

Appendix B

RF Test Data for 5.8G WLAN (Conducted Measurement)

Product Name: HD wireless video transmitter

Trade Mark: N/A

Test Model: 7072

Environmental Conditions

Temperature:	22.4 ° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Tom.Liu
Supervised by:	Jayden.Zhuo

B.1 Duty Cycle

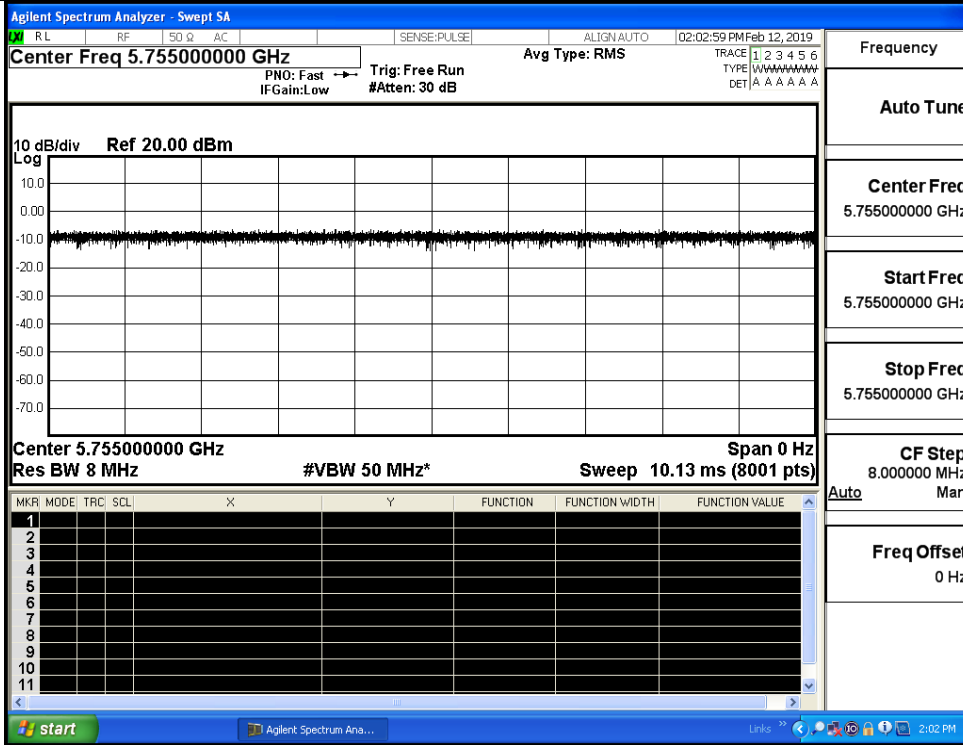
Antenna 0

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

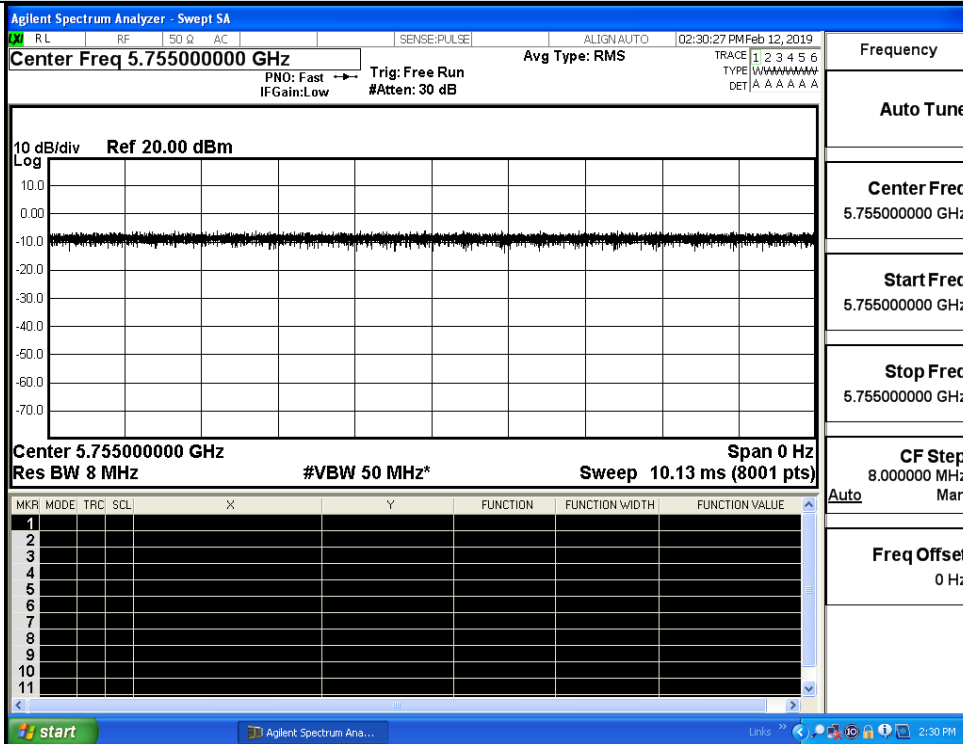
Antenna 1

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

On Time and Duty Cycle



IEEE 802.11n HT40_Ant0



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)
IEEE 802.11n HT40	151	5755	10.66	0	10.66	30
	159	5795	10.14	0	10.14	

Antenna 1

