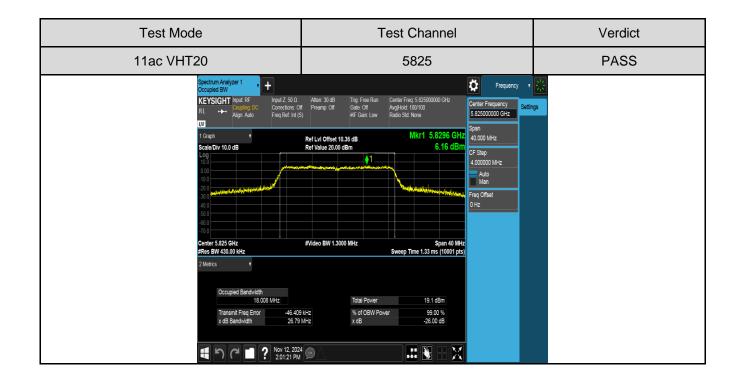
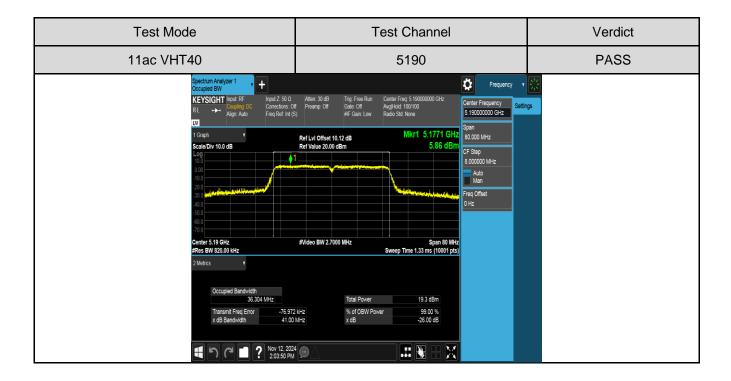
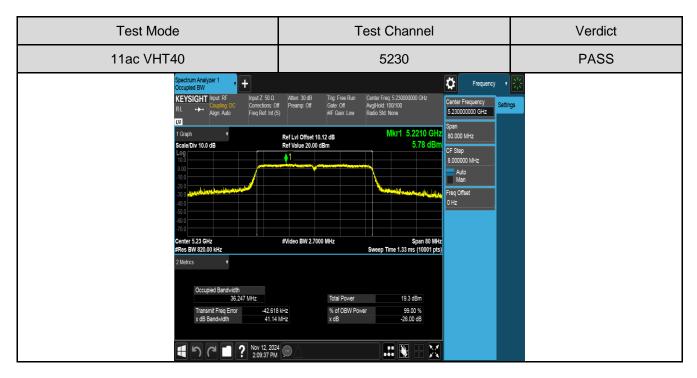


Test Mode Test Channel Verdict **PASS** 11ac VHT20 5785 ₿ KEYSIGHT Input: RF 5.785000000 GHz Span 40.000 MHz Mkr1 5.7807 GHz 5.92 dBm Ref LvI Offset 10.27 dB Ref Value 20.00 dBm CF Step 4.000000 MHz Auto Man Freq Offset #Video BW 1.3000 MHz 19.6 dBm 99.00 % -26.00 dB % of OBW Power x dB # 1

