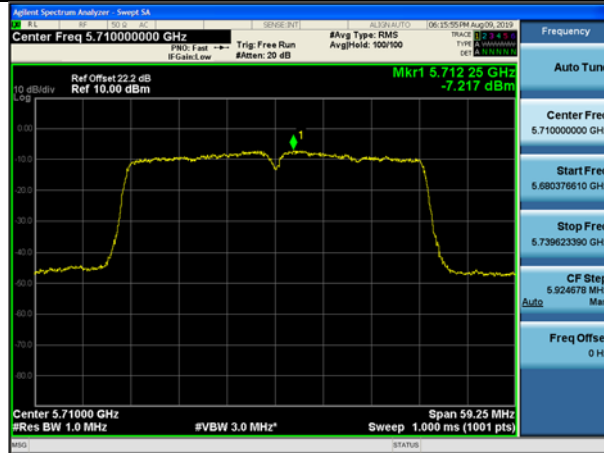
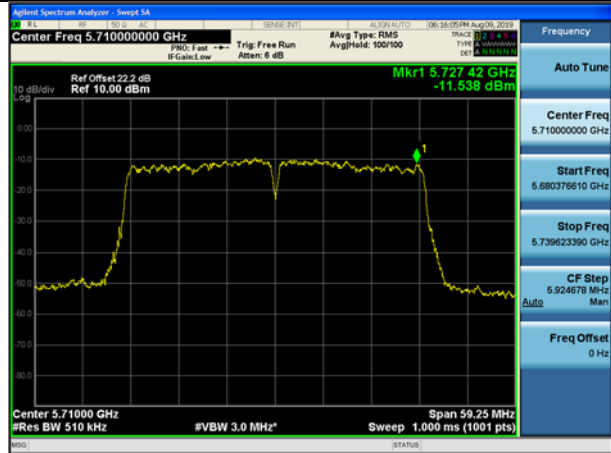


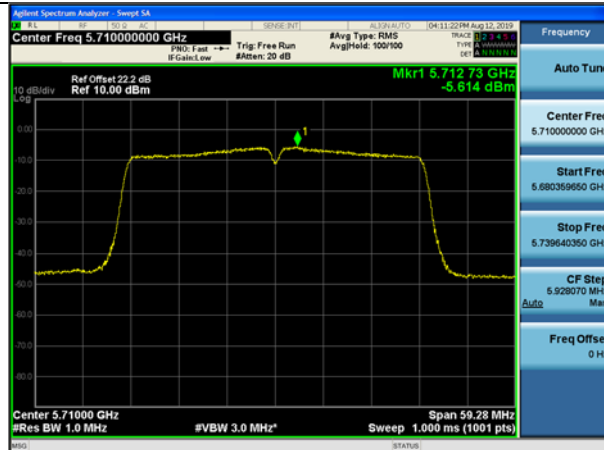
802.11n(HT40) UNII 2C Band



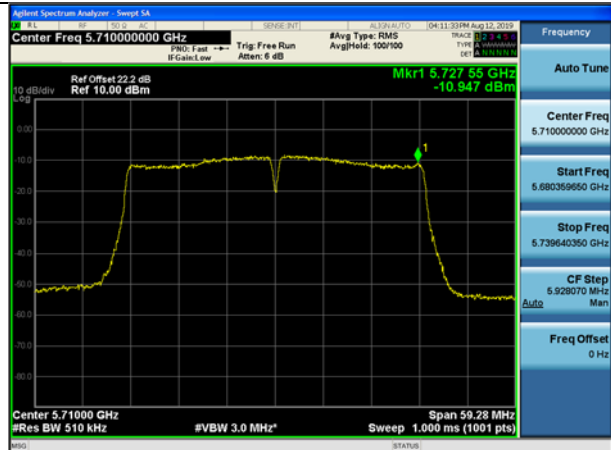
802.11n(HT40) UNII 3 Band



802.11ac(VHT40) UNII 2C Band



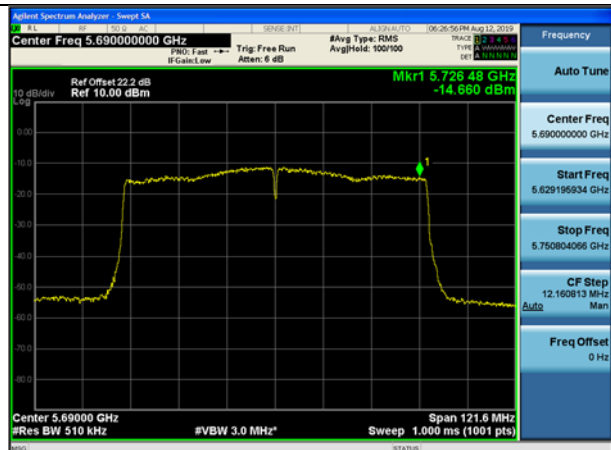
802.11ac(VHT40) UNII 3 Band



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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10360	49.30	4.10	V	53.40	68.20	14.80	PK
15540	48.14	5.36	V	53.50	73.98	20.48	PK
15540	33.87	5.36	V	39.23	53.98	14.75	AV
10360	49.40	4.10	H	53.50	68.20	14.70	PK
15540	47.69	5.36	H	53.05	73.98	20.93	PK
15540	34.18	5.36	H	39.54	53.98	14.44	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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10400	50.57	3.87	V	54.44	68.20	13.76	PK
15600	48.13	4.75	V	52.88	73.98	21.10	PK
15600	34.63	4.75	V	39.38	53.98	14.60	AV
10400	51.56	3.87	H	55.43	68.20	12.77	PK
15600	48.27	4.75	H	53.02	73.98	20.96	PK
15600	34.52	4.75	H	39.27	53.98	14.71	AV

Band : UNII 1

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5240 MHz

Channel No. 48 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10480	50.55	4.52	V	55.07	68.20	13.13	PK
15720	48.98	3.58	V	52.56	73.98	21.42	PK
15720	34.75	3.58	V	38.33	53.98	15.65	AV
10480	50.69	4.52	H	55.21	68.20	12.99	PK
15720	49.45	3.58	H	53.03	73.98	20.95	PK
15720	34.86	3.58	H	38.44	53.98	15.54	AV

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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10360	50.32	4.10	V	54.42	68.20	13.78	PK
15540	47.93	5.36	V	53.29	73.98	20.69	PK
15540	33.90	5.36	V	39.26	53.98	14.72	AV
10360	50.49	4.10	H	54.59	68.20	13.61	PK
15540	48.29	5.36	H	53.65	73.98	20.33	PK
15540	34.00	5.36	H	39.36	53.98	14.62	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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10400	50.13	3.87	V	54.00	68.20	14.20	PK
15600	48.27	4.75	V	53.02	73.98	20.96	PK
15600	34.23	4.75	V	38.98	53.98	15.00	AV
10400	50.90	3.87	H	54.77	68.20	13.43	PK
15600	48.38	4.75	H	53.13	73.98	20.85	PK
15600	34.34	4.75	H	39.09	53.98	14.89	AV

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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10480	49.32	4.52	V	53.84	68.20	14.36	PK
15720	48.54	3.58	V	52.12	73.98	21.86	PK
15720	34.27	3.58	V	37.85	53.98	16.13	AV
10480	50.19	4.52	H	54.71	68.20	13.49	PK
15720	48.59	3.58	H	52.17	73.98	21.81	PK
15720	34.56	3.58	H	38.14	53.98	15.84	AV

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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10360	50.41	4.10	V	54.51	68.20	13.69	PK
15540	47.66	5.36	V	53.02	73.98	20.96	PK
15540	33.78	5.36	V	39.14	53.98	14.84	AV
10360	50.96	4.10	H	55.06	68.20	13.14	PK
15540	47.71	5.36	H	53.07	73.98	20.91	PK
15540	34.01	5.36	H	39.37	53.98	14.61	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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10400	50.96	3.87	V	54.83	68.20	13.37	PK
15600	46.88	4.75	V	51.63	73.98	22.35	PK
15600	34.70	4.75	V	39.45	53.98	14.53	AV
10400	51.37	3.87	H	55.24	68.20	12.96	PK
15600	47.86	4.75	H	52.61	73.98	21.37	PK
15600	34.11	4.75	H	38.86	53.98	15.12	AV

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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10480	49.39	4.52	V	53.91	68.20	14.29	PK
15720	47.49	3.58	V	51.07	73.98	22.91	PK
15720	33.95	3.58	V	37.53	53.98	16.45	AV
10480	50.20	4.52	H	54.72	68.20	13.48	PK
15720	47.81	3.58	H	51.39	73.98	22.59	PK
15720	34.29	3.58	H	37.87	53.98	16.11	AV

Band : UNII 1

Operation Mode: 802.11 n(HT40)

Transfer MCS Index: MCS0

Operating Frequency 5190 MHz

Channel No. 38 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10380	50.62	4.09	V	54.71	68.20	13.49	PK
15570	47.86	4.73	V	52.59	73.98	21.39	PK
15570	34.88	4.73	V	39.61	53.98	14.37	AV
10380	49.64	4.09	H	53.73	68.20	14.47	PK
15570	46.91	4.73	H	51.64	73.98	22.34	PK
15570	34.46	4.73	H	39.19	53.98	14.79	AV

Band : UNII 1  
Operation Mode: 802.11 n(HT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5230 MHz  
Channel No. 46 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10460	50.45	4.54	V	54.99	68.20	13.21	PK
15690	49.08	3.69	V	52.77	73.98	21.21	PK
15690	35.16	3.69	V	38.85	53.98	15.13	AV
10460	50.32	4.54	H	54.86	68.20	13.34	PK
15690	48.95	3.69	H	52.64	73.98	21.34	PK
15690	35.11	3.69	H	38.80	53.98	15.18	AV

Band : UNII 1  
Operation Mode: 802.11 ac(VHT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5190 MHz  
Channel No. 38 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10380	50.21	4.09	V	54.30	68.20	13.90	PK
15570	48.07	4.73	V	52.80	73.98	21.18	PK
15570	35.13	4.73	V	39.86	53.98	14.12	AV
10380	49.53	4.09	H	53.62	68.20	14.58	PK
15570	47.62	4.73	H	52.35	73.98	21.63	PK
15570	34.21	4.73	H	38.94	53.98	15.04	AV



