

Straddle channels TEST Plot for 802.11a/n_HT20/ac_VHT20_Ant 3





802.11ac_VHT20 UNII 2C Band PSD CH.144

802.11ac_VHT20 UNII 3 Band PSD CH.144 ter Freq 5.720000000 GHz Free #Avg Type: RMS Avg[Hold: 100/100 Fre #Avg Type: RMS Avg[Hold: 100/100 Center Freq 5.720000000 GHz Trig: Free Run Trig: Free Run Auto Tune Auto Tun Ref Offset 22.6 dB Ref 10.00 dBm Ref Offset 22.6 dB Ref 10.00 dBm -4.217 -7.147 Center Freq 5.720000000 GHz Center Free 5.72000000 GHz **•**¹ Start Freq 3854041 GHz Start Free 5.703854041 GH 5.70385 Stop Freq 5.736145959 GHz Stop Free 5.736145959 GH CF Step 3.229192 MH Ma CF Step 3.229192 MHz Man Freq Offse 0 H Freq Offse 0 H Span 32.29 MHz Sweep 1.000 ms (1001 pts) Span 32.29 MHz Sweep 1.000 ms (1001 pts) nter 5.72000 GHz es BW 1.0 MHz ter 5.72000 GHz s BW 510 kHz #VBW 3.0 MHz* #VBW 3.0 MHz*



Straddle channels

TEST RESULTS for 802.11a/n_HT20/ac_VHT20_Sum Data of Ant.0 and Ant.1 and Ant.2 and Ant.3 (UNII 2C)

Frequency (MHz)	Channel No.		Test Result				
		Mode	Measured Power	Limit	Pass/Fail		
			Density (dBm)	(dBm)			
5720	144	802.11a	2.56	4.50	Pass		
		802.11n	2.27	4.50	Pass		
		802.11ac	2.63	4.50	Pass		

Conducted Power Density Measurements (UNII 2C Band 5720MHz)

TEST RESULTS for 802.11a/n_HT20/ac_VHT20_Sum Data of Ant.0 and Ant.1 (UNII 3)

Frequency Channel (MHz) No.	Channol		Test Result						
	No	Mode	Measured Power	Limit	Pass/Fail				
	110.		Density (dBm)	(dBm)					
5720	144	802.11a	-0.37	23.50	Pass				
		802.11n	-0.61	23.50	Pass				
		802.11ac	-0.32	23.50	Pass				

Conducted Power Density Measurements (UNII 3 Band 5720MHz)



Straddle channels TEST RESULTS for 802.11n_HT40/ac_VHT40_Ant 0

Conducted Power Density Measurements (UNII 2C Band 5710MHz)

	Channel No.	Mode	Test Result						
Frequency (MHz)			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail		
					Factor				
5710	142	802.11n	-7.297	0.719	-6.578	10.52	Pass		
		802.11ac	-6.948	0.939	-6.009	10.52	Pass		

Conducted Power Density Measurements (UNII 3 Band 5710MHz)

	Channel No.	Mode	Test Result						
Frequency (MHz)			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail		
					Factor				
5710	142	802.11n	-10.061	0.719	-9.342	29.52	Pass		
		802.11ac	-9.922	0.939	-8.983	29.52	Pass		







Straddle channels TEST RESULTS for 802.11n_HT40/ac_VHT40_Ant 1

Conducted Power Density Measurements (UNII 2C Band 5710MHz)

	Channel No.	Mode	Test Result					
Frequency (MHz)			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail	
		802.11n	-7.411	0.719	-6.692	10.52	Pass	
5710	142	802.11ac	-7.366	0.939	-6.427	10.52	Pass	

Conducted Power Density Measurements (UNII 3 Band 5710MHz)

	Channel No.	Mode	Test Result					
Frequency (MHz)			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail	
					Factor			
5710	142	802.11n	-10.309	0.719	-9.590	29.52	Pass	
		802.11ac	-10.138	0.939	-9.199	29.52	Pass	







Straddle channels TEST RESULTS for 802.11n_HT40/ac_VHT40_Ant 2

Conducted Power Density Measurements (UNII 2C Band 5710MHz)

	Channel No.	Mode	Test Result						
Frequency (MHz)			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail		
					Factor				
5710	142	802.11n	-7.336	0.719	-6.617	10.52	Pass		
		802.11ac	-6.931	0.939	-5.992	10.52	Pass		

Conducted Power Density Measurements (UNII 3 Band 5710MHz)

	Channel No.	Mode	Test Result						
Frequency (MHz)			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail		
		802.11n	-10.125	0.719	-9.406	29.52	Pass		
5710	142	802.11ac	-9.979	0.939	-9.040	29.52	Pass		







Straddle channels TEST RESULTS for 802.11n_HT40/ac_VHT40_Ant 3

Conducted Power Density Measurements (UNII 2C Band 5710MHz)

	Channel No.	Mode	Test Result					
Frequency (MHz)			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail	
					Factor			
5710	140	802.11n	-7.489	0.719	-6.770	10.52	Pass	
	142	802.11ac	-7.478	0.835	-6.643	10.52	Pass	

Conducted Power Density Measurements (UNII 3 Band 5710MHz)

	Channel No.	Mode	Test Result					
Frequency (MHz)			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail	
					Factor			
5710	140	802.11n	-10.577	0.719	-9.858	29.52	Pass	
	142	802.11ac	-10.074	0.835	-9.239	29.52	Pass	







Straddle channels

TEST RESULTS for 802.11n_HT40/ac_VHT40_Sum Data of Ant.0 and Ant.1 and Ant.2 and Ant.3 (UNII 2C)

Conducted Power Density Measurements (UNII 2C Band 5710MHz) Test Result

Frequency Channel (MHz) No.	Channel		Test Result				
	Mode	Measured Power	Limit	Pass/Fail			
	110.		Density (dBm)	(dBm)			
5710	142	802.11n	-0.64	4.50	Pass		
		802.11ac	-0.24	4.50	Pass		

TEST RESULTS for 802.11n_HT40/ac_VHT40_Sum Data of Ant.0 and Ant.1 and Ant.2 and Ant.3 (UNII 3)

Frequency Channel (MHz) No.	Channel		Test Result			
	Mode	Measured Power	Limit	Pass/Fail		
			Density (dBm)	(dBm)		
5710 ⁻	142	802.11n	-3.53	23.50	Pass	
		802.11ac	-3.09	23.50	Pass	

Conducted Power Density Measurements (UNII 3 Band 5710MHz)



Conducted Power Density Measurements (UNII 2C Band 5690MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail	
			(aBm)		Factor			
5690	138	802.11ac	-10.080	1.362	-8.718	10.52	Pass	

Conducted Power Density Measurements (UNII 3 Band 5690MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail	
			. ,		Factor			
5690	138	802.11ac	-13.067	1.362	-11.705	29.52	Pass	





Conducted Power Density Measurements (UNII 2C Band 5690MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail	
					Factor			
5690	138	802.11ac	-10.668	1.427	-9.241	10.52	Pass	

Conducted Power Density Measurements (UNII 3 Band 5690MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail	
					Factor			
5690	138	802.11ac	-13.716	1.427	-12.289	29.52	Pass	





Conducted Power Density Measurements (UNII 2C Band 5690MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail	
			(abiii)		Factor			
5690	138	802.11ac	-10.170	1.427	-8.743	10.52	Pass	

Conducted Power Density Measurements (UNII 3 Band 5690MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail	
					Factor			
5690	138	802.11ac	-12.362	1.427	-10.935	29.52	Pass	





Conducted Power Density Measurements (UNII 2C Band 5690MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail	
			(abm)		Factor			
5690	138	802.11ac	-10.103	1.249	-8.854	10.52	Pass	

Conducted Power Density Measurements (UNII 3 Band 5690MHz)

			Test Result					
Frequency (MHz)	Channel No.	Mode	Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle	Limit (dBm)	Pass/Fail	
			, , , , , , , , , , , , , , , , , , ,		Factor			
5690	138	802.11ac	-12.828	1.249	-11.579	29.52	Pass	





Straddle channels

TEST RESULTS for 802.11n_HT40/ac_VHT40_Sum Data of Ant.0 and Ant.1 and Ant.2 and Ant.3 (UNII 2C)

Conducted Power Density Measurements (UNII 2C Band 5690MHz)

Frequency Channel	Channel		Test Result			
	Mode	Measured Power	Limit	Pass/Fail		
(11112)			Density (dBm)	(dBm)		
5690	138	802.11ac	-2.87	4.50	Pass	

TEST RESULTS for 802.11n_HT40/ac_VHT40_Sum Data of Ant.0 and Ant.1 and Ant.2 and Ant.3 (UNII 3)

Conducted Power Density Measurements (UNII 3 Band 5690MHz)

Frequency (MHz)	Channel		Test Result			
	No.	Mode	Measured Power	Limit	Pass/Fail	
			Density (dBm)	(dBm)		
5690	138	802.11ac	-5.59	23.50	Pass	

9.5 FREQUENCY STABILITY

The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between -30 $^{\circ}$ C and 50 $^{\circ}$ C. The temperature was incremented by 10 $^{\circ}$ C intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.