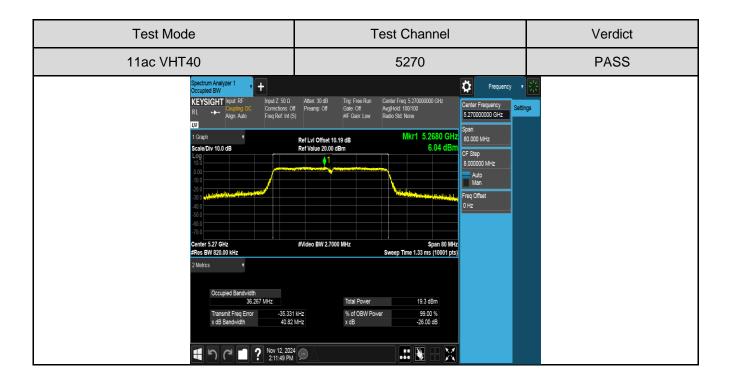


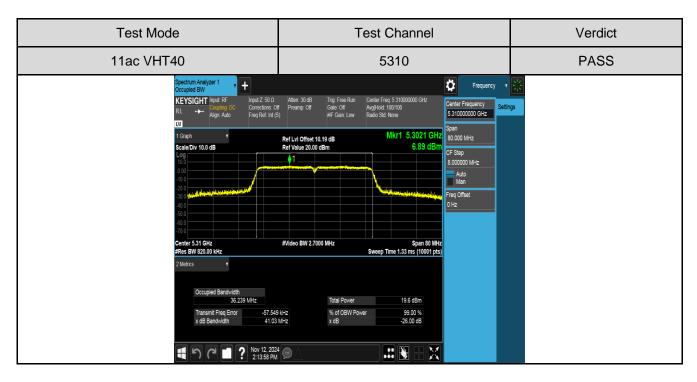




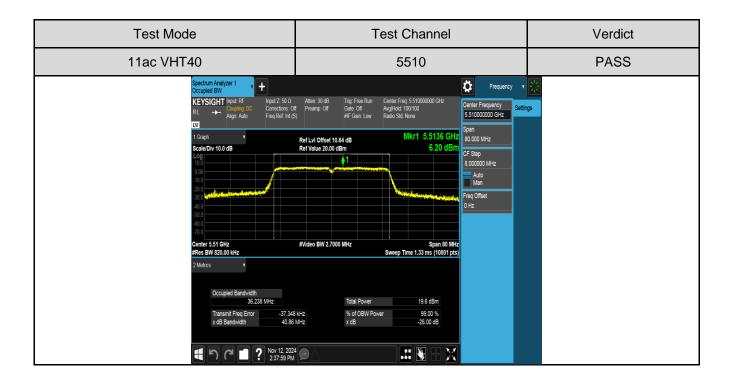


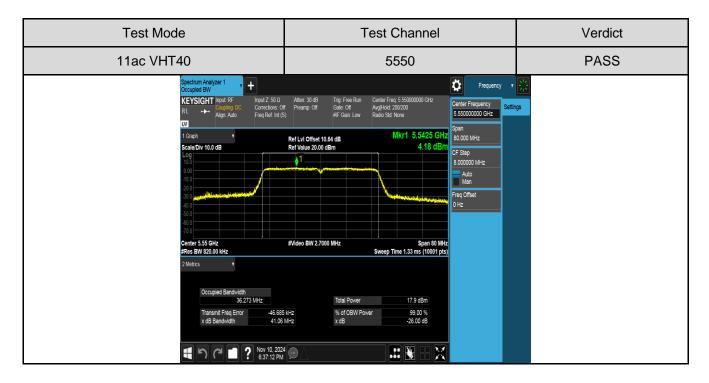




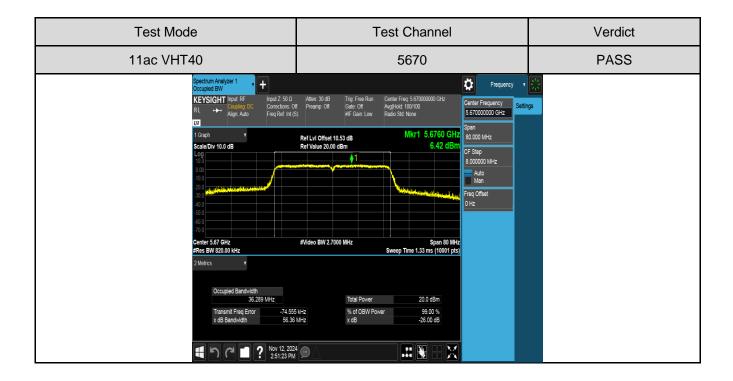


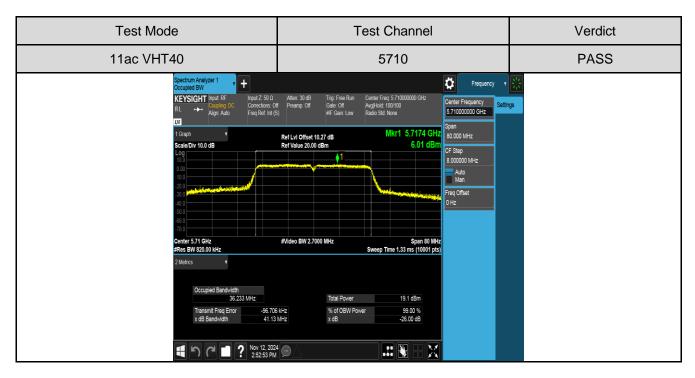




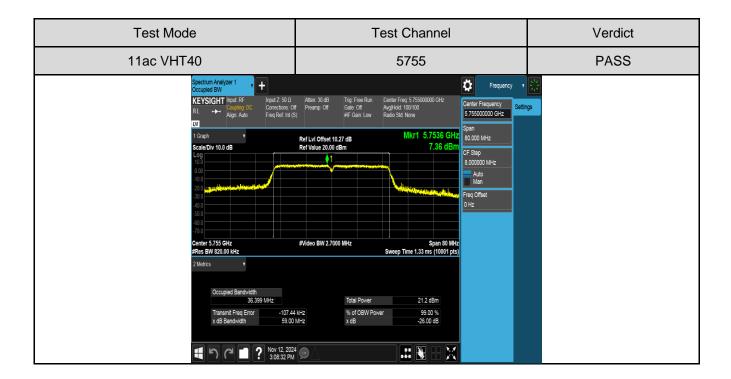


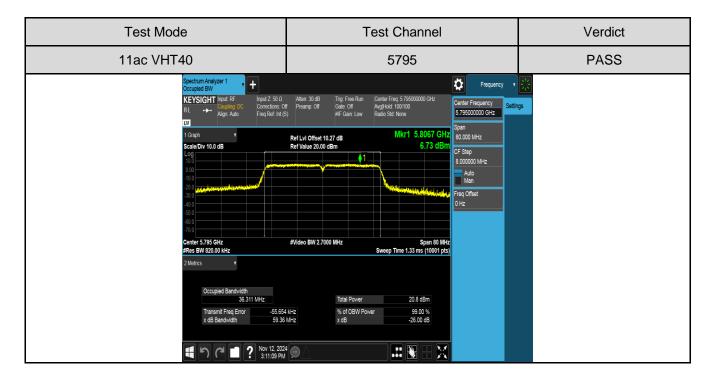




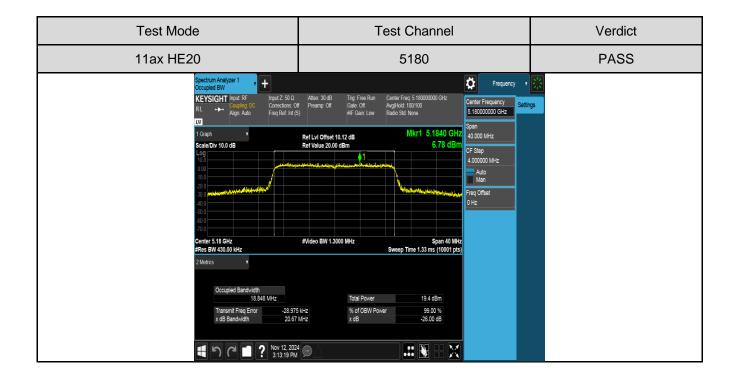


