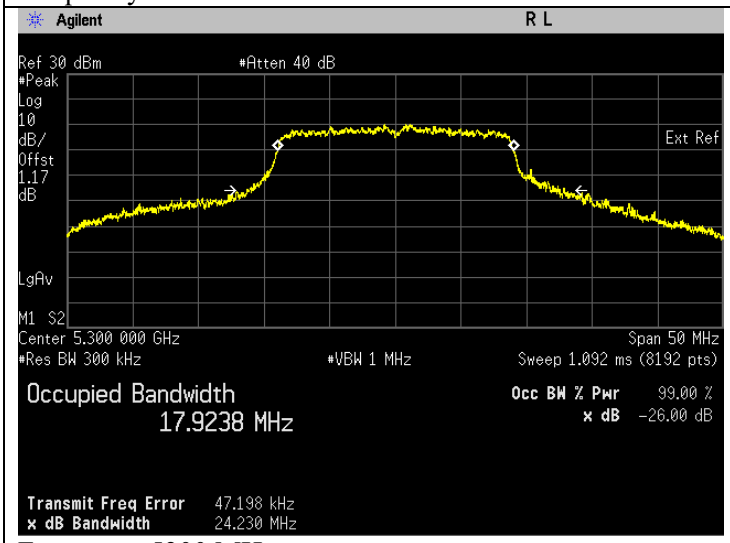
Frequency 5220 MHz



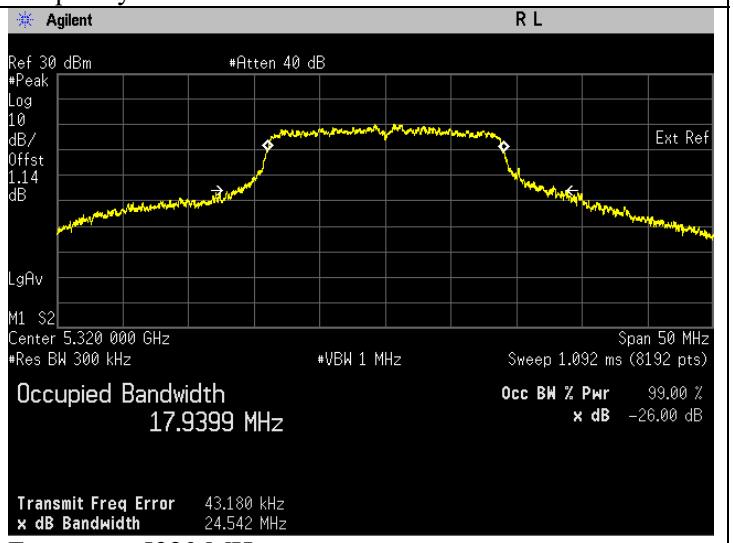
Frequency 5240 MHz



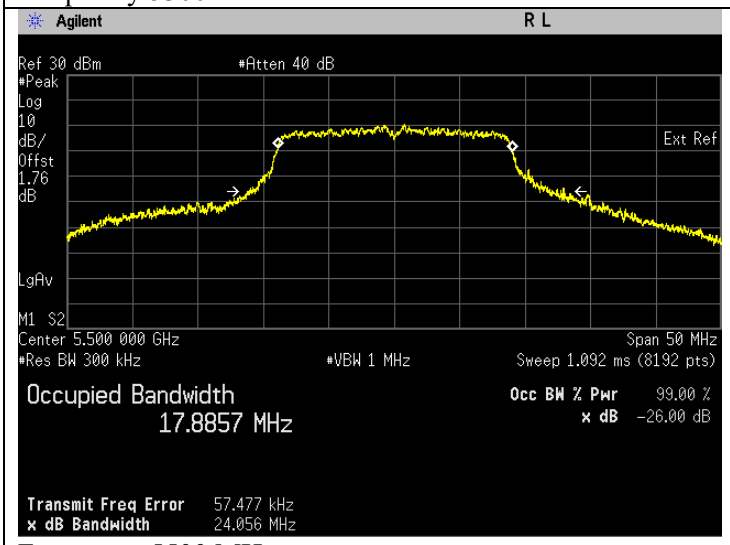
Frequency 5260 MHz



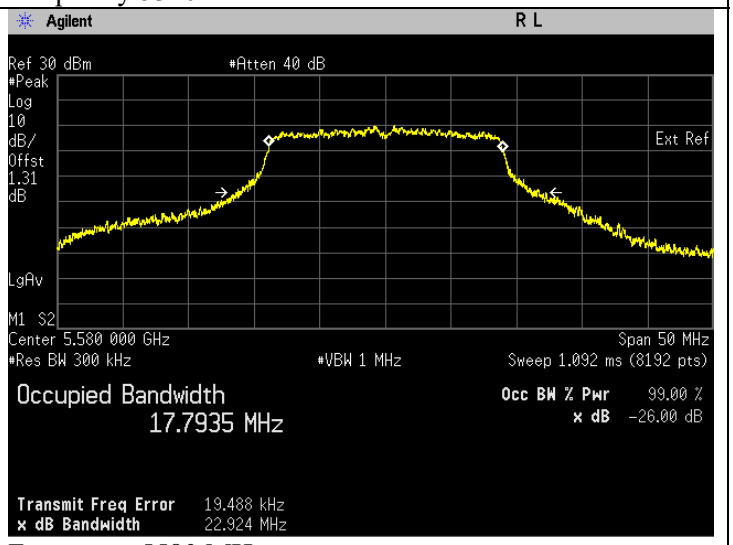
Frequency 5300 MHz



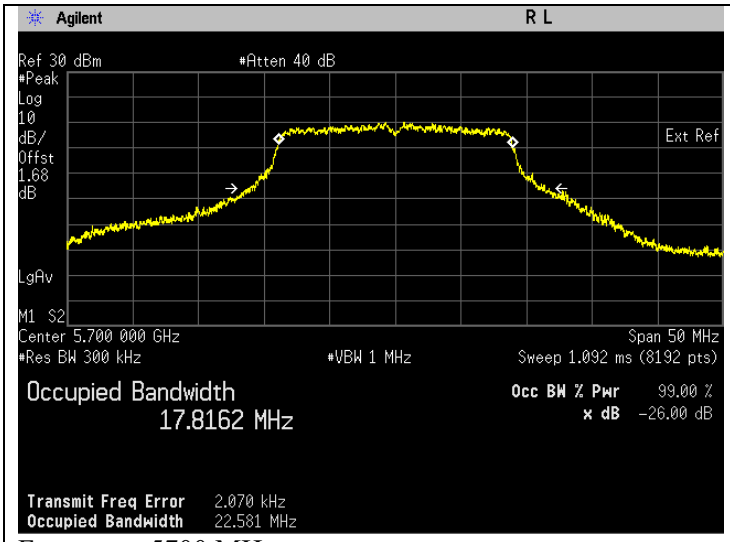
Frequency 5320 MHz



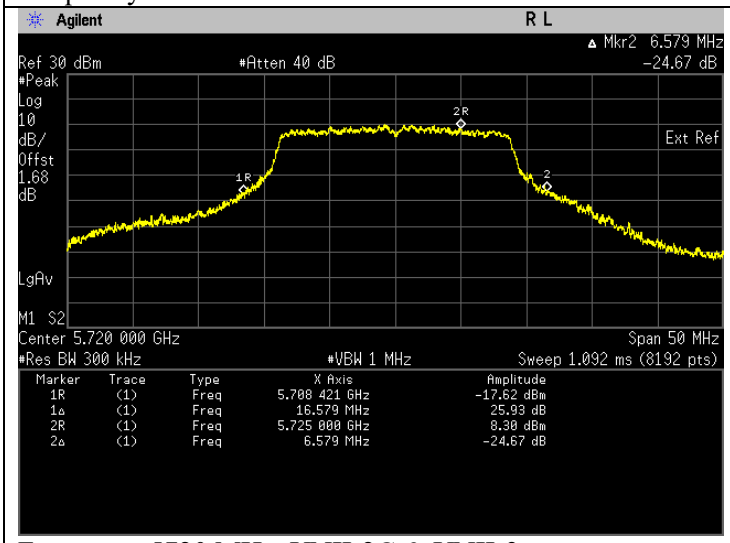
Frequency 5500 MHz



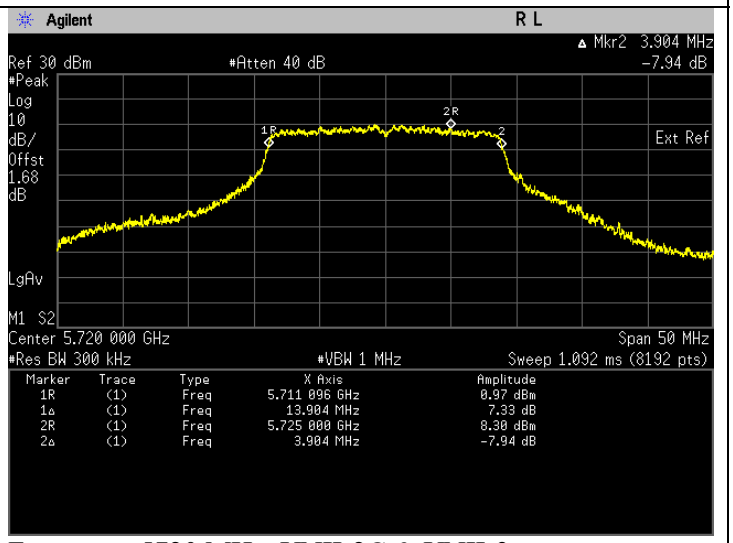
Frequency 5580 MHz



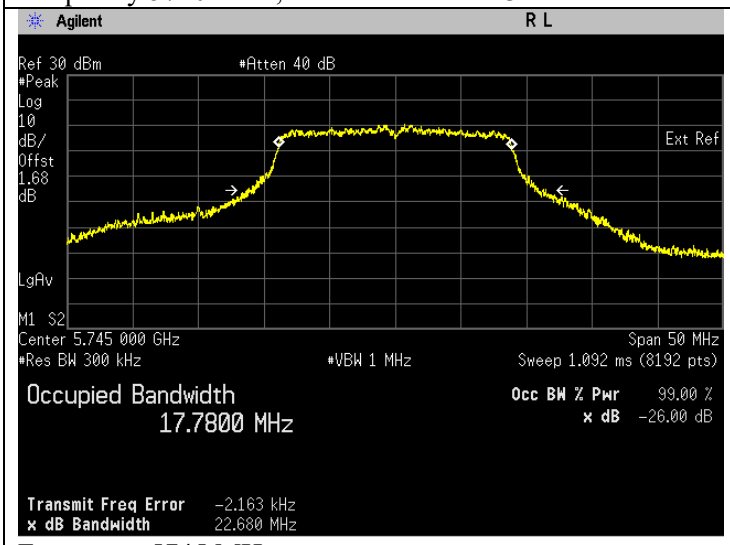
Frequency 5700 MHz



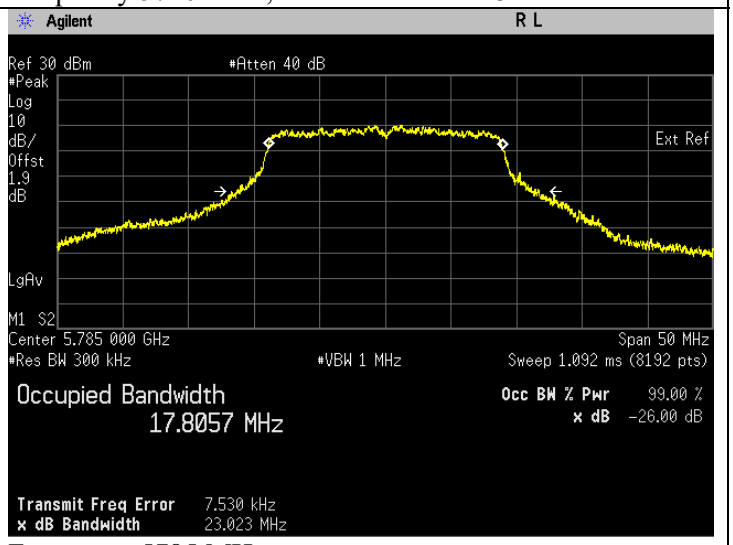
Frequency 5720 MHz, UNII-2C & UNII-3



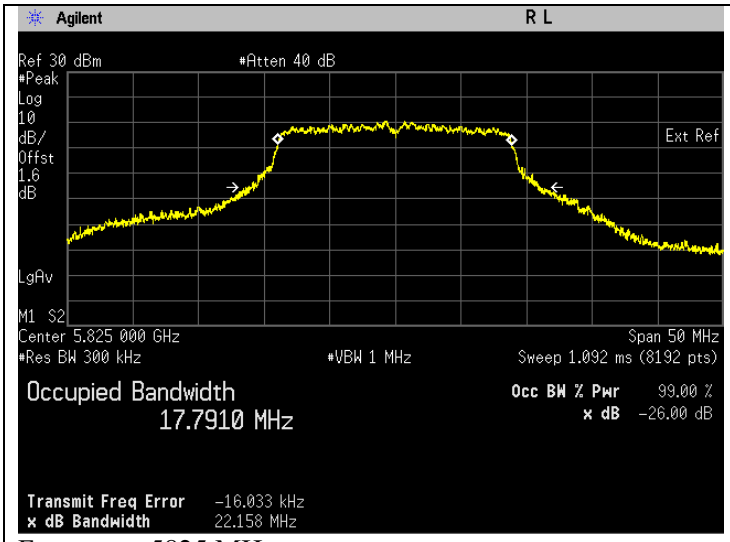
Frequency 5720 MHz, UNII-2C & UNII-3



Frequency 5745 MHz



Frequency 5785 MHz

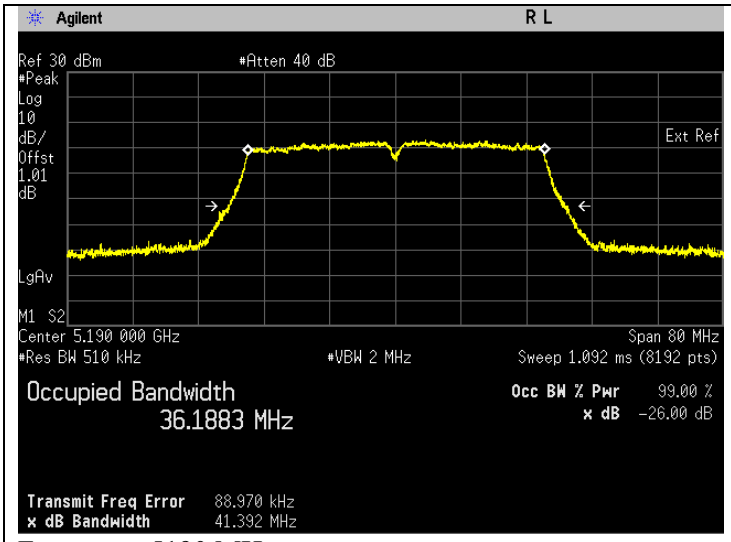


Frequency 5825 MHz

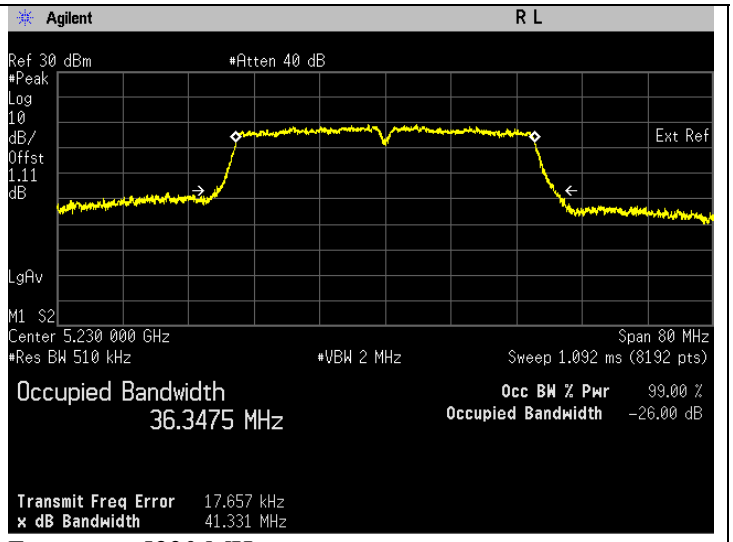
802.11n (HT40)

Frequency (MHz)	Test Configuration	Results			
		26 dB Bandwidth(MHz)	Status	99% Bandwidth(MHz)	Status
5190	Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.392	Pass	36.188	Pass
5230	Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.331	Pass	36.348	Pass
5270	Mod Type: BPSK, Data Rate: MCS0 (13.5)	52.205	Pass	36.427	Pass
5310	Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.111	Pass	36.250	Pass
5510	Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.222	Pass	36.256	Pass
5590	Mod Type: BPSK, Data Rate: MCS0 (13.5)	42.227	Pass	36.309	Pass
5670	Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.432	Pass	36.279	Pass
5710	Mod Type: BPSK, Data Rate: MCS0 (13.5), UNII-2C	35.699	Pass	33.142	Pass
5710	Mod Type: BPSK, Data Rate: MCS0 (13.5), UNII-3	5.699	Pass	3.142	Pass
5755	Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.654	Pass	36.226	Pass
5795	Mod Type: BPSK, Data Rate: MCS0 (13.5)	41.412	Pass	36.258	Pass

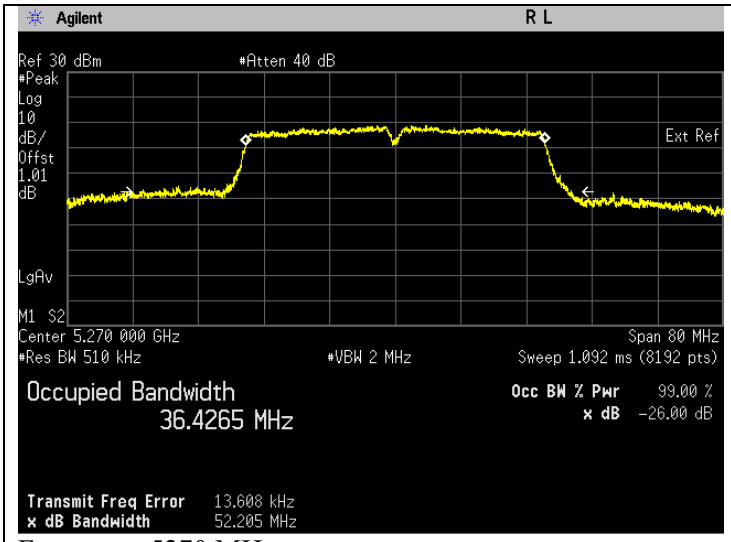
26 dB Bandwidth/ 99% Bandwidth



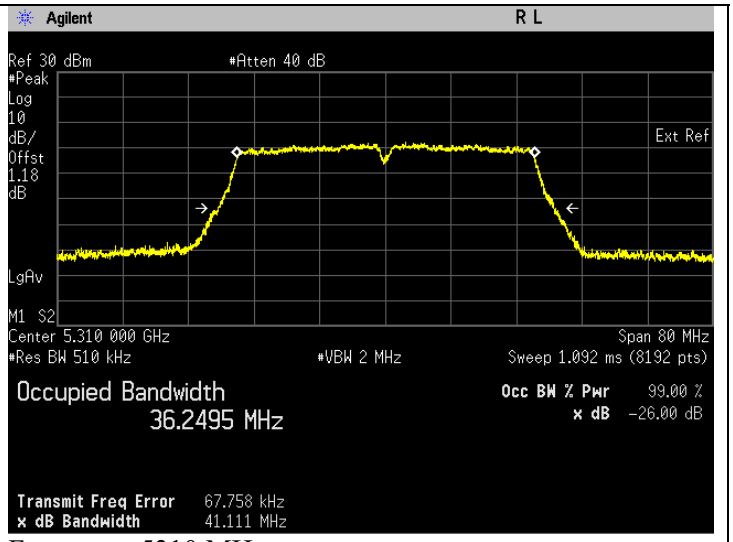
Frequency 5190 MHz



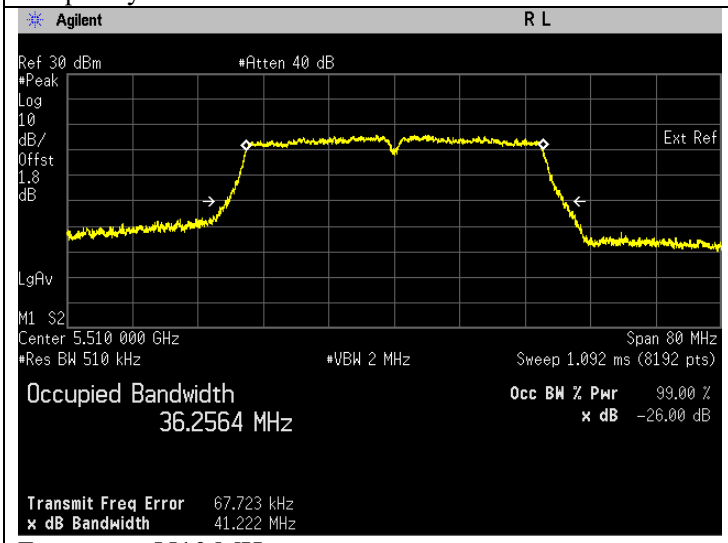
Frequency 5230 MHz



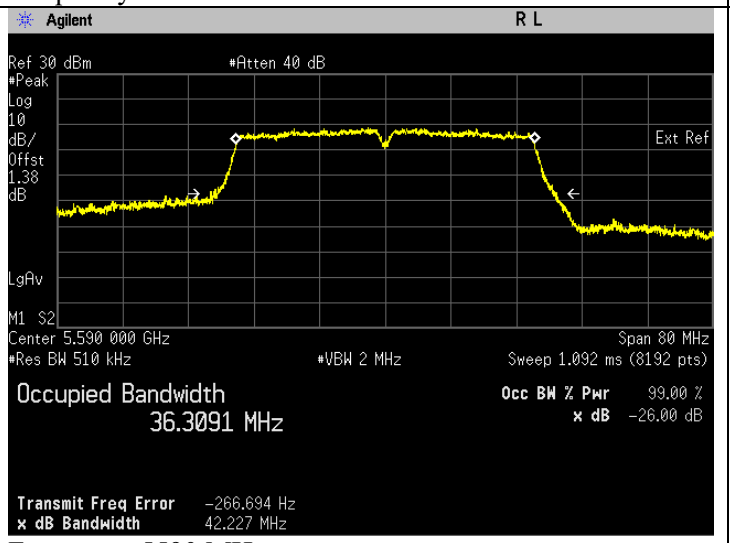
Frequency 5270 MHz



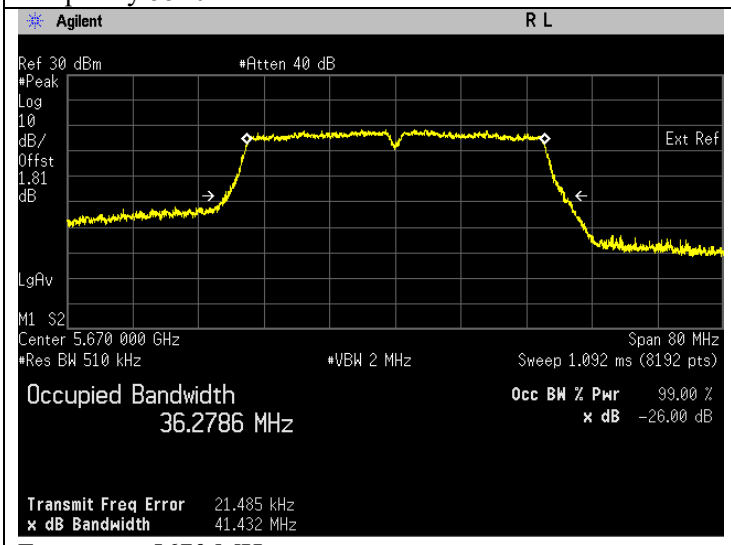
Frequency 5310 MHz



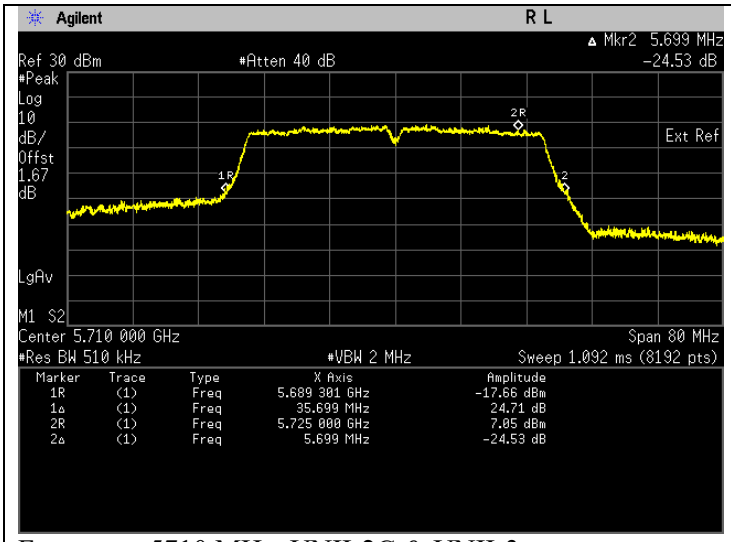
Frequency 5510 MHz



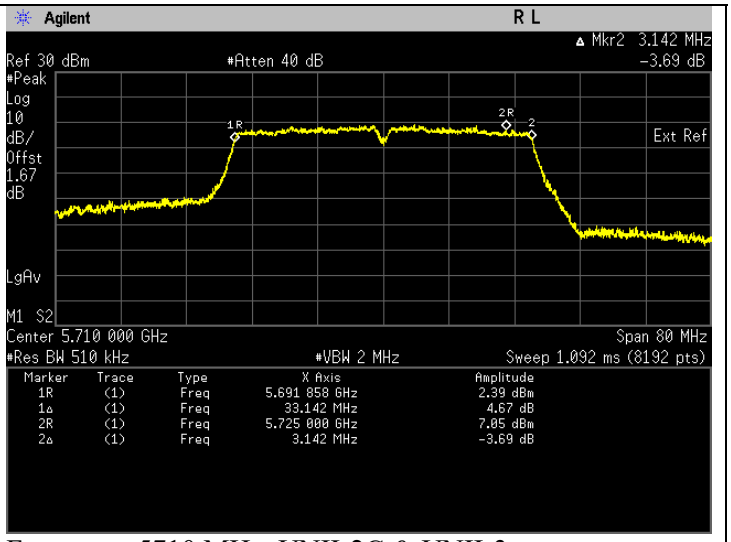
Frequency 5590 MHz



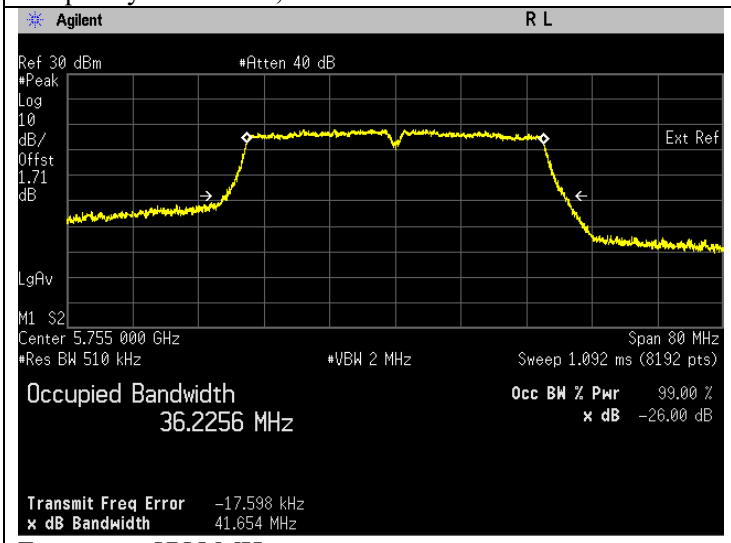
Frequency 5670 MHz



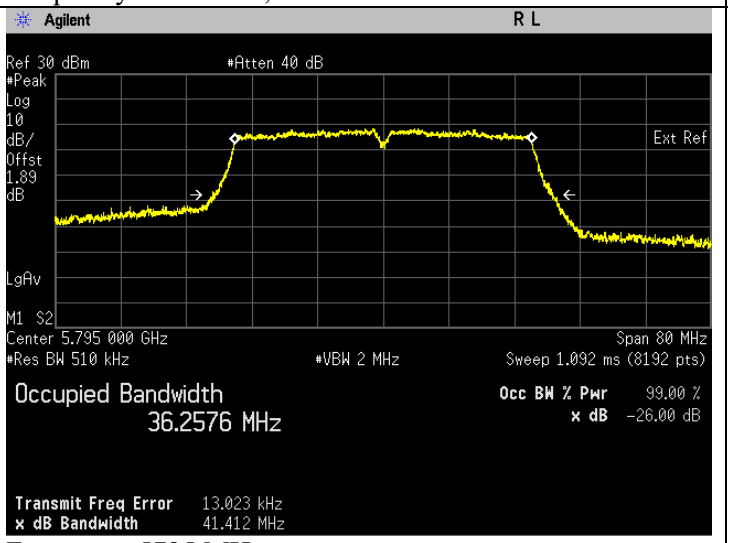
Frequency 5710 MHz, UNII-2C & UNII-3



Frequency 5710 MHz, UNII-2C & UNII-3



Frequency 5755 MHz

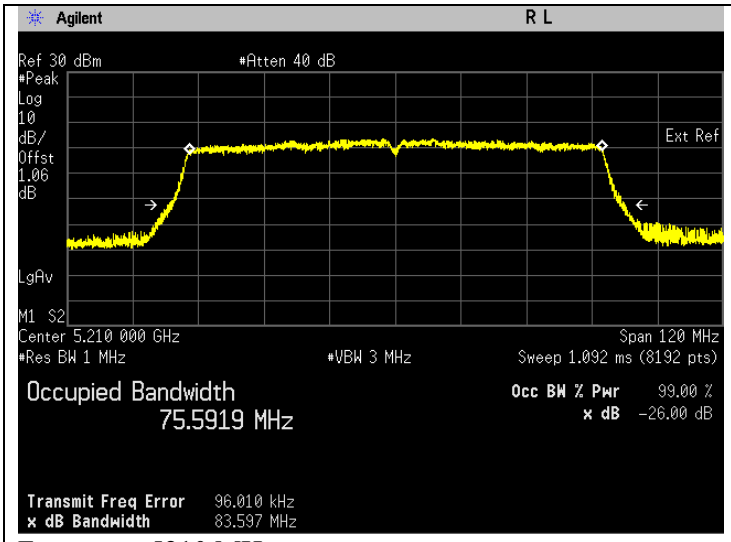


Frequency 5795 MHz

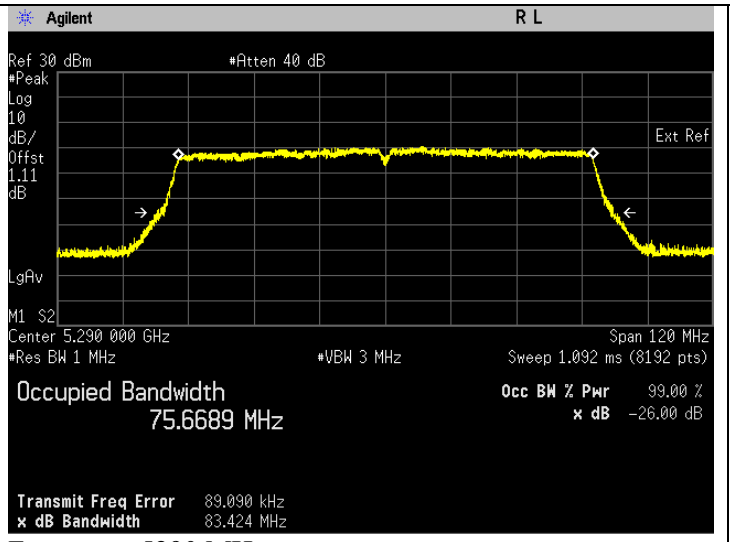
802.11ac (HT80)

Frequency (MHz)	Test Configuration	Results			
		26 dB Bandwidth(MHz)	Status	99% Bandwidth(MHz)	Status
5210	Mod Type: BPSK, Data Rate: MCS0 (29.3)	83.597	Pass	75.592	Pass
5290	Mod Type: BPSK, Data Rate: MCS0 (29.3)	83.424	Pass	75.669	Pass
5530	Mod Type: BPSK, Data Rate: MCS0 (29.3)	83.391	Pass	75.658	Pass
5610	Mod Type: BPSK, Data Rate: MCS0 (29.3)	99.439	Pass	75.706	Pass
5690	Mod Type: BPSK, Data Rate: MCS0 (29.3), UNII-2C	76.776	Pass	72.848	Pass
5690	Mod Type: BPSK, Data Rate: MCS0 (29.3), UNII-3	6.776	Pass	2.848	Pass
5775	Mod Type: BPSK, Data Rate: MCS0 (29.3)	96.393	Pass	75.716	Pass

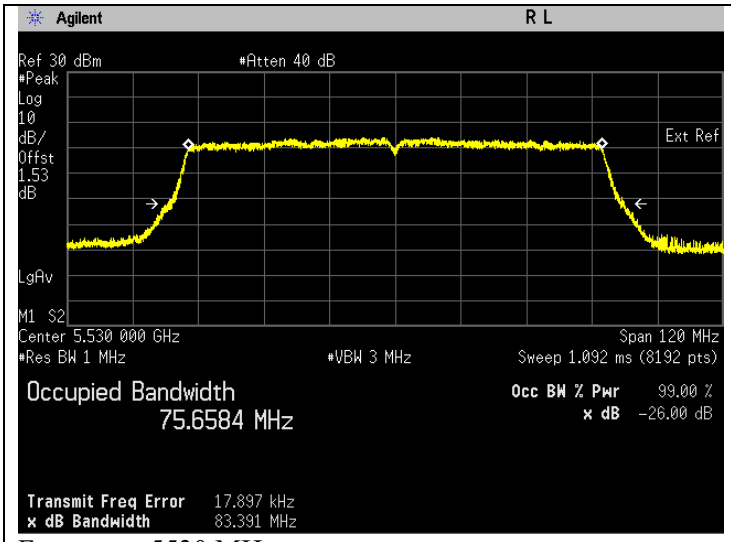
26 dB Bandwidth/ 99% Bandwidth



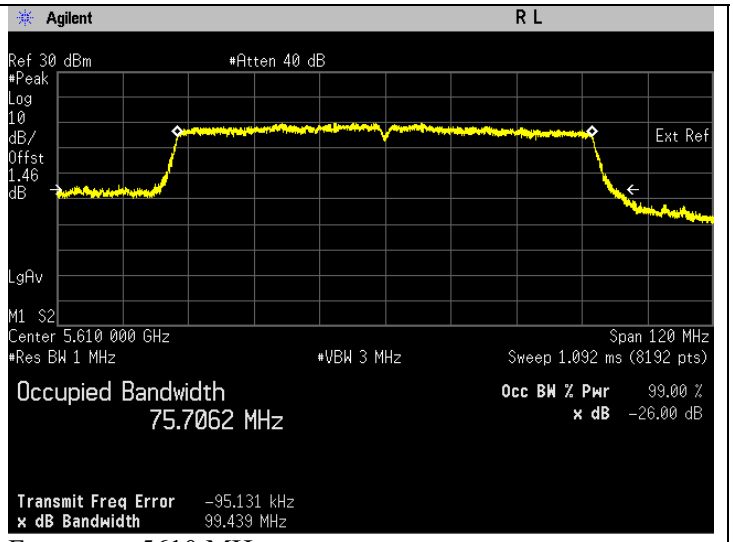
Frequency 5210 MHz



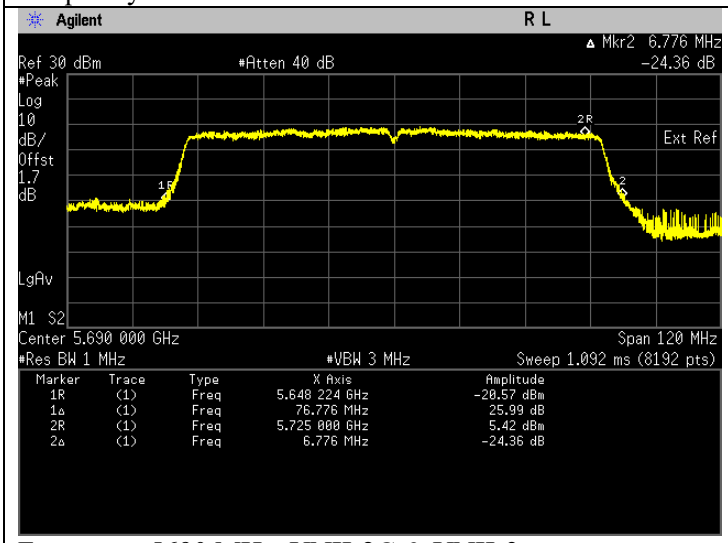
Frequency 5290 MHz



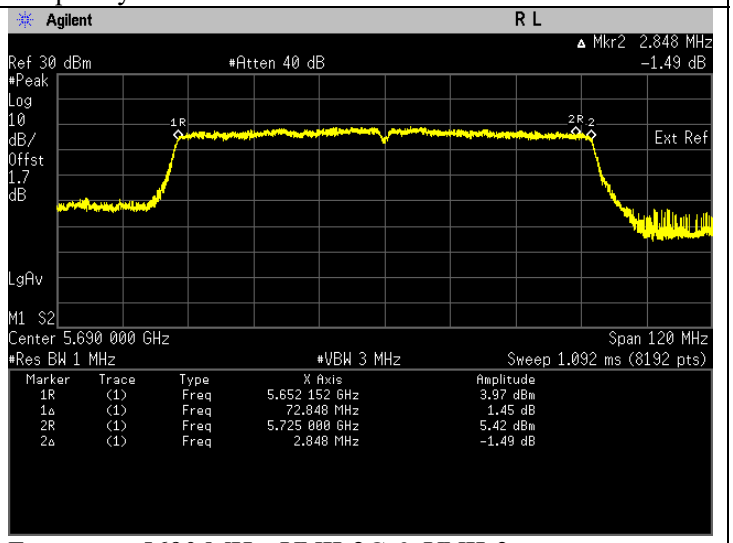
Frequency 5530 MHz



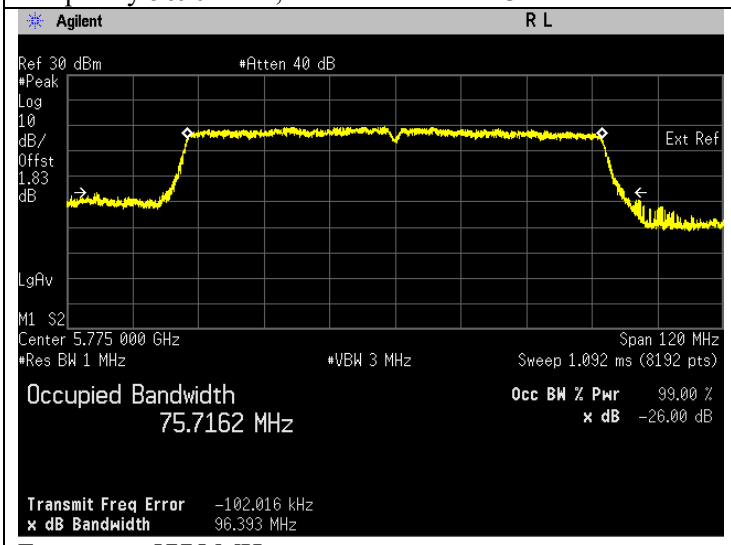
Frequency 5610 MHz



Frequency 5690 MHz, UNII-2C & UNII-3



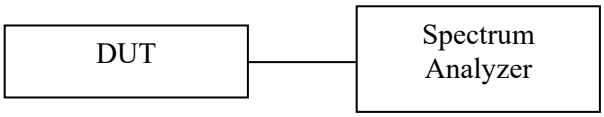
Frequency 5690 MHz, UNII-2C & UNII-3



Frequency 5775 MHz

7.2. Maximum Conducted Output Power

7.2.1. Test Setup



a) Test setup as per illustrated above.
b) Set DUT to transmit at desire transmit frequency.
c) Connect DUT's antenna terminal to spectrum analyzer with a low loss cable.
d) Setting of Spectrum analyzer :
- Span to encompass the entire 26dB EBW or 99% Occupied Bandwidth.
- RBW = 1 MHz
- VBW ≥ 3 MHz
- Detector = power averaging (RMS)
- Trace = Max hold
- Number of points in sweep ≥ 2 × span / RBW
- Sweep time = auto
- Trace average at least 100 traces in power averaging (rms) mode
- Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges.
- Add 10 log (1/x), where x is the duty cycle, to the measured power to compute the average power during the actual transmission times

e) The measurement method follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04 under clause E.2.d) Method SA-2.
f) The Maximum output power results are included duty cycle correction factor.

7.2.2. Test Limits

FCC 15.407(a)

Range(GHz)	Condition		Output Power Limit
5.15-5.25 (UNII-1)		Outdoor AP	≤1W
		Indoor AP	≤1W
		Fixed Point to Point AP	≤1W
	√	Mobile and Portable client devices	≤250mW

5.25-5.35 (UNII-2A)	√	≤250mW or 11dBm+10log$_{10}$ B*
5.47-5.525 (UNII-2C)	√	*B is 26dB emission bandwidth in MHz

5.725-5.85 (UNII-3)	√	≤1W

RSS-247 6.2

Range(GHz)	Condition	Output Power Limit
5.15-5.25	indoor only (e.i.r.p.)	≤200mW or $10+10\log_{10}B$* *B is 99% emission bandwidth in 1MHz
5.25-5.35	(Conducted & e.i.r.p.)	Conducted: ≤250mW or $11+10\log_{10}B$* EIRP: < 1.0W or $17+10\log_{10}B$* *B is 99% emission bandwidth in 1MHz
5.47-5.6 5.65-5.725	(Conducted & e.i.r.p.)	Conducted: ≤250mW or $11+10\log_{10}B$* EIRP: < 1.0W or $17+10\log_{10}B$* *B is 99% emission bandwidth in 1MHz
5.725-5.85	(Conducted)	≤1W

7.2.3. Additional Info

Antenna	Gain (dBi)
UNII1&UNII2A	4.6
UNII2C	3.3
UNII3	3.1
Duty Cycle Correction Factor	
802.11a	0.073
802.11n20	0.076
802.11n40	0.154
802.11ac80	0.322

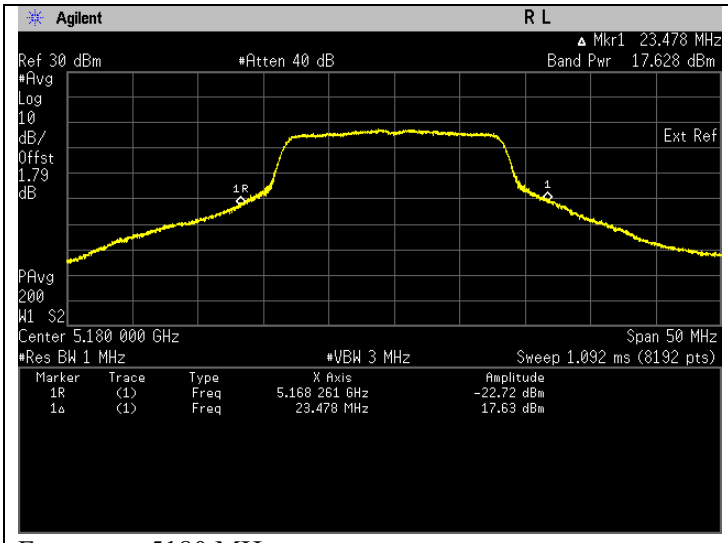
7.2.4. Test Data

Summary table

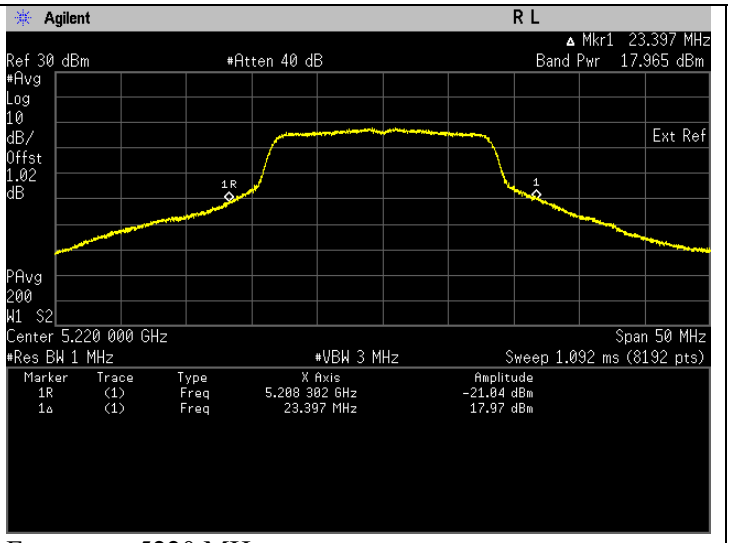
WLAN	Frequency Range (MHz)	Bandwidth (MHz)	RF Power Output		EIRP		Max Emission Designator
			Max measured (mW)	Max declared (mW)	Max measured (mW)	Max declared (mW)	
802.11a	5180-5240	20	62.63	79.43	180.63	229.09	16M7D1D
	5260-5320	20	63.96	79.43	184.46	229.09	16M8D1D
	5500-5580	20	59.88	79.43	128.03	169.82	16M6D1D
	5660-5720	20	56.66	79.43	121.14	169.82	16M6D1D
	5745-5825	20	58.18	79.43	118.80	162.18	16M6D1D
802.11n/ac (HT20)	5180-5240	20	62.79	79.43	181.09	229.09	17M9D1D
	5260-5320	20	62.73	79.43	180.93	229.09	17M9D1D
	5500-5580	20	64.82	79.43	138.58	169.82	17M9D1D
	5660-5720	20	64.08	79.43	136.99	169.82	17M8D1D
	5745-5825	20	67.50	79.43	137.82	162.18	17M8D1D
802.11n/ac (HT40)	5190-5230	40	66.70	79.43	192.35	229.09	36M3D1D
	5270-5310	40	64.68	79.43	186.55	229.09	36M4D1D
	5510-5550	40	63.40	79.43	135.55	169.82	36M3D1D
	5670-5710	40	58.93	79.43	125.98	169.82	36M3D1D
	5755-5795	40	59.55	79.43	121.59	162.18	36M3D1D
802.11ac (VHT80)	5210	80	16.03	19.95	46.22	57.54	75M6D1D
	5290	80	8.04	10.00	23.20	28.84	75M7D1D
	5530	80	18.48	19.95	39.51	42.66	75M7D1D
	5690	80	64.02	79.43	136.87	169.82	75M7D1D
	5775	80	65.49	79.43	133.72	162.18	75M7D1D

802.11a (26dB EBW)

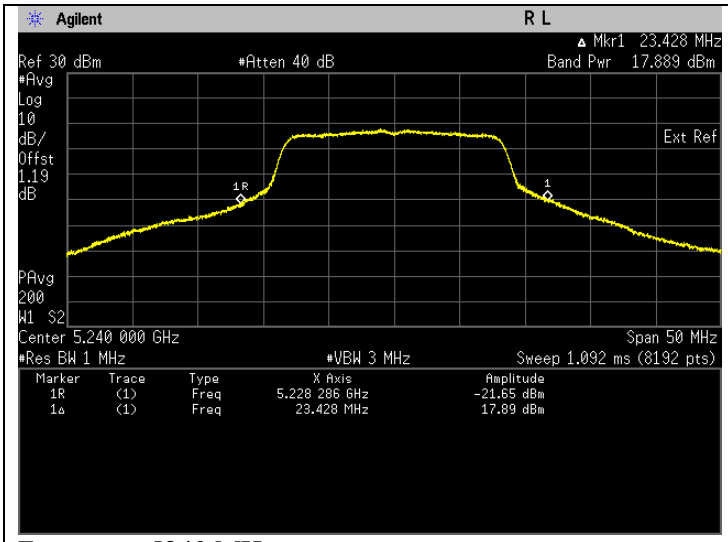
Freq. (MHz)	Test Conditions	Results		
		Power (mW)	Power (dBm)	Status
5180	Mod Type: BPSK, Data Rate: 6	58.900	17.701	Pass
5220	Mod Type: BPSK, Data Rate: 6	63.650	18.038	Pass
5240	Mod Type: BPSK, Data Rate: 6	62.546	17.962	Pass
5260	Mod Type: BPSK, Data Rate: 6	62.431	17.954	Pass
5300	Mod Type: BPSK, Data Rate: 6	63.797	18.048	Pass
5320	Mod Type: BPSK, Data Rate: 6	63.154	18.004	Pass
5500	Mod Type: BPSK, Data Rate: 6	46.272	16.653	Pass
5580	Mod Type: BPSK, Data Rate: 6	61.320	17.876	Pass
5700	Mod Type: BPSK, Data Rate: 6	57.743	17.615	Pass
5745	Mod Type: BPSK, Data Rate: 6	59.553	17.749	Pass
5785	Mod Type: BPSK, Data Rate: 6	57.214	17.575	Pass
5825	Mod Type: BPSK, Data Rate: 6	59.129	17.718	Pass



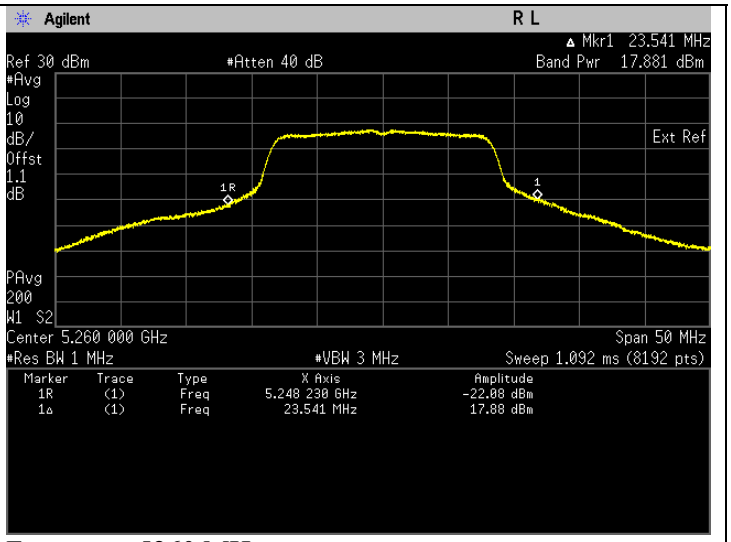
Frequency 5180 MHz.



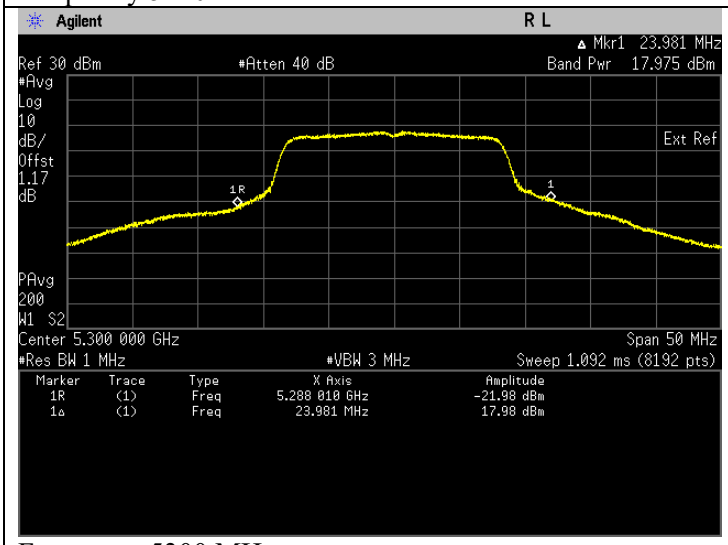
Frequency 5220 MHz.



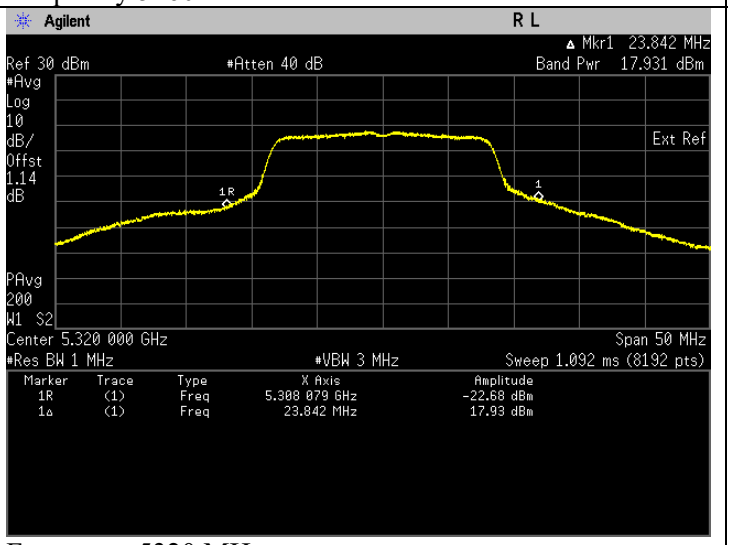
Frequency 5240 MHz.



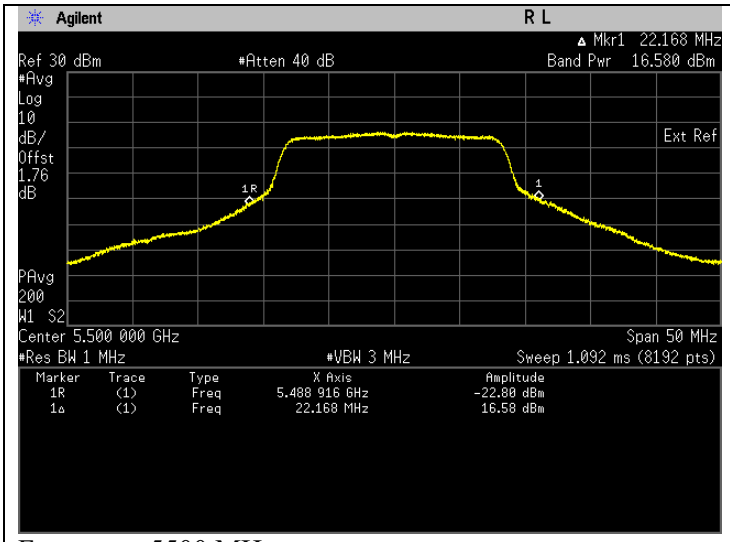
Frequency 5260 MHz.



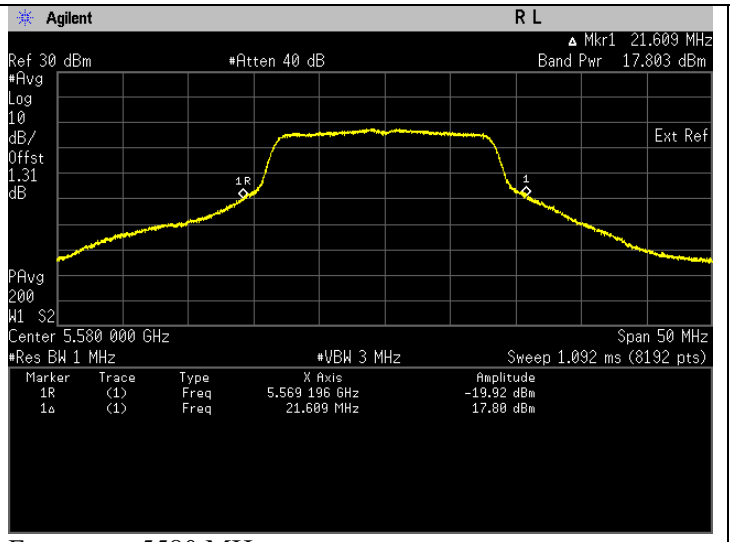
Frequency 5300 MHz.



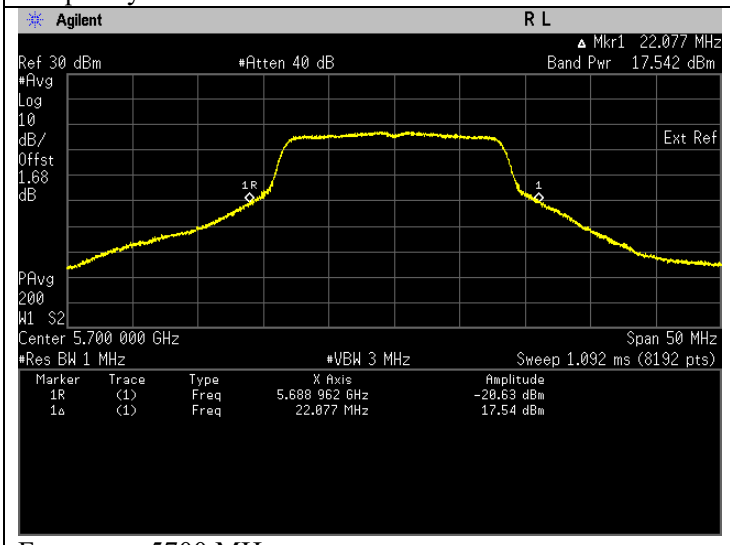
Frequency 5320 MHz.



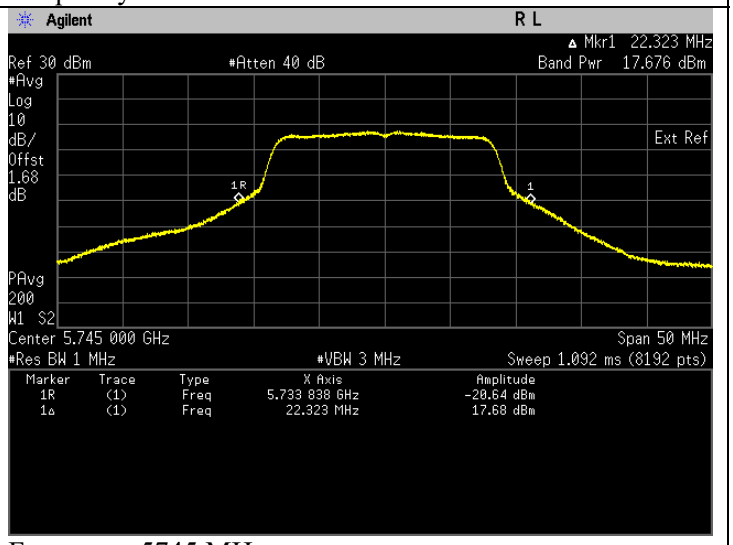
Frequency 5500 MHz.



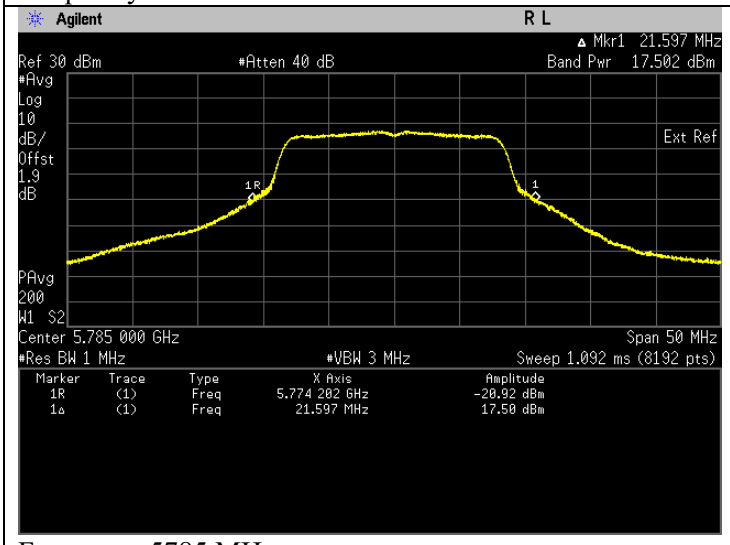
Frequency 5580 MHz.



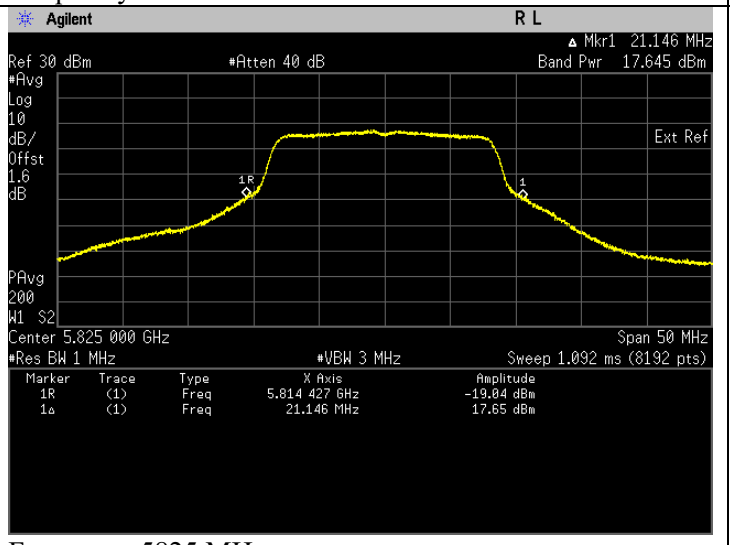
Frequency 5700 MHz.



Frequency 5745 MHz.



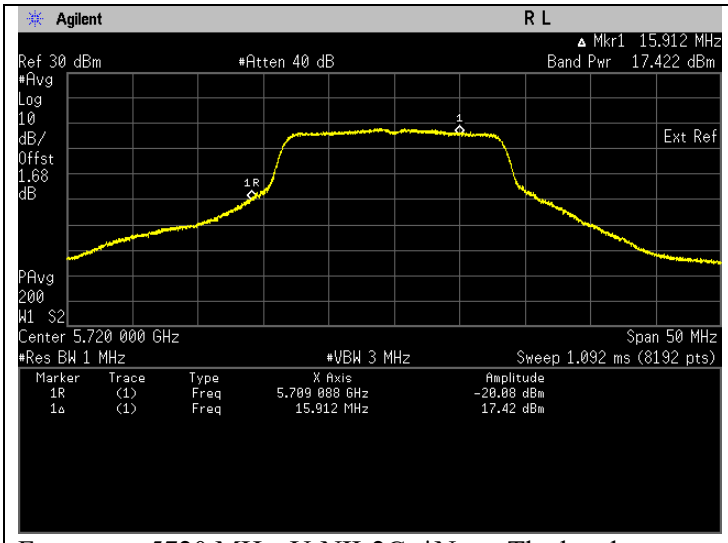
Frequency 5785 MHz.



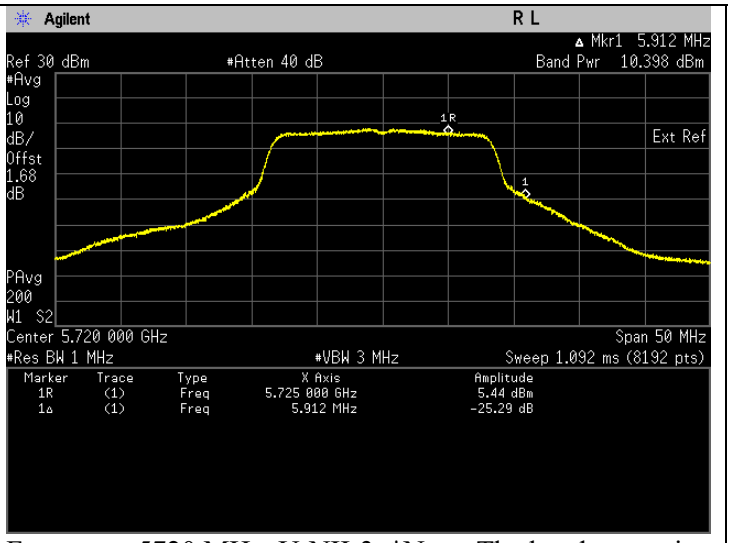
Frequency 5825 MHz.

Straddle Frequency

Freq. (MHz)	Test Conditions	Results		
		U-NII- 2C		
		Power (mW)	Power (dBm)	Status
5720	Mod Type: BPSK, Data Rate: 6	56.169	17.495	Pass
		U-NII-3		
5720	Mod Type: BPSK, Data Rate: 6	11.146	10.471	Pass



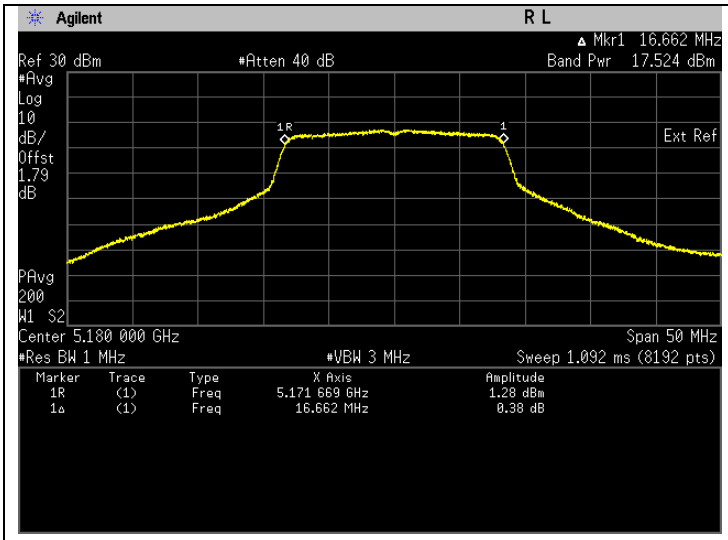
Frequency 5720 MHz, U-NII-2C. *Note: The band power is captured before the 5725 MHz.



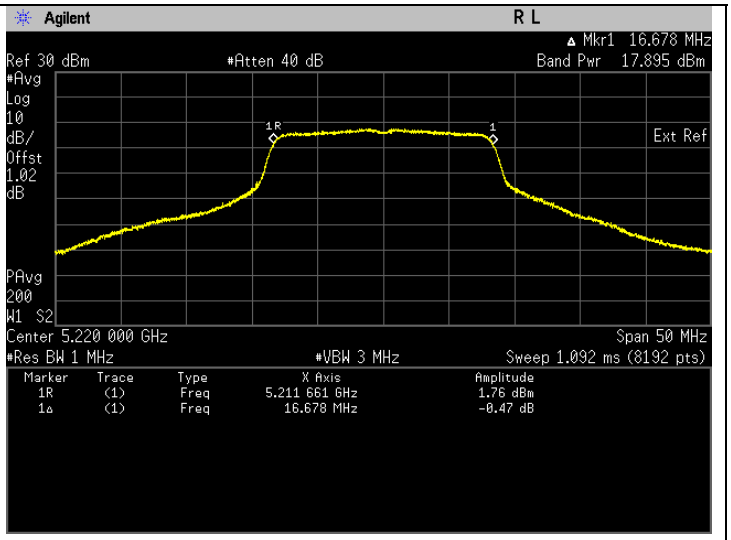
Frequency 5720 MHz, U-NII-3. *Note: The band power is captured after the 5725 MHz.

802.11a (99% EBW)

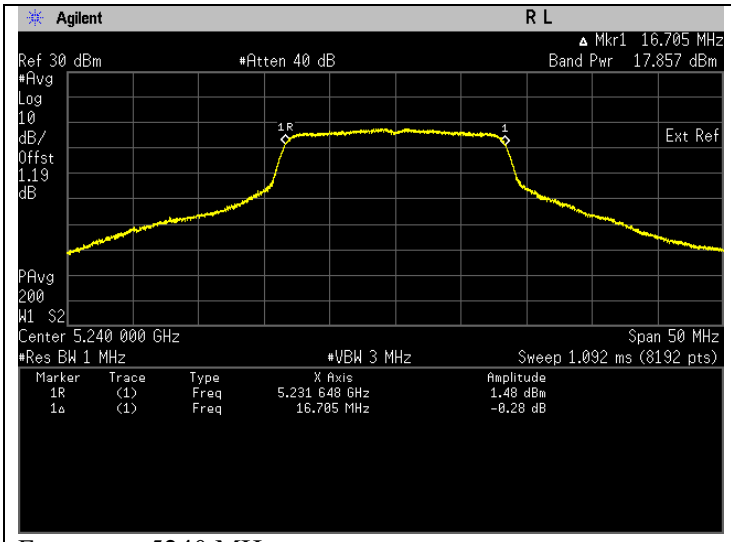
Freq. (MHz)	Test Conditions	Results				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5180	Mod Type: BPSK, Data Rate: 6	57.506	17.597	Pass	22.197	Pass
5220	Mod Type: BPSK, Data Rate: 6	62.633	17.968	Pass	22.568	Pass
5240	Mod Type: BPSK, Data Rate: 6	62.087	17.930	Pass	22.530	Pass
5260	Mod Type: BPSK, Data Rate: 6	61.052	17.857	Pass	22.457	Pass
5300	Mod Type: BPSK, Data Rate: 6	63.959	18.059	Pass	22.659	Pass
5320	Mod Type: BPSK, Data Rate: 6	62.101	17.931	Pass	22.531	Pass
5500	Mod Type: BPSK, Data Rate: 6	45.437	16.574	Pass	19.874	Pass
5580	Mod Type: BPSK, Data Rate: 6	59.883	17.773	Pass	21.073	Pass
5700	Mod Type: BPSK, Data Rate: 6	56.663	17.533	Pass	20.833	Pass
5745	Mod Type: BPSK, Data Rate: 6	58.184	17.648	Pass	20.748	Pass
5785	Mod Type: BPSK, Data Rate: 6	56.260	17.502	Pass	20.602	Pass
5825	Mod Type: BPSK, Data Rate: 6	58.063	17.639	Pass	20.739	Pass



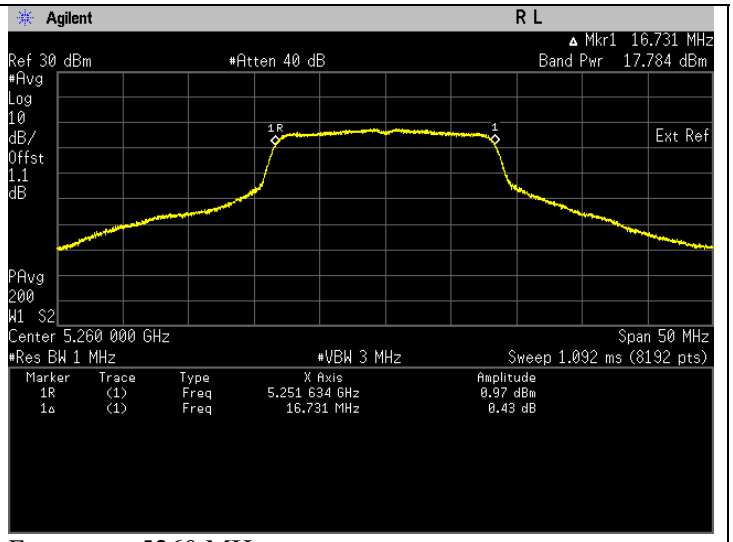
Frequency 5180 MHz



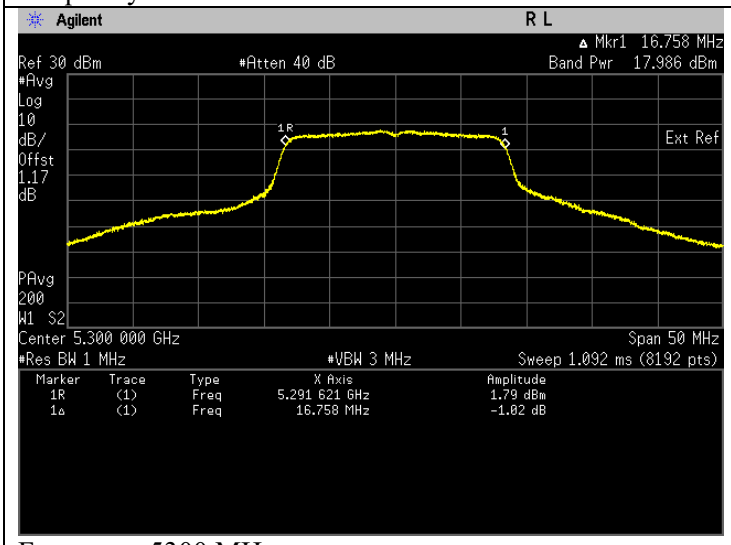
Frequency 5220 MHz



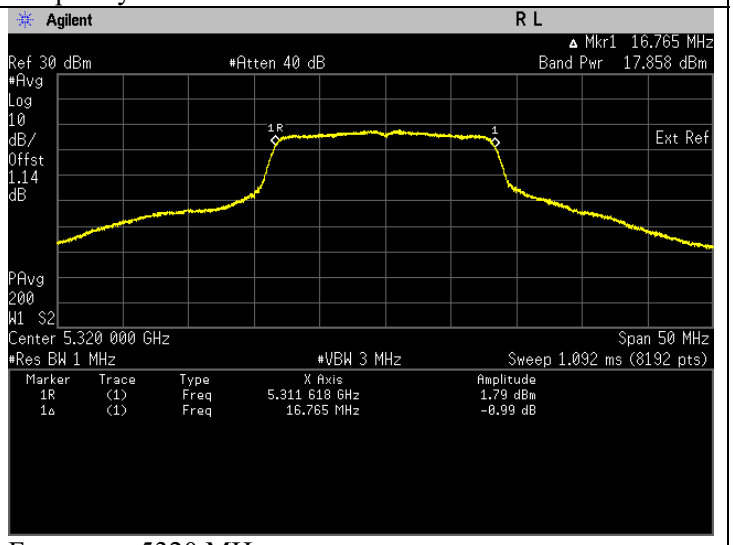
Frequency 5240 MHz



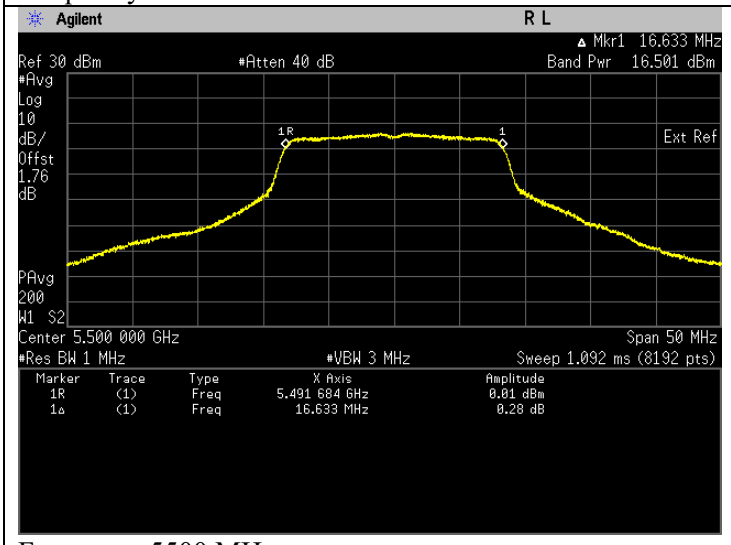
Frequency 5260 MHz



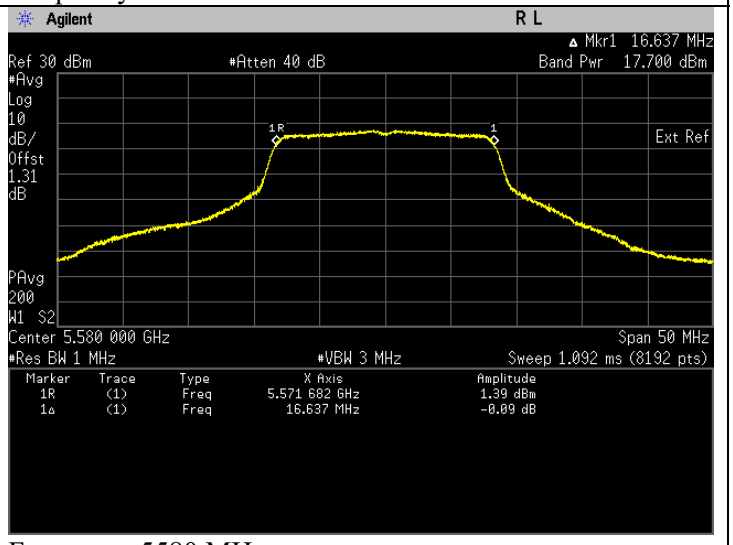
Frequency 5300 MHz



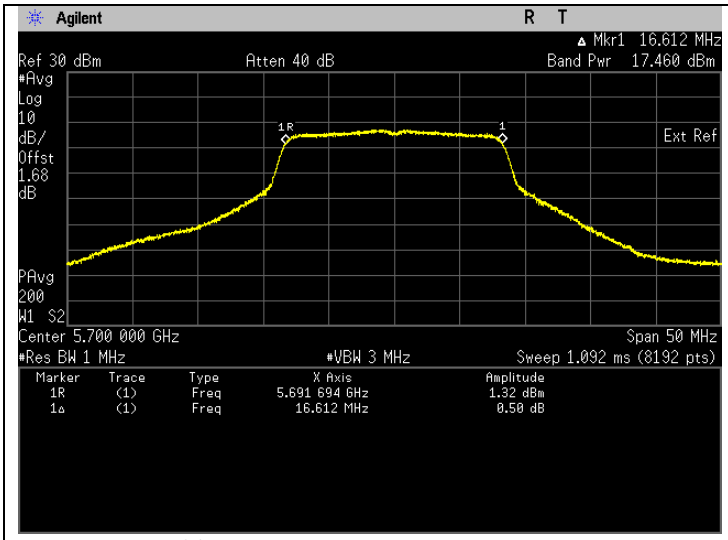
Frequency 5320 MHz



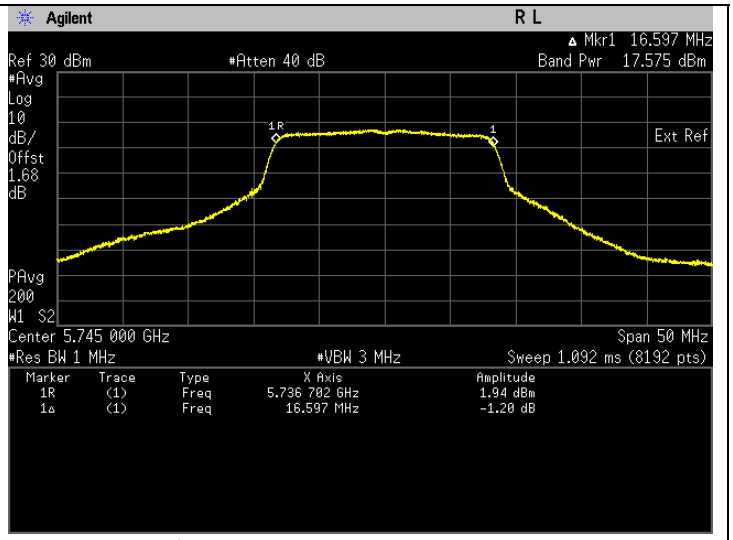
Frequency 5500 MHz



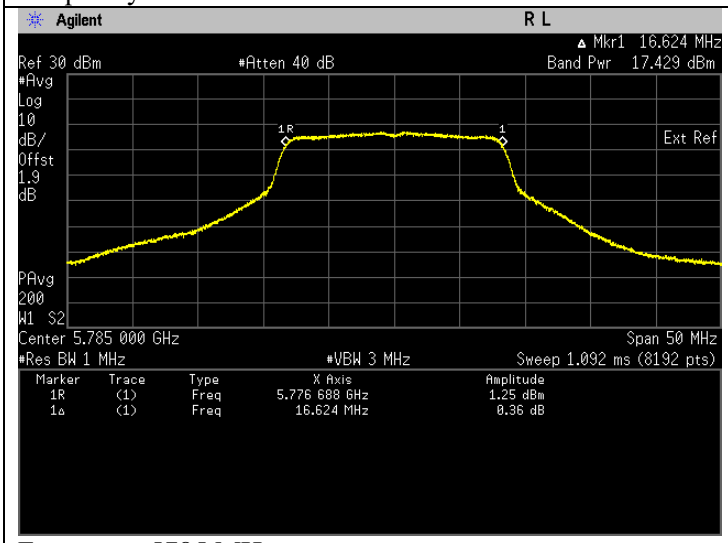
Frequency 5580 MHz



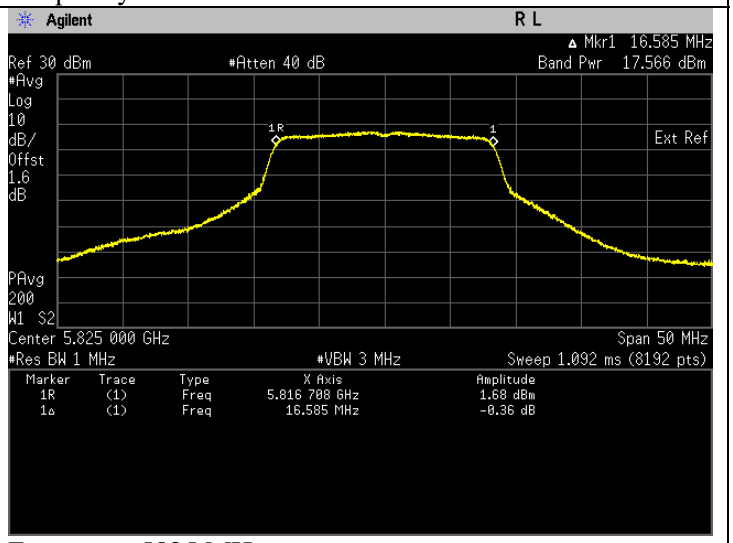
Frequency 5700 MHz



Frequency 5745 MHz



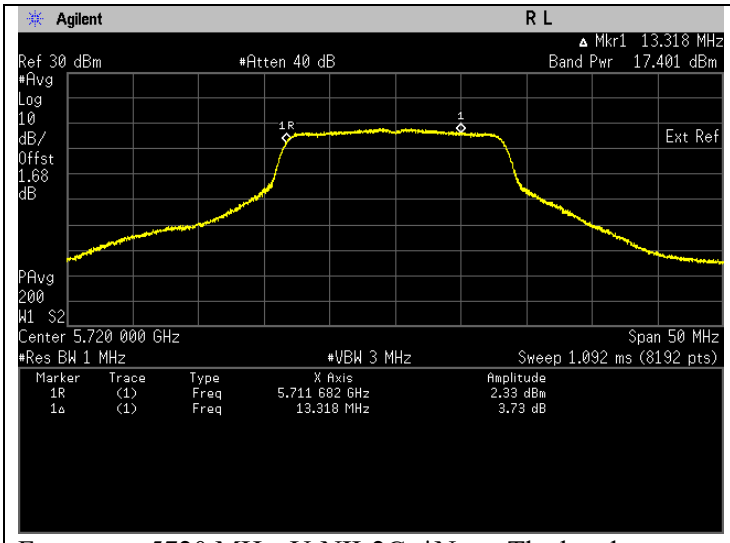
Frequency 5785 MHz



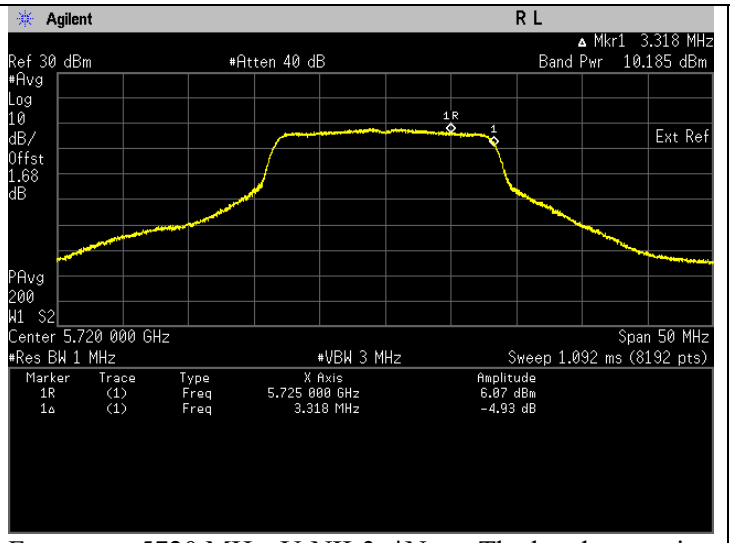
Frequency 5825 MHz

Straddle Frequency

Freq. (MHz)	Test Conditions	Results				
		U-NII- 2C				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5720	Mod Type: BPSK, Data Rate: 6	55.898	17.474	Pass	20.774	Pass
		U-NII-3				
5720	Mod Type: BPSK, Data Rate: 6	10.612	10.258	Pass	13.558	Pass



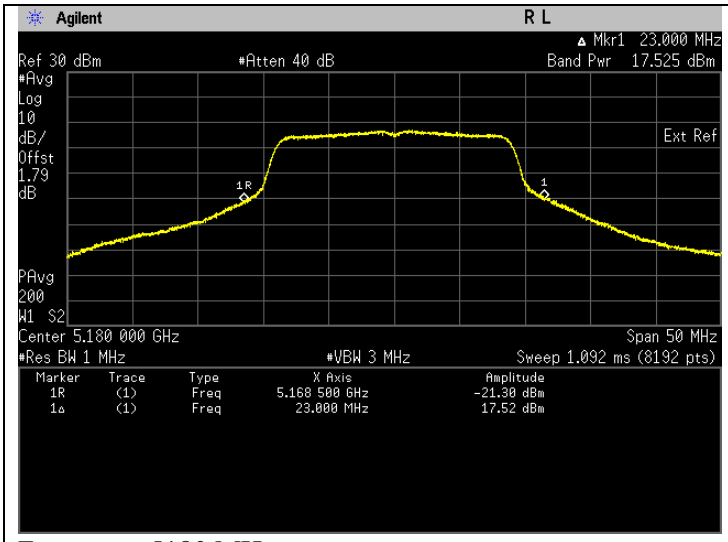
Frequency 5720 MHz, U-NII-2C. *Note: The band power is captured before the 5725 MHz.



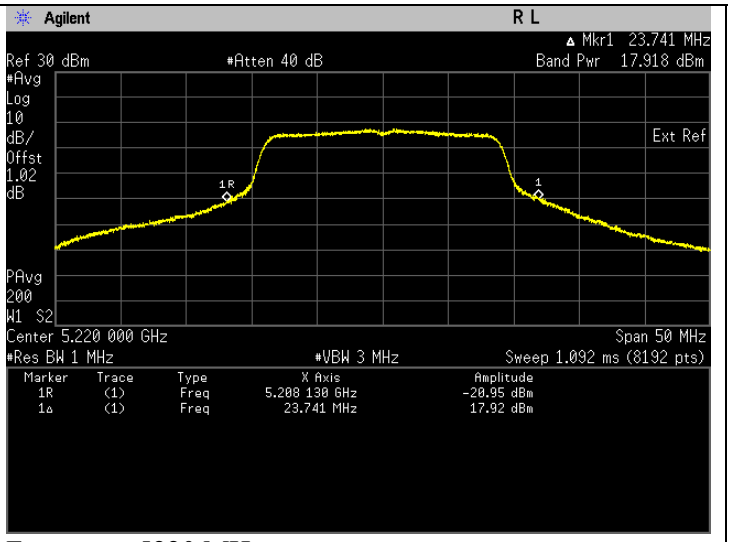
Frequency 5720 MHz, U-NII-3. *Note: The band power is captured after the 5725 MHz.

802.11n (HT20)(26dB EBW)

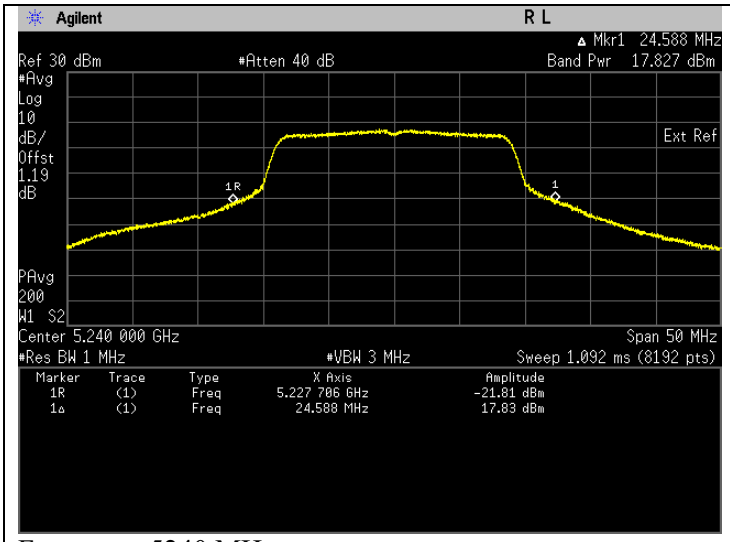
Freq. (MHz)	Test Conditions	Results		
		Power (mW)	Power (dBm)	Status
5180	Mod Type: BPSK, Data Rate: MCS0 (6.5)	57.554	17.601	Pass
5220	Mod Type: BPSK, Data Rate: MCS0 (6.5)	63.009	17.994	Pass
5240	Mod Type: BPSK, Data Rate: MCS0 (6.5)	61.702	17.903	Pass
5260	Mod Type: BPSK, Data Rate: MCS0 (6.5)	59.731	17.762	Pass
5300	Mod Type: BPSK, Data Rate: MCS0 (6.5)	63.929	18.057	Pass
5320	Mod Type: BPSK, Data Rate: MCS0 (6.5)	61.404	17.882	Pass
5500	Mod Type: BPSK, Data Rate: MCS0 (6.5)	65.778	18.181	Pass
5580	Mod Type: BPSK, Data Rate: MCS0 (6.5)	59.814	17.768	Pass
5700	Mod Type: BPSK, Data Rate: MCS0 (6.5)	64.893	18.122	Pass
5745	Mod Type: BPSK, Data Rate: MCS0 (6.5)	68.328	18.346	Pass
5785	Mod Type: BPSK, Data Rate: MCS0 (6.5)	67.999	18.325	Pass
5825	Mod Type: BPSK, Data Rate: MCS0 (6.5)	68.818	18.377	Pass



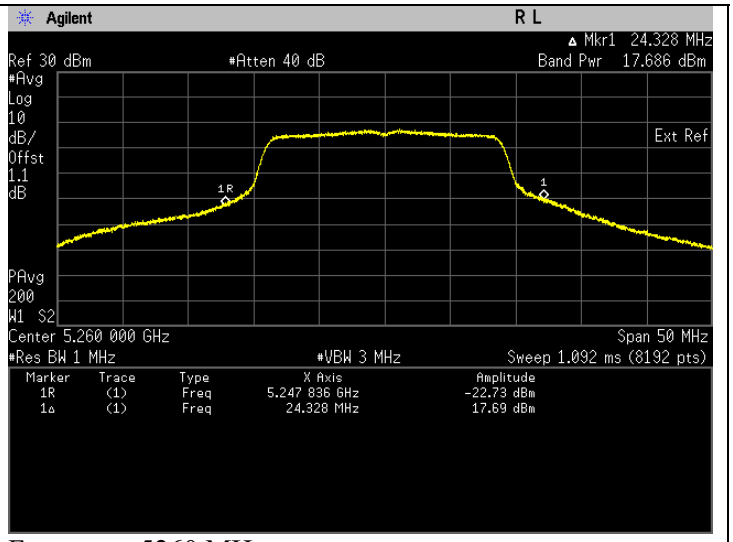
Frequency 5180 MHz



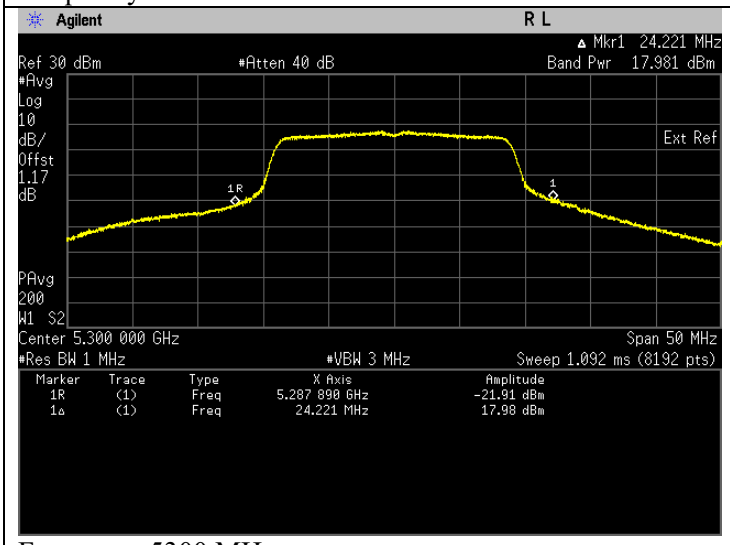
Frequency 5220 MHz



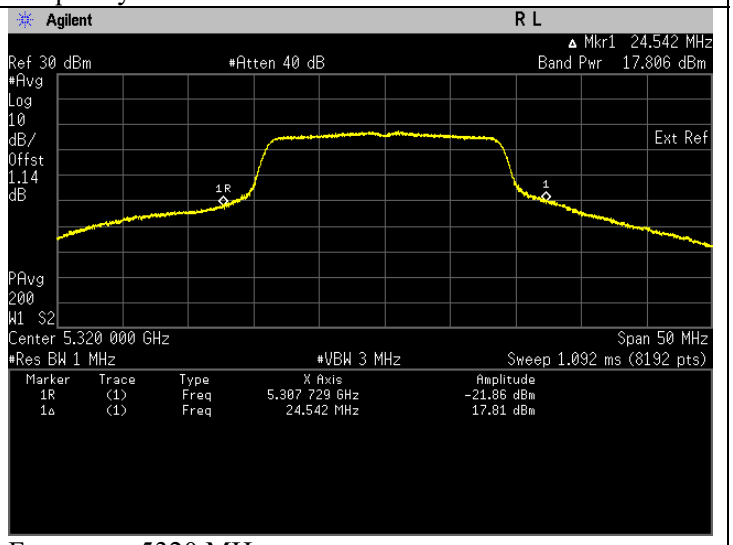
Frequency 5240 MHz



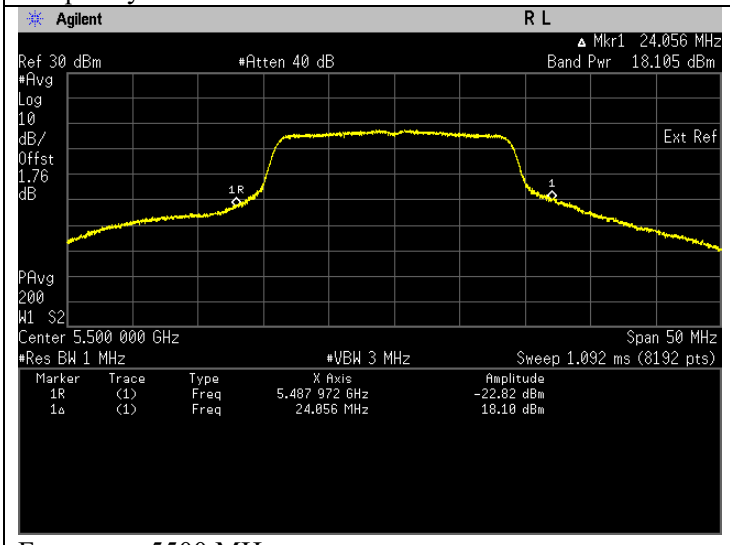
Frequency 5260 MHz



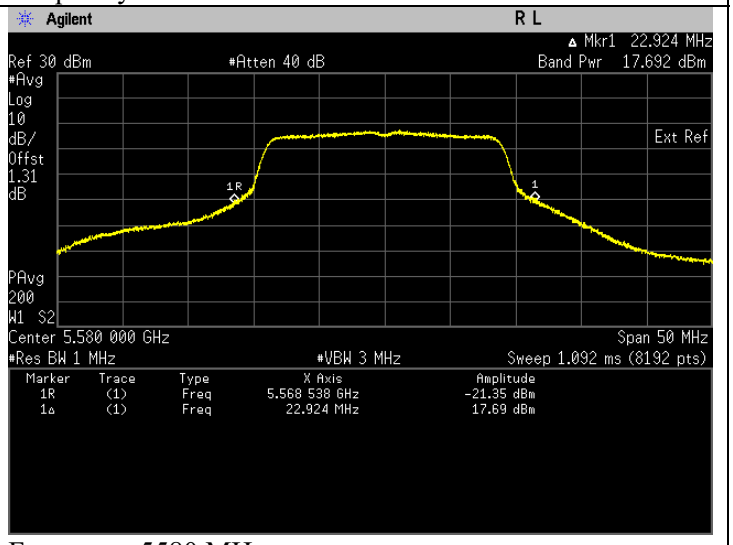
Frequency 5300 MHz



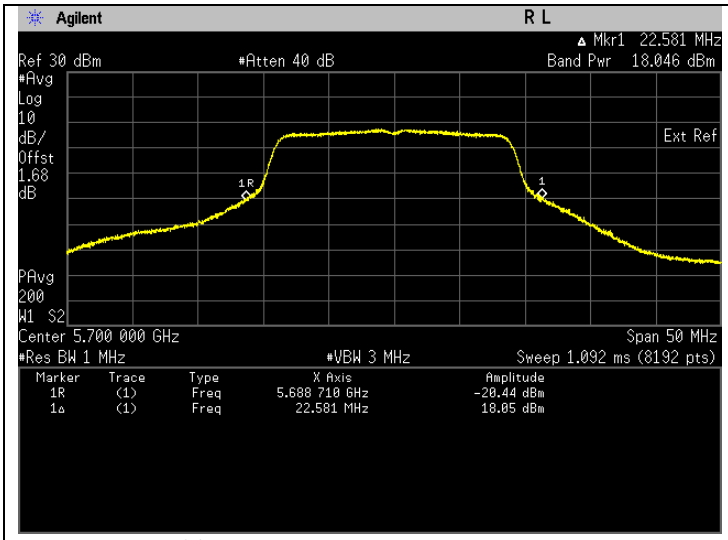
Frequency 5320 MHz



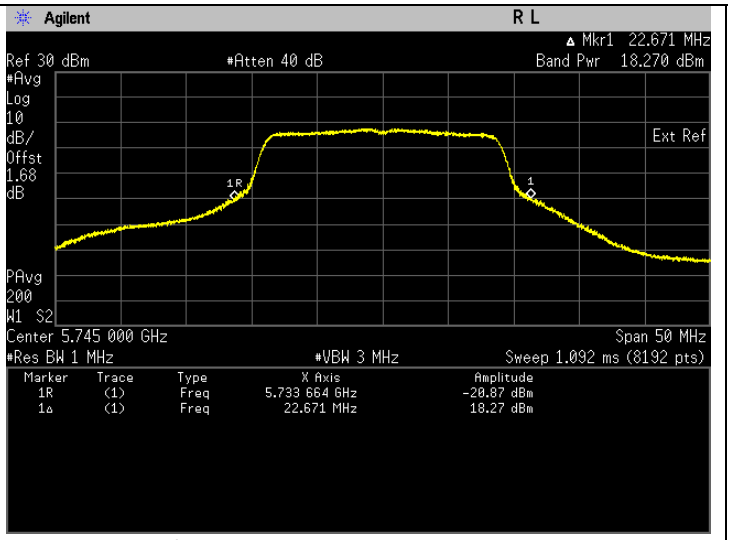
Frequency 5500 MHz



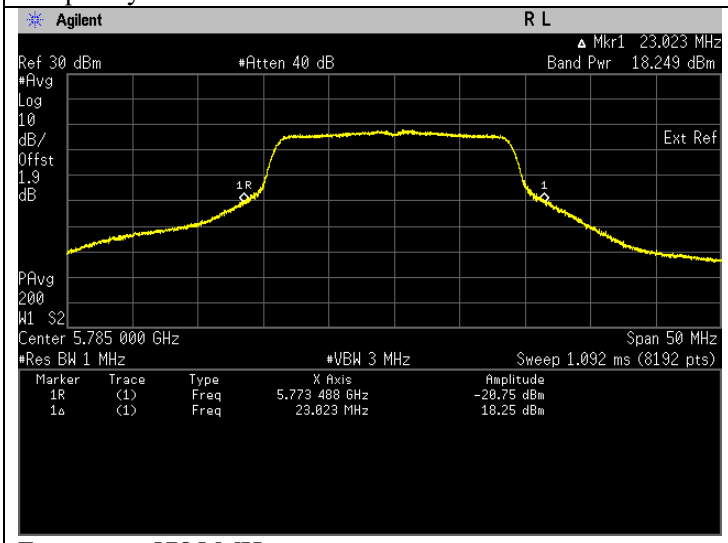
Frequency 5580 MHz



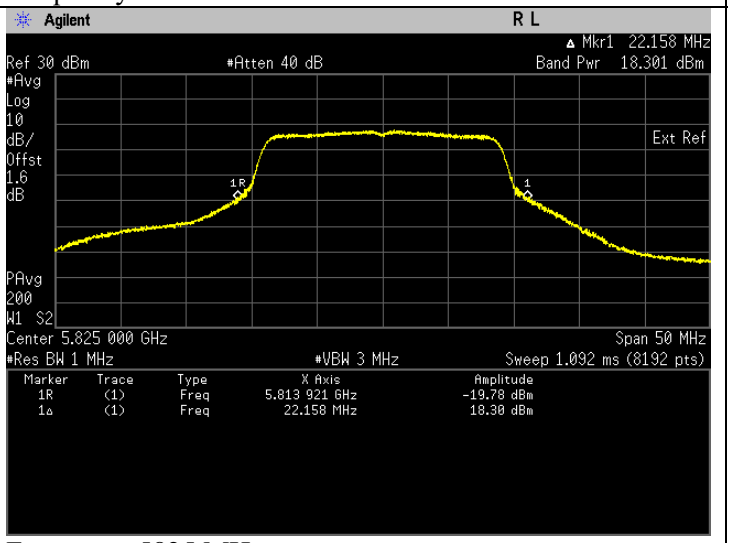
Frequency 5700 MHz



Frequency 5745 MHz



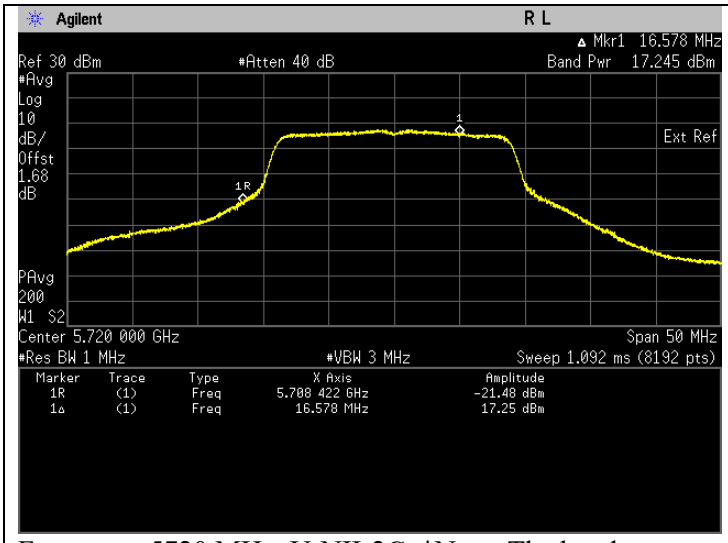
Frequency 5785 MHz



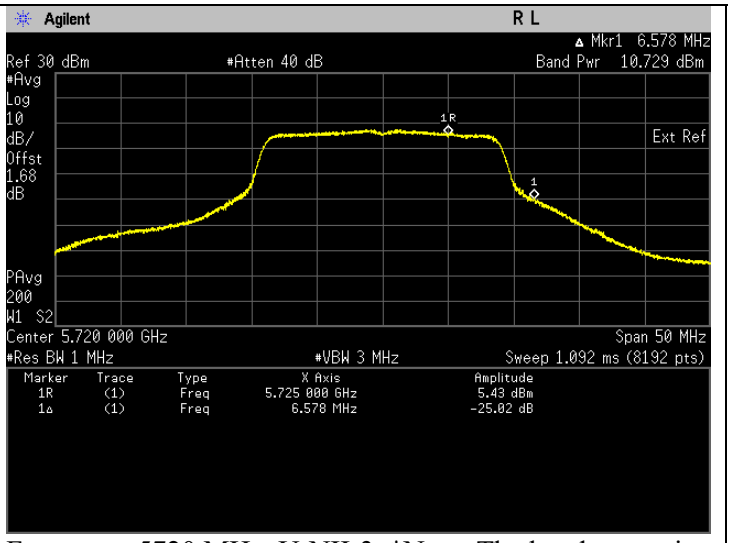
Frequency 5825 MHz

Straddle Frequency

Freq. (MHz)	Test Conditions	Results		
		U-NII- 2C		
		Power (mW)	Power (dBm)	Status
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	53.963	17.321	Pass
		U-NII-3		
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	12.036	10.805	Pass



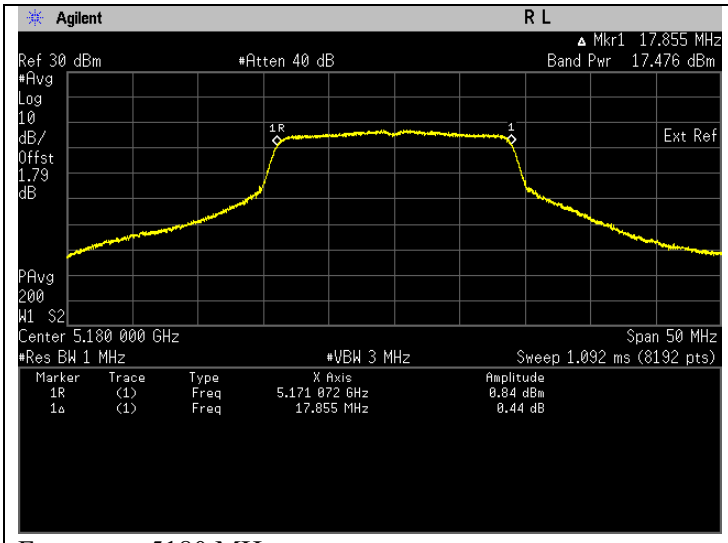
Frequency 5720 MHz, U-NII-2C. *Note: The band power is captured before the 5725 MHz.



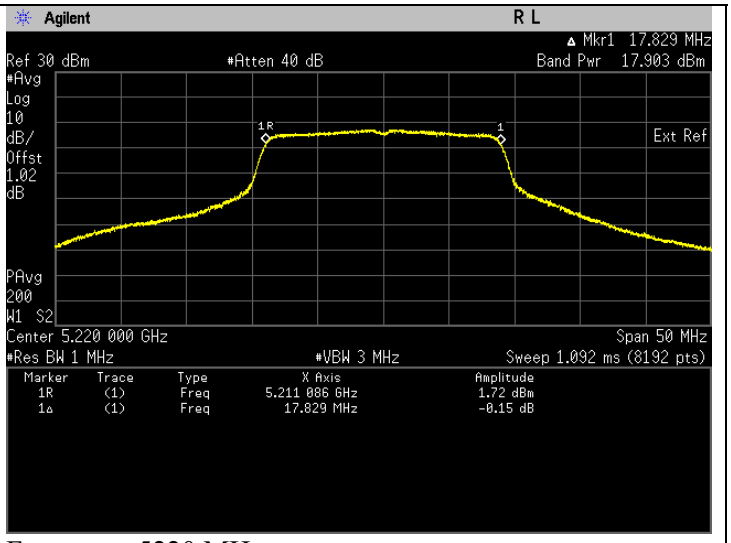
Frequency 5720 MHz, U-NII-3. *Note: The band power is captured after the 5725 MHz.