Band : UNII 1  
Operation Mode: 802.11 ac(VHT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5230 MHz  
Channel No. 46 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10460	50.09	4.54	V	54.63	68.20	13.57	PK
15690	48.40	3.69	V	52.09	73.98	21.89	PK
15690	35.05	3.69	V	38.74	53.98	15.24	AV
10460	49.32	4.54	H	53.86	68.20	14.34	PK
15690	47.65	3.69	H	51.34	73.98	22.64	PK
15690	34.97	3.69	H	38.66	53.98	15.32	AV

Band : UNII 1  
Operation Mode: 802.11 ac(VHT80)  
Transfer MCS Index: MCS0  
Operating Frequency 5210 MHz  
Channel No. 42 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10420	49.69	3.79	V	53.48	68.20	14.72	PK
15630	49.22	4.02	V	53.24	73.98	20.74	PK
15630	36.40	4.02	V	40.42	53.98	13.56	AV
10420	49.50	3.79	H	53.29	68.20	14.91	PK
15630	48.37	4.02	H	52.39	73.98	21.59	PK
15630	36.99	4.02	H	41.01	53.98	12.97	AV

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

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10520	51.87	4.70	V	56.57	68.20	11.63	PK
15780	48.90	3.76	V	52.66	73.98	21.32	PK
15780	34.83	3.76	V	38.59	53.98	15.39	AV
10520	50.22	4.70	H	54.92	68.20	13.28	PK
15780	48.07	3.76	H	51.83	73.98	22.15	PK
15780	33.98	3.76	H	37.74	53.98	16.24	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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10600	50.08	4.27	V	54.35	73.98	19.63	PK
10600	37.02	4.27	V	41.29	53.98	12.69	AV
15900	48.01	4.58	V	52.59	73.98	21.39	PK
15900	33.84	4.58	V	38.42	53.98	15.56	AV
10600	49.37	4.27	H	53.64	73.98	20.34	PK
10600	36.99	4.27	H	41.26	53.98	12.72	AV
15900	47.36	4.58	H	51.94	73.98	22.04	PK
15900	33.75	4.58	H	38.33	53.98	15.65	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 G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10640	50.63	4.40	V	55.03	73.98	18.95	PK
10640	41.09	4.40	V	45.49	53.98	8.49	AV
15960	48.22	4.03	V	52.25	73.98	21.73	PK
15960	34.57	4.03	V	38.60	53.98	15.38	AV
10640	50.31	4.40	H	54.71	73.98	19.27	PK
10640	41.01	4.40	H	45.41	53.98	8.57	AV
15960	47.56	4.03	H	51.59	73.98	22.39	PK
15960	33.78	4.03	H	37.81	53.98	16.17	AV

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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10520	51.49	4.70	V	56.19	68.20	12.01	PK
15780	48.50	3.76	V	52.26	73.98	21.72	PK
15780	34.64	3.76	V	38.40	53.98	15.58	AV
10520	50.63	4.70	H	55.33	68.20	12.87	PK
15780	47.98	3.76	H	51.74	73.98	22.24	PK
15780	34.32	3.76	H	38.08	53.98	15.90	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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10600	51.17	4.27	V	55.44	73.98	18.54	PK
10600	42.48	4.27	V	46.75	53.98	7.23	AV
15900	47.86	4.58	V	52.44	73.98	21.54	PK
15900	33.97	4.58	V	38.55	53.98	15.43	AV
10600	50.96	4.27	H	55.23	73.98	18.75	PK
10600	41.93	4.27	H	46.20	53.98	7.78	AV
15900	47.29	4.58	H	51.87	73.98	22.11	PK
15900	33.57	4.58	H	38.15	53.98	15.83	AV

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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10640	50.38	4.40	V	54.78	73.98	19.20	PK
10640	41.96	4.40	V	46.36	53.98	7.62	AV
15960	47.73	4.03	V	51.76	73.98	22.22	PK
15960	34.32	4.03	V	38.35	53.98	15.63	AV
10640	49.94	4.40	H	54.34	73.98	19.64	PK
10640	41.67	4.40	H	46.07	53.98	7.91	AV
15960	47.39	4.03	H	51.42	73.98	22.56	PK
15960	34.29	4.03	H	38.32	53.98	15.66	AV

Band : UNII 2A  
Operation Mode: 802.11 ac(VHT20)  
Transfer MCS Index: MCS0  
Operating Frequency 5260MHz  
Channel No. 52 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10520	51.02	4.70	V	55.72	68.20	12.48	PK
15780	49.04	3.76	V	52.80	73.98	21.18	PK
15780	34.29	3.76	V	38.05	53.98	15.93	AV
10520	50.93	4.70	H	55.63	68.20	12.57	PK
15780	48.39	3.76	H	52.15	73.98	21.83	PK
15780	33.67	3.76	H	37.43	53.98	16.55	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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10600	51.80	4.27	V	56.07	73.98	17.91	PK
10600	42.45	4.27	V	46.72	53.98	7.26	AV
15900	48.02	4.58	V	52.60	73.98	21.38	PK
15900	34.24	4.58	V	38.82	53.98	15.16	AV
10600	50.72	4.27	H	54.99	73.98	18.99	PK
10600	42.33	4.27	H	46.60	53.98	7.38	AV
15900	47.66	4.58	H	52.24	73.98	21.74	PK
15900	33.79	4.58	H	38.37	53.98	15.61	AV

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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10640	50.39	4.40	V	54.79	73.98	19.19	PK
10640	41.59	4.40	V	45.99	53.98	7.99	AV
15960	47.93	4.03	V	51.96	73.98	22.02	PK
15960	34.27	4.03	V	38.30	53.98	15.68	AV
10640	49.99	4.40	H	54.39	73.98	19.59	PK
10640	41.93	4.40	H	46.33	53.98	7.65	AV
15960	47.25	4.03	H	51.28	73.98	22.70	PK
15960	34.22	4.03	H	38.25	53.98	15.73	AV

Band : UNII 2A  
Operation Mode: 802.11 n(HT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5270 MHz  
Channel No. 54 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10540	50.64	5.03	V	55.67	68.20	12.53	PK
15810	47.32	4.69	V	52.01	73.98	21.97	PK
15810	34.37	4.69	V	39.06	53.98	14.92	AV
10540	49.37	5.03	H	54.40	68.20	13.80	PK
15810	46.95	4.69	H	51.64	73.98	22.34	PK
15810	34.33	4.69	H	39.02	53.98	14.96	AV

Band : UNII 2A  
Operation Mode: 802.11 n(HT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5310 MHz  
Channel No. 62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10620	50.52	4.92	V	55.44	73.98	18.54	PK
10620	41.58	4.92	V	46.50	53.98	7.48	AV
15930	46.91	4.50	V	51.41	73.98	22.57	PK
15930	34.09	4.50	V	38.59	53.98	15.39	AV
10620	50.07	4.92	H	54.99	73.98	18.99	PK
10620	41.18	4.92	H	46.10	53.98	7.88	AV
15930	46.12	4.50	H	50.62	73.98	23.36	PK
15930	34.02	4.50	H	38.52	53.98	15.46	AV

Band : UNII 2A  
Operation Mode: 802.11 ac(VHT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5270 MHz  
Channel No. 54 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10540	51.19	5.03	V	56.22	68.20	11.98	PK
15810	47.73	4.69	V	52.42	73.98	21.56	PK
15810	34.62	4.69	V	39.31	53.98	14.67	AV
10540	50.23	5.03	H	55.26	68.20	12.94	PK
15810	46.98	4.69	H	51.67	73.98	22.31	PK
15810	34.22	4.69	H	38.91	53.98	15.07	AV

Band : UNII 2A  
 Operation Mode: 802.11 ac(VHT40)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5310 MHz  
 Channel No. 62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10620	50.71	4.92	V	55.63	73.98	18.35	PK
10620	41.59	4.92	V	46.51	53.98	7.47	AV
15930	47.62	4.50	V	52.12	73.98	21.86	PK
15930	34.29	4.50	V	38.79	53.98	15.19	AV
10620	49.14	4.92	H	54.06	73.98	19.92	PK
10620	41.11	4.92	H	46.03	53.98	7.95	AV
15930	47.23	4.50	H	51.73	73.98	22.25	PK
15930	33.87	4.50	H	38.37	53.98	15.61	AV

Band : UNII 2A  
 Operation Mode: 802.11 ac(VHT80)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5290 MHz  
 Channel No. 58 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
10580	53.40	4.02	V	57.42	68.20	10.78	PK
15870	47.20	5.51	V	52.71	73.98	21.27	PK
15870	35.22	5.51	V	40.73	53.98	13.25	AV
10580	50.66	4.02	H	54.68	68.20	13.52	PK
15870	46.89	5.51	H	52.40	73.98	21.58	PK
15870	35.20	5.51	H	40.71	53.98	13.27	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 G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11000	48.57	4.29	V	52.86	73.98	21.12	PK
11000	35.21	4.29	V	39.50	53.98	14.48	AV
16500	47.08	6.22	V	53.30	68.20	14.90	PK
11000	48.63	4.29	H	52.92	73.98	21.06	PK
11000	35.23	4.29	H	39.52	53.98	14.46	AV
16500	47.56	6.22	H	53.78	68.20	14.42	PK

Band : UNII 2C

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

Operating Frequency 5580 MHz

Channel No. 116 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11160	50.18	4.28	V	54.46	73.98	19.52	PK
11160	36.88	4.28	V	41.16	53.98	12.82	AV
16740	47.12	7.73	V	54.85	68.20	13.35	PK
11160	50.23	4.28	H	54.51	73.98	19.47	PK
11160	36.91	4.28	H	41.19	53.98	12.79	AV
16740	47.15	7.73	H	54.88	68.20	13.32	PK

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

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11440	49.59	4.38	V	53.97	73.98	20.01	PK
11440	38.69	4.38	V	43.07	53.98	10.91	AV
17160	48.09	8.77	V	56.86	68.20	11.34	PK
11440	49.51	4.38	H	53.89	73.98	20.09	PK
11440	38.47	4.38	H	42.85	53.98	11.13	AV
17160	48.11	8.77	H	56.88	68.20	11.32	PK

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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11000	49.14	4.29	V	53.43	73.98	20.55	PK
11000	34.88	4.29	V	39.17	53.98	14.81	AV
16500	46.89	6.22	V	53.11	68.20	15.09	PK
11000	49.26	4.29	H	53.55	73.98	20.43	PK
11000	35.19	4.29	H	39.48	53.98	14.50	AV
16500	47.58	6.22	H	53.80	68.20	14.40	PK

