

Appendix B

RF Test Data for 5.8G WLAN (Conducted Measurement)

Product Name: HD wireless video transmitter

Trade Mark: N/A

Test Model: 7061

Environmental Conditions

Temperature:	24.1° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Tom.Liu
Supervised by:	Jayden.Zhuo

B.1 Duty Cycle

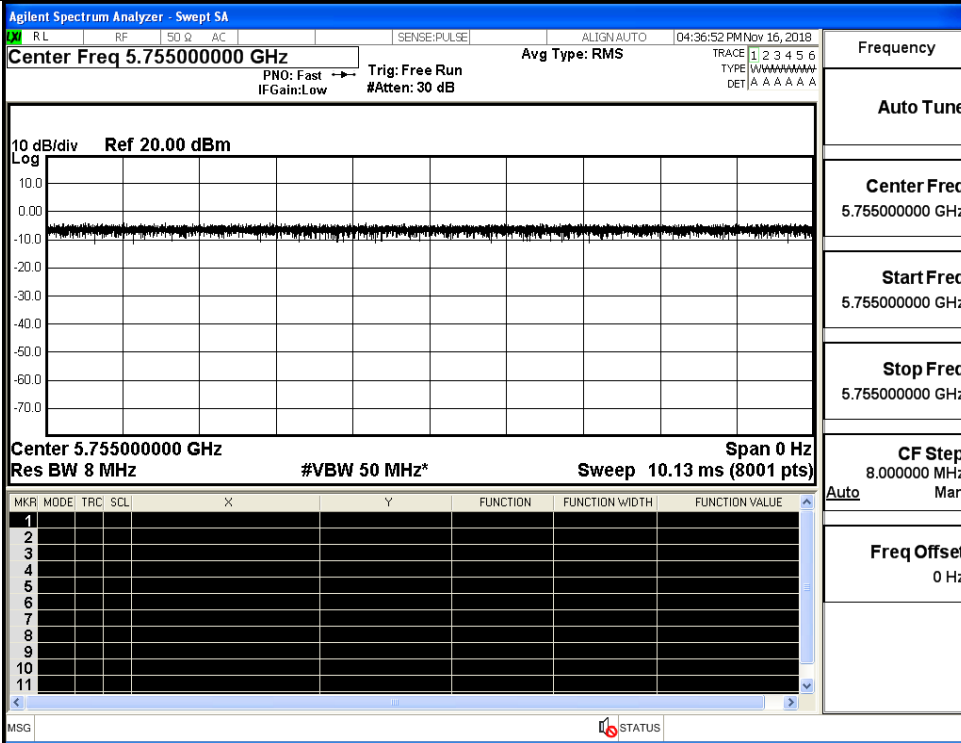
Antenna 0

Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11N40	5755	100	0.00	0.01

Antenna 1

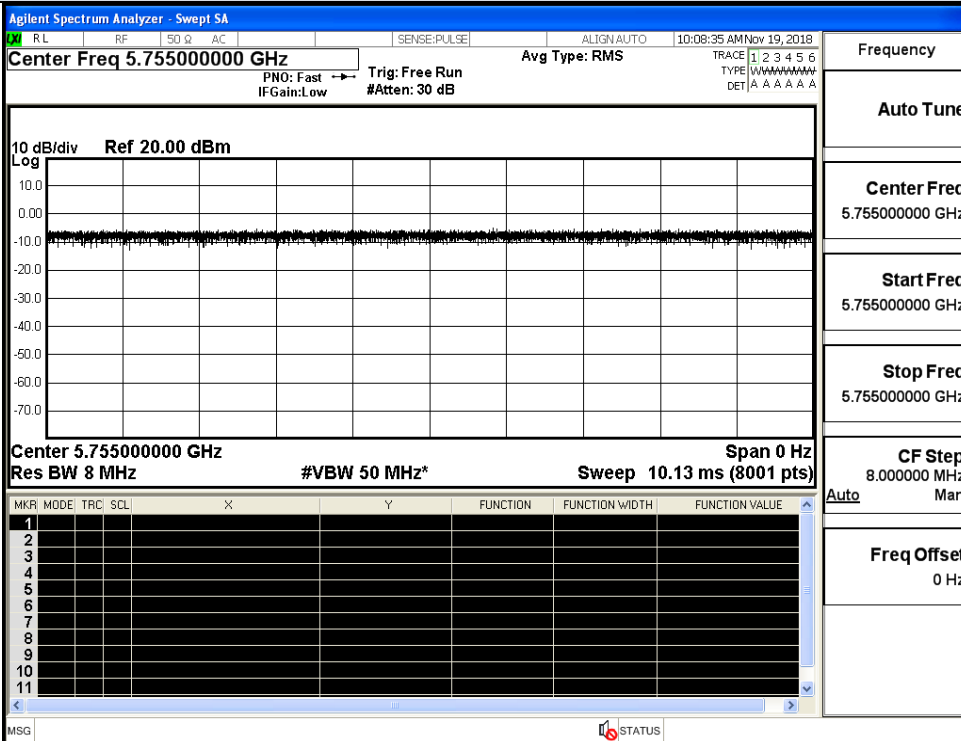
Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11N40	5755	100	0.00	0.01

On Time and Duty Cycle



Frequency
Auto Tune
Center Freq 5.755000000 GHz
Start Freq 5.755000000 GHz
Stop Freq 5.755000000 GHz
CF Step 8.000000 MHz Auto Man
Freq Offset 0 Hz

IEEE 802.11n HT40_Ant0



Frequency
Auto Tune
Center Freq 5.755000000 GHz
Start Freq 5.755000000 GHz
Stop Freq 5.755000000 GHz
CF Step 8.000000 MHz Auto Man
Freq Offset 0 Hz