802.11n (HT20)(99% EBW)

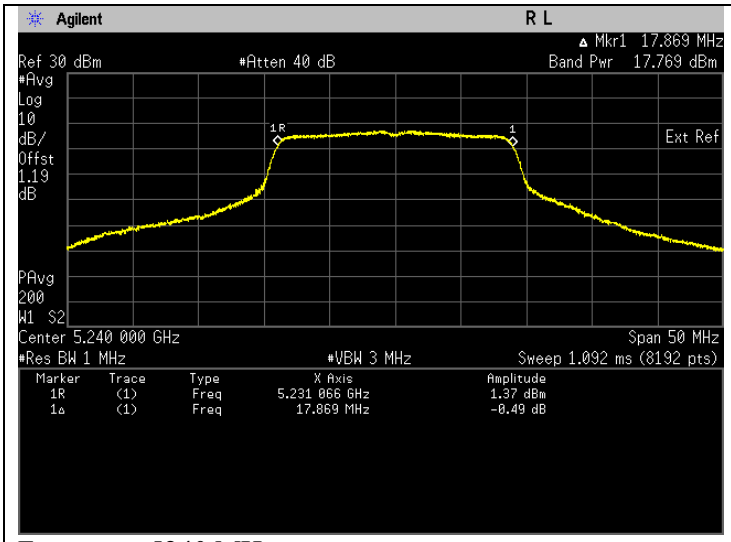
Freq. (MHz)	Test Conditions	Results				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5180	Mod Type: BPSK, Data Rate: MCS0 (6.5)	56.909	17.552	Pass	22.152	Pass
5220	Mod Type: BPSK, Data Rate: MCS0 (6.5)	62.791	17.979	Pass	22.579	Pass
5240	Mod Type: BPSK, Data Rate: MCS0 (6.5)	60.884	17.845	Pass	22.445	Pass
5260	Mod Type: BPSK, Data Rate: MCS0 (6.5)	58.627	17.681	Pass	22.281	Pass
5300	Mod Type: BPSK, Data Rate: MCS0 (6.5)	62.734	17.975	Pass	22.575	Pass
5320	Mod Type: BPSK, Data Rate: MCS0 (6.5)	60.187	17.795	Pass	22.395	Pass
5500	Mod Type: BPSK, Data Rate: MCS0 (6.5)	64.816	18.117	Pass	21.417	Pass
5580	Mod Type: BPSK, Data Rate: MCS0 (6.5)	58.398	17.664	Pass	20.964	Pass
5700	Mod Type: BPSK, Data Rate: MCS0 (6.5)	64.077	18.067	Pass	21.367	Pass
5745	Mod Type: BPSK, Data Rate: MCS0 (6.5)	67.251	18.277	Pass	21.377	Pass
5785	Mod Type: BPSK, Data Rate: MCS0 (6.5)	66.191	18.208	Pass	21.308	Pass
5825	Mod Type: BPSK, Data Rate: MCS0 (6.5)	67.499	18.293	Pass	21.393	Pass



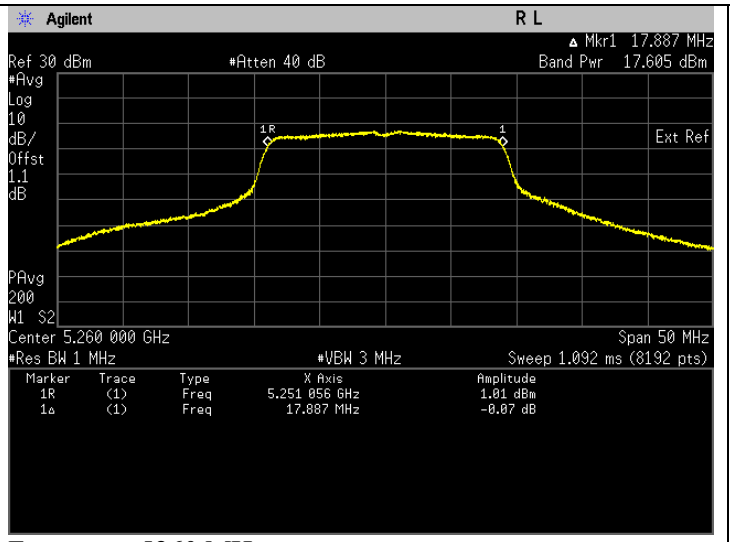
Frequency 5180 MHz



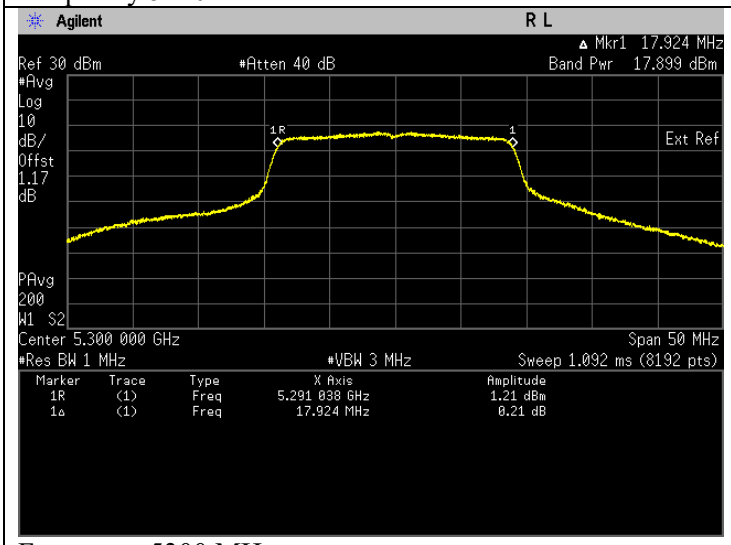
Frequency 5220 MHz



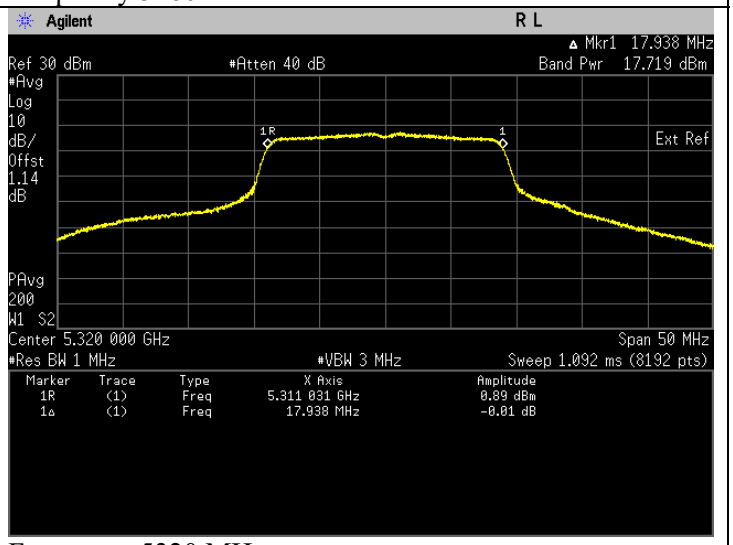
Frequency 5240 MHz



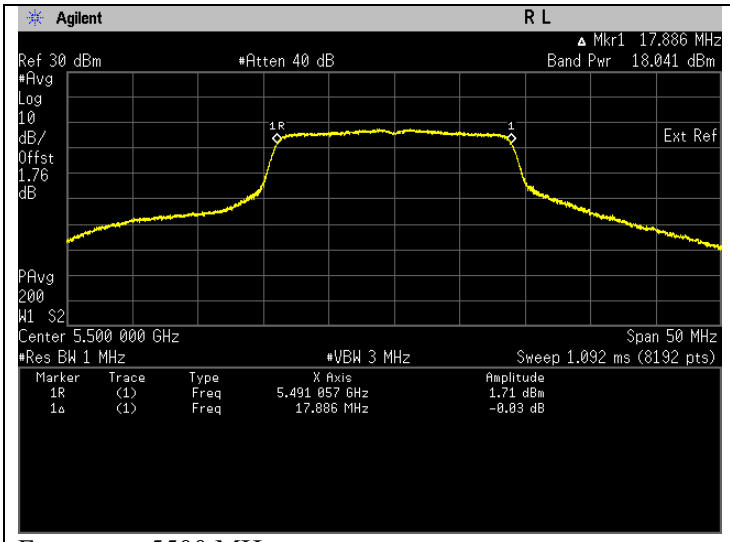
Frequency 5260 MHz



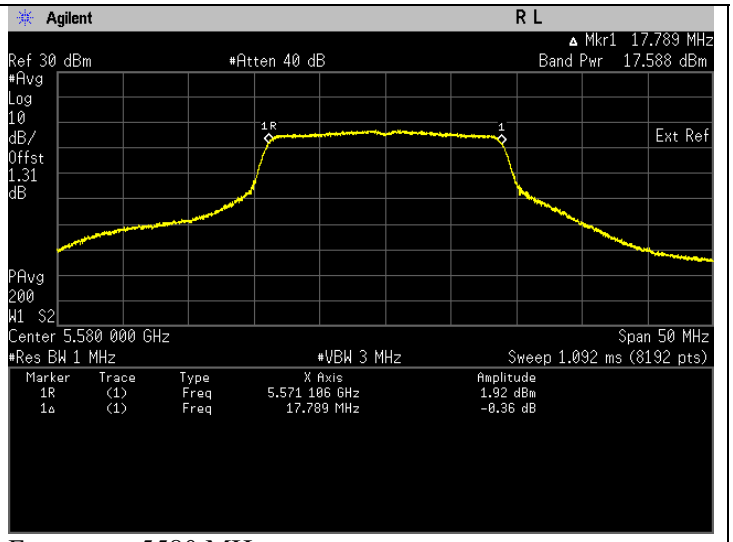
Frequency 5300 MHz



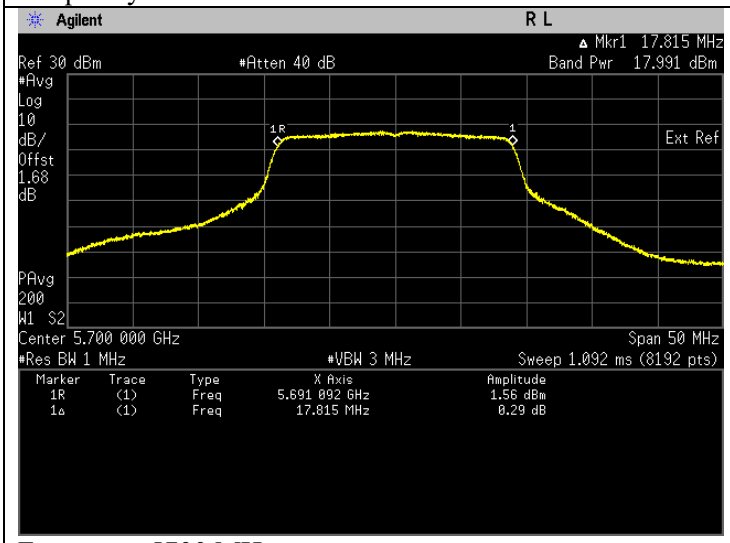
Frequency 5320 MHz



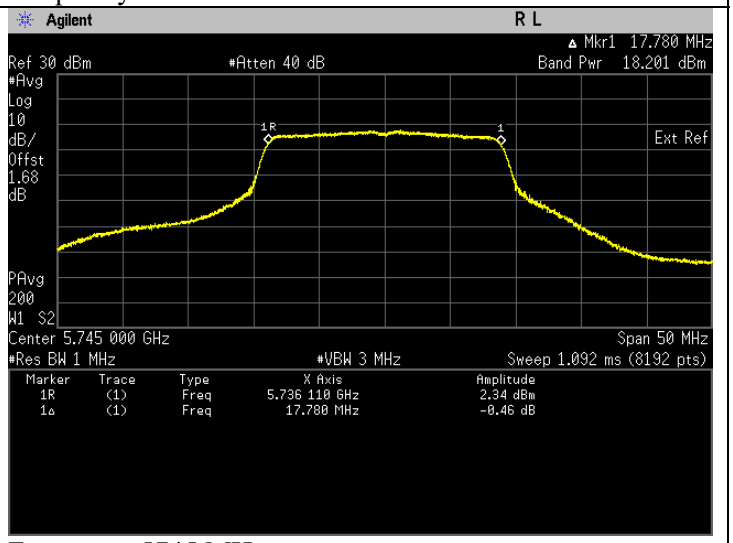
Frequency 5500 MHz



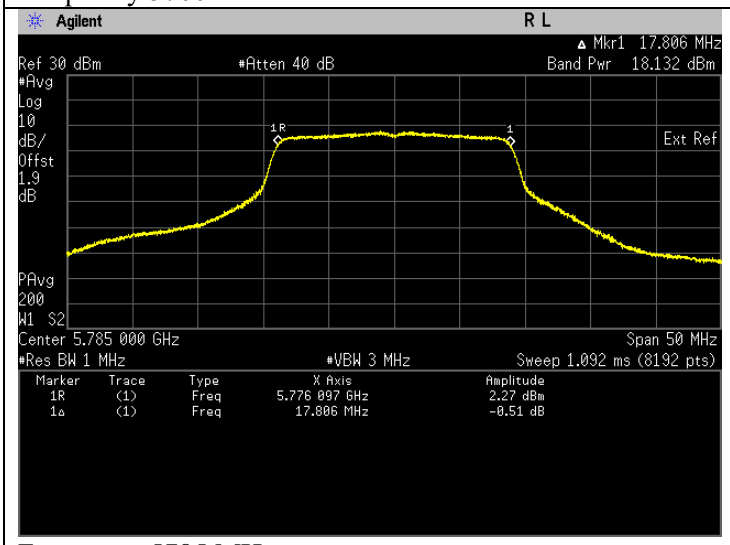
Frequency 5580 MHz



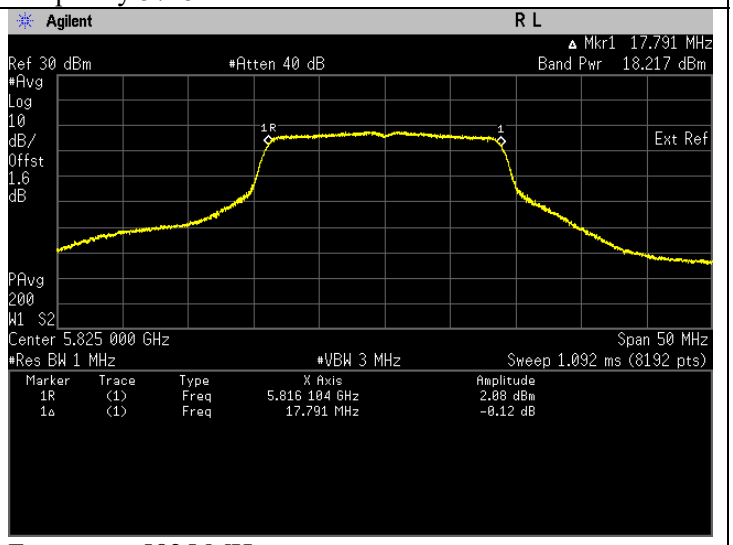
Frequency 5700 MHz



Frequency 5745 MHz



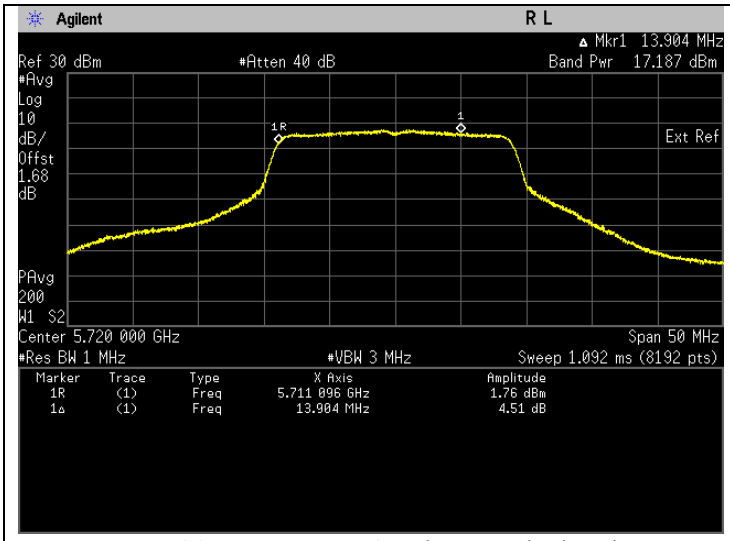
Frequency 5785 MHz



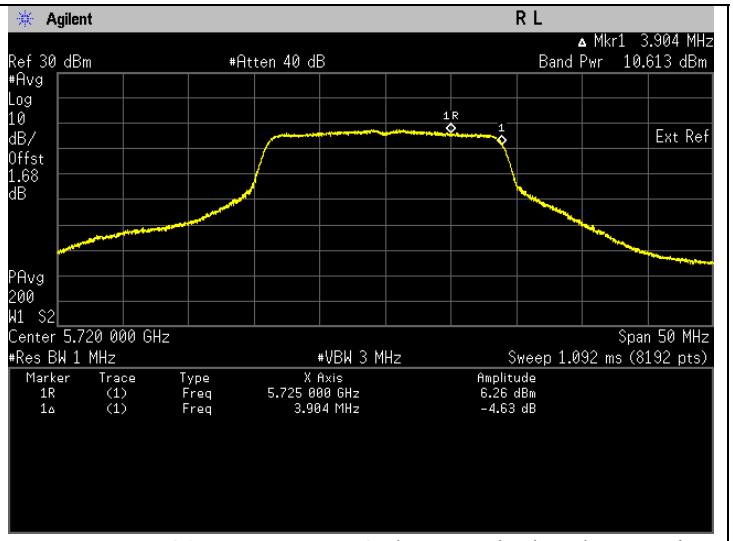
Frequency 5825 MHz

Straddle Frequency

Freq. (MHz)	Test Conditions	Results				
		U-NII- 2C				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	53.248	17.263	Pass	20.563	Pass
		U-NII-3				
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	11.719	10.689	Pass	13.989	Pass



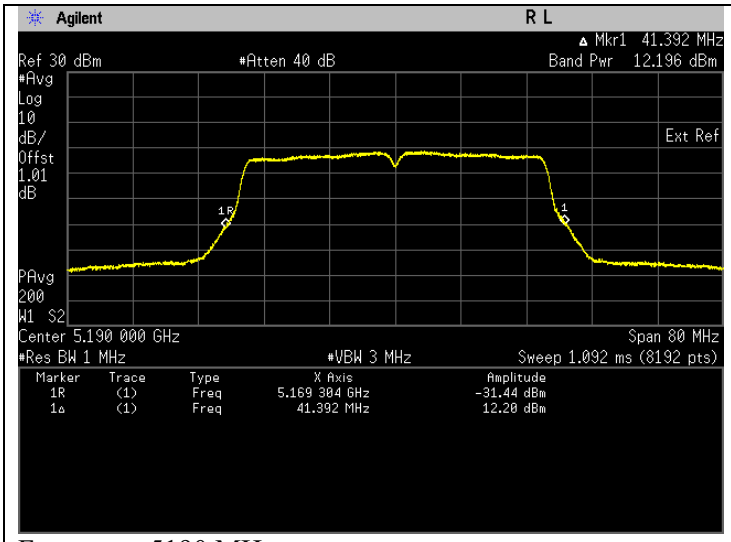
Frequency 5720 MHz, U-NII-2C. *Note: The band power is captured before the 5725 MHz.



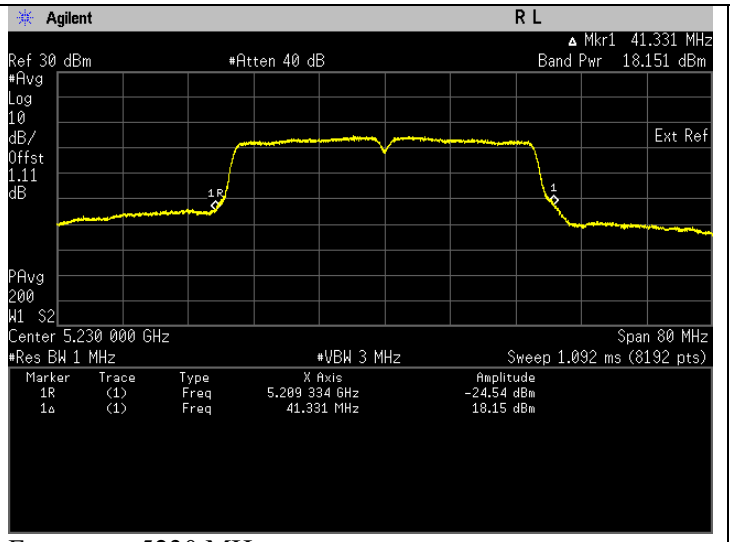
Frequency 5720 MHz, U-NII-3. *Note: The band power is captured after the 5725 MHz.

802.11n (HT40)(26dB EBW)

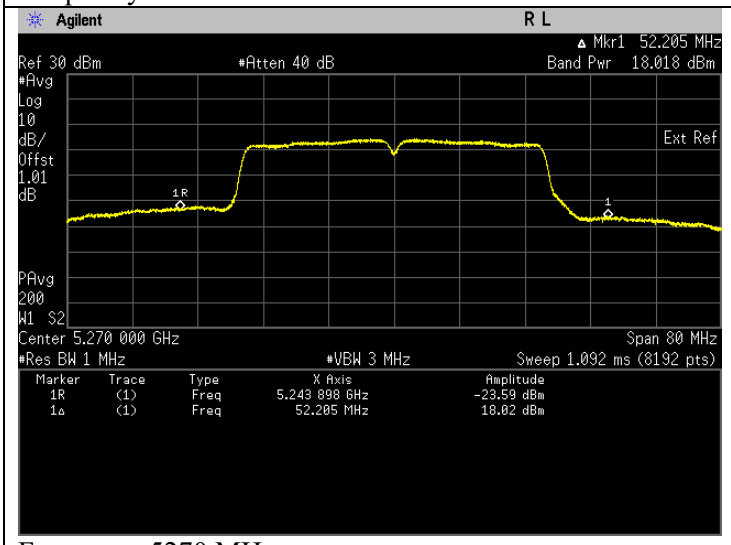
Freq. (MHz)	Test Conditions	Results		
		Power (mW)	Power (dBm)	Status
5190	Mod Type: BPSK, Data Rate: MCS0 (13.5)	17.179	12.350	Pass
5230	Mod Type: BPSK, Data Rate: MCS0 (13.5)	67.686	18.305	Pass
5270	Mod Type: BPSK, Data Rate: MCS0 (13.5)	65.645	18.172	Pass
5310	Mod Type: BPSK, Data Rate: MCS0 (13.5)	13.571	11.326	Pass
5510	Mod Type: BPSK, Data Rate: MCS0 (13.5)	33.005	15.186	Pass
5590	Mod Type: BPSK, Data Rate: MCS0 (13.5)	63.358	18.018	Pass
5670	Mod Type: BPSK, Data Rate: MCS0 (13.5)	59.388	17.737	Pass
5755	Mod Type: BPSK, Data Rate: MCS0 (13.5)	59.102	17.716	Pass
5795	Mod Type: BPSK, Data Rate: MCS0 (13.5)	60.298	17.803	Pass



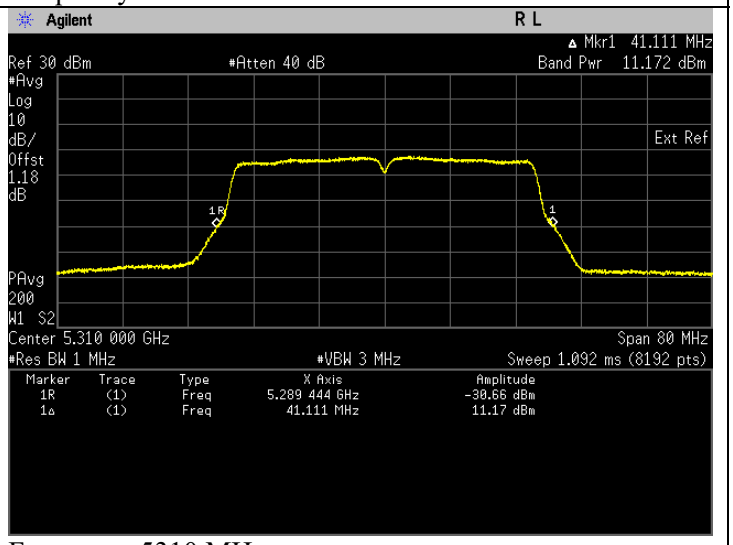
Frequency 5190 MHz



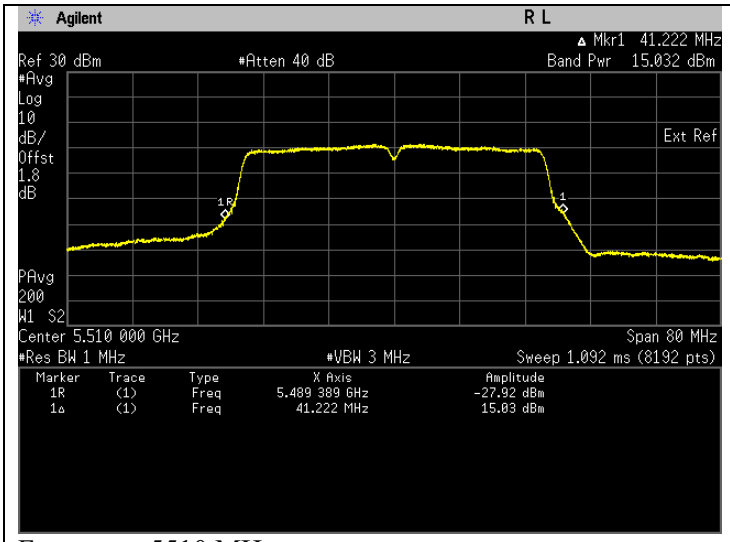
Frequency 5230 MHz



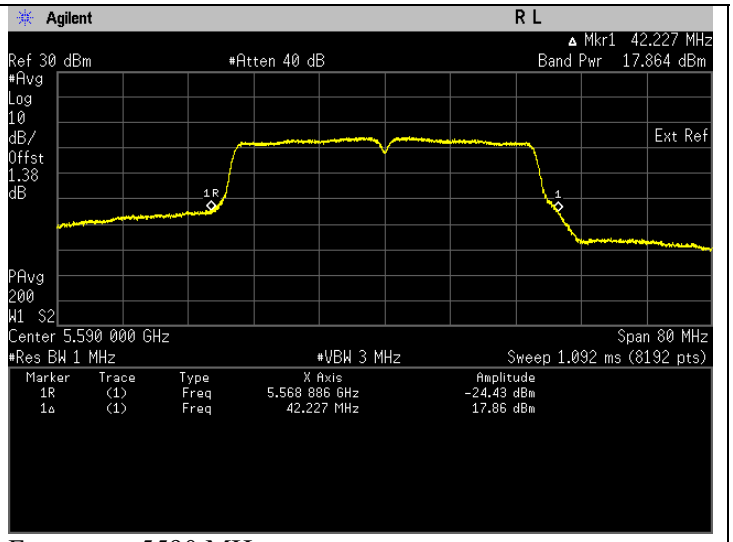
Frequency 5270 MHz



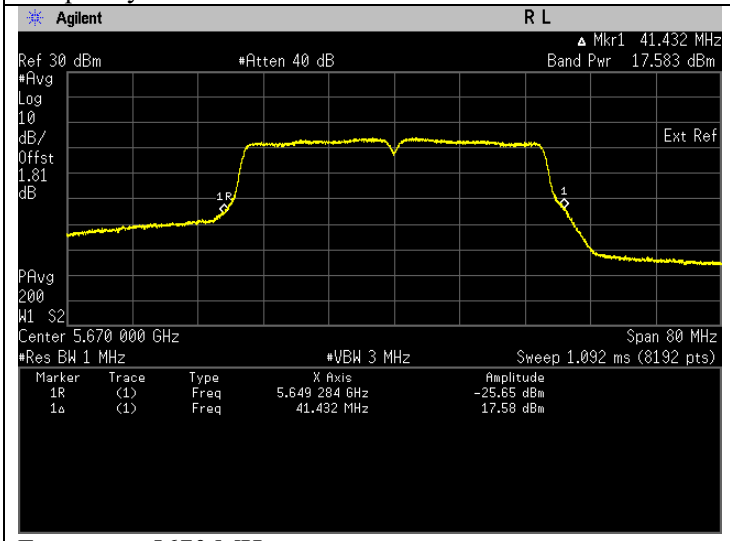
Frequency 5310 MHz



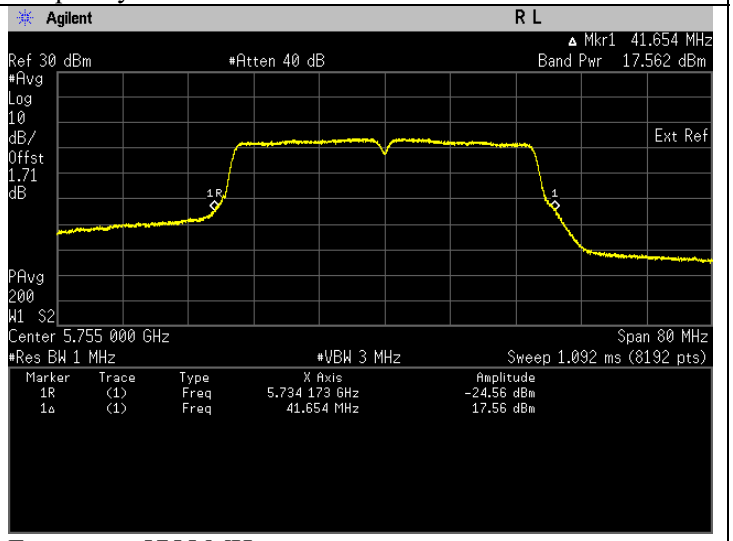
Frequency 5510 MHz



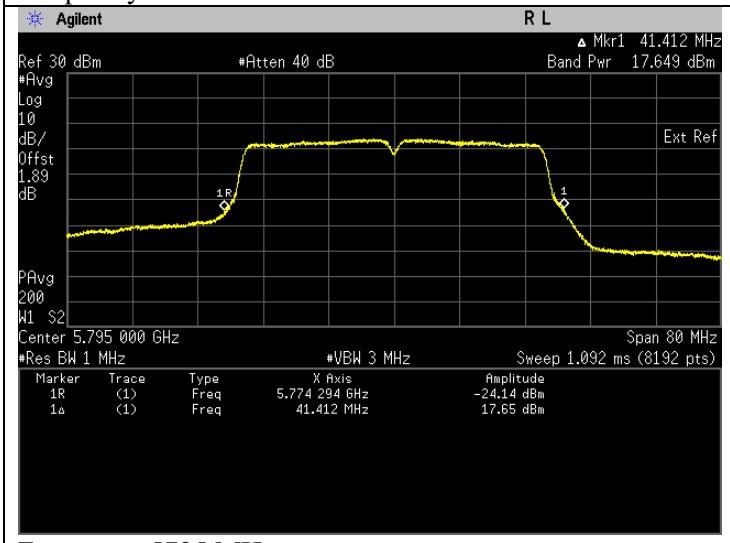
Frequency 5590 MHz



Frequency 5670 MHz



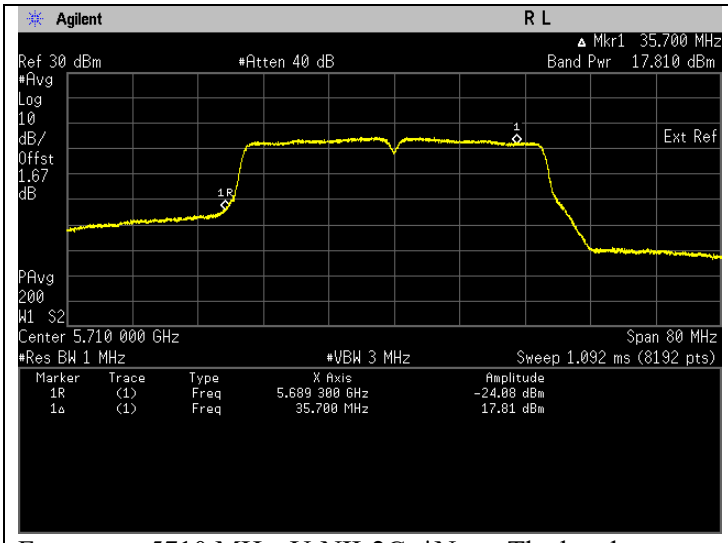
Frequency 5755 MHz



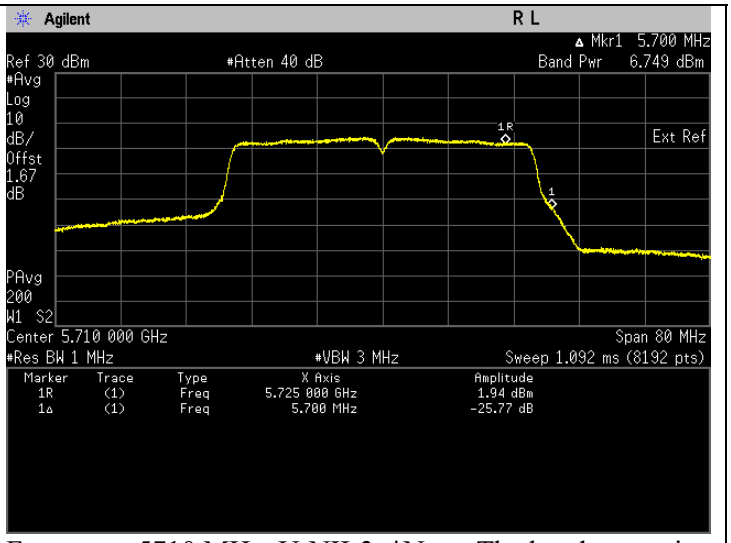
Frequency 5795 MHz

Straddle Frequency

Freq. (MHz)	Test Conditions	Results		
		U-NII- 2C		
		Power (mW)	Power (dBm)	Status
5710	Mod Type: BPSK, Data Rate: MCS0 (13.5)	62.575	17.964	Pass
		U-NII-3		
5710	Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.901	6.903	Pass



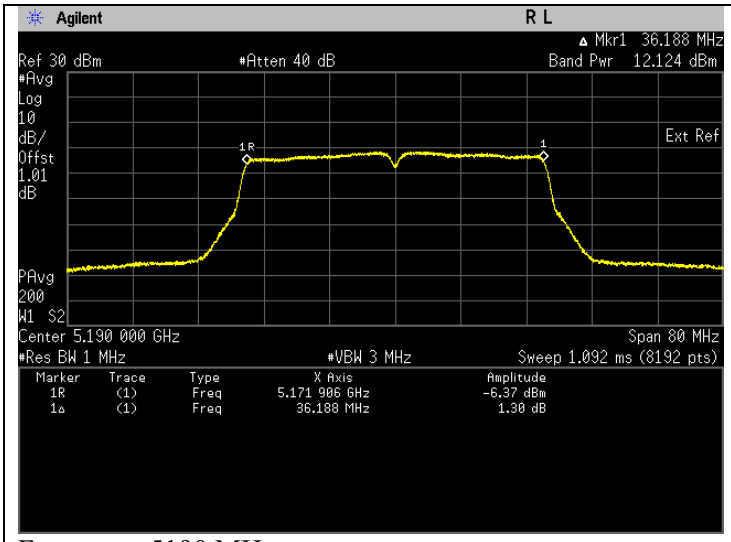
Frequency 5710 MHz, U-NII-2C. *Note: The band power is captured before the 5725 MHz.



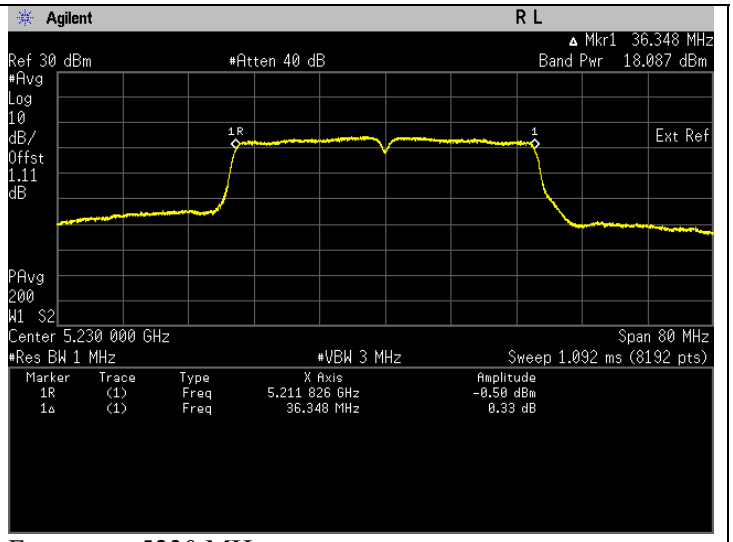
Frequency 5710 MHz, U-NII-3. *Note: The band power is captured after the 5725 MHz.

802.11n (HT40)(99% EBW)

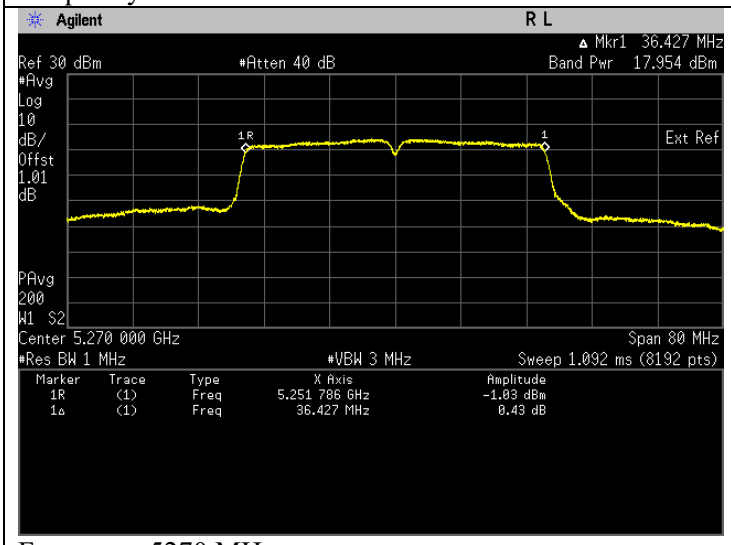
Freq. (MHz)	Test Conditions	Results				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5190	Mod Type: BPSK, Data Rate: MCS0 (13.5)	16.897	12.278	Pass	16.878	Pass
5230	Mod Type: BPSK, Data Rate: MCS0 (13.5)	66.696	18.241	Pass	22.841	Pass
5270	Mod Type: BPSK, Data Rate: MCS0 (13.5)	64.684	18.108	Pass	22.708	Pass
5310	Mod Type: BPSK, Data Rate: MCS0 (13.5)	13.428	11.280	Pass	15.880	Pass
5510	Mod Type: BPSK, Data Rate: MCS0 (13.5)	32.403	15.106	Pass	18.406	Pass
5590	Mod Type: BPSK, Data Rate: MCS0 (13.5)	63.402	18.021	Pass	21.321	Pass
5670	Mod Type: BPSK, Data Rate: MCS0 (13.5)	58.925	17.703	Pass	21.003	Pass
5755	Mod Type: BPSK, Data Rate: MCS0 (13.5)	58.668	17.684	Pass	20.784	Pass
5795	Mod Type: BPSK, Data Rate: MCS0 (13.5)	59.553	17.749	Pass	20.849	Pass



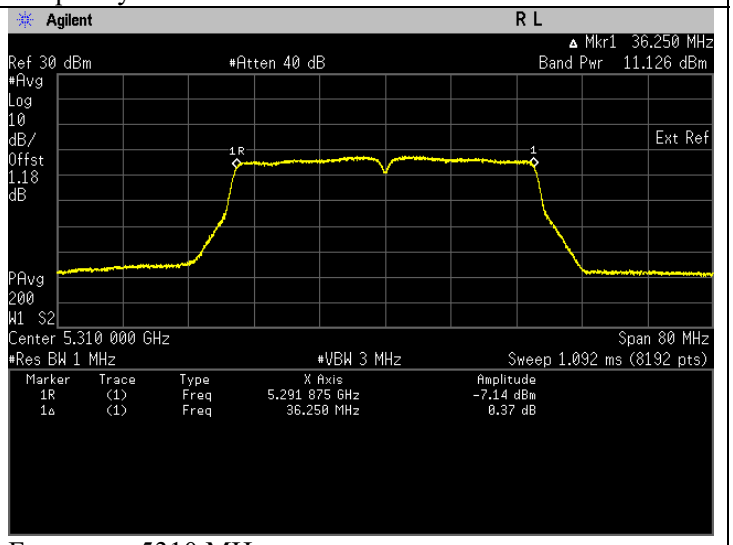
Frequency 5190 MHz



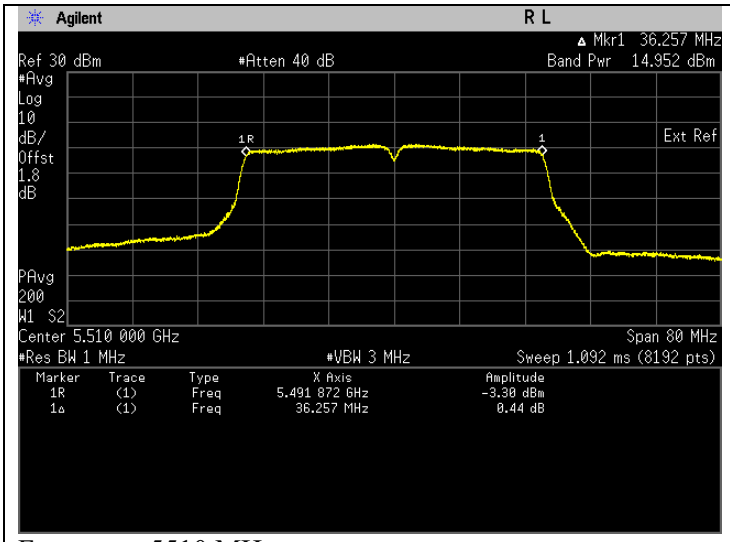
Frequency 5230 MHz



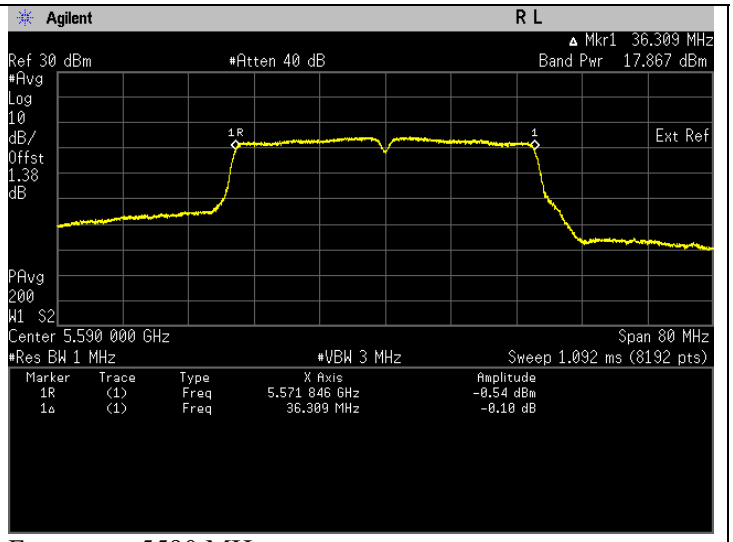
Frequency 5270 MHz



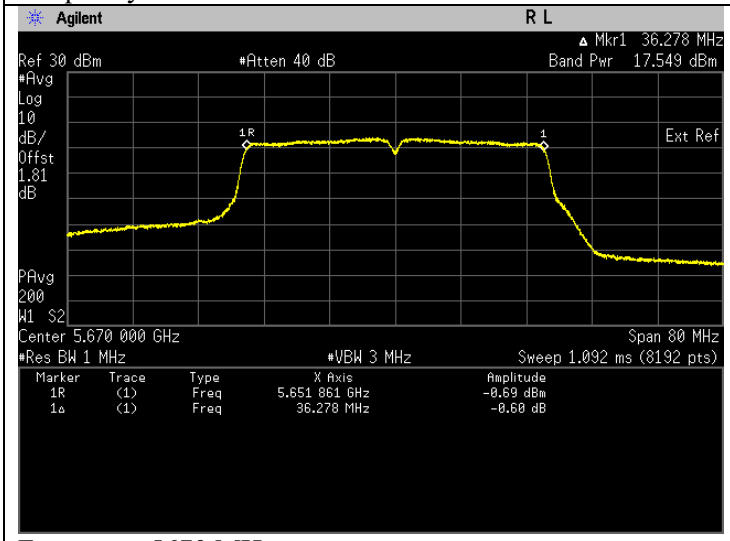
Frequency 5310 MHz



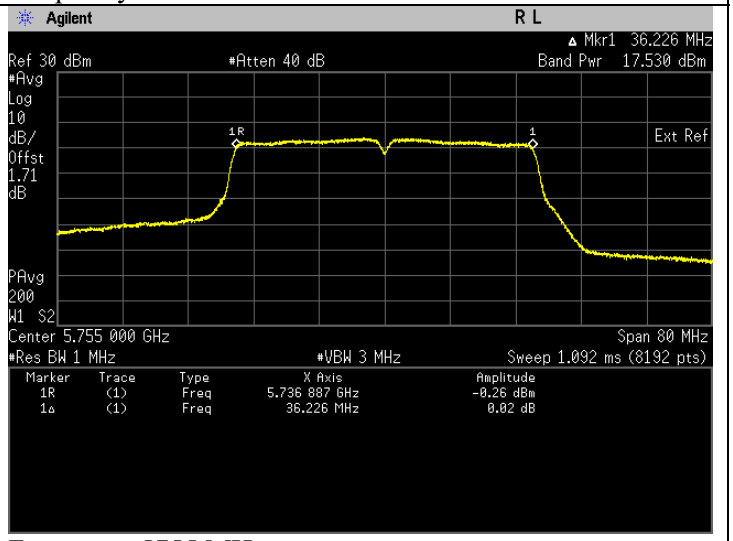
Frequency 5510 MHz



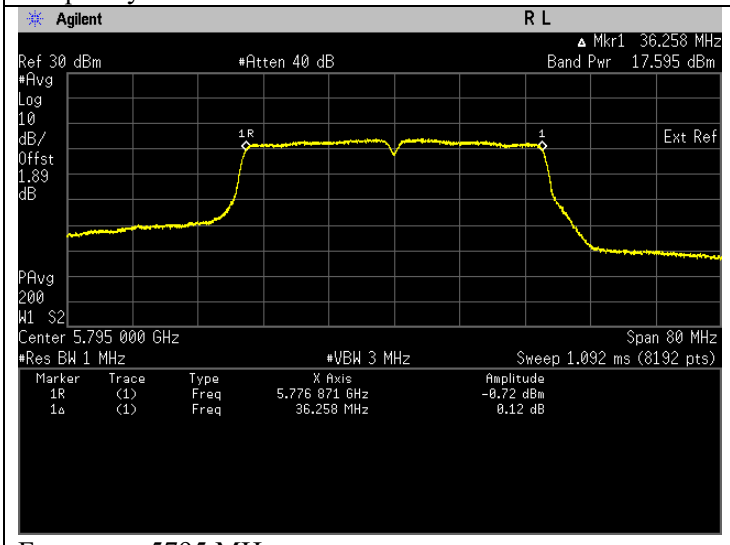
Frequency 5590 MHz



Frequency 5670 MHz



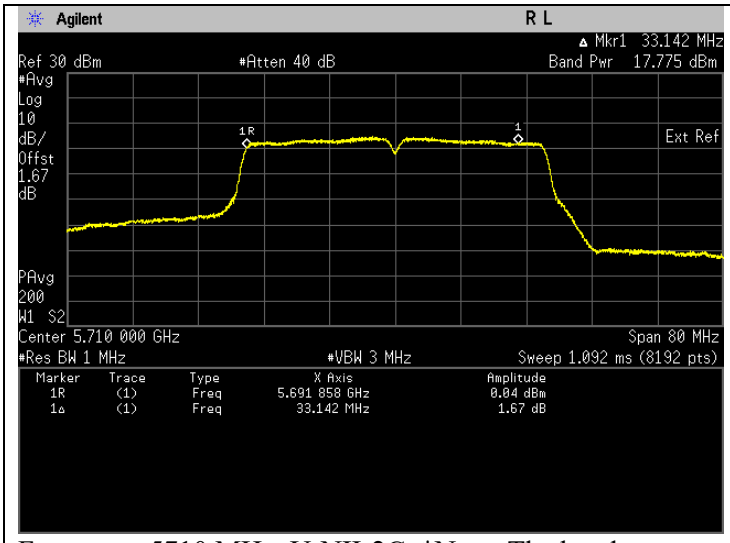
Frequency 5755 MHz



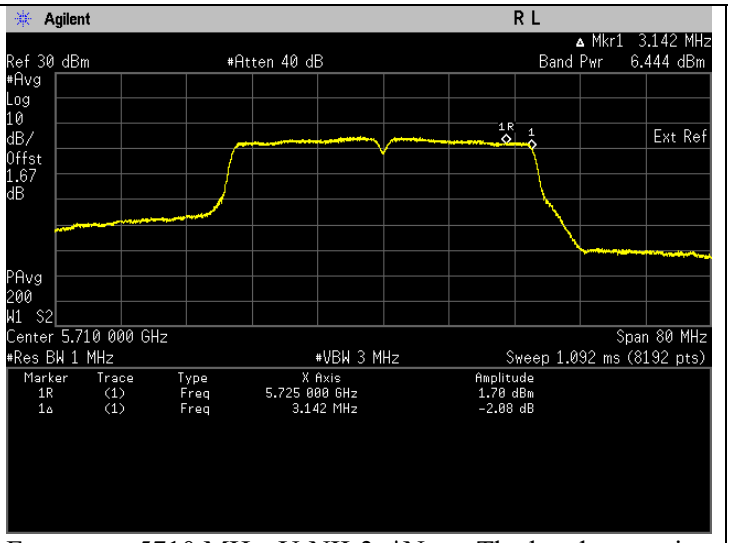
Frequency 5795 MHz

Straddle Frequency

Freq. (MHz)	Test Conditions	Results				
		U-NII- 2C				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5710	Mod Type: BPSK, Data Rate: MCS0 (13.5)	62.073	17.929	Pass	21.229	Pass
		U-NII-3				
5710	Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.569	6.598	Pass	9.898	Pass



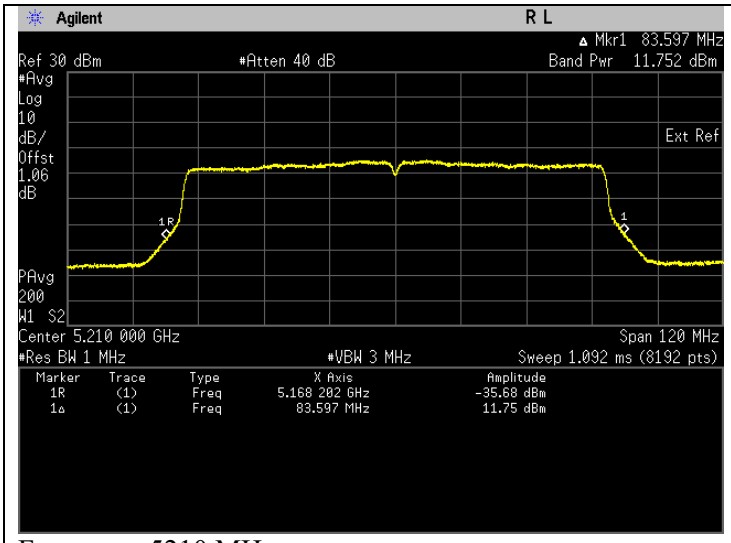
Frequency 5710 MHz, U-NII-2C. *Note: The band power is captured before the 5725 MHz.



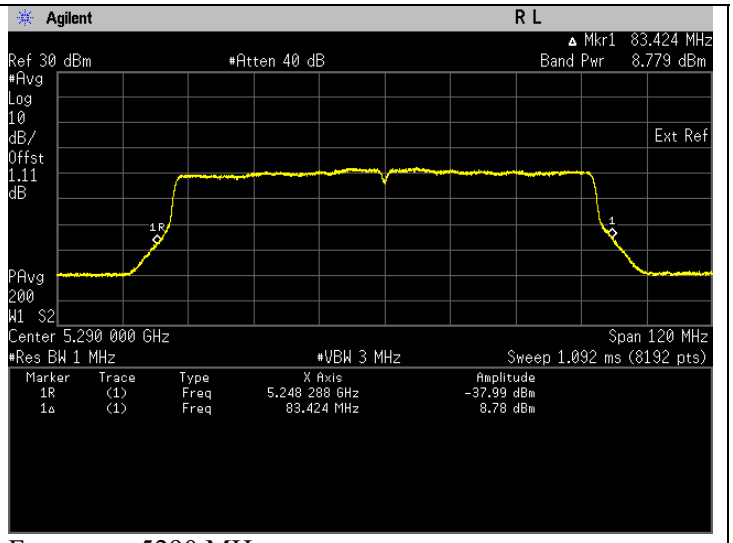
Frequency 5710 MHz, U-NII-3. *Note: The band power is captured after the 5725 MHz.

802.11ac (HT80)(26dB EBW)

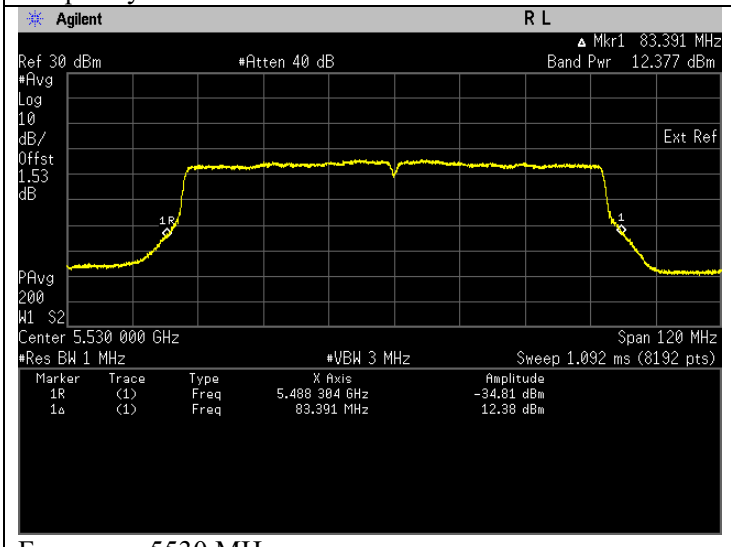
Freq. (MHz)	Test Conditions	Results		
		Power (mW)	Power (dBm)	Status
5210	Mod Type: BPSK, Data Rate: MCS0 (29.3)	16.121	12.074	Pass
5290	Mod Type: BPSK, Data Rate: MCS0 (29.3)	8.130	9.101	Pass
5530	Mod Type: BPSK, Data Rate: MCS0 (29.3)	18.617	12.699	Pass
5610	Mod Type: BPSK, Data Rate: MCS0 (29.3)	64.953	18.126	Pass
5775	Mod Type: BPSK, Data Rate: MCS0 (29.3)	66.313	18.216	Pass



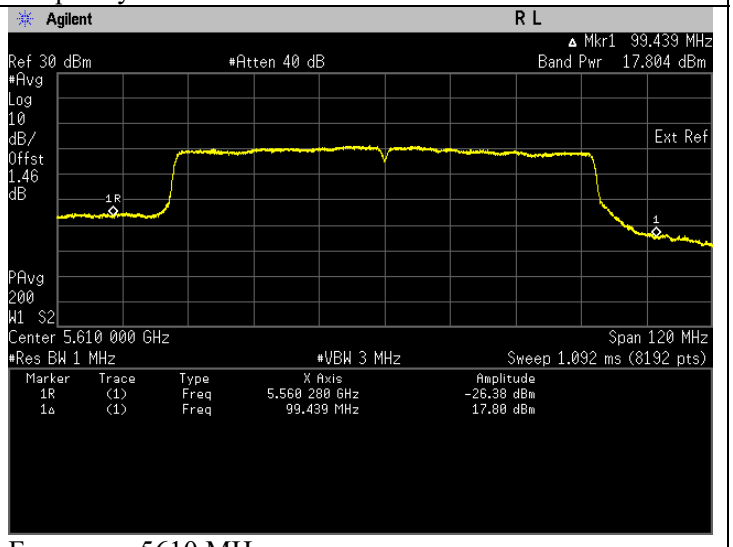
Frequency 5210 MHz



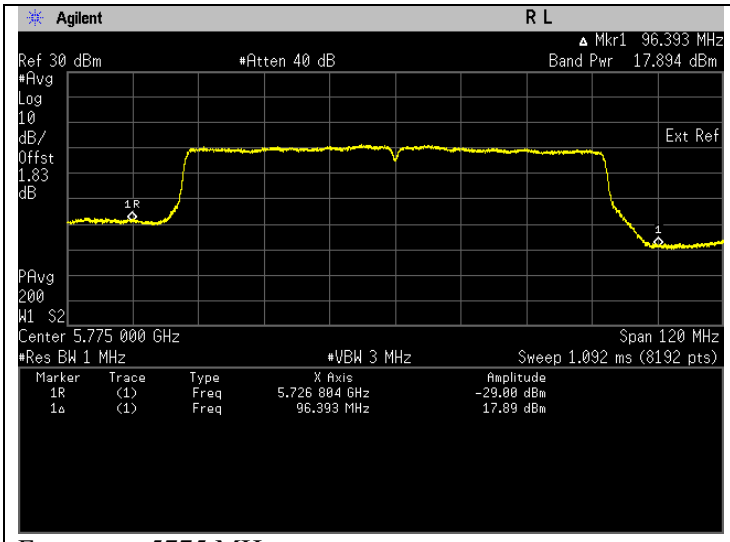
Frequency 5290 MHz



Frequency 5530 MHz



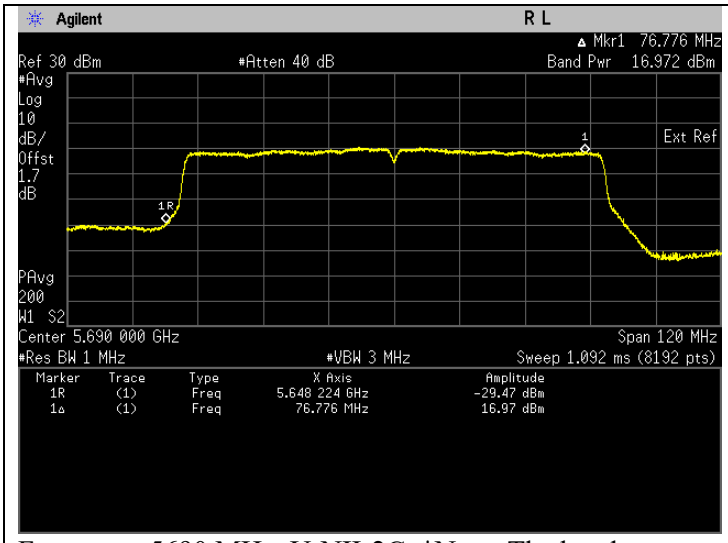
Frequency 5610 MHz



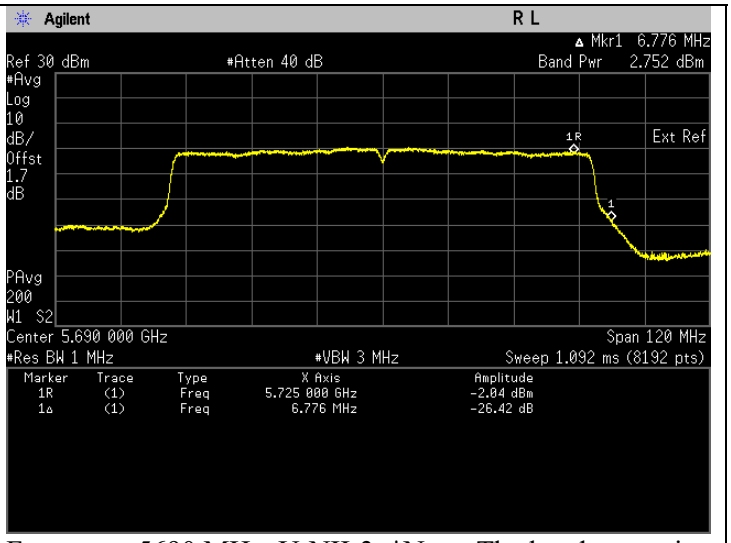
Frequency 5775 MHz

Straddle Frequency

Freq. (MHz)	Test Conditions	Results		
		U-NII- 2C		
		Power (mW)	Power (dBm)	Status
5690	Mod Type: BPSK, Data Rate: MCS0 (29.3)	53.625	17.294	Pass
		U-NII-3		
5690	Mod Type: BPSK, Data Rate: MCS0 (29.3)	2.029	3.074	Pass



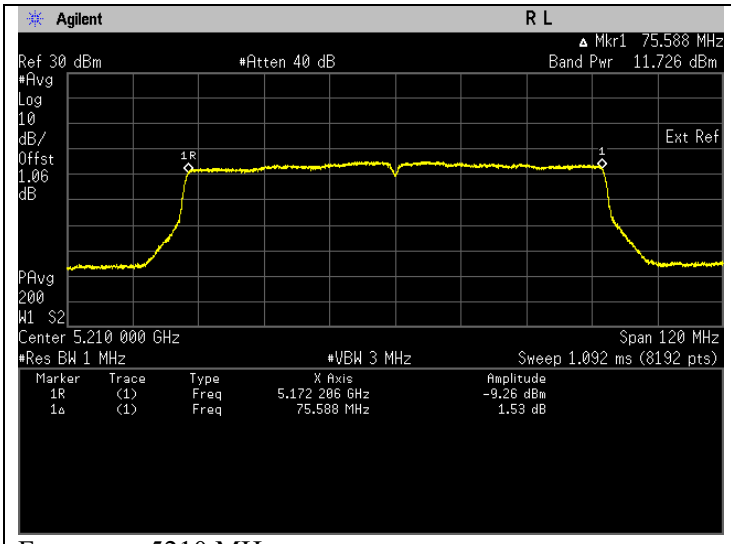
Frequency 5690 MHz, U-NII-2C. *Note: The band power is captured before the 5725 MHz.



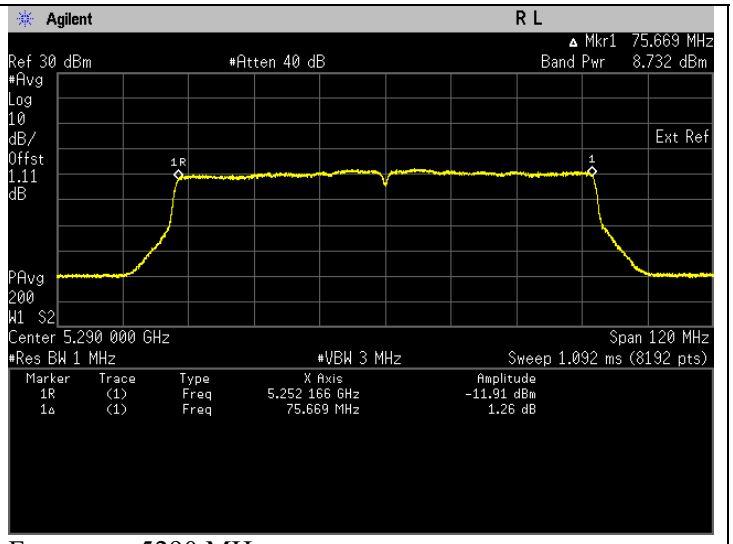
Frequency 5690 MHz, U-NII-3. *Note: The band power is captured after the 5725 MHz.

802.11ac (HT80)(99% EBW)

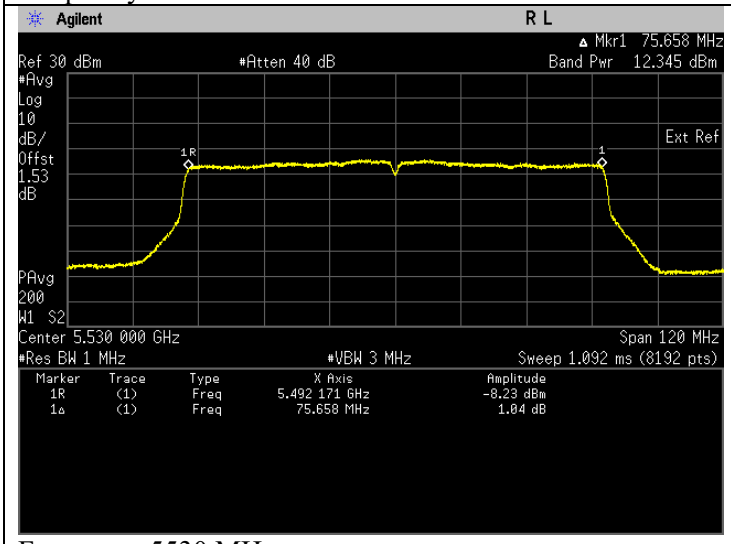
Freq. (MHz)	Test Conditions	Results				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5210	Mod Type: BPSK, Data Rate: MCS0 (29.3)	16.025	12.048	Pass	16.648	Pass
5290	Mod Type: BPSK, Data Rate: MCS0 (29.3)	8.043	9.054	Pass	13.654	Pass
5530	Mod Type: BPSK, Data Rate: MCS0 (29.3)	18.480	12.667	Pass	15.967	Pass
5610	Mod Type: BPSK, Data Rate: MCS0 (29.3)	64.018	18.063	Pass	21.363	Pass
5775	Mod Type: BPSK, Data Rate: MCS0 (29.3)	65.494	18.162	Pass	21.262	Pass



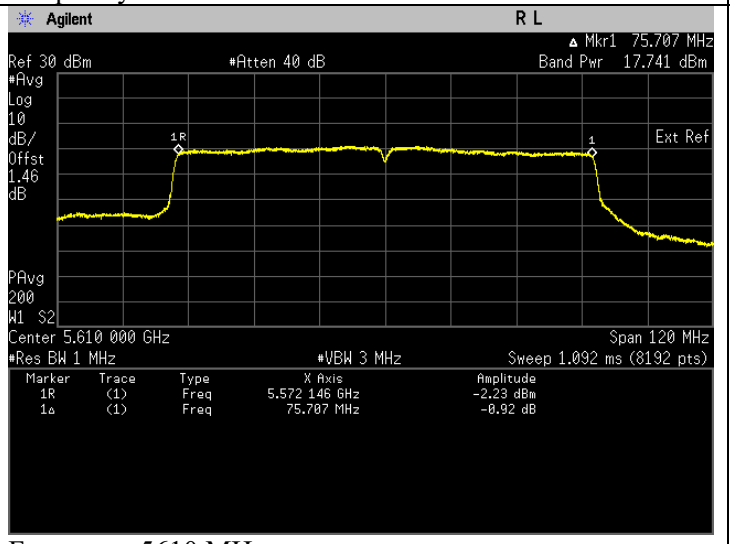
Frequency 5210 MHz



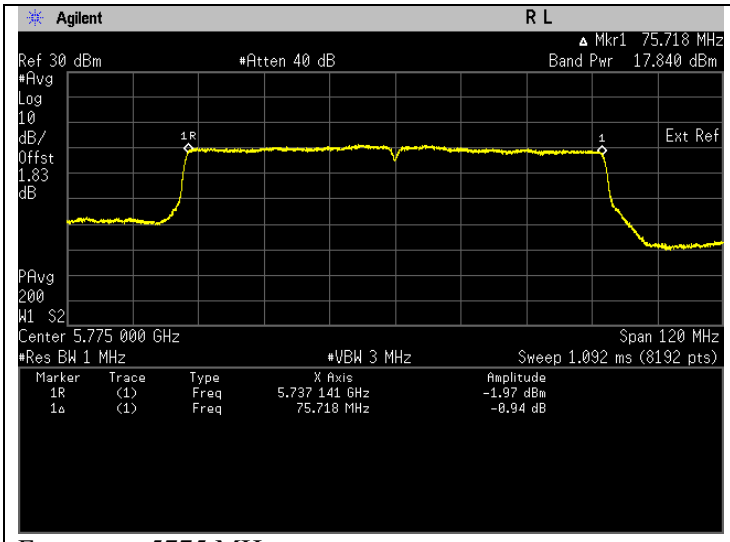
Frequency 5290 MHz



Frequency 5530 MHz



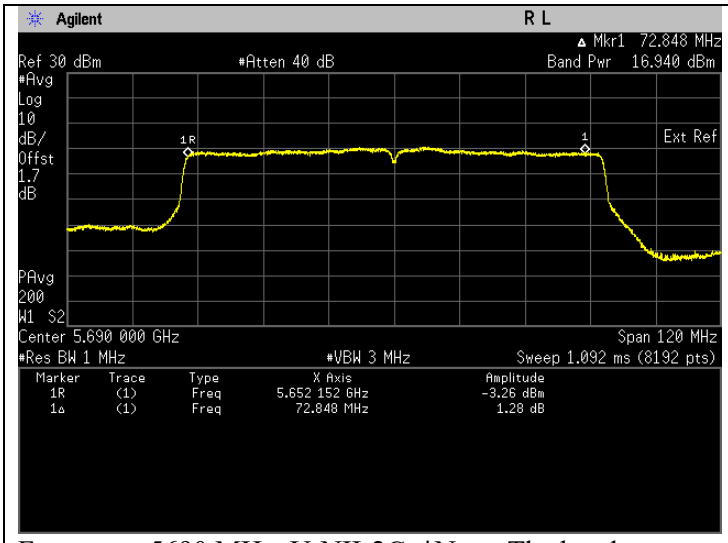
Frequency 5610 MHz



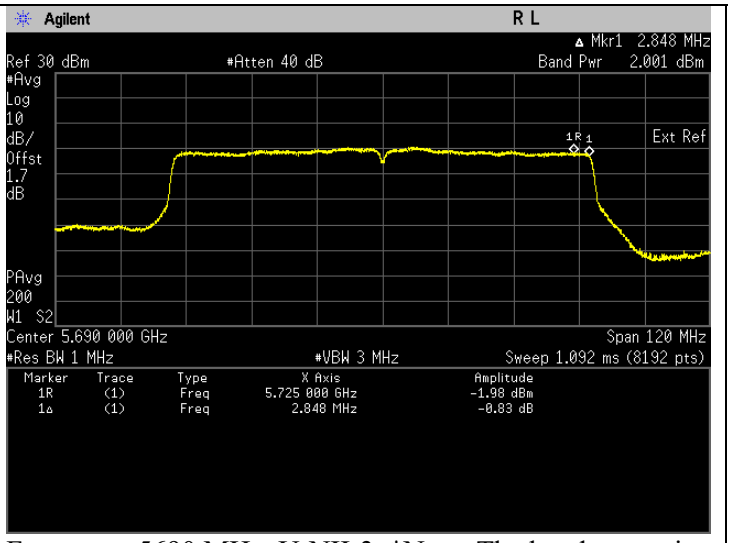
Frequency 5775 MHz

Straddle Frequency

Freq. (MHz)	Test Conditions	Results				
		U-NII- 2C				
		Power (mW)	Power (dBm)	Status	EIRP (dBm)	Status
5690	Mod Type: BPSK, Data Rate: MCS0 (29.3)	53.232	17.262	Pass	20.562	Pass
		U-NII-3				
5690	Mod Type: BPSK, Data Rate: MCS0 (29.3)	1.707	2.323	Pass	5.62	Pass



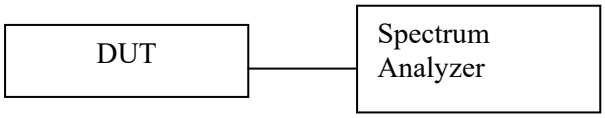
Frequency 5690 MHz, U-NII-2C. *Note: The band power is captured before the 5725 MHz.



Frequency 5690 MHz, U-NII-3. *Note: The band power is captured after the 5725 MHz.

7.3. Maximum Power Spectral Density

7.3.1. Test Setup



a) Test setup as per illustrated above.
b) Set DUT to transmit at desire transmit frequency.
c) Connect DUT's antenna terminal to spectrum analyzer with a low loss cable.
d) Setting of Spectrum analyzer :
   - Span to encompass the entire 26dB EBW or 99% occupied bandwidth.
   - RBW = 1 MHz (5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz) / 500 kHz (5.725-5.85 GHz)
   - VBW ≥ 3·RBW
   - Detector = power averaging (RMS)
   - Trace = Max hold
   - Number of points in sweep ≥ 2 × span / RBW
   - Sweep time = auto
   - Trace average at least 100 traces in power averaging (rms) mode
e) Use the peak search function on the instrument to find the peak of the spectrum and record its value.
f) Add 10 log (1/x), where x is the duty cycle, to the peak of the spectrum.
g) The measurement method follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04 under clause F) Method SA-2.
h) The Maximum power spectral density results are included duty cycle correction factor.

7.3.2. Test Limits

FCC 15.407(a)

Range (GHz)	Condition		Limit
5.15-5.25		Outdoor AP	17dBm/ 1MHz
		Indoor AP	17dBm/ 1MHz
		Fixed Point to Point AP	17dBm/ 1MHz
	√	Mobile and Portable Client Devices	11dBm/ 1MHz
5.25-5.35	√		11dBm/ 1MHz
5.47-5.525	√		11dBm/ 1MHz
5.725-5.85	√		30dBm/ 500kHz

RSS-247 6.2

Range(GHz)	Condition	Limit
5.15-5.25	Indoor Operation Only	EIRP: 10dBm/ 1MHz
5.25-5.35		11dBm/ 1MHz
5.47-5.6 5.6-5.525		11dBm/ 1MHz
5.725-5.85		30dBm/ 500kHz

7.3.3. Additional Info

Antenna	**Gain (dBi)**
UNII1&UNII2A	4.6
UNII2C	3.3
UNII3	3.1
Duty Cycle Correction Factor	
802.11a	0.073
802.11n20	0.076
802.11n40	0.154

7.3.4. Test Data

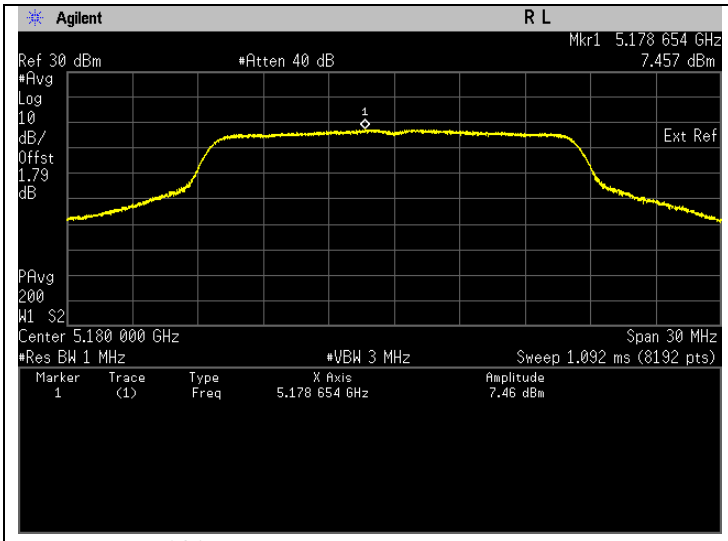
802.11a (26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
5180	Mod Type: BPSK, Data Rate: 6	7.530	Pass
5220	Mod Type: BPSK, Data Rate: 6	7.833	Pass
5240	Mod Type: BPSK, Data Rate: 6	7.826	Pass
5260	Mod Type: BPSK, Data Rate: 6	7.662	Pass
5300	Mod Type: BPSK, Data Rate: 6	8.041	Pass
5320	Mod Type: BPSK, Data Rate: 6	8.128	Pass
5500	Mod Type: BPSK, Data Rate: 6	6.738	Pass
5580	Mod Type: BPSK, Data Rate: 6	7.605	Pass
5700	Mod Type: BPSK, Data Rate: 6	7.318	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status
5745	Mod Type: BPSK, Data Rate: 6	4.794	Pass
5785	Mod Type: BPSK, Data Rate: 6	4.608	Pass
5825	Mod Type: BPSK, Data Rate: 6	4.666	Pass

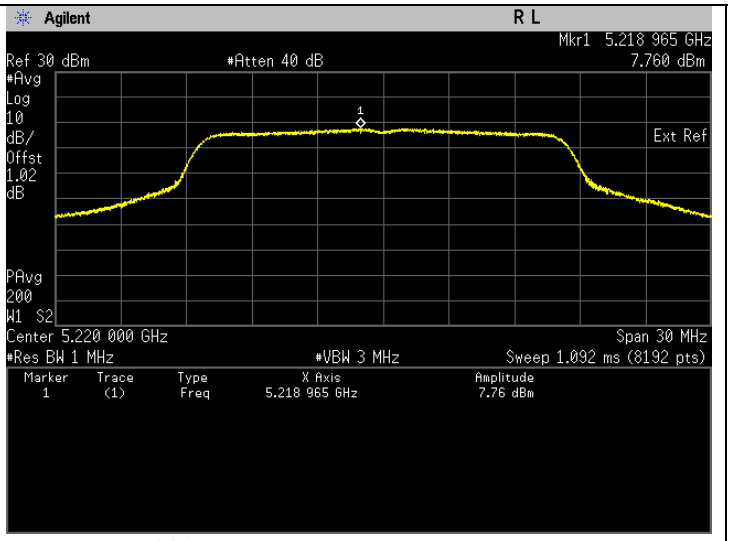
802.11a (99% EBW)

Freq. (MHz)	Test Conditions	Results			
		Power/Frequency (dBm/MHz)	Status	EIRP (dBm/MHz)	Status
5180	Mod Type: BPSK, Data Rate: 6	7.530	Pass	12.130	Pass
5220	Mod Type: BPSK, Data Rate: 6	7.833	Pass	12.433	Pass
5240	Mod Type: BPSK, Data Rate: 6	7.826	Pass	12.426	Pass
5260	Mod Type: BPSK, Data Rate: 6	7.662	Pass	12.262	Pass
5300	Mod Type: BPSK, Data Rate: 6	8.041	Pass	12.641	Pass
5320	Mod Type: BPSK, Data Rate: 6	8.128	Pass	12.728	Pass
5500	Mod Type: BPSK, Data Rate: 6	6.738	Pass	10.038	Pass
5580	Mod Type: BPSK, Data Rate: 6	7.605	Pass	10.905	Pass
5700	Mod Type: BPSK, Data Rate: 6	7.318	Pass	10.618	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status		
5745	Mod Type: BPSK, Data Rate: 6	4.794	Pass	7.894	Pass
5785	Mod Type: BPSK, Data Rate: 6	4.608	Pass	7.708	Pass
5825	Mod Type: BPSK, Data Rate: 6	4.666	Pass	7.766	Pass

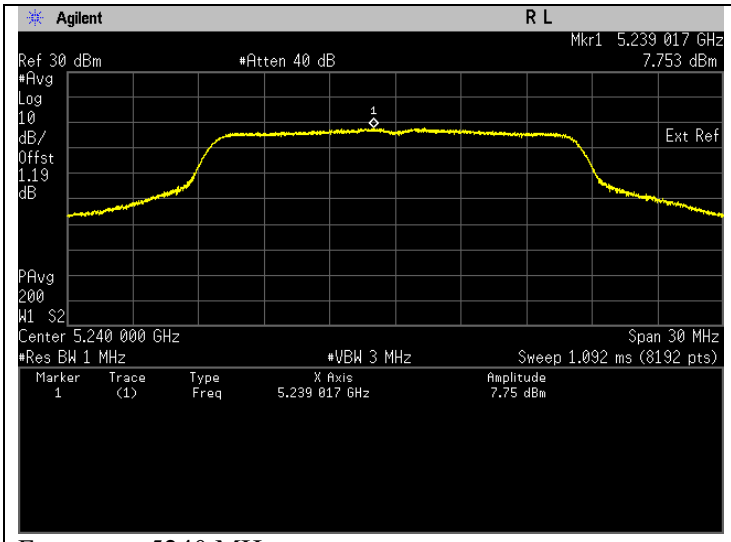
Plots for 802.11a (26dB EBW & 99% EBW)



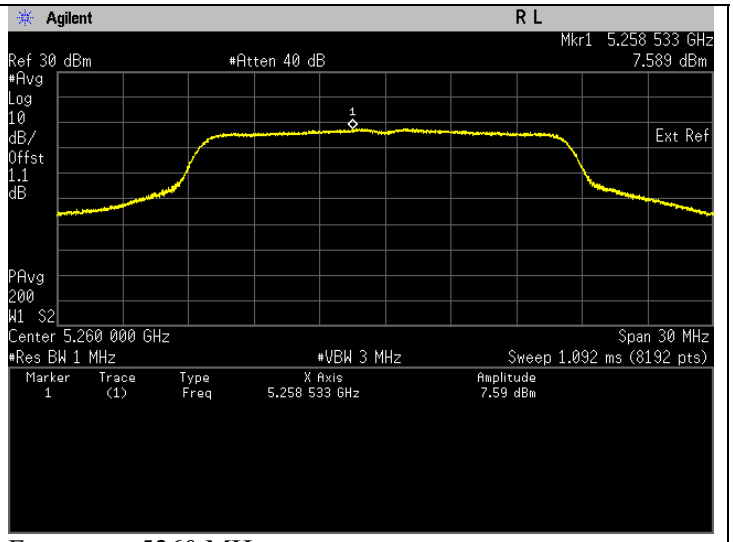
Frequency 5180 MHz



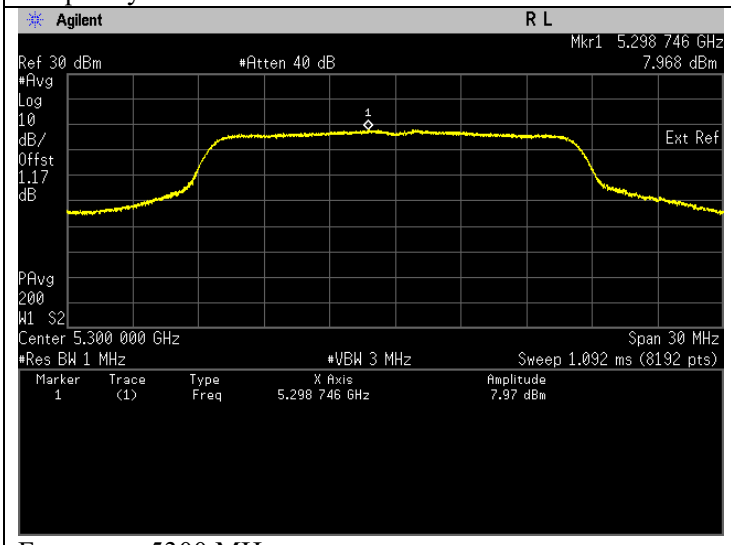
Frequency 5220 MHz



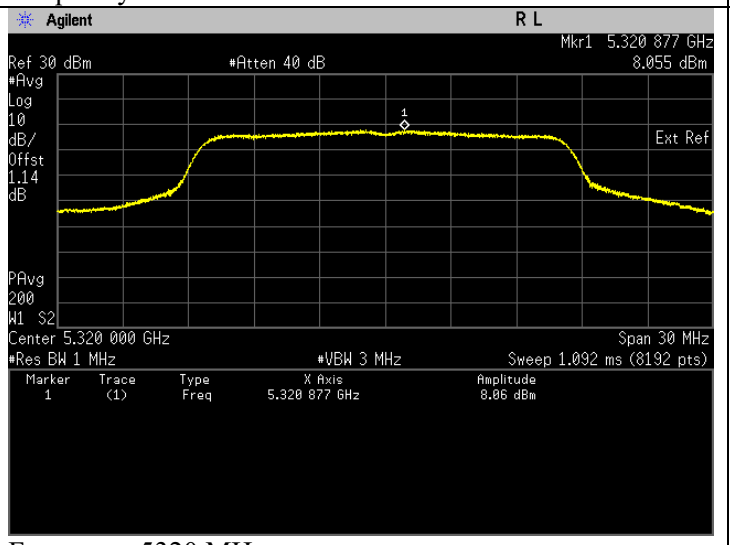
Frequency 5240 MHz



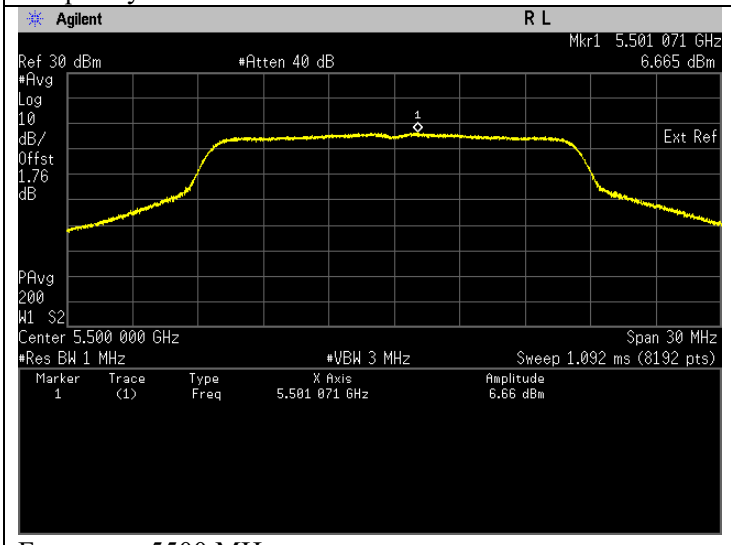
Frequency 5260 MHz



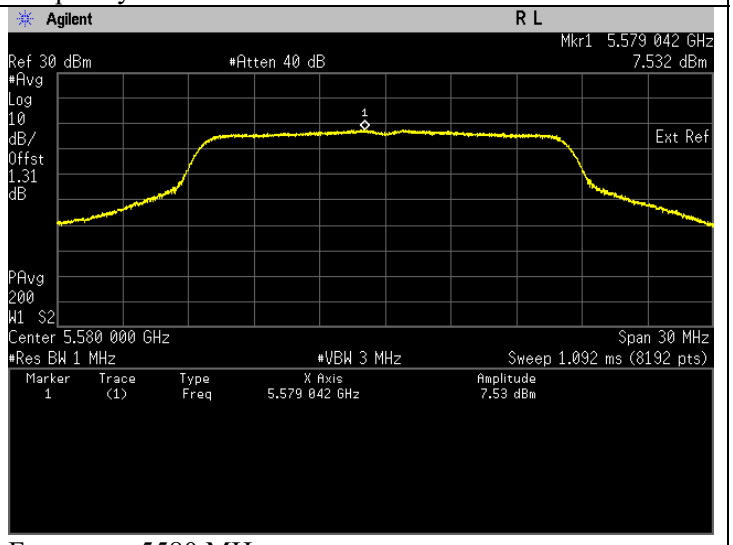
Frequency 5300 MHz



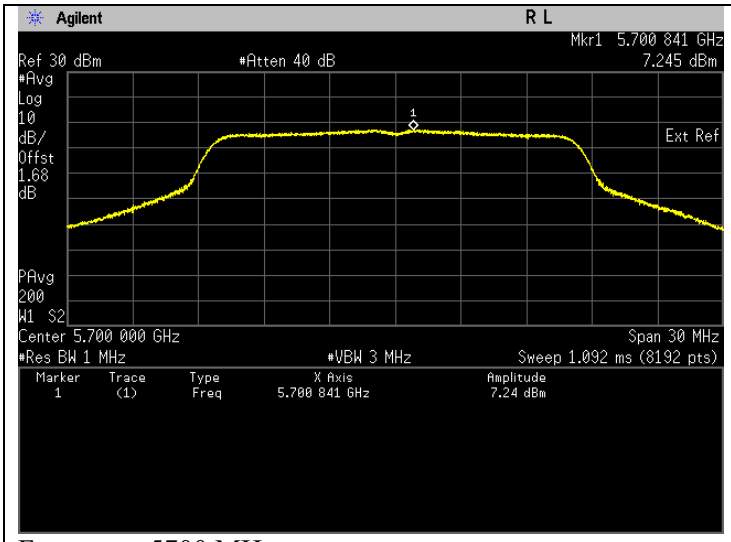
Frequency 5320 MHz



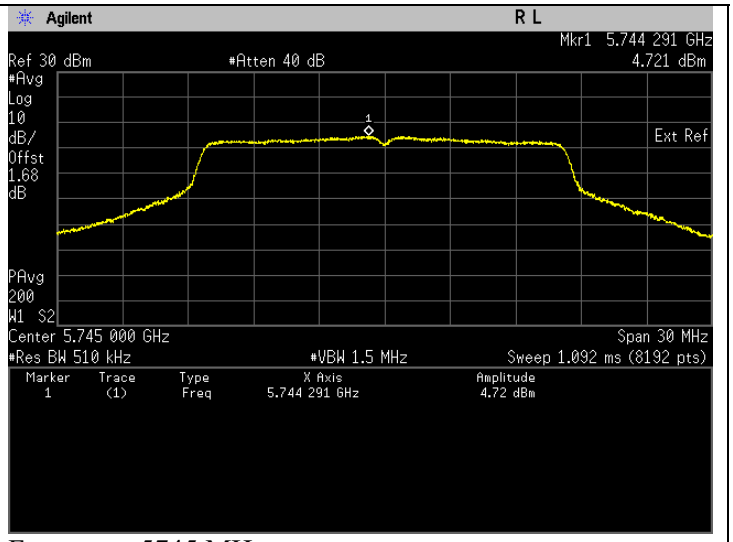
Frequency 5500 MHz



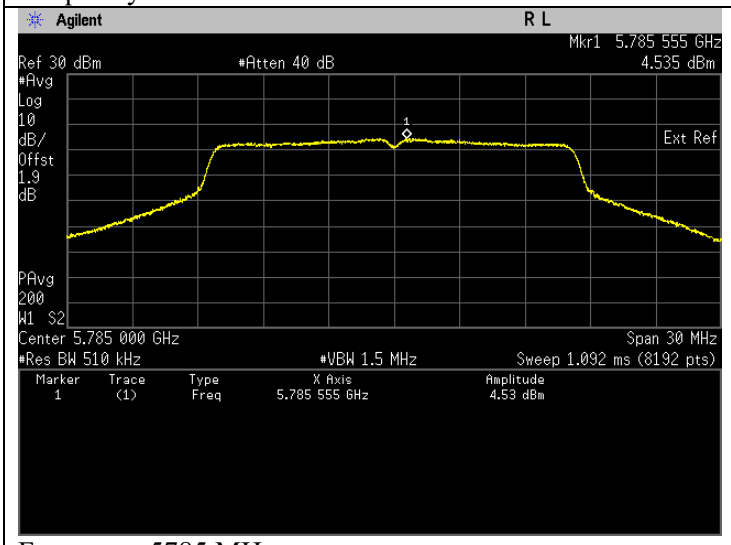
Frequency 5580 MHz



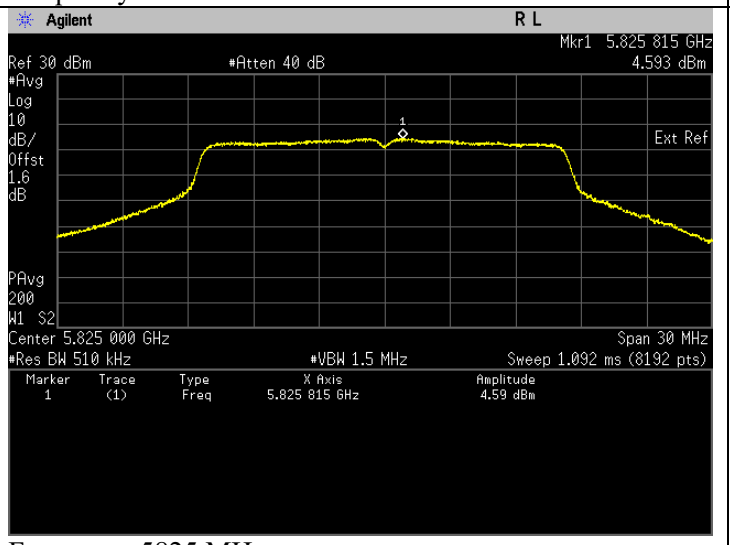
Frequency 5700 MHz



Frequency 5745 MHz



Frequency 5785 MHz



Frequency 5825 MHz

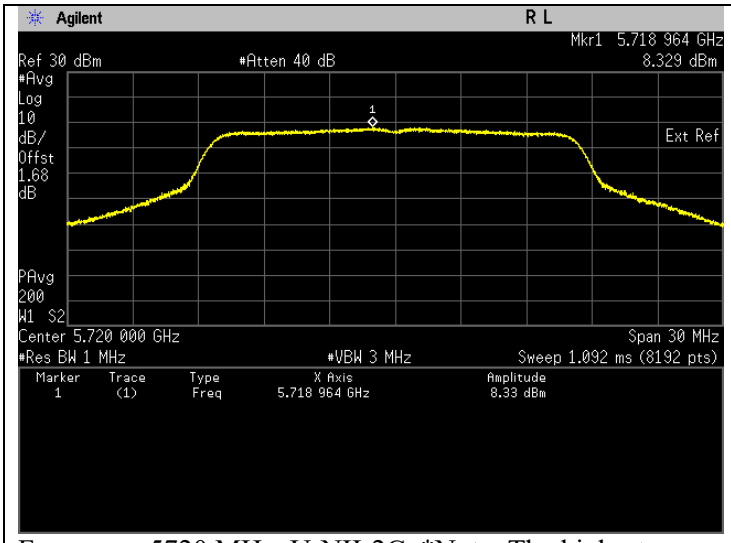
Straddle Frequency for 802.11a (26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
		U-NII- 2C	
5720	Mod Type: BPSK, Data Rate: 6	8.402	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5720	Mod Type: BPSK, Data Rate: 6	6.695	Pass

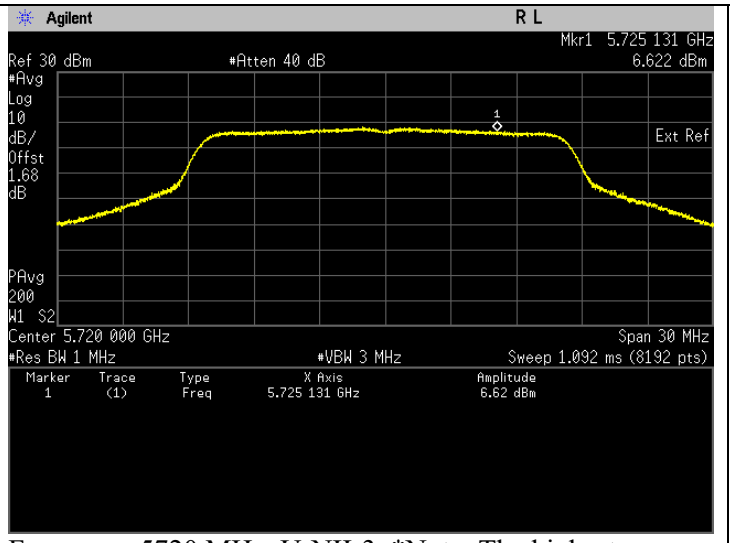
Straddle Frequency for 802.11a (99% EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
		U-NII- 2C	
5720	Mod Type: BPSK, Data Rate: 6	8.402	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5720	Mod Type: BPSK, Data Rate: 6	6.695	Pass

Plots for 802.11a Straddle Frequency (26dB EBW & 99% EBW)



Frequency 5720 MHz, U-NII-2C. *Note: The highest spectral density is captured before the 5725 MHz.



Frequency 5720 MHz, U-NII-3. *Note: The highest spectral density is captured after the 5725 MHz.

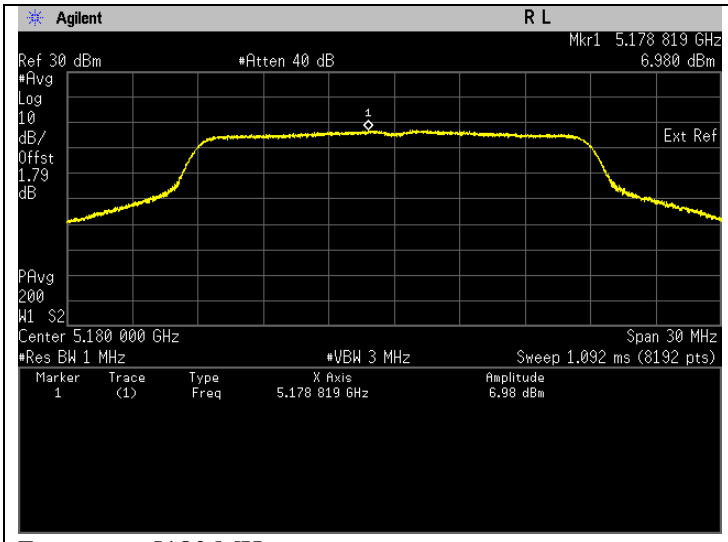
802.11n (HT20)(26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
5180	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.056	Pass
5220	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.833	Pass
5240	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.345	Pass
5260	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.226	Pass
5300	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.618	Pass
5320	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.345	Pass
5500	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.640	Pass
5580	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.312	Pass
5700	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.731	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status
5745	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.148	Pass
5785	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.041	Pass
5825	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.101	Pass

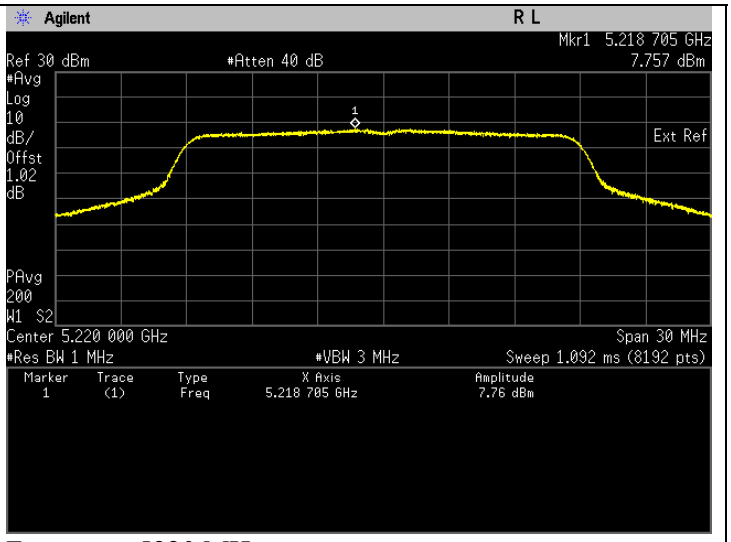
802.11n (HT20)(99% EBW)

Freq. (MHz)	Test Conditions	Results			
		Power/Frequency (dBm/MHz)	Status	EIRP (dBm/MHz)	Status
5180	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.056	Pass	11.656	Pass
5220	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.833	Pass	12.433	Pass
5240	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.345	Pass	11.945	Pass
5260	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.226	Pass	11.826	Pass
5300	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.618	Pass	12.218	Pass
5320	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.345	Pass	11.945	Pass
5500	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.640	Pass	10.940	Pass
5580	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.312	Pass	10.612	Pass
5700	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.731	Pass	11.031	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status		
5745	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.148	Pass	8.248	Pass
5785	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.041	Pass	8.141	Pass
5825	Mod Type: BPSK, Data Rate: MCS0 (6.5)	5.101	Pass	8.201	Pass

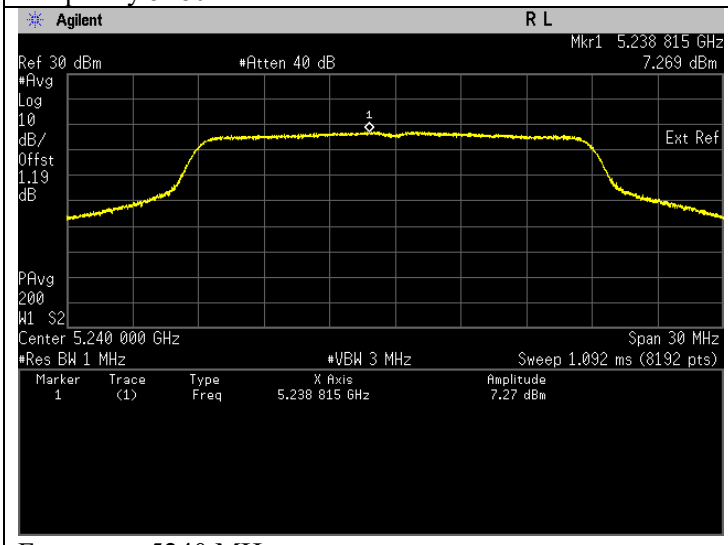
Plots for 802.11n (HT20) (26dB EBW & 99% EBW)



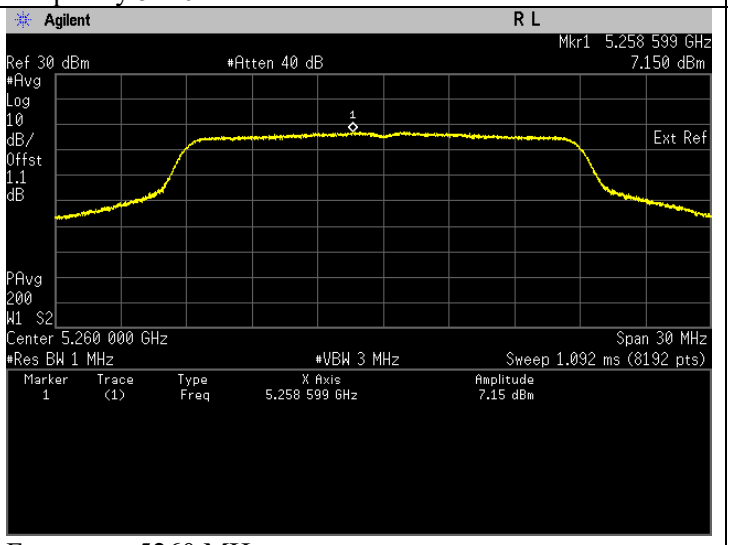
Frequency 5180 MHz



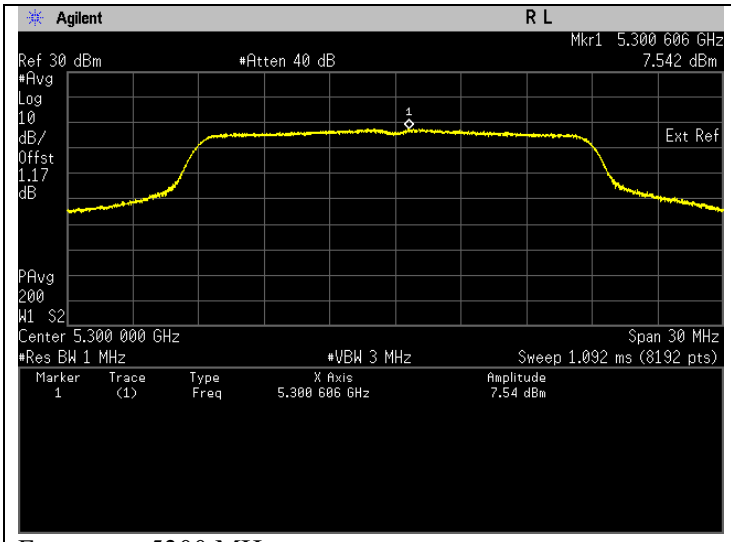
Frequency 5220 MHz



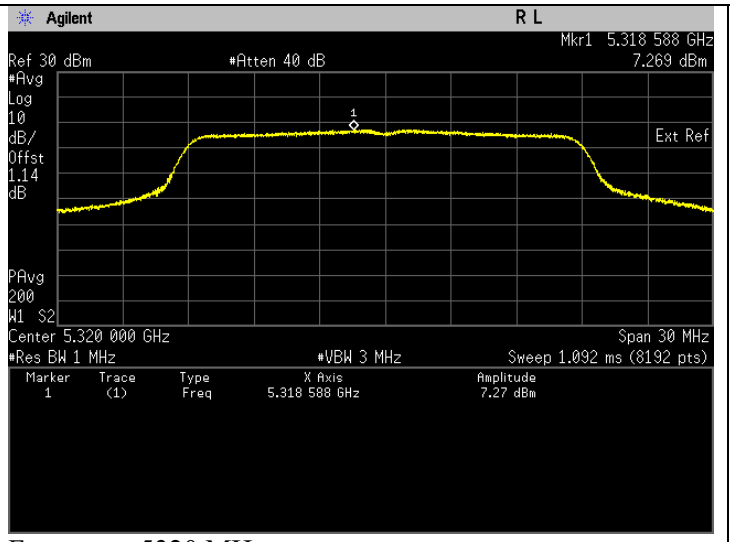
Frequency 5240 MHz



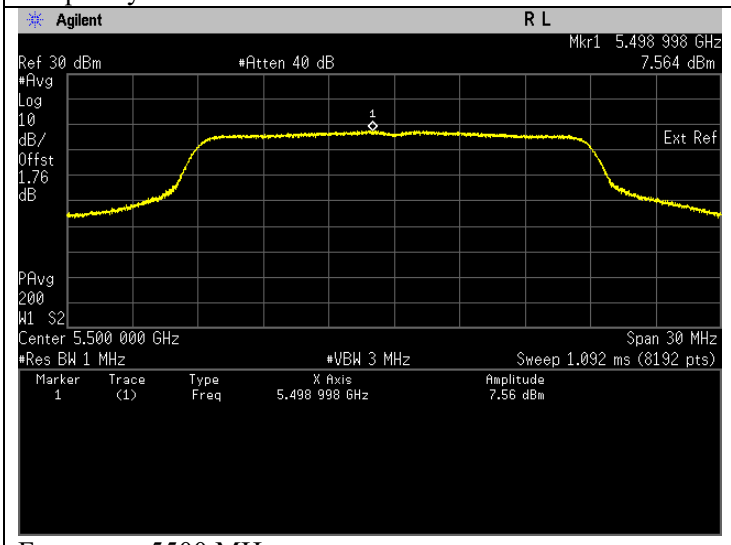
Frequency 5260 MHz



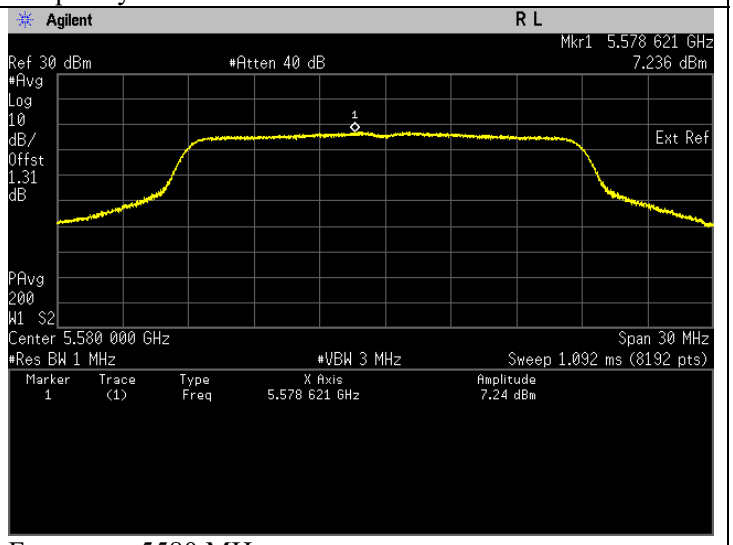
Frequency 5300 MHz



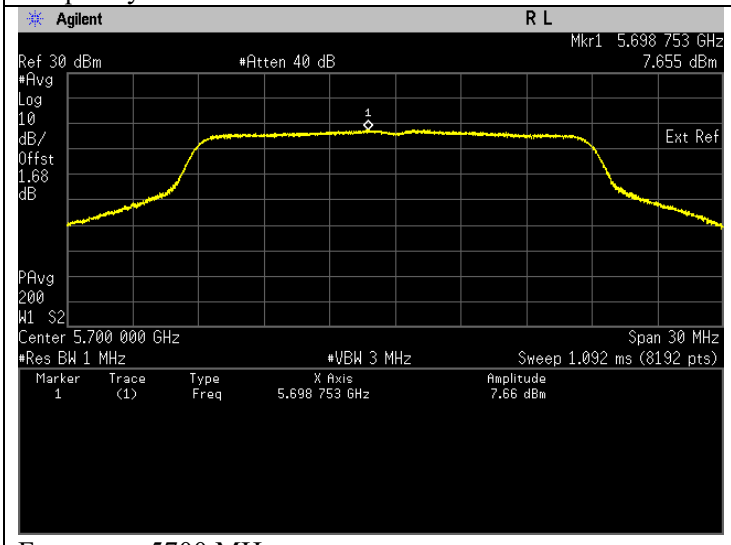
Frequency 5320 MHz



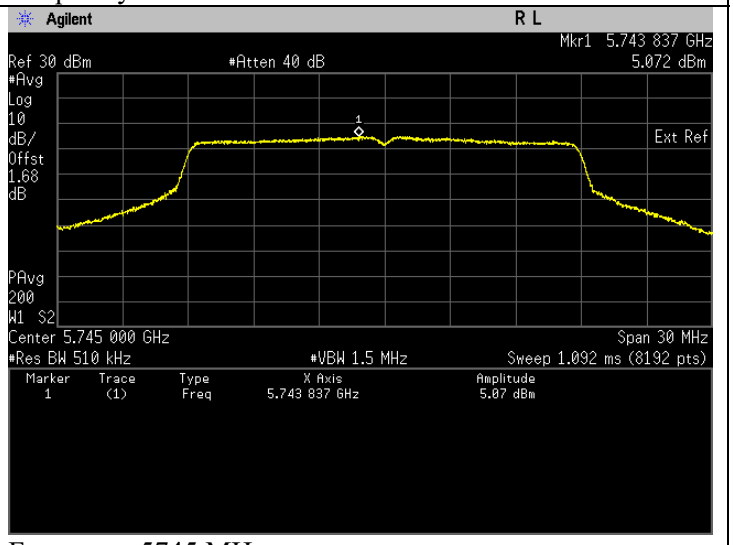
Frequency 5500 MHz



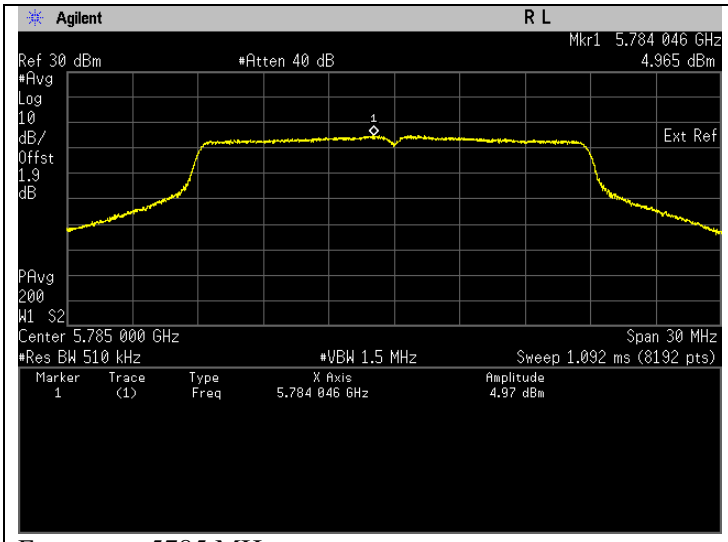
Frequency 5580 MHz



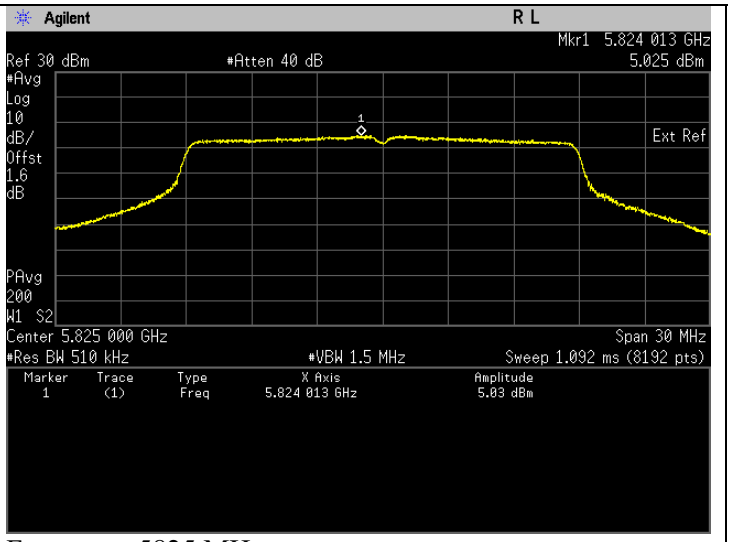
Frequency 5700 MHz



Frequency 5745 MHz



Frequency 5785 MHz



Frequency 5825 MHz

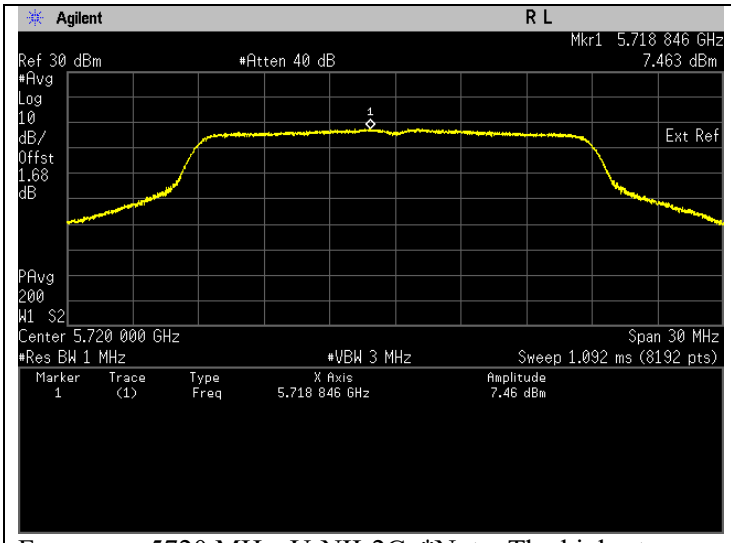
Straddle Frequency for 802.11n (HT20) (26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
		U-NII- 2C	
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.539	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	6.157	Pass

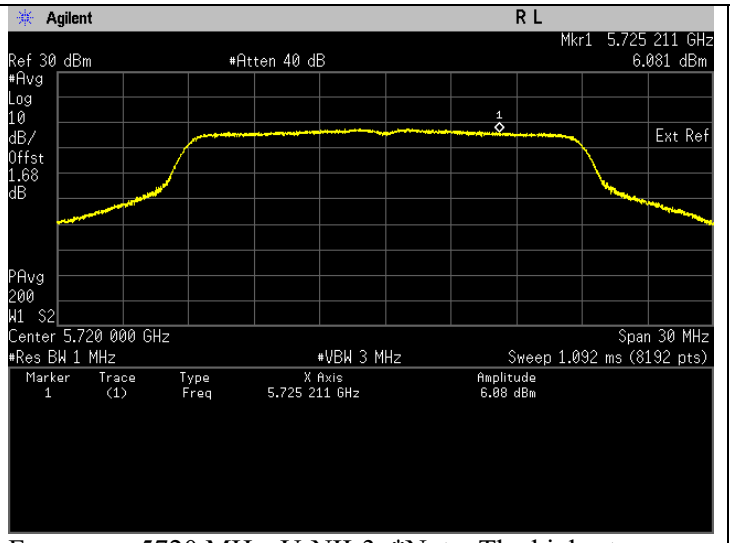
Straddle Frequency for 802.11n (HT20) (99% EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
		U-NII- 2C	
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	7.539	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	6.157	Pass

Plots for 802.11n (HT20) Straddle Frequency (26dB EBW & 99% EBW)



Frequency 5720 MHz, U-NII-2C. *Note: The highest spectral density is captured before the 5725 MHz.



