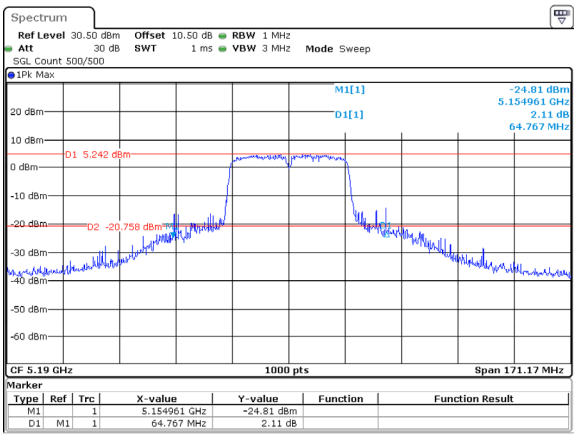
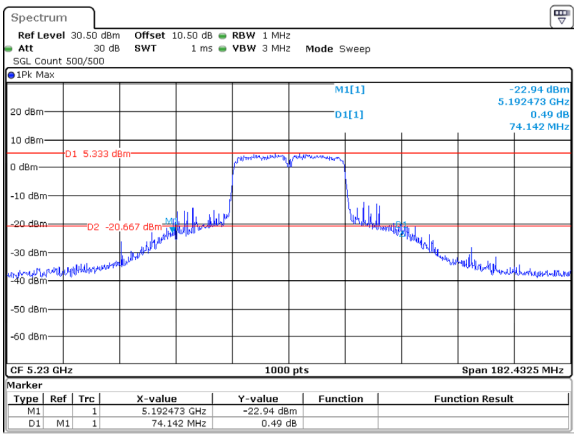
802.11n40_5190MHz

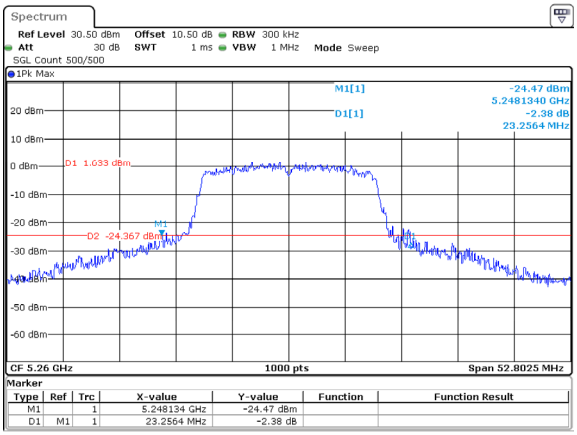


802.11n40_5230MHz

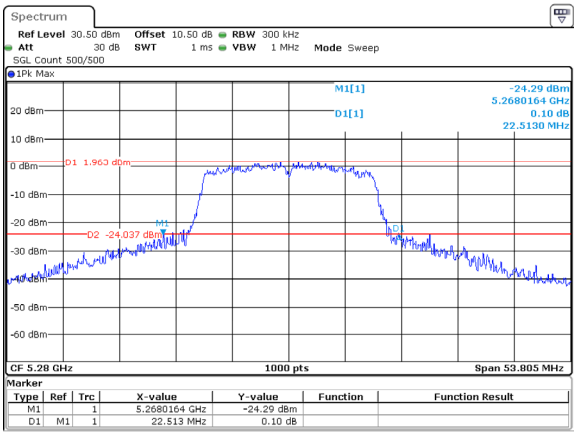


5250-5350MHz

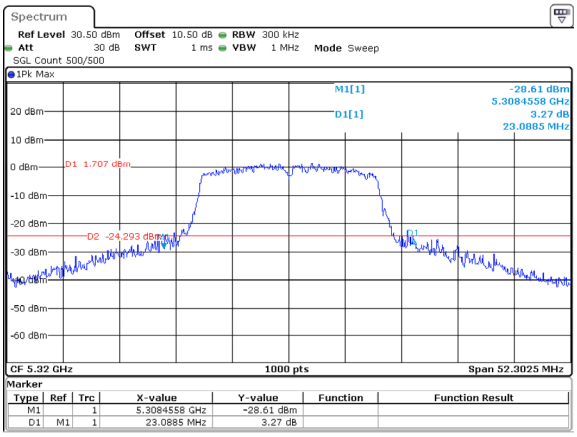
802.11a_5260MHz



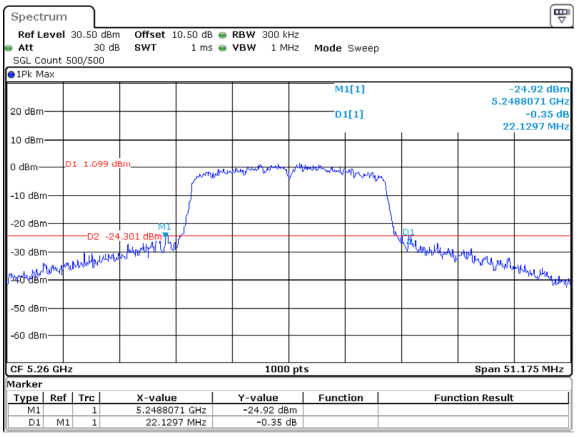
802.11a_5280MHz



802.11a_5320MHz



802.11n20_5260MHz



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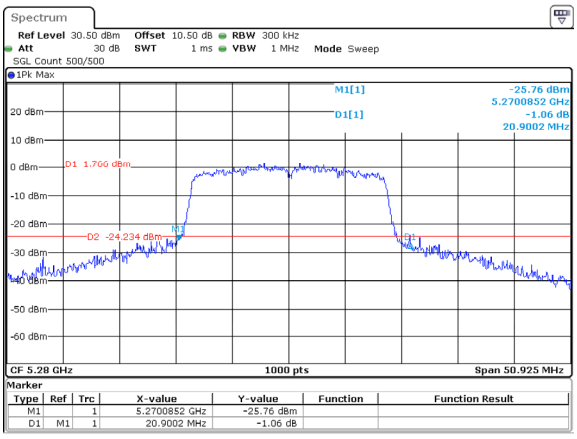

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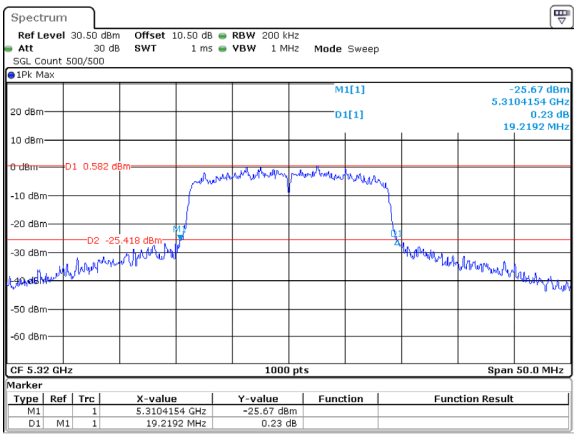
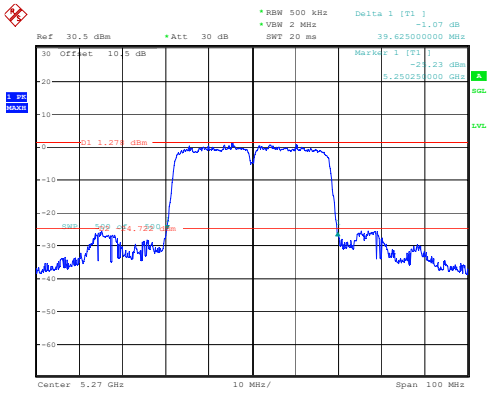
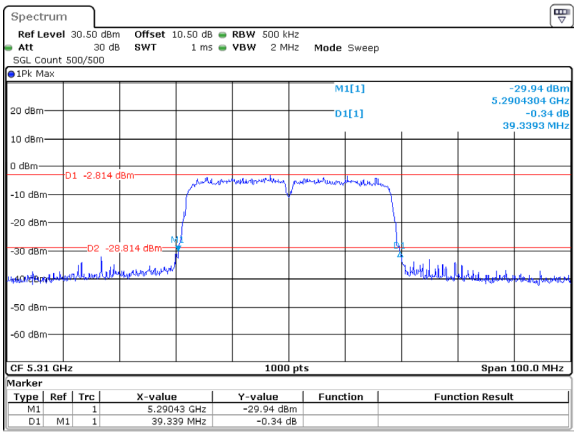