IEEE 802.11n HT40_Ant1

B.2 Maximum Conduct Output Power

Antenna 0

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor (dB)	Report Conducted Power (dBm)	Limit (dBm)
11N40	151	5755	13.38	0	13.38	30
	159	5795	11.41	0	11.41	

Antenna 1

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor (dB)	Report Conducted Power (dBm)	Limit (dBm)
11N40	151	5755	11.98	0	11.98	30
	159	5795	10.26	0	10.26	

Antenna 0+Antenna 1

Test Mode	Channel	Frequency (MHz)	Duty Cycle Factor (dB)	Report Conducted Power (dBm)			Limit (dBm)
				Ant0	Ant1	Sum	
11N40	151	5755	0	13.38	11.98	15.75	30
	159	5795	0	11.41	10.26	13.88	

B.3 Power Spectral Density

Antenna 0

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/300KHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)	Limit (dBm/500KHz)
11N40	151	5755	-3.659	0	2.218	-1.441	30
	159	5795	-5.832	0	2.218	-3.614	

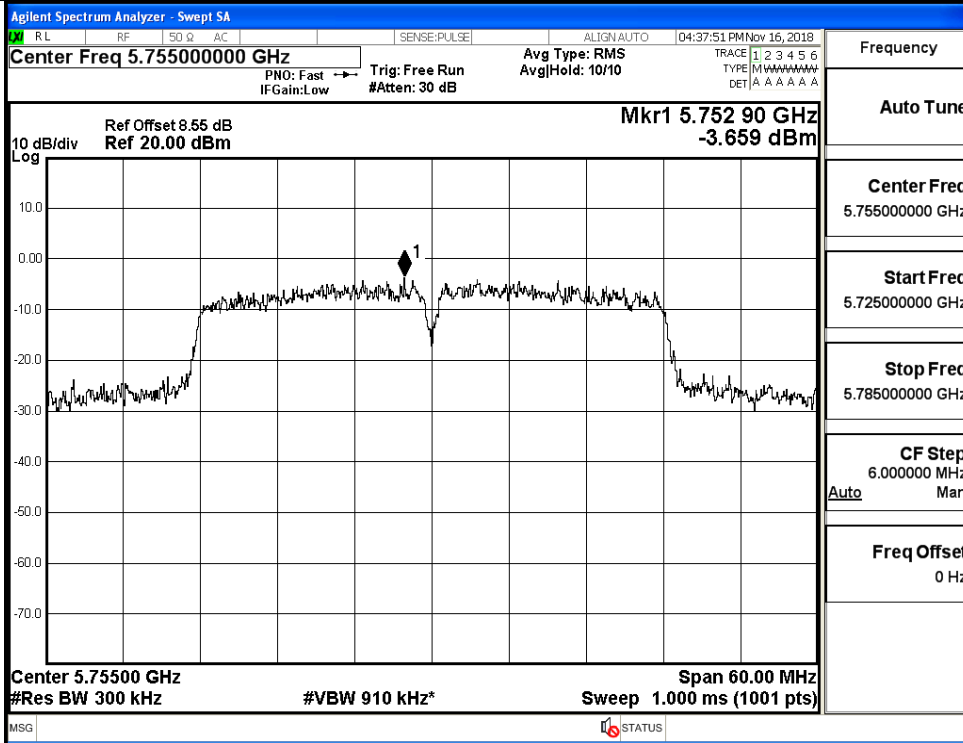
Antenna 1

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/300KHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)	Limit (dBm/500KHz)
11N40	151	5755	-5.561	0	2.218	-3.343	30
	159	5795	-5.916	0	2.218	-3.698	

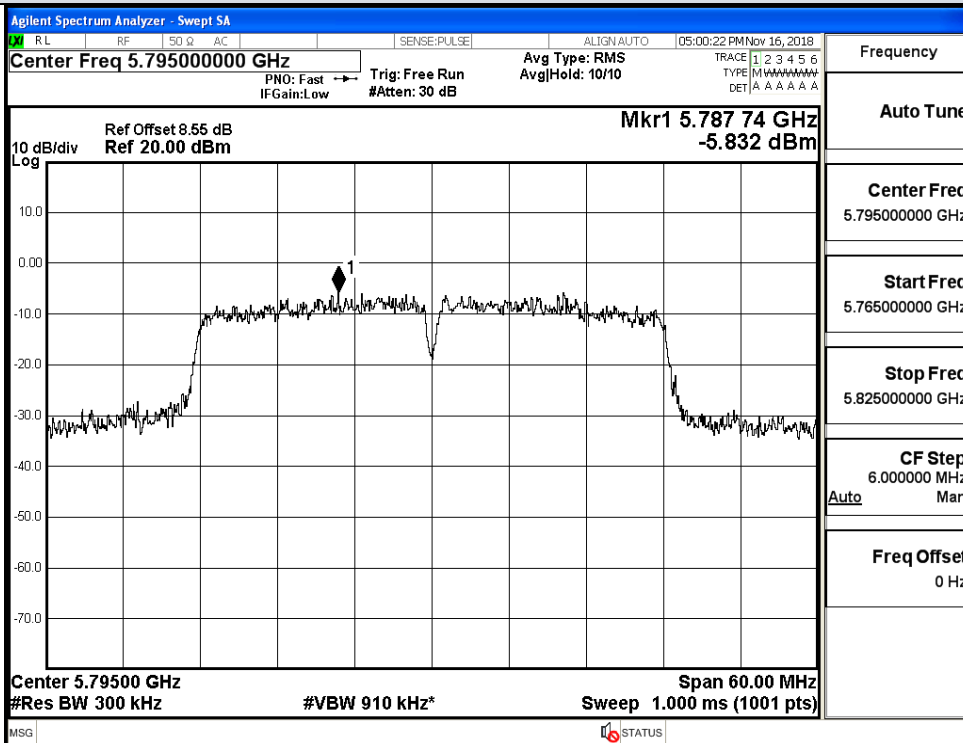
Antenna 0+Antenna 1

Test Mode	Channel	Frequency (MHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/MHz)			Limit (dBm/MHz)
					Ant0	Ant1	Sum	
11N40	151	5755	0	2.218	-1.441	-3.343	0.722	27.99
	159	5795	0	2.218	-3.614	-3.698	-0.645	

