[ANT2]

Startup after the EUT is energized

OPERATING BAND: UNII Band 1
OPERATING FREQUENCY: 5,210,000,000 Hz
CHANNEL: 42
REFERENCE VOLTAGE: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5210059.99	59.99
100%		-30	5210034.26	34.26
100%		-20	5210048.65	48.65
100%		-10	5210033.34	33.34
100%		0	5210073.42	73.42
100%		+10	5210003.37	3.37
100%		+30	5210008.25	8.25
100%		+40	5210078.87	78.87
100%		+50	5210056.70	56.70
Batt. Endpoint	3.4	+20	5210055.25	55.25

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 2A
OPERATING FREQUENCY: 5,290,000,000 Hz
CHANNEL: 58
REFERENCE VOLTAGE: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5290001.03	1.03
100%		-30	5290071.70	71.70
100%		-20	5290044.94	44.94
100%		-10	5290057.93	57.93
100%		0	5290085.42	85.42
100%		+10	5290005.21	5.21
100%		+30	5290083.51	83.51
100%		+40	5290017.81	17.81
100%		+50	5290058.35	58.35
Batt. Endpoint	3.4	+20	5290026.21	26.21

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: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5530059.22	59.22
100%		-30	5530050.92	50.92
100%		-20	5530076.90	76.9
100%		-10	5530046.55	46.55
100%		0	5530001.71	1.71
100%		+10	5530088.67	88.67
100%		+30	5530016.87	16.87
100%		+40	5530032.69	32.69
100%		+50	5530030.70	30.70
Batt. Endpoint	3.4	+20	5530059.53	59.53

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.

OPERATING BAND: UNII Band 3
OPERATING FREQUENCY: 5,775,000,000 Hz
CHANNEL: 155
REFERENCE VOLTAGE: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5775053.30	53.30
100%		-30	5775055.47	55.47
100%		-20	5775032.38	32.38
100%		-10	5775056.95	56.95
100%		0	5775003.92	3.92
100%		+10	5775019.18	19.18
100%		+30	5775076.14	76.14
100%		+40	5775062.82	62.82
100%		+50	5775089.66	89.66
Batt. Endpoint	3.4	+20	5775060.33	60.33

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.

2 minutes after the EUT is energized

OPERATING BAND: UNII Band 1
OPERATING FREQUENCY: 5,210,000,000 Hz
CHANNEL: 42
REFERENCE VOLTAGE: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5210069.27	69.27
100%		-30	5210071.20	71.20
100%		-20	5210064.97	64.97
100%		-10	5210091.07	91.07
100%		0	5210086.59	86.59
100%		+10	5210023.57	23.57
100%		+30	5210073.59	73.59
100%		+40	5210036.13	36.13
100%		+50	5210049.49	49.49
Batt. Endpoint	3.4	+20	5210002.68	2.68

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: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5290038.45	38.45
100%		-30	5290073.83	73.83
100%		-20	5290052.36	52.36
100%		-10	5290021.42	21.42
100%		0	5290006.99	6.99
100%		+10	5290099.16	99.16
100%		+30	5290041.61	41.61
100%		+40	5290032.13	32.13
100%		+50	5290081.57	81.57
Batt. Endpoint	3.4	+20	5290012.38	12.38

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: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5530085.95	85.95
100%		-30	5530090.83	90.83
100%		-20	5530007.77	7.77
100%		-10	5530039.35	39.35
100%		0	5530045.84	45.84
100%		+10	5530022.36	22.36
100%		+30	5530051.06	51.06
100%		+40	5530001.27	1.27
100%		+50	5530079.30	79.30
Batt. Endpoint	3.4	+20	5530059.34	59.34

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: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5775076.84	76.84
100%		-30	5775049.76	49.76
100%		-20	5775001.96	1.96
100%		-10	5775018.30	18.3
100%		0	5775026.69	26.69
100%		+10	5775014.56	14.56
100%		+30	5775051.04	51.04
100%		+40	5775081.54	81.54
100%		+50	5775065.20	65.20
Batt. Endpoint	3.4	+20	5775008.36	8.36

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:	3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5210041.58	41.58
100%		-30	5210063.05	63.05
100%		-20	5210056.36	56.36
100%		-10	5210069.69	69.69
100%		0	5210014.94	14.94
100%		+10	5210061.37	61.37
100%		+30	5210026.44	26.44
100%		+40	5210015.94	15.94
100%		+50	5210007.74	7.74
Batt. Endpoint	3.4	+20	5210005.49	5.49

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: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5290008.96	8.96
100%		-30	5290034.35	34.35
100%		-20	5290015.82	15.82
100%		-10	5290021.59	21.59
100%		0	5290041.92	41.92
100%		+10	5290063.24	63.24
100%		+30	5290010.56	10.56
100%		+40	5290026.55	26.55
100%		+50	5290087.70	87.70
Batt. Endpoint	3.4	+20	5290045.26	45.26

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: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5530021.90	21.90
100%		-30	5530030.78	30.78
100%		-20	5530016.45	16.45
100%		-10	5530058.28	58.28
100%		0	5530034.16	34.16
100%		+10	5530075.12	75.12
100%		+30	5530063.08	63.08
100%		+40	5530014.08	14.08
100%		+50	5530075.39	75.39
Batt. Endpoint	3.4	+20	5530049.02	49.02

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: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5775077.73	77.73
100%		-30	5775097.04	97.04
100%		-20	5775003.89	3.89
100%		-10	5775007.95	7.95
100%		0	5775066.78	66.78
100%		+10	5775001.19	1.19
100%		+30	5775011.52	11.52
100%		+40	5775090.06	90.06
100%		+50	5775082.38	82.38
Batt. Endpoint	3.4	+20	5775036.29	36.29

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:	3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5210087.24	87.24
100%		-30	5210001.88	1.88
100%		-20	5210023.64	23.64
100%		-10	5210053.23	53.23
100%		0	5210015.86	15.86
100%		+10	5210048.06	48.06
100%		+30	5210053.88	53.88
100%		+40	5210008.15	8.15
100%		+50	5210064.15	64.15
Batt. Endpoint	3.4	+20	5210061.68	61.68

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: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5290010.37	10.37
100%		-30	5290067.23	67.23
100%		-20	5290032.45	32.45
100%		-10	5290005.92	5.92
100%		0	5290064.90	64.9
100%		+10	5290062.96	62.96
100%		+30	5290027.04	27.04
100%		+40	5290061.03	61.03
100%		+50	5290032.54	32.54
Batt. Endpoint	3.4	+20	5290011.17	11.17

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: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5530006.58	6.58
100%		-30	5530023.55	23.55
100%		-20	5530052.48	52.48
100%		-10	5530071.41	71.41
100%		0	5530053.84	53.84
100%		+10	5530072.44	72.44
100%		+30	5530038.22	38.22
100%		+40	5530045.85	45.85
100%		+50	5530013.05	13.05
Batt. Endpoint	3.4	+20	5530043.24	43.24

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 3
OPERATING FREQUENCY: 5,775,000,000 Hz
CHANNEL: 155
REFERENCE VOLTAGE: 3.88 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	3.88	+20(Ref)	5775088.54	88.54
100%		-30	5775003.99	3.99
100%		-20	5775022.25	22.25
100%		-10	5775032.07	32.07
100%		0	5775034.11	34.11
100%		+10	5775091.87	91.87
100%		+30	5775033.16	33.16
100%		+40	5775015.17	15.17
100%		+50	5775062.19	62.19
Batt. Endpoint	3.4	+20	5775036.23	36.23

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

[ANT1]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11a	UNII 2C	5720	144	5709.40	15.60
802.11n(HT20)				5709.24	15.76
802.11ac(VHT20)				5709.36	15.64
802.11a	UNII 3	5720	144	5730.60	5.60
802.11n(HT20)				5730.64	5.64
802.11ac(VHT20)				5730.56	5.56

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11n(HT40)	UNII 2C	5710	142	5689.36	35.64
802.11ac(VHT40)				5690.08	34.92
802.11n(HT40)	UNII 3	5710	142	5730.08	5.08
802.11ac(VHT40)				5729.76	4.76

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11ac(VHT80)	UNII 2C	5690	138	5649.44	75.56
	UNII 3	5690	138	5730.32	5.32

Note:

[UNII 2C] 26dB Bandwidth = 5725MHz - Measured Frequency[MHz]

[UNII 3C] 26dB Bandwidth = Measured Frequency[MHz] -5725MHz

[ANT2]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11a	UNII 2C	5720	144	5709.32	15.68
802.11n(HT20)				5709.12	15.88
802.11ac(VHT20)				5708.96	16.04
802.11a	UNII 3	5720	144	5731.00	6.00
802.11n(HT20)				5730.76	5.76
802.11ac(VHT20)				5730.96	5.96

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11n(HT40)	UNII 2C	5710	142	5688.88	36.12
802.11ac(VHT40)				5689.36	35.64
802.11n(HT40)	UNII 3	5710	142	5730.40	5.40
802.11ac(VHT40)				5730.00	5.00

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	26dB Bandwidth [MHz]
802.11ac(VHT80)	UNII 2C	5690	138	5649.44	75.56
	UNII 3	5690	138	5730.56	5.56

Note:

[UNII 2C] 26dB Bandwidth = 5725MHz **-** Measured Frequency[MHz]

[UNII 3C] 26dB Bandwidth = Measured Frequency[MHz] -5725MHz

[ANT1]

▣ 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


[ANT2]

▣ 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 6dB Bandwidth

[ANT1]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11a	UNII 3	5720	144	5728.24	3.24	> 0.5
802.11n(HT20)				5728.88	3.88	> 0.5
802.11ac(VHT20)				5728.88	3.88	> 0.5

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11n(HT40)	UNII 3	5710	142	5728.32	3.32	> 0.5
802.11ac(VHT40)				5728.24	3.24	> 0.5

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11ac(VHT80)	UNII 3	5690	138	5728.28	3.28	> 0.5

Note:

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

[ANT2]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11a	UNII 3	5720	144	5728.24	3.24	> 0.5
802.11n(HT20)				5728.88	3.88	> 0.5
802.11ac(VHT20)				5728.84	3.84	> 0.5

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11n(HT40)	UNII 3	5710	142	5728.24	3.24	> 0.5
802.11ac(VHT40)				5728.24	3.24	> 0.5

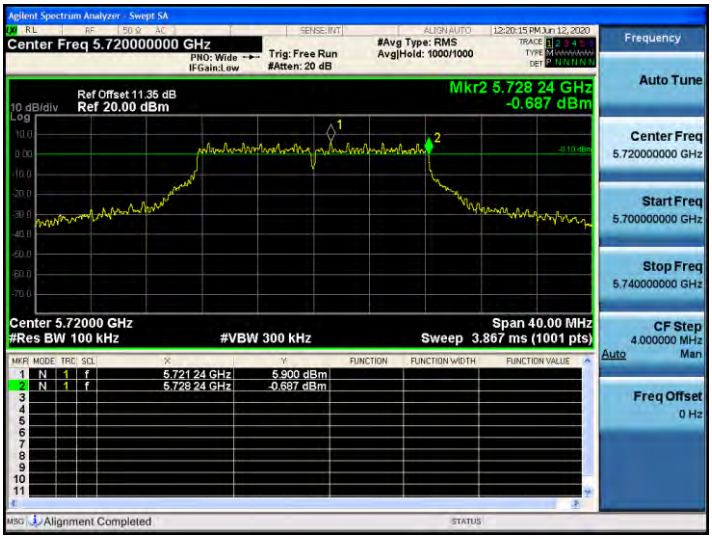
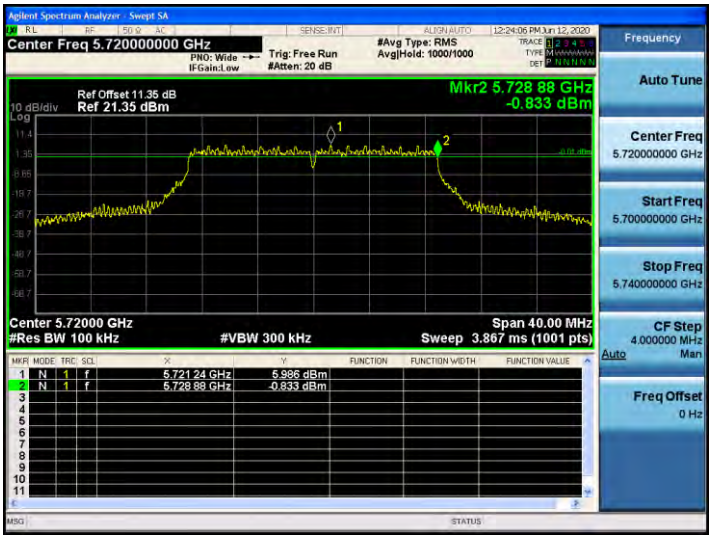
Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11ac(VHT80)	UNII 3	5690	138	5728.28	3.28	> 0.5

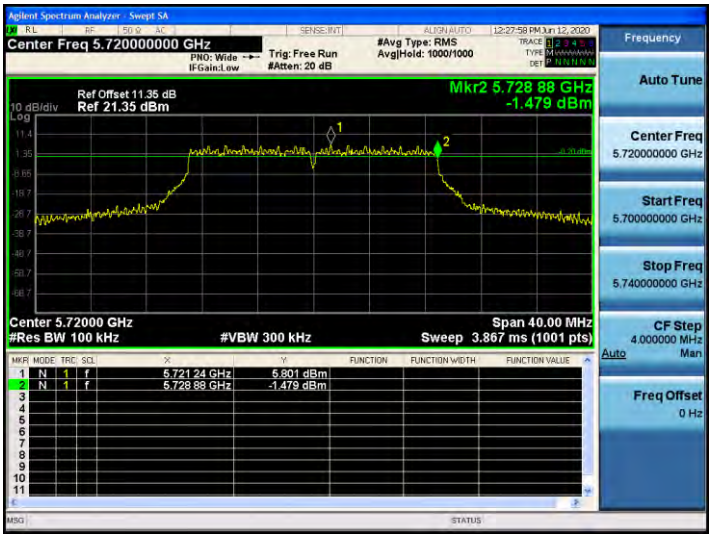
Note:

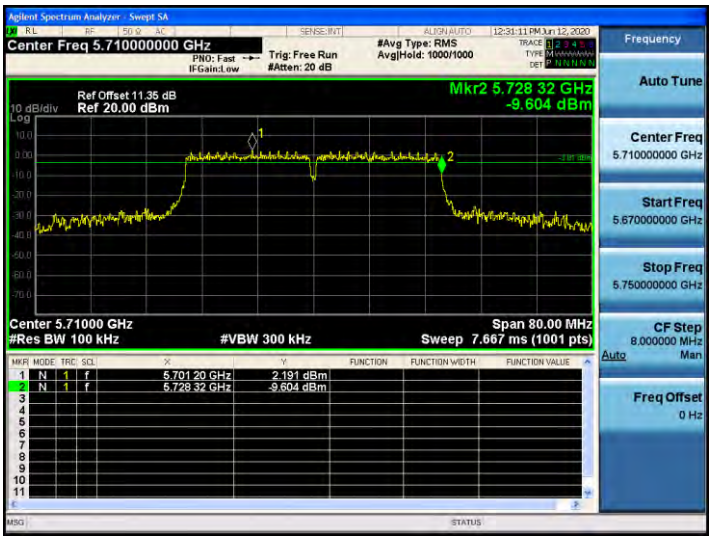
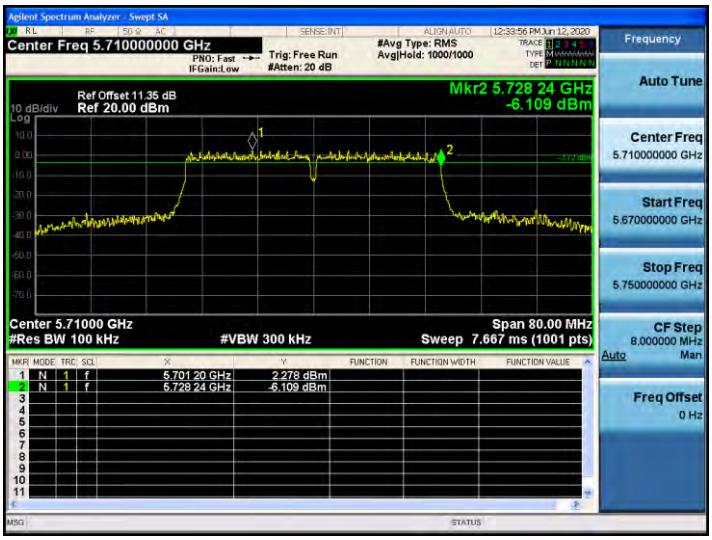
6dB Bandwidth = Measured Frequency[MHz] – 5725MHz

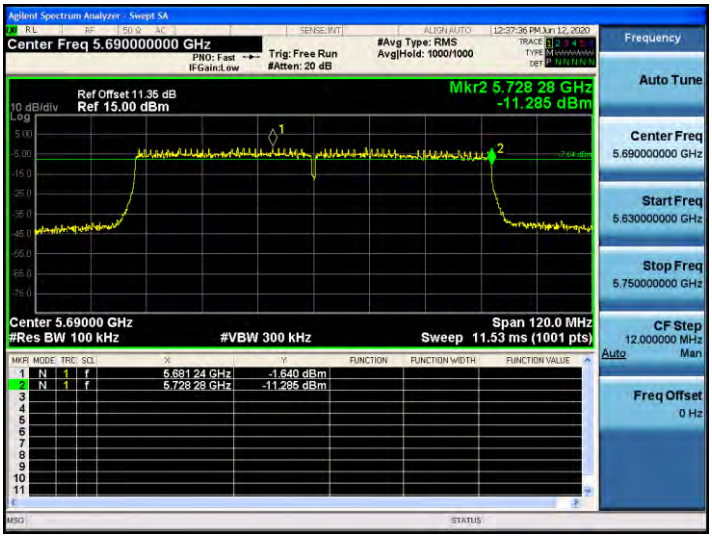
[ANT1]