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor (dB)	Report Conducted Power (dBm)	Limit (dBm)
IEEE 802.11n HT40	151	5755	10.86	0	10.86	30
	159	5795	10.07	0	10.07	

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	10.66	10.86	13.77	30
	159	5795	0	10.14	10.07	13.12	

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)
IEEE 802.11n HT40	151	5755	-6.659	0	2.218	-4.441	30.00
	159	5795	-7.024	0	2.218	-4.806	

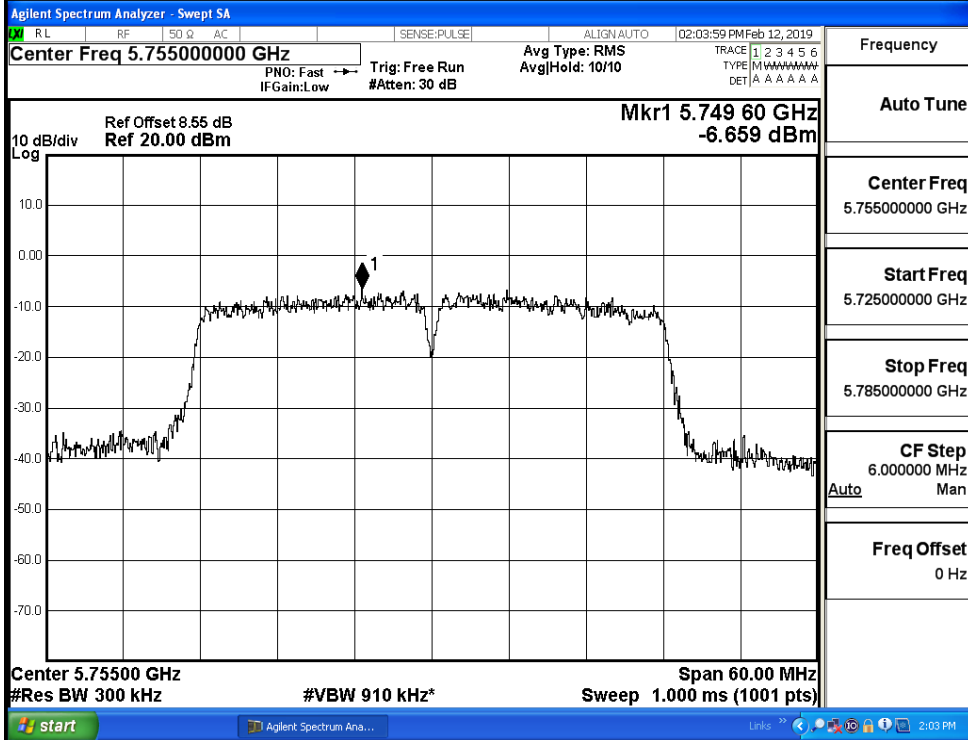
Antenna 1

Test Mode	Channel	Frequency (MHz)	Power Density (dBm/300KHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)	Limit (dBm/500KHz)
IEEE 802.11n HT40	151	5755	-6.653	0	2.218	-4.435	30.00
	159	5795	-7.153	0	2.218	-4.935	