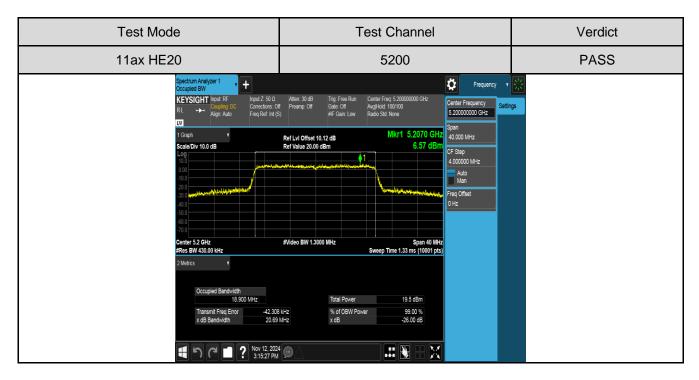




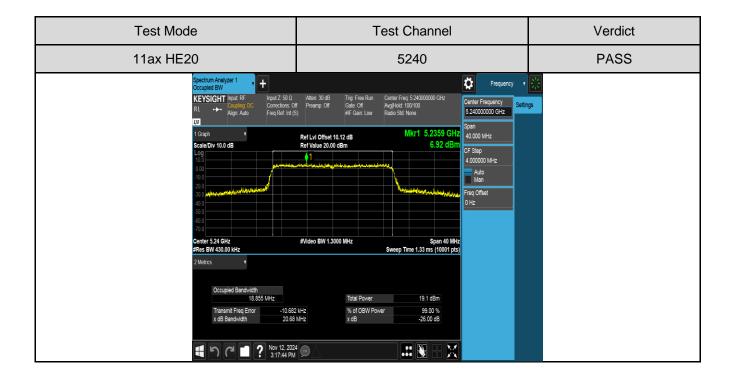


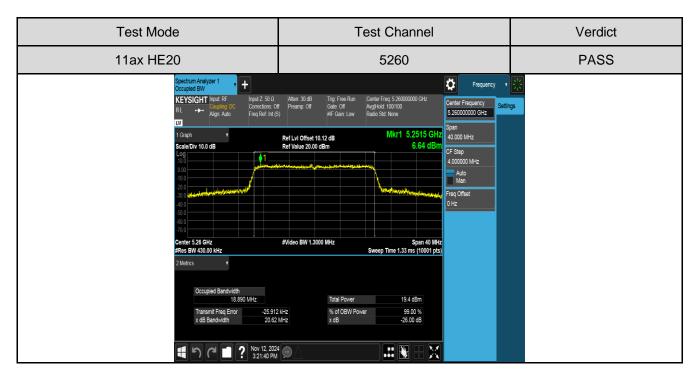




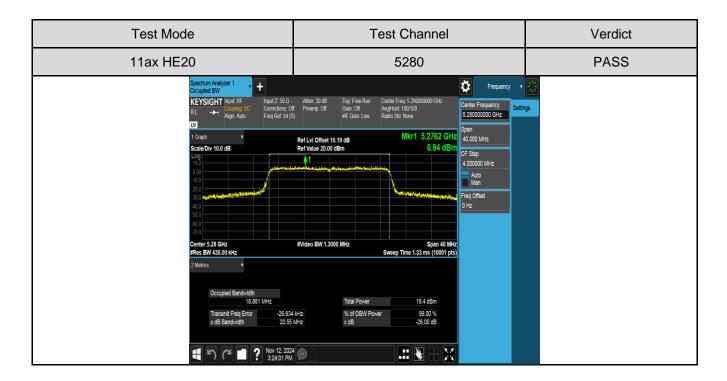


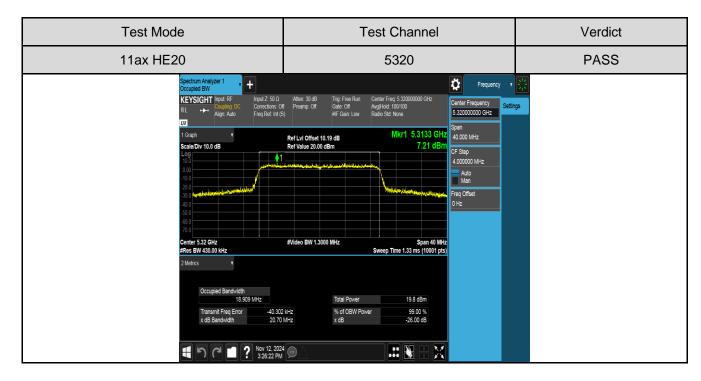




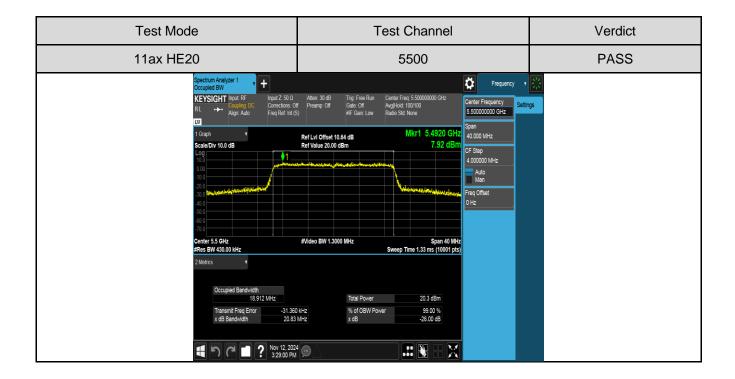


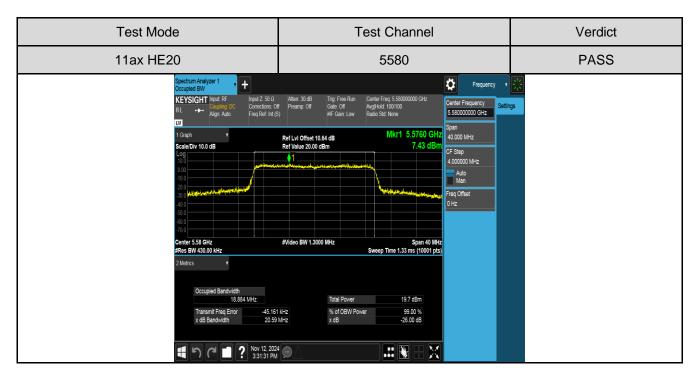




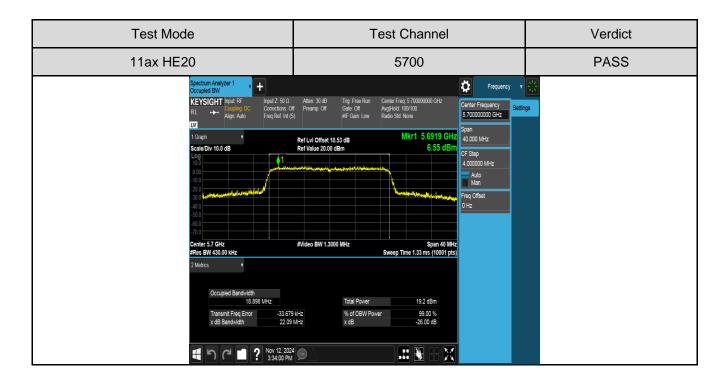