▣ Test Plots(UNII 3 Band 6dB Bandwidth)

802.11a CH.144	802.11n_HT20 CH.144
	

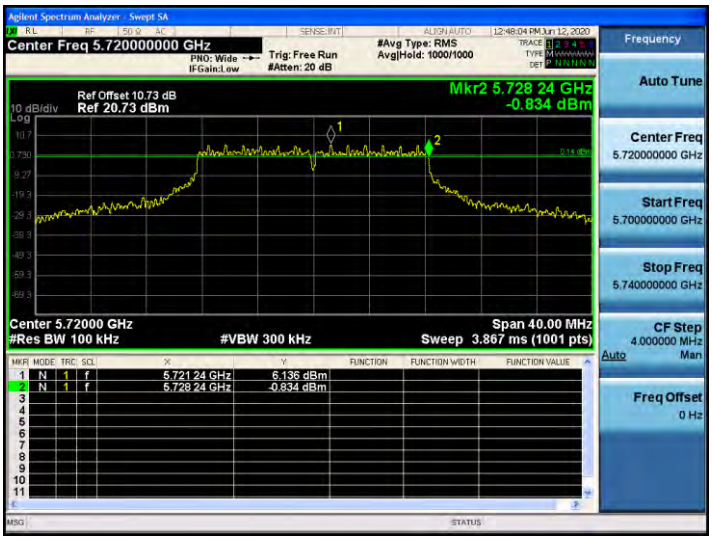
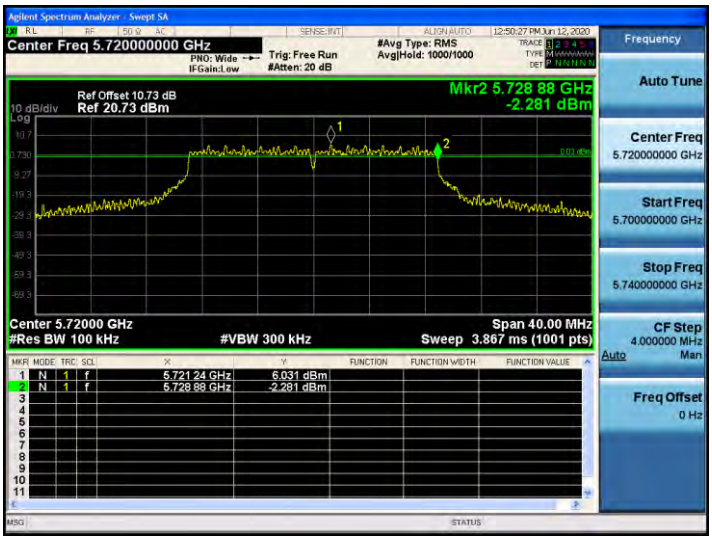
802.11ac_VHT20 CH.144


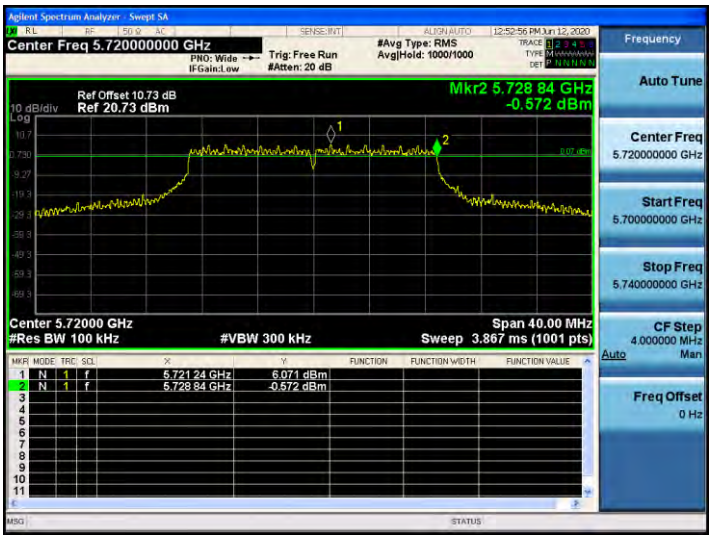
802.11n_HT40 CH.142	802.11ac_VHT40 CH.142
	

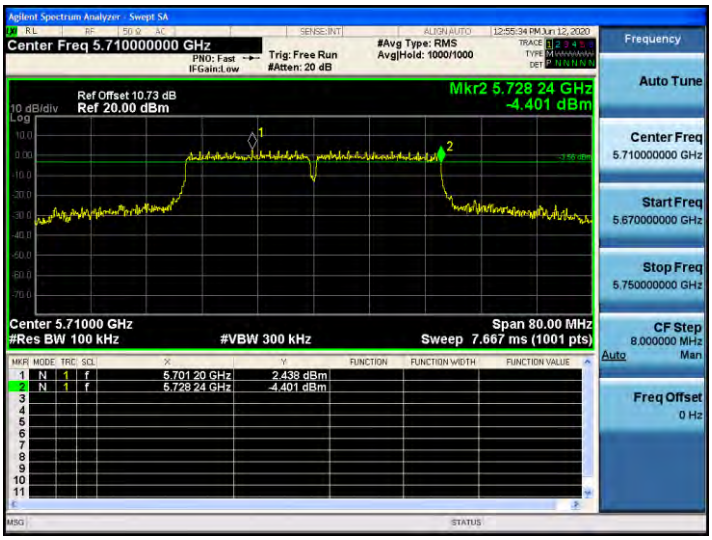
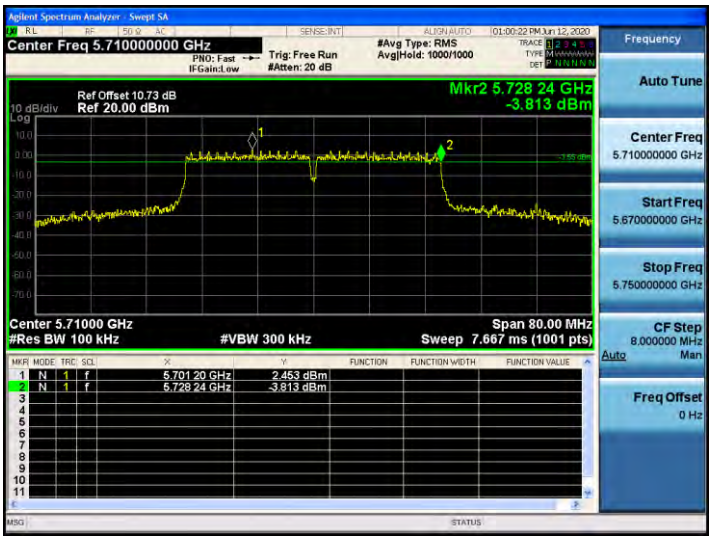
802.11ac_VHT80 CH.138


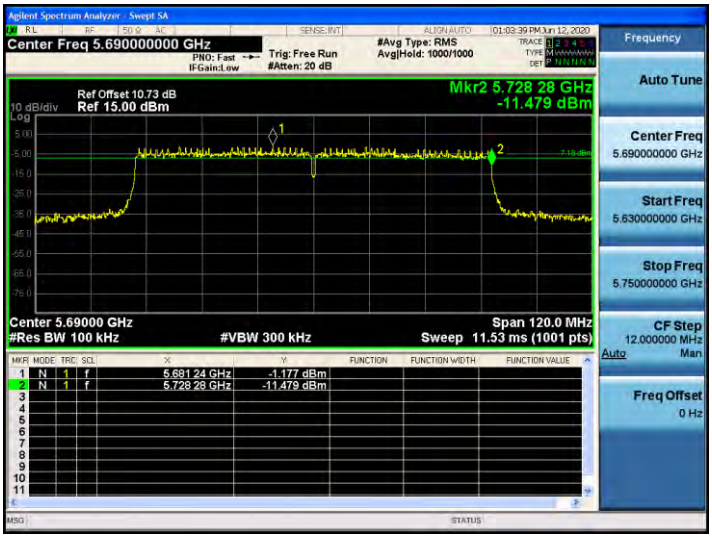
[ANT2]

▣ 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

[ANT1]

Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)
802.11a	5720 (UNII 2C Band)	144	14.07	1.883	15.96	22.93
802.11n(HT20)			13.87	1.991	15.86	22.98
802.11ac(VHT20)			13.59	2.150	15.74	22.94
802.11a	5720 (UNII 3 Band)	144	7.83	1.830	9.66	30.00
802.11n(HT20)			8.08	1.991	10.07	30.00
802.11ac(VHT20)			7.82	2.150	9.97	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	14.00	1.760	15.76	23.98
802.11ac(VHT40)			12.79	3.326	16.12	23.98
802.11n(HT40)	5710 (UNII 3 Band)	142	3.38	1.760	5.14	30.00
802.11ac(VHT40)			2.38	3.326	5.71	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	11.61	3.382	14.99	23.98
	5690 (UNII 3 Band)	138	-3.06	3.382	0.33	30.00

[ANT2]

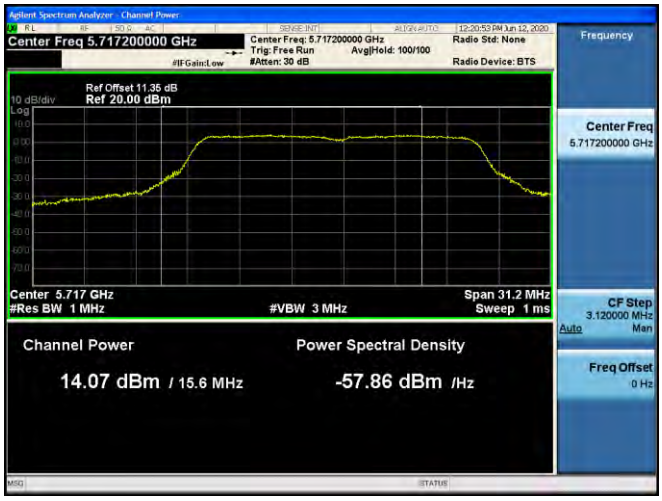
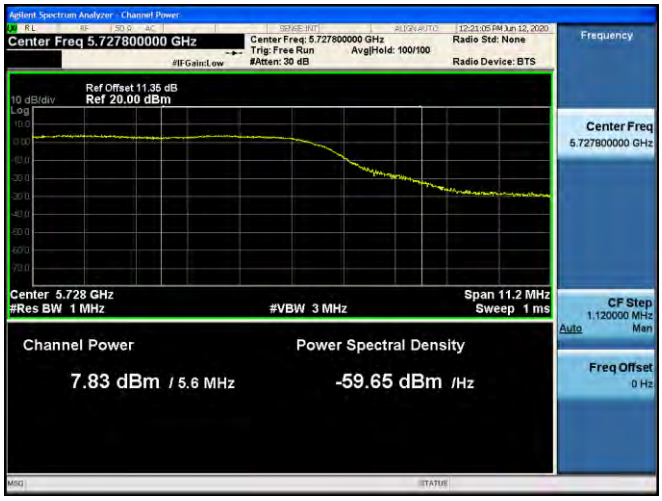
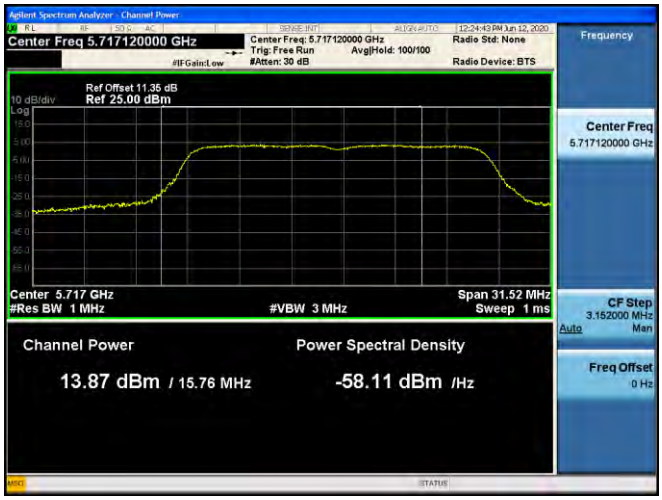
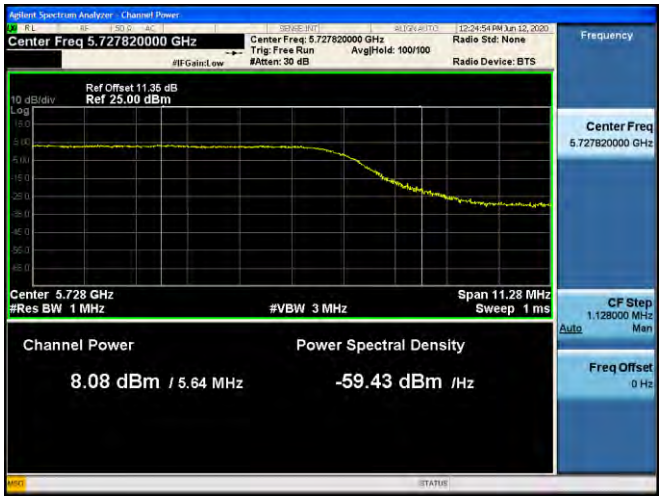
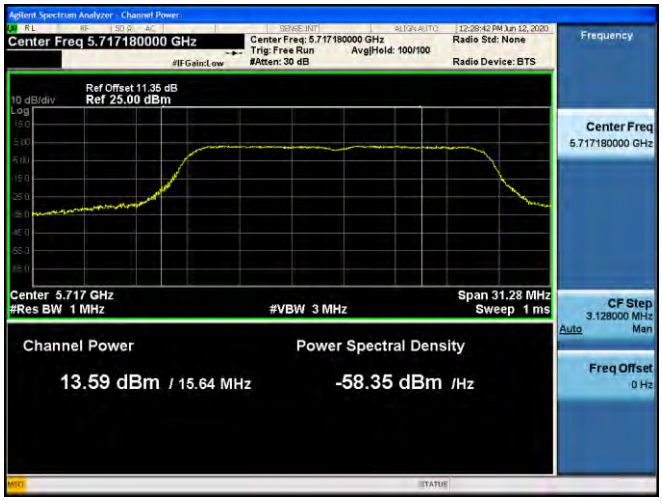
Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)
802.11a	5720 (UNII 2C Band)	144	14.05	1.883	15.94	22.95
802.11n(HT20)			13.85	1.991	15.84	23.01
802.11ac(VHT20)			13.71	2.150	15.86	23.05
802.11a	5720 (UNII 3 Band)	144	7.83	1.830	9.66	30.00
802.11n(HT20)			8.06	1.991	10.05	30.00
802.11ac(VHT20)			7.88	2.150	10.03	30.00

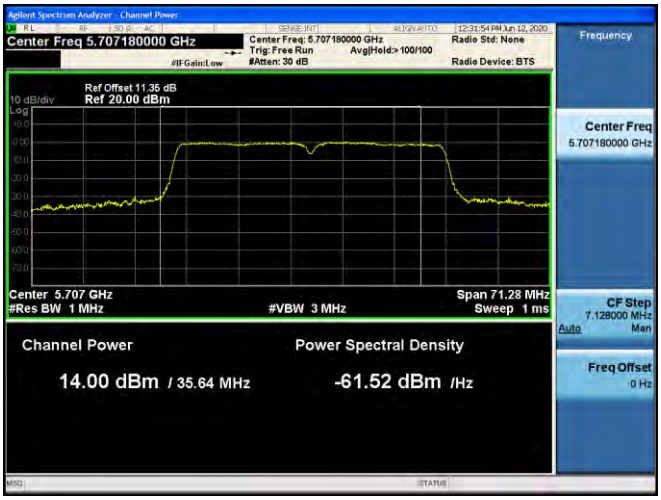
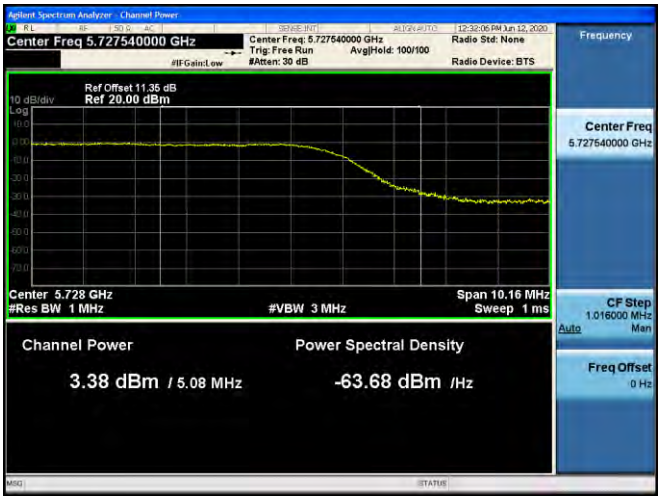
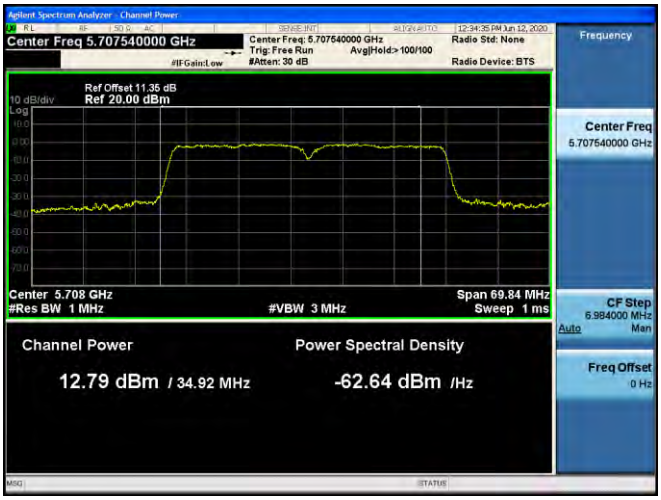
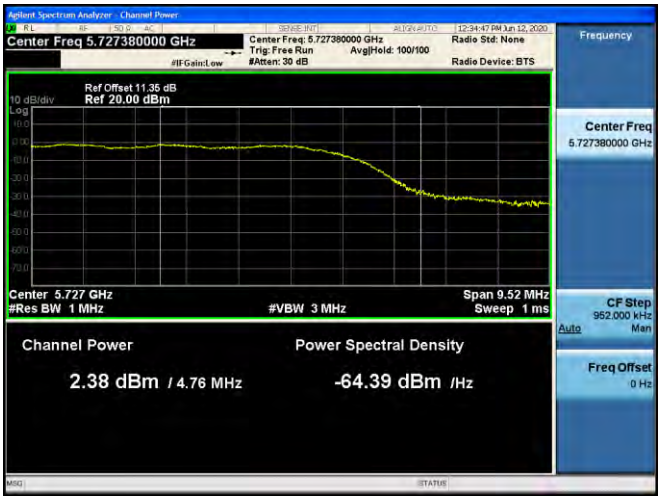
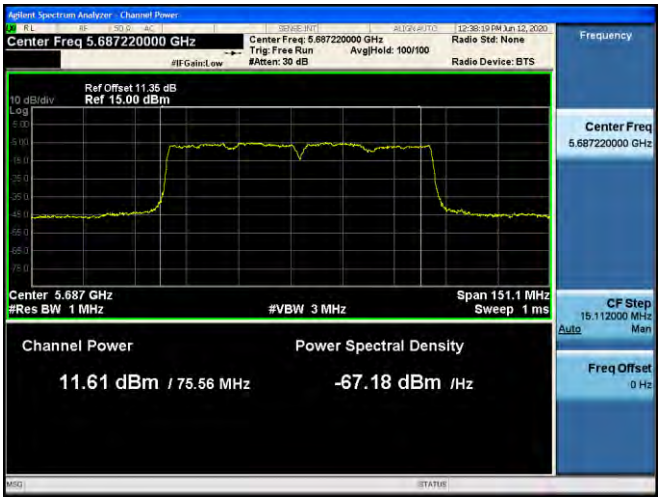
Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)
802.11n(HT40)	5710 (UNII 2C Band)	142	14.13	1.760	15.89	23.98
802.11ac(VHT40)			12.79	3.326	16.12	23.98
802.11n(HT40)	5710 (UNII 3 Band)	142	3.54	1.760	5.30	30.00
802.11ac(VHT40)			2.40	3.326	5.73	30.00