[Ant.0]

20 MHz BW

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,180,000,000 Hz
CHANNEL:	36
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5180024.50	24.5
100%		-30	5180028.59	28.59
100%		-20	5180032.08	32.08
100%		-10	5180035.76	35.76
100%	12.00	0	5180040.79	40.79
100%		+10	5180048.81	48.81
100%		+30	5180053.23	53.23
100%		+40	5180056.35	56.35
100%		+50	5180041.32	41.32
115%	13.80	+20	5180035.89	35.89
Batt. Endpoint	10.20	+20	5180036.21	36.21

Note:

OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,260,000,000 Hz
CHANNEL:	52
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°°)	(kHz)	Error (kHz)
100%		+20(Ref)	5260024.42	24.42
100%		-30	5260028.79	28.79
100%		-20	5260033.12	33.12
100%		-10	5260037.16	37.16
100%	12.00	0	5260041.69	41.69
100%		+10	5260050.02	50.02
100%		+30	5260053.51	53.51
100%		+40	5260057.41	57.41
100%		+50	5260040.96	40.96
115%	13.80	+20	5260038.14	38.14
Batt. Endpoint	10.20	+20	5260038.66	38.66



OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,500,000,000 Hz
CHANNEL:	100
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5500023.20	23.2
100%		-30	5500026.76	26.76
100%		-20	5500031.24	31.24
100%		-10	5500036.30	36.3
100%	12.00	0	5500040.02	40.02
100%		+10	5500049.13	49.13
100%		+30	5500053.11	53.11
100%		+40	5500057.67	57.67
100%		+50	5500039.94	39.94
115%	13.80	+20	5500035.37	35.37
Batt. Endpoint	10.20	+20	5500037.22	37.22



OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,745,000,000 Hz
CHANNEL:	149
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5745027.05	27.05
100%		-30	5745031.12	31.12
100%		-20	5745034.32	34.32
100%		-10	5745037.58	37.58
100%	12.00	0	5745041.24	41.24
100%		+10	5745048.92	48.92
100%		+30	5745053.19	53.19
100%		+40	5745056.90	56.9
100%		+50	5745041.74	41.74
115%	13.80	+20	5745038.24	38.24
Batt. Endpoint	10.20	+20	5745037.83	37.83



40 MHz BW

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,190,000,000 Hz
CHANNEL:	38
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5190023.57	23.57
100%		-30	5190027.98	27.98
100%		-20	5190031.38	31.38
100%		-10	5190036.38	36.38
100%	12	0	5190039.98	39.98
100%		+10	5190048.85	48.85
100%		+30	5190053.67	53.67
100%		+40	5190058.18	58.18
100%		+50	5190040.00	40
115%	13.8	+20	5190035.23	35.23
Batt. Endpoint	10.2	+20	5190036.88	36.88

Note:

OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,270,000,000 Hz
CHANNEL:	54
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°°)	(kHz)	Error (kHz)
100%		+20(Ref)	5270024.04	24.04
100%		-30	5270028.98	28.98
100%		-20	5270033.77	33.77
100%		-10	5270037.23	37.23
100%	12	0	5270041.75	41.75
100%		+10	5270048.24	48.24
100%		+30	5270051.70	51.7
100%		+40	5270055.34	55.34
100%		+50	5270041.54	41.54
115%	13.8	+20	5270037.01	37.01
Batt. Endpoint	10.2	+20	5270037.09	37.09



OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,510,000,000 Hz
CHANNEL:	102
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5510024.89	24.89
100%		-30	5510029.42	29.42
100%		-20	5510032.76	32.76
100%		-10	5510037.78	37.78
100%	12	0	5510041.15	41.15
100%		+10	5510050.20	50.2
100%		+30	5510052.71	52.71
100%		+40	5510057.41	57.41
100%		+50	5510041.29	41.29
115%	13.8	+20	5510035.60	35.60
Batt. Endpoint	10.2	+20	5510038.73	38.73



OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,755,000,000 Hz
CHANNEL:	151
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5755025.68	25.68
100%		-30	5755030.08	30.08
100%		-20	5755033.30	33.3
100%		-10	5755037.04	37.04
100%	12	0	5755041.38	41.38
100%		+10	5755049.80	49.8
100%		+30	5755054.12	54.12
100%		+40	5755058.51	58.51
100%		+50	5755041.26	41.26
115%	13.8	+20	5755038.10	38.1
Batt. Endpoint	10.2	+20	5755046.16	46.16



80 MHz BW

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,210,000,000 Hz
CHANNEL:	42
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°°)	(kHz)	Error (kHz)
100%		+20(Ref)	5210025.17	25.17
100%		-30	5210029.84	29.84
100%		-20	5210034.50	34.5
100%		-10	5210038.47	38.47
100%	12	0	5210041.81	41.81
100%		+10	5210049.77	49.77
100%		+30	5210054.66	54.66
100%		+40	5210059.02	59.02
100%		+50	5210041.03	41.03
115%	13.8	+20	5210039.27	39.27
Batt. Endpoint	10.2	+20	5210048.13	48.13

Note:



OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,290,000,000 Hz
CHANNEL:	58
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5290023.04	23.04
100%		-30	5290027.20	27.2
100%		-20	5290031.66	31.66
100%		-10	5290035.74	35.74
100%	12	0	5290040.49	40.49
100%		+10	5290048.15	48.15
100%		+30	5290052.82	52.82
100%		+40	5290057.34	57.34
100%		+50	5290040.92	40.92
115%	13.8	+20	5290034.81	34.81
Batt. Endpoint	10.2	+20	5290043.56	43.56



OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,530,000,000 Hz
CHANNEL:	106
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5530025.10	25.10
100%		-30	5530028.59	28.59
100%		-20	5530031.31	31.31
100%		-10	5530037.80	37.8
100%	12	0	5530041.66	41.66
100%		+10	5530049.90	49.9
100%		+30	5530052.36	52.36
100%		+40	5530026.90	26.9
100%		+50	5530041.33	41.33
115%	13.8	+20	5530038.32	38.32
Batt. Endpoint	10.2	+20	5530035.01	35.01



OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,775,000,000 Hz
CHANNEL:	155
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5775024.57	24.57
100%		-30	5775027.74	27.74
100%		-20	5775032.77	32.77
100%		-10	5775036.77	36.77
100%	12	0	5775039.94	39.94
100%		+10	5775048.32	48.32
100%		+30	5775053.04	53.04
100%		+40	5775056.73	56.73
100%		+50	5775041.00	41
115%	13.8	+20	5775036.09	36.09
Batt. Endpoint	10.2	+20	5775044.81	44.81



[Ant.1]

20 MHz BW

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,180,000,000 Hz
CHANNEL:	36
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5180022.97	22.97
100%		-30	5180026.40	26.4
100%		-20	5180031.47	31.47
100%		-10	5180036.51	36.51
100%	12.00	0	5180040.43	40.43
100%		+10	5180049.68	49.68
100%		+30	5180054.27	54.27
100%		+40	5180057.51	57.51
100%		+50	5180039.96	39.96
115%	13.80	+20	5180036.15	36.15
Batt. Endpoint	10.20	+20	5180034.95	34.95

Note:

OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,260,000,000 Hz
CHANNEL:	52
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°°)	(kHz)	Error (kHz)
100%		+20(Ref)	5260023.13	23.13
100%		-30	5260027.43	27.43
100%		-20	5260031.57	31.57
100%		-10	5260035.23	35.23
100%	12.00	0	5260040.30	40.3
100%		+10	5260049.62	49.62
100%		+30	5260054.36	54.36
100%		+40	5260059.26	59.26
100%		+50	5260041.34	41.34
115%	13.80	+20	5260036.19	36.19
Batt. Endpoint	10.20	+20	5260037.16	37.16



OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,500,000,000 Hz
CHANNEL:	100
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5500024.83	24.83
100%		-30	5500028.33	28.33
100%		-20	5500032.61	32.61
100%		-10	5500035.85	35.85
100%	12.00	0	5500040.24	40.24
100%		+10	5500049.08	49.08
100%		+30	5500052.72	52.72
100%		+40	5500057.14	57.14
100%		+50	5500041.76	41.76
115%	13.80	+20	5500036.69	36.69
Batt. Endpoint	10.20	+20	5500036.72	36.72



OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,745,000,000 Hz
CHANNEL:	149
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5745023.58	23.58
100%		-30	5745028.31	28.31
100%		-20	5745033.33	33.33
100%		-10	5745036.72	36.72
100%	12.00	0	5745040.66	40.66
100%		+10	5745048.41	48.41
100%		+30	5745053.50	53.5
100%		+40	5745057.88	57.88
100%		+50	5745041.61	41.61
115%	13.80	+20	5745036.74	36.74
Batt. Endpoint	10.20	+20	5745038.94	38.94



40 MHz BW

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,190,000,000 Hz
CHANNEL:	38
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5190026.70	26.7
100%		-30	5190030.48	30.48
100%		-20	5190033.92	33.92
100%		-10	5190037.56	37.56
100%	12	0	5190040.85	40.85
100%		+10	5190048.58	48.58
100%		+30	5190051.94	51.94
100%		+40	5190056.44	56.44
100%		+50	5190041.36	41.36
115%	13.8	+20	5190037.50	37.5
Batt. Endpoint	10.2	+20	5190044.50	44.5

Note:

OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,270,000,000 Hz
CHANNEL:	54
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5270025.24	25.24
100%		-30	5270028.38	28.38
100%		-20	5270031.96	31.96
100%		-10	5270036.48	36.48
100%	12	0	5270041.30	41.3
100%		+10	5270048.51	48.51
100%		+30	5270052.62	52.62
100%		+40	5270056.69	56.69
100%		+50	5270040.48	40.48
115%	13.8	+20	5270035.47	35.47
Batt. Endpoint	10.2	+20	5270044.10	44.1



OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,510,000,000 Hz
CHANNEL:	102
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5510024.49	24.49
100%		-30	5510028.51	28.51
100%		-20	5510032.36	32.36
100%		-10	5510035.65	35.65
100%	12	0	5510040.64	40.64
100%		+10	5510048.96	48.96
100%		+30	5510053.31	53.31
100%		+40	5510057.72	57.72
100%		+50	5510041.71	41.71
115%	13.8	+20	5510036.32	36.32
Batt. Endpoint	10.2	+20	5510043.96	43.96


OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,755,000,000 Hz
CHANNEL:	151
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5755023.47	23.47
100%		-30	5755027.06	27.06
100%		-20	5755031.29	31.29
100%		-10	5755036.20	36.2
100%	12	0	5755040.10	40.1
100%		+10	5755048.56	48.56
100%		+30	5755052.22	52.22
100%		+40	5755055.79	55.79
100%		+50	5755040.09	40.09
115%	13.8	+20	5755034.85	34.85
Batt. Endpoint	10.2	+20	5755043.42	43.42



80 MHz BW

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,210,000,000 Hz
CHANNEL:	42
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°°)	(kHz)	Error (kHz)
100%		+20(Ref)	5210024.91	24.91
100%		-30	5210028.46	28.46
100%		-20	5210032.14	32.14
100%		-10	5210036.52	36.52
100%	12	0	5210041.43	41.43
100%		+10	5210049.30	49.3
100%		+30	5210052.80	52.8
100%		+40	5210056.41	56.41
100%		+50	5210040.62	40.62
115%	13.8	+20	5210036.44	36.44
Batt. Endpoint	10.2	+20	5210044.32	44.32

Note:



OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,290,000,000 Hz
CHANNEL:	58
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°°)	(kHz)	Error (kHz)
100%		+20(Ref)	5290024.80	24.8
100%		-30	5290029.87	29.87
100%		-20	5290033.36	33.36
100%		-10	5290036.77	36.77
100%	12	0	5290041.14	41.14
100%		+10	5290049.53	49.53
100%		+30	5290053.17	53.17
100%		+40	5290057.51	57.51
100%		+50	5290041.59	41.59
115%	13.8	+20	5290037.89	37.89
Batt. Endpoint	10.2	+20	5290044.94	44.94



OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,530,000,000 Hz
CHANNEL:	106
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5530025.35	25.35
100%		-30	5530029.28	29.28
100%		-20	5530033.01	33.01
100%		-10	5530037.78	37.78
100%	12	0	5530041.42	41.42
100%		+10	5530048.13	48.13
100%		+30	5530052.73	52.73
100%		+40	5530056.74	56.74
100%		+50	5530040.23	40.23
115%	13.8	+20	5530036.14	36.14
Batt. Endpoint	10.2	+20	5530045.51	45.51



OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,775,000,000 Hz
CHANNEL:	155
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5775025.45	25.45
100%		-30	5775029.30	29.3
100%		-20	5775033.52	33.52
100%		-10	5775038.28	38.28
100%	12	0	5775041.58	41.58
100%		+10	5775048.26	48.26
100%		+30	5775053.12	53.12
100%		+40	5775056.86	56.86
100%		+50	5775040.24	40.24
115%	13.8	+20	5775036.78	36.78
Batt. Endpoint	10.2	+20	5775046.40	46.4



[Ant.2]

20 MHz BW

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,180,000,000 Hz
CHANNEL:	36
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5180025.45	25.45
100%		-30	5180030.34	30.34
100%		-20	5180033.50	33.5
100%		-10	5180036.63	36.63
100%	12.00	0	5180041.43	41.43
100%		+10	5180049.01	49.01
100%		+30	5180054.05	54.05
100%		+40	5180058.07	58.07
100%		+50	5180041.87	41.87
115%	13.80	+20	5180037.51	37.51
Batt. Endpoint	10.20	+20	5180037.17	37.17

Note:

OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,260,000,000 Hz
CHANNEL:	52
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5260023.01	23.01
100%		-30	5260027.61	27.61
100%		-20	5260031.31	31.31
100%		-10	5260035.45	35.45
100%	12.00	0	5260040.39	40.39
100%		+10	5260048.59	48.59
100%		+30	5260052.98	52.98
100%		+40	5260056.20	56.2
100%		+50	5260040.86	40.86
115%	13.80	+20	5260034.90	34.9
Batt. Endpoint	10.20	+20	5260036.72	36.72



OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,500,000,000 Hz
CHANNEL:	100
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°°)	(kHz)	Error (kHz)
100%		+20(Ref)	5500025.92	25.92
100%		-30	5500029.12	29.12
100%		-20	5500032.76	32.76
100%		-10	5500037.34	37.34
100%	12.00	0	5500041.18	41.18
100%		+10	5500048.52	48.52
100%		+30	5500053.14	53.14
100%		+40	5500057.46	57.46
100%		+50	5500040.42	40.42
115%	13.80	+20	5500036.28	36.28
Batt. Endpoint	10.20	+20	5500036.45	36.45



OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,745,000,000 Hz
CHANNEL:	149
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5745023.73	23.73
100%		-30	5745028.48	28.48
100%		-20	5745031.86	31.86
100%		-10	5745036.26	36.26
100%	12.00	0	5745040.34	40.34
100%		+10	5745048.86	48.86
100%		+30	5745053.34	53.34
100%		+40	5745057.55	57.55
100%		+50	5745040.60	40.6
115%	13.80	+20	5745035.72	35.72
Batt. Endpoint	10.20	+20	5745035.61	35.61



40 MHz BW

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,190,000,000 Hz
CHANNEL:	38
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5190024.78	24.78
100%		-30	5190029.42	29.42
100%		-20	5190033.77	33.77
100%		-10	5190038.33	38.33
100%	12	0	5190041.47	41.47
100%		+10	5190048.94	48.94
100%		+30	5190052.32	52.32
100%		+40	5190056.37	56.37
100%		+50	5190040.44	40.44
115%	13.8	+20	5190037.71	37.71
Batt. Endpoint	10.2	+20	5190045.65	45.65

Note:

OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,270,000,000 Hz
CHANNEL:	54
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°°)	(kHz)	Error (kHz)
100%		+20(Ref)	5270026.38	26.38
100%		-30	5270030.33	30.33
100%		-20	5270033.65	33.65
100%		-10	5270037.78	37.78
100%	12	0	5270041.58	41.58
100%		+10	5270049.00	49
100%		+30	5270053.83	53.83
100%		+40	5270056.97	56.97
100%		+50	5270040.87	40.87
115%	13.8	+20	5270037.65	37.65
Batt. Endpoint	10.2	+20	5270046.61	46.61



OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,510,000,000 Hz
CHANNEL:	102
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5510025.61	25.61
100%		-30	5510029.52	29.52
100%		-20	5510032.90	32.9
100%		-10	5510036.07	36.07
100%	12	0	5510040.58	40.58
100%		+10	5510048.30	48.3
100%		+30	5510053.33	53.33
100%		+40	5510056.51	56.51
100%		+50	5510041.83	41.83
115%	13.8	+20	5510036.20	36.2
Batt. Endpoint	10.2	+20	5510044.40	44.4



OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,755,000,000 Hz
CHANNEL:	151
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5755024.28	24.28
100%		-30	5755028.99	28.99
100%		-20	5755032.72	32.72
100%		-10	5755036.67	36.67
100%	12	0	5755039.97	39.97
100%		+10	5755049.43	49.43
100%		+30	5755053.72	53.72
100%		+40	5755057.82	57.82
100%		+50	5755041.05	41.05
115%	13.8	+20	5755037.15	37.15
Batt. Endpoint	10.2	+20	5755045.39	45.39



80 MHz BW

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,210,000,000 Hz
CHANNEL:	42
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5210022.48	22.48
100%		-30	5210026.76	26.76
100%		-20	5210031.45	31.45
100%		-10	5210036.38	36.38
100%	12	0	5210041.33	41.33
100%		+10	5210049.52	49.52
100%		+30	5210054.37	54.37
100%		+40	5210057.63	57.63
100%		+50	5210040.07	40.07
115%	13.8	+20	5210035.97	35.97
Batt. Endpoint	10.2	+20	5210045.75	45.75

Note:



OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,290,000,000 Hz
CHANNEL:	58
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5290024.85	24.85
100%		-30	5290028.83	28.83
100%		-20	5290032.45	32.45
100%		-10	5290037.03	37.03
100%	12	0	5290041.06	41.06
100%		+10	5290048.90	48.9
100%		+30	5290053.08	53.08
100%		+40	5290057.10	57.1
100%		+50	5290040.42	40.42
115%	13.8	+20	5290036.35	36.35
Batt. Endpoint	10.2	+20	5290045.11	45.11



OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,530,000,000 Hz
CHANNEL:	106
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5530023.18	23.18
100%		-30	5530028.01	28.01
100%		-20	5530032.99	32.99
100%		-10	5530036.60	36.6
100%	12	0	5530040.11	40.11
100%		+10	5530048.49	48.49
100%		+30	5530051.64	51.64
100%		+40	5530056.16	56.16
100%		+50	5530041.39	41.39
115%	13.8	+20	5530036.48	36.48
Batt. Endpoint	10.2	+20	5530043.24	43.24



OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,775,000,000 Hz
CHANNEL:	155
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5775027.42	27.42
100%		-30	5775030.53	30.53
100%		-20	5775034.23	34.23
100%		-10	5775037.61	37.61
100%	12	0	5775040.86	40.86
100%		+10	5775049.44	49.44
100%		+30	5775054.09	54.09
100%		+40	5775057.83	57.83
100%		+50	5775041.62	41.62
115%	13.8	+20	5775038.67	38.67
Batt. Endpoint	10.2	+20	5775046.70	46.7



[Ant.3]

20 MHz BW

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,180,000,000 Hz
CHANNEL:	36
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5180025.42	25.42
100%		-30	5180030.09	30.09
100%		-20	5180033.43	33.43
100%		-10	5180036.94	36.94
100%	12.00	0	5180041.02	41.02
100%		+10	5180049.89	49.89
100%		+30	5180053.32	53.32
100%		+40	5180056.72	56.72
100%		+50	5180041.49	41.49
115%	13.80	+20	5180038.32	38.32
Batt. Endpoint	10.20	+20	5180037.90	37.9

Note:

OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,260,000,000 Hz
CHANNEL:	52
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°°)	(kHz)	Error (kHz)
100%		+20(Ref)	5260025.51	25.51
100%		-30	5260029.92	29.92
100%		-20	5260033.11	33.11
100%		-10	5260037.84	37.84
100%	12.00	0	5260041.79	41.79
100%		+10	5260049.26	49.26
100%		+30	5260053.39	53.39
100%		+40	5260056.73	56.73
100%		+50	5260040.27	40.27
115%	13.80	+20	5260037.37	37.37
Batt. Endpoint	10.20	+20	5260035.40	35.4



OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,500,000,000 Hz
CHANNEL:	100
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5500025.48	25.48
100%		-30	5500030.35	30.35
100%		-20	5500033.88	33.88
100%		-10	5500038.02	38.02
100%	12.00	0	5500041.44	41.44
100%		+10	5500049.01	49.01
100%		+30	5500052.25	52.25
100%		+40	5500057.27	57.27
100%		+50	5500040.86	40.86
115%	13.80	+20	5500037.89	37.89
Batt. Endpoint	10.20	+20	5500036.18	36.18



OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,745,000,000 Hz
CHANNEL:	149
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5745023.48	23.48
100%		-30	5745028.15	28.15
100%		-20	5745031.69	31.69
100%		-10	5745036.10	36.1
100%	12.00	0	5745040.45	40.45
100%		+10	5745048.48	48.48
100%		+30	5745053.51	53.51
100%		+40	5745056.70	56.7
100%		+50	5745040.59	40.59
115%	13.80	+20	5745035.17	35.17
Batt. Endpoint	10.20	+20	5745038.24	38.24



40 MHz BW

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,190,000,000 Hz
CHANNEL:	38
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5190026.31	26.31
100%		-30	5190029.77	29.77
100%		-20	5190034.15	34.15
100%		-10	5190037.35	37.35
100%	12	0	5190041.68	41.68
100%		+10	5190049.61	49.61
100%		+30	5190052.86	52.86
100%		+40	5190057.17	57.17
100%		+50	5190041.80	41.8
115%	13.8	+20	5190038.76	38.76
Batt. Endpoint	10.2	+20	5190045.21	45.21

Note:

OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,270,000,000 Hz
CHANNEL:	54
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5270022.88	22.88
100%		-30	5270027.27	27.27
100%		-20	5270031.18	31.18
100%		-10	5270036.24	36.24
100%	12	0	5270040.60	40.6
100%		+10	5270049.87	49.87
100%		+30	5270054.87	54.87
100%		+40	5270058.69	58.69
100%		+50	5270039.94	39.94
115%	13.8	+20	5270036.05	36.05
Batt. Endpoint	10.2	+20	5270046.11	46.11



OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,510,000,000 Hz
CHANNEL:	102
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°°)	(kHz)	Error (kHz)
100%		+20(Ref)	5510024.58	24.58
100%		-30	5510029.43	29.43
100%		-20	5510033.19	33.19
100%		-10	5510036.62	36.62
100%	12	0	5510041.07	41.07
100%		+10	5510049.40	49.4
100%		+30	5510052.59	52.59
100%		+40	5510057.34	57.34
100%		+50	5510041.57	41.57
115%	13.8	+20	5510037.59	37.59
Batt. Endpoint	10.2	+20	5510044.21	44.21



OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,755,000,000 Hz
CHANNEL:	151
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5755026.46	26.46
100%		-30	5755031.00	31
100%		-20	5755034.20	34.2
100%		-10	5755038.52	38.52
100%	12	0	5755041.82	41.82
100%		+10	5755049.08	49.08
100%		+30	5755053.82	53.82
100%		+40	5755058.42	58.42
100%		+50	5755040.68	40.68
115%	13.8	+20	5755038.28	38.28
Batt. Endpoint	10.2	+20	5755047.34	47.34



80 MHz BW

OPERATING BAND:	UNII Band 1
OPERATING FREQUENCY:	5,210,000,000 Hz
CHANNEL:	42
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5210025.82	25.82
100%		-30	5210030.48	30.48
100%		-20	5210033.60	33.6
100%		-10	5210038.23	38.23
100%	12	0	5210041.79	41.79
100%		+10	5210049.71	49.71
100%		+30	5210053.09	53.09
100%		+40	5210056.48	56.48
100%		+50	5210040.37	40.37
115%	13.8	+20	5210038.31	38.31
Batt. Endpoint	10.2	+20	5210046.32	46.32

Note:



OPERATING BAND:	UNII Band 2A
OPERATING FREQUENCY:	5,290,000,000 Hz
CHANNEL:	58
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5290024.72	24.72
100%		-30	5290028.03	28.03
100%		-20	5290032.64	32.64
100%		-10	5290036.96	36.96
100%	12	0	5290040.76	40.76
100%		+10	5290048.18	48.18
100%		+30	5290051.32	51.32
100%		+40	5290054.76	54.76
100%		+50	5290040.68	40.68
115%	13.8	+20	5290035.82	35.82
Batt. Endpoint	10.2	+20	5290043.28	43.28



OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,530,000,000 Hz
CHANNEL:	106
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5530023.74	23.74
100%		-30	5530028.34	28.34
100%		-20	5530033.30	33.3
100%		-10	5530036.71	36.71
100%	12	0	5530041.76	41.76
100%		+10	5530048.86	48.86
100%		+30	5530052.70	52.7
100%		+40	5530055.85	55.85
100%		+50	5530041.59	41.59
115%	13.8	+20	5530037.16	37.16
Batt. Endpoint	10.2	+20	5530044.41	44.41



OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,775,000,000 Hz
CHANNEL:	155
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5775024.95	24.95
100%		-30	5775028.13	28.13
100%		-20	5775033.20	33.2
100%		-10	5775037.14	37.14
100%	12	0	5775041.89	41.89
100%		+10	5775049.89	49.89
100%		+30	5775053.92	53.92
100%		+40	5775057.33	57.33
100%		+50	5775041.06	41.06
115%	13.8	+20	5775038.09	38.09
Batt. Endpoint	10.2	+20	5775046.06	46.06



[Ant.0, 2]

160 MHz BW

OPERATING FREQUENCY:	5,250,000,000 Hz
CHANNEL:	50
REFERENCE VOLTAGE:	12 VDC

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°°)	(kHz)	Error (kHz)
100%		+20(Ref)	5250024.48	24.48
100%		-30	5250028.26	28.26
100%		-20	5250032.69	32.69
100%		-10	5250036.30	36.3
100%	12	0	5250040.09	40.09
100%		+10	5250049.46	49.46
100%		+30	5250053.18	53.18
100%		+40	5250057.52	57.52
100%		+50	5250041.39	41.39
115%	13.8	+20	5250037.15	37.15
Batt. Endpoint	10.2	+20	5250044.48	44.48

Note:

OPERATING FREQUENCY:	5,570,000,000 Hz	
CHANNEL:	114	
REFERENCE VOLTAGE:	12 VDC	

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°C)	(kHz)	Error (kHz)
100%		+20(Ref)	5570023.11	23.11
100%		-30	5570026.98	26.98
100%		-20	5570031.41	31.41
100%		-10	5570036.29	36.29
100%	12	0	5570041.03	41.03
100%		+10	5570049.33	49.33
100%		+30	5570053.30	53.3
100%		+40	5570058.28	58.28
100%		+50	5570040.12	40.12
115%	13.8	+20	5570035.74	35.74
Batt. Endpoint	10.2	+20	5570044.59	44.59



[Ant.1, 3]

160 MHz BW

OPERATING FREQUENCY:	5,250,000,000 Hz	
CHANNEL:	50	
REFERENCE VOLTAGE:	12 VDC	

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(Ĵ)	(kHz)	Error (kHz)
100%		+20(Ref)	5250024.87	24.87
100%		-30	5250029.12	29.12
100%		-20	5250033.49	33.49
100%		-10	5250036.79	36.79
100%	12	0	5250040.81	40.81
100%		+10	5250048.88	48.88
100%		+30	5250052.59	52.59
100%		+40	5250057.05	57.05
100%		+50	5250041.70	41.7
115%	13.8	+20	5250037.37	37.37
Batt. Endpoint	10.2	+20	5250044.38	44.38

