

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

UNII4

Duty Cycle

Test Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor(dB)	Plot
802.11a	5865	99.87%	0	Fig.1
802.11a	5865	99.85%	0	Fig.2
802.11a	5885	99.88%	0	Fig.3
802.11a	5885	99.87%	0	Fig.4
802.11n HT20	5865	99.96%	0	Fig.5
802.11n HT20	5865	99.94%	0	Fig.6
802.11n HT20	5885	99.95%	0	Fig.7
802.11n HT20	5885	99.93%	0	Fig.8
802.11ac VHT20	5865	99.95%	0	Fig.9
802.11ac VHT20	5865	99.95%	0	Fig.10
802.11ac VHT20	5885	99.94%	0	Fig.11
802.11ac VHT20	5885	99.94%	0	Fig.12
802.11ax HE20	5865	99.94%	0	Fig.13
802.11ax HE20	5865	99.96%	0	Fig.14
802.11ax HE20	5885	99.96%	0	Fig.15
802.11ax HE20	5885	99.95%	0	Fig.16
802.11n HT40	5875	99.95%	0	Fig.17
802.11n HT40	5875	99.94%	0	Fig.18
802.11ac VHT40	5875	99.96%	0	Fig.19
802.11ac VHT40	5875	99.94%	0	Fig.20
802.11ax HE40	5875	99.93%	0	Fig.21
802.11ax HE40	5875	99.96%	0	Fig.22

