

OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,775,000,000 Hz
CHANNEL:	155
REFERENCE VOLTAGE:	3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	12.57	12.57
100%		-30	43.98	43.98
100%		-20	66.69	66.69
100%		-10	25.54	25.54
100%		0	95.15	95.15
100%		+10	81.96	81.96
100%		+30	78.69	78.69
100%		+40	91.21	91.21
100%		+50	69.95	69.95
115%	4.40	+20	1.96	1.96
End. Point	3.40	+20	23.63	23.63

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

5 minutes after the EUT is energized

OPERATING BAND: UNII Band 1
 OPERATING FREQUENCY: 5,210,000,000 Hz
 CHANNEL: 42
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5210024.89	24.89
100%		-30	5210069.08	69.08
100%		-20	5210089.50	89.50
100%		-10	5210063.13	63.13
100%		0	5210036.31	36.31
100%		+10	5210071.84	71.84
100%		+30	5210067.17	67.17
100%		+40	5210097.97	97.97
100%		+50	5210087.43	87.43
115%	4.40	+20	5210024.72	24.72
End. Point	3.40	+20	5210057.24	57.24

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2A
 OPERATING FREQUENCY: 5,290,000,000 Hz
 CHANNEL: 58
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	23.85	23.85
100%		-30	75.99	75.99
100%		-20	83.67	83.67
100%		-10	70.89	70.89
100%		0	37.28	37.28
100%		+10	88.50	88.50
100%		+30	59.15	59.15
100%		+40	46.09	46.09
100%		+50	20.23	20.23
115%	4.40	+20	68.12	68.12
End. Point	3.40	+20	23.39	23.39

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,530,000,000 Hz
CHANNEL:	106
REFERENCE VOLTAGE:	3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	74.61	74.61
100%		-30	94.68	94.68
100%		-20	26.48	26.48
100%		-10	15.76	15.76
100%		0	32.24	32.24
100%		+10	75.74	75.74
100%		+30	64.91	64.91
100%		+40	19.84	19.84
100%		+50	20.39	20.39
115%	4.40	+20	50.08	50.08
End. Point	3.40	+20	59.03	59.03

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND:	UNII Band 3
OPERATING FREQUENCY:	5,775,000,000 Hz
CHANNEL:	155
REFERENCE VOLTAGE:	3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	85.71	85.71
100%		-30	62.23	62.23
100%		-20	72.12	72.12
100%		-10	65.19	65.19
100%		0	28.19	28.19
100%		+10	43.48	43.48
100%		+30	84.22	84.22
100%		+40	13.92	13.92
100%		+50	21.84	21.84
115%	4.40	+20	5.45	5.45
End. Point	3.40	+20	43.54	43.54

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

10 minutes after the EUT is energized

OPERATING BAND: UNII Band 1
 OPERATING FREQUENCY: 5,210,000,000 Hz
 CHANNEL: 42
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5210075.04	75.04
100%		-30	5210044.89	44.89
100%		-20	5210059.50	59.50
100%		-10	5210017.10	17.10
100%		0	5210078.66	78.66
100%		+10	5210004.92	4.92
100%		+30	5210001.40	1.40
100%		+40	5210045.36	45.36
100%		+50	5210045.49	45.49
115%	4.40	+20	5210084.71	84.71
End. Point	3.40	+20	5210024.98	24.98

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2A
 OPERATING FREQUENCY: 5,290,000,000 Hz
 CHANNEL: 58
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	66.72	66.72
100%		-30	67.66	67.66
100%		-20	90.20	90.20
100%		-10	3.14	3.14
100%		0	65.86	65.86
100%		+10	13.14	13.14
100%		+30	22.40	22.40
100%		+40	55.83	55.83
100%		+50	99.75	99.75
115%	4.40	+20	52.75	52.75
End. Point	3.40	+20	17.25	17.25

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND:	UNII Band 2C
OPERATING FREQUENCY:	5,530,000,000 Hz
CHANNEL:	106
REFERENCE VOLTAGE:	3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	9.35	9.35
100%		-30	46.66	46.66
100%		-20	69.47	69.47
100%		-10	73.43	73.43
100%		0	98.94	98.94
100%		+10	38.41	38.41
100%		+30	3.14	3.14
100%		+40	80.24	80.24
100%		+50	77.92	77.92
115%	4.40	+20	18.19	18.19
End. Point	3.40	+20	35.55	35.55

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 3
 OPERATING FREQUENCY: 5,775,000,000 Hz
 CHANNEL: 155
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	38.30	38.30
100%		-30	97.41	97.41
100%		-20	52.37	52.37
100%		-10	40.40	40.40
100%		0	85.49	85.49
100%		+10	31.15	31.15
100%		+30	41.77	41.77
100%		+40	7.83	7.83
100%		+50	23.77	23.77
115%	4.40	+20	82.64	82.64
End. Point	3.40	+20	91.53	91.53

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

10.7 STRADDLE CHANNEL

10.7.1 26dB Bandwidth

Mode	Frequency [MHz]	Channel No.	26dB Bandwidth [MHz]
802.11a	5720 (UNII 2C Band)	144	14.24
802.11n(HT20)			14.68
802.11ac(VHT20)			14.68
802.11a	5720 (UNII 3 Band)	144	4.48
802.11n(HT20)			4.80
802.11ac(VHT20)			4.88

Mode	Frequency [MHz]	Channel No.	26dB Bandwidth [MHz]
802.11n(HT40)	5710 (UNII 2C Band)	142	34.84
802.11ac(VHT40)			35.32
802.11n(HT40)	5710 (UNII 3 Band)	142	5.24
802.11ac(VHT40)			5.56

Mode	Frequency [MHz]	Channel No.	26dB Bandwidth [MHz]
802.11ac(VHT80)	5690 (UNII 2C Band)	138	75.44
	5690 (UNII 3 Band)	138	5.56

Test Plots (26dB Bandwidth)

802.11a UNII Band



802.11n(HT20) UNII Band



802.11ac(VHT20) UNII Band



☐ Test Plots (26dB Bandwidth)

802.11n(HT40) UNII Band



802.11ac(VHT40) UNII Band



802.11ac(VHT80) UNII Band



10.7.2 6 dB Bandwidth

Mode	Frequency [MHz]	Channel No.	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11a	5720	144	5727.60	2.60	> 0.5
802.11n(HT20)	(UNII 3		5727.88	2.88	> 0.5
802.11ac(VHT20)	Band)		5727.80	2.80	> 0.5

Mode	Frequency [MHz]	Channel No.	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11n(HT40)	5710	142	5727.48	2.48	> 0.5
802.11ac(VHT40)	(UNII 3 Band)		5727.56	2.56	> 0.5

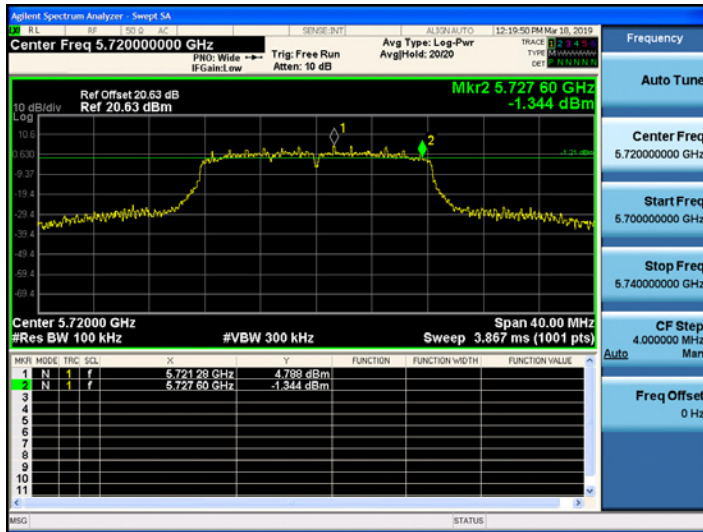
Mode	Frequency [MHz]	Channel No.	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11ac(VHT80)	5690 (UNII 3 Band)	138	5727.76	2.76	> 0.5

Note:

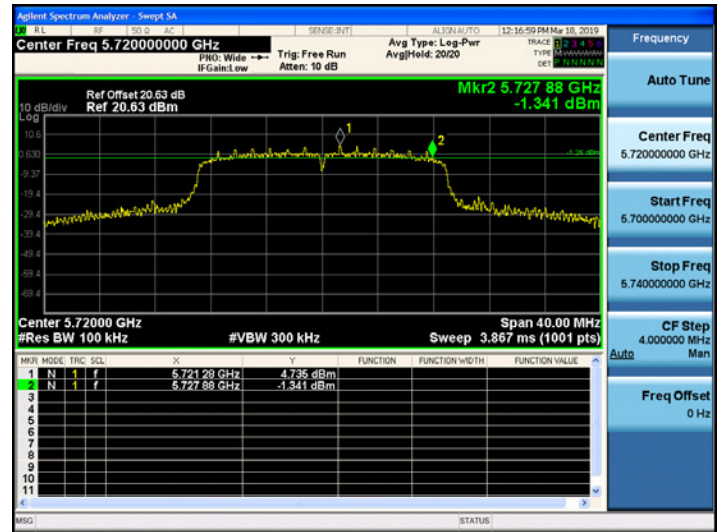
6 dB Bandwidth = Measured Frequency [MHz] – 5725MHz

☐ Test Plots(UNII 3 Band 6dB Bandwidth)