Power Spectral Density

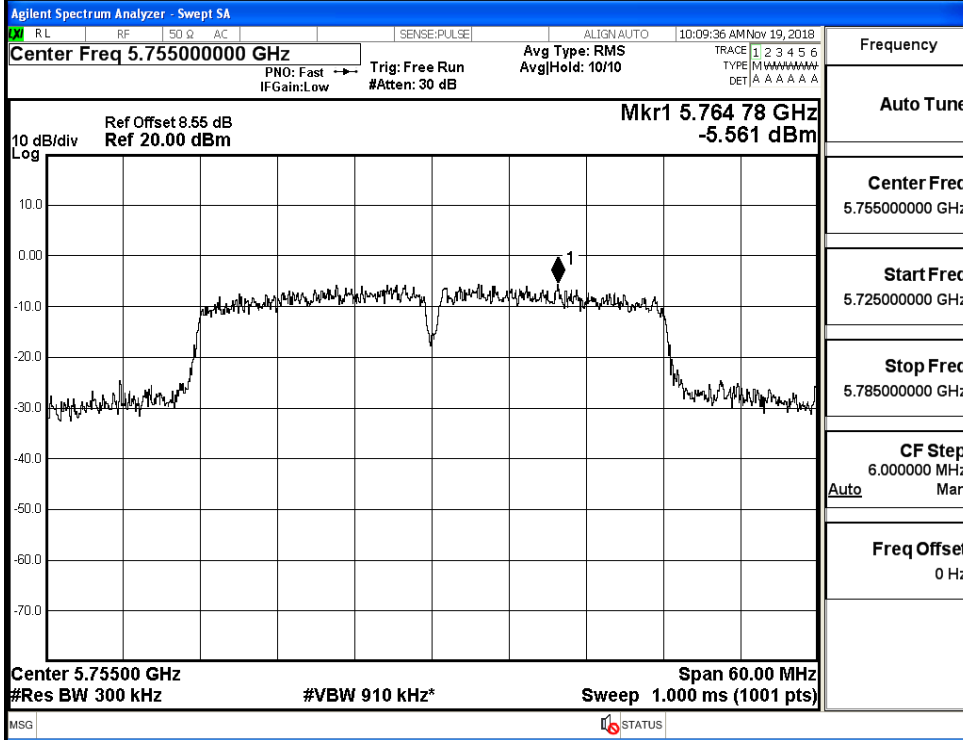


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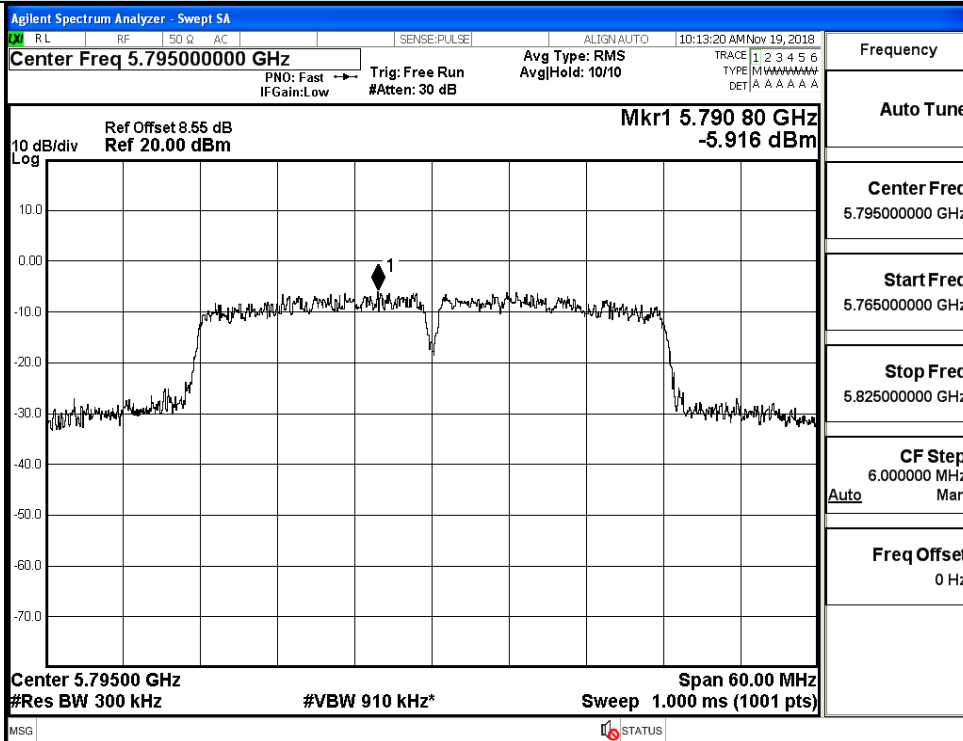