Mode	Frequency [MHz]	Channel	Measured Power (dBm)	Duty Cycle Factor (dB)	Total Power (dBm)	Limit (dBm)
802.11ac(VHT80)	5690 (UNII 2C Band)	138	11.89	3.382	15.27	23.98
	5690 (UNII 3 Band)	138	-3.00	3.382	0.39	30.00

[ANT1]

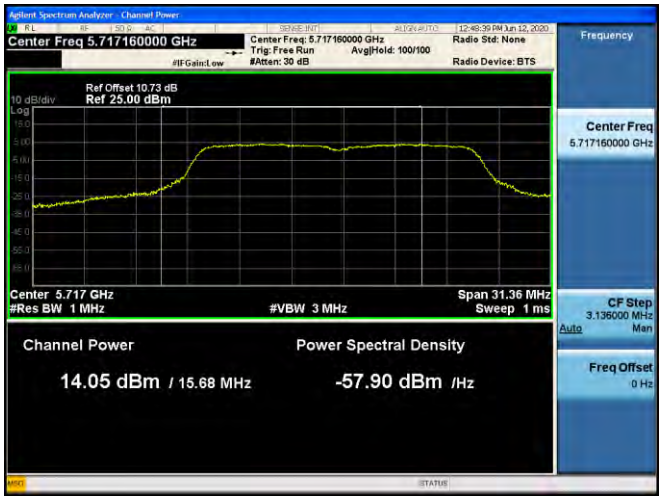
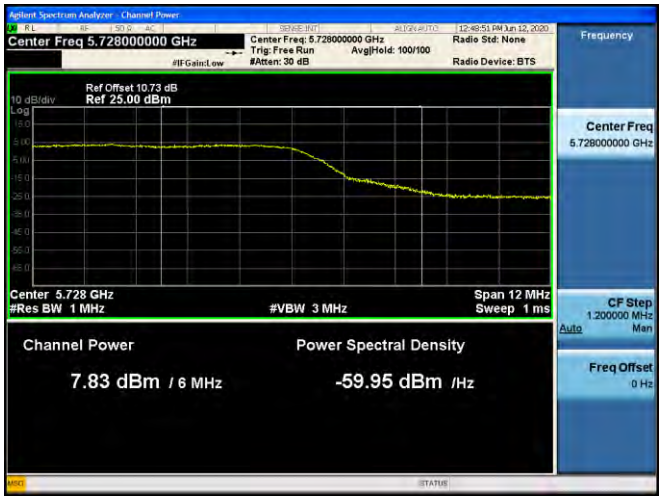
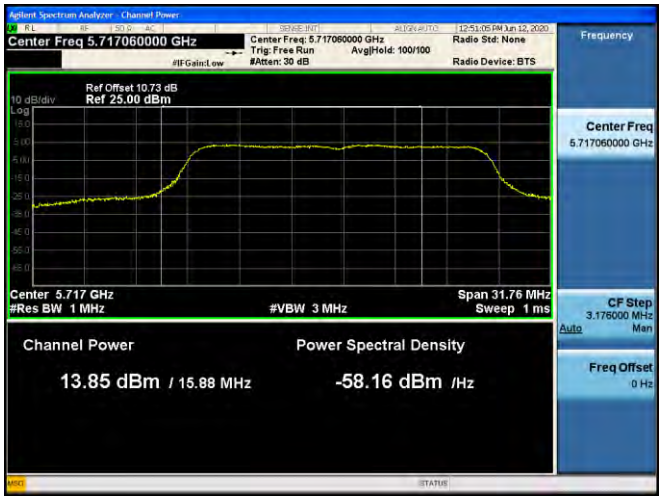
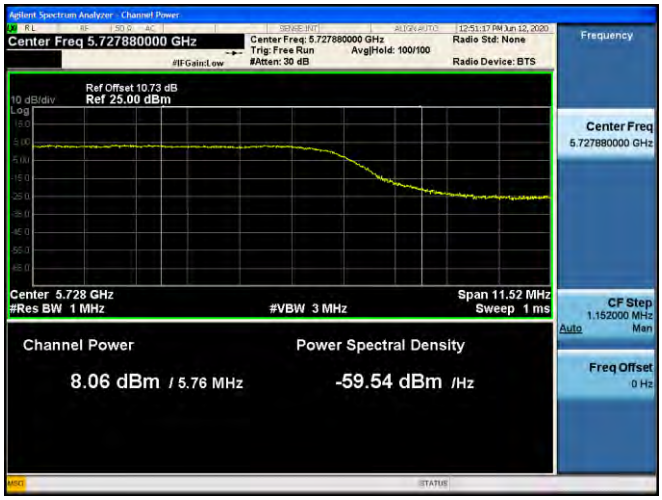
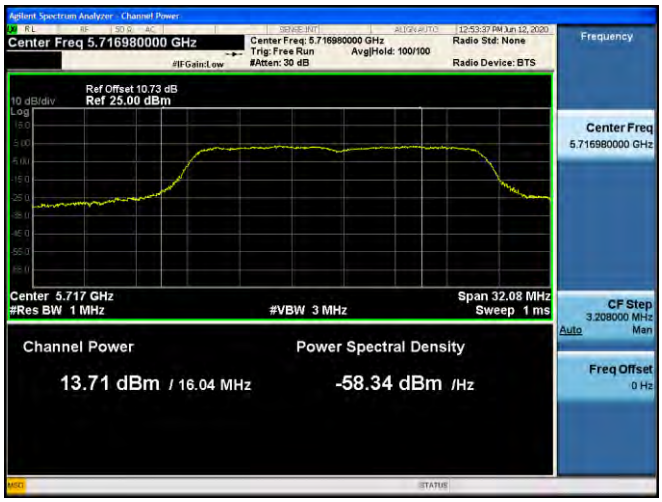
▣ Test Plots_

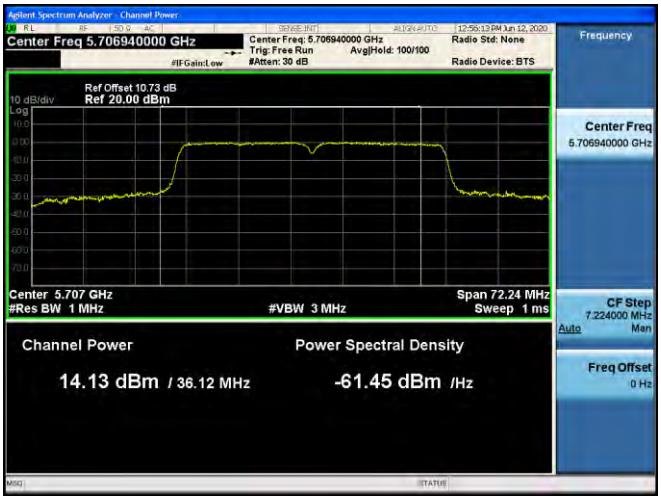
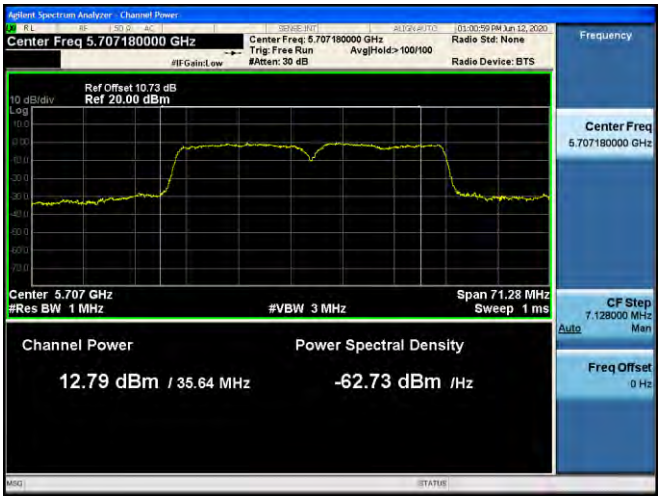
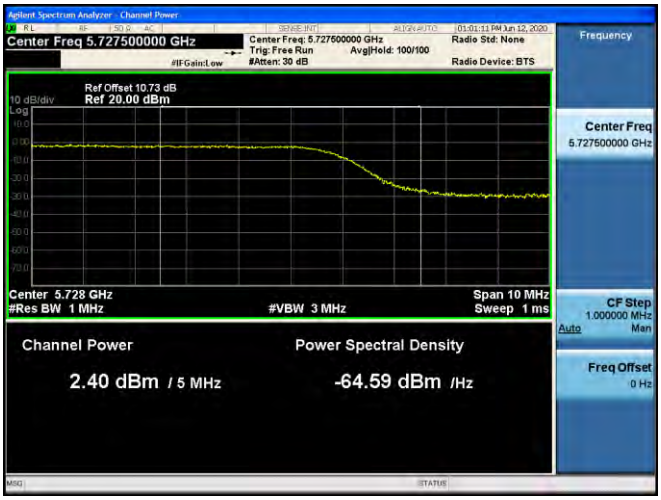
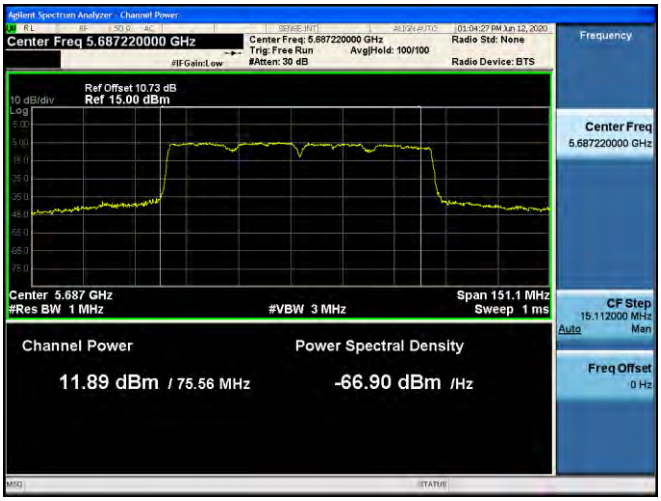
802.11a UNII 2C Band	802.11a UNII 3 Band
	
802.11n(HT20) UNII 2C Band	**802.11n(HT20) UNII 3 Band**
	
802.11ac(VHT20) UNII 2C Band	**802.11ac(VHT20) UNII 3 Band**
	

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**
	

[ANT2]

▣ Test Plots_

802.11a UNII 2C Band	802.11a UNII 3 Band
	
802.11n(HT20) UNII 2C Band	**802.11n(HT20) UNII 3 Band**
	
802.11ac(VHT20) UNII 2C Band	**802.11ac(VHT20) UNII 3 Band**
	

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

[ANT1]

Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)
802.11a	5720 (UNII 2C Band)	144	4.082	1.883	5.965	11dBm/ MHz
802.11n(HT20)			3.574	1.991	5.565	
802.11ac(VHT20)			3.381	2.150	5.531	
802.11a	5720 (UNII 3 Band)	144	1.194	1.883	3.077	30 dBm/ 500kHz
802.11n(HT20)			0.890	1.991	2.881	
802.11ac(VHT20)			1.029	2.150	3.179	

Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)
802.11n(HT40)	5710 (UNII 2C Band)	142	0.488	1.760	2.248	11dBm/ MHz
802.11ac(VHT40)			-0.723	3.326	2.603	
802.11n(HT40)	5710 (UNII 3 Band)	142	-2.955	1.760	-1.195	30 dBm/ 500kHz
802.11ac(VHT40)			-3.666	3.326	-0.340	

Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)
802.11ac(VHT80)	5690 (UNII 2C Band)	138	-4.897	3.382	-1.515	11dBm/ MHz
	5690 (UNII 3 Band)	138	-9.213	3.382	-5.831	30 dBm/ 500kHz

[ANT2]

Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)
802.11a	5720 (UNII 2C Band)	144	4.044	1.883	5.927	11dBm/ MHz
802.11n(HT20)			3.496	1.991	5.487	
802.11ac(VHT20)			3.683	2.150	5.833	
802.11a	5720 (UNII 3 Band)	144	1.326	1.883	3.209	30 dBm/ 500kHz
802.11n(HT20)			0.871	1.991	2.862	
802.11ac(VHT20)			0.677	2.150	2.827	

Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)
802.11n(HT40)	5710 (UNII 2C Band)	142	0.611	1.760	2.371	11dBm/ MHz
802.11ac(VHT40)			-0.265	3.326	3.061	
802.11n(HT40)	5710 (UNII 3 Band)	142	-3.165	1.760	-1.405	30 dBm/ 500kHz
802.11ac(VHT40)			-3.985	3.326	-0.659	

Mode	Frequency [MHz]	Channel	Measured Density (dBm)	Duty Cycle Factor (dB)	Total PSD (dBm)	Limit (dBm)
802.11ac(VHT80)	5690 (UNII 2C Band)	138	-4.557	3.382	-1.175	11dBm/ MHz
	5690 (UNII 3 Band)	138	-8.871	3.382	-5.489	30 dBm/ 500kHz

[ANT1]

▣ Test Plots

802.11a UNII 2C Band	802.11a UNII 3 Band
	
802.11n(HT20) UNII 2C Band	**802.11n(HT20) UNII 3 Band**
	
802.11ac(VHT20) UNII 2C Band	**802.11ac(VHT20) UNII 3 Band**
	

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**
	

[ANT2]

▣ Test Plots

802.11a UNII 2C Band	802.11a UNII 3 Band
	
802.11n(HT20) UNII 2C Band	**802.11n(HT20) UNII 3 Band**
	
802.11ac(VHT20) UNII 2C Band	**802.11ac(VHT20) UNII 3 Band**
	

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 = 40log (specific distance / test distance) (dB)
3. Limit line = specific Limits (dBuV) + Distance extrapolation factor