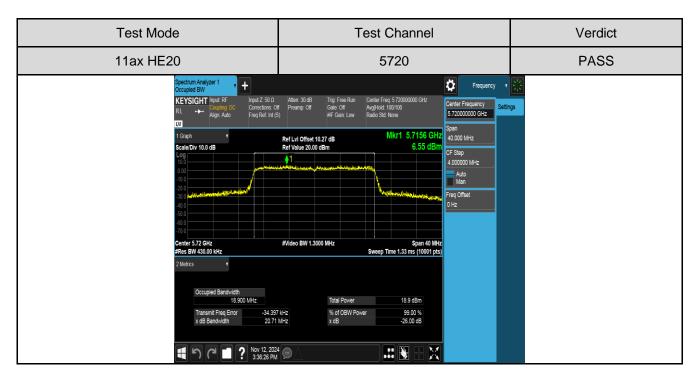




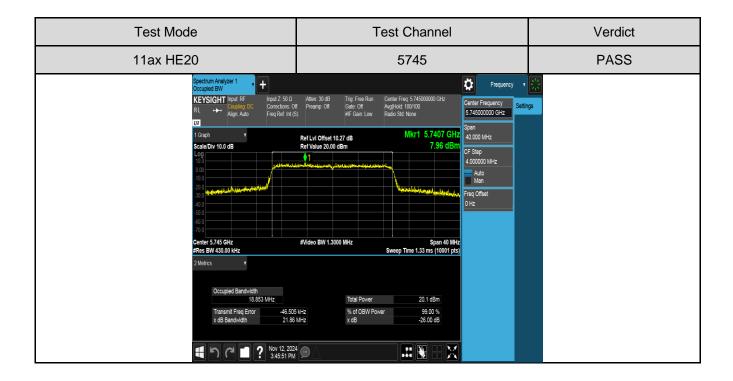


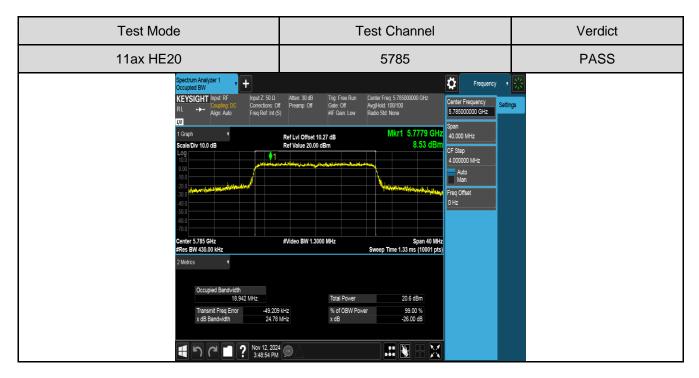




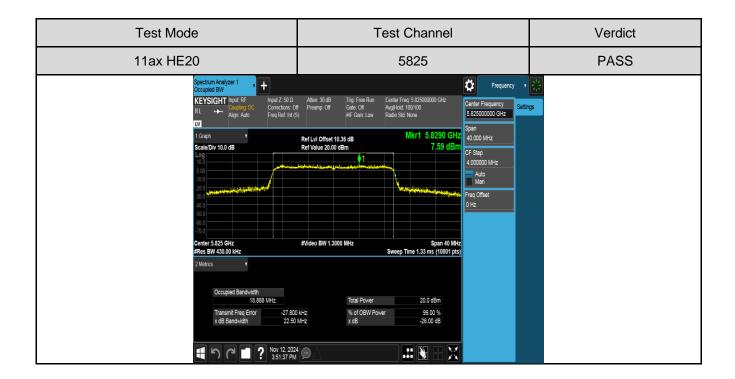


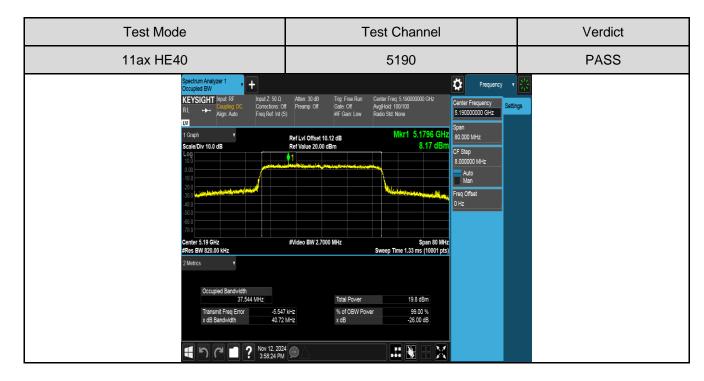




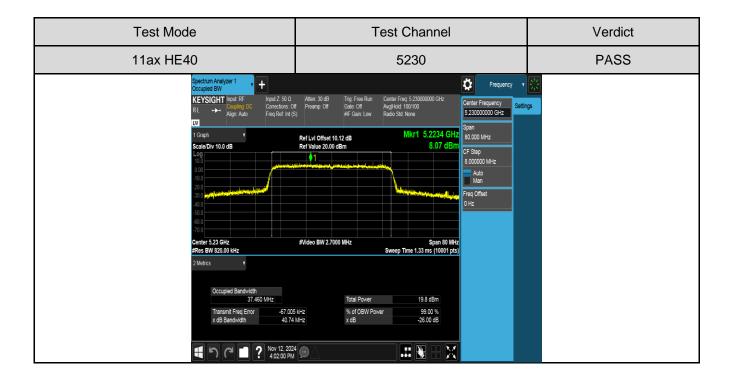


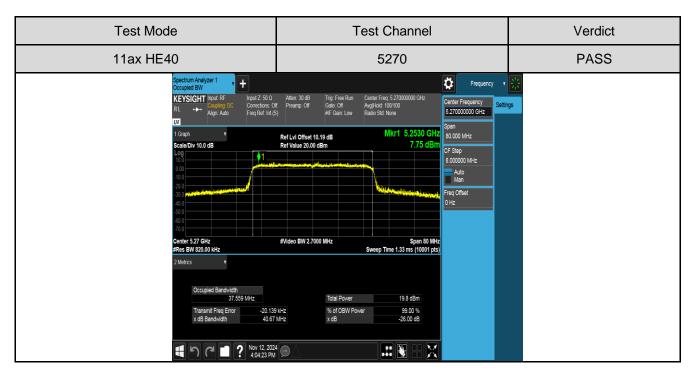




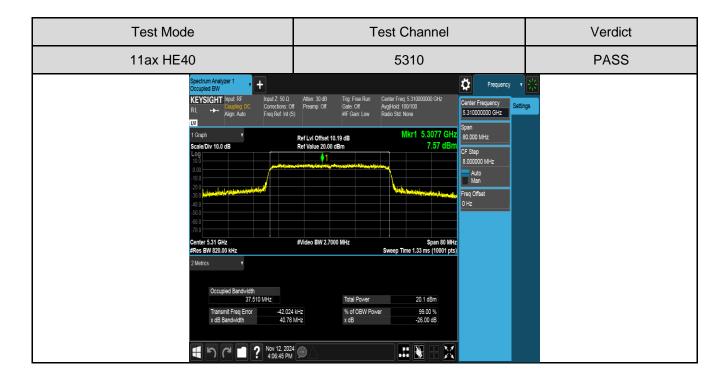


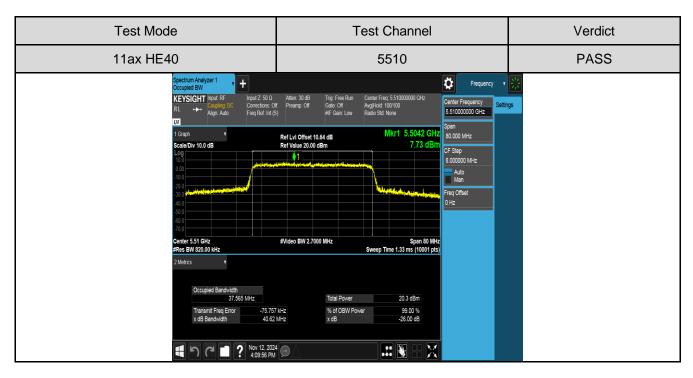