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

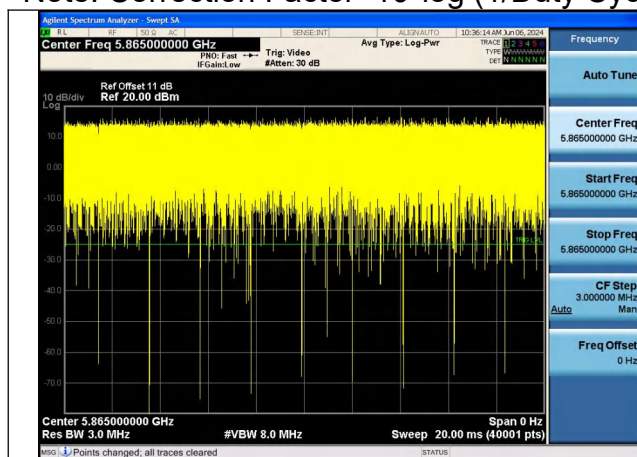


Fig.1

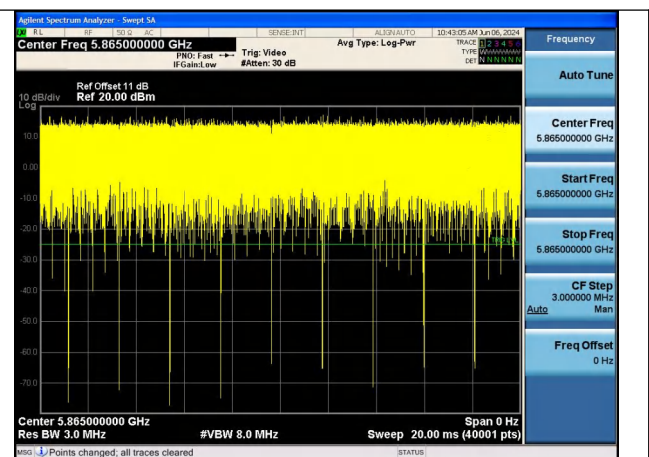


Fig.2

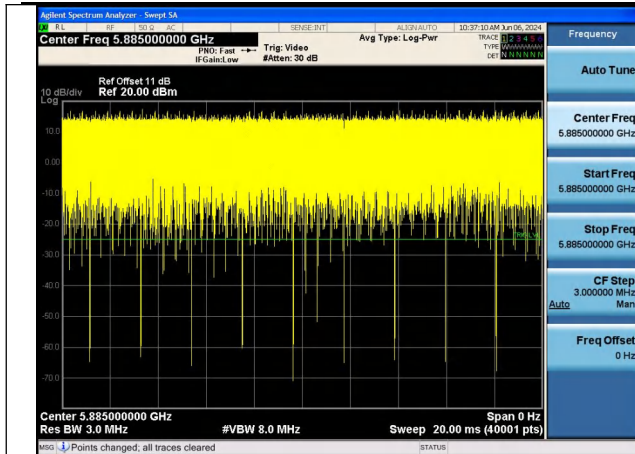


Fig.3

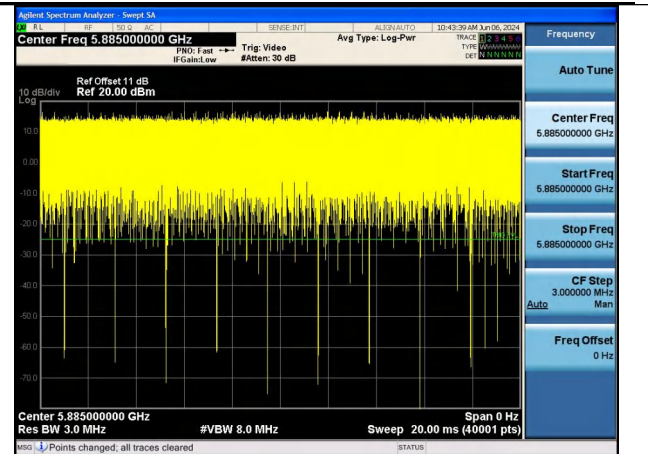


Fig.4

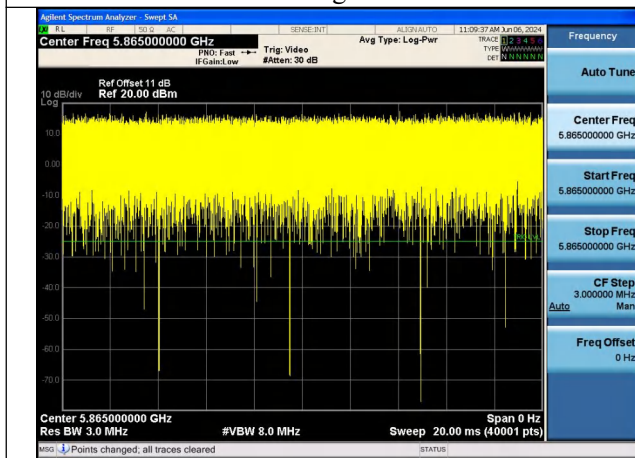


Fig.5

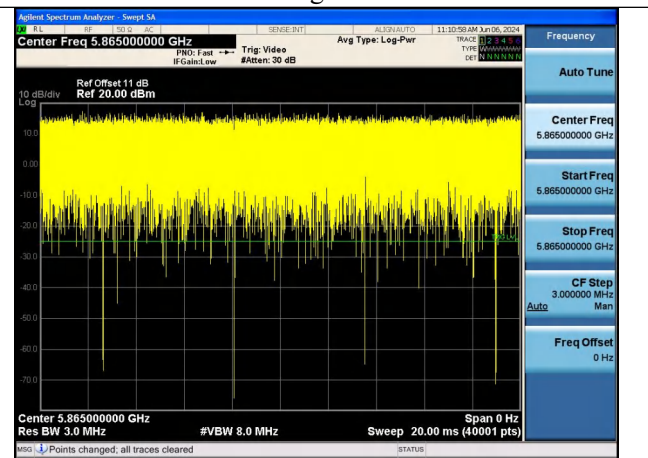


Fig.6

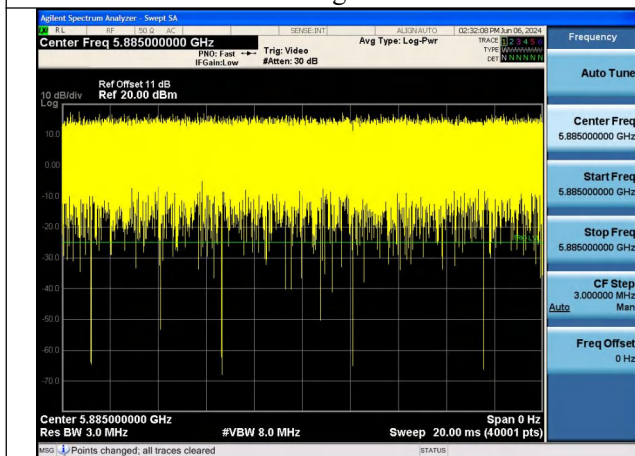


Fig.7

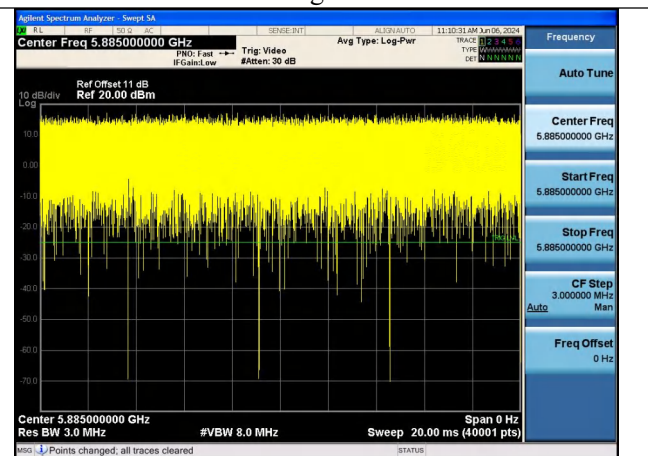


Fig.8

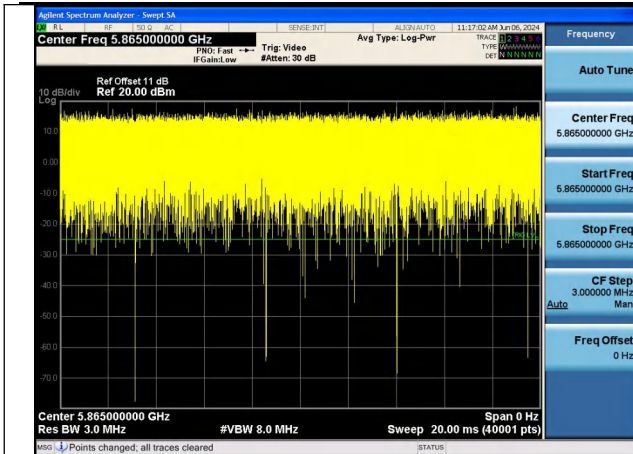


Fig.9

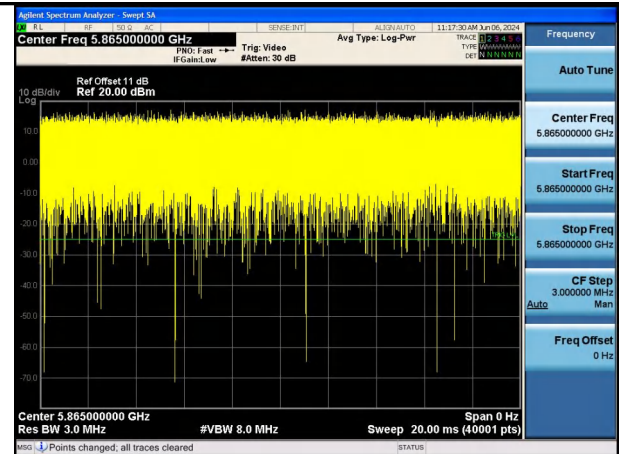


Fig.10

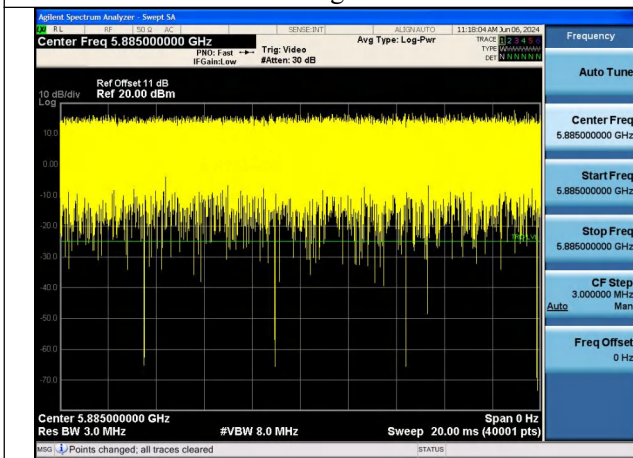


Fig.11

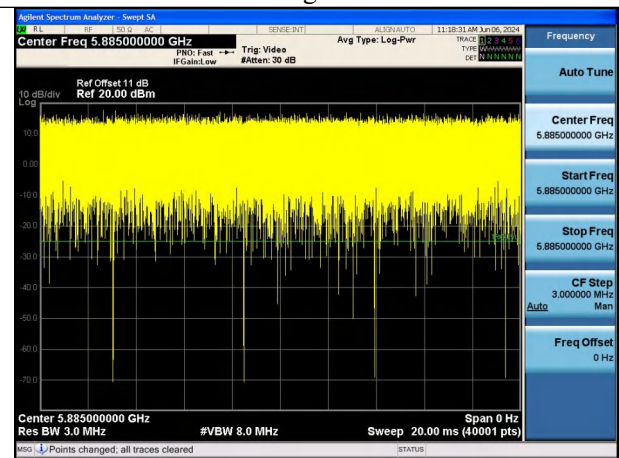


Fig.12

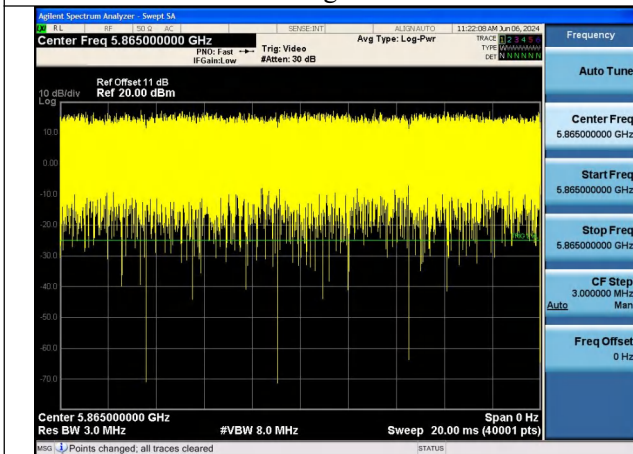


Fig.13

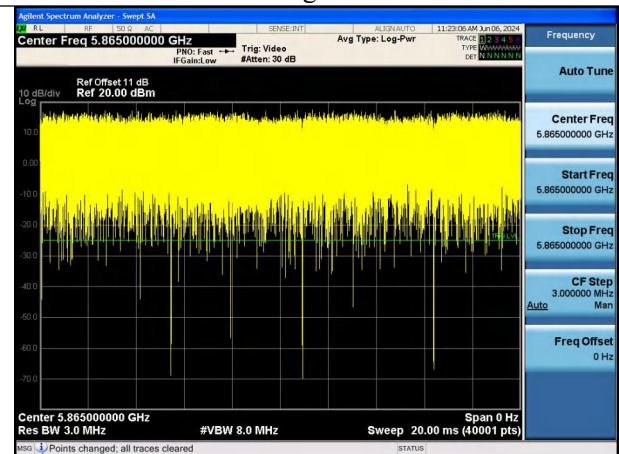


Fig.14

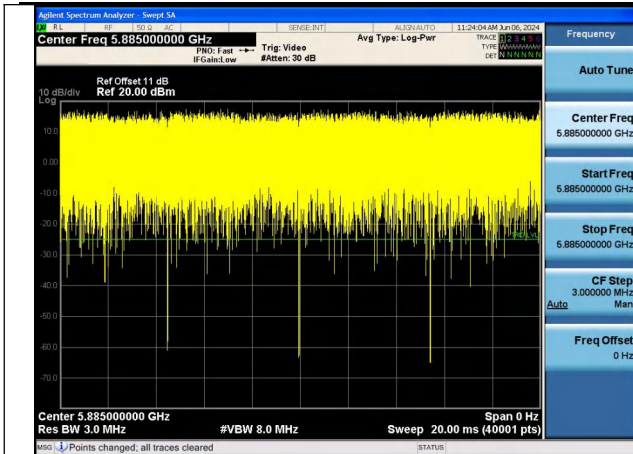


Fig.15

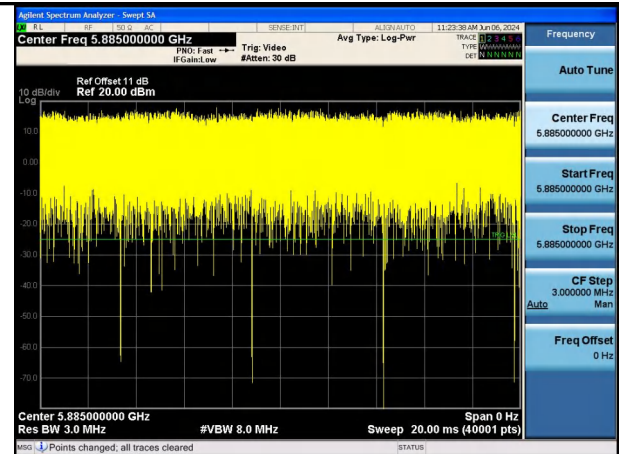


Fig.16

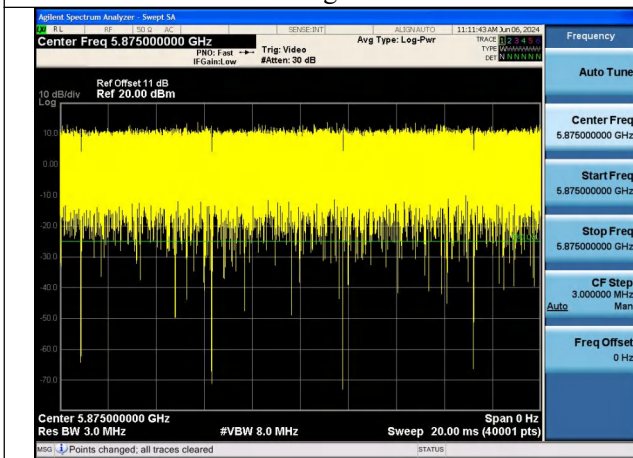


Fig.17

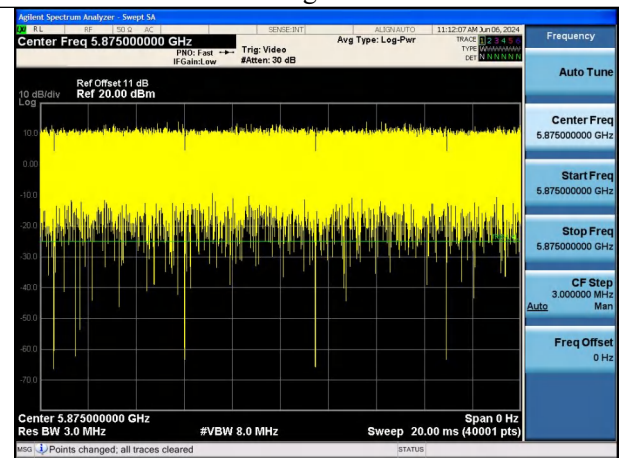


Fig.18

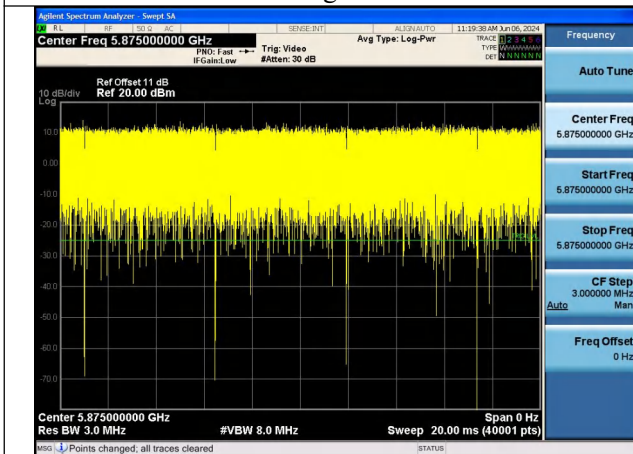


Fig.19

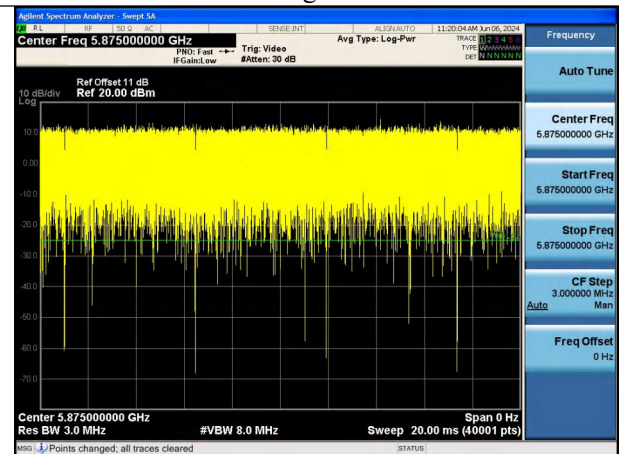


Fig.20

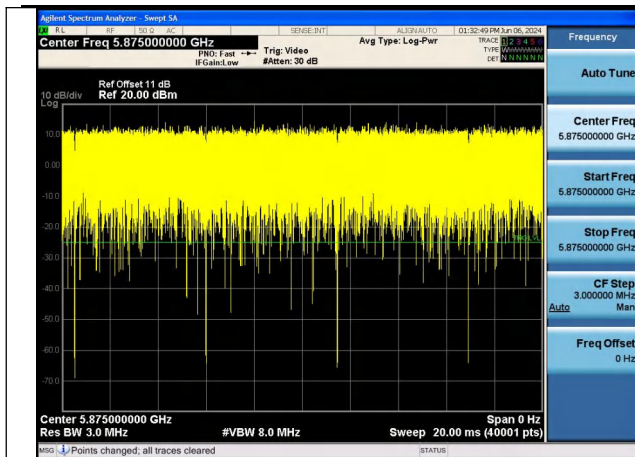


Fig.21

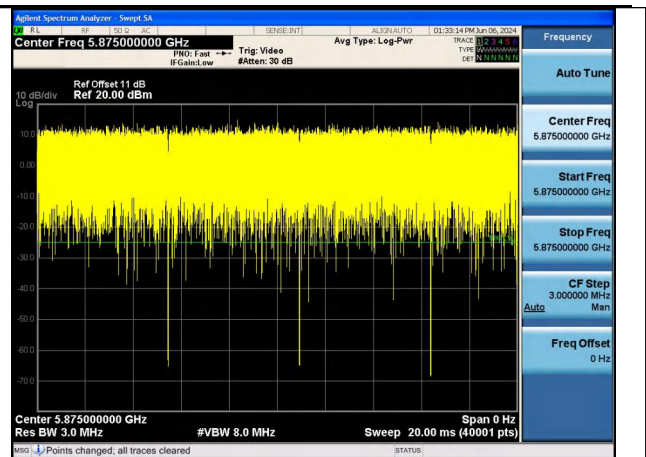


Fig.22

Output Power

Mode	Tones/ RU Index	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11a	NA	5865	Chain0	14.02	17.34
802.11a	NA	5865	Chain1	14.02	17.34
802.11a	NA	5885	Chain0	14.21	17.53
802.11a	NA	5885	Chain1	14.15	17.47
802.11n HT20	NA	5865	Chain0	14.06	17.38
802.11n HT20	NA	5865	Chain1	13.95	17.27
802.11n HT20	NA	5865	MIMO	17.02	20.34
802.11n HT20	NA	5885	Chain0	14.15	17.47
802.11n HT20	NA	5885	Chain1	14.09	17.41
802.11n HT20	NA	5885	MIMO	17.13	20.45
802.11ac VHT20	NA	5865	Chain0	14.03	17.35
802.11ac VHT20	NA	5865	Chain1	13.96	17.28
802.11ac VHT20	NA	5865	MIMO	17.01	20.33
802.11ac VHT20	NA	5885	Chain0	14.13	17.45
802.11ac VHT20	NA	5885	Chain1	14.12	17.44
802.11ac VHT20	NA	5885	MIMO	17.14	20.46
802.11n HT40	NA	5875	Chain0	14.30	17.62
802.11n HT40	NA	5875	Chain1	14.32	17.64
802.11n HT40	NA	5875	MIMO	17.32	20.64
802.11ac VHT40	NA	5875	Chain0	14.39	17.71
802.11ac VHT40	NA	5875	Chain1	14.37	17.69
802.11ac VHT40	NA	5875	MIMO	17.39	20.71

Mode	Tones/ RU Index	Frequency (MHz)	Antenna	Conducted average power output(dBm)	EIRP (dBm)
802.11ax HE20	26T 0	5865	Chain0	14.10	17.42
802.11ax HE20	26T 0	5865	Chain1	14.01	17.33
802.11ax HE20	26T 0	5865	MIMO	17.07	20.39
802.11ax HE20	26T 0	5885	Chain0	14.29	17.61
802.11ax HE20	26T 0	5885	Chain1	14.24	17.56
802.11ax HE20	26T 0	5885	MIMO	17.28	20.60
802.11ax HE20	26T 4	5865	Chain0	14.06	17.38
802.11ax HE20	26T 4	5865	Chain1	14.05	17.37
802.11ax HE20	26T 4	5865	MIMO	17.07	20.39
802.11ax HE20	26T 4	5885	Chain0	14.35	17.67
802.11ax HE20	26T 4	5885	Chain1	14.29	17.61
802.11ax HE20	26T 4	5885	MIMO	17.33	20.65
802.11ax HE20	26T 8	5865	Chain0	14.14	17.46
802.11ax HE20	26T 8	5865	Chain1	14.01	17.33
802.11ax HE20	26T 8	5865	MIMO	17.09	20.41
802.11ax HE20	26T 8	5885	Chain0	14.32	17.64

802.11ax HE20	26T 8	5885	Chain1	14.30	17.62
802.11ax HE20	26T 8	5885	MIMO	17.32	20.64
802.11ax HE20	52T 37	5865	Chain0	14.00	17.32
802.11ax HE20	52T 37	5865	Chain1	13.95	17.27
802.11ax HE20	52T 37	5865	MIMO	16.99	20.31