Band : UNII 2C  
Operation Mode: 802.11 n(HT20)  
Transfer MCS Index: MCS0  
Operating Frequency 5580 MHz  
Channel No. 116 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11160	49.32	4.28	V	53.60	73.98	20.38	PK
11160	35.72	4.28	V	40.00	53.98	13.98	AV
16740	47.00	7.73	V	54.73	68.20	13.47	PK
11160	49.49	4.28	H	53.77	73.98	20.21	PK
11160	36.78	4.28	H	41.06	53.98	12.92	AV
16740	47.04	7.73	H	54.77	68.20	13.43	PK

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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11440	49.78	4.38	V	54.16	73.98	19.82	PK
11440	38.83	4.38	V	43.21	53.98	10.77	AV
17160	47.34	8.77	V	56.11	68.20	12.09	PK
11440	49.49	4.38	H	53.87	73.98	20.11	PK
11440	38.28	4.38	H	42.66	53.98	11.32	AV
17160	47.77	8.77	H	56.54	68.20	11.66	PK

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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11000	48.00	4.29	V	52.29	73.98	21.69	PK
11000	35.02	4.29	V	39.31	53.98	14.67	AV
16500	46.90	6.22	V	53.12	68.20	15.08	PK
11000	48.04	4.29	H	52.33	73.98	21.65	PK
11000	35.04	4.29	H	39.33	53.98	14.65	AV
16500	46.72	6.22	H	52.94	68.20	15.26	PK

Band : UNII 2C

Operation Mode: 802.11 ac(VHT20)

Transfer MCS Index: MCS0

Operating Frequency 5580 MHz

Channel No. 116 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11160	49.65	4.28	V	53.93	73.98	20.05	PK
11160	36.59	4.28	V	40.87	53.98	13.11	AV
16740	45.96	7.73	V	53.69	68.20	14.51	PK
11160	49.68	4.28	H	53.96	73.98	20.02	PK
11160	36.73	4.28	H	41.01	53.98	12.97	AV
16740	46.33	7.73	H	54.06	68.20	14.14	PK

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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11440	49.88	4.38	V	54.26	73.98	19.72	PK
11440	38.75	4.38	V	43.13	53.98	10.85	AV
17160	48.33	8.77	V	57.10	68.20	11.10	PK
11440	50.13	4.38	H	54.51	73.98	19.47	PK
11440	38.38	4.38	H	42.76	53.98	11.22	AV
17160	48.54	8.77	H	57.31	68.20	10.89	PK

Band : UNII 2C  
Operation Mode: 802.11 n(HT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5510 MHz  
Channel No. 102 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11020	48.13	4.58	V	52.71	73.98	21.27	PK
11020	36.01	4.58	V	40.59	53.98	13.39	AV
16530	46.12	6.22	V	52.34	68.20	15.86	PK
11020	48.55	4.58	H	53.13	73.98	20.85	PK
11020	35.58	4.58	H	40.16	53.98	13.82	AV
16530	47.68	6.22	H	53.90	68.20	14.30	PK

Band : UNII 2C  
Operation Mode: 802.11 n(HT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5550 MHz  
Channel No. 110 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11100	49.09	5.04	V	54.13	73.98	19.85	PK
11100	36.22	5.04	V	41.26	53.98	12.72	AV
16650	47.36	7.21	V	54.57	68.20	13.63	PK
11100	49.21	5.04	H	54.25	73.98	19.73	PK
11100	36.15	5.04	H	41.19	53.98	12.79	AV
16650	48.26	7.21	H	55.47	68.20	12.73	PK

Band : UNII 2C  
Operation Mode: 802.11 n(HT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5710 MHz  
Channel No. 142 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11420	50.36	4.11	V	54.47	73.98	19.51	PK
11420	39.67	4.11	V	43.78	53.98	10.20	AV
17130	45.47	7.70	V	53.17	68.20	15.03	PK
11420	49.87	4.11	H	53.98	73.98	20.00	PK
11420	36.57	4.11	H	40.68	53.98	13.30	AV
17130	46.94	7.70	H	54.64	68.20	13.56	PK

Band : UNII 2C  
Operation Mode: 802.11 ac(VHT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5510 MHz  
Channel No. 102 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11020	49.29	4.58	V	53.87	73.98	20.11	PK
11020	35.68	4.58	V	40.26	53.98	13.72	AV
16530	46.78	6.22	V	53.00	68.20	15.20	PK
11020	49.72	4.58	H	54.30	73.98	19.68	PK
11020	35.74	4.58	H	40.32	53.98	13.66	AV
16530	46.99	6.22	H	53.21	68.20	14.99	PK

Band : UNII 2C  
Operation Mode: 802.11 ac(VHT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5550 MHz  
Channel No. 110 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11100	50.96	5.04	V	56.00	73.98	17.98	PK
11100	36.01	5.04	V	41.05	53.98	12.93	AV
16650	46.72	7.21	V	53.93	68.20	14.27	PK
11100	51.03	5.04	H	56.07	73.98	17.91	PK
11100	36.37	5.04	H	41.41	53.98	12.57	AV
16650	47.65	7.21	H	54.86	68.20	13.34	PK

Band : UNII 2C  
Operation Mode: 802.11 ac(VHT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5710 MHz  
Channel No. 142 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11420	50.39	4.11	V	54.50	73.98	19.48	PK
11420	39.57	4.11	V	43.68	53.98	10.30	AV
17130	46.00	7.70	V	53.70	68.20	14.50	PK
11420	50.50	4.11	H	54.61	73.98	19.37	PK
11420	39.62	4.11	H	43.73	53.98	10.25	AV
17130	47.07	7.70	H	54.77	68.20	13.43	PK

Band : UNII 2C  
Operation Mode: 802.11 ac(VHT80)  
Transfer MCS Index: MCS0  
Operating Frequency 5530 MHz  
Channel No. 106 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11060	48.27	4.97	V	53.24	73.98	20.74	PK
11060	35.45	4.97	V	40.42	53.98	13.56	AV
16590	47.94	6.79	V	54.73	68.20	13.47	PK
11060	48.64	4.97	H	53.61	73.98	20.37	PK
11060	36.74	4.97	H	41.71	53.98	12.27	AV
16590	46.93	6.79	H	53.72	68.20	14.48	PK



Band : UNII 2C  
 Operation Mode: 802.11 ac(VHT80)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5690 MHz  
 Channel No. 138 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11380	49.89	4.20	V	54.09	73.98	19.89	PK
11380	39.44	4.20	V	43.64	53.98	10.34	AV
17070	46.42	8.73	V	55.15	68.20	13.05	PK
11380	48.81	4.20	H	53.01	73.98	20.97	PK
11380	39.34	4.20	H	43.54	53.98	10.44	AV
17070	46.55	8.73	H	55.28	68.20	12.92	PK

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

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11490	48.21	4.19	V	52.40	73.98	21.58	PK
11490	36.98	4.19	V	41.17	53.98	12.81	AV
17235	46.89	9.09	V	55.98	68.20	12.22	PK
11490	49.21	4.19	H	53.40	73.98	20.58	PK
11490	38.88	4.19	H	43.07	53.98	10.91	AV
17235	47.69	9.09	H	56.78	68.20	11.42	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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11570	48.11	4.83	V	52.94	73.98	21.04	PK
11570	37.21	4.83	V	42.04	53.98	11.94	AV
17355	47.99	9.81	V	57.80	68.20	10.40	PK
11570	49.19	4.83	H	54.02	73.98	19.96	PK
11570	38.28	4.83	H	43.11	53.98	10.87	AV
17355	48.25	9.81	H	58.06	68.20	10.14	PK

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

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11650	48.63	3.70	V	52.33	73.98	21.65	PK
11650	37.02	3.70	V	40.72	53.98	13.26	AV
17475	48.29	10.25	V	58.54	68.20	9.66	PK
11650	48.74	3.70	H	52.44	73.98	21.54	PK
11650	37.72	3.70	H	41.42	53.98	12.56	AV
17475	48.54	10.25	H	58.79	68.20	9.41	PK

Band : UNII 3  
 Operation Mode: 802.11 n(HT20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5745MHz  
 Channel No. 149 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
17235	46.97	9.09	V	56.06	68.20	12.14	PK
11490	49.61	4.19	H	53.80	73.98	20.18	PK
11490	38.03	4.19	H	42.22	53.98	11.76	AV
17235	47.05	9.09	H	56.14	68.20	12.06	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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
17355	47.64	9.81	V	57.45	68.20	10.75	PK
11570	48.90	4.83	H	53.73	73.98	20.25	PK
11570	38.42	4.83	H	43.25	53.98	10.73	AV
17355	47.74	9.81	H	57.55	68.20	10.65	PK

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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
17475	48.24	10.25	V	58.49	68.20	9.71	PK
11650	49.74	3.70	H	53.44	73.98	20.54	PK
11650	37.62	3.70	H	41.32	53.98	12.66	AV
17475	48.69	10.25	H	58.94	68.20	9.26	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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11490	49.87	4.19	V	54.06	73.98	19.92	PK
11490	39.12	4.19	V	43.31	53.98	10.67	AV
17235	46.78	9.09	V	55.87	68.20	12.33	PK
11490	50.17	4.19	H	54.36	73.98	19.62	PK
11490	39.76	4.19	H	43.95	53.98	10.03	AV
17235	46.88	9.09	H	55.97	68.20	12.23	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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11570	48.29	4.83	V	53.12	73.98	20.86	PK
11570	38.09	4.83	V	42.92	53.98	11.06	AV
17355	47.25	9.81	V	57.06	68.20	11.14	PK
11570	48.96	4.83	H	53.79	73.98	20.19	PK
11570	38.48	4.83	H	43.31	53.98	10.67	AV
17355	47.33	9.81	H	57.14	68.20	11.06	PK

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	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11650	48.12	3.70	V	51.82	73.98	22.16	PK
11650	36.55	3.70	V	40.25	53.98	13.73	AV
17475	47.96	10.25	V	58.21	68.20	9.99	PK
11650	48.80	3.70	H	52.50	73.98	21.48	PK
11650	37.78	3.70	H	41.48	53.98	12.50	AV
17475	48.49	10.25	H	58.74	68.20	9.46	PK