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	56.84	0.49	V	57.33	68.20	10.87	PK
15540	51.34	2.62	V	53.96	73.98	20.02	PK
15540	38.55	2.62	V	41.17	53.98	12.81	AV
10360	57.25	0.49	H	57.74	68.20	10.46	PK
15540	51.63	2.62	H	54.25	73.98	19.73	PK
15540	38.66	2.62	H	41.28	53.98	12.70	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	55.83	1.38	V	57.21	68.20	10.99	PK
15600	50.99	1.50	V	52.49	73.98	21.49	PK
15600	37.99	1.50	V	39.49	53.98	14.49	AV
10400	56.14	1.38	H	57.52	68.20	10.68	PK
15600	50.19	1.50	H	51.69	73.98	22.29	PK
15600	37.86	1.50	H	39.36	53.98	14.62	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]	A.F.+C.L. -A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	55.44	-0.33	V	55.11	68.20	13.09	PK
15720	51.85	0.56	V	52.41	73.98	21.57	PK
15720	39.01	0.56	V	39.57	53.98	14.41	AV
10480	55.58	-0.33	H	55.25	68.20	12.95	PK
15720	52.04	0.56	H	52.60	73.98	21.38	PK
15720	39.12	0.56	H	39.68	53.98	14.30	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]	A.F.+C.L. -A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	57.15	-0.06	V	57.09	68.20	11.11	PK
15780	52.55	0.96	V	53.51	73.98	20.47	PK
15780	40.25	0.96	V	41.21	53.98	12.77	AV
10520	56.45	-0.06	H	56.39	68.20	11.81	PK
15780	53.01	0.96	H	53.97	73.98	20.01	PK
15780	40.73	0.96	H	41.69	53.98	12.29	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	55.31	-0.18	V	55.13	73.98	18.85	PK
10600	42.23	-0.18	V	42.05	53.98	11.93	AV
15900	53.39	-0.13	V	53.26	73.98	20.72	PK
15900	40.70	-0.13	V	40.57	53.98	13.41	AV
10600	54.84	-0.18	H	54.66	73.98	19.32	PK
10600	41.94	-0.18	H	41.76	53.98	12.22	AV
15900	53.89	-0.13	H	53.76	73.98	20.22	PK
15900	40.94	-0.13	H	40.81	53.98	13.17	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]	A.F.+C.L. -A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10640	53.74	-0.04	V	53.70	73.98	20.28	PK
10640	41.86	-0.04	V	41.82	53.98	12.16	AV
15960	51.49	-0.36	V	51.13	73.98	22.85	PK
15960	38.84	-0.36	V	38.48	53.98	15.50	AV
10640	53.73	-0.04	H	53.69	73.98	20.29	PK
10640	41.59	-0.04	H	41.55	53.98	12.43	AV
15960	52.38	-0.36	H	52.02	73.98	21.96	PK
15960	39.07	-0.36	H	38.71	53.98	15.27	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]	A.F.+C.L. -A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11000	55.17	1.75	V	56.92	73.98	17.06	PK
11000	42.86	1.75	V	44.61	53.98	9.37	AV
16500	56.29	1.06	V	57.35	68.20	10.85	PK
11000	54.61	1.75	H	56.36	73.98	17.62	PK
11000	42.18	1.75	H	43.93	53.98	10.05	AV
16500	56.72	1.06	H	57.78	68.20	10.42	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	55.72	0.26	V	55.98	73.98	18.00	PK
11200	42.58	0.26	V	42.84	53.98	11.14	AV
16800	55.03	3.41	V	58.44	68.20	9.76	PK
11200	54.94	0.26	H	55.20	73.98	18.78	PK
11200	42.11	0.26	H	42.37	53.98	11.61	AV
16800	55.83	3.41	H	59.24	68.20	8.96	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]	A.F.+C.L. -A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11440	55.38	0.74	V	56.12	73.98	17.86	PK
11440	42.05	0.74	V	42.79	53.98	11.19	AV
17160	55.34	5.47	V	60.81	68.20	7.39	PK
11440	54.67	0.74	H	55.41	73.98	18.57	PK
11440	41.55	0.74	H	42.29	53.98	11.69	AV
17160	56.36	5.47	H	61.83	68.20	6.37	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	53.49	0.57	V	54.06	73.98	19.92	PK
11490	40.86	0.57	V	41.43	53.98	12.55	AV
17235	54.50	5.22	V	59.72	68.20	8.48	PK
11490	52.78	0.57	H	53.35	73.98	20.63	PK
11490	40.40	0.57	H	40.97	53.98	13.01	AV
17235	55.21	5.22	H	60.43	68.20	7.77	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	52.87	0.73	V	53.60	73.98	20.38	PK
11570	40.29	0.73	V	41.02	53.98	12.96	AV
17355	55.02	6.04	V	61.06	68.20	7.14	PK
11570	53.07	0.73	H	53.80	73.98	20.18	PK
11570	40.62	0.73	H	41.35	53.98	12.63	AV
17355	55.51	6.04	H	61.55	68.20	6.65	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]	A.F.+C.L. -A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	53.84	-0.65	V	53.19	73.98	20.79	PK
11650	41.28	-0.65	V	40.63	53.98	13.35	AV
17475	54.60	7.62	V	62.22	68.20	5.98	PK
11650	55.07	-0.65	H	54.42	73.98	19.56	PK
11650	41.93	-0.65	H	41.28	53.98	12.70	AV
17475	56.04	7.62	H	63.66	68.20	4.54	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]	A.F.+C.L. -A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	53.27	-0.65	V	52.62	73.98	21.36	PK
11650	40.80	-0.65	V	40.15	53.98	13.83	AV
17475	53.75	7.62	V	61.37	68.20	6.83	PK
11650	53.75	-0.65	H	53.10	73.98	20.88	PK
11650	40.96	-0.65	H	40.31	53.98	13.67	AV
17475	54.09	7.62	H	61.71	68.20	6.49	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]	A.F.+C.L. -A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	52.95	-0.65	V	52.30	73.98	21.68	PK
11650	40.68	-0.65	V	40.03	53.98	13.95	AV
17475	53.56	7.62	V	61.18	68.20	7.02	PK
11650	53.67	-0.65	H	53.02	73.98	20.96	PK
11650	41.06	-0.65	H	40.41	53.98	13.57	AV
17475	54.70	7.62	H	62.32	68.20	5.88	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]	A.F.+C.L. -A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11590	50.96	0.49	V	51.45	73.98	22.53	PK
11590	39.88	0.49	V	40.37	53.98	13.61	AV
17385	52.45	6.00	V	58.45	68.20	9.75	PK
11590	51.54	0.49	H	52.03	73.98	21.95	PK
11590	39.93	0.49	H	40.42	53.98	13.56	AV
17385	53.31	6.00	H	59.31	68.20	8.89	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]	A.F.+C.L. -A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11590	51.35	0.49	V	51.84	73.98	22.14	PK
11590	39.77	0.49	V	40.26	53.98	13.72	AV
17385	52.88	6.00	V	58.88	68.20	9.32	PK
11590	51.97	0.49	H	52.46	73.98	21.52	PK
11590	39.99	0.49	H	40.48	53.98	13.50	AV
17385	53.16	6.00	H	59.16	68.20	9.04	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]	A.F.+C.L. -A.G+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11550	51.38	0.55	V	51.93	73.98	22.05	PK
11550	38.95	0.55	V	39.50	53.98	14.48	AV
17325	50.48	5.18	V	55.66	68.20	12.54	PK
11550	51.48	0.55	H	52.03	73.98	21.95	PK
11550	39.28	0.55	H	39.83	53.98	14.15	AV
17325	50.72	5.18	H	55.90	68.20	12.30	PK

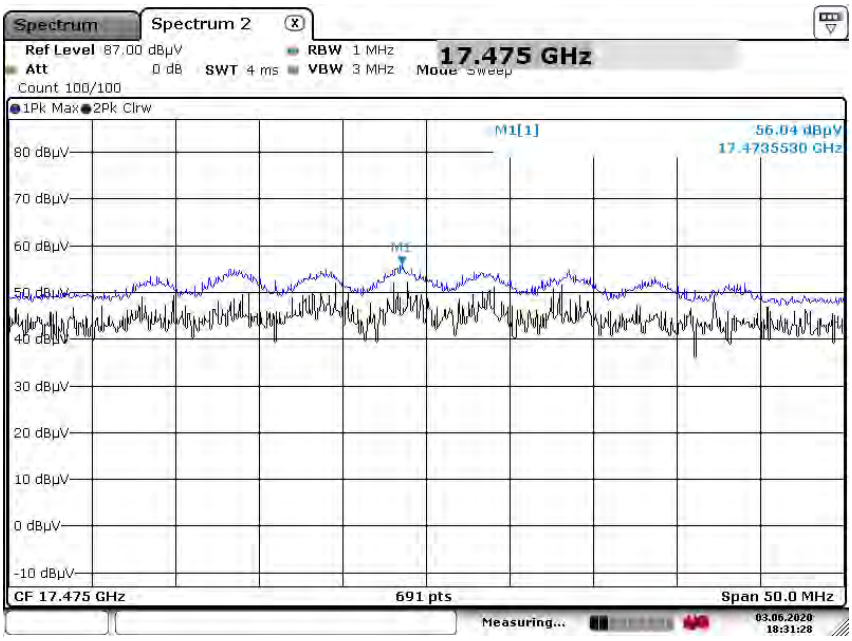
Note:

All Modes of operation were investigated and the worst case configuration results are reported.

In order to simplify the report, We only have attached RSE result of worst channel.

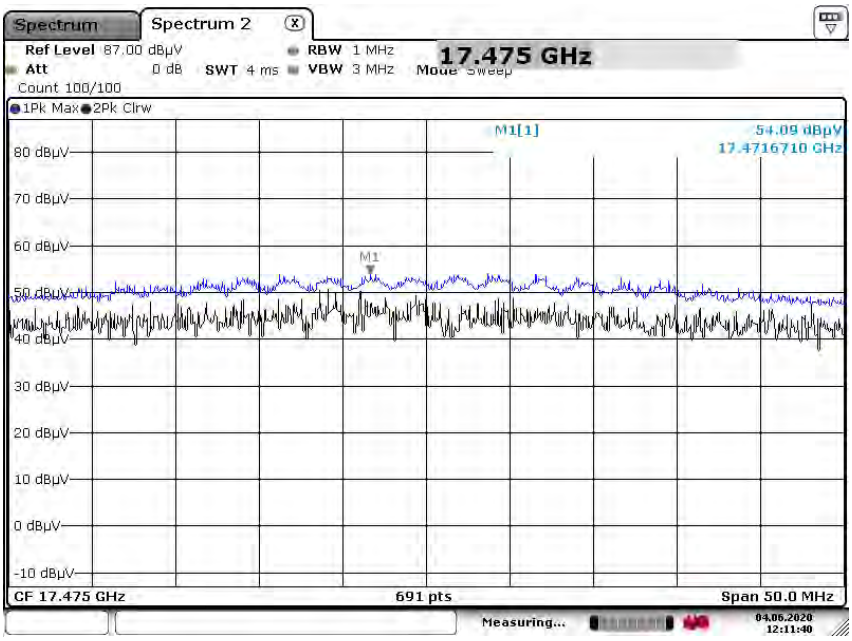
▣ Test Plots

Peak Reading (802.11a, Ch.165 3rd Harmonic, Z-H)



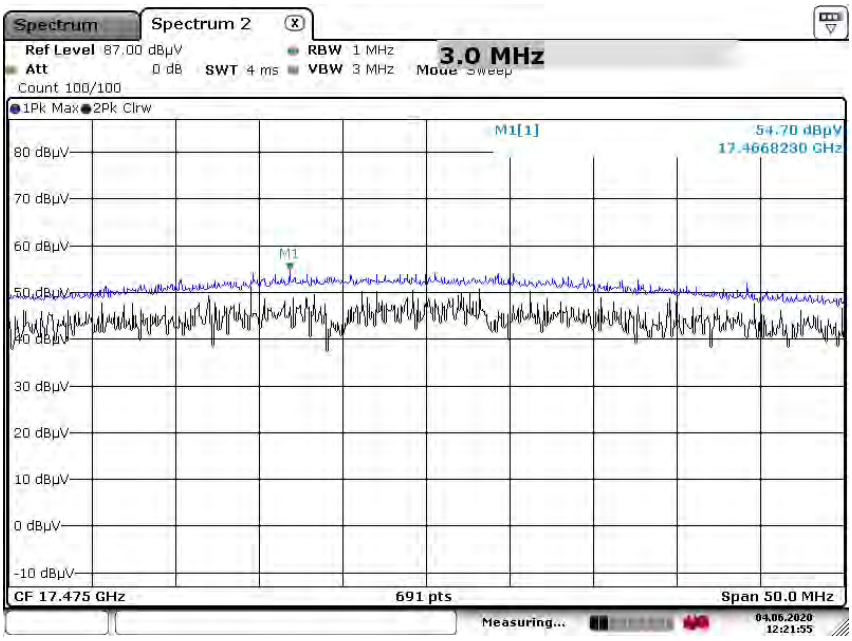
Date: 3.JUN.2020 18:31:28

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



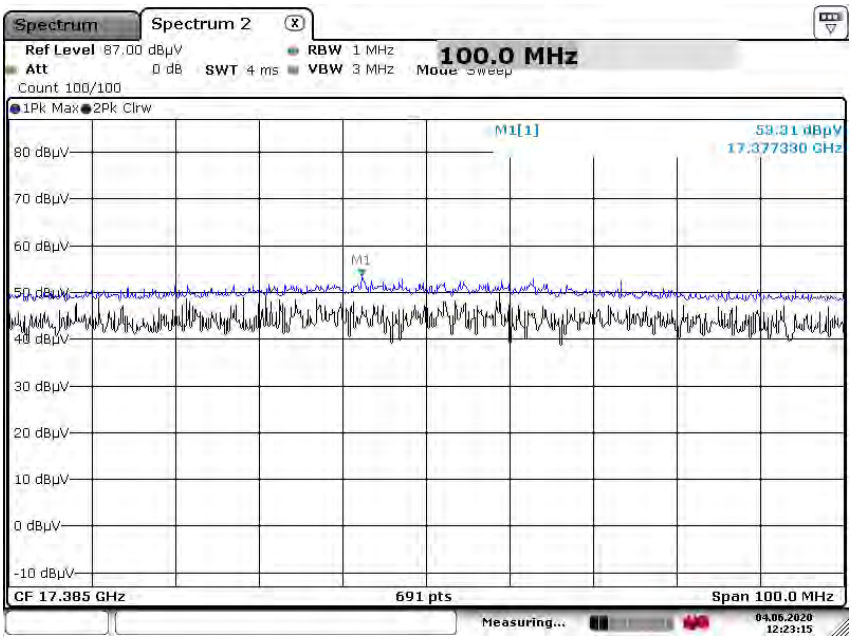
Date: 4.JUN.2020 12:11:40

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



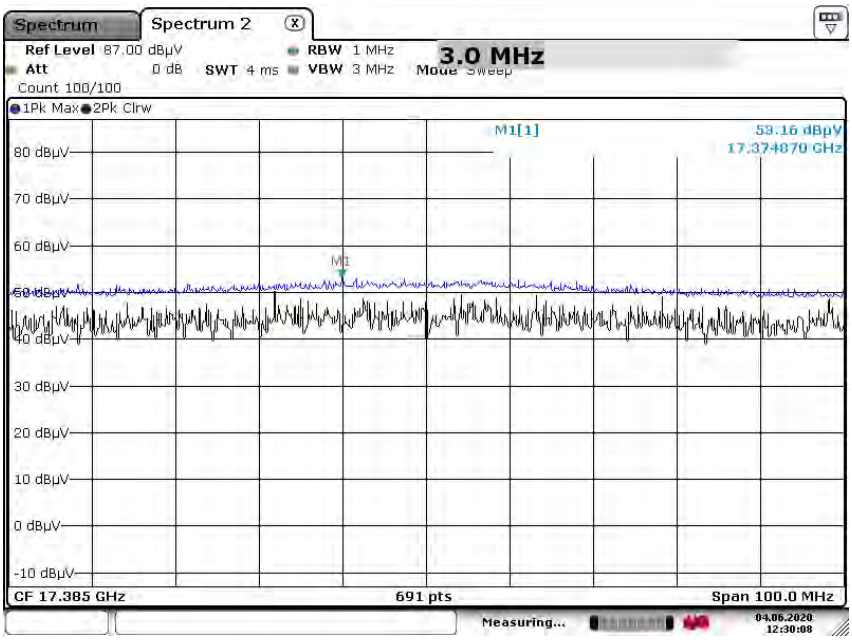
Date: 4.JUN.2020 12:21:55

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



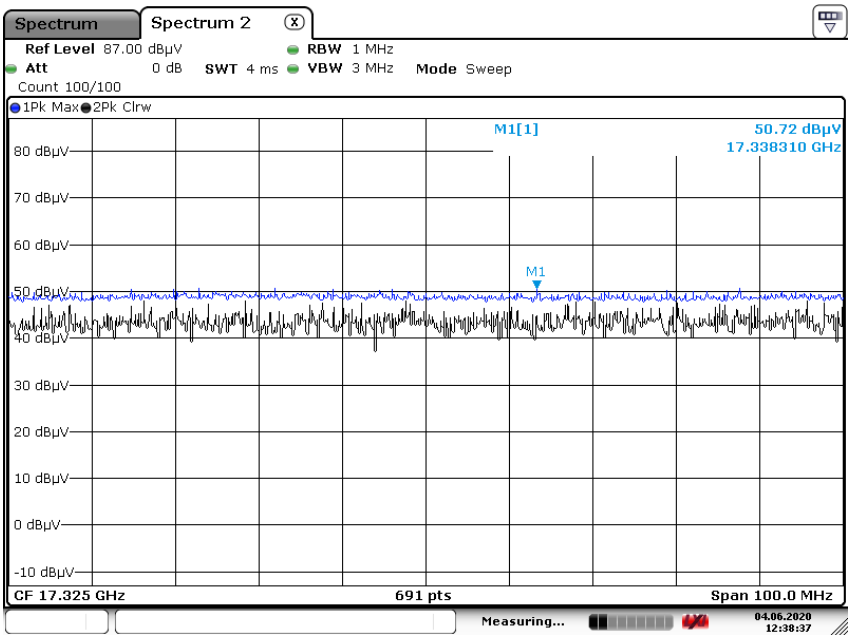
Date: 4.JUN.2020 12:23:15

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



Date: 4.JUN.2020 12:30:09

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



Date: 4.JUN.2020 12:38:38

9

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	51.24	12.72	H	63.96	73.98	10.02	PK
5150	37.91	12.72	H	50.63	53.98	3.35	AV
5150	50.32	12.72	V	63.04	73.98	10.94	PK
5150	36.55	12.72	V	49.27	53.98	4.71	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	54.30	12.38	H	66.68	73.98	7.30	PK
5350	37.61	12.38	H	49.99	53.98	3.99	AV
5350	53.89	12.38	V	66.27	73.98	7.71	PK
5350	37.50	12.38	V	49.88	53.98	4.10	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	46.77	13.91	H	60.68	73.98	13.30	PK
5460	33.71	13.91	H	47.62	53.98	6.36	AV
5470	51.48	13.46	H	64.94	68.20	3.26	PK
5460	46.51	13.91	V	60.42	73.98	13.56	PK
5460	33.34	13.91	V	47.25	53.98	6.73	AV
5470	49.85	13.46	V	63.31	68.20	4.89	PK

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	54.88	12.72	H	67.60	73.98	6.38	PK
5150	38.31	12.72	H	51.03	53.98	2.95	AV
5150	51.65	12.72	V	64.37	73.98	9.61	PK
5150	38.01	12.72	V	50.73	53.98	3.25	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	53.23	12.38	H	65.61	73.98	8.37	PK
5350	38.54	12.38	H	50.92	53.98	3.06	AV
5350	52.84	12.38	V	65.22	73.98	8.76	PK
5350	38.40	12.38	V	50.78	53.98	3.20	AV