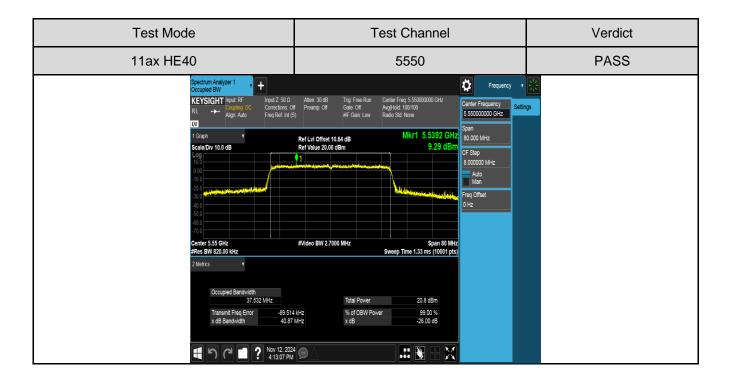


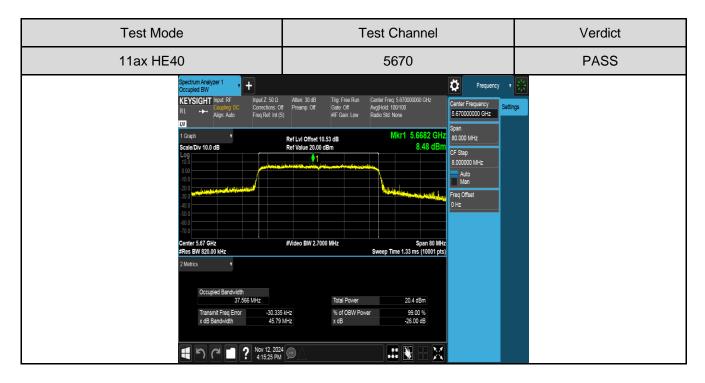




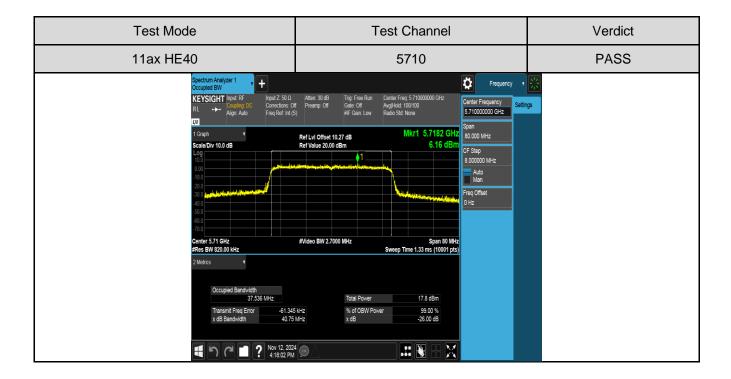


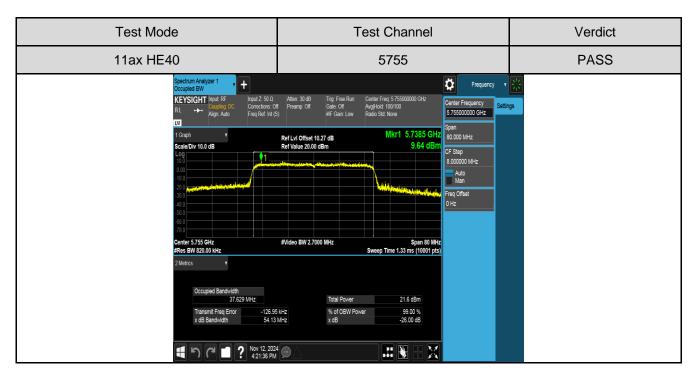






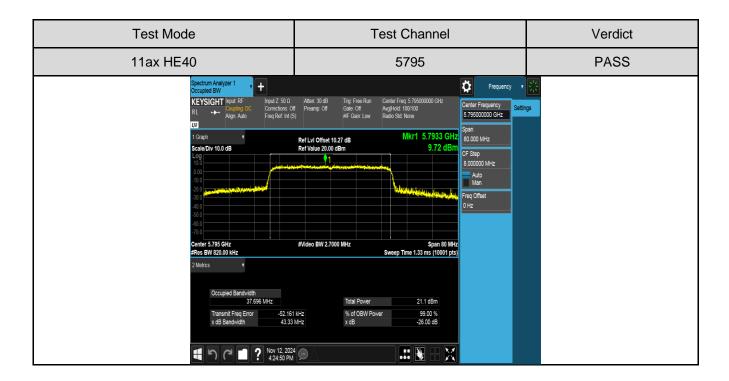






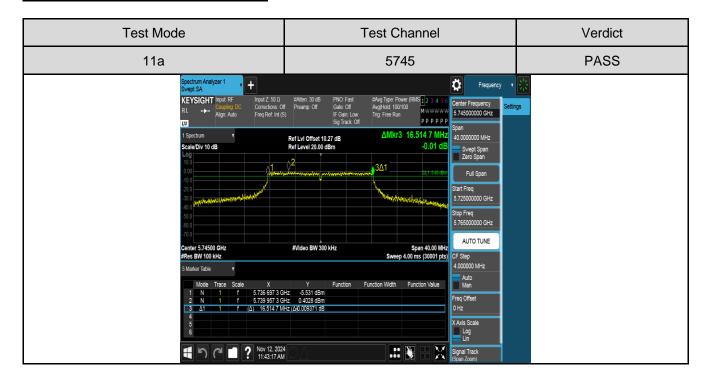


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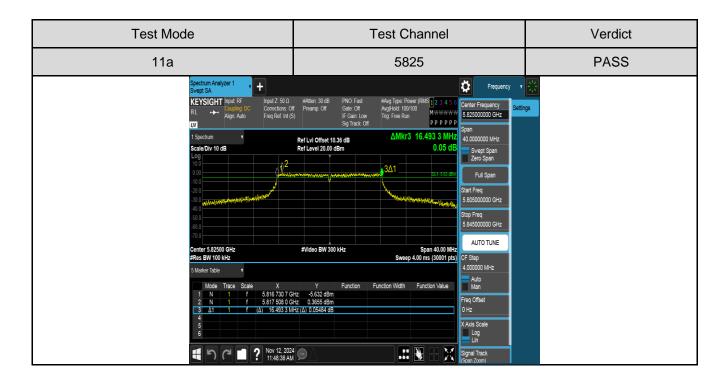