802.11n40_5270MHz

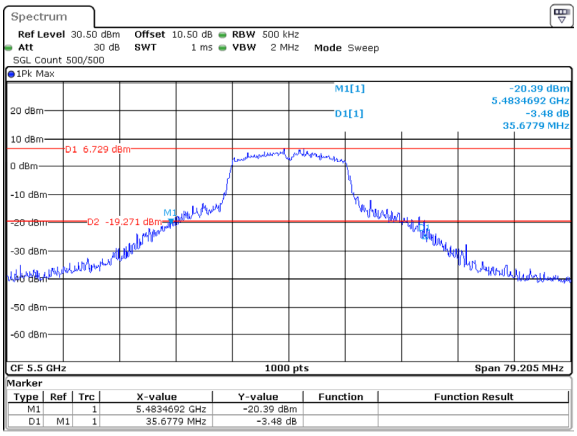


802.11n40_5310MHz

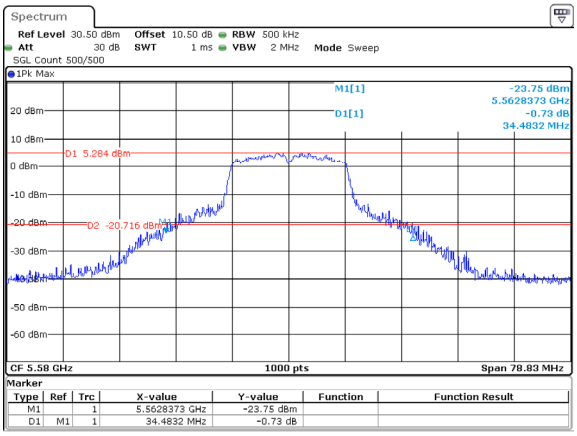


5470-5725MHz

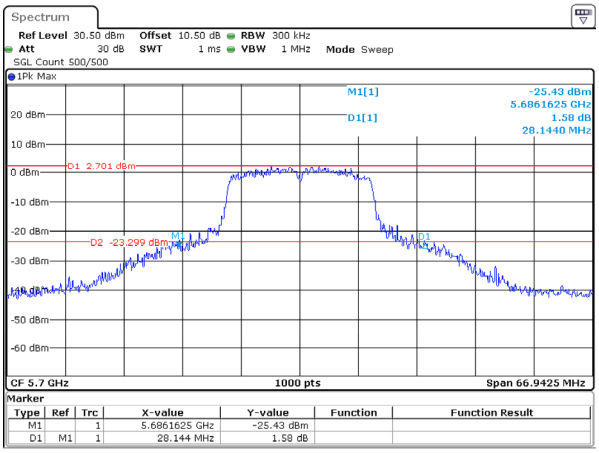
802.11a_5500MHz



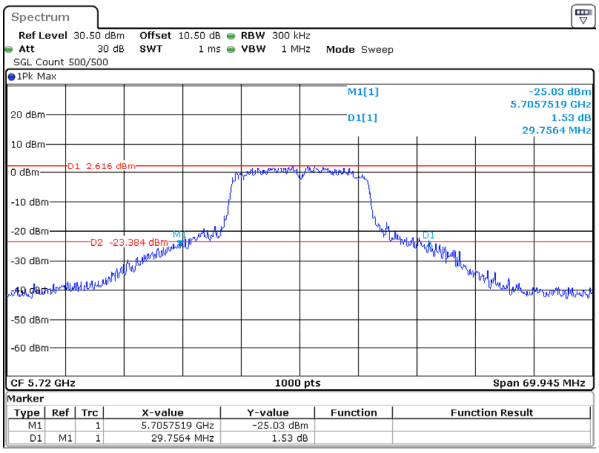
802.11a_5580MHz



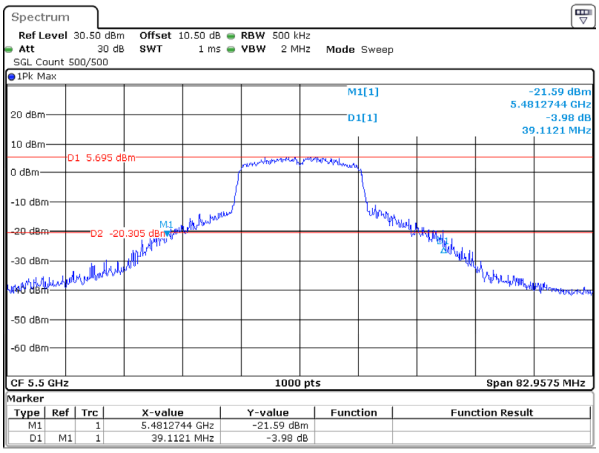
802.11a_5700MHz



802.11a_5720MHz



802.11n20_5500MHz



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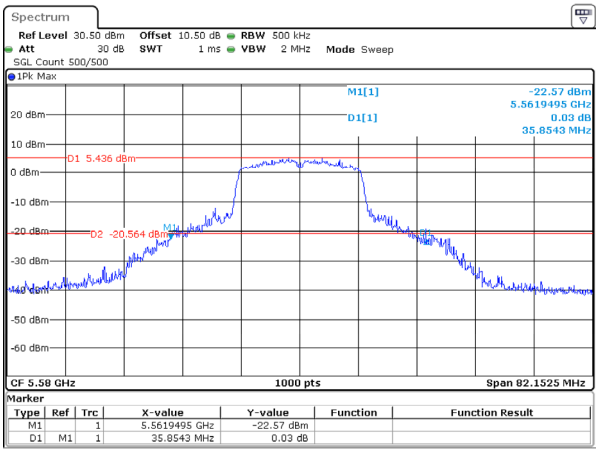
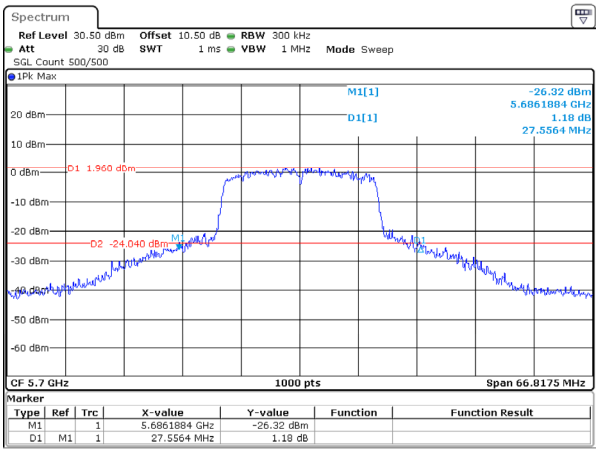
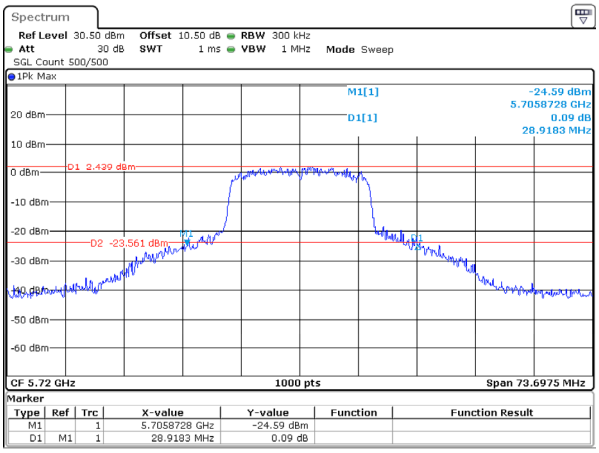


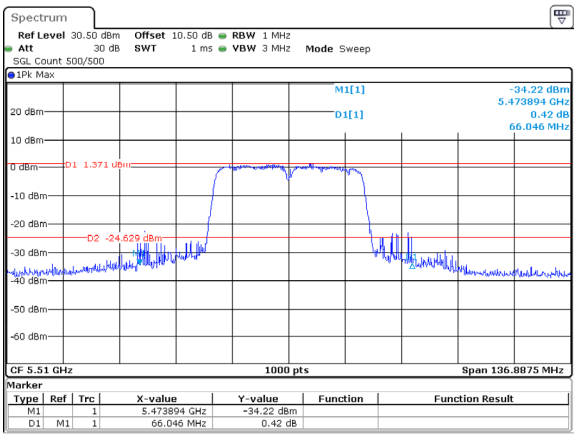
802.11n20_5700MHz



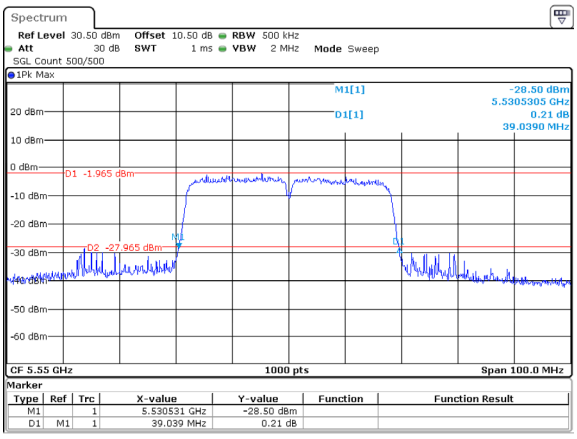
802.11n20_5720MHz



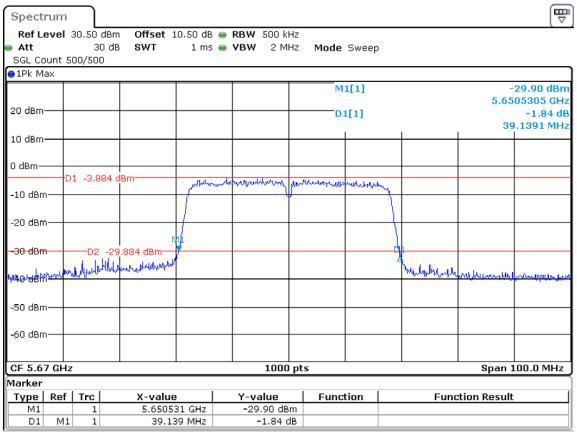
802.11n40_5510MHz



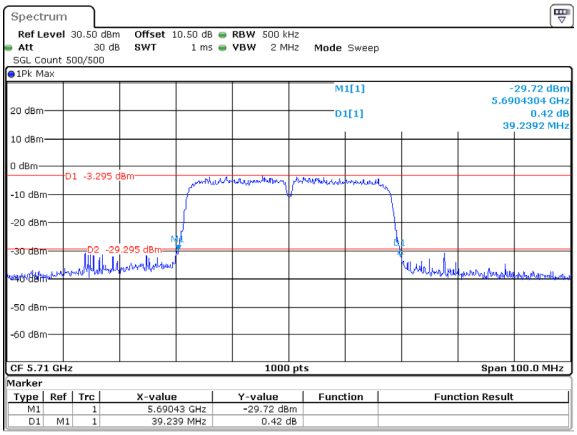
802.11n40_5550MHz



802.11n40_5670MHz

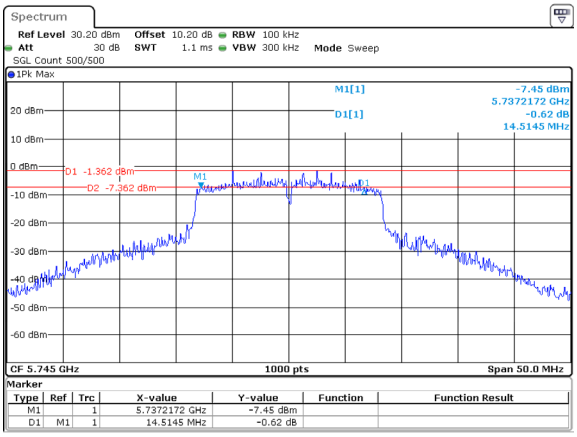


802.11n40_5710MHz

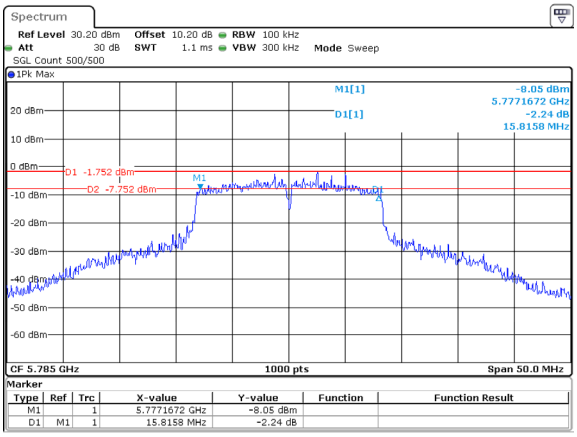


5725-5850MHz

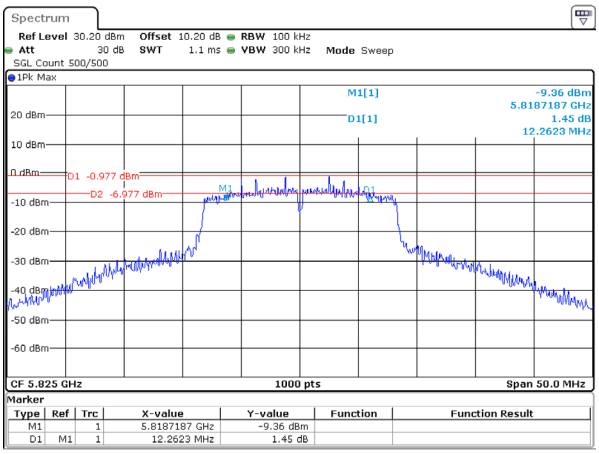
802.11a_5745MHz



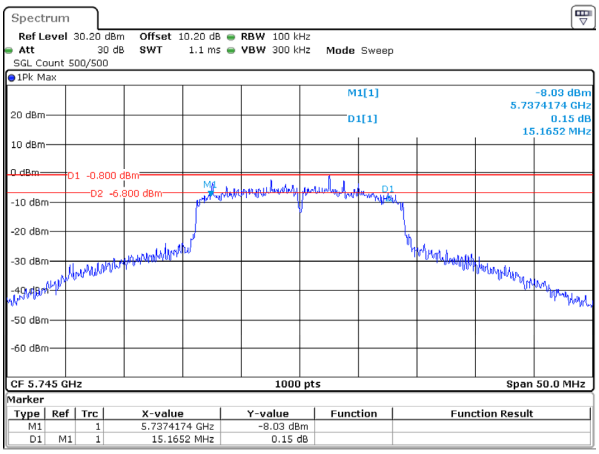
802.11a_5785MHz



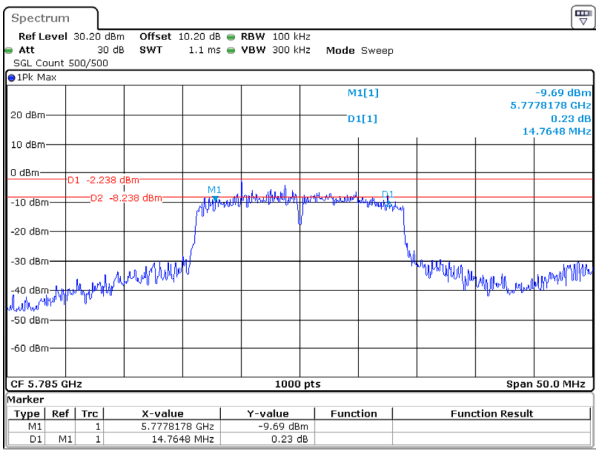
802.11a_5825MHz



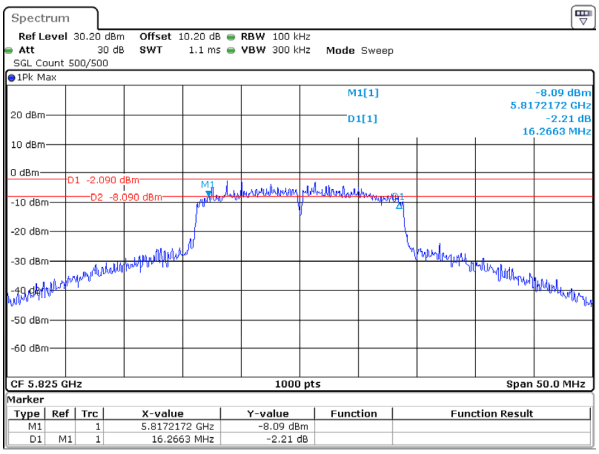
802.11n20_5745MHz



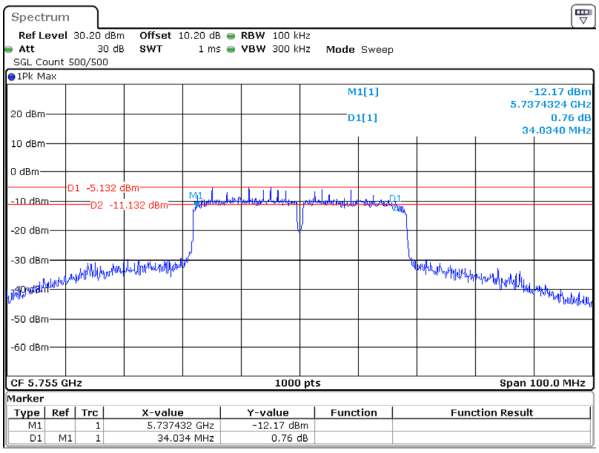
802.11n20_5785MHz



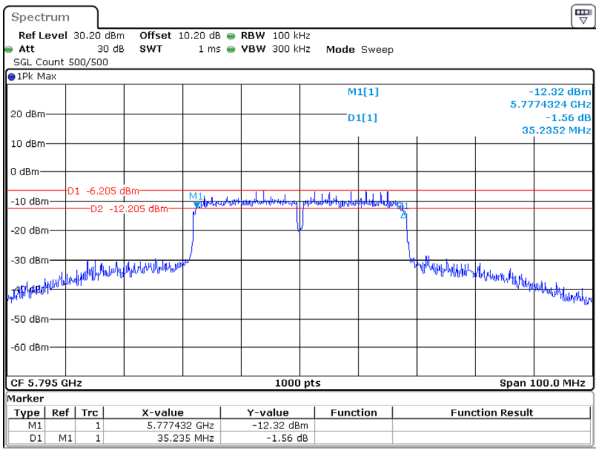
802.11n20_5825MHz



802.11n40_5755MHz



802.11n40_5795MHz



99% Occupied Bandwidth

Test Information:

Sample No.:	2ZSR-2	**Test Date:**	2025/03/29~2025/06/24
Test Site:	RF	**Test Mode:**	Transmitting
Tester:	Brian Li	**Test Result:**	Pass

Environmental Conditions:

Temperature: (°C)	23-25.2	**Relative Humidity: (%)**	44-46	**ATM Pressure: (kPa)**	101

Test Data:

5150-5250MHz

Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5180	16.600
	5200	16.650
	5240	16.650
802.11n20	5180	17.550
	5200	17.550
	5240	17.650
802.11n40	5190	36.100
	5230	36.100

Note:
The 99% Occupied Bandwidth have not fall into the band 5250-5350MHz, please refer to the test plots of 99% Occupied Bandwidth.