Note:

5,570,000,000 Hz	
114	
12 VDC	

Voltage	Power	Temp.	Frequency	Frequency
	(VDC)	(°°)	(kHz)	Error (kHz)
100%		+20(Ref)	5570023.46	23.46
100%		-30	5570027.03	27.03
100%		-20	5570030.20	30.2
100%		-10	5570035.22	35.22
100%	12	0	5570040.25	40.25
100%		+10	5570049.82	49.82
100%		+30	5570053.15	53.15
100%		+40	5570057.26	57.26
100%		+50	5570039.98	39.98
115%	13.8	+20	5570035.02	35.02
Batt. Endpoint	10.2	+20	5570043.37	43.37

9.6 RADIATED MEASUREMENT 9.6.1 RADIATED SPURIOUS EMISSIONS.

Test Requirements and limit, §15.205, §15.209, §15.407

Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)	
0.009 – 0.490	2400/F(kHz)	300	
0.490 – 1.705	24000/F(kHz)	30	
1.705 – 30	30	30	
30-88	100	3	
88-216	150	3	
216-960	200	3	
Above 960	500	3	

§15.407, KDB 789033 D02

All harmonics that do not lie in a restricted band are subject to a peak limit of -27 dBm/MHz. At a distance of 3 meters the field strength limit in dB μ V/m can be determined by adding a "conversion" factor of 95.2 dB to the EIRP limit of -27 dBm/MHz to obtain the limit for out of band spurious emissions of 68.2 dB μ V/m. Espectally, for transmitter operating in the 5725 Mhz – 5850 MHz : all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequency 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.



Test Configuration

Below 30 MHz



30 MHz - 1 GHz





Above 1 GHz



TEST PROCEDURE USED

ANSI C63.10:2013 Method G)5) in KDB 789033 D02 v02r01 (Peak) Method G)6)d) in KDB 789033 D02 v02r01 (Average)

. Spectrum setting:

- Peak.
- 1. RBW = 1 MHz
- 2. VBW \geq 3 MHz
- 3. Detector = Peak
- 4. Sweep Time = auto
- 5. Trace mode = max hold
- 6. Allow sweeps to continue until the trace stabilizes.
- 7. Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately 1/x, where x is the duty cycle.
- Average (Method VB : Averaging using reduced video bandwidth)
- 1. RBW = 1 MHz
- 2. VBW
 - 2.1. If the EUT is configured to transmit with duty cycle ≥ 98 percent, set VBW ≤ RBW/100(i.e., 10 kHz) but not less than 10 Hz.
 - 2.2. If the EUT duty cycle is < 98 percent, set VBW ≥ 1/T, where T is the minimum transmission duration.
- 3. The analyzer is set to linear detector mode.
- 4. Detector = Peak.
- 5. Sweep time = auto.
- 6. Trace mode = max hold.
- 7. Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 percent duty cycle. For lower duty cycles, increase the minimym number of traces by a factor of 1/x, where x is the duty cycle.

Note :

- 1. We used the Method VB for 802.11a/n_HT20, n_HT40, ac_VHT20, 40, 80, 160 mode to perform the average filed strength measurements.
- 2. The actual setting value of VBW for 802.11a/n_HT20, n_HT40, ac_VHT20, 40, 80, 160

3. According to SVSWR requirement in ANSI 63.4-2014, We performed the radiated test at 3.75 m distance from center of turn table. So, we applied the distance factor(reference distance : 3 m).

Mode	Worst Data rate (Mbps)	T _{on} (ms)	T _{total} (ms)	Duty Cycle (%)	VBW(1/T) (Hz)	The actual setting value of VBW (Hz)
а	6	2.064	2.171	95.062	485	1000
n_HT20	MCS 0	1.919	2.017	95.161	521	1000
ac_VHT20	MCS 0	1.928	1.956	98.545	519	1000
n_HT40	MCS 0	0.943	1.043	90.434	1061	3000
ac_VHT40	MCS 0	0.952	0.981	97.044	1050	3000
ac_VHT80	MCS 0	0.460	0.488	94.262	2174	3000
ac_VHT160	MCS 0	0.252	0.280	89.881	3970	10000



TEST RESULTS

9 kHz – 30MHz

Operation Mode: Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBμN	dB /m	dB	(H/V)	dBµN/m	dBµN/m	dB
No Critical peaks found							

Notes:

- 1. Measuring frequencies from 9 kHz to the 30MHz.
- 2. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
- 3. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- 4. Limit line = specific Limits (dBuV) + Distance extrapolation factor
- 5. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 6. The test results for below 30 MHz is correlated to an open site.

The result on OATS is about 2 dB higher than semi-anechoic chamber (10 m chamber)



TEST RESULTS

Below 1 GHz

Operation Mode: Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dΒμN	dB /m	dB	(H/V)	dBµN/m	dBµN/m	dB
No Critical peaks found							

Notes:

- 1. Measuring frequencies from 30 MHz to the 1 GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.

3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.



Above 1 GHz

[MIMO]	
Band :	UNII 1
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5180 MHz
Channel No.	36 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10360	57.62	4.47	V	62.09	68.20	6.11	PK
15540	48.39	1.80	V	50.19	73.98	23.79	PK
15540	34.96	1.80	V	36.76	53.98	17.22	AV
10360	56.74	4.47	Н	61.21	68.20	6.99	PK
15540	47.81	1.80	Н	49.61	73.98	24.37	PK
15540	33.82	1.80	Н	35.62	53.98	18.36	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 1
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5200 MHz
Channel No.	40 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10400	56.59	3.22	V	59.81	68.20	8.39	PK
15600	48.49	1.06	V	49.55	73.98	24.43	PK
15600	35.25	1.06	V	36.31	53.98	17.67	AV
10400	55.72	3.22	Н	58.94	68.20	9.26	PK
15600	47.20	1.06	Н	48.26	73.98	25.72	PK
15600	35.79	1.06	Н	36.85	53.98	17.13	AV

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.



Band :	UNII 1
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5240 MHz
Channel No.	48 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10480	58.00	3.53	V	61.53	68.20	6.67	PK
15720	48.54	1.54	V	50.08	73.98	23.90	PK
15720	34.95	1.54	V	36.49	53.98	17.49	AV
10480	57.62	3.53	Н	61.15	68.20	7.05	PK
15720	48.09	1.54	Н	49.63	73.98	24.35	PK
15720	33.94	1.54	Н	35.48	53.98	18.50	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 1
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5180 MHz
Channel No.	36 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10360	57.36	4.47	V	61.83	68.20	6.37	PK
15540	48.47	1.80	V	50.27	73.98	23.71	PK
15540	34.82	1.80	V	36.62	53.98	17.36	AV
10360	56.87	4.47	Н	61.34	68.20	6.86	PK
15540	47.76	1.80	Н	49.56	73.98	24.42	PK
15540	34.33	1.80	Н	36.13	53.98	17.85	AV

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.



FCC ID : WQTAR4520

Band :	UNII 1
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5200 MHz
Channel No.	40 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10400	56.17	3.22	V	59.39	68.20	8.81	PK
15600	48.11	1.06	V	49.17	73.98	24.81	PK
15600	35.13	1.06	V	36.19	53.98	17.79	AV
10400	55.79	3.22	Н	59.01	68.20	9.19	PK
15600	47.82	1.06	Н	48.88	73.98	25.10	PK
15600	34.29	1.06	Н	35.35	53.98	18.63	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 1
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5240 MHz
Channel No.	48 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10480	56.17	3.53	V	59.70	68.20	8.50	PK
15720	48.36	1.54	V	49.90	73.98	24.08	PK
15720	34.97	1.54	V	36.51	53.98	17.47	AV
10480	55.37	3.53	Н	58.90	68.20	9.30	PK
15720	47.58	1.54	Н	49.12	73.98	24.86	PK
15720	34.09	1.54	Н	35.63	53.98	18.35	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 1
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5180 MHz
Channel No.	36 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10360	57.35	4.47	V	61.82	68.20	6.38	PK
15540	48.23	1.80	V	50.03	73.98	23.95	PK
15540	35.08	1.80	V	36.88	53.98	17.10	AV
10360	56.90	4.47	Н	61.37	68.20	6.83	PK
15540	47.55	1.80	Н	49.35	73.98	24.63	PK
15540	34.81	1.80	Н	36.61	53.98	17.37	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 1
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5200 MHz
Channel No.	40 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10400	56.25	3.22	V	59.47	68.20	8.73	PK
15600	48.17	1.06	V	49.23	73.98	24.75	PK
15600	35.14	1.06	V	36.20	53.98	17.78	AV
10400	55.89	3.22	Н	59.11	68.20	9.09	PK
15600	47.37	1.06	Н	48.43	73.98	25.55	PK
15600	34.79	1.06	Н	35.85	53.98	18.13	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 1
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5240 MHz
Channel No.	48 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10480	56.05	3.53	V	59.58	68.20	8.62	PK
15720	48.29	1.54	V	49.83	73.98	24.15	PK
15720	34.83	1.54	V	36.37	53.98	17.61	AV
10480	55.78	3.53	Н	59.31	68.20	8.89	PK
15720	47.64	1.54	Н	49.18	73.98	24.80	PK
15720	33.91	1.54	Н	35.45	53.98	18.53	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 1
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5190 MHz
Channel No.	38 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10380	56.51	2.88	V	59.39	68.20	8.81	PK
15570	47.50	1.57	V	49.07	73.98	24.91	PK
15570	34.32	1.57	V	35.89	53.98	18.09	AV
10380	55.84	2.88	Н	58.72	68.20	9.48	PK
15570	46.81	1.57	Н	48.38	73.98	25.60	PK
15570	33.79	1.57	Н	35.36	53.98	18.62	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 1
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5230 MHz
Channel No.	46 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10460	55.59	3.56	V	59.15	68.20	9.05	PK
15690	47.87	1.38	V	49.25	73.98	24.73	PK
15690	34.49	1.38	V	35.87	53.98	18.11	AV
10460	54.37	3.56	Н	57.93	68.20	10.27	PK
15690	46.81	1.38	Н	48.19	73.98	25.79	PK
15690	33.89	1.38	Н	35.27	53.98	18.71	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 1
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5190 MHz
Channel No.	38 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10380	56.01	2.88	V	58.89	68.20	9.31	PK
15570	47.83	1.57	V	49.40	73.98	24.58	PK
15570	34.37	1.57	V	35.94	53.98	18.04	AV
10380	55.48	2.88	Н	58.36	68.20	9.84	PK
15570	46.85	1.57	Н	48.42	73.98	25.56	PK
15570	33.86	1.57	Н	35.43	53.98	18.55	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 1
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5230 MHz
Channel No.	46 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10460	55.54	3.56	V	59.10	68.20	9.10	PK
15690	47.70	1.38	V	49.08	73.98	24.90	PK
15690	34.73	1.38	V	36.11	53.98	17.87	AV
10460	54.19	3.56	Н	57.75	68.20	10.45	PK
15690	46.89	1.38	Н	48.27	73.98	25.71	PK
15690	33.76	1.38	Н	35.14	53.98	18.84	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 1
Operation Mode:	802.11ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5210 MHz
Channel No.	42 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10420	52.21	2.64	V	54.85	68.20	13.35	PK
15630	48.51	1.84	V	50.35	73.98	23.63	PK
15630	35.16	1.84	V	37.00	53.98	16.98	AV
10420	51.79	2.64	Н	54.43	68.20	13.77	PK
15630	47.84	1.84	Н	49.68	73.98	24.30	PK
15630	34.75	1.84	Н	36.59	53.98	17.39	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Report No.: HCT-RF-1805-FC028-R1	