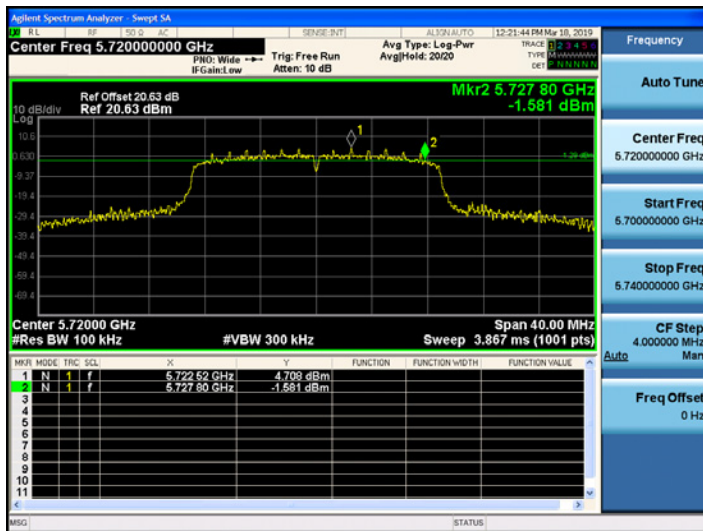
802.11a CH.144



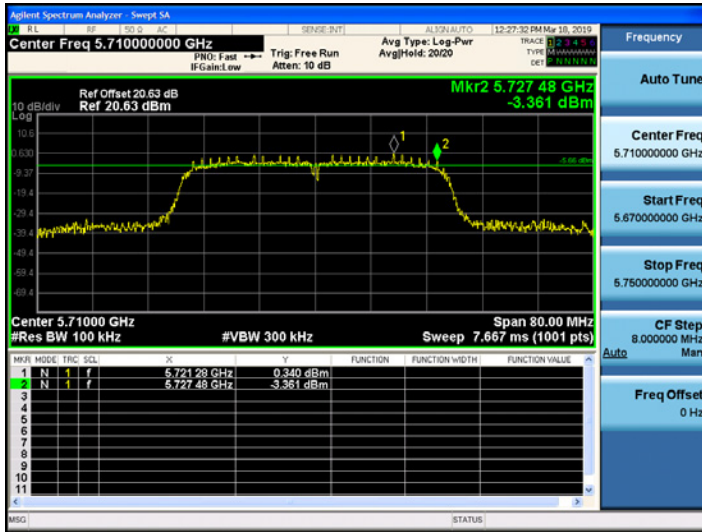
802.11n_HT20 CH.144



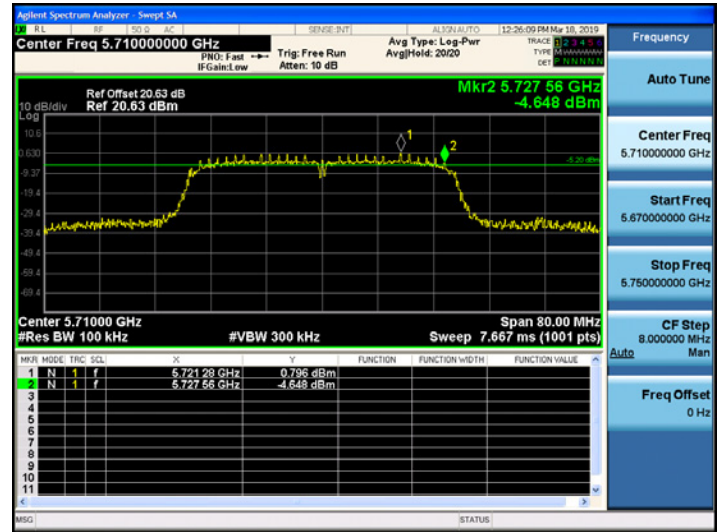
802.11ac_VHT20 CH.144



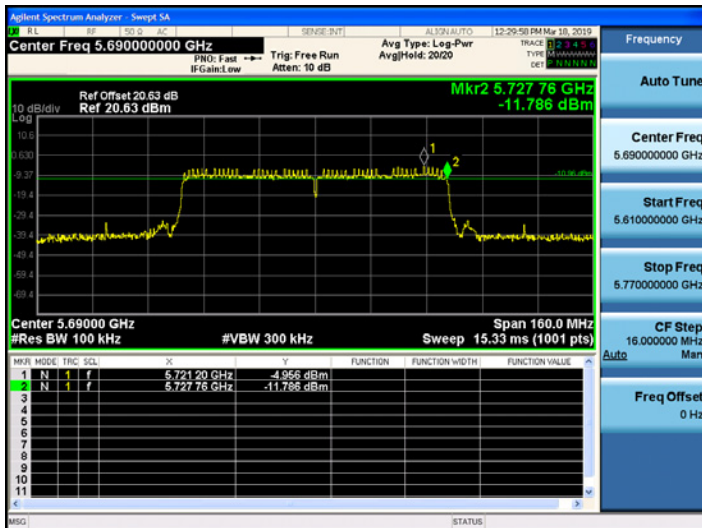
802.11n_HT40 CH.142



802.11ac_VHT40 CH.142



802.11ac_VHT80 CH.138



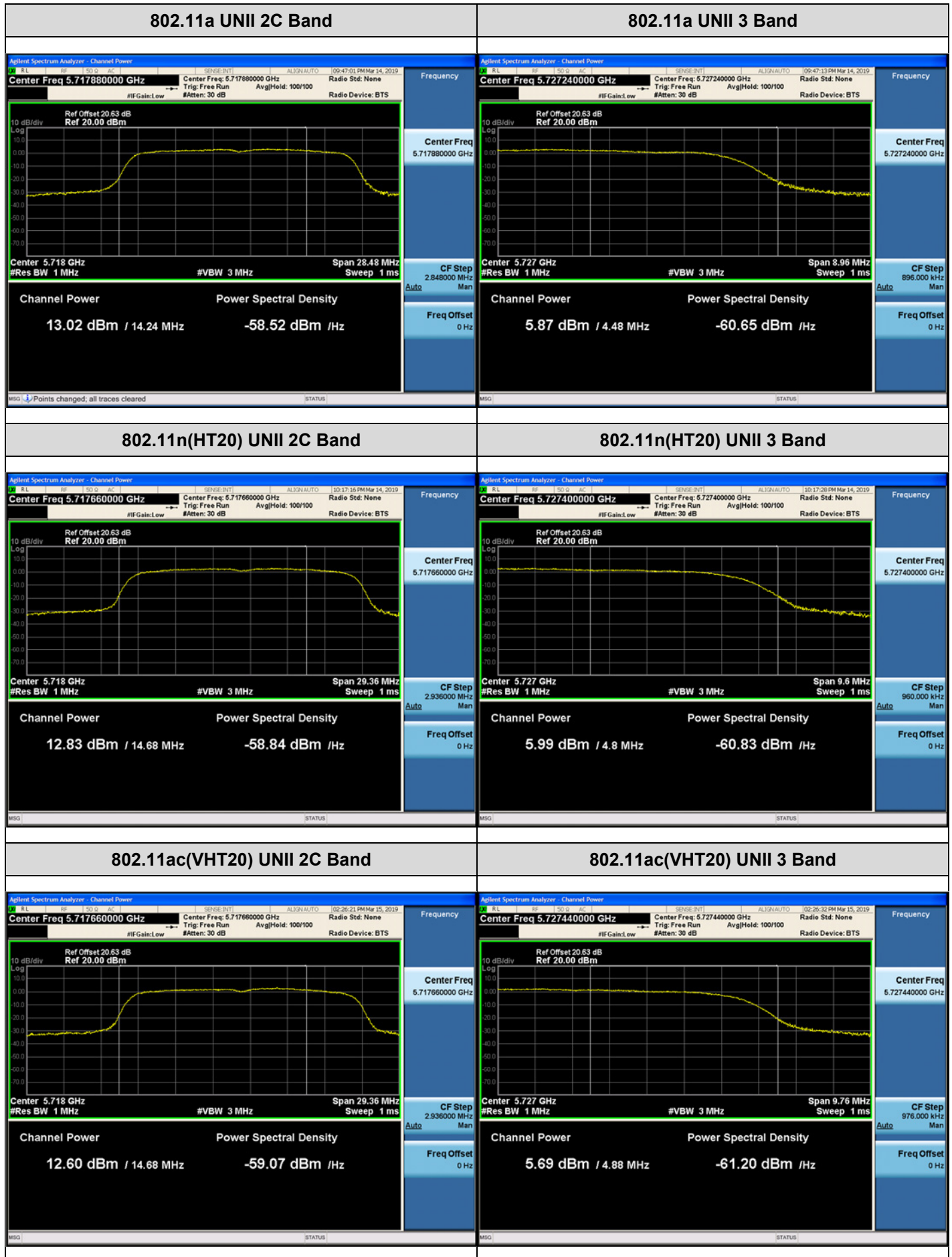
10.7.3 Output Power

Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)
802.11a	5720 (UNII 2C Band)	144	13.02	1.702	14.72	22.54
802.11n(HT20)			12.83	1.691	14.52	22.67
802.11ac(VHT20)			12.6	1.584	14.18	22.67
802.11a	5720 (UNII 3 Band)	144	5.87	1.702	7.57	30.00
802.11n(HT20)			5.99	1.691	7.68	30.00
802.11ac(VHT20)			5.69	1.584	7.27	30.00

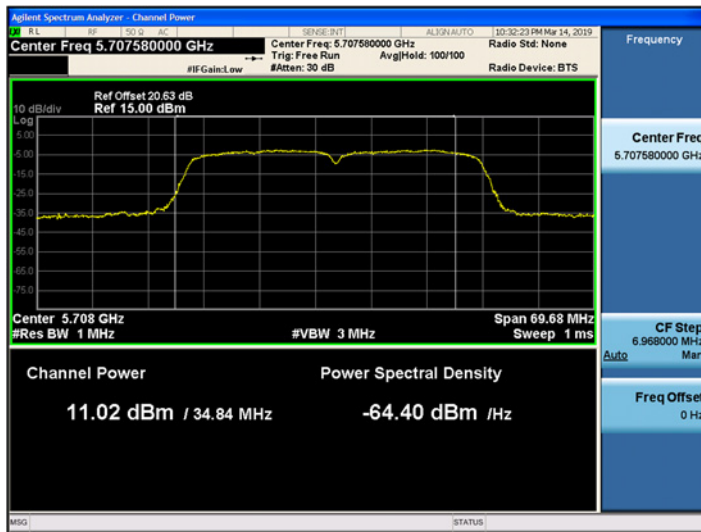
Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)
802.11n(HT40)	5710 (UNII 2C Band)	142	11.02	2.541	13.56	23.98
802.11ac(VHT40)			11.71	1.853	13.56	23.98
802.11n(HT40)	5710 (UNII 3 Band)	142	-0.29	2.541	2.25	30.00
802.11ac(VHT40)			0.26	1.853	2.11	30.00

Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)
802.11ac(VHT80)	5690 (UNII 2C Band)	138	7.57	2.269	9.84	23.98
	5690 (UNII 3 Band)	138	-6.33	2.269	-4.06	30.00

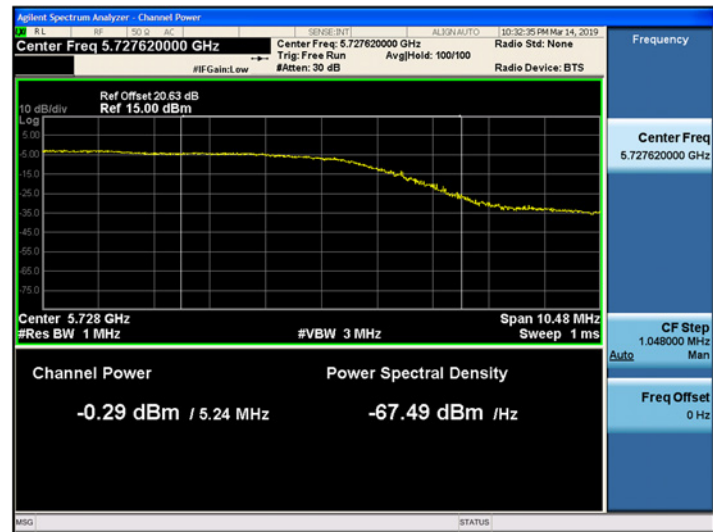
Test Plots



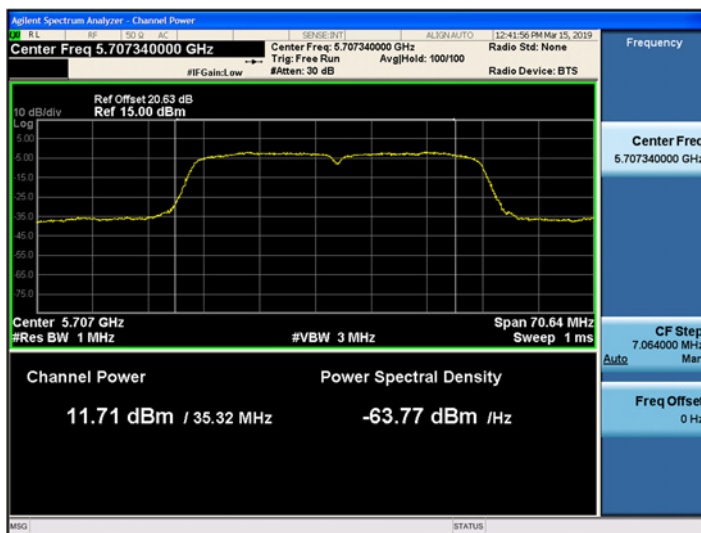
802.11n(HT40) UNII 2C Band



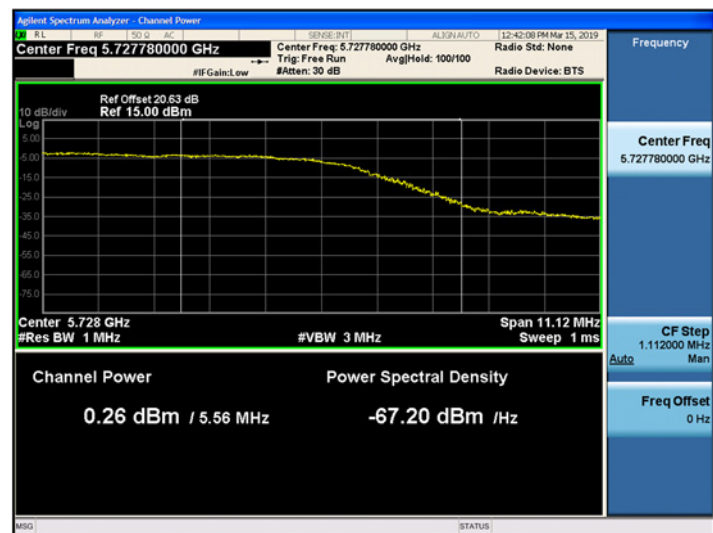
802.11n(HT40) UNII 3 Band



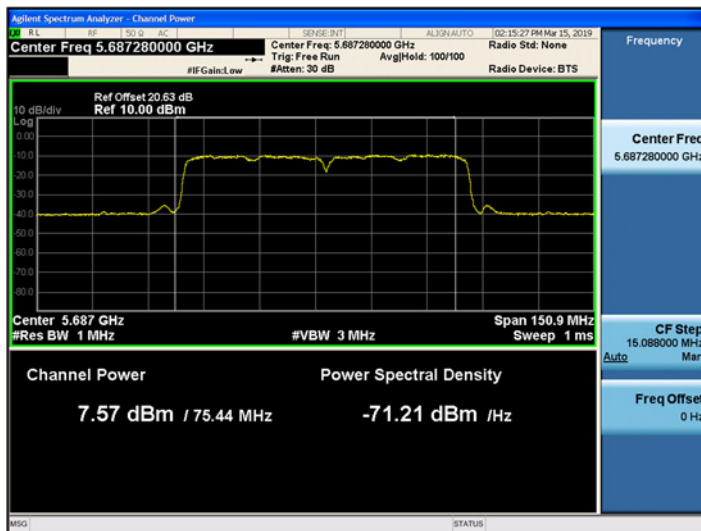
802.11ac(VHT40) UNII 2C Band



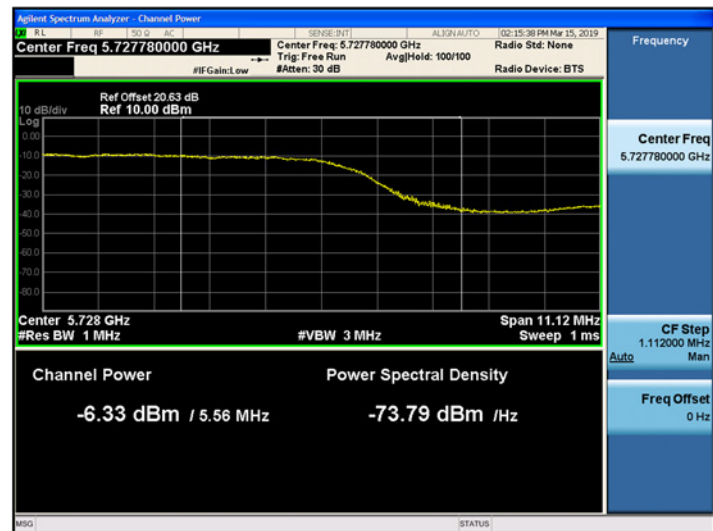
802.11ac(VHT40) UNII 3 Band



802.11ac(VHT80) UNII 2C Band



802.11ac(VHT80) UNII 3 Band



10.7.4 Power Spectral Density

Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)
802.11a	5720 (UNII 2C Band)	144	3.437	1.702	5.139	11.00
802.11n(HT20)			3.294	1.691	4.985	11.00
802.11ac(VHT20)			2.649	1.584	4.233	11.00
802.11a	5720 (UNII 3 Band)	144	-0.333	1.702	1.369	30.00
802.11n(HT20)			-0.999	1.691	0.692	30.00
802.11ac(VHT20)			-1.076	1.584	0.508	30.00

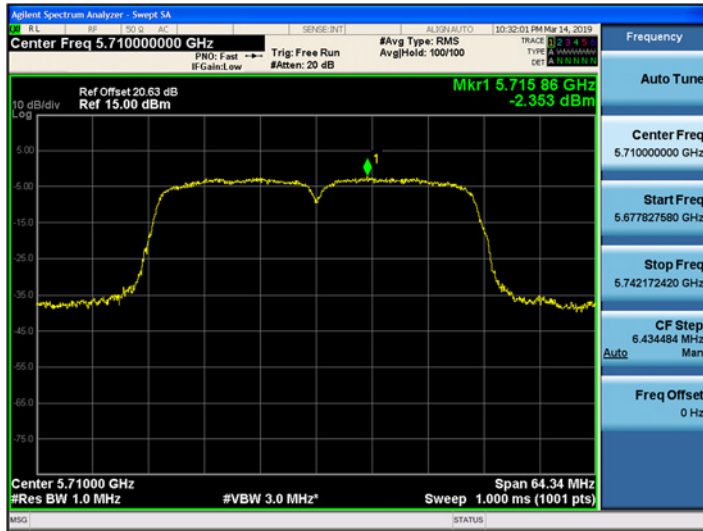
Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)
802.11n(HT40)	5710 (UNII 2C Band)	142	-2.353	2.541	0.188	11.00
802.11ac(VHT40)			-1.727	1.853	0.126	11.00
802.11n(HT40)	5710 (UNII 3 Band)	142	-6.741	2.541	-4.200	30.00
802.11ac(VHT40)			-5.984	1.853	-4.131	30.00

Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)
802.11ac(VHT80)	5690 (UNII 2C Band)	138	-8.792	2.269	-6.523	11.00
	5690 (UNII 3 Band)	138	-12.685	2.269	-10.416	30.00