802.11ax HE20	52T 37	5885	Chain0	14.43	17.75
802.11ax HE20	52T 37	5885	Chain1	14.39	17.71
802.11ax HE20	52T 37	5885	MIMO	17.42	20.74
802.11ax HE20	52T 39	5865	Chain0	13.91	17.23
802.11ax HE20	52T 39	5865	Chain1	13.94	17.26
802.11ax HE20	52T 39	5865	MIMO	16.94	20.26
802.11ax HE20	52T 39	5885	Chain0	14.47	17.79
802.11ax HE20	52T 39	5885	Chain1	14.41	17.73
802.11ax HE20	52T 39	5885	MIMO	17.45	20.77
802.11ax HE20	52T 40	5865	Chain0	14.04	17.36
802.11ax HE20	52T 40	5865	Chain1	13.94	17.26
802.11ax HE20	52T 40	5865	MIMO	17.00	20.32
802.11ax HE20	52T 40	5885	Chain0	14.37	17.69
802.11ax HE20	52T 40	5885	Chain1	14.44	17.76
802.11ax HE20	52T 40	5885	MIMO	17.42	20.74
802.11ax HE20	106T 53	5865	Chain0	14.13	17.45
802.11ax HE20	106T 53	5865	Chain1	14.07	17.39
802.11ax HE20	106T 53	5865	MIMO	17.11	20.43
802.11ax HE20	106T 53	5885	Chain0	14.40	17.72
802.11ax HE20	106T 53	5885	Chain1	14.37	17.69
802.11ax HE20	106T 53	5885	MIMO	17.40	20.72
802.11ax HE20	106T 54	5865	Chain0	14.09	17.41
802.11ax HE20	106T 54	5865	Chain1	14.08	17.40
802.11ax HE20	106T 54	5865	MIMO	17.10	20.42
802.11ax HE20	106T 54	5885	Chain0	14.42	17.74
802.11ax HE20	106T 54	5885	Chain1	14.35	17.67
802.11ax HE20	106T 54	5885	MIMO	17.40	20.72
802.11ax HE20	242T 61	5865	Chain0	14.23	17.55
802.11ax HE20	242T 61	5865	Chain1	14.16	17.48
802.11ax HE20	242T 61	5865	MIMO	17.21	20.53
802.11ax HE20	242T 61	5885	Chain0	14.36	17.68
802.11ax HE20	242T 61	5885	Chain1	14.32	17.64
802.11ax HE20	242T 61	5885	MIMO	17.35	20.67
802.11ax HE40	26T 0	5875	Chain0	13.90	17.22
802.11ax HE40	26T 0	5875	Chain1	13.73	17.05
802.11ax HE40	26T 0	5875	MIMO	16.83	20.15
802.11ax HE40	26T 10	5875	Chain0	13.83	17.15
802.11ax HE40	26T 10	5875	Chain1	13.83	17.15
802.11ax HE40	26T 10	5875	MIMO	16.84	20.16
802.11ax HE40	26T 17	5875	Chain0	13.87	17.19
802.11ax HE40	26T 17	5875	Chain1	13.81	17.13

802.11ax HE40	26T 17	5875	MIMO	16.85	20.17
802.11ax HE40	52T 37	5875	Chain0	14.03	17.35
802.11ax HE40	52T 37	5875	Chain1	14.03	17.35
802.11ax HE40	52T 37	5875	MIMO	17.04	20.36
802.11ax HE40	52T 41	5875	Chain0	14.03	17.35
802.11ax HE40	52T 41	5875	Chain1	14.02	17.34
802.11ax HE40	52T 41	5875	MIMO	17.04	20.36
802.11ax HE40	52T 44	5875	Chain0	13.97	17.29
802.11ax HE40	52T 44	5875	Chain1	14.00	17.32
802.11ax HE40	52T 44	5875	MIMO	17.00	20.32
802.11ax HE40	106T 53	5875	Chain0	14.16	17.48
802.11ax HE40	106T 53	5875	Chain1	14.24	17.56
802.11ax HE40	106T 53	5875	MIMO	17.21	20.53
802.11ax HE40	106T 55	5875	Chain0	14.22	17.54
802.11ax HE40	106T 55	5875	Chain1	14.20	17.52
802.11ax HE40	106T 55	5875	MIMO	17.22	20.54
802.11ax HE40	106T 56	5875	Chain0	14.21	17.53
802.11ax HE40	106T 56	5875	Chain1	14.04	17.36
802.11ax HE40	106T 56	5875	MIMO	17.14	20.46
802.11ax HE40	242T 61	5875	Chain0	14.34	17.66
802.11ax HE40	242T 61	5875	Chain1	14.41	17.73
802.11ax HE40	242T 61	5875	MIMO	17.39	20.71
802.11ax HE40	242T 62	5875	Chain0	14.37	17.69
802.11ax HE40	242T 62	5875	Chain1	14.33	17.65
802.11ax HE40	242T 62	5875	MIMO	17.36	20.68
802.11ax HE40	484T 65	5875	Chain0	14.45	17.77
802.11ax HE40	484T 65	5875	Chain1	14.41	17.73
802.11ax HE40	484T 65	5875	MIMO	17.44	20.76