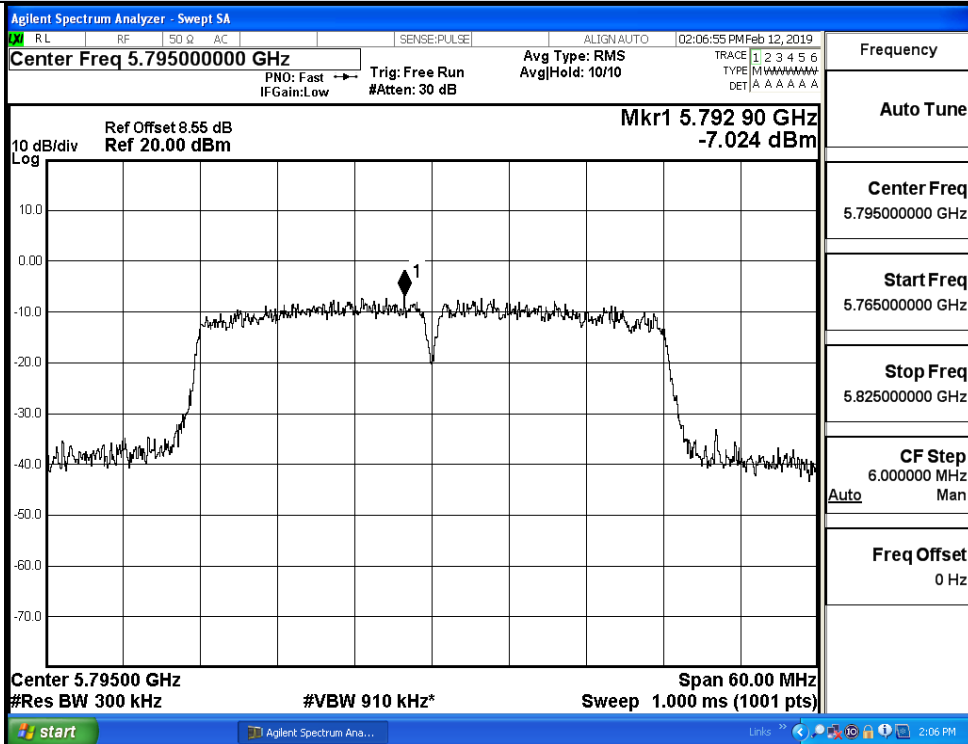
Antenna 0+Antenna 1

Test Mode	Channel	Frequency (MHz)	Duty Cycle Factor (dB)	RBW Factor (dB)	Report Power Density (dBm/500KHz)			Limit (dBm/500KHz)
					Ant0	Ant1	Sum	
IEEE 802.11n HT40	151	5755	0	2.218	-4.441	-4.435	-1.428	30.00
	159	5795	0	2.218	-4.806	-4.935	-1.860	

