

CFR 47 FCC PART 15 SUBPART C ISED RSS-247 Issue 2

CERTIFICATION TEST REPORT

For

Carpet One Spot

MODEL NUMBER: SC100100US

PROJECT NUMBER: 4790446015

REPORT NUMBER: 4790446015-3

FCC ID: 2AV7A-SC10

IC: 26039-SC10

ISSUE DATE: Jul. 23, 2022

Prepared for

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Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	07/23/2022	Initial Issue	



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ATTESTATION OF TEST RESULTS

Company Name: Tineco Intelligent Technology Co., Ltd.

Address: No.108Shihu Road West, Wuzhong Zone, Suzhou, 215168 P.R. China

Factory Information

Tineco Intelligent Technology Co., Ltd.

Company Name: Address: No.108Shihu Road West, Wuzhong Zone, Suzhou, 215168 P.R. China

EUT Description

Product Name: Carpet One Spot Model Number: SC100100US Sample Number: 5055687 Data of Receipt Sample: Jun.15, 2022

Date Tested: Jun.15, 2022 – Jul. 22, 2022

APPLICABLE STANDARDS					
STANDARD	TEST RESULTS				
CFR 47 Part 15 Subpart C	PASS				
ISED RSS-247 Issue 2	PASS				
ISED RSS-GEN Issue 5	PASS				



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	Summary of Test Results						
Clause	Test Items	t Items FCC/IC Rules					
1	6db DTS Bandwidth and 99% Bandwidth	FCC 15.247 (a) (2) RSS-247 Clause 5.2 (a) RSS-Gen Clause 6.7	Complied				
2	Conducted Power	FCC 15.247 (b) (3) RSS-247 Clause 5.4 (d) RSS-Gen Clause 6.12	Complied				
3	Power Spectral Density	FCC 15.247 (e) RSS-247 Clause 5.2 (b)	Complied				
4	Conducted Band edge And Spurious emission	FCC 15.247 (d) RSS-247 Clause 5.5 RSS-GEN Clause 6.13	Complied				
5	Radiated Band edges and Spurious emission	FCC 15.247 (d) FCC 15.209 FCC 15.205 RSS-247 Clause 5.5 RSS-GEN Clause 8.9 RSS-GEN Clause 6.13	Complied				
6	Conducted Emission Test For AC Power Port	FCC 15.207 RSS-GEN Clause 8.8	Complied				
7	Antenna Requirement	FCC 15.203 RSS-GEN Clause 6.8	Complied				

Remark:

Prepared By:	Reviewed By:	Reviewed By:		
Tom Tang	Leon Wu			
Tom Tang	Leon Wu			
Authorized By:				
Chris Zhong				
Chris Zhong Laboratory Leader				

¹⁾ The measurement result for the sample received is <Pass> according to < ANSI C63.10-2013, FCC CFR 47 Part 2, FCC CFR 47 Part 15C, ISED RSS-GEN, ISED RSS-247> when <Accuracy Method> decision rule is applied.



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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC KDB 558074 D01 15.247 Meas Guidance v05r02, KDB 414788 D01 Radiated Test Site v01r01, ANSI C63.10-2013, FCC CFR 47 Part 2, FCC CFR 47 Part 15, ISED RSS-GEN ISSUE5, ISED RSS-247 ISSUE2.

3. FACILITIES AND ACCREDITATION

Test Location	UL-CCIC Company Limited, EMC&RF Lab
Address	No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122 ,China
Accreditation Certificate	A2LA (Certificate No.: 4829.01) UL-CCIC COMPANY LIMITED has been assessed and proved to be in compliance with A2LA. FCC (FCC Designation No.: CN1247) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules. IC (IC Designation No.: 25056; CAB No.:CN0073) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.

Note 1: All tests measurement facilities use to collect the measurement data are located at No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122, People's Republic of China

Note 2: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. These measurements below 30MHz had been correlated to measurements performed on an OFS.

Note 3: The test anechoic chamber in UL-CCIC COMPANY LIMITED had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.



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4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Conduction emission	3.1dB
Radiation Emission test(include Fundamental emission) (9KHz-30MHz)	3.4dB
Radiation Emission test(include Fundamental emission) (30MHz-1GHz)	3.4dB
Radiation Emission test (1GHz to 26GHz)(include Fundamental emission)	3.7dB (1GHz-18Gz)
Nets This was attaint are assets an auron and all un	4.0dB (18GHz-26.5Gz)

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



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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

Product Name:	Carpet One Spot
Model No.:	SC100100US
Operating Frequency:	IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz
Type of Modulation:	IEEE for 802.11b: DSSS (CCK, DQPSK, DBPSK)
	IEEE for 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK)
	IEEE for 802.11n (HT20): OFDM (64QAM, 16QAM, QPSK, BPSK)
Channels Step:	Channels with 5MHz step
Test software of EUT:	EspRFtestTool_2.0 (manufacturer declare)
Antenna Type:	PCB antenna
Antenna Gain:	Antenna1: 2.87 dBi
	Remark: This data is provided by customer and our lab isn't responsible for this data
Test Voltage	AC120V/ 60Hz



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5.2. MAXIMUM OUTPUT POWER

Number of Transmit Chains (NTX)	IEE Std. 802.11	Channel Number	Max AV Conducted Power (dBm)
1	IEEE 802.11B SISO	1-11[11]	16.88
1	IEEE 802.11G SISO	1-11[11]	15.04
1	IEEE 802.11nHT20	1-11[11]	14.64