Band : UNII 3  
Operation Mode: 802.11 n(HT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5755 MHz  
Channel No. 151 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11510	48.98	4.20	V	53.18	73.98	20.80	PK
11510	38.21	4.20	V	42.41	53.98	11.57	AV
17265	46.38	9.64	V	56.02	68.20	12.18	PK
11510	49.42	4.20	H	53.62	73.98	20.36	PK
11510	39.84	4.20	H	44.04	53.98	9.94	AV
17265	47.34	9.64	H	56.98	68.20	11.22	PK

Band : UNII 3  
Operation Mode: 802.11 n(HT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5795 MHz  
Channel No. 159 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11590	48.58	4.91	V	53.49	73.98	20.49	PK
11590	36.80	4.91	V	41.71	53.98	12.27	AV
17385	46.95	10.20	V	57.15	68.20	11.05	PK
11590	48.83	4.91	H	53.74	73.98	20.24	PK
11590	37.68	4.91	H	42.59	53.98	11.39	AV
17385	47.30	10.20	H	57.50	68.20	10.70	PK

Band : UNII 3  
Operation Mode: 802.11 ac(VHT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5755 MHz  
Channel No. 151 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11510	48.23	4.20	V	52.43	73.98	21.55	PK
11510	38.56	4.20	V	42.76	53.98	11.22	AV
17265	46.31	9.64	V	55.95	68.20	12.25	PK
11510	49.56	4.20	H	53.76	73.98	20.22	PK
11510	39.97	4.20	H	44.17	53.98	9.81	AV
17265	46.59	9.64	H	56.23	68.20	11.97	PK

Band : UNII 3  
Operation Mode: 802.11 ac(VHT40)  
Transfer MCS Index: MCS0  
Operating Frequency 5795 MHz  
Channel No. 159 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11590	49.35	4.91	V	54.26	73.98	19.72	PK
11590	36.94	4.91	V	41.85	53.98	12.13	AV
17385	46.58	10.20	V	56.78	68.20	11.42	PK
11590	49.41	4.91	H	54.32	73.98	19.66	PK
11590	37.69	4.91	H	42.60	53.98	11.38	AV
17385	47.23	10.20	H	57.43	68.20	10.77	PK

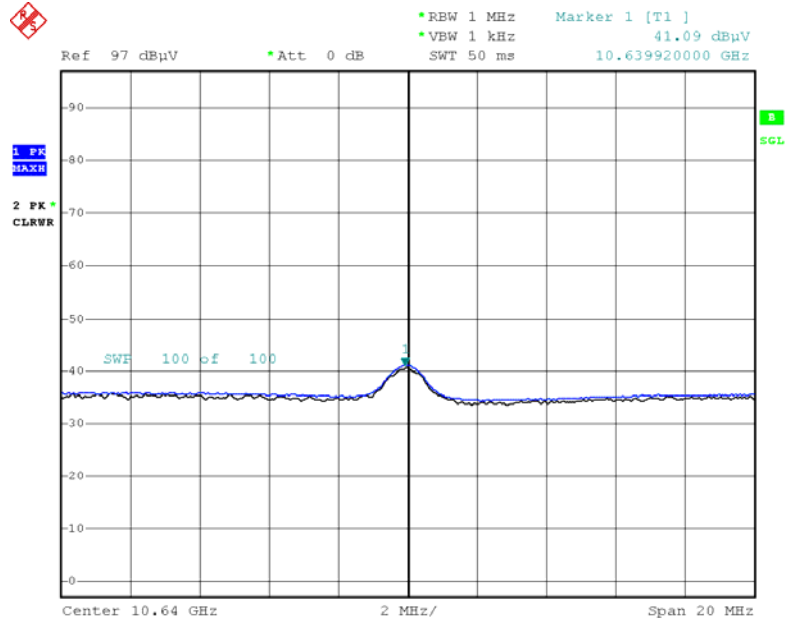
Band : UNII 3  
Operation Mode: 802.11 ac(VHT80)  
Transfer MCS Index: MCS0  
Operating Frequency 5775 MHz  
Channel No. 155 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
11550	48.99	4.50	V	53.49	73.98	20.49	PK
11550	38.19	4.50	V	42.69	53.98	11.29	AV
17325	47.22	10.22	V	57.44	68.20	10.76	PK
11550	49.03	3.32	H	52.35	73.98	21.63	PK
11550	38.91	3.32	H	42.23	53.98	11.75	AV
17325	47.31	10.22	H	57.53	68.20	10.67	PK