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	46.30	13.91	H	60.21	73.98	13.77	PK
5460	33.52	13.91	H	47.43	53.98	6.55	AV
5470	51.73	13.46	H	65.19	68.20	3.01	PK
5460	45.61	13.91	V	59.52	73.98	14.46	PK
5460	33.45	13.91	V	47.36	53.98	6.62	AV
5470	50.20	13.46	V	63.66	68.20	4.54	PK

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	50.72	12.72	H	63.44	73.98	10.54	PK
5150	38.27	12.72	H	50.99	53.98	2.99	AV
5150	50.35	12.72	V	63.07	73.98	10.91	PK
5150	37.91	12.72	V	50.63	53.98	3.35	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	53.96	12.38	H	66.34	73.98	7.64	PK
5350	38.15	12.38	H	50.53	53.98	3.45	AV
5350	52.74	12.38	V	65.12	73.98	8.86	PK
5350	37.98	12.38	V	50.36	53.98	3.62	AV

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	45.48	13.91	H	59.39	73.98	14.59	PK
5460	33.27	13.91	H	47.18	53.98	6.80	AV
5470	51.70	13.46	H	65.16	68.20	3.04	PK
5460	45.18	13.91	V	59.09	73.98	14.89	PK
5460	33.15	13.91	V	47.06	53.98	6.92	AV
5470	50.90	13.46	V	64.36	68.20	3.84	PK

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	49.54	12.72	H	62.26	73.98	11.72	PK
5150	37.63	12.72	H	50.35	53.98	3.63	AV
5150	48.88	12.72	V	61.6	73.98	12.38	PK
5150	37.25	12.72	V	49.97	53.98	4.01	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	56.96	12.38	H	69.34	73.98	4.64	PK
5350	37.07	12.38	H	49.45	53.98	4.53	AV
5350	56.56	12.38	V	68.94	73.98	5.04	PK
5350	36.26	12.38	V	48.64	53.98	5.34	AV

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	46.39	13.91	H	60.30	73.98	13.68	PK
5460	33.22	13.91	H	47.13	53.98	6.85	AV
5470	51.46	13.46	H	64.92	68.20	3.28	PK
5460	45.19	13.91	V	59.1	73.98	14.88	PK
5460	33.06	13.91	V	46.97	53.98	7.01	AV
5470	51.10	13.46	V	64.56	68.20	3.64	PK

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	51.10	12.72	H	63.82	73.98	10.16	PK
5150	37.07	12.72	H	49.79	53.98	4.19	AV
5150	50.35	12.72	V	63.07	73.98	10.91	PK
5150	36.86	12.72	V	49.58	53.98	4.40	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	54.75	12.38	H	67.13	73.98	6.85	PK
5350	36.53	12.38	H	48.91	53.98	5.07	AV
5350	54.25	12.38	V	66.63	73.98	7.35	PK
5350	36.40	12.38	V	48.78	53.98	5.20	AV

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	46.34	13.91	H	60.25	73.98	13.73	PK
5460	33.07	13.91	H	46.98	53.98	7.00	AV
5470	50.89	13.46	H	64.35	68.20	3.85	PK
5460	46.14	13.91	V	60.05	73.98	13.93	PK
5460	33.00	13.91	V	46.91	53.98	7.07	AV
5470	49.56	13.46	V	63.02	68.20	5.18	PK

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	50.48	12.72	H	63.20	73.98	10.78	PK
5150	38.00	12.72	H	50.72	53.98	3.26	AV
5150	50.15	12.72	V	62.87	73.98	11.11	PK
5150	37.50	12.72	V	50.22	53.98	3.76	AV

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

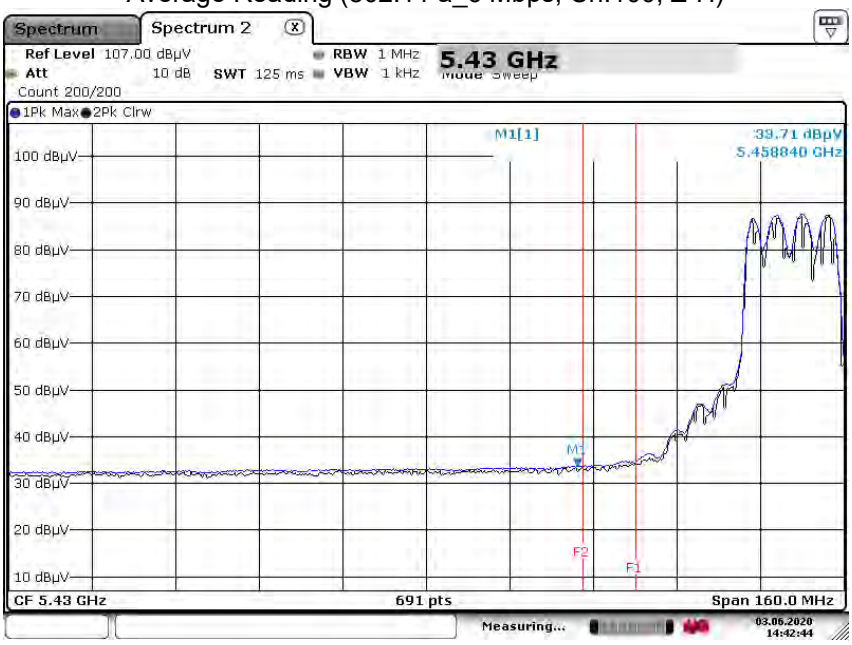
Frequency [MHz]	Reading dBuV	AN.+CL-AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	54.86	12.38	H	67.24	73.98	6.74	PK
5350	38.37	12.38	H	50.75	53.98	3.23	AV
5350	53.61	12.38	V	65.99	73.98	7.99	PK
5350	38.14	12.38	V	50.52	53.98	3.46	AV

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	48.67	13.91	H	62.58	73.98	11.40	PK
5460	35.33	13.91	H	49.24	53.98	4.74	AV
5470	49.95	13.46	H	63.41	68.20	4.79	PK
5460	47.90	13.91	V	61.81	73.98	12.17	PK
5460	34.61	13.91	V	48.52	53.98	5.46	AV
5470	49.18	13.46	V	62.64	68.20	5.56	PK

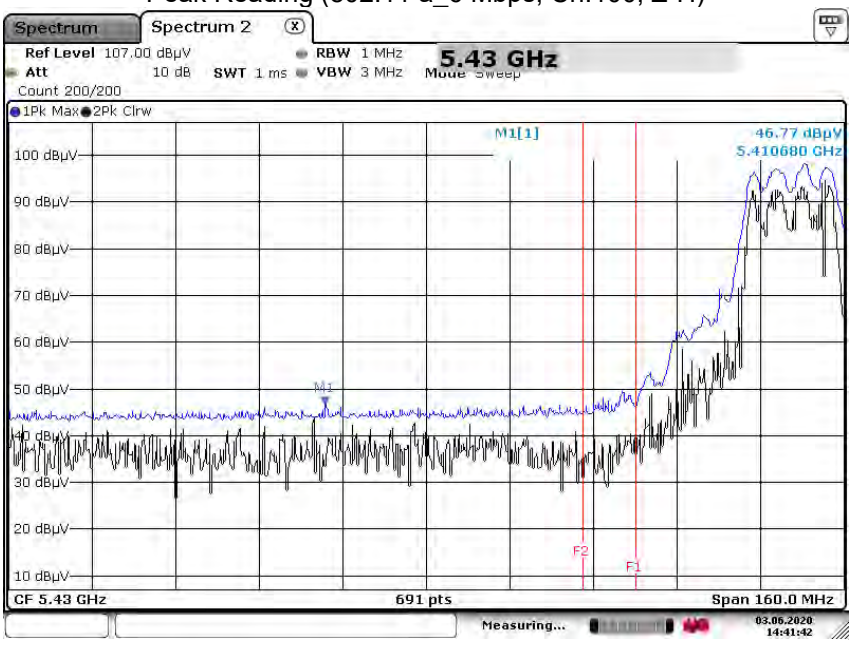
▣ Test Plots(UNII 1, 2A, 2C)

Average Reading (802.11 a_6 Mbps, Ch.100, Z-H)



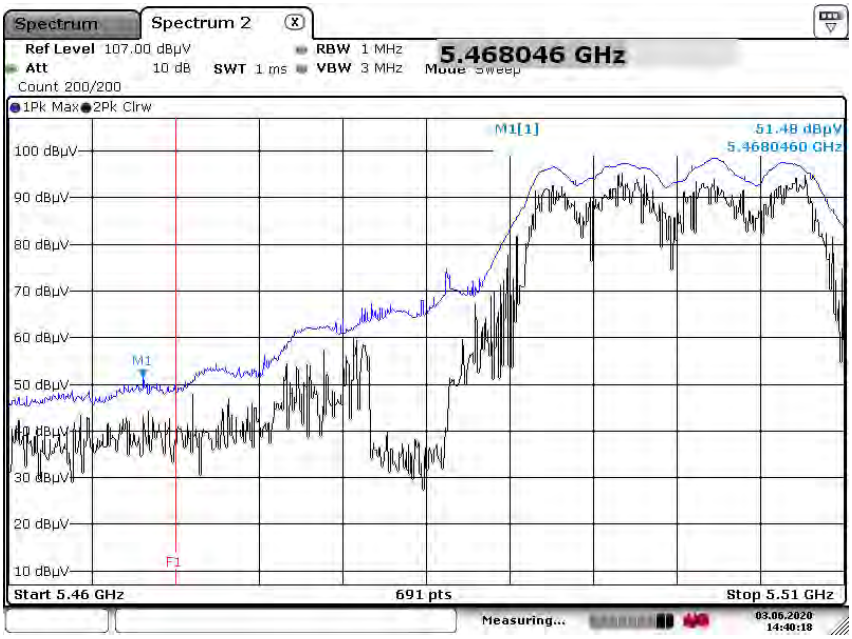
Date: 3.JUN.2020 14:42:43

Peak Reading (802.11 a_6 Mbps, Ch.100, Z-H)



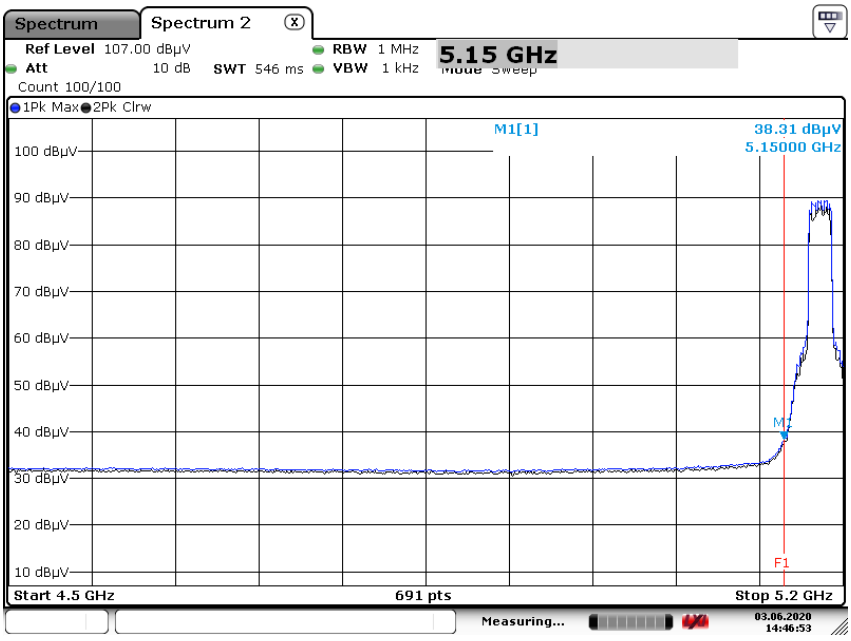
Date: 3.JUN.2020 14:41:42

Peak Reading (802.11 a_6 Mbps, Ch.100, Z-H)



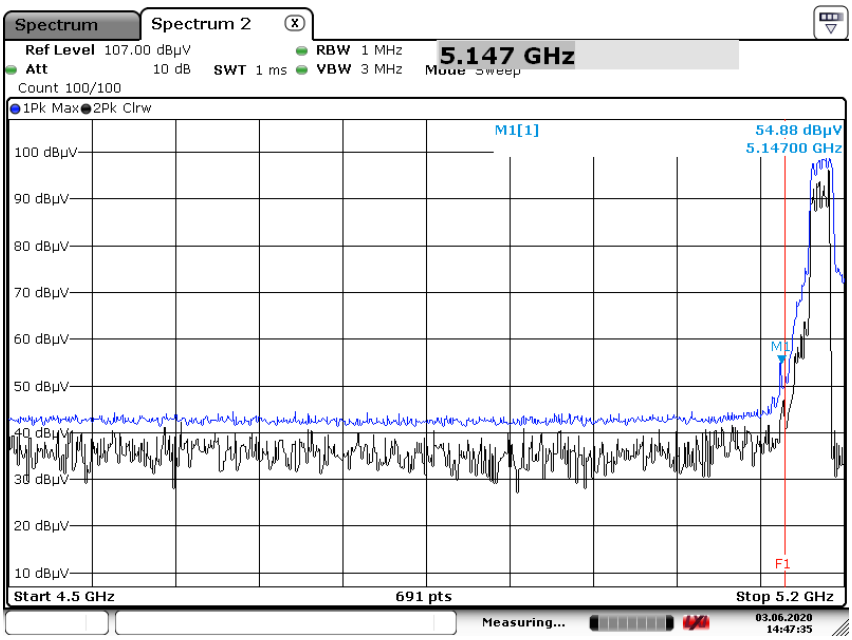
Date: 3.JUN.2020 14:40:18

Average Reading (802.11 n(HT20)_MCS0, Ch.36, Z-H)



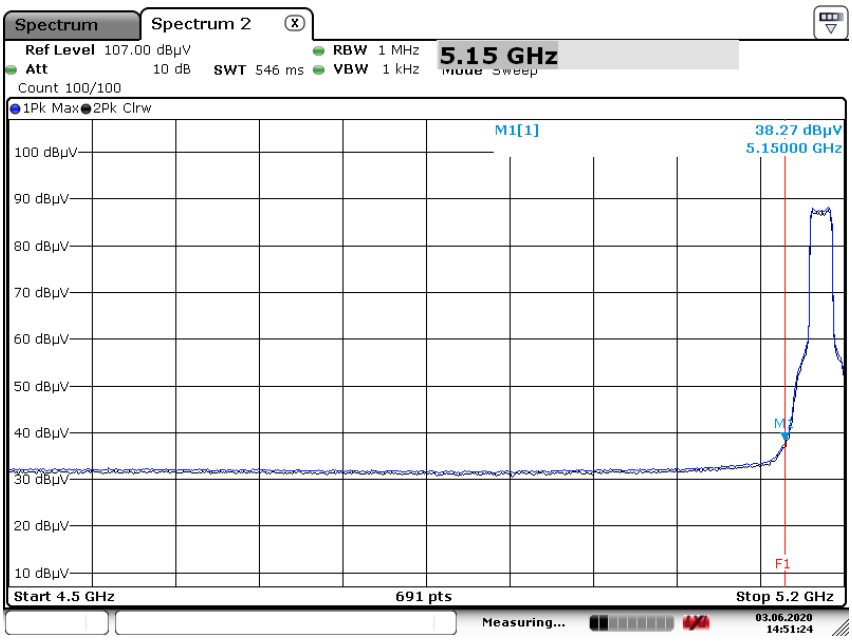
Date: 3.JUN.2020 14:46:52

Peak Reading (802.11 n(HT20)_MCS0, Ch.36, Z-H)



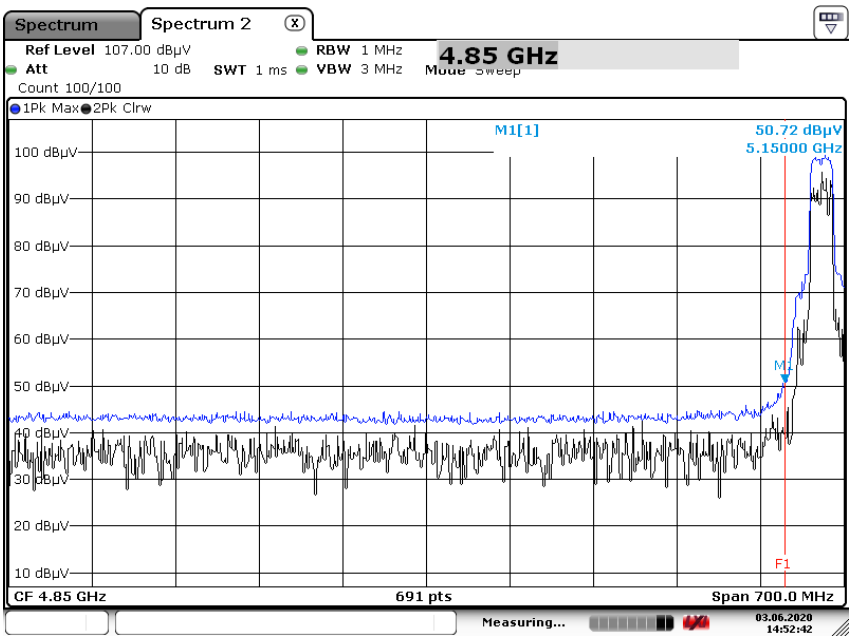
Date: 3.JUN.2020 14:47:35

Average Reading (802.11 ac(VHT20)_MCS0, Ch.36, Z-H)