Frequency 5720 MHz, U-NII-3. *Note: The highest spectral density is captured after the 5725 MHz.

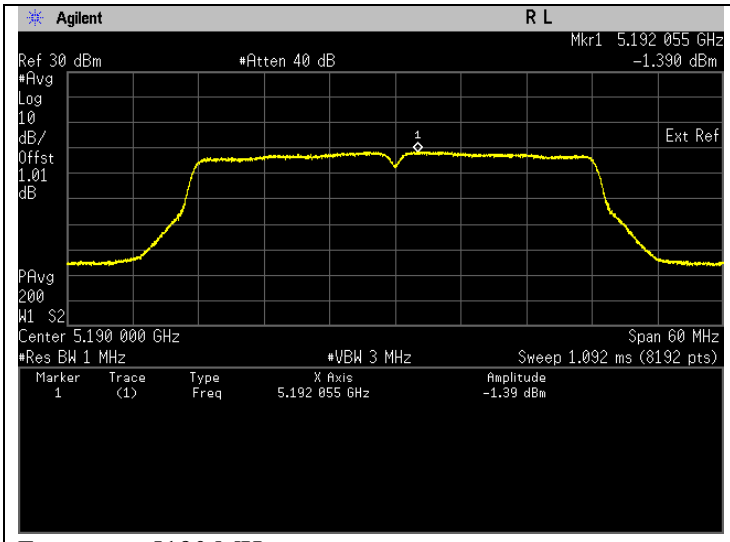
802.11n (HT40) (26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
5190	Mod Type: BPSK, Data Rate: MCS0 (13.5)	-1.236	Pass
5230	Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.618	Pass
5270	Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.583	Pass
5310	Mod Type: BPSK, Data Rate: MCS0 (13.5)	-2.454	Pass
5510	Mod Type: BPSK, Data Rate: MCS0 (13.5)	1.553	Pass
5590	Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.599	Pass
5670	Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.137	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status
5755	Mod Type: BPSK, Data Rate: MCS0 (13.5)	1.190	Pass
5795	Mod Type: BPSK, Data Rate: MCS0 (13.5)	1.682	Pass

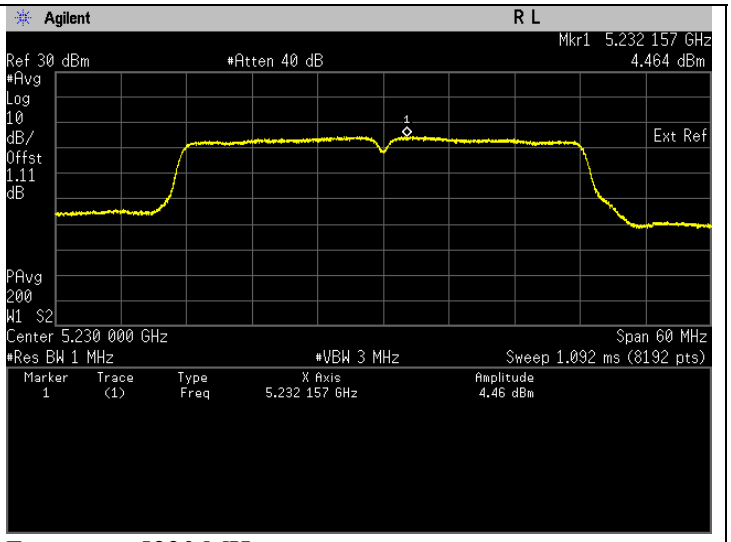
802.11n (HT40)(99% EBW)

Freq. (MHz)	Test Conditions	Results			
		Power/Frequency (dBm/MHz)	Status	EIRP (dBm/MHz)	Status
5190	Mod Type: BPSK, Data Rate: MCS0 (13.5)	-1.236	Pass	3.364	Pass
5230	Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.618	Pass	9.218	Pass
5270	Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.583	Pass	9.183	Pass
5310	Mod Type: BPSK, Data Rate: MCS0 (13.5)	-2.454	Pass	2.146	Pass
5510	Mod Type: BPSK, Data Rate: MCS0 (13.5)	1.553	Pass	4.853	Pass
5590	Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.599	Pass	7.899	Pass
5670	Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.137	Pass	7.437	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status		
5755	Mod Type: BPSK, Data Rate: MCS0 (13.5)	1.190	Pass	4.290	Pass
5795	Mod Type: BPSK, Data Rate: MCS0 (13.5)	1.682	Pass	4.782	Pass

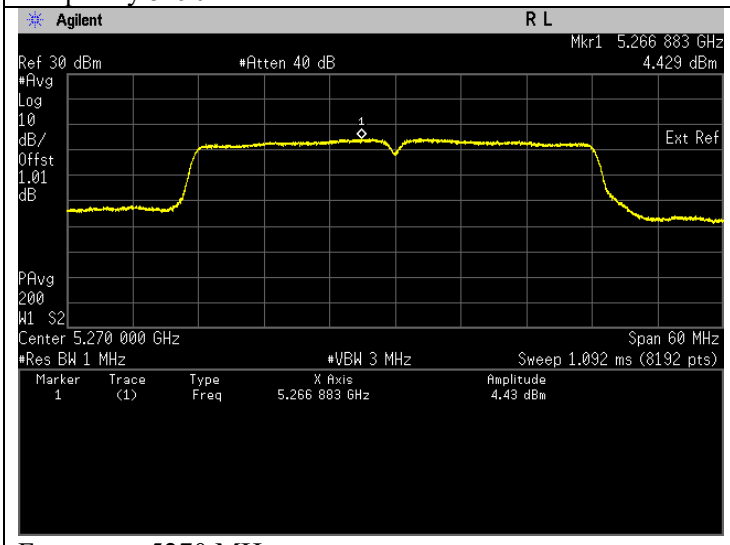
Plots for 802.11n (HT40) (26dB EBW & 99% EBW)



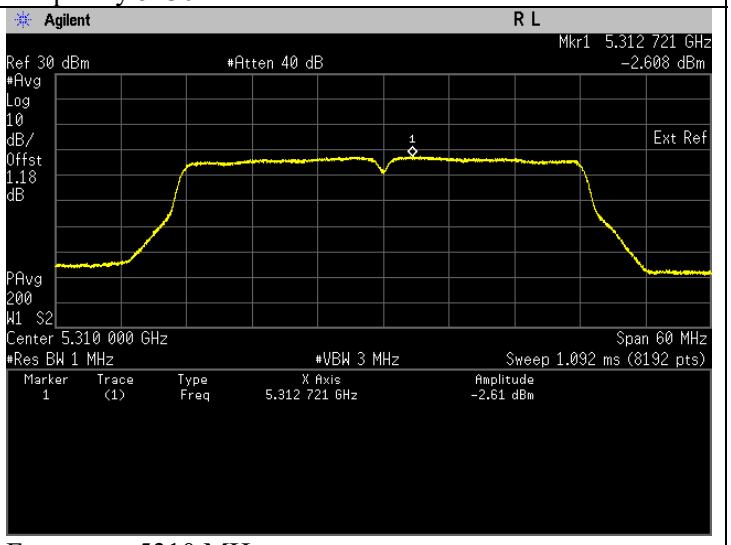
Frequency 5190 MHz



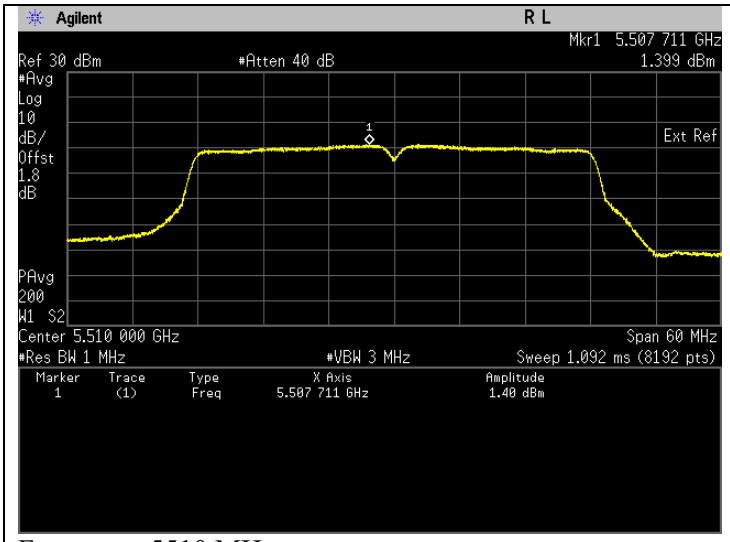
Frequency 5230 MHz



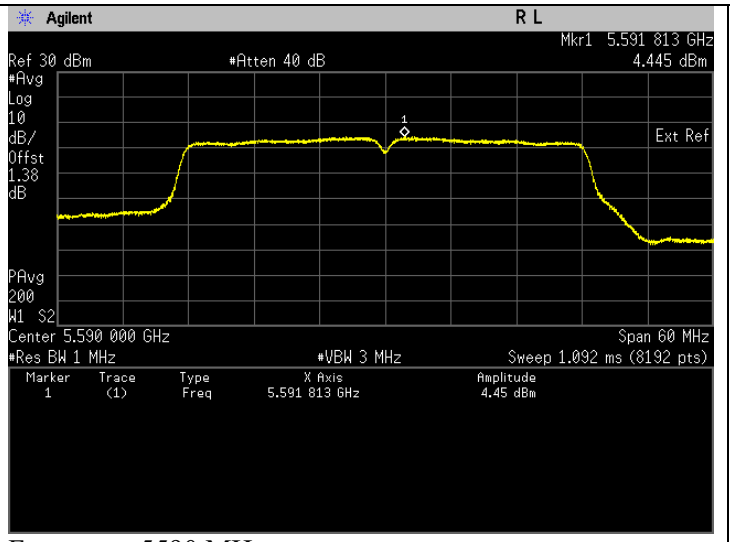
Frequency 5270 MHz



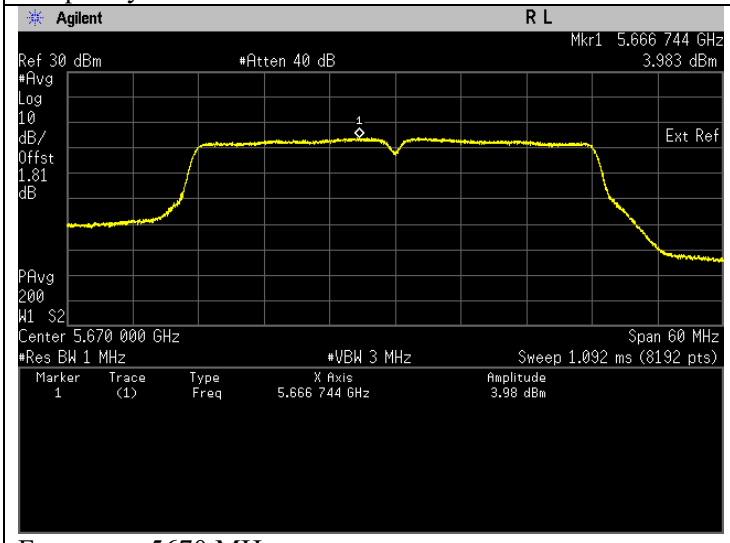
Frequency 5310 MHz



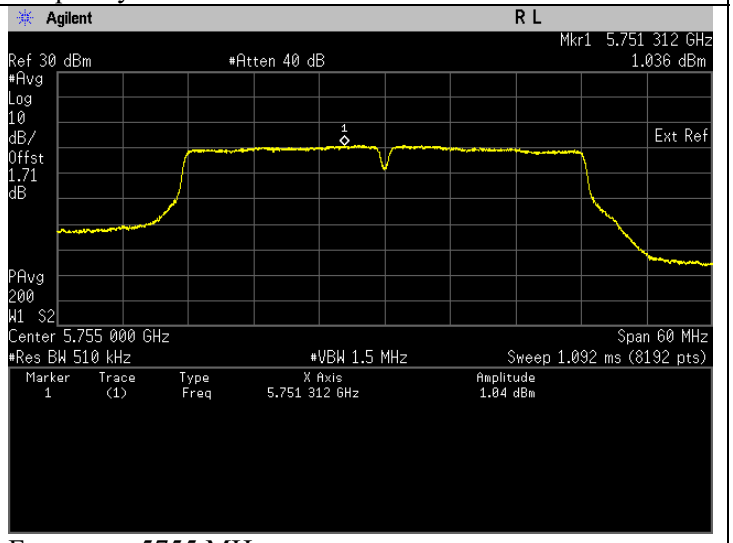
Frequency 5510 MHz



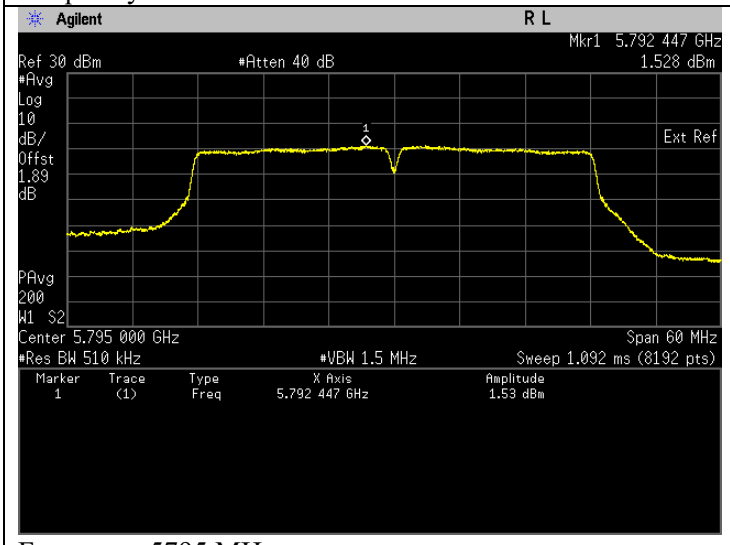
Frequency 5590 MHz



Frequency 5670 MHz



Frequency 5755 MHz



Frequency 5795 MHz

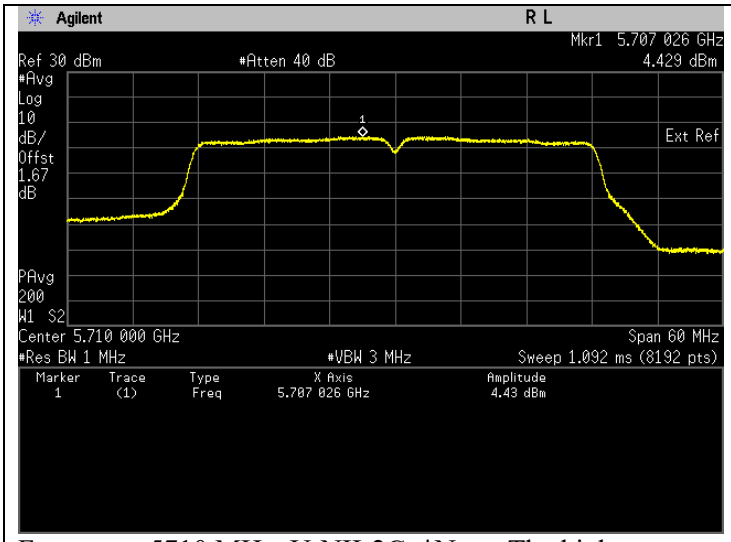
Straddle Frequency 802.11n (HT40) (26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		U-NII- 2C	
		Power/Frequency (dBm/MHz)	Status
5710	Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.583	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5710	Mod Type: BPSK, Data Rate: MCS0 (13.5)	2.608	Pass

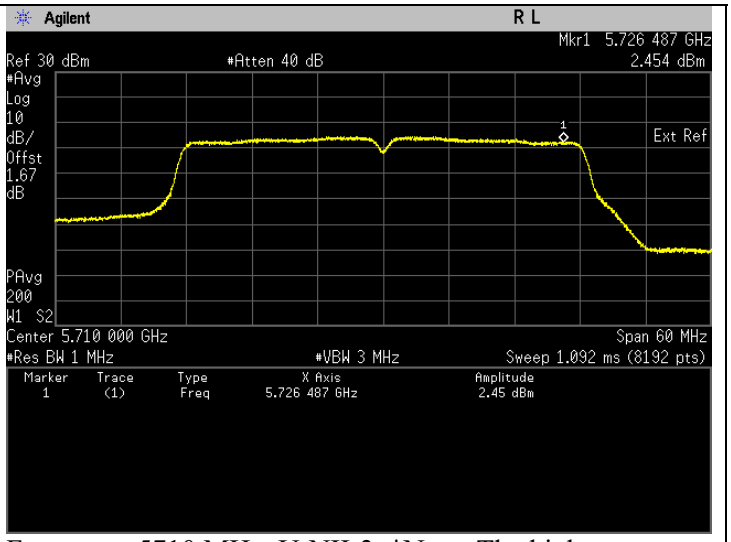
Straddle Frequency 802.11n (HT40) (99% EBW)

Freq. (MHz)	Test Conditions	Results	
		U-NII- 2C	
		Power/Frequency (dBm/MHz)	Status
5710	Mod Type: BPSK, Data Rate: MCS0 (13.5)	4.583	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5710	Mod Type: BPSK, Data Rate: MCS0 (13.5)	2.608	Pass

Plots for 802.11n (HT40) Straddle Frequency (26dB EBW & 99% EBW)



Frequency 5710 MHz, U-NII-2C. *Note: The highest spectral density is captured before the 5725 MHz.



Frequency 5710 MHz, U-NII-3. *Note: The highest spectral density is captured after the 5725 MHz.

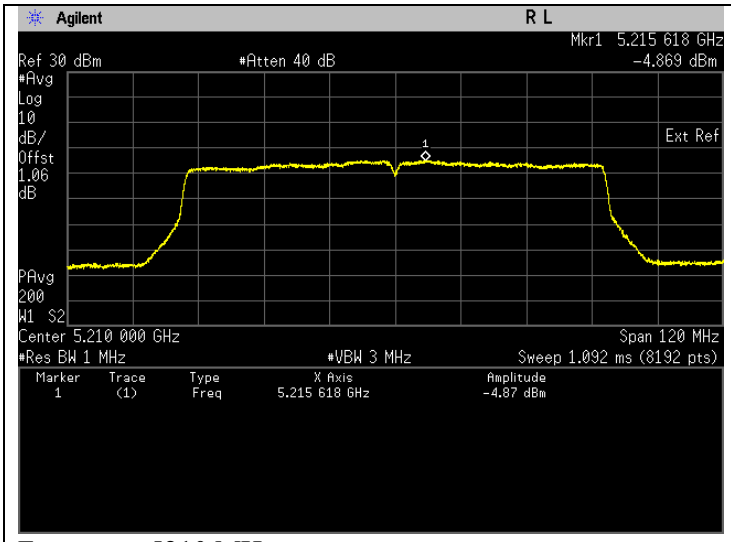
802.11ac (HT80)(26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		Power/Frequency (dBm/MHz)	Status
5210	Mod Type: BPSK, Data Rate: MCS0 (29.3)	-4.547	Pass
5290	Mod Type: BPSK, Data Rate: MCS0 (29.3)	-7.453	Pass
5530	Mod Type: BPSK, Data Rate: MCS0 (29.3)	-3.812	Pass
5610	Mod Type: BPSK, Data Rate: MCS0 (29.3)	1.669	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status
5775	Mod Type: BPSK, Data Rate: MCS0 (29.3)	-1.085	Pass

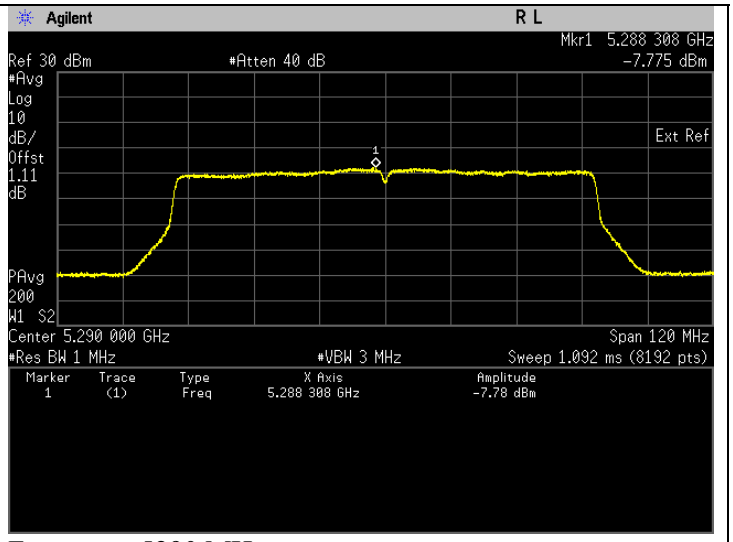
802.11ac (HT80)(99% EBW)

Freq. (MHz)	Test Conditions	Results			
		Power/Frequency (dBm/MHz)	Status	EIRP (dBm/MHz)	Status
5210	Mod Type: BPSK, Data Rate: MCS0 (29.3)	-4.547	Pass	0.053	Pass
5290	Mod Type: BPSK, Data Rate: MCS0 (29.3)	-7.453	Pass	-2.853	Pass
5530	Mod Type: BPSK, Data Rate: MCS0 (29.3)	-3.812	Pass	-0.512	Pass
5610	Mod Type: BPSK, Data Rate: MCS0 (29.3)	1.669	Pass	4.969	Pass
Freq. (MHz)	Test Conditions	Power/Frequency (dBm/500kHz)	Status		
5775	Mod Type: BPSK, Data Rate: MCS0 (29.3)	-1.085	Pass	2.015	Pass

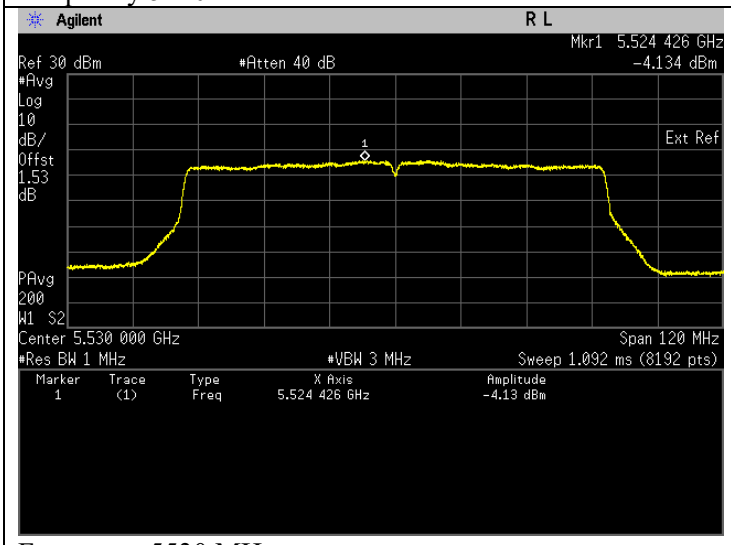
Plots for 802.11ac (HT80) (26dB EBW & 99% EBW)



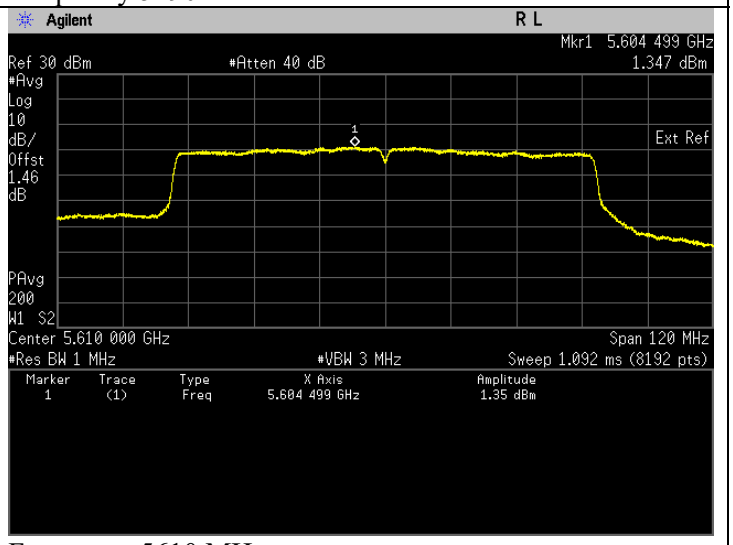
Frequency 5210 MHz



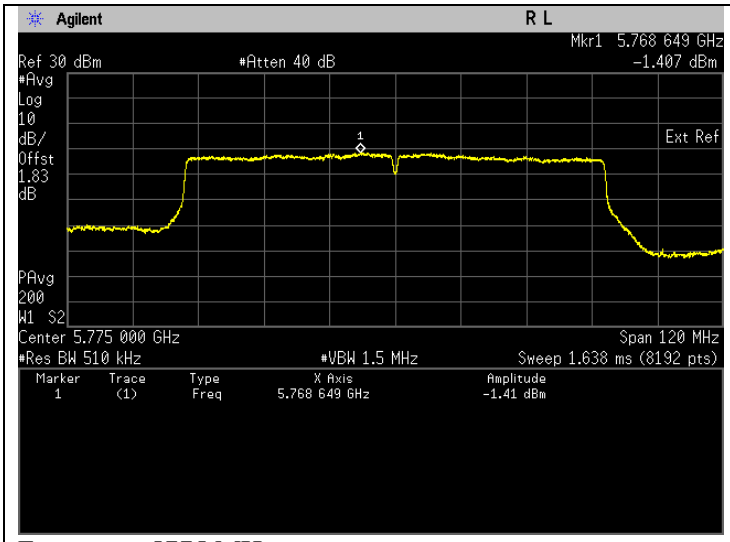
Frequency 5290 MHz



Frequency 5530 MHz



Frequency 5610 MHz



Frequency 5775 MHz

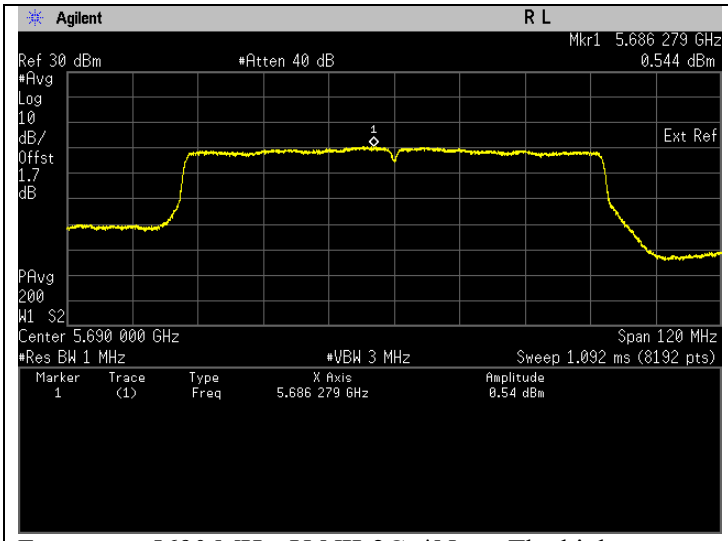
Straddle Frequency 802.11ac (HT80) (26dB EBW)

Freq. (MHz)	Test Conditions	Results	
		U-NII- 2C	
		Power/Frequency (dBm/MHz)	Status
5690	Mod Type: BPSK, Data Rate: MCS0 (29.3)	0.866	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5690	Mod Type: BPSK, Data Rate: MCS0 (29.3)	-1.190	Pass

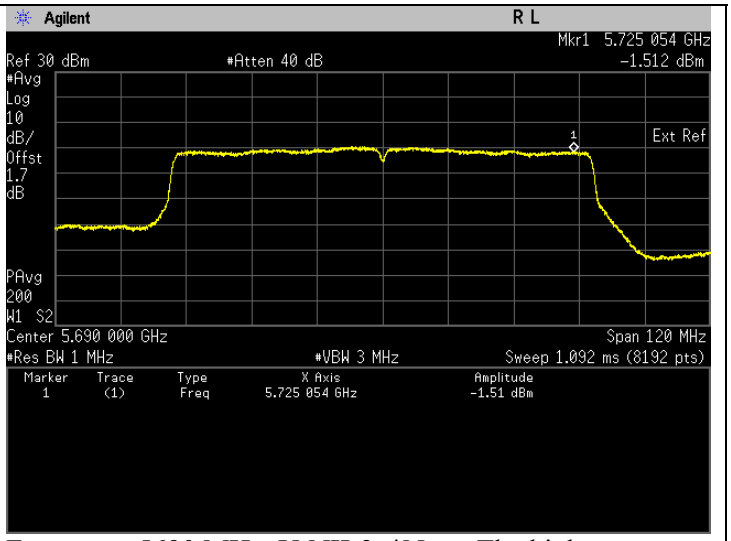
Straddle Frequency 802.11ac (HT80) (99% EBW)

Freq. (MHz)	Test Conditions	Results	
		U-NII- 2C	
		Power/Frequency (dBm/MHz)	Status
5690	Mod Type: BPSK, Data Rate: MCS0 (29.3)	0.866	Pass
Freq. (MHz)	Test Conditions	U-NII-3	
		Power/Frequency (dBm/500kHz)	Status
5690	Mod Type: BPSK, Data Rate: MCS0 (29.3)	-1.190	Pass

Plots for 802.11ac (HT80) Straddle Frequency (26dB EBW & 99% EBW)



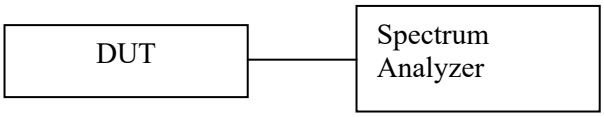
Frequency 5690 MHz, U-NII-2C. *Note: The highest spectral density is captured before the 5725 MHz.



Frequency 5690 MHz, U-NII-3. *Note: The highest spectral density is captured after the 5725 MHz.

7.4. 6dB Bandwidth

7.4.1. Test Setup



a) Test setup as per illustrated above.
b) Set DUT to transmit at desire transmit frequency.
c) 6dB bandwidth is applicable for the band 5.725-5.85GHz only.
d) Connect DUT's antenna terminal to spectrum analyzer with a low loss cable.
e) Setting of Spectrum analyzer :
   - RBW = 100 kHz
   - VBW ≥ 3·RBW
   - Detector = Peak
   - Trace = Max Hold
   - Sweep = Auto couple

f) Allow trace to stabilize.
g) 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.
h) The measurement method follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04 under clause C.2).

7.4.2. Test Limits

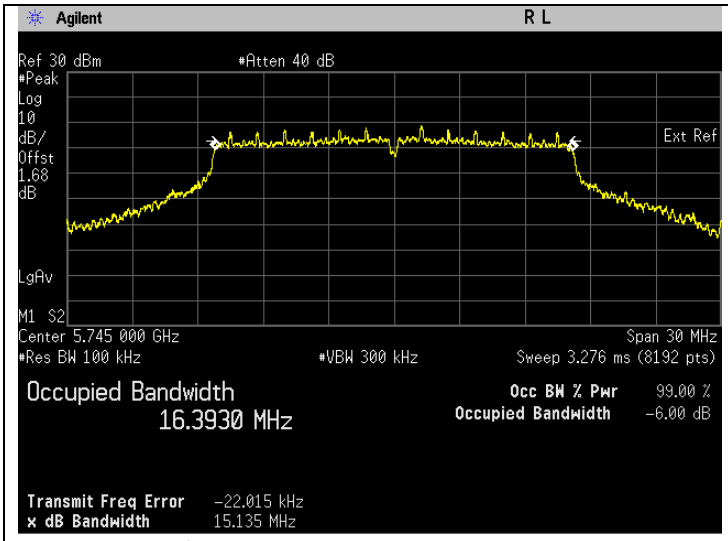
FCC 15.407(e)
Within the 5.725-5.85GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

RSS 247 6.2.4
For equipment operating in the band 5725-5850 MHz, the minimum 6 dB bandwidth shall be at least 500 kHz.

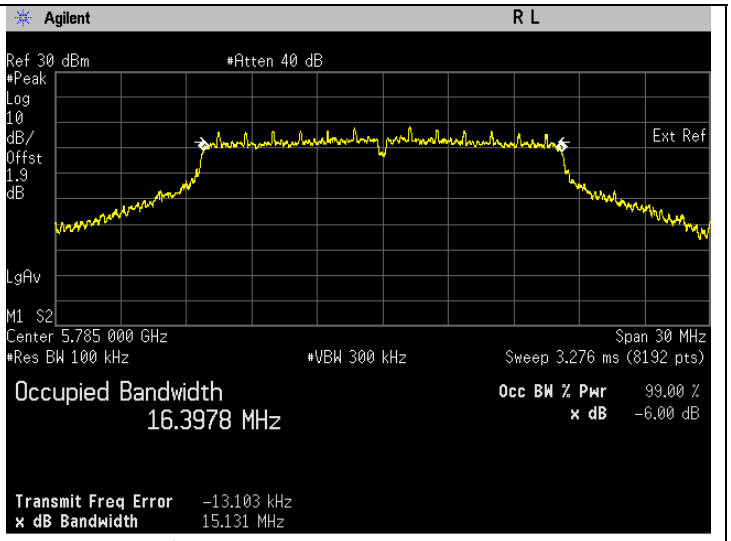
7.4.3. Test Data

802.11a

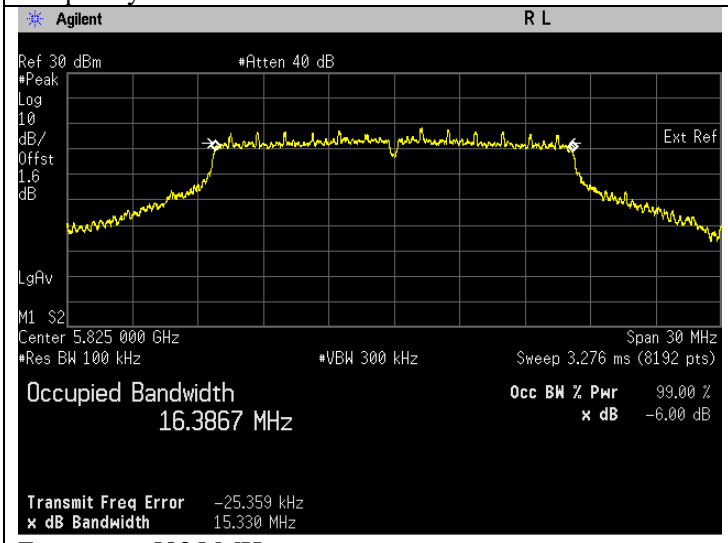
Frequency (MHz)	Test Configuration	Results	
		Bandwidth(MHz)	Status
5745	Mod Type: BPSK, Data Rate: 6	15.135	Pass
5785	Mod Type: BPSK, Data Rate: 6	15.131	Pass
5825	Mod Type: BPSK, Data Rate: 6	15.330	Pass



Frequency 5745 MHz



Frequency 5785 MHz

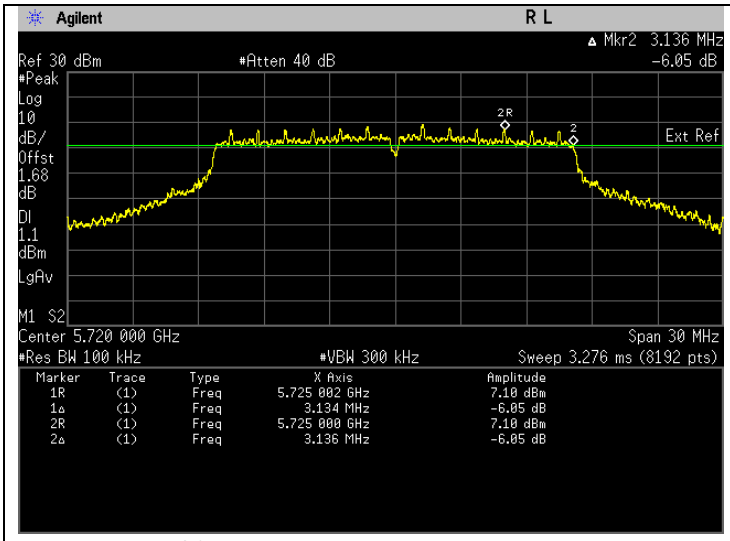


Frequency 5825 MHz

Straddle Frequency for 802.11a

Freq. (MHz)	Test Conditions	Results	
		Bandwidth(MHz)	Status
		U-NII- 3	
5720	Mod Type: BPSK, Data Rate: 6	3.136	Pass

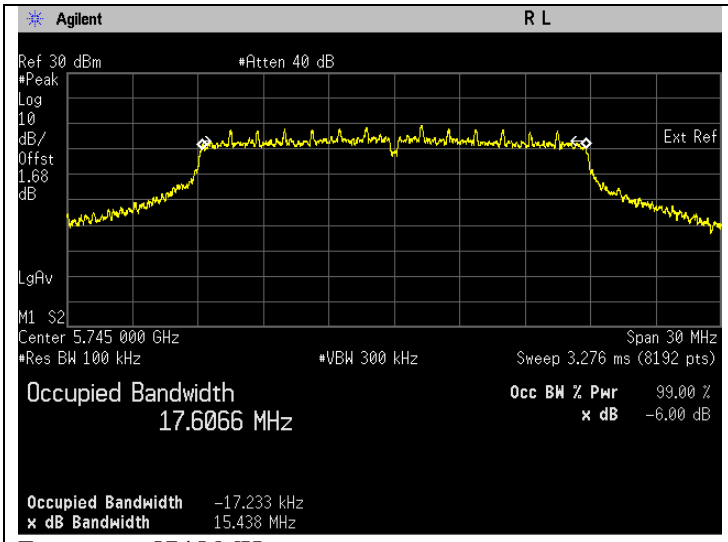
Plots for 802.11a Straddle Frequency



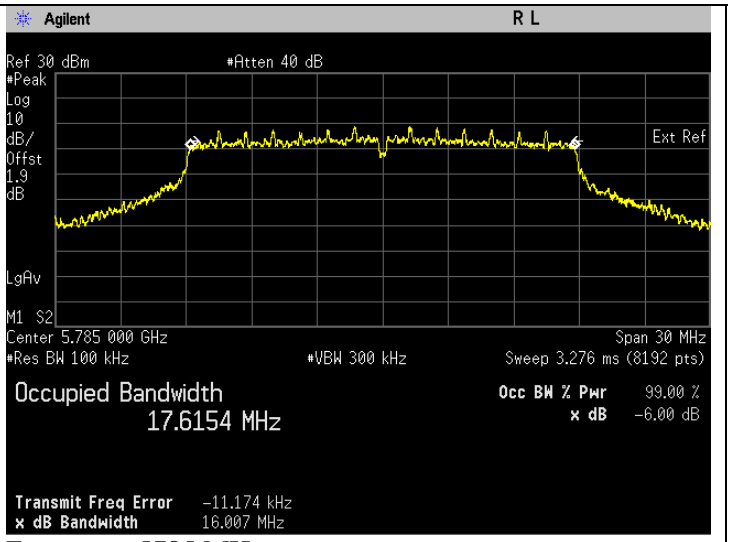
Frequency 5720 MHz

802.11n (HT20)

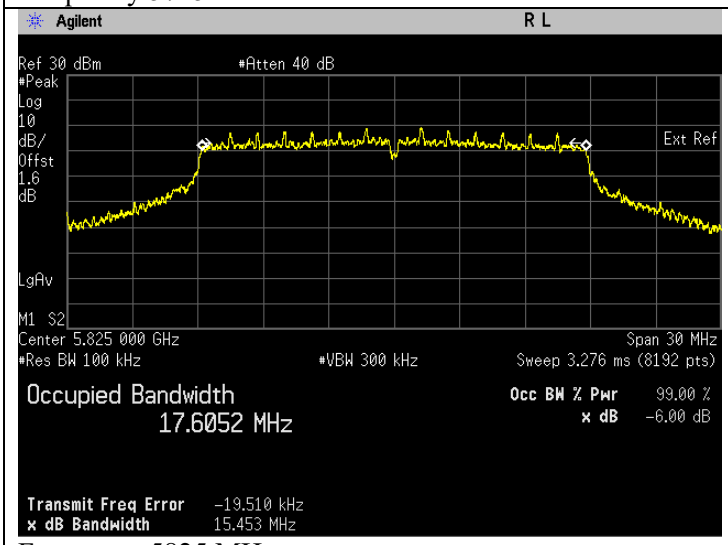
Frequency (MHz)	Test Configuration	Results	
		Bandwidth(MHz)	Status
5745	Mod Type: BPSK, Data Rate: MCS0 (6.5)	15.438	Pass
5785	Mod Type: BPSK, Data Rate: MCS0 (6.5)	16.007	Pass
5825	Mod Type: BPSK, Data Rate: MCS0 (6.5)	15.453	Pass



Frequency 5745 MHz



Frequency 5785 MHz

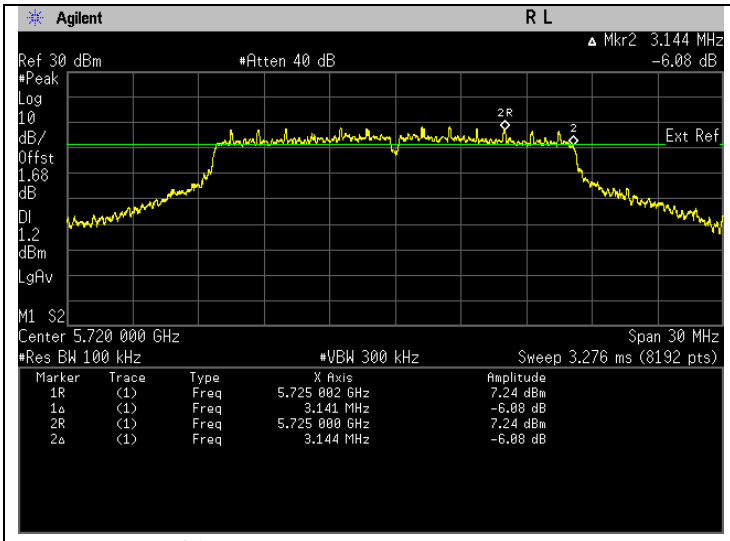


Frequency 5825 MHz

Straddle Frequency for 802.11n (HT20)

Freq. (MHz)	Test Conditions	Results	
		Bandwidth(MHz)	Status
		U-NII- 3	
5720	Mod Type: BPSK, Data Rate: MCS0 (6.5)	3.144	Pass

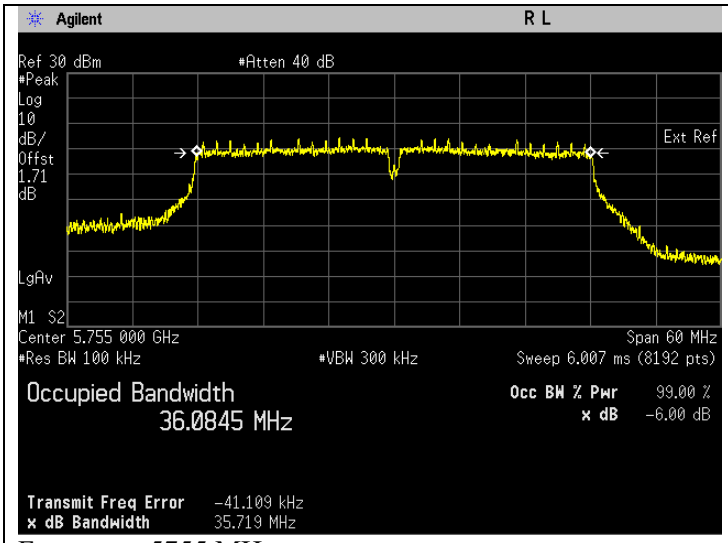
Plots for 802.11n (HT20) Straddle Frequency



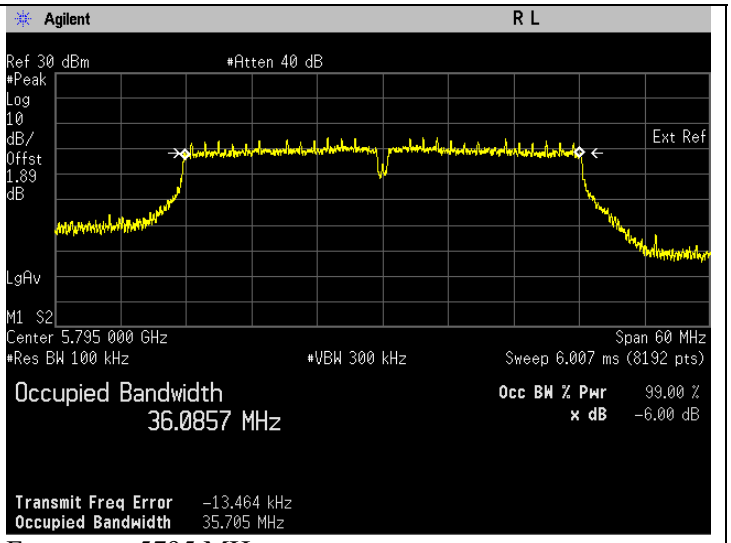
Frequency 5720 MHz

802.11n (HT40)

Frequency (MHz)	Test Configuration	Results	
		Bandwidth(MHz)	Status
5755	Mod Type: BPSK, Data Rate: MCS0 (13.5)	35.719	Pass
5795	Mod Type: BPSK, Data Rate: MCS0 (13.5)	35.705	Pass



Frequency 5755 MHz

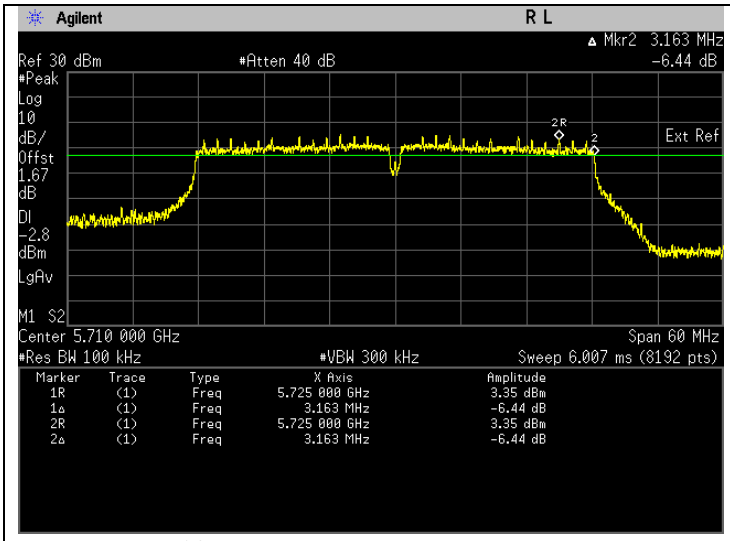


Frequency 5795 MHz

Straddle Frequency for 802.11n (HT40)

Freq. (MHz)	Test Conditions	Results	
		Bandwidth(MHz)	Status
		U-NII- 3	
5710	Mod Type: BPSK, Data Rate: MCS0 (13.5)	3.163	Pass

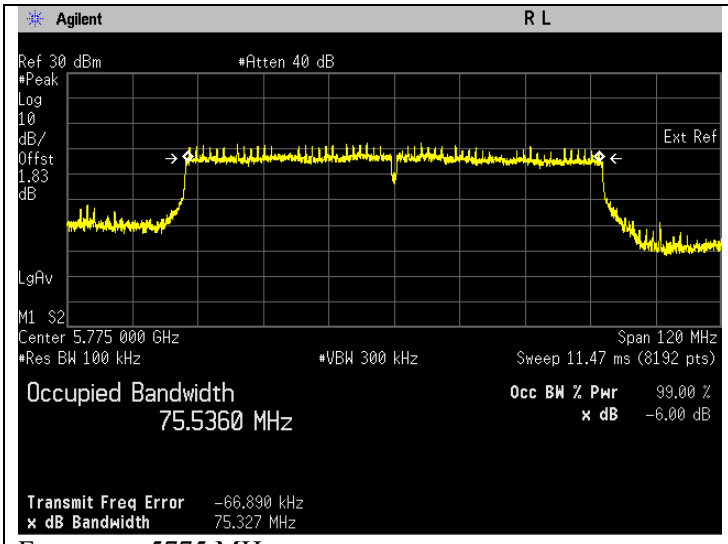
Plots for 802.11n (HT40) Straddle Frequency



Frequency 5710 MHz

802.11ac (HT80)

Frequency (MHz)	Test Configuration	Results	
		Bandwidth(MHz)	Status
5775	Mod Type: BPSK, Data Rate: MCS0 (29.3)	75.327	Pass

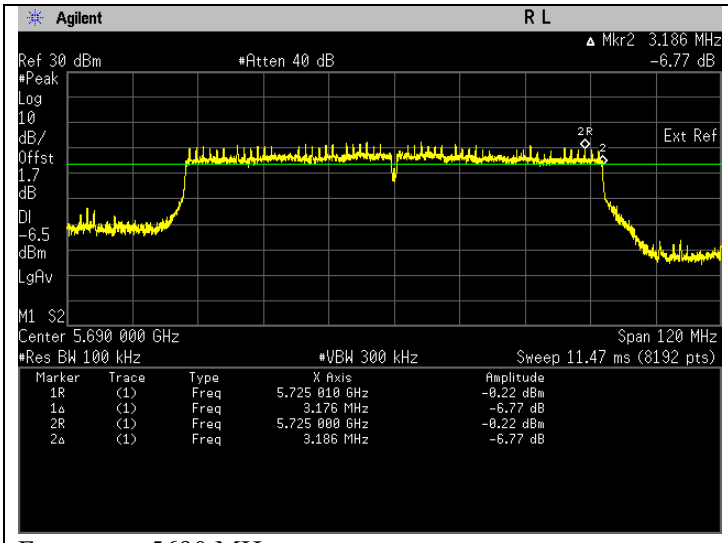


Frequency 5775 MHz

Straddle Frequency for 802.11ac (HT80)

Freq. (MHz)	Test Conditions	Results	
		Bandwidth(MHz)	Status
		U-NII- 3	
5690	Mod Type: BPSK, Data Rate: MCS0 (13.5)	3.186	Pass

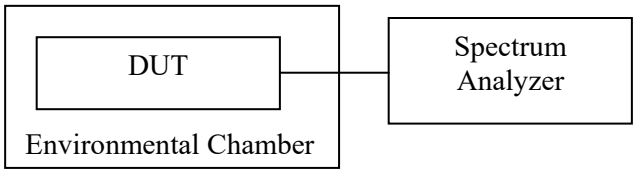
Plots for 802.11ac (HT80) Straddle Frequency



Frequency 5690 MHz

7.5. Frequency Stability

7.5.1. Test Setup



a) Test setup as per illustrated above.
b) Set DUT to transmit un-modulated signal at desire transmit frequency.
c) Connect DUT's antenna terminal to spectrum analyzer with a low loss cable.
d) The DUT was operated at the maximum output power, and spectrum which is set to maximum hold function and peak detector.
e) The peak value of the power envelope was measured and noted.
f) Test was conducted from temperature range from -30^{0}C to 50^{0}C with step size of 10^{0}C on manufacturer's rated supply voltage.
g) At temperature of 20^{0}C, +/-15% of manufacturer's rated voltage are to be applied.
h) The frequency stability is measured and recorded of frequency deviation due to temperature and supply voltage variations as mentioned at condition f) & g) above.

7.5.2. Test Limits

FCC 15.407(g)
Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

RSS-GEN 6.11

7.5.3. Test Data

802.11a

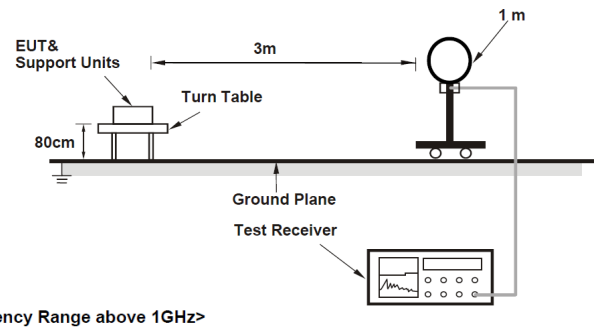
Test Configuration	Test Frequency Tx (MHz)
Mod Type: BPSK, Data Rate: 6	5180

		Results			
Temperature(°C)	Voltage	Measured Frequency(MHz)	Frequency Error(kHz)	Frequency Error(%)	Status
20	+15%	5180.035775	35.775000	0.000691	Pass
	±0%	5180.035450	35.450000	0.000684	Pass
	-15%	5180.036176	36.176000	0.000698	Pass
-30		5180.033082	33.082000	0.000639	Pass
-20		5180.025282	25.282000	0.000488	Pass
-10		5180.006628	6.628000	0.000128	Pass
0		5179.991548	8.452000	0.000163	Pass
10		5179.982588	17.412000	0.000336	Pass
30		5179.998813	1.187000	0.000023	Pass
40		5179.998966	1.034000	0.000020	Pass
50		5179.999165	0.835000	0.000016	Pass

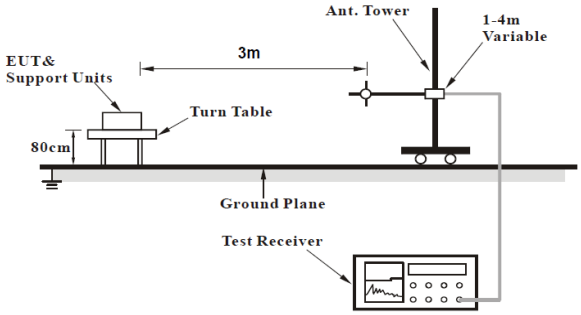
7.6. Band Edge Radiated Spurious Emission Measurement

7.6.1. Test Setup

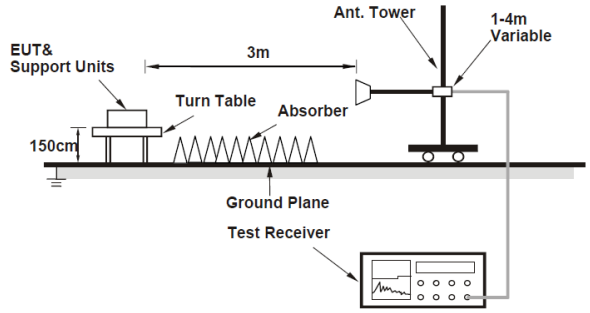
<Radiated emission below 30MHz>



<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



1. The EUT is placed on the top of a rotating table 0.8m/1.5m above the ground at a 3m semi-anechoic chamber. The table is rotated 360 degrees to determine the position of the highest radiation.
2. The EUT is set 3m away from the interference-receiving antenna, which is mounted on the top of a variable-height antenna tower.
3. The antenna is Bilog/Horn antenna depend on which frequency range uses, 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.
4. For each suspected emission, the EUT is arranged to its worst case and then the antenna is tuned to heights from 1m to 4m and the rotatable table is turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system is set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode is fall within the range of 10dB from the limit specified, the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. Otherwise, the testing could be stopped and the peak values of the EUT would be reported.

NOTE:

a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection at frequency below 1GHz.
b. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3 MHz for Peak detection at frequency above 1 GHz.
c. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection using reduced video bandwidth (Duty cycle ≥98%) at frequency above 1GHz.
d. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 1/ τ Hz, where τ is minimum transmitter on time (Duty cycle <98%) for Average detection using reduced video bandwidth at frequency above 1GHz.
e. All modes of operation were investigated and the worst-case emissions are reported.

7.6.2. Test Limits

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

Frequency (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:

a. The lower limit shall apply at the transition frequencies.
b. Emission level (dBuV/m) = 20 log Emission level (uV/m).
c. For frequencies above 1000 MHz, 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.

For Radiated emissions which fall out of the restricted bands must comply with the radiated emission limits specified as below table.

<table>
<tr><th colspan="2">Applicable To</th><th colspan="2">Limit</th></tr>
<tr><td colspan="2" rowspan="2">789033 D02 General UNII Test Procedures New Rules v01r03</td><td colspan="2">Field Strength at 3 m</td></tr>
<tr><td>PK: 74 (dBµV/m)</td><td>AV: 54 (dBµV/m)</td></tr>
<tr><th>Frequency Band</th><th>Applicable To</th><th>EIRP Limit</th><th>Equivalent Field Strength at 3 m</th></tr>
<tr><td>5150~5250 MHz</td><td>15.407(b)(1)</td><td rowspan="3">PK: -27 (dBm/MHz)</td><td rowspan="3">PK: 68.2 (dBµV/m)</td></tr>
<tr><td>5250~5350 MHz</td><td>15.407(b)(2)</td></tr>
<tr><td>5470~5725 MHz</td><td>15.407(b)(3)</td></tr>
<tr><td rowspan="2">5725~5850 MHz</td><td>15.407(b)(4)(i)</td><td>PK:-27 (dBm/MHz) *1
PK:10 (dBm/MHz) *2
PK:15.6 (dBm/MHz) *3
PK:27 (dBm/MHz) *4</td><td>PK: 68.2 (dBµV/m) *1
PK:105.2 (dBµV/m) *2
PK: 110.8 (dBµV/m) *3
PK:122.2 (dBµV/m) *4</td></tr>
<tr><td>15.407(b)(4)(ii)</td><td colspan="2">Emission limits in section 15.247(d)</td></tr>
<tr><td colspan="4">*1 beyond 75 MHz or more above of the band edge.
*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.
*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.
*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</td></tr>
</table>

NOTE:

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

$E = ((1000000 \surd (30P)) / 3)$ μV/m, where P is the eirp (Watts)

7.6.3. Test Result

802.11a

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5180.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

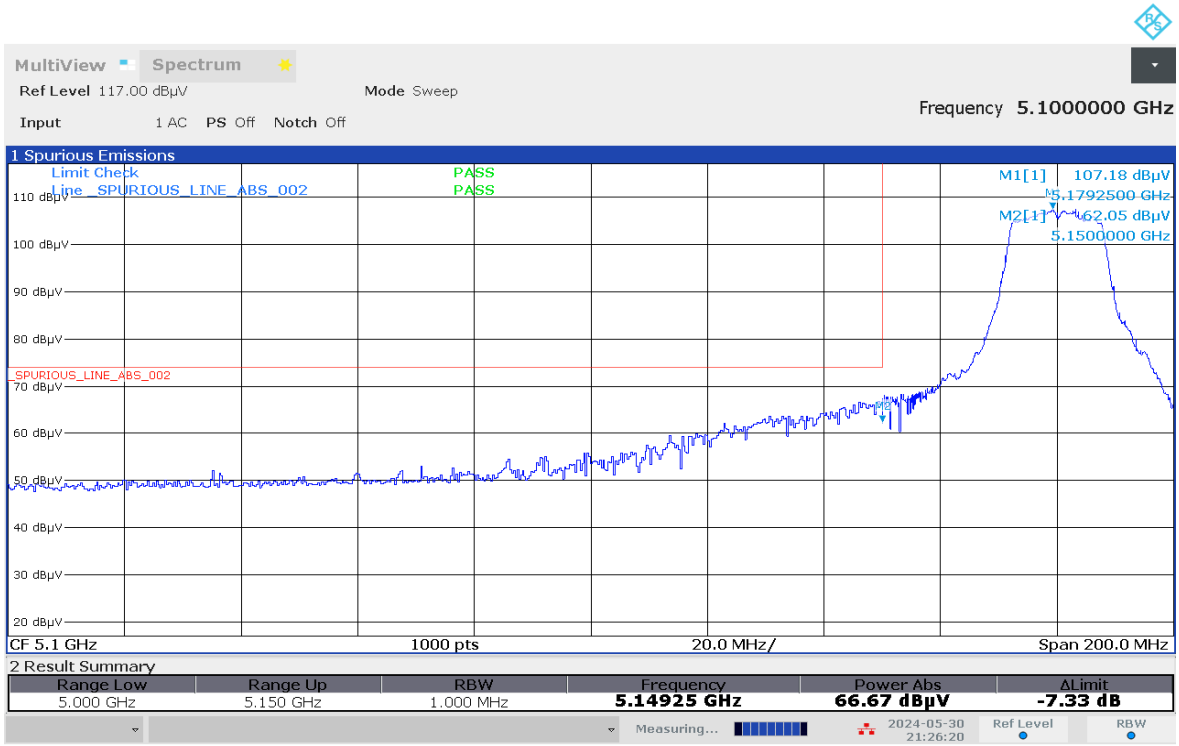
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5149.8500	-	-	47.5680	-	-	54.0000	-	-	6.4320	-
5150.0000	-	62.0454	47.6184	-	74.0000	54.0000	-	11.9546	6.3816	-
Horizontal Radiated Emission Result										
5137.8500	-	68.2916	-	-	74.0000	-	-	5.7084	-	-
5148.3500	-	69.8956	-	-	74.0000	-	-	4.1044	-	-
5149.8500	-	70.1781	48.0713	-	74.0000	54.0000	-	3.8219	5.9287	-
5150.0000	-	69.5552	48.1295	-	74.0000	54.0000	-	4.4448	5.8705	-

Remarks: Pass Result	Marginal Result	Fail Result

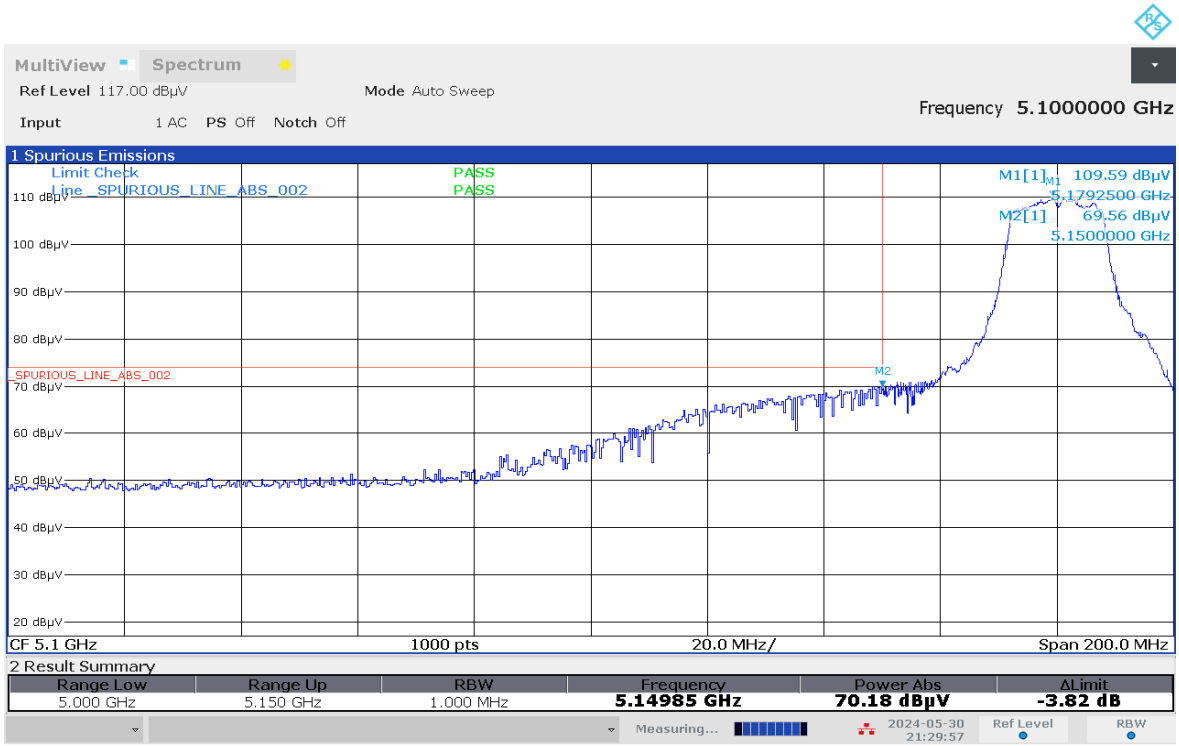
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



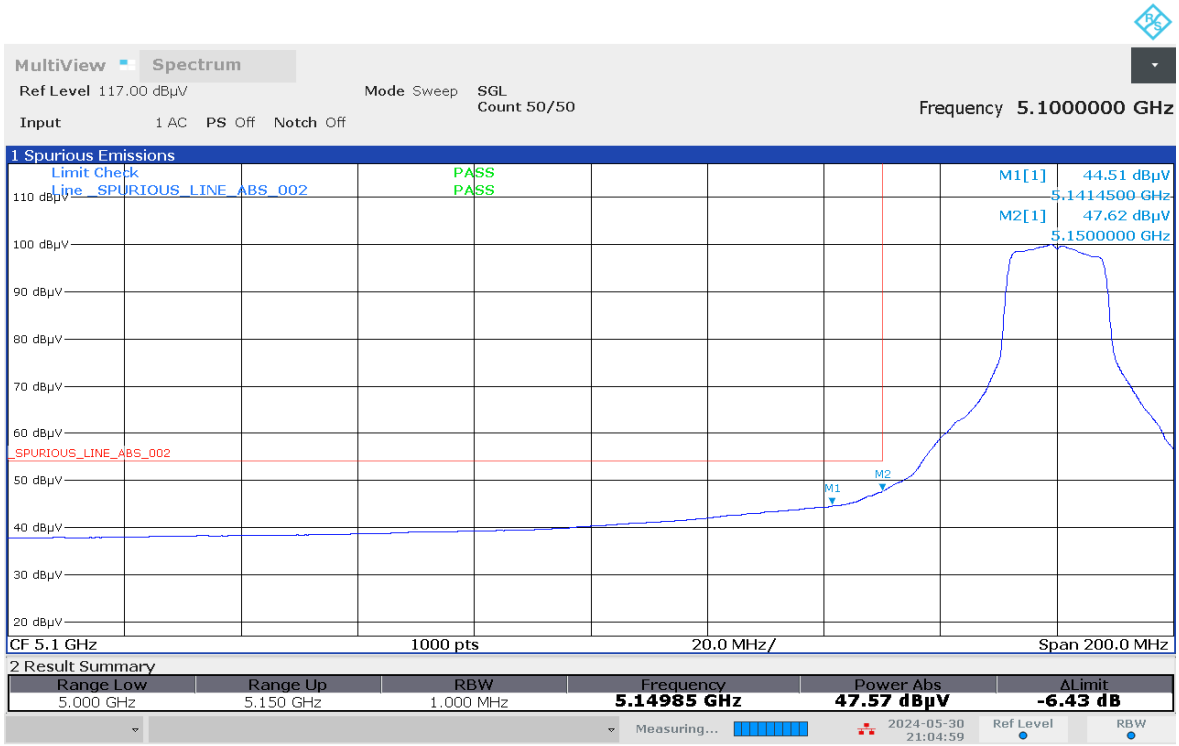
09:26:21 PM 05/30/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



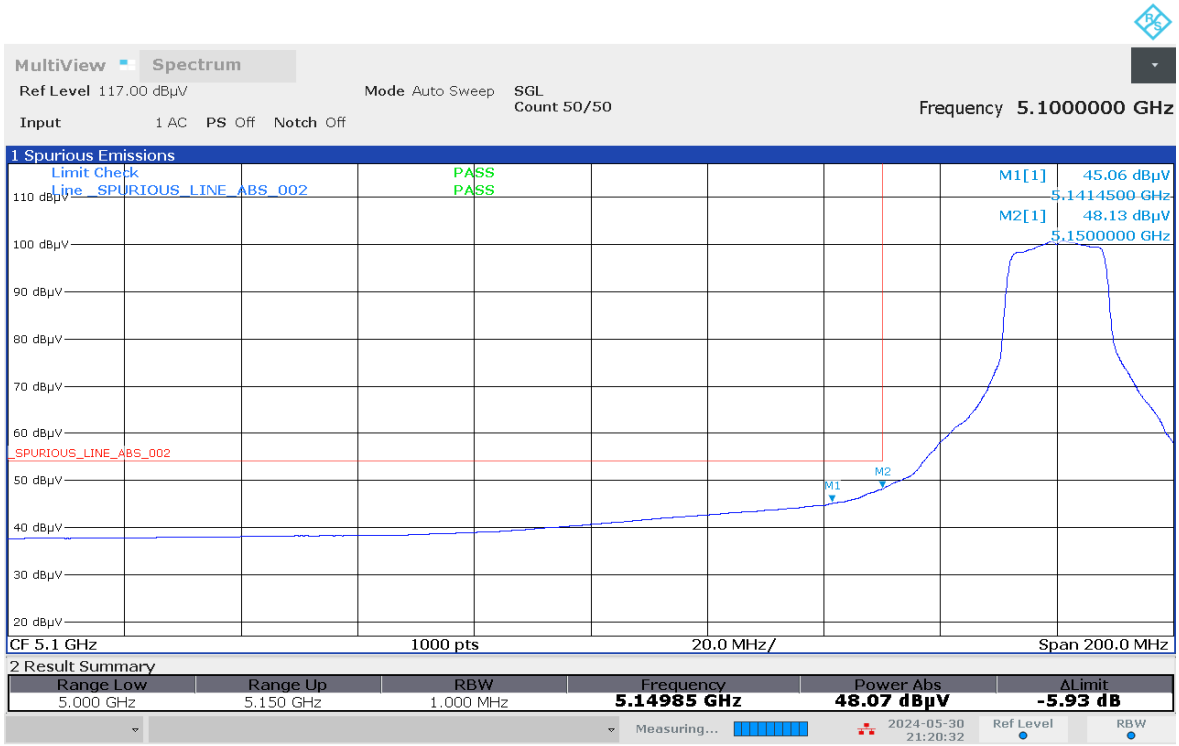
09:29:58 PM 05/30/2024

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



09:04:59 PM 05/30/2024

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



09:20:32 PM 05/30/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5320.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

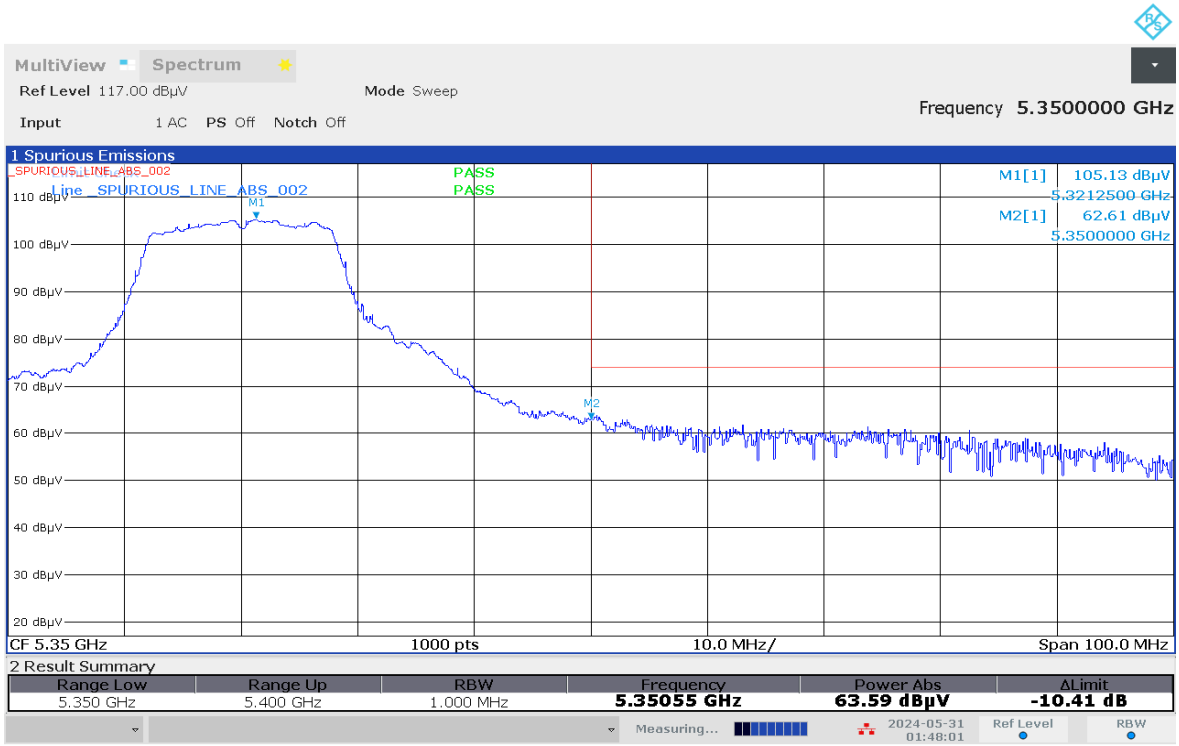
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5350.0000	-	62.6099	47.7627	-	74.0000	54.0000	-	11.3901	6.2373	-
Horizontal Radiated Emission Result										
5350.0000	-	63.9978	50.7358	-	74.0000	54.0000	-	10.0022	3.2642	-

Remarks: Pass Result	Marginal Result	Fail Result

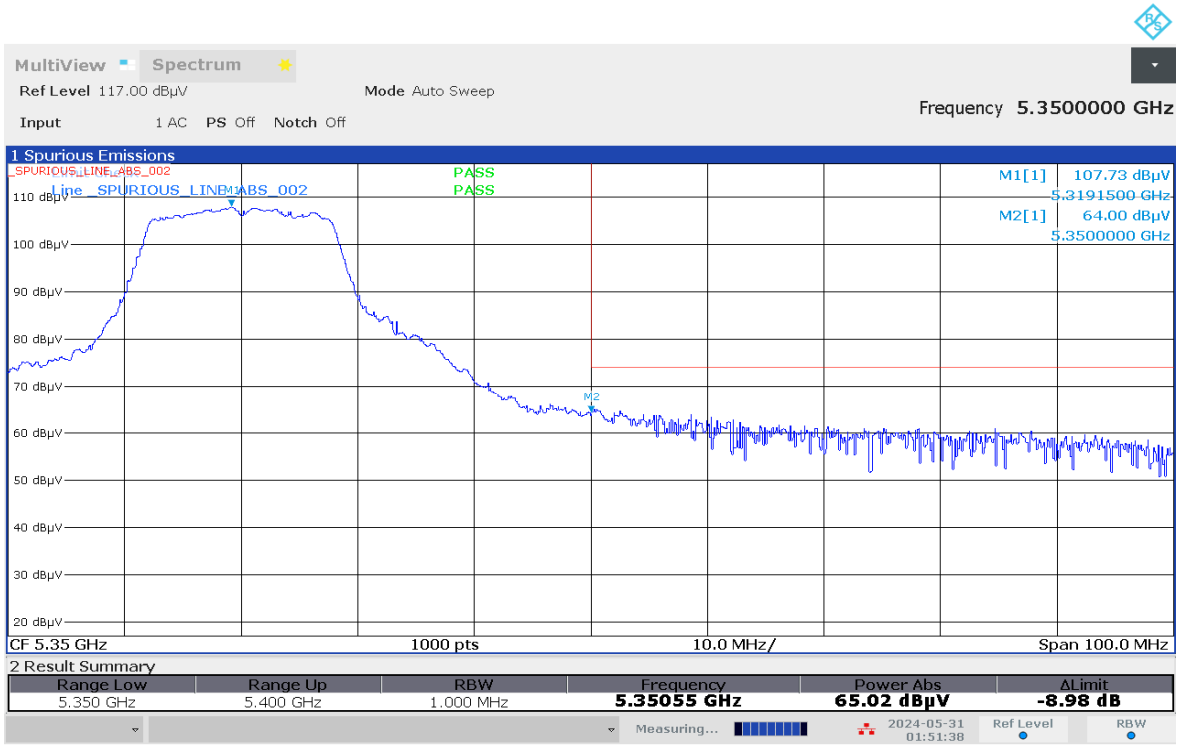
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



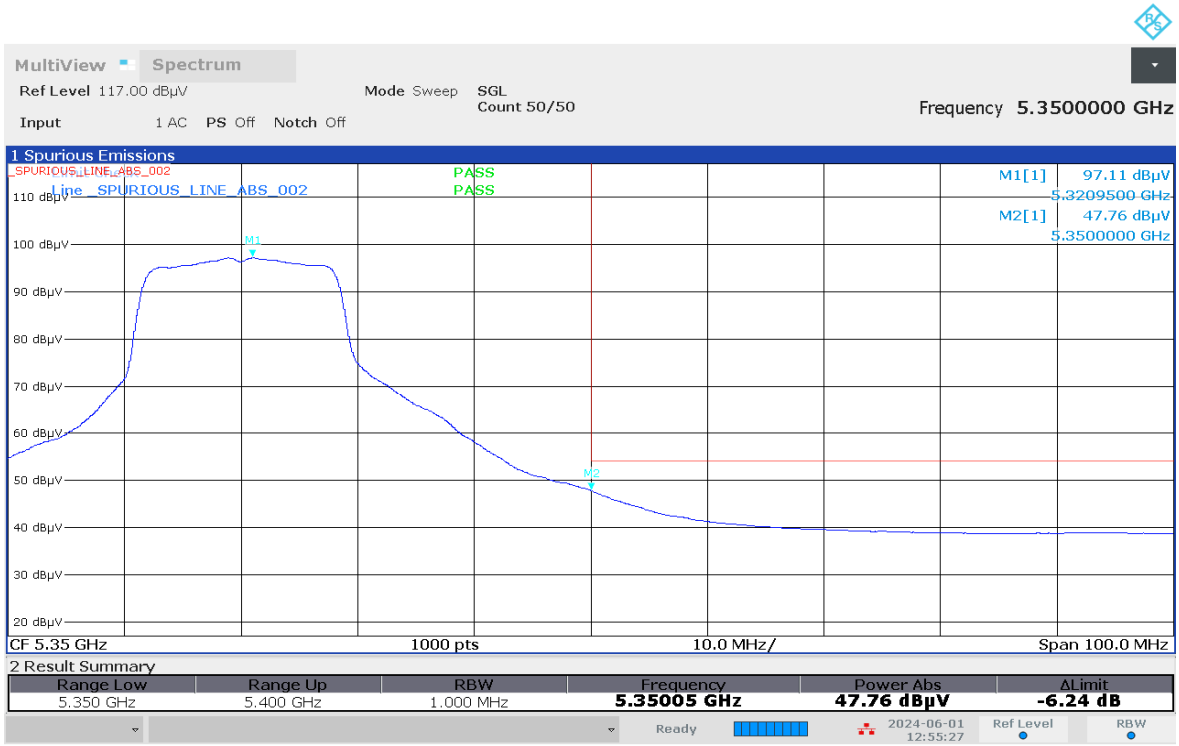
01:48:01 AM 05/31/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



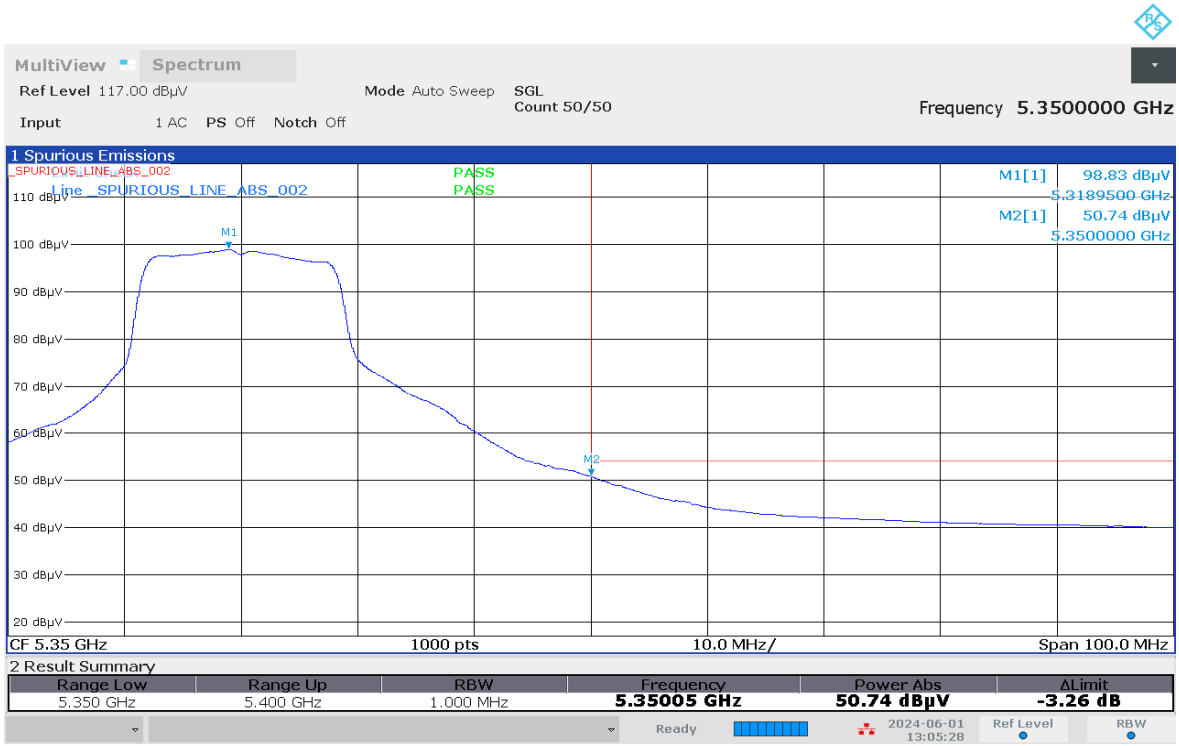
01:51:39 AM 05/31/2024

Restricted Band Edge (High Channel, Vertical, Average) graphical screen shot



12:55:28 PM 06/01/2024

Restricted Band Edge (High Channel, Horizontal, Average) graphical screen shot



01:05:29 PM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (16dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5500.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

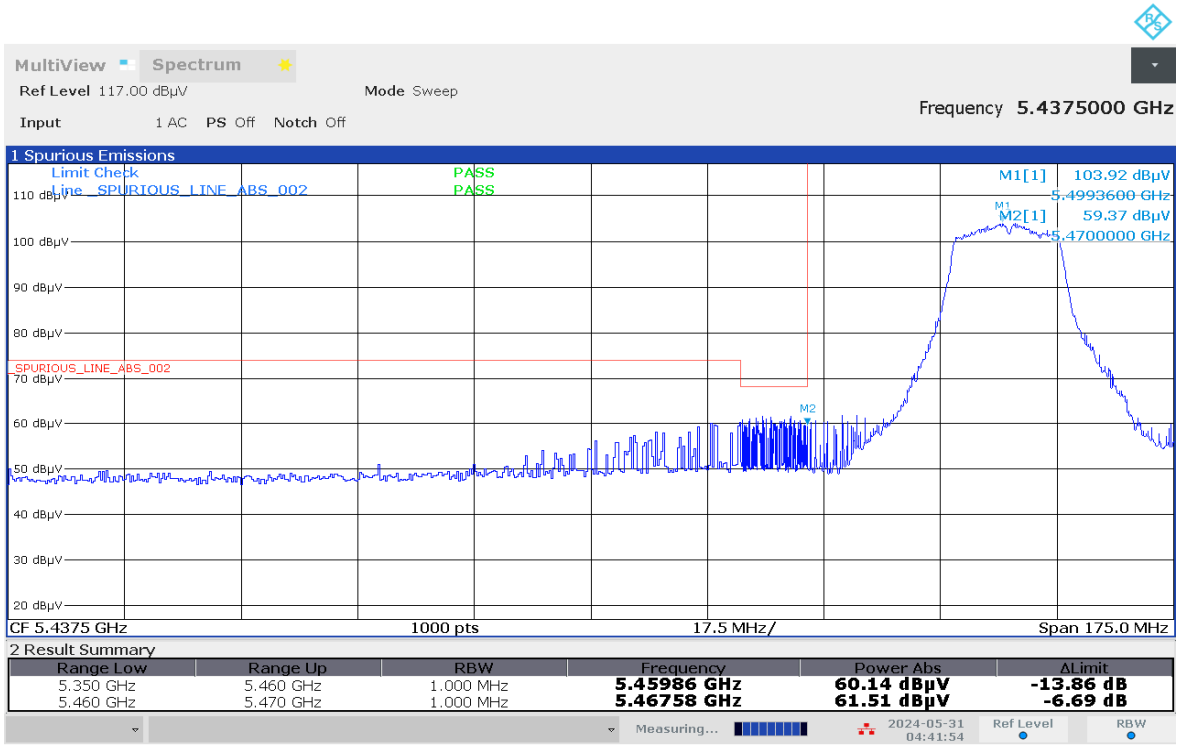
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5460.0000	-	-	40.7051	-	-	54.0000	-	-	13.2949	-
5470.0000	-	59.3735	-	-	68.2000	-	-	8.8265	-	-
Horizontal Radiated Emission Result										
5460.0000	-	-	40.5170	-	-	54.0000	-	-	13.4830	-
5461.9250	-	64.2873	-	-	68.2000	-	-	3.9127	-	-
5470.0000	-	51.5244	-	-	68.2000	-	-	16.6756	-	-

Remarks: Pass Result	Marginal Result	Fail Result

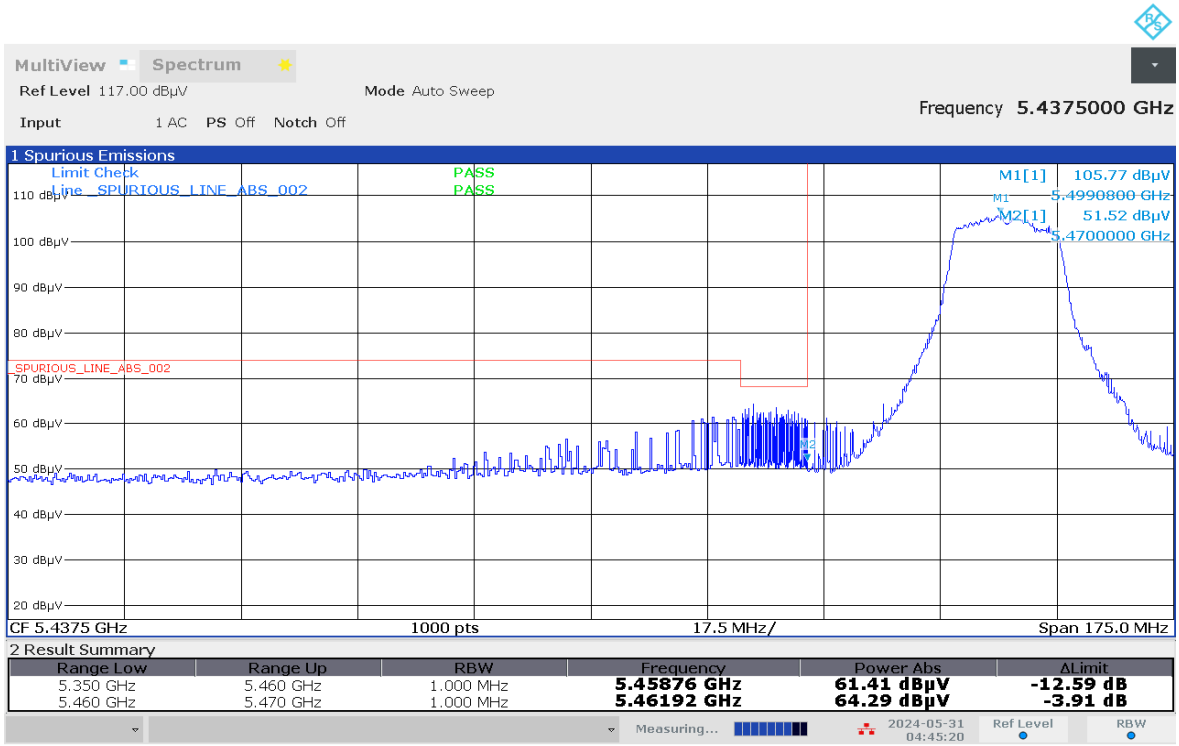
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



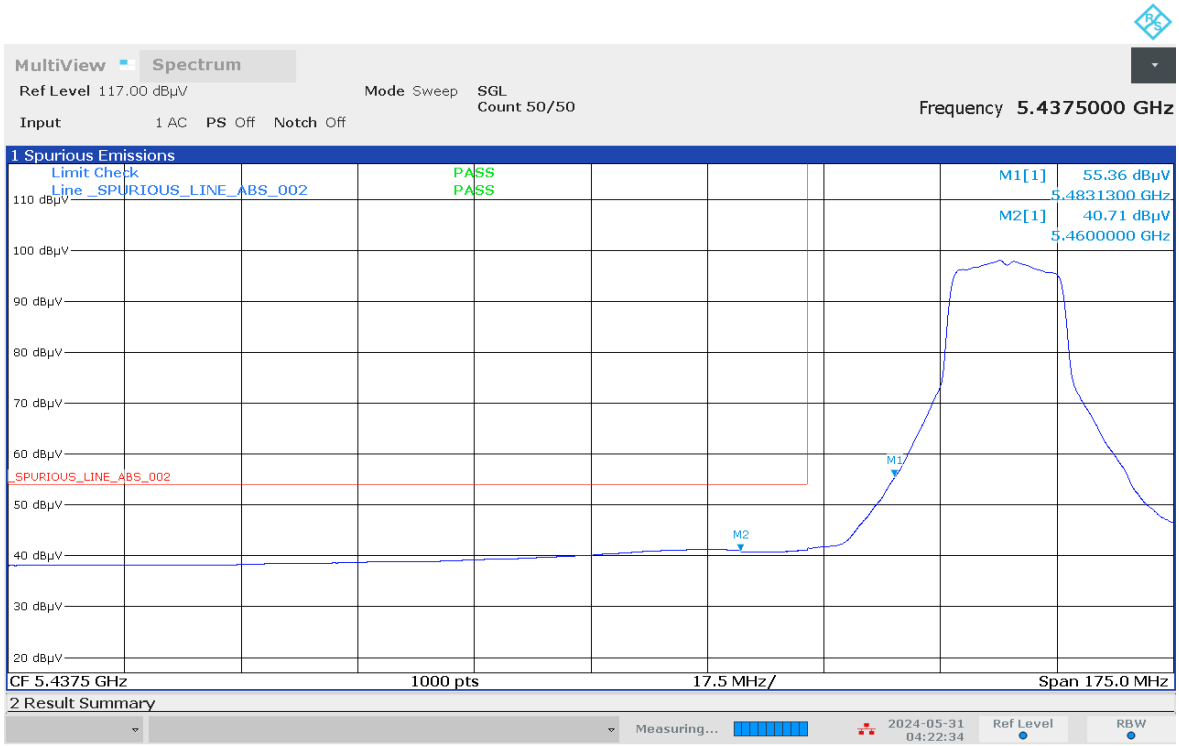
04:41:55 AM 05/31/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



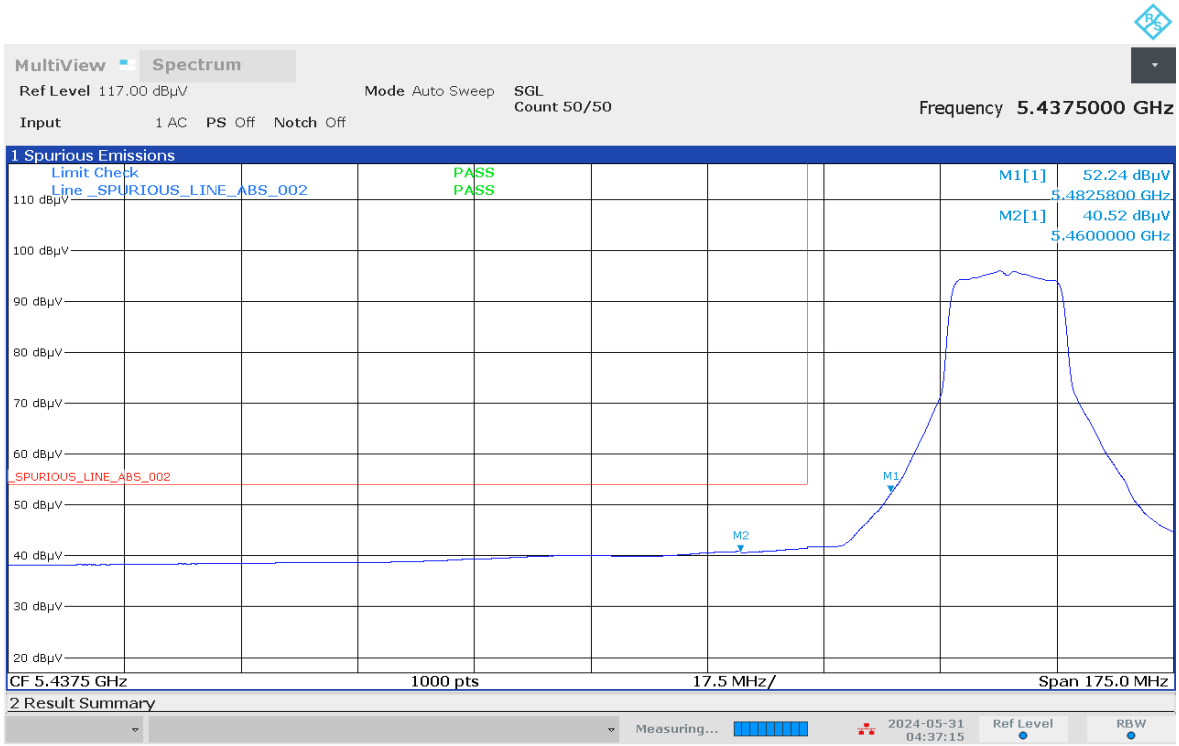
04:45:21 AM 05/31/2024

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



04:22:34 AM 05/31/2024

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



04:37:15 AM 05/31/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5700.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

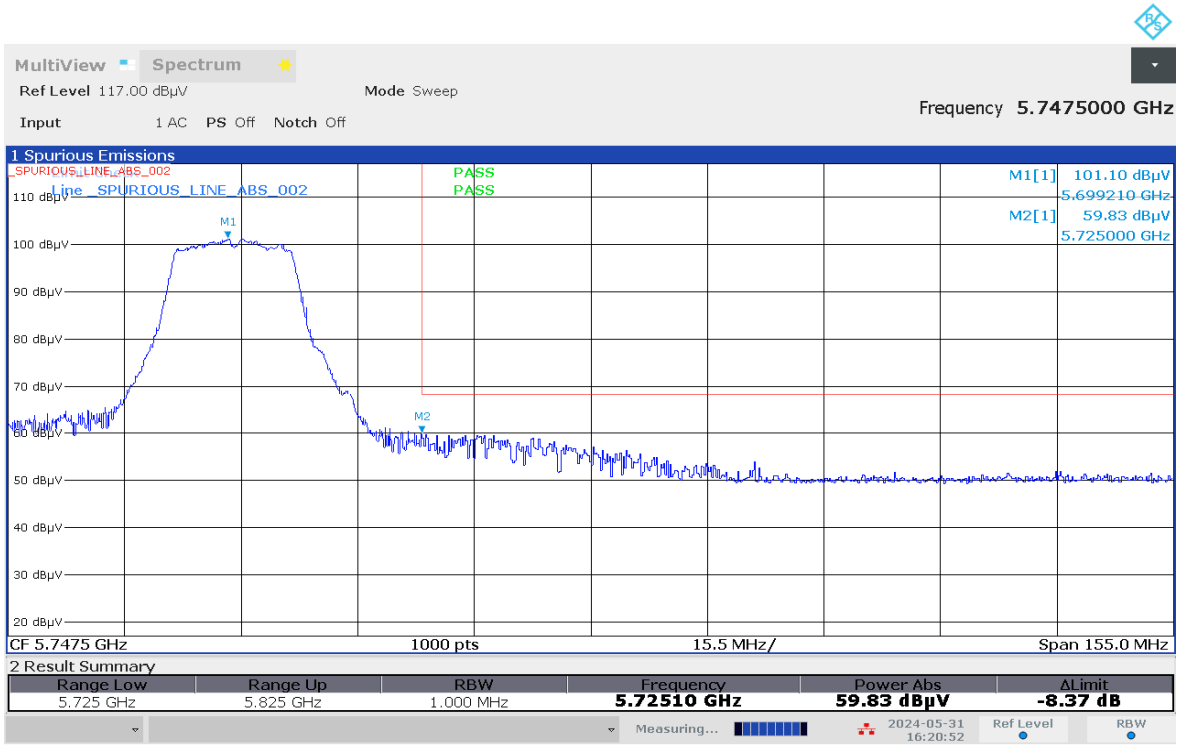
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5725.0000	-	59.8264	-	-	68.2000	-	-	8.3736	-	-
Horizontal Radiated Emission Result										
5725.0000	-	61.2891	-	-	68.2000	-	-	6.9109	-	-
5726.9000	-	62.8756	-	-	68.2000	-	-	5.3244	-	-
5727.5000	-	62.4658	-	-	68.2000	-	-	5.7342	-	-
5731.7000	-	62.9707	-	-	68.2000	-	-	5.2293	-	-
5733.5000	-	63.4306	-	-	68.2000	-	-	4.7694	-	-
5735.1000	-	62.4115	-	-	68.2000	-	-	5.7885	-	-
5739.7000	-	63.0575	-	-	68.2000	-	-	5.1425	-	-
5744.5000	-	63.0020	-	-	68.2000	-	-	5.1980	-	-

Remarks: Pass Result	Marginal Result	Fail Result

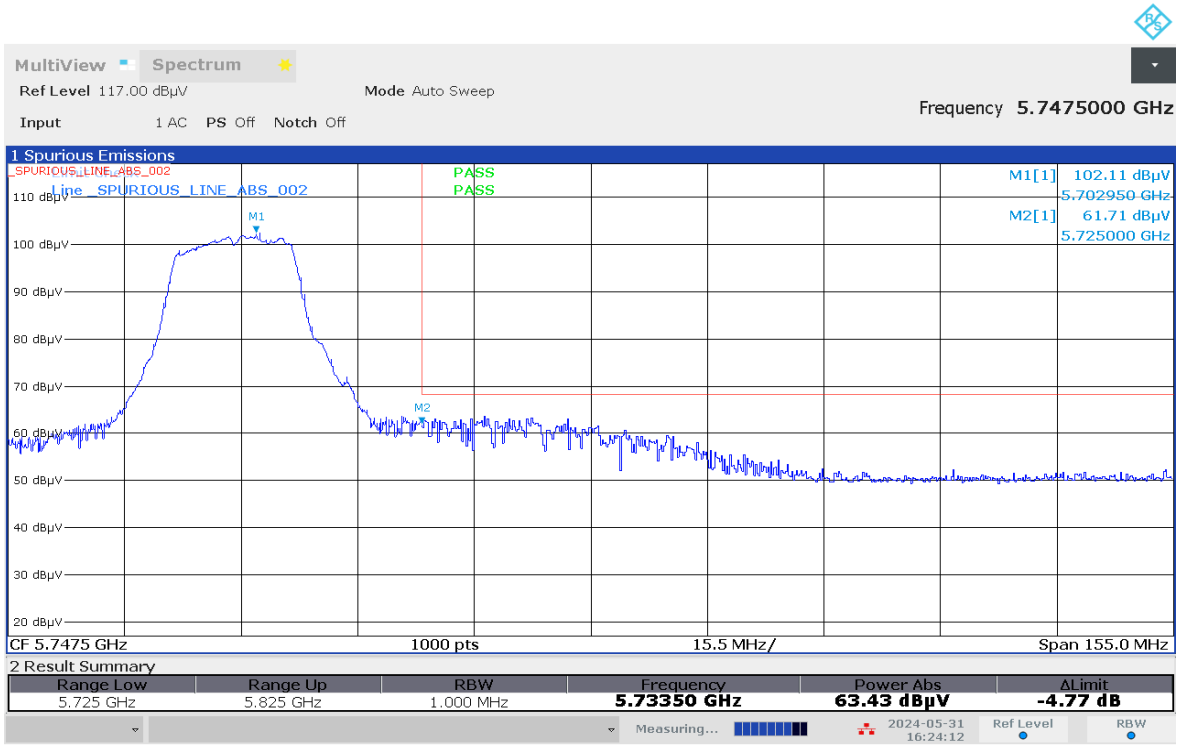
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



04:20:53 PM 05/31/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



04:24:12 PM 05/31/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Straddle Test Frequency: 5720.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

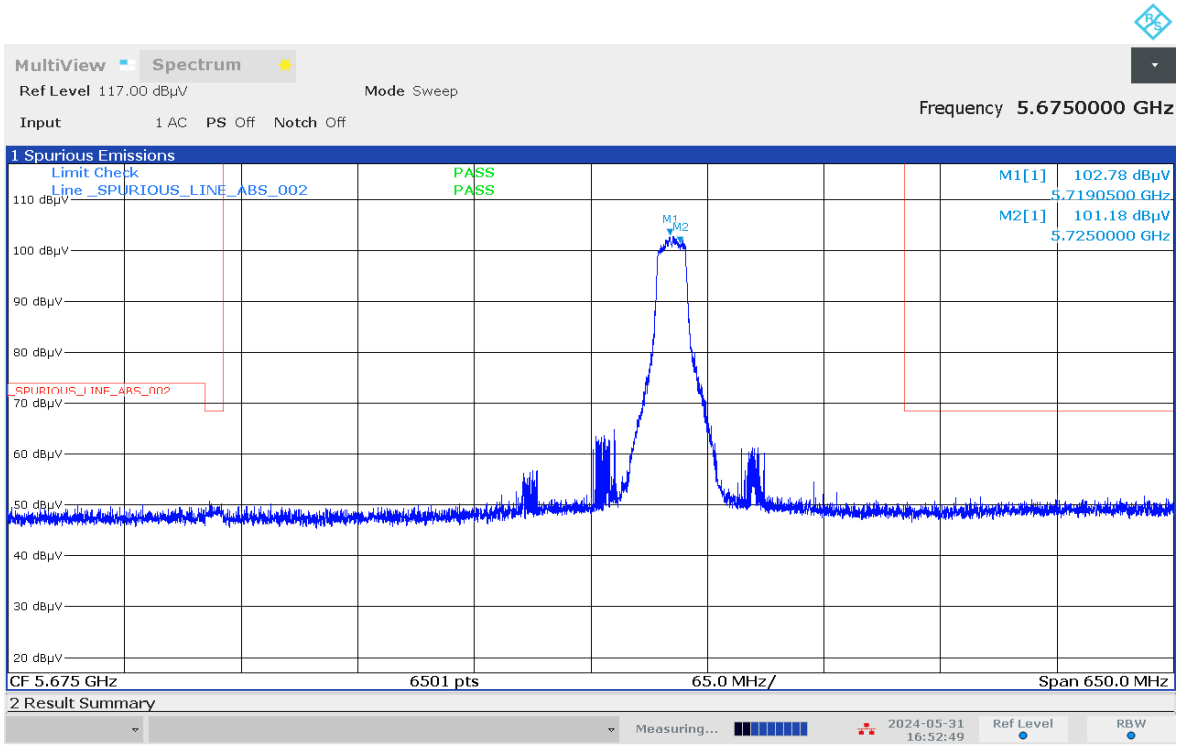
Restricted Band Edge (Straddle Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
Horizontal Radiated Emission Result										

Remarks: Pass Result	Marginal Result	Fail Result

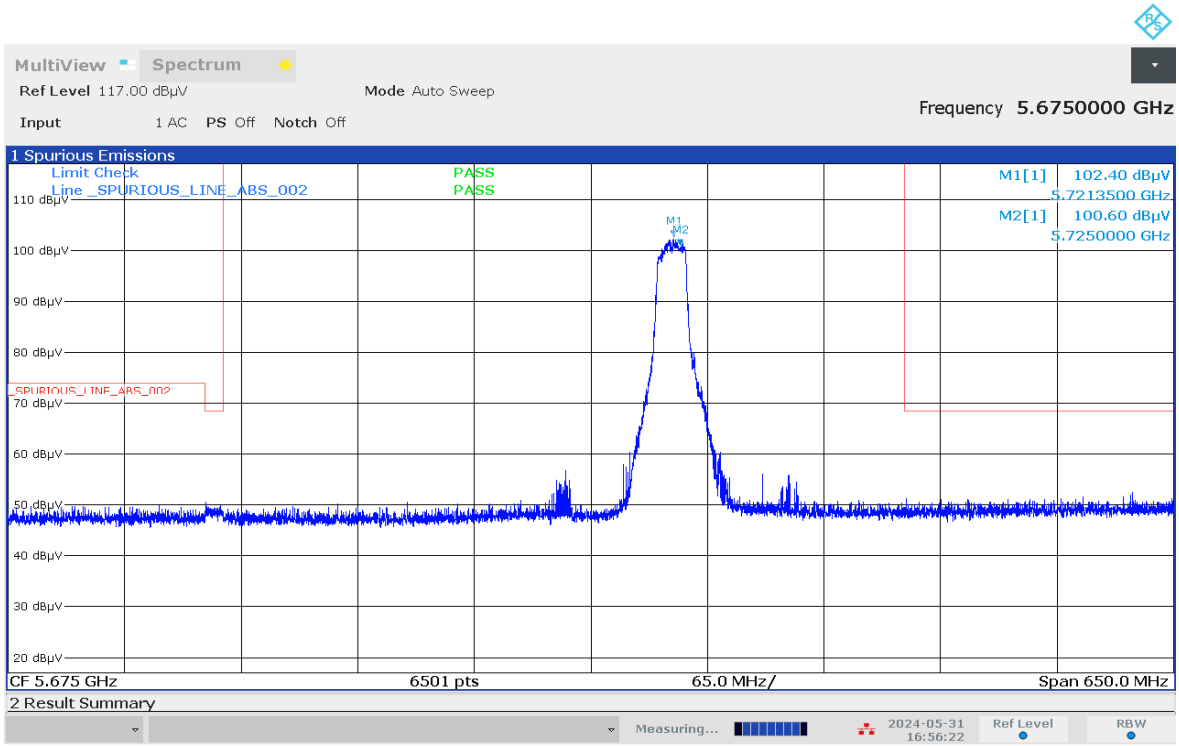
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (Straddle Channel, Vertical, Peak) graphical screen shot