Power Spectral Density

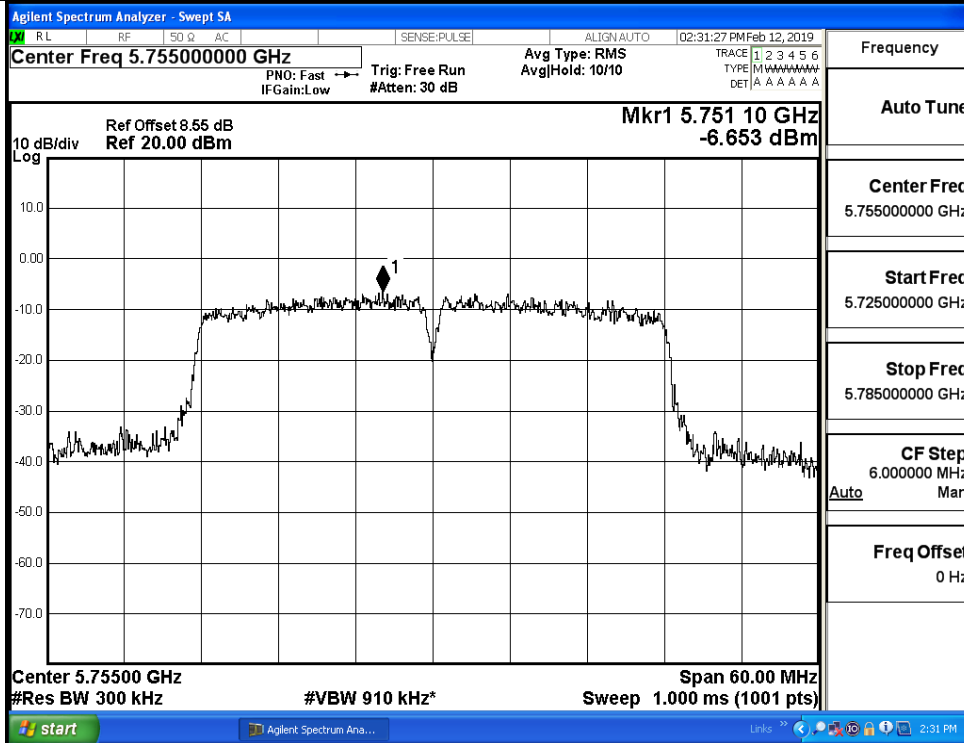


IEEE 802.11n HT40 / Channel 151 / 5755 MHz_Ant0

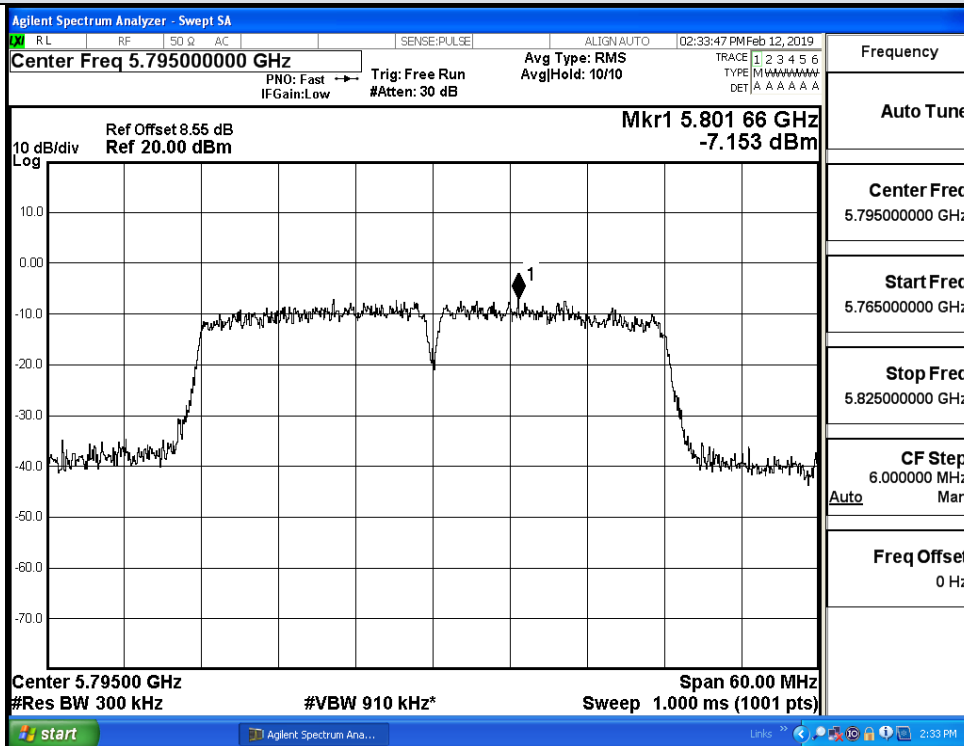


IEEE 802.11n HT40 / Channel 159 / 5795 MHz_Ant0

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)	Limit (MHz)
IEEE 802.11n HT40	151	5755	36.390	≥0.5
	159	5795	36.380	