Test Plots



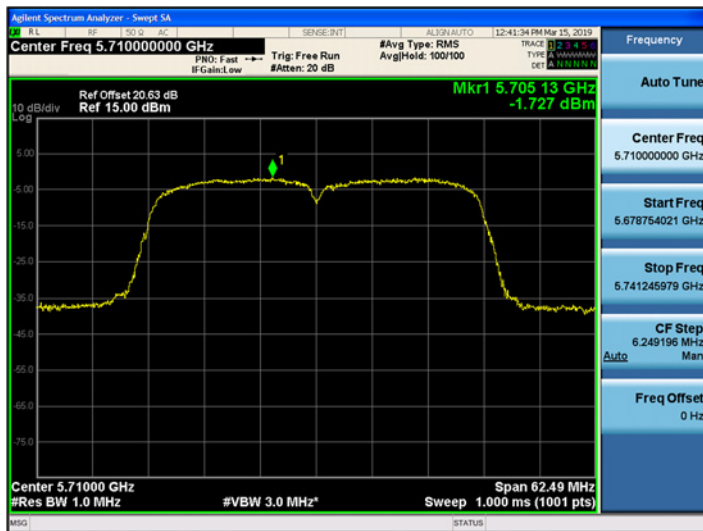
802.11n(HT40) UNII 2C Band



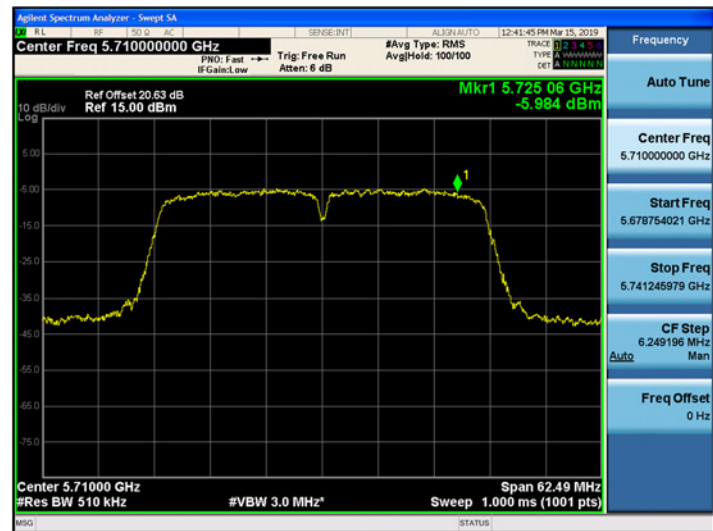
802.11n(HT40) UNII 3 Band



802.11ac(VHT40) UNII 2C Band



802.11ac(VHT40) UNII 3 Band



802.11ac(VHT80) UNII 2C Band



802.11ac(VHT80) UNII 3 Band



10.8 RADIATED SPURIOUS EMISSIONS

Frequency Range : 9 kHz – 30MHz

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

Note:

1. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
2. Distance extrapolation factor = $40 \cdot \log(\text{specific distance} / \text{test distance})$ (dB)
3. Limit line = specific Limits (dBuV) + Distance extrapolation factor
4. The test results for below 30 MHz is correlated to an open site.
The result on OFS is about 2 dB higher than semi-anechoic chamber(10 m chamber)

Frequency Range : Below 1 GHz

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

Note:

1. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode

Frequency Range : Above 1 GHz

Band : UNII 1

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5180 MHz

Channel No. 36 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	51.93	4.10	V	56.03	68.20	12.17	PK
15540	53.54	5.36	V	58.90	73.98	15.08	PK
15540	38.96	5.36	V	44.32	53.98	9.66	AV
10360	52.43	4.10	H	56.53	68.20	11.67	PK
15540	54.05	5.36	H	59.41	73.98	14.57	PK
15540	39.03	5.36	H	44.39	53.98	9.59	AV

Band : UNII 1

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5200 MHz

Channel No. 40 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	52.14	3.87	V	56.01	68.20	12.19	PK
15600	52.68	4.75	V	57.43	73.98	16.55	PK
15600	39.27	4.75	V	44.02	53.98	9.96	AV
10400	52.22	3.87	H	56.09	68.20	12.11	PK
15600	52.98	4.75	H	57.73	73.98	16.25	PK
15600	39.42	4.75	H	44.17	53.98	9.81	AV

Report No.: HCT-RF-1903-FC044

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

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	51.33	4.52	V	55.85	68.20	12.35	PK
15720	54.95	3.58	V	58.53	73.98	15.45	PK
15720	39.51	3.58	V	43.09	53.98	10.89	AV
10480	51.87	4.52	H	56.39	68.20	11.81	PK
15720	55.12	3.58	H	58.70	73.98	15.28	PK
15720	39.60	3.58	H	43.18	53.98	10.80	AV

Report No.: HCT-RF-1903-FC044

Band : UNII 1

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5180 MHz

Channel No. 36 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	51.69	4.10	V	55.79	68.20	12.41	PK
15540	53.44	5.36	V	58.80	73.98	15.18	PK
15540	38.94	5.36	V	44.30	53.98	9.68	AV
10360	51.89	4.10	H	55.99	68.20	12.21	PK
15540	53.86	5.36	H	59.22	73.98	14.76	PK
15540	39.10	5.36	H	44.46	53.98	9.52	AV

Band : UNII 1

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5200 MHz

Channel No. 40 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	52.47	3.87	V	56.34	68.20	11.86	PK
15600	53.01	4.75	V	57.76	73.98	16.22	PK
15600	39.44	4.75	V	44.19	53.98	9.79	AV
10400	52.65	3.87	H	56.52	68.20	11.68	PK
15600	53.10	4.75	H	57.85	73.98	16.13	PK
15600	39.51	4.75	H	44.26	53.98	9.72	AV

Report No.: HCT-RF-1903-FC044

Band :	UNII 1
Operation Mode:	802.11 n(HT20)
Transfer MCS Index:	MCS0
Operating Frequency	5240 MHz
Channel No.	48 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	52.48	4.52	V	57.00	68.20	11.20	PK
15720	54.69	3.58	V	58.27	73.98	15.71	PK
15720	39.27	3.58	V	42.85	53.98	11.13	AV
10480	52.93	4.52	H	57.45	68.20	10.75	PK
15720	54.96	3.58	H	58.54	73.98	15.44	PK
15720	39.58	3.58	H	43.16	53.98	10.82	AV

Report No.: HCT-RF-1903-FC044

Band : UNII 1

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5180 MHz

Channel No. 36 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	50.94	4.10	V	55.04	68.20	13.16	PK
15540	53.97	5.36	V	59.33	73.98	14.65	PK
15540	38.68	5.36	V	44.04	53.98	9.94	AV
10360	51.05	4.10	H	55.15	68.20	13.05	PK
15540	54.11	5.36	H	59.47	73.98	14.51	PK
15540	38.91	5.36	H	44.27	53.98	9.71	AV

Band : UNII 1

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5200 MHz

Channel No. 40 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	52.16	3.87	V	56.03	68.20	12.17	PK
15600	53.27	4.75	V	58.02	73.98	15.96	PK
15600	38.73	4.75	V	43.48	53.98	10.50	AV
10400	52.22	3.87	H	56.09	68.20	12.11	PK
15600	53.61	4.75	H	58.36	73.98	15.62	PK
15600	38.80	4.75	H	43.55	53.98	10.43	AV

Report No.: HCT-RF-1903-FC044

Band :	UNII 1
Operation Mode:	802.11 ac(VHT20)
Transfer MCS Index:	MCS0
Operating Frequency	5240 MHz
Channel No.	48 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	50.92	4.52	V	55.44	68.20	12.76	PK
15720	54.24	3.58	V	57.82	73.98	16.16	PK
15720	38.54	3.58	V	42.12	53.98	11.86	AV
10480	51.46	4.52	H	55.98	68.20	12.22	PK
15720	54.51	3.58	H	58.09	73.98	15.89	PK
15720	38.69	3.58	H	42.27	53.98	11.71	AV

Band : UNII 1
 Operation Mode: 802.11 n(HT40)
 Transfer MCS Index: 0
 Operating Frequency 5190 MHz
 Channel No. 38 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10380	50.23	4.09	V	54.32	68.20	13.88	PK
15570	49.04	4.73	V	53.77	73.98	20.21	PK
15570	35.62	4.73	V	40.35	53.98	13.63	AV
10380	50.59	4.09	H	54.68	68.20	13.52	PK
15570	49.29	4.73	H	54.02	73.98	19.96	PK
15570	35.84	4.73	H	40.57	53.98	13.41	AV

Band : UNII 1
 Operation Mode: 802.11 n(HT40)
 Transfer MCS Index: 0
 Operating Frequency 5230 MHz
 Channel No. 46 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10460	49.89	4.54	V	54.43	68.20	13.77	PK
15690	49.12	3.69	V	52.81	73.98	21.17	PK
15690	35.61	3.69	V	39.30	53.98	14.68	AV
10460	50.18	4.54	H	54.72	68.20	13.48	PK
15690	49.31	3.69	H	53.00	73.98	20.98	PK
15690	35.73	3.69	H	39.42	53.98	14.56	AV

Report No.: HCT-RF-1903-FC044

Band : UNII 1

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5190 MHz

Channel No. 38 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10380	50.48	4.09	V	54.57	68.20	13.63	PK
15570	49.12	4.73	V	53.85	73.98	20.13	PK
15570	35.44	4.73	V	40.17	53.98	13.81	AV
10380	50.68	4.09	H	54.77	68.20	13.43	PK
15570	49.33	4.73	H	54.06	73.98	19.92	PK
15570	35.79	4.73	H	40.52	53.98	13.46	AV

Band : UNII 1

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5230 MHz

Channel No. 46 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10460	50.10	4.54	V	54.64	68.20	13.56	PK
15690	49.68	3.69	V	53.37	73.98	20.61	PK
15690	35.48	3.69	V	39.17	53.98	14.81	AV
10460	50.30	4.54	H	54.84	68.20	13.36	PK
15690	49.83	3.69	H	53.52	73.98	20.46	PK
15690	35.69	3.69	H	39.38	53.98	14.60	AV

Report No.: HCT-RF-1903-FC044

Band :	UNII 1
Operation Mode:	802.11 ac(VHT80)
Transfer MCS Index:	0
Operating Frequency	5210 MHz
Channel No.	42 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10420	49.58	3.79	V	53.37	68.20	14.83	PK
15630	47.59	4.02	V	51.61	73.98	22.37	PK
15630	36.49	4.02	V	40.51	53.98	13.47	AV
10420	49.92	3.79	H	53.71	68.20	14.49	PK
15630	47.77	4.02	H	51.79	73.98	22.19	PK
15630	36.71	4.02	H	40.73	53.98	13.25	AV

Report No.: HCT-RF-1903-FC044

Band : UNII 2A

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5260 MHz

Channel No. 52 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	51.39	4.70	V	56.09	68.20	12.11	PK
15780	56.01	3.76	V	59.77	73.98	14.21	PK
15780	41.02	3.76	V	44.78	53.98	9.20	AV
10520	50.97	4.70	H	55.67	68.20	12.53	PK
15780	56.04	3.76	H	59.80	73.98	14.18	PK
15780	40.92	3.76	H	44.68	53.98	9.30	AV

Band : UNII 2A

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5300 MHz

Channel No. 60 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10600	50.89	4.27	V	55.16	73.98	18.82	PK
10600	38.58	4.27	V	42.85	53.98	11.13	AV
15900	56.23	4.58	V	60.81	73.98	13.17	PK
15900	40.26	4.58	V	44.84	53.98	9.14	AV
10600	50.73	4.27	H	55.00	73.98	18.98	PK
10600	38.43	4.27	H	42.70	53.98	11.28	AV
15900	56.04	4.58	H	60.62	73.98	13.36	PK
15900	40.11	4.58	H	44.69	53.98	9.29	AV

Report No.: HCT-RF-1903-FC044

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

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10640	50.77	4.40	V	55.17	73.98	18.81	PK
10640	38.61	4.40	V	43.01	53.98	10.97	AV
15960	55.58	4.03	V	59.61	73.98	14.37	PK
15960	40.91	4.03	V	44.94	53.98	9.04	AV
10640	50.69	4.40	H	55.09	73.98	18.89	PK
10640	38.53	4.40	H	42.93	53.98	11.05	AV
15960	55.37	4.03	H	59.40	73.98	14.58	PK
15960	40.82	4.03	H	44.85	53.98	9.13	AV

Report No.: HCT-RF-1903-FC044

Band : UNII 2A

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5260 MHz

Channel No. 52 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	51.64	4.70	V	56.34	68.20	11.86	PK
15780	56.08	3.76	V	59.84	73.98	14.14	PK
15780	40.15	3.76	V	43.91	53.98	10.07	AV
10520	51.23	4.70	H	55.93	68.20	12.27	PK
15780	55.86	3.76	H	59.62	73.98	14.36	PK
15780	40.07	3.76	H	43.83	53.98	10.15	AV

Band : UNII 2A

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5300 MHz

Channel No. 60 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10600	50.72	4.27	V	54.99	73.98	18.99	PK
10600	38.43	4.27	V	42.70	53.98	11.28	AV
15900	55.48	4.58	V	60.06	73.98	13.92	PK
15900	40.16	4.58	V	44.74	53.98	9.24	AV
10600	50.47	4.27	H	54.74	73.98	19.24	PK
10600	38.34	4.27	H	42.61	53.98	11.37	AV
15900	54.63	4.58	H	59.21	73.98	14.77	PK
15900	39.87	4.58	H	44.45	53.98	9.53	AV

Report No.: HCT-RF-1903-FC044

Band :	UNII 2A
Operation Mode:	802.11 n(HT20)
Transfer MCS Index:	MCS0
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10640	50.63	4.40	V	55.03	73.98	18.95	PK
10640	38.46	4.40	V	42.86	53.98	11.12	AV
15960	56.47	4.03	V	60.50	73.98	13.48	PK
15960	40.51	4.03	V	44.54	53.98	9.44	AV
10640	50.47	4.40	H	54.87	73.98	19.11	PK
10640	38.12	4.40	H	42.52	53.98	11.46	AV
15960	56.30	4.03	H	60.33	73.98	13.65	PK
15960	40.27	4.03	H	44.30	53.98	9.68	AV

Report No.: HCT-RF-1903-FC044

Band : UNII 2A

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5260MHz

Channel No. 52 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	51.39	4.70	V	56.09	68.20	12.11	PK
15780	55.96	3.76	V	59.72	73.98	14.26	PK
15780	40.56	3.76	V	44.32	53.98	9.66	AV
10520	51.21	4.70	H	55.91	68.20	12.29	PK
15780	55.47	3.76	H	59.23	73.98	14.75	PK
15780	40.39	3.76	H	44.15	53.98	9.83	AV

Band : UNII 2A

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5300 MHz

Channel No. 60 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10600	49.93	4.27	V	54.20	73.98	19.78	PK
10600	38.22	4.27	V	42.49	53.98	11.49	AV
15900	56.13	4.58	V	60.71	73.98	13.27	PK
15900	40.39	4.58	V	44.97	53.98	9.01	AV
10600	49.75	4.27	H	54.02	73.98	19.96	PK
10600	38.17	4.27	H	42.44	53.98	11.54	AV
15900	55.73	4.58	H	60.31	73.98	13.67	PK
15900	40.19	4.58	H	44.77	53.98	9.21	AV

Report No.: HCT-RF-1903-FC044

Band :	UNII 2A
Operation Mode:	802.11 ac(VHT20)
Transfer MCS Index:	MCS0
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10640	50.57	4.40	V	54.97	73.98	19.01	PK
10640	38.31	4.40	V	42.71	53.98	11.27	AV
15960	56.92	4.03	V	60.95	73.98	13.03	PK
15960	40.66	4.03	V	44.69	53.98	9.29	AV
10640	50.24	4.40	H	54.64	73.98	19.34	PK
10640	38.17	4.40	H	42.57	53.98	11.41	AV
15960	56.44	4.03	H	60.47	73.98	13.51	PK
15960	40.42	4.03	H	44.45	53.98	9.53	AV

Report No.: HCT-RF-1903-FC044

Band : UNII 2A

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5270 MHz

Channel No. 54 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10540	45.19	5.03	V	50.22	68.20	17.98	PK
15810	51.45	4.69	V	56.14	73.98	17.84	PK
15810	38.12	4.69	V	42.81	53.98	11.17	AV
10540	45.05	5.03	H	50.08	68.20	18.12	PK
15810	51.36	4.69	H	56.05	73.98	17.93	PK
15810	37.99	4.69	H	42.68	53.98	11.30	AV