04:52:50 PM 05/31/2024

Restricted Band Edge (Straddle Channel, Horizontal, Peak) graphical screen shot



04:56:23 PM 05/31/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5745.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

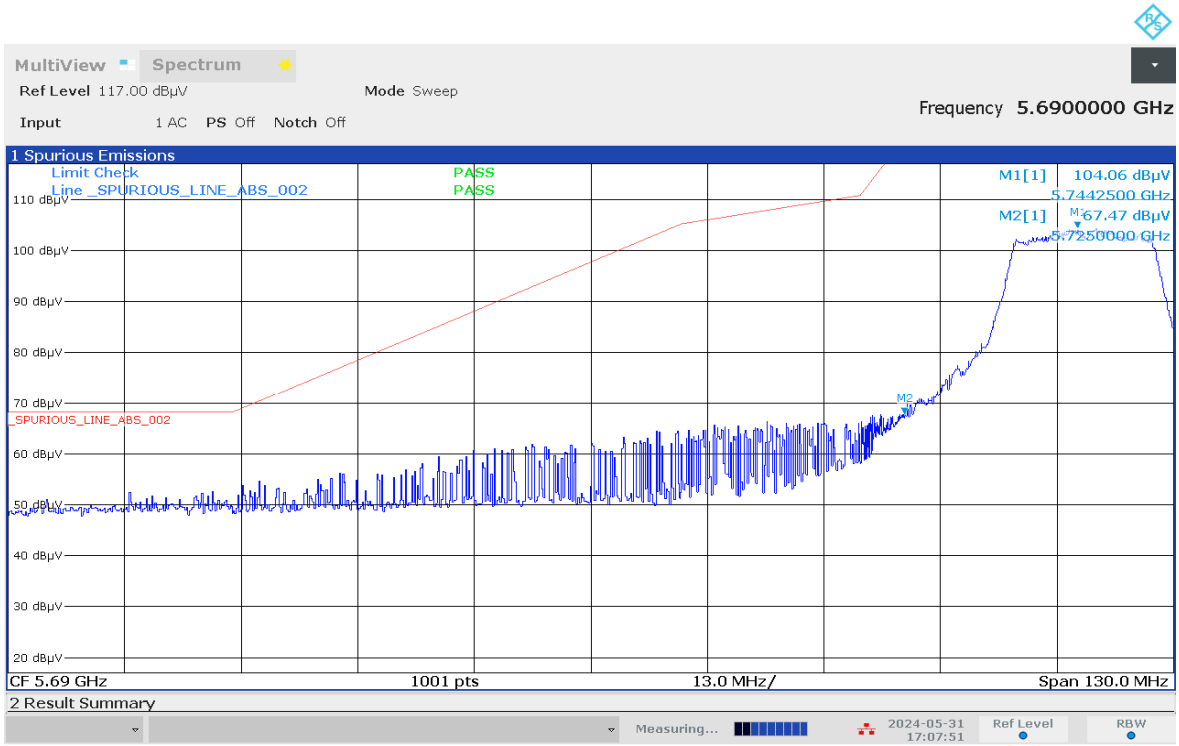
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5725.0000	-	67.4680	-	-	122.2000	-	-	54.7320	-	-
Horizontal Radiated Emission Result										
5725.0000	-	65.0359	-	-	122.2000	-	-	57.1641	-	-

Remarks: Pass Result	Marginal Result	Fail Result

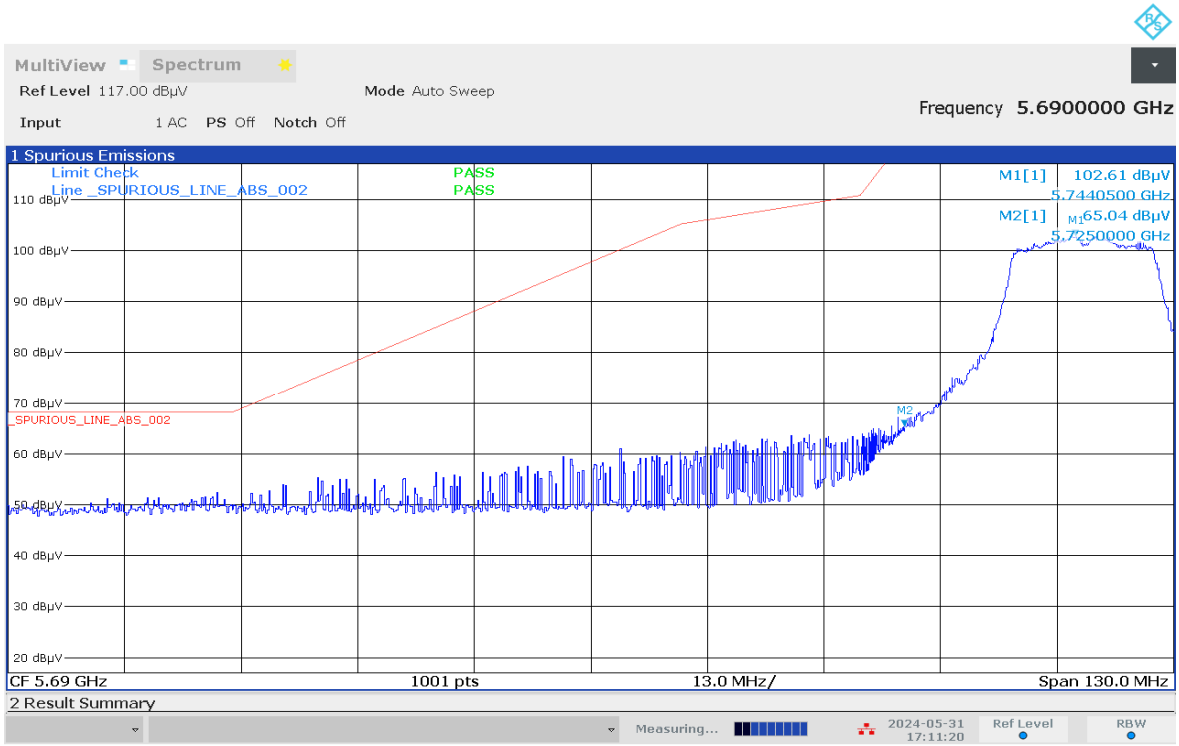
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



05:07:51 PM 05/31/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



05:11:20 PM 05/31/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5825.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

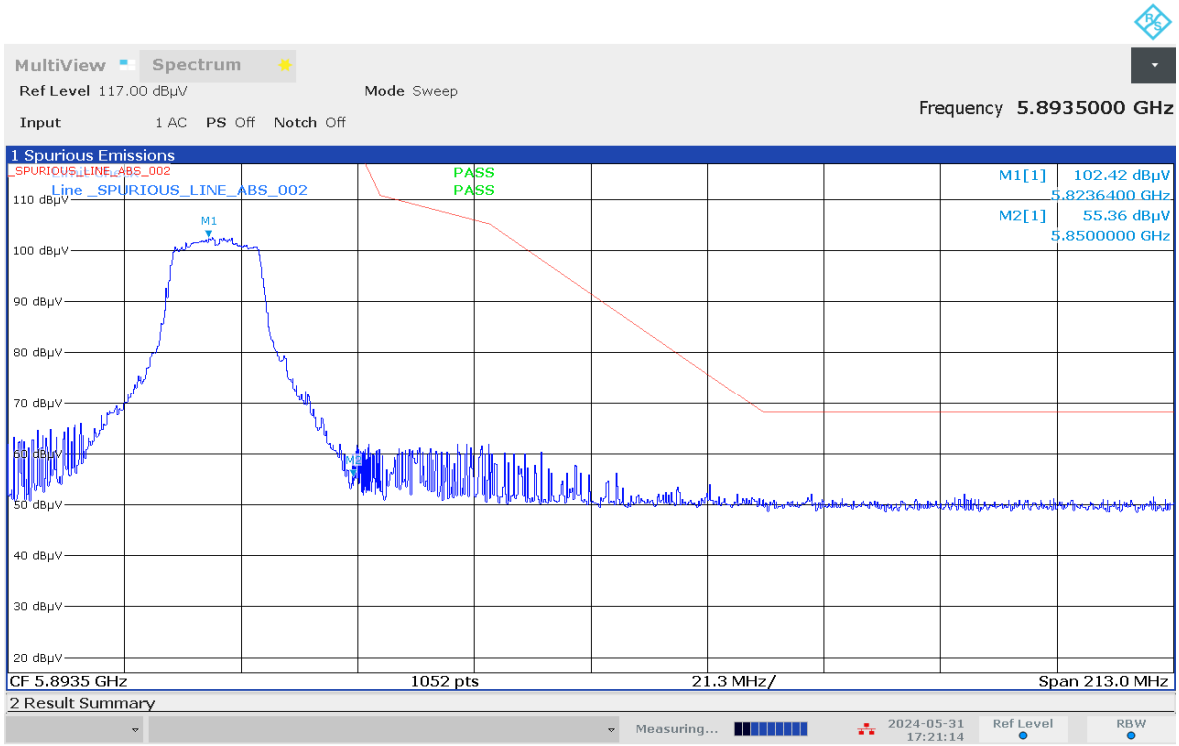
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5850.0000	-	55.3584	-	-	122.2000	-	-	66.8416	-	-
Horizontal Radiated Emission Result										
5850.0000	-	62.5700	-	-	122.2000	-	-	59.6300	-	-

Remarks: Pass Result	Marginal Result	Fail Result

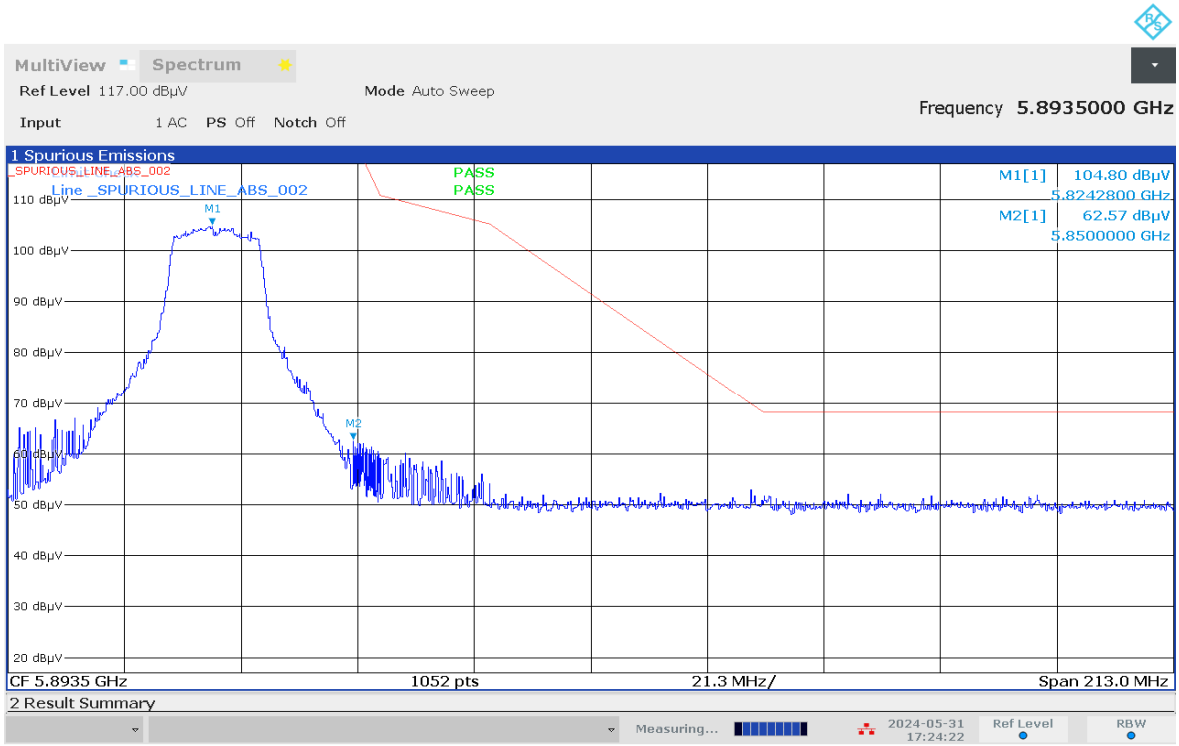
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



05:21:15 PM 05/31/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



05:24:22 PM 05/31/2024

802.11n (HT20)

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5180.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

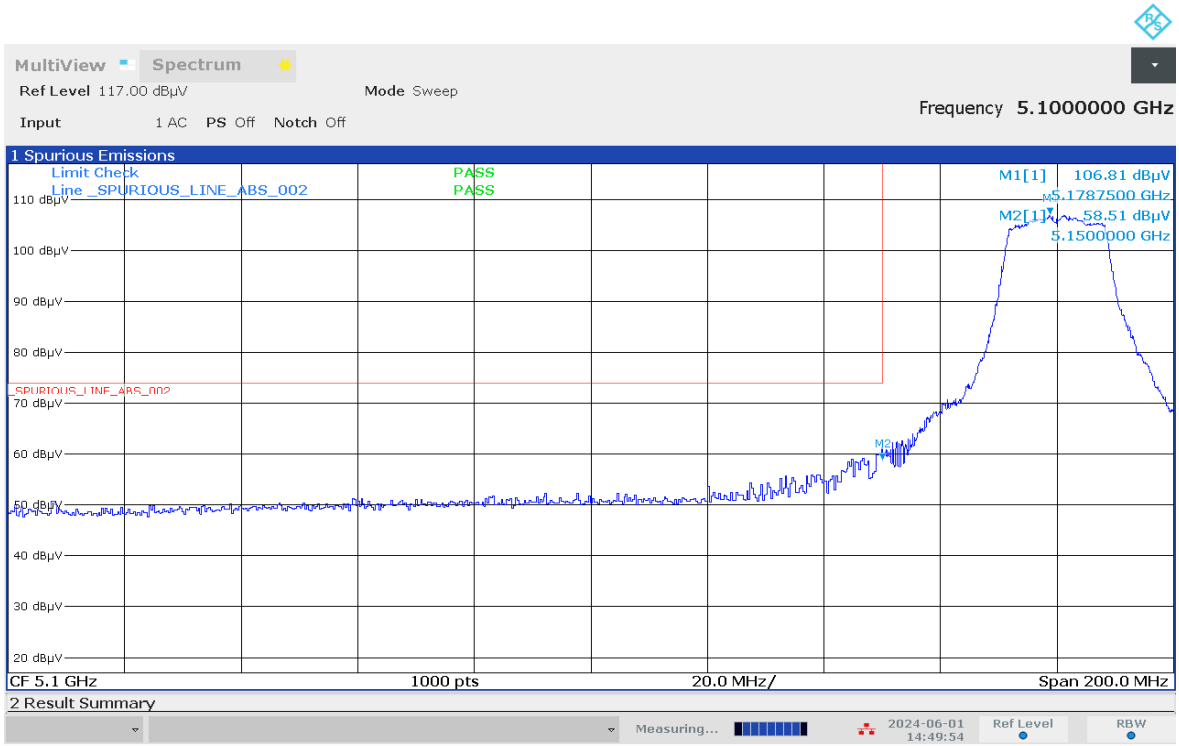
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5150.0000	-	58.5131	43.8718	-	74.0000	54.0000	-	15.4869	10.1282	-
Horizontal Radiated Emission Result										
5150.0000	-	51.9955	47.7053	-	74.0000	54.0000	-	22.0045	6.2947	-

Remarks: Pass Result	Marginal Result	Fail Result

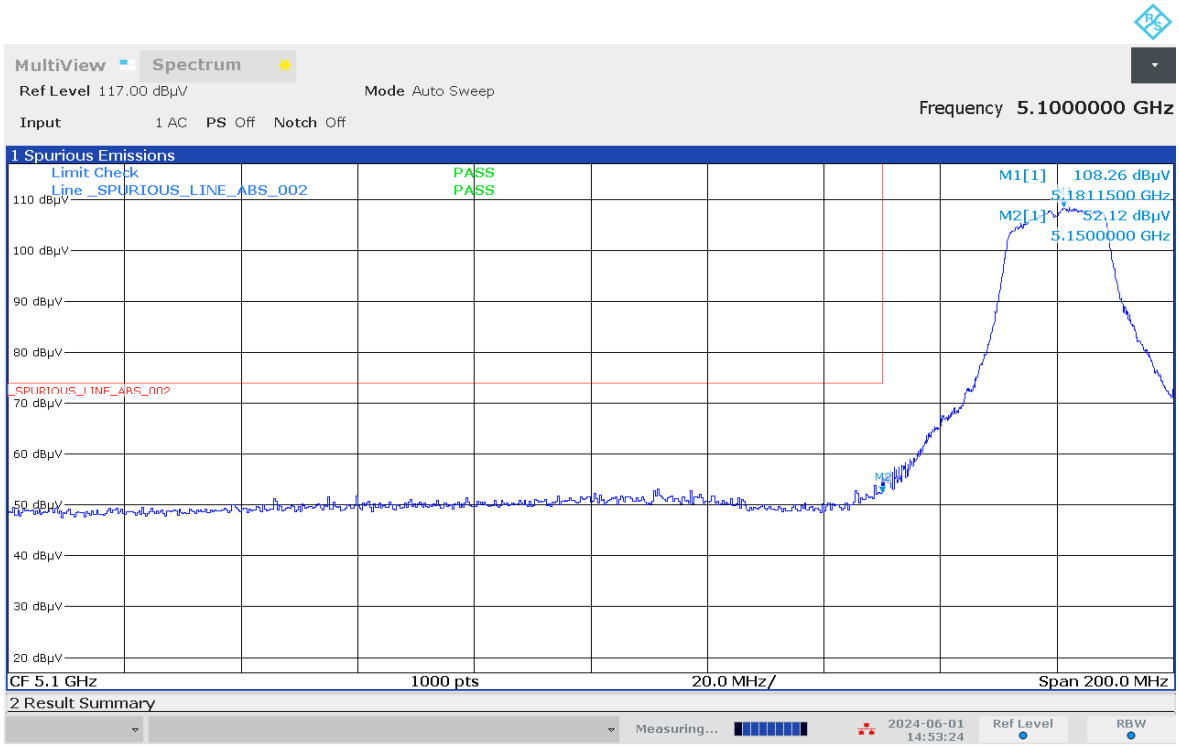
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



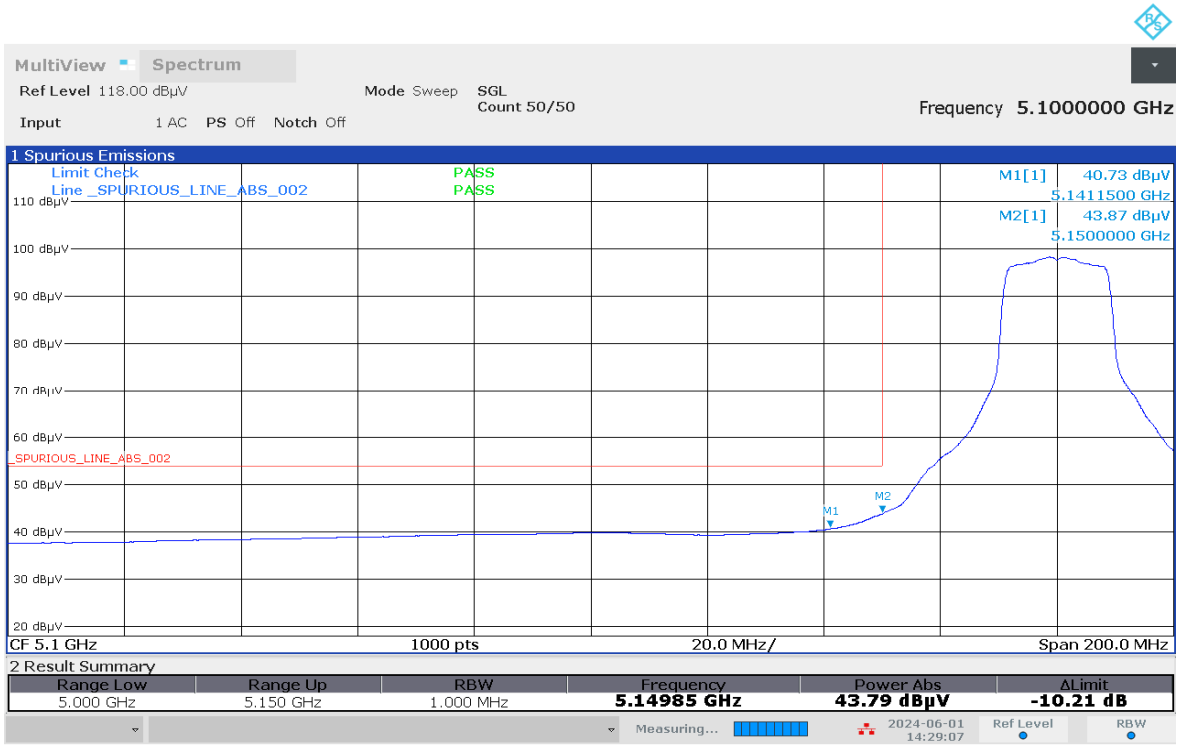
02:49:55 PM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



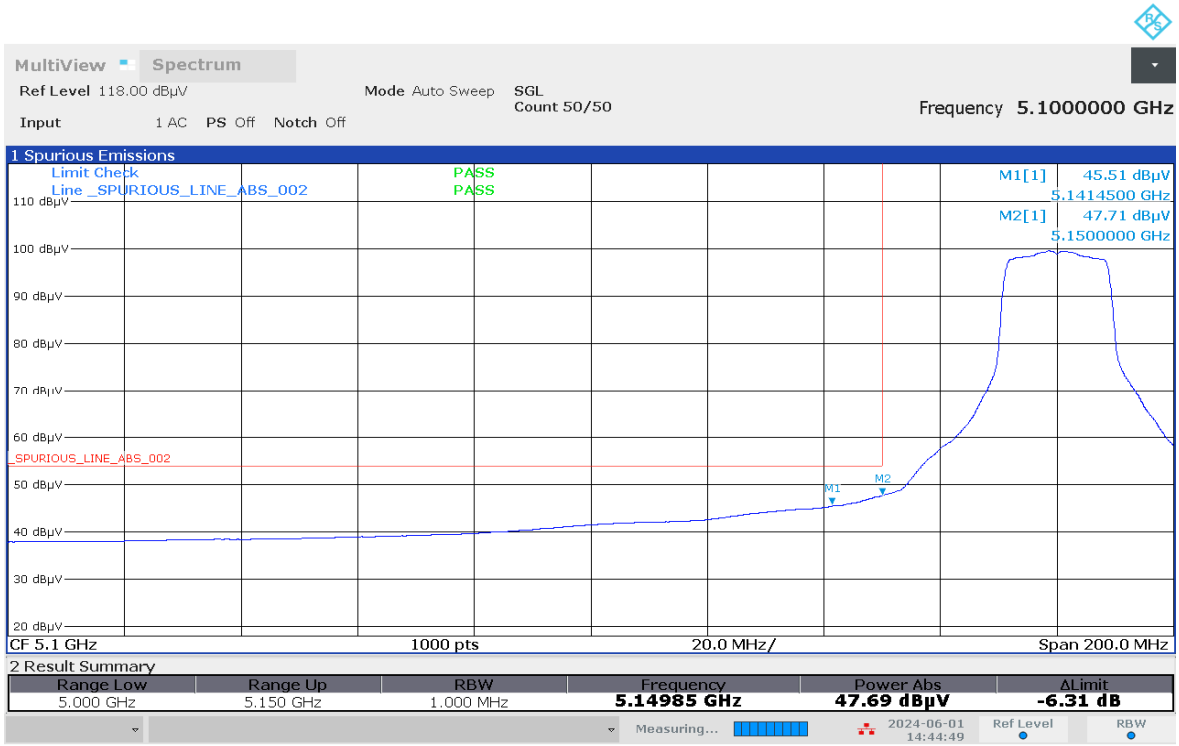
02:53:24 PM 06/01/2024

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



02:29:08 PM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



02:44:50 PM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5320.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

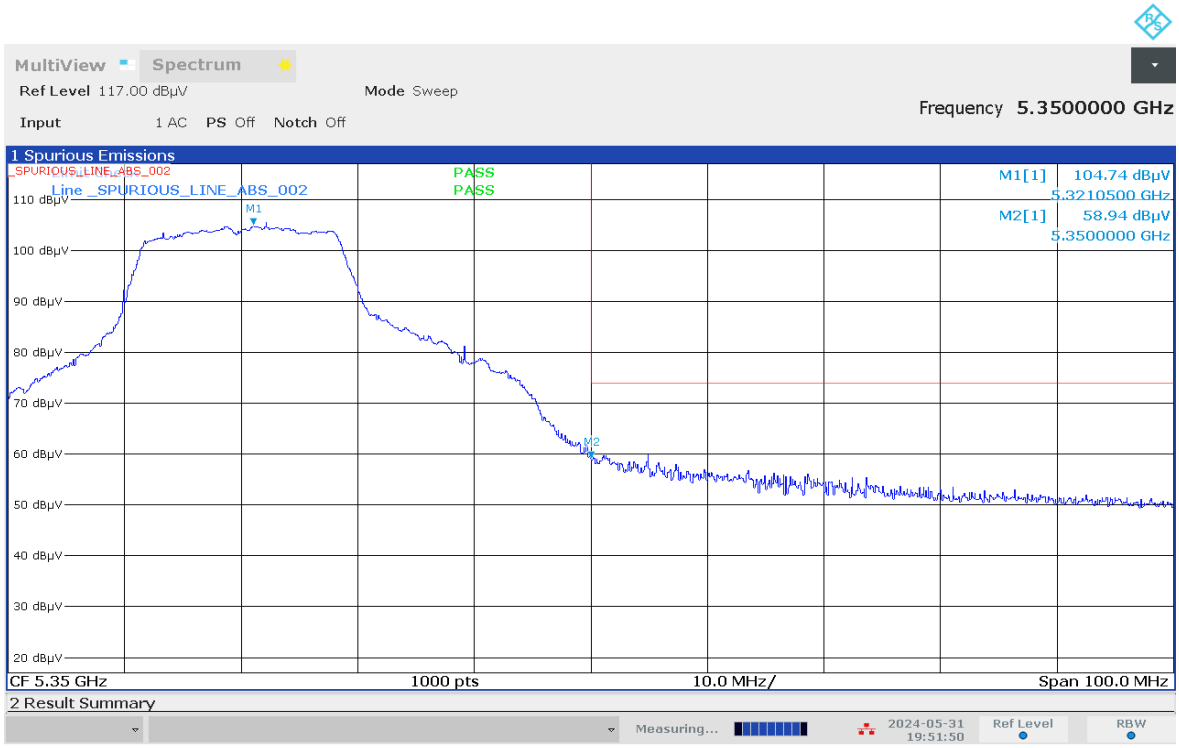
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5350.0000	-	58.9388	46.9533	-	74.0000	54.0000	-	15.0612	7.0467	-
Horizontal Radiated Emission Result										
5350.0000	-	58.7669	48.3959	-	74.0000	54.0000	-	15.2331	5.6041	-

Remarks: Pass Result	Marginal Result	Fail Result

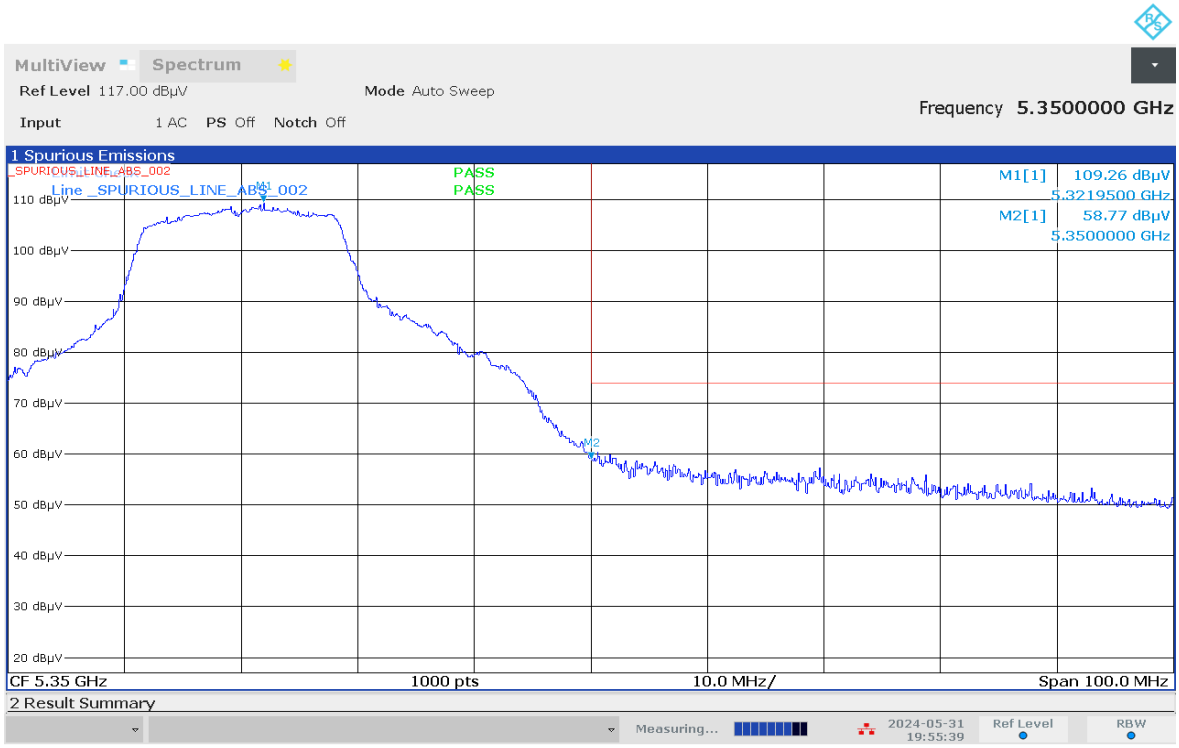
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



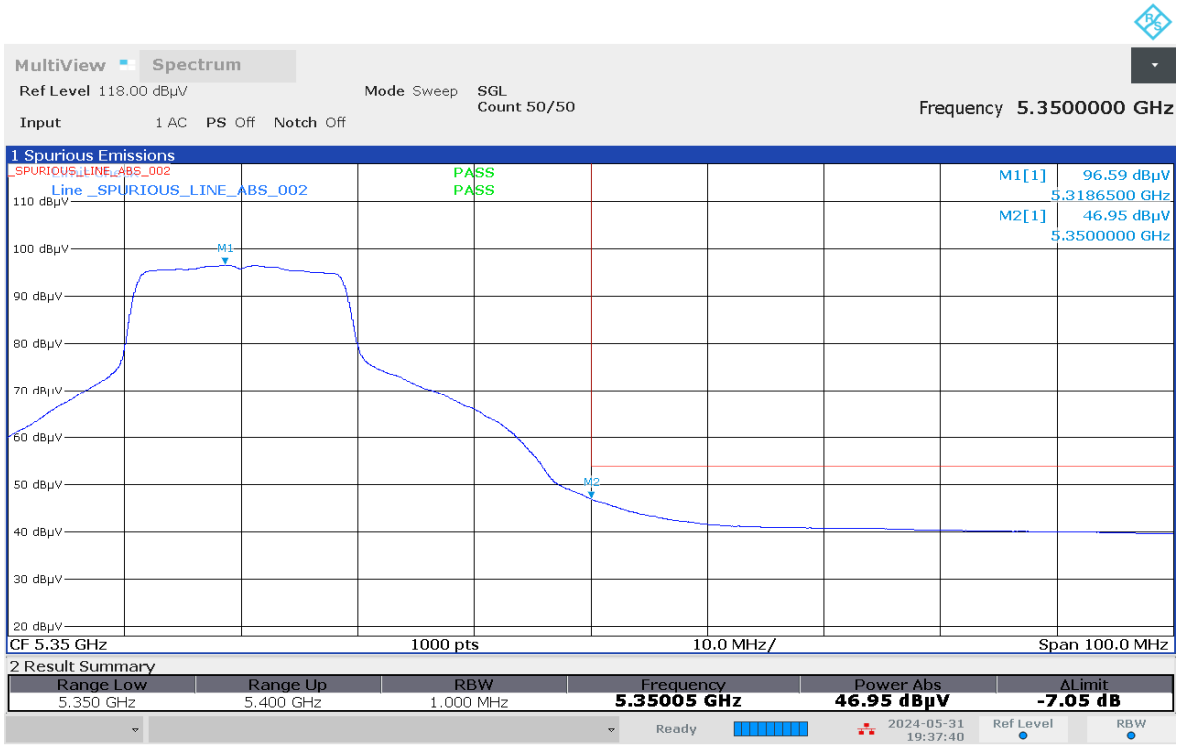
07:51:50 PM 05/31/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



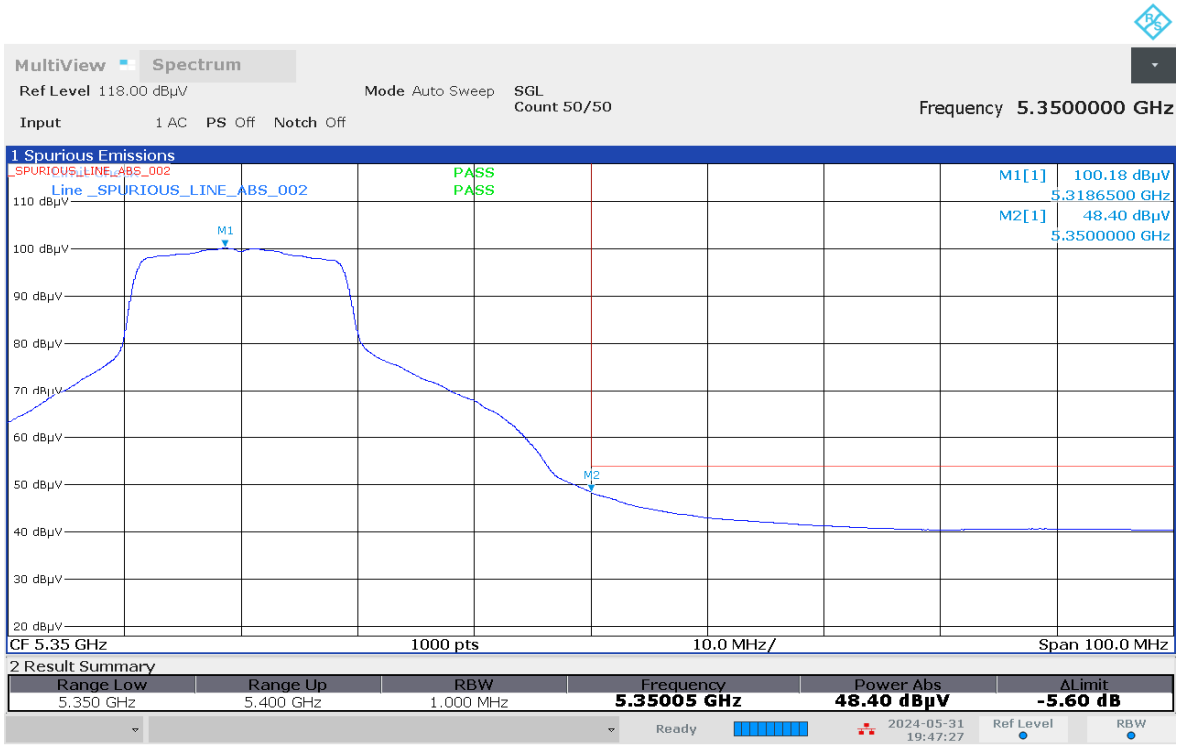
07:55:39 PM 05/31/2024

Restricted Band Edge (High Channel, Vertical, Average) graphical screen shot



07:37:41 PM 05/31/2024

Restricted Band Edge (High Channel, Horizontal, Average) graphical screen shot



07:47:28 PM 05/31/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5500.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

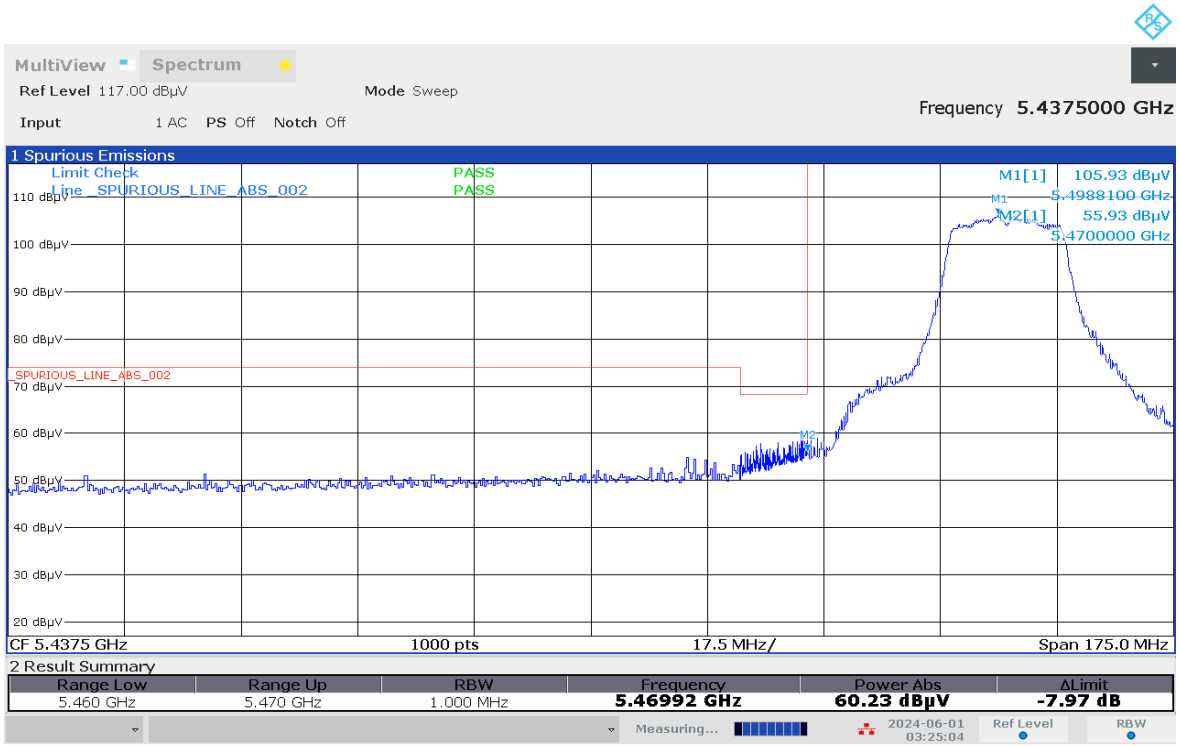
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5460.0000	-	-	43.1036	-	-	54.0000	-	-	10.8964	-
5469.8750	-	-	46.1546	-	-	54.0000	-	-	7.8454	-
5470.0000	-	55.6436	-	-	68.2000	-	-	12.5564	-	-
Horizontal Radiated Emission Result										
5460.0000	-	-	41.1899	-	-	54.0000	-	-	12.8101	-
5470.0000	-	51.1331	-	-	68.2000	-	-	17.0669	-	-

Remarks: Pass Result	Marginal Result	Fail Result

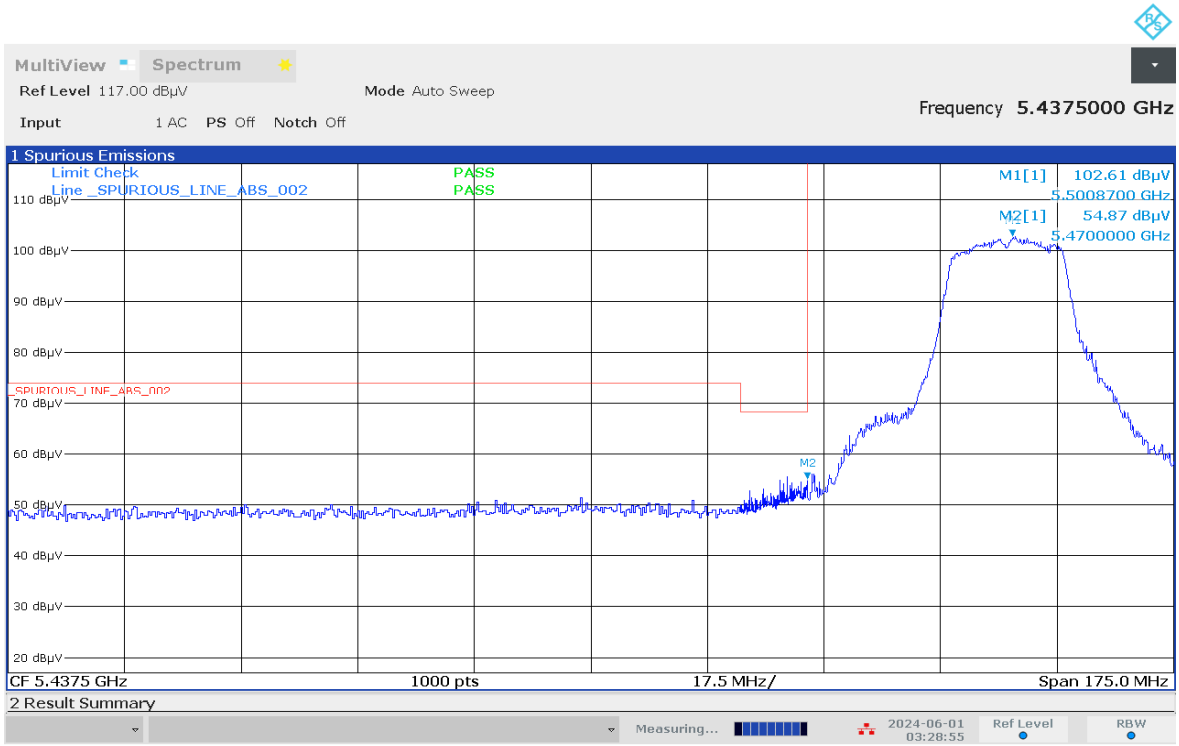
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



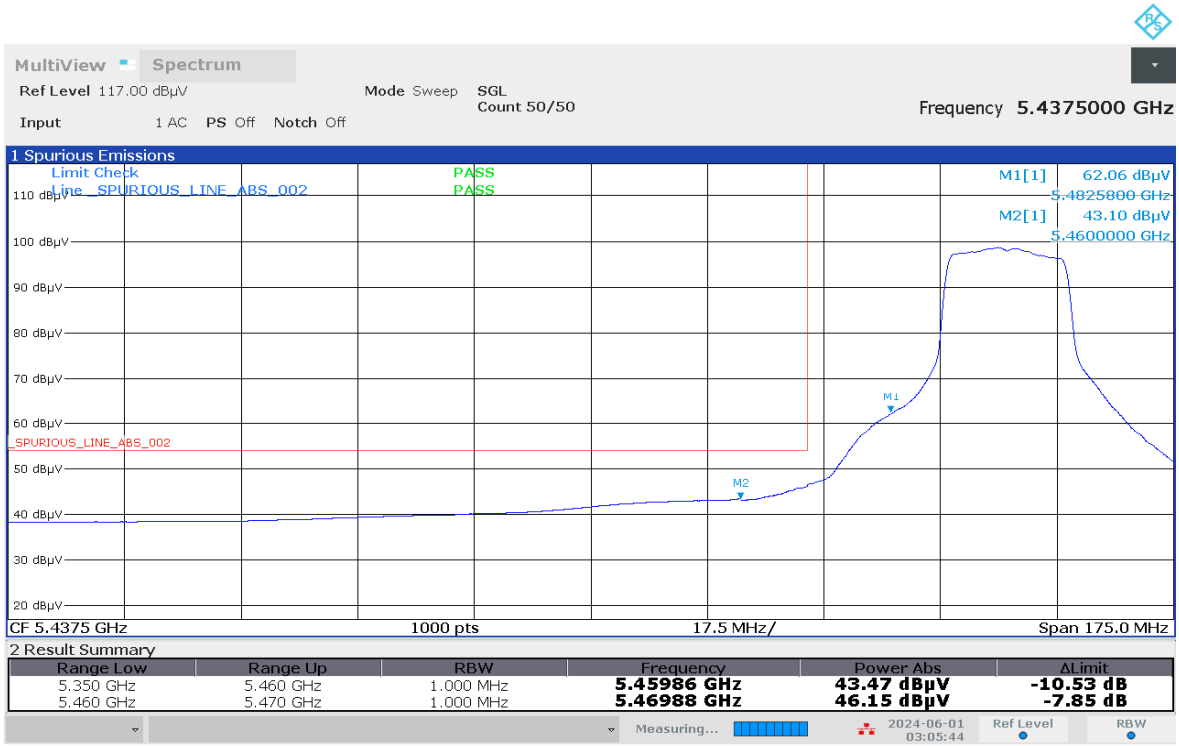
03:25:05 AM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



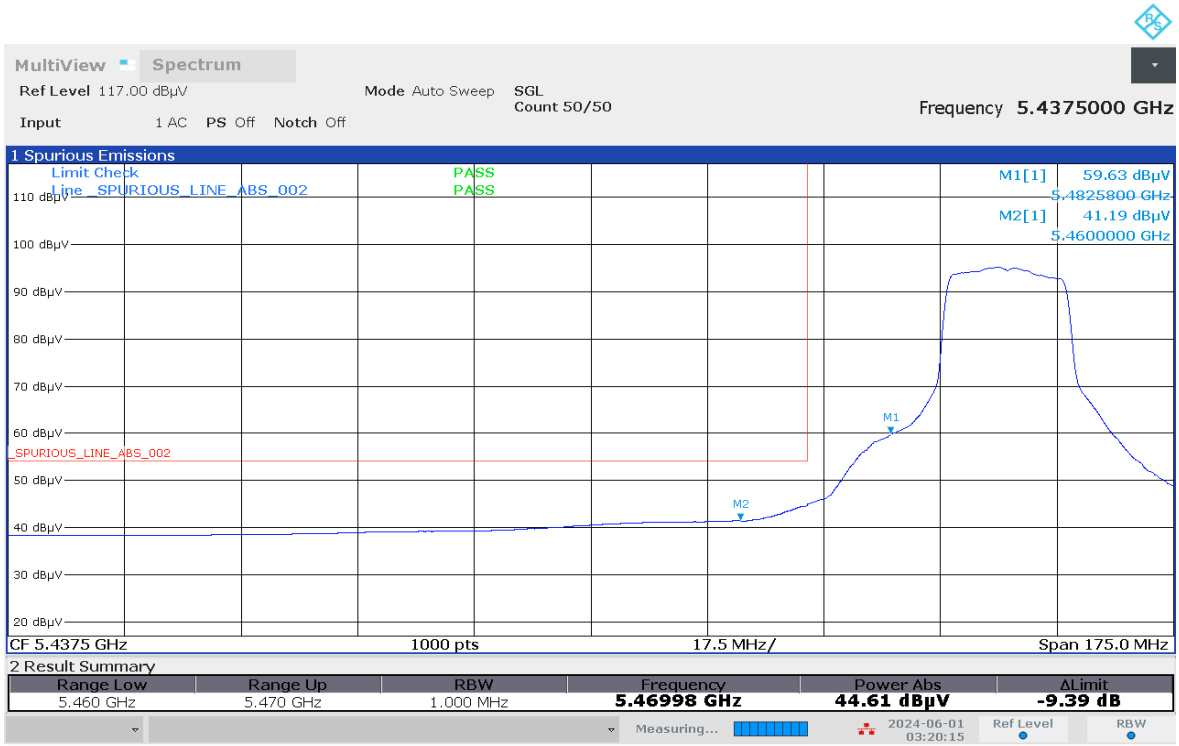
03:28:55 AM 06/01/2024

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



03:05:45 AM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



03:20:16 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5700.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

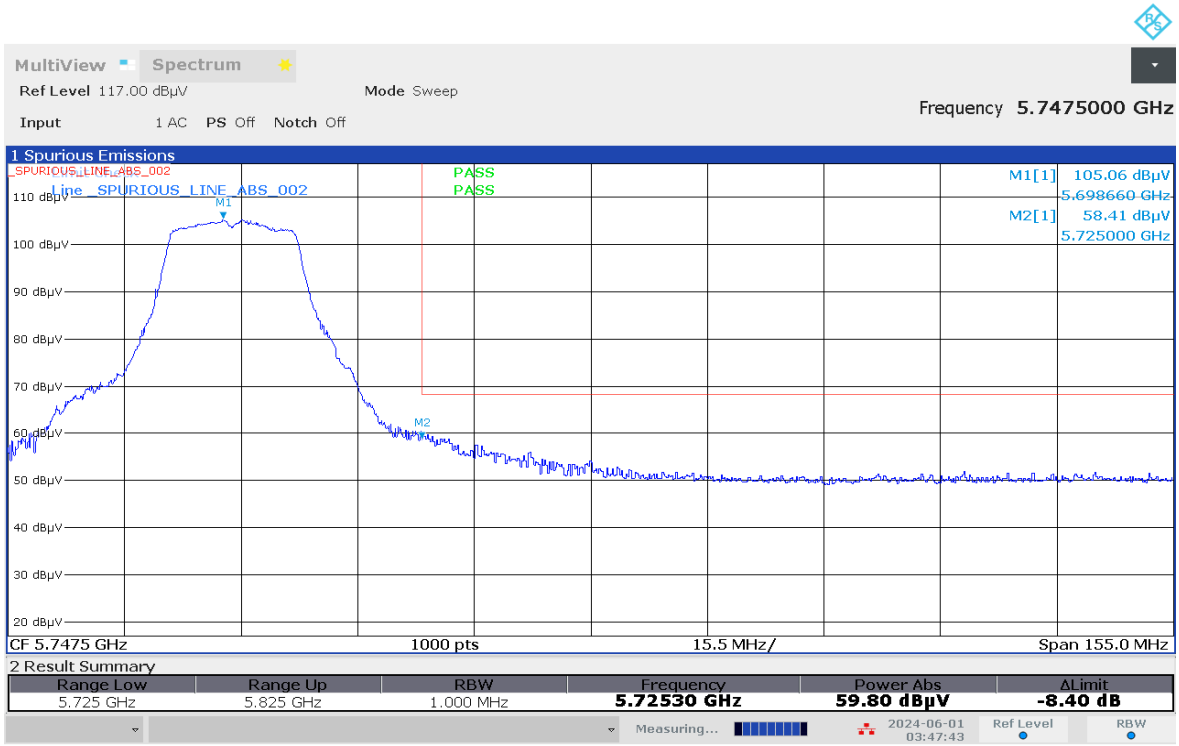
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5725.0000	-	58.4087	-	-	68.2000	-	-	9.7913	-	-
Horizontal Radiated Emission Result										
5725.0000	-	60.6284	-	-	68.2000	-	-	7.5716	-	-

Remarks: Pass Result	Marginal Result	Fail Result

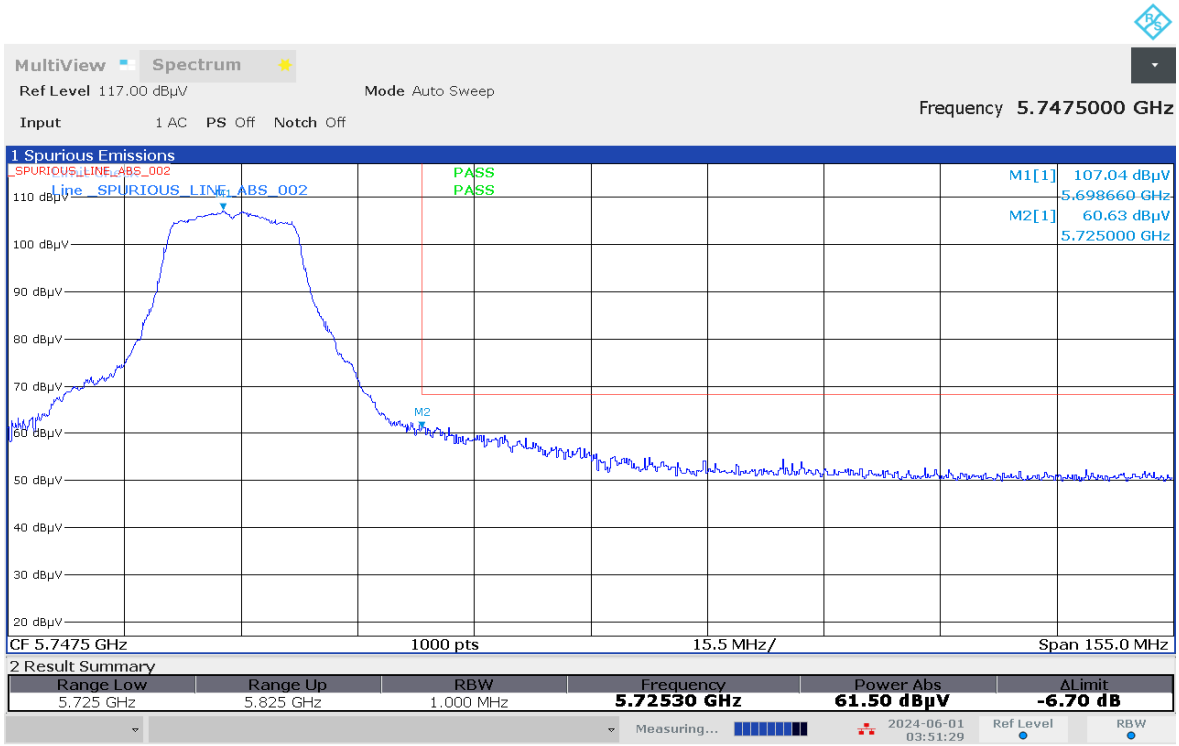
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



03:47:44 AM 06/01/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



03:51:30 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Straddle Test Frequency: 5720.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

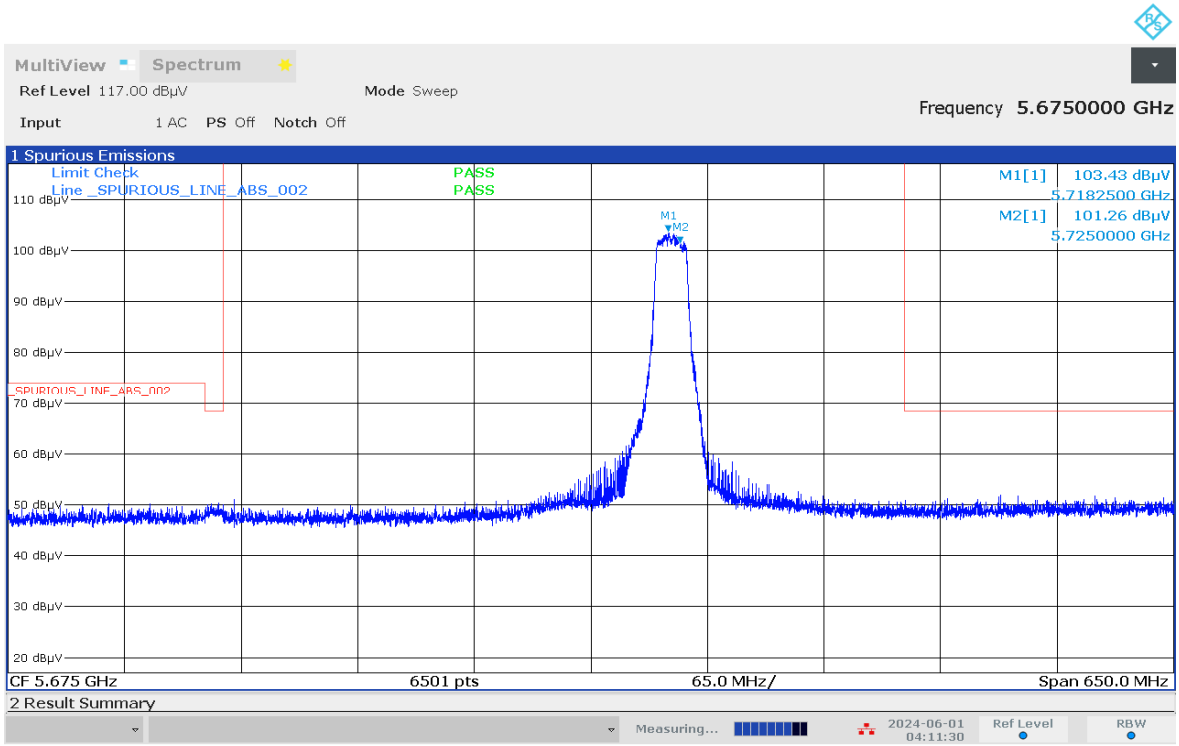
Restricted Band Edge (Straddle Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
Horizontal Radiated Emission Result										

Remarks: Pass Result	Marginal Result	Fail Result

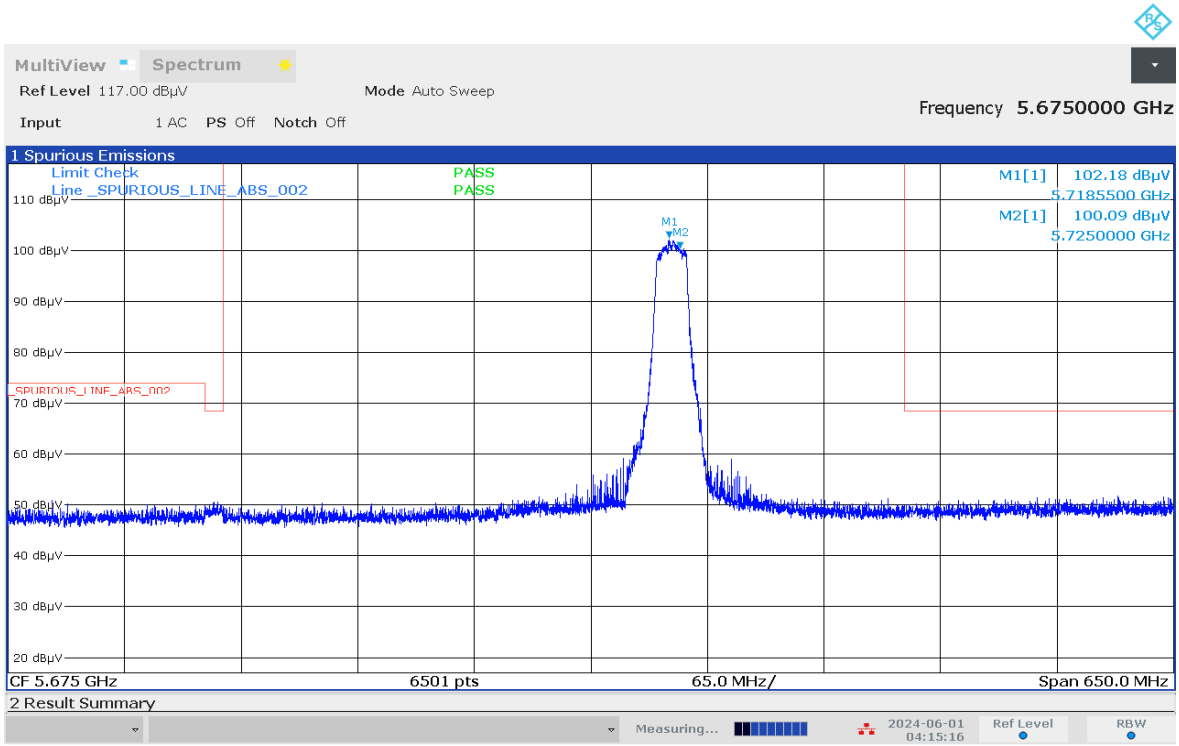
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (Straddle Channel, Vertical, Peak) graphical screen shot



04:11:31 AM 06/01/2024

Restricted Band Edge (Straddle Channel, Horizontal, Peak) graphical screen shot



04:15:17 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5745.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

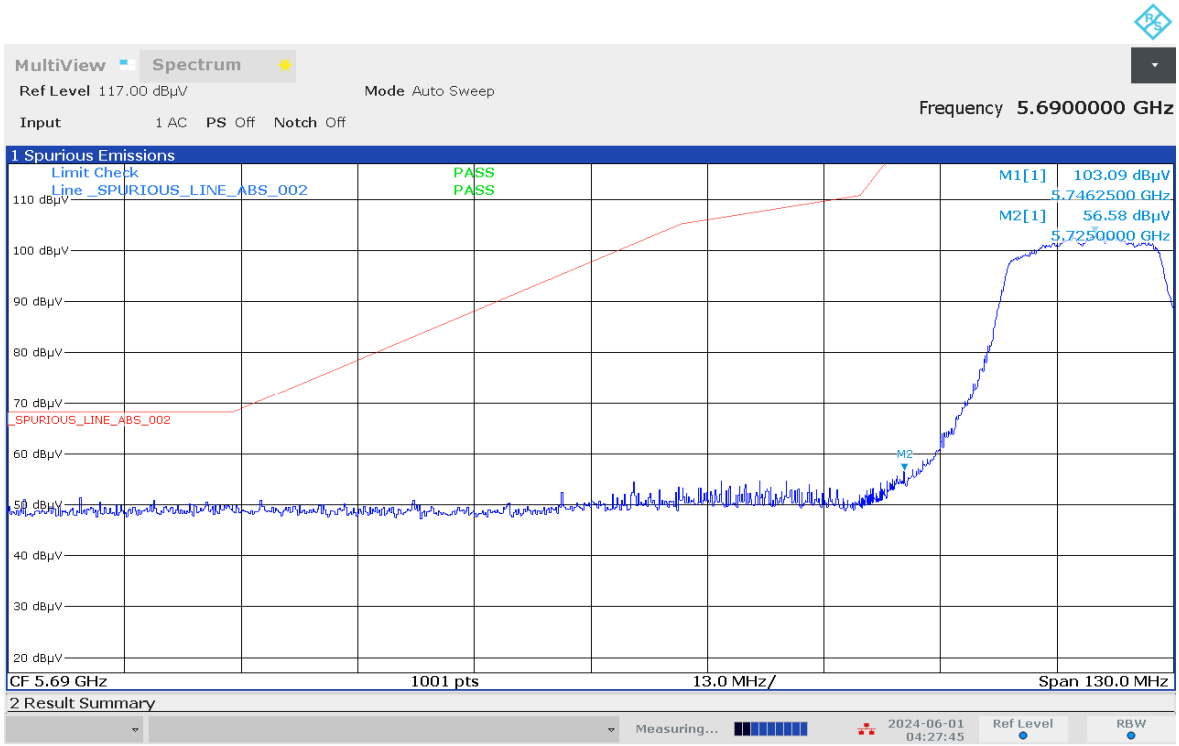
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5725.0000	-	60.6689	-	-	122.2000	-	-	61.5311	-	-
Horizontal Radiated Emission Result										
5725.0000	-	56.5811	-	-	122.2000	-	-	65.6189	-	-

Remarks: Pass Result	Marginal Result	Fail Result

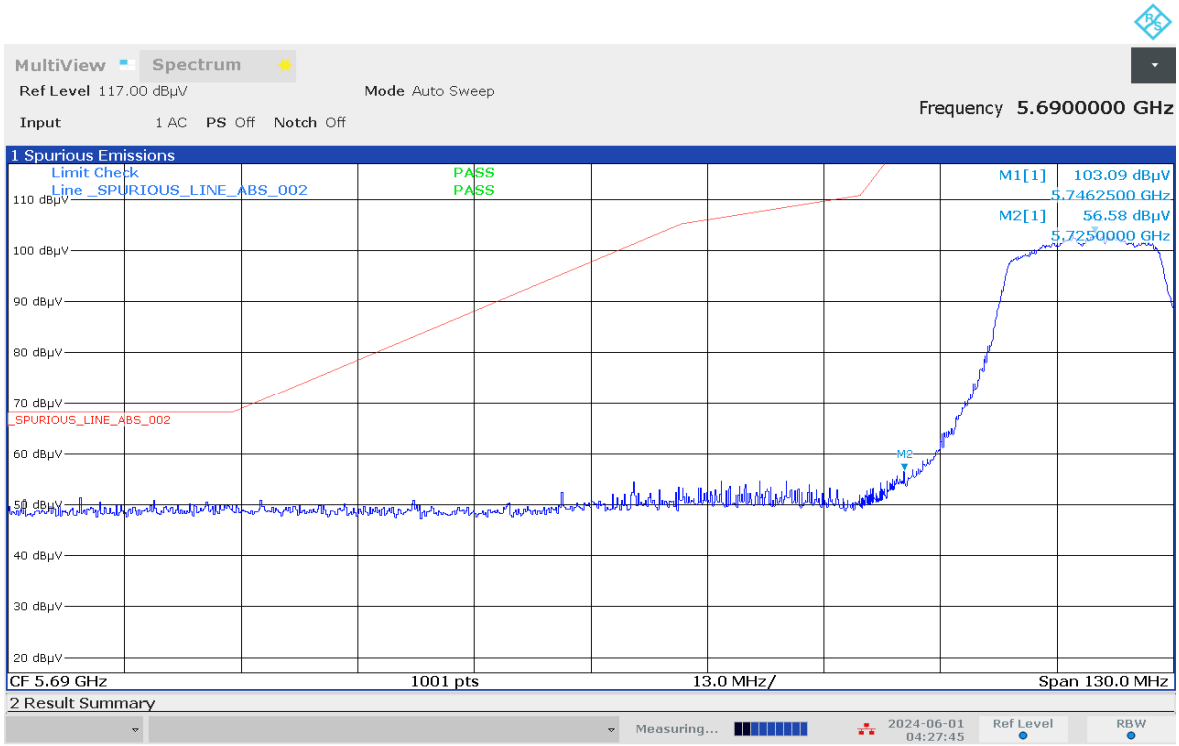
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



04:27:46 AM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



04:27:46 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5825.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

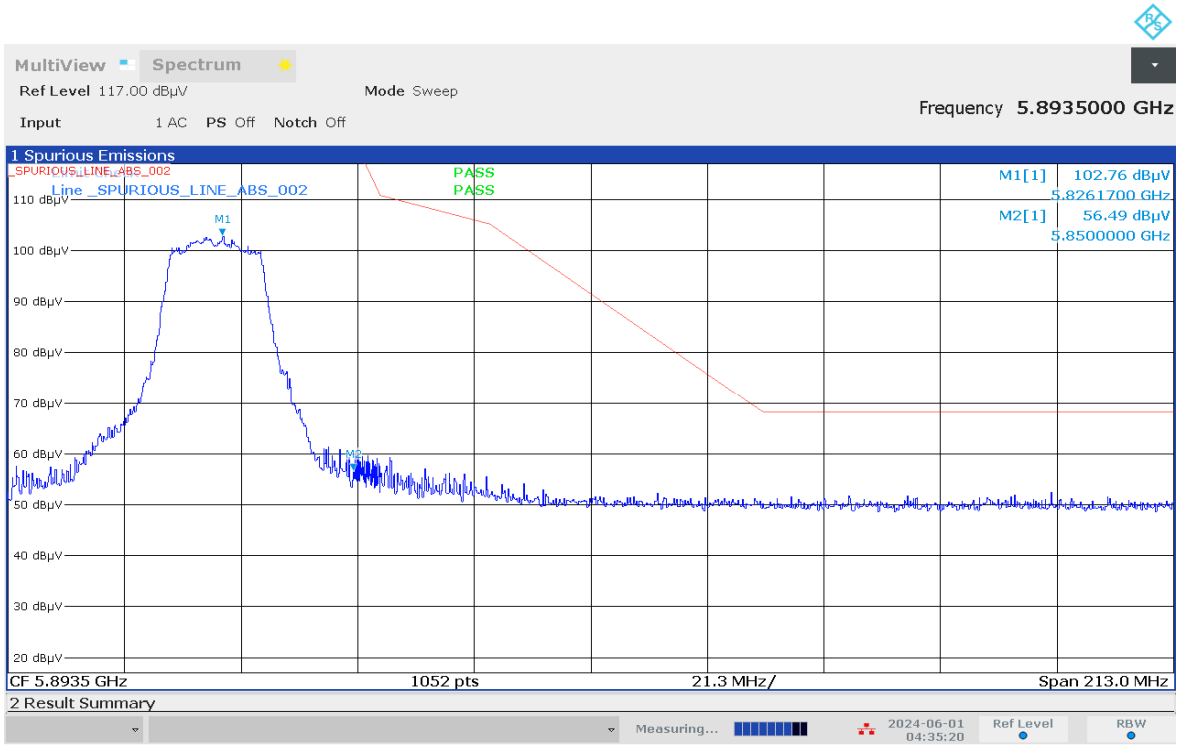
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5850.0000	-	56.4939	-	-	122.2000	-	-	65.7061	-	-
Horizontal Radiated Emission Result										
5850.0000	-	56.1805	-	-	122.2000	-	-	66.0195	-	-

Remarks: Pass Result	Marginal Result	Fail Result

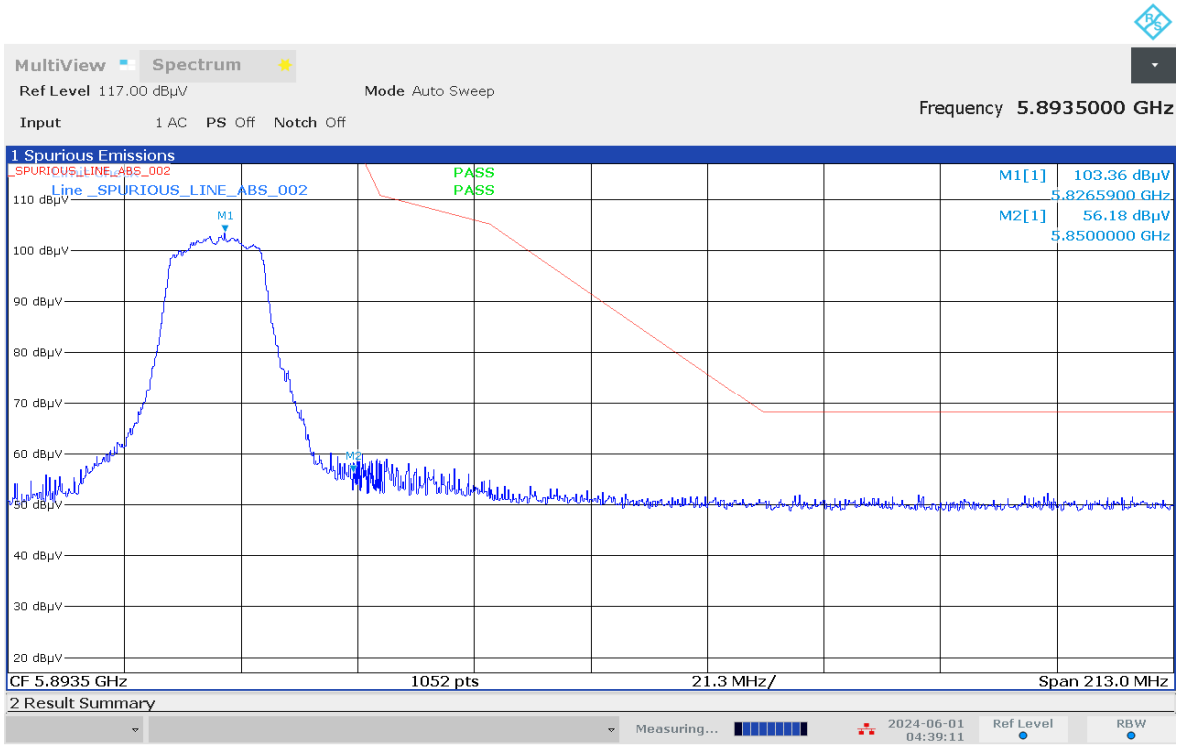
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



04:35:20 AM 06/01/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



04:39:11 AM 06/01/2024

802.11n (HT40)

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (13dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5190.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

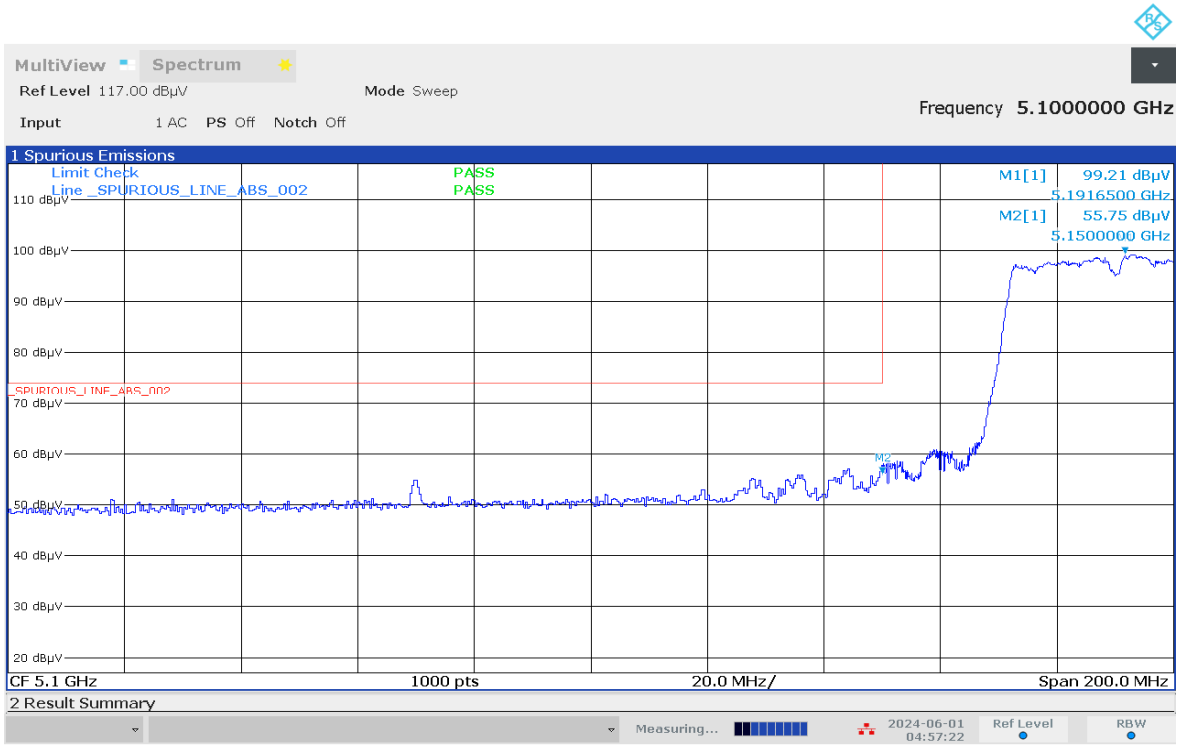
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5150.0000	-	55.5675	41.3121	-	74.0000	54.0000	-	18.4325	12.6879	-
Horizontal Radiated Emission Result										
5148.9500	-	-	43.7653	-	-	54.0000	-	-	10.2347	-
5150.0000	-	56.6099	43.6843	-	74.0000	54.0000	-	17.3901	10.3157	-

Remarks: Pass Result	Marginal Result	Fail Result

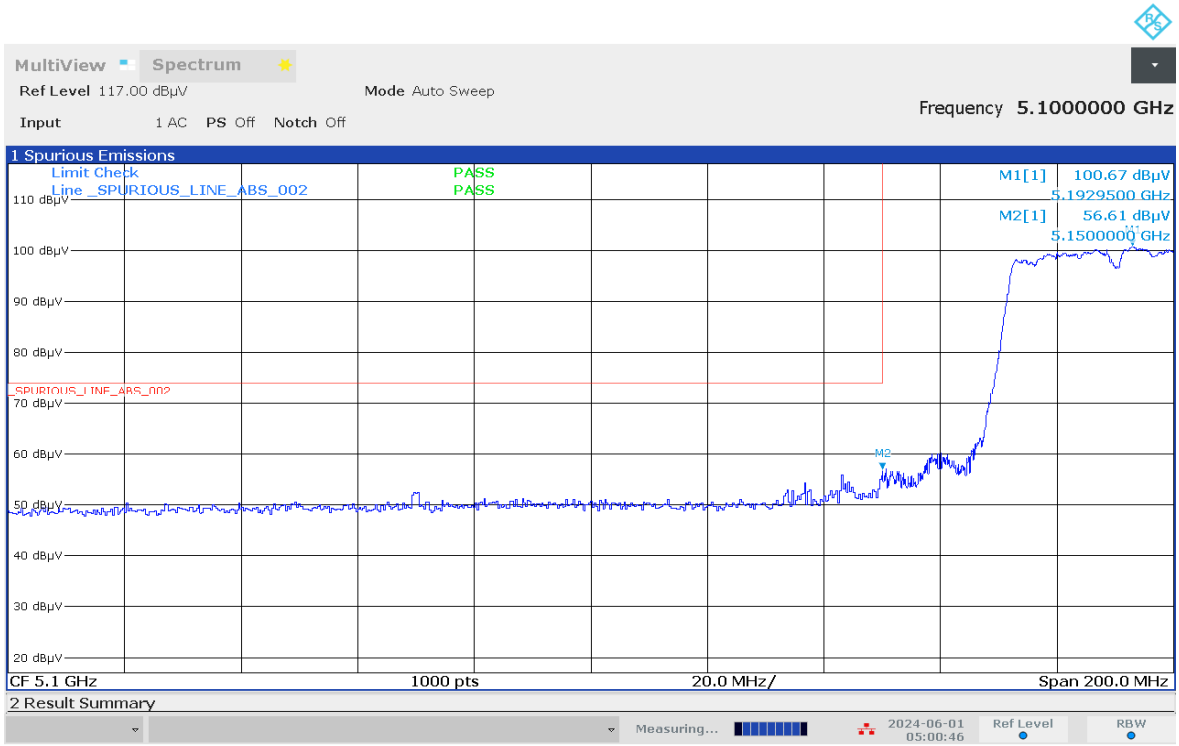
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



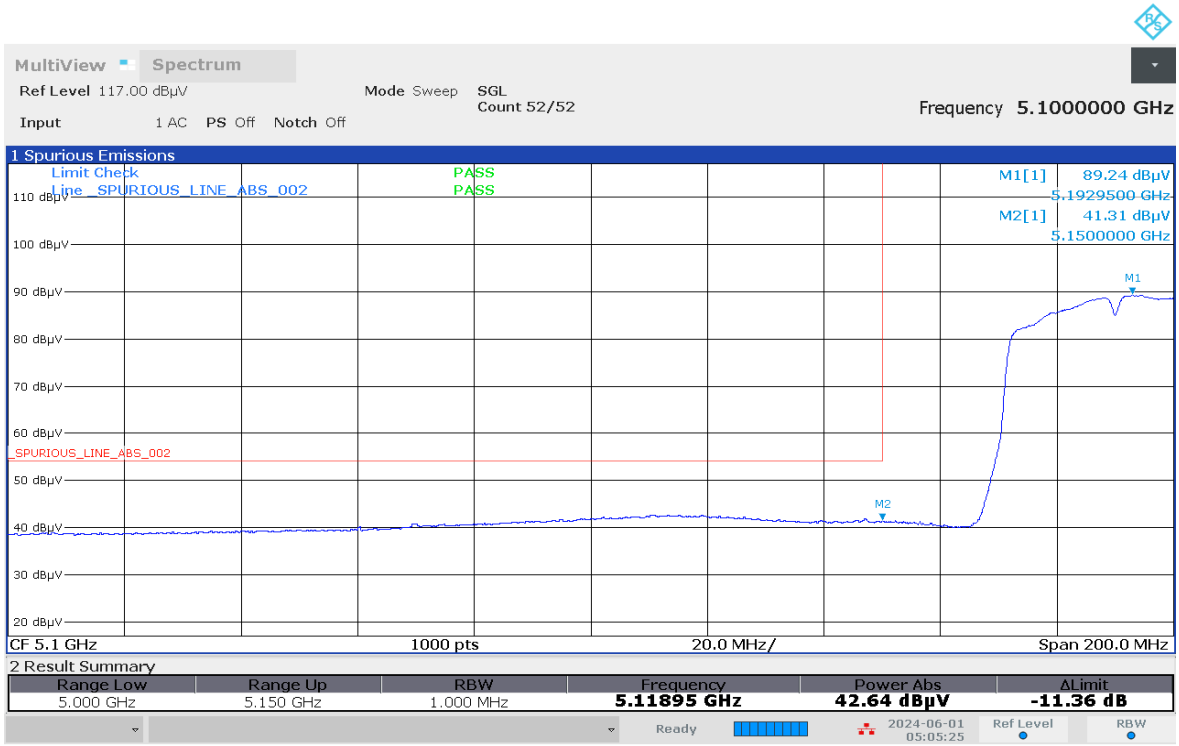
04:57:22 AM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



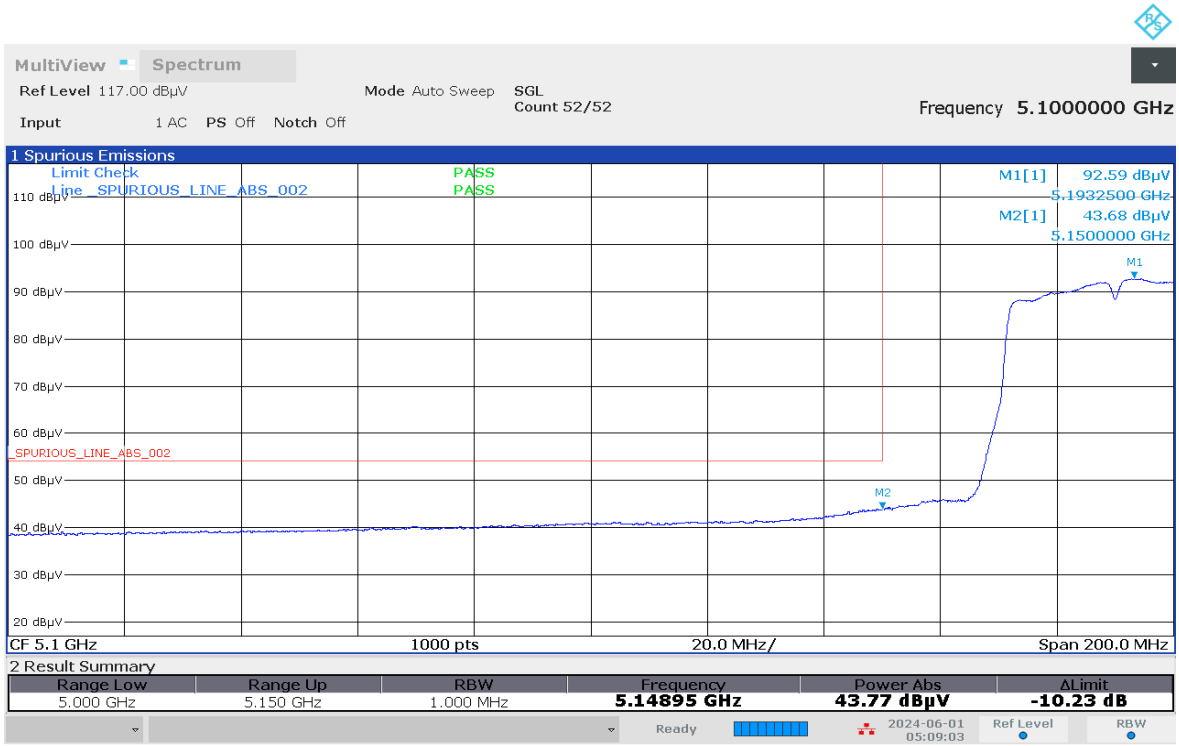
05:00:47 AM 06/01/2024

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



05:05:25 AM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



05:09:03 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (12dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5310.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

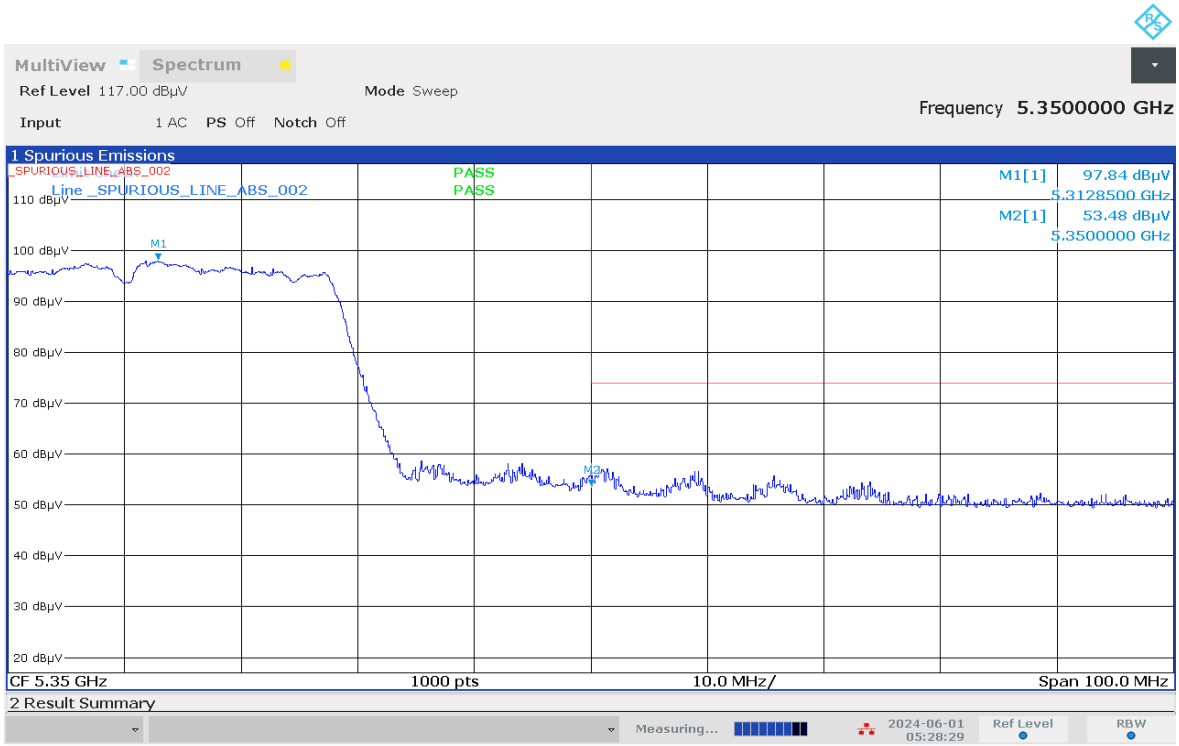
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5350.0000	-	53.4821	43.8789	-	74.0000	54.0000	-	20.5179	10.1211	-
Horizontal Radiated Emission Result										
5350.0000	-	57.2492	43.7860	-	74.0000	54.0000	-	16.7508	10.2140	-
5355.9500	-	64.4385	-	-	74.0000	-	-	9.5615	-	-

Remarks: Pass Result	Marginal Result	Fail Result

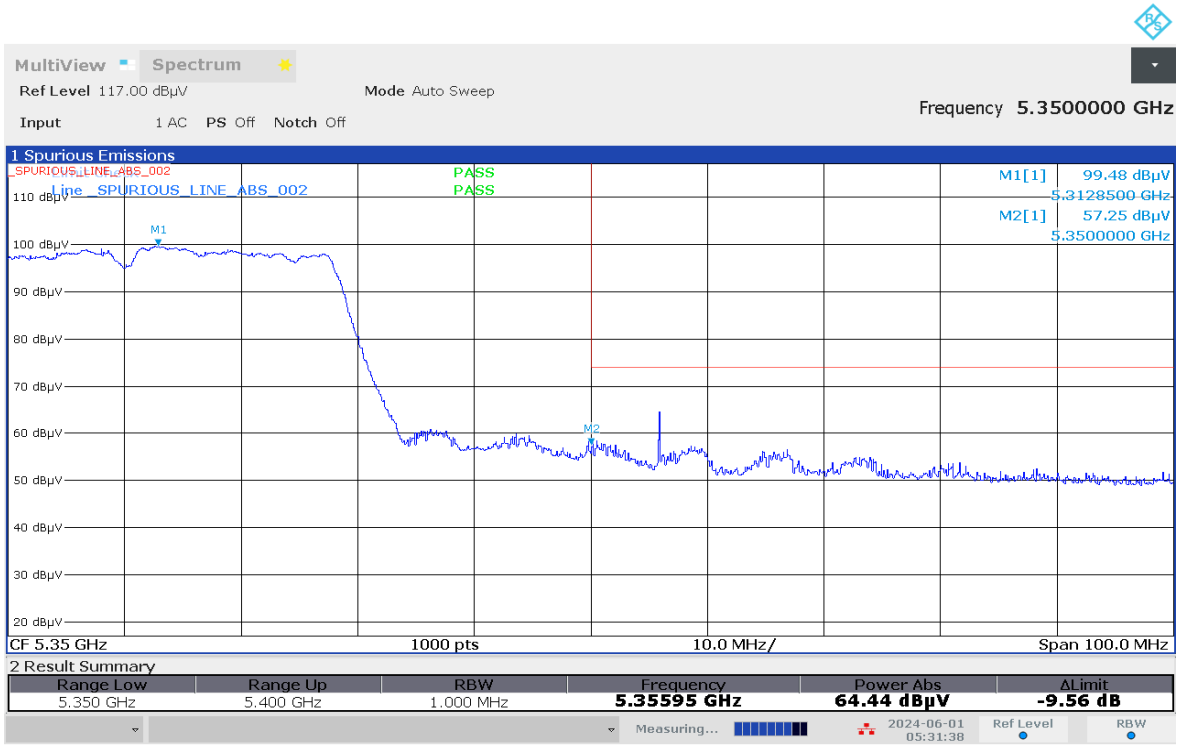
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



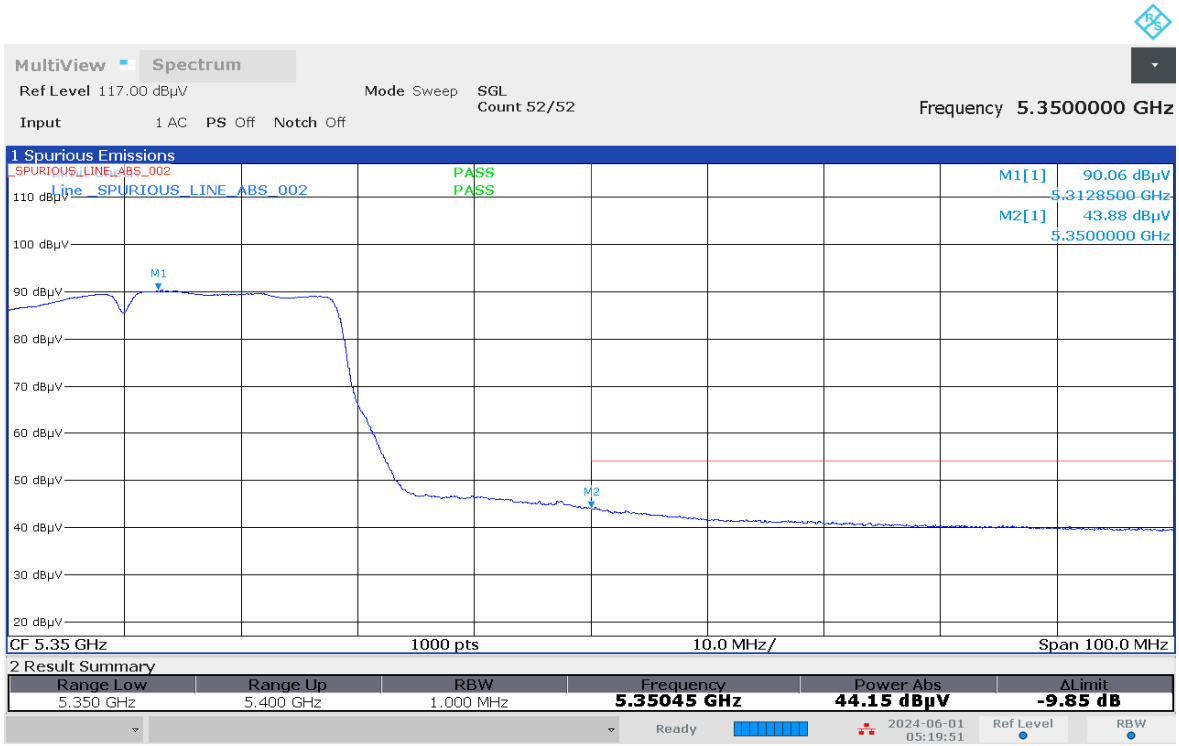
05:28:30 AM 06/01/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



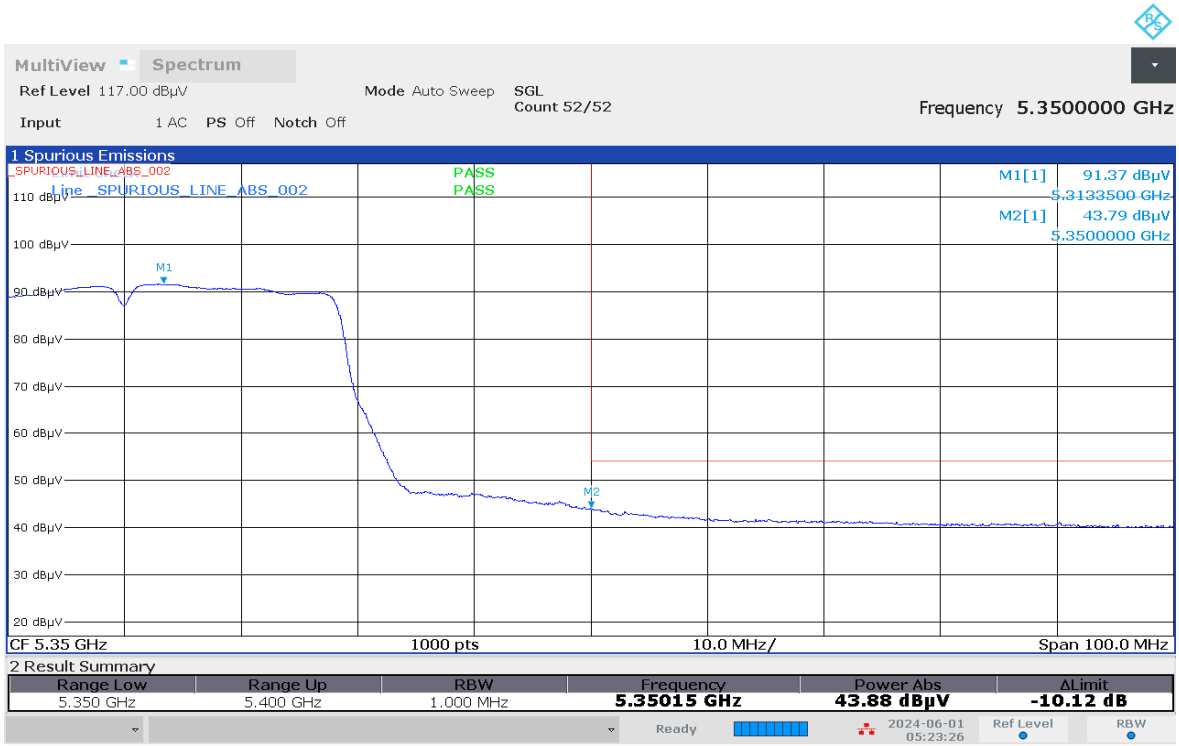
05:31:39 AM 06/01/2024

Restricted Band Edge (High Channel, Vertical, Average) graphical screen shot



05:19:51 AM 06/01/2024

Restricted Band Edge (High Channel, Horizontal, Average) graphical screen shot



05:23:26 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (14dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5510.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

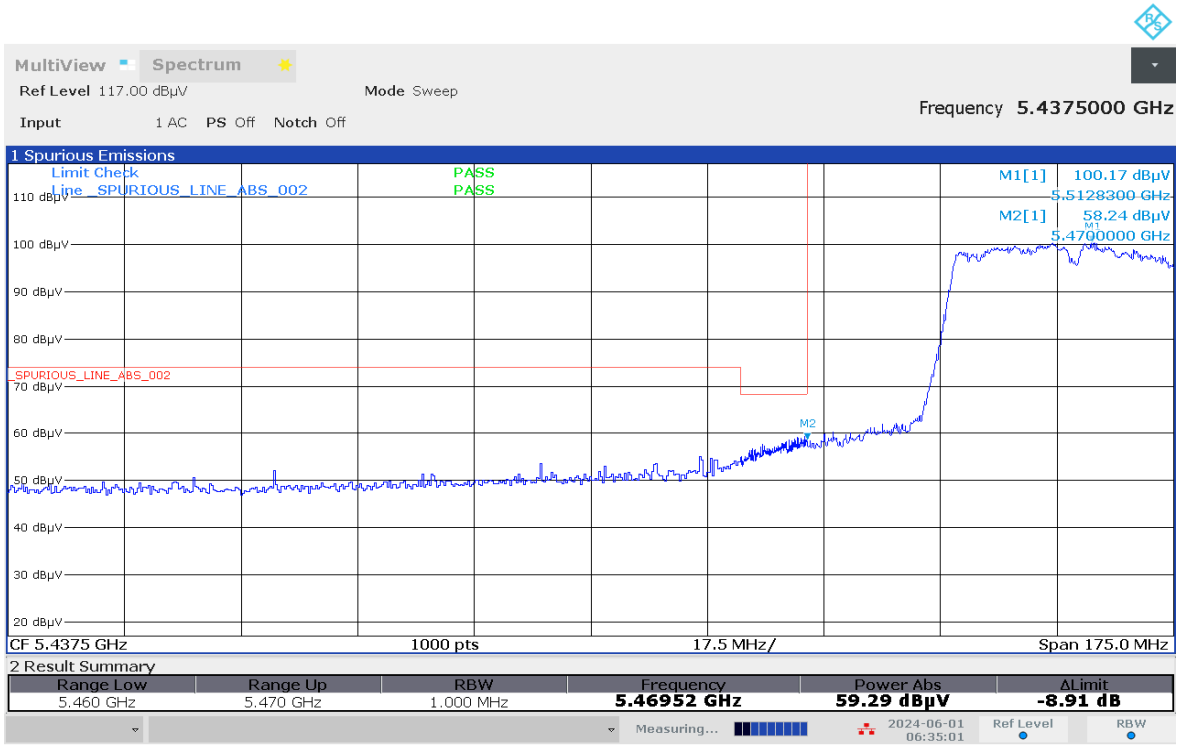
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5460.0000	-	-	43.9448	-	-	54.0000	-	-	10.0552	-
5469.6250	-	-	48.2300	-	-	54.0000	-	-	5.7700	-
5470.0000	-	58.2407	-	-	68.2000	-	-	9.9593	-	-
Horizontal Radiated Emission Result										
5460.0000	-	-	42.8041	-	-	54.0000	-	-	11.1959	-
5469.9250	-	-	46.7859	-	-	54.0000	-	-	7.2141	-
5470.0000	-	48.9239	-	-	68.2000	-	-	19.2761	-	-

Remarks: Pass Result	Marginal Result	Fail Result

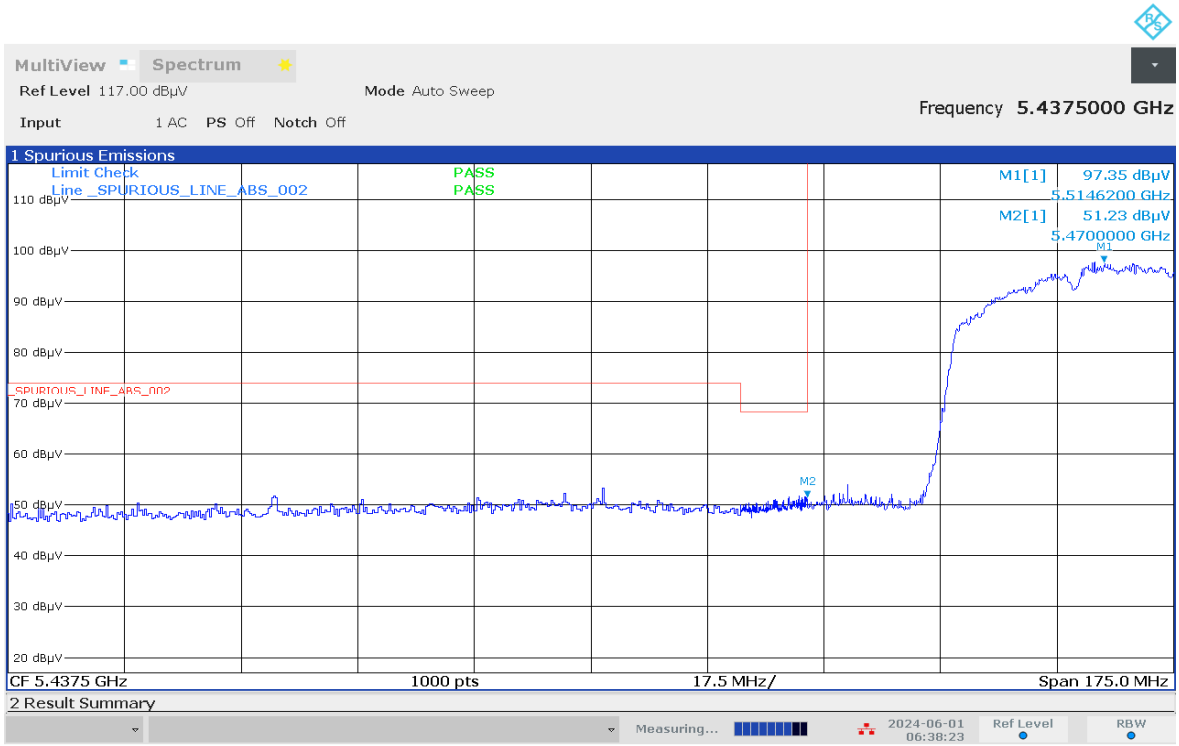
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



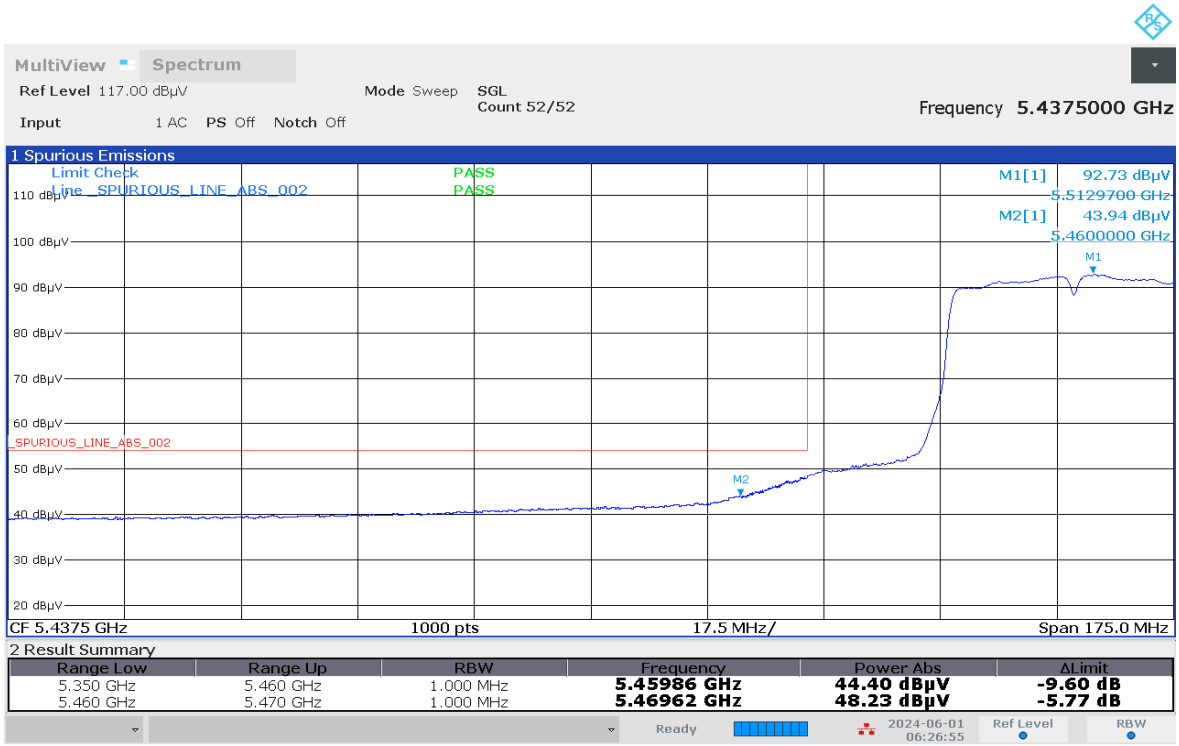
06:35:01 AM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



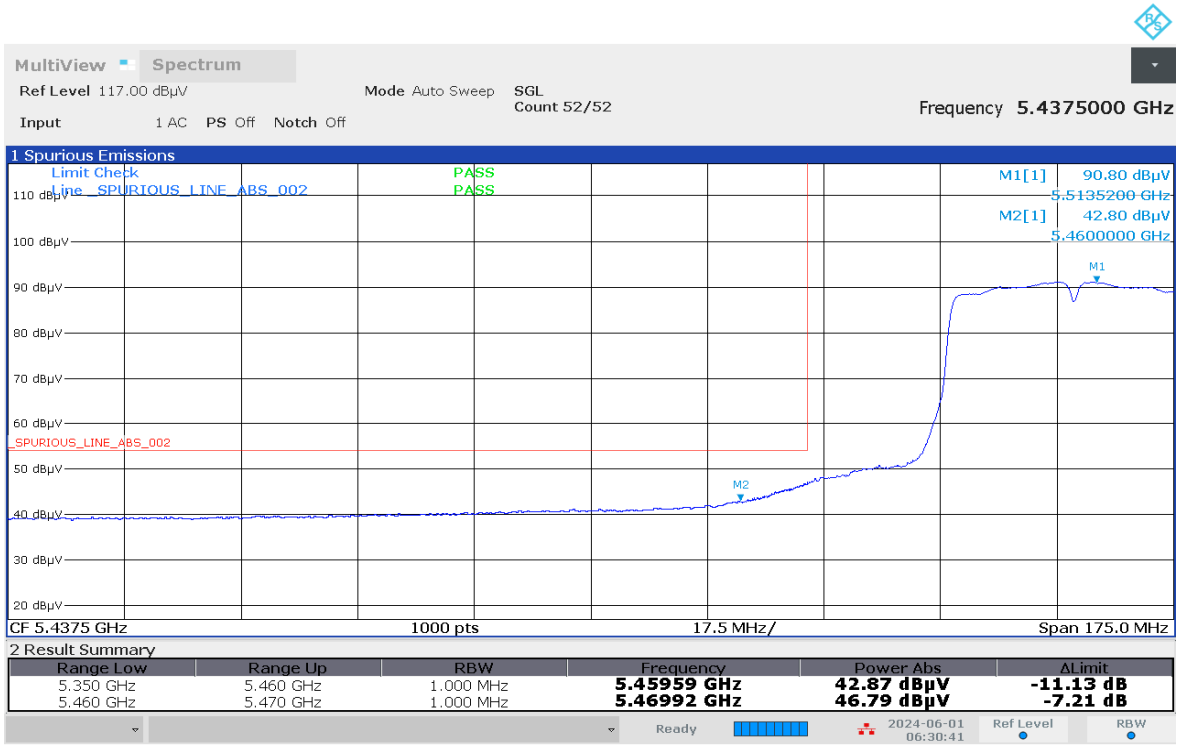
06:38:23 AM 06/01/2024

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



06:26:56 AM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



06:30:41 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5670.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

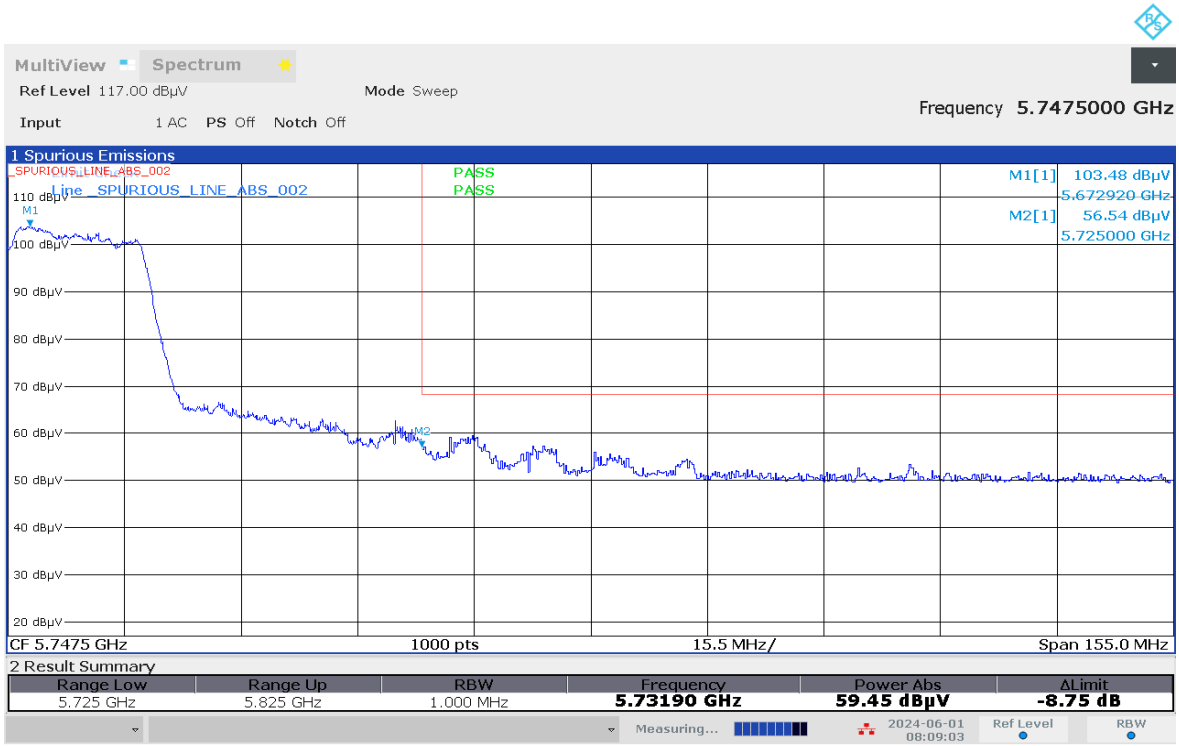
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5725.0000	-	56.5371	-	-	68.2000	-	-	11.6629	-	-
5731.9000	-	59.4524	-	-	68.2000	-	-	8.7476	-	-
Horizontal Radiated Emission Result										
5725.0000	-	53.3327	-	-	68.2000	-	-	14.8673	-	-