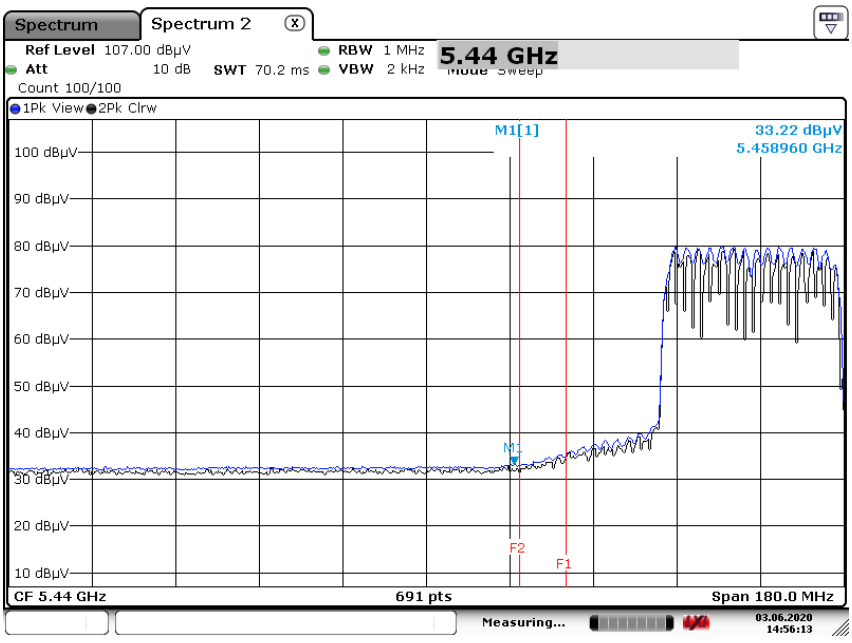
Date: 3.JUN.2020 14:51:24

Peak Reading (802.11 ac(VHT20)_MCS0, Ch.36, Z-H)



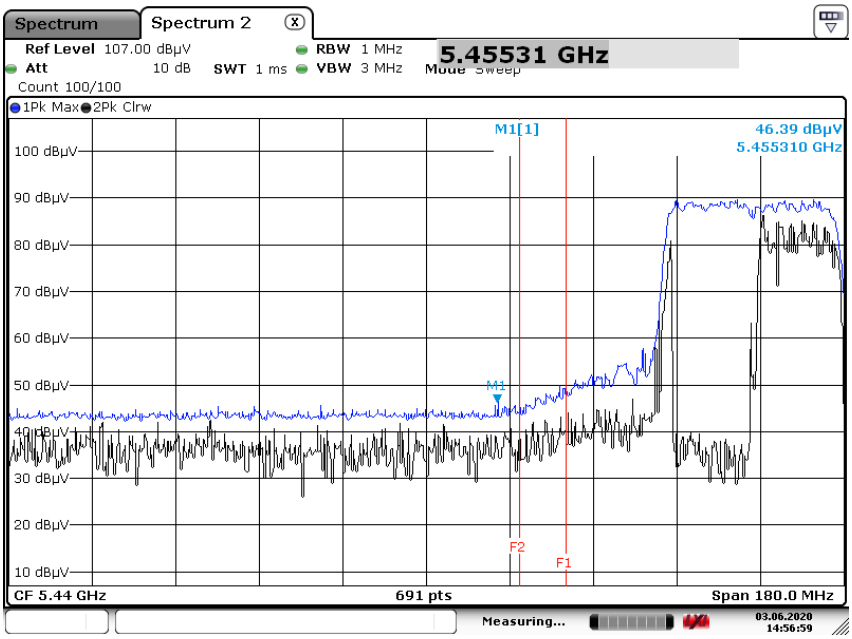
Date: 3.JUN.2020 14:52:42

Average Reading (802.11 n(HT40)_MCS0, Ch.102, Z-H)



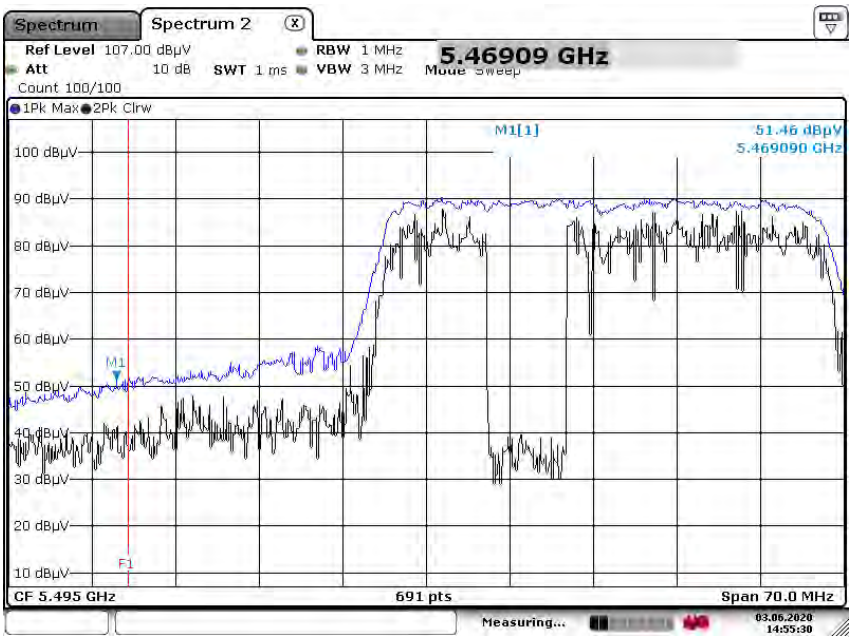
Date: 3.JUN.2020 14:56:14

Peak Reading (802.11 n(HT40)_MCS0, Ch.102, Z-H)



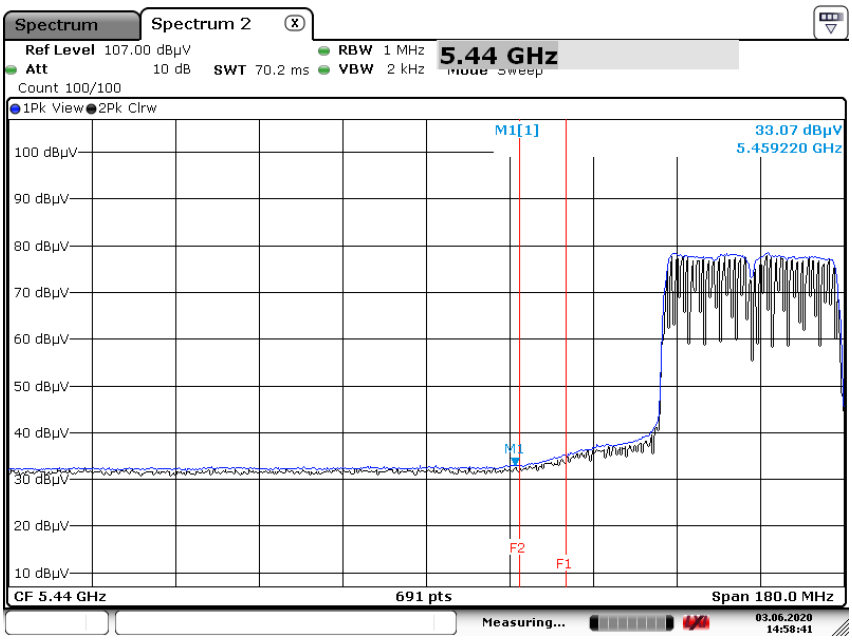
Date: 3.JUN.2020 14:56:59

Peak Reading (802.11 n(HT40)_MCS0, Ch.102, Z-H)



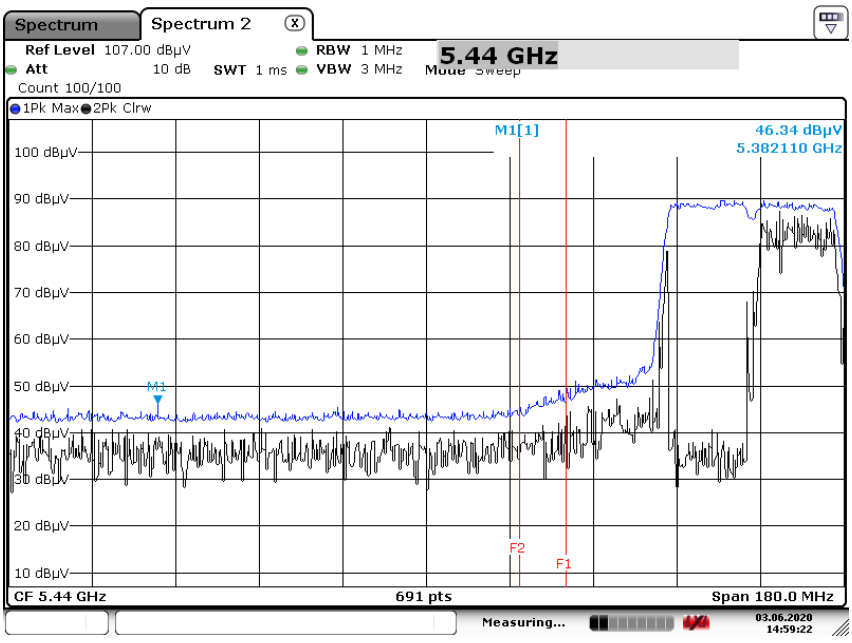
Date: 3.JUN.2020 14:55:30

Average Reading (802.11 ac(VHT40)_MCS0, Ch.102, Z-H)



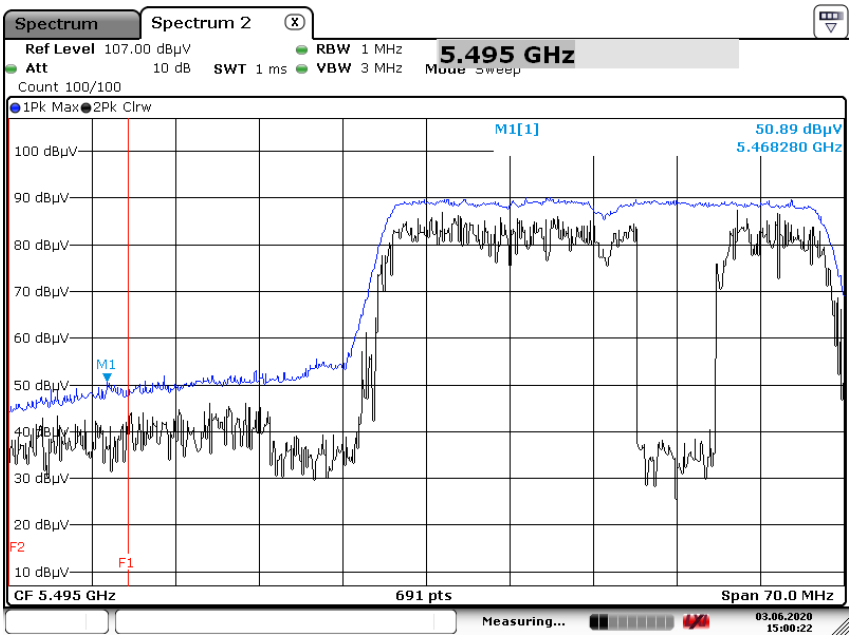
Date: 3.JUN.2020 14:58:41

Peak Reading (802.11 ac(VHT40)_MCS0, Ch.102, Z-H)



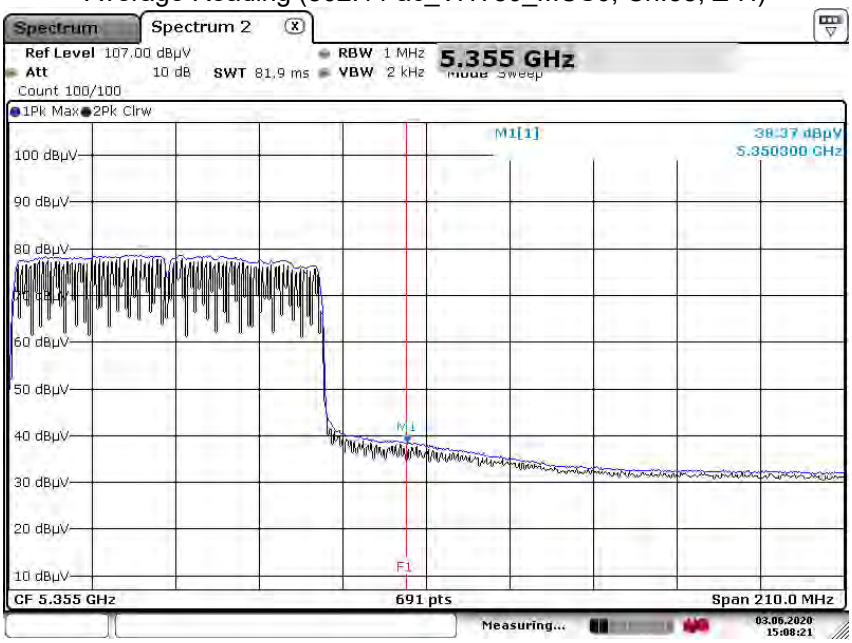
Date: 3.JUN.2020 14:59:21

Peak Reading (802.11 ac(VHT40)_MCS0, Ch.102, Z-H)



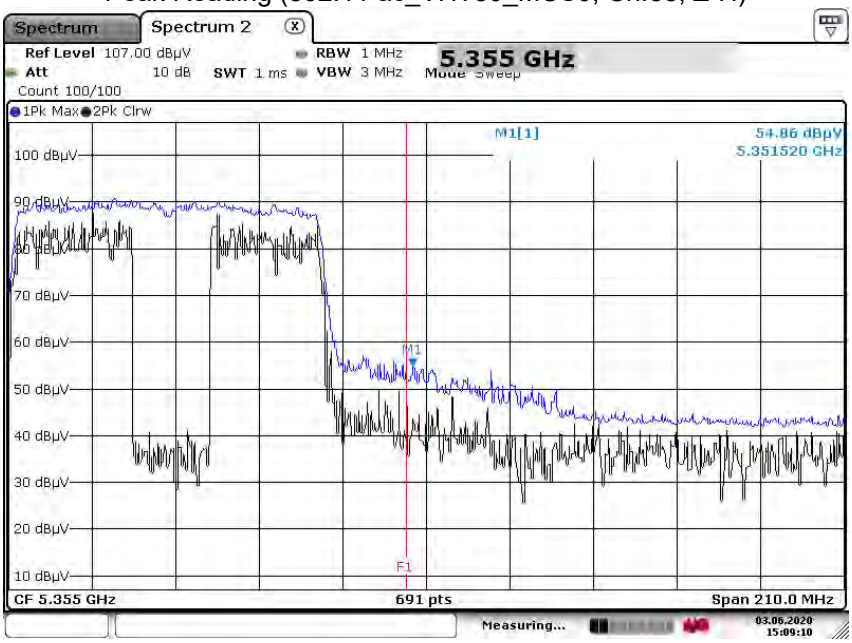
Date: 3.JUN.2020 15:00:21

Average Reading (802.11 ac_VHT80_MCS0, Ch.58, Z-H)



Date: 3.JUN.2020 15:08:20

Peak Reading (802.11 ac_VHT80_MCS0, Ch.58, Z-H)



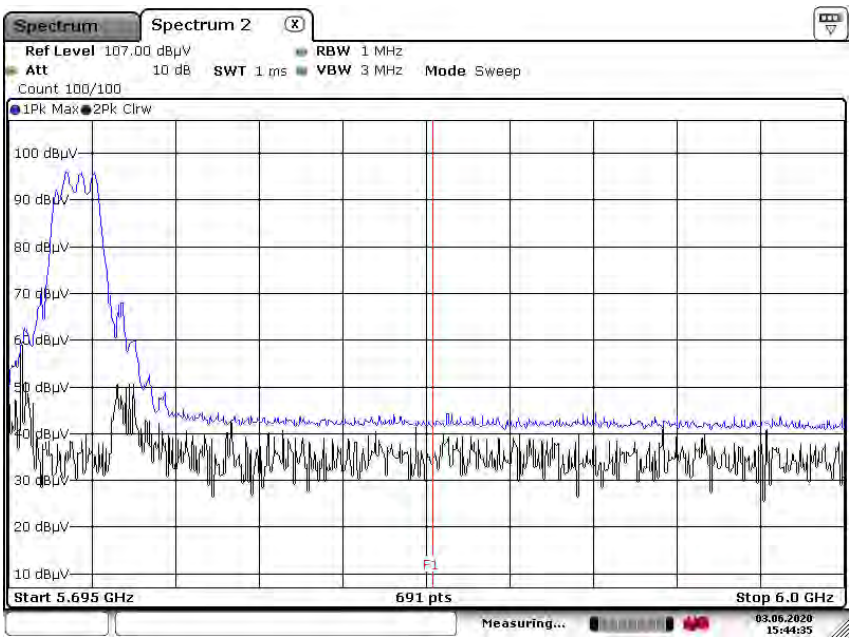
Date: 3.JUN.2020 15:09:09

Note:

Only the worst case plots for Radiated Restricted Band Edge.