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Power Spectral Density



IEEE 802.11n HT40 / Channel 151 / 5755 MHz_Ant1



IEEE 802.11n HT40 / Channel 159 / 5795 MHz_Ant1

B.4 Emission Bandwidth

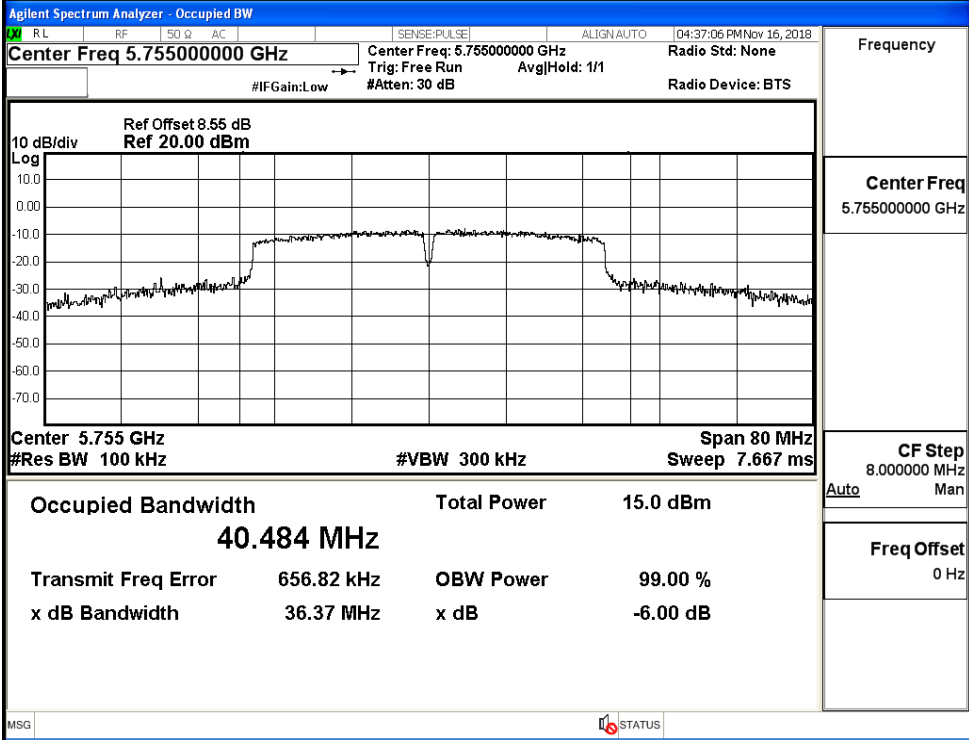
Antenna 0

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)
11N40	151	5755	36.370	35.780	≥0.5
	159	5795	36.400	35.600	

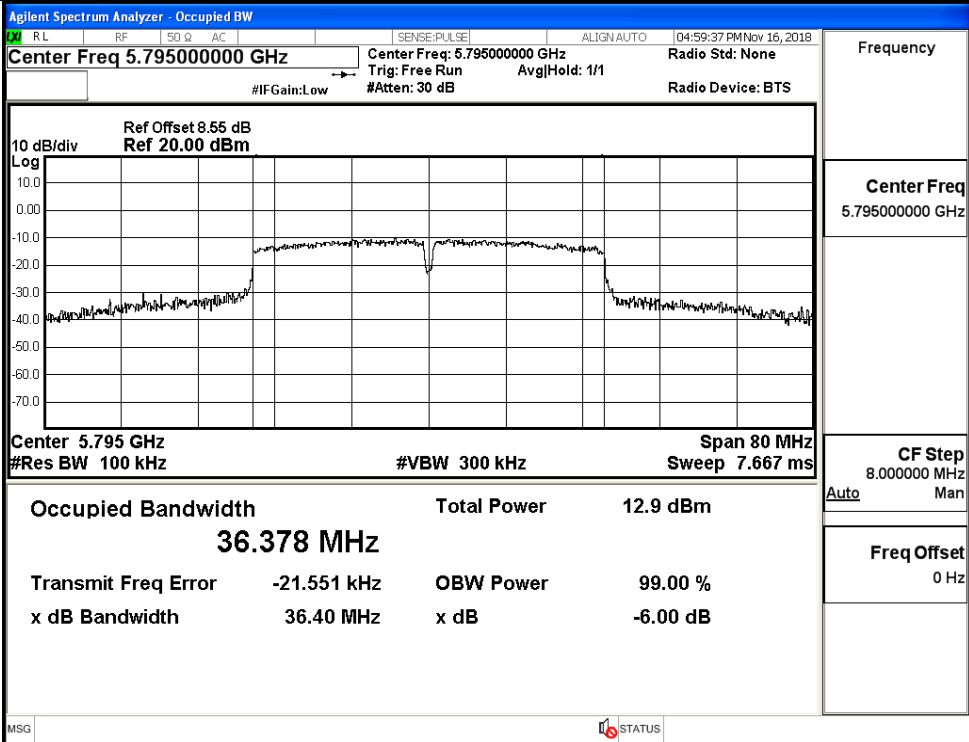
Antenna 1

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)
11N40	151	5755	36.360	35.920	≥0.5
	159	5795	36.380	35.940	