5250-5350MHz

Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5260	16.450
	5280	16.450
	5320	16.450
802.11n20	5260	17.400
	5280	17.450
	5320	17.400
802.11n40	5270	**35.800**
	5310	**35.800**

5470-5725MHz

Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5500	18.800
	5580	17.350
	5700	16.650
	5720	16.700
802.11n20	5500	19.450
	5580	17.950
	5700	17.600
	5720	17.650
802.11n40	5510	**35.900**
	5550	**35.900**
	5670	**35.900**
	5710	**35.900**

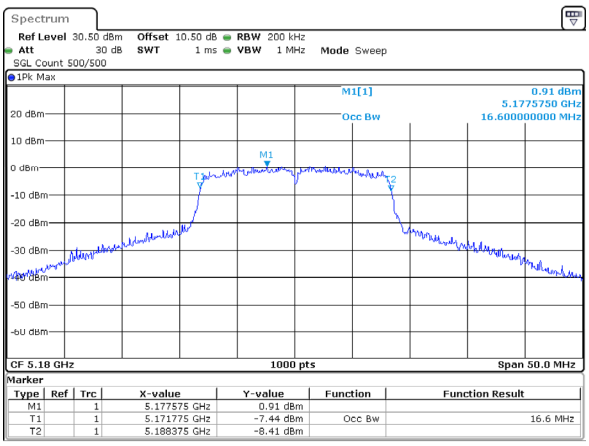
5725-5850MHz

Mode	Test Frequency (MHz)	99% OBW (MHz)
802.11a	5745	17.200
	5785	16.750
	5825	16.750
802.11n20	5745	17.950
	5785	17.750
	5825	17.850
802.11n40	5755	36.400
	5795	**36.700**

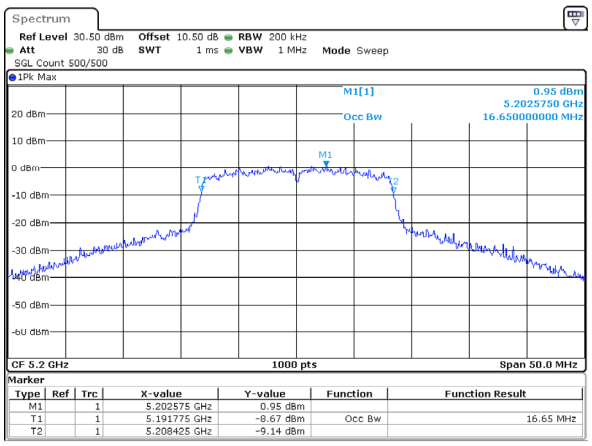
Note:
The 99% Occupied Bandwidth have not fall into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.