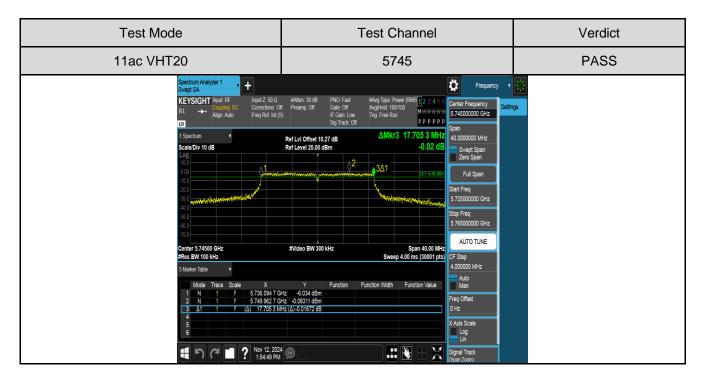
For 6 dB Emission Bandwidth Part:



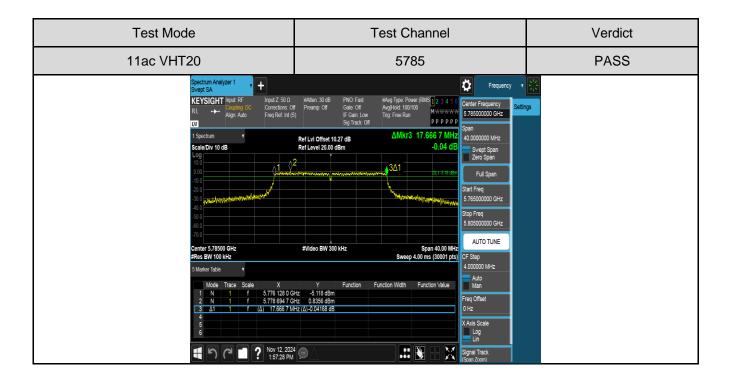


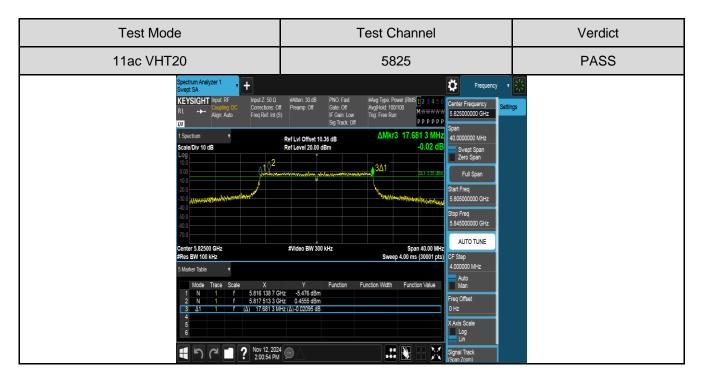




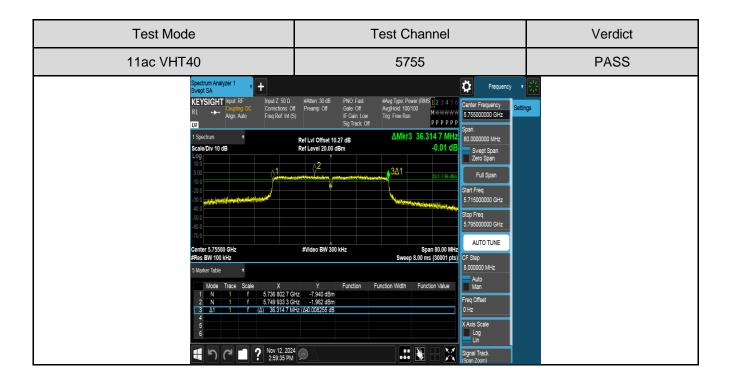


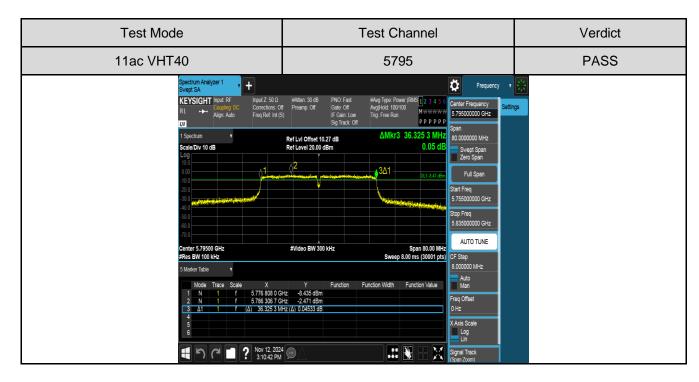
























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6.3. MAXIMUM CONDUCTED AVERAGE OUTPUT POWER