6dB Bandwidth

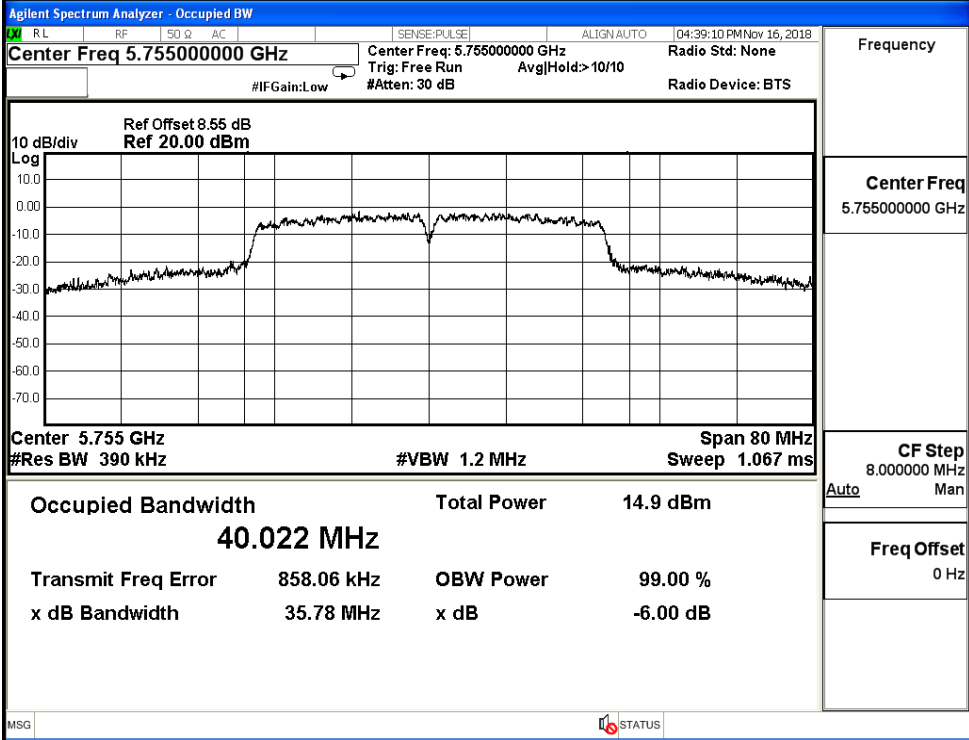


IEEE 802.11n HT40 / Channel 151 / 5755 MHz_Ant0

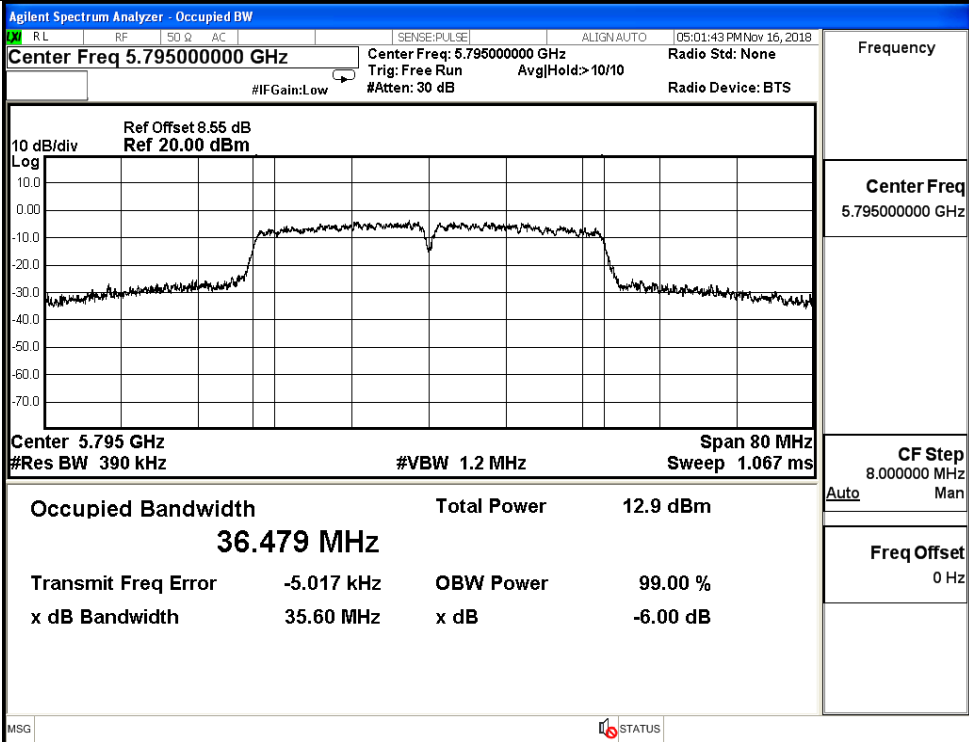


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99% Occupied Bandwidth



IEEE 802.11n HT40 / Channel 151 / 5755 MHz_Ant0



IEEE 802.11n HT40 / Channel 159 / 5795 MHz_Ant0

6dB Bandwidth

Agilent Spectrum Analyzer - Occupied BW

Center Freq 5.75500000 GHz

Center Freq: 5.755000000 GHz

Trig: Free Run Avg|Hold: 1/1

Radio Std: None

Radio Device: BTS

#IFGain:Low #Atten: 30 dB

10 dB/div Ref Offset 8.55 dB Ref 20.00 dBm

Center 5.755 GHz Span 80 MHz

#Res BW 100 kHz #VBW 300 kHz Sweep 7.667 ms

Occupied Bandwidth	Total Power	13.6 dBm
39.503 MHz		
Transmit Freq Error	1.0340 MHz	OBW Power 99.00 %
x dB Bandwidth	36.36 MHz	x dB -6.00 dB

Frequency: 5.75500000 GHz

Center Freq: 5.75500000 GHz

CF Step: 8.000000 MHz

Freq Offset: 0 Hz

IEEE 802.11n HT40 / Channel 151 / 5755 MHz_Ant1

Agilent Spectrum Analyzer - Occupied BW

Center Freq 5.79500000 GHz

Center Freq: 5.795000000 GHz

Trig: Free Run Avg|Hold: 1/1

Radio Std: None

Radio Device: BTS

#IFGain:Low #Atten: 30 dB

10 dB/div Ref Offset 8.55 dB Ref 20.00 dBm

Center 5.795 GHz Span 80 MHz

#Res BW 100 kHz #VBW 300 kHz Sweep 7.667 ms

Occupied Bandwidth	Total Power	5.81 dBm
41.344 MHz		
Transmit Freq Error	2.1003 MHz	OBW Power 99.00 %
x dB Bandwidth	36.38 MHz	x dB -6.00 dB