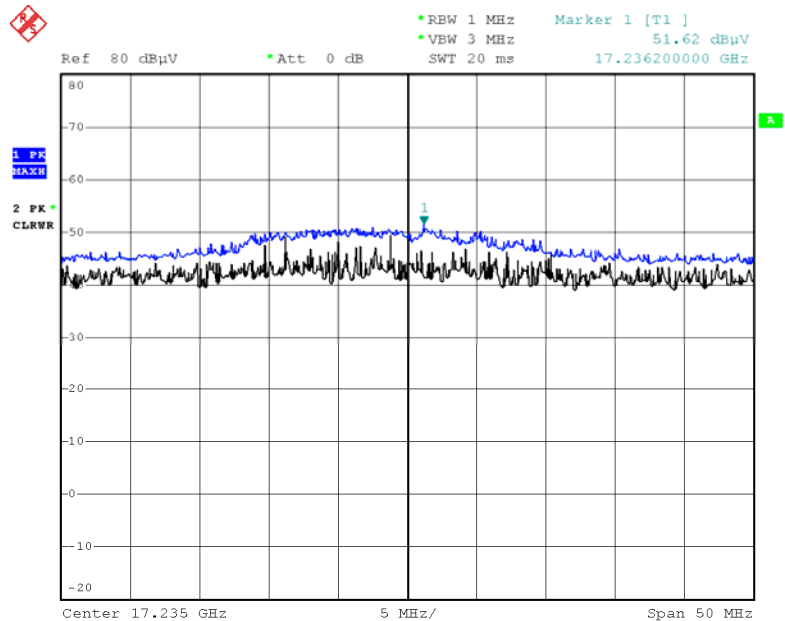
## Test Plots

### Average Reading (802.11a, Ch.64 2nd Harmonic, X-H)



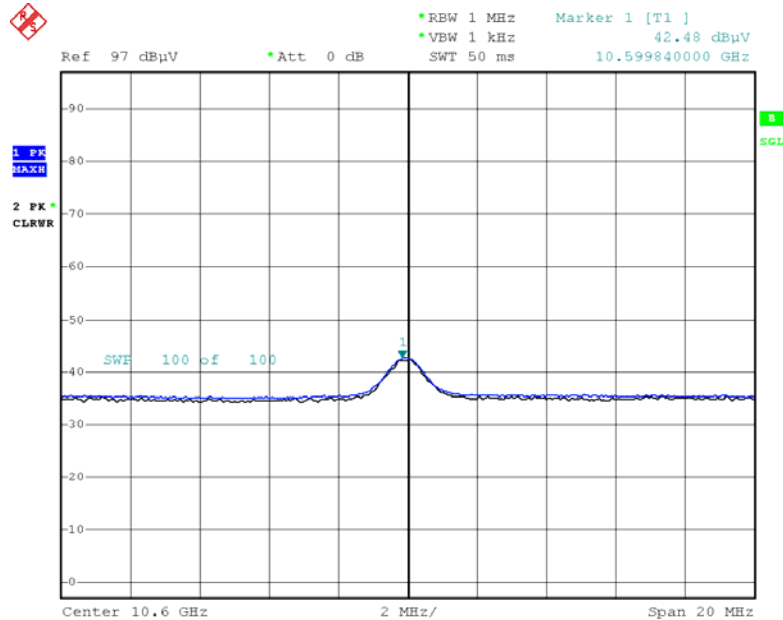
Date: 22.AUG.2019 02:55:14

### Peak Reading (802.11a, Ch.64 2nd Harmonic, X-H)



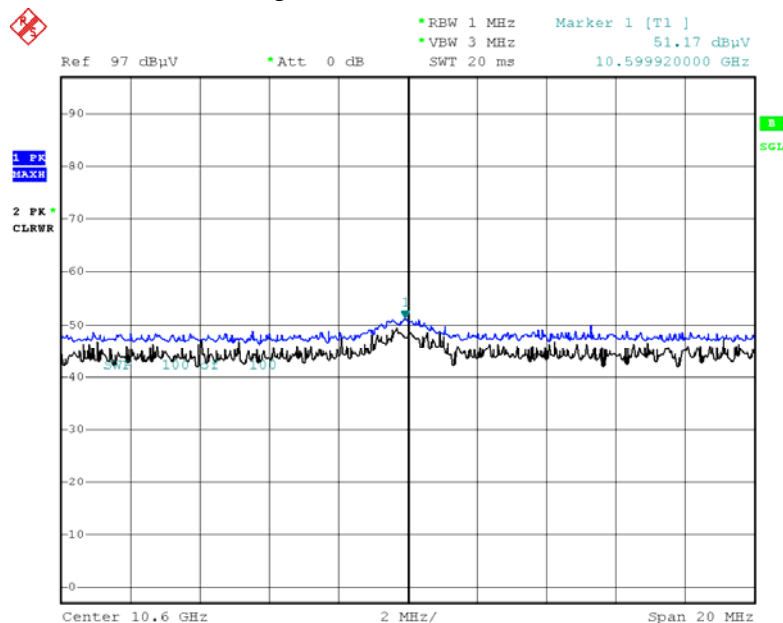
Date: 27.JUN.2019 10:39:12

## Average Reading (802.11n, Ch.60 2nd Harmonic, V)



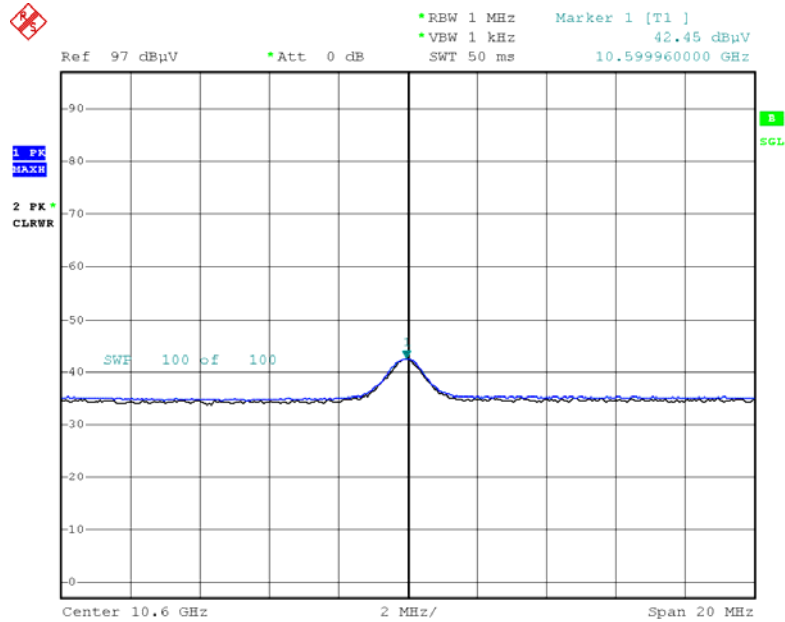
Date: 23.AUG.2019 09:33:11

## Peak Reading (802.11n, Ch.60 2nd Harmonic, V)



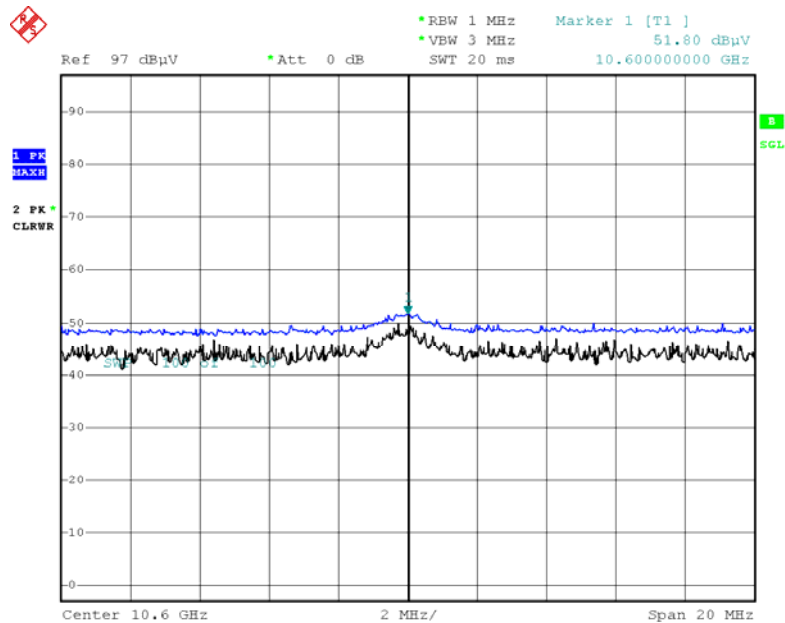
Date: 23.AUG.2019 09:33:22

### Average Reading (802.11ac, Ch.60 2nd Harmonic, V)



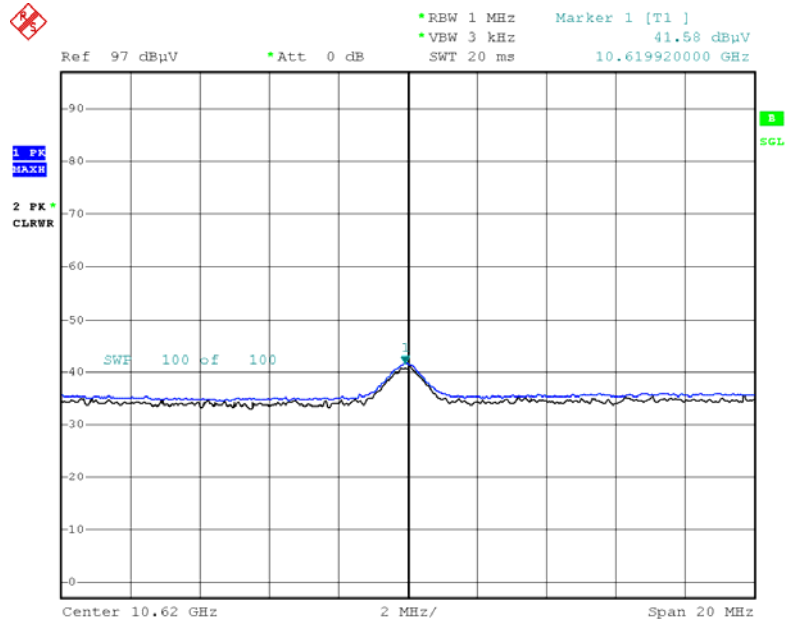
Date: 23.AUG.2019 12:28:12

### Peak Reading (802.11ac, Ch.60 2nd Harmonic, V)



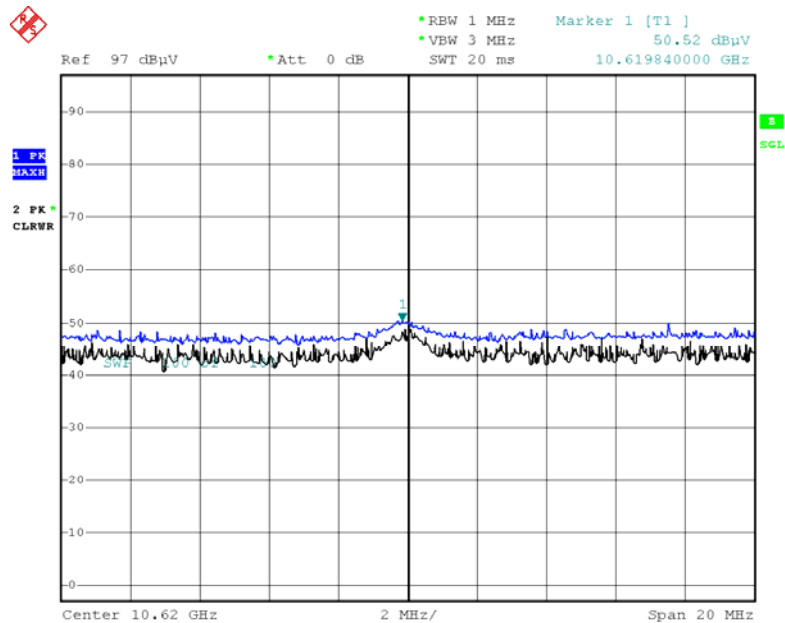
Date: 23.AUG.2019 12:33:40

### Average Reading (802.11ac, Ch.62 2nd Harmonic, V)



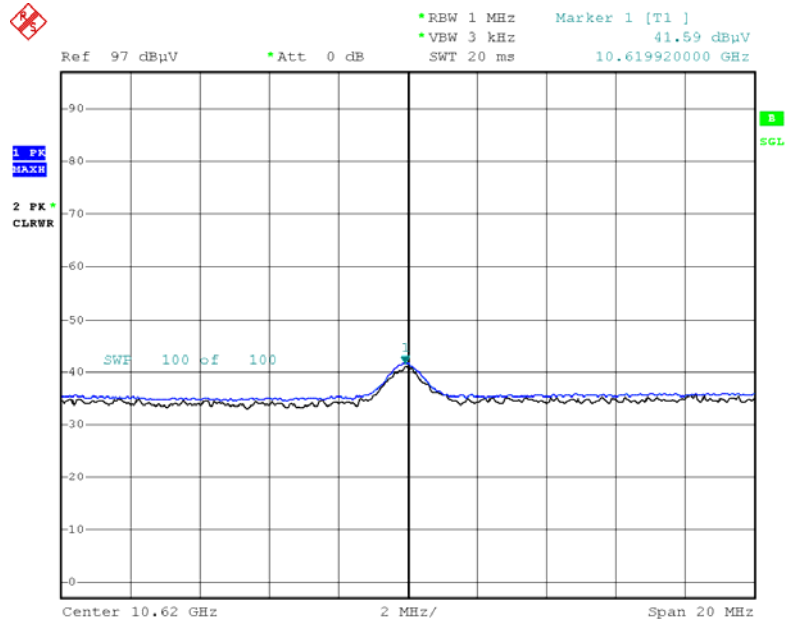
Date: 23.AUG.2019 14:32:28

### Peak Reading (802.11ac, Ch.62 2nd Harmonic, V)



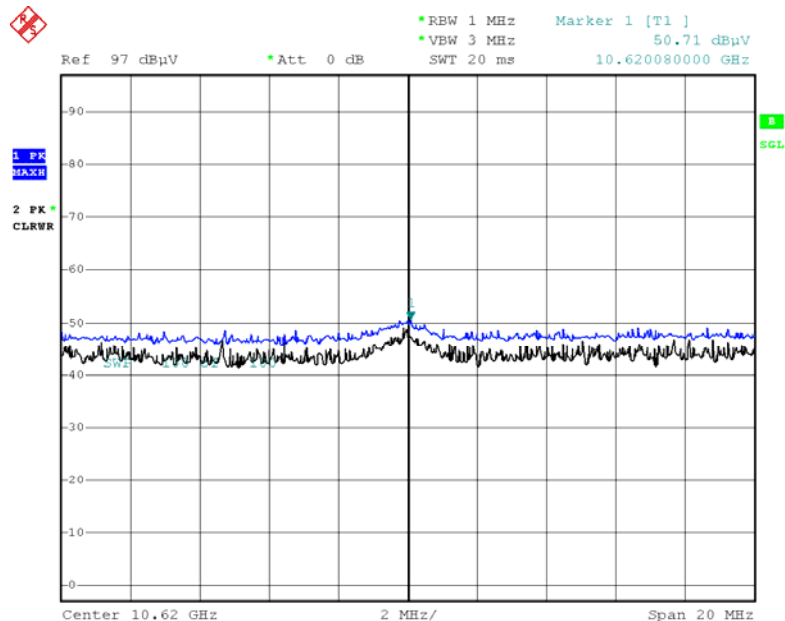
Date: 23.AUG.2019 14:32:47

### Average Reading (802.11ac40, Ch.62 2nd Harmonic, V)



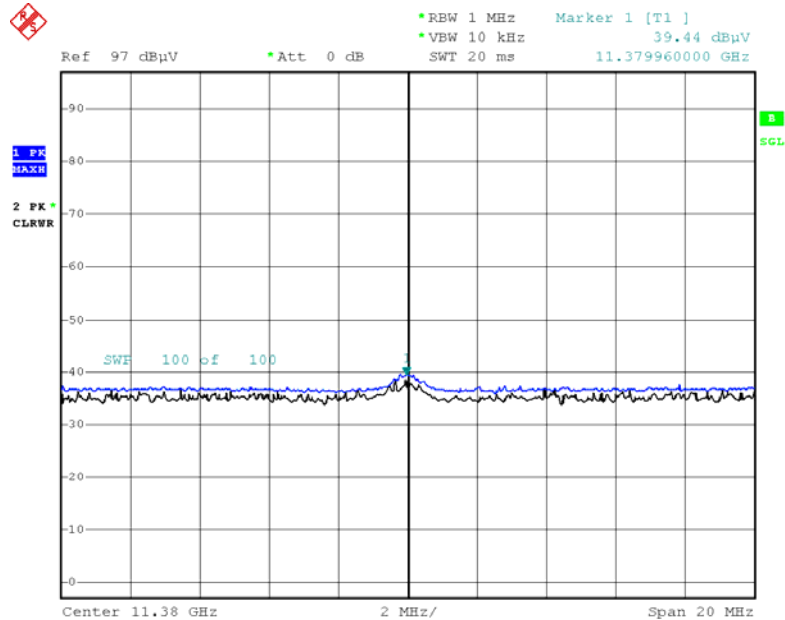
Date: 23.AUG.2019 15:11:56

### Peak Reading (802.11ac40, Ch.62 2nd Harmonic, V)



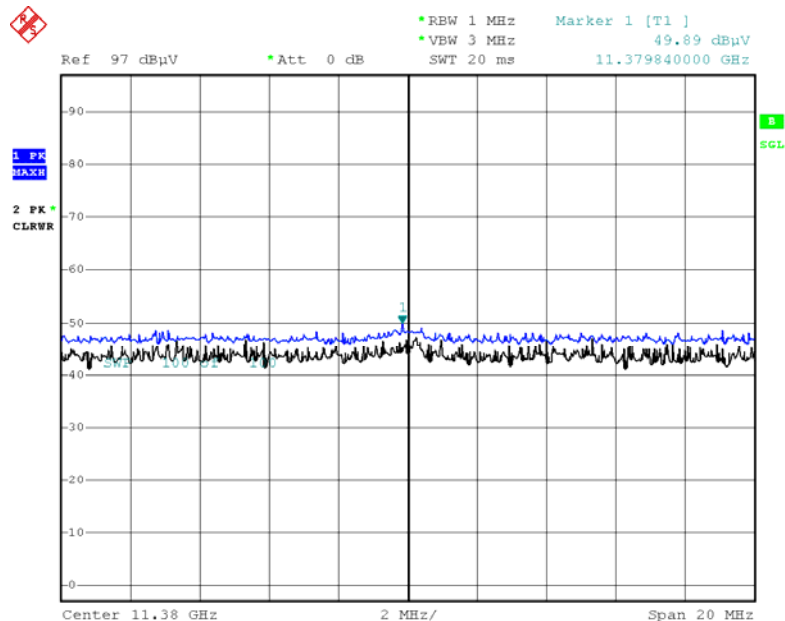
Date: 23.AUG.2019 15:12:13

### Average Reading (802.11ac80, Ch.138 2nd Harmonic, V)



Date: 30.AUG.2019 05:00:58

### Peak Reading (802.11ac80, Ch.138 2nd Harmonic, V)



Date: 30.AUG.2019 03:02:07

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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5150	45.99	11.06	H	57.05	73.98	16.93	PK
5150	32.93	11.06	H	43.99	53.98	9.99	AV
5150	46.15	11.06	V	57.21	73.98	16.77	PK
5150	33.50	11.06	V	44.56	53.98	9.42	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5150	46.22	11.06	H	57.28	73.98	16.70	PK
5150	33.12	11.06	H	44.18	53.98	9.80	AV
5150	46.49	11.06	V	57.55	73.98	16.43	PK
5150	33.29	11.06	V	44.35	53.98	9.63	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5150	45.18	11.06	H	56.24	73.98	17.74	PK
5150	33.09	11.06	H	44.15	53.98	9.83	AV
5150	45.66	11.06	V	56.72	73.98	17.26	PK
5150	33.14	11.06	V	44.2	53.98	9.78	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5150	44.89	11.06	H	55.95	73.98	18.03	PK
5150	32.98	11.06	H	44.04	53.98	9.94	AV
5150	45.81	11.06	V	56.87	73.98	17.11	PK
5150	33.18	11.06	V	44.24	53.98	9.74	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5150	44.78	11.06	H	55.84	73.98	18.14	PK
5150	32.44	11.06	H	43.5	53.98	10.48	AV
5150	45.16	11.06	V	56.22	73.98	17.76	PK
5150	32.94	11.06	V	44	53.98	9.98	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5150	45.24	11.06	H	56.30	73.98	17.68	PK
5150	34.04	11.06	H	45.1	53.98	8.88	AV
5150	45.83	11.06	V	56.89	73.98	17.09	PK
5150	34.55	11.06	V	45.61	53.98	8.37	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5350	45.78	11.86	H	57.64	73.98	16.34	PK
5350	32.35	11.86	H	44.21	53.98	9.77	AV
5350	46.66	11.86	V	58.52	73.98	15.46	PK