Band :	UNII 2A
Operation Mode:	802.11 a
Transfer MCS Index:	6 Mbps
Operating Frequency	5260 MHz
Channel No.	52 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10520	59.47	2.35	V	61.82	68.20	6.38	PK
15780	48.26	2.07	V	50.33	73.98	23.65	PK
15780	35.15	2.07	V	37.22	53.98	16.76	AV
10520	58.16	2.35	Н	60.51	68.20	7.69	PK
15780	47.24	2.07	Н	49.31	73.98	24.67	PK
15780	34.55	2.07	Н	36.62	53.98	17.36	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2A
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5300 MHz
Channel No.	60 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10600	58.73	3.16	V	61.89	73.98	12.09	PK
10600	42.32	3.16	V	45.48	53.98	8.50	AV
15900	47.85	1.23	V	49.08	73.98	24.90	PK
15900	35.02	1.23	V	36.25	53.98	17.73	AV
10600	57.46	3.16	Н	60.62	73.98	13.36	PK
10600	41.88	3.16	Н	45.04	53.98	8.94	AV
15900	46.81	1.23	Н	48.04	73.98	25.94	PK
15900	34.29	1.23	Н	35.52	53.98	18.46	AV

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.



Band :	UNII 2A
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5320 MHz
Channel No.	64 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10640	58.85	3.07	V	61.92	73.98	12.06	PK
10640	42.89	3.07	V	45.96	53.98	8.02	AV
15960	48.26	2.06	V	50.32	73.98	23.66	PK
15960	34.87	2.06	V	36.93	53.98	17.05	AV
10640	57.81	3.07	Н	60.88	73.98	13.10	PK
10640	41.97	3.07	Н	45.04	53.98	8.94	AV
15960	47.74	2.06	Н	49.80	73.98	24.18	PK
15960	33.45	2.06	Н	35.51	53.98	18.47	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2A
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5260 MHz
Channel No.	52 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10520	58.34	2.35	V	60.69	68.20	7.51	PK
15780	48.78	2.07	V	50.85	73.98	23.13	PK
15780	34.98	2.07	V	37.05	53.98	16.93	AV
10520	57.56	2.35	Н	59.91	68.20	8.29	PK
15780	47.67	2.07	Н	49.74	73.98	24.24	PK
15780	33.92	2.07	Н	35.99	53.98	17.99	AV

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.



Band :	UNII 2A
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5300 MHz
Channel No.	60 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10600	57.68	3.16	V	60.84	73.98	13.14	PK
10600	41.80	3.16	V	44.96	53.98	9.02	AV
15900	48.07	1.23	V	49.30	73.98	24.68	PK
15900	34.99	1.23	V	36.22	53.98	17.76	AV
10600	56.20	3.16	Н	59.36	73.98	14.62	PK
10600	40.39	3.16	Н	43.55	53.98	10.43	AV
15900	47.51	1.23	Н	48.74	73.98	25.24	PK
15900	34.27	1.23	Н	35.50	53.98	18.48	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2A
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5320 MHz
Channel No.	64 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10640	58.35	3.07	V	61.42	73.98	12.56	PK
10640	42.51	3.07	V	45.58	53.98	8.40	AV
15960	49.10	2.06	V	51.16	73.98	22.82	PK
15960	34.94	2.06	V	37.00	53.98	16.98	AV
10640	57.48	3.07	Н	60.55	73.98	13.43	PK
10640	41.62	3.07	Н	44.69	53.98	9.29	AV
15960	48.11	2.06	Н	50.17	73.98	23.81	PK
15960	34.29	2.06	Н	36.35	53.98	17.63	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2A
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5260MHz
Channel No.	52 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10520	58.02	2.35	V	60.37	68.20	7.83	PK
15780	48.70	2.07	V	50.77	73.98	23.21	PK
15780	35.06	2.07	V	37.13	53.98	16.85	AV
10520	57.12	2.35	Н	59.47	68.20	8.73	PK
15780	47.16	2.07	Н	49.23	73.98	24.75	PK
15780	34.28	2.07	Н	36.35	53.98	17.63	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2A
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5300 MHz
Channel No.	60 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10600	57.60	3.16	V	60.76	73.98	13.22	PK
10600	41.69	3.16	V	44.85	53.98	9.13	AV
15900	48.16	1.23	V	49.39	73.98	24.59	PK
15900	34.96	1.23	V	36.19	53.98	17.79	AV
10600	56.81	3.16	Н	59.97	73.98	14.01	PK
10600	40.98	3.16	Н	44.14	53.98	9.84	AV
15900	47.27	1.23	Н	48.50	73.98	25.48	PK
15900	33.92	1.23	Н	35.15	53.98	18.83	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2A
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5320 MHz
Channel No.	64 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10640	58.24	3.07	V	61.31	73.98	12.67	PK
10640	42.38	3.07	V	45.45	53.98	8.53	AV
15960	48.56	2.06	V	50.62	73.98	23.36	PK
15960	34.98	2.06	V	37.04	53.98	16.94	AV
10640	57.84	3.07	Н	60.91	73.98	13.07	PK
10640	41.79	3.07	Н	44.86	53.98	9.12	AV
15960	48.09	2.06	Н	50.15	73.98	23.83	PK
15960	34.27	2.06	Н	36.33	53.98	17.65	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2A
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5270 MHz
Channel No.	54 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10540	55.93	3.85	V	59.78	68.20	8.42	PK
15810	48.75	2.79	V	51.54	73.98	22.44	PK
15810	35.44	2.79	V	38.23	53.98	15.75	AV
10540	54.76	3.85	Н	58.61	68.20	9.59	PK
15810	47.24	2.79	Н	50.03	73.98	23.95	PK
15810	34.77	2.79	Н	37.56	53.98	16.42	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2A
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5310 MHz
Channel No.	62 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10620	56.02	2.96	V	58.98	73.98	15.00	PK
10620	40.63	2.96	V	43.59	53.98	10.39	AV
15930	48.87	1.43	V	50.30	73.98	23.68	PK
15930	35.06	1.43	V	36.49	53.98	17.49	AV
10620	55.72	2.96	Н	58.68	73.98	15.30	PK
10620	39.89	2.96	Н	42.85	53.98	11.13	AV
15930	47.94	1.43	Н	49.37	73.98	24.61	PK
15930	34.57	1.43	Н	36.00	53.98	17.98	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2A
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5270 MHz
Channel No.	54 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10540	55.23	3.85	V	59.08	68.20	9.12	PK
15810	48.79	2.79	V	51.58	73.98	22.40	PK
15810	35.46	2.79	V	38.25	53.98	15.73	AV
10540	54.66	3.85	Н	58.51	68.20	9.69	PK
15810	47.86	2.79	Н	50.65	73.98	23.33	PK
15810	34.27	2.79	Н	37.06	53.98	16.92	AV

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.