Band : UNII 2A

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5310 MHz

Channel No. 62 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10620	46.55	4.92	V	51.47	73.98	22.51	PK
10620	38.92	4.92	V	43.84	53.98	10.14	AV
15930	48.38	4.50	V	52.88	73.98	21.10	PK
15930	36.86	4.50	V	41.36	53.98	12.62	AV
10620	46.39	4.92	H	51.31	73.98	22.67	PK
10620	38.76	4.92	H	43.68	53.98	10.30	AV
15930	48.25	4.50	H	52.75	73.98	21.23	PK
15930	36.79	4.50	H	41.29	53.98	12.69	AV

Report No.: HCT-RF-1903-FC044

Band : UNII 2A

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5270 MHz

Channel No. 54 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10540	45.30	5.03	V	50.33	68.20	17.87	PK
15810	50.96	4.69	V	55.65	73.98	18.33	PK
15810	38.05	4.69	V	42.74	53.98	11.24	AV
10540	45.22	5.03	H	50.25	68.20	17.95	PK
15810	50.76	4.69	H	55.45	73.98	18.53	PK
15810	37.94	4.69	H	42.63	53.98	11.35	AV

Band : UNII 2A

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5310 MHz

Channel No. 62 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10620	46.11	4.92	V	51.03	73.98	22.95	PK
10620	38.64	4.92	V	43.56	53.98	10.42	AV
15930	49.50	4.50	V	54.00	73.98	19.98	PK
15930	36.96	4.50	V	41.46	53.98	12.52	AV
10620	45.97	4.92	H	50.89	73.98	23.09	PK
10620	38.47	4.92	H	43.39	53.98	10.59	AV
15930	49.39	4.50	H	53.89	73.98	20.09	PK
15930	36.81	4.50	H	41.31	53.98	12.67	AV

Report No.: HCT-RF-1903-FC044

Band : UNII 2A

Operation Mode: 802.11 ac(VHT80)

Transfer MCS Index: 0

Operating Frequency 5290 MHz

Channel No. 58 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10580	48.88	4.02	V	52.90	68.20	15.30	PK
15870	47.84	5.51	V	53.35	73.98	20.63	PK
15870	35.77	5.51	V	41.28	53.98	12.70	AV
10580	49.56	4.02	H	53.58	68.20	14.62	PK
15870	48.60	5.51	H	54.11	73.98	19.87	PK
15870	35.64	5.51	H	41.15	53.98	12.83	AV

Report No.: HCT-RF-1903-FC044

Band : UNII 2C

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5500 MHz

Channel No. 100 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11000	48.72	4.29	V	53.01	73.98	20.97	PK
11000	36.30	4.29	V	40.59	53.98	13.39	AV
16500	52.86	6.22	V	59.08	68.20	9.12	PK
11000	48.56	4.29	H	52.85	73.98	21.13	PK
11000	35.97	4.29	H	40.26	53.98	13.72	AV
16500	52.53	6.22	H	58.75	68.20	9.45	PK

Band : UNII 2C

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5600 MHz

Channel No. 120 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11200	48.66	4.40	V	53.06	73.98	20.92	PK
11200	36.10	4.40	V	40.50	53.98	13.48	AV
16800	52.82	7.60	V	60.42	68.20	7.78	PK
11200	48.57	4.40	H	52.97	73.98	21.01	PK
11200	35.95	4.40	H	40.35	53.98	13.63	AV
16800	52.69	7.60	H	60.29	68.20	7.91	PK

Report No.: HCT-RF-1903-FC044

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

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11440	48.90	4.38	V	53.28	73.98	20.70	PK
11440	36.31	4.38	V	40.69	53.98	13.29	AV
17160	53.11	8.77	V	61.88	68.20	6.32	PK
11440	48.69	4.38	H	53.07	73.98	20.91	PK
11440	36.27	4.38	H	40.65	53.98	13.33	AV
17160	52.97	8.77	H	61.74	68.20	6.46	PK

Report No.: HCT-RF-1903-FC044

Band : UNII 2C

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5500 MHz

Channel No. 100 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11000	48.54	4.29	V	52.83	73.98	21.15	PK
11000	36.23	4.29	V	40.52	53.98	13.46	AV
16500	52.94	6.22	V	59.16	68.20	9.04	PK
11000	48.23	4.29	H	52.52	73.98	21.46	PK
11000	35.97	4.29	H	40.26	53.98	13.72	AV
16500	52.83	6.22	H	59.05	68.20	9.15	PK

Band : UNII 2C

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5600 MHz

Channel No. 120 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11200	48.38	4.40	V	52.78	73.98	21.20	PK
11200	35.96	4.40	V	40.36	53.98	13.62	AV
16800	52.63	7.60	V	60.23	68.20	7.97	PK
11200	48.21	4.40	H	52.61	73.98	21.37	PK
11200	35.73	4.40	H	40.13	53.98	13.85	AV
16800	52.57	7.60	H	60.17	68.20	8.03	PK

Report No.: HCT-RF-1903-FC044

Band :	UNII 2C
Operation Mode:	802.11 n(HT20)
Transfer MCS Index:	MCS0
Operating Frequency	5720 MHz
Channel No.	144 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11440	48.69	4.38	V	53.07	73.98	20.91	PK
11440	36.28	4.38	V	40.66	53.98	13.32	AV
17160	52.98	8.77	V	61.75	68.20	6.45	PK
11440	48.54	4.38	H	52.92	73.98	21.06	PK
11440	36.10	4.38	H	40.48	53.98	13.50	AV
17160	52.17	8.77	H	60.94	68.20	7.26	PK

Report No.: HCT-RF-1903-FC044

Band : UNII 2C

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5500 MHz

Channel No. 100 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11000	49.55	4.29	V	53.84	73.98	20.14	PK
11000	36.10	4.29	V	40.39	53.98	13.59	AV
16500	53.12	6.22	V	59.34	68.20	8.86	PK
11000	49.12	4.29	H	53.41	73.98	20.57	PK
11000	35.79	4.29	H	40.08	53.98	13.90	AV
16500	52.96	6.22	H	59.18	68.20	9.02	PK

Band : UNII 2C

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5600 MHz

Channel No. 120 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11200	48.86	4.40	V	53.26	73.98	20.72	PK
11200	36.05	4.40	V	40.45	53.98	13.53	AV
16800	52.29	7.60	V	59.89	68.20	8.31	PK
11200	48.73	4.40	H	53.13	73.98	20.85	PK
11200	35.79	4.40	H	40.19	53.98	13.79	AV
16800	52.14	7.60	H	59.74	68.20	8.46	PK

Report No.: HCT-RF-1903-FC044

Band : UNII 2C

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5720 MHz

Channel No. 144 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11440	49.16	4.38	V	53.54	73.98	20.44	PK
11440	36.11	4.38	V	40.49	53.98	13.49	AV
17160	52.93	8.77	V	61.70	68.20	6.50	PK
11440	49.05	4.38	H	53.43	73.98	20.55	PK
11440	35.94	4.38	H	40.32	53.98	13.66	AV
17160	52.77	8.77	H	61.54	68.20	6.66	PK

Band : UNII 2C

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5510 MHz

Channel No. 102 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11020	48.82	4.58	V	53.40	73.98	20.58	PK
11020	36.73	4.58	V	41.31	53.98	12.67	AV
16530	47.52	6.22	V	53.74	68.20	14.46	PK
11020	48.76	4.58	H	53.34	73.98	20.64	PK
11020	36.69	4.58	H	41.27	53.98	12.71	AV
16530	47.36	6.22	H	53.58	68.20	14.62	PK

Band : UNII 2C

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5590 MHz

Channel No. 118 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11180	49.10	5.04	V	54.14	73.98	19.84	PK
11180	36.42	5.04	V	41.46	53.98	12.52	AV
16770	49.64	7.21	V	56.85	68.20	11.35	PK
11180	49.07	5.04	H	54.11	73.98	19.87	PK
11180	36.38	5.04	H	41.42	53.98	12.56	AV
16770	49.53	7.21	H	56.74	68.20	11.46	PK

Report No.: HCT-RF-1903-FC044

Band : UNII 2C

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: 0

Operating Frequency 5710 MHz

Channel No. 142 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11420	48.67	4.11	V	52.78	73.98	21.20	PK
11420	36.36	4.11	V	40.47	53.98	13.51	AV
17130	48.59	7.70	V	56.29	68.20	11.91	PK
11420	48.54	4.11	H	52.65	73.98	21.33	PK
11420	36.21	4.11	H	40.32	53.98	13.66	AV
17130	48.38	7.70	H	56.08	68.20	12.12	PK

Band : UNII 2C
 Operation Mode: 802.11 ac(VHT40)
 Transfer MCS Index: 0
 Operating Frequency 5510 MHz
 Channel No. 102 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11020	48.69	4.58	V	53.27	73.98	20.71	PK
11020	36.68	4.58	V	41.26	53.98	12.72	AV
16530	47.33	6.22	V	53.55	68.20	14.65	PK
11020	48.42	4.58	H	53.00	73.98	20.98	PK
11020	36.54	4.58	H	41.12	53.98	12.86	AV
16530	47.24	6.22	H	53.46	68.20	14.74	PK

Band : UNII 2C
 Operation Mode: 802.11 ac(VHT40)
 Transfer MCS Index: 0
 Operating Frequency 5590 MHz
 Channel No. 118 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11180	49.05	5.04	V	54.09	73.98	19.89	PK
11180	36.23	5.04	V	41.27	53.98	12.71	AV
16770	49.39	7.21	V	56.60	68.20	11.60	PK
11180	48.83	5.04	H	53.87	73.98	20.11	PK
11180	36.17	5.04	H	41.21	53.98	12.77	AV
16770	49.24	7.21	H	56.45	68.20	11.75	PK

Report No.: HCT-RF-1903-FC044

Band : UNII 2C
 Operation Mode: 802.11 ac(VHT40)
 Transfer MCS Index: 0
 Operating Frequency 5710 MHz
 Channel No. 142 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11420	48.56	4.11	V	52.67	73.98	21.31	PK
11420	36.23	4.11	V	40.34	53.98	13.64	AV
17130	48.49	7.70	V	56.19	68.20	12.01	PK
11420	48.51	4.11	H	52.62	73.98	21.36	PK
11420	35.81	4.11	H	39.92	53.98	14.06	AV
17130	48.28	7.70	H	55.98	68.20	12.22	PK

Report No.: HCT-RF-1903-FC044

Band : UNII 2C

Operation Mode: 802.11 ac(VHT80)

Transfer MCS Index: 0

Operating Frequency 5530 MHz

Channel No. 106 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11060	48.13	4.97	V	53.10	73.98	20.88	PK
11060	36.07	4.97	V	41.04	53.98	12.94	AV
16590	47.31	6.79	V	54.10	68.20	14.10	PK
11060	48.05	4.97	H	53.02	73.98	20.96	PK
11060	35.86	4.97	H	40.83	53.98	13.15	AV
16590	47.18	6.79	H	53.97	68.20	14.23	PK

Band : UNII 2C

Operation Mode: 802.11 ac(VHT80)

Transfer MCS Index: 0

Operating Frequency 5610 MHz

Channel No. 122 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11220	48.01	4.26	V	52.27	73.98	21.71	PK
11220	36.53	4.26	V	40.79	53.98	13.19	AV
16830	46.91	8.51	V	55.42	68.20	12.78	PK
11220	47.92	4.26	H	52.18	73.98	21.80	PK
11220	36.51	4.26	H	40.77	53.98	13.21	AV
16830	46.70	8.51	H	55.21	68.20	12.99	PK

Report No.: HCT-RF-1903-FC044

Band : UNII 2C

Operation Mode: 802.11 ac(VHT80)

Transfer MCS Index: 0

Operating Frequency 5690 MHz

Channel No. 138 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11380	49.56	4.20	V	53.76	73.98	20.22	PK
11380	37.07	4.20	V	41.27	53.98	12.71	AV
17070	47.08	8.73	V	55.81	68.20	12.39	PK
11380	49.31	4.20	H	53.51	73.98	20.47	PK
11380	37.01	4.20	H	41.21	53.98	12.77	AV
17070	46.94	8.73	H	55.67	68.20	12.53	PK

Band : UNII 3

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5745MHz

Channel No. 149 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	47.64	4.19	V	51.83	73.98	22.15	PK
11490	35.27	4.19	V	39.46	53.98	14.52	AV
17235	52.88	9.09	V	61.97	68.20	6.23	PK
11490	47.66	4.19	H	51.85	73.98	22.13	PK
11490	35.34	4.19	H	39.53	53.98	14.45	AV
17235	53.05	9.09	H	62.14	68.20	6.06	PK

Band : UNII 3

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5785 MHz

Channel No. 157 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11570	47.69	4.83	V	52.52	73.98	21.46	PK
11570	35.48	4.83	V	40.31	53.98	13.67	AV
17355	54.86	9.81	V	64.67	68.20	3.53	PK
11570	47.86	4.83	H	52.69	73.98	21.29	PK
11570	35.60	4.83	H	40.43	53.98	13.55	AV
17355	55.04	9.81	H	64.85	68.20	3.35	PK

Report No.: HCT-RF-1903-FC044

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

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	47.96	3.70	V	51.66	73.98	22.32	PK
11650	35.11	3.70	V	38.81	53.98	15.17	AV
17475	54.01	10.25	V	64.26	68.20	3.94	PK
11650	48.11	3.70	H	51.81	73.98	22.17	PK
11650	35.39	3.70	H	39.09	53.98	14.89	AV
17475	54.16	10.25	H	64.41	68.20	3.79	PK

Report No.: HCT-RF-1903-FC044

Band : UNII 3

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5745MHz

Channel No. 149 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	47.78	4.19	V	51.97	73.98	22.01	PK
11490	35.39	4.19	V	39.58	53.98	14.40	AV
17235	52.98	9.09	V	62.07	68.20	6.13	PK
11490	47.81	4.19	H	52.00	73.98	21.98	PK
11490	35.62	4.19	H	39.81	53.98	14.17	AV
17235	53.11	9.09	H	62.20	68.20	6.00	PK

Band : UNII 3

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5785 MHz

Channel No. 157 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11570	47.66	4.83	V	52.49	73.98	21.49	PK
11570	35.73	4.83	V	40.56	53.98	13.42	AV
17355	54.54	9.81	V	64.35	68.20	3.85	PK
11570	47.58	4.83	H	52.41	73.98	21.57	PK
11570	35.91	4.83	H	40.74	53.98	13.24	AV
17355	54.77	9.81	H	64.58	68.20	3.62	PK

Report No.: HCT-RF-1903-FC044

Band : UNII 3

Operation Mode: 802.11 n(HT20)

Transfer MCS Index: MCS0

Operating Frequency 5825 MHz

Channel No. 165 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	48.83	3.70	V	52.53	73.98	21.45	PK
11650	35.26	3.70	V	38.96	53.98	15.02	AV
17475	54.61	10.25	V	64.86	68.20	3.34	PK
11650	49.20	3.70	H	52.90	73.98	21.08	PK
11650	35.48	3.70	H	39.18	53.98	14.80	AV
17475	54.88	10.25	H	65.13	68.20	3.07	PK