5.3. CHANNEL LIST

Channel List for 802.11b/g/n (20 MHz)								
							Frequency (MHz)	
<u>1</u>	<u>2412</u>	4	2427	<u>7</u>	<u>2442</u>	<u>10</u>	<u>2457</u>	
<u>2</u>	<u>2417</u>	<u>5</u>	2432	<u>8</u>	<u>2447</u>	<u>11</u>	<u>2462</u>	
3	2422	6	2437	9	<u>2452</u>			



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5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency
WiFi TX(802.11b)	CH 1, CH 6, CH 11	2412MHz, 2437MHz, 2462MHz
WiFi TX(802.11g)	CH 1, CH 6, CH 11	2412MHz, 2437MHz, 2462MHz
WiFi TX(802.11n HT20)	CH 1, CH 6, CH 11	2412MHz, 2437MHz, 2462MHz

5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band							
Test Software			EspRFtestTool				
	Transmit			Test C	Channel		
Modulation Mode	Mode Antenna Number	NCB: 20MHz		NCB: 40MHz			
Mode		CH 1	CH 6	CH 11	CH 3	CH 6	CH 9
802.11b	1	N/A	N/A	N/A			
802.11g	1	N/A	N/A	N/A			
802.11n HT20	1	N/A	N/A	N/A	7		

Remark: The value list above are the setting of att in the software.



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5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Ant.	Frequency (MHz)	Antenna Type	Antenna Gain (dBi)
1	2400-2483.5	PCB antenna	2.87

Test Mode	Transmit and Receive Mode	Description	
IEEE 802.11b	⊠1TX, 1RX	Antenna1 can be used as transmitting/receiving antenna independently.	
IEEE 802.11g	⊠1TX, 1RX	Antenna1 can be used as transmitting/receiving antenna independently.	
IEEE 802.11N (HT20)	⊠1TX, 1RX	Antenna1 can be used as transmitting/receiving antenna independently.	

5.7. THE WORSE CASE CONFIGURATIONS

- 1) For the product, there only one transmission antennas.
- 2) This EUT can working with and without charger modes, pre-testing both test modes, but only the data of worse case is record in this report.
- 3) Worst-case data rates as provided by the client were:

802.11b mode: 1 Mbps 802.11b mode: 6 Mbps 802.11n HT20 mode: MCS0

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5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Description
1	Laptop	ThinkPad	E590	N/A
2	Fixed Frequency Board	N/A	N/A	Supply by Customer
3	USB Cable	N/A	N/A	Supply by UL Lab(100cm length)

I/O PORT

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	N/A	N/A	N/A	N/A	N/A

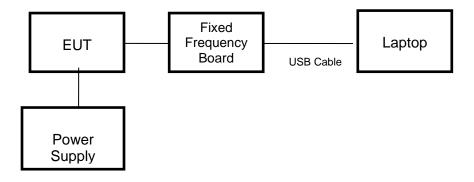
ACCESSORY

Item	Accessory	Brand Name	Model Name	Description	
1	Power Supply	Tineco	KL-WA260060-J	INPUT: 100-240V~ 50/60Hz, 0.5A OUTPUT: 26.0V = 0.6A	

TEST SETUP

The EUT can work in an engineer mode with a software through a table PC.

SETUP DIAGRAM FOR TESTS



Form-ULID-008536-9 V1.0



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5.9. MEASURING INSTRUMENT AND SOFTWARE USED

	Conducted Emissions (Instrument)									
		Cor	nauctea	Emis	sions (instru					
Used	Equipment	Manufacturer	Model No.		Serial No.	Upper Last Cal.	Last Cal.	Next Cal.		
V	EMI Test Receiver	R&S	ESR	3	126700	2020-12-05	2021-12-04	2022-12-03		
V	Two-Line V- Network	R&S	ENV2	216	126701	2020-12-05	2021-12-04	2022-12-03		
				Soft	ware					
Used	Des	cription		Ма	ınufacturer	Name	Version			
V	Test Software for C	Conducted distu	ırbance		R&S	EMC32	Ver. 9.25			
		Ra	diated E	missi	ions (Instrum	nent)				
Used	Equipment	Manufacturer	Model	No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.		
$\overline{\checkmark}$	Spectrum Analyzer	Keysight	N901	0B	155727	2021-05-09	2022-04-09	2023-04-08		
$\overline{\mathbf{A}}$	EMI test receiver	R&S	ESR	26	126703	2020-12-05	2021-12-04	2022-12-03		
V	Receiver Antenna (9kHz-30MHz)	Schwarzbeck	FMZB ²	1513	155456	2018-06-15	2021-06-03	2024-06-02		
V	Receiver Antenna (30MHz-1GHz)	SunAR RF Motion	JB1		177821	2019-01-28	2022-01-18	2025-01-17		
V	Receiver Antenna (1GHz-18GHz)	R&S	HF90	07	126705	2018-01-29	2022-02-28	2025-02-27		
V	Receiver Antenna (18GHz-26.5GHz)	ETS	3160-	10	155565	2019-01-05	2021-07-15	2024-07-14		
V	Pre-amplification (To 18GHz)	Compliance Direction System Inc.	PAP-10 50		177825	2021-03-18	2022-03-01	2023-02-28		
V	Pre-amplification (To 26.5GHz)	R&S	SCU-2	26D	135391	2021-12-05	2022-12-04	2022-12-03		
V	Band Reject Filter	Wainwright	WRCJ 2350-24 2483 2533.5-4	400- .5-	1	2021-05-09	2022-04-09	2023-04-08		
V	Highpass Filter	Wainwright	WHKX10- 2700-3000- 18000-40SS		2	2021-05-09	2022-04-09	2023-04-08		
	Software									
Used	Descr	ription	Manufac		turer	Name	Version			
$\overline{\checkmark}$	Test Software for Ra	adiated disturba	oance Tonsce		end JS	S36-RSE	4.0.0.1			
	Other instruments									
Used	Equipment	Manufacturer	Model No.		Serial No.	Upper Last Cal.	Last Cal.	Next Cal.		
V	Spectrum Analyzer	Keysight	N901	0B	155368	2021-05-09	2022-04-09	2023-04-08		
V	Power Meter	Keysight	U2021	XA	155370	2021-05-09	2022-04-09	2023-04-08		