Report No.: HCT-RF-1805-FC028-R1

Band :	UNII 2A
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5310 MHz
Channel No.	62 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10620	55.42	2.96	V	58.38	73.98	15.60	PK
10620	41.28	2.96	V	44.24	53.98	9.74	AV
15930	48.95	1.43	V	50.38	73.98	23.60	PK
15930	35.09	1.43	V	36.52	53.98	17.46	AV
10620	54.67	2.96	Н	57.63	73.98	16.35	PK
10620	40.89	2.96	Н	43.85	53.98	10.13	AV
15930	48.68	1.43	Н	50.11	73.98	23.87	PK
15930	34.68	1.43	Н	36.11	53.98	17.87	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2A
Operation Mode:	802.11ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5290 MHz
Channel No.	58 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10580	53.22	2.79	V	56.01	68.20	12.19	PK
15870	48.31	2.47	V	50.78	73.98	23.20	PK
15870	35.58	2.47	V	38.05	53.98	15.93	AV
10580	52.16	2.79	Н	54.95	68.20	13.25	PK
15870	47.54	2.47	Н	50.01	73.98	23.97	PK
15870	34.83	2.47	Н	37.30	53.98	16.68	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2C		
Operation Mode:	802.11 a		
Transfer Rate:	6 Mbps		
Operating Frequency	5500 MHz		
Channel No.	100 Ch		

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11000	55.13	3.36	V	58.49	73.98	15.49	PK
11000	40.27	3.36	V	43.63	53.98	10.35	AV
16500	47.83	5.07	V	52.90	68.20	15.30	PK
11000	55.83	3.36	Н	59.19	73.98	14.79	PK
11000	40.81	3.36	Н	44.17	53.98	9.81	AV
16500	48.09	5.07	Н	53.16	68.20	15.04	PK

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.



Band :	UNII 2C		
Operation Mode:	802.11 a		
Transfer Rate:	6 Mbps		
Operating Frequency	5600 MHz		
Channel No.	120 Ch		

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11200	53.86	4.02	V	57.88	73.98	16.10	PK
11200	38.99	4.02	V	43.01	53.98	10.97	AV
16800	46.77	6.06	V	52.83	68.20	15.37	PK
11200	54.73	4.02	Н	58.75	73.98	15.23	PK
11200	39.80	4.02	Н	43.82	53.98	10.16	AV
16800	47.32	6.06	Н	53.38	68.20	14.82	PK

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.



Band :	UNII 2C
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5720 MHz
Channel No.	144 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11440	50.44	3.57	V	54.01	73.98	19.97	PK
11440	36.80	3.57	V	40.37	53.98	13.61	AV
17160	45.74	5.24	V	50.98	68.20	17.22	PK
11440	51.24	3.57	Н	54.81	73.98	19.17	PK
11440	37.20	3.57	Н	40.77	53.98	13.21	AV
17160	46.31	5.24	Н	51.55	68.20	16.65	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2C
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5500 MHz
Channel No.	100 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11000	53.67	3.36	V	57.03	73.98	16.95	PK
11000	38.28	3.36	V	41.64	53.98	12.34	AV
16500	46.92	5.07	V	51.99	68.20	16.21	PK
11000	54.08	3.36	Н	57.44	73.98	16.54	PK
11000	39.31	3.36	Н	42.67	53.98	11.31	AV
16500	47.62	5.07	Н	52.69	68.20	15.51	PK

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.



Band :	UNII 2C		
Operation Mode:	802.11 n_HT20		
Transfer MCS Index:	0		
Operating Frequency	5600 MHz		
Channel No.	120 Ch		

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11200	54.28	4.02	V	58.30	73.98	15.68	PK
11200	39.76	4.02	V	43.78	53.98	10.20	AV
16800	46.81	6.06	V	52.87	68.20	15.33	PK
11200	55.53	4.02	Н	59.55	73.98	14.43	PK
11200	40.03	4.02	Н	44.05	53.98	9.93	AV
16800	47.22	6.06	Н	53.28	68.20	14.92	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)


Band :	UNII 2C
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5720 MHz
Channel No.	144 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11440	51.07	3.57	V	54.64	73.98	19.34	PK
11440	36.84	3.57	V	40.41	53.98	13.57	AV
17160	46.09	5.24	V	51.33	68.20	16.87	PK
11440	51.41	3.57	Н	54.98	73.98	19.00	PK
11440	37.22	3.57	Н	40.79	53.98	13.19	AV
17160	46.60	5.24	Н	51.84	68.20	16.36	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



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Band :	UNII 2C
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5500MHz
Channel No.	100 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11000	54.19	3.36	V	57.55	73.98	16.43	PK
11000	39.67	3.36	V	43.03	53.98	10.95	AV
16500	47.52	5.07	V	52.59	68.20	15.61	PK
11000	54.68	3.36	Н	58.04	73.98	15.94	PK
11000	40.17	3.36	Н	43.53	53.98	10.45	AV
16500	48.19	5.07	Н	53.26	68.20	14.94	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2C
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5600 MHz
Channel No.	120 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11200	37.86	4.02	V	41.88	73.98	32.10	PK
11200	38.34	4.02	V	42.36	53.98	11.62	AV
16800	46.81	6.06	V	52.87	68.20	15.33	PK
11200	54.99	4.02	Н	59.01	73.98	14.97	PK
11200	39.72	4.02	Н	43.74	53.98	10.24	AV
16800	47.30	6.06	Н	53.36	68.20	14.84	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2C
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5720 MHz
Channel No.	144 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11440	50.91	3.57	V	54.48	73.98	19.50	PK
11440	36.13	3.57	V	39.70	53.98	14.28	AV
17160	46.10	5.24	V	51.34	68.20	16.86	PK
11440	51.88	3.57	Н	55.45	73.98	18.53	PK
11440	37.06	3.57	Н	40.63	53.98	13.35	AV
17160	46.70	5.24	Н	51.94	68.20	16.26	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2C
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5510 MHz
Channel No.	102 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11020	51.79	2.97	V	54.76	73.98	19.22	PK
11020	38.46	2.97	V	41.43	53.98	12.55	AV
16530	47.07	4.15	V	51.22	68.20	16.98	PK
11020	52.72	2.97	Н	55.69	73.98	18.29	PK
11020	38.77	2.97	Н	41.74	53.98	12.24	AV
16530	47.55	4.15	Н	51.70	68.20	16.50	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2C
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5550 MHz
Channel No.	110 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11100	51.22	2.79	V	54.01	73.98	19.97	PK
11100	38.44	2.79	V	41.23	53.98	12.75	AV
16650	47.11	7.19	V	54.30	68.20	13.90	PK
11100	52.10	2.79	Н	54.89	73.98	19.09	PK
11100	38.87	2.79	Н	41.66	53.98	12.32	AV
16650	48.42	7.19	Н	55.61	68.20	12.59	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2C
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5710 MHz
Channel No.	142 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11420	49.72	3.36	V	53.08	73.98	20.90	PK
11420	36.11	3.36	V	39.47	53.98	14.51	AV
17130	47.54	7.02	V	54.56	68.20	13.64	PK
11420	50.09	3.36	Н	53.45	73.98	20.53	PK
11420	36.90	3.36	Н	40.26	53.98	13.72	AV
17130	48.06	7.02	Н	55.08	68.20	13.12	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2C
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5510 MHz
Channel No.	102 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11020	52.16	2.97	V	55.13	73.98	18.85	PK
11020	38.79	2.97	V	41.76	53.98	12.22	AV
16530	47.69	4.15	V	51.84	68.20	16.36	PK
11020	53.54	2.97	Н	56.51	73.98	17.47	PK
11020	39.20	2.97	Н	42.17	53.98	11.81	AV
16530	48.15	4.15	Н	52.30	68.20	15.90	PK

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2C
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5550 MHz
Channel No.	110 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11100	51.70	2.79	V	54.49	73.98	19.49	PK
11100	38.43	2.79	V	41.22	53.98	12.76	AV
16650	47.97	7.19	V	55.16	68.20	13.04	PK
11100	52.77	2.79	Н	55.56	73.98	18.42	PK
11100	38.95	2.79	Н	41.74	53.98	12.24	AV
16650	48.67	7.19	Н	55.86	68.20	12.34	PK

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

7. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.

- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2C
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5710 MHz
Channel No.	142 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11420	49.76	3.36	V	53.12	73.98	20.86	PK
11420	35.68	3.36	V	39.04	53.98	14.94	AV
17130	47.81	7.02	V	54.83	68.20	13.37	PK
11420	50.42	3.36	Н	53.78	73.98	20.20	PK
11420	36.95	3.36	Н	40.31	53.98	13.67	AV
17130	48.06	7.02	Н	55.08	68.20	13.12	PK

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

8. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.

- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2C
Operation Mode:	802.11ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5530 MHz
Channel No.	106 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11060	49.82	3.46	V	53.28	73.98	20.70	PK
11060	36.70	3.46	V	40.16	53.98	13.82	AV
16590	47.01	4.11	V	51.12	68.20	17.08	PK
11060	50.47	3.46	Н	53.93	73.98	20.05	PK
11060	37.06	3.46	Н	40.52	53.98	13.46	AV
16590	47.53	4.11	Н	51.64	68.20	16.56	PK

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

9. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.

- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 2C
Operation Mode:	802.11ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5690 MHz
Channel No.	138 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11380	49.14	3.41	V	52.55	73.98	21.43	PK
11380	35.46	3.41	V	38.87	53.98	15.11	AV
17070	46.77	5.78	V	52.55	68.20	15.65	PK
11380	49.57	3.41	Н	52.98	73.98	21.00	PK
11380	36.26	3.41	Н	39.67	53.98	14.31	AV
17070	47.64	5.78	Н	53.42	68.20	14.78	PK

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

10. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.

- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 3
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5745MHz
Channel No.	149 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11490	48.50	2.87	V	51.37	73.98	22.61	PK
11490	35.14	2.87	V	38.01	53.98	15.97	AV
17235	47.08	7.44	V	54.52	68.20	13.69	PK
11490	47.84	2.51	Н	50.35	73.98	23.63	PK
11490	35.00	2.51	Н	37.51	53.98	16.47	AV
17235	46.89	7.44	Н	54.33	68.20	13.88	PK

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB



Band :	UNII 3
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5785 MHz
Channel No.	157 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11570	49.14	2.48	V	51.62	73.98	22.36	PK
11570	35.50	2.48	V	37.98	53.98	16.00	AV
17355	47.69	7.86	V	55.55	68.20	12.66	PK
11570	48.27	2.48	Н	50.75	73.98	23.23	PK
11570	34.86	2.48	Н	37.34	53.98	16.64	AV
17355	46.76	7.86	Н	54.62	68.20	13.59	PK

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 3
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5825 MHz
Channel No.	165 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11650	49.96	3.24	V	53.20	73.98	20.78	PK
11650	36.47	3.24	V	39.71	53.98	14.27	AV
17475	48.72	8.14	V	56.86	68.20	11.35	PK
11650	48.99	3.24	Н	52.23	73.98	21.75	PK
11650	35.79	3.24	Н	39.03	53.98	14.95	AV
17475	47.84	8.14	Н	55.98	68.20	12.23	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 3
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5745 MHz
Channel No.	149 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11490	48.60	2.87	V	51.47	73.98	22.51	PK
11490	35.15	2.87	V	38.02	53.98	15.96	AV
17235	47.60	7.44	V	55.04	68.20	13.17	PK
11490	47.85	2.51	Н	50.36	73.98	23.62	PK
11490	34.55	2.51	Н	37.06	53.98	16.92	AV
17235	46.94	7.44	Н	54.38	68.20	13.83	PK

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 3
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5785 MHz
Channel No.	157 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11570	48.84	2.48	V	51.32	73.98	22.66	PK
11570	35.54	2.48	V	38.02	53.98	15.96	AV
17355	48.03	7.86	V	55.89	68.20	12.32	PK
11570	47.81	2.48	Н	50.29	73.98	23.69	PK
11570	34.69	2.48	Н	37.17	53.98	16.81	AV
17355	47.22	7.86	Н	55.08	68.20	13.13	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 3
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5825 MHz
Channel No.	165 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11650	49.87	3.24	V	53.11	73.98	20.87	PK
11650	36.47	3.24	V	39.71	53.98	14.27	AV
17475	49.22	8.14	V	57.36	68.20	10.85	PK
11650	48.77	3.24	Н	52.01	73.98	21.97	PK
11650	35.98	3.24	Н	39.22	53.98	14.76	AV
17475	48.29	8.14	Н	56.43	68.20	11.78	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Report No.: HCT-RF-1805-FC028-R1

Band :	UNII 3
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5745 MHz
Channel No.	149 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11490	48.61	2.87	V	51.48	73.98	22.50	PK
11490	35.27	2.87	V	38.14	53.98	15.84	AV
17235	47.44	7.44	V	54.88	68.20	13.33	PK
11490	47.28	2.51	Н	49.79	73.98	24.19	PK
11490	34.11	2.51	Н	36.62	53.98	17.36	AV
17235	46.81	7.44	Н	54.25	68.20	13.96	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 3
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5785 MHz
Channel No.	157 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11570	49.41	2.48	V	51.89	73.98	22.09	PK
11570	35.49	2.48	V	37.97	53.98	16.01	AV
17355	47.84	7.86	V	55.70	68.20	12.51	PK
11570	48.73	2.48	Н	51.21	73.98	22.77	PK
11570	34.79	2.48	Н	37.27	53.98	16.71	AV
17355	46.54	7.86	Н	54.40	68.20	13.81	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Report No.: HCT-RF-1805-FC028-R1

Band :	UNII 3
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5825 MHz
Channel No.	165 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11650	49.78	3.24	V	53.02	73.98	20.96	PK
11650	36.04	3.24	V	39.28	53.98	14.70	AV
17475	48.34	8.14	V	56.48	68.20	11.73	PK
11650	48.99	3.24	Н	52.23	73.98	21.75	PK
11650	35.72	3.24	Н	38.96	53.98	15.02	AV
17475	48.07	8.14	Н	56.21	68.20	12.00	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII3
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5755 MHz
Channel No.	151 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11510	49.85	2.90	V	52.75	73.98	21.23	PK
11510	35.96	2.90	V	38.86	53.98	15.12	AV
17265	48.94	6.80	V	55.74	68.20	12.46	PK
11510	49.41	2.90	Н	52.31	73.98	21.67	PK
11510	35.77	2.90	Н	38.67	53.98	15.31	AV
17265	48.22	6.80	Н	55.02	68.20	13.18	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 3
Operation Mode:	802.11n_HT40
Transfer MCS Index:	0
Operating Frequency	5795 MHz
Channel No.	159 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11590	49.31	3.72	V	53.03	73.98	20.95	PK
11590	35.40	3.72	V	39.12	53.98	14.86	AV
17385	48.87	7.21	V	56.08	68.20	12.13	PK
11590	48.24	3.72	Н	51.96	73.98	22.02	PK
11590	34.55	3.72	Н	38.27	53.98	15.71	AV
17385	47.92	7.21	Н	55.13	68.20	13.08	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 3
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5755 MHz
Channel No.	151 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11510	49.69	2.90	V	52.59	73.98	21.39	PK
11510	35.24	2.90	V	38.14	53.98	15.84	AV
17265	48.53	6.80	V	55.33	68.20	12.87	PK
11510	48.74	2.90	Н	51.64	73.98	22.34	PK
11510	34.22	2.90	Н	37.12	53.98	16.86	AV
17265	47.50	6.80	Н	54.30	68.20	13.90	PK

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.

6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 3
Operation Mode:	802.11ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5795 MHz
Channel No.	159 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11590	49.58	3.72	V	53.30	73.98	20.68	PK
11590	35.45	3.72	V	39.17	53.98	14.81	AV
17385	48.38	7.21	V	55.59	68.20	12.62	PK
11590	48.79	3.72	Н	52.51	73.98	21.47	PK
11590	34.86	3.72	Н	38.58	53.98	15.40	AV
17385	47.88	7.21	Н	55.09	68.20	13.12	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Band :	UNII 3
Operation Mode:	802.11ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5775 MHz
Channel No.	155 Ch

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11550	48.33	3.32	V	51.65	73.98	22.33	PK
11550	35.09	3.32	V	38.41	53.98	15.57	AV
17325	48.65	8.09	V	56.74	68.20	11.47	PK
11550	47.46	3.32	Н	50.78	73.98	23.20	PK
11550	34.72	3.32	Н	38.04	53.98	15.94	AV
17325	47.99	8.09	Н	56.08	68.20	12.13	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
10500	49.15	2.46	V	51.61	68.20	16.59	PK
15750	48.40	3.18	V	51.58	73.98	22.40	PK
15750	35.28	3.18	V	38.46	53.98	15.52	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT160. Worst case is MCS0 in 802.11ac_VHT160.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



Operation Mode:	802.11ac_VHT160			
Transfer MCS Index:	0			
Operating Frequency	5570 MHz			
Channel No.	114 Ch			

		AN.+CL-Amp					
Frequency	Reading	G.+D.F.	ANT. POL	Total	Limit	Margin	Measurement
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Туре
11140	49.38	3.21	V	52.59	73.98	21.39	PK
11140	35.83	3.21	V	39.04	53.98	14.94	AV
16710	47.31	5.97	V	53.28	68.20	14.92	PK

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain + Distance Factor
- 5. We have done all data rate in 802.11ac_VHT160. Worst case is MCS0 in 802.11ac_VHT160.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
- 7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)



RESULT PLOTS





Date: 4.APR.2018 08:01:11

Radiated Spurious Emissions plot – Peak Reading (802.11n_HT20, Ch.36 2nd Harmonic, Ant 90-V)



Date: 4.APR.2018 08:02:31



Radiated Spurious Emissions plot – Peak Reading (802.11ac_VHT20, Ch.36 2nd Harmonic, Ant 90-V)



Date: 4.APR.2018 08:04:09

Radiated Spurious Emissions plot –Peak Reading (802.11n_HT40, Ch.54 2nd Harmonic, Ant 0-V)



Date: 4.APR.2018 08:10:19



Radiated Spurious Emissions plot –Peak Reading (802.11ac_VHT40, Ch.46 2nd Harmonic, Ant 90-V)



Date: 4.APR.2018 08:07:08

Radiated Spurious Emissions plot –Peak Reading (802.11ac_VHT80, Ch.155 3rd Harmonic, Ant 0-V)



Date: 4.APR.2018 08:12:51

Note : Only the worst case plots for Radiated Spurious Emissions.

Radiated Spurious Emissions plot –Average Reading (802.11ac_VHT160, Ch.50 3rd Harmonic, V)



Radiated Spurious Emissions plot –Peak Reading (802.11ac_VHT160, Ch.50 3rd Harmonic, V)



Date: 5.APR.2018 12:37:47