Antenna 1

Test Mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
IEEE 802.11n HT40	151	5755	36.380	≥0.5
	159	5795	36.380	

6dB Bandwidth

Agilent Spectrum Analyzer - Occupied BW

Center Freq 5.75500000 GHz

Center Freq: 5.755000000 GHz
Trig: Free Run Avg|Hold: 1/1
#IFGain: Low #Atten: 30 dB

Radio Std: None
Radio Device: BTS

10 dB/div
Log
Ref Offset 8.55 dB
Ref 20.00 dBm

Center 5.755 GHz
#Res BW 100 kHz #VBW 300 kHz Span 80 MHz
Sweep 7.667 ms

Occupied Bandwidth	Total Power	12.1 dBm
35.995 MHz		
Transmit Freq Error	-43.986 kHz	OBW Power 99.00 %
x dB Bandwidth	36.39 MHz	x dB -6.00 dB

Frequency: 5.75500000 GHz

CF Step: 8.000000 MHz (Auto)

Freq Offset: 0 Hz

IEEE 802.11n HT40 / Channel 151 / 5755 MHz_Ant0

Agilent Spectrum Analyzer - Occupied BW

Center Freq 5.79500000 GHz

Center Freq: 5.795000000 GHz
Trig: Free Run Avg|Hold: 1/1
#IFGain: Low #Atten: 30 dB

Radio Std: None
Radio Device: BTS

10 dB/div
Log
Ref Offset 8.55 dB
Ref 20.00 dBm

Center 5.795 GHz
#Res BW 100 kHz #VBW 300 kHz Span 80 MHz
Sweep 7.667 ms

Occupied Bandwidth	Total Power	11.6 dBm
35.981 MHz		
Transmit Freq Error	-25.736 kHz	OBW Power 99.00 %
x dB Bandwidth	36.38 MHz	x dB -6.00 dB

Frequency: 5.79500000 GHz

CF Step: 8.000000 MHz (Auto)

Freq Offset: 0 Hz

IEEE 802.11n HT40 / Channel 159 / 5795 MHz_Ant0

6dB Bandwidth

Agilent Spectrum Analyzer - Occupied BW

Center Freq 5.75500000 GHz

Center Freq: 5.75500000 GHz
Trig: Free Run Avg|Hold: 1/1
#IFGain: Low #Atten: 30 dB

Radio Std: None
Radio Device: BTS

10 dB/div
Log
Ref Offset 8.55 dB
Ref 20.00 dBm

Center 5.755 GHz
#Res BW 100 kHz #VBW 300 kHz Span 80 MHz
Sweep 7.667 ms

Occupied Bandwidth	Total Power	12.4 dBm
36.000 MHz		
Transmit Freq Error	-54.109 kHz	OBW Power 99.00 %
x dB Bandwidth	36.38 MHz	x dB -6.00 dB

Frequency: 5.75500000 GHz

CF Step: 8.000000 MHz (Auto)

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: 5.79500000 GHz
Trig: Free Run Avg|Hold: 1/1
#IFGain: Low #Atten: 30 dB

Radio Std: None
Radio Device: BTS

10 dB/div
Log
Ref Offset 8.55 dB
Ref 20.00 dBm

Center 5.795 GHz
#Res BW 100 kHz #VBW 300 kHz Span 80 MHz
Sweep 7.667 ms

Occupied Bandwidth	Total Power	11.6 dBm
35.977 MHz		
Transmit Freq Error	-19.281 kHz	OBW Power 99.00 %
x dB Bandwidth	36.38 MHz	x dB -6.00 dB

Frequency: 5.79500000 GHz

CF Step: 8.000000 MHz (Auto)