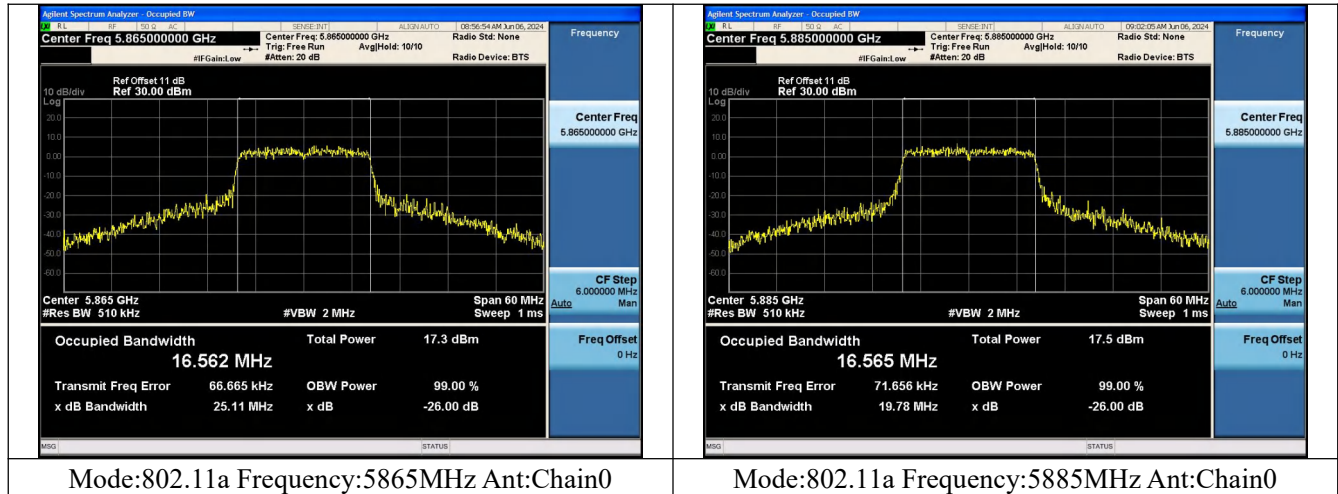
Emission Bandwidth

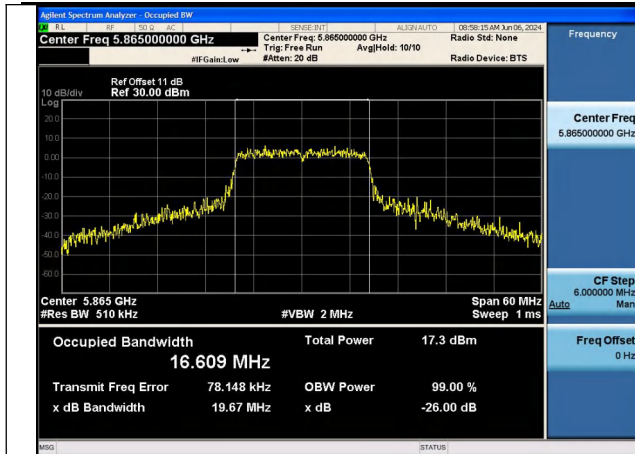
Offset 11dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	26dB Bandwidth (MHz)		
		---	5865MHz	5885MHz
802.11a	Chain0	---	25.11	19.78
802.11a	Chain1	---	19.67	20.23
802.11n HT20	Chain0	---	19.99	22.00
802.11n HT20	Chain1	---	20.67	20.71
802.11ac VHT20	Chain0	---	20.45	20.36
802.11ac VHT20	Chain1	---	20.82	20.21
802.11ax HE20	Chain0	---	21.60	21.66
802.11ax HE20	Chain1	---	21.01	20.88

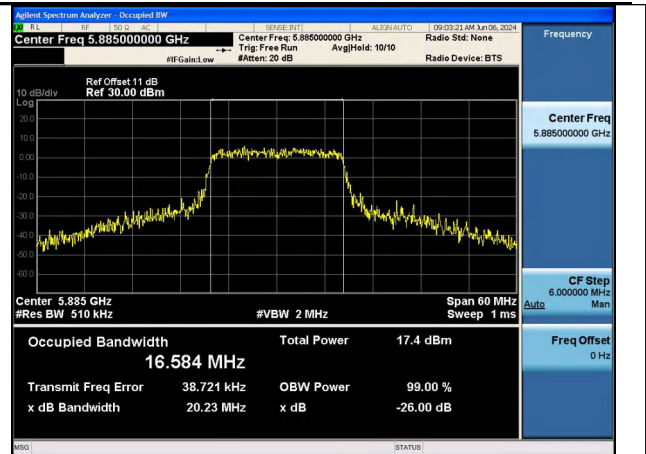
Test Mode	Antenna	26dB Bandwidth (MHz)		
		---	5875MHz	---
802.11n HT40	Chain0	---	39.98	---
802.11n HT40	Chain1	---	39.46	---
802.11ac VHT40	Chain0	---	39.98	---
802.11ac VHT40	Chain1	---	39.18	---
802.11ax HE40	Chain0	---	40.32	---
802.11ax HE40	Chain1	---	43.12	---

Test Mode: 802.11a



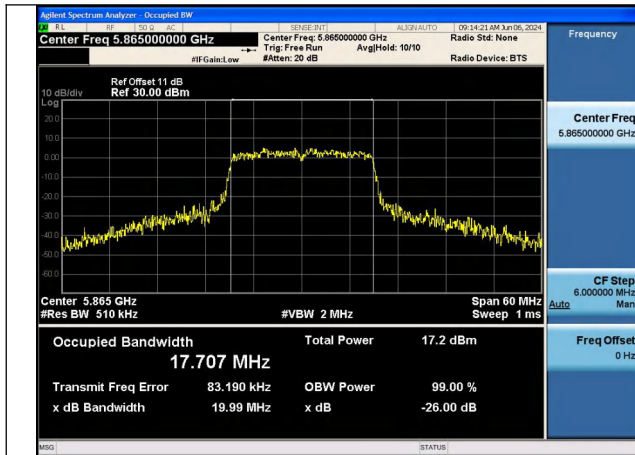


Mode:802.11a Frequency:5865MHz Ant:Chain1

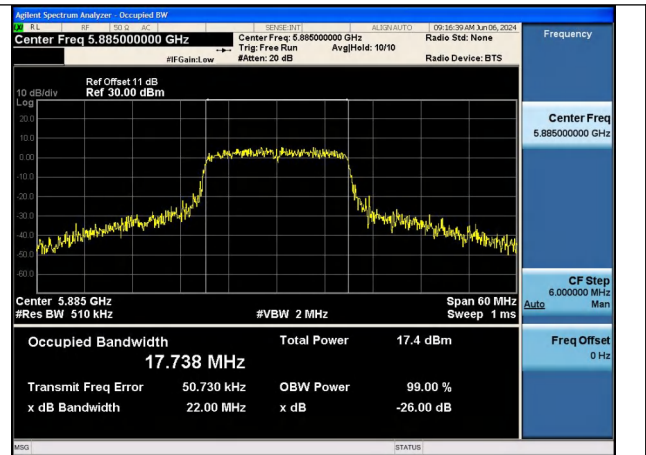


Mode:802.11a Frequency:5885MHz Ant:Chain1

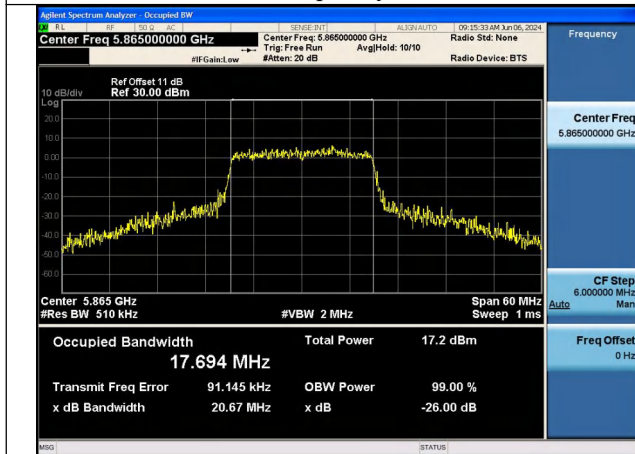
Test Mode: 802.11n HT20



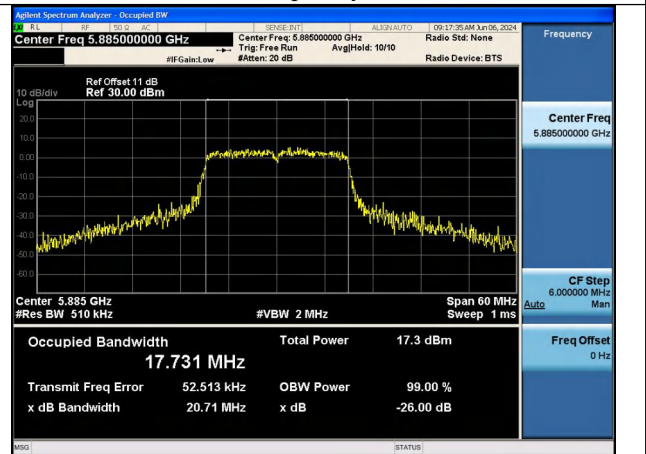
Mode:802.11n HT20 Frequency:5865MHz Ant:Chain0