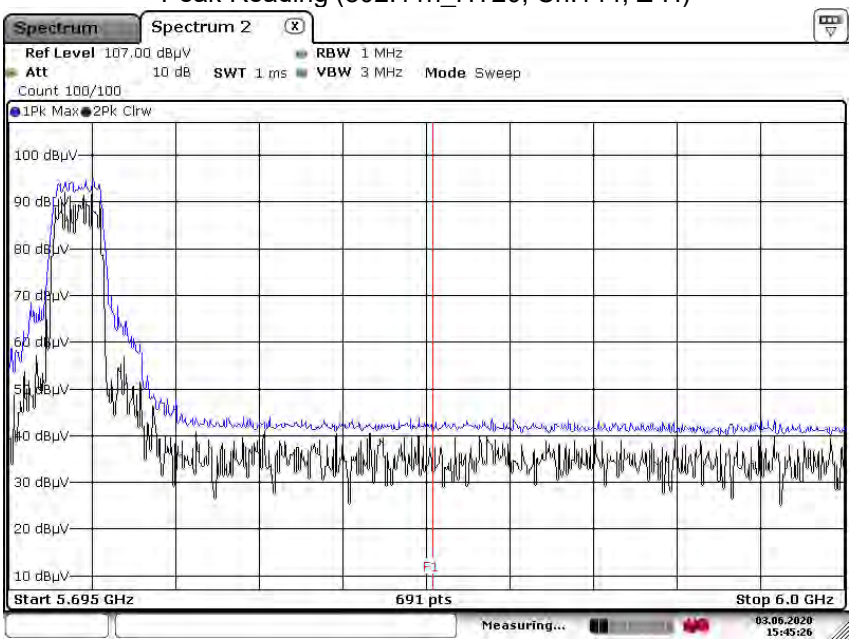
▣ Test Plots(Staraddle Channel)

Peak Reading (802.11a, Ch.144, Z-H)



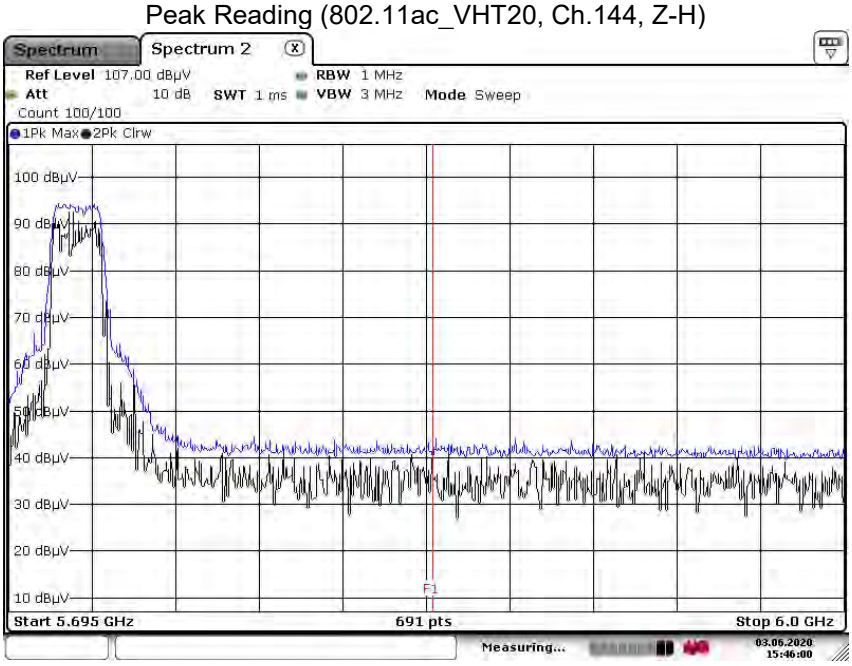
Date: 3.JUN.2020 15:44:36

Peak Reading (802.11n_HT20, Ch.144, Z-H)



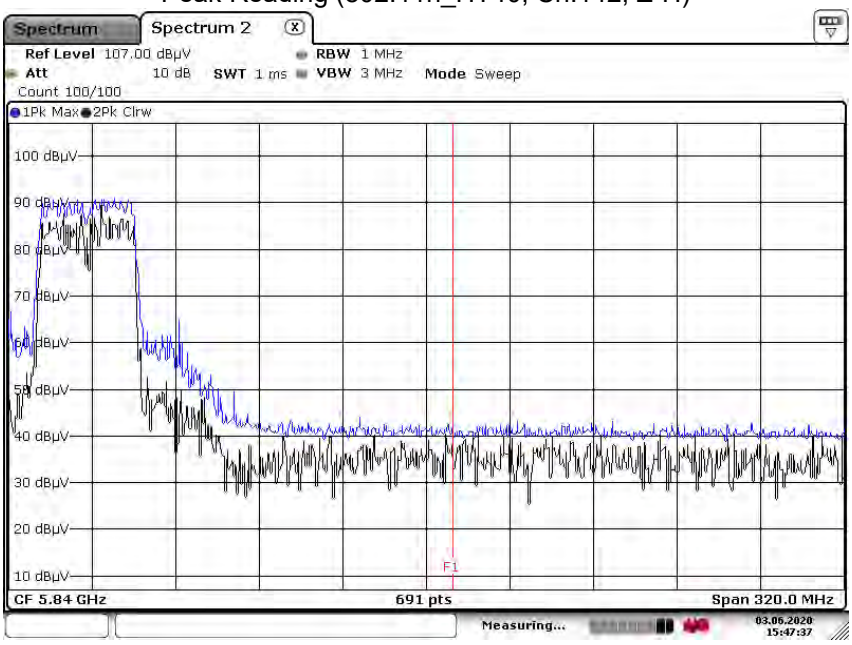
Date: 3.JUN.2020 15:45:26

Peak Reading (802.11ac_VHT20, Ch.144, Z-H)



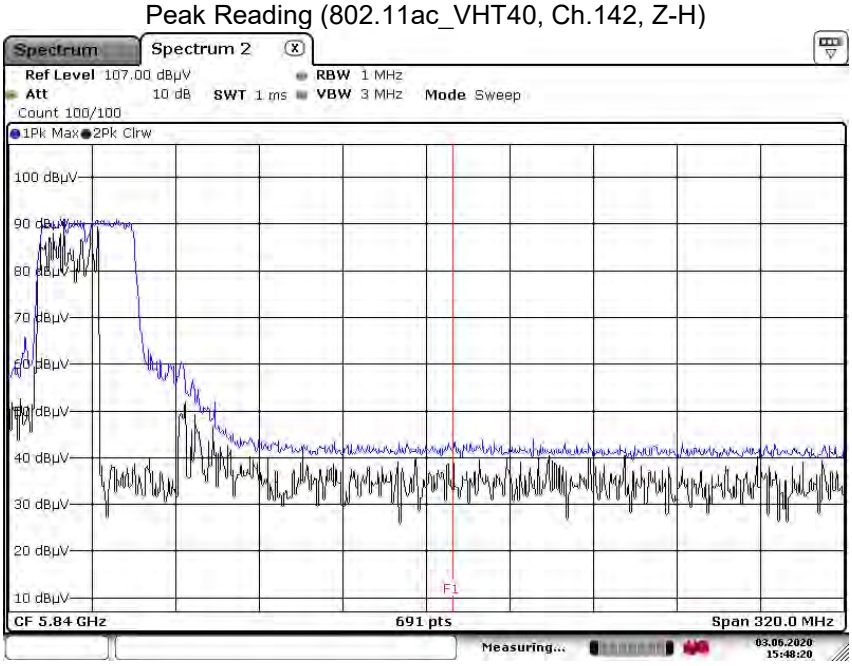
Date: 3.JUN.2020 15:46:01

Peak Reading (802.11n_HT40, Ch.142, Z-H)



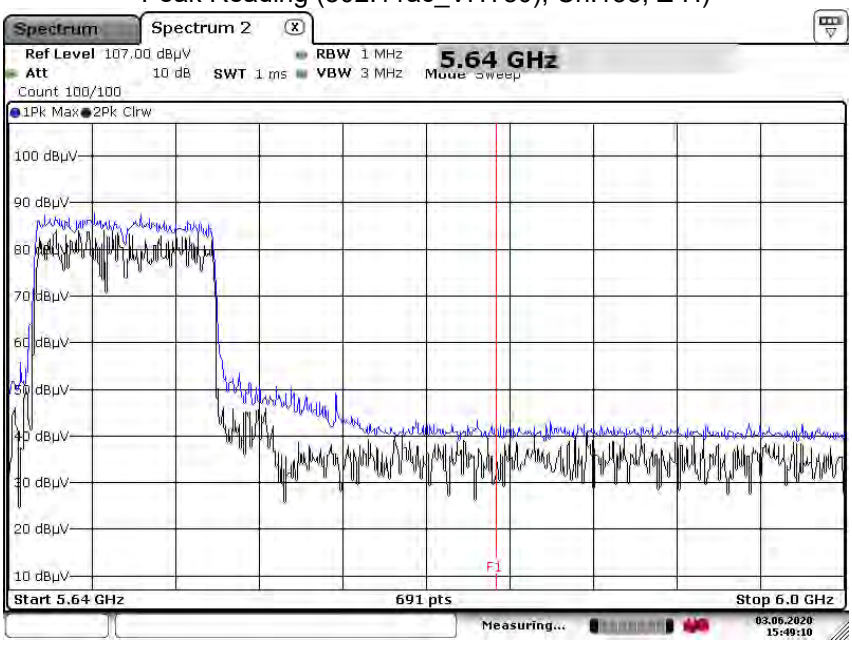
Date: 3.JUN.2020 15:47:38

Peak Reading (802.11ac_VHT40, Ch.142, Z-H)



Date: 3.JUN.2020 15:48:21

Peak Reading (802.11ac_VHT80), Ch.138, Z-H)



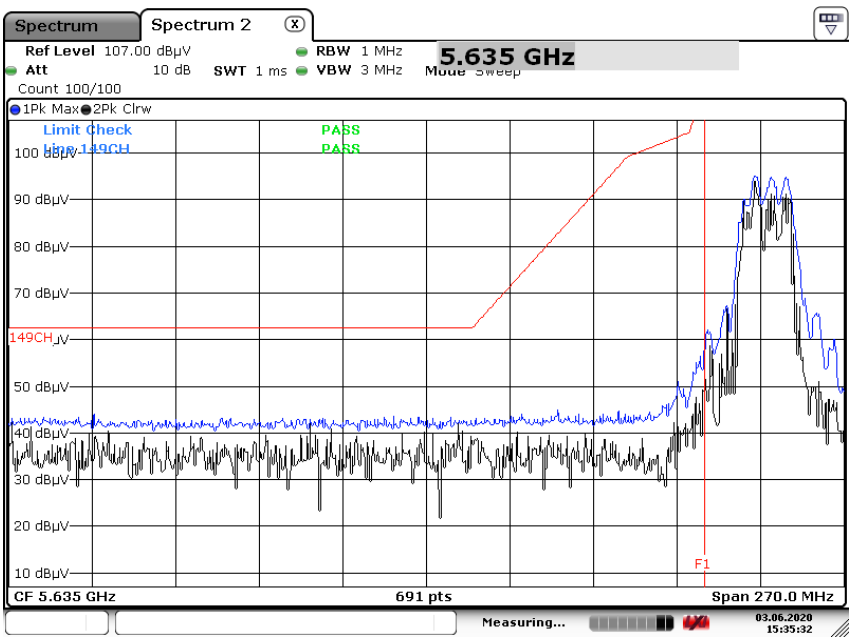
Date: 3.JUN.2020 15:49:10

Note :

1. Only the worst case plots for Radiated Restricted Band Edge.
2. Red line : 5 850 MHz
3. Ambient Noise (Because of ambient noise, We attached only the worst plot without a data table)

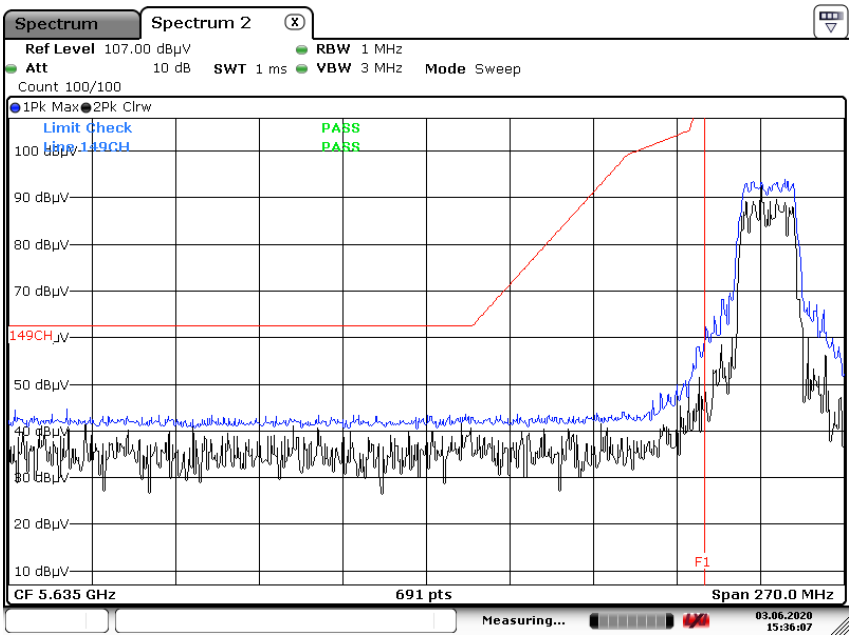
▣ Test Plots(UNII 3)

Peak Reading (802.11a, Ch.149, Z-H)



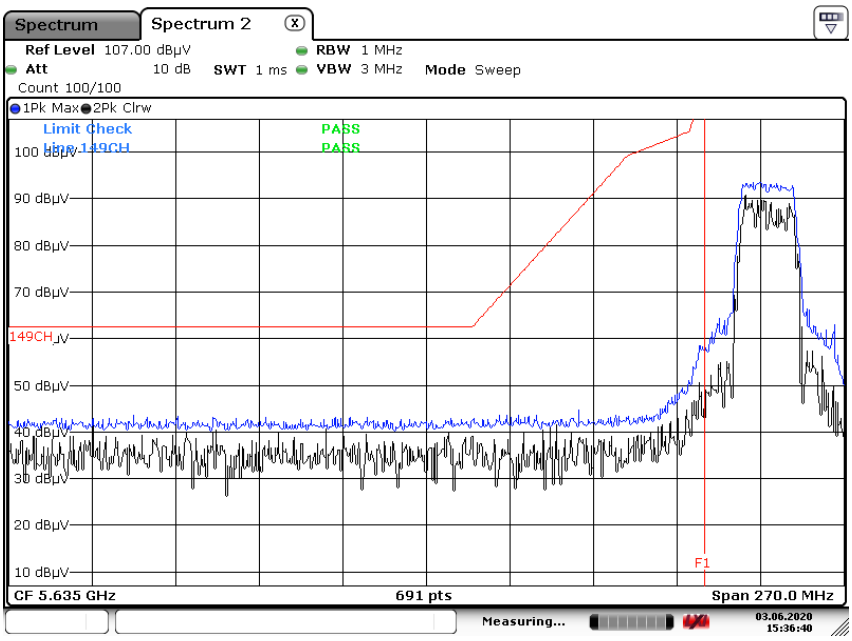
Date: 3.JUN.2020 15:35:32

Peak Reading (802.11n_HT20, Ch.149, Z-H)



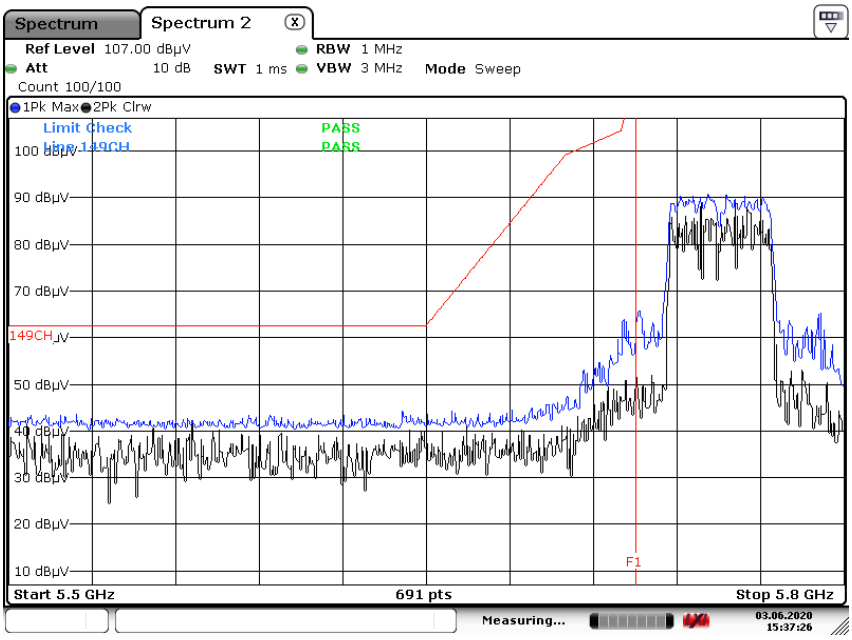
Date: 3.JUN.2020 15:36:06

Peak Reading (802.11ac_VHT20, Ch.149, Z-H)



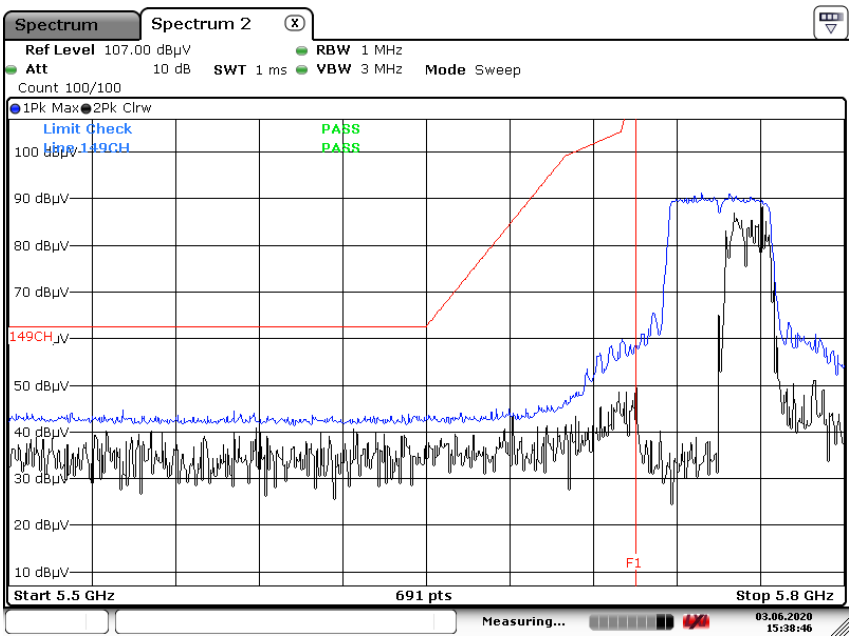
Date: 3.JUN.2020 15:36:40

Peak Reading (802.11n_HT40, Ch.151, Z-H)