Band : UNII 3

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5745MHz

Channel No. 149 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	48.05	4.19	V	52.24	73.98	21.74	PK
11490	35.29	4.19	V	39.48	53.98	14.50	AV
17235	53.04	9.09	V	62.13	68.20	6.07	PK
11490	48.17	4.19	H	52.36	73.98	21.62	PK
11490	35.55	4.19	H	39.74	53.98	14.24	AV
17235	53.14	9.09	H	62.23	68.20	5.97	PK

Band : UNII 3

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5785 MHz

Channel No. 157 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11570	47.26	4.83	V	52.09	73.98	21.89	PK
11570	35.51	4.83	V	40.34	53.98	13.64	AV
17355	54.61	9.81	V	64.42	68.20	3.78	PK
11570	47.49	4.83	H	52.32	73.98	21.66	PK
11570	35.69	4.83	H	40.52	53.98	13.46	AV
17355	54.78	9.81	H	64.59	68.20	3.61	PK

Report No.: HCT-RF-1903-FC044

Band :	UNII 3
Operation Mode:	802.11 ac(VHT20)
Transfer MCS Index:	MCS0
Operating Frequency	5825 MHz
Channel No.	165 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	49.04	3.70	V	52.74	73.98	21.24	PK
11650	35.11	3.70	V	38.81	53.98	15.17	AV
17475	54.39	10.25	V	64.64	68.20	3.56	PK
11650	49.13	3.70	H	52.83	73.98	21.15	PK
11650	35.28	3.70	H	38.98	53.98	15.00	AV
17475	54.61	10.25	H	64.86	68.20	3.34	PK

Band : UNII 3
 Operation Mode: 802.11 n(HT40)
 Transfer MCS Index: 0
 Operating Frequency 5755 MHz
 Channel No. 151 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11510	48.86	4.20	V	53.06	73.98	20.92	PK
11510	35.77	4.20	V	39.97	53.98	14.01	AV
17265	49.32	9.64	V	58.96	68.20	9.24	PK
11510	49.11	4.20	H	53.31	73.98	20.67	PK
11510	35.86	4.20	H	40.06	53.98	13.92	AV
17265	49.49	9.64	H	59.13	68.20	9.07	PK

Band : UNII 3
 Operation Mode: 802.11 n(HT40)
 Transfer MCS Index: 0
 Operating Frequency 5795 MHz
 Channel No. 159 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11590	49.14	4.91	V	54.05	73.98	19.93	PK
11590	35.73	4.91	V	40.64	53.98	13.34	AV
17385	50.96	10.20	V	61.16	68.20	7.04	PK
11590	49.25	4.91	H	54.16	73.98	19.82	PK
11590	36.01	4.91	H	40.92	53.98	13.06	AV
17385	51.01	10.20	H	61.21	68.20	6.99	PK

Report No.: HCT-RF-1903-FC044

Band : UNII 3

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5755 MHz

Channel No. 151 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11510	48.04	4.20	V	52.24	73.98	21.74	PK
11510	35.07	4.20	V	39.27	53.98	14.71	AV
17265	49.21	9.64	V	58.85	68.20	9.35	PK
11510	48.13	4.20	H	52.33	73.98	21.65	PK
11510	35.21	4.20	H	39.41	53.98	14.57	AV
17265	49.38	9.64	H	59.02	68.20	9.18	PK

Band : UNII 3

Operation Mode: 802.11 ac(VHT40)

Transfer MCS Index: 0

Operating Frequency 5795 MHz

Channel No. 159 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11590	48.56	4.91	V	53.47	73.98	20.51	PK
11590	35.27	4.91	V	40.18	53.98	13.80	AV
17385	49.55	10.20	V	59.75	68.20	8.45	PK
11590	48.77	4.91	H	53.68	73.98	20.30	PK
11590	35.43	4.91	H	40.34	53.98	13.64	AV
17385	49.75	10.20	H	59.95	68.20	8.25	PK

Report No.: HCT-RF-1903-FC044

Band : UNII 3

Operation Mode: 802.11 ac(VHT80)

Transfer MCS Index: 0

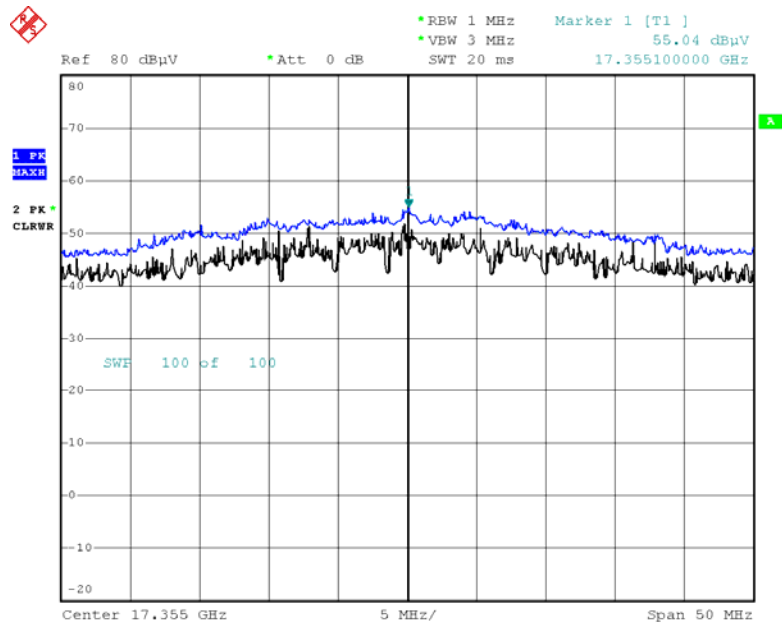
Operating Frequency 5775 MHz

Channel No. 155 Ch

Frequency [MHz]	Reading [dBuV]	A.F.+C.L.-A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11550	48.53	4.50	V	53.03	73.98	20.95	PK
11550	36.21	4.50	V	40.71	53.98	13.27	AV
17325	47.18	10.22	V	57.40	68.20	10.80	PK
11550	48.71	3.32	H	52.03	73.98	21.95	PK
11550	36.38	3.32	H	39.70	53.98	14.28	AV
17325	47.36	10.22	H	57.58	68.20	10.62	PK

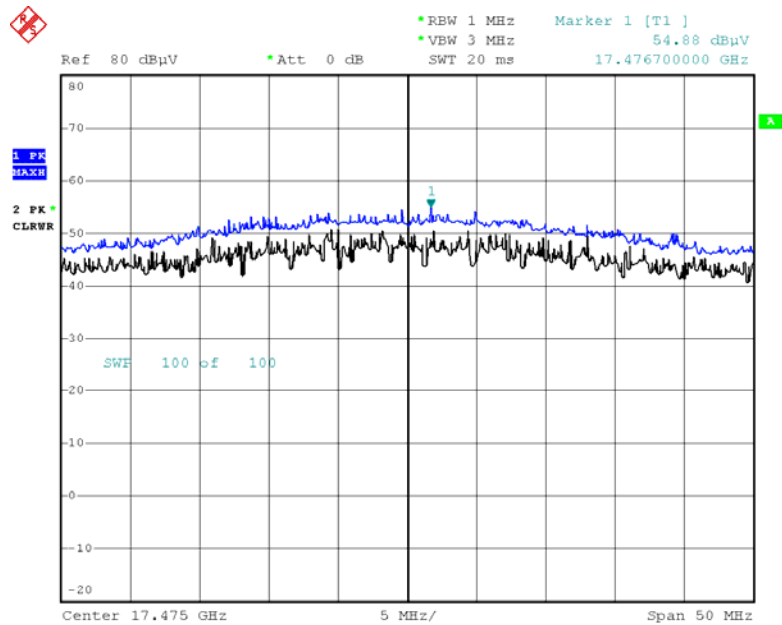
■ Test Plots

Peak Reading (802.11a, Ch.157 3rd Harmonic)



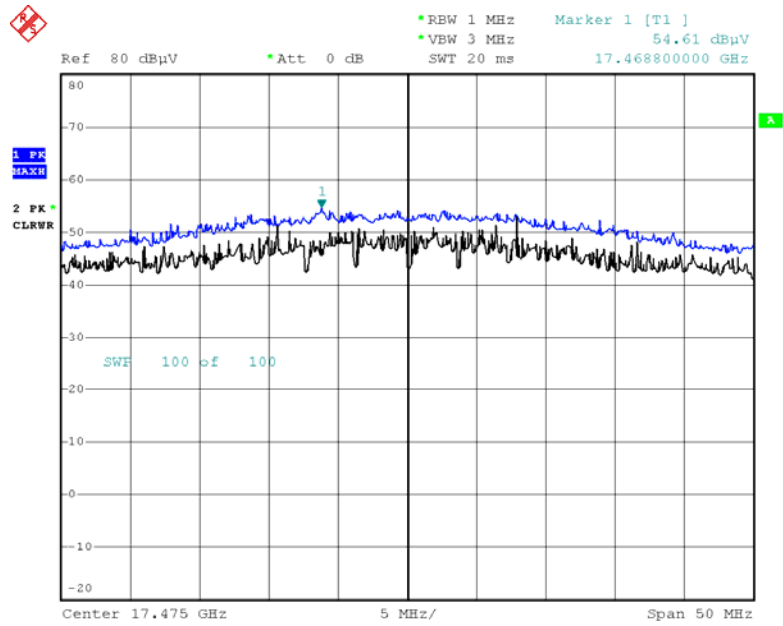
Date: 15.MAR.2019 02:44:49

Peak Reading (802.11n(HT20), Ch.165 3rd Harmonic)



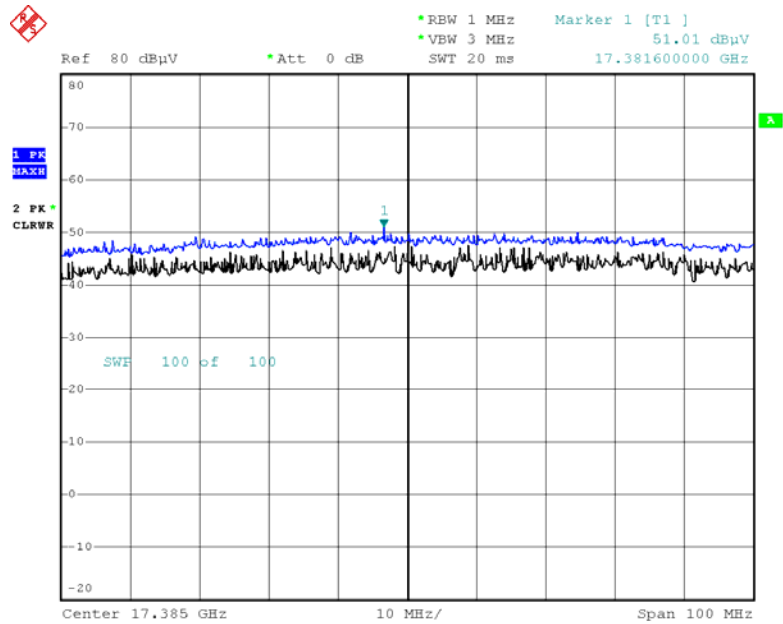
Date: 15.MAR.2019 02:48:59

Peak Reading (802.11ac(VHT20), Ch.165 3rd Harmonic)



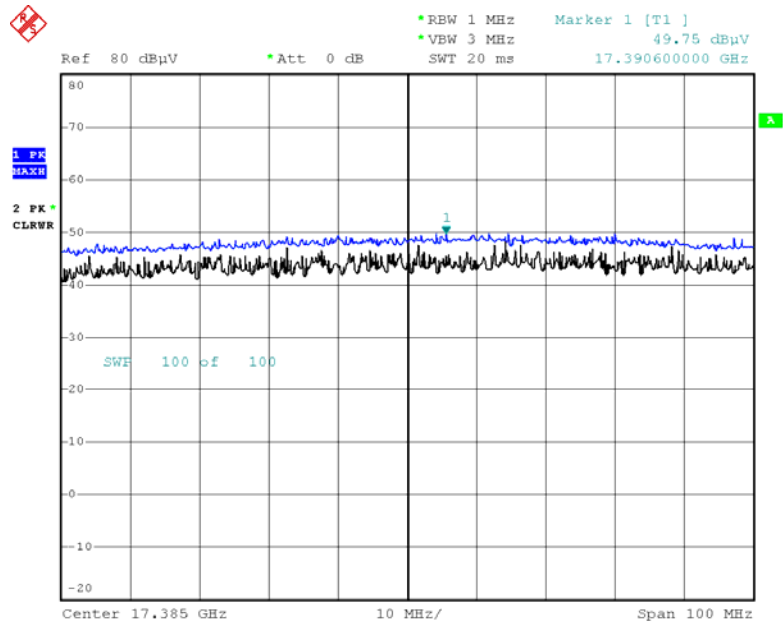
Date: 15.MAR.2019 02:50:58

Peak Reading (802.11n(HT40), Ch.159 3rd Harmonic)



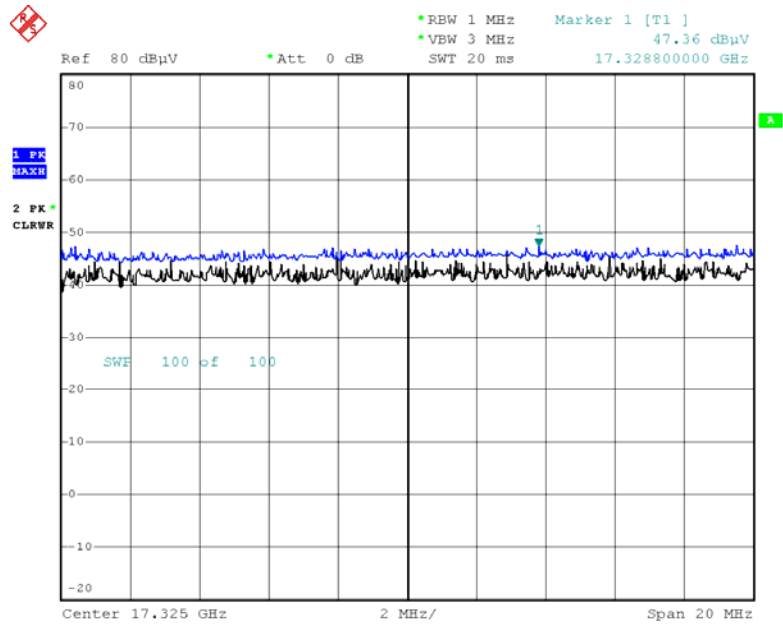
Date: 15.MAR.2019 03:11:49

Peak Reading (802.11ac(VHT40), Ch.159 3rd Harmonic)



Date: 15.MAR.2019 03:15:43

Peak Reading (802.11ac(VHT80), Ch.155 3rd Harmonic)



Date: 15.MAR.2019 03:18:40

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

10.9 RADIATED RESTRICTED BAND EDGE

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	50.90	11.06	H	61.96	73.98	12.02	PK
5150	36.73	11.06	H	47.79	53.98	6.19	AV
5150	50.73	11.06	V	61.79	73.98	12.19	PK
5150	36.46	11.06	V	47.52	53.98	6.46	AV

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	53.75	11.06	H	64.81	73.98	9.17	PK
5150	37.38	11.06	H	48.44	53.98	5.54	AV
5150	53.69	11.06	V	64.75	73.98	9.23	PK
5150	37.21	11.06	V	48.27	53.98	5.71	AV