Mode:802.11n HT20 Frequency:5885MHz Ant:Chain0

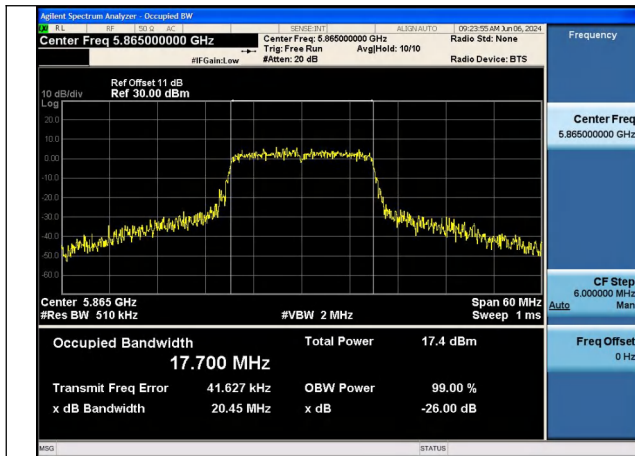


Mode:802.11n HT20 Frequency:5865MHz Ant:Chain1

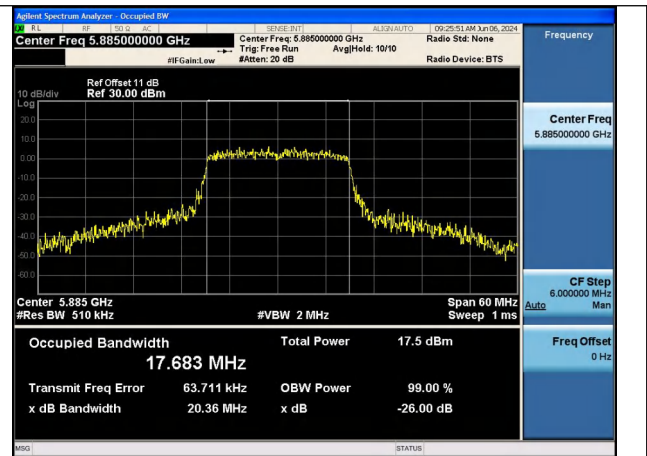


Mode:802.11n HT20 Frequency:5885MHz Ant:Chain1

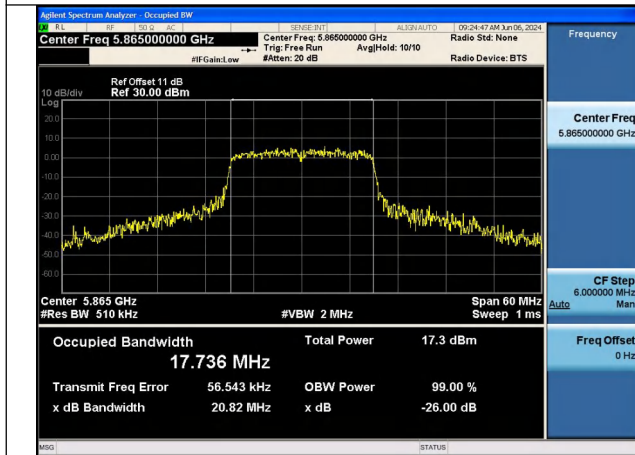
Test Mode: 802.11ac VHT20



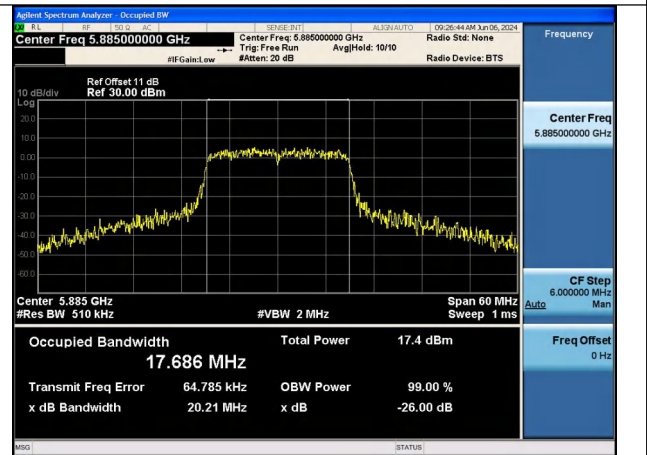
Mode:802.11ac VHT20 Frequency:5865MHz
Ant:Chain0



Mode:802.11ac VHT20 Frequency:5885MHz
Ant:Chain0

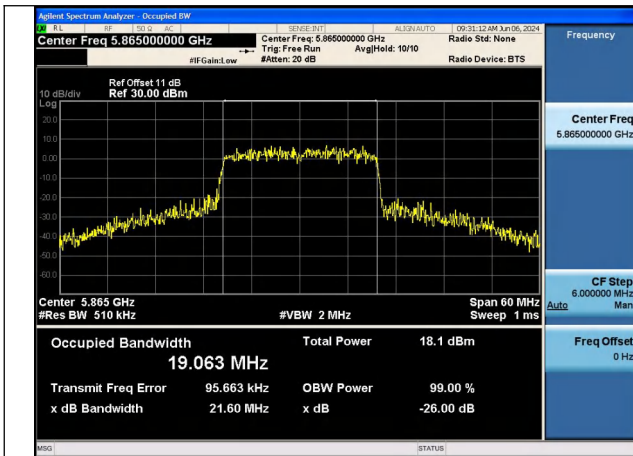


Mode:802.11ac VHT20 Frequency:5865MHz
Ant:Chain1

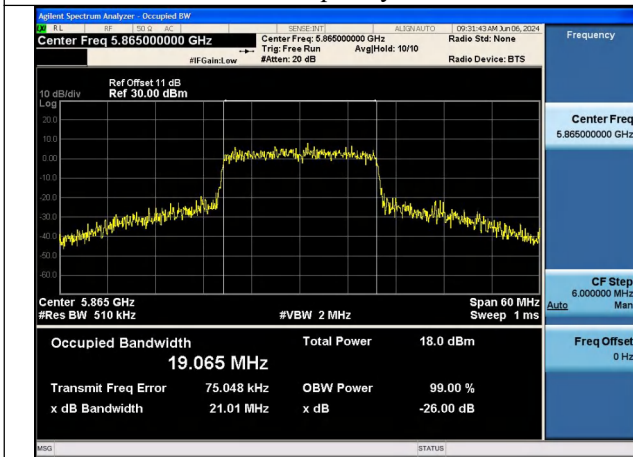


Mode:802.11ac VHT20 Frequency:5885MHz
Ant:Chain1

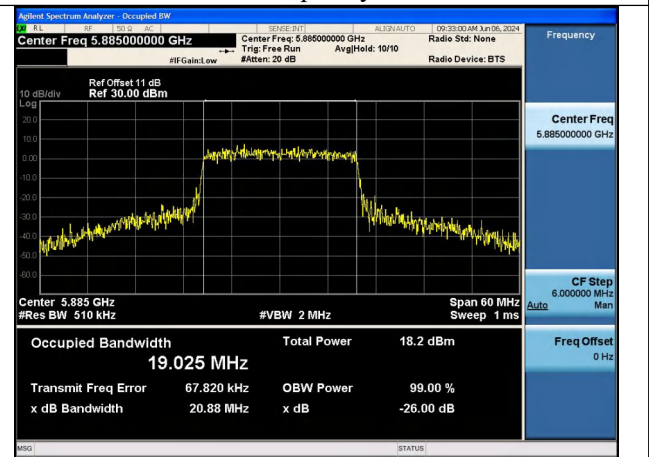
Test Mode: 802.11ax HE20



Mode:802.11ax HE20 Frequency:5865MHz Ant:Chain0



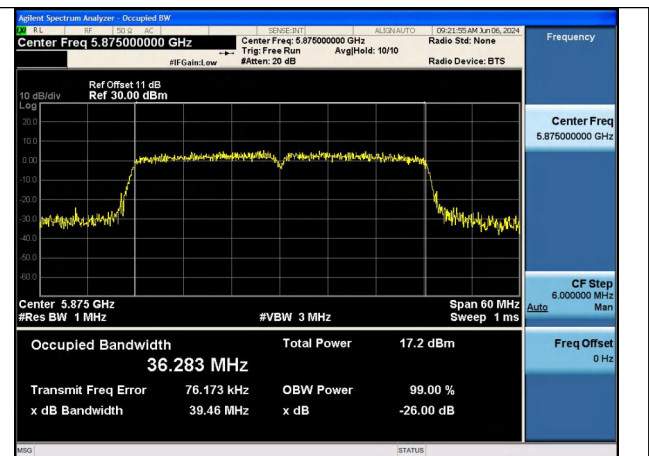
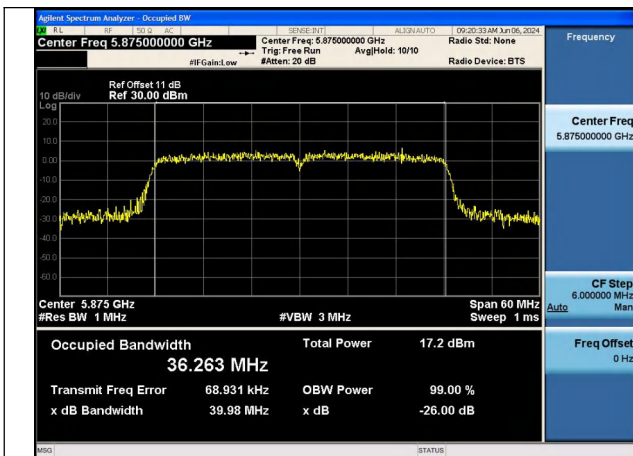
Mode:802.11ax HE20 Frequency:5885MHz Ant:Chain0



Mode:802.11ax HE20 Frequency:5865MHz Ant:Chain1

Mode:802.11ax HE20 Frequency:5885MHz Ant:Chain1

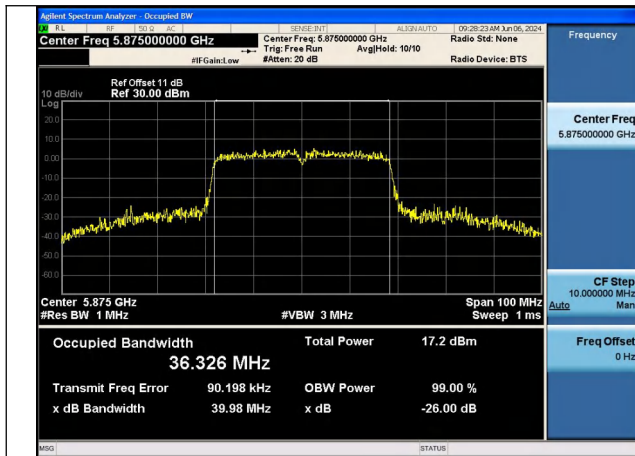
Test Mode: 802.11n HT40



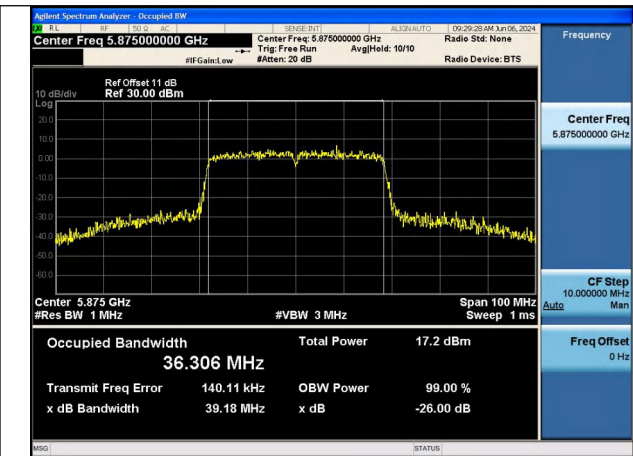
Mode:802.11n HT40 Frequency:5875MHz Ant:Chain0