5350	33.18	11.86	V	45.04	53.98	8.94	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5350	45.40	11.86	H	57.26	73.98	16.72	PK
5350	32.31	11.86	H	44.17	53.98	9.81	AV
5350	46.19	11.86	V	58.05	73.98	15.93	PK
5350	33.34	11.86	V	45.2	53.98	8.78	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5350	45.74	11.86	H	57.60	73.98	16.38	PK
5350	32.55	11.86	H	44.41	53.98	9.57	AV
5350	47.30	11.86	V	59.16	73.98	14.82	PK
5350	33.49	11.86	V	45.35	53.98	8.63	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5350	46.99	11.86	H	58.85	73.98	15.13	PK
5350	33.84	11.86	H	45.7	53.98	8.28	AV
5350	47.57	11.86	V	59.43	73.98	14.55	PK
5350	35.26	11.86	V	47.12	53.98	6.86	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5350	45.63	11.86	H	57.49	73.98	16.49	PK
5350	33.43	11.86	H	45.29	53.98	8.69	AV
5350	46.54	11.86	V	58.4	73.98	15.58	PK
5350	33.87	11.86	V	45.73	53.98	8.25	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5350	45.03	11.86	H	56.89	73.98	17.09	PK
5350	34.28	11.86	H	46.14	53.98	7.84	AV
5350	44.91	11.86	V	56.77	73.98	17.21	PK
5350	34.18	11.86	V	46.04	53.98	7.94	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5460	47.02	12.24	H	59.26	73.98	14.72	PK
5460	31.96	12.24	H	44.2	53.98	9.78	AV
5470	46.23	12.50	H	58.73	68.20	9.47	PK
5460	47.12	12.24	V	59.36	73.98	14.62	PK
5460	32.63	12.24	V	44.87	53.98	9.11	AV
5470	46.56	12.50	V	59.06	68.20	9.14	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5460	45.89	12.24	H	58.13	73.98	15.85	PK
5460	31.98	12.24	H	44.22	53.98	9.76	AV
5470	46.53	12.50	H	59.03	68.20	9.17	PK
5460	45.92	12.24	V	58.16	73.98	15.82	PK
5460	32.40	12.24	V	44.64	53.98	9.34	AV
5470	46.62	12.50	V	59.12	68.20	9.08	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5460	44.89	12.24	H	57.13	73.98	16.85	PK
5460	31.97	12.24	H	44.21	53.98	9.77	AV
5470	46.12	12.50	H	58.62	68.20	9.58	PK
5460	45.72	12.24	V	57.96	73.98	16.02	PK
5460	32.41	12.24	V	44.65	53.98	9.33	AV
5470	46.62	12.50	V	59.12	68.20	9.08	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5460	45.94	12.24	H	58.18	73.98	15.80	PK
5460	32.92	12.24	H	45.16	53.98	8.82	AV
5470	45.56	12.50	H	58.06	68.20	10.14	PK
5460	46.37	12.24	V	58.61	73.98	15.37	PK
5460	32.98	12.24	V	45.22	53.98	8.76	AV
5470	45.36	12.50	V	57.86	68.20	10.34	PK

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

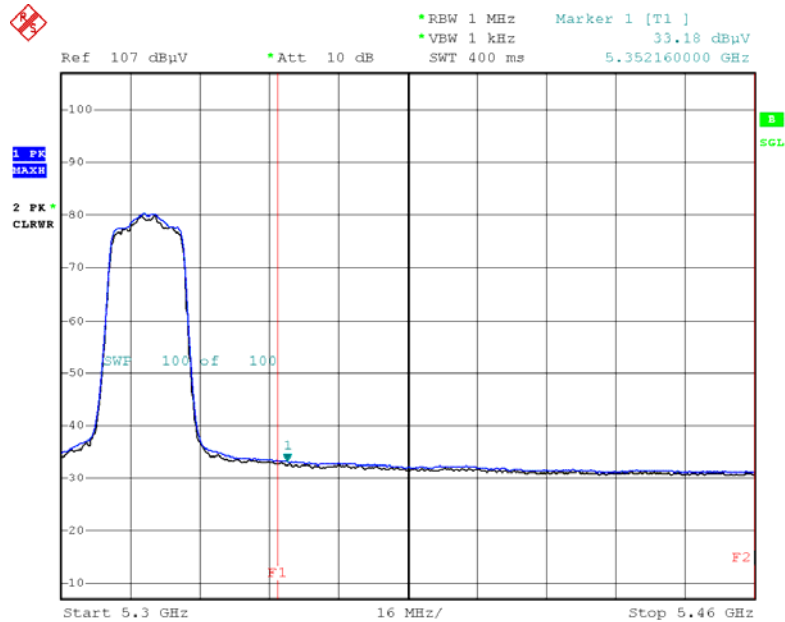
Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5460	46.53	12.24	H	58.77	73.98	15.21	PK
5460	33.18	12.24	H	45.42	53.98	8.56	AV
5470	45.74	12.50	H	58.24	68.20	9.96	PK
5460	45.42	12.24	V	57.66	73.98	16.32	PK
5460	33.16	12.24	V	45.4	53.98	8.58	AV
5470	46.46	12.50	V	58.96	68.20	9.24	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	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Detect
5460	45.08	12.24	H	57.32	73.98	16.66	PK
5460	35.45	12.24	H	47.69	53.98	6.29	AV
5470	48.22	12.50	H	60.72	68.20	7.48	PK
5460	48.33	12.24	V	60.57	73.98	13.41	PK
5460	36.25	12.24	V	48.49	53.98	5.49	AV
5470	49.78	12.50	V	62.28	68.20	5.92	PK