Freq Offset: 0 Hz

IEEE 802.11n HT40 / Channel 159 / 5795 MHz_Ant1

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 SISO	151	5650.0	-50.318	2.00	-48.318	Peak	-27.0
		5700.0	-48.672	2.00	-46.672	Peak	10.0
		5720.0	-39.862	2.00	-37.862	Peak	15.6
		5725.0	-38.614	2.00	-36.614	Peak	27.0
	159	5850.0	-48.880	2.00	-46.880	Peak	27.0
		5855.0	-49.620	2.00	-47.620	Peak	15.6
		5875.0	-49.427	2.00	-47.427	Peak	10.0
		5925.0	-49.743	2.00	-47.743	Peak	-27.0

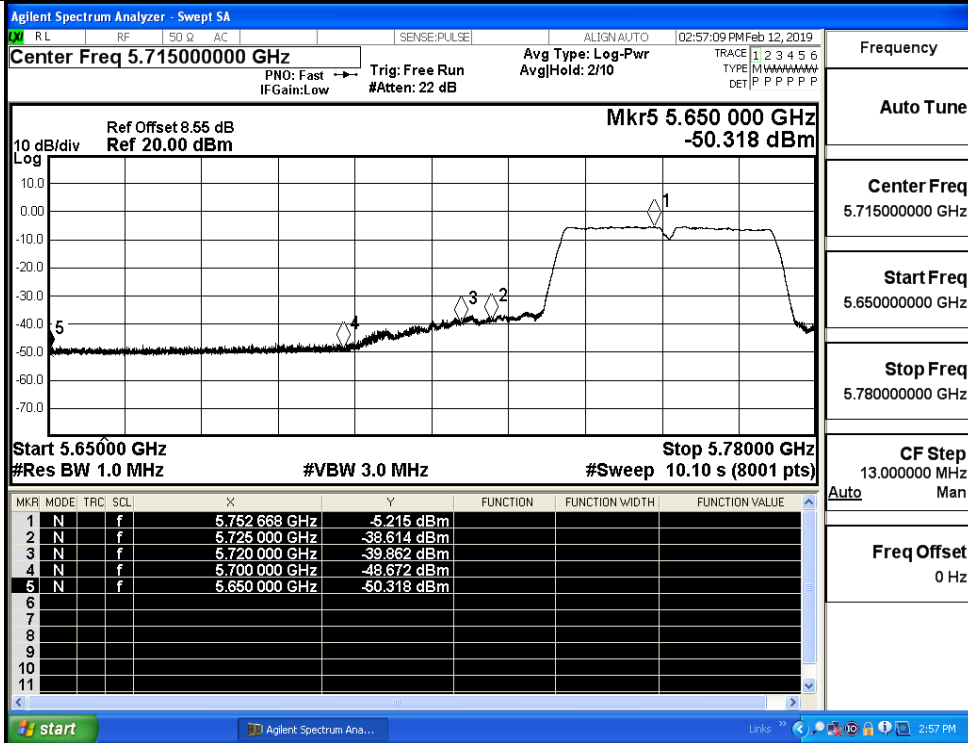
Antenna 1

Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm/MHz)	Detector	Limit (dBm/MHz)
11N40 SISO	151	5650.0	-50.181	2.00	-48.181	Peak	-27.0
		5700.0	-48.300	2.00	-46.300	Peak	10.0
		5720.0	-39.370	2.00	-37.370	Peak	15.6
		5725.0	-39.187	2.00	-37.187	Peak	27.0
	159	5850.0	-48.873	2.00	-46.873	Peak	27.0
		5855.0	-49.251	2.00	-47.251	Peak	15.6
		5875.0	-49.950	2.00	-47.950	Peak	10.0
		5925.0	-50.116	2.00	-48.116	Peak	-27.0