Remarks: Pass Result	Marginal Result	Fail Result

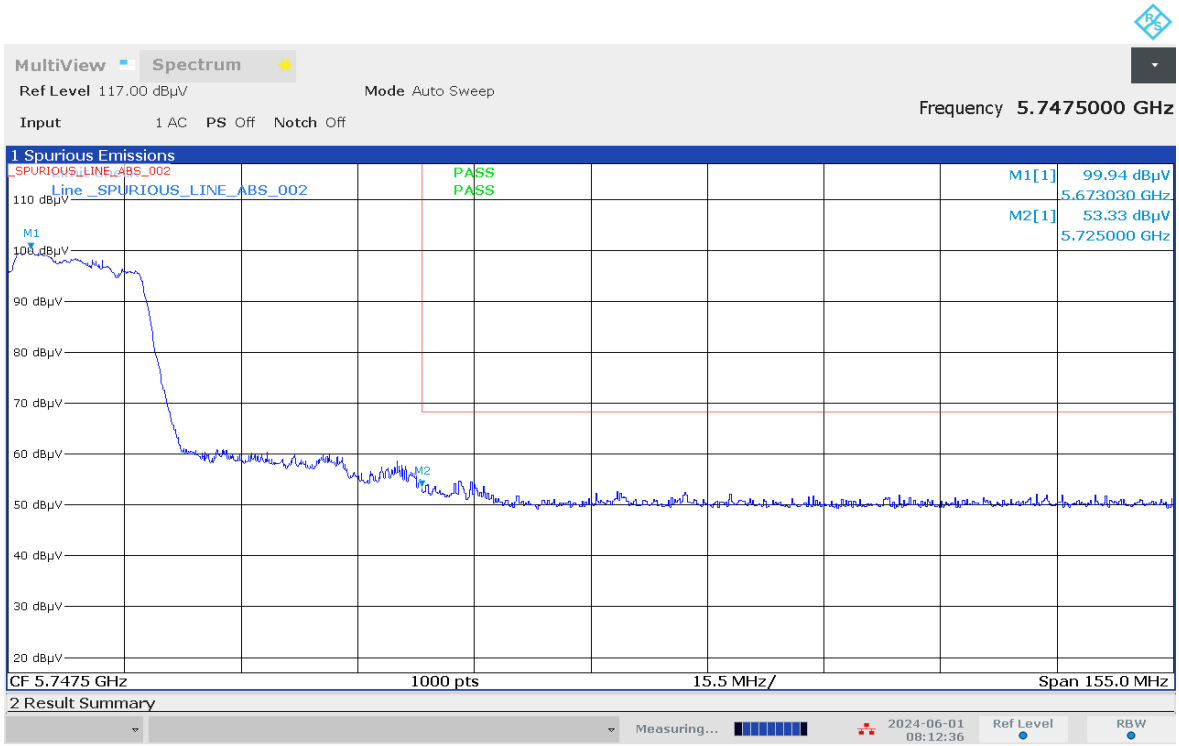
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



08:09:03 AM 06/01/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



08:12:36 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5710.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

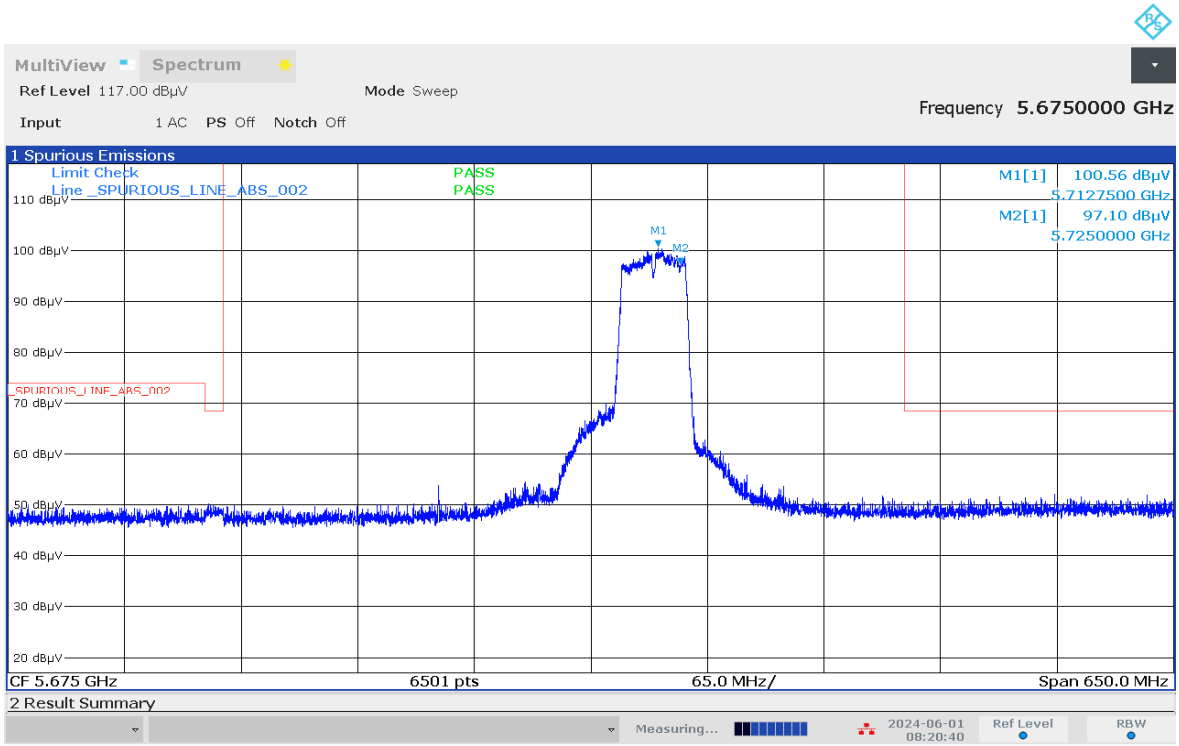
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
Horizontal Radiated Emission Result										

Remarks: Pass Result	Marginal Result	Fail Result

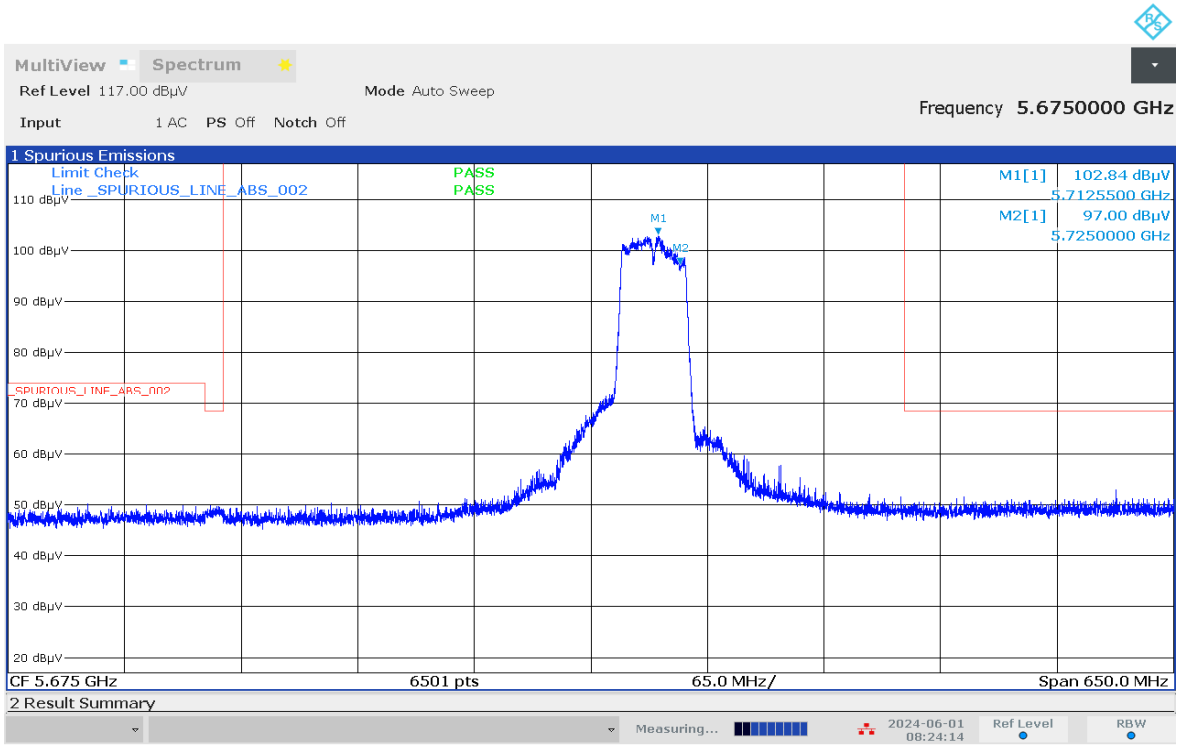
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



08:20:41 AM 06/01/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



08:24:15 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5755.0000 MHz Test Standard: ANSI C63.10-2013 W
orst Case Plane: Z-Plane (802.11n 40MHz)

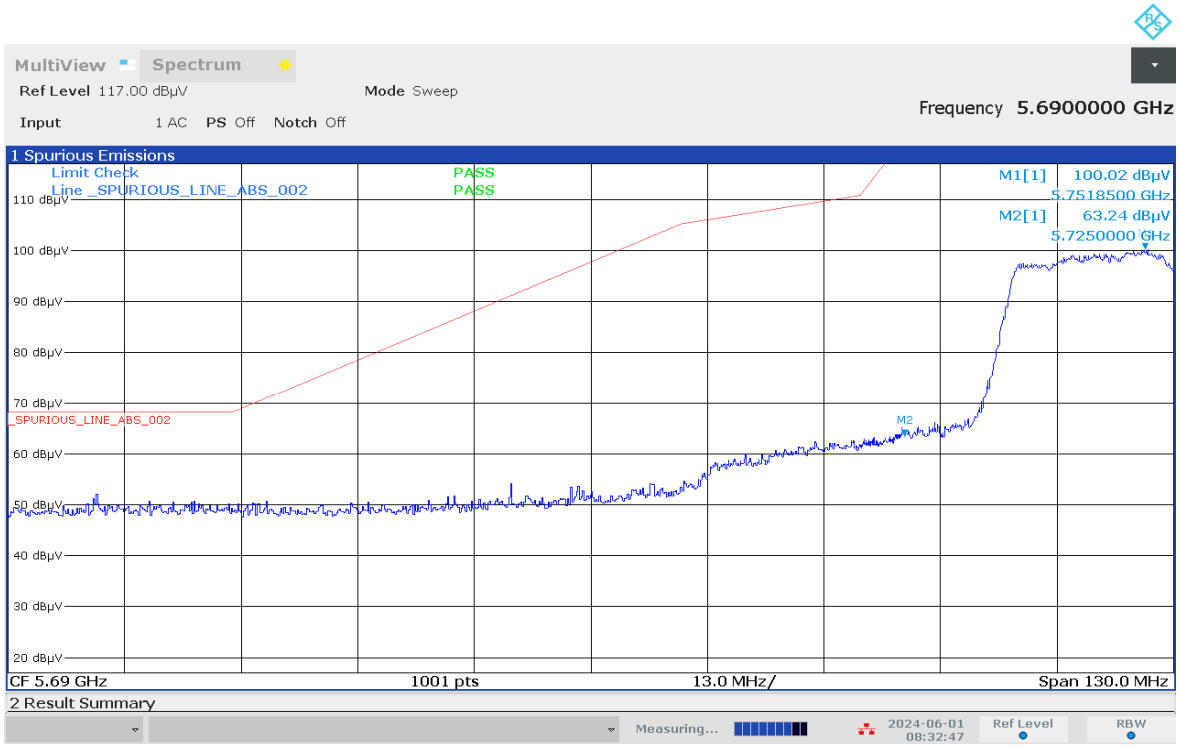
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5725.0000	-	63.2369	-	-	122.2000	-	-	58.9631	-	-
Horizontal Radiated Emission Result										
5725.0000	-	68.7567	-	-	122.2000	-	-	53.4433	-	-

Remarks: Pass Result	Marginal Result	Fail Result

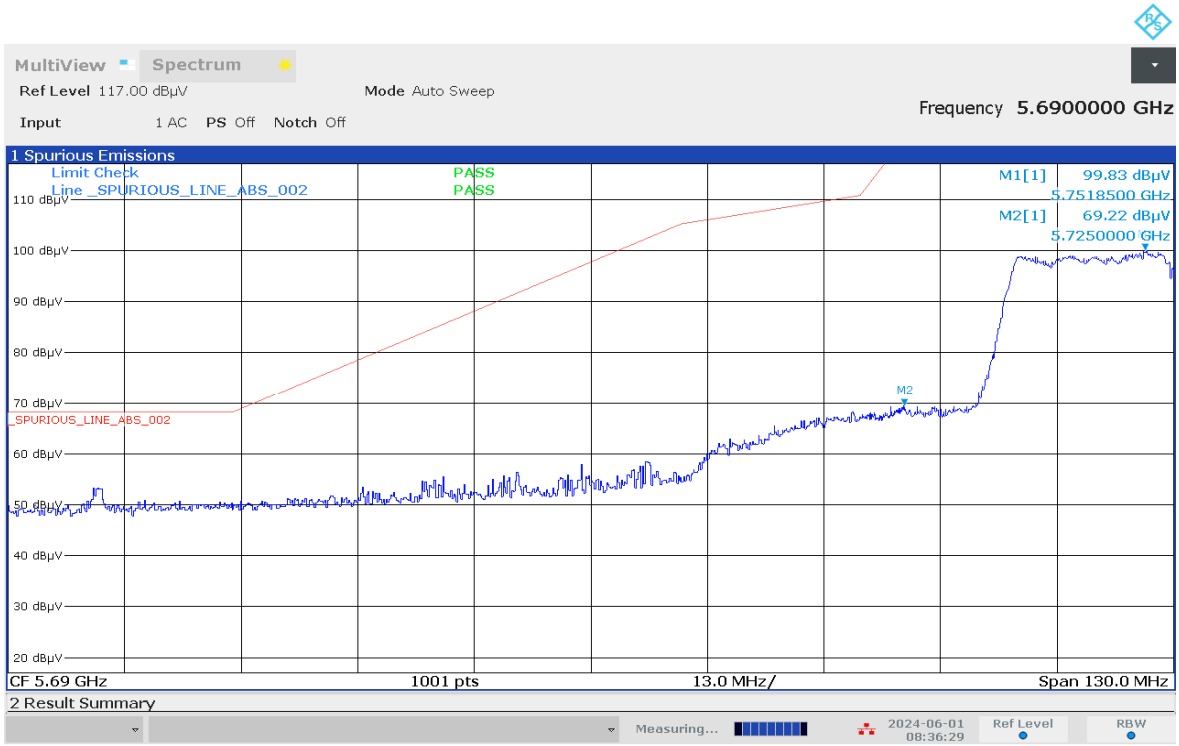
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



08:32:48 AM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



08:36:29 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5795.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

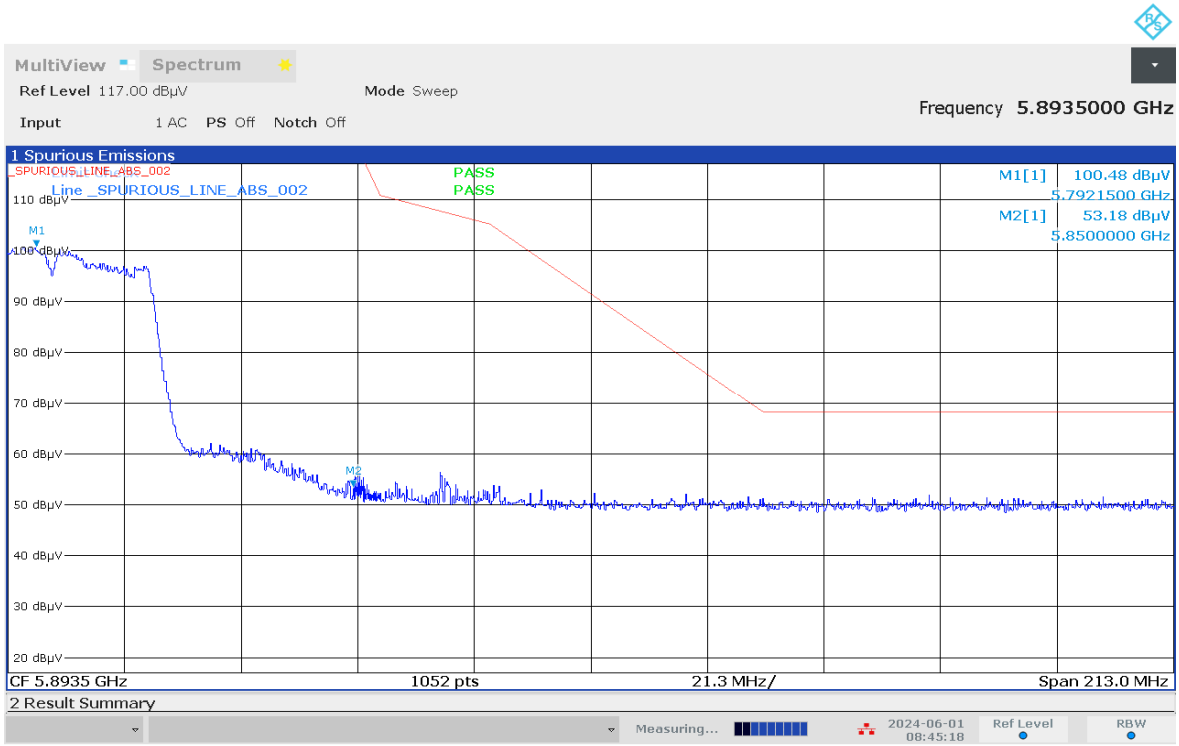
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5850.0000	-	53.1822	-	-	122.2000	-	-	69.0178	-	-
Horizontal Radiated Emission Result										
5850.0000	-	55.8555	-	-	122.2000	-	-	66.3445	-	-

Remarks: Pass Result	Marginal Result	Fail Result

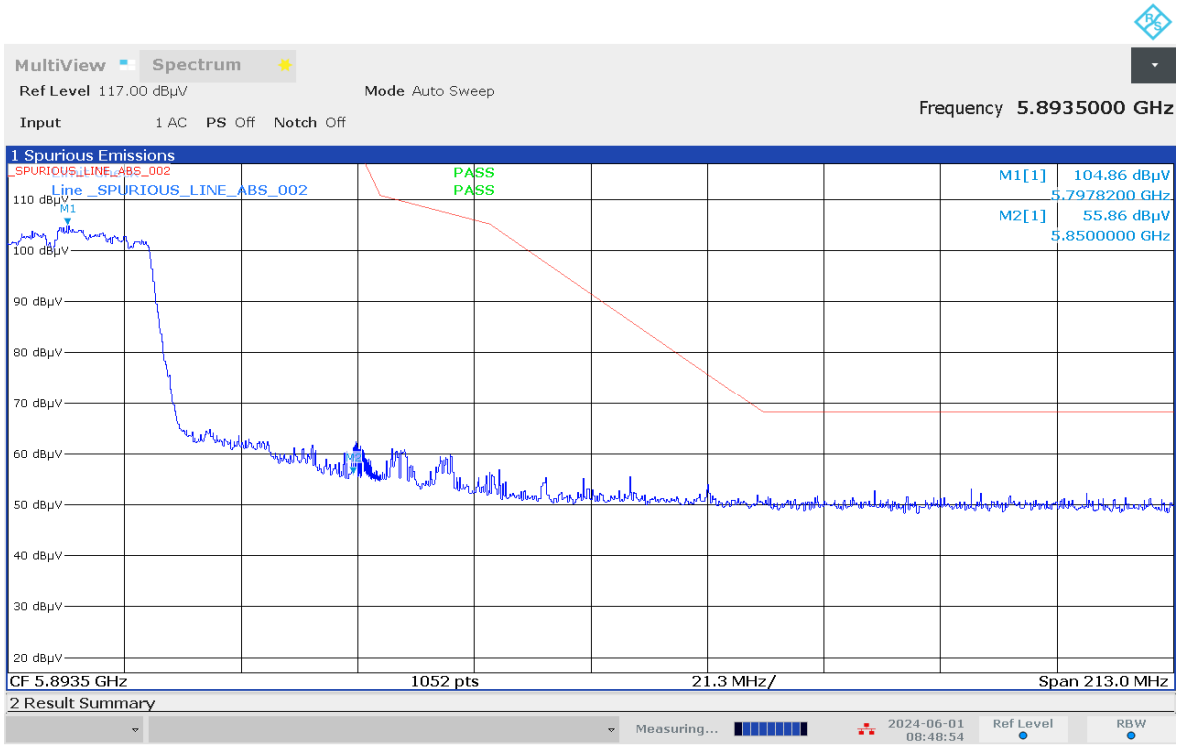
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



08:45:19 AM 06/01/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



08:48:54 AM 06/01/2024

802.11ac(VHT80)

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (13dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5210.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11ac 80MHz)

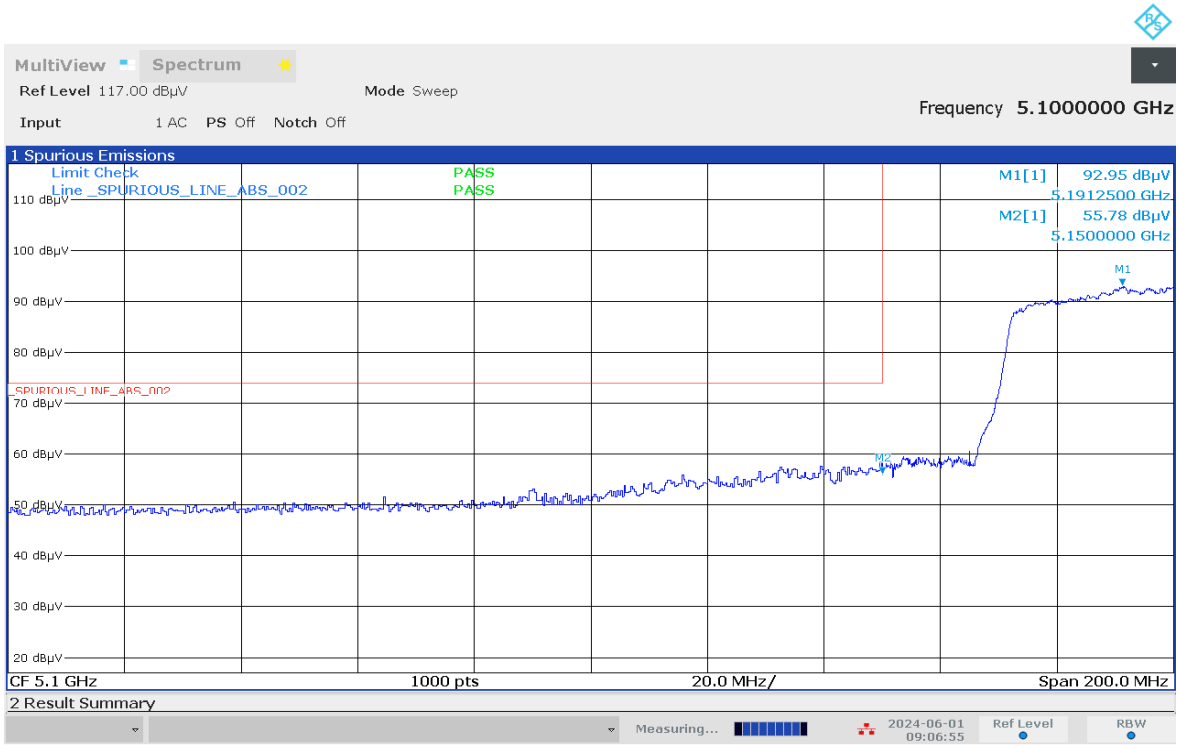
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5150.0000	-	53.5096	40.3156	-	74.0000	54.0000	-	20.4904	13.6844	-
Horizontal Radiated Emission Result										
5146.2500	-	-	48.7111	-	-	54.0000	-	-	5.2889	-
5150.0000	-	57.7189	48.0742	-	74.0000	54.0000	-	16.2811	5.9258	-

Remarks: Pass Result	Marginal Result	Fail Result

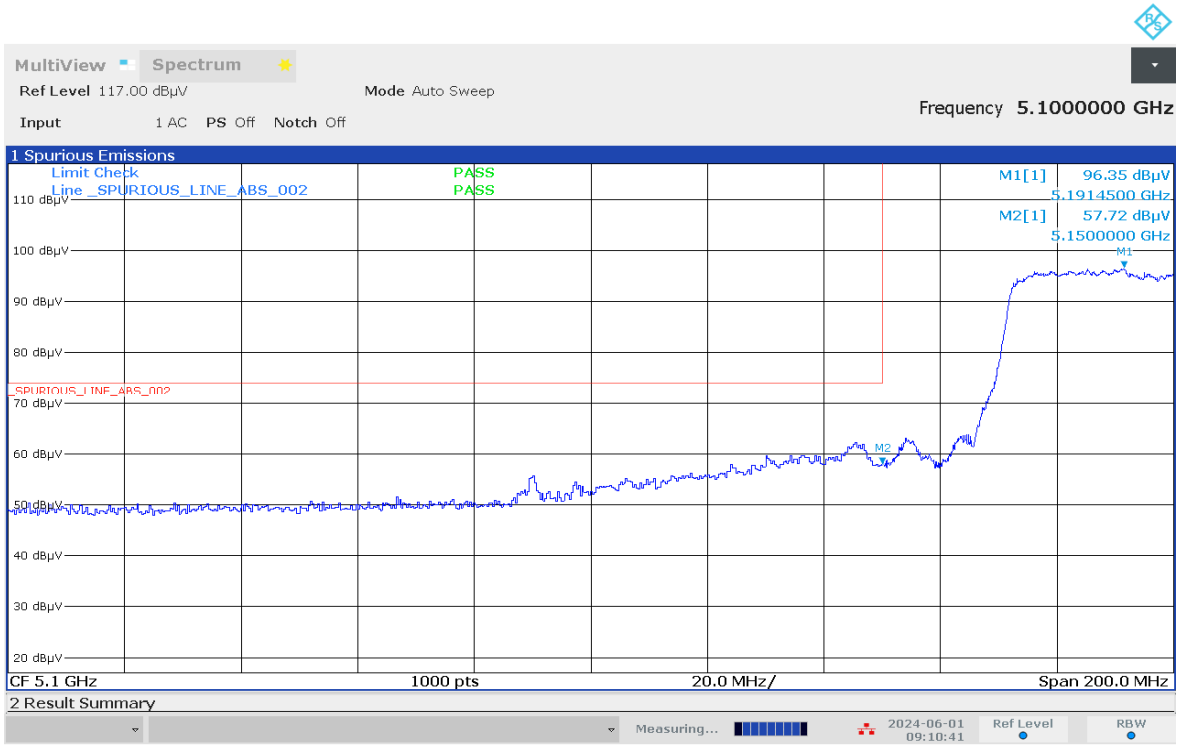
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



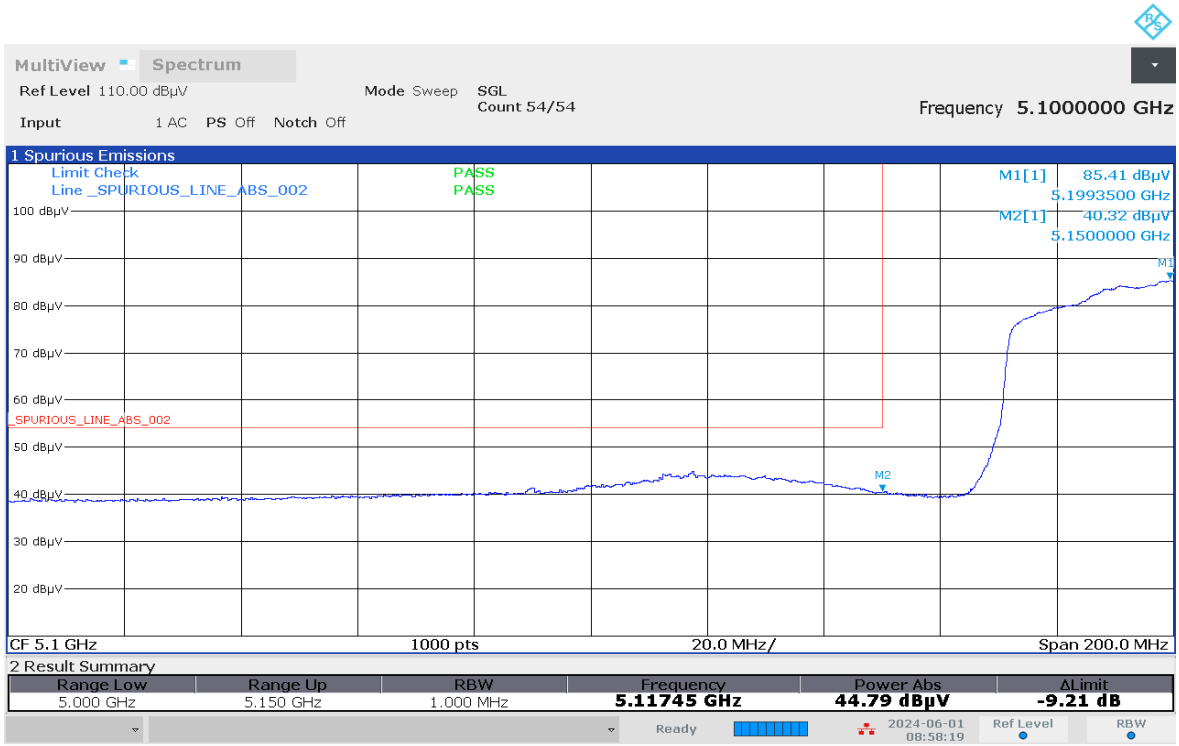
09:06:56 AM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



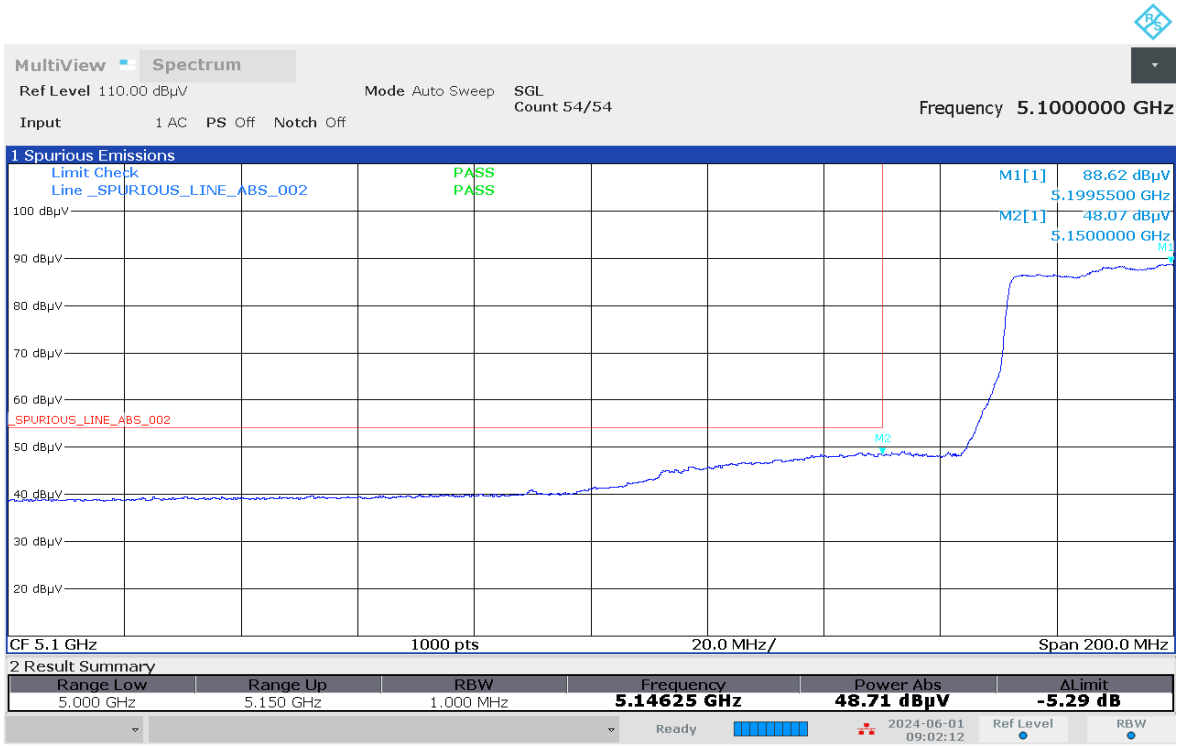
09:10:42 AM 06/01/2024

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



08:58:19 AM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



09:02:12 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (10dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5290.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11ac 80MHz)

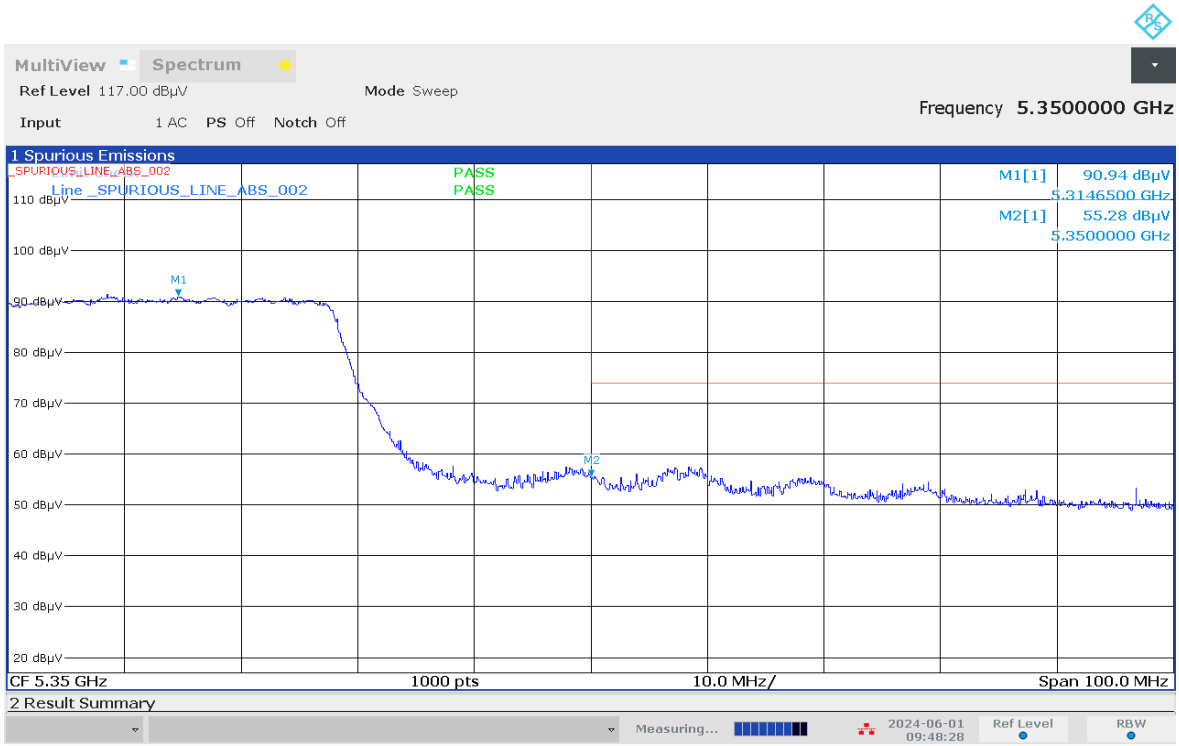
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5350.0000	-	55.2841	41.9176	-	74.0000	54.0000	-	18.7159	12.0824	-
Horizontal Radiated Emission Result										
5350.0000	-	54.7218	43.4042	-	74.0000	54.0000	-	19.2782	10.5958	-

Remarks: Pass Result	Marginal Result	Fail Result

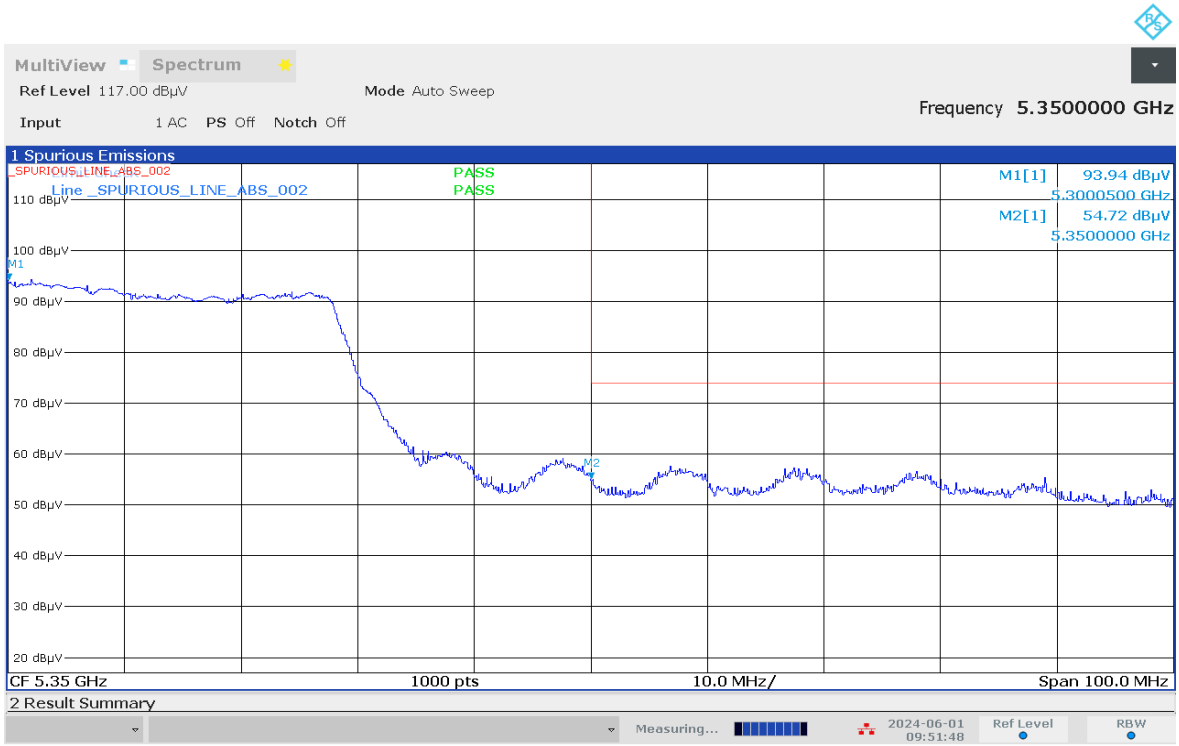
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



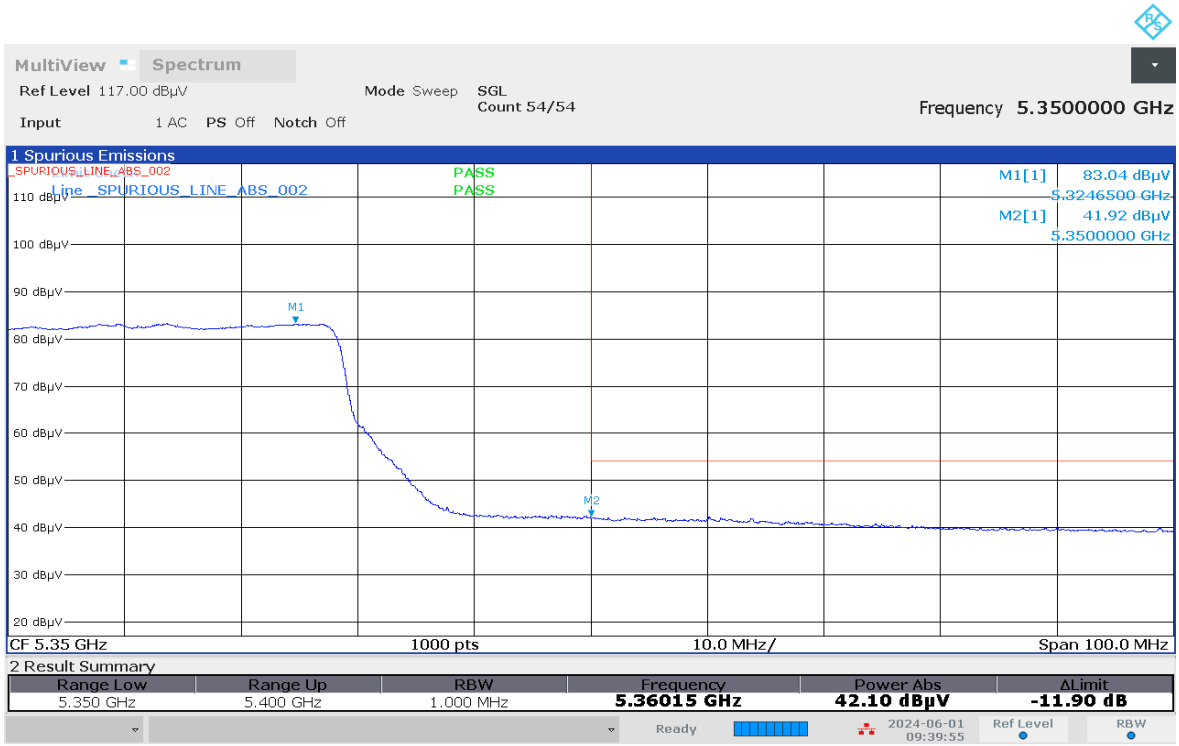
09:48:28 AM 06/01/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



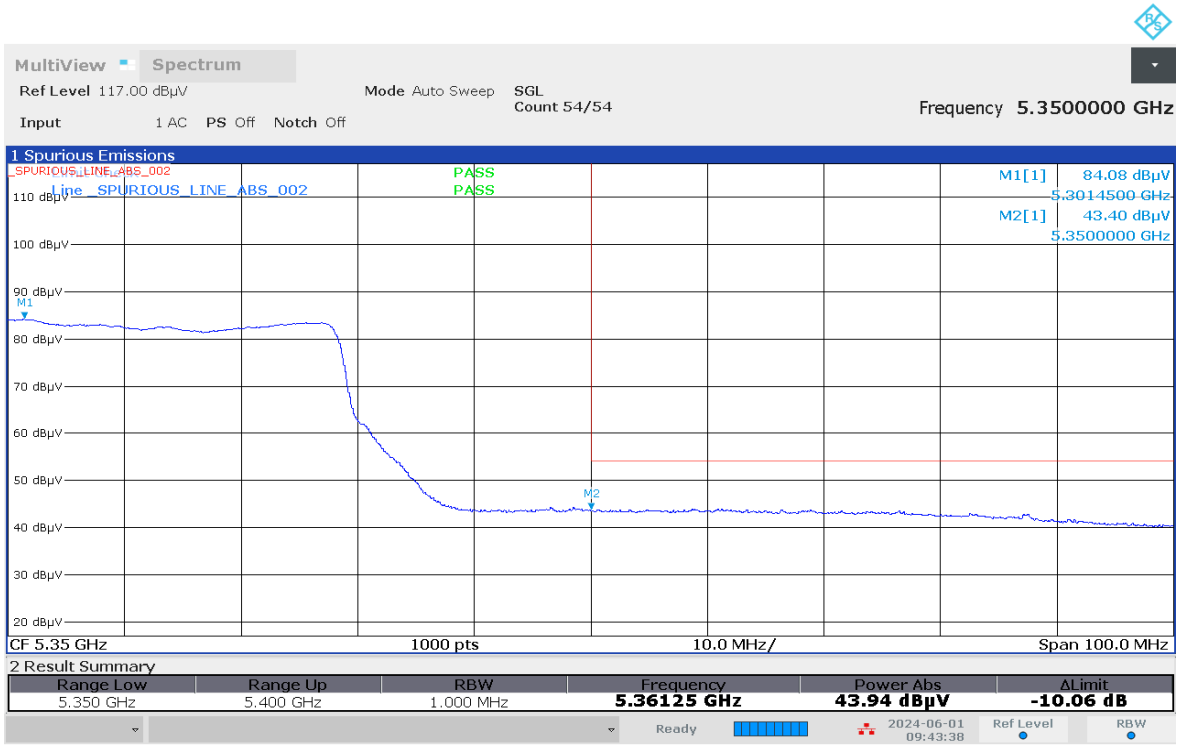
09:51:49 AM 06/01/2024

Restricted Band Edge (High Channel, Vertical, Average) graphical screen shot



09:39:55 AM 06/01/2024

Restricted Band Edge (High Channel, Horizontal, Average) graphical screen shot



09:43:38 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (12dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5530.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11ac 80MHz)

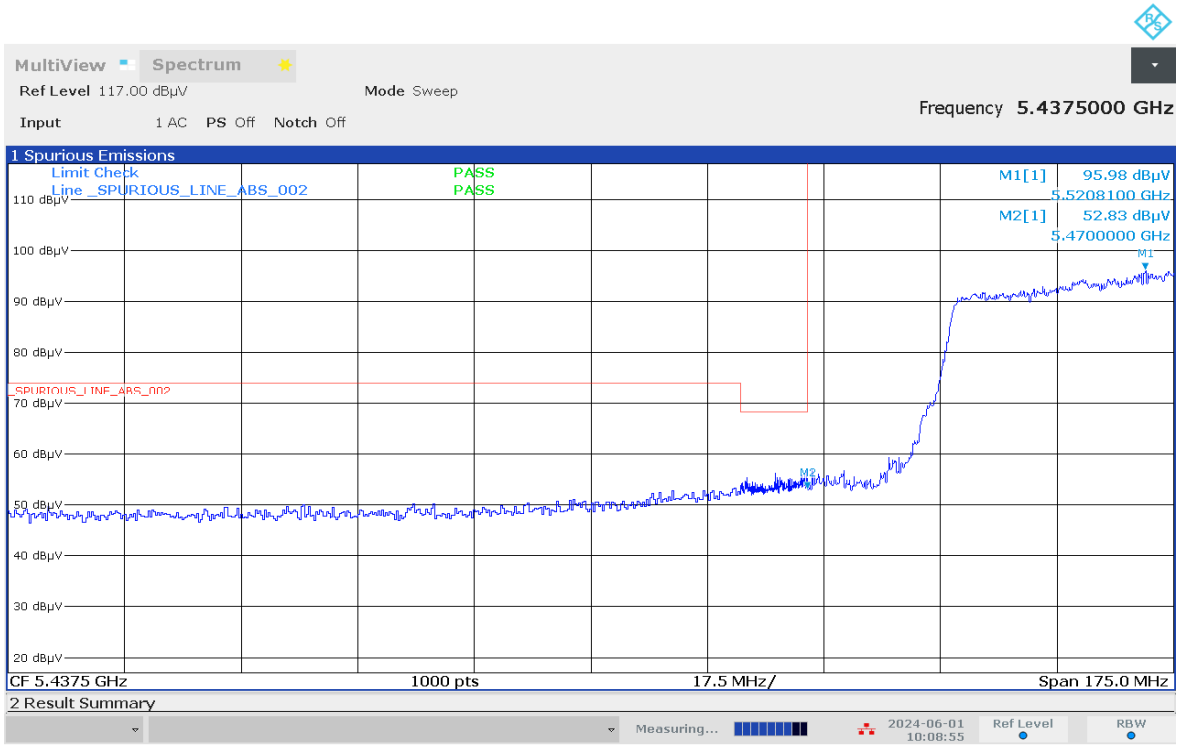
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5460.0000	-	-	43.5800	-	-	54.0000	-	-	10.4200	-
5470.0000	-	52.8258	-	-	68.2000	-	-	15.3742	-	-
Horizontal Radiated Emission Result										
5459.5875	-	-	45.7372	-	-	54.0000	-	-	8.2628	-
5460.0000	-	-	45.0310	-	-	54.0000	-	-	8.9690	-
5470.0000	-	52.0941	-	-	68.2000	-	-	16.1059	-	-

Remarks: Pass Result	Marginal Result	Fail Result

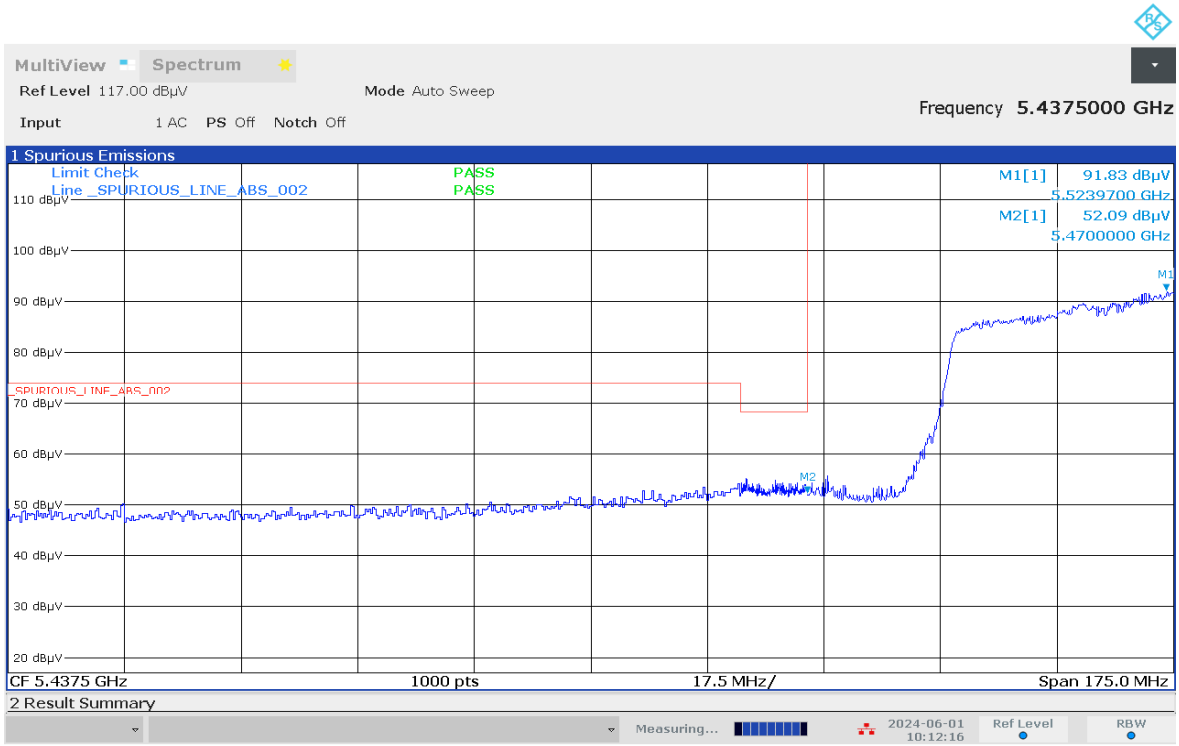
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (Low Channel, Vertical, Peak) graphical screen shot



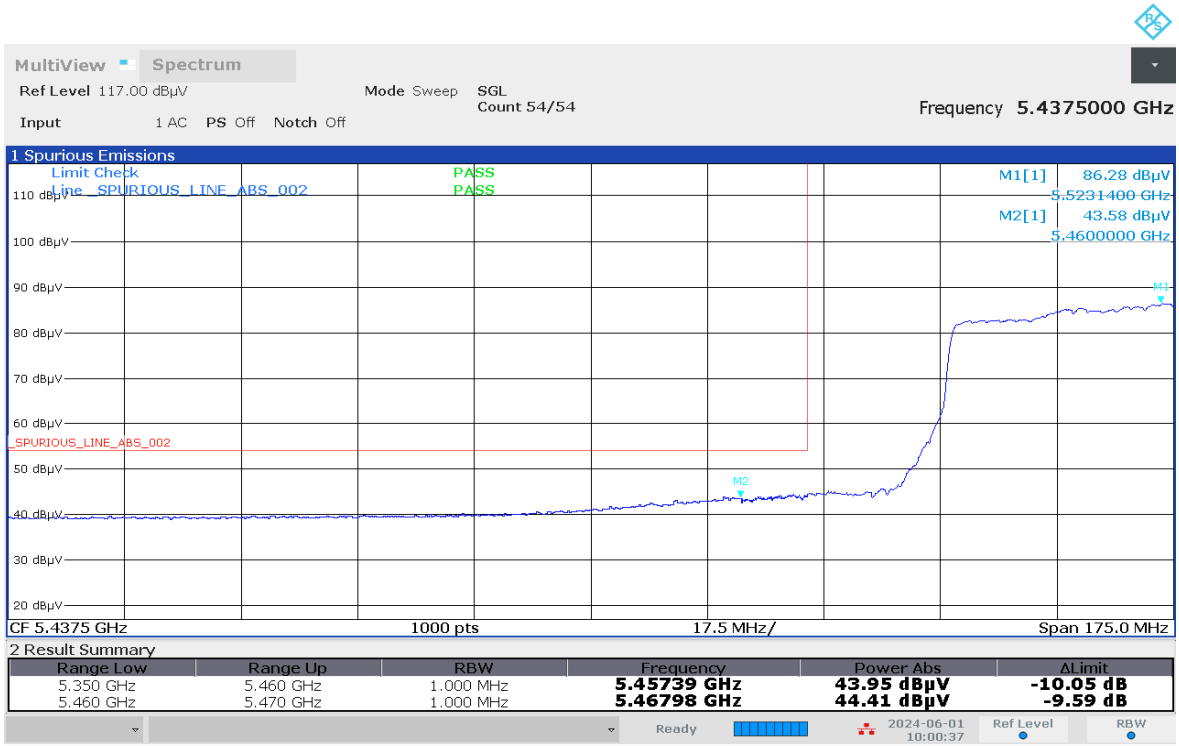
10:08:55 AM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Peak) graphical screen shot



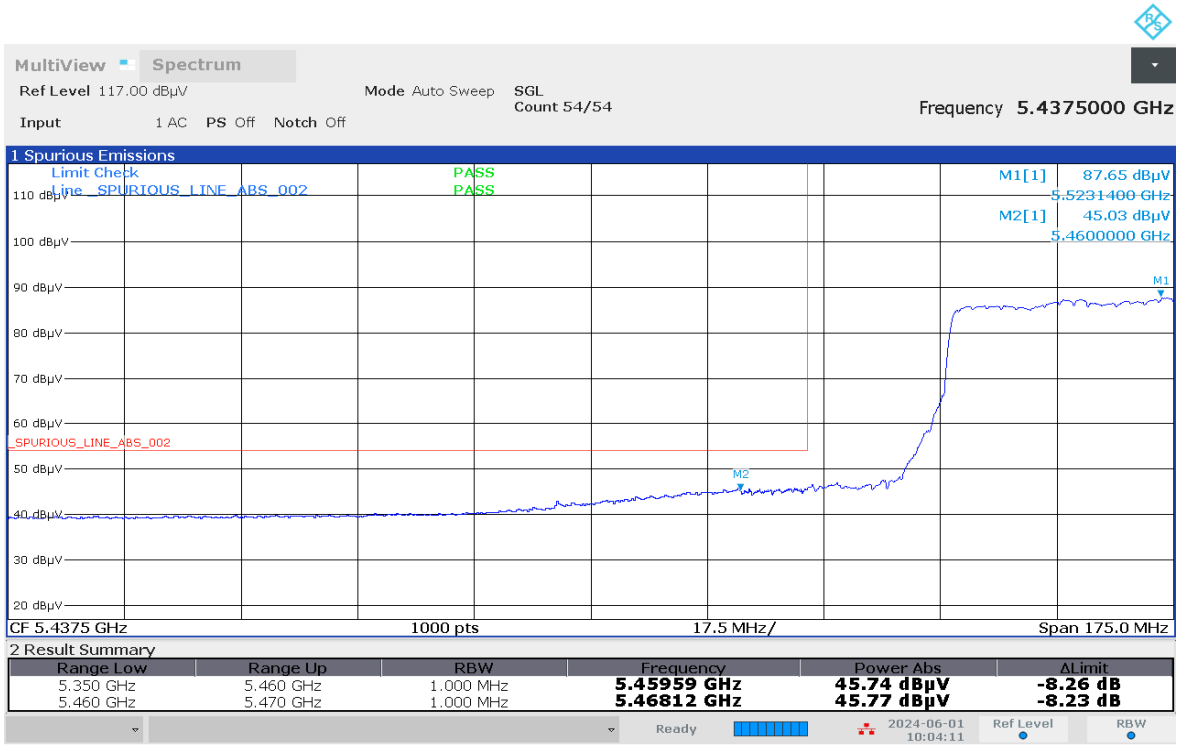
10:12:16 AM 06/01/2024

Restricted Band Edge (Low Channel, Vertical, Average) graphical screen shot



10:00:38 AM 06/01/2024

Restricted Band Edge (Low Channel, Horizontal, Average) graphical screen shot



10:04:12 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5610.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11ac 80MHz)

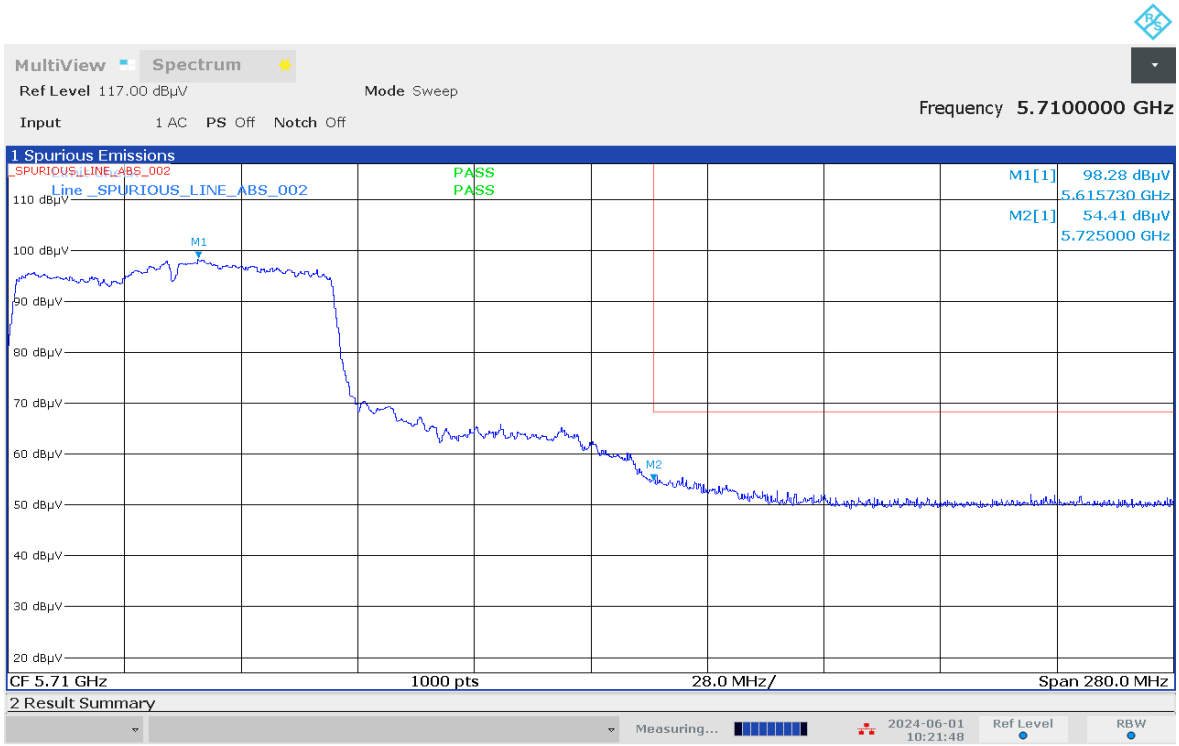
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5725.0000	-	54.2313	-	-	68.2000	-	-	13.9687	-	-
Horizontal Radiated Emission Result										
5725.0000	-	52.9682	-	-	68.2000	-	-	15.2318	-	-

Remarks: Pass Result	Marginal Result	Fail Result

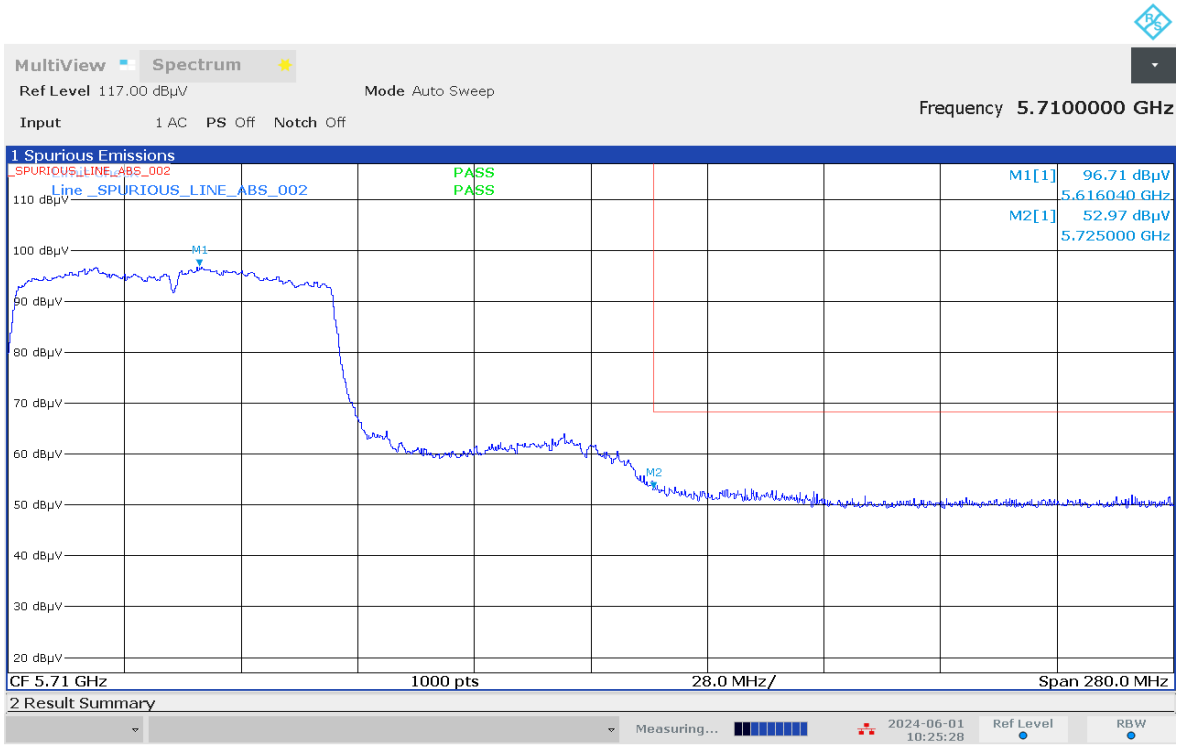
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



10:21:49 AM 06/01/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



10:25:28 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5690.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11ac 80MHz)

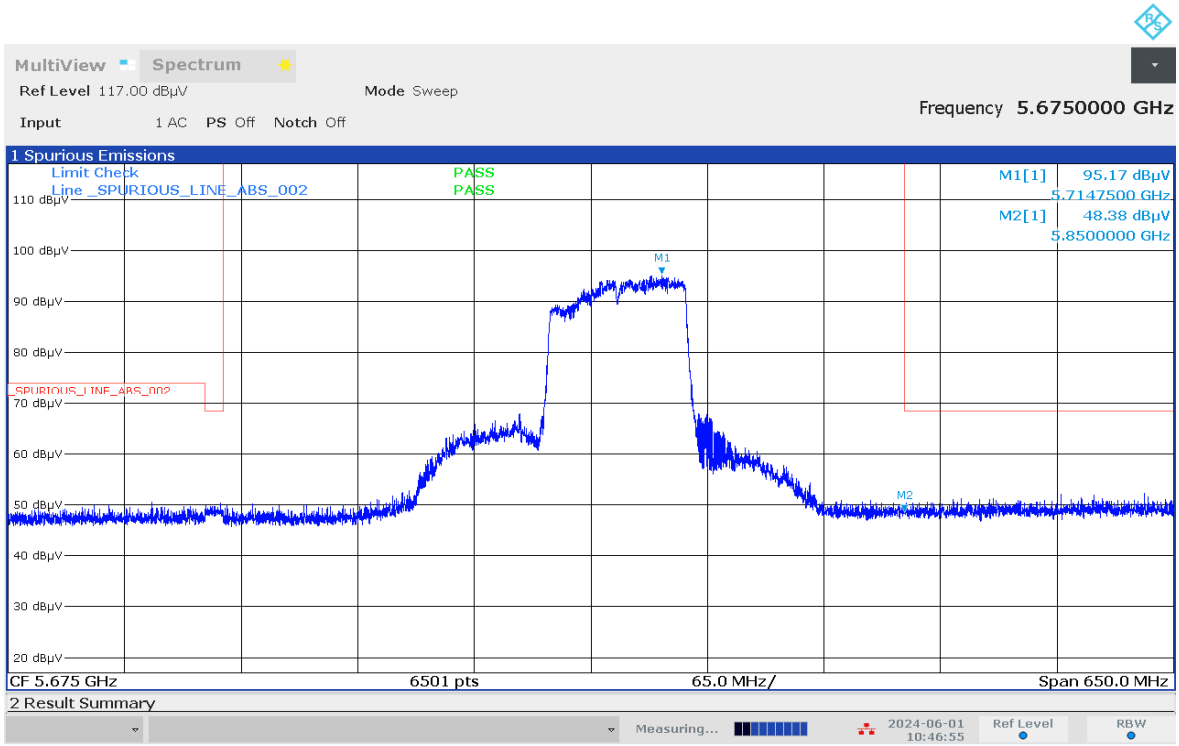
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
Horizontal Radiated Emission Result										

Remarks: Pass Result	Marginal Result	Fail Result

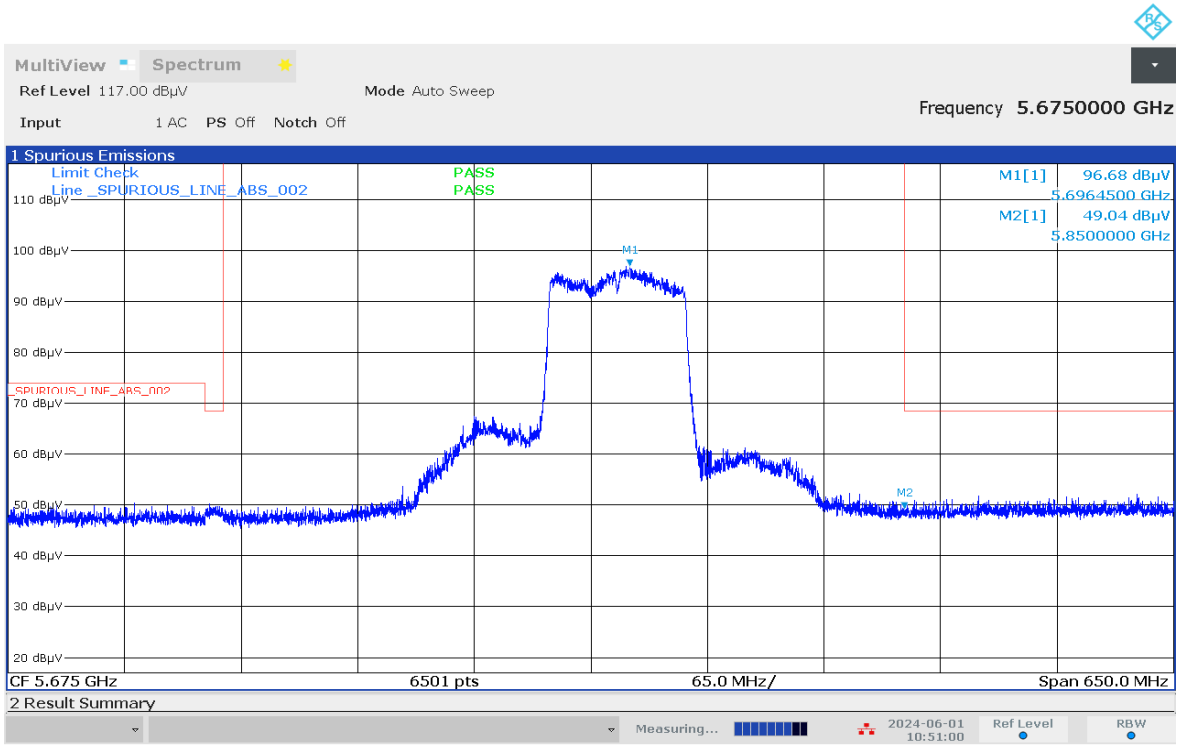
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



10:46:55 AM 06/01/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



10:51:01 AM 06/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5775.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11ac 80MHz)

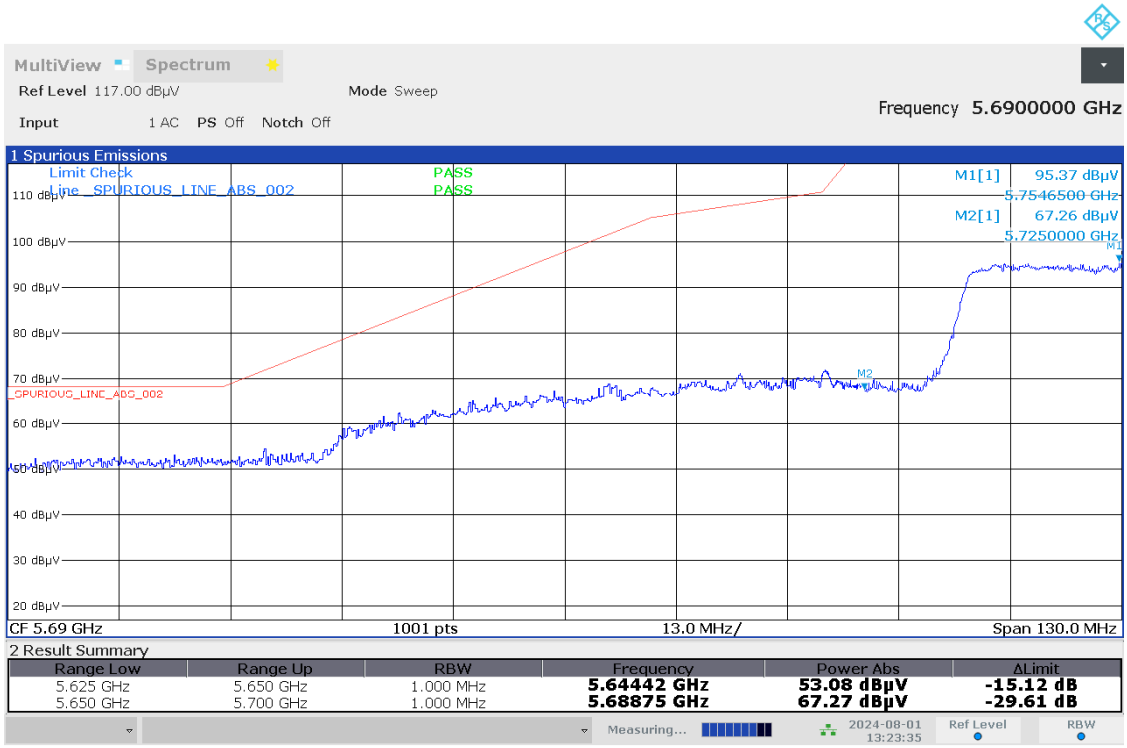
Restricted Band Edge (Low Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5725.0000	-	-	67.2566	-	-	122.2000	-	-	54.9434	-
Horizontal Radiated Emission Result										
5725.0000	-	-	69.5832	-	-	122.2000	-	-	52.6168	-

Remarks: Pass Result	Marginal Result	Fail Result

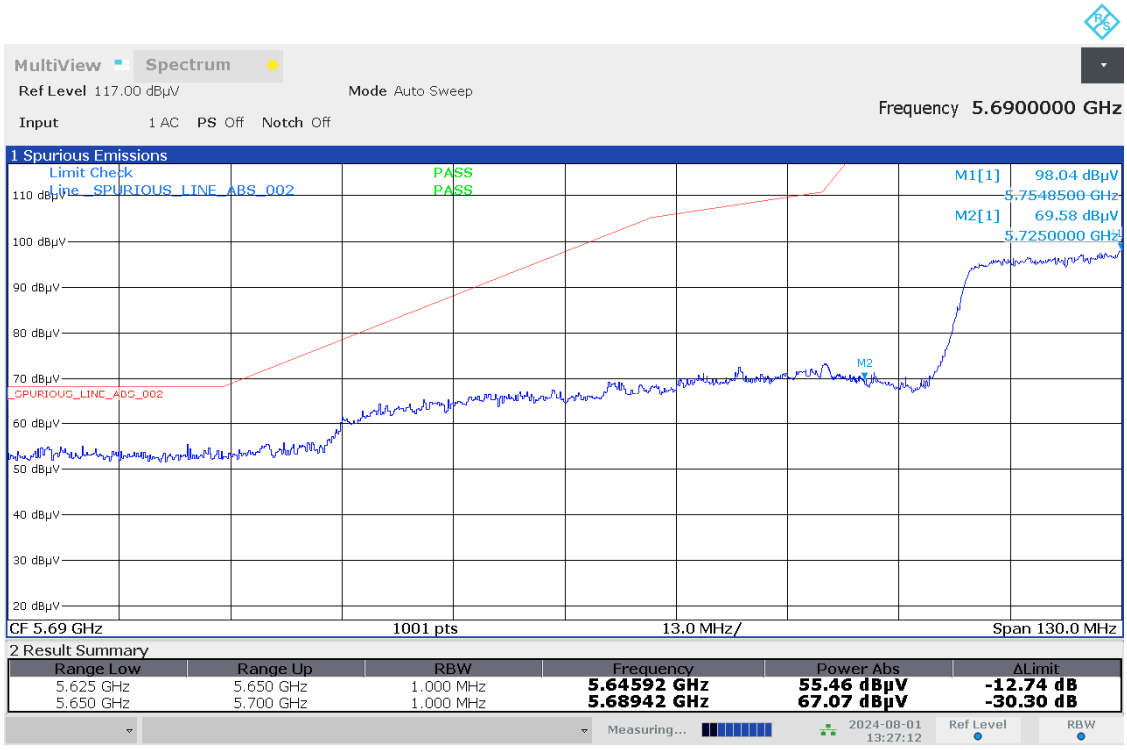
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 1 Aug, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



01:23:35 PM 08/01/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot



01:27:12 PM 08/01/2024

Test: WIFI SAC Restricted Band Edge
Model Number: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5775.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11ac 80MHz)

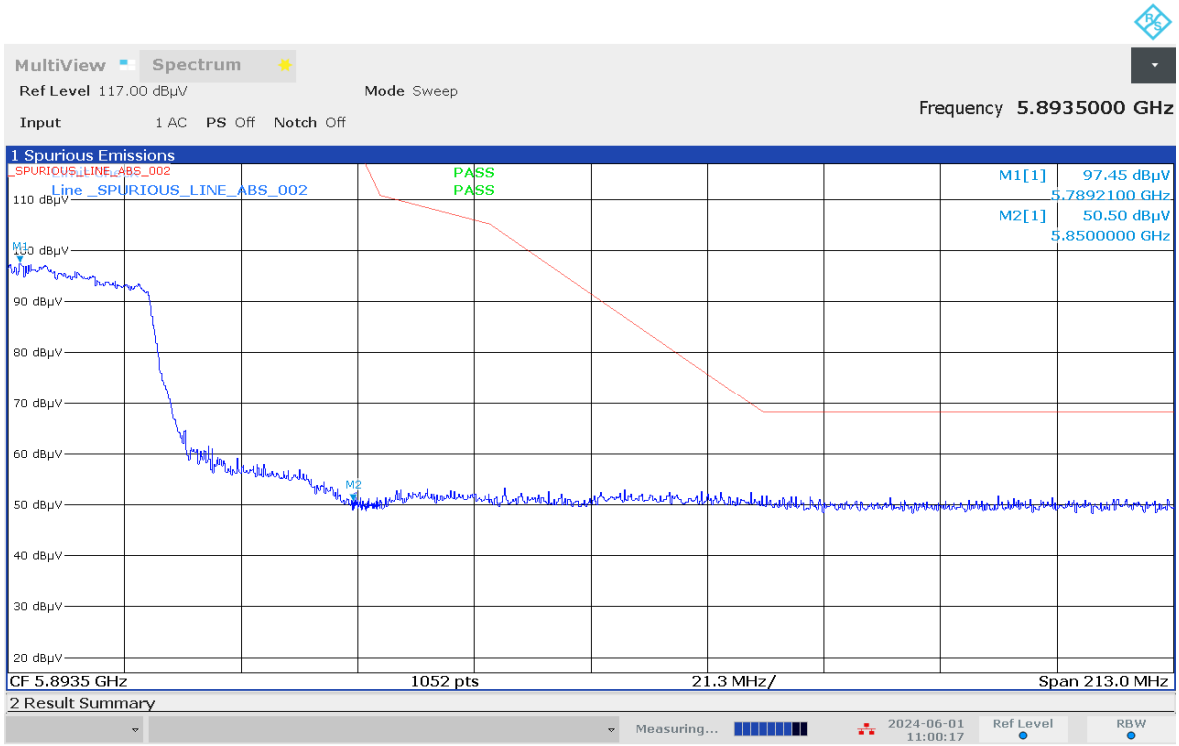
Restricted Band Edge (High Channel) tabular data

Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
5850.0000	-	50.4962	-	-	122.2000	-	-	71.7038	-	-
Horizontal Radiated Emission Result										
5850.0000	-	62.0033	-	-	122.2000	-	-	60.1967	-	-

Remarks: Pass Result	Marginal Result	Fail Result

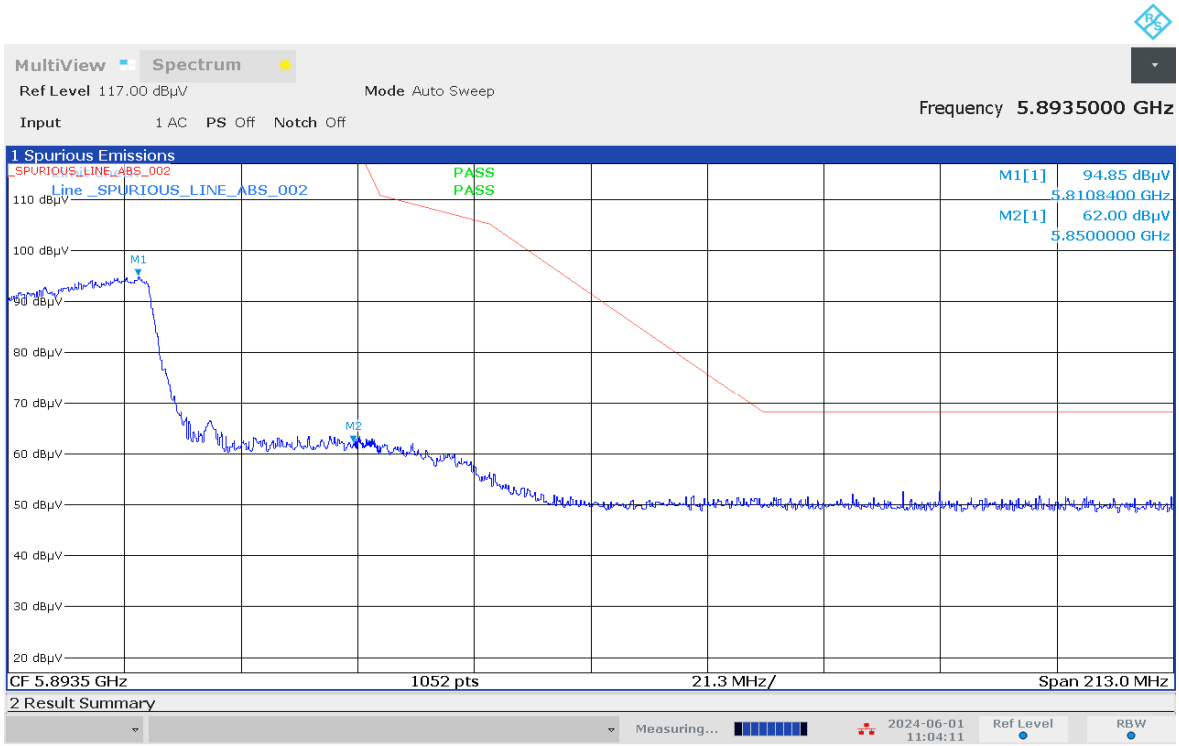
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Sat, 1 Jun, 2024**
System MU: 5.84dB

Restricted Band Edge (High Channel, Vertical, Peak) graphical screen shot



11:00:17 AM 06/01/2024

Restricted Band Edge (High Channel, Horizontal, Peak) graphical screen shot

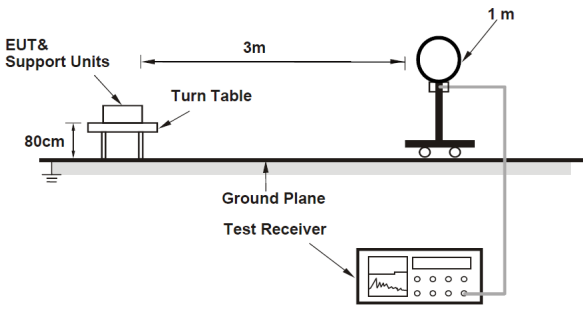


11:04:11 AM 06/01/2024

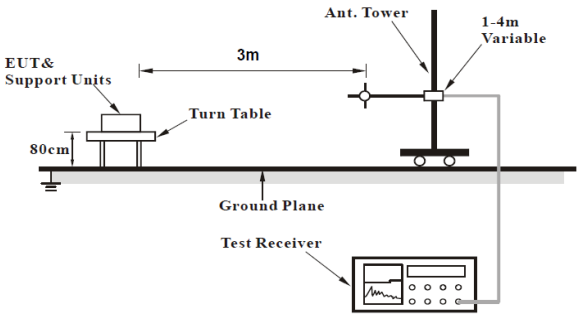
7.7. Radiated Spurious Emission Measurement

7.7.1. Test Setup

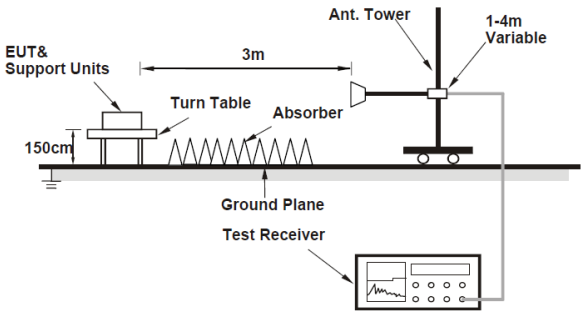
<Radiated emission below 30MHz>



<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



1. The EUT is placed on the top of a rotating table 0.8m/1.5m above the ground at a 3m semi-anechoic chamber. The table is rotated 360 degrees to determine the position of the highest radiation.
2. The EUT is set 3m away from the interference-receiving antenna, which is mounted on the top of a variable-height antenna tower.
3. The antenna is Bilog/Horn antenna depend on which frequency range uses, 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.
4. For each suspected emission, the EUT is arranged to its worst case and then the antenna is tuned to heights from 1m to 4m and the rotatable table is turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system is set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode is fall within the range of 10dB from the limit specified, the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. Otherwise, the testing could be stopped and the peak values of the EUT would be reported.

NOTE:

a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection at frequency below 1GHz.
b. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3 MHz for Peak detection at frequency above 1 GHz.
c. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection using reduced video bandwidth (Duty cycle ≥98%) at frequency above 1GHz.
d. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 1/ τ Hz, where τ is minimum transmitter on time (Duty cycle <98%) for Average detection using reduced video bandwidth at frequency above 1GHz.
e. All modes of operation were investigated and the worst-case emissions are reported.

7.7.2. Test Limits

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

Frequency (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:

d. The lower limit shall apply at the transition frequencies.
e. Emission level (dBuV/m) = 20 log Emission level (uV/m).
f. For frequencies above 1000 MHz, 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.

For Radiated emissions which fall out of the restricted bands must comply with the radiated emission limits specified as below table.

Applicable To		Limit	
789033 D02 General UNII Test Procedures New Rules v01r03		Field Strength at 3 m	
		PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
Frequency Band	**Applicable To**	**EIRP Limit**	**Equivalent Field Strength at 3 m**
5150~5250 MHz	15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	15.407(b)(4)(i)	PK:-27 (dBm/MHz) *1 PK:10 (dBm/MHz) *2 PK:15.6 (dBm/MHz) *3 PK:27 (dBm/MHz) *4	PK: 68.2 (dBμV/m) *1 PK:105.2 (dBμV/m) *2 PK: 110.8 (dBμV/m) *3 PK:122.2 (dBμV/m) *4
	15.407(b)(4)(ii)	Emission limits in section 15.247(d)	

*1 beyond 75 MHz or more above of the band edge.
*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.
*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.
*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

NOTE:

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

$E = ((1000000 \surd (30P)) / 3)$ μV/m, where P is the eirp (Watts)

7.7.3. Test Data

802.11a

Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5180.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

Radiated Emission (Low Channel) tabular data

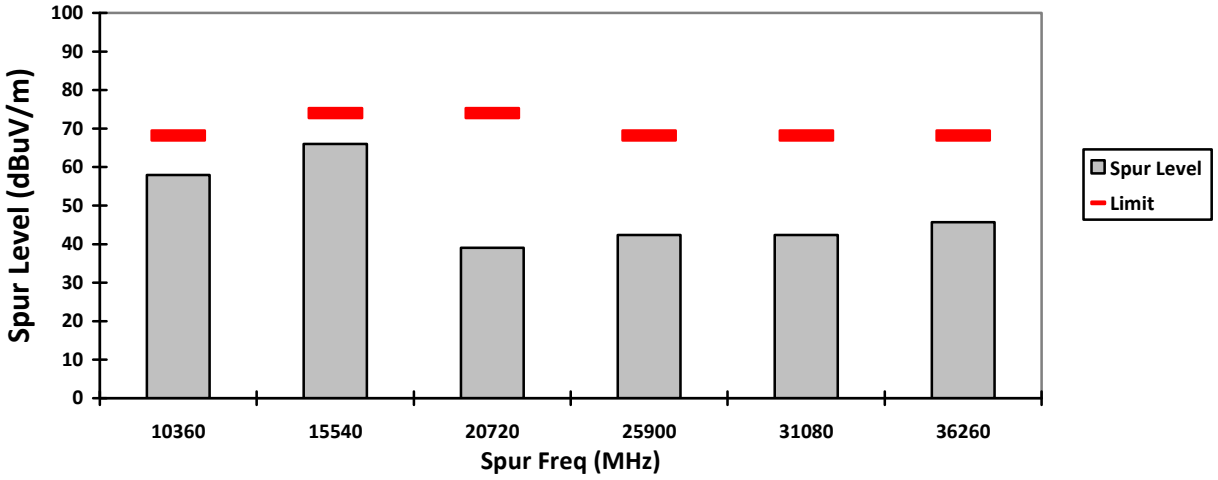
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10360	-	57.9673**	-	-	68.2000	-	-	10.2327	-	-
15540	-	65.9753**	52.1033**	-	74.0000	54.0000	-	8.0247	1.8967	-
20720	-	39.0926**	-	-	74.0000	-	-	34.9074	-	-
25900	-	42.3405**	-	-	68.2000	-	-	25.8595	-	-
31080	-	42.4108**	-	-	68.2000	-	-	25.7892	-	-
36260	-	45.6618**	-	-	68.2000	-	-	22.5382	-	-
Horizontal Radiated Emission Result										
10360	-	57.5890**	-	-	68.2000	-	-	10.6110	-	-
15540	-	65.7836**	52.0980**	-	74.0000	54.0000	-	8.2164	1.9020	-
20720	-	39.1267**	-	-	74.0000	-	-	34.8733	-	-
25900	-	40.4401**	-	-	68.2000	-	-	27.7599	-	-
31080	-	41.9158**	-	-	68.2000	-	-	26.2842	-	-
36260	-	45.5219**	-	-	68.2000	-	-	22.6781	-	-

Remarks: Pass Result	Marginal Result	Fail Result

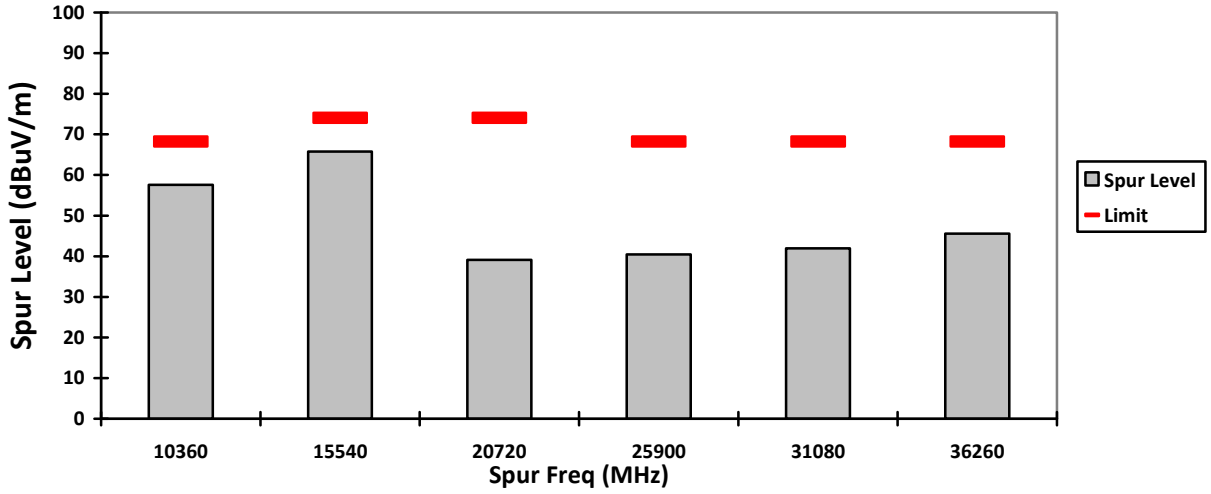
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

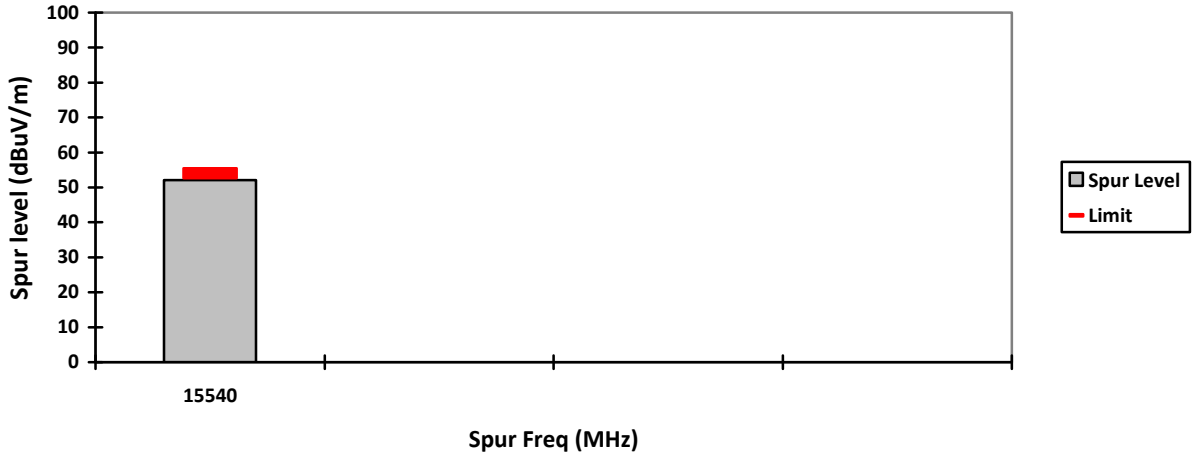
VERTICAL, PK



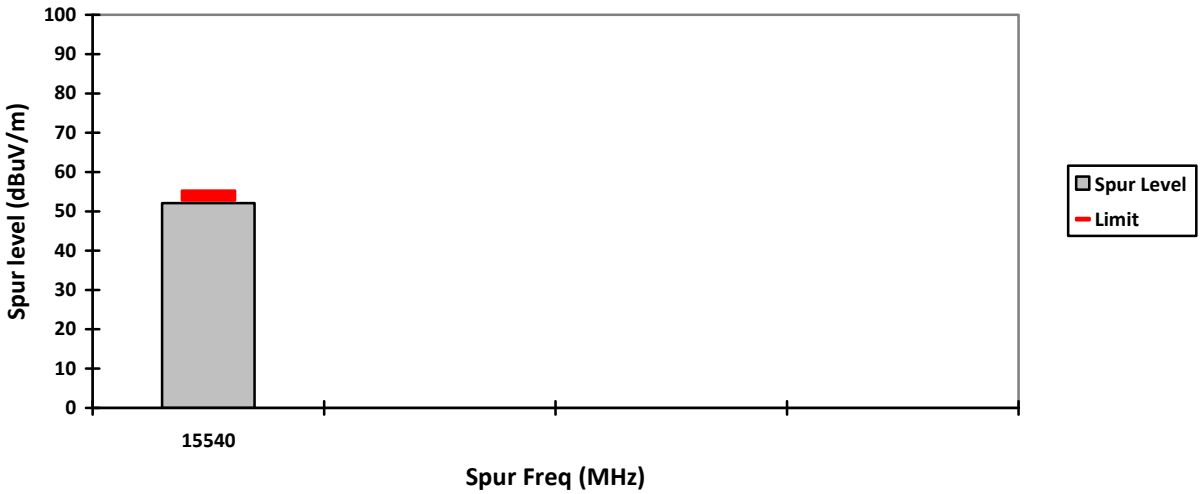
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Mid Test Frequency: 5220.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

Radiated Emission (Mid Channel) tabular data

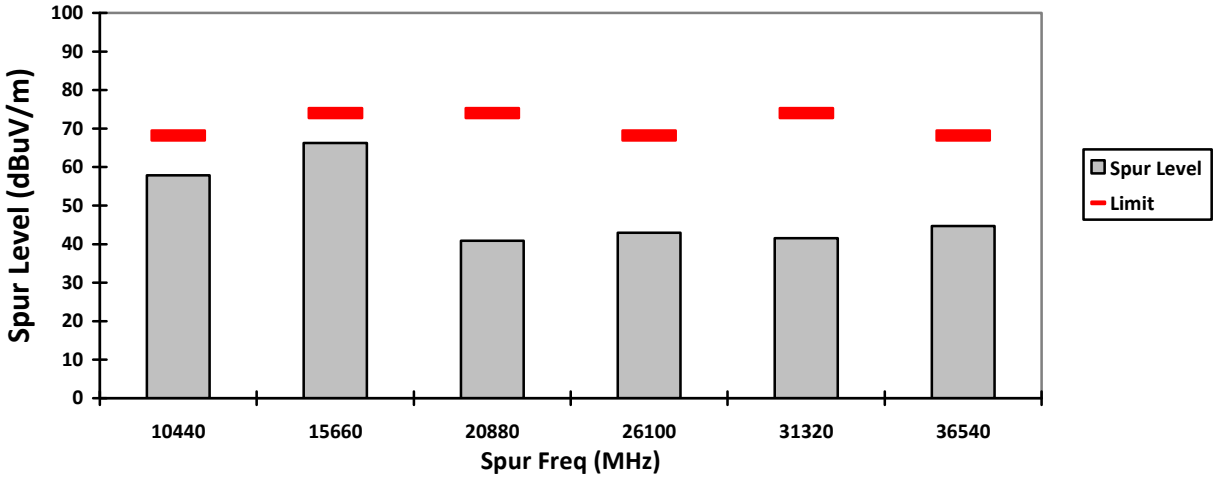
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10440	-	57.8631**	-	-	68.2000	-	-	10.3369	-	-
15660	-	66.2254**	51.8132**	-	74.0000	54.0000	-	7.7746	2.1868	-
20880	-	40.8541**	-	-	74.0000	-	-	33.1459	-	-
26100	-	42.9363**	-	-	68.2000	-	-	25.2637	-	-
31320	-	41.5273**	-	-	74.0000	-	-	32.4727	-	-
36540	-	44.6865**	-	-	68.2000	-	-	23.5135	-	-
Horizontal Radiated Emission Result										
10440	-	58.1609**	-	-	68.2000	-	-	10.0391	-	-
15660	-	65.9547**	51.8087**	-	74.0000	54.0000	-	8.0453	2.1913	-
20880	-	40.4061**	-	-	74.0000	-	-	33.5939	-	-
26100	-	41.9828**	-	-	68.2000	-	-	26.2172	-	-
31320	-	41.6226**	-	-	74.0000	-	-	32.3774	-	-
36540	-	45.6972**	-	-	68.2000	-	-	22.5028	-	-

Remarks: Pass Result	Marginal Result	Fail Result

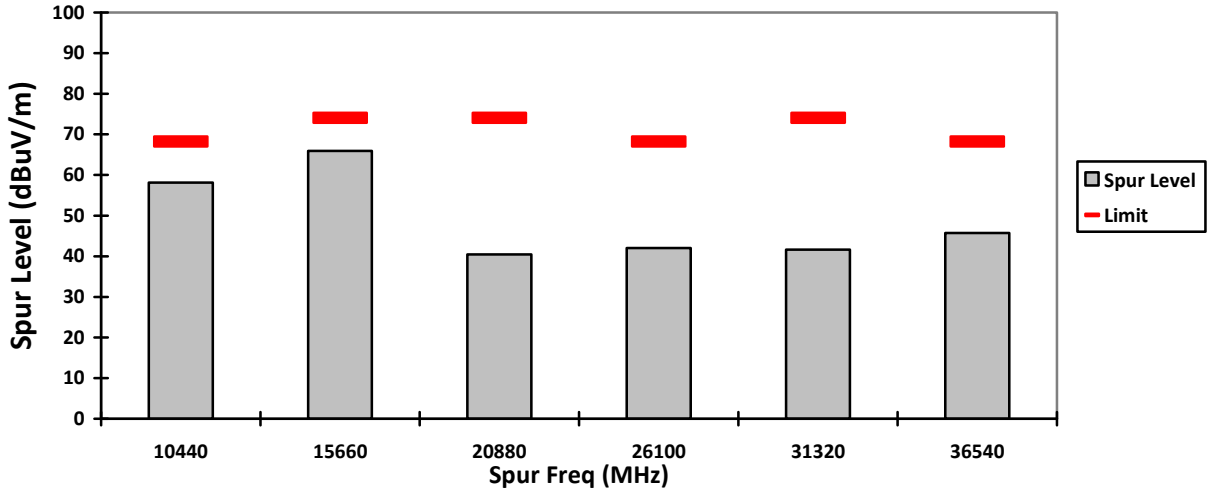
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

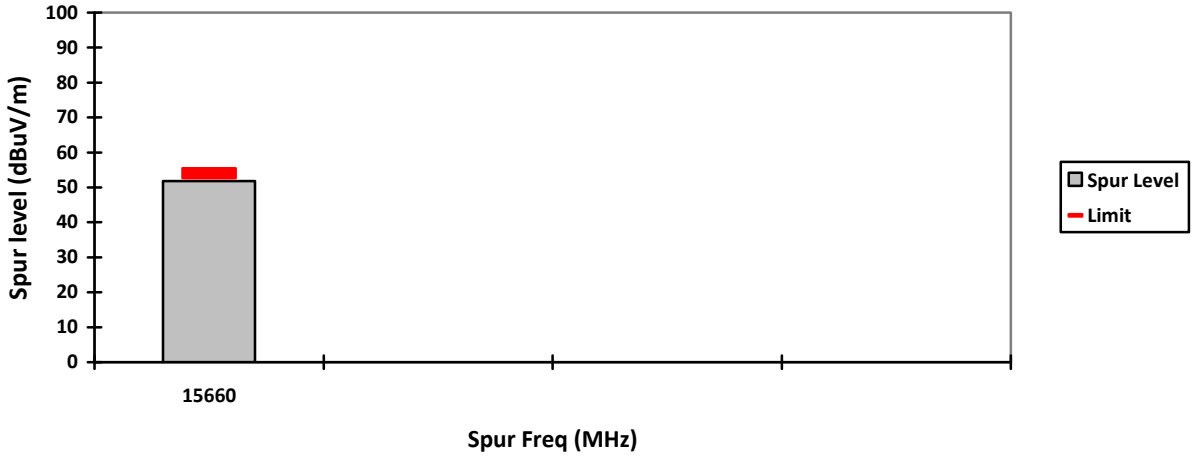
VERTICAL, PK



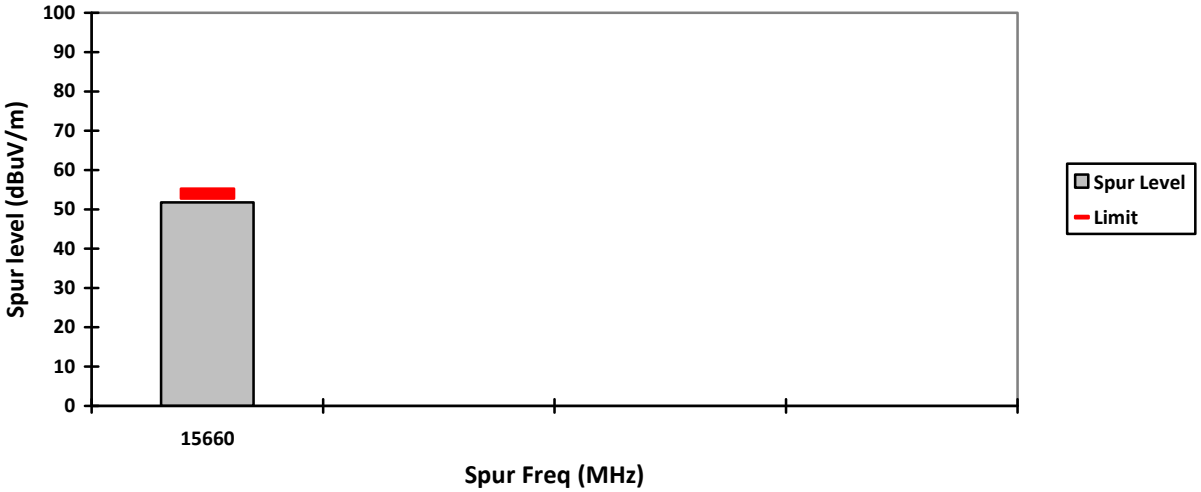
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5240.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

Radiated Emission (High Channel) tabular data

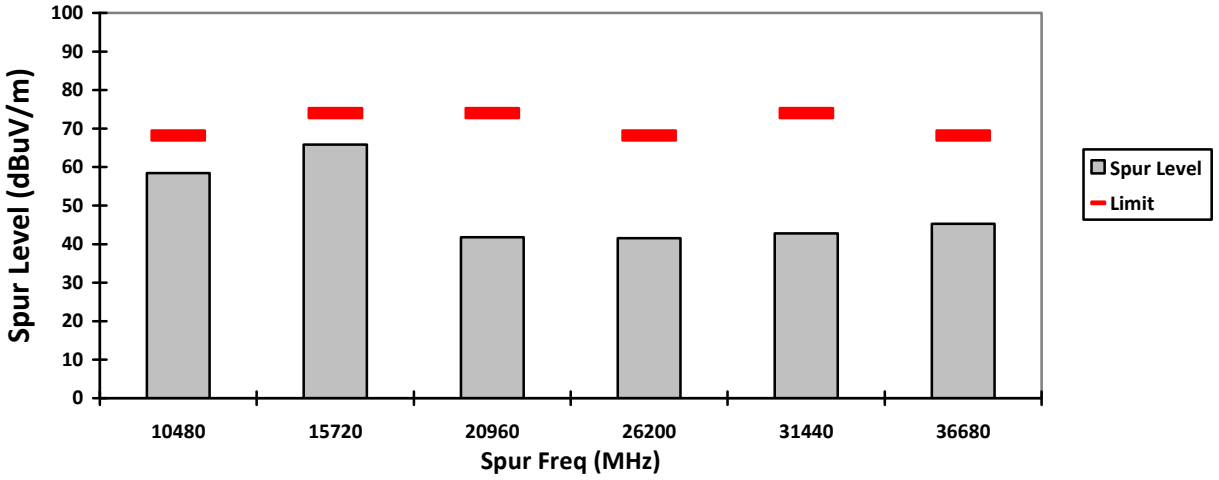
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10480	-	58.4265**	-	-	68.2000	-	-	9.7735	-	-
15720	-	65.8178**	51.7063**	-	74.0000	54.0000	-	8.1822	2.2937	-
20960	-	41.8215**	-	-	74.0000	-	-	32.1785	-	-
26200	-	41.5661**	-	-	68.2000	-	-	26.6339	-	-
31440	-	42.8212**	-	-	74.0000	-	-	31.1788	-	-
36680	-	45.3103**	-	-	68.2000	-	-	22.8897	-	-
Horizontal Radiated Emission Result										
10480	-	58.0318**	-	-	68.2000	-	-	10.1682	-	-
15720	-	65.4979**	51.6118**	-	74.0000	54.0000	-	8.5021	2.3882	-
20960	-	40.2156**	-	-	74.0000	-	-	33.7844	-	-
26200	-	41.3900**	-	-	68.2000	-	-	26.8100	-	-
31440	-	42.4901**	-	-	74.0000	-	-	31.5099	-	-
36680	-	46.0435**	-	-	68.2000	-	-	22.1565	-	-

Remarks: Pass Result	Marginal Result	Fail Result

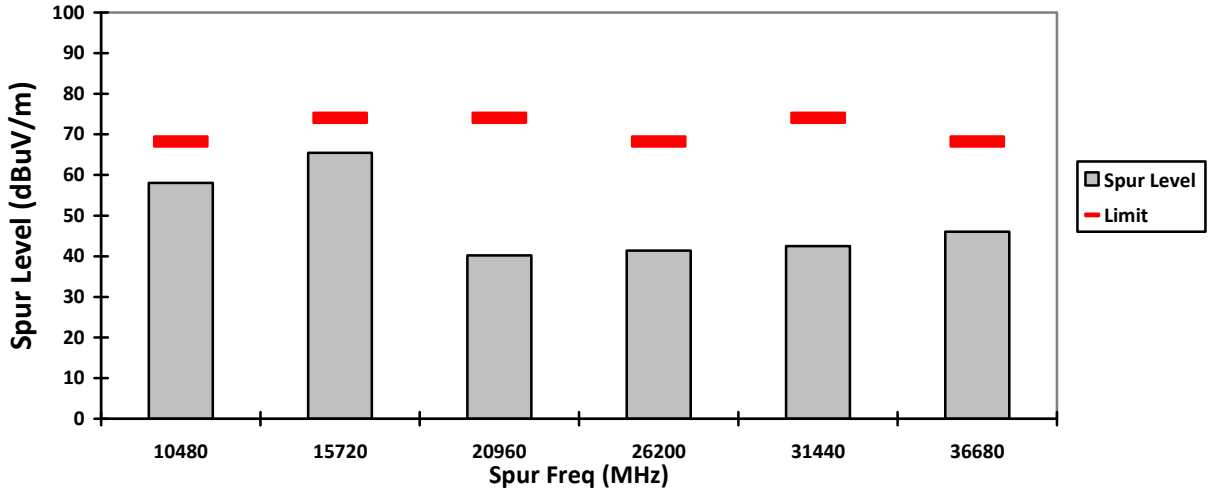
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