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6. MEASUREMENT METHODS

No.	Test Item	KDB Name	Section
1	6dB Bandwidth and 99% Bandwidth	KDB 558074 D01 15.247 Meas Guidance v05r02	8.2
2	Conducted Output Power	KDB 558074 D01 15.247 Meas Guidance v05r02	8.3.2.3 (Method AVGPM)
3	Power Spectral Density	KDB 558074 D01 15.247 Meas Guidance v05r02	8.4 (Method PKPSD)
4	Out-of-band emissions in non-restricted bands	KDB 558074 D01 15.247 Meas Guidance v05r02	8.5
5	Out-of-band emissions in restricted bands	KDB 558074 D01 15.247 Meas Guidance v05r02	8.6
6	Band-edge	KDB 558074 D01 15.247 Meas Guidance v05r02	8.7
7	Conducted Emission Test For AC Power Port	ANSI C63.10-2013	6.2



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7. ANTENNA PORT TEST RESULTS

7.1. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests
Relative Humidity	59.7%
Atmospheric Pressure:	101kPa
Temperature	21.3°C



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7.2. ON TIME AND DUTY CYCLE

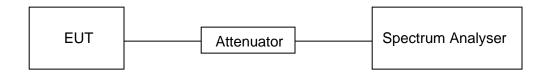
LIMITS

None; for reporting purposes only

PROCEDURE

FCC KDB 558074 Zero-Span Spectrum Analyzer Method

TEST SETUP



RESULTS

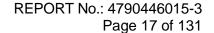
Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (db)	Final Minimum VBW (KHz)
11B	100	100	1	100	0	0.01(Note4)
11G	100	100	1	100	0	0.01(Note4)
11N HT20	100	100	1	100	0	0.01(Note4)

Note: 1) Duty Cycle Correction Factor=10log(1/x).

2) Where: x is Duty Cycle(Linear)

3) Where: T is On Time (transmit duration)

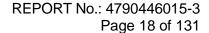
4) The minimum VBW should be 10Hz if the duty cycle is over 98%.













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7.3. 6 dB BANDWIDTH AND 99% BANDWIDTH

LIMITS

FCC Part15 (15.247) Subpart C, ISED RSS-247 Issue 2						
Section Test Item Limit Frequency Range (MHz)						
FCC 15.247(a)(2)	6dB Bandwidth	>= 500KHz	2400-2483.5			
ISED RSS-Gen Clause 6.7	99% Occupied Bandwidth	For reporting purposes only.	2400-2483.5			

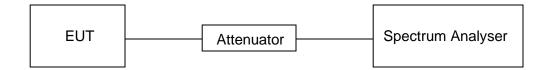
TEST PROCEDURE

Refer to FCC KDB 558074, connect the UUT to the spectrum analyzer and use the following settings:

Center Frequency	The centre frequency of the channel under test
Detector	Peak
IRRW	For 6dB Bandwidth :100K For 99% Occupied Bandwidth :1% to 5% of the occupied bandwidth
IV/BW/	For 6dB Bandwidth : ≥3 × RBW For 99% Occupied Bandwidth : approximately 3×RBW
Trace	Max hold
Sweep	Auto couple

Allow the trace to stabilize and 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.

TEST SETUP



Form-ULID-008536-9 V1.0



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RESULTS

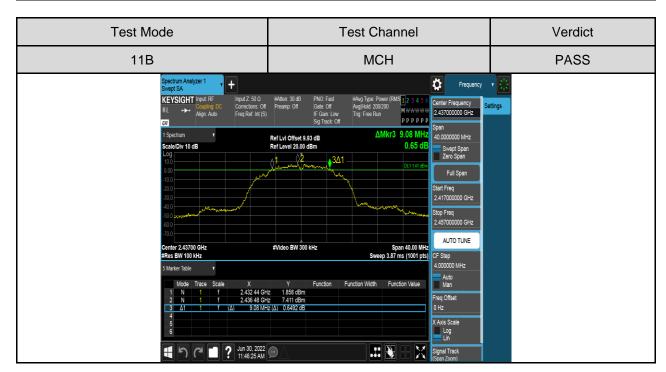
Test Mode	Test Channel	6dB bandwidth (MHz)	99% bandwidth (MHz)	Result
	LCH	9.080	13.056	Pass
11B	MCH	9.080	13.060	Pass
	HCH	9.040	13.131	Pass
	LCH	16.280	16.334	Pass
11G	MCH	16.320	16.354	Pass
	HCH	16.360	16.367	Pass
	LCH	16.800	17.031	Pass
11N HT20	MCH	16.560	17.002	Pass
	HCH	16.800	17.060	Pass

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Test Graphs

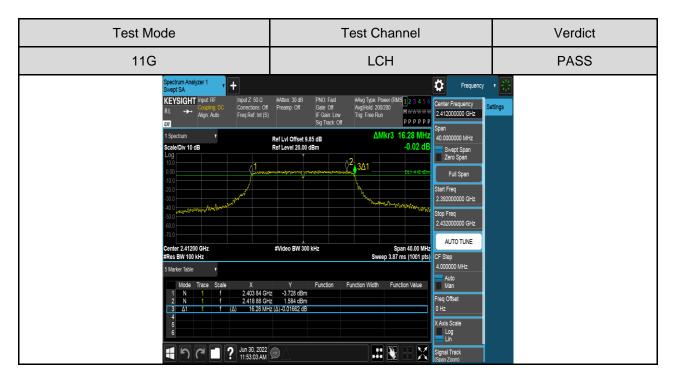
For 6dB Bandwidth part:



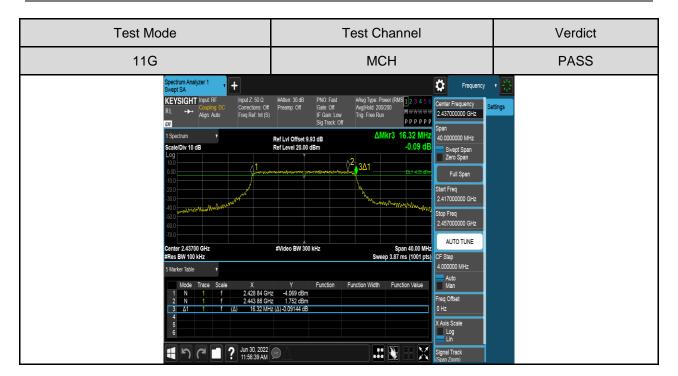


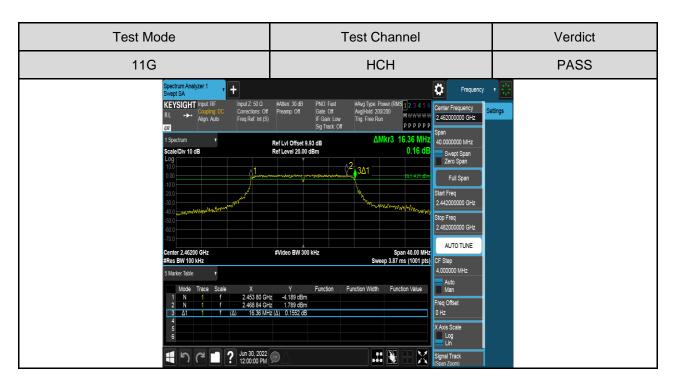




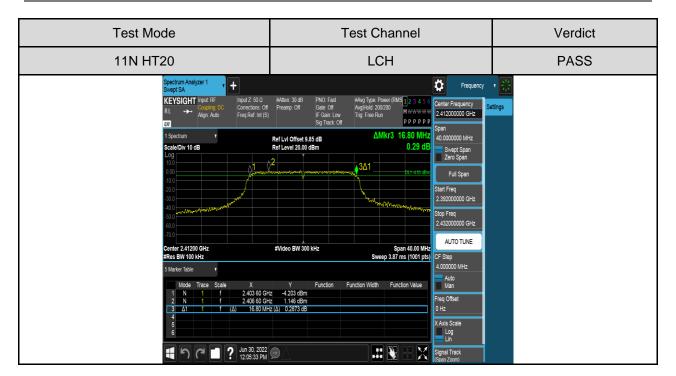




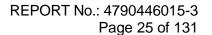




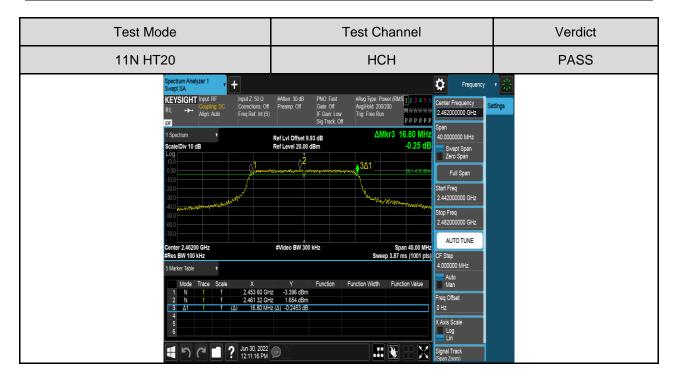








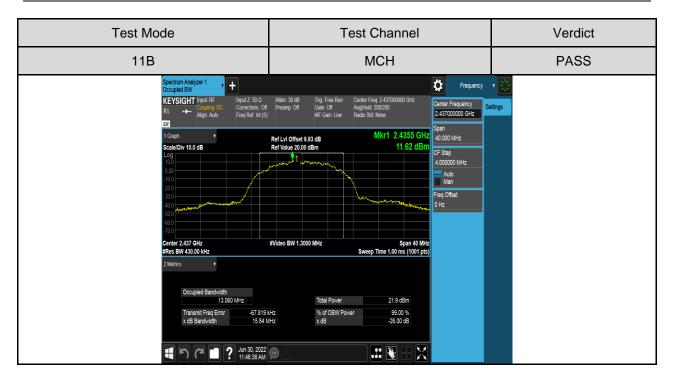


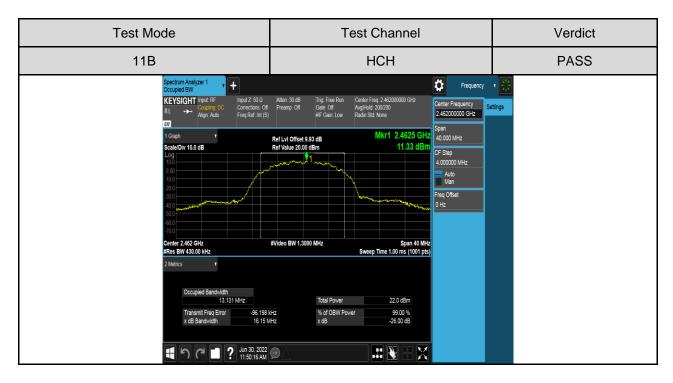


For 99% Bandwidth part:

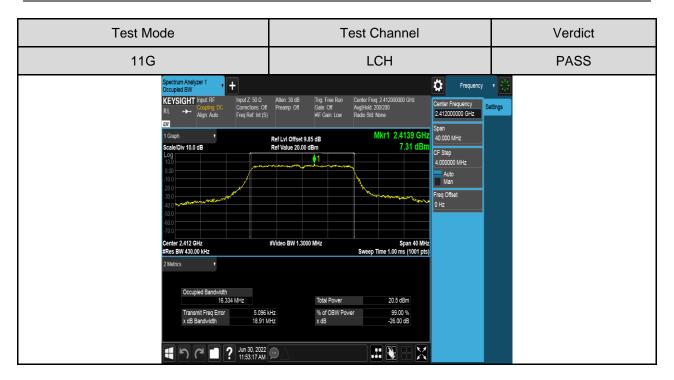


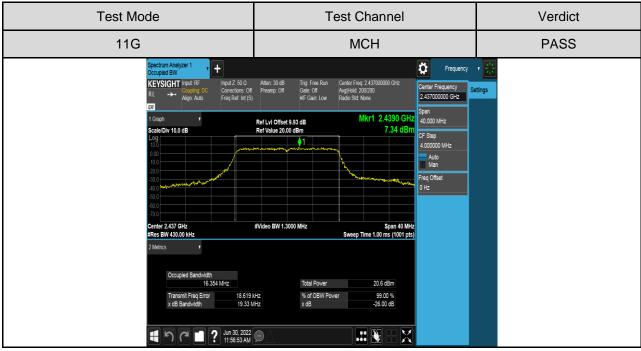




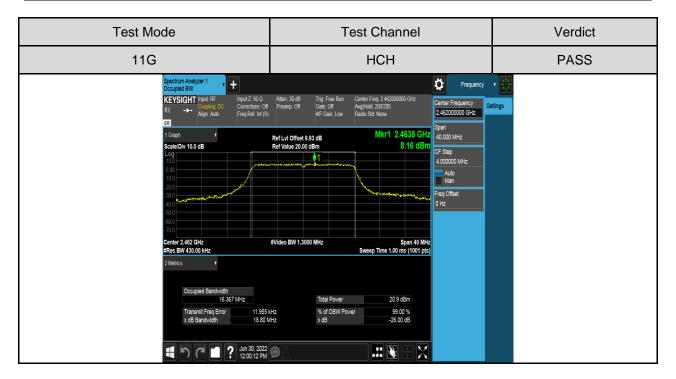


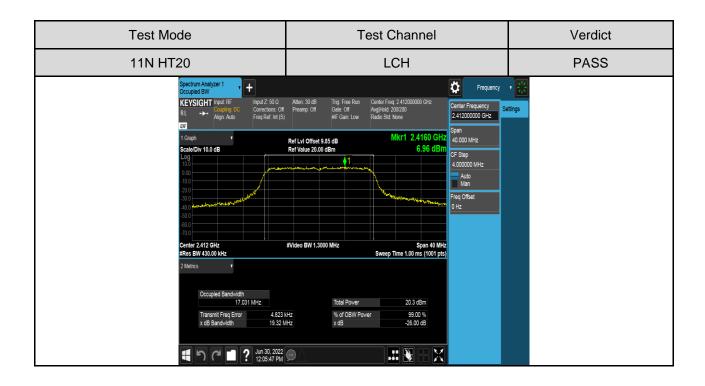


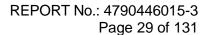






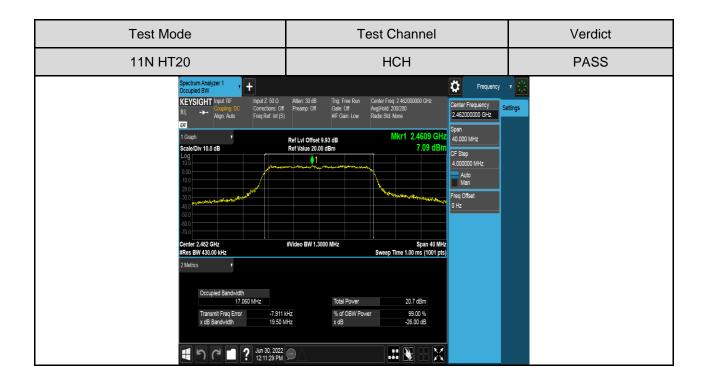








Test Channel Test Mode Verdict 11N HT20 **MCH PASS** Ö KEYSIGHT Input RI 2.437000000 GHz Mkr1 2.4380 G Ref Lvl Offset 9.93 dB Ref Value 20.00 dBm 7.65 dBi /Div 10.0 dB CF Step 4.000000 MHz Auto Man #Video BW 1.3000 MHz -12.537 kHz 19.33 MHz 99.00 % -26.00 dB .:: 📎



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7.4. CONDUCTED POWER

LIMITS

FCC Part15 (15.247) Subpart C, , ISED RSS-247 ISSUE 2				
Section	Test Item	Limit	Frequency Range (MHz)	
FCC 15.247(b)(3) ISED RSS-247 5.4 (d) RSS-Gen Clause 6.12	Output Power	1 watt or 30dBm	2400-2483.5	

TEST PROCEDURE

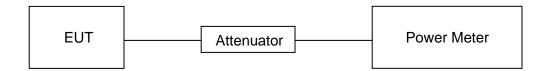
Place the EUT on the table and set it in the transmitting mode.

Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the Power Meter.