Frequency: 5.79500000 GHz

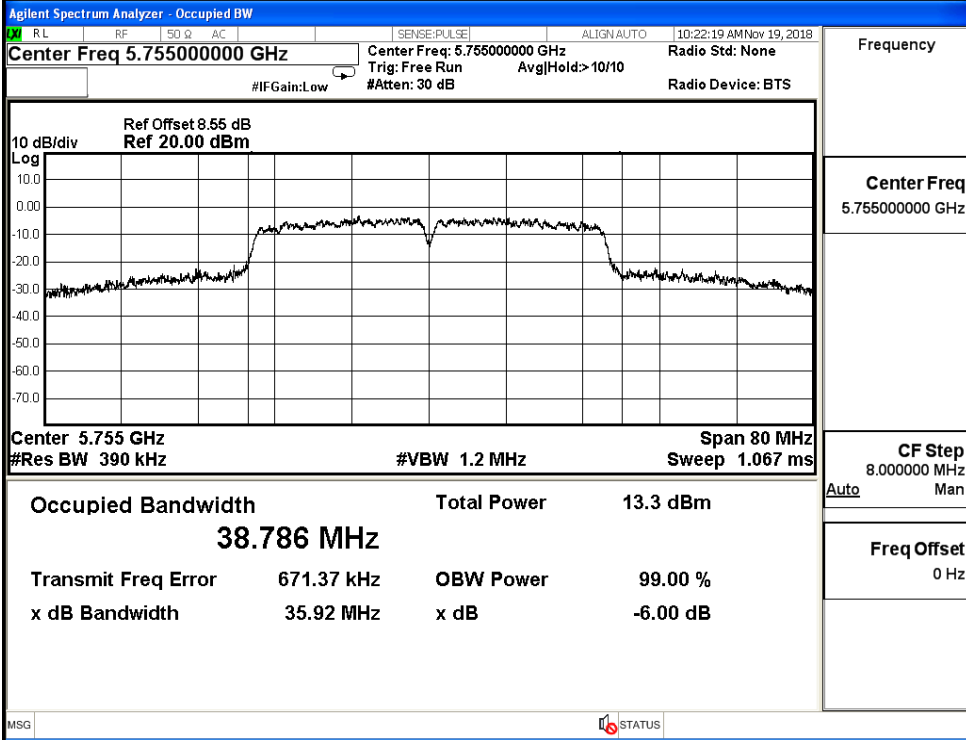
Center Freq: 5.79500000 GHz

CF Step: 8.000000 MHz

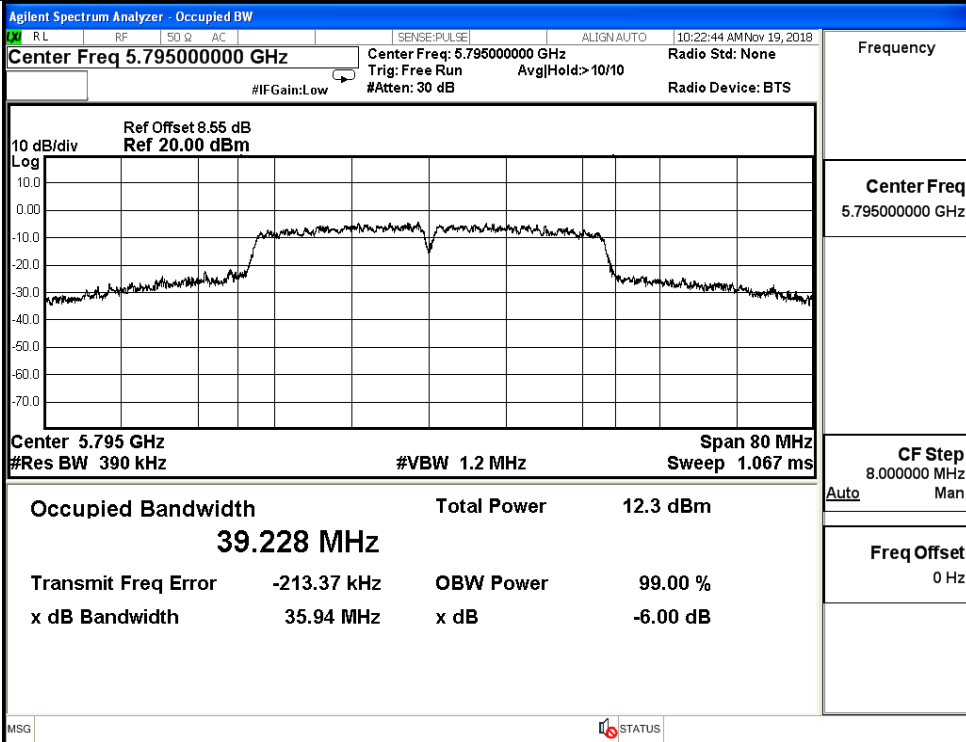
Freq Offset: 0 Hz

IEEE 802.11n HT40 / Channel 159 / 5795 MHz_Ant1

99% Occupied Bandwidth



IEEE 802.11n HT40 / Channel 151 / 5755 MHz_Ant2



IEEE 802.11n HT40 / Channel 159 / 5795 MHz_Ant2

B.5 Undesirable Emissions Measurement

Antenna 0

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)
11N40	151	5650.0	-49.076	5.00	-44.076	Peak	27.0
		5700.0	-48.579	5.00	-43.579	Peak	15.6
		5720.0	-35.871	5.00	-30.871	Peak	10.0
		5725.0	-34.243	5.00	-29.243	Peak	-27.0
	159	5850.0	-36.596	5.00	-31.596	Peak	-27.0
		5855.0	-37.412	5.00	-32.412	Peak	10.0
		5875.0	-42.850	5.00	-37.850	Peak	15.6
		5925.0	-48.957	5.00	-43.957	Peak	27.0