LIMITS

	CFR 47 FCC Part15, Subpart E							
Test Item	Limit	Frequency Range (MHz)						
Conducted	 ☐ Outdoor Access Point: 1 W (30 dBm) ☐ Indoor Access Point: 1 W (30 dBm) ☐ Fixed Point-To-Point Access Points: 1 W (30 dBm) ☐ Client Devices: 250 mW (24 dBm) 	5150 ~ 5250						
Output Power	Shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.	5250 ~ 5350 5470 ~ 5725						
	Shall not exceed 1 Watt (30 dBm).	5725 ~ 5850						

	ISED RSS-247 ISSUE 3							
Test Item	Limit	Frequency Range (MHz)						
	The maximum e.i.r.p. shall not exceed 200 mW (23 dBm) or 10 + 10 log ₁₀ B, dBm, whichever power is less. B is the 99 % emission bandwidth in megahertz.	5150 ~ 5250						
Conducted Output Power or e.i.r.p.	 a. The maximum conducted output power shall not exceed 250 mW (24 dBm) or 11 + 10 log₁₀B dBm, whichever is less. b. The maximum e.i.r.p. shall not exceed 1.0 W (30 dBm) or 17 + 10 log₁₀B dBm, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W. 	5250 ~ 5350 5470 ~ 5600 5650 ~ 5725						
	Shall not exceed 1 Watt (30 dBm). The e.i.r.p. shall not exceed 4 W	5725 ~ 5850						

Noto

The above limits are based upon the maximum antenna gain does not exceed 6 dBi.

If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.



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TEST PROCEDURE

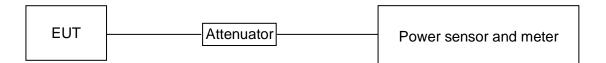
Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.E.

Method AVGSA-2 (trace averaging across ON and OFF times of the EUT transmissions, followed by duty cycle correction):

- a) Measure the duty cycle D of the transmitter output signal as described in 11.6.
- b) Set span to at least 1.5 times the OBW.
- c) Set RBW = 1% to 5% of the OBW, not to exceed 1 MHz.
- d) Set VBW \geq [3 x RBW].
- e) Number of points in sweep \geq [2 x span / RBW]. (This gives bin-to-bin spacing \leq RBW / 2, so that narrowband signals are not lost between frequency bins.)
- f) Sweep time = auto.
- g) Detector = RMS (i.e., power averaging), if available. Otherwise, use the sample detector mode.
- h) Do not use sweep triggering. Allow the sweep to "free run."
- i) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter.
- j) Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function with band limits set equal to the OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum. k) Add [10 log (1 / D)], where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission). For example, add [10 log (1/0.25)] = 6 dB if the duty cycle is 25%.

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TEST SETUP



TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests			
Relative Humidity	60%			
Atmospheric Pressure:	101kPa			
Temperature	22.2°C			
Test Voltage	AC 120V			
Test Date	11/12/2024			

TEST RESULT TABLE

Mode	Frequency	Measurement Output Power	Duty Cycle Correction Factor	Average Conducted Output Power	FCC Power Limit	ISED Power Limit	Antenna Gain	EIRP	ISED EIRP Limit
	MHz	dBm	dB	dBm	dBm	dBm	dBi	dBm	dBm
	5180	13.20	0	13.20	24.00	/	2.66	15.86	22.31
	5200	13.35	0	13.35	24.00	/	2.66	16.01	22.31
	5240	12.93	0	12.93	24.00	/	2.66	15.59	22.31
	5260	13.25	0	13.25	24.00	23.32	2.66	15.91	29.32
	5280	13.16	0	13.16	24.00	23.31	2.66	15.82	29.31
	5320	13.54	0	13.54	24.00	23.32	2.66	16.20	29.32
	5500	13.66	0	13.66	24.00	23.31	2.66	16.32	29.31
11a	5580	12.85	0	12.85	24.00	23.31	2.66	15.51	29.31
	5700	12.54	0	12.54	24.00	23.31	2.66	15.20	29.31
	5720_ UNII-2C	11.11	0	11.11	22.82	22.32	2.66	13.77	28.32
	5720_ UNII-3	4.98	0	4.98	30.00	/	2.66	7.64	36.00
	5745	13.26	0	13.26	30.00	/	2.66	15.92	36.00
	5785	13.91	0	13.91	30.00	/	2.66	16.57	36.00
	5825	13.38	0	13.38	30.00	/	2.66	16.04	36.00



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Mode	Frequency	Measurement Output Power	Duty Cycle Correction Factor	Average Conducted Output Power	FCC Power Limit	ISED Power Limit	Antenna Gain	EIRP	ISED EIRP Limit
	MHz	dBm	dB	dBm	dBm	dBm	dBi	dBm	dBm
	5180	13.49	0	13.49	24.00	/	2.66	16.15	22.54
	5200	13.60	0	13.60	24.00	/	2.66	16.26	22.55
	5240	13.16	0	13.16	24.00	/	2.66	15.82	22.53
	5260	13.46	0	13.46	24.00	23.54	2.66	16.12	29.54
	5280	13.36	0	13.36	24.00	23.53	2.66	16.02	29.53
	5320	13.72	0	13.72	24.00	23.54	2.66	16.38	29.54
1100	5500	13.69	0	13.69	24.00	23.54	2.66	16.35	29.54
11ac VHT20	5580	13.04	0	13.04	24.00	23.54	2.66	15.70	29.54
20	5700	12.72	0	12.72	24.00	23.53	2.66	15.38	29.53
	5720_ UNII-2C	11.12	0	11.12	22.93	22.47	2.66	13.78	28.47
	5720_ UNII-3	5.52	0	5.52	30.00	/	2.66	8.180	36.00
	5745	13.39	0	13.39	30.00	/	2.66	16.05	36.00
	5785	14.02	0	14.02	30.00	/	2.66	16.68	36.00
	5825	13.51	0	13.51	30.00	/	2.66	16.17	36.00