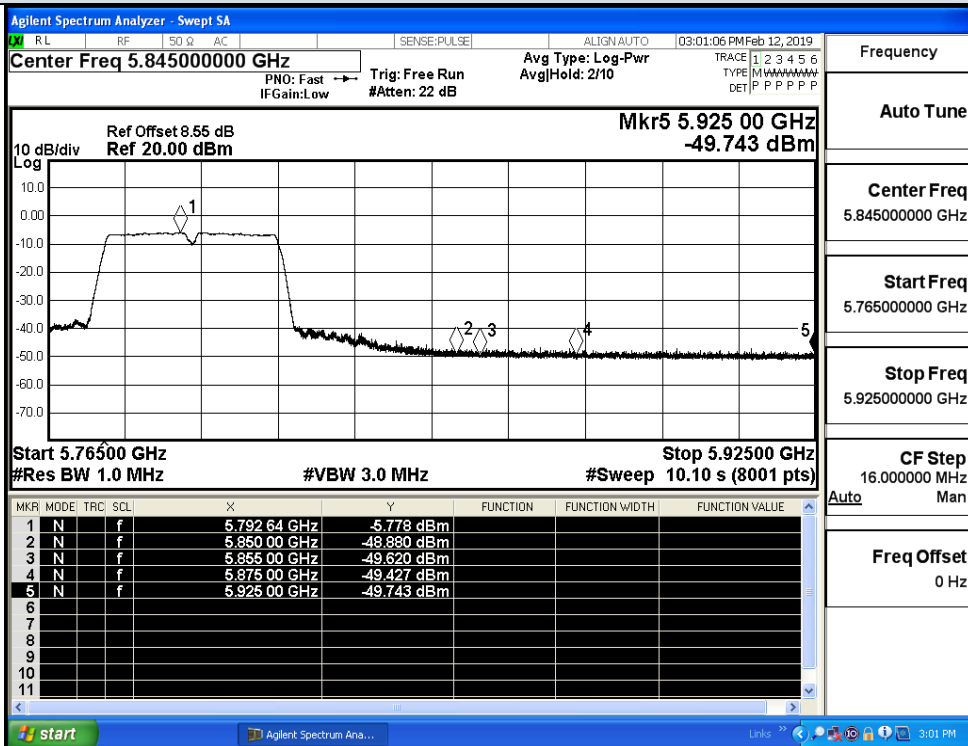
Antenna 0+Antenna 1

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	-50.318	-50.181	-47.239	5.01	-42.229	Peak	27.0
		5700.0	-48.672	-48.300	-45.472	5.01	-40.462	Peak	15.6
		5720.0	-39.862	-39.370	-36.599	5.01	-31.589	Peak	10.0
		5725.0	-38.614	-39.187	-35.881	5.01	-30.871	Peak	-27.0
	159	5850.0	-48.880	-48.873	-45.866	5.01	-40.856	Peak	-27.0
		5855.0	-49.620	-49.251	-46.421	5.01	-41.411	Peak	10.0
		5875.0	-49.427	-49.950	-46.670	5.01	-41.660	Peak	15.6
		5925.0	-49.743	-50.116	-46.915	5.01	-41.905	Peak	27.0