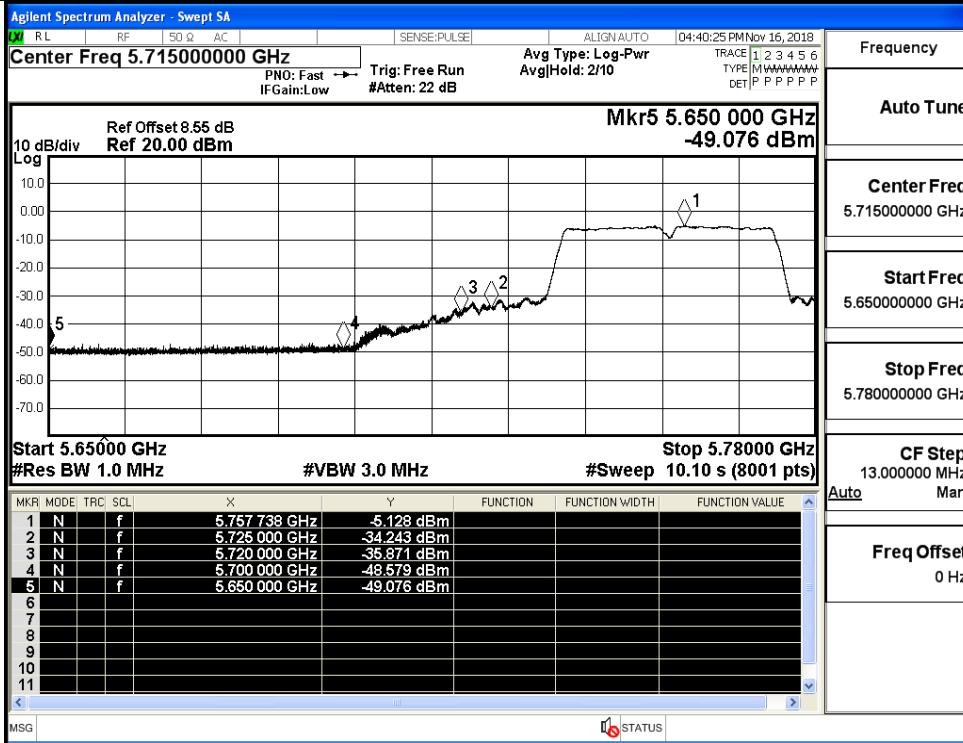
Antenna 1

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)
11N40	151	5650.0	-50.051	5.00	-45.051	Peak	27.0
		5700.0	-49.181	5.00	-44.181	Peak	15.6
		5720.0	-38.803	5.00	-33.803	Peak	10.0
		5725.0	-36.644	5.00	-31.644	Peak	-27.0
	159	5850.0	-35.130	5.00	-30.130	Peak	-27.0
		5855.0	-36.742	5.00	-31.742	Peak	10.0
		5875.0	-43.757	5.00	-38.757	Peak	15.6
		5925.0	-48.888	5.00	-43.888	Peak	27.0

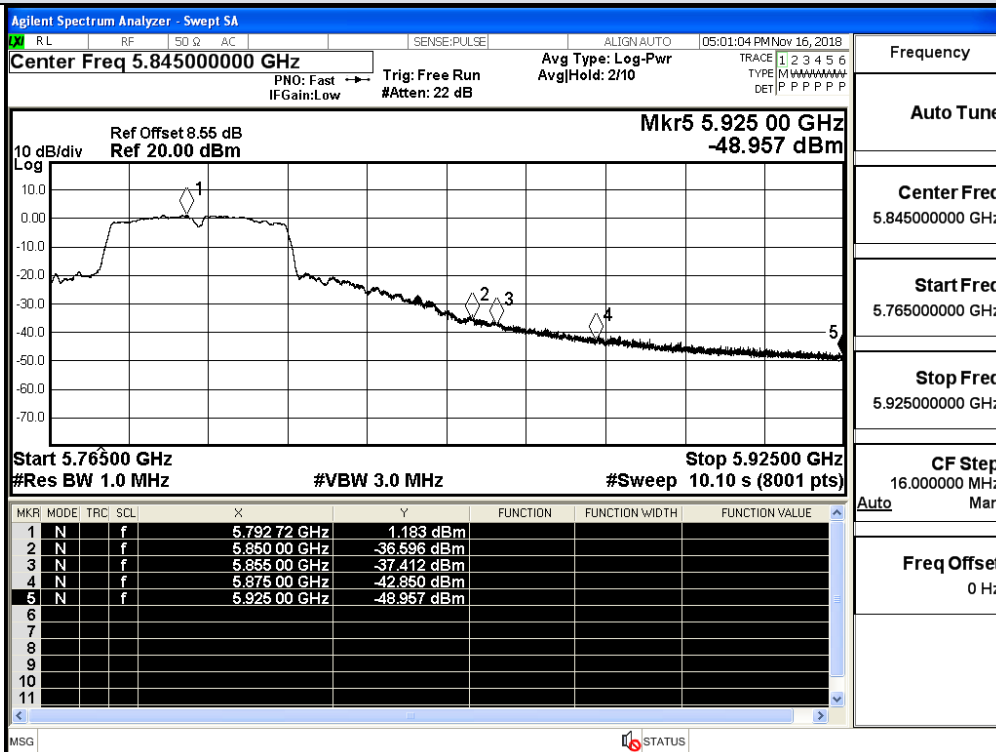
Antenna 0+Antenna 1

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)			Directional Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)
			Ant0	Ant1	Sum				
11N40	151	5650.0	-49.076	-50.051	-46.526	8.01	-38.516	Peak	27.0
		5700.0	-48.579	-49.181	-45.859	8.01	-37.849	Peak	15.6
		5720.0	-35.871	-38.803	-34.084	8.01	-26.074	Peak	10.0
		5725.0	-34.243	-36.644	-32.269	8.01	-24.259	Peak	-27.0
	159	5850.0	-36.596	-35.130	-32.791	8.01	-24.781	Peak	-27.0
		5855.0	-37.412	-36.742	-34.054	8.01	-26.044	Peak	10.0
		5875.0	-42.850	-43.757	-40.270	8.01	-32.260	Peak	15.6
		5925.0	-48.957	-48.888	-45.912	8.01	-37.902	Peak	27.0