Mode	Frequency	Measurement Output Power	Duty Cycle Correction Factor	Average Conducted Output Power	FCC Power Limit	ISED Power Limit	Antenna Gain	EIRP	ISED EIRP Limit
	MHz	dBm	dB	dBm	dBm	dBm	dBi	dBm	dBm
	5190	12.66	0	12.66	24.00	24.00	2.66	15.32	23.00
	5230	13.01	0	13.01	24.00	24.00	2.66	15.67	23.00
	5270	13.11	0	13.11	24.00	24.00	2.66	15.77	30.00
	5310	13.48	0	13.48	24.00	24.00	2.66	16.14	30.00
	5510	13.25	0	13.25	24.00	24.00	2.66	15.91	30.00
11ac	5550	13.59	0	13.59	24.00	24.00	2.66	16.25	30.00
VHT40	5670	12.89	0	12.89	24.00	24.00	2.66	15.55	30.00
	5710_UNII- 2C	11.49	0	11.49	24.00	24.00	2.66	14.15	30.00
	5710_UNII- 3	0.31	0	0.31	30.00	/	2.66	2.97	36.00
	5755	13.96	0	13.96	30.00	/	2.66	16.62	36.00
	5795	13.70	0	13.70	30.00	/	2.66	16.36	36.00



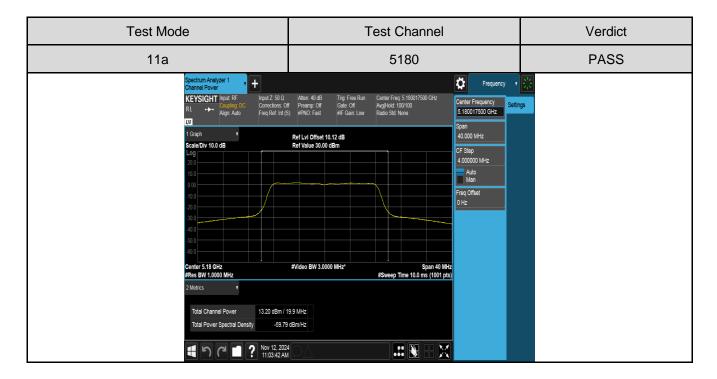
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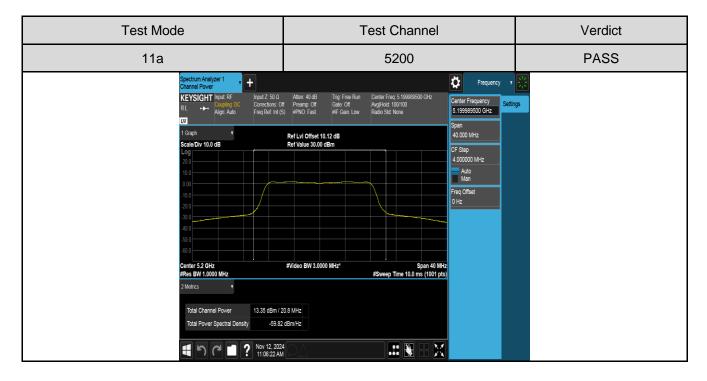
Mode	Frequency	Measurement Output Power	Duty Cycle Correction Factor	Average Conducted Output Power	FCC Power Limit	ISED Power Limit	Antenna Gain	EIRP	ISED EIRP Limit
	MHz	dBm	dB	dBm	dBm	dBm	dBi	dBm	dBm
	5180	12.96	0	12.96	24.00	/	2.66	15.62	22.75
	5200	13.17	0	13.17	24.00	/	2.66	15.83	22.76
	5240	12.78	0	12.78	24.00	/	2.66	15.44	22.75
	5260	13.10	0	13.10	24.00	23.76	2.66	15.76	29.76
	5280	13.03	0	13.03	24.00	23.76	2.66	15.69	29.76
	5320	13.43	0	13.43	24.00	23.77	2.66	16.09	29.77
1100	5500	13.57	0	13.57	24.00	23.77	2.66	16.23	29.77
11ax HE20	5580	12.78	0	12.78	24.00	23.76	2.66	15.44	29.76
11220	5700	12.41	0	12.41	24.00	23.76	2.66	15.07	29.76
	5720_ UNII-2C	10.91	0	10.91	22.85	22.61	2.66	13.57	28.61
	5720_ UNII-3	5.54	0	5.54	30.00	/	2.66	8.20	36.00
	5745	13.17	0	13.17	30.00	/	2.66	15.83	36.00
	5785	13.84	0	13.84	30.00	/	2.66	16.50	36.00
	5825	13.31	0	13.31	30.00	/	2.66	15.97	36.00

Mode	Frequency	Measurement Output Power	Duty Cycle Correction Factor	Average Conducted Output Power	FCC Power Limit	ISED Power Limit	Antenna Gain	EIRP	ISED EIRP Limit
	MHz	dBm	dB	dBm	dBm	dBm	dBi	dBm	dBm
	5190	12.77	0	12.77	24.00	24.00	2.66	15.43	23.00
	5230	12.90	0	12.90	24.00	24.00	2.66	15.56	23.00
	5270	13.01	0	13.01	24.00	24.00	2.66	15.67	30.00
	5310	13.38	0	13.38	24.00	24.00	2.66	16.04	30.00
	5510	13.18	0	13.18	24.00	24.00	2.66	15.84	30.00
11ax	5550	13.59	0	13.59	24.00	24.00	2.66	16.25	30.00
HE40	5670	12.89	0	12.89	24.00	24.00	2.66	15.55	30.00
	5710_UNII- 2C	9.83	0	9.83	24.00	24.00	2.66	12.49	30.00
	5710_UNII- 3	-1.14	0	-1.14	30.00	/	2.66	1.52	36.00
	5755	13.92	0	13.92	30.00	/	2.66	16.58	36.00
	5795	13.74	0	13.74	30.00	/	2.66	16.40	36.00



TEST GRAPHS







Verdict **Test Mode Test Channel PASS** 11a 5240 Ö 5.240807500 GHz 40.000 MHz Ref Lvl Offset 10.12 dB Ref Value 30.00 dBm Scale/Div 10.0 dB CF Step 4.000000 MHz Auto Man Freq Offset 0 Hz Center 5.241 GHz Res BW 1.0000 MHz Span 40 MHz #Sweep Time 10.0 ms (1001 pts) #Video BW 3.0000 MHz* Total Channel Power 12.93 dBm / 21.9 MHz Total Power Spectral Density -60.47 dBm/Hz .:: ₹