Mode:802.11n HT40 Frequency:5875MHz Ant:Chain1

Test Mode: 802.11ac VHT40

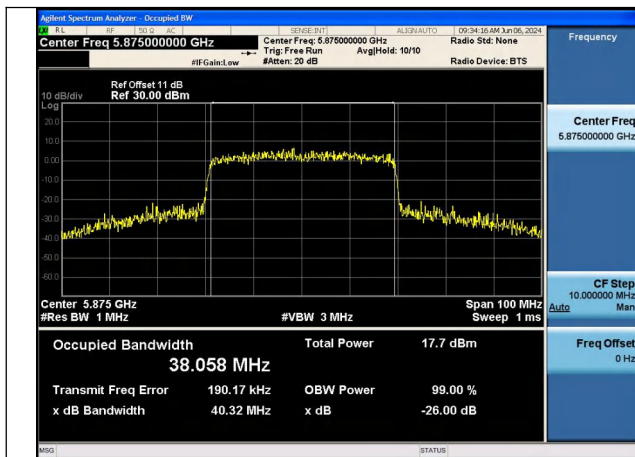


Mode:802.11ac VHT40 Frequency:5875MHz
Ant:Chain0

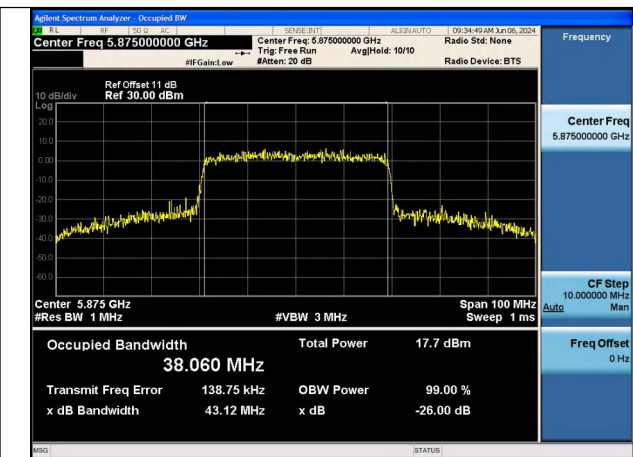


Mode:802.11ac VHT40 Frequency:5875MHz
Ant:Chain1

Test Mode: 802.11ax HE40



Mode:802.11ax HE40 Frequency:5875MHz Ant:Chain0



Mode:802.11ax HE40 Frequency:5875MHz Ant:Chain1

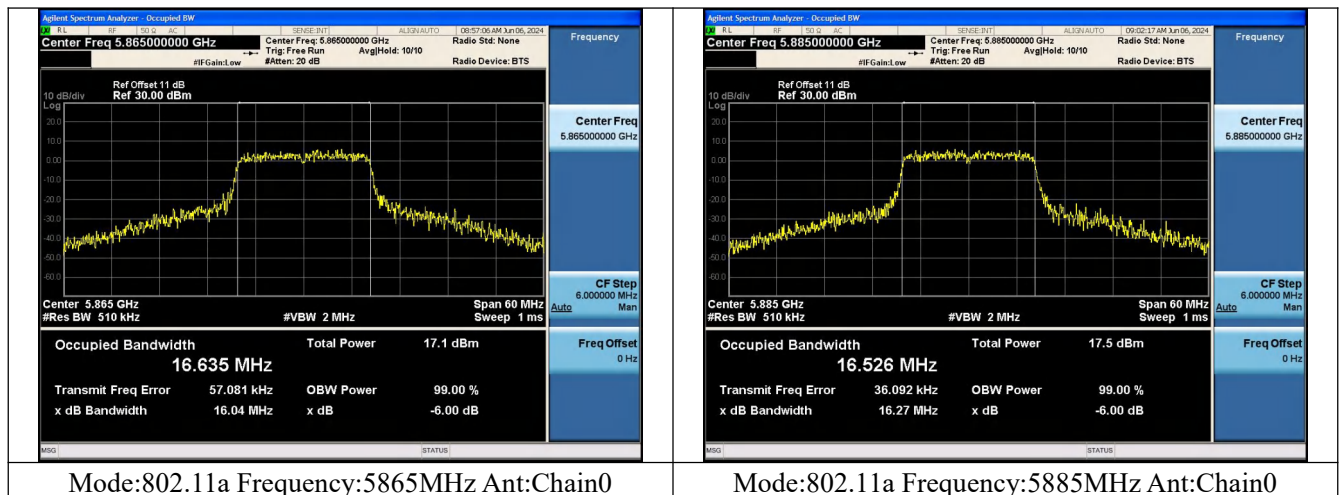
Occupied Bandwidth

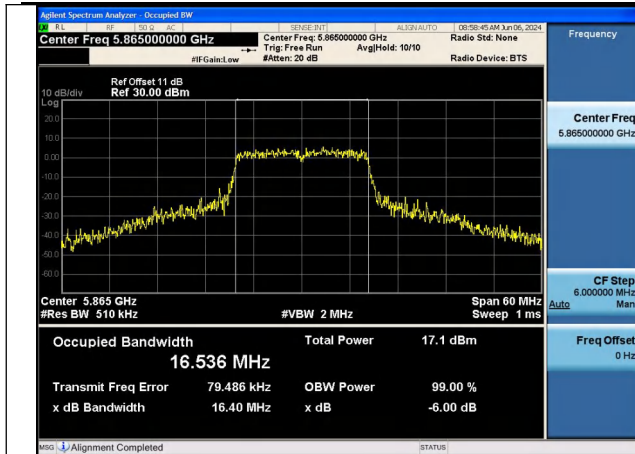
Offset 11dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Occupied Bandwidth (MHz)		
		---	5865MHz	5885MHz
802.11a	Chain0	---	16.635	16.526
802.11a	Chain1	---	16.536	16.561
802.11n HT20	Chain0	---	17.784	17.701
802.11n HT20	Chain1	---	17.767	17.722
802.11ac VHT20	Chain0	---	17.666	17.743
802.11ac VHT20	Chain1	---	17.723	17.736
802.11ax HE20	Chain0	---	19.049	19.012
802.11ax HE20	Chain1	---	19.086	18.964

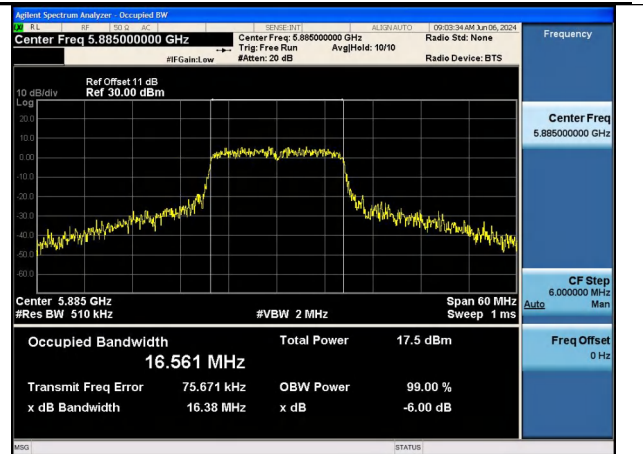
Test Mode	Antenna	Occupied Bandwidth (MHz)		
		---	5875MHz	---
802.11n HT40	Chain0	---	36.288	---
802.11n HT40	Chain1	---	36.267	---
802.11ac VHT40	Chain0	---	36.388	---
802.11ac VHT40	Chain1	---	36.347	---
802.11ax HE40	Chain0	---	38.145	---
802.11ax HE40	Chain1	---	38.061	---