5150-5250MHz

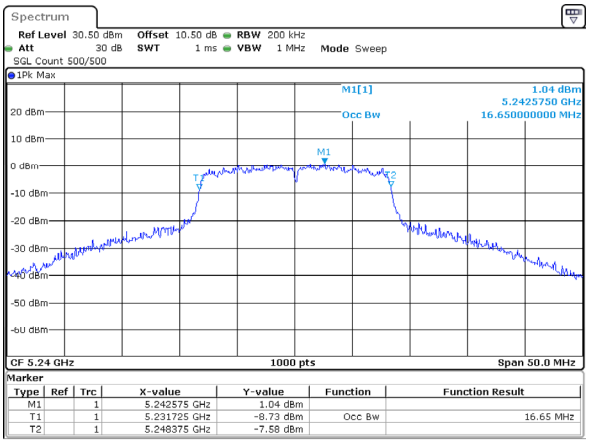
802.11a_5180MHz



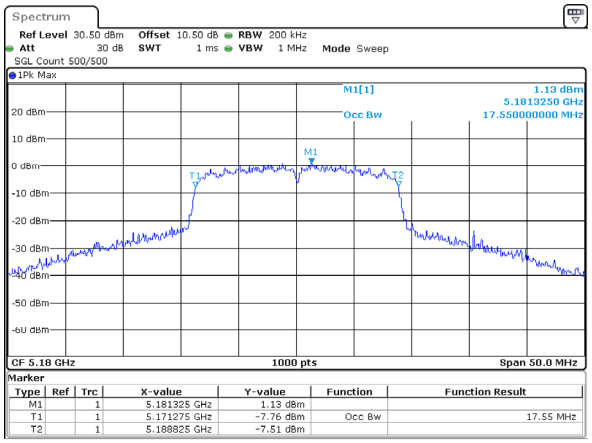
802.11a_5200MHz



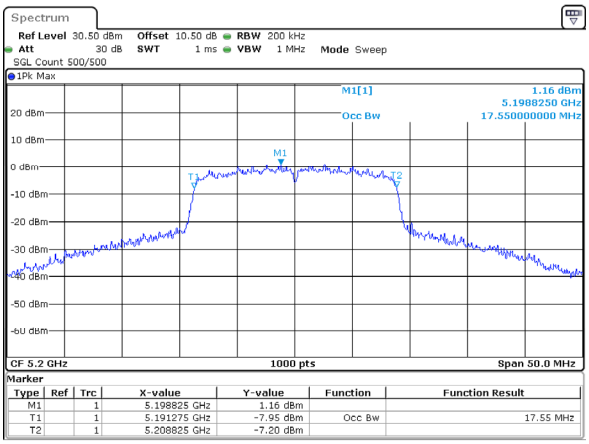
802.11a_5240MHz



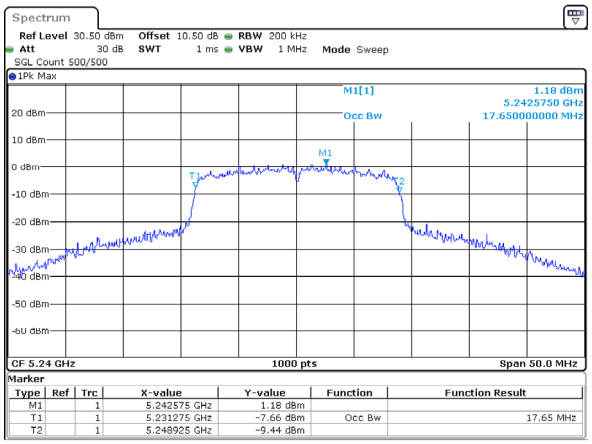
802.11n20_5180MHz



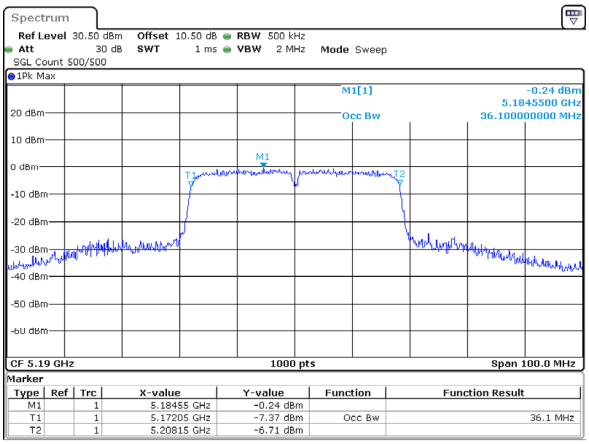
802.11n20_5200MHz



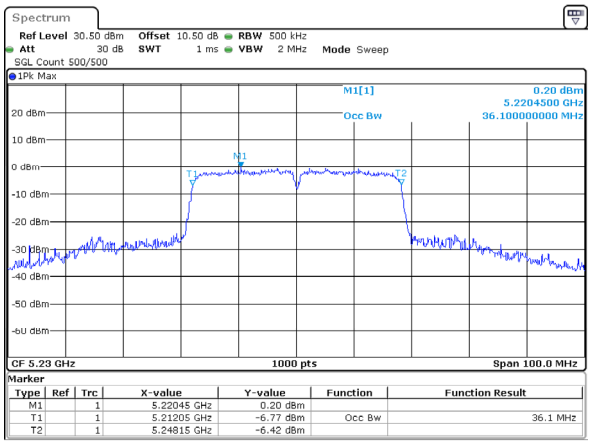
802.11n20_5240MHz



802.11n40_5190MHz

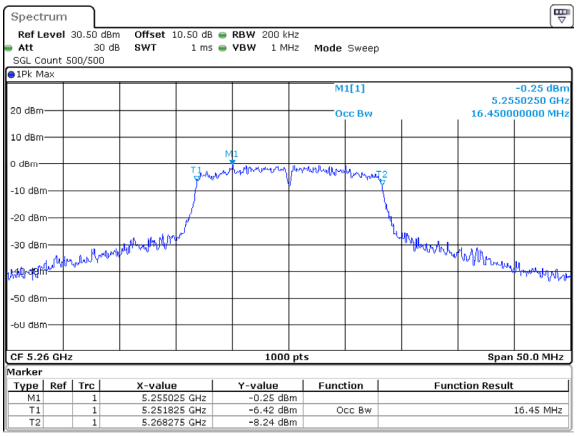


802.11n40_5230MHz

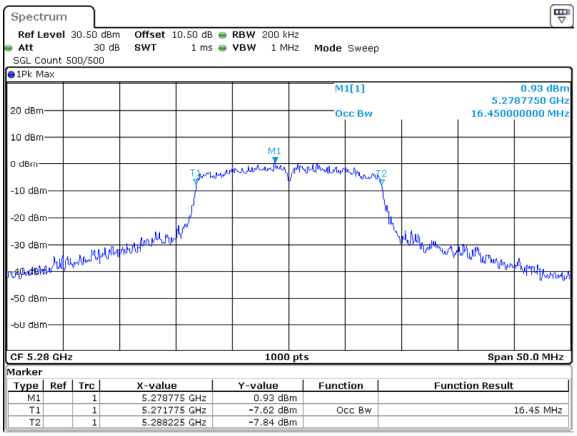


5250-5350MHz

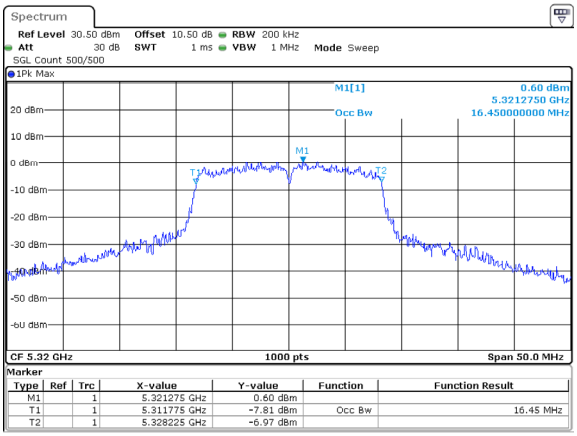
802.11a_5260MHz



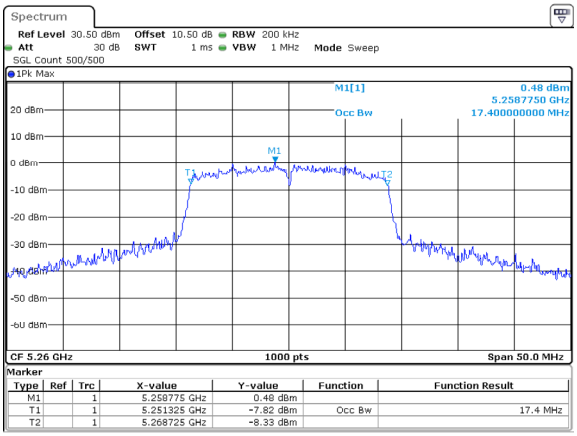
802.11a_5280MHz



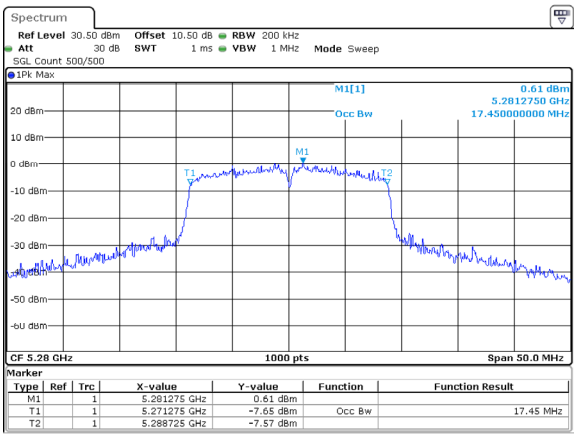
802.11a_5320MHz



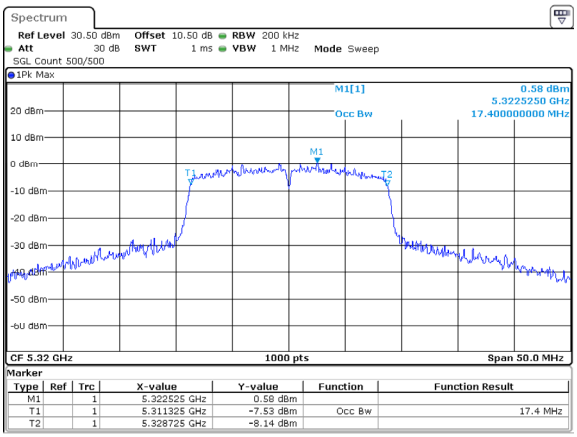
802.11n20_5260MHz



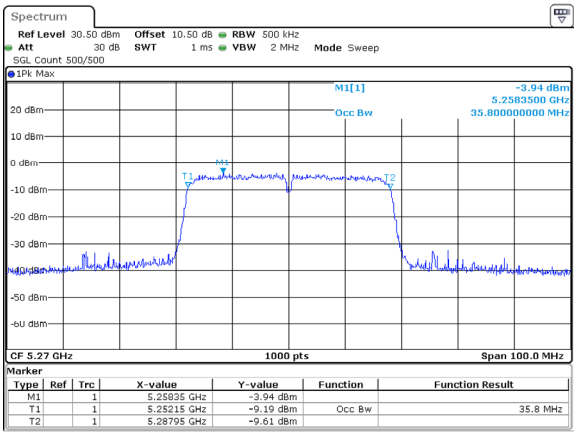
802.11n20_5280MHz



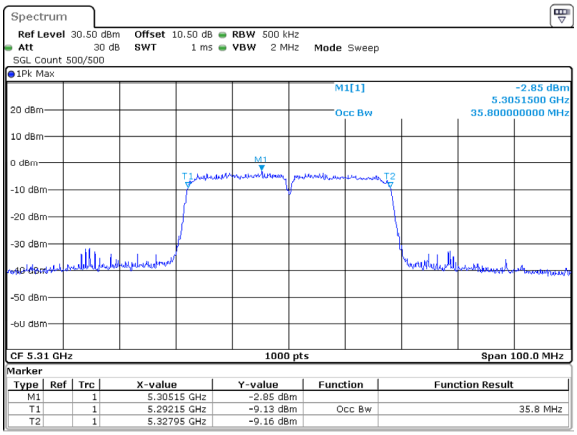
802.11n20_5320MHz



802.11n40_5270MHz

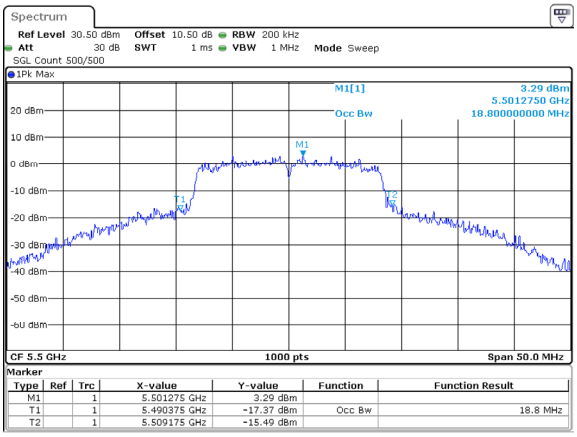


802.11n40_5310MHz

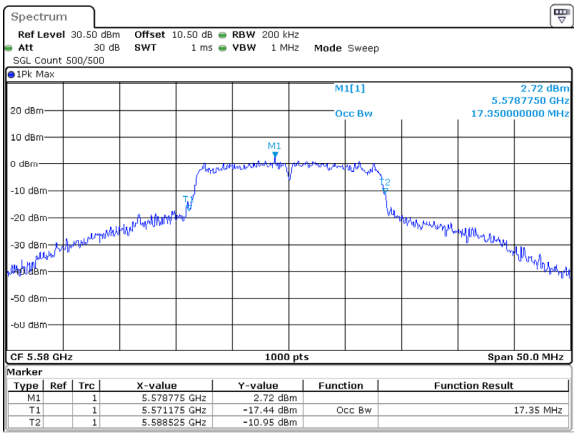


5470-5725MHz

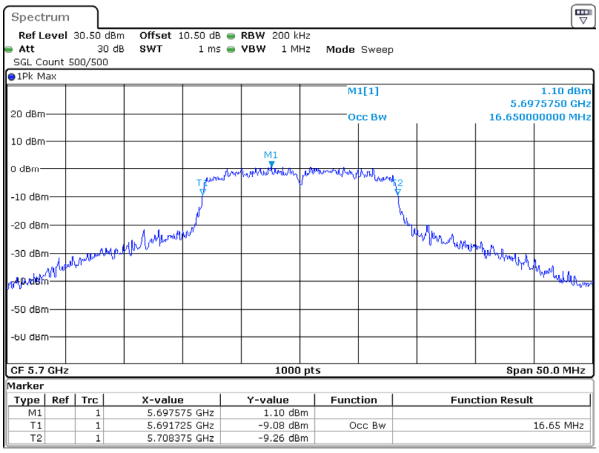
802.11a_5500MHz



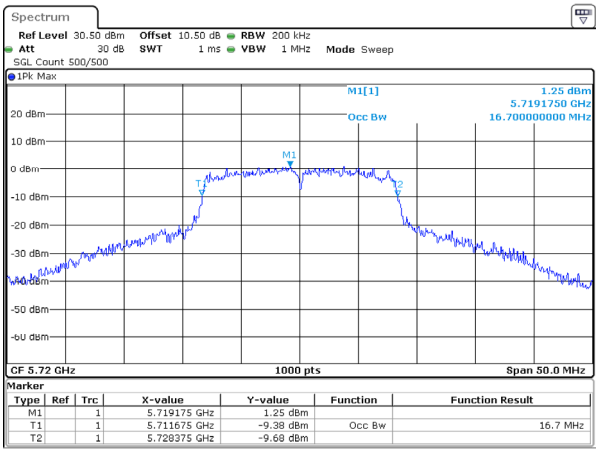
802.11a_5580MHz



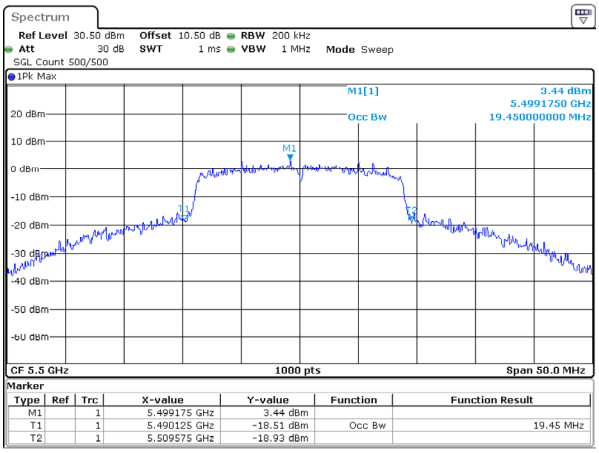
802.11a_5700MHz



802.11a_5720MHz



802.11n20_5500MHz



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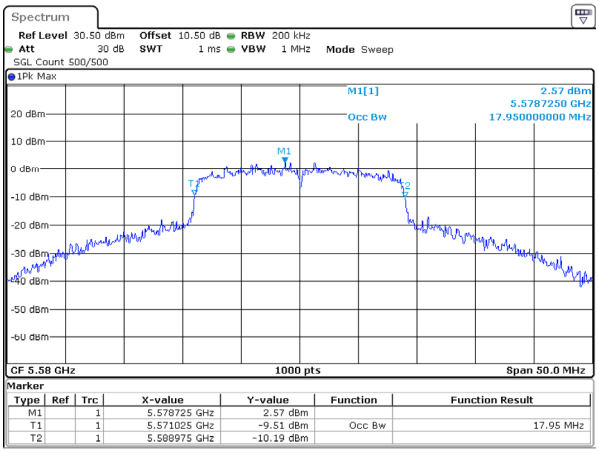

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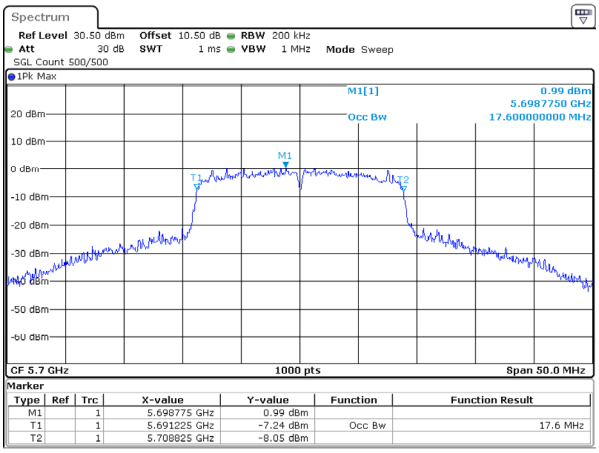

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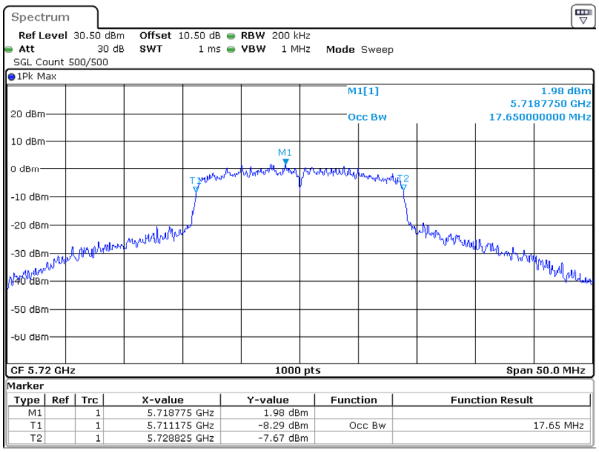
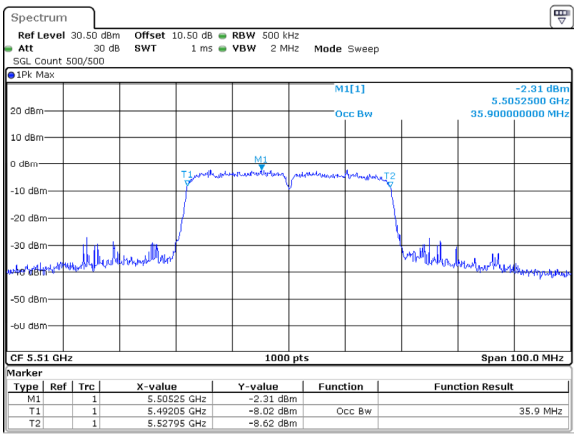


802.11n40_5510MHz



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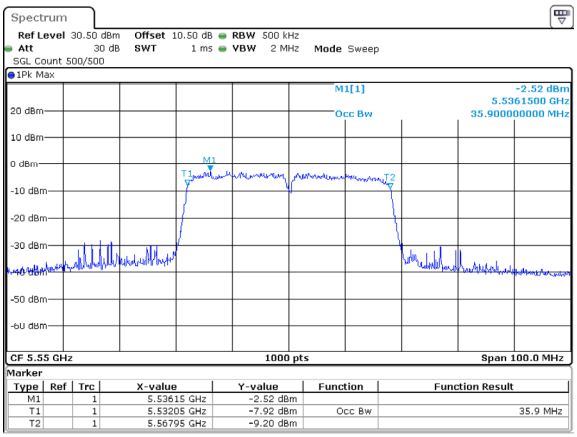
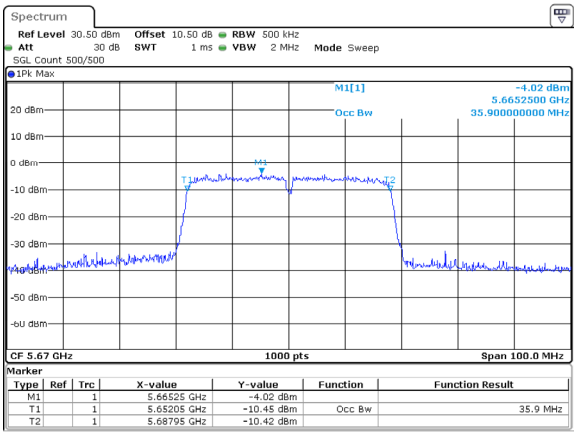