Undesirable Emissions Measurement

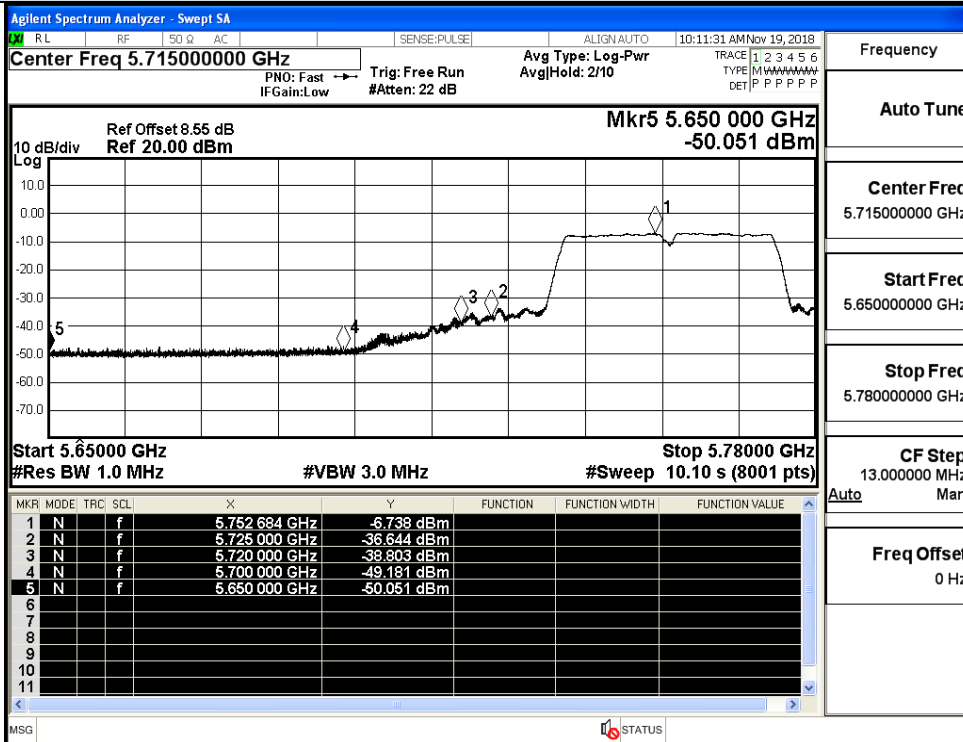


IEEE 802.11n HT40 / Channel 151 / 5755 MHz / Peak_Ant0

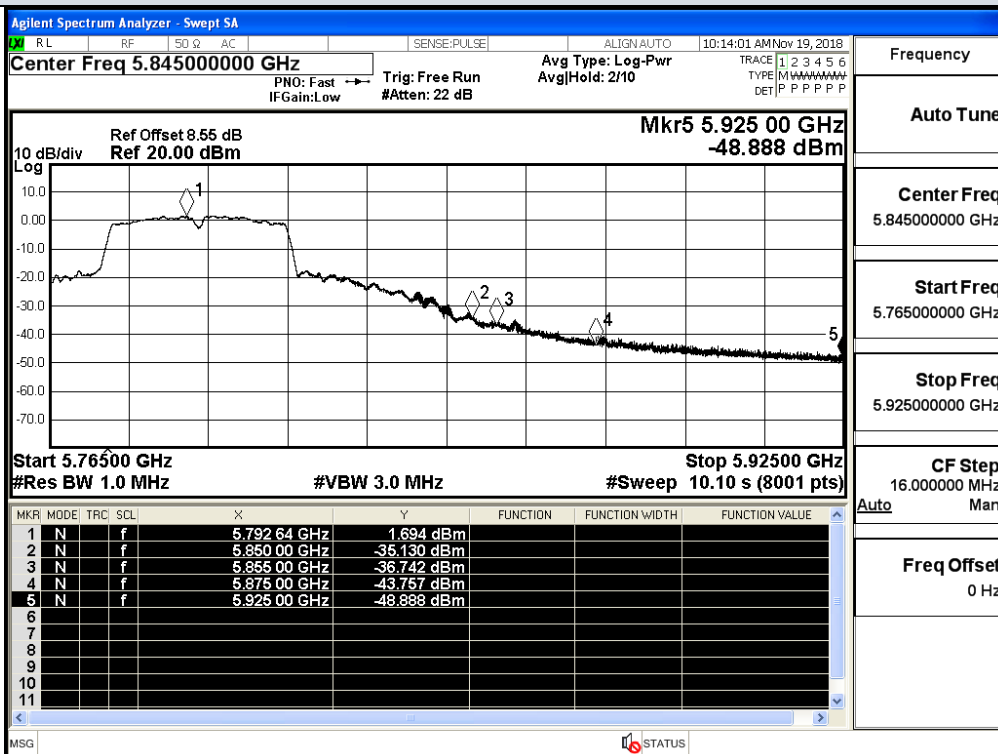


IEEE 802.11n HT40 / Channel 159 / 5795 MHz / Peak_Ant0

Undesirable Emissions Measurement



IEEE 802.11n HT40 / Channel 151 / 5755 MHz / Peak_Ant1



IEEE 802.11n HT40 / Channel 159 / 5795 MHz / Peak_Ant1