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	53.02	11.06	H	64.08	73.98	9.90	PK
5150	37.19	11.06	H	48.25	53.98	5.73	AV
5150	52.96	11.06	V	64.02	73.98	9.96	PK
5150	37.03	11.06	V	48.09	53.98	5.89	AV

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	56.03	11.06	H	67.09	73.98	6.89	PK
5150	39.04	11.06	H	50.1	53.98	3.88	AV
5150	55.83	11.06	V	66.89	73.98	7.09	PK
5150	38.56	11.06	V	49.62	53.98	4.36	AV

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	55.01	11.06	H	66.07	73.98	7.91	PK
5150	38.82	11.06	H	49.88	53.98	4.10	AV
5150	54.83	11.06	V	65.89	73.98	8.09	PK
5150	38.43	11.06	V	49.49	53.98	4.49	AV

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	50.25	11.06	H	61.31	73.98	12.67	PK
5150	38.25	11.06	H	49.31	53.98	4.67	AV
5150	48.96	11.06	V	60.02	73.98	13.96	PK
5150	37.96	11.06	V	49.02	53.98	4.96	AV

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	48.54	11.86	H	60.40	73.98	13.58	PK
5350	34.28	11.86	H	46.14	53.98	7.84	AV
5350	48.39	11.86	V	60.25	73.98	13.73	PK
5350	34.18	11.86	V	46.04	53.98	7.94	AV

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	50.93	11.86	H	62.79	73.98	11.19	PK
5350	34.01	11.86	H	45.87	53.98	8.11	AV
5350	50.58	11.86	V	62.44	73.98	11.54	PK
5350	33.97	11.86	V	45.83	53.98	8.15	AV

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	52.53	11.86	H	64.39	73.98	9.59	PK
5350	34.66	11.86	H	46.52	53.98	7.46	AV
5350	52.37	11.86	V	64.23	73.98	9.75	PK
5350	34.56	11.86	V	46.42	53.98	7.56	AV

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	51.37	11.86	H	63.23	73.98	10.75	PK
5350	36.99	11.86	H	48.85	53.98	5.13	AV
5350	51.13	11.86	V	62.99	73.98	10.99	PK
5350	36.73	11.86	V	48.59	53.98	5.39	AV

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	50.33	11.86	H	62.19	73.98	11.79	PK
5350	37.44	11.86	H	49.3	53.98	4.68	AV
5350	50.16	11.86	V	62.02	73.98	11.96	PK
5350	37.32	11.86	V	49.18	53.98	4.80	AV

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	48.92	11.86	H	60.78	73.98	13.20	PK
5350	37.23	11.86	H	49.09	53.98	4.89	AV
5350	48.73	11.86	V	60.59	73.98	13.39	PK
5350	37.12	11.86	V	48.98	53.98	5.00	AV

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

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	44.41	12.24	H	56.65	73.98	17.33	PK
5460	31.47	12.24	H	43.71	53.98	10.27	AV
5470	48.12	12.50	H	60.62	68.20	7.58	PK
5460	44.21	12.24	V	56.45	73.98	17.53	PK
5460	31.16	12.24	V	43.4	53.98	10.58	AV
5470	48.05	12.50	V	60.55	68.20	7.65	PK

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

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	45.36	12.24	H	57.60	73.98	16.38	PK
5460	31.77	12.24	H	44.01	53.98	9.97	AV
5470	49.74	12.50	H	62.24	68.20	5.96	PK
5460	45.26	12.24	V	57.5	73.98	16.48	PK
5460	30.98	12.24	V	43.22	53.98	10.76	AV
5470	49.36	12.50	V	61.86	68.20	6.34	PK

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

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	44.62	12.24	H	56.86	73.98	17.12	PK
5460	32.18	12.24	H	44.42	53.98	9.56	AV
5470	49.89	12.50	H	62.39	68.20	5.81	PK
5460	44.28	12.24	V	56.52	73.98	17.46	PK
5460	31.96	12.24	V	44.2	53.98	9.78	AV
5470	49.76	12.50	V	62.26	68.20	5.94	PK

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

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	45.72	12.24	H	57.96	73.98	16.02	PK
5460	32.88	12.24	H	45.12	53.98	8.86	AV
5470	48.40	12.50	H	60.9	68.20	7.30	PK
5460	45.39	12.24	V	57.63	73.98	16.35	PK
5460	32.53	12.24	V	44.77	53.98	9.21	AV
5470	48.12	12.50	V	60.62	68.20	7.58	PK

Band : UNII 2C

Operation Mode: 802.11 ac_VHT40

Transfer MCS Index: 0

Operating Frequency 5510 MHz

Channel No. 102 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	44.68	12.24	H	56.92	73.98	17.06	PK
5460	32.91	12.24	H	45.15	53.98	8.83	AV
5470	50.41	12.50	H	62.91	68.20	5.29	PK
5460	44.39	12.24	V	56.63	73.98	17.35	PK
5460	32.73	12.24	V	44.97	53.98	9.01	AV
5470	50.28	12.50	V	62.78	68.20	5.42	PK

Band : UNII 2C

Operation Mode: 802.11 ac_VHT80

Transfer MCS Index: 0

Operating Frequency 5530 MHz

Channel No. 106 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	50.11	12.24	H	62.35	73.98	11.63	PK
5460	35.66	12.24	H	47.9	53.98	6.08	AV
5470	50.65	12.50	H	63.15	68.20	5.05	PK
5460	49.96	12.24	V	62.2	73.98	11.78	PK
5460	35.34	12.24	V	47.58	53.98	6.40	AV
5470	50.36	12.50	V	62.86	68.20	5.34	PK

Report No.: HCT-RF-1903-FC044

Band : UNII 2C
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 Operating Frequency 5720 MHz
 Channel No. 144 Ch
 Measured Frequency Range Above 5850MHz

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5850	43.60	13.80	H	57.40	68.20	10.80	PK
5850	43.47	13.80	V	57.27	68.20	10.93	PK

Band : UNII 2C
 Operation Mode: 802.11 n_HT20
 Transfer MCS Index: 0
 Operating Frequency 5720 MHz
 Channel No. 144 Ch
 Measured Frequency Range Above 5850MHz

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5850	43.33	13.80	H	57.13	68.20	11.07	PK
5850	43.21	13.80	V	57.01	68.20	11.19	PK

Band : UNII 2C
 Operation Mode: 802.11 ac_VHT20
 Transfer MCS Index: 0
 Operating Frequency 5720 MHz
 Channel No. 144 Ch
 Measured Frequency Range Above 5850MHz

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5850	43.29	13.80	H	57.09	68.20	11.11	PK
5850	43.15	13.80	V	56.95	68.20	11.25	PK

Report No.: HCT-RF-1903-FC044

Band : UNII 2C
 Operation Mode: 802.11 n_HT40
 Transfer MCS Index: 0
 Operating Frequency 5710 MHz
 Channel No. 142 Ch
 Measured Frequency Range Above 5850MHz

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5850	43.50	13.80	H	57.30	68.20	10.90	PK
5850	43.39	13.80	V	57.19	68.20	11.01	PK

Band : UNII 2C
 Operation Mode: 802.11 ac_VHT40
 Transfer MCS Index: 0
 Operating Frequency 5710 MHz
 Channel No. 142 Ch
 Measured Frequency Range Above 5850MHz

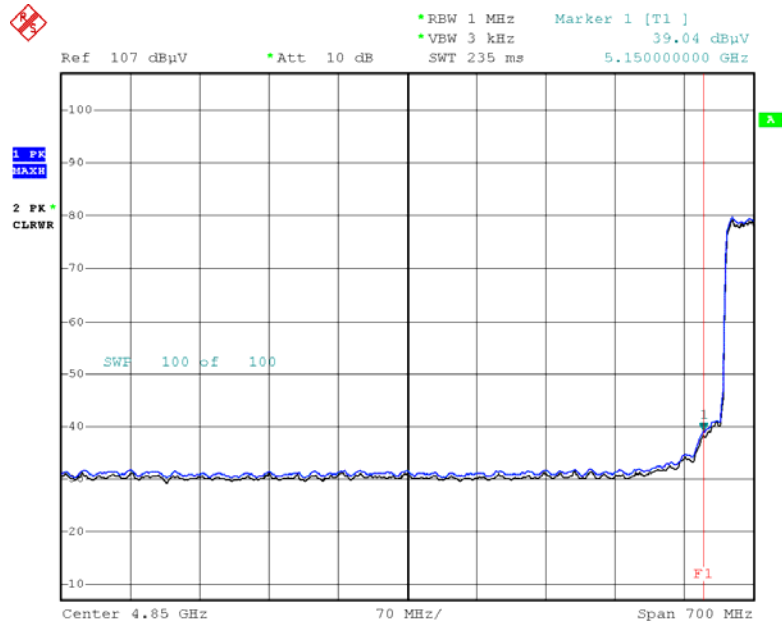
Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5850	43.27	13.19	H	56.46	68.20	11.74	PK
5850	43.21	13.19	V	56.40	68.20	11.80	PK

Band : UNII 2C
 Operation Mode: 802.11 ac_VHT80
 Transfer MCS Index: 0
 Operating Frequency 5690 MHz
 Channel No. 138 Ch
 Measured Frequency Range Above 5850MHz

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5850	43.99	13.80	H	57.79	68.20	10.41	PK
5850	43.86	13.80	V	57.66	68.20	10.54	PK

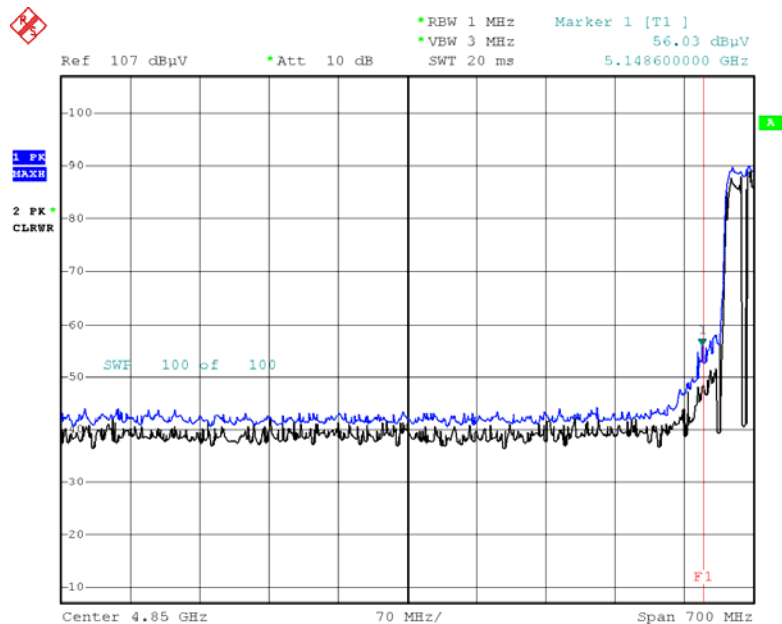
■ Test Plots(UNII 1, 2A, 2C)

Average Reading (802.11n_HT40, Ch.38)



Date: 15.MAR.2019 04:06:31

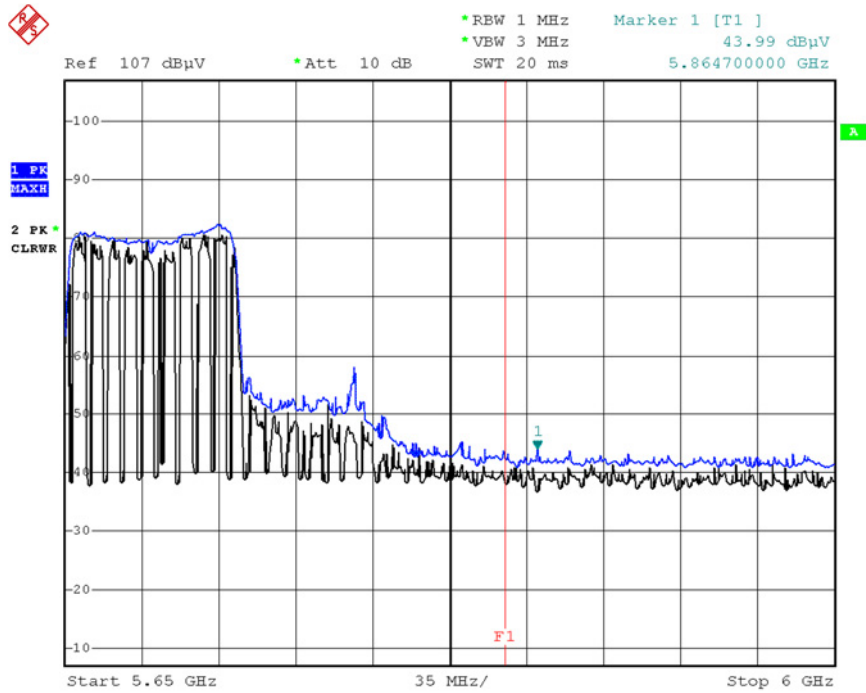
Peak Reading (802.11n_HT40, Ch.38)



Date: 15.MAR.2019 04:07:26

Note : Only the worst case plots for Radiated Restricted Band Edge.