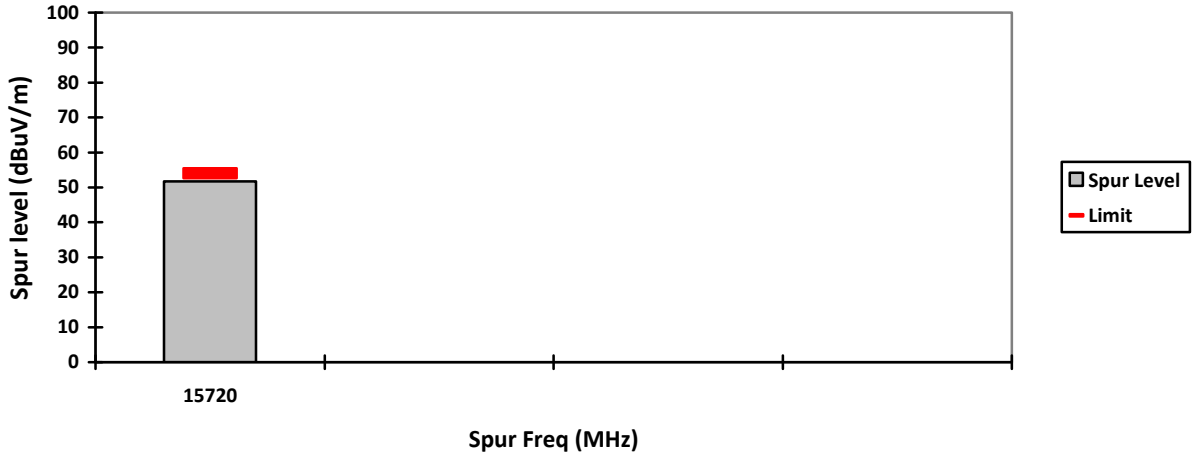
VERTICAL, PK



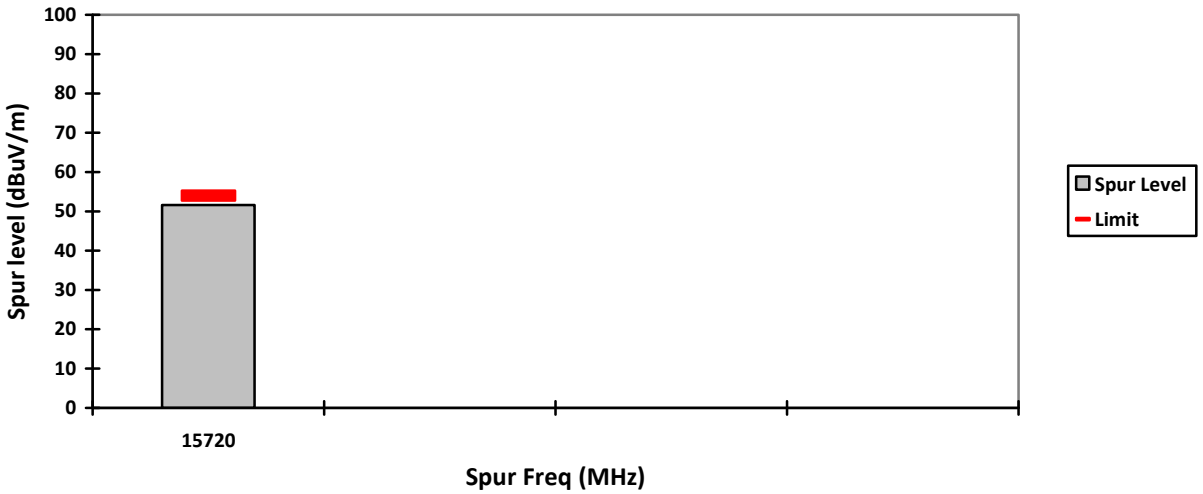
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5260.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

Radiated Emission (Low Channel) tabular data

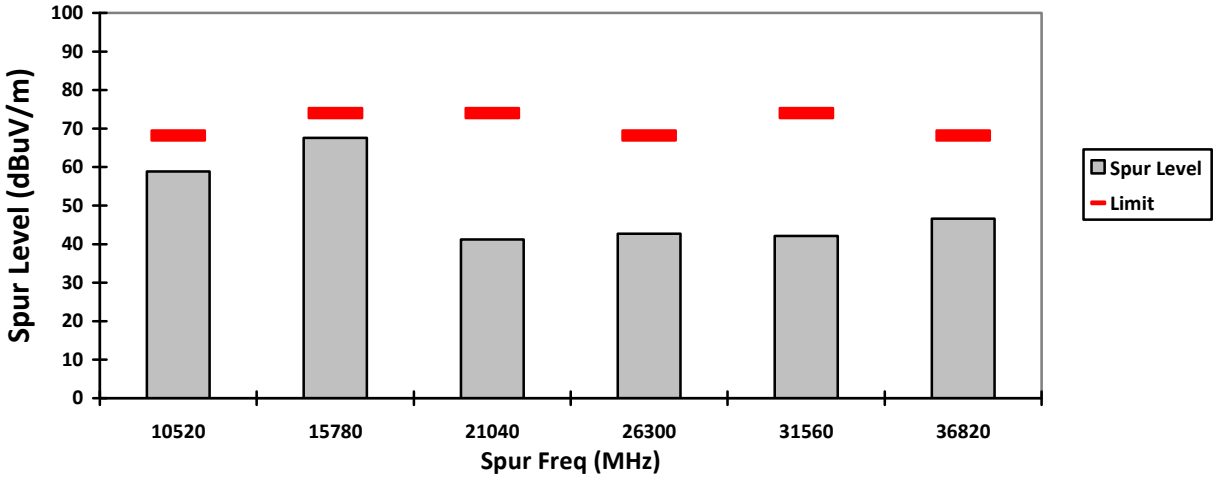
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10520	-	58.8617**	-	-	68.2000	-	-	9.3383	-	-
15780	-	67.5581**	52.7123**	-	74.0000	54.0000	-	6.4419	1.2877	-
21040	-	41.1731**	-	-	74.0000	-	-	32.8269	-	-
26300	-	42.7377**	-	-	68.2000	-	-	25.4623	-	-
31560	-	42.0969**	-	-	74.0000	-	-	31.9031	-	-
36820	-	46.6084**	-	-	68.2000	-	-	21.5916	-	-
Horizontal Radiated Emission Result										
10520	-	57.5098**	-	-	68.2000	-	-	10.6902	-	-
15780	-	67.0280**	52.7159**	-	74.0000	54.0000	-	6.9720	1.2841	-
21040	-	39.5691**	-	-	74.0000	-	-	34.4309	-	-
26300	-	43.0361**	-	-	68.2000	-	-	25.1639	-	-
31560	-	42.8417**	-	-	74.0000	-	-	31.1583	-	-
36820	-	44.8568**	-	-	68.2000	-	-	23.3432	-	-

Remarks: Pass Result	Marginal Result	Fail Result

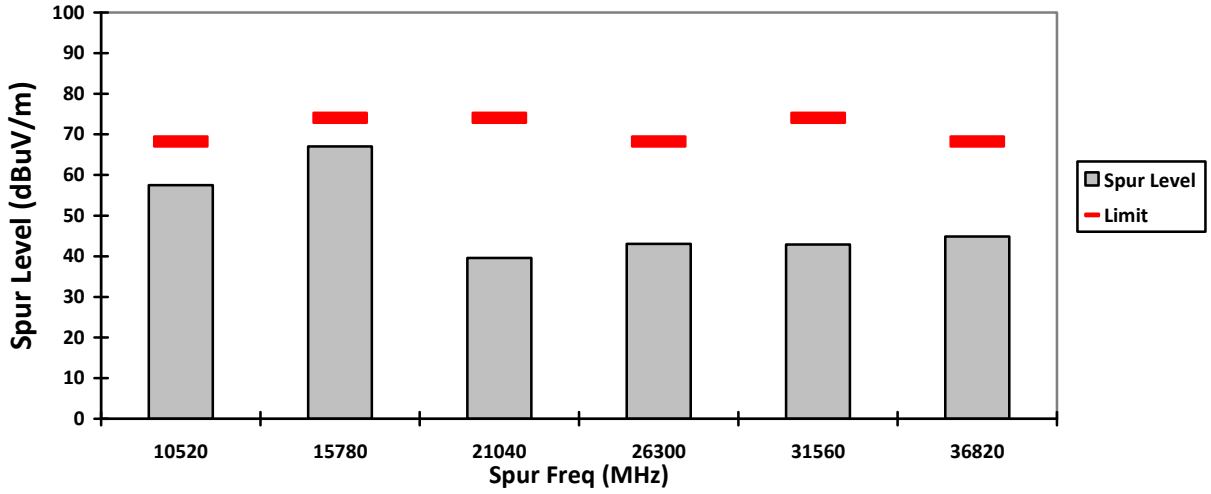
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

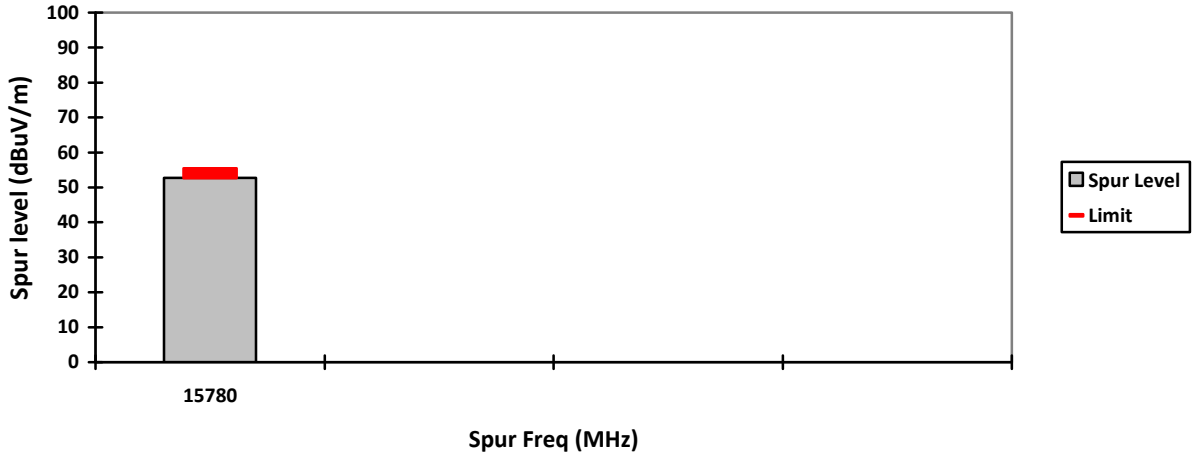
VERTICAL, PK



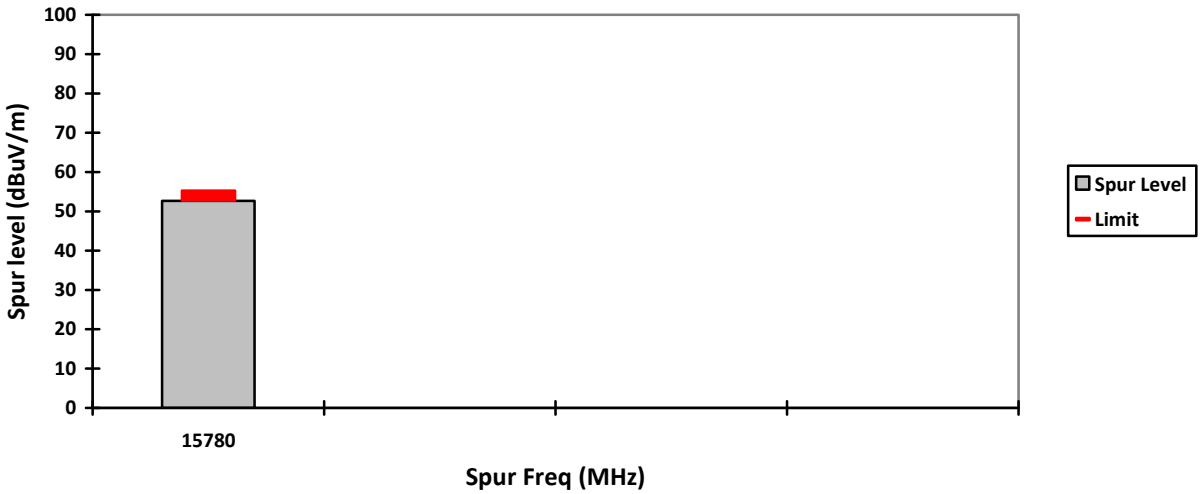
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Mid Test Frequency: 5300.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

Radiated Emission (Mid Channel) tabular data

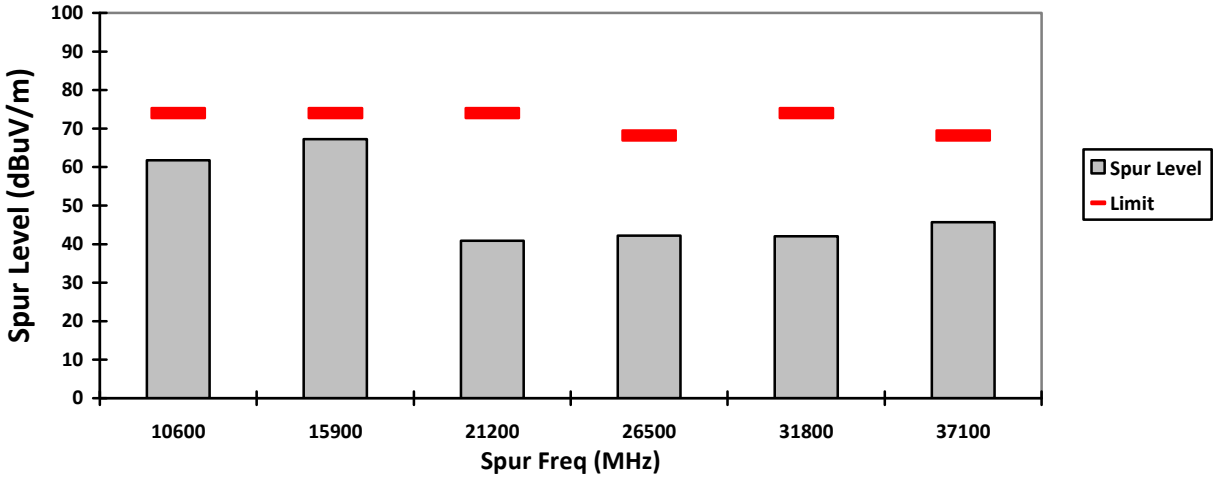
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10600	-	61.7711**	47.6073**	-	74.0000	54.0000	-	12.2289	6.3927	-
15900	-	67.2628**	53.5567**	-	74.0000	54.0000	-	6.7372	0.4433	-
21200	-	40.8493**	-	-	74.0000	-	-	33.1507	-	-
26500	-	42.1852**	-	-	68.2000	-	-	26.0148	-	-
31800	-	42.0796**	-	-	74.0000	-	-	31.9204	-	-
37100	-	45.6471**	-	-	68.2000	-	-	22.5529	-	-
Horizontal Radiated Emission Result										
10600	-	61.5161**	47.6496**	-	74.0000	54.0000	-	12.4839	6.3504	-
15900	-	67.6286**	53.5528**	-	74.0000	54.0000	-	6.3714	0.4472	-
21200	-	40.5702**	-	-	74.0000	-	-	33.4298	-	-
26500	-	42.9242**	-	-	68.2000	-	-	25.2758	-	-
31800	-	41.9448**	-	-	74.0000	-	-	32.0552	-	-
37100	-	47.8869**	-	-	68.2000	-	-	20.3131	-	-

Remarks: Pass Result	Marginal Result	Fail Result

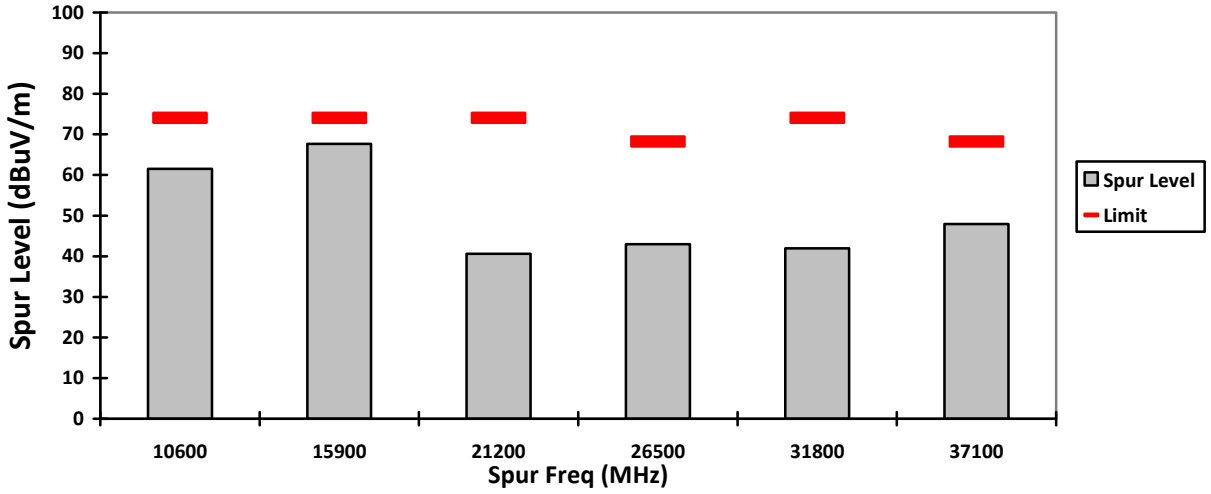
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

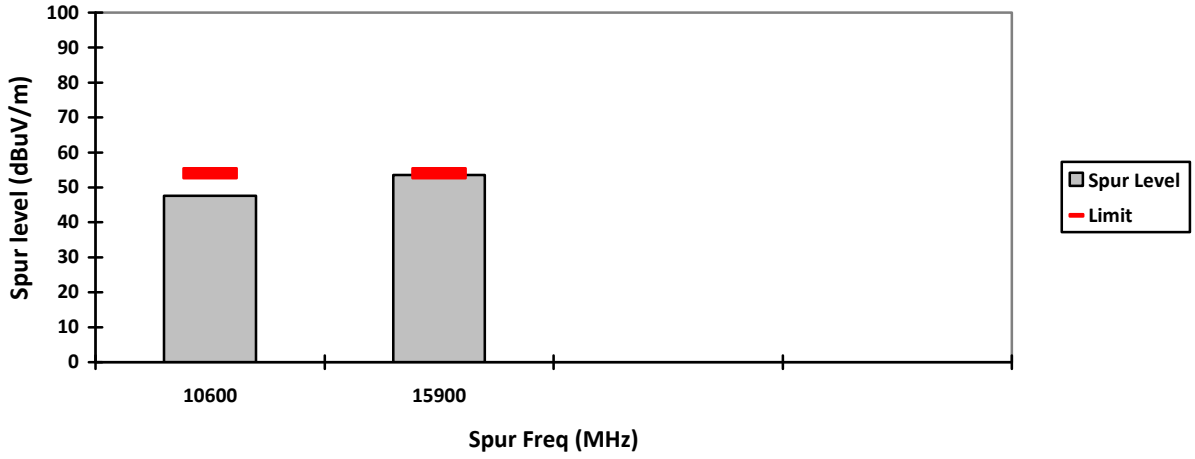
VERTICAL, PK



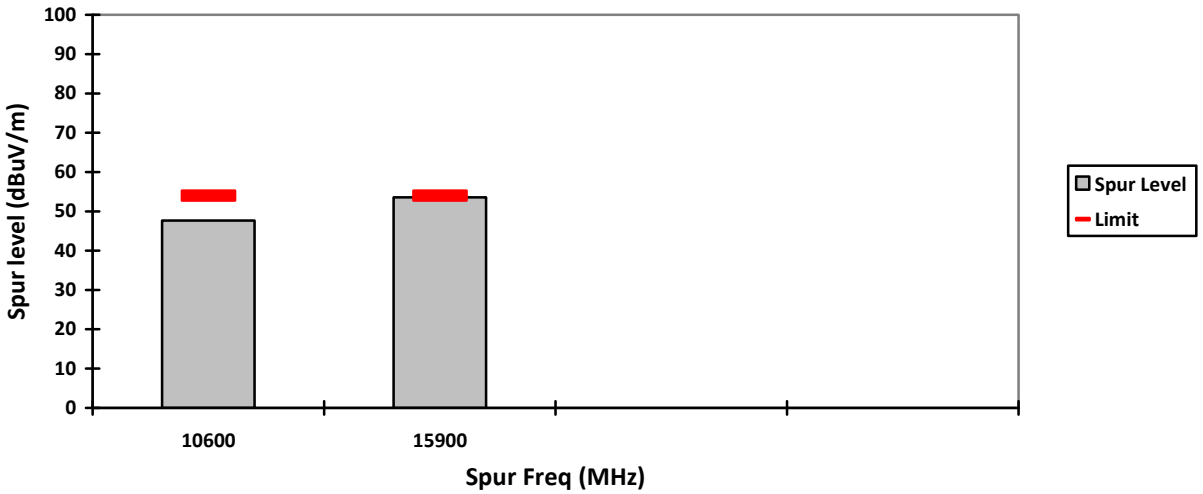
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5320.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

Radiated Emission (High Channel) tabular data

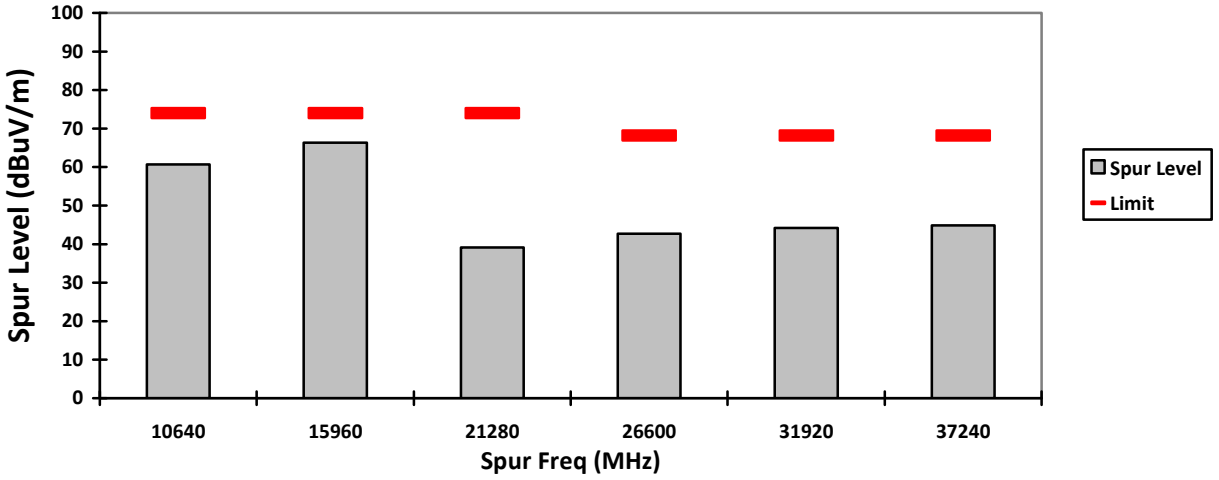
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10640	-	60.6748**	46.8769**	-	74.0000	54.0000	-	13.3252	7.1231	-
15960	-	66.3066**	52.3903**	-	74.0000	54.0000	-	7.6934	1.6097	-
21280	-	39.1195**	-	-	74.0000	-	-	34.8805	-	-
26600	-	42.7019**	-	-	68.2000	-	-	25.4981	-	-
31920	-	44.1937**	-	-	68.2000	-	-	24.0063	-	-
37240	-	44.8414**	-	-	68.2000	-	-	23.3586	-	-
Horizontal Radiated Emission Result										
10640	-	61.0576**	46.8955**	-	74.0000	54.0000	-	12.9424	7.1045	-
15960	-	66.3519**	52.4034**	-	74.0000	54.0000	-	7.6481	1.5966	-
21280	-	40.4516**	-	-	74.0000	-	-	33.5484	-	-
26600	-	42.3962**	-	-	68.2000	-	-	25.8038	-	-
31920	-	43.0109**	-	-	68.2000	-	-	25.1891	-	-
37240	-	45.9539**	-	-	68.2000	-	-	22.2461	-	-

Remarks: Pass Result	Marginal Result	Fail Result

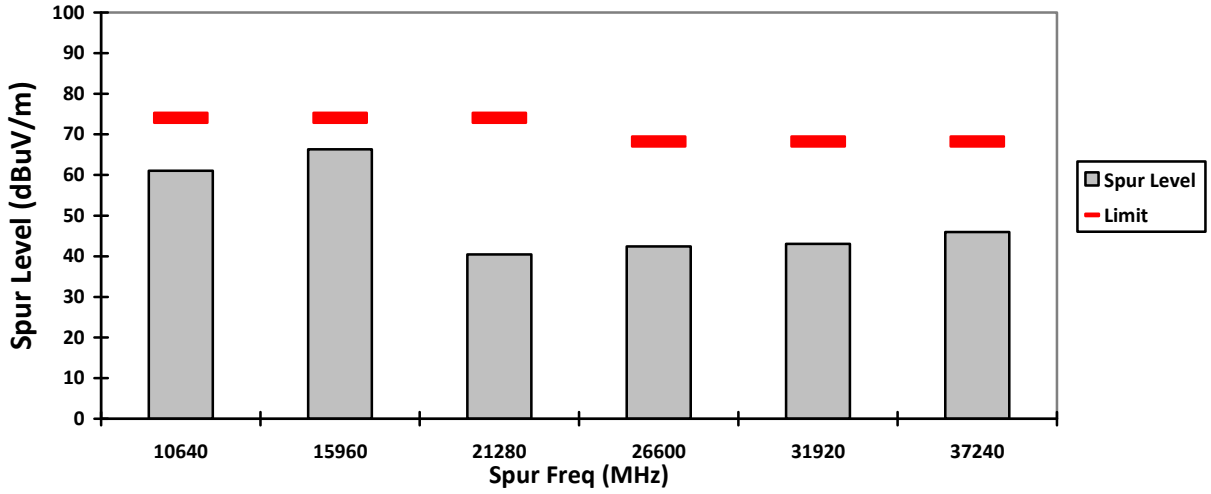
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

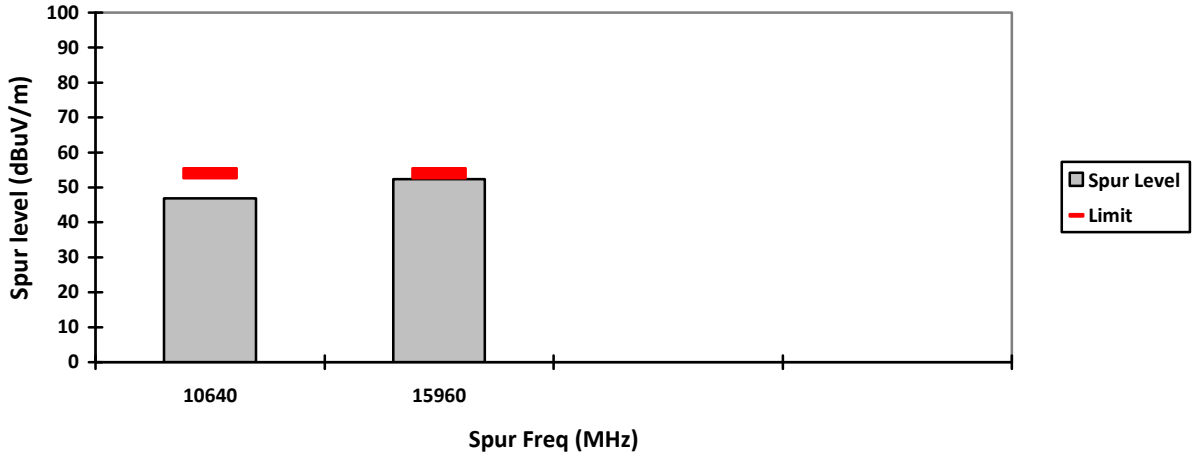
VERTICAL, PK



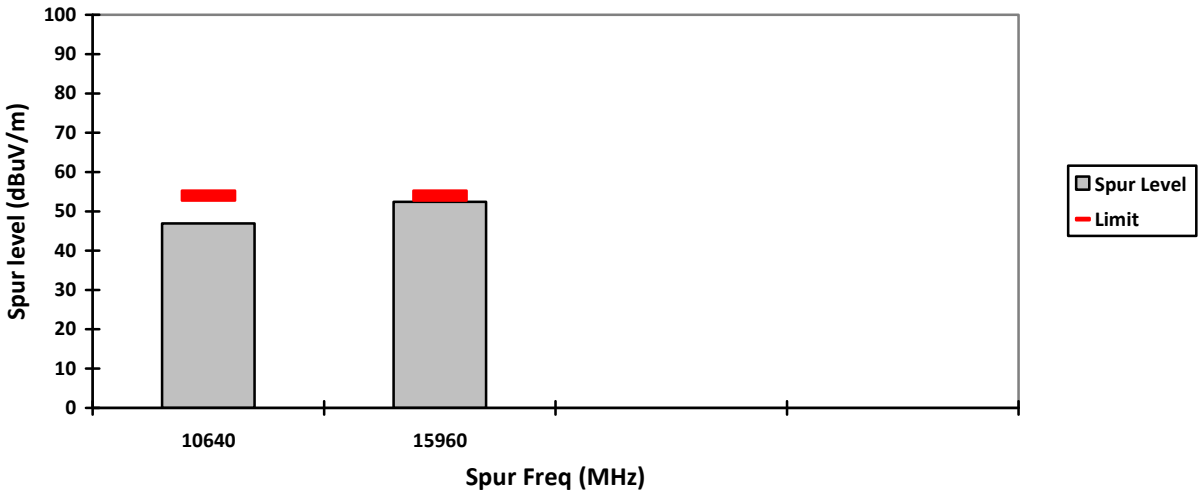
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5500.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

Radiated Emission (Low Channel) tabular data

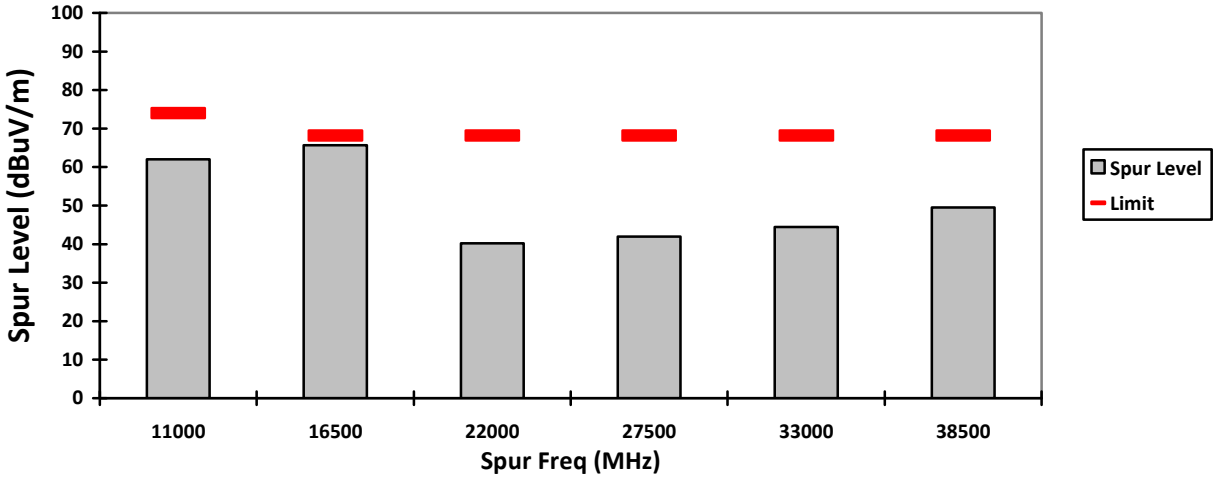
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11000	-	61.9862**	48.1241**	-	74.0000	54.0000	-	12.0138	5.8759	-
16500	-	65.6321**	-	-	68.2000	-	-	2.5679	-	-
22000	-	40.1898**	-	-	68.2000	-	-	28.0102	-	-
27500	-	41.9917**	-	-	68.2000	-	-	26.2083	-	-
33000	-	44.4721**	-	-	68.2000	-	-	23.7279	-	-
38500	-	49.4766**	-	-	68.2000	-	-	18.7234	-	-
Horizontal Radiated Emission Result										
11000	-	61.8428**	48.1105**	-	74.0000	54.0000	-	12.1572	5.8895	-
16500	-	64.9148**	-	-	68.2000	-	-	3.2852	-	-
22000	-	42.0919**	-	-	68.2000	-	-	26.1081	-	-
27500	-	41.9406**	-	-	68.2000	-	-	26.2594	-	-
33000	-	42.5043**	-	-	68.2000	-	-	25.6957	-	-
38500	-	49.4675**	-	-	68.2000	-	-	18.7325	-	-

Remarks: Pass Result	Marginal Result	Fail Result

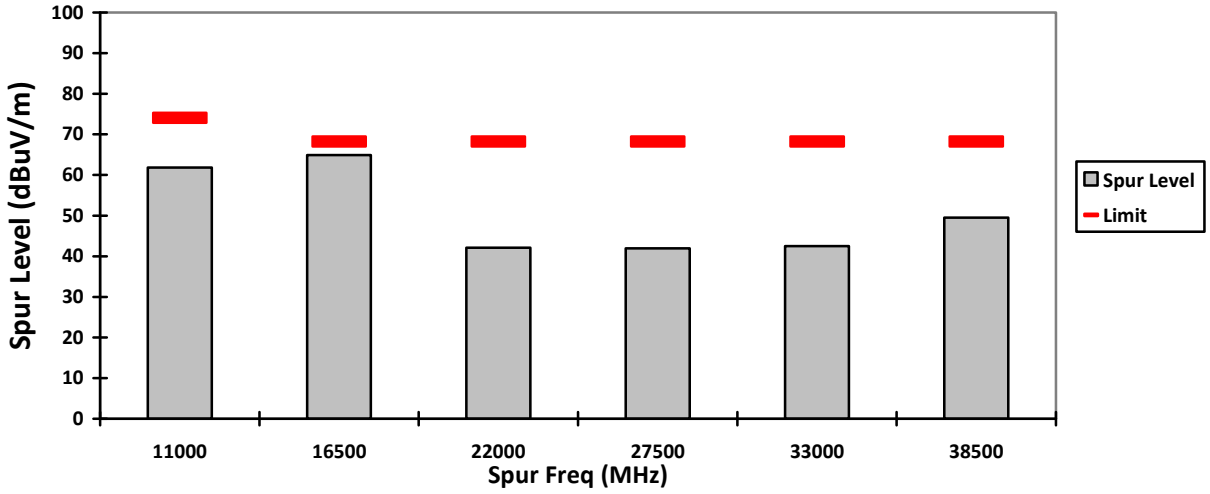
Temperature (degC): 23.1 Humidity (%): 67.4
Test Performed by: Nazrin & Rezza Test Date: Thu, 30 May, 2024
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

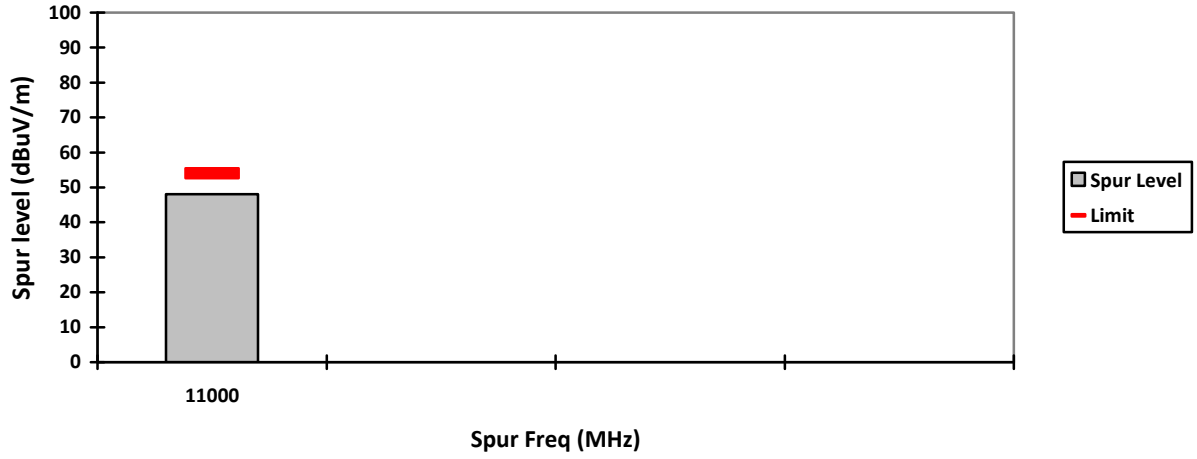
VERTICAL, PK



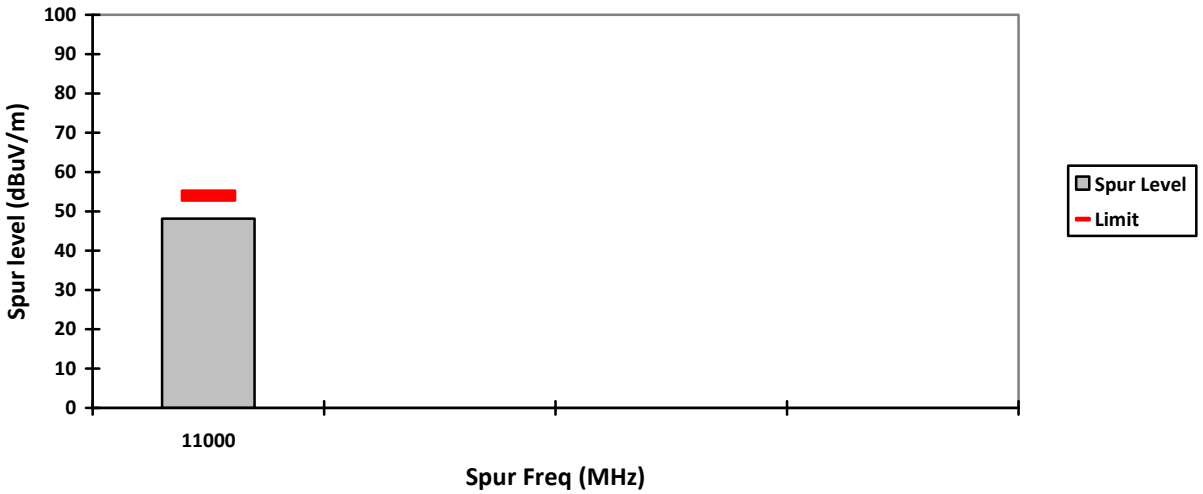
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: Mid Test Frequency: 5580.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

Radiated Emission (Mid Channel) tabular data

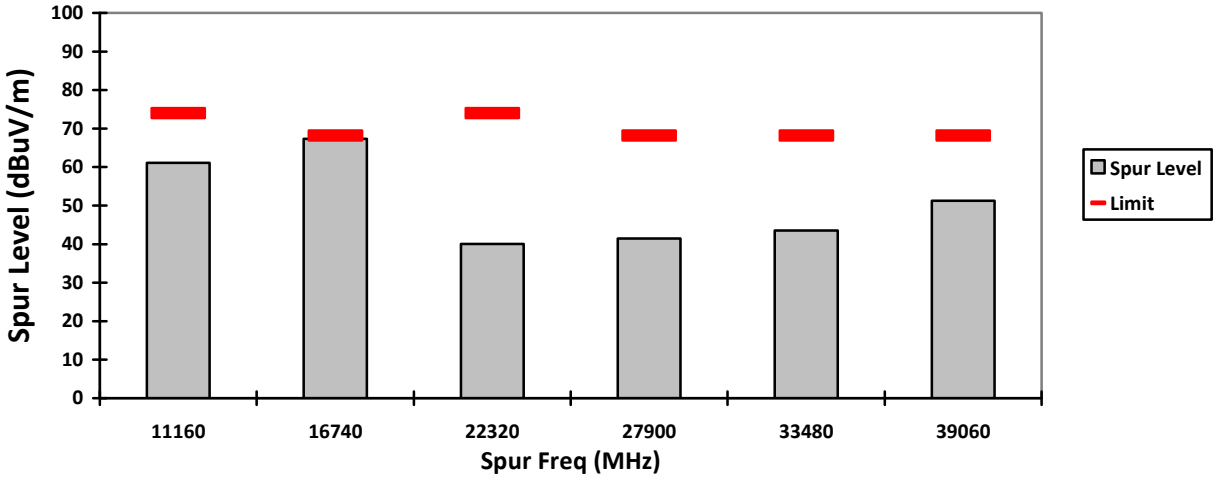
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11160	-	61.0709**	47.1198**	-	74.0000	54.0000	-	12.9291	6.8802	-
16740	-	67.3566**	-	-	68.2000	-	-	0.8434	-	-
22320	-	40.0887**	-	-	74.0000	-	-	33.9113	-	-
27900	-	41.4457**	-	-	68.2000	-	-	26.7543	-	-
33480	-	43.4986**	-	-	68.2000	-	-	24.7014	-	-
39060	-	51.2769**	-	-	68.2000	-	-	16.9231	-	-
Horizontal Radiated Emission Result										
11160	-	61.5216**	47.0903**	-	74.0000	54.0000	-	12.4784	6.9097	-
16740	-	66.3983**	-	-	68.2000	-	-	1.8017	-	-
22320	-	40.1837**	-	-	74.0000	-	-	33.8163	-	-
27900	-	42.1112**	-	-	68.2000	-	-	26.0888	-	-
33480	-	42.5265**	-	-	68.2000	-	-	25.6735	-	-
39060	-	51.1195**	-	-	68.2000	-	-	17.0805	-	-

Remarks: Pass Result	Marginal Result	Fail Result

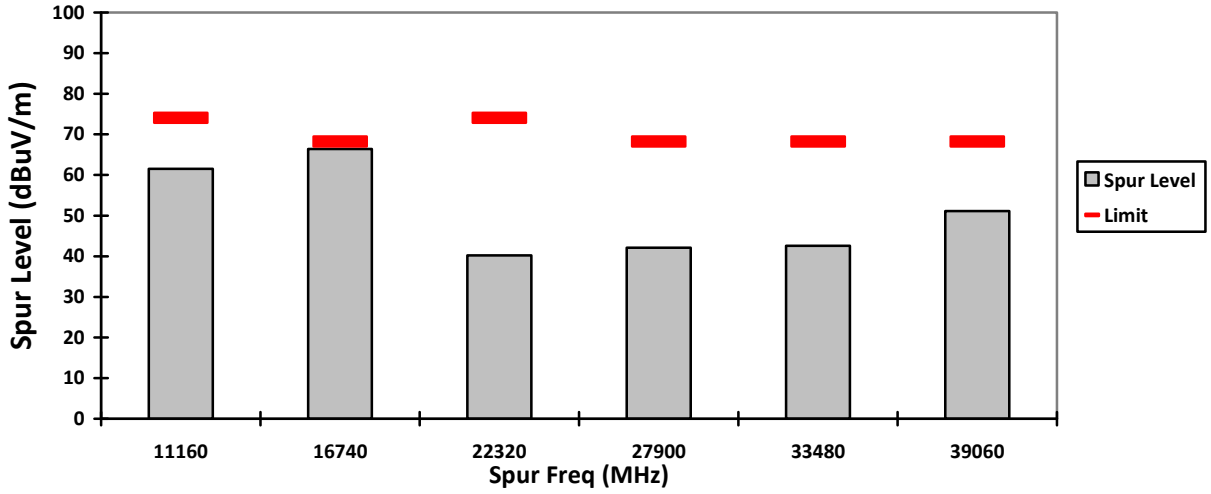
Temperature (degC): 23.1 Humidity (%): 67.4
Test Performed by: Nazrin & Rezza Test Date: Thu, 30 May, 2024
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

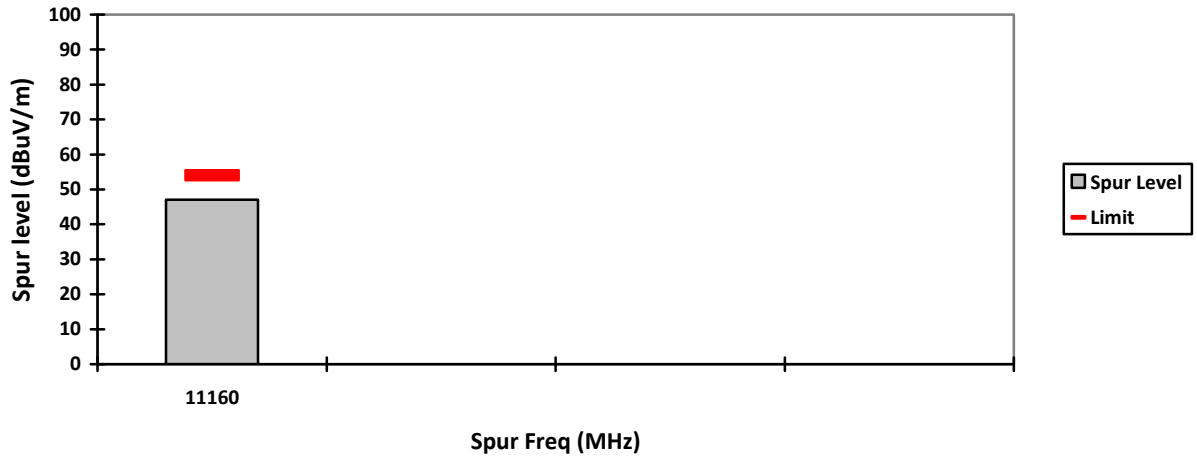
VERTICAL, PK



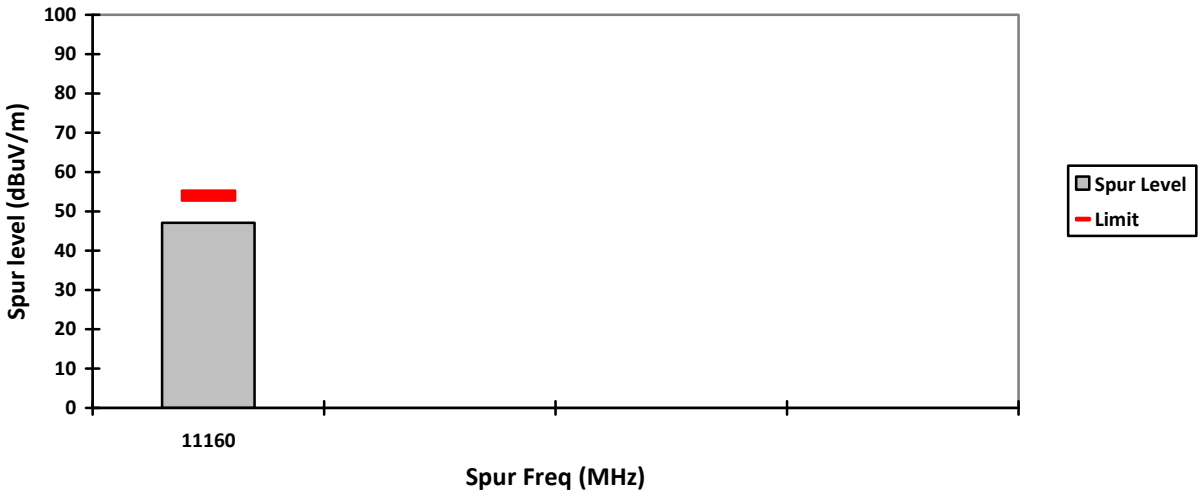
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Straddle Test Frequency: 5720.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

Radiated Emission (Straddle Channel) tabular data

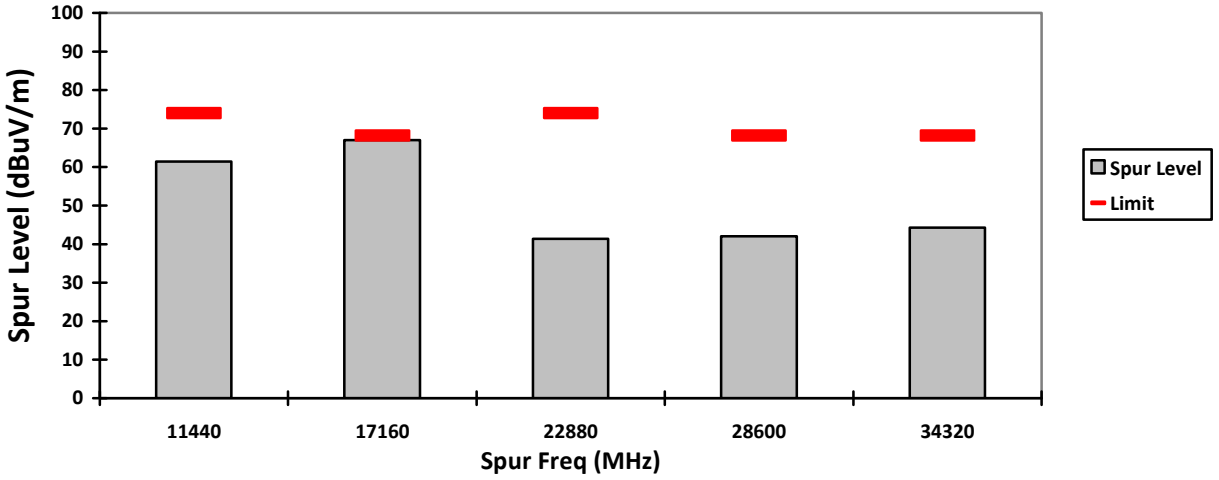
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11440	-	61.4644**	47.5136**	-	74.0000	54.0000	-	12.5356	6.4864	-
17160	-	66.9598**	-	-	68.2000	-	-	1.2402	-	-
22880	-	41.3548**	-	-	74.0000	-	-	32.6452	-	-
28600	-	42.0111**	-	-	68.2000	-	-	26.1889	-	-
34320	-	44.2974**	-	-	68.2000	-	-	23.9026	-	-
										-
Horizontal Radiated Emission Result										
11440	-	61.1591**	47.5137**	-	74.0000	54.0000	-	12.8409	6.4863	-
17160	-	67.7405**	-	-	68.2000	-	-	0.4595	-	-
22880	-	39.8554**	-	-	74.0000	-	-	34.1446	-	-
28600	-	41.1479**	-	-	68.2000	-	-	27.0521	-	-
34320	-	46.0724**	-	-	68.2000	-	-	22.1276	-	-
										-

Remarks: Pass Result	Marginal Result	Fail Result

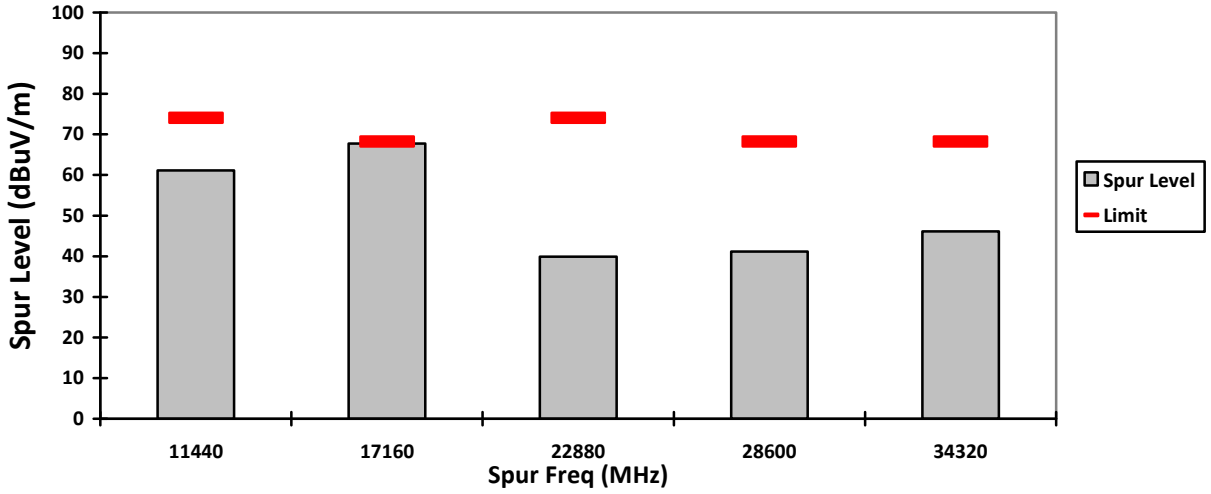
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

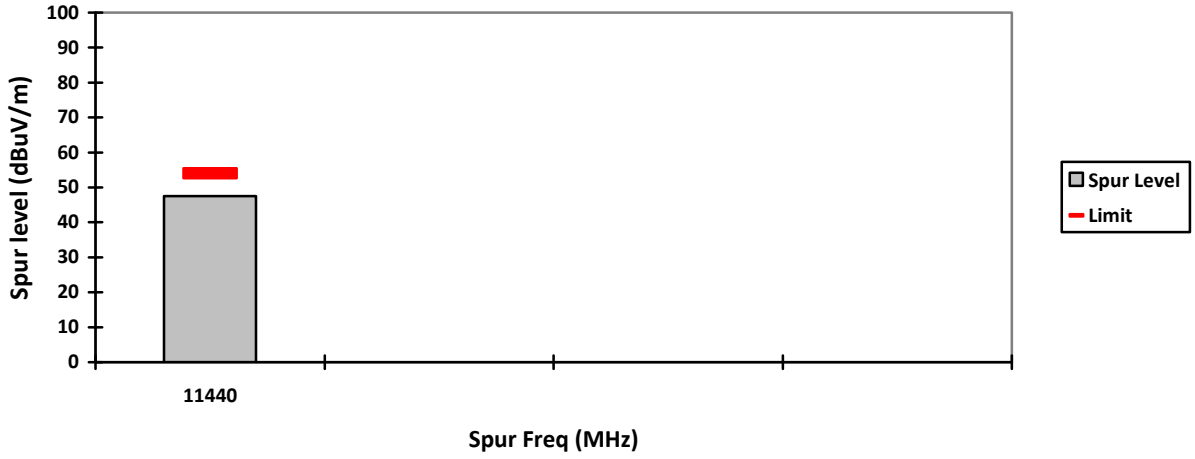
VERTICAL, PK



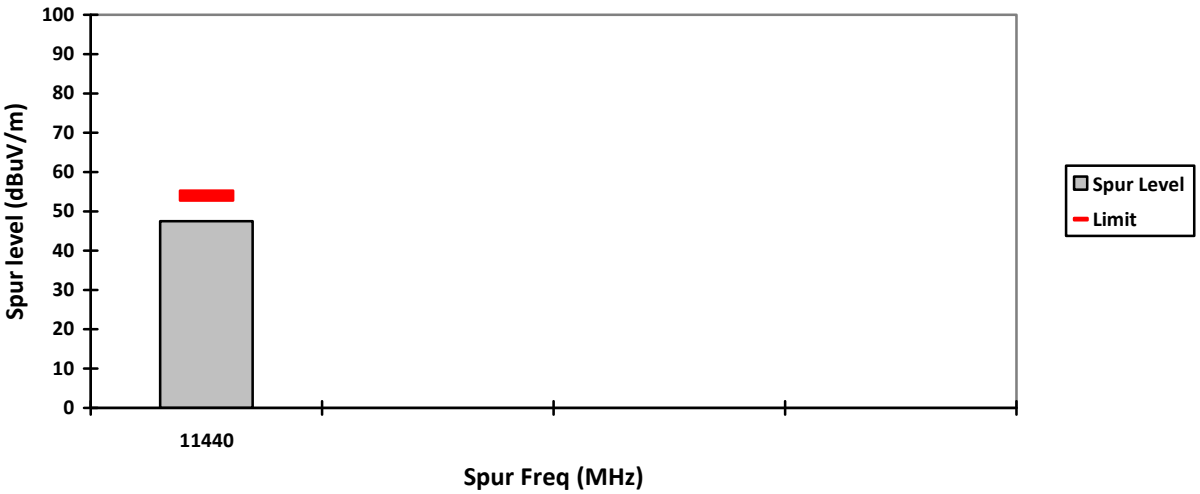
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5745.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

Radiated Emission (Low Channel) tabular data

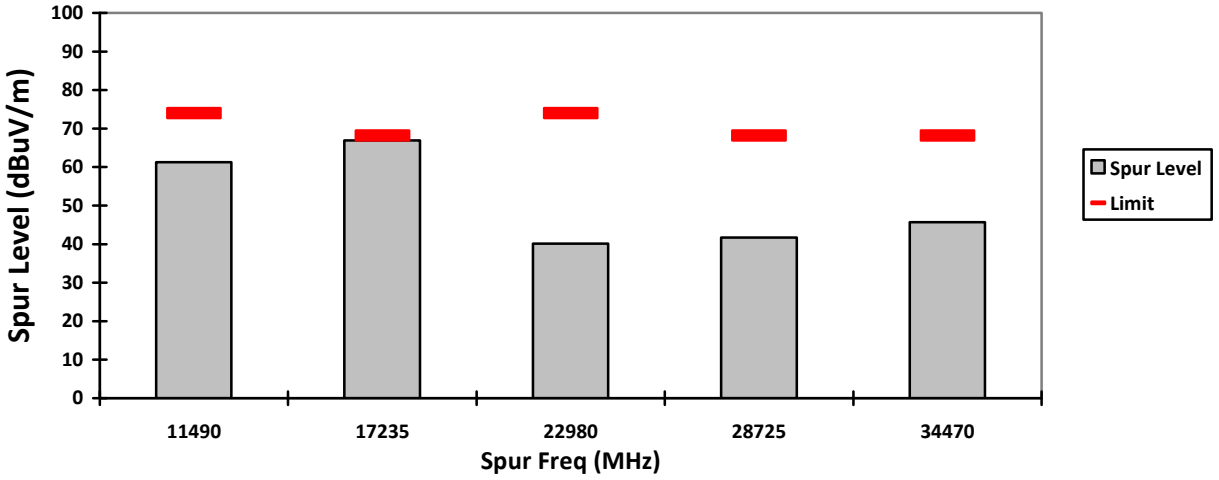
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11490	-	61.2726**	47.5865**	-	74.0000	54.0000	-	12.7274	6.4135	-
17235	-	66.9547**	-	-	68.2000	-	-	1.2453	-	-
22980	-	40.1039**	-	-	74.0000	-	-	33.8961	-	-
28725	-	41.7202**	-	-	68.2000	-	-	26.4798	-	-
34470	-	45.7172**	-	-	68.2000	-	-	22.4828	-	-
										-
Horizontal Radiated Emission Result										
11490	-	61.7673**	47.5964**	-	74.0000	54.0000	-	12.2327	6.4036	-
17235	-	66.9649**	-	-	68.2000	-	-	1.2351	-	-
22980	-	40.5269**	-	-	74.0000	-	-	33.4731	-	-
28725	-	42.5196**	-	-	68.2000	-	-	25.6804	-	-
34470	-	46.0261**	-	-	68.2000	-	-	22.1739	-	-
										-

Remarks: Pass Result	Marginal Result	Fail Result

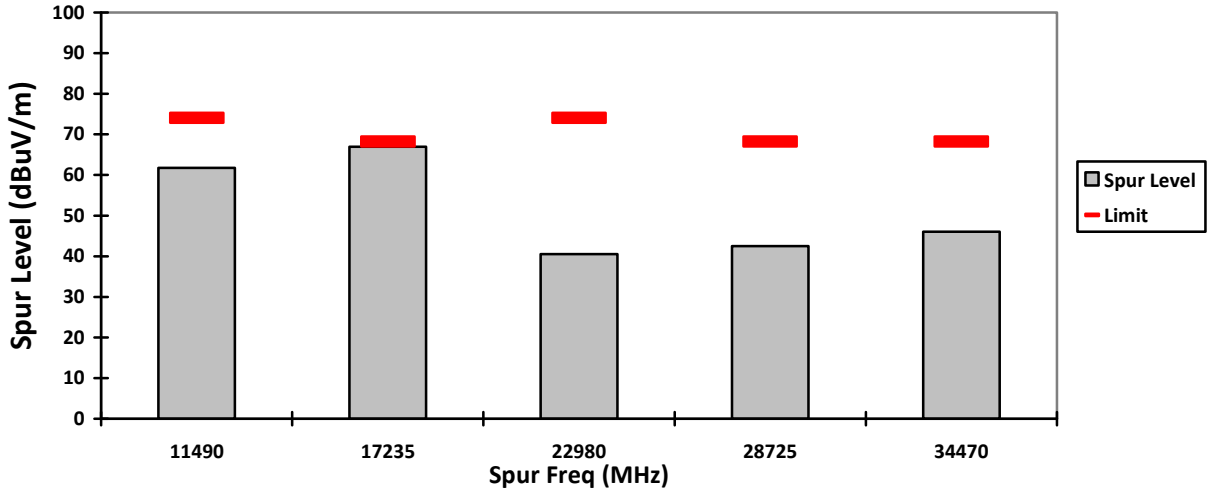
Temperature (degC): 23.1 Humidity (%): 67.4
Test Performed by: Nazrin & Rezza Test Date: Thu, 30 May, 2024
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

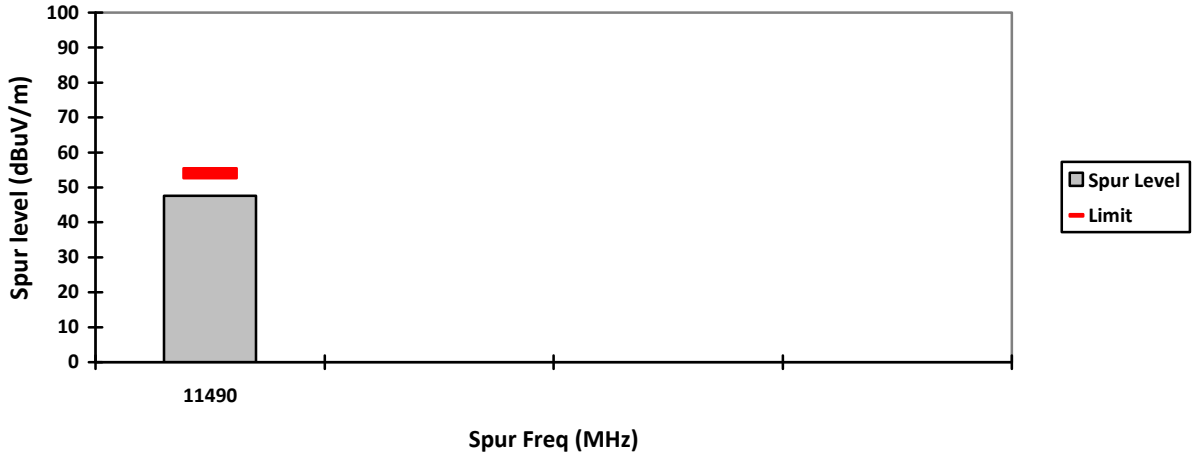
VERTICAL, PK



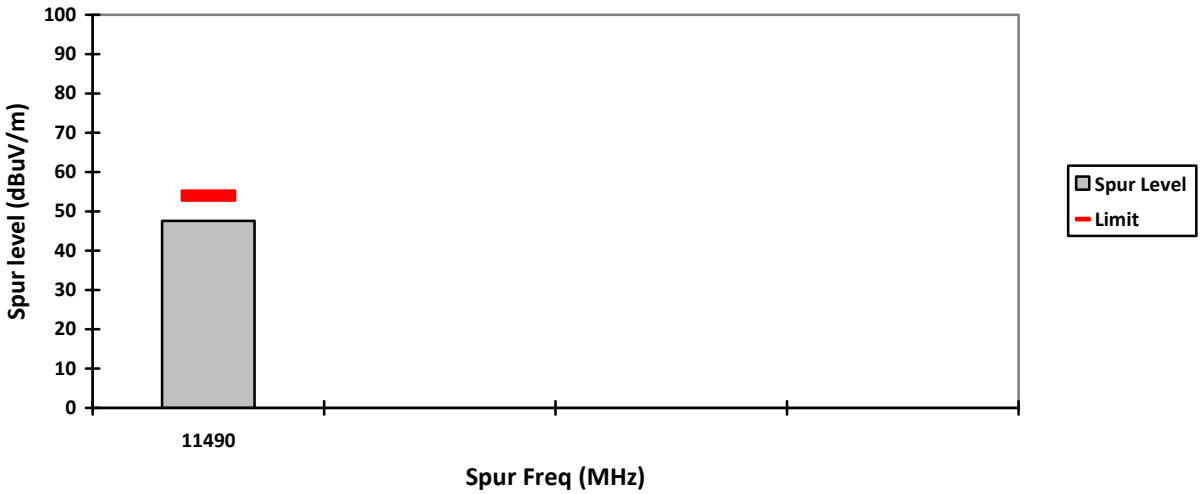
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission

Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: Mid Test Frequency: 5785.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

Radiated Emission (Mid Channel) tabular data

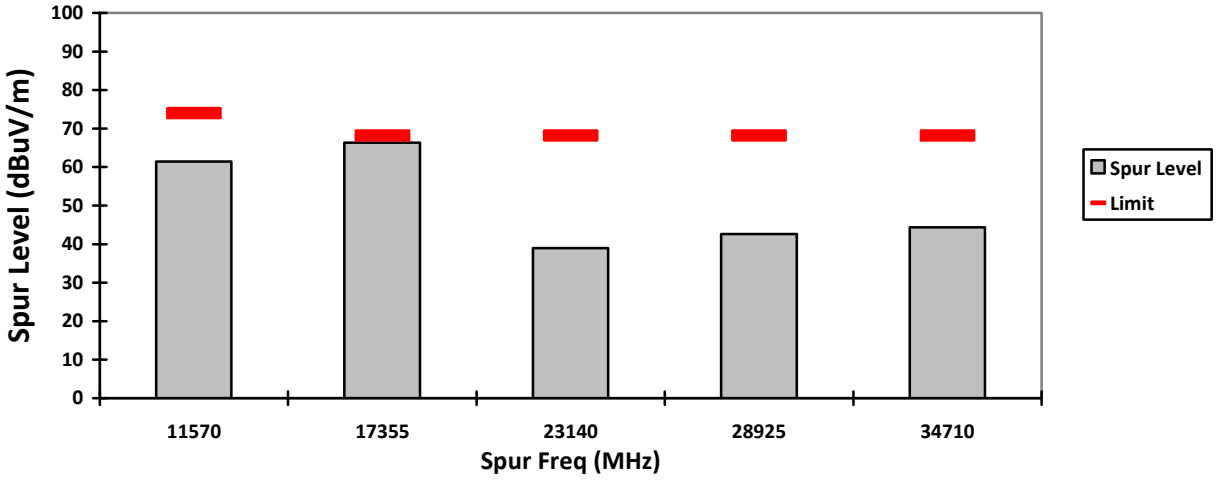
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11570	-	61.4538**	47.5909**	-	74.0000	54.0000	-	12.5462	6.4091	-
17355	-	66.3021**	-	-	68.2000	-	-	1.8979	-	-
23140	-	38.9874**	-	-	68.2000	-	-	29.2126	-	-
28925	-	42.6466**	-	-	68.2000	-	-	25.5534	-	-
34710	-	44.3947**	-	-	68.2000	-	-	23.8053	-	-
										-
Horizontal Radiated Emission Result										
11570	-	61.9758**	47.5805**	-	74.0000	54.0000	-	12.0242	6.4195	-
17355	-	66.6884**	-	-	68.2000	-	-	1.5116	-	-
23140	-	40.8785**	-	-	68.2000	-	-	27.3215	-	-
28925	-	43.4844**	-	-	68.2000	-	-	24.7156	-	-
34710	-	45.6866**	-	-	68.2000	-	-	22.5134	-	-
										-

Remarks: Pass Result	Marginal Result	Fail Result

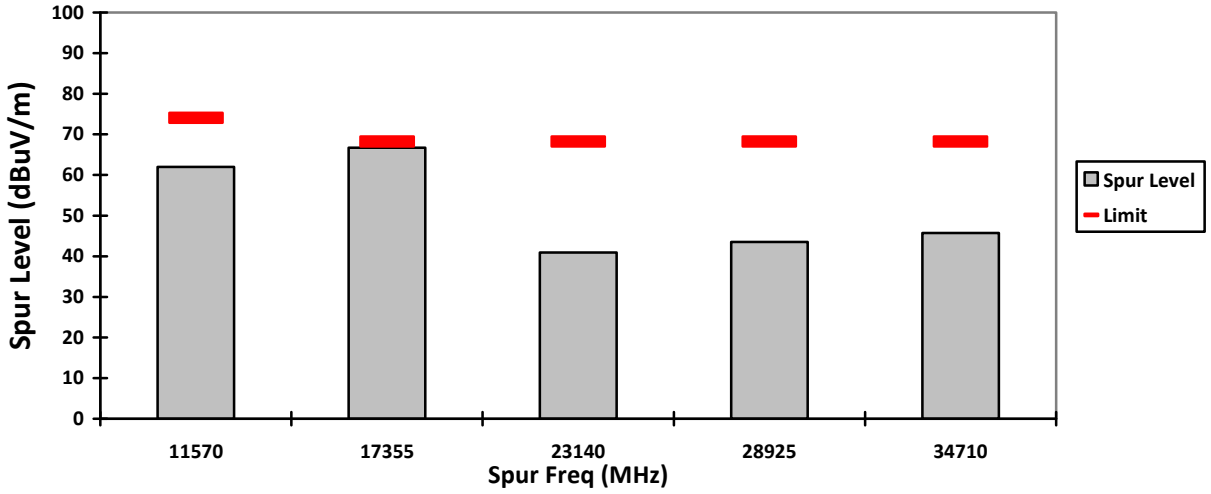
Temperature (degC): 23.1 Humidity (%): 67.4
Test Performed by: Nazrin & Rezza Test Date: Thu, 30 May, 2024
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

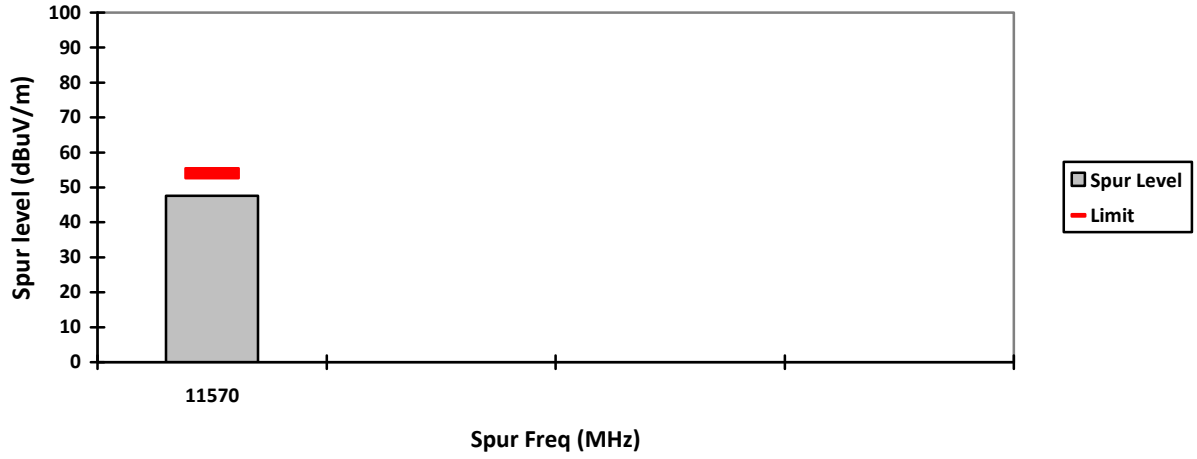
VERTICAL, PK



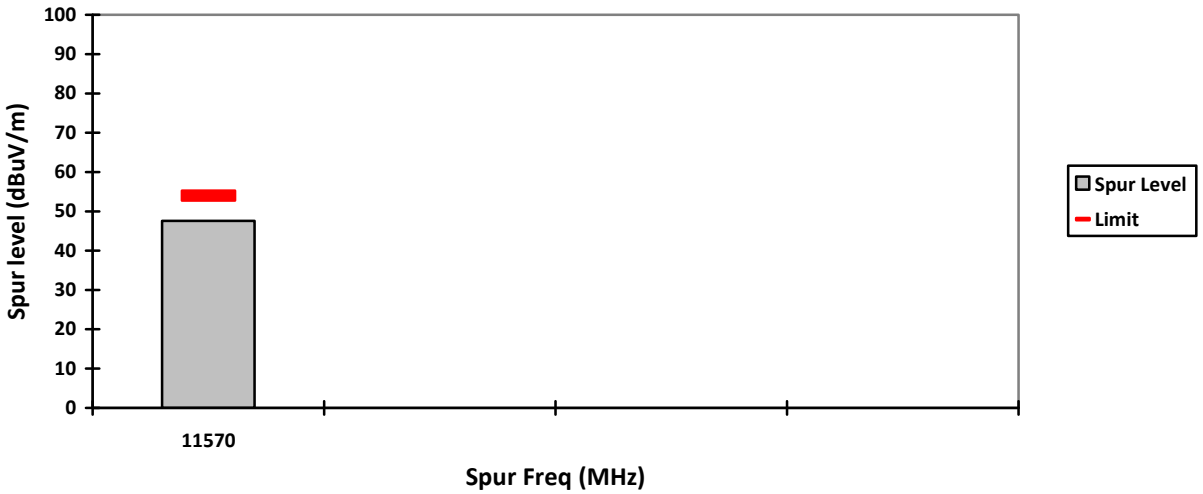
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5825.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11a 20MHz)

Radiated Emission (High Channel) tabular data

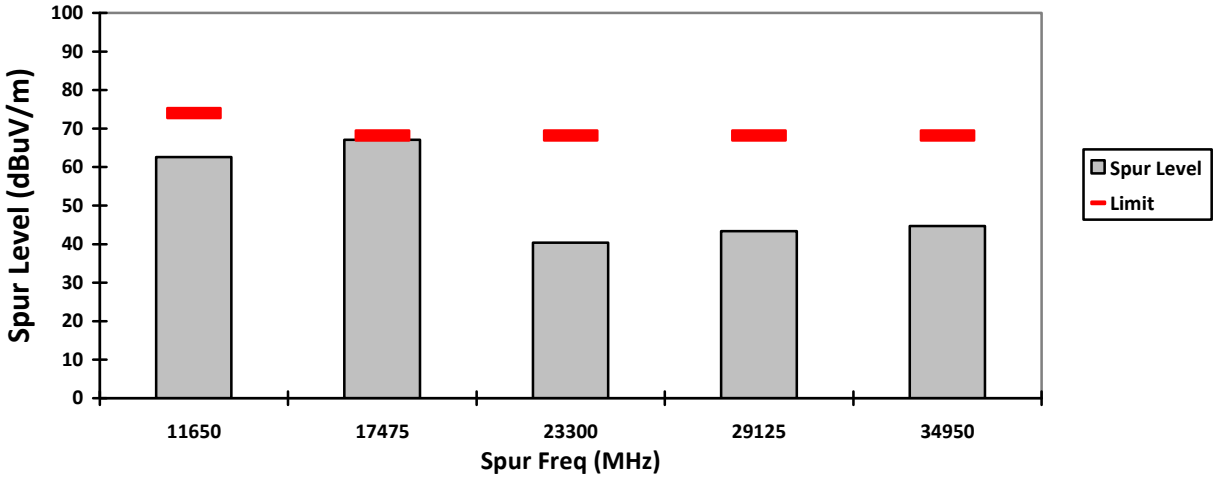
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11650	-	62.6293**	48.6801**	-	74.0000	54.0000	-	11.3707	5.3199	-
17475	-	67.1070**	-	-	68.2000	-	-	1.093	-	-
23300	-	40.3978**	-	-	68.2000	-	-	27.8022	-	-
29125	-	43.4032**	-	-	68.2000	-	-	24.7968	-	-
34950	-	44.7225**	-	-	68.2000	-	-	23.4775	-	-
										-
Horizontal Radiated Emission Result										
11650	-	62.5710**	48.6773**	-	74.0000	54.0000	-	11.4290	5.3227	-
17475	-	67.3189**	-	-	68.2000	-	-	0.8811	-	-
23300	-	40.3881**	-	-	68.2000	-	-	27.8119	-	-
29125	-	41.7769**	-	-	68.2000	-	-	26.4231	-	-
34950	-	43.7782**	-	-	68.2000	-	-	24.4218	-	-
										-

Remarks: Pass Result	Marginal Result	Fail Result

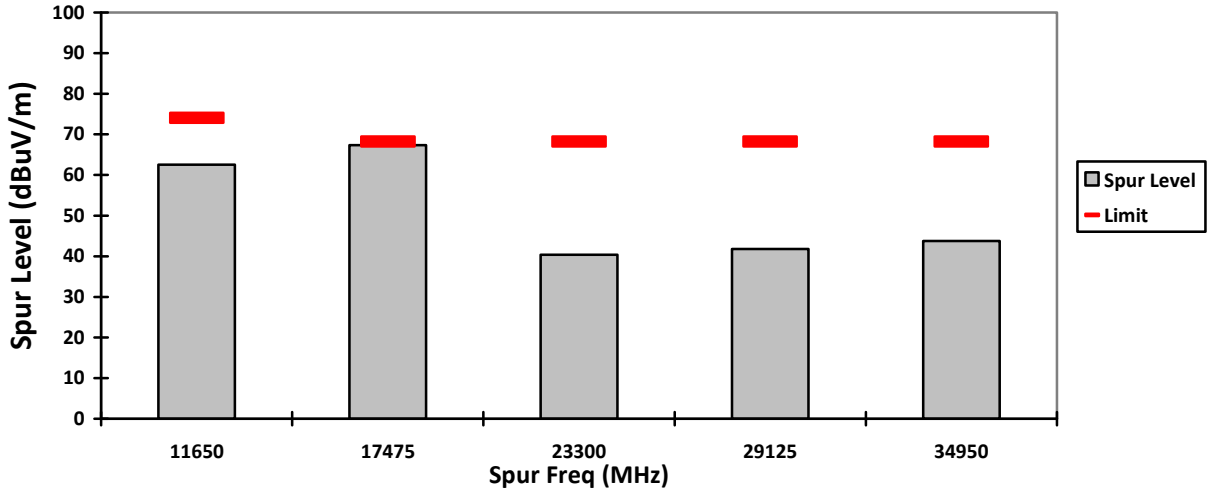
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

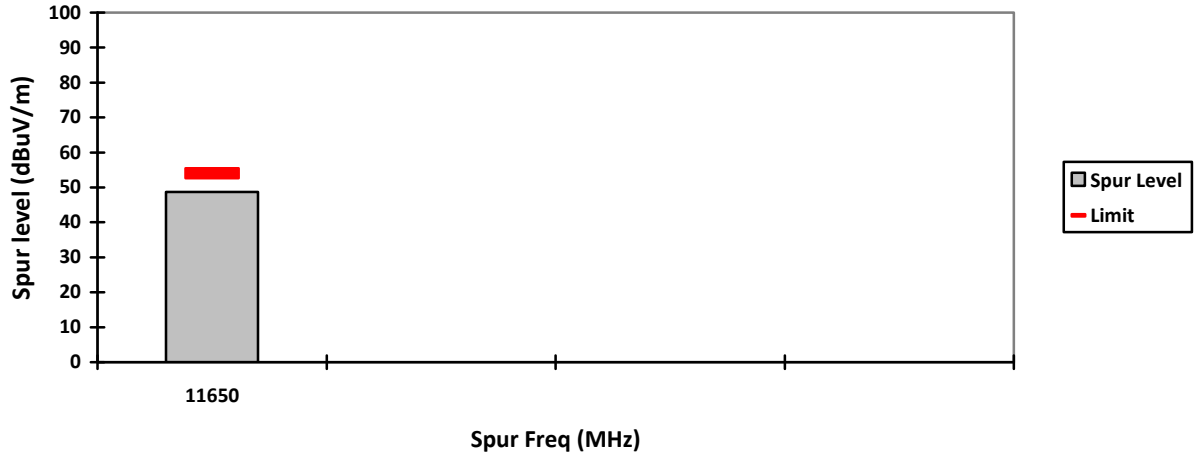
VERTICAL, PK



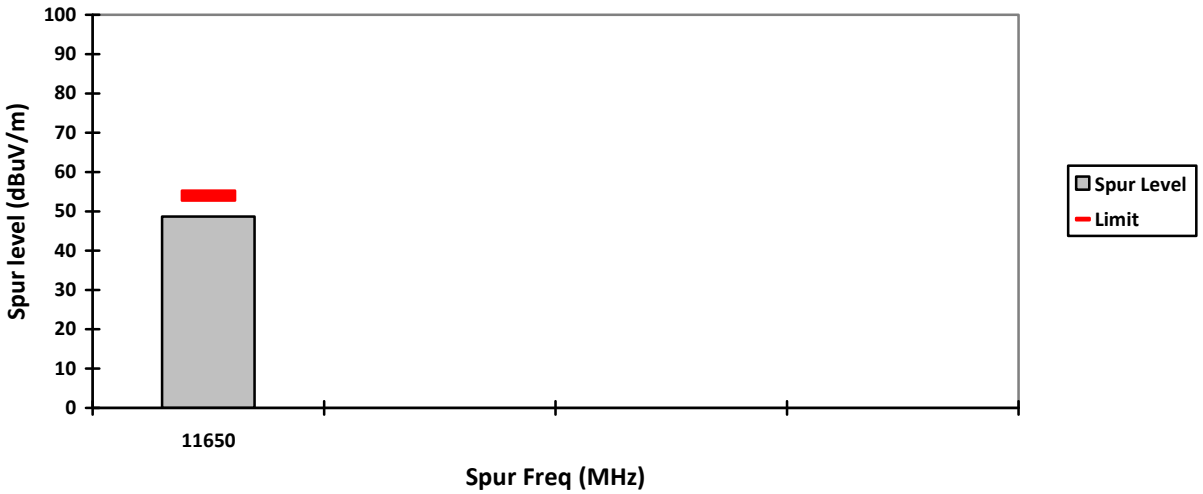
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



802.11n (HT20)

Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5180.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

Radiated Emission (Low Channel) tabular data

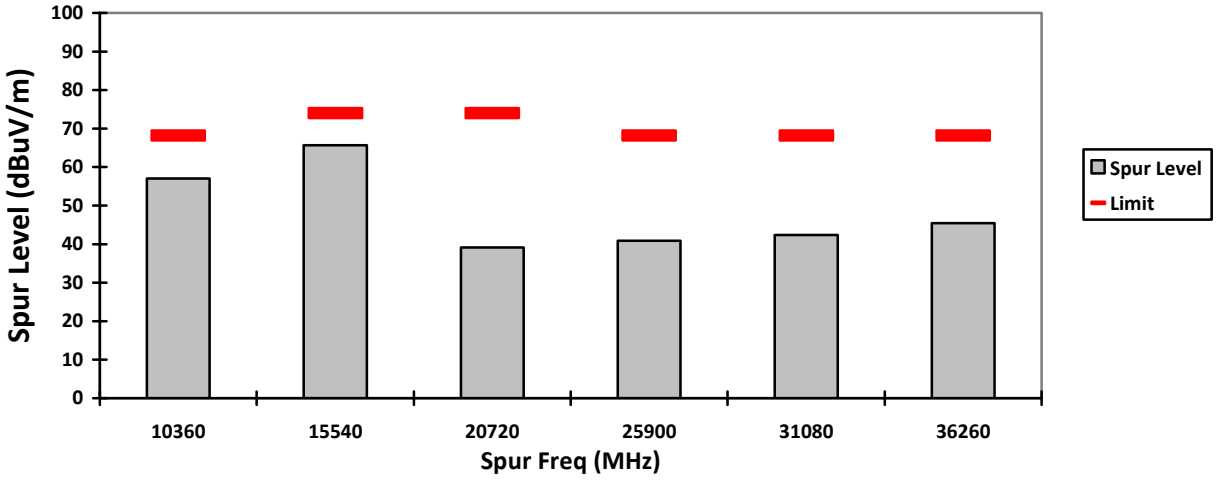
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10360	-	57.0874**	-	-	68.2000	-	-	11.1126	-	-
15540	-	65.6883**	51.9770**	-	74.0000	54.0000	-	8.3117	2.0230	-
20720	-	39.1397**	-	-	74.0000	-	-	34.8603	-	-
25900	-	40.9045**	-	-	68.2000	-	-	27.2955	-	-
31080	-	42.3732**	-	-	68.2000	-	-	25.8268	-	-
36260	-	45.4136**	-	-	68.2000	-	-	22.7864	-	-
Horizontal Radiated Emission Result										
10360	-	58.1091**	-	-	68.2000	-	-	10.0909	-	-
15540	-	66.0897**	51.9692**	-	74.0000	54.0000	-	7.9103	2.0308	-
20720	-	39.2964**	-	-	74.0000	-	-	34.7036	-	-
25900	-	41.5632**	-	-	68.2000	-	-	26.6368	-	-
31080	-	42.3745**	-	-	68.2000	-	-	25.8255	-	-
36260	-	45.0159**	-	-	68.2000	-	-	23.1841	-	-
`										

Remarks: Pass Result	Marginal Result	Fail Result

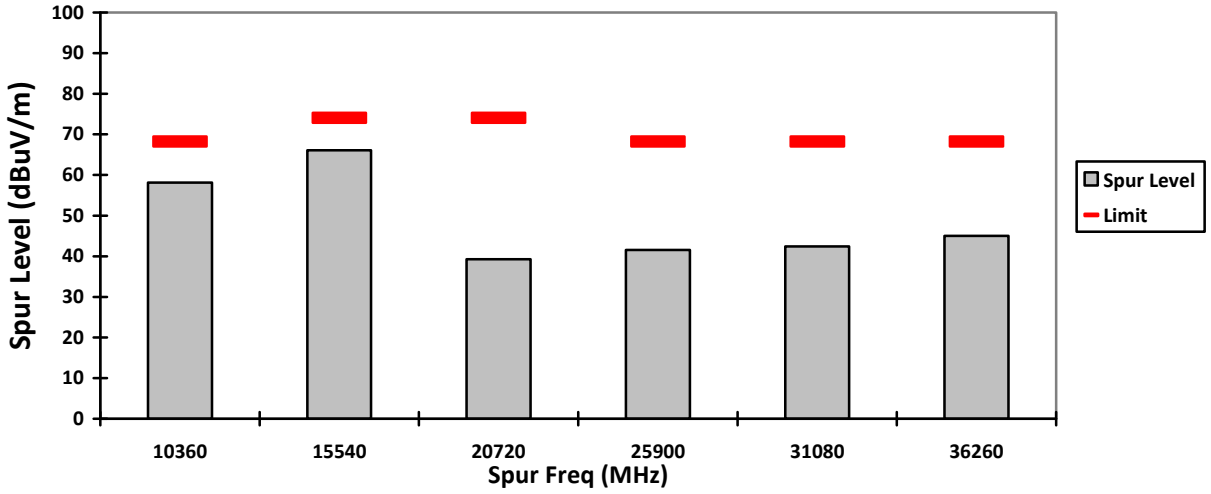
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Mon, 3 June, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

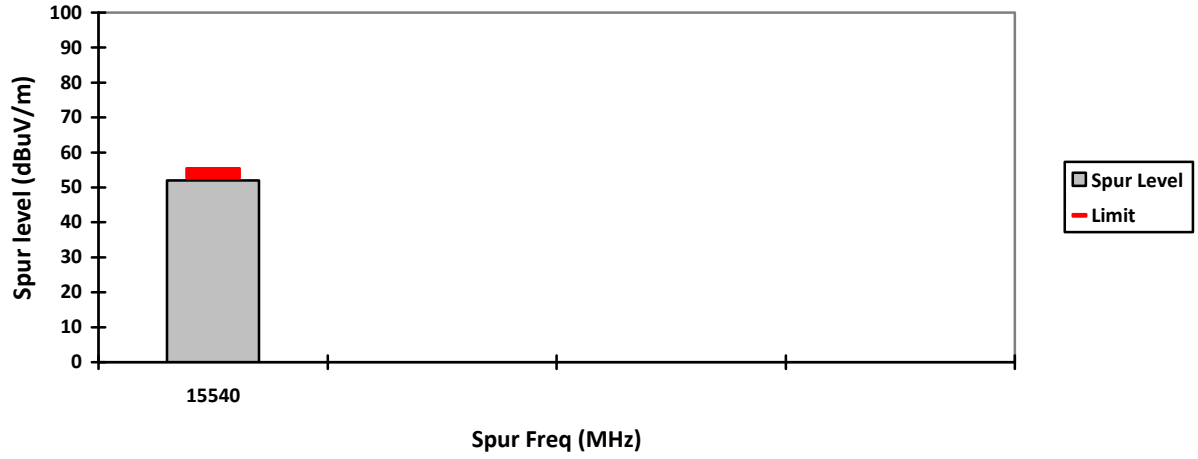
VERTICAL, PK



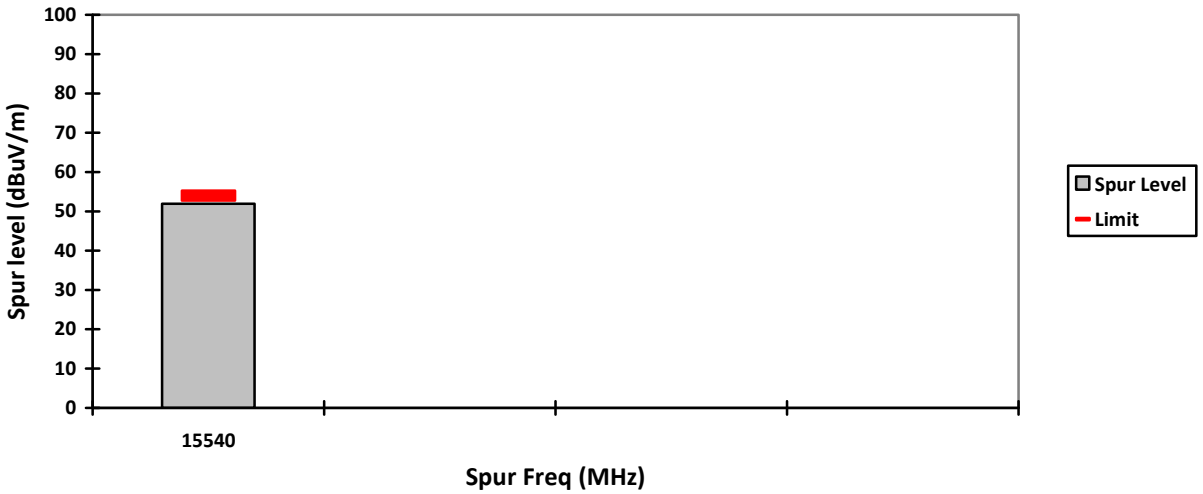
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Mid Test Frequency: 5220.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

Radiated Emission (Mid Channel) tabular data

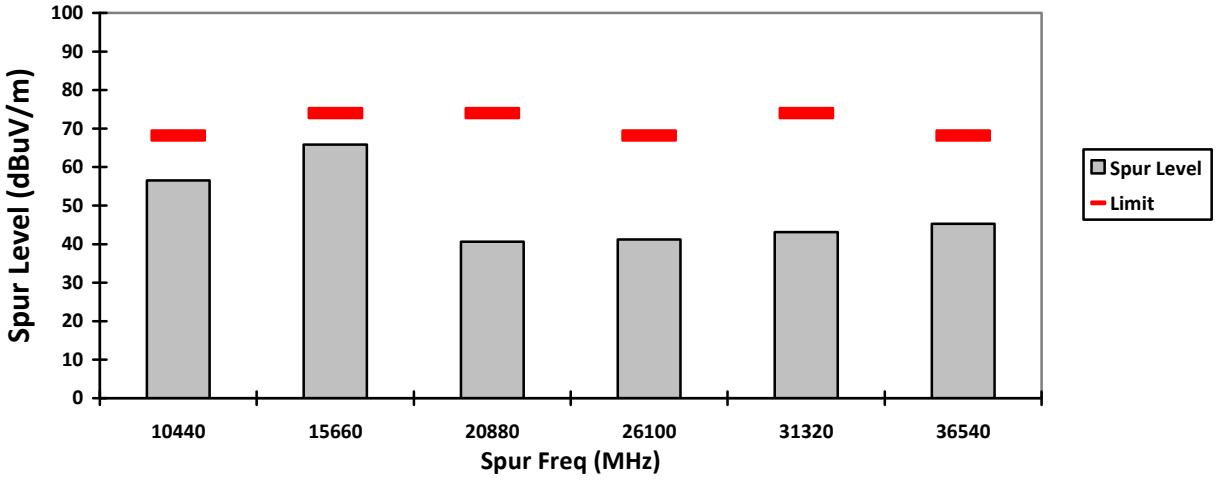
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10440	-	56.5721**	-	-	68.2000	-	-	11.6279	-	-
15660	-	65.8154**	51.8058**	-	74.0000	54.0000	-	8.1846	2.1942	-
20880	-	40.6230**	-	-	74.0000	-	-	33.3770	-	-
26100	-	41.2011**	-	-	68.2000	-	-	26.9989	-	-
31320	-	43.1317**	-	-	74.0000	-	-	30.8683	-	-
36540	-	45.2865**	-	-	68.2000	-	-	22.9135	-	-
Horizontal Radiated Emission Result										
10440	-	58.0880**	-	-	68.2000	-	-	10.1120	-	-
15660	-	65.9393**	51.9307**	-	74.0000	54.0000	-	8.0607	2.0693	-
20880	-	40.8111**	-	-	74.0000	-	-	33.1889	-	-
26100	-	42.2047**	-	-	68.2000	-	-	25.9953	-	-
31320	-	41.8037**	-	-	74.0000	-	-	32.1963	-	-
36540	-	47.0482**	-	-	68.2000	-	-	21.1518	-	-

Remarks: Pass Result	Marginal Result	Fail Result

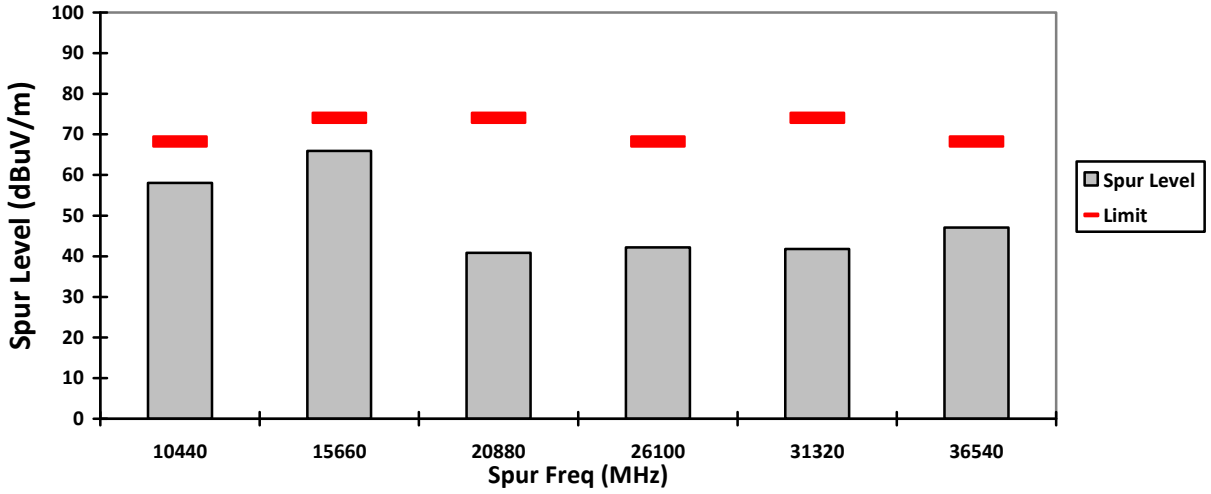
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Mon, 3 June, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

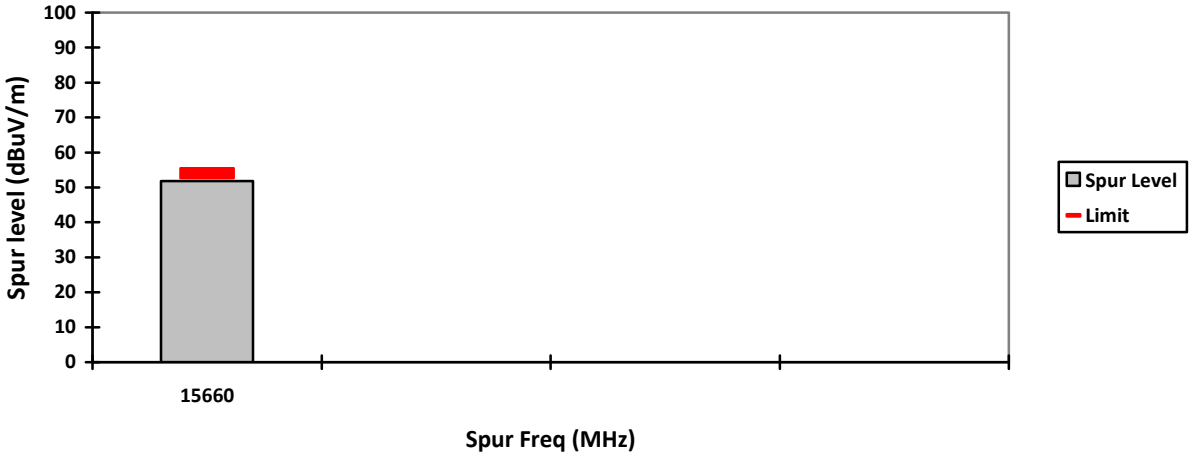
VERTICAL, PK



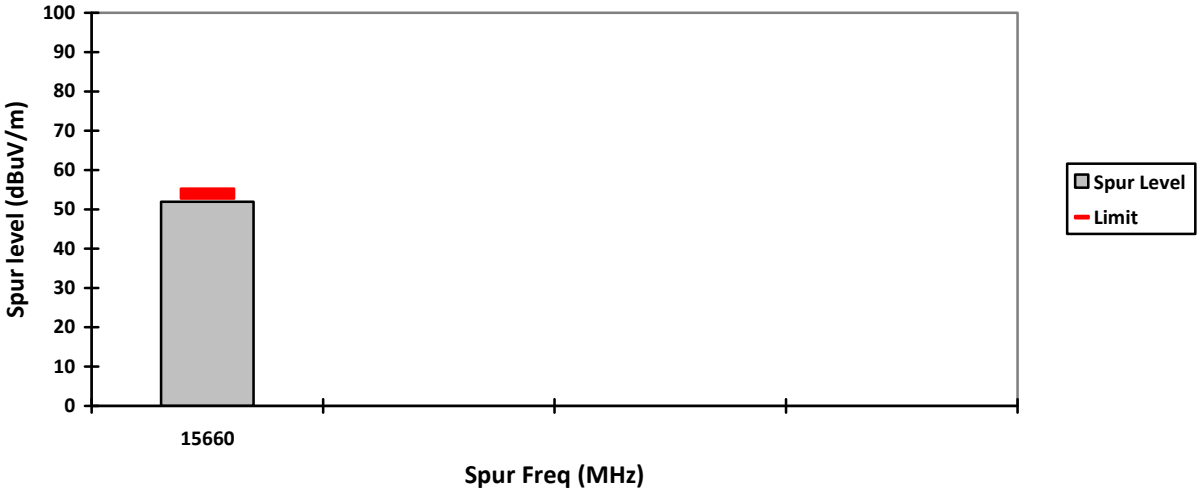
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5240.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

Radiated Emission (High Channel) tabular data

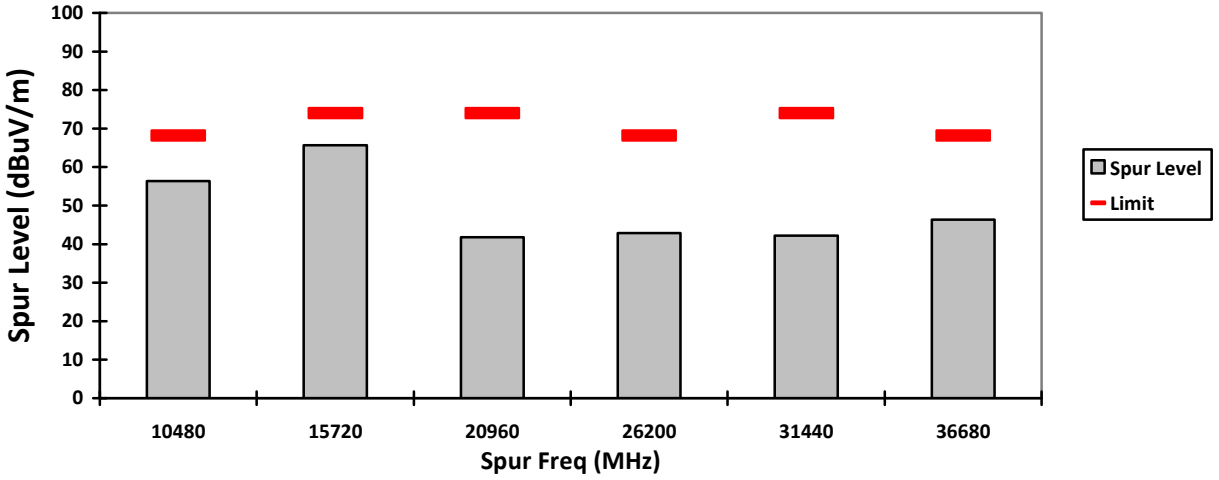
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10480	-	56.3522**	-	-	68.2000	-	-	11.8478	-	-
15720	-	65.6866**	51.6258**	-	74.0000	54.0000	-	8.3134	2.3742	-
20960	-	41.7915**	-	-	74.0000	-	-	32.2085	-	-
26200	-	42.8429**	-	-	68.2000	-	-	25.3571	-	-
31440	-	42.2082**	-	-	74.0000	-	-	31.7918	-	-
36680	-	46.3619**	-	-	68.2000	-	-	21.8381	-	-
Horizontal Radiated Emission Result										
10480	-	57.0004**	-	-	68.2000	-	-	11.1996	-	-
15720	-	65.2820**	51.6112**	-	74.0000	54.0000	-	8.7180	2.3888	-
20960	-	41.2561**	-	-	74.0000	-	-	32.7439	-	-
26200	-	42.4583**	-	-	68.2000	-	-	25.7417	-	-
31440	-	42.4635**	-	-	74.0000	-	-	31.5365	-	-
36680	-	46.1090**	-	-	68.2000	-	-	22.0910	-	-

Remarks: Pass Result	Marginal Result	Fail Result

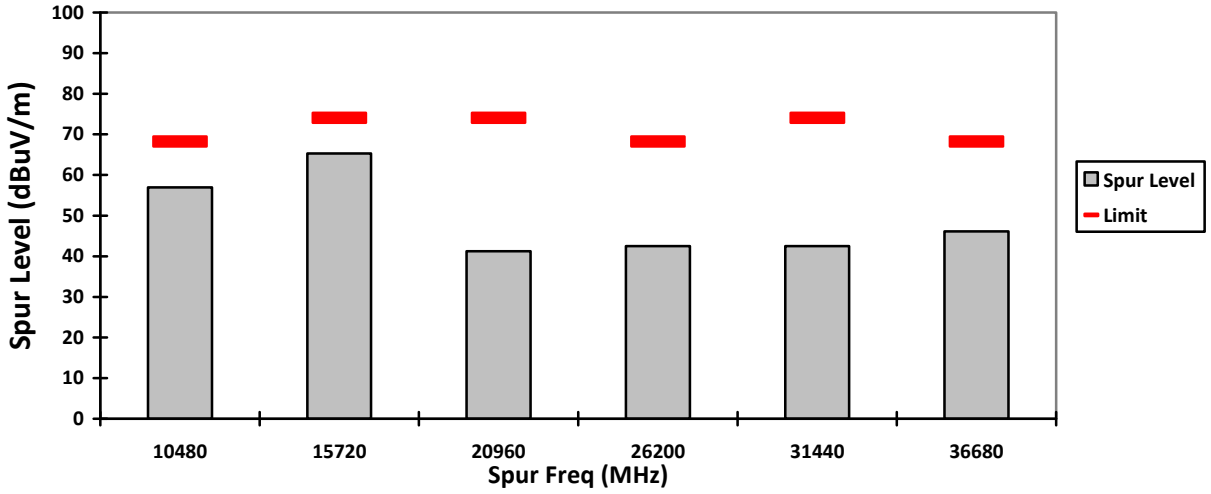
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

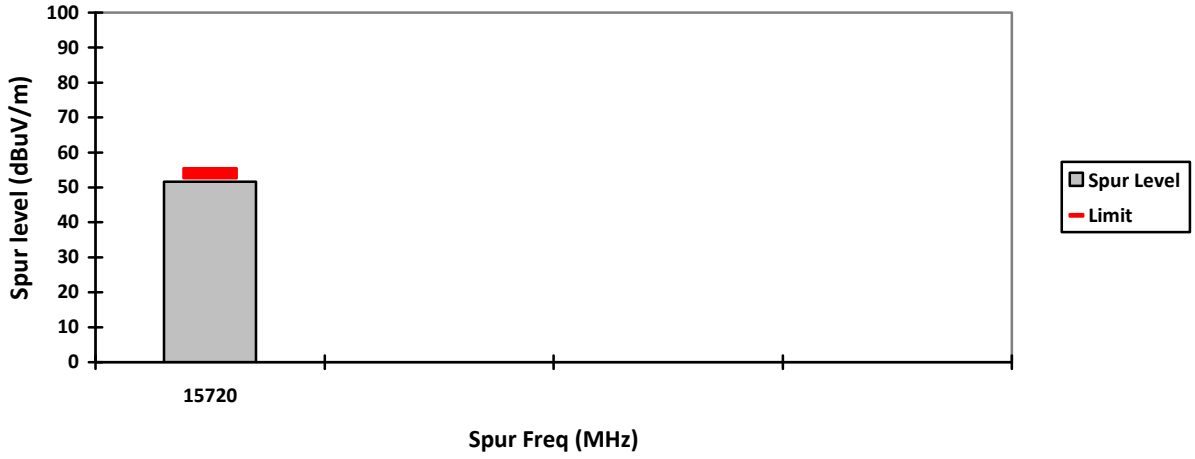
VERTICAL, PK



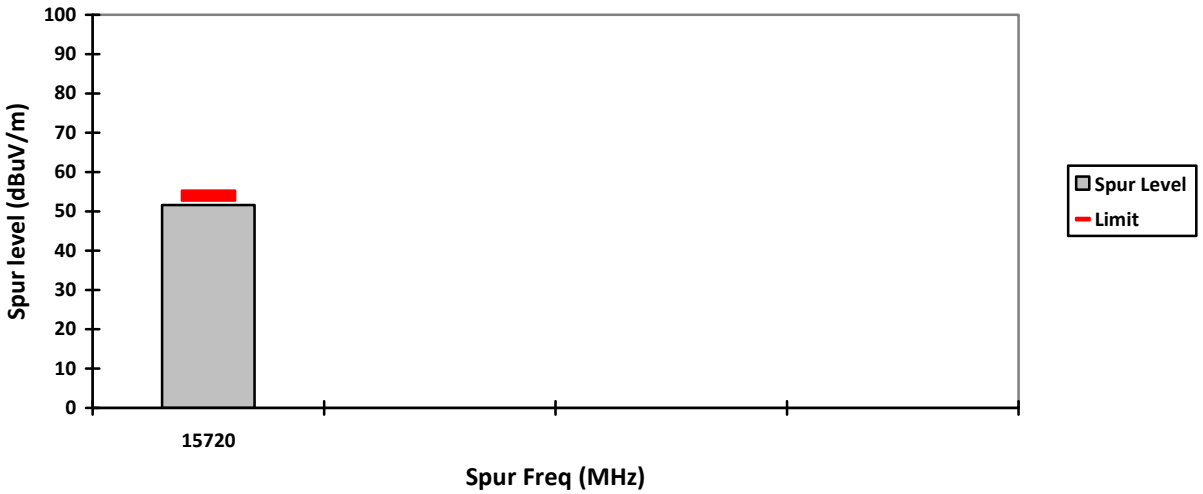
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5260.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

Radiated Emission (Low Channel) tabular data

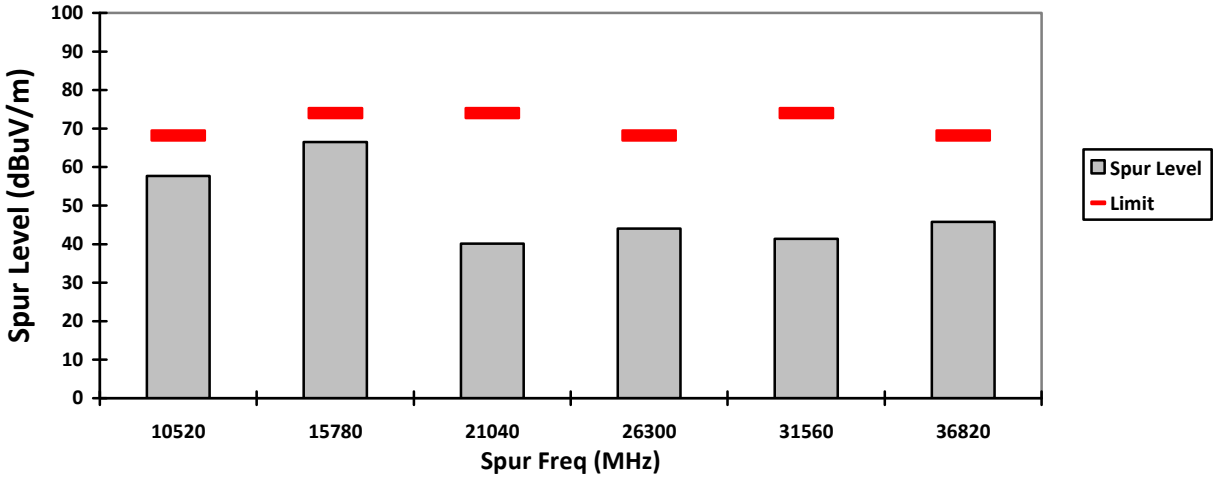
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10520	-	57.6752**	-	-	68.2000	-	-	10.5248	-	-
15780	-	66.5050**	52.6051**	-	74.0000	54.0000	-	7.4950	1.3949	-
21040	-	40.1669**	-	-	74.0000	-	-	33.8331	-	-
26300	-	44.0093**	-	-	68.2000	-	-	24.1907	-	-
31560	-	41.4110**	-	-	74.0000	-	-	32.5890	-	-
36820	-	45.7630**	-	-	68.2000	-	-	22.4370	-	-
Horizontal Radiated Emission Result										
10520	-	57.2627**	-	-	68.2000	-	-	10.9373	-	-
15780	-	66.2728**	52.5930**	-	74.0000	54.0000	-	7.7272	1.4070	-
21040	-	39.6716**	-	-	74.0000	-	-	34.3284	-	-
26300	-	43.8726**	-	-	68.2000	-	-	24.3274	-	-
31560	-	41.4571**	-	-	74.0000	-	-	32.5429	-	-
36820	-	46.6397**	-	-	68.2000	-	-	21.5603	-	-