Measure the power of each channel.

AVG Detector use for AVG result.

TEST SETUP





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RESULTS

For Normal Testing Part:

Test Mode	Test Channel	Maximum Conducted Output Power (AV)	Result
11B	LCH	16.88	Pass
	MCH	16.41	Pass
	HCH	16.38	Pass
	LCH	14.71	Pass
11G	MCH	14.87	Pass
	HCH	15.04	Pass
11N HT20	LCH	14.41	Pass
	MCH	14.50	Pass
	HCH	14.64	Pass

Remark:

¹⁾ For all the test results has been adjusted the duty cycle factor.

²⁾ For Correction Factor is refer to the result in section 7.2

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7.5. POWER SPECTRAL DENSITY

LIMITS

FCC Part15 (15.247) Subpart C, ISED RSS-247 ISSUE 2				
Section	Test Item	Limit	Frequency Range (MHz)	
FCC §15.247 (e) ISED RSS-247 5.2 (b)	Power Spectral Density	8 dBm in any 3 kHz band	2400-2483.5	

TEST PROCEDURE

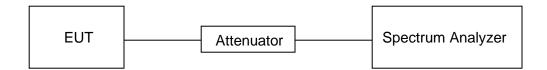
Refer to FCC KDB 558074, connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The centre frequency of the channel under test	
Detector	Peak	
RBW	3 kHz ≤ RBW ≤100 kHz	
VBW	≥3 × RBW	
Span	1.5 x DTS bandwidth	
Trace	Max hold	
Sweep time	Auto couple.	

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST SETUP





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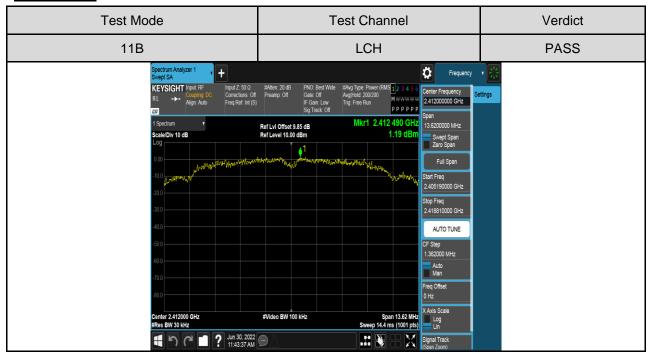
RESULTS

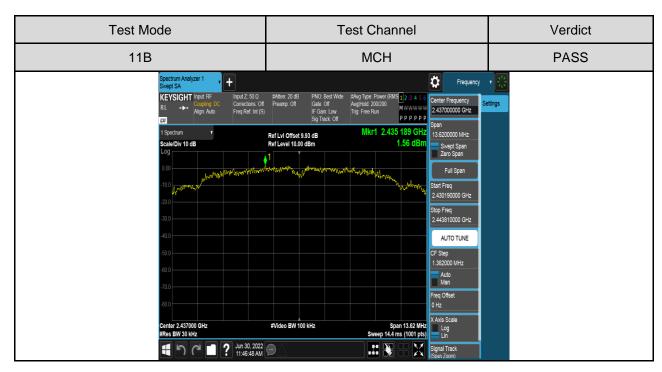
For Normal Testing Part:

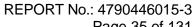
Test Mode	Test Channel	Maximum Peak power spectral density (dBm/30kHz)	Result
11B	LCH	1.19	Pass
	MCH	1.56	Pass
	HCH	1.71	Pass
11G	LCH	-2.11	Pass
	MCH	-1.94	Pass
	HCH	-1.79	Pass
11N HT20	LCH	-2.47	Pass
	MCH	-2.47	Pass
	HCH	-2.25	Pass



Test Graphs:

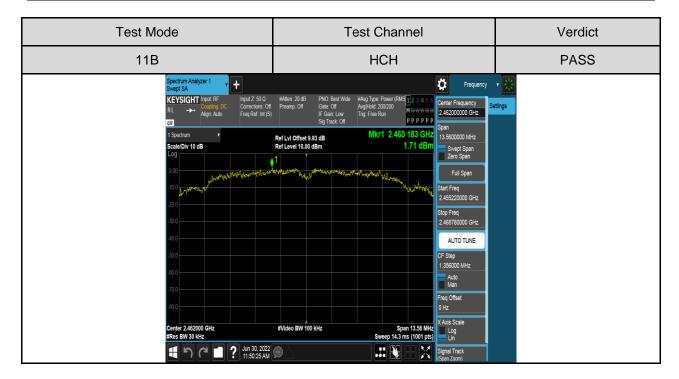


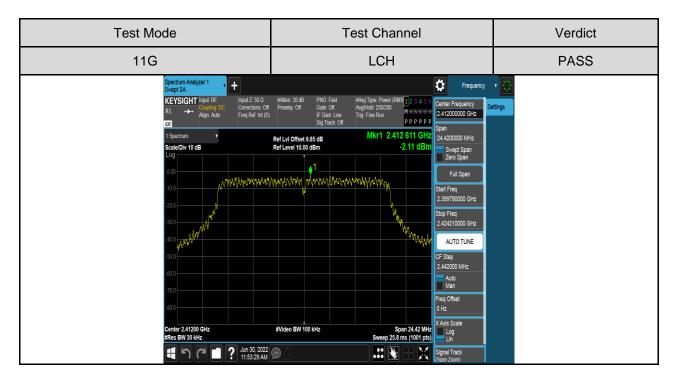


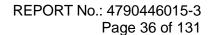




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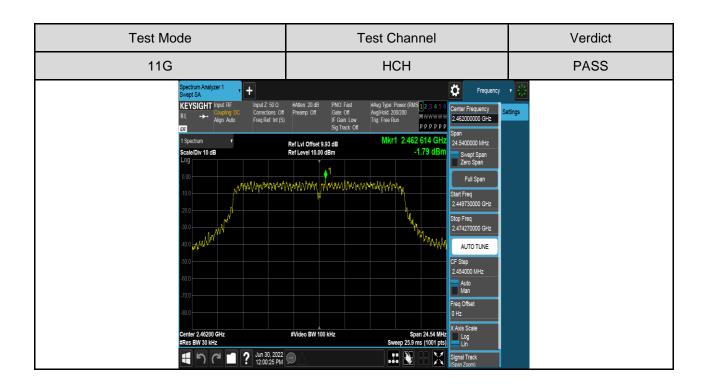