Test Mode: 802.11a



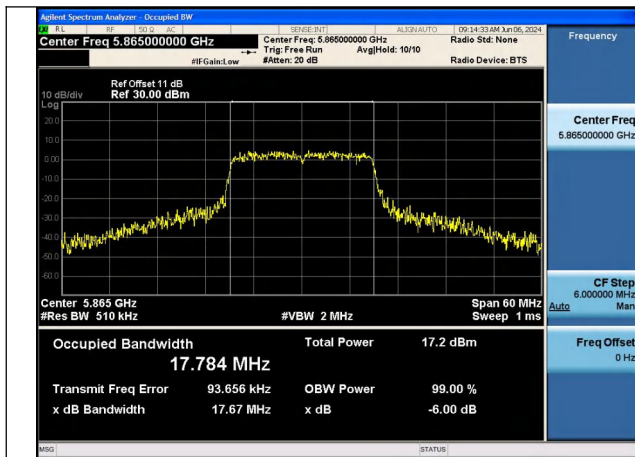


Mode:802.11a Frequency:5865MHz Ant:Chain1

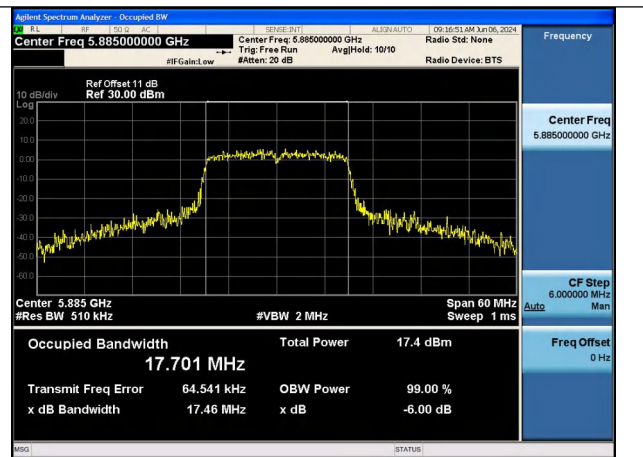


Mode:802.11a Frequency:5885MHz Ant:Chain1

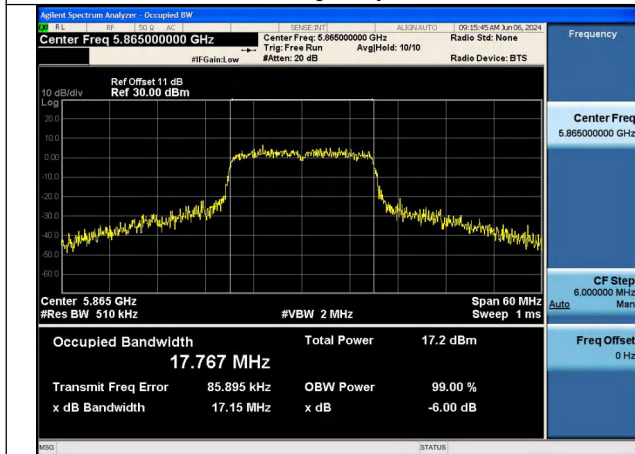
Test Mode: 802.11n HT20



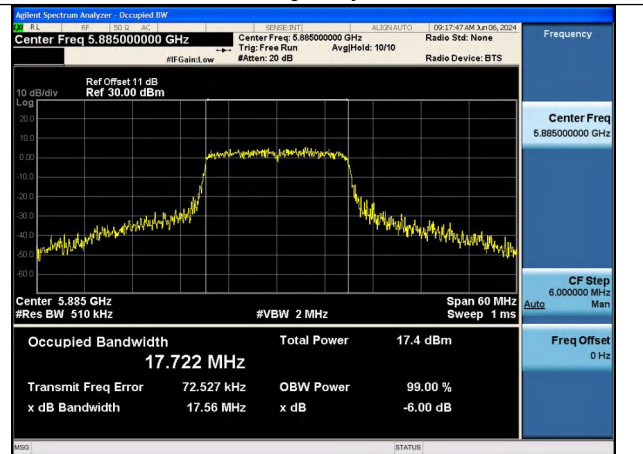
Mode:802.11n HT20 Frequency:5865MHz Ant:Chain0



Mode:802.11n HT20 Frequency:5885MHz Ant:Chain0

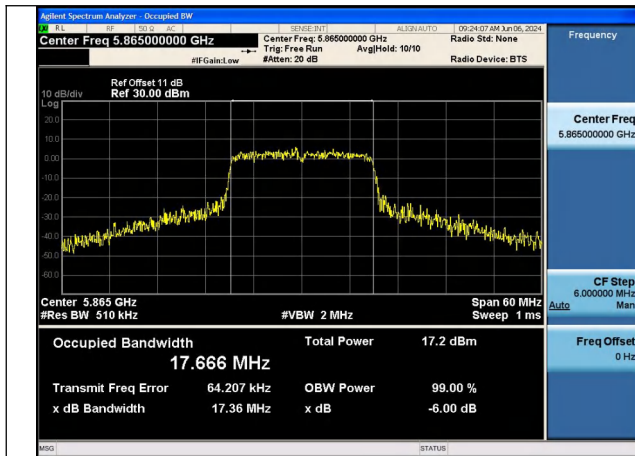


Mode:802.11n HT20 Frequency:5865MHz Ant:Chain1

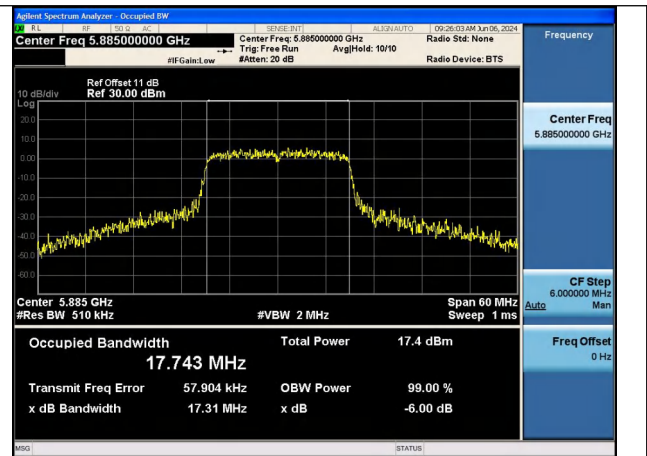


Mode:802.11n HT20 Frequency:5885MHz Ant:Chain1

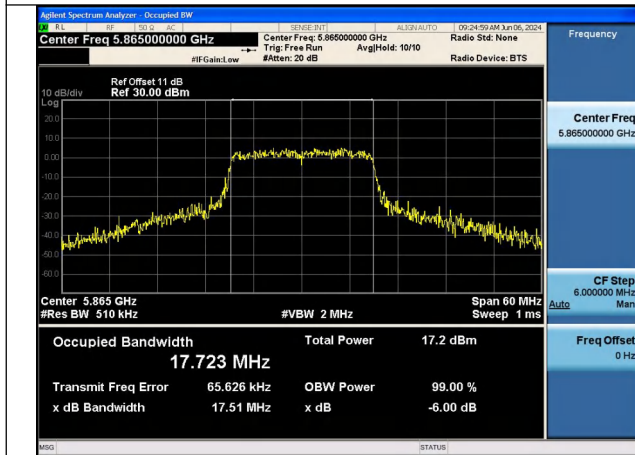
Test Mode: 802.11ac VHT20



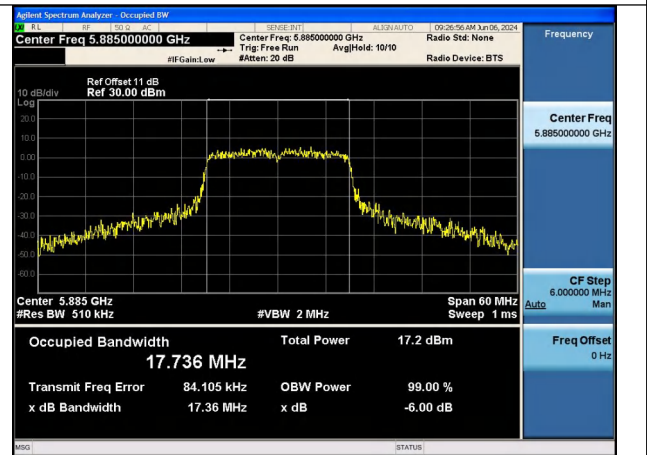
Mode:802.11ac VHT20 Frequency:5865MHz
Ant:Chain0



Mode:802.11ac VHT20 Frequency:5885MHz
Ant:Chain0

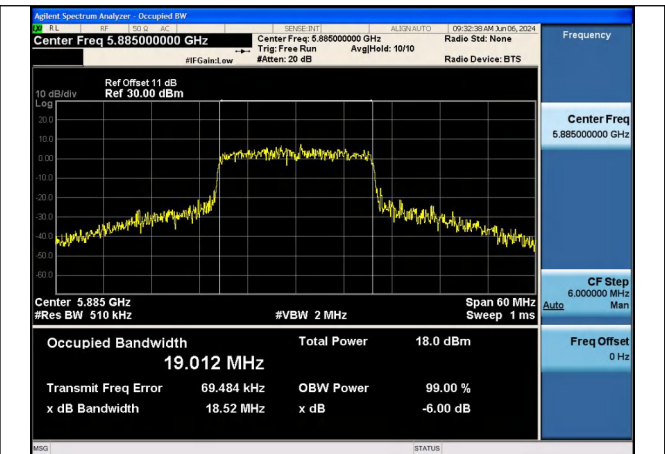
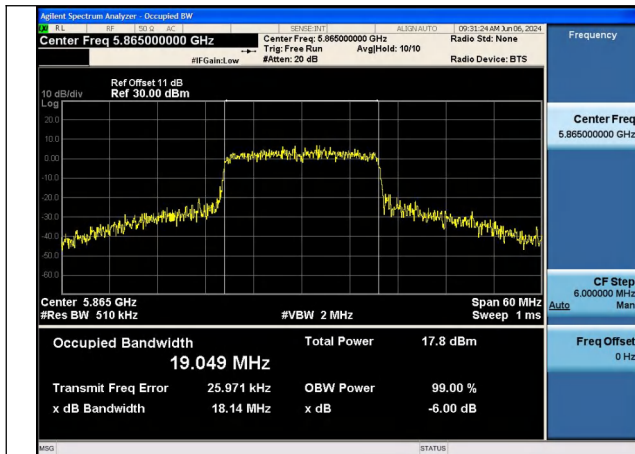


Mode:802.11ac VHT20 Frequency:5865MHz
Ant:Chain1



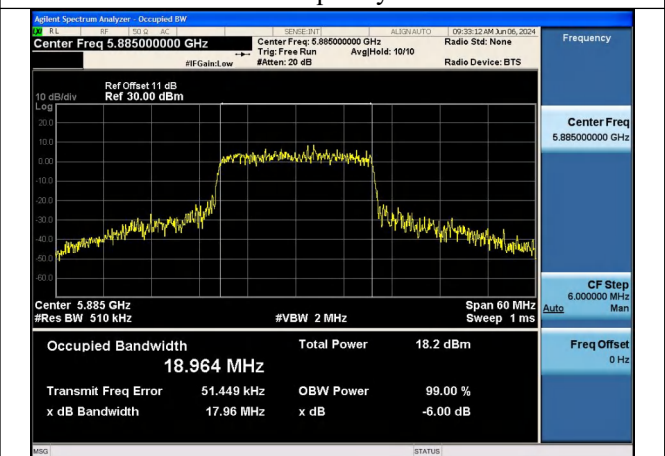
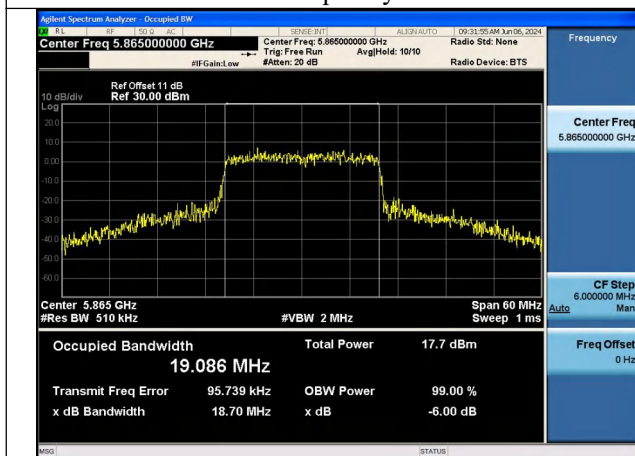
Mode:802.11ac VHT20 Frequency:5885MHz
Ant:Chain1