Remarks: Pass Result	Marginal Result	Fail Result

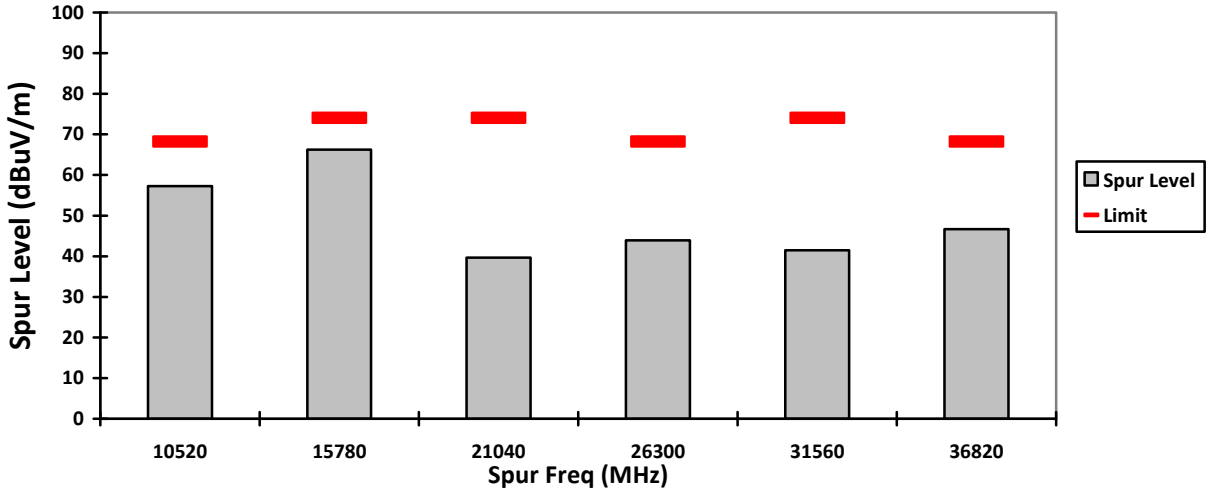
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

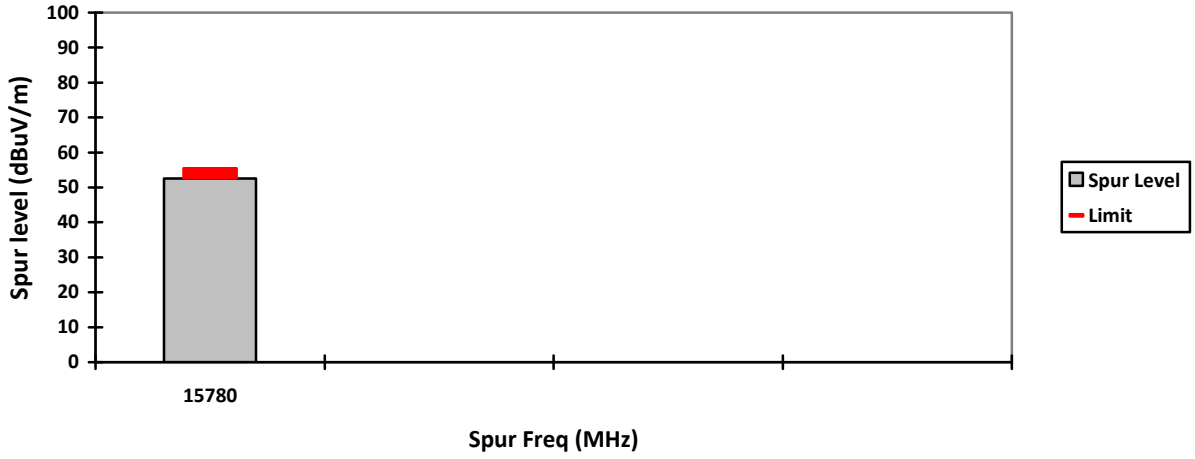
VERTICAL, PK



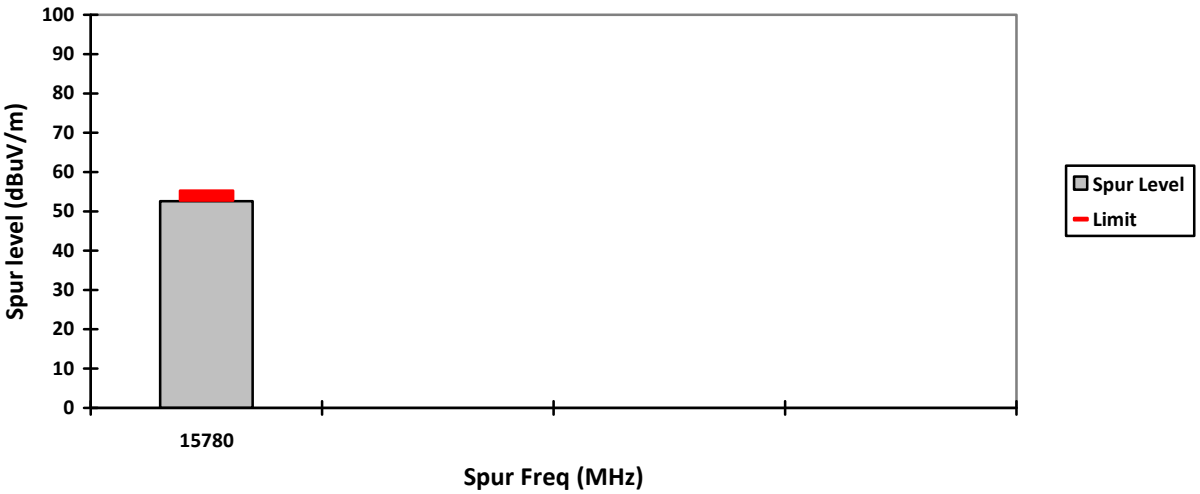
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Mid Test Frequency: 5300.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

Radiated Emission (Mid Channel) tabular data

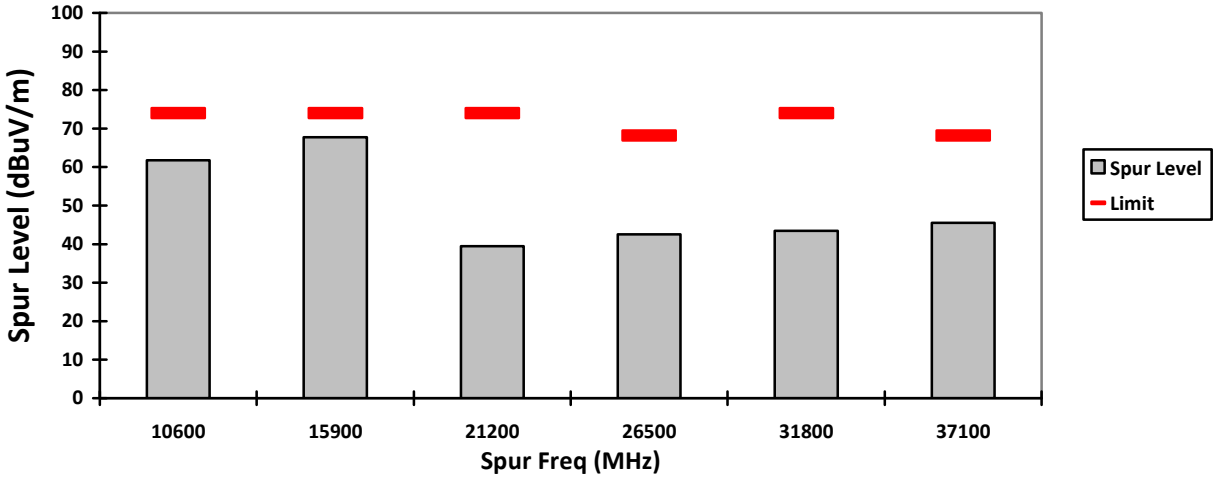
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10600	-	61.7377**	48.7927**	-	68.2000	54.0000	-	6.4623	5.2073	-
15900	-	67.7692**	53.4316**	-	74.0000	54.0000	-	6.2308	0.5684	-
21200	-	39.4484**	-	-	74.0000	-	-	34.5516	-	-
26500	-	42.5127**	-	-	68.2000	-	-	25.6873	-	-
31800	-	43.4238**	-	-	74.0000	-	-	30.5762	-	-
37100	-	45.5197**	-	-	68.2000	-	-	22.6803	-	-
Horizontal Radiated Emission Result										
10600	-	61.7232**	48.6718**	-	68.2000	54.0000	-	6.4768	5.3282	-
15900	-	68.6760**	53.4194**	-	74.0000	54.0000	-	5.3240	0.5806	-
21200	-	39.8059**	-	-	74.0000	-	-	34.1941	-	-
26500	-	40.7803**	-	-	68.2000	-	-	27.4197	-	-
31800	-	41.6673**	-	-	74.0000	-	-	32.3327	-	-
37100	-	46.8514**	-	-	68.2000	-	-	21.3486	-	-

Remarks: Pass Result	Marginal Result	Fail Result

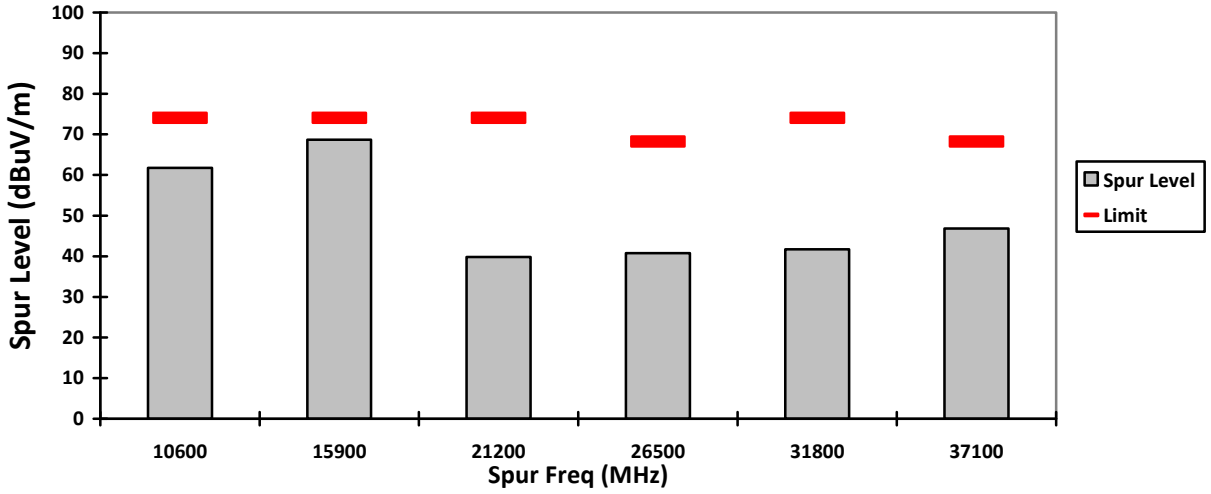
Temperature (degC): 23.1 Humidity (%): 67.4
Test Performed by: Nazrin & Rezza Test Date: Mon, 3 June, 2024
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

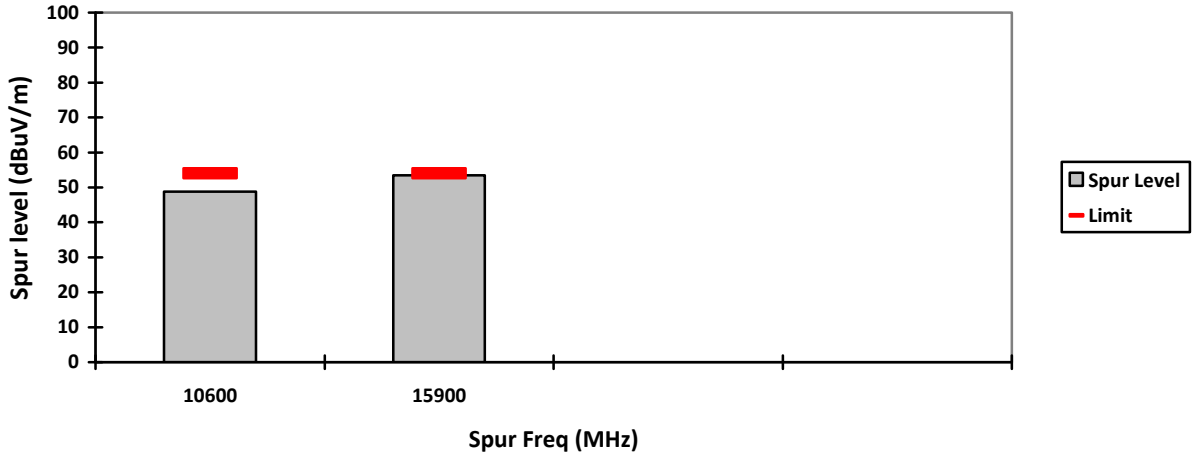
VERTICAL, PK



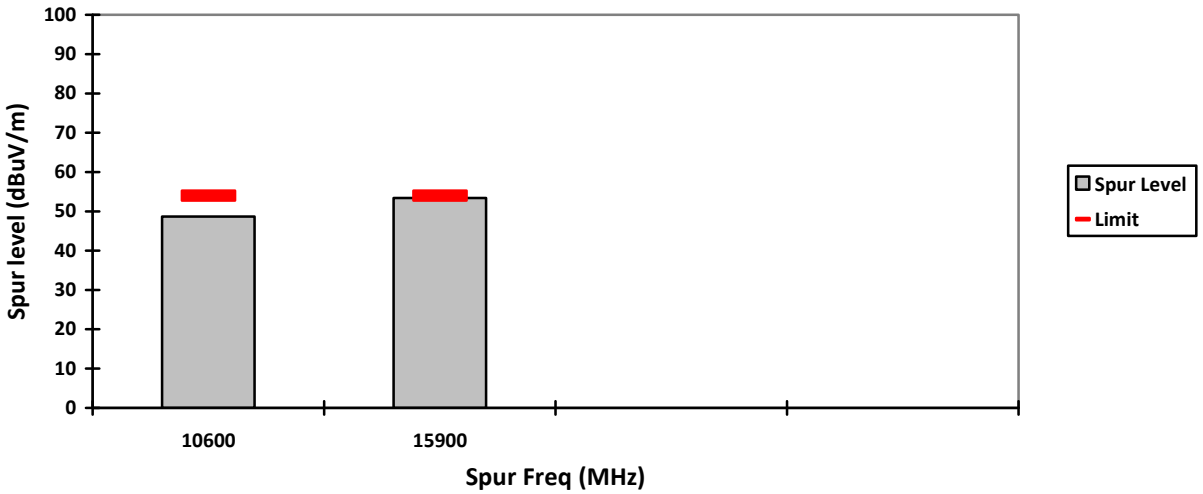
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5320.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

Radiated Emission (High Channel) tabular data

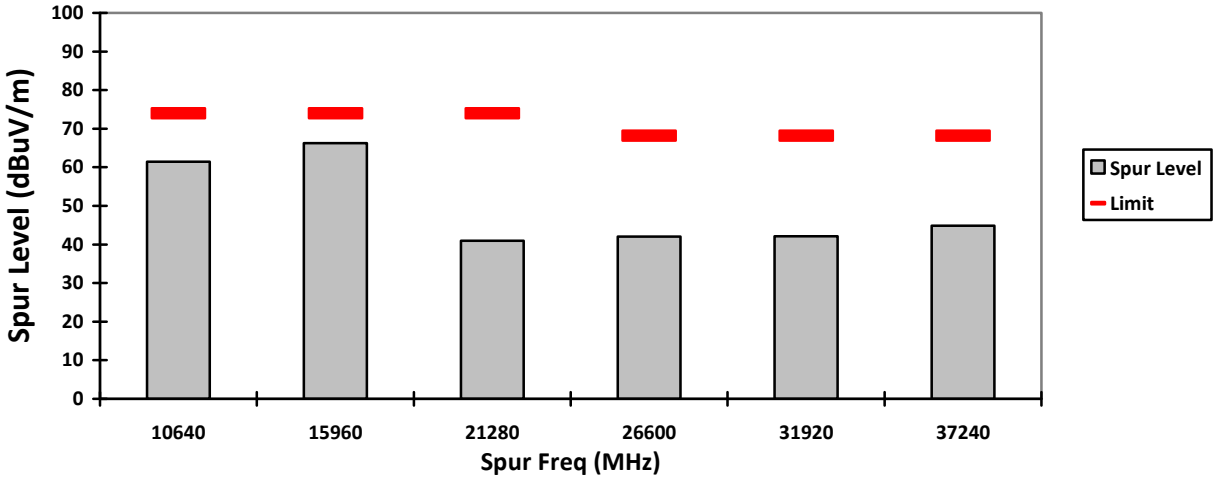
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10640	-	61.4815**	46.9094**	-	74.0000	54.0000	-	12.5185	7.0906	-
15960	-	66.2352**	52.3835**	-	74.0000	54.0000	-	7.7648	1.6165	-
21280	-	40.9298**	-	-	74.0000	-	-	33.0702	-	-
26600	-	42.0716**	-	-	68.2000	-	-	26.1284	-	-
31920	-	42.1537**	-	-	68.2000	-	-	26.0463	-	-
37240	-	44.8936**	-	-	68.2000	-	-	23.3064	-	-
Horizontal Radiated Emission Result										
10640	-	60.8547**	46.9078**	-	74.0000	54.0000	-	13.1453	7.0922	-
15960	-	66.1909**	52.4081**	-	74.0000	54.0000	-	7.8091	1.5919	-
21280	-	40.4608**	-	-	74.0000	-	-	33.5392	-	-
26600	-	42.3681**	-	-	68.2000	-	-	25.8319	-	-
31920	-	42.5084**	-	-	68.2000	-	-	25.6916	-	-
37240	-	45.7687**	-	-	68.2000	-	-	22.4313	-	-

Remarks: Pass Result	Marginal Result	Fail Result

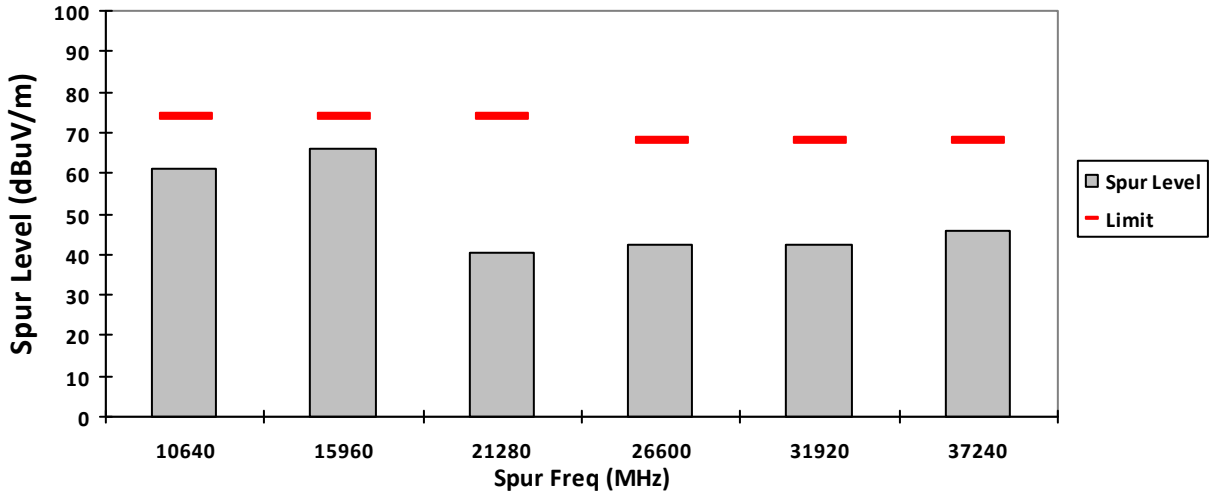
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Mon, 3 June, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

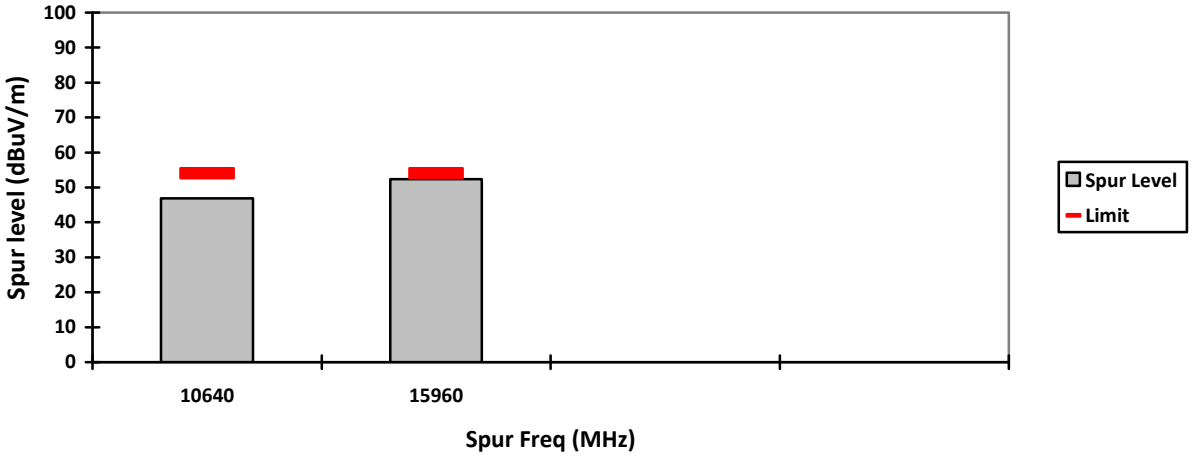
VERTICAL, PK



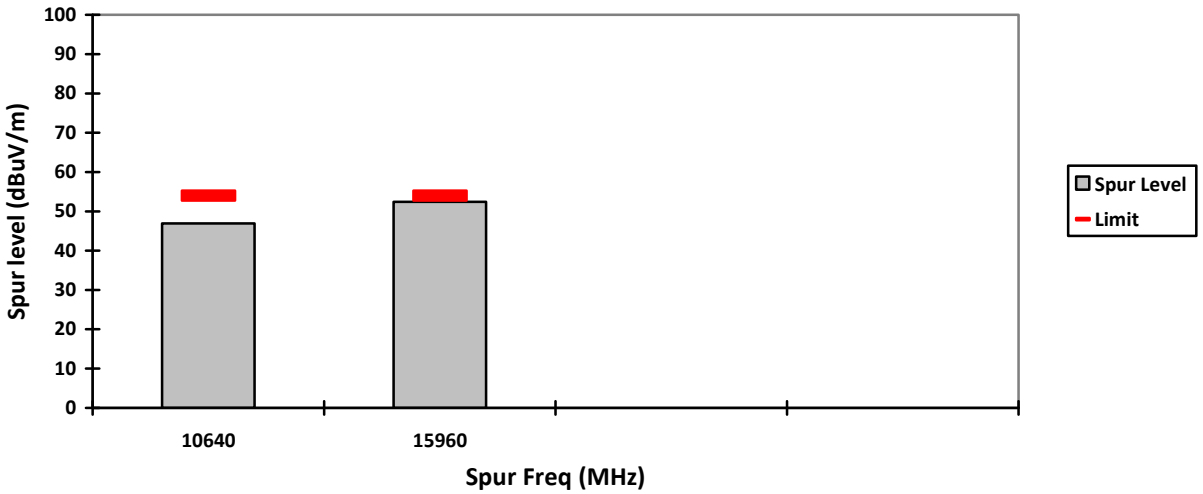
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5500.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

Radiated Emission (Low Channel) tabular data

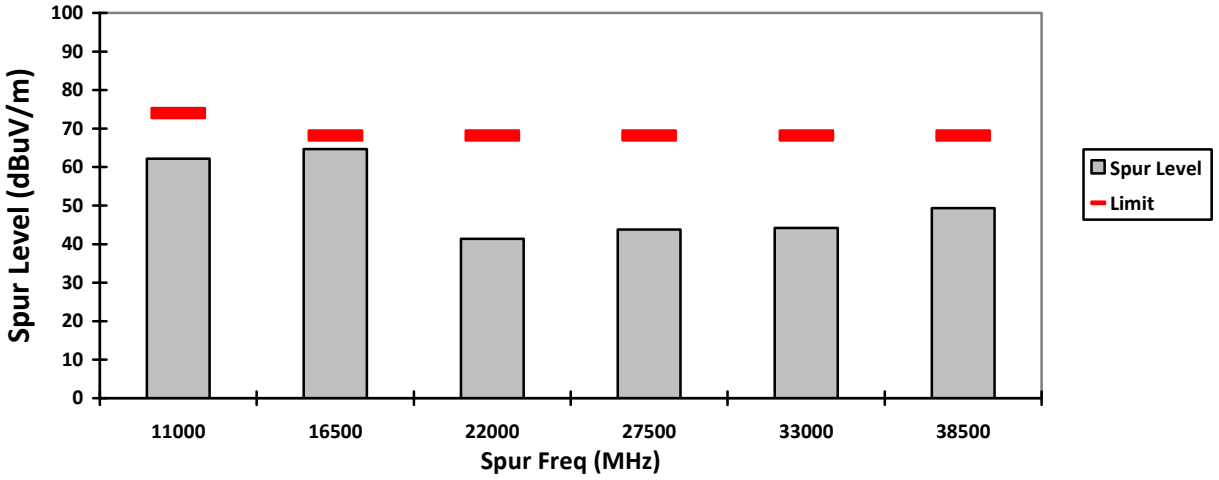
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11000	-	62.2135**	48.1172**	-	74.0000	54.0000	-	11.7865	5.8828	-
16500	-	64.6902**	-	-	68.2000	-	-	3.5098	-	-
22000	-	41.3671**	-	-	68.2000	-	-	26.8329	-	-
27500	-	43.7888**	-	-	68.2000	-	-	24.4112	-	-
33000	-	44.1908**	-	-	68.2000	-	-	24.0092	-	-
38500	-	49.3588**	-	-	68.2000	-	-	18.8412	-	-
Horizontal Radiated Emission Result										
11000	-	62.2501**	47.9890**	-	74.0000	54.0000	-	11.7499	6.0110	-
16500	-	64.3596**	-	-	68.2000	-	-	3.8404	-	-
22000	-	41.3974**	-	-	68.2000	-	-	26.8026	-	-
27500	-	40.9917**	-	-	68.2000	-	-	27.2083	-	-
33000	-	43.0130**	-	-	68.2000	-	-	25.1870	-	-
38500	-	49.6527**	-	-	68.2000	-	-	18.5473	-	-

Remarks: Pass Result	Marginal Result	Fail Result

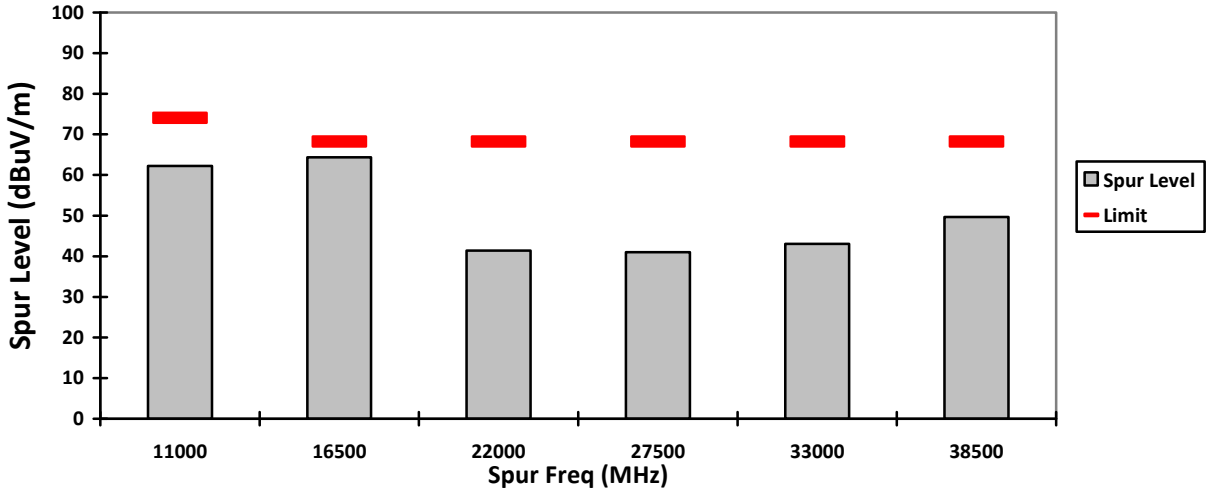
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

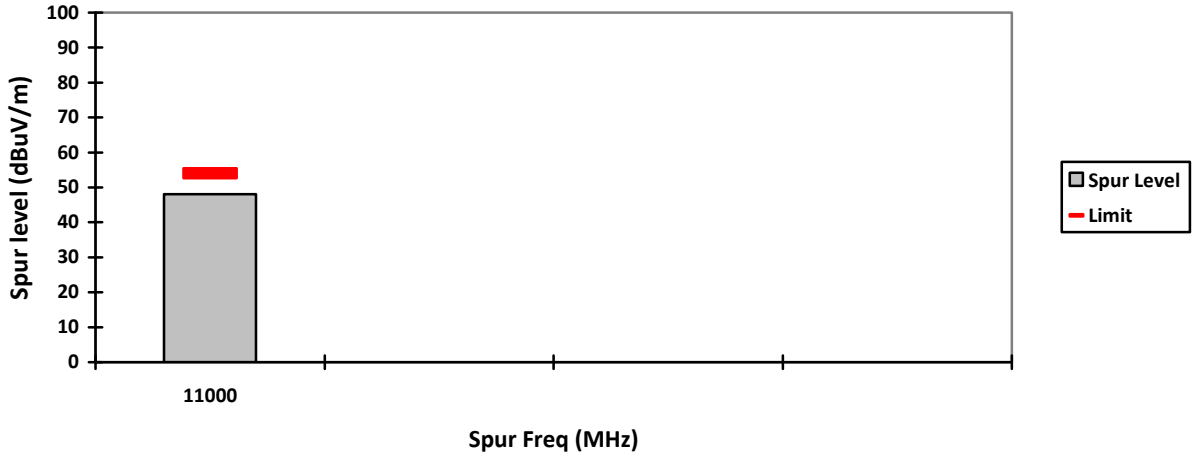
VERTICAL, PK



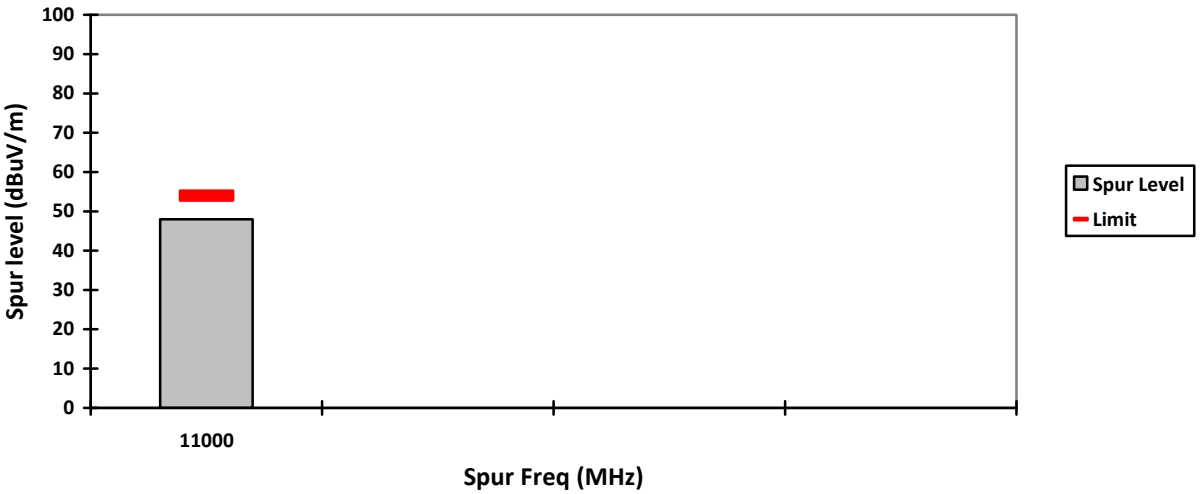
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: Mid Test Frequency: 5580.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

Radiated Emission (Mid Channel) tabular data

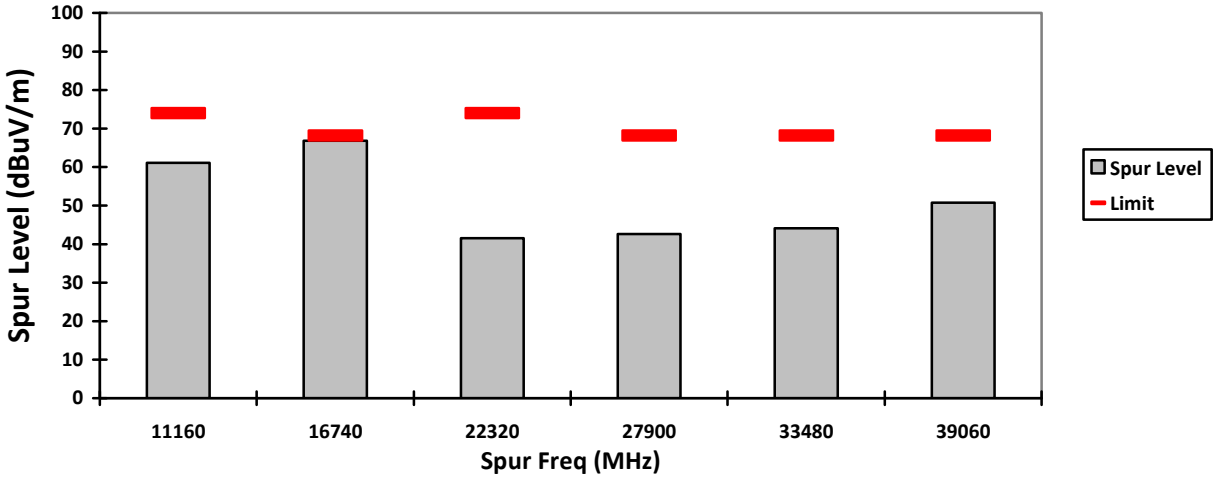
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11160	-	61.1223**	47.0983**	-	74.0000	54.0000	-	12.8777	6.9017	-
16740	-	66.8616**	-	-	68.2000	-	-	1.3384	-	-
22320	-	41.5360**	-	-	74.0000	-	-	32.4640	-	-
27900	-	42.6462**	-	-	68.2000	-	-	25.5538	-	-
33480	-	44.1124**	-	-	68.2000	-	-	24.0876	-	-
39060	-	50.7311**	-	-	68.2000	-	-	17.4689	-	-
Horizontal Radiated Emission Result										
11160	-	60.8213**	47.1047**	-	74.0000	54.0000	-	13.1787	6.8953	-
16740	-	67.2715**	-	-	68.2000	-	-	0.9285	-	-
22320	-	41.0255**	-	-	74.0000	-	-	32.9745	-	-
27900	-	43.4480**	-	-	68.2000	-	-	24.7520	-	-
33480	-	42.2013**	-	-	68.2000	-	-	25.9987	-	-
39060	-	51.6018**	-	-	68.2000	-	-	16.5982	-	-

Remarks: Pass Result	Marginal Result	Fail Result

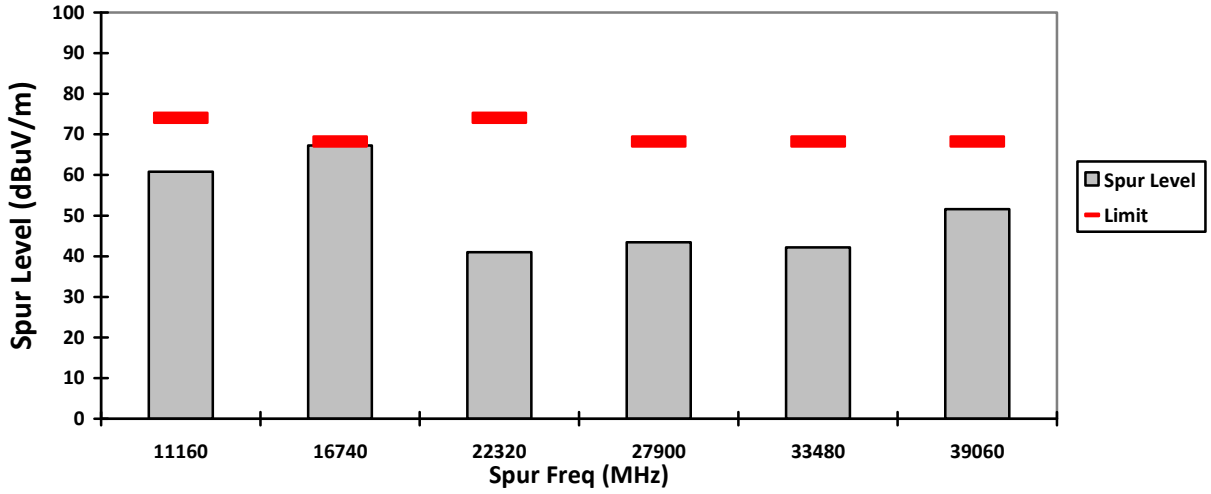
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

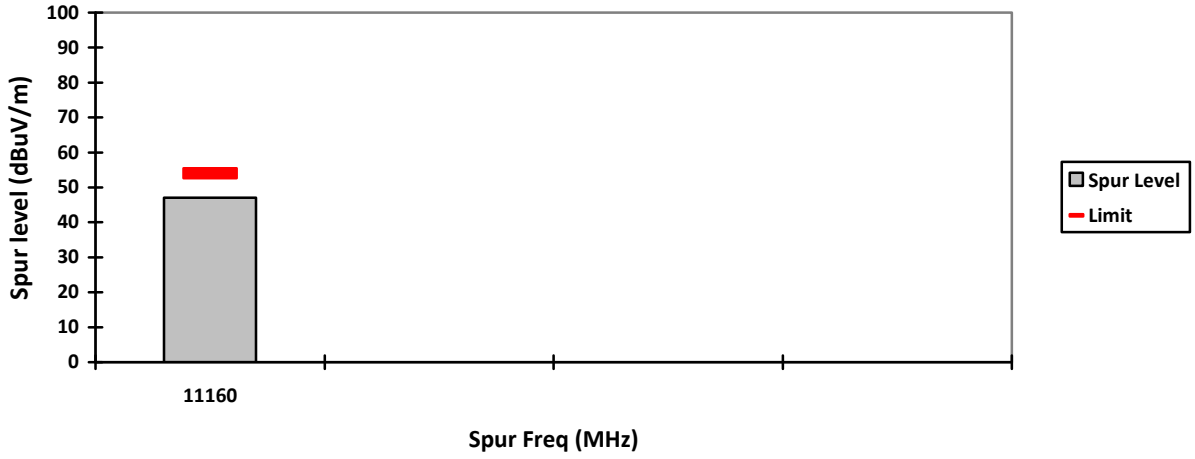
VERTICAL, PK



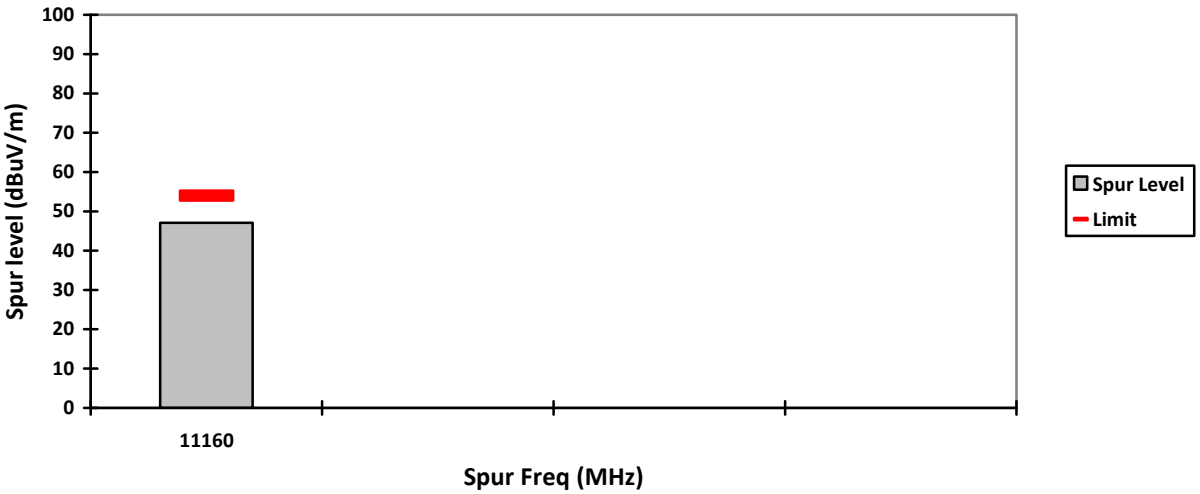
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Straddle Test Frequency: 5720.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

Radiated Emission (Straddle Channel) tabular data

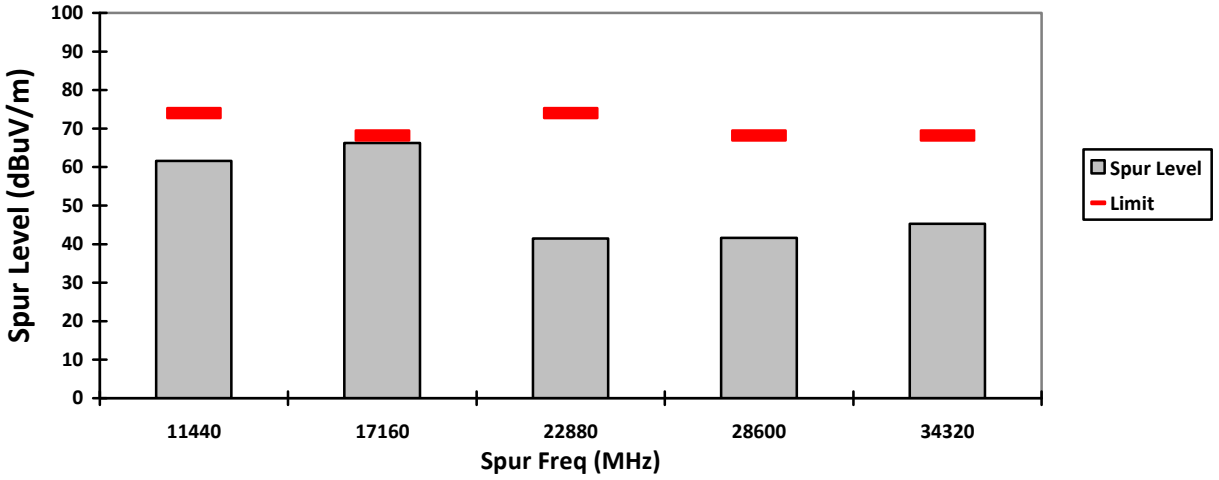
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11440	-	61.5954**	47.4990**	-	74.0000	54.0000	-	12.4046	6.5010	-
17160	-	66.2716**	-	-	68.2000	-	-	1.9284	-	-
22880	-	41.4609**	-	-	74.0000	-	-	32.5391	-	-
28600	-	41.6401**	-	-	68.2000	-	-	26.5599	-	-
34320	-	45.2837**	-	-	68.2000	-	-	22.9163	-	-
										-
Horizontal Radiated Emission Result										
11440	-	61.4463**	47.5143**	-	74.0000	54.0000	-	12.5537	6.4857	-
17160	-	66.1712**	-	-	68.2000	-	-	2.0288	-	-
22880	-	41.3531**	-	-	74.0000	-	-	32.6469	-	-
28600	-	40.9684**	-	-	68.2000	-	-	27.2316	-	-
34320	-	45.3290**	-	-	68.2000	-	-	22.8710	-	-
										-

Remarks: Pass Result	Marginal Result	Fail Result

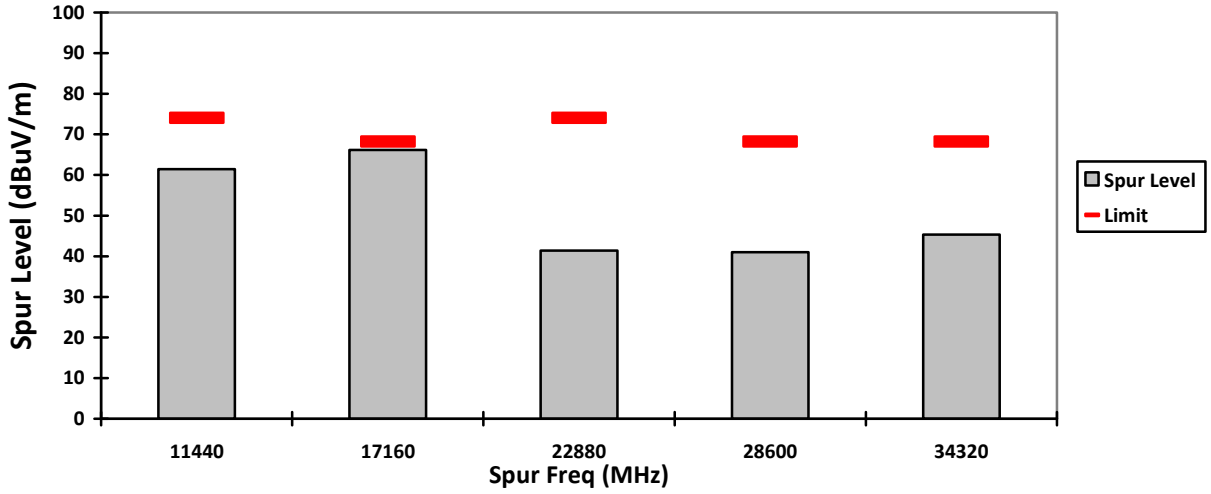
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Mon, 3 June, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

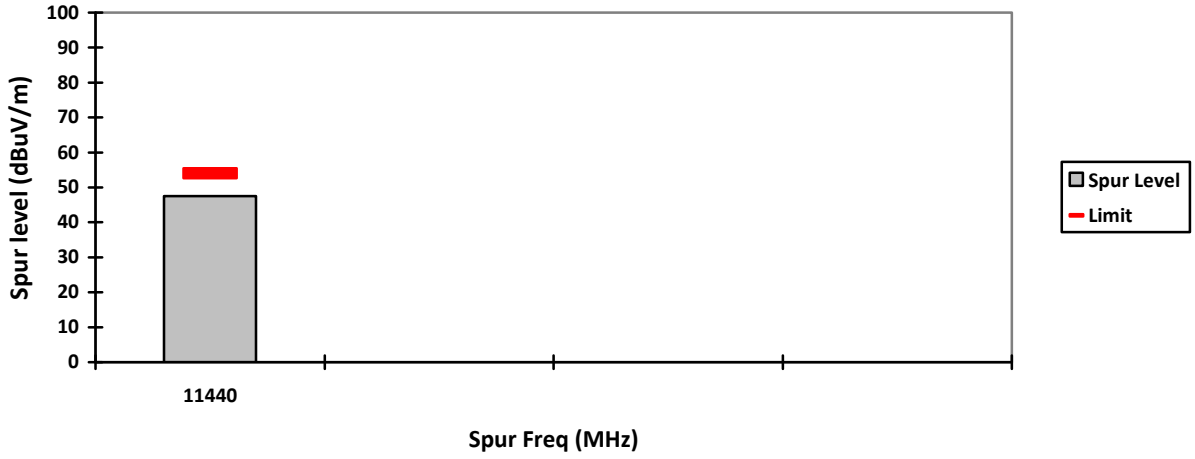
VERTICAL, PK



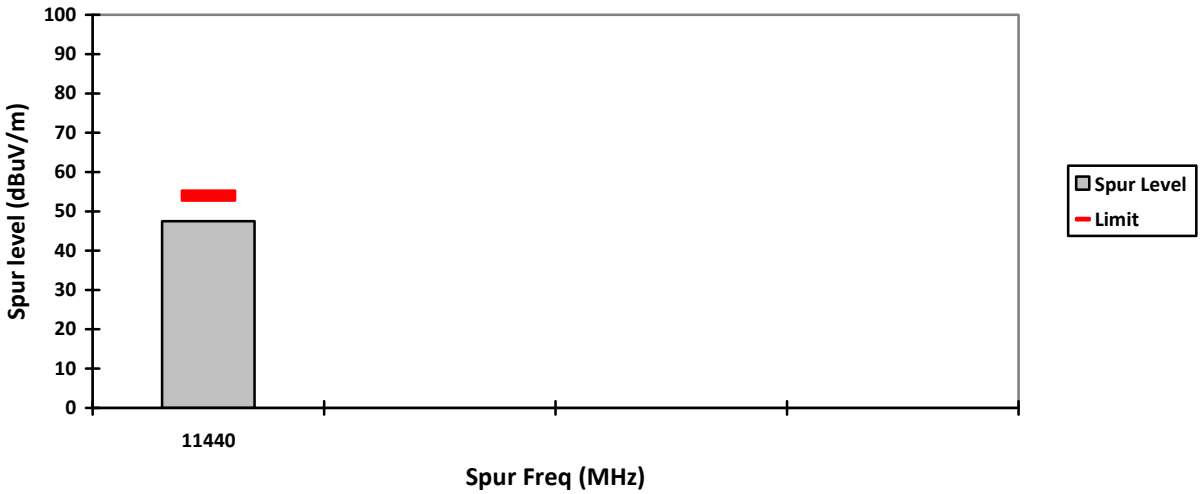
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5745.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

Radiated Emission (Low Channel) tabular data

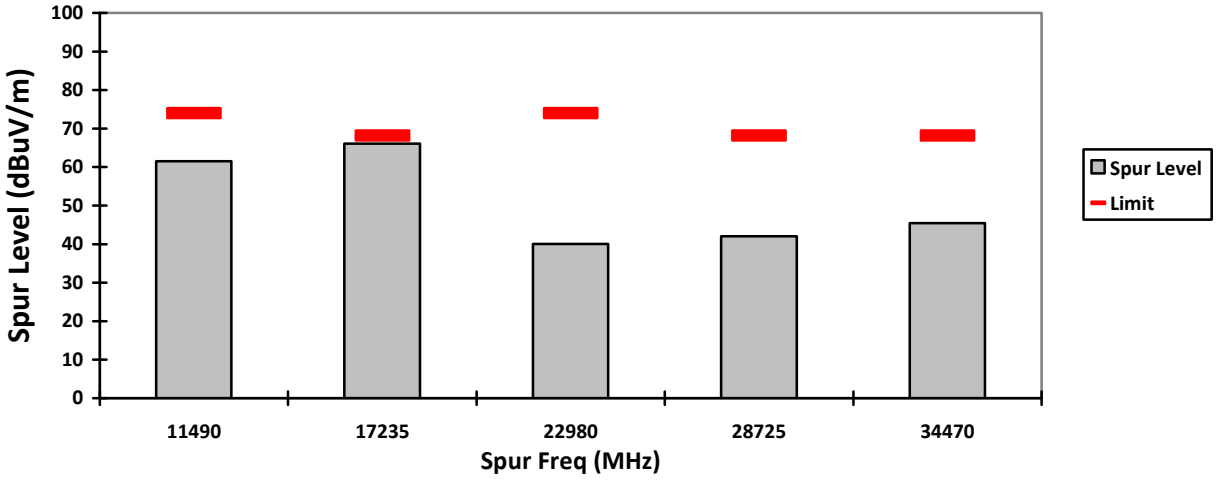
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11490	-	61.5089**	47.5909**	-	74.0000	54.0000	-	12.4911	6.4091	-
17235	-	66.0616**	-	-	68.2000	-	-	2.1384	-	-
22980	-	40.0400**	-	-	74.0000	-	-	33.9600	-	-
28725	-	42.0421**	-	-	68.2000	-	-	26.1579	-	-
34470	-	45.4397**	-	-	68.2000	-	-	22.7603	-	-
										-
Horizontal Radiated Emission Result										
11490	-	61.3416**	47.5956**	-	74.0000	54.0000	-	12.6584	6.4044	-
17235	-	66.5585**	-	-	68.2000	-	-	1.6415	-	-
22980	-	39.1100**	-	-	74.0000	-	-	34.8900	-	-
28725	-	42.8743**	-	-	68.2000	-	-	25.3257	-	-
34470	-	45.5705**	-	-	68.2000	-	-	22.6295	-	-
										-

Remarks: Pass Result	Marginal Result	Fail Result

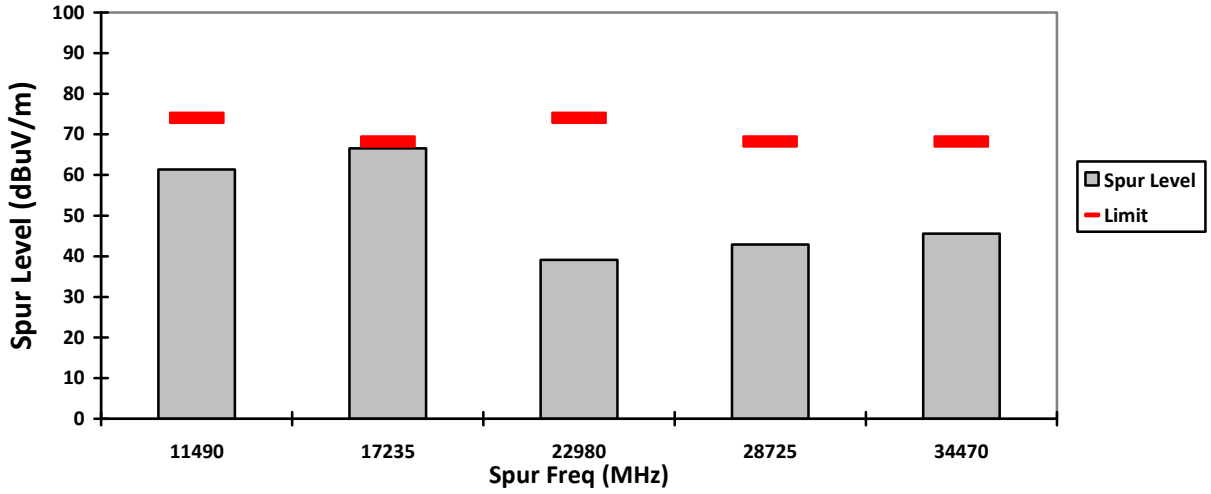
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Mon, 3 June, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

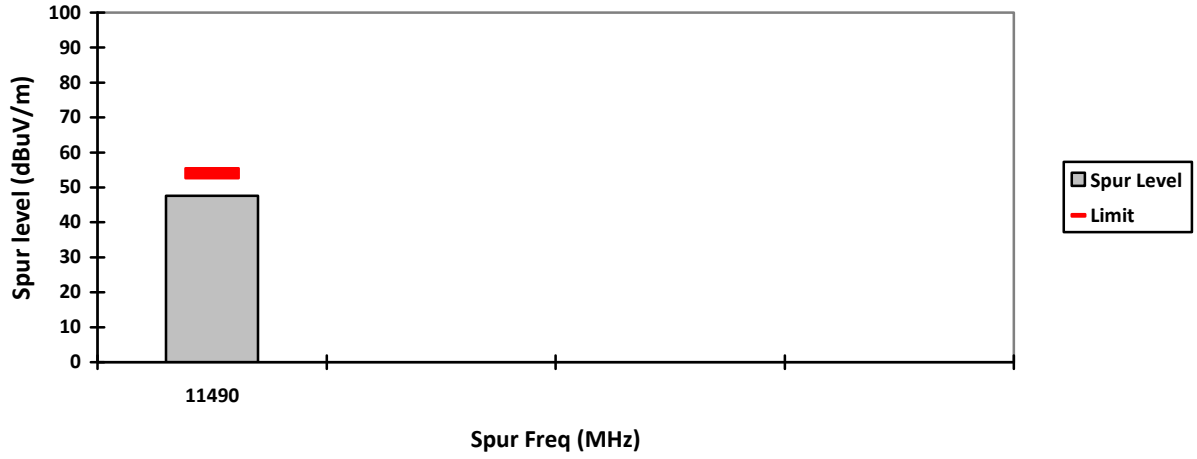
VERTICAL, PK



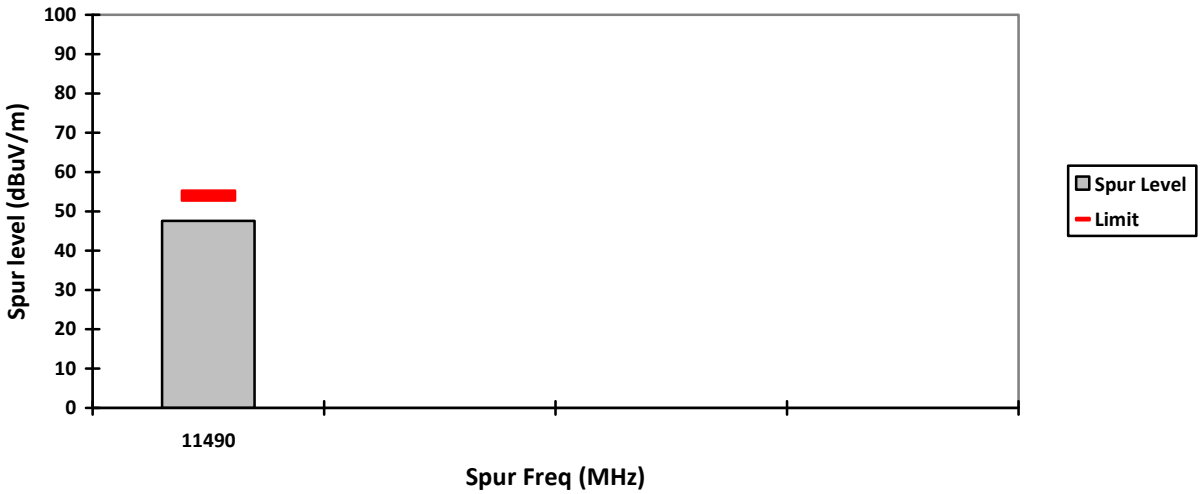
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Mid Test Frequency: 5785.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

Radiated Emission (Mid Channel) tabular data

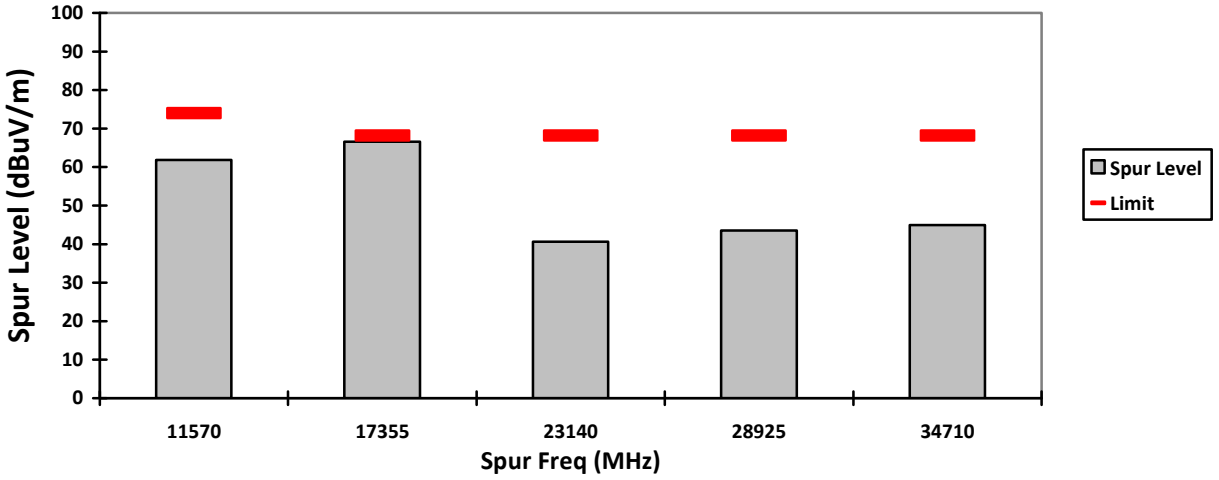
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11570	-	61.8823**	47.6111**	-	74.0000	54.0000	-	12.1177	6.3889	-
17355	-	66.6236**	-	-	68.2000	-	-	1.5764	-	-
23140	-	40.6159**	-	-	68.2000	-	-	27.5841	-	-
28925	-	43.5599**	-	-	68.2000	-	-	24.6401	-	-
34710	-	44.9492**	-	-	68.2000	-	-	23.2508	-	-
										-
Horizontal Radiated Emission Result										
11570	-	61.3612**	47.5956**	-	74.0000	54.0000	-	12.6388	6.4044	-
17355	-	66.7185**	-	-	68.2000	-	-	1.4815	-	-
23140	-	39.8802**	-	-	68.2000	-	-	28.3198	-	-
28925	-	42.7262**	-	-	68.2000	-	-	25.4738	-	-
34710	-	45.6269**	-	-	68.2000	-	-	22.5731	-	-
										-

Remarks: Pass Result	Marginal Result	Fail Result

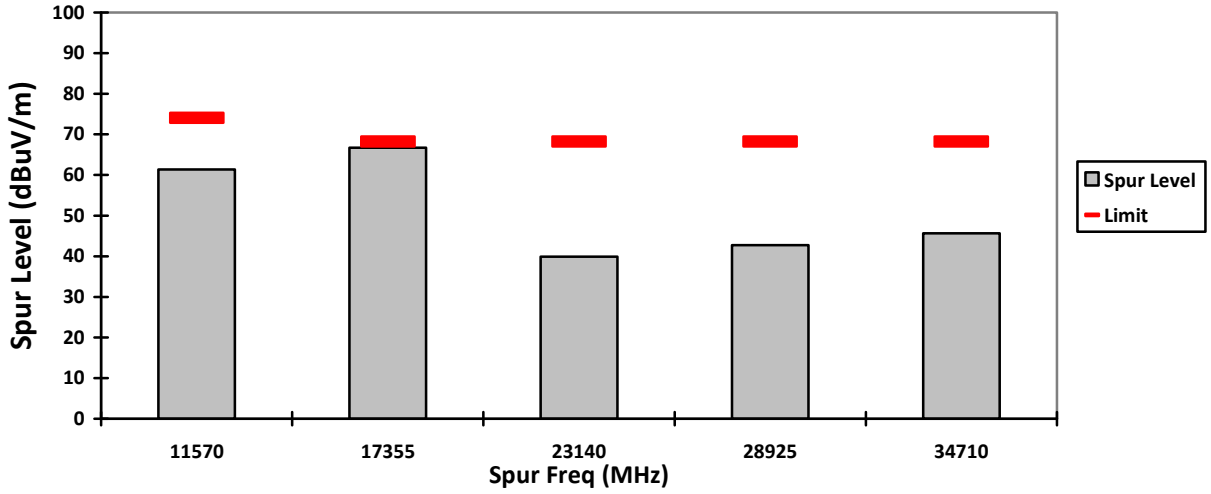
Temperature (degC): 23.1 Humidity (%): 67.4
Test Performed by: Nazrin & Rezza Test Date: Mon, 3 June, 2024
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

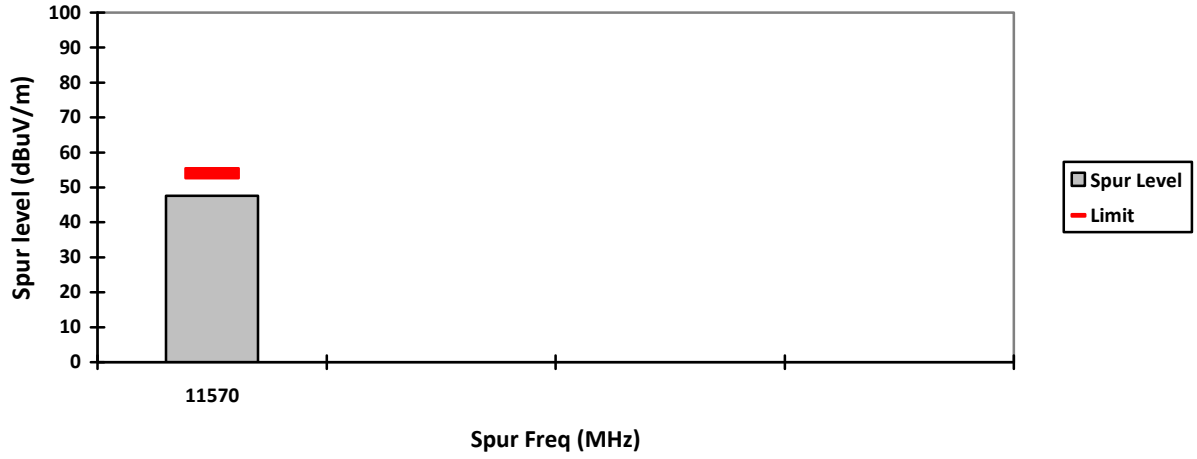
VERTICAL, PK



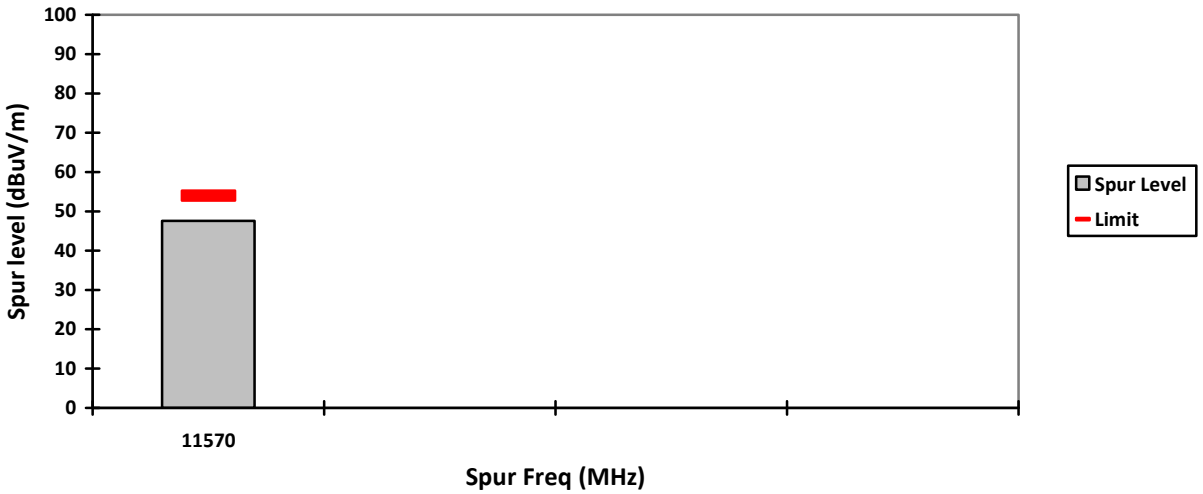
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5825.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 20MHz)

Radiated Emission (High Channel) tabular data

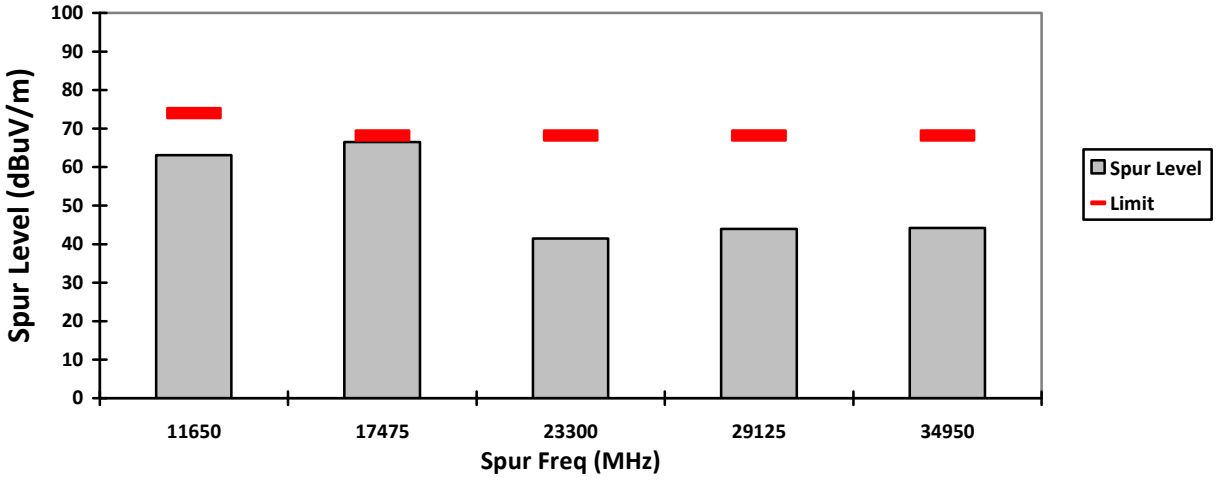
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11650	-	63.0880**	48.6705**	-	74.0000	54.0000	-	10.9120	5.3295	-
17475	-	66.4613**	-	-	68.2000	-	-	1.7387	-	-
23300	-	41.4502**	-	-	68.2000	-	-	26.7498	-	-
29125	-	43.9856**	-	-	68.2000	-	-	24.2144	-	-
34950	-	44.2217**	-	-	68.2000	-	-	23.9783	-	-
										-
Horizontal Radiated Emission Result										
11650	-	62.4107**	48.6714**	-	74.0000	54.0000	-	11.5893	5.3286	-
17475	-	66.3132**	-	-	68.2000	-	-	1.8868	-	-
23300	-	40.6046**	-	-	68.2000	-	-	27.5954	-	-
29125	-	43.7161**	-	-	68.2000	-	-	24.4839	-	-
34950	-	44.0000**	-	-	68.2000	-	-	24.2000	-	-
										-

Remarks: Pass Result	Marginal Result	Fail Result

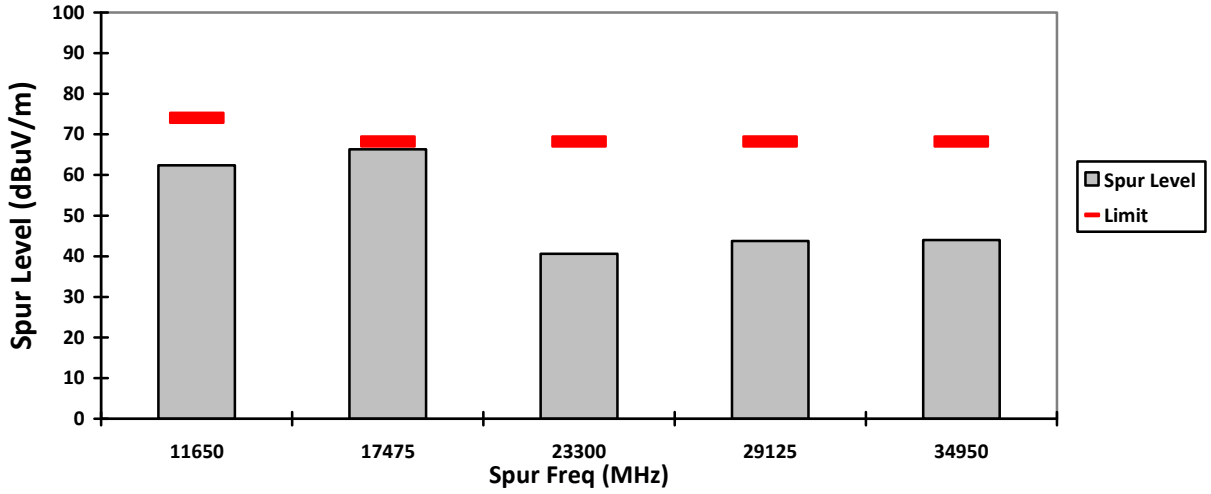
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Mon, 3 June, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

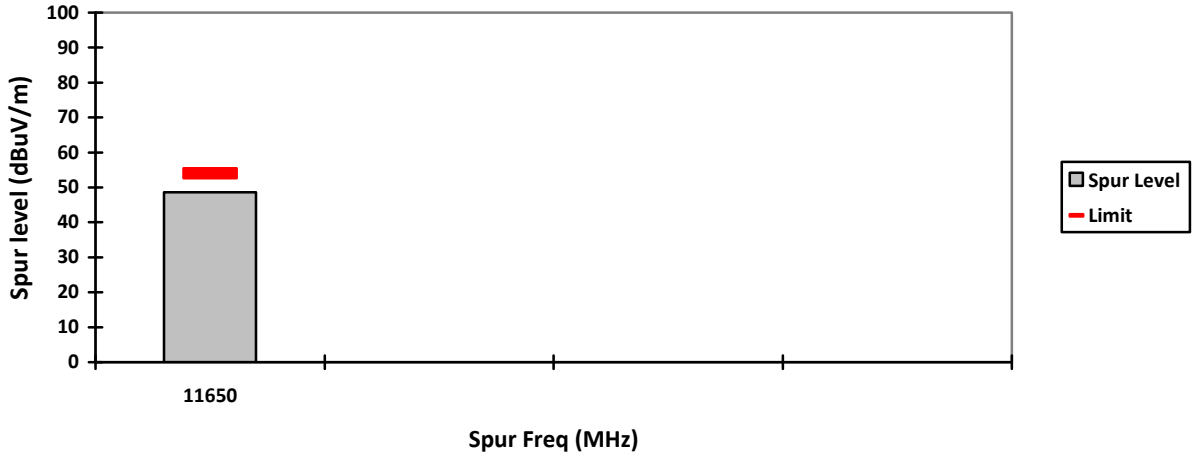
VERTICAL, PK



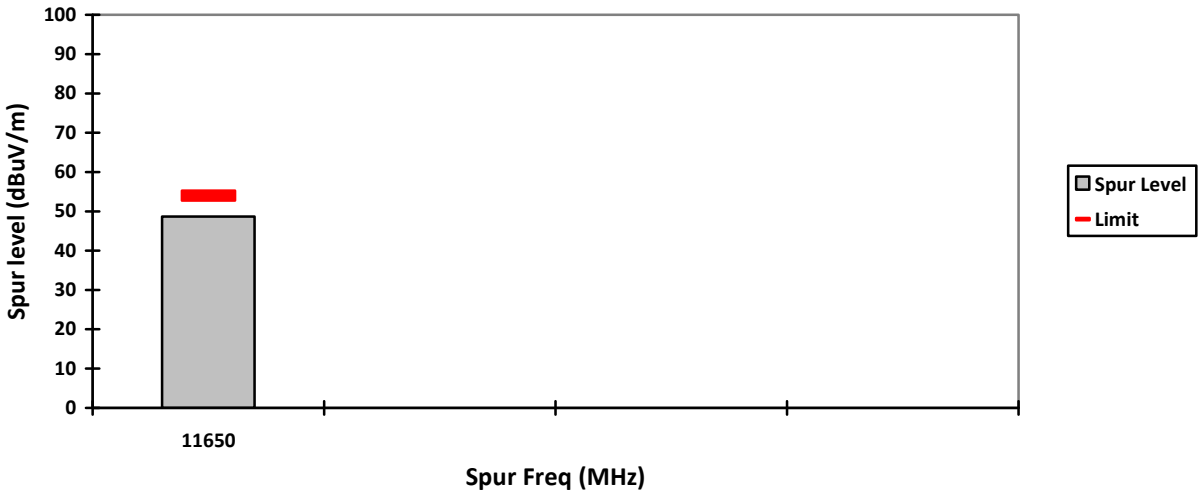
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



802.11n (HT40)

Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (13dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5190.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

Radiated Emission (Low Channel) tabular data

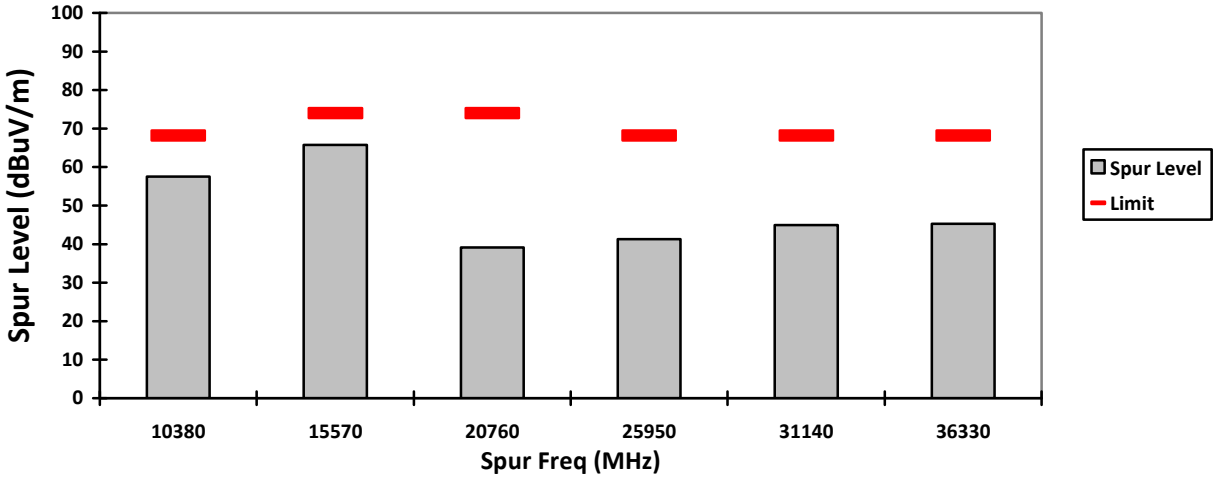
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10380	-	57.5766**	-	-	68.2000	-	-	10.6234	-	-
15570	-	65.7865**	52.8245**	-	74.0000	54.0000	-	8.2135	1.1755	-
20760	-	39.1122**	-	-	74.0000	-	-	34.8878	-	-
25950	-	41.2605**	-	-	68.2000	-	-	26.9395	-	-
31140	-	44.9709**	-	-	68.2000	-	-	23.2291	-	-
36330	-	45.2959**	-	-	68.2000	-	-	22.9041	-	-
Horizontal Radiated Emission Result										
10380	-	58.5070**	-	-	68.2000	-	-	9.6930	-	-
15570	-	66.2009**	52.8236**	-	74.0000	54.0000	-	7.7991	1.1764	-
20760	-	40.3792**	-	-	74.0000	-	-	33.6208	-	-
25950	-	41.6344**	-	-	68.2000	-	-	26.5656	-	-
31140	-	41.2926**	-	-	68.2000	-	-	26.9074	-	-
36330	-	45.6341**	-	-	68.2000	-	-	22.5659	-	-

Remarks: Pass Result	Marginal Result	Fail Result

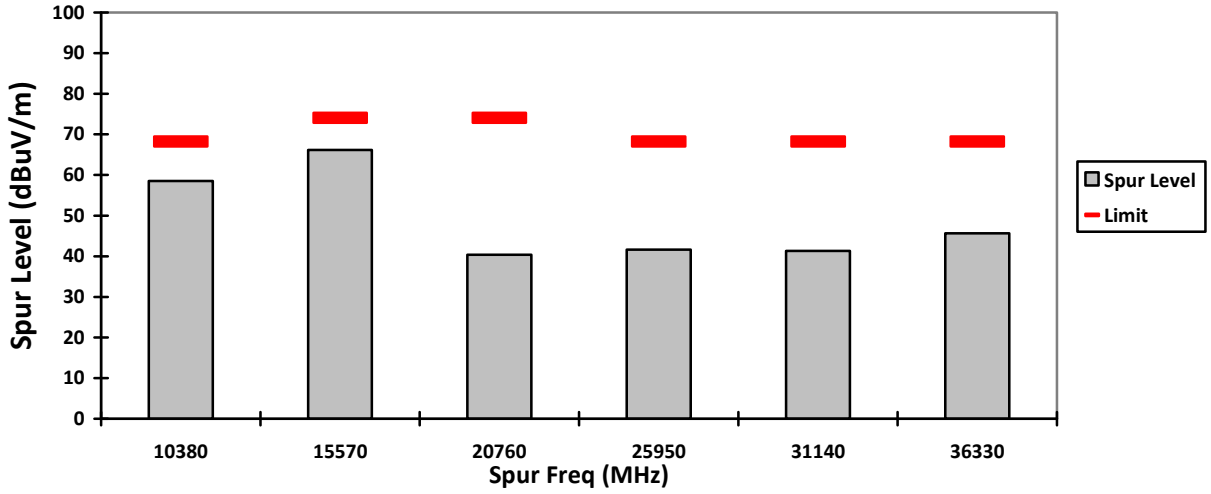
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

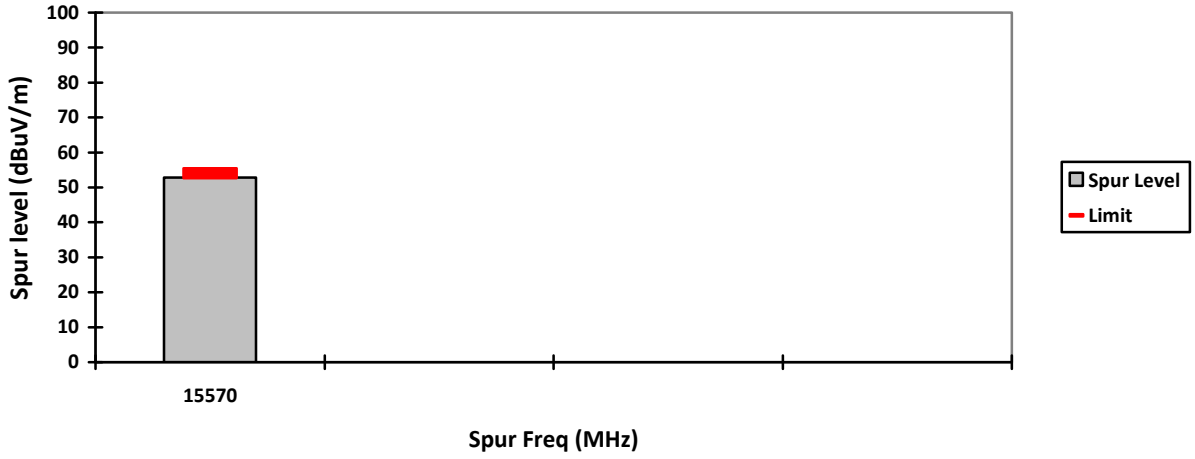
VERTICAL, PK



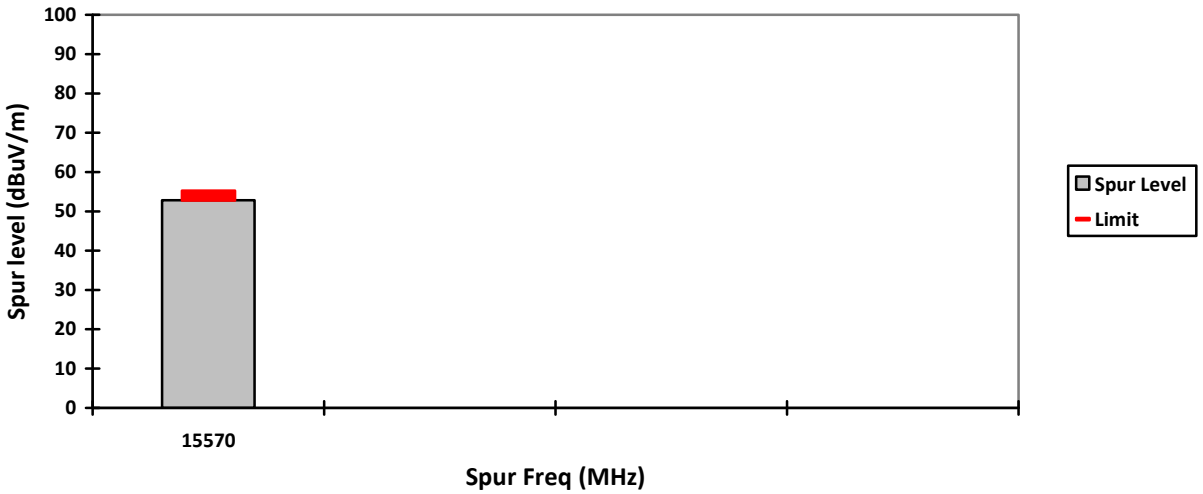
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5230.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

Radiated Emission (High Channel) tabular data

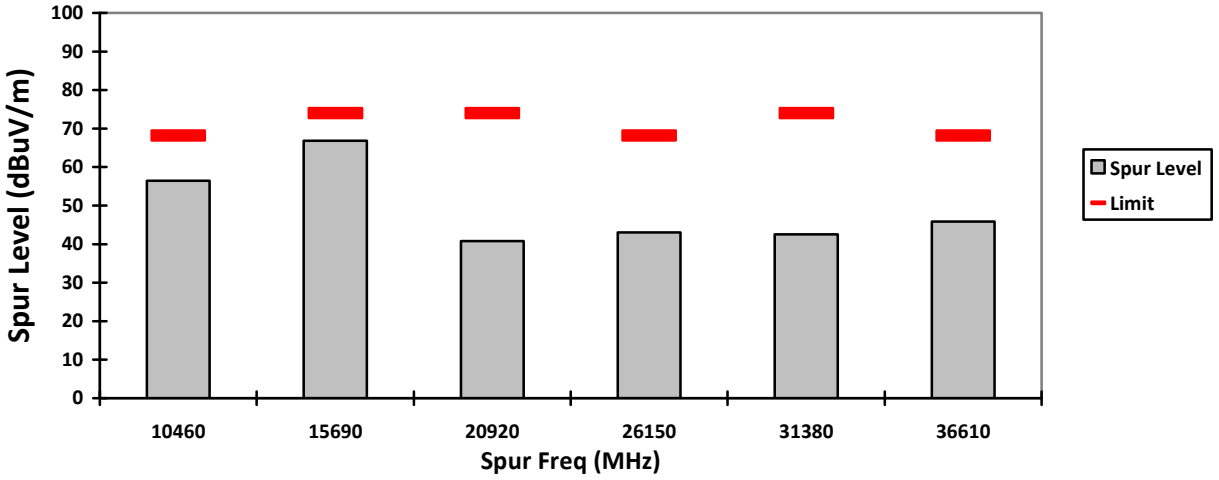
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10460	-	56.4626**	-	-	68.2000	-	-	11.7374	-	-
15690	-	66.8679**	53.5050**	-	74.0000	54.0000	-	7.1321	0.4950	-
20920	-	40.7720**	-	-	74.0000	-	-	33.2280	-	-
26150	-	43.0219**	-	-	68.2000	-	-	25.1781	-	-
31380	-	42.5705**	-	-	74.0000	-	-	31.4295	-	-
36610	-	45.8772**	-	-	68.2000	-	-	22.3228	-	-
Horizontal Radiated Emission Result										
10460	-	57.1739**	-	-	68.2000	54.0000	-	11.0261	-	-
15690	-	66.9483**	53.5112**	-	74.0000	54.0000	-	7.0517	0.4888	-
20920	-	41.1139**	-	-	74.0000	54.0000	-	32.8861	-	-
26150	-	41.4462**	-	-	68.2000	54.0000	-	26.7538	-	-
31380	-	42.9215**	-	-	74.0000	54.0000	-	31.0785	-	-
36610	-	45.3792**	-	-	68.2000	54.0000	-	22.8208	-	-

Remarks: Pass Result	Marginal Result	Fail Result

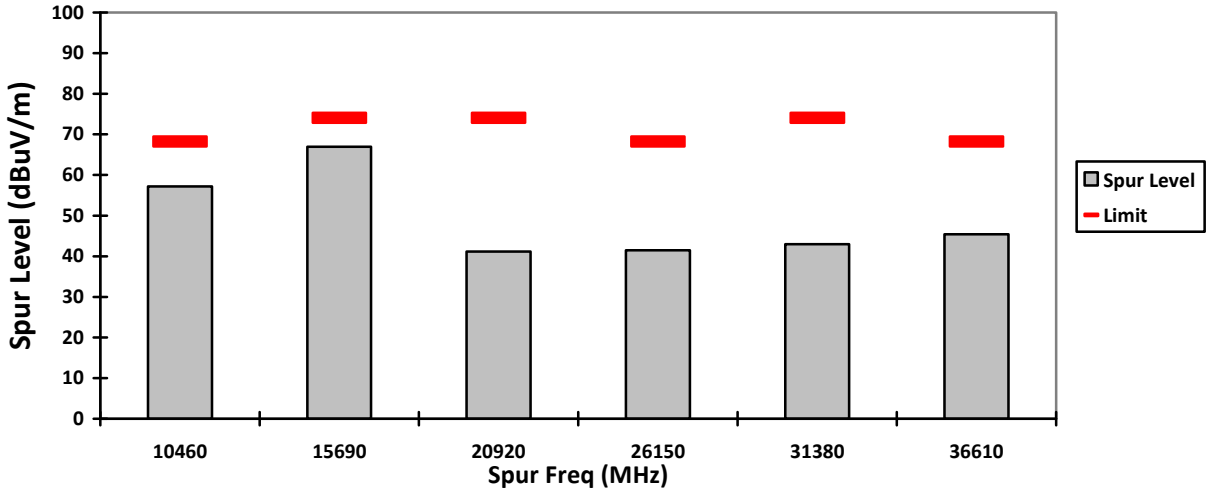
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

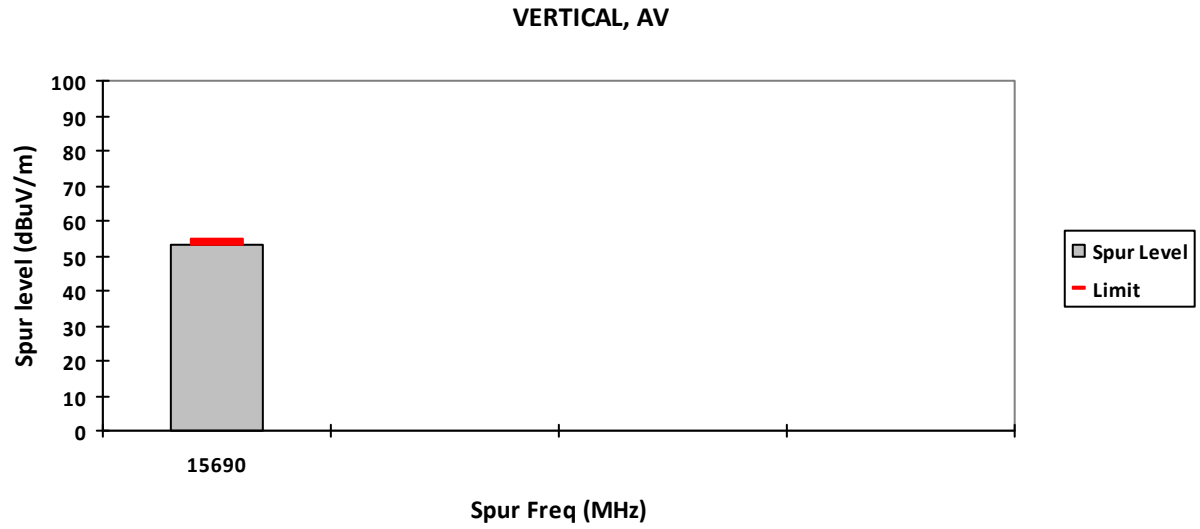
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

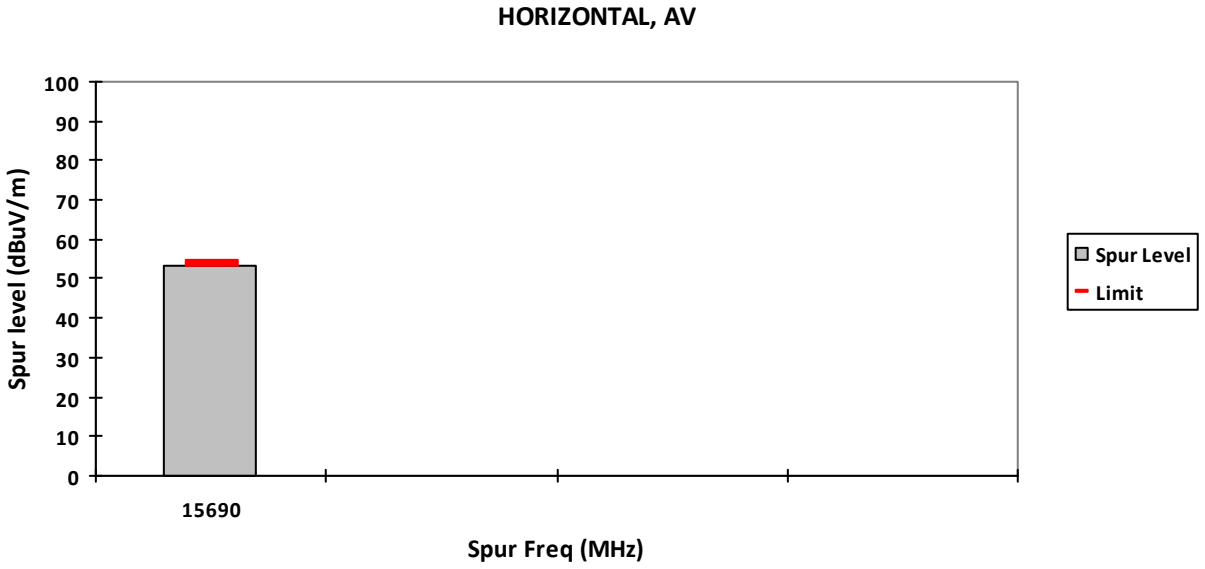
VERTICAL, PK



HORIZONTAL, PK




VERTICAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
15690
Spur Freq (MHz)
Spur Level
Limit


HORIZONTAL, AV
Spur level (dBuV/m)
100
90
80
70
60
50
40
30
20
10
0
15690
Spur Freq (MHz)
Spur Level
Limit

Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5270.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

Radiated Emission (Low Channel) tabular data

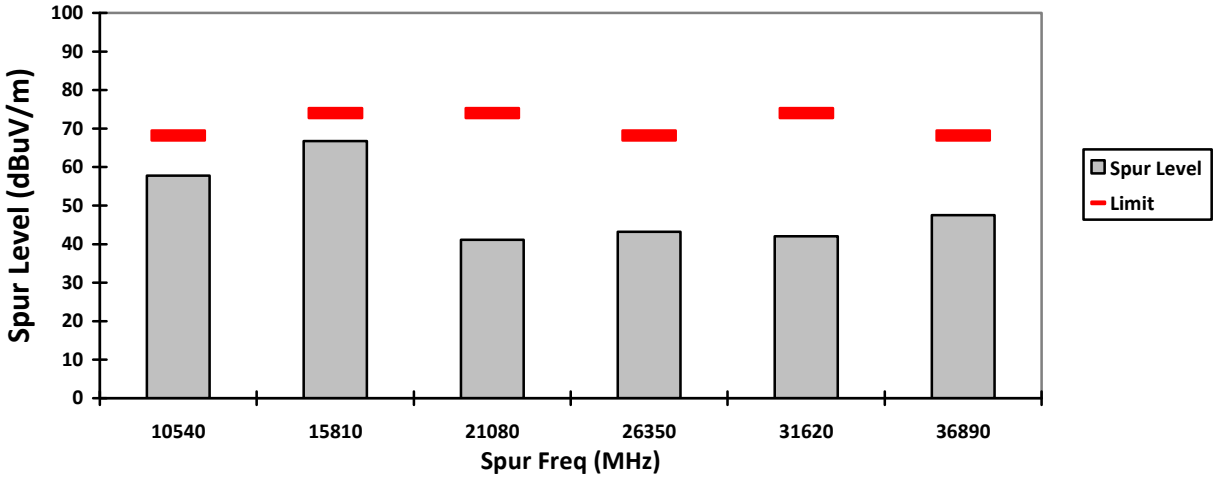
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10540	-	57.8169**	-	-	68.2000	-	-	10.3831	-	-
15810	-	66.7900**	53.4071**	-	74.0000	54.0000	-	7.2100	0.5929	-
21080	-	41.0924**	-	-	74.0000	-	-	32.9076	-	-
26350	-	43.2352**	-	-	68.2000	-	-	24.9648	-	-
31620	-	42.0609**	-	-	74.0000	-	-	31.9391	-	-
36890	-	47.5053**	-	-	68.2000	-	-	20.6947	-	-
Horizontal Radiated Emission Result										
10540	-	57.4974**	-	-	68.2000	-	-	10.7026	-	-
15810	-	66.6183**	53.4212**	-	74.0000	54.0000	-	7.3817	0.5788	-
21080	-	40.2356**	-	-	74.0000	-	-	33.7644	-	-
26350	-	43.5969**	-	-	68.2000	-	-	24.6031	-	-
31620	-	40.9624**	-	-	74.0000	-	-	33.0376	-	-
36890	-	45.5306**	-	-	68.2000	-	-	22.6694	-	-

Remarks: Pass Result	Marginal Result	Fail Result

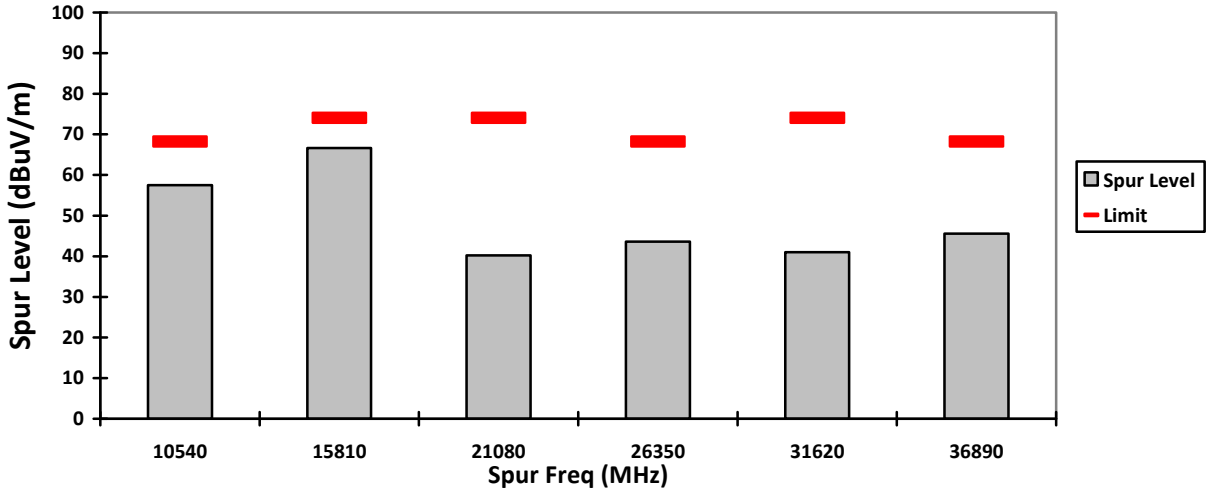
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

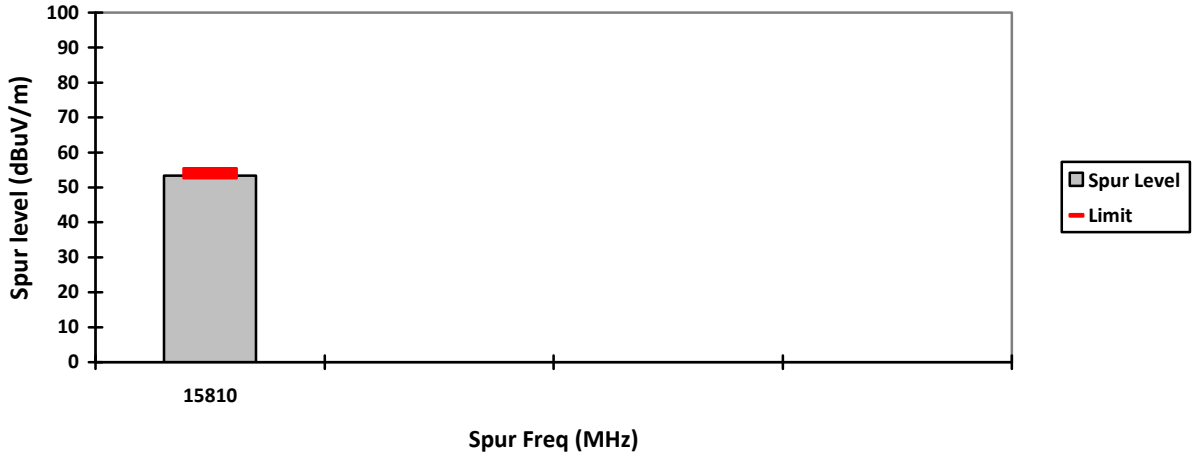
VERTICAL, PK



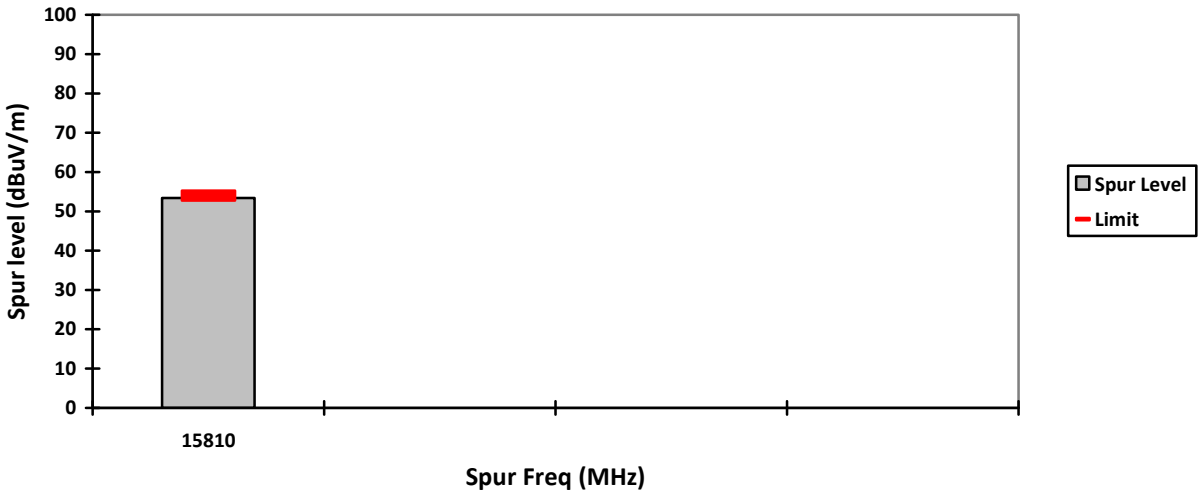
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (12dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5310.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

Radiated Emission (High Channel) tabular data

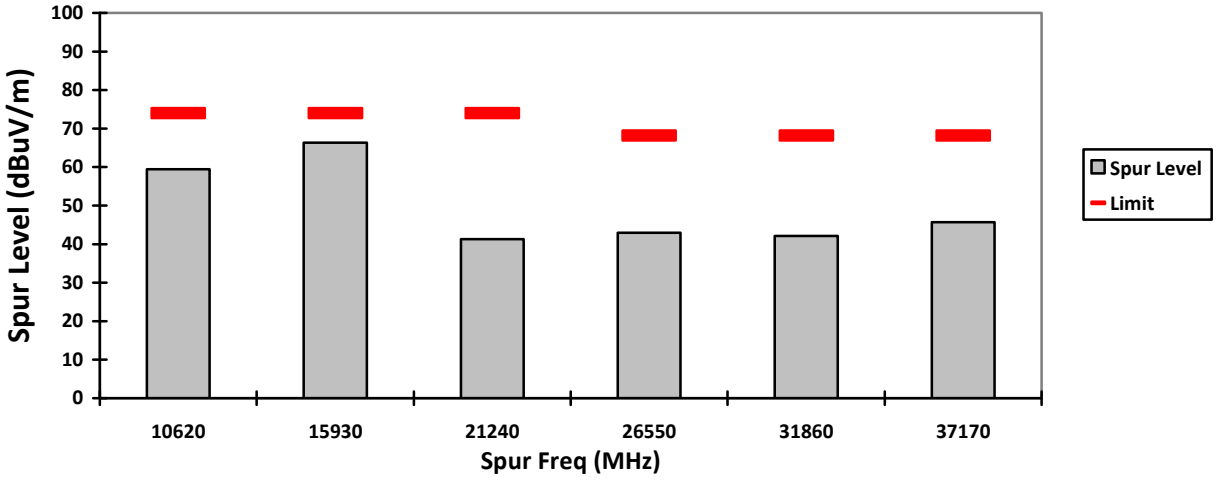
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10620	-	59.4729**	46.7650**	-	74.0000	54.0000	-	14.5271	7.2350	-
15930	-	66.3097**	53.4817**	-	74.0000	54.0000	-	7.6903	0.5183	-
21240	-	41.2589**	-	-	74.0000	-	-	32.7411	-	-
26550	-	42.9698**	-	-	68.2000	-	-	25.2302	-	-
31860	-	42.1559**	-	-	68.2000	-	-	26.0441	-	-
37170	-	45.7143**	-	-	68.2000	-	-	22.4857	-	-
Horizontal Radiated Emission Result										
10620	-	59.5641**	46.8726**	-	74.0000	54.0000	-	14.4359	7.1274	-
15930	-	66.1817**	53.4548**	-	74.0000	54.0000	-	7.8183	0.5452	-
21240	-	40.7157**	-	-	74.0000	-	-	33.2843	-	-
26550	-	41.5000**	-	-	68.2000	-	-	26.7000	-	-
31860	-	41.7267**	-	-	68.2000	-	-	26.4733	-	-
37170	-	45.7420**	-	-	68.2000	-	-	22.4580	-	-

Remarks: Pass Result	Marginal Result	Fail Result

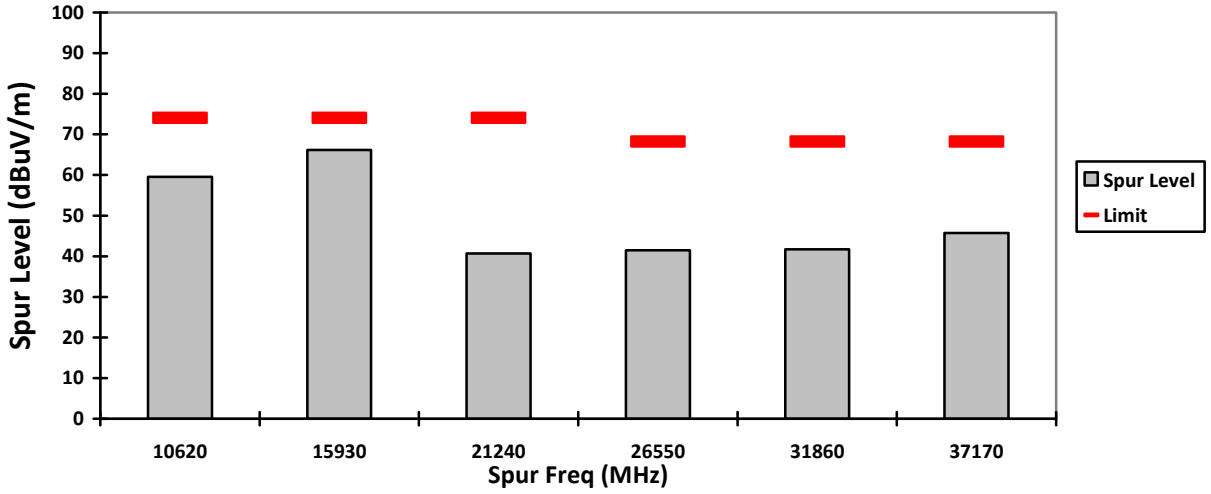
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