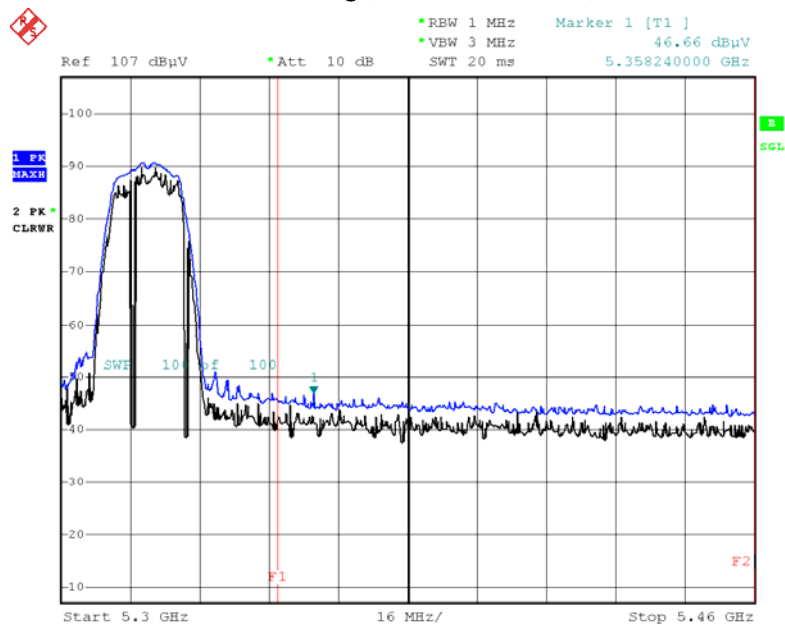
## Test Plots

### Average Reading (802.11a, Ch.64 , X-V)



Date: 21.AUG.2019 10:23:15

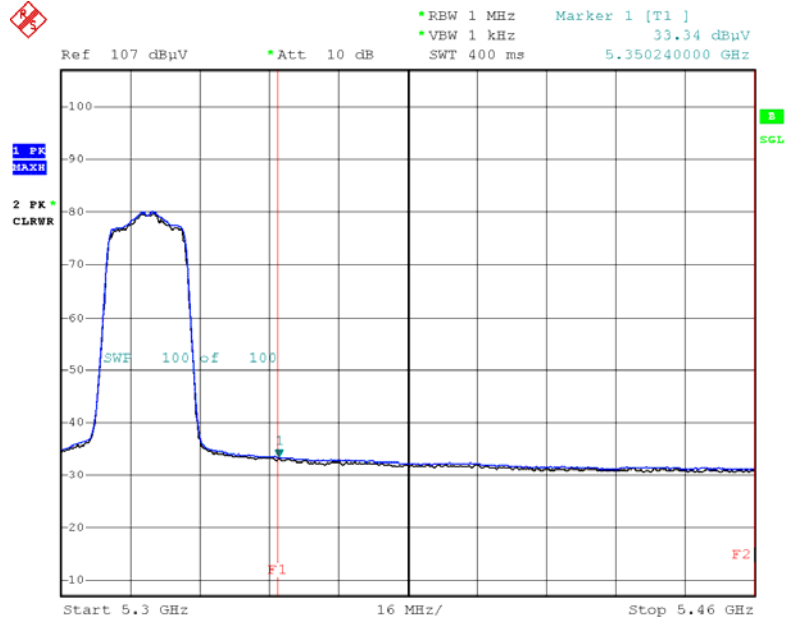
### Peak Reading (802.11a Ch.64, X-V)