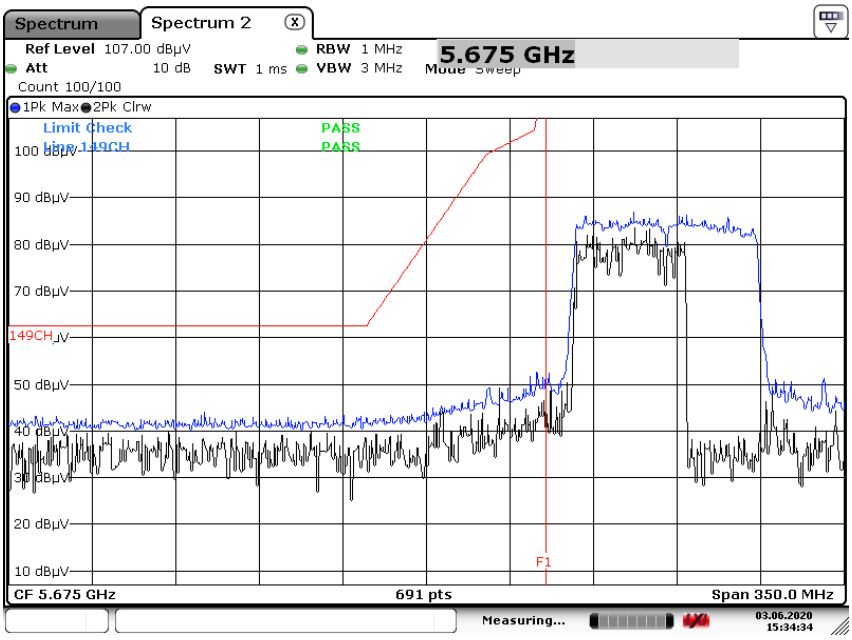
Date: 3.JUN.2020 15:37:26

Peak Reading (802.11ac_VHT40, Ch.151, Z-H)



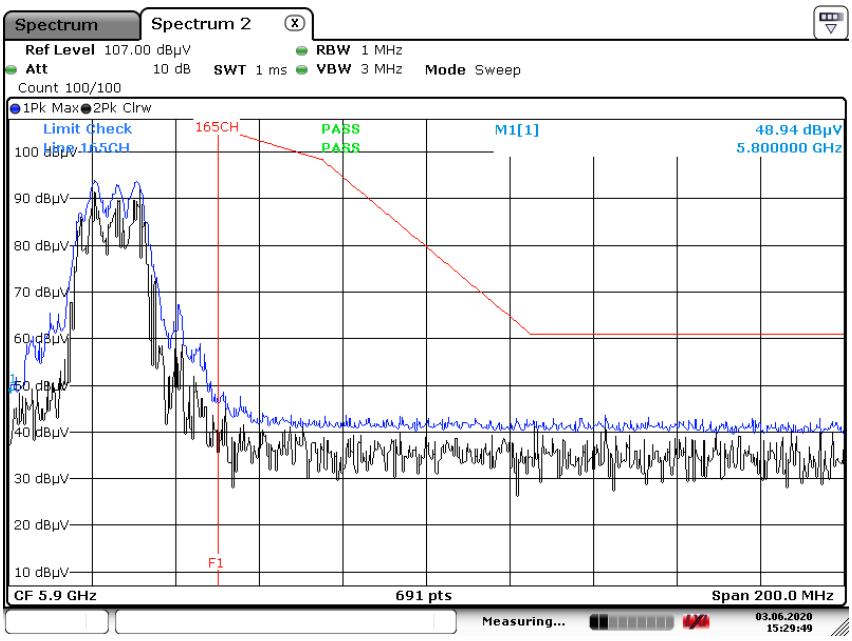
Date: 3.JUN.2020 15:38:46

Peak Reading (802.11ac_VHT80, Ch.155, Z-H)



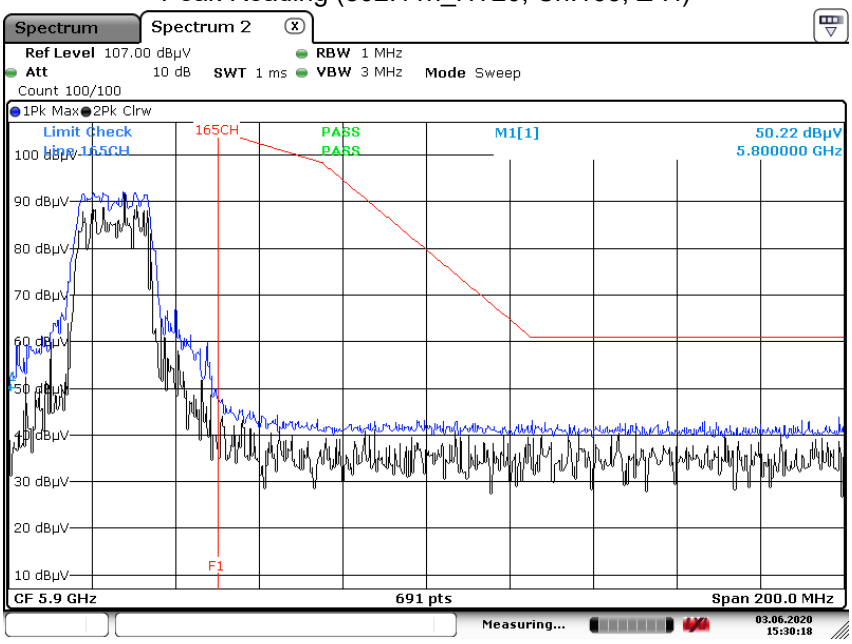
Date: 3.JUN.2020 15:34:34

Peak Reading (802.11a, Ch.165, Z-H)



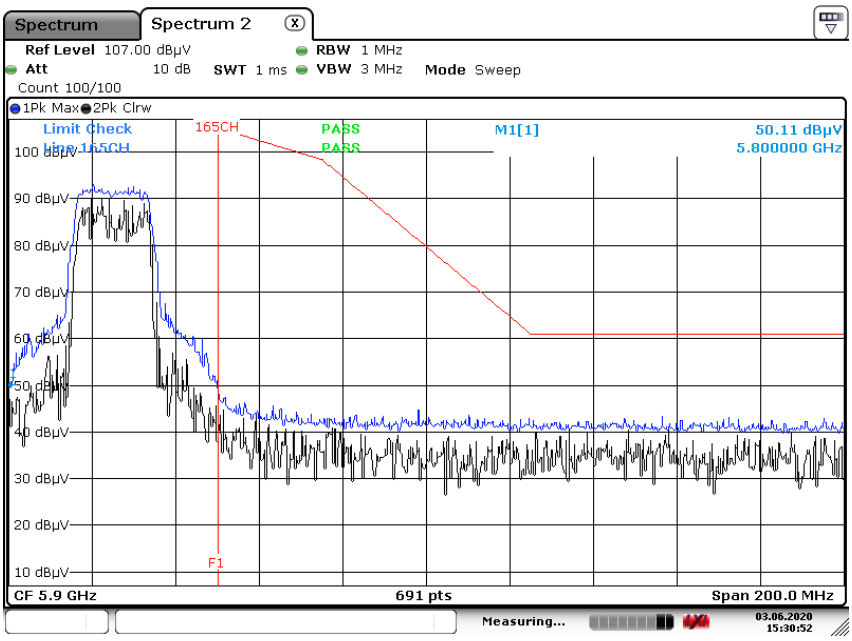
Date: 3.JUN.2020 15:29:48

Peak Reading (802.11n_HT20, Ch.165, Z-H)



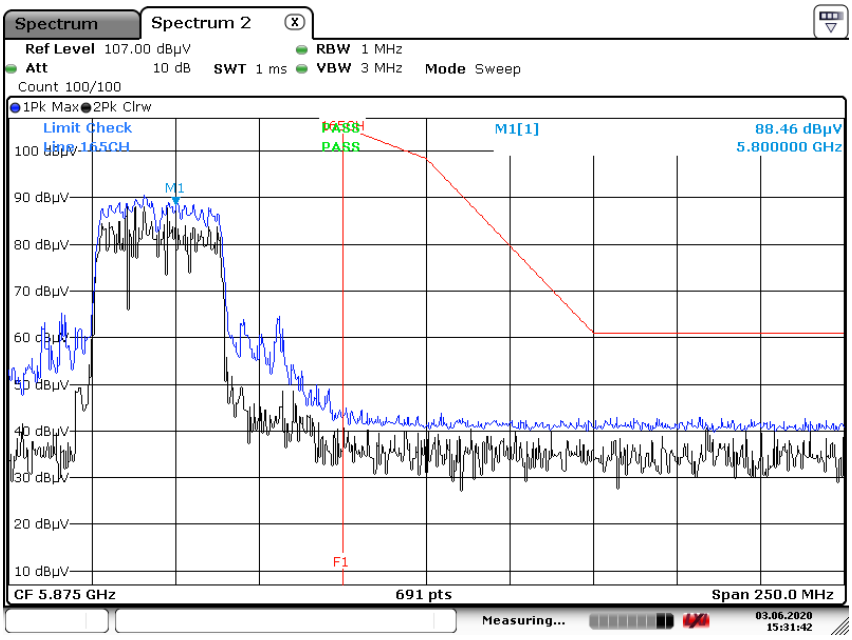
Date: 3.JUN.2020 15:30:17

Peak Reading (802.11ac_VHT20, Ch.165, Z-H)



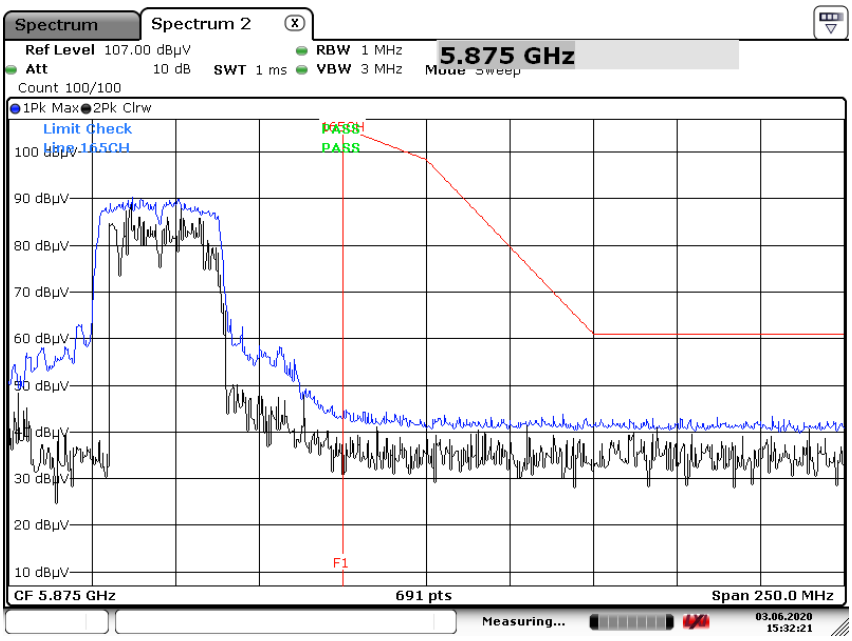
Date: 3.JUN.2020 15:30:52

Peak Reading (802.11n_HT40, Ch.159, Z-H)



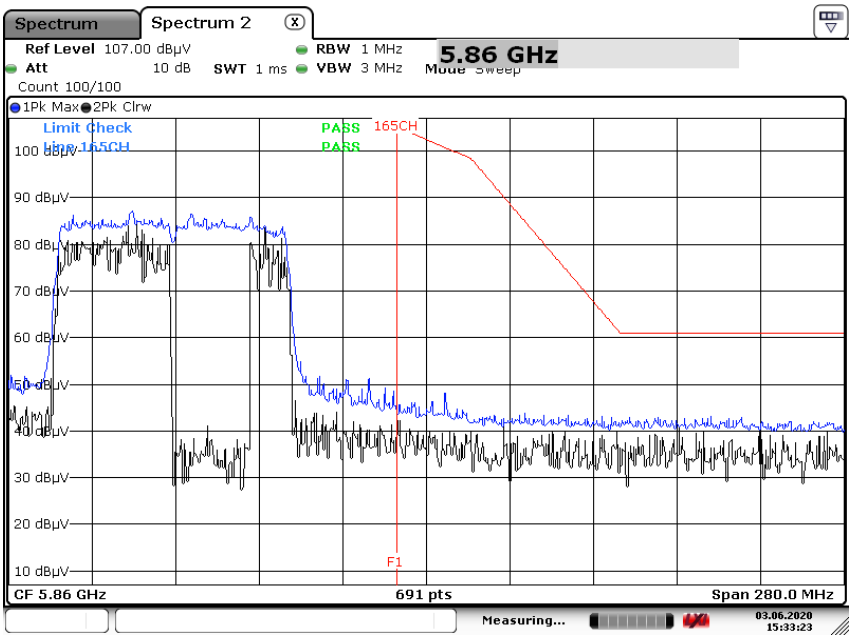
Date: 3.JUN.2020 15:31:42

Peak Reading (802.11ac_VHT40, Ch.159, Z-H)



Date: 3.JUN.2020 15:32:21

Peak Reading (802.11ac_VHT80, Ch.155, Z-H)



Date: 3.JUN.2020 15:33:23

10.10 POWERLINE CONDUCTED EMISSIONS

Conducted Emissions (Line 1)

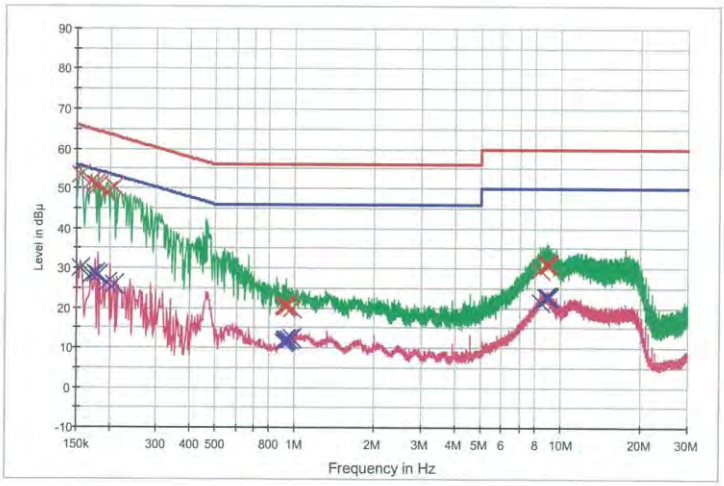
5GHz WLAN MODE_L1 1 / 2

HCT TEST Report

Common Information

EUT:	SM-N981B/DS
Manufacturer:	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions:	5GHz WLAN MODE_L1

FCC CLASS B_Exten Cable



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.156000	53.3	9.000	Off	L1	9.8	12.4	65.7
0.170000	51.6	9.000	Off	L1	9.8	13.4	65.0
0.176000	51.0	9.000	Off	L1	9.8	13.7	64.7
0.180000	50.6	9.000	Off	L1	9.8	13.9	64.5
0.196000	49.1	9.000	Off	L1	9.8	14.7	63.8
0.208000	50.4	9.000	Off	L1	9.8	12.9	63.3
0.906000	20.4	9.000	Off	L1	9.8	35.6	56.0
0.916000	20.3	9.000	Off	L1	9.8	35.7	56.0
0.922000	20.7	9.000	Off	L1	9.8	35.3	56.0
0.932000	20.6	9.000	Off	L1	9.8	35.4	56.0
0.942000	20.5	9.000	Off	L1	9.8	35.5	56.0
0.970000	19.8	9.000	Off	L1	9.8	36.2	56.0
8.350000	29.8	9.000	Off	L1	10.1	30.2	60.0
8.828000	31.1	9.000	Off	L1	10.2	28.9	60.0
8.884000	31.1	9.000	Off	L1	10.2	28.9	60.0
8.938000	31.0	9.000	Off	L1	10.2	29.0	60.0
8.956000	31.1	9.000	Off	L1	10.2	28.9	60.0
9.002000	30.8	9.000	Off	L1	10.2	29.2	60.0

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5GHz WLAN MODE_L1 2 / 2

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.156000	30.0	9.000	Off	L1	9.8	25.7	55.7
0.170000	28.4	9.000	Off	L1	9.8	26.6	55.0
0.176000	28.6	9.000	Off	L1	9.8	26.1	54.7
0.180000	28.4	9.000	Off	L1	9.8	26.1	54.5
0.196000	26.3	9.000	Off	L1	9.8	27.5	53.8
0.208000	25.8	9.000	Off	L1	9.8	27.5	53.3
0.906000	11.3	9.000	Off	L1	9.8	34.7	46.0
0.918000	11.9	9.000	Off	L1	9.8	34.1	46.0
0.922000	11.8	9.000	Off	L1	9.8	34.2	46.0
0.932000	12.1	9.000	Off	L1	9.8	33.9	46.0
0.950000	12.2	9.000	Off	L1	9.8	33.8	46.0
0.972000	12.3	9.000	Off	L1	9.8	33.7	46.0
8.350000	21.6	9.000	Off	L1	10.1	28.4	50.0
8.784000	22.8	9.000	Off	L1	10.2	27.2	50.0
8.884000	22.9	9.000	Off	L1	10.2	27.1	50.0
8.938000	22.7	9.000	Off	L1	10.2	27.3	50.0
8.956000	22.7	9.000	Off	L1	10.2	27.3	50.0
9.002000	22.7	9.000	Off	L1	10.2	27.3	50.0

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Conducted Emissions (Line 2)

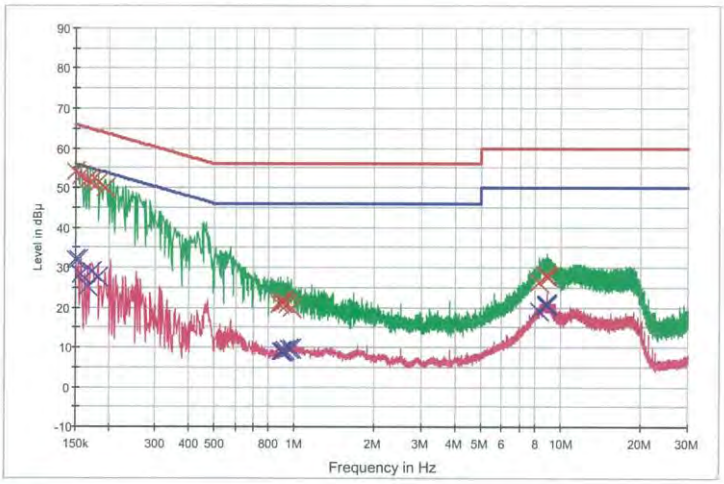
5GHz WLAN MODE