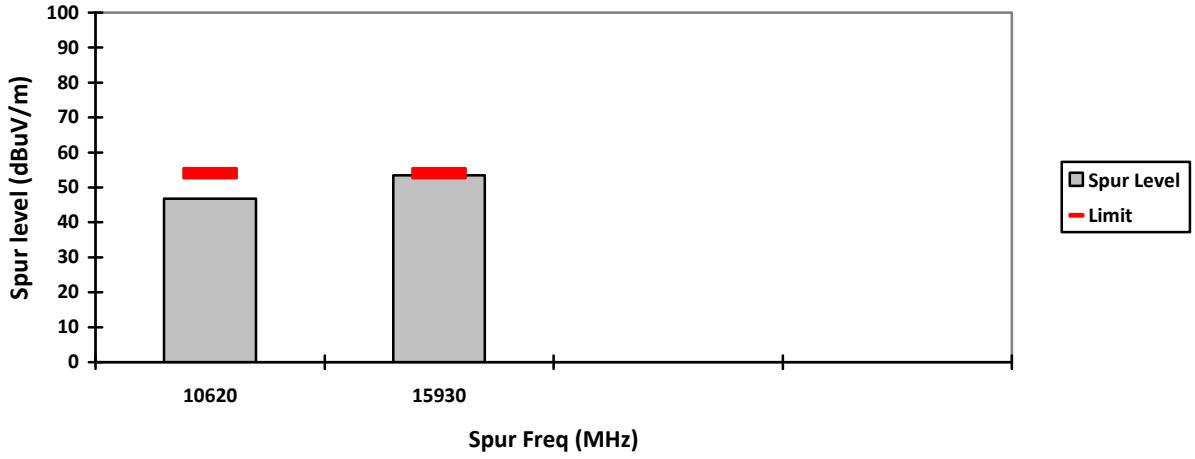
VERTICAL, PK



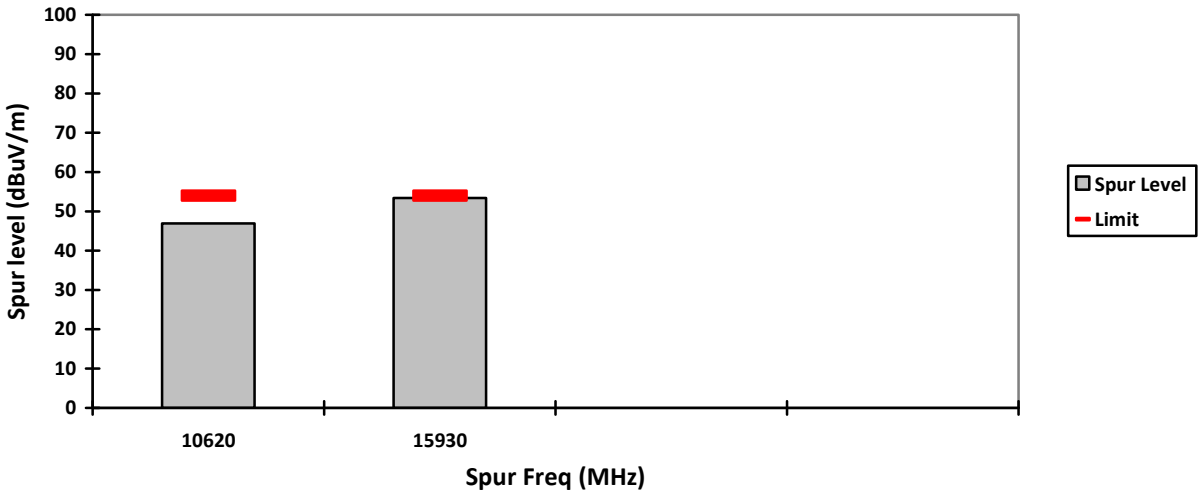
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power: (18dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5510.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

Radiated Emission (Low Channel) tabular data

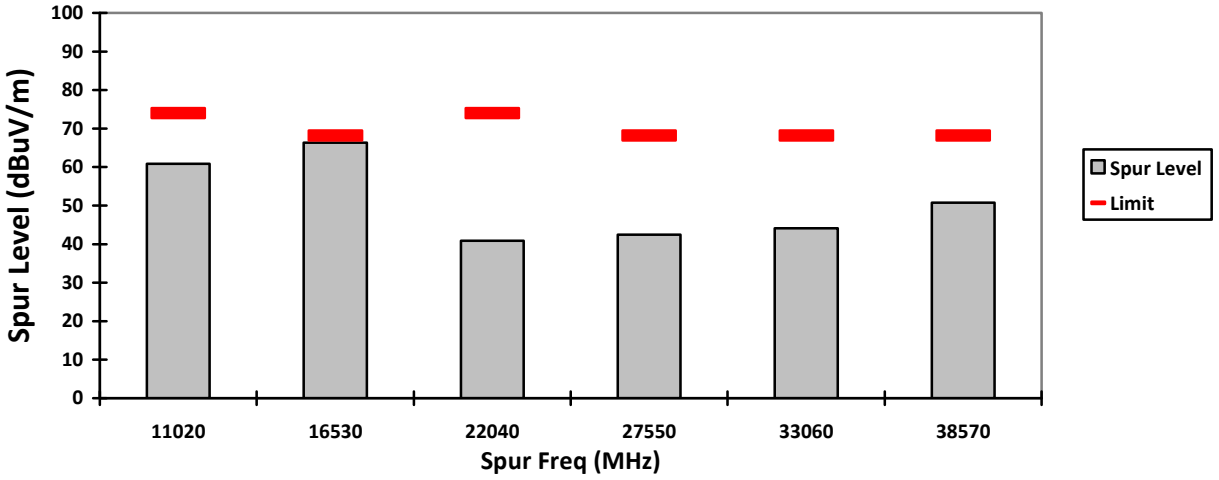
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11020	-	60.8486**	47.7044**	-	74.0000	54.0000	-	13.1514	6.2956	-
16530	-	66.3644**	-	-	68.2000	-	-	1.8356	-	-
22040	-	40.9129**	-	-	74.0000	-	-	33.0871	-	-
27550	-	42.4347**	-	-	68.2000	-	-	25.7653	-	-
33060	-	44.1353**	-	-	68.2000	-	-	24.0647	-	-
38570	-	50.7123**	-	-	68.2000	-	-	17.4877	-	-
Horizontal Radiated Emission Result										
11020	-	60.9200**	47.8326**	-	74.0000	54.0000	-	13.0800	6.1674	-
16530	-	67.4720**	-	-	68.2000	-	-	0.7280	-	-
22040	-	41.5988**	-	-	74.0000	-	-	32.4012	-	-
27550	-	42.7722**	-	-	68.2000	-	-	25.4278	-	-
33060	-	42.6243**	-	-	68.2000	-	-	25.5757	-	-
38570	-	49.8864**	-	-	68.2000	-	-	18.3136	-	-

Remarks: Pass Result	Marginal Result	Fail Result

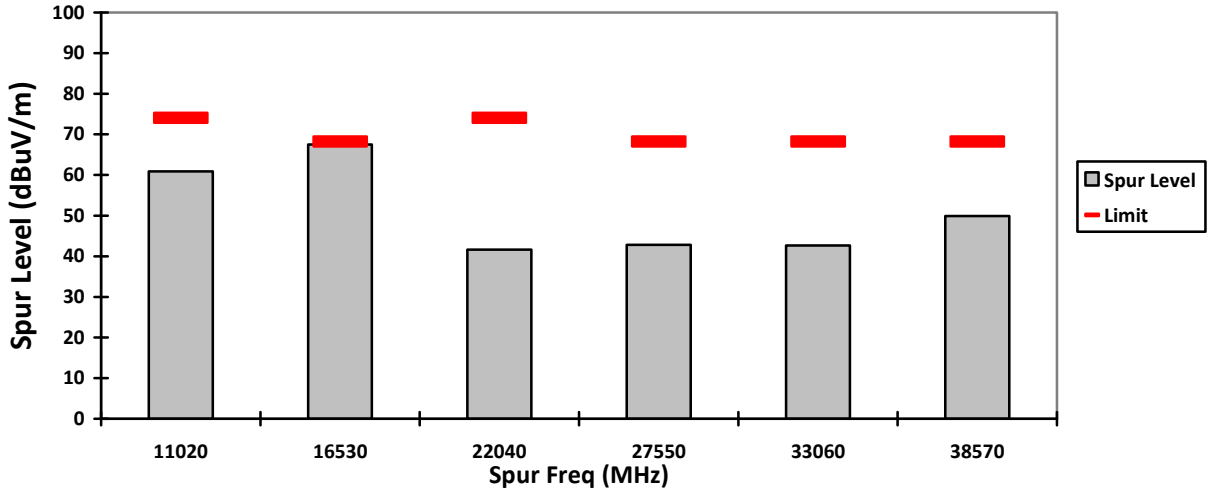
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

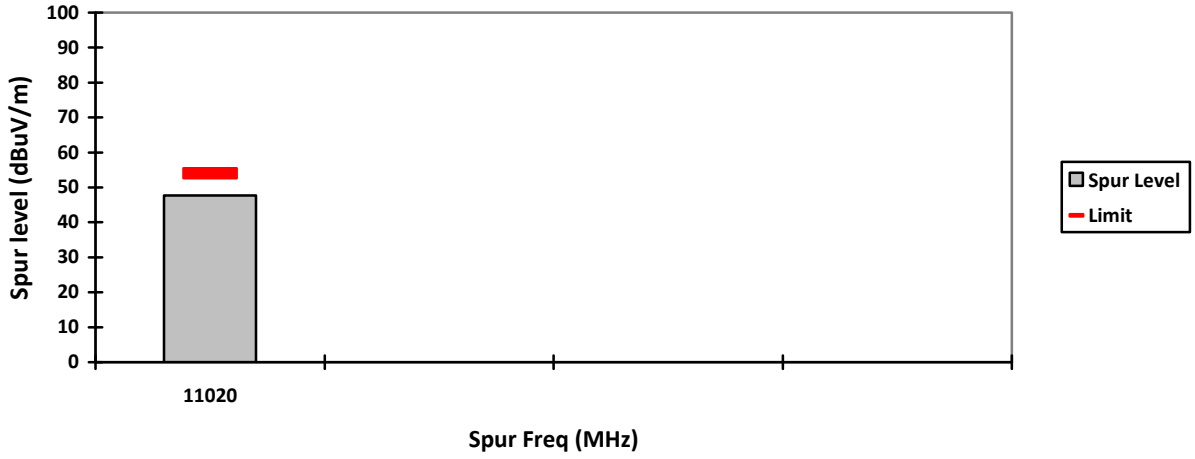
VERTICAL, PK



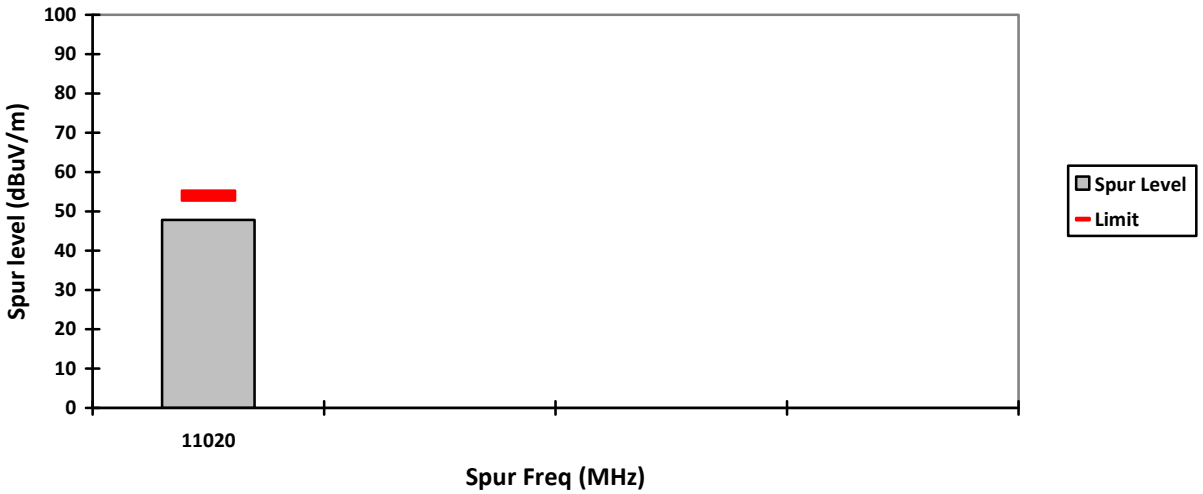
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: Mid Test Frequency: 5550.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

Radiated Emission (Mid Channel) tabular data

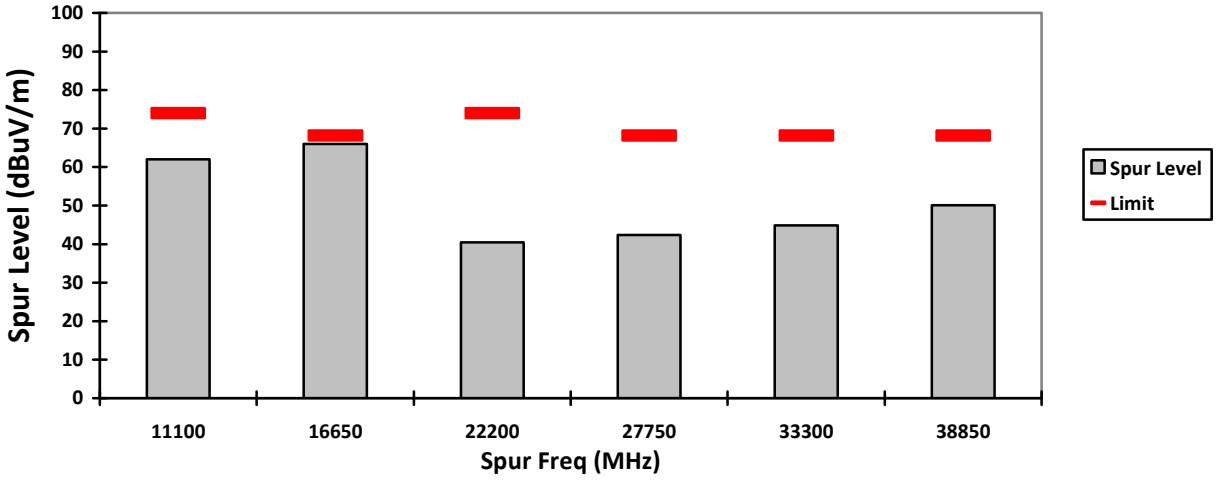
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11100	-	62.0252**	49.0301**	-	74.0000	54.0000	-	11.9748	4.9699	-
16650	-	65.9774**	-	-	68.2000	-	-	2.2226	-	-
22200	-	40.5008**	-	-	74.0000	-	-	33.4992	-	-
27750	-	42.3901**	-	-	68.2000	-	-	25.8099	-	-
33300	-	44.8239**	-	-	68.2000	-	-	23.3761	-	-
38850	-	50.1079**	-	-	68.2000	-	-	18.0921	-	-
Horizontal Radiated Emission Result										
11100	-	62.0306**	48.8072**	-	74.0000	54.0000	-	11.9694	5.1928	-
16650	-	67.2657**	-	-	68.2000	-	-	0.9343	-	-
22200	-	40.8196**	-	-	74.0000	-	-	33.1804	-	-
27750	-	42.8421**	-	-	68.2000	-	-	25.3579	-	-
33300	-	43.7192**	-	-	68.2000	-	-	24.4808	-	-
38850	-	50.5176**	-	-	68.2000	-	-	17.6824	-	-

Remarks: Pass Result	Marginal Result	Fail Result

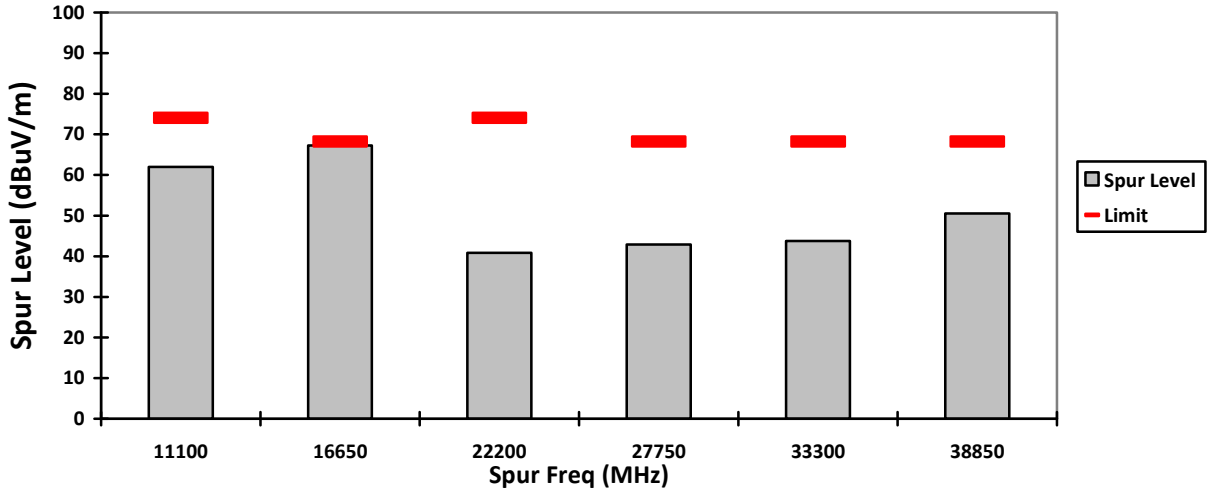
Temperature (degC): 23.1 Humidity (%): 67.4
Test Performed by: Nazrin & Rezza Test Date: Thu, 30 May, 2024
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

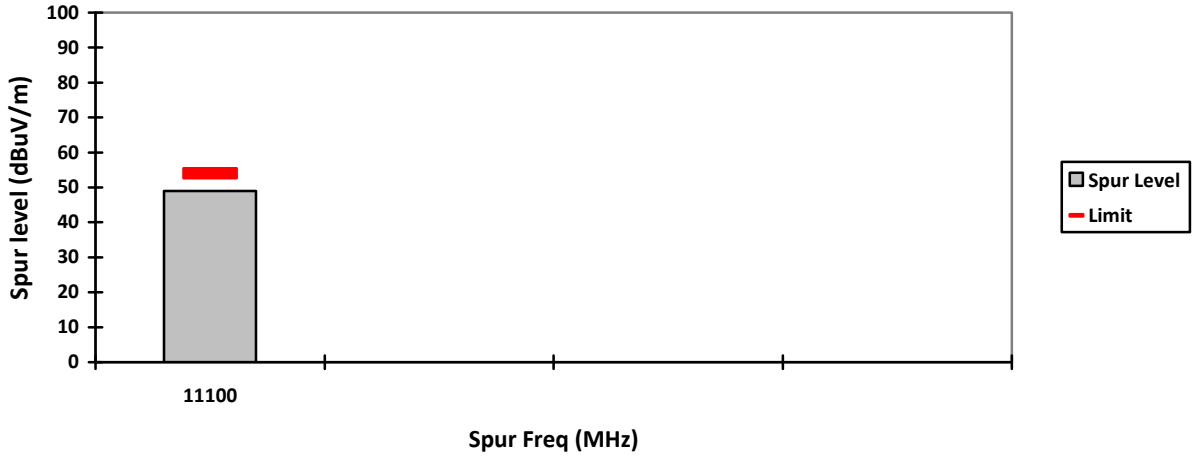
VERTICAL, PK



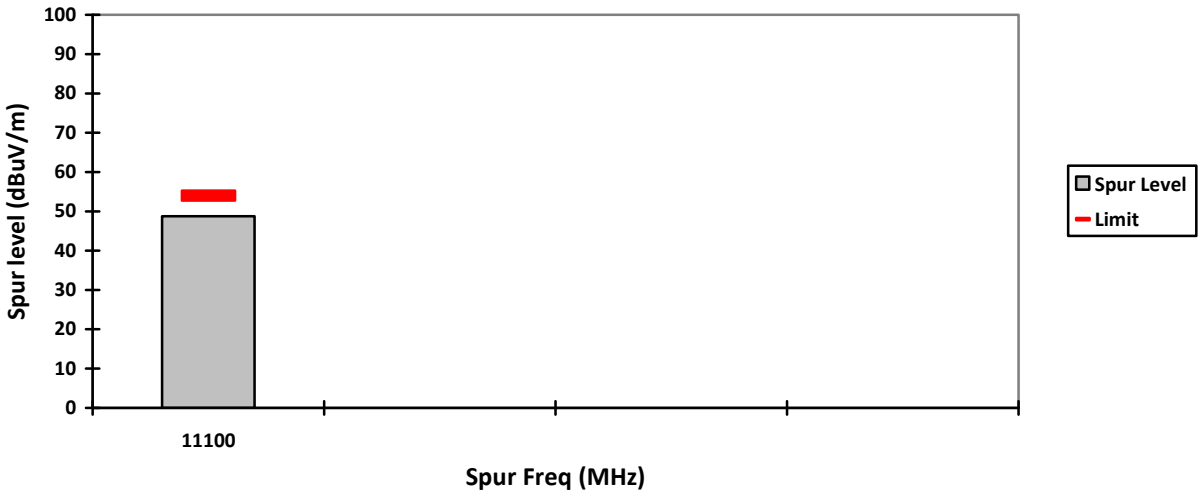
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Straddle Test Frequency: 5710.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

Radiated Emission (Straddle Channel) tabular data

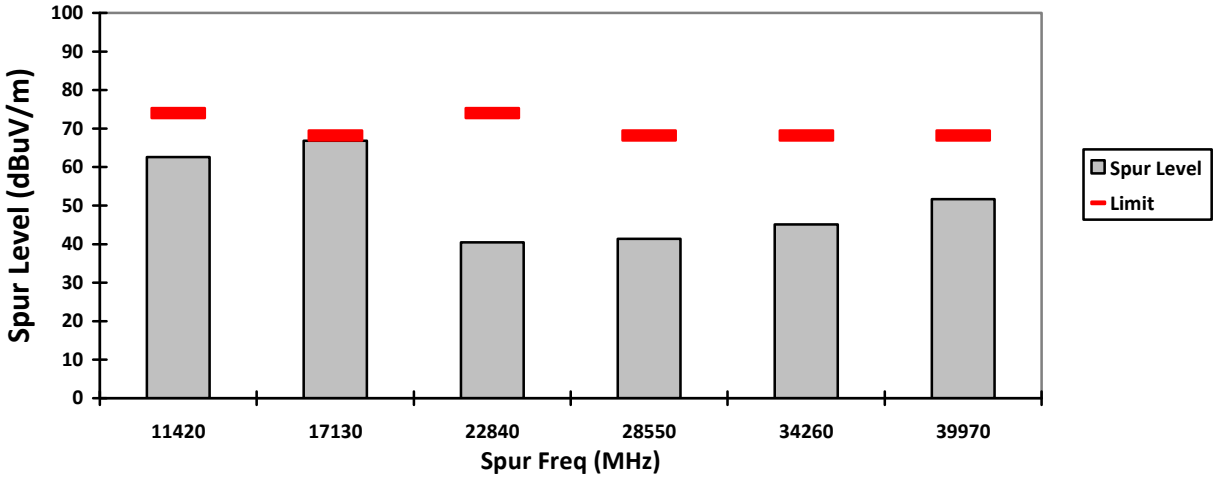
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11420	-	62.5624**	48.8884**	-	74.0000	54.0000	-	11.4376	5.1116	-
17130	-	66.8613**	-	-	68.2000	-	-	1.3387	-	-
22840	-	40.4907**	-	-	74.0000	-	-	33.5093	-	-
28550	-	41.3563**	-	-	68.2000	-	-	26.8437	-	-
34260	-	45.1305**	-	-	68.2000	-	-	23.0695	-	-
39970	-	51.6586**	-	-	68.2000	-	-	16.5414	-	-
Horizontal Radiated Emission Result										
11420	-	61.7588**	49.0927**	-	74.0000	54.0000	-	12.2412	4.9073	-
17130	-	66.9441**	-	-	68.2000	-	-	1.2559	-	-
22840	-	40.8067**	-	-	74.0000	-	-	33.1933	-	-
28550	-	42.2502**	-	-	68.2000	-	-	25.9498	-	-
34260	-	45.1458**	-	-	68.2000	-	-	23.0542	-	-
39970	-	51.1457**	-	-	68.2000	-	-	17.0543	-	-

Remarks: Pass Result	Marginal Result	Fail Result

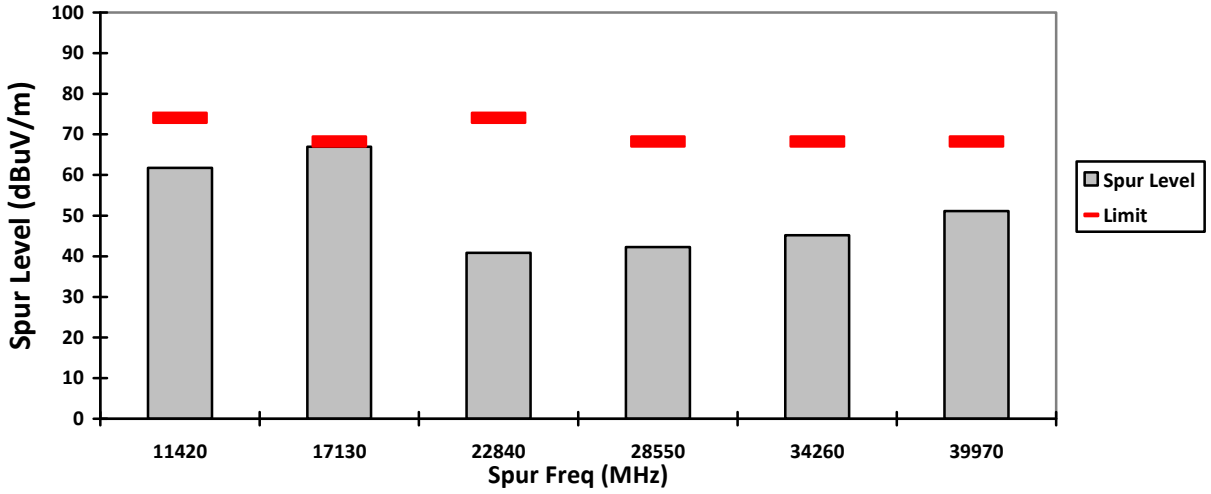
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

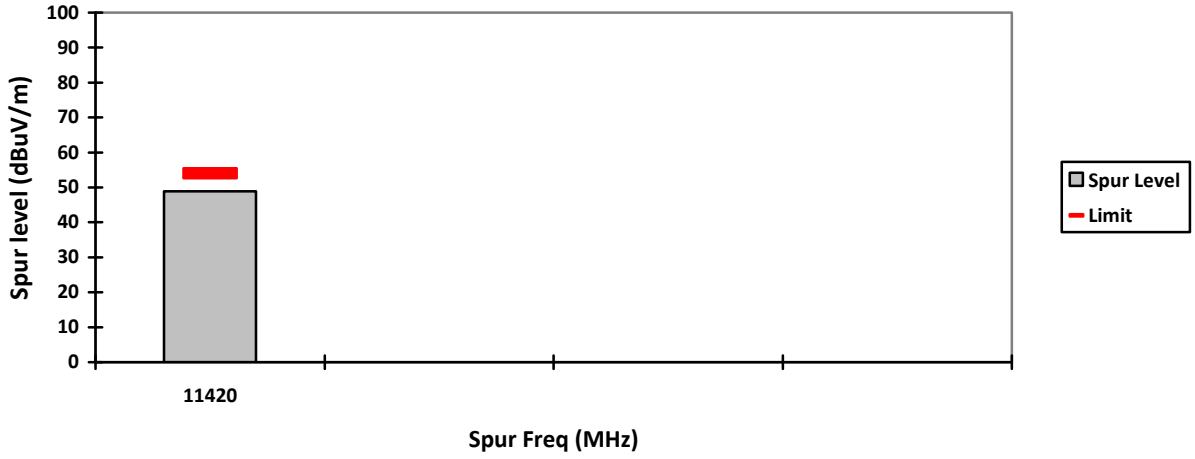
VERTICAL, PK



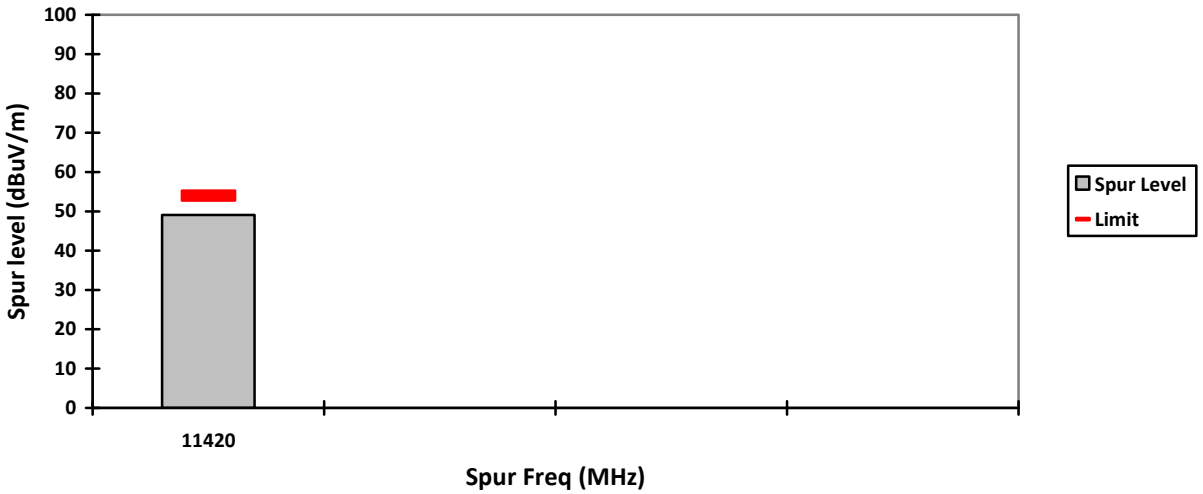
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5755.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

Radiated Emission (Low Channel) tabular data

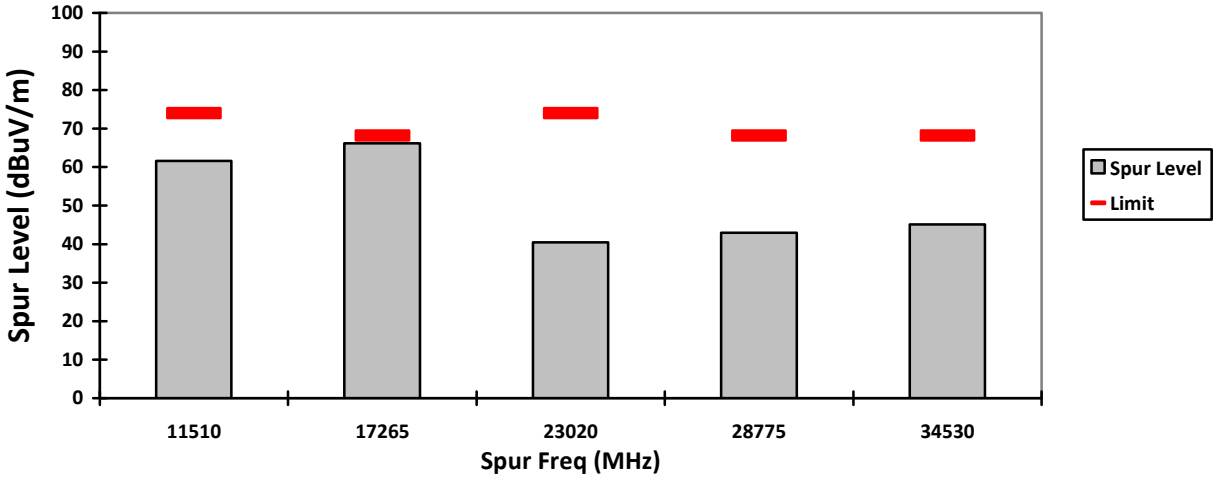
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11510	-	61.6378**	47.4904**	-	74.0000	54.0000	-	12.3622	6.5096	-
17265	-	66.1586**	-	-	68.2000	-	-	2.0414	-	-
23020	-	40.4829**	-	-	74.0000	-	-	33.5171	-	-
28775	-	42.9718**	-	-	68.2000	-	-	25.2282	-	-
34530	-	45.0859**	-	-	68.2000	-	-	23.1141	-	-
										-
Horizontal Radiated Emission Result										
11510	-	61.3931**	47.6157**	-	74.0000	54.0000	-	12.6069	6.3843	-
17265	-	66.1346**	-	-	68.2000	-	-	2.0654	-	-
23020	-	40.7391**	-	-	74.0000	-	-	33.2609	-	-
28775	-	42.6298**	-	-	68.2000	-	-	25.5702	-	-
34530	-	44.6531**	-	-	68.2000	-	-	23.5469	-	-
										-

Remarks: Pass Result	Marginal Result	Fail Result

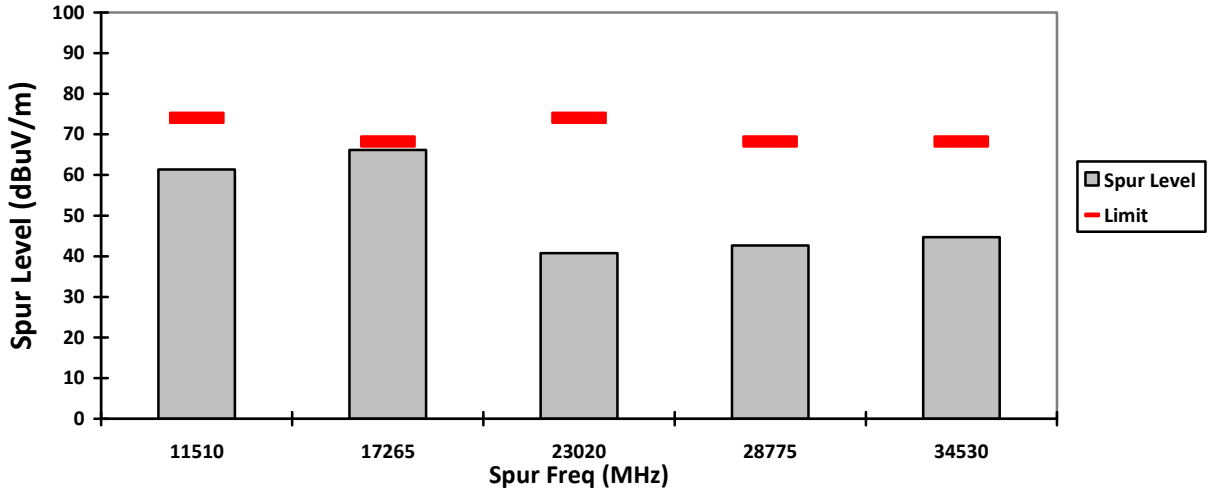
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

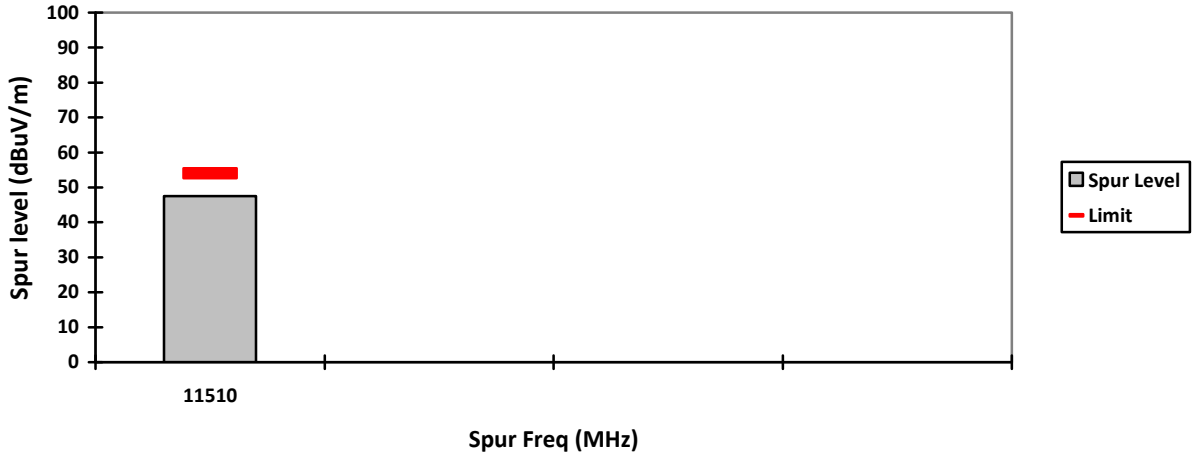
VERTICAL, PK



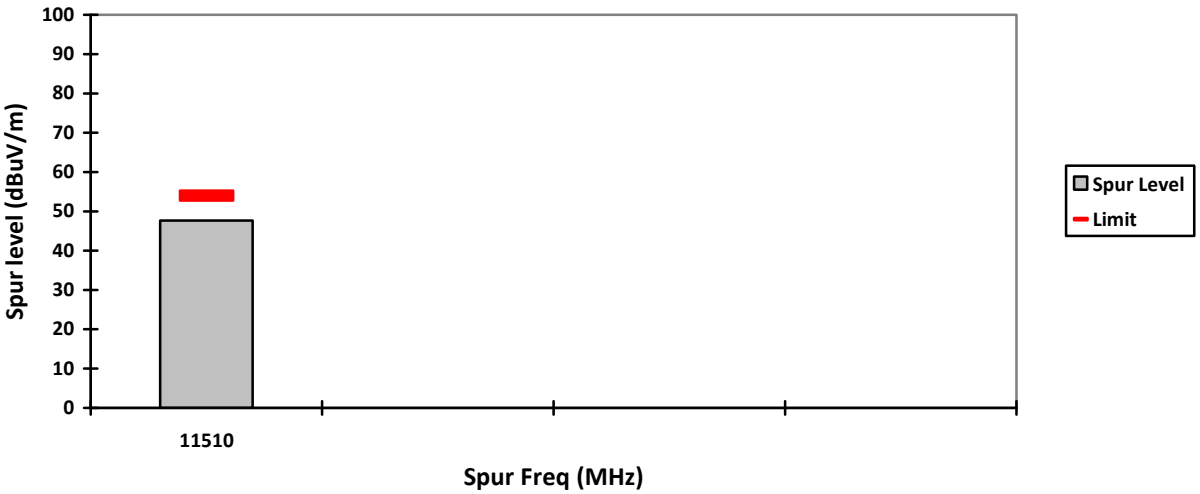
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5795.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11n 40MHz)

Radiated Emission (High Channel) tabular data

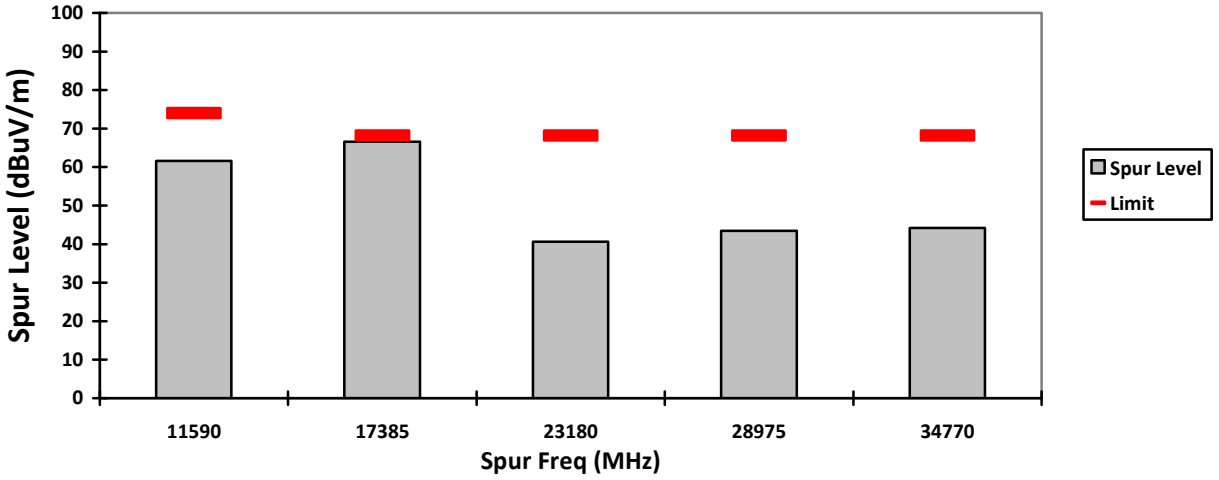
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11590	-	61.6229**	48.4356**	-	74.0000	54.0000	-	12.3771	5.5644	-
17385	-	66.5820**	-	-	68.2000	-	-	1.618	-	-
23180	-	40.6108**	-	-	68.2000	-	-	27.5892	-	-
28975	-	43.4491**	-	-	68.2000	-	-	24.7509	-	-
34770	-	44.2109**	-	-	68.2000	-	-	23.9891	-	-
										-
Horizontal Radiated Emission Result										
11590	-	60.8661**	48.4597**	-	74.0000	54.0000	-	13.1339	5.5403	-
17385	-	66.1203**	-	-	68.2000	-	-	2.0797	-	-
23180	-	40.3384**	-	-	68.2000	-	-	27.8616	-	-
28975	-	42.8429**	-	-	68.2000	-	-	25.3571	-	-
34770	-	44.2330**	-	-	68.2000	-	-	23.9670	-	-
										-

Remarks: Pass Result	Marginal Result	Fail Result

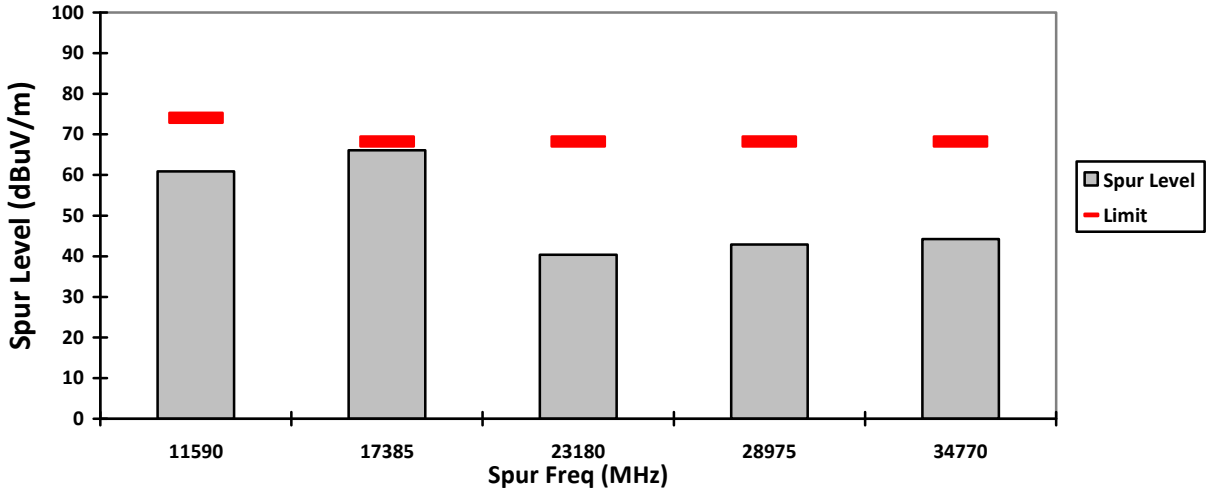
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Thu, 30 May, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

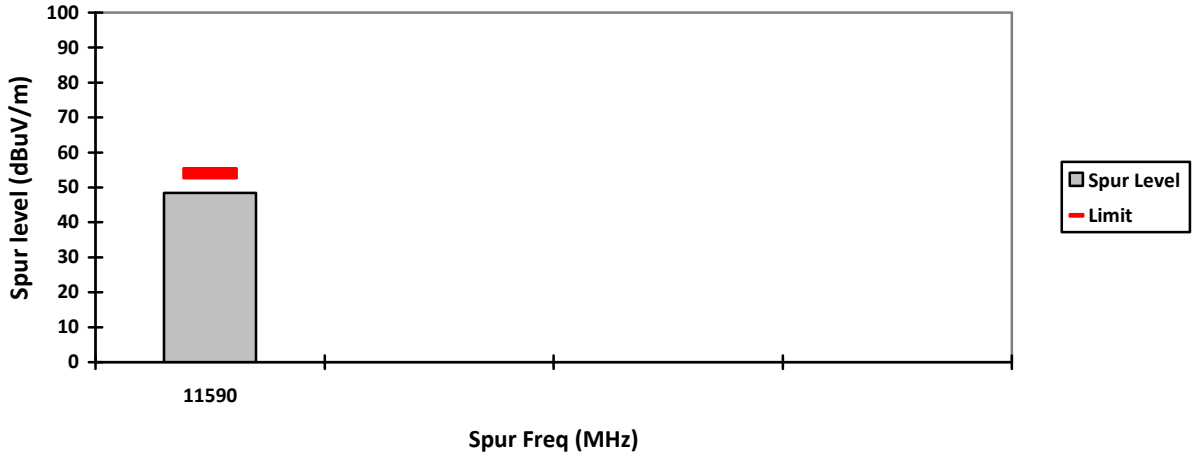
VERTICAL, PK



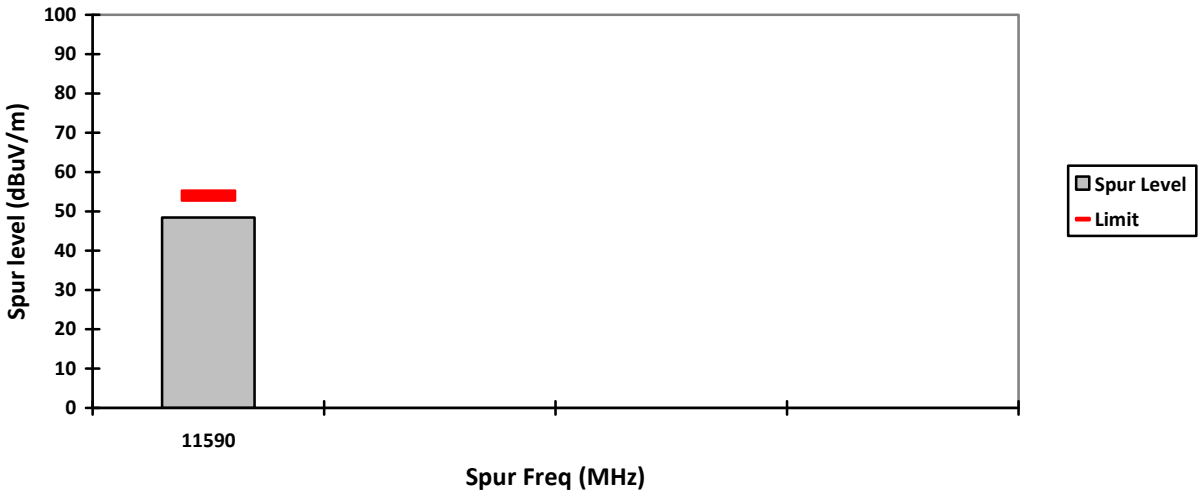
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



802.11ac(VHT80)

Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (13 dBm) Accessory: AN000414A01
Test Channel: Mid Test Frequency: 5210.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11ac 80MHz)

Radiated Emission (Mid Channel) tabular data

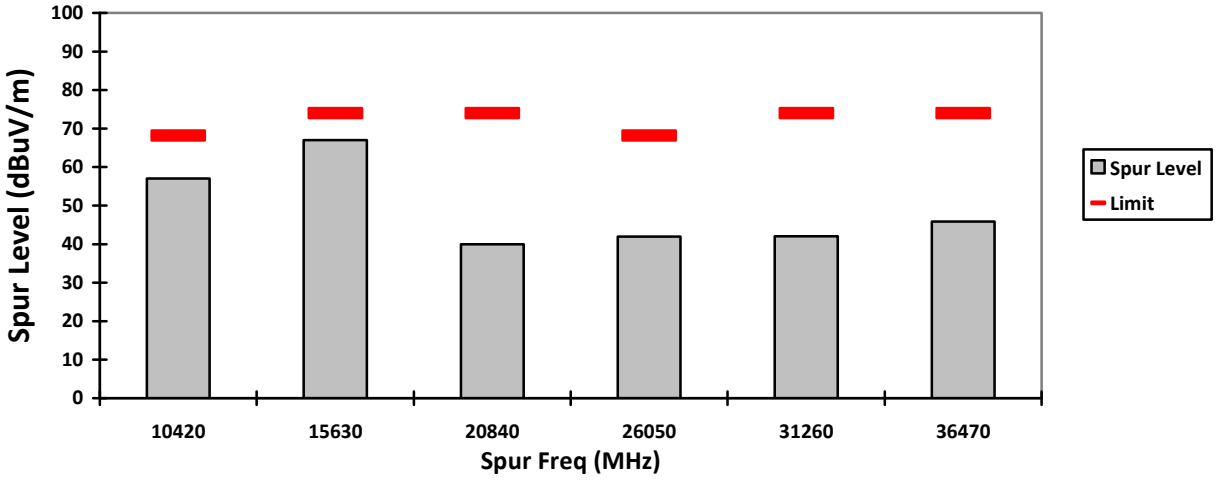
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10420	-	57.0078**	-	-	68.2000	-	-	11.1922	-	-
15630	-	66.9907**	53.8860**	-	74.0000	54.0000	-	7.0093	0.1140	-
20840	-	39.9416**	-	-	74.0000	-	-	34.0584	-	-
26050	-	41.9821**	-	-	68.2000	-	-	26.2179	-	-
31260	-	42.0566**	-	-	74.0000	-	-	31.9434	-	-
36470	-	45.8349**	-	-	74.0000	-	-	28.1651	-	-
Horizontal Radiated Emission Result										
10420	-	58.0532**	-	-	68.2000	-	-	10.1468	-	-
15630	-	66.4077**	53.7818**	-	74.0000	54.0000	-	7.5923	0.2182	-
20840	-	40.2904**	-	-	74.0000	-	-	33.7096	-	-
26050	-	42.7449**	-	-	68.2000	-	-	25.4551	-	-
31260	-	42.0872**	-	-	74.0000	-	-	31.9128	-	-
36470	-	45.7474**	-	-	74.0000	-	-	28.2526	-	-

Remarks: Pass Result	Marginal Result	Fail Result

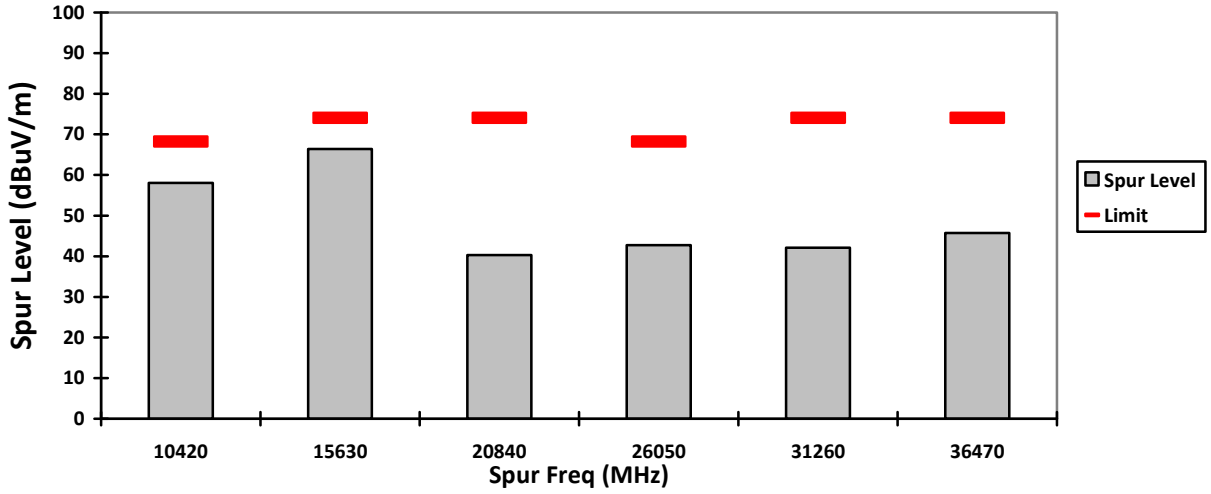
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Mon, 3 June, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

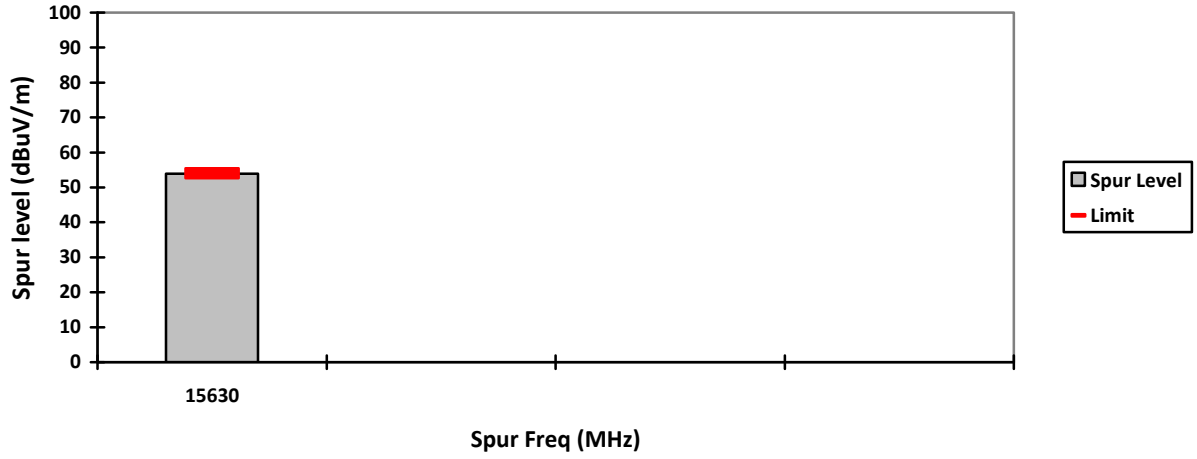
VERTICAL, PK



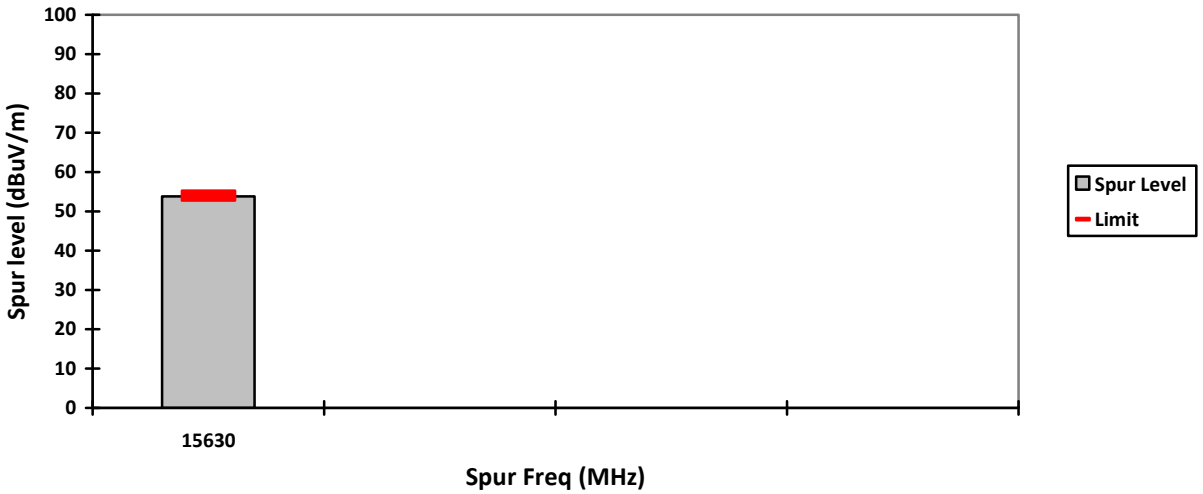
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (10dBm) Accessory: AN000414A01
Test Channel: Mid Test Frequency: 5290.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11ac 80MHz)

Radiated Emission (Mid Channel) tabular data

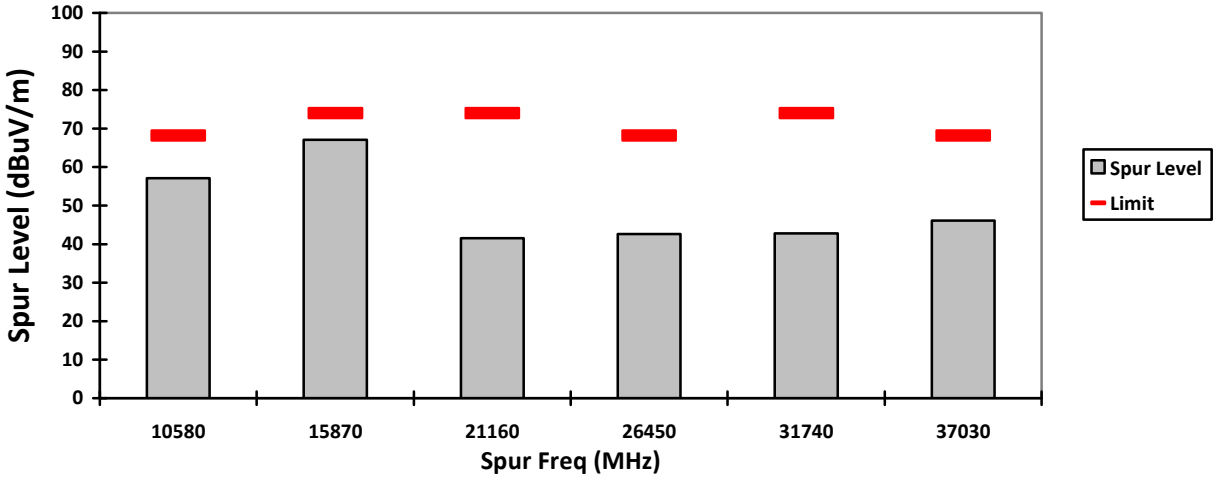
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
10580	-	57.1034**	-	-	68.2000	-	-	11.0966	-	-
15870	-	67.0510**	53.2785**	-	74.0000	54.0000	-	6.9490	0.7215	-
21160	-	41.5334**	-	-	74.0000	-	-	32.4666	-	-
26450	-	42.5984**	-	-	68.2000	-	-	25.6016	-	-
31740	-	42.7659**	-	-	74.0000	-	-	31.2341	-	-
37030	-	46.0671**	-	-	68.2000	-	-	22.1329	-	-
Horizontal Radiated Emission Result										
10580	-	58.1209**	-	-	68.2000	-	-	10.0791	-	-
15870	-	67.2460**	53.3847**	-	74.0000	54.0000	-	6.7540	0.6153	-
21160	-	39.3931**	-	-	74.0000	-	-	34.6069	-	-
26450	-	42.6437**	-	-	68.2000	-	-	25.5563	-	-
31740	-	41.9968**	-	-	74.0000	-	-	32.0032	-	-
37030	-	47.0279**	-	-	68.2000	-	-	21.1721	-	-

Remarks: Pass Result	Marginal Result	Fail Result

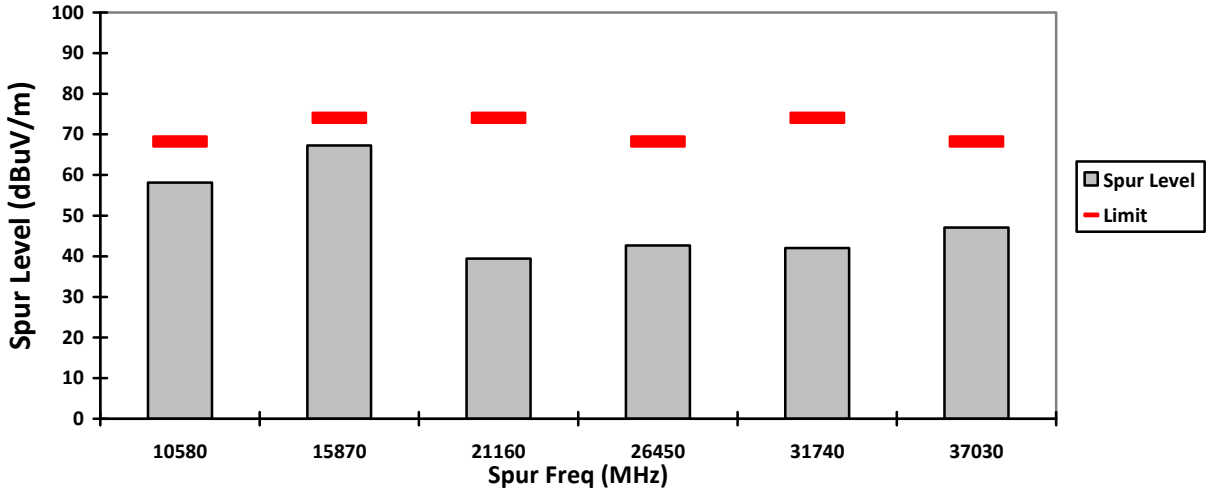
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Mon, 3 June, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

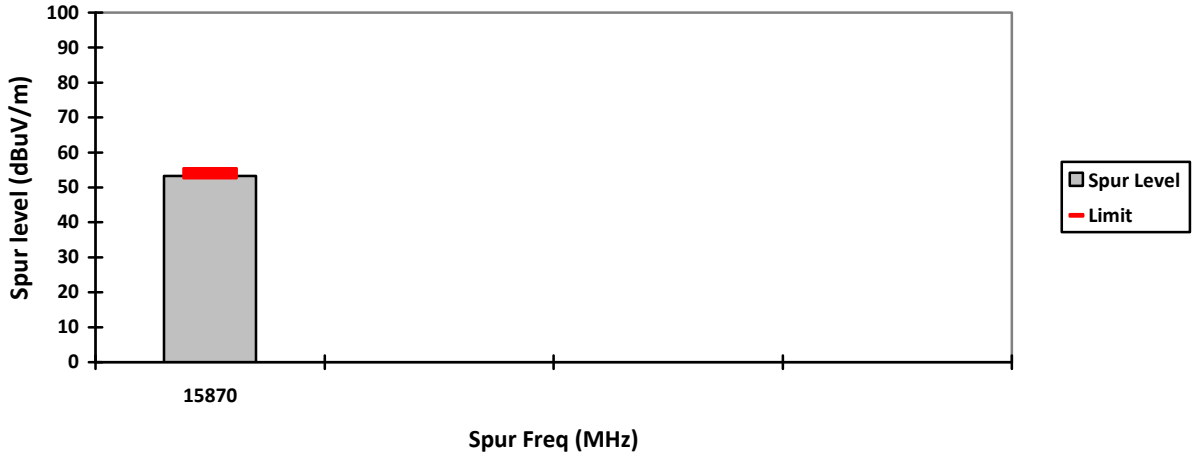
VERTICAL, PK



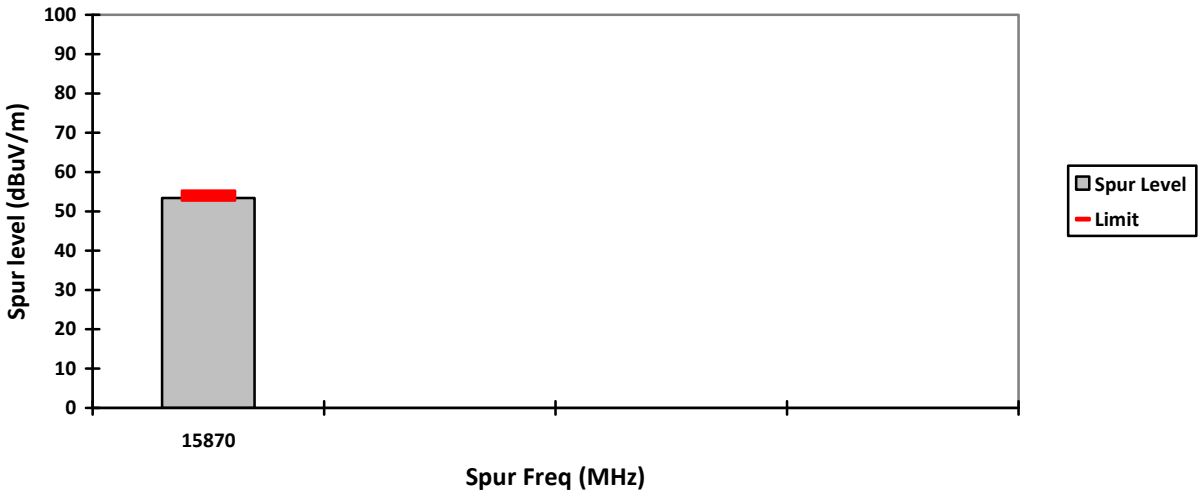
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (12dBm) Accessory: AN000414A01
Test Channel: Low Test Frequency: 5530.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11ac 80MHz)

Radiated Emission (Low Channel) tabular data

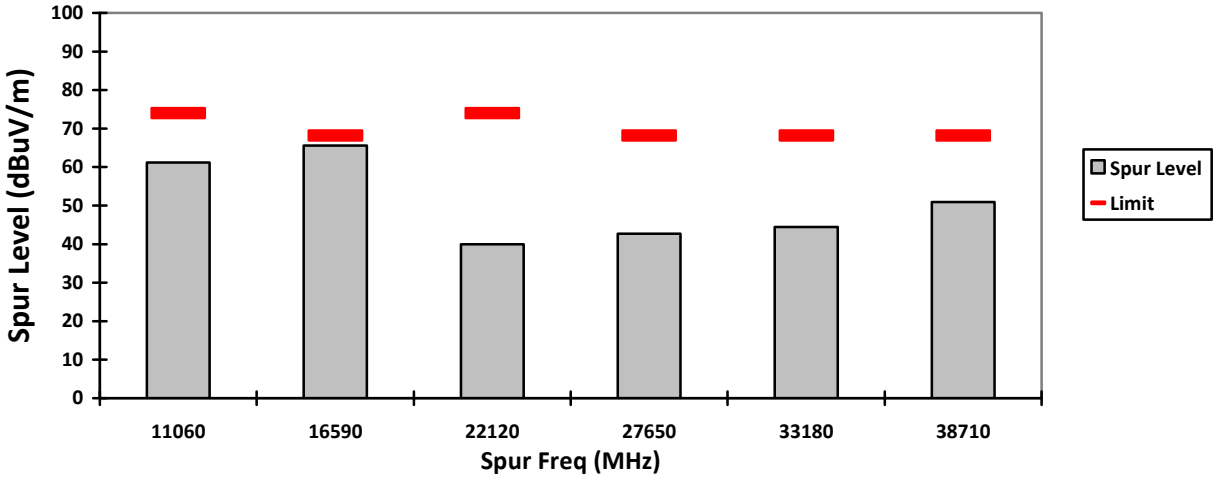
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11060	-	61.2130**	48.9783**	-	74.0000	54.0000	-	12.7870	5.0217	-
16590	-	65.5495**	-	-	68.2000	-	-	2.6505	-	-
22120	-	39.9663**	-	-	74.0000	-	-	34.0337	-	-
27650	-	42.6885**	-	-	68.2000	-	-	25.5115	-	-
33180	-	44.4158**	-	-	68.2000	-	-	23.7842	-	-
38710	-	50.9001**	-	-	68.2000	-	-	17.2999	-	-
Horizontal Radiated Emission Result										
11060	-	61.4669**	48.9789**	-	74.0000	54.0000	-	12.5331	5.0211	-
16590	-	65.8968**	-	-	68.2000	-	-	2.3032	-	-
22120	-	40.5831**	-	-	74.0000	-	-	33.4169	-	-
27650	-	42.5690**	-	-	68.2000	-	-	25.6310	-	-
33180	-	43.7423**	-	-	68.2000	-	-	24.4577	-	-
38710	-	49.7120**	-	-	68.2000	-	-	18.4880	-	-

Remarks: Pass Result	Marginal Result	Fail Result

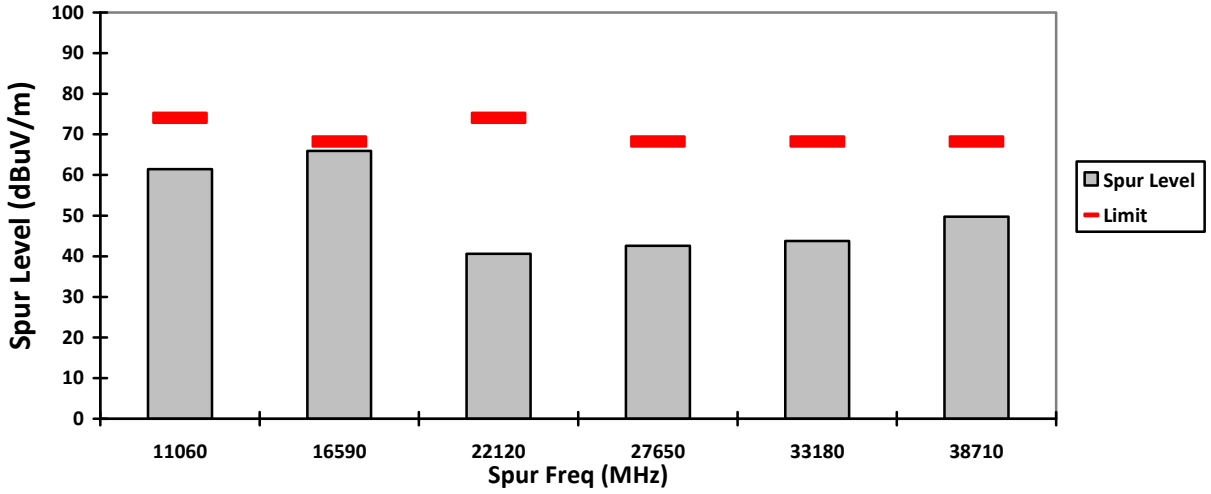
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Mon, 3 June, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

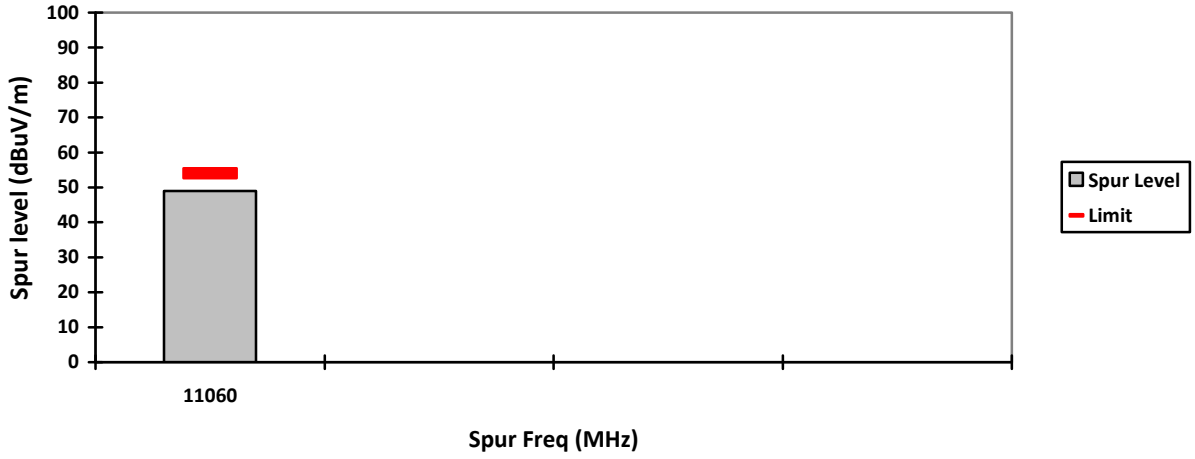
VERTICAL, PK



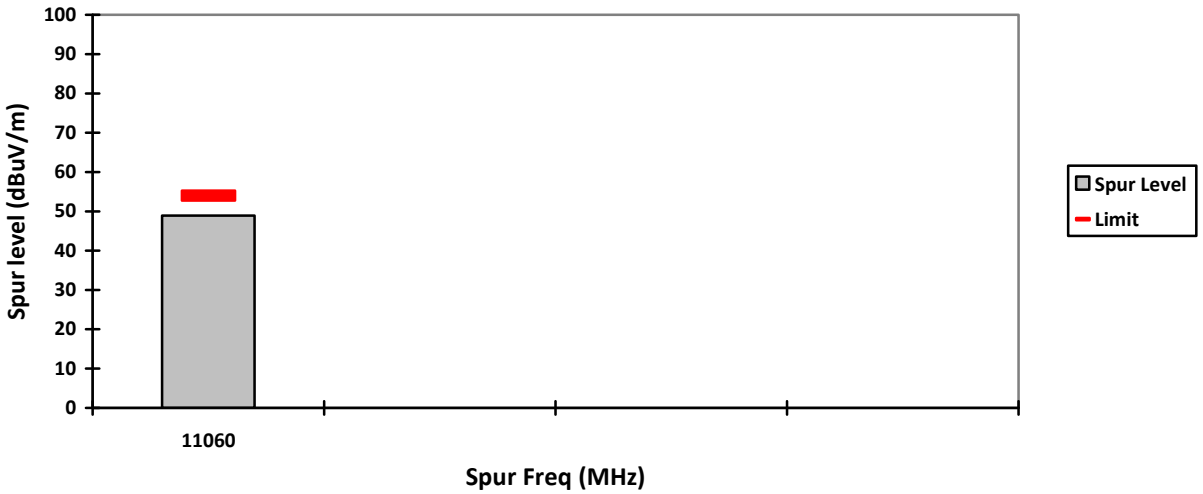
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Mid Test Frequency: 5610.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11ac 80MHz)

Radiated Emission (Mid Channel) tabular data

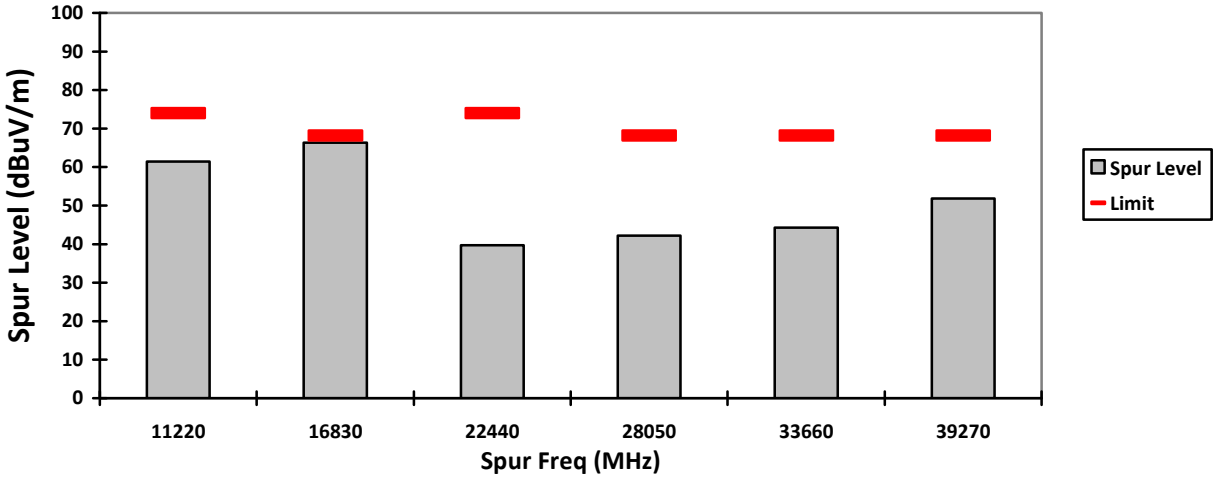
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11220	-	61.4732**	48.1511**	-	74.0000	54.0000	-	12.5268	5.8489	-
16830	-	66.3638**	-	-	68.2000	-	-	1.8362	-	-
22440	-	39.7327**	-	-	74.0000	-	-	34.2673	-	-
28050	-	42.1964**	-	-	68.2000	-	-	26.0036	-	-
33660	-	44.2908**	-	-	68.2000	-	-	23.9092	-	-
39270	-	51.8047**	-	-	68.2000	-	-	16.3953	-	-
Horizontal Radiated Emission Result										
11220	-	60.8247**	48.3604**	-	74.0000	54.0000	-	13.1753	5.6396	-
16830	-	67.3843**	-	-	68.2000	-	-	0.8157	-	-
22440	-	40.1787**	-	-	74.0000	-	-	33.8213	-	-
28050	-	42.3715**	-	-	68.2000	-	-	25.8285	-	-
33660	-	43.8296**	-	-	68.2000	-	-	24.3704	-	-
39270	-	52.3312**	-	-	68.2000	-	-	15.8688	-	-

Remarks: Pass Result	Marginal Result	Fail Result

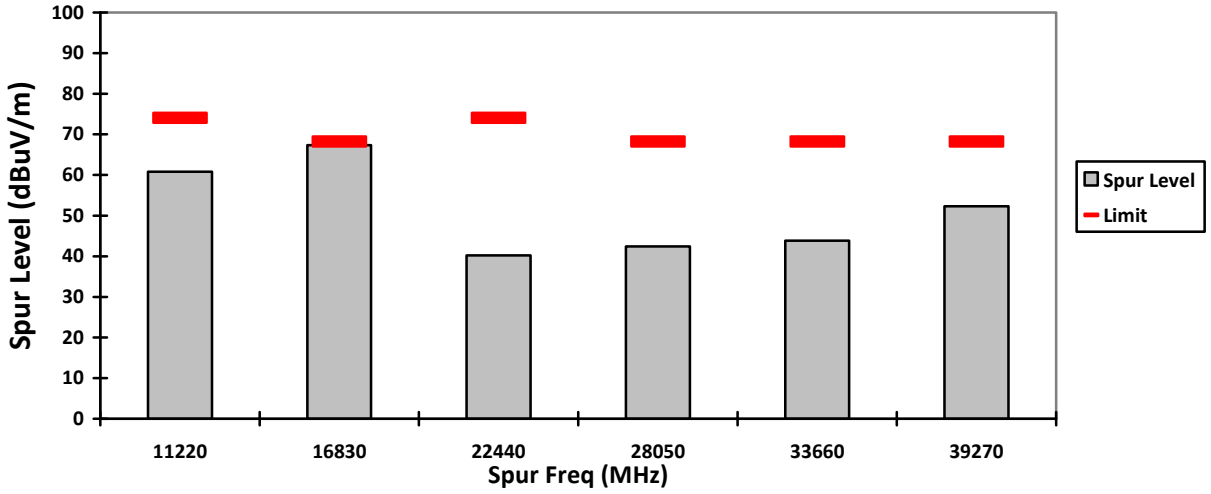
Temperature (degC): 23.1 Humidity (%): 67.4
Test Performed by: Nazrin & Rezza Test Date: Mon, 3 June, 2024
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

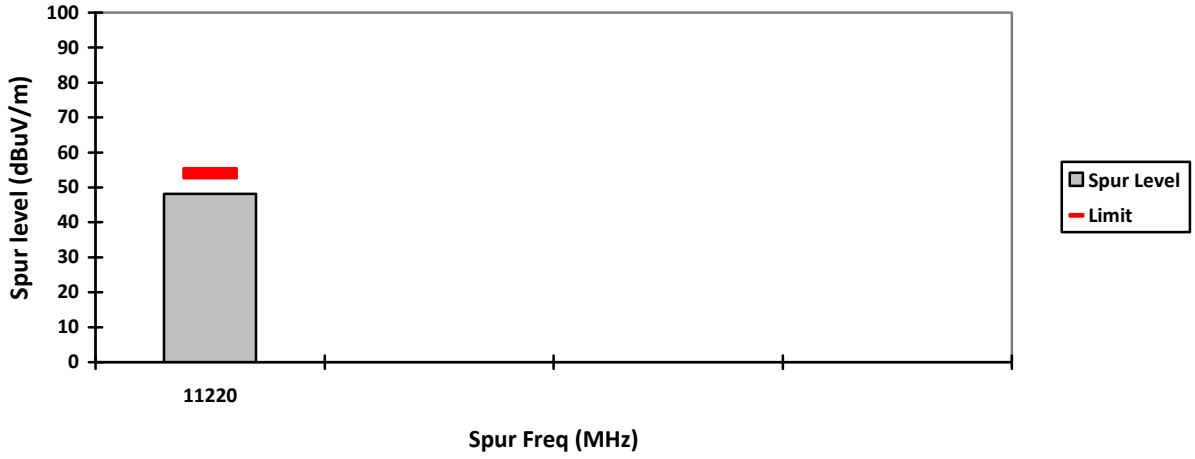
VERTICAL, PK



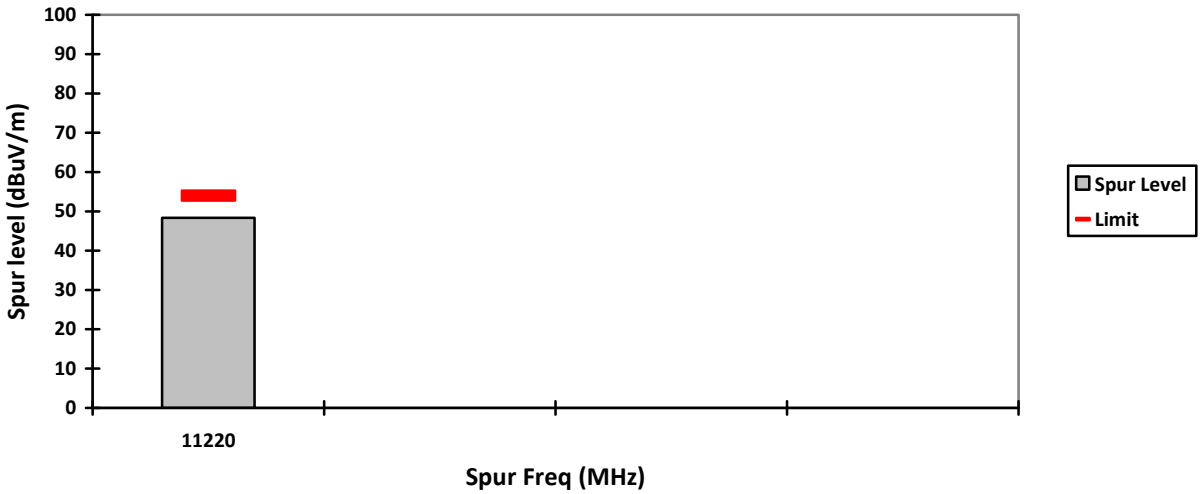
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (18dBm) Accessory: AN000414A01
Test Channel: High Test Frequency: 5690.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11ac 80MHz)

Radiated Emission (High Channel) tabular data

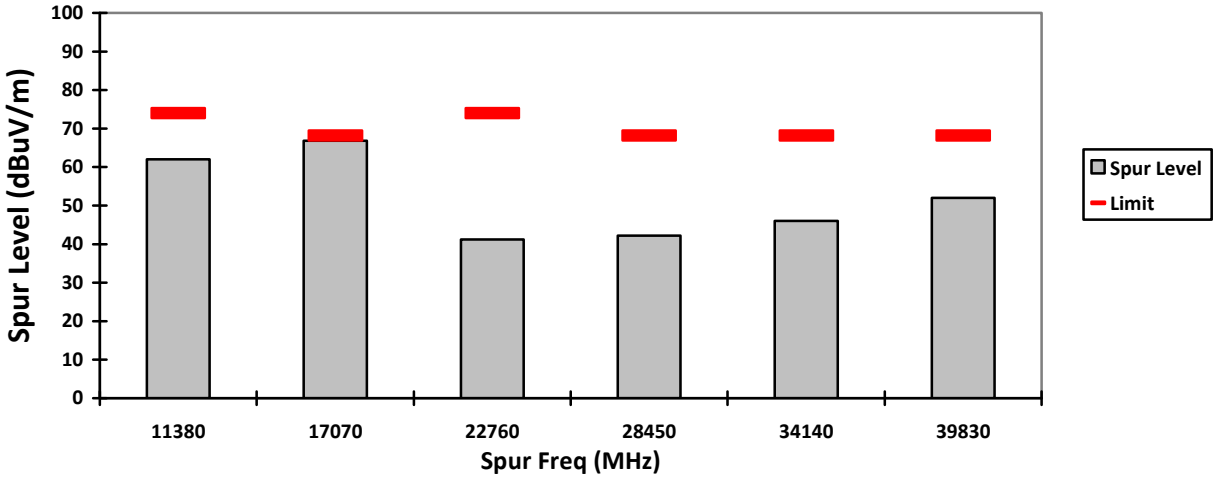
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11380	-	62.0015**	49.6850**	-	74.0000	54.0000	-	11.9985	4.3150	-
17070	-	66.8484**	-	-	68.2000	-	-	1.3516	-	-
22760	-	41.1789**	-	-	74.0000	-	-	32.8211	-	-
28450	-	42.2293**	-	-	68.2000	-	-	25.9707	-	-
34140	-	45.9944**	-	-	68.2000	-	-	22.2056	-	-
39830	-	51.9510**	-	-	68.2000	-	-	16.2490	-	-
Horizontal Radiated Emission Result										
11380	-	62.0490**	49.4721**	-	74.0000	54.0000	-	11.9510	4.5279	-
17070	-	66.5901**	-	-	68.2000	-	-	1.6099	-	-
22760	-	41.3700**	-	-	74.0000	-	-	32.6300	-	-
28450	-	42.8029**	-	-	68.2000	-	-	25.3971	-	-
34140	-	46.7135**	-	-	68.2000	-	-	21.4865	-	-
39830	-	52.6873**	-	-	68.2000	-	-	15.5127	-	-

Remarks: Pass Result	Marginal Result	Fail Result

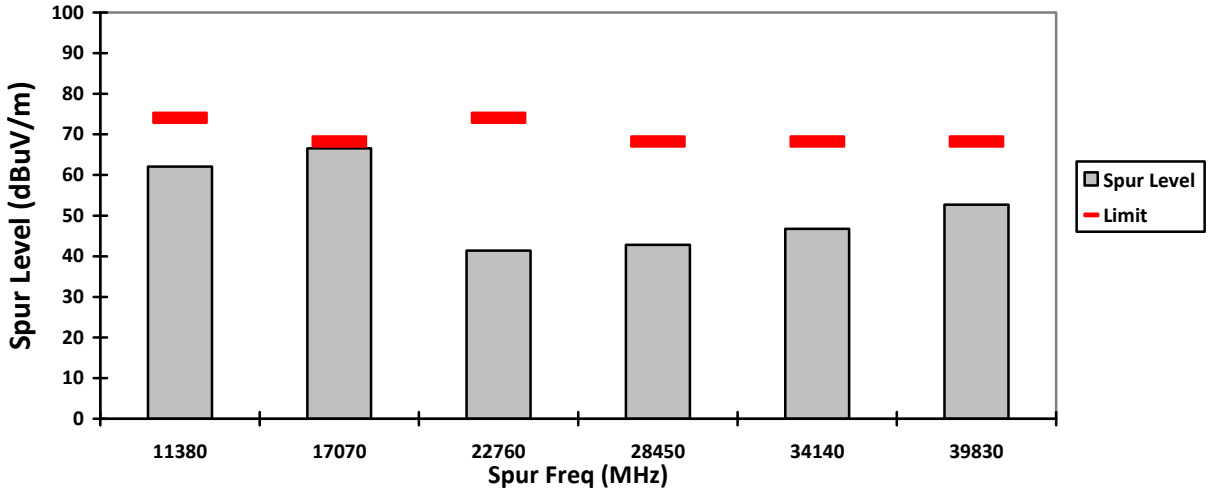
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Mon, 3 June, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

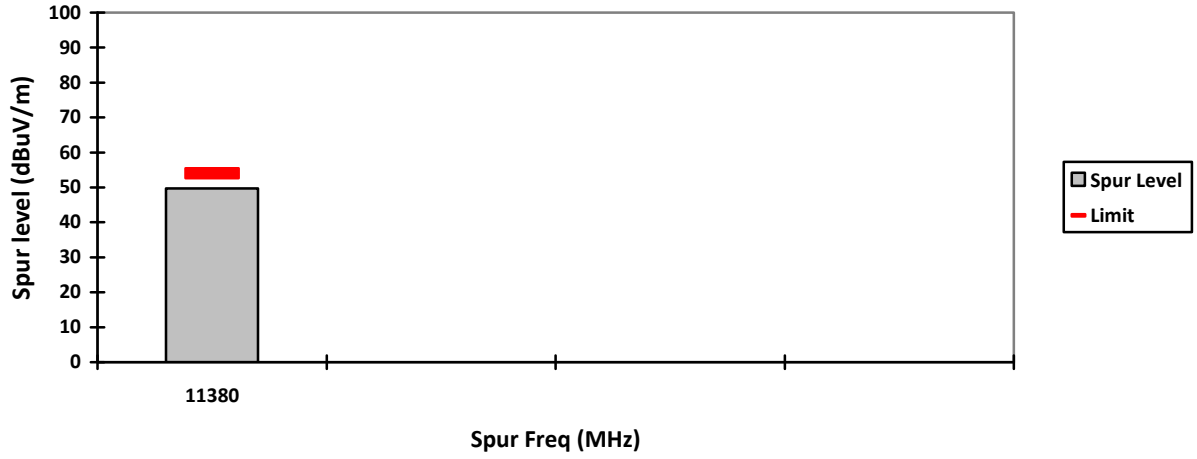
VERTICAL, PK



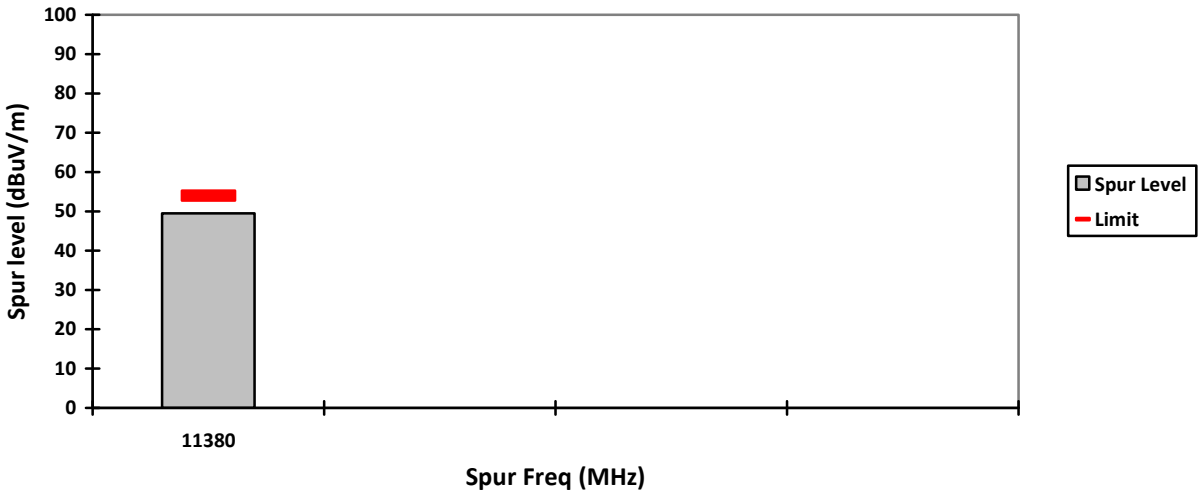
HORIZONTAL, PK



VERTICAL, AV



HORIZONTAL, AV



Test: WIFI SAC Transmitter Radiated Emission
Model#: H35KET9PW8AN-H S/N: 022TAF1508 EMC SR ID#: 30468-EMC-00045
Battery: PMNN4818A Softpot power (19dBm) Accessory: AN000414A01
Test Channel: Mid Test Frequency: 5775.0000 MHz Test Standard: ANSI C63.10-2013
Worst Case Plane: Z-Plane (802.11ac 80MHz)

Radiated Emission (Mid Channel) tabular data

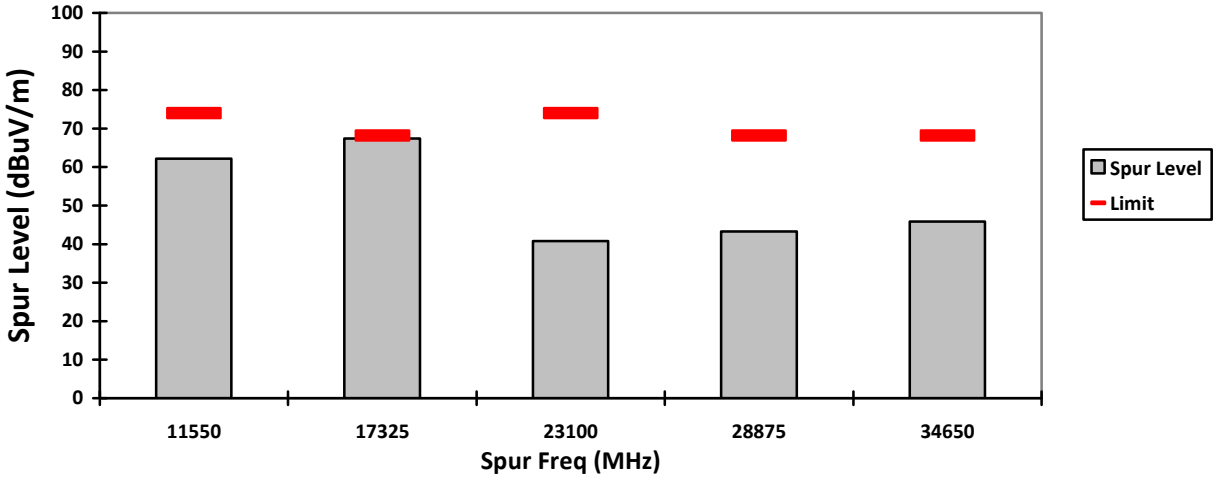
Vertical Radiated Emission Result										
Spur Freq (MHz)	Spur level QPK (dBµV/m)	Spur level PK (dBµV/m)	Spur level AV (dBµV/m)	Limit QPK (dBµV/m)	Limit PK (dBµV/m)	Limit AV (dBµV/m)	Margin QPK (dBµV/m)	Margin PK (dBµV/m)	Margin AV (dBµV/m)	Carrier PK Power (dBµV/m)
11550	-	62.1517**	49.3644**	-	74.0000	54.0000	-	11.8483	4.6356	-
17325	-	67.4525**	-	-	68.2000	-	-	0.7475	-	-
23100	-	40.7971**	-	-	74.0000	-	-	33.2029	-	-
28875	-	43.3100**	-	-	68.2000	-	-	24.8900	-	-
34650	-	45.8931**	-	-	68.2000	-	-	22.3069	-	-
										-
Horizontal Radiated Emission Result										
11550	-	62.1625**	49.3527**	-	74.0000	54.0000	-	11.8375	4.6473	-
17325	-	67.3903**	-	-	68.2000	-	-	0.8097	-	-
23100	-	40.6663**	-	-	74.0000	-	-	33.3337	-	-
28875	-	42.1054**	-	-	68.2000	-	-	26.0946	-	-
34650	-	45.6556**	-	-	68.2000	-	-	22.5444	-	-
										-

Remarks: Pass Result	Marginal Result	Fail Result

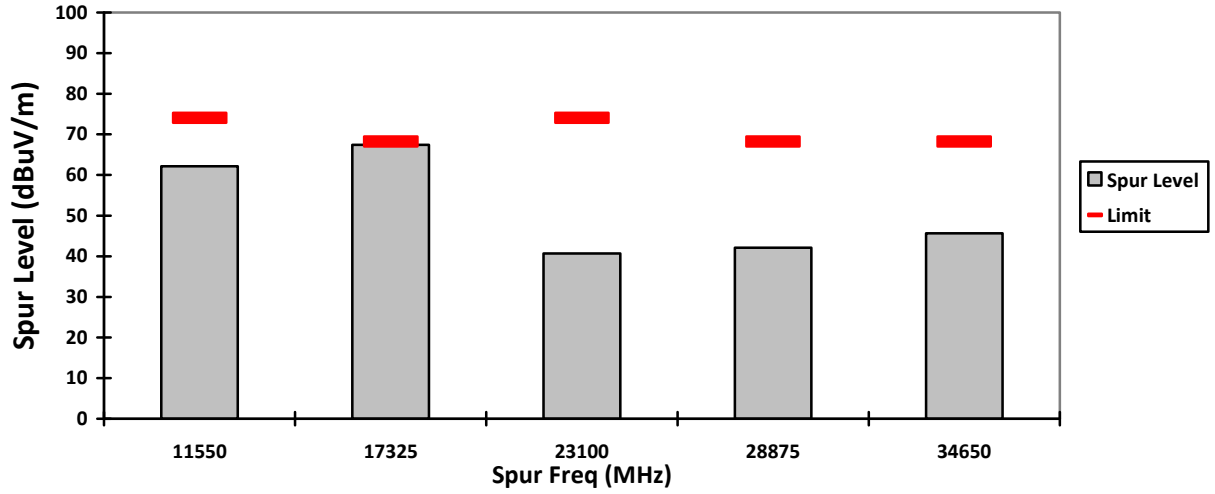
Temperature (degC): 23.1 **Humidity (%): 67.4**
Test Performed by: Nazrin & Rezza **Test Date: Mon, 3 June, 2024**
System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz-40000MHz)

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported.**

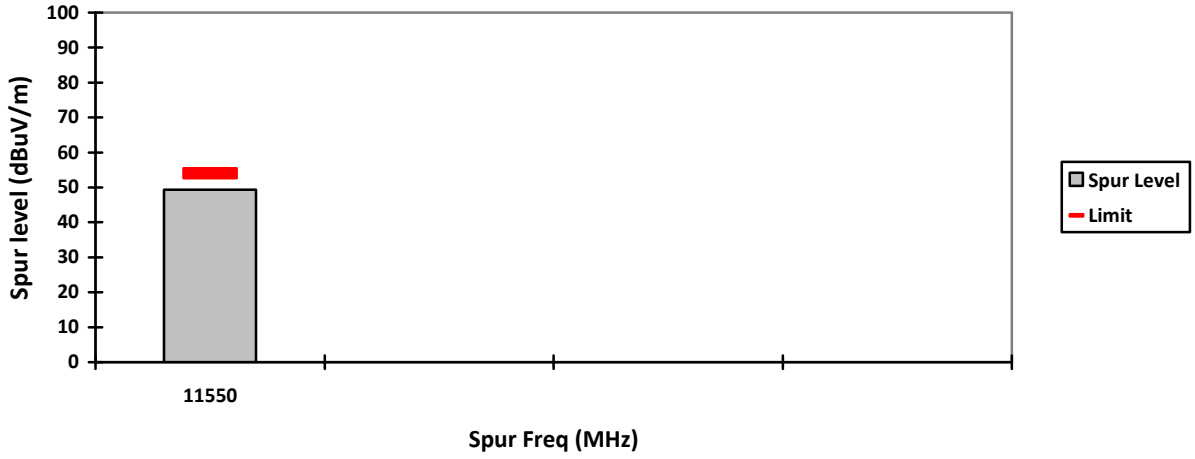
VERTICAL, PK



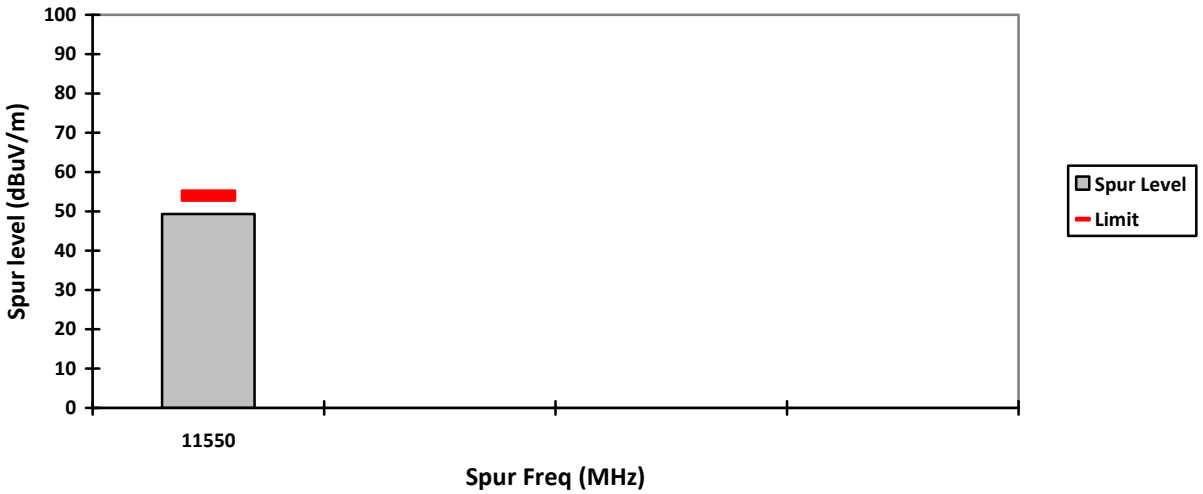
HORIZONTAL, PK



VERTICAL, AV

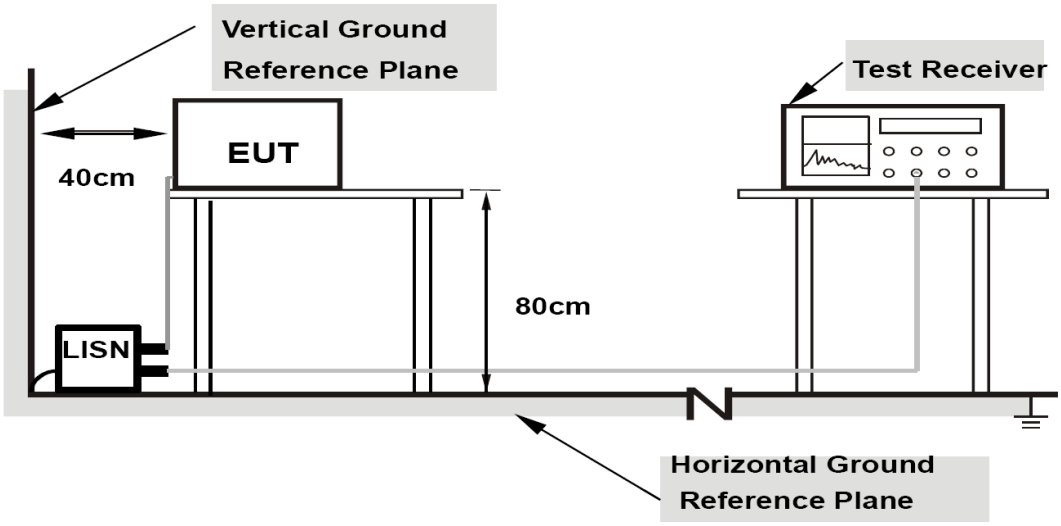


HORIZONTAL, AV



7.8. AC Powerline Conducted Emission

7.8.1. Test Setup



1) Tests were conducted for both Receive and Transmit Mode of the EUT.
2) 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.
3) Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
4) The frequency range from 150 kHz to 30MHz was measured.

7.8.2. Test Limits

For AC Power Line Conducted Test Limit can be Class A or B depends on product classification.

Limits for conducted disturbance at the mains ports of class A ITE

Frequency range MHz	Limits dB(µV)	
	Quasi-peak	Average
0,15 to 0,50	79	66
0,50 to 30	73	60
NOTE The lower limit shall apply at the transition frequency.		

Table 1: Limits for Conducted Disturbance at the Mains Ports of Class A ITE.

Limits for conducted disturbance at the mains ports of class B ITE

Frequency range MHz	Limits dB(µV)	
	Quasi-peak	Average
0,15 to 0,50	66 to 56	56 to 46
0,50 to 5	56	46
5 to 30	60	50
NOTE 1 The lower limit shall apply at the transition frequencies. NOTE 2 The limit decreases linearly with the logarithm of the frequency in the range 0,15 MHz to 0,50 MHz.		

Table 2: Limits for Conducted Disturbance at the Mains Ports of Class B ITE

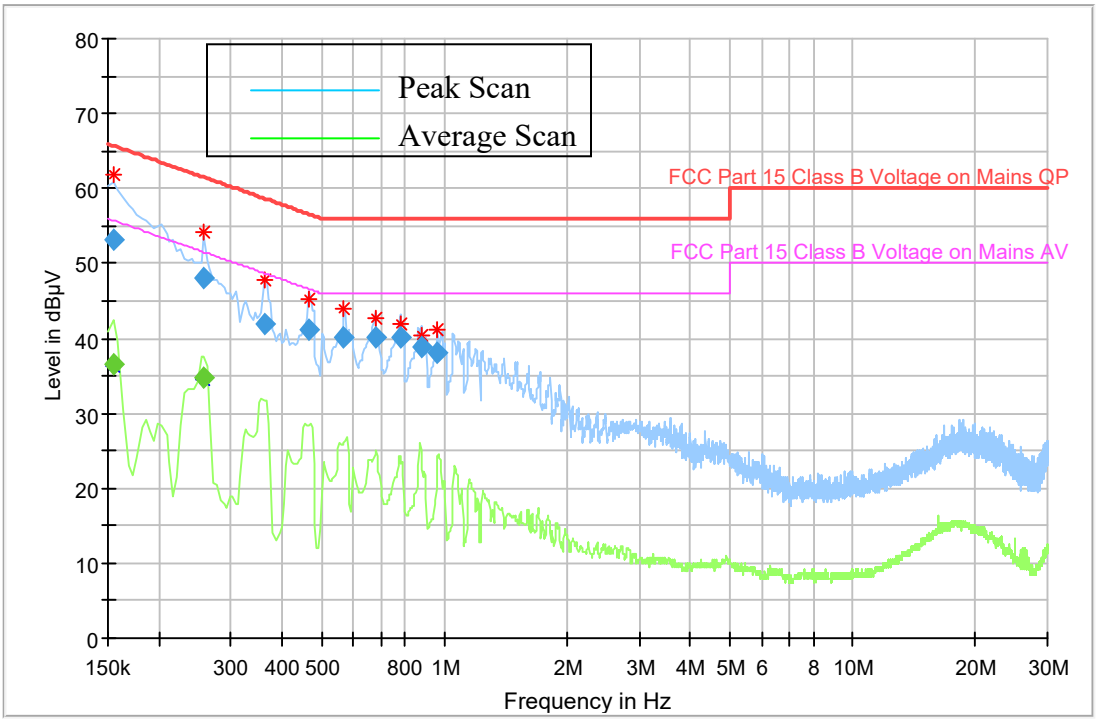
7.8.3. Test Data

SUC

120 Vac, 60Hz

1) Charger + Radio TX WIFI 5GHz 802.11a

Full Spectrum



Quasipeak and Average Measurement

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)	Comment
0.154500	---	36.67	55.75	19.09	1000.0	9.000	L1	ON	10.3	Pass
0.154500	53.10	---	65.75	12.66	1000.0	9.000	L1	ON	10.3	Pass
0.258000	---	34.76	51.50	16.74	1000.0	9.000	L1	ON	10.3	Pass
0.258000	48.15	---	61.50	13.35	1000.0	9.000	L1	ON	10.3	Pass
0.361500	42.00	---	58.69	16.69	1000.0	9.000	N	ON	10.3	Pass
0.465000	41.06	---	56.60	15.54	1000.0	9.000	L1	ON	10.3	Pass
0.568500	40.24	---	56.00	15.76	1000.0	9.000	L1	ON	10.3	Pass
0.676500	40.08	---	56.00	15.92	1000.0	9.000	L1	ON	10.3	Pass
0.780000	40.09	---	56.00	15.91	1000.0	9.000	L1	ON	10.3	Pass
0.879000	38.86	---	56.00	17.14	1000.0	9.000	L1	ON	10.3	Pass
0.960000	38.04	---	56.00	17.96	1000.0	9.000	L1	ON	10.3	Pass

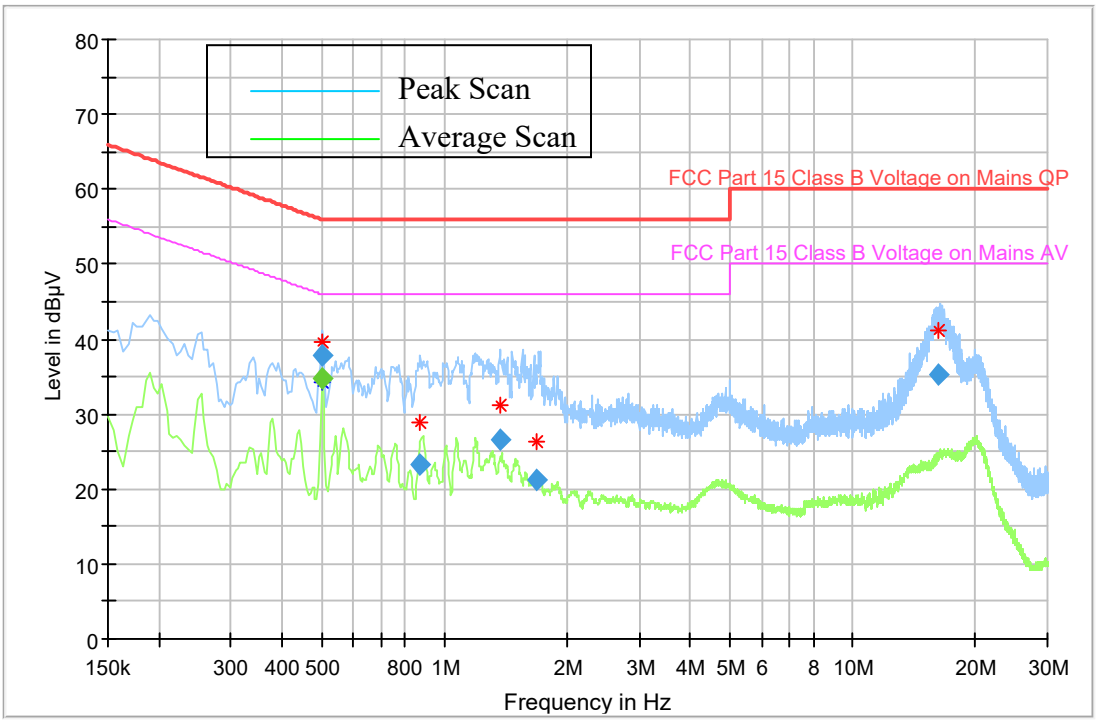
*** Expanded Uncertainty (U) = +/- 3.48dB**

MUC

120 Vac, 60Hz

1) Charger + Radio TX WIFI 5GHz 802.11a

Full Spectrum



Quasipeak and Average Measurement

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)	Comment
0.501000	37.89	---	56.00	18.11	1000.0	9.000	L1	ON	10.3	Pass
0.501000	---	34.68	46.00	11.32	1000.0	9.000	L1	ON	10.3	Pass
0.874500	23.32	---	56.00	32.68	1000.0	9.000	L1	ON	10.3	Pass
1.369500	26.47	---	56.00	29.53	1000.0	9.000	N	ON	10.3	Pass
1.689000	21.28	---	56.00	34.72	1000.0	9.000	N	ON	10.3	Pass
16.242000	35.18	---	60.00	24.82	1000.0	9.000	N	ON	11.0	Pass

*** Expanded Uncertainty (U) = +/- 3.48dB**

END OF TEST REPORT