Undesirable Emissions Measurement

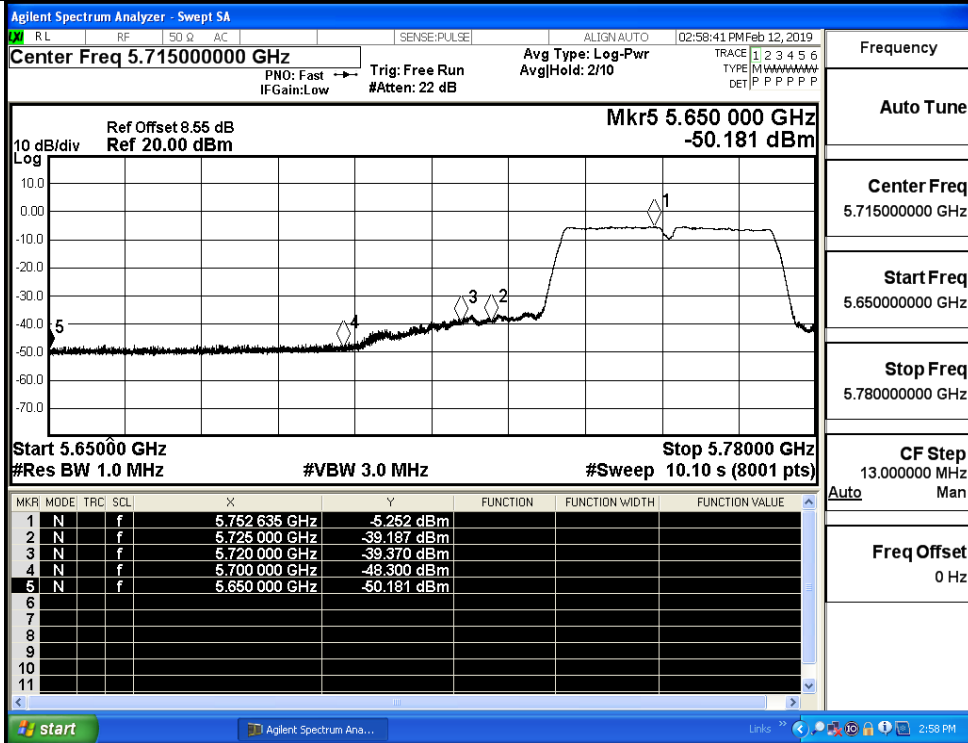


IEEE 802.11n HT40 / Channel 151 / 5755 MHz / Peak_Ant0

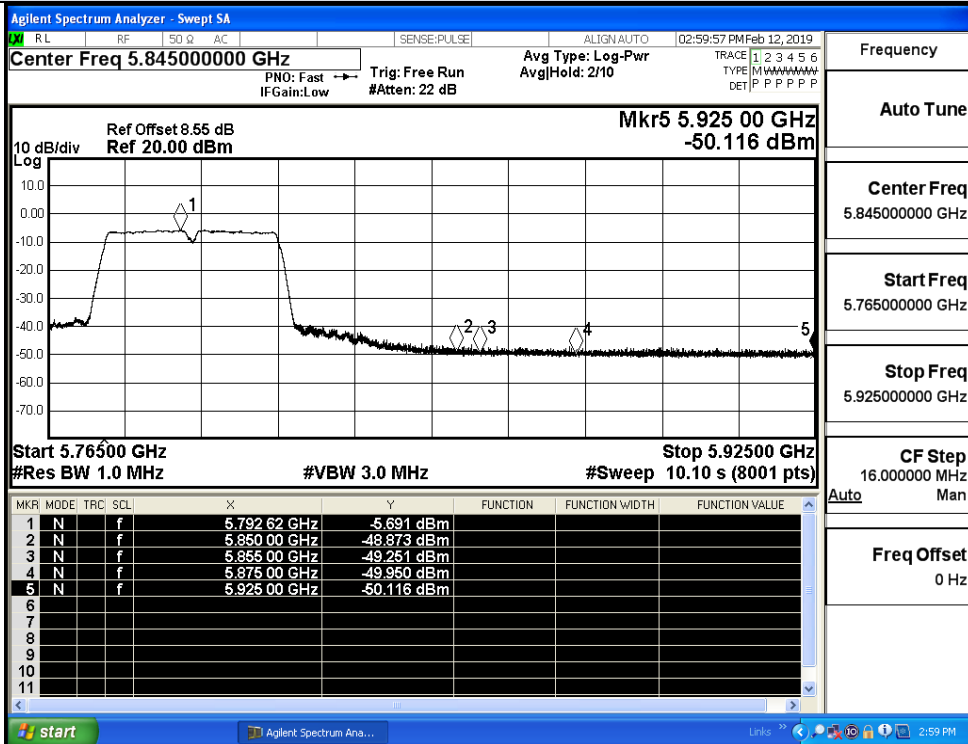


IEEE 802.11n HT40 / Channel 159 / 5795 MHz / Peak_Ant0

Undesirable Emissions Measurement



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



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