802.11n40_5670MHz



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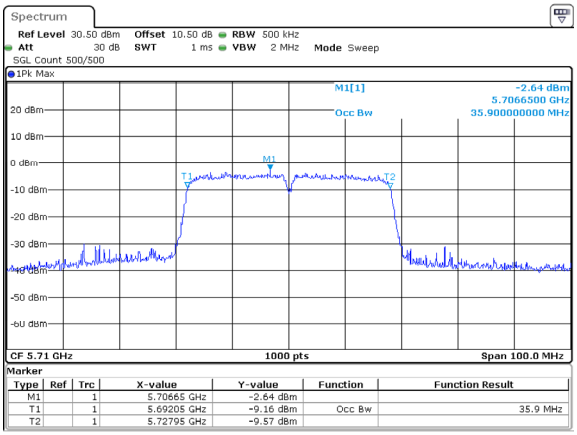
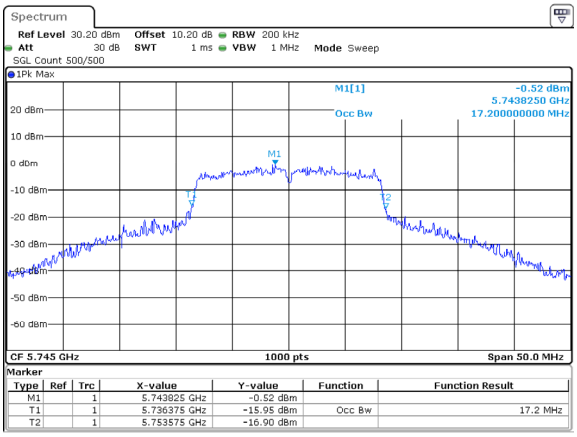
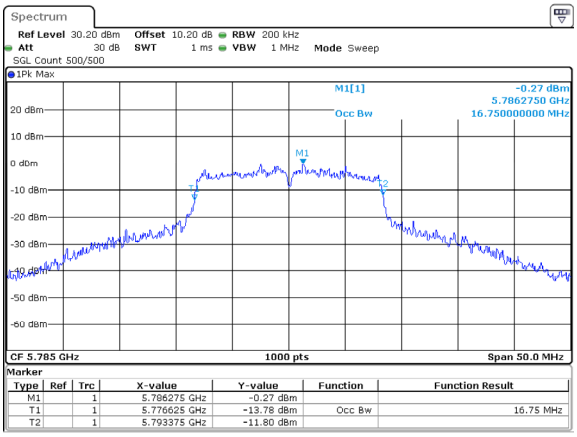


5725-5850MHz

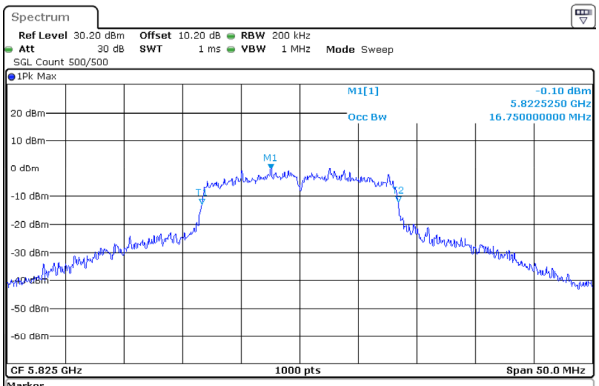
802.11a_5745MHz



802.11a_5785MHz



802.11a_5825MHz

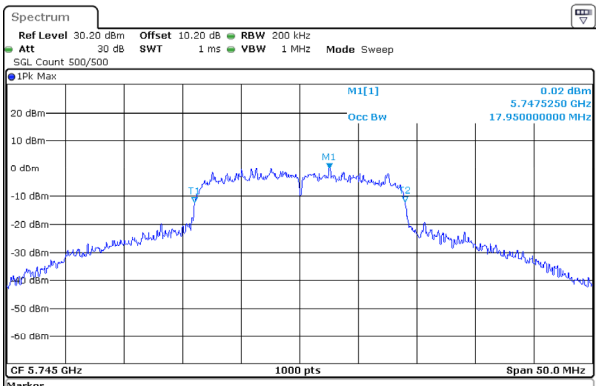


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.822525 GHz	-0.10 dBm		
T1		1	5.816675 GHz	-12.80 dBm	Occ Bw	16.75 MHz
T2		1	5.833425 GHz	-12.04 dBm		

ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 29.MAR.2025 00:58:04

802.11n20_5745MHz

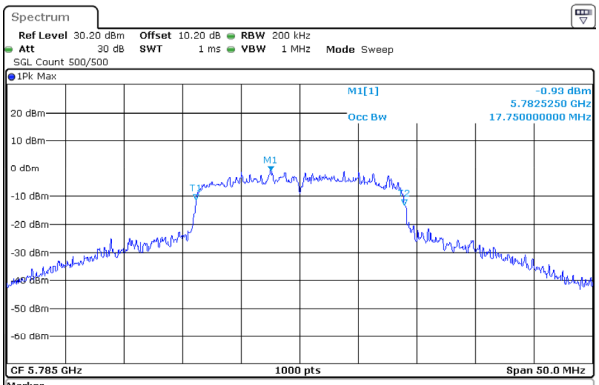


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.747525 GHz	0.02 dBm		
T1		1	5.736025 GHz	-12.28 dBm	Occ Bw	17.95 MHz
T2		1	5.753975 GHz	-12.25 dBm		

ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 29.MAR.2025 00:59:58

802.11n20_5785MHz

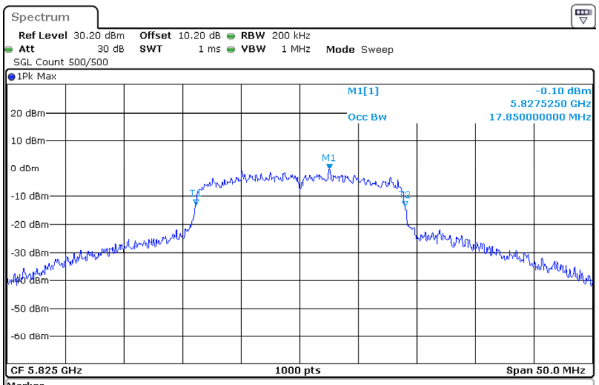


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.782525 GHz	-0.93 dBm		
T1		1	5.776175 GHz	-11.25 dBm	Occ Bw	17.75 MHz
T2		1	5.793925 GHz	-13.24 dBm		

ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 29.MAR.2025 01:01:47

802.11n20_5825MHz



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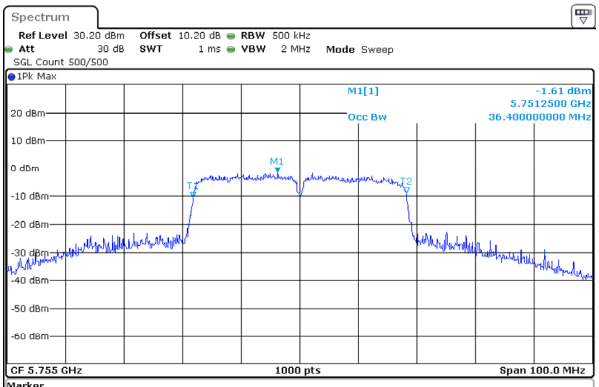
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.827525 GHz	-0.10 dBm		
T1		1	5.816125 GHz	-13.07 dBm	Occ Bw	17.85 MHz
T2		1	5.833975 GHz	-13.68 dBm		

ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 29.MAR.2025 01:03:24

802.11n40_5755MHz



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.75125 GHz	-1.61 dBm		
T1		1	5.73675 GHz	-10.48 dBm	Occ Bw	36.4 MHz
T2		1	5.77315 GHz	-8.97 dBm		

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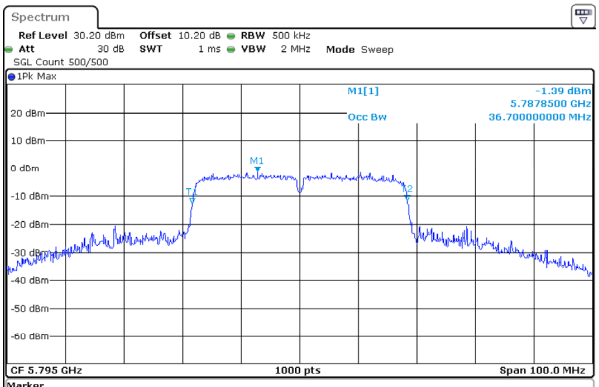
Date: 29.MAR.2025 01:04:43

802.11n40_5795MHz



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.78785 GHz	-1.39 dBm		
T1		1	5.77665 GHz	-12.78 dBm	Occ Bw	36.7 MHz
T2		1	5.81335 GHz	-11.64 dBm		

ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 29.MAR.2025 01:05:51

Maximum Conducted Output Power

Test Information:

Sample No.:	2ZSR-2	**Test Date:**	2025/03/29~2025/06/24
Test Site:	RF	**Test Mode:**	Transmitting
Tester:	Brian Li	**Test Result:**	Pass

Environmental Conditions:

Temperature: (°C)	23-25.2	**Relative Humidity: (%)**	44-46	**ATM Pressure: (kPa)**	101

Test Data:

5150-5250MHz

Mode	Test Frequency (MHz)	Average Output Power(dBm)	Limit (dBm)	Verdict
802.11a	5180	17.48	24	Pass
	5200	17.39	24	Pass
	5240	17.62	24	Pass
802.11n20	5180	17.55	24	Pass
	5200	17.15	24	Pass
	5240	17.44	24	Pass
802.11n40	5190	11.91	24	Pass
	5230	12.38	24	Pass

5250-5350MHz

Mode	Test Frequency (MHz)	Average Output Power(dBm)	Limit (dBm)	Verdict
802.11a	5260	10.39	24	Pass
	5280	10.23	24	Pass
	5320	10.43	24	Pass
802.11n20	5260	9.71	24	Pass
	5280	9.55	24	Pass
	5320	**10.53**	24	Pass
802.11n40	5270	5.99	24	Pass
	5310	6.24	24	Pass

5470-5725MHz

Mode	Test Frequency (MHz)	Average Output Power(dBm)	Limit (dBm)	Verdict
802.11a	5500	**12.74**	24	Pass
	5580	11.8	24	Pass
	5700	11.22	24	Pass
	5720	10.26	24	Pass
802.11n20	5500	12.46	24	Pass
	5580	11.81	24	Pass
	5700	11.05	24	Pass
	5720	10.92	24	Pass
802.11n40	5510	7.29	24	Pass
	5550	7.0	24	Pass
	5670	5.35	24	Pass
	5710	5.67	24	Pass

5725-5850MHz

Mode	Test Frequency (MHz)	Average Output Power(dBm)	Limit (dBm)	Verdict
802.11a	5745	9.51	30	Pass
	5785	9.19	30	Pass
	5825	9.62	30	Pass
802.11n20	5745	**9.73**	30	Pass
	5785	8.49	30	Pass
	5825	9.48	30	Pass
802.11n40	5755	8.32	30	Pass
	5795	8.38	30	Pass

Power Spectral Density

Test Information:

Sample No.:	2ZSR-2	**Test Date:**	2025/03/29~2025/05/16
Test Site:	RF	**Test Mode:**	Transmitting
Tester:	Brian Li	**Test Result:**	Pass

Environmental Conditions:

Temperature: (°C)	23-25.2	**Relative Humidity: (%)**	44-46	**ATM Pressure: (kPa)**	101

Test Data:

5150-5250MHz

Mode	Test Frequency (MHz)	Reading (dBm/MHz)	Duty Cycle Factor(dB)	Result (dBm/MHz)	Limit (dBm/MHz)	Verdict
802.11a	5180	-1.30	7.01	5.71	11	Pass
	5200	-2.49	7.01	4.52	11	Pass
	5240	-2.79	7.01	4.22	11	Pass
802.11n20	5180	-1.12	6.97	**5.85**	11	Pass
	5200	-2.69	6.97	4.28	11	Pass
	5240	-2.19	6.97	4.78	11	Pass
802.11n40	5190	-5.45	3.18	-2.27	11	Pass
	5230	-5.42	3.18	-2.24	11	Pass

5250-5350MHz

Mode	Test Frequency (MHz)	Reading (dBm/MHz)	Duty Cycle Factor(dB)	Result (dBm/MHz)	Limit (dBm/MHz)	Verdict
802.11a	5260	-7.04	7.01	-0.03	11	Pass
	5280	-5.41	7.01	**1.60**	11	Pass
	5320	-7.18	7.01	-0.17	11	Pass
802.11n20	5260	-6.55	6.97	0.42	11	Pass
	5280	-6.93	6.97	0.04	11	Pass
	5320	-7.33	6.97	-0.36	11	Pass
802.11n40	5270	-11.01	3.18	-7.83	11	Pass
	5310	-10.86	3.18	-7.68	11	Pass

5470-5725MHz

Mode	Test Frequency (MHz)	Reading (dBm/MHz)	Duty Cycle Factor(dB)	Result (dBm/MHz)	Limit (dBm/MHz)	Verdict
802.11a	5500	-3.44	7.01	3.57	11	Pass
	5580	-5.47	7.01	1.54	11	Pass
	5700	-4.79	7.01	2.22	11	Pass
	5720	-5.80	7.01	1.21	11	Pass
802.11n20	5500	-3.01	6.97	**3.96**	11	Pass
	5580	-4.54	6.97	2.43	11	Pass
	5700	-7.45	6.97	-0.48	11	Pass
	5720	-5.91	6.97	1.06	11	Pass
802.11n40	5510	-9.49	3.18	-6.31	11	Pass
	5550	-10.36	3.18	-7.18	11	Pass
	5670	-11.81	3.18	-8.63	11	Pass
	5710	-11.15	3.18	-7.97	11	Pass