Date: 21.AUG.2019 10:23:52

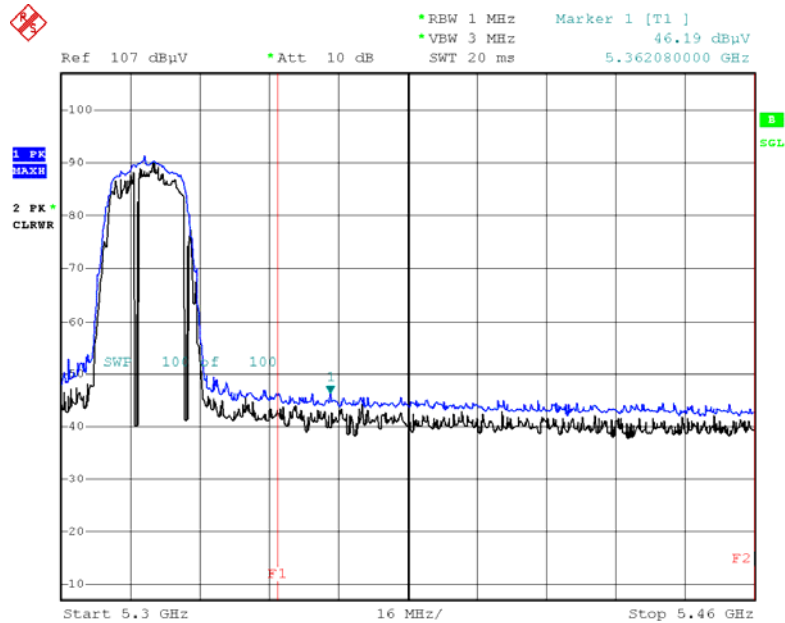


### Average Reading (802.11n, Ch.64, X-V)



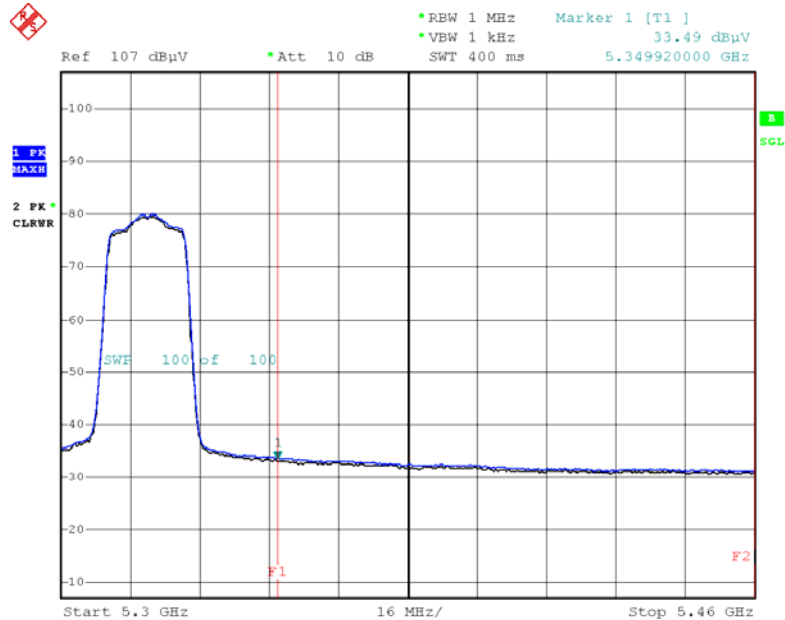
Date: 21.AUG.2019 15:17:09

### Peak Reading (802.11n Ch.64, X-V)



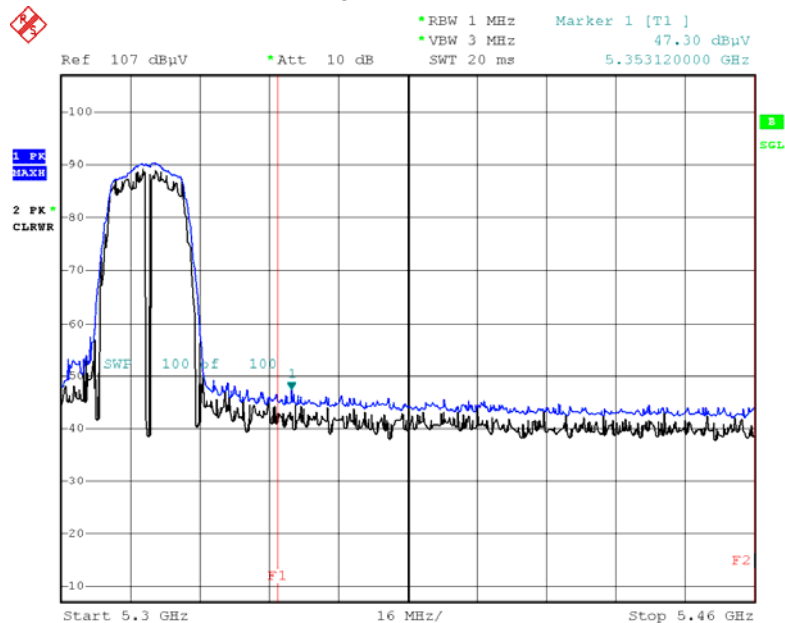
Date: 21.AUG.2019 15:17:28

## Average Reading (802.11ac, Ch.64 , X-V)



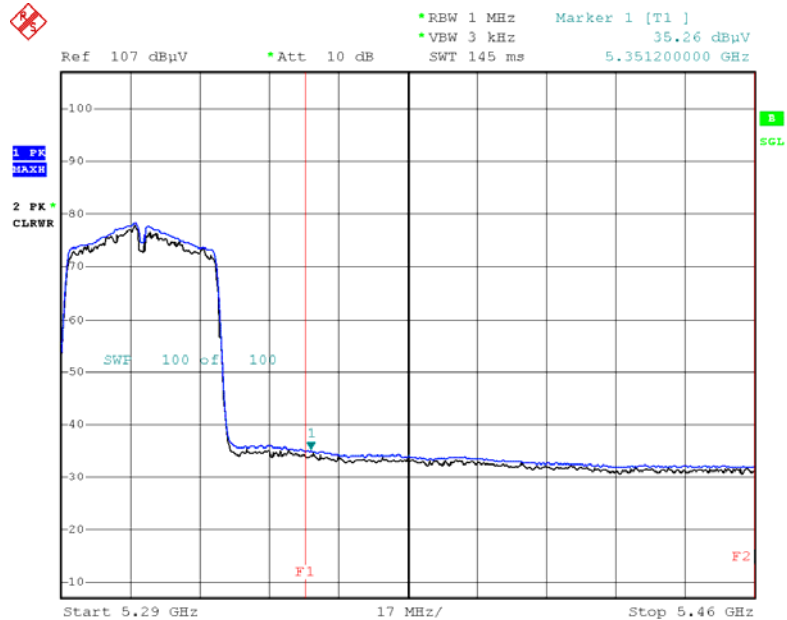
Date: 21.AUG.2019 12:39:59

## Peak Reading (802.11ac Ch.64, X-V)



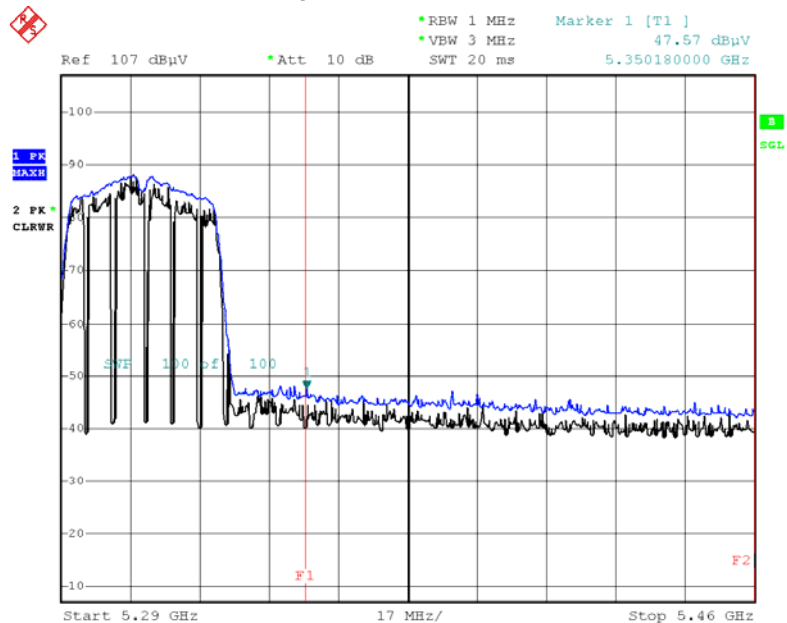
Date: 21.AUG.2019 12:40:14

## Average Reading (802.11n\_VHT40, Ch.62, X-V)



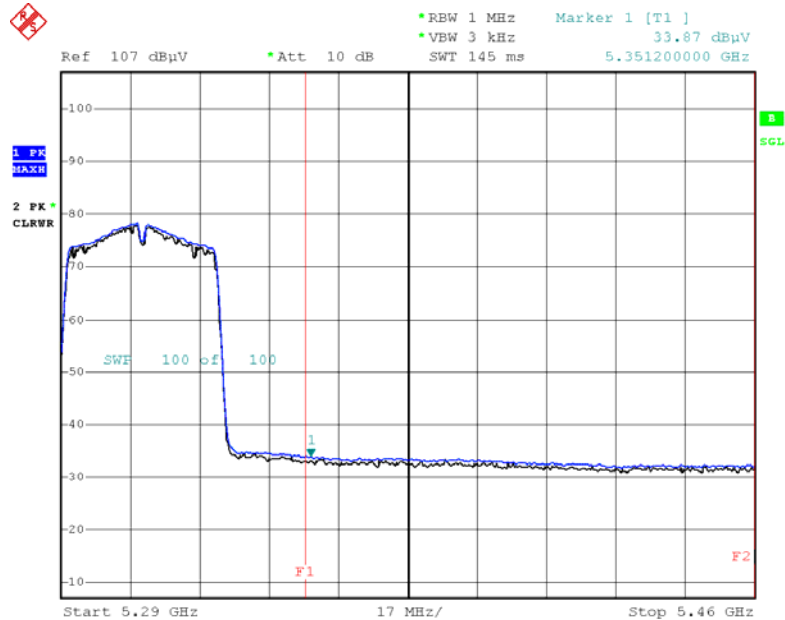
Date: 21.AUG.2019 13:12:40

## Peak Reading (802.11n\_VHT40 Ch.62, X-V)



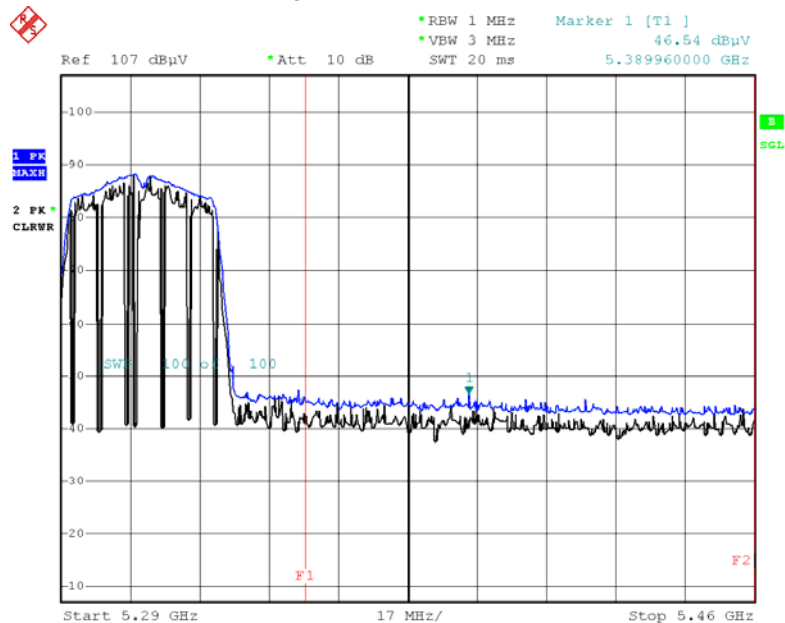
Date: 21.AUG.2019 13:12:53

## Average Reading (802.11ac\_VHT40, Ch.62, X-V)



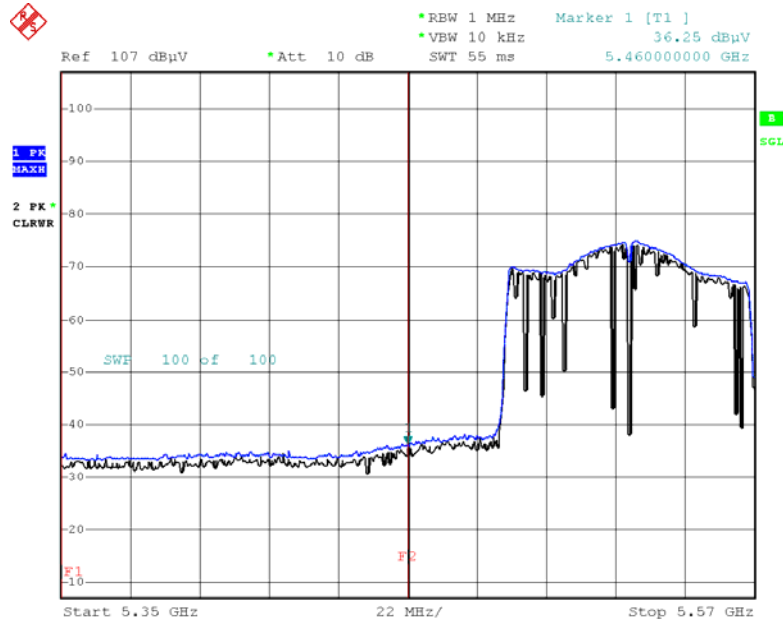
Date: 22.AUG.2019 01:50:32

## Peak Reading (802.11ac\_VHT40 Ch.62, X-V)



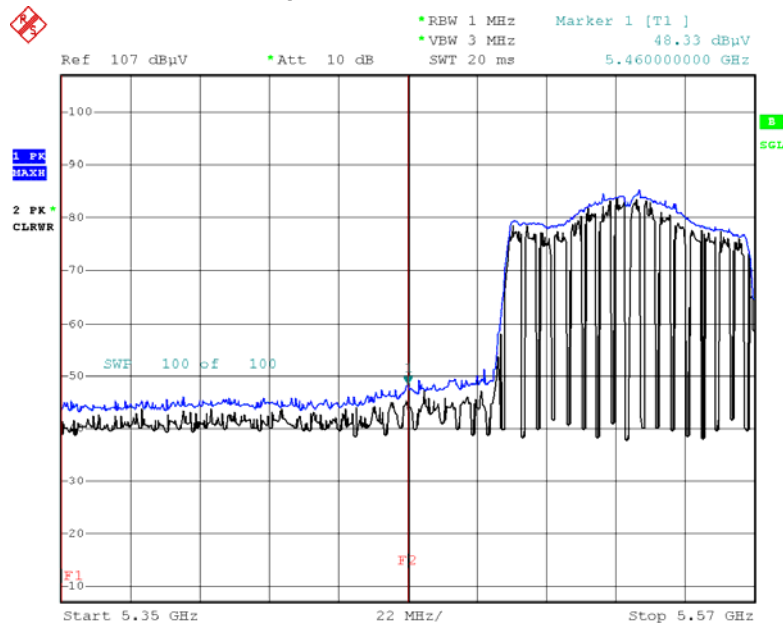
Date: 22.AUG.2019 01:50:46

**Average Reading (802.11ac\_VHT80, Ch.106 , X-V)**



Date: 21.AUG.2019 14:48:49

### Peak Reading (802.11ac\_VHT80 Ch.106, X-V)



Date: 21.AUG.2019 14:52:38

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

## 10.10 RECEIVER SPURIOUS EMISSIONS

### 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

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							

## 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	06/18/2019	Annual	100033
ESPAC	SU-642 / Temperature Chamber	03/12/2019	Annual	0093008124
Agilent	N9020A / Signal Analyzer	05/23/2019	Annual	MY51110085
Agilent	N9030A / Signal Analyzer	11/20/2018	Annual	MY49431210
Agilent	N1911A / Power Meter	04/10/2019	Annual	MY45100523
Agilent	N1921A / Power Sensor	04/10/2019	Annual	MY52260025
Agilent	87300B / Directional Coupler	11/20/2018	Annual	3116A03621
Hewlett Packard	11667B / Power Splitter	05/24/2019	Annual	5001
Hewlett Packard	E3632A / DC Power Supply	06/18/2019	Annual	KR75303960
Agilent	8493C / Attenuator(10 dB)	07/02/2019	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	05/16/2019	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	01/18/2019	Biennial	1513-175
Schwarzbeck	VULB 9160 / Hybrid Antenna	08/09/2019	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	06/19/2019	Annual	2
Wainwright Instruments	WRCJV5100/5850-40/50-8EEK / Band Reject Filter	01/03/2019	Annual	2
Api tech.	18B-03 / Attenuator (3 dB)	06/04/2019	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	06/18/2019	Annual	25956
TESCOM	TC-3000C / Bluetooth Tester	03/26/2019	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-1909-FI008-P