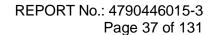




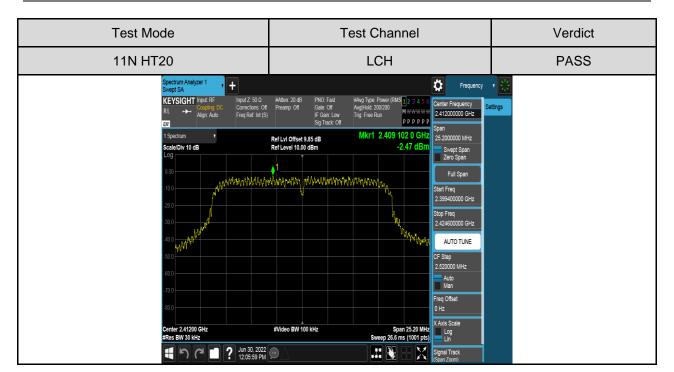
Test Channel Test Mode Verdict 11G **MCH PASS** Ö KEYSIGHT Input I PPPPPP Mkr1 2.437 612 GI Ref LvI Offset 9.93 dB Ref Level 10.00 dBm -1.94 dB Start Freq 2.424760000 GHz AUTO TUNE CF Step 2.448000 MHz Auto Man Freq Offset 0 Hz #Video BW 100 kHz Span 24.48 MHz Sweep 25.9 ms (1001 pts)

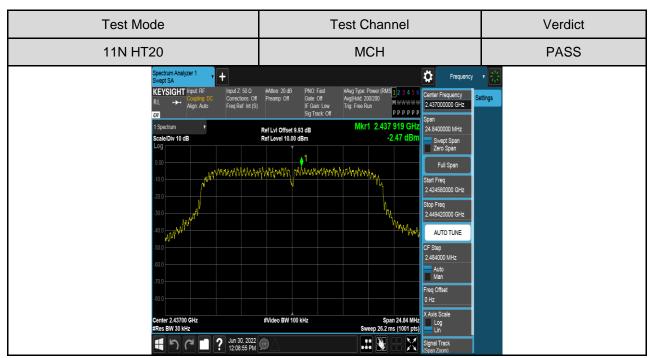
11:57:05 AM





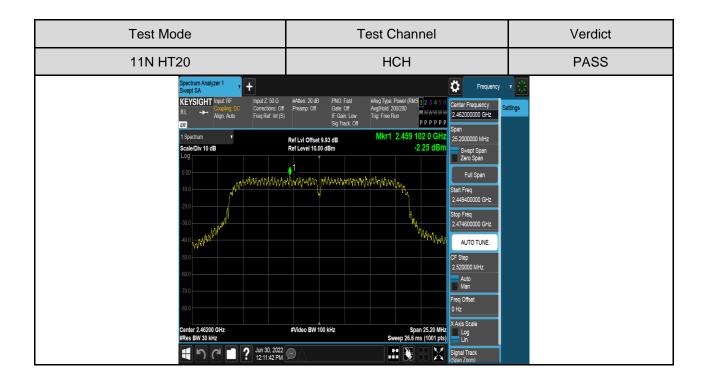








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7.6. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

LIMITS

FCC Part15 (15.247) Subpart C, ISED RSS-247 ISSUE 2			
Section	Test Item	Limit	
FCC §15.247 (d) RSS-247 Clause 5.5 RSS-GEN Clause 6.13	Conducted Bandedge and Spurious Emissions	At least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power	

TEST PROCEDURE

Refer to FCC KDB 558074, connect the UUT to the spectrum analyser and use the following

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	100K
VBW	≥3 × RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

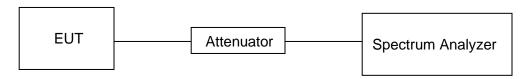
settings:

Use the peak marker function to determine the maximum PSD level.

Span	Set the center frequency and span to encompass frequency range to be measured	
Detector	Peak	
RBW	100K	
VBW	≥3 × RBW	
measurement points	≥span/RBW	
Trace	Max hold	
Sweep time	Auto couple.	

Use the peak marker function to determine the maximum amplitude level.