Peak Reading (802.11ac_VHT80, Ch.138)



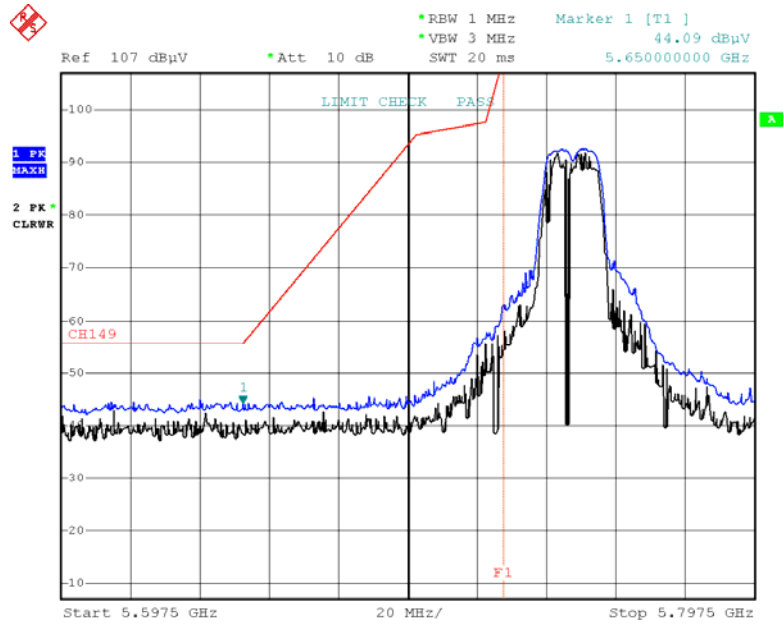
Date: 18.MAR.2019 13:44:25

Note :

1. Only the worst case plots for Radiated Restricted Band Edge.
2. Red line : 5850MHz

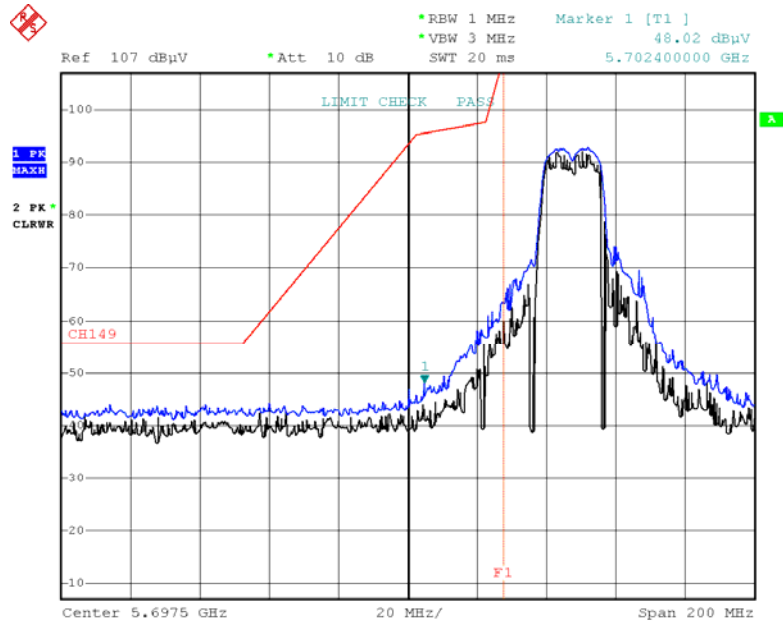
■ Test Plots(UNII 3)

Peak Reading (802.11a, Ch.149)



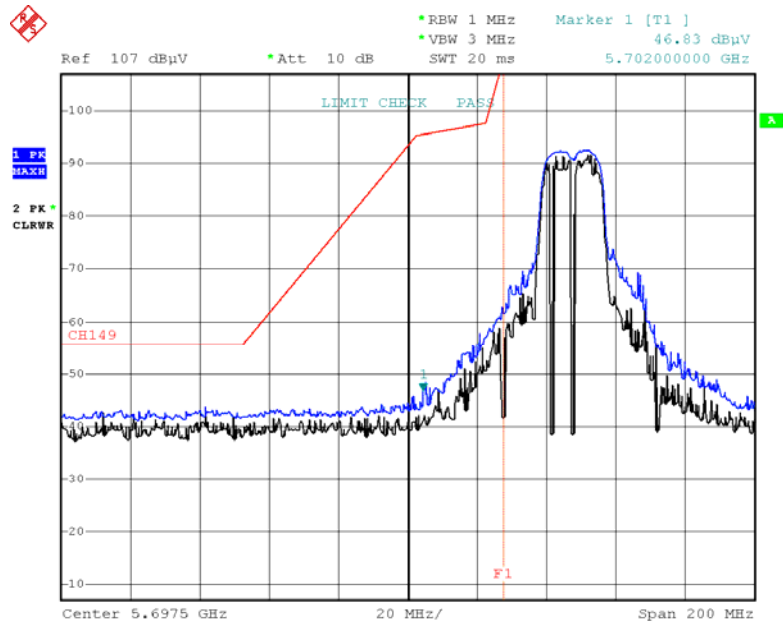
Date: 18.MAR.2019 14:01:07

Peak Reading (802.11n_HT20, Ch.149)



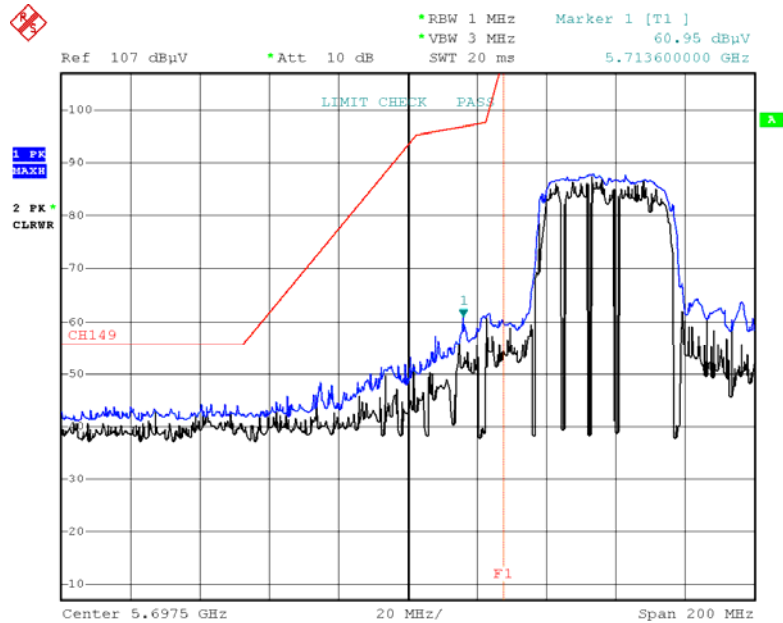
Date: 18.MAR.2019 14:02:55

Peak Reading (802.11ac_VHT20, Ch.149)



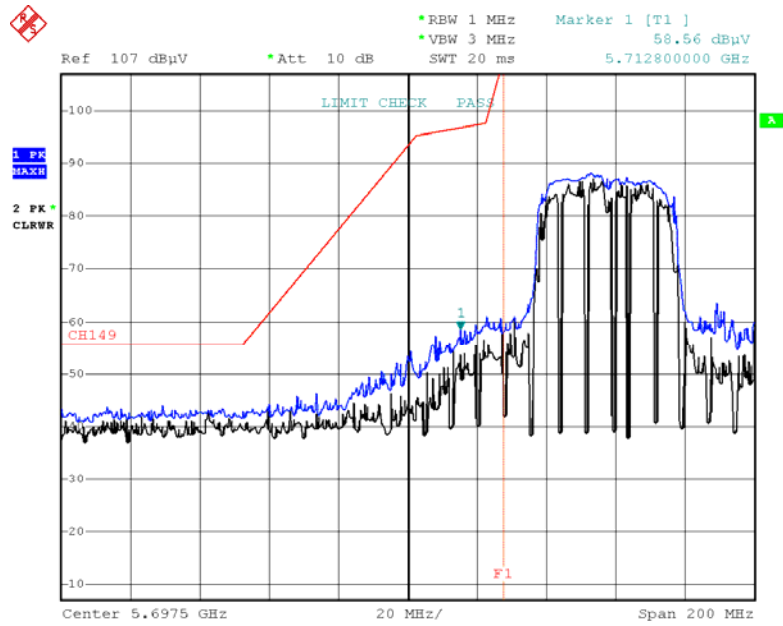
Date: 18.MAR.2019 14:03:37

Peak Reading (802.11n_HT40, Ch.151)



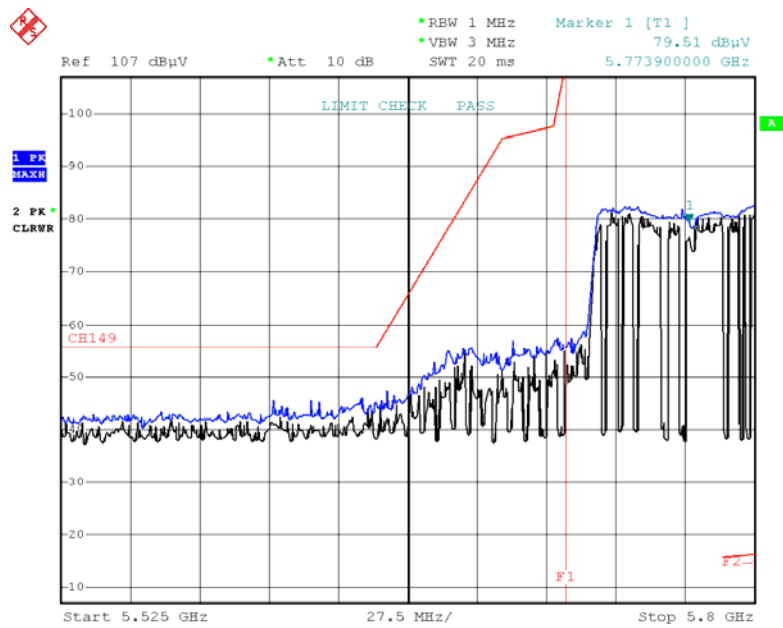
Date: 18.MAR.2019 14:04:54

Peak Reading (802.11ac_VHT40, Ch.151)



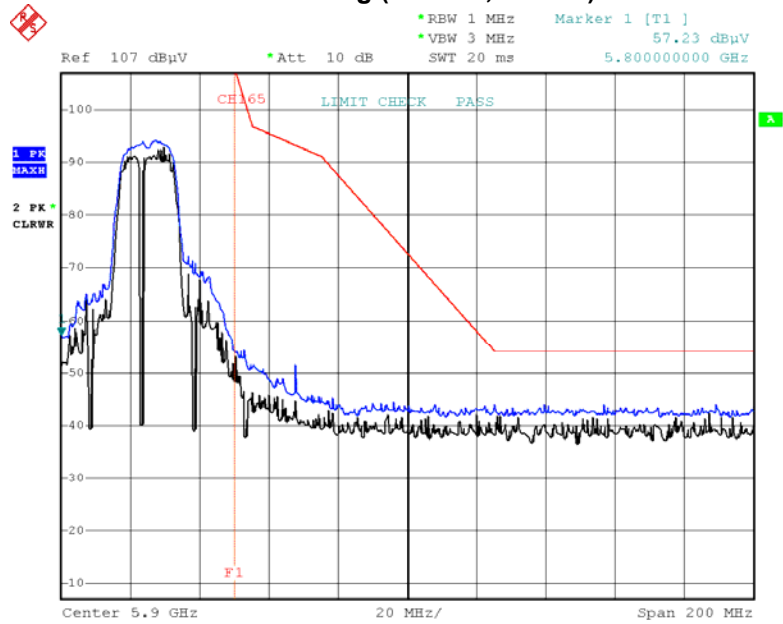
Date: 18.MAR.2019 14:05:51

Peak Reading (802.11ac_VHT80, Ch.155)



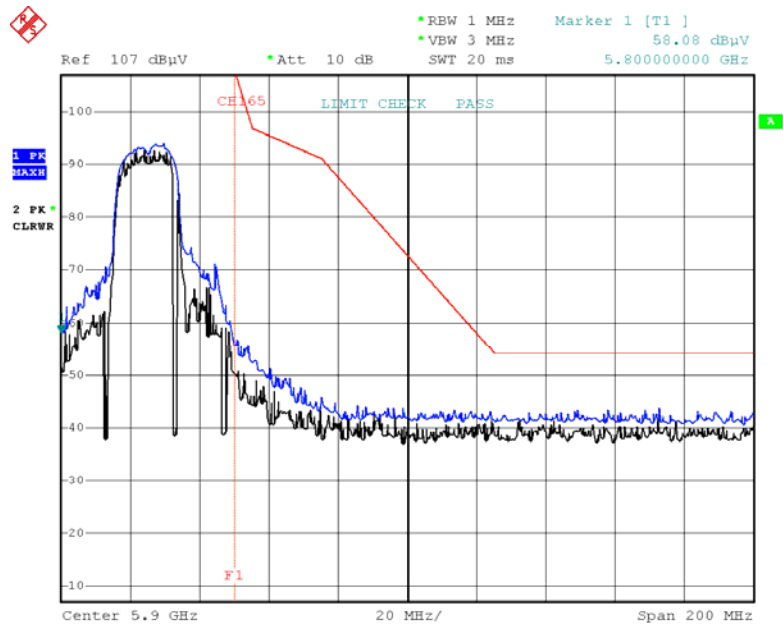
Date: 18.MAR.2019 14:08:37

Peak Reading (802.11a, Ch.165)



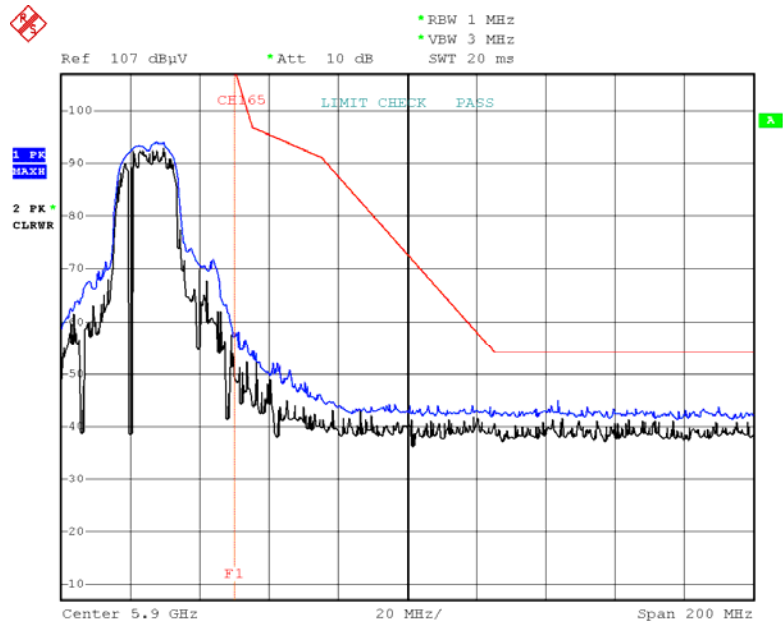
Date: 14.MAR.2019 02:38:34

Peak Reading (802.11n_HT20, Ch.165)



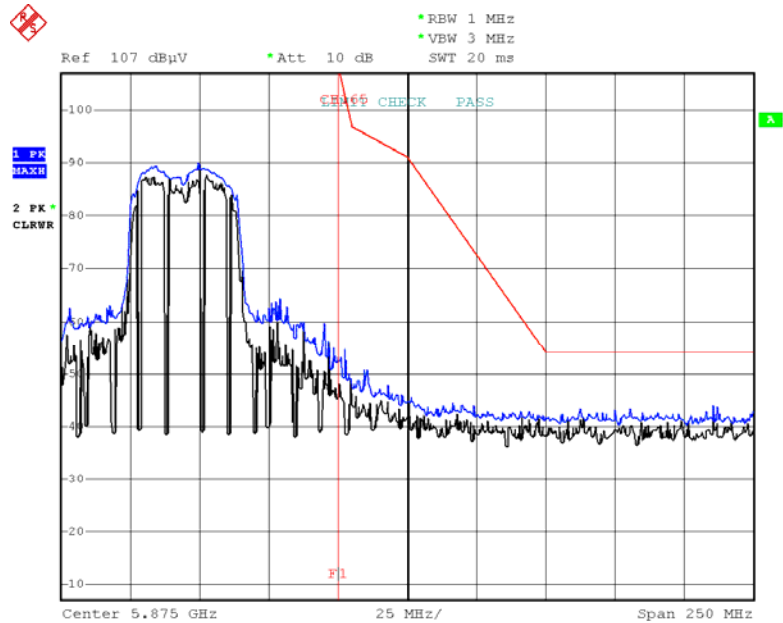
Date: 14.MAR.2019 02:43:01

Peak Reading (802.11ac_VHT20, Ch.165)