Test Mode: 802.11ax HE20



Mode: 802.11ax HE20 Frequency: 5865MHz Ant: Chain0

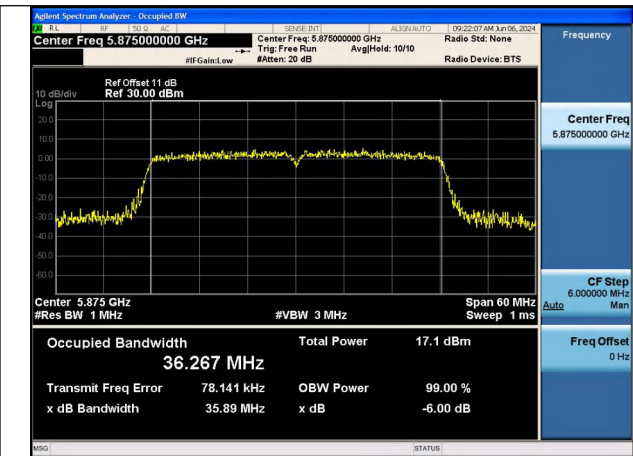
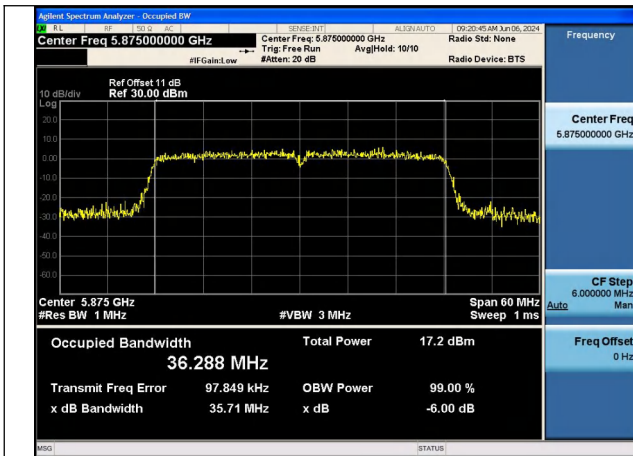
Mode: 802.11ax HE20 Frequency: 5885MHz Ant: Chain0



Mode: 802.11ax HE20 Frequency: 5865MHz Ant: Chain1

Mode: 802.11ax HE20 Frequency: 5885MHz Ant: Chain1

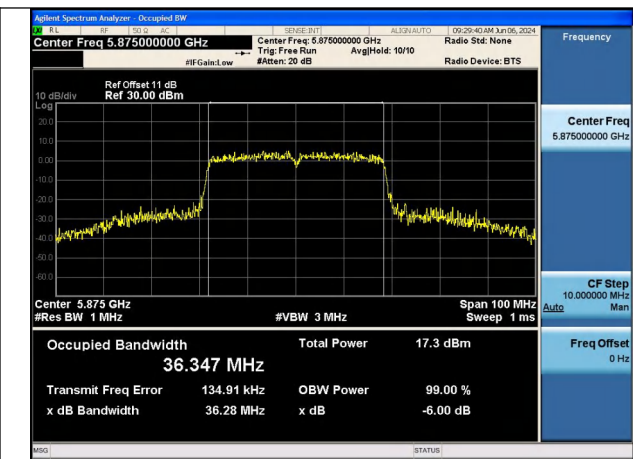
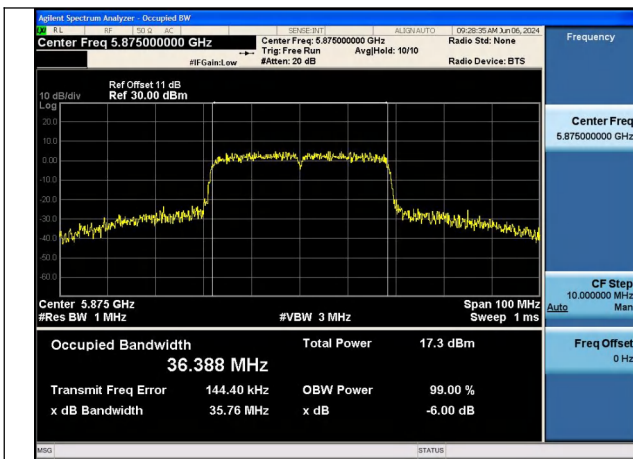
Test Mode: 802.11n HT40



Mode:802.11n HT40 Frequency:5875MHz Ant:Chain0

Mode:802.11n HT40 Frequency:5875MHz Ant:Chain1

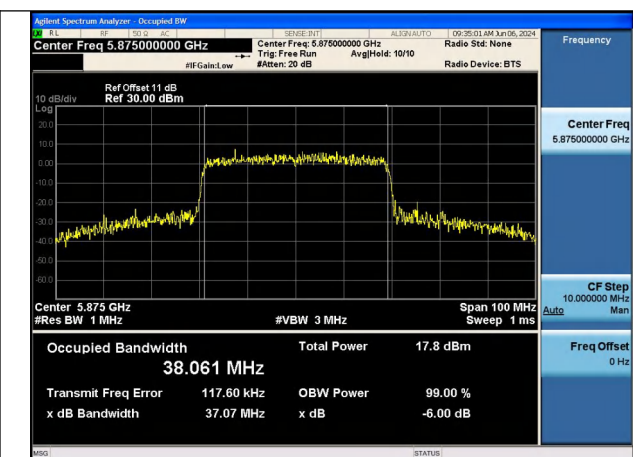
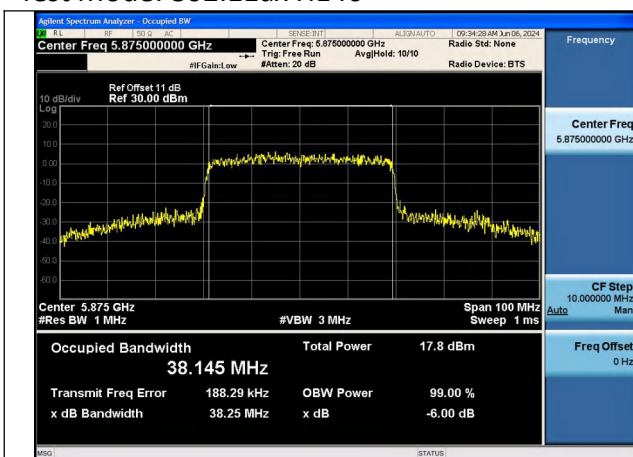
Test Mode: 802.11ac VHT40



Mode:802.11ac VHT40 Frequency:5875MHz
Ant:Chain0

Mode:802.11ac VHT40 Frequency:5875MHz
Ant:Chain1

Test Mode: 802.11ax HE40



Mode:802.11ax HE40 Frequency:5875MHz Ant:Chain0

Mode:802.11ax HE40 Frequency:5875MHz Ant:Chain1

Transmitter Power Spectral Density

Offset 11dB = Attenuator + Temporary antenna connector loss + Cable loss

Test Mode	Antenna	Tones	---		5865MHz		5885MHz	
			Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11a	Chain0	NA	---	---	0	4.262	0	4.221
802.11a	Chain1	NA	---	---		4.070		4.085
802.11n HT20	Chain0	NA	---	---	0	4.050	0	4.054
802.11n HT20	Chain1	NA	---	---		4.042		3.975
802.11n HT20	MIMO	NA	---	---	---	7.056	---	7.025
802.11ac VHT20	Chain0	NA	---	---	0	4.080	0	4.058
802.11ac VHT20	Chain1	NA	---	---		3.948		4.151
802.11ac VHT20	MIMO	NA	---	---	---	7.025	---	7.115
802.11ax HE20	Chain0	26T	---	---	0	11.429	0	11.689
802.11ax HE20	Chain1	26T	---	---		11.374		11.687
802.11ax HE20	MIMO	26T	---	---	---	14.412	---	14.698
802.11ax HE20	Chain0	52T	---	---	0	8.480	0	8.899
802.11ax HE20	Chain1	52T	---	---		8.348		8.919
802.11ax HE20	MIMO	52T	---	---	---	11.425	---	11.919
802.11ax HE20	Chain0	106T	---	---	0	5.569	0	5.844
802.11ax HE20	Chain1	106T	---	---		5.487		5.825
802.11ax HE20	MIMO	106T	---	---	---	8.538	---	8.845
802.11ax HE20	Chain0	242T	---	---	0	2.636	0	2.709
802.11ax HE20	Chain1	242T	---	---		2.522		2.599
802.11ax HE20	MIMO	242T	---	---	---	5.590	---	5.665

Note: As measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/\text{RBW})$ to the measured result.

Test Mode	Antenna	Tones	---		5875MHz		---	
			Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)	Correction Factor(dB)	Power Density (dBm/MHz)
802.11n HT40	Chain0	NA	---	---	0	1.259	---	---
802.11n HT40	Chain1	NA	---	---		1.230	---	---
802.11n HT40	MIMO	NA	---	---	---	4.255	---	---
802.11ac VHT40	Chain0	NA	---	---	0	1.259	---	---
802.11ac VHT40	Chain1	NA	---	---		1.268	---	---
802.11ac VHT40	MIMO	NA	---	---	---	4.274	---	---
802.11ax HE40	Chain0	26T	---	---	0	11.178	---	---
802.11ax HE40	Chain1	26T	---	---		11.281	---	---
802.11ax HE40	MIMO	26T	---	---	---	14.240	---	---
802.11ax HE40	Chain0	52T	---	---	0	8.529	---	---
802.11ax HE40	Chain1	52T	---	---		8.484	---	---
802.11ax HE40	MIMO	52T	---	---	---	11.517	---	---
802.11ax HE40	Chain0	106T	---	---	0	5.624	---	---
802.11ax HE40	Chain1	106T	---	---		5.678	---	---
802.11ax HE40	MIMO	106T	---	---	---	8.661	---	---
802.11ax HE40	Chain0	242T	---	---	0	2.668	---	---
802.11ax HE40	Chain1	242T	---	---		2.572	---	---
802.11ax HE40	MIMO	242T	---	---	---	5.631	---	---
802.11ax HE40	Chain0	484T	---	---	0	0.151	---	---
802.11ax HE40	Chain1	484T	---	---		0.185	---	---
802.11ax HE40	MIMO	484T	---	---	---	3.178	---	---

Note: As measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/\text{RBW})$ to the measured result.