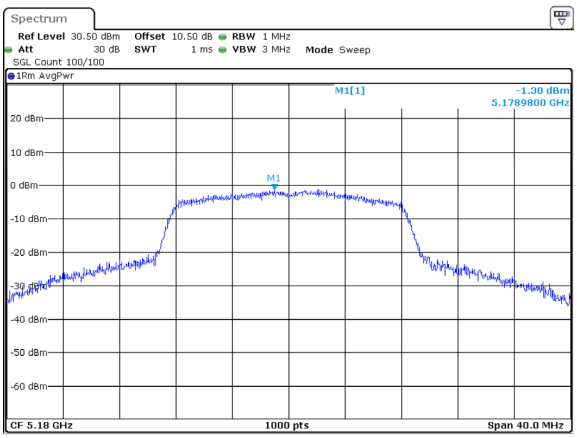
5725-5850MHz

Mode	Test Frequency (MHz)	Reading (dBm/500kHz)	Duty Cycle Factor(dB)	Result (dBm/500kHz)	Limit (dBm/500kHz)	Verdict
802.11a	5745	-10.59	7.01	-3.58	30	Pass
	5785	-11.44	7.01	-4.43	30	Pass
	5825	-9.16	7.01	**-2.15**	30	Pass
802.11n20	5745	-10.53	6.97	-3.56	30	Pass
	5785	-11.51	6.97	-4.54	30	Pass
	5825	-11.79	6.97	-4.82	30	Pass
802.11n40	5755	-11.67	3.18	-8.49	30	Pass
	5795	-11.75	3.18	-8.57	30	Pass

Result = Reading + Duty Cycle Factor

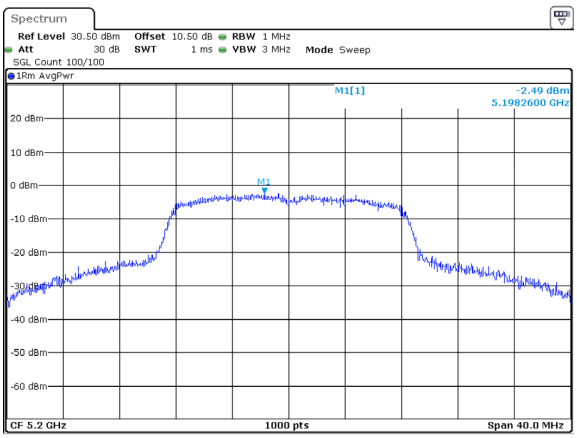
5150-5250MHz

802.11a_5180MHz



ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 16.MAY.2025 21:02:43

802.11a_5200MHz



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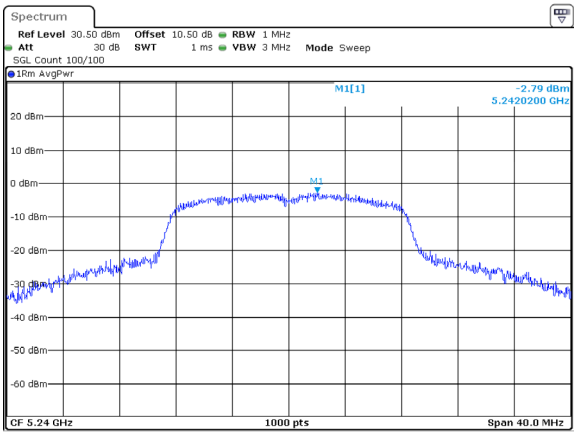
Date: 16.MAY.2025 21:05:46

802.11a_5240MHz



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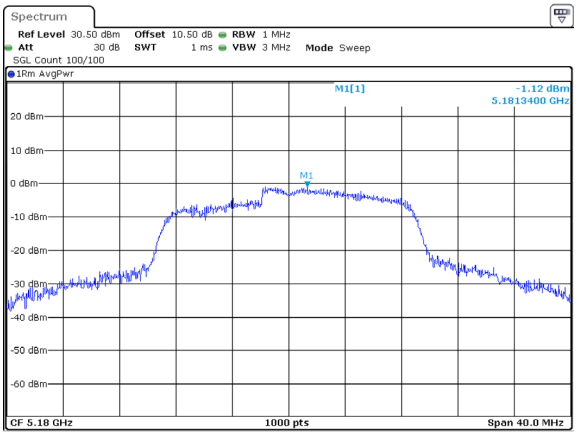
Date: 16.MAY.2025 21:08:19

802.11n20_5180MHz



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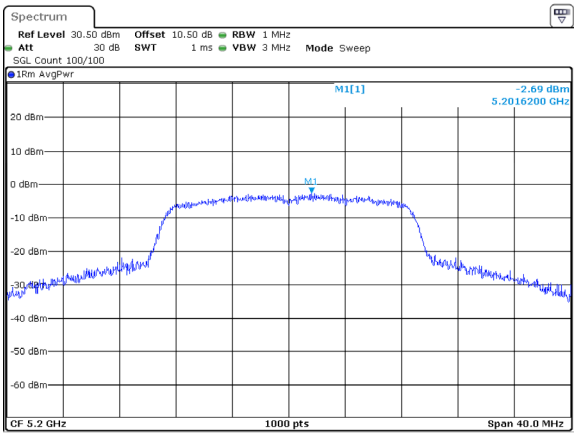
Date: 16.MAY.2025 21:10:06

802.11n20_5200MHz



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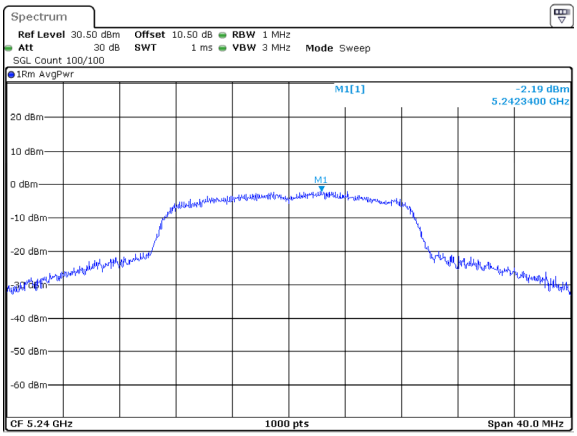
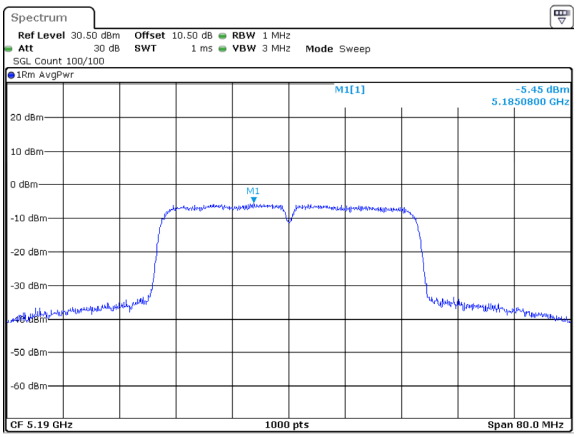
Date: 16.MAY.2025 21:15:32

802.11n20_5240MHz



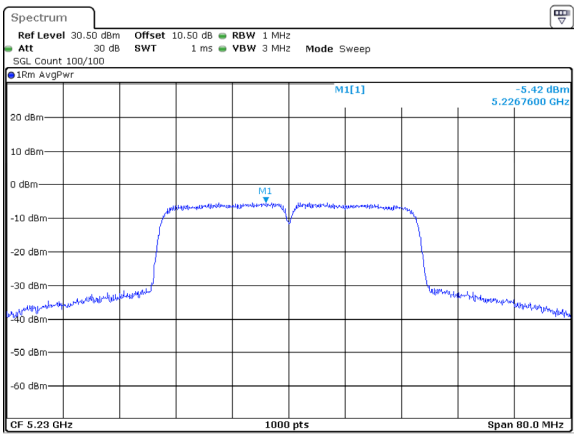
ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 16.MAY.2025 21:17:11

802.11n40_5190MHz



ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 16.MAY.2025 21:22:05

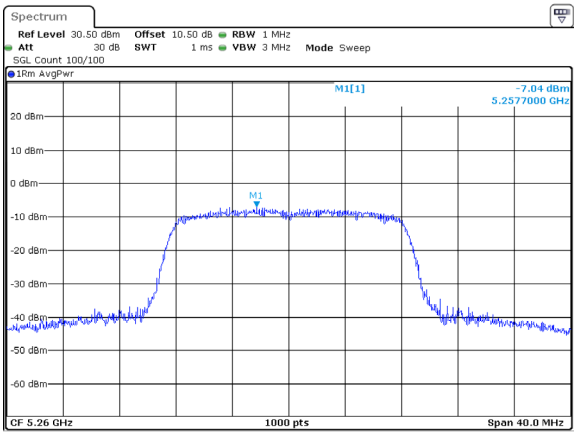
802.11n40_5230MHz



ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 16.MAY.2025 21:24:29

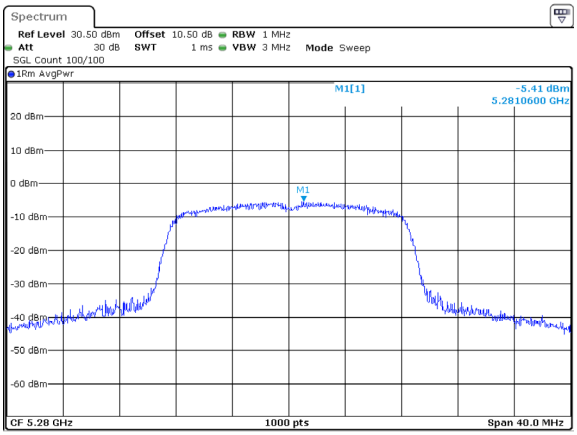
5250-5350MHz

802.11a_5260MHz



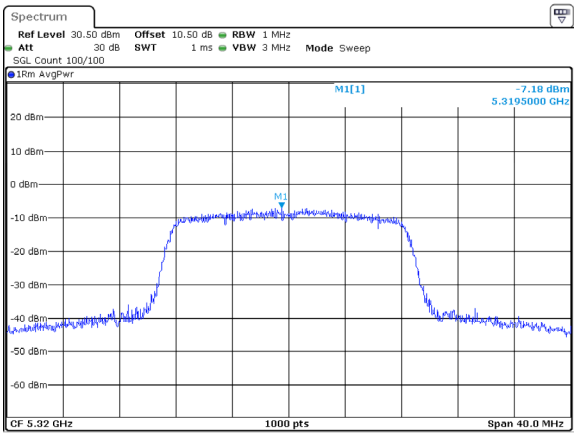
ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 16.MAY.2025 21:28:14

802.11a_5280MHz



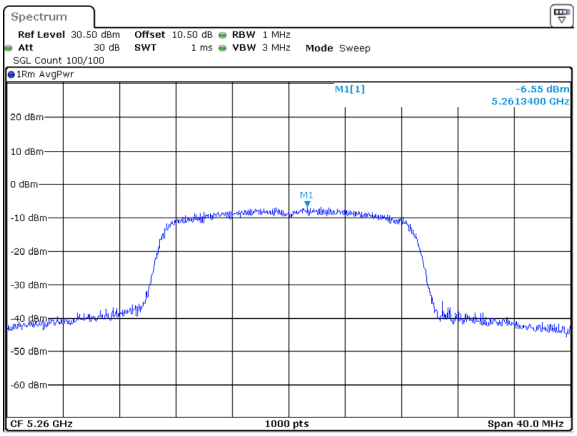
ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 16.MAY.2025 21:30:12

802.11a_5320MHz



ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 16.MAY.2025 21:33:33

802.11n20_5260MHz



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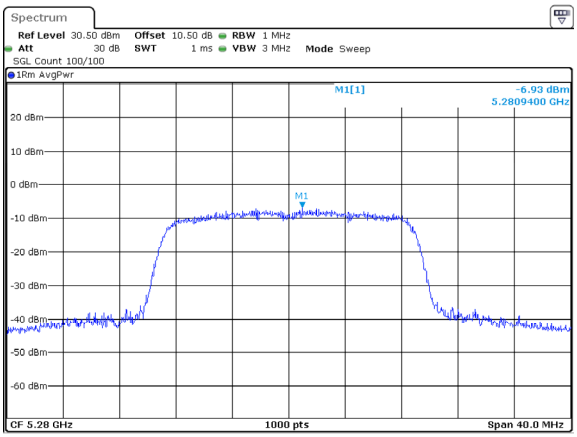
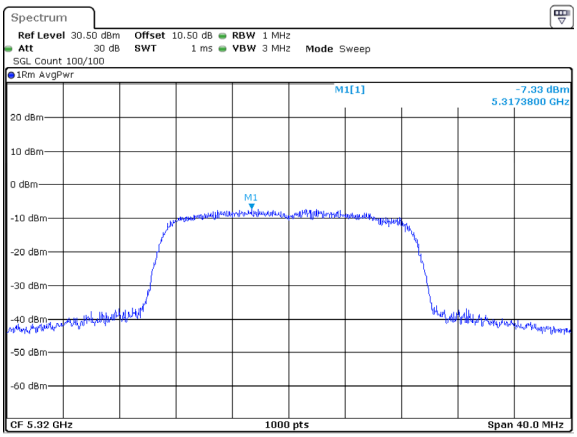
Date: 16.MAY.2025 21:36:48