TEST SETUP



Form-ULID-008536-9 V1.0



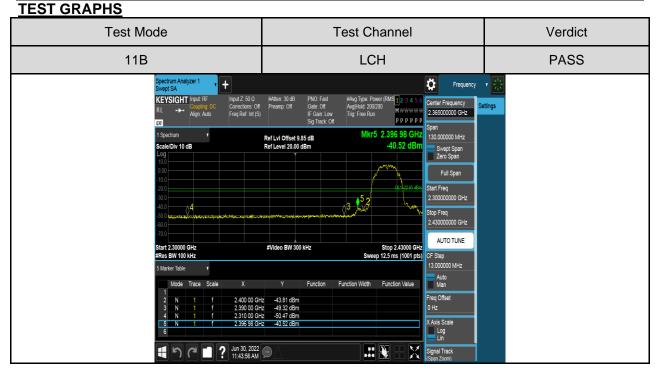
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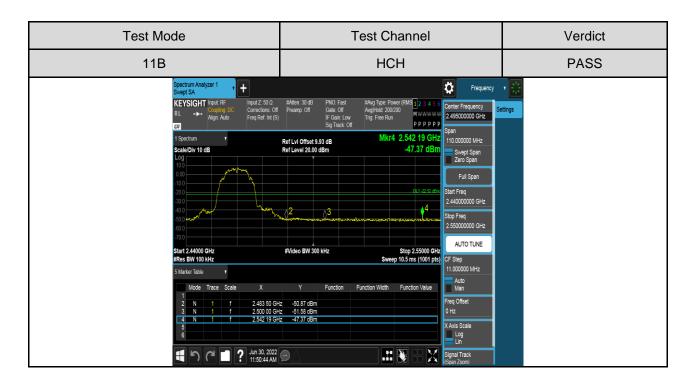
Part I: Conducted Bandedge

RESULTS TABLE

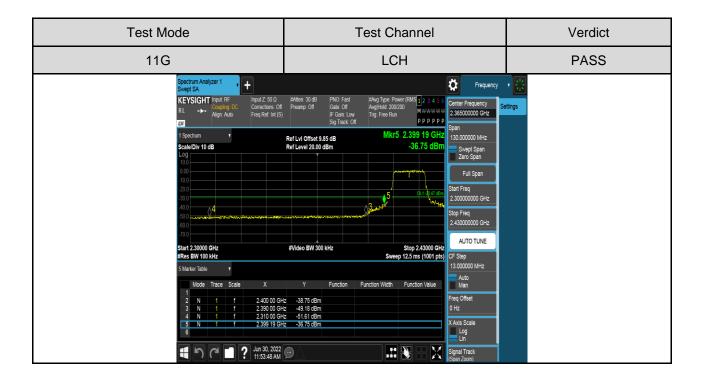
Test Mode	Test Antenna	Test Channel	Test Result	Verdict
440	11B Antenna 1	LCH	See the test graphs	PASS
IID		HCH	See the test graphs	PASS
110	11G Antenna 1	LCH	See the test graphs	PASS
IIG		HCH	See the test graphs	PASS
11N HT20	Antenna 1	LCH	See the test graphs	PASS
		HCH	See the test graphs	PASS

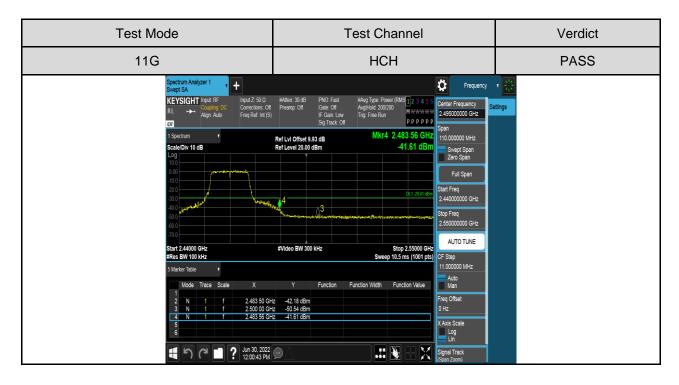
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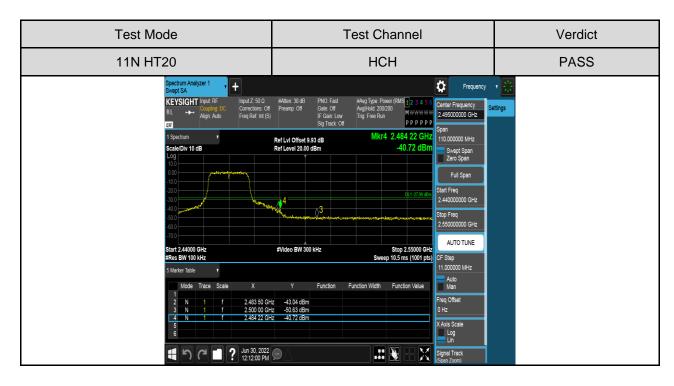














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Part II: Conducted Emission

Test Result Table

Test Mode	Test Antenna	Channel	Pref(dBm)	Puw(dBm)	Verdict
		LCH	See the test graphs	<limit< td=""><td>PASS</td></limit<>	PASS
11B SISO	Antenna 1	MCH	See the test graphs	<limit< td=""><td>PASS</td></limit<>	PASS
		HCH	See the test graphs	<limit< td=""><td>PASS</td></limit<>	PASS
	A . 1	LCH	See the test graphs	<limit< td=""><td>PASS</td></limit<>	PASS
11G SISO	Antenna 1	MCH	See the test graphs	<limit< td=""><td>PASS</td></limit<>	PASS
		HCH	See the test graphs	<limit< td=""><td>PASS</td></limit<>	PASS
		LCH	See the test graphs	<limit< td=""><td>PASS</td></limit<>	PASS
11N HT20 Antenna 1	Antenna 1	MCH	See the test graphs	<limit< td=""><td>PASS</td></limit<>	PASS
		HCH	See the test graphs	<limit< td=""><td>PASS</td></limit<>	PASS



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Test Plots

Test Mode	Channel	Verdict
11B	LCH	PASS





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Puw test Plot







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Test Mode	Channel	Verdict
11B	MCH	PASS





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Puw test Plot







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Test Mode	Channel	Verdict
11B	HCH	PASS





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Puw test Plot







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Test Mode	Channel	Verdict
11G	LCH	PASS