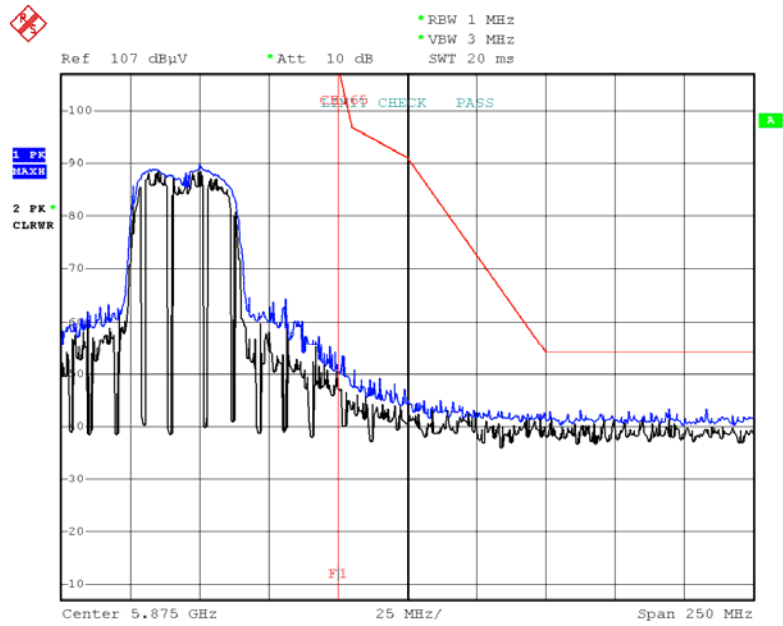
Date: 14.MAR.2019 02:45:43

Peak Reading (802.11n_HT40, Ch.159)



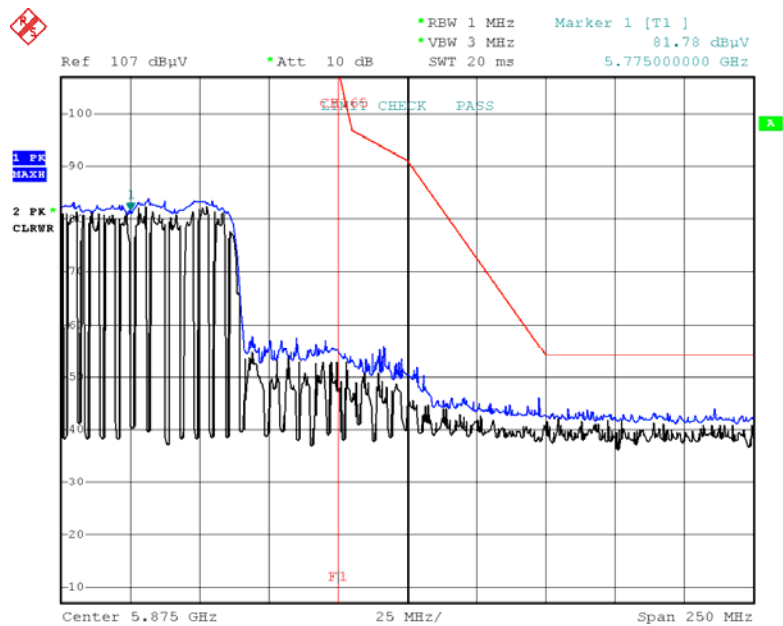
Date: 14.MAR.2019 02:47:28

Peak Reading (802.11ac_VHT40, Ch.159)



Date: 14.MAR.2019 02:47:48

Peak Reading (802.11ac_VHT80, Ch.155)



Date: 14.MAR.2019 02:48:59

10.10 POWERLINE CONDUCTED EMISSIONS

Conducted Emissions (Line 1)

Test

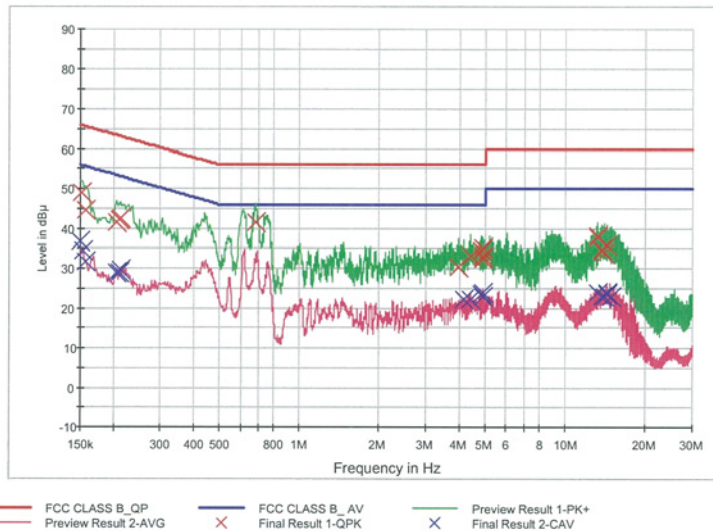
1 / 2

HCT TEST Report

Common Information

EUT: SM-A3050
Manufacturer: SAMSUNG
Test Site: SHIELD ROOM
Operating Conditions: WLAN 5.0GHz (802.11 a/n) L1

FCC CLASS B_Exten Cable



Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	48.9	9.000	Off	L1	9.7	17.0	65.9
0.158000	44.4	9.000	Off	L1	9.7	21.2	65.6
0.206000	41.5	9.000	Off	L1	9.7	21.8	63.4
0.210000	42.3	9.000	Off	L1	9.7	20.9	63.2
0.214000	42.4	9.000	Off	L1	9.7	20.7	63.0
0.686000	41.6	9.000	Off	L1	9.8	14.4	56.0
3.954000	30.2	9.000	Off	L1	10.0	25.8	56.0
4.422000	33.0	9.000	Off	L1	10.0	23.0	56.0
4.816000	34.4	9.000	Off	L1	10.0	21.6	56.0
4.886000	32.4	9.000	Off	L1	10.0	23.6	56.0
4.892000	35.1	9.000	Off	L1	10.0	20.9	56.0
4.898000	33.1	9.000	Off	L1	10.0	22.9	56.0
13.184000	37.9	9.000	Off	L1	10.3	22.1	60.0
13.188000	38.2	9.000	Off	L1	10.3	21.8	60.0
13.646000	34.7	9.000	Off	L1	10.4	25.3	60.0
13.734000	34.3	9.000	Off	L1	10.4	25.7	60.0
14.042000	33.6	9.000	Off	L1	10.4	26.4	60.0
14.348000	35.9	9.000	Off	L1	10.4	24.1	60.0

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Test

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Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	36.9	9.000	Off	L1	9.7	19.1	56.0
0.154000	34.4	9.000	Off	L1	9.7	21.4	55.8
0.158000	31.6	9.000	Off	L1	9.7	23.9	55.6
0.206000	28.9	9.000	Off	L1	9.7	24.5	53.4
0.210000	28.9	9.000	Off	L1	9.7	24.3	53.2
0.214000	29.6	9.000	Off	L1	9.7	23.4	53.0
4.140000	22.0	9.000	Off	L1	10.0	24.0	46.0
4.422000	22.2	9.000	Off	L1	10.0	23.8	46.0
4.812000	23.7	9.000	Off	L1	10.0	22.3	46.0
4.820000	23.4	9.000	Off	L1	10.0	22.6	46.0
4.892000	23.9	9.000	Off	L1	10.0	22.1	46.0
4.896000	22.8	9.000	Off	L1	10.0	23.2	46.0
13.184000	24.0	9.000	Off	L1	10.3	26.0	50.0
13.734000	23.0	9.000	Off	L1	10.4	27.0	50.0
14.042000	22.9	9.000	Off	L1	10.4	27.1	50.0
14.348000	23.9	9.000	Off	L1	10.4	26.1	50.0
14.352000	23.7	9.000	Off	L1	10.4	26.3	50.0
14.816000	22.9	9.000	Off	L1	10.4	27.1	50.0

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Conducted Emissions (Line 2)

Test

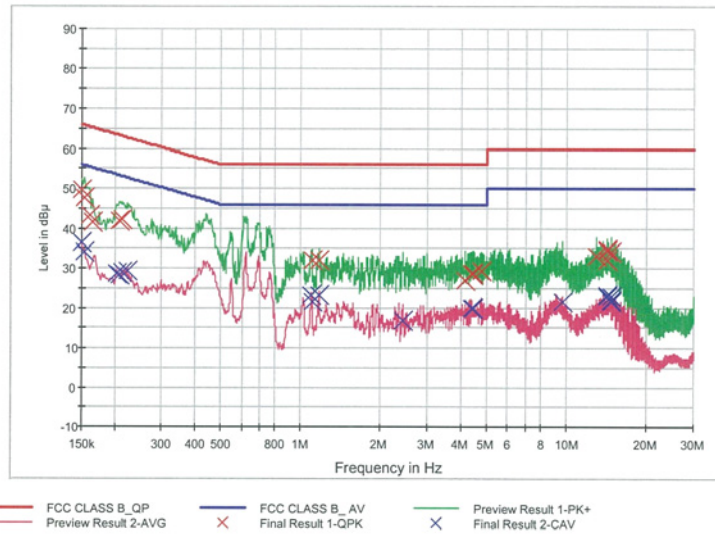
1 / 2

HCT TEST Report

Common Information

EUT: SM-A3050
Manufacturer: SAMSUNG
Test Site: SHIELD ROOM
Operating Conditions: WLAN 5.0GHz (802.11 a/n) N

FCC CLASS B_Exten Cable



Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	49.5	9.000	Off	N	9.8	16.5	66.0
0.154000	47.6	9.000	Off	N	9.8	18.2	65.8
0.160000	43.2	9.000	Off	N	9.8	22.3	65.5
0.164000	41.4	9.000	Off	N	9.8	23.8	65.3
0.208000	41.8	9.000	Off	N	9.9	21.5	63.3
0.212000	42.2	9.000	Off	N	9.9	20.9	63.1
1.102000	32.1	9.000	Off	N	10.0	23.9	56.0
1.176000	32.0	9.000	Off	N	10.0	24.0	56.0
4.150000	27.0	9.000	Off	N	10.2	29.0	56.0
4.416000	28.6	9.000	Off	N	10.2	27.4	56.0
4.484000	28.8	9.000	Off	N	10.2	27.2	56.0
4.804000	29.3	9.000	Off	N	10.2	26.7	56.0
12.968000	33.0	9.000	Off	N	10.6	27.0	60.0
14.140000	32.0	9.000	Off	N	10.6	28.0	60.0
14.216000	34.3	9.000	Off	N	10.6	25.7	60.0
14.222000	34.7	9.000	Off	N	10.6	25.3	60.0
14.694000	34.2	9.000	Off	N	10.7	25.8	60.0
14.770000	34.2	9.000	Off	N	10.7	25.8	60.0

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Test

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Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	36.3	9.000	Off	N	9.8	19.7	56.0
0.154000	34.1	9.000	Off	N	9.8	21.6	55.8
0.204000	28.7	9.000	Off	N	9.9	24.8	53.4
0.208000	28.4	9.000	Off	N	9.9	24.9	53.3
0.212000	28.8	9.000	Off	N	9.9	24.3	53.1
0.222000	29.4	9.000	Off	N	9.9	23.4	52.7
1.100000	23.2	9.000	Off	N	10.0	22.8	46.0
1.104000	21.4	9.000	Off	N	10.0	24.6	46.0
1.174000	23.1	9.000	Off	N	10.0	22.9	46.0
2.438000	16.9	9.000	Off	N	10.1	29.1	46.0
4.416000	19.7	9.000	Off	N	10.2	26.3	46.0
4.484000	19.7	9.000	Off	N	10.2	26.3	46.0
9.666000	21.7	9.000	Off	N	10.4	28.3	50.0
14.216000	22.8	9.000	Off	N	10.6	27.2	50.0
14.220000	23.2	9.000	Off	N	10.6	26.8	50.0
14.692000	21.7	9.000	Off	N	10.7	28.3	50.0
14.696000	23.0	9.000	Off	N	10.7	27.0	50.0
14.772000	21.8	9.000	Off	N	10.7	28.2	50.0

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11. LIST OF TEST EQUIPMENT

Conducted Test

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Rohde & Schwarz	ENV216 / LISN	12/12/2018	Annual	102245
Rohde & Schwarz	ESCI / Test Receiver	06/27/2018	Annual	100033
ESPACE	SU-642 / Temperature Chamber	03/30/2018	Annual	0093008124
Agilent	N9020A / Signal Analyzer	06/08/2018	Annual	MY51110085
Agilent	N9030A / Signal Analyzer	11/20/2018	Annual	MY49431210
Agilent	N1911A / Power Meter	04/16/2018	Annual	MY45100523
Agilent	N1921A / Power Sensor	04/16/2018	Annual	MY52260025
Agilent	87300B / Directional Coupler	11/20/2018	Annual	3116A03621
Hewlett Packard	11667B / Power Splitter	06/07/2018	Annual	05001
Hewlett Packard	E3632A / DC Power Supply	06/26/2018	Annual	KR75303960
Agilent	8493C / Attenuator(10 dB)	07/10/2018	Annual	07560
Rohde & Schwarz	EMC32 / Software	N/A	N/A	N/A
HCT CO., LTD.	FCC WLAN&BT&BLE Conducted Test Software v3.0	N/A	N/A	N/A
Rohde & Schwarz	CBT / Bluetooth Tester	05/17/2018	Annual	100422

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

Radiated Test

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Innco system	CO3000 / Controller(Antenna mast)	N/A	N/A	CO3000-4p
Innco system	MA4640/800-XP-EP / Antenna Position Tower	N/A	N/A	N/A
Emco	2090 / Controller	N/A	N/A	060520
Ets	Turn Table	N/A	N/A	N/A
Rohde & Schwarz	Loop Antenna	08/23/2018	Biennial	1513-175
Schwarzbeck	VULB 9160 / Hybrid Antenna	08/09/2018	Biennial	3368
Schwarzbeck	BBHA 9120D / Horn Antenna	11/21/2017	Biennial	9120D-1191
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	12/04/2017	Biennial	BBHA9170541
Rohde & Schwarz	FSP(9 kHz ~ 30 GHz) / Spectrum Analyzer	09/19/2018	Annual	836650/016
Rohde & Schwarz	FSV40-N / Spectrum Analyzer	09/19/2018	Annual	101068-SZ
Wainwright Instruments	WHKX10-2700-3000-18000-40SS / High Pass Filter	01/03/2019	Annual	4
Wainwright Instruments	WHKX8-6090-7000-18000-40SS / High Pass Filter	01/03/2019	Annual	5
Wainwright Instruments	WRCJV2400/2483.5-2370/2520-60/12SS / Band Reject Filter	06/29/2018	Annual	2
Wainwright Instruments	WRCJV5100/5850-40/50-8EEK / Band Reject Filter	01/03/2019	Annual	2
Api tech.	18B-03 / Attenuator (3 dB)	06/07/2018	Annual	2
WEINSCHL	56-10 / Attenuator(10 dB)	10/10/2018	Annual	72316
CERNEX	CBLU1183540B-01/Broadband Bench Top LNA	01/03/2019	Annual	28549
CERNEX	CBL06185030 / Broadband Low Noise Amplifier	01/03/2019	Annual	24615
CERNEX	CBL18265035 / Power Amplifier	01/03/2019	Annual	22966
CERNEX	CBL26405040 / Power Amplifier	06/29/2018	Annual	25956
TESCOM	TC-3000C / Bluetooth Tester	03/27/2018	Annual	3000C000276

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

12. ANNEX A_ TEST SETUP PHOTO

Please refer to test setup photo file no. as follows;

No.	Description
1	HCT-RF-1903-FC044-P