802.11n20_5280MHz



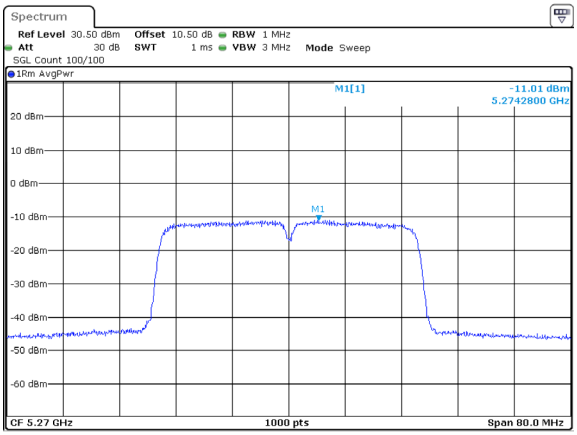
ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 16.MAY.2025 21:43:55

802.11n20_5320MHz



ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 16.MAY.2025 21:48:24

802.11n40_5270MHz



ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 16.MAY.2025 22:11:51

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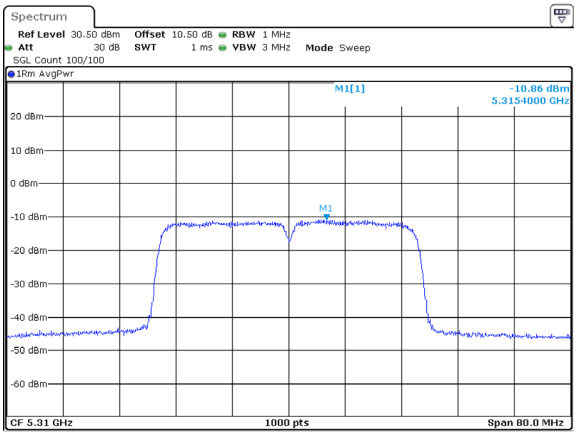
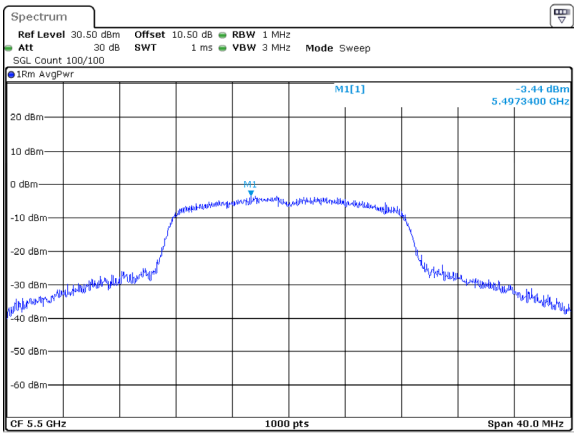


ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 16.MAY.2025 22:19:18

5470-5725MHz

802.11a_5500MHz



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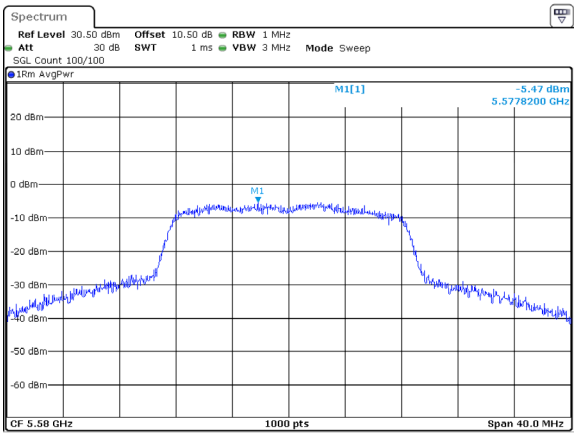
Date: 16.MAY.2025 22:21:51

802.11a_5580MHz



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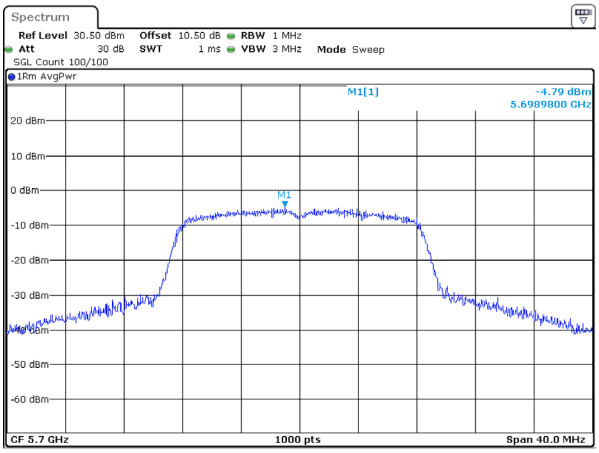
Date: 16.MAY.2025 22:28:15

802.11a_5700MHz



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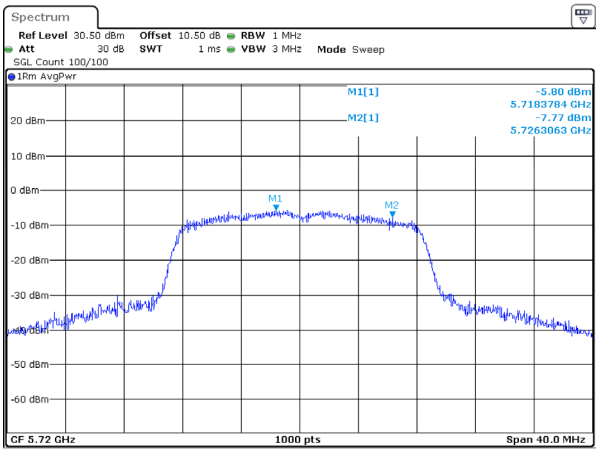
Date: 16.MAY.2025 22:30:02

802.11a_5720MHz



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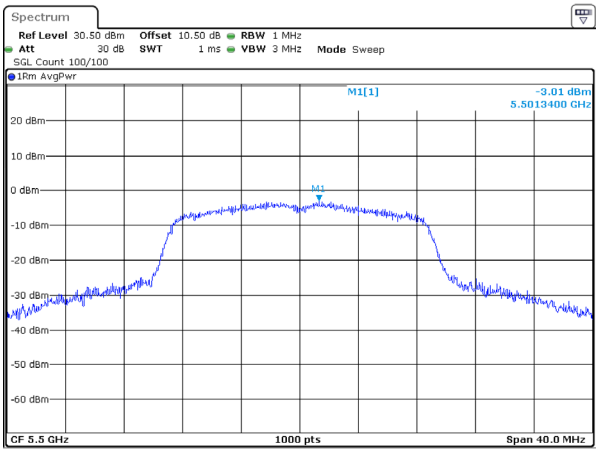
Date: 16.MAY.2025 22:36:04

802.11n20_5500MHz



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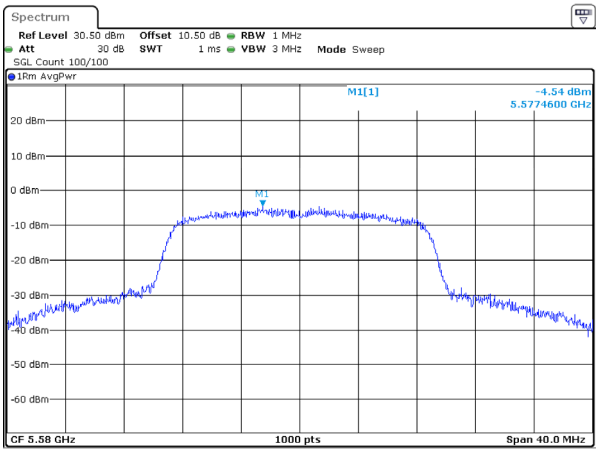
Date: 16.MAY.2025 22:38:16

802.11n20_5580MHz



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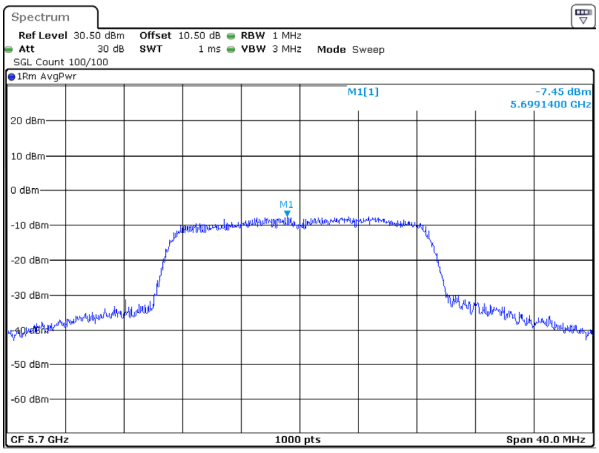
802.11n20_5700MHz



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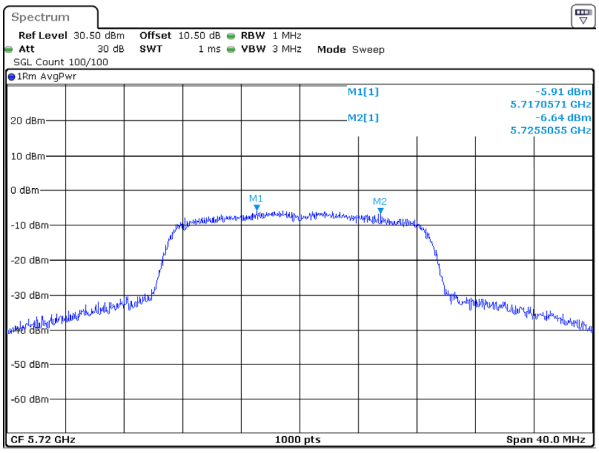
802.11n20_5720MHz



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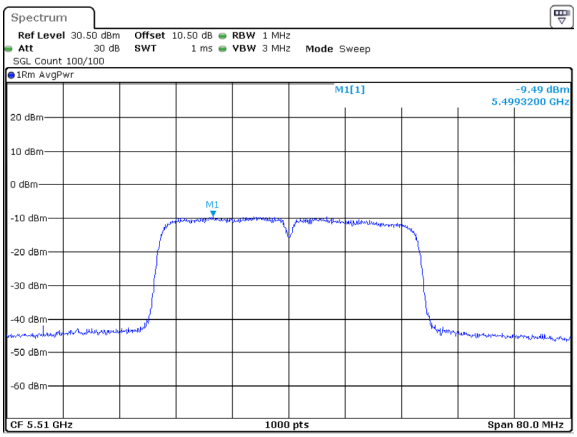
802.11n40_5510MHz



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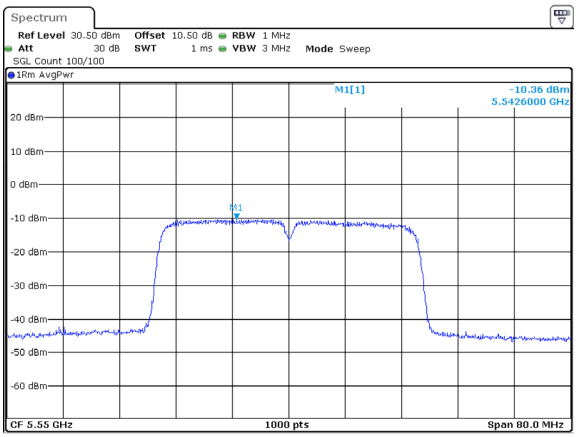
Date: 16.MAY.2025 23:15:17

802.11n40_5550MHz



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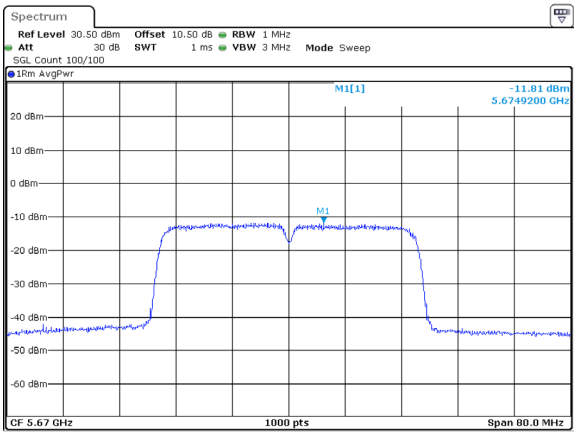
802.11n40_5670MHz



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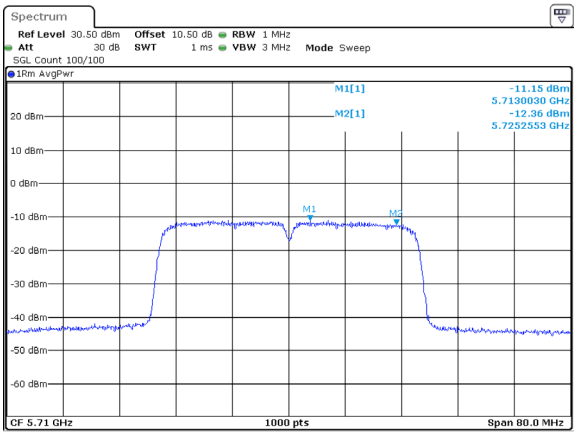
802.11n40_5710MHz



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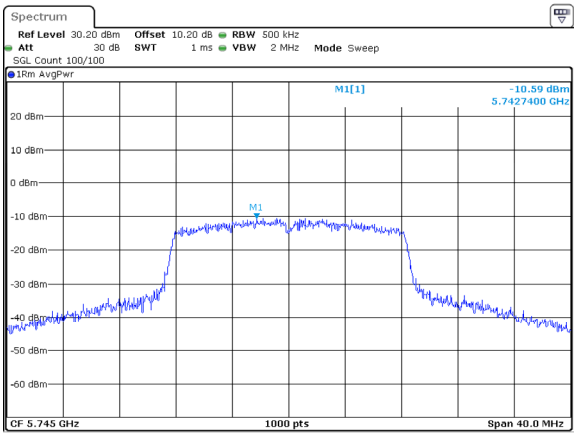
5725-5850MHz

802.11a_5745MHz



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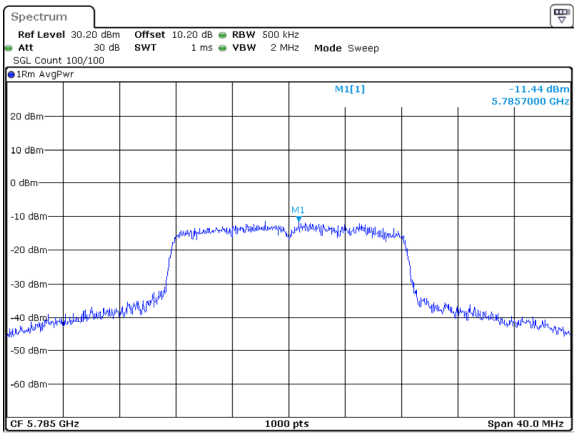
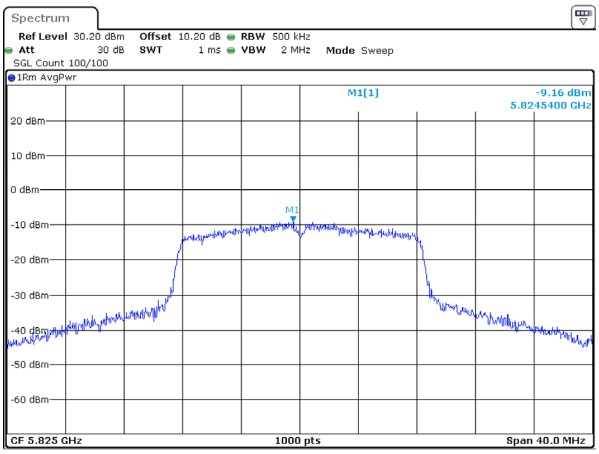
Date: 29.MAR.2025 00:55:30

802.11a_5785MHz



ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 29.MAR.2025 00:57:08

802.11a_5825MHz



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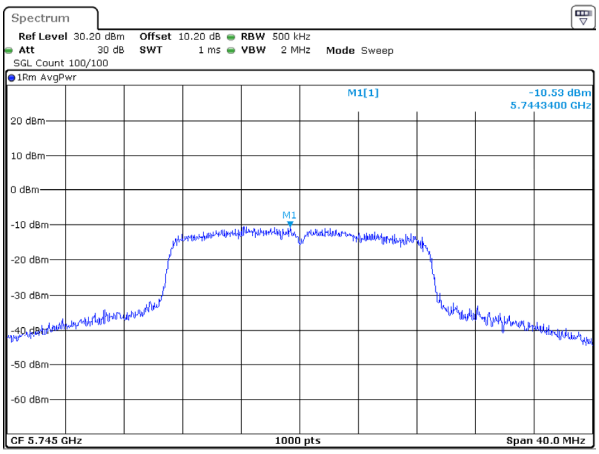
Date: 29.MAR.2025 00:58:28

802.11n20_5745MHz



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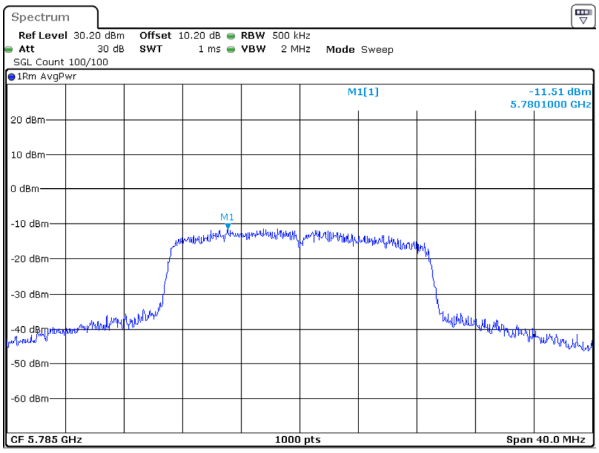
802.11n20_5785MHz



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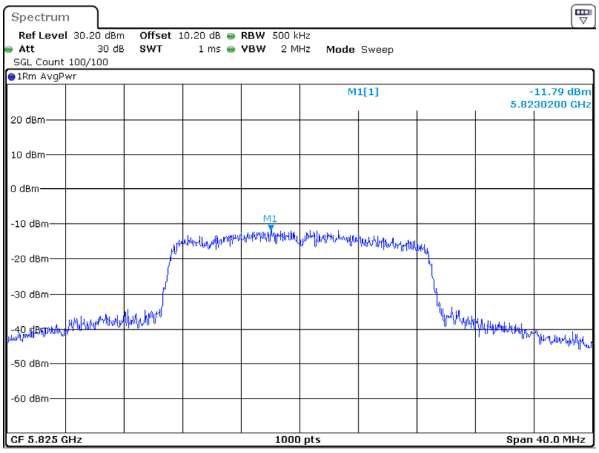
802.11n20_5825MHz



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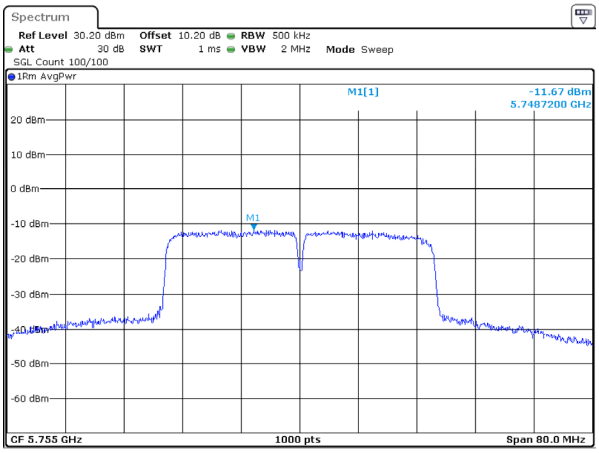
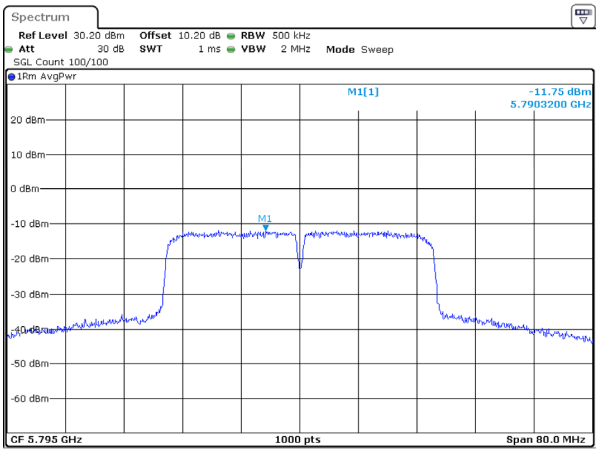
802.11n40_5755MHz



ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 29.MAR.2025 01:05:08

802.11n40_5795MHz



ProjectNo.:2501R15334E-RF Tester:Brian Li
Date: 29.MAR.2025 01:06:15

Duty Cycle

Test Information:

Sample No.:	2ZSR-2	**Test Date:**	2025/03/28
Test Site:	RF	**Test Mode:**	Transmitting
Tester:	Brian Li	**Test Result:**	Pass

Environmental Conditions:

Temperature: (°C)	23	**Relative Humidity: (%)**	44	**ATM Pressure: (kPa)**	101

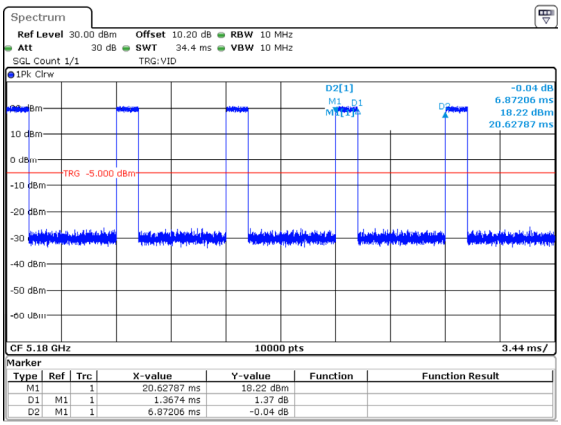
Test Data:

5150-5250MHz

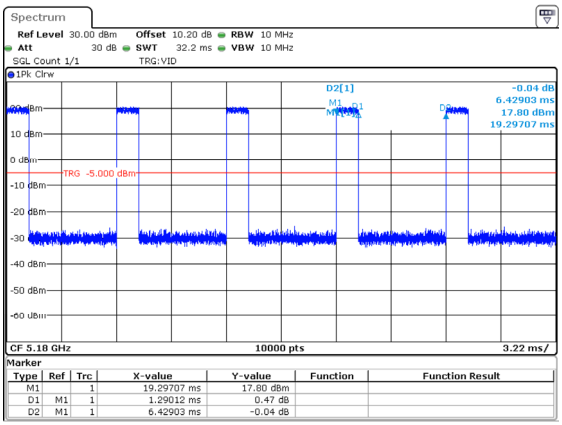
Mode	Test Frequency (MHz)	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor(dB)	1/Ton (Hz)	VBW Setting (kHz)
802.11a	5180	1.367	6.872	19.89	7.01	732	1
802.11n20	5180	1.290	6.429	20.07	6.97	775	1
802.11n40	5190	**2.461**	5.118	48.09	3.18	406	0.500

Duty Cycle = Ton/(Ton+Toff)*100%

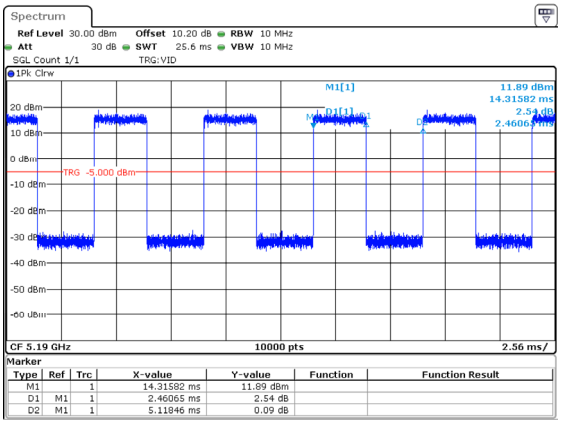
802.11a_5180MHz



802.11n20_5180MHz



802.11n40_5190MHz



RF EXPOSURE EVALUATION

MPE-Based Exemption

Applicable Standard

According to subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

According to KDB 447498 D04 v01 Interim General RF Exposure Guidance

MPE-Based Exemption:
General frequency and separation-distance dependent MPE-based effective radiated power(ERP) thresholds are in Table B.1 [Table 1 of § 1.1307(b)(3)(i)(C)] to support an exemptionfrom further evaluation from 300 kHz through 100 GHz.

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	1,920 R^2.
1.34-30	3,450 R^2/f^2.
30-300	3.83 R^2.
300-1,500	0.0128 R^2f.
1,500-100,000	19.2R^2.

R is the minimum separation distance in meters
f = frequency in MHz

Result

Mode	Frequency (MHz)	Tune up conducted power#(dBm)	Antenna Gain#		ERP		Evaluation Distance (m)	ERP Limit (mW)
			(dBi)	(dBd)	(dBm)	(mW)		
5G Wi-Fi	5150-5250	18.0	2.30	0.15	18.15	65.31	0.2	768
	5250-5350	11.0	2.30	0.15	11.15	13.03	0.2	768
	5470-5725	13.0	1.04	-1.11	11.89	15.45	0.2	768
	5725-5850	10.0	1.26	-0.89	9.11	8.15	0.2	768

Note: 1. The tune up conducted power and antenna gain was declared by the applicant.
2. The 2.4G and 5G Wi-Fi cannot transmit at same time.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliant

EUT PHOTOGRAPHS

Please refer to the attachment 2501R15334E-RF External photo and 2501R15334E-RF Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2501R15334E-RF-00B Test Setup photo.

******* END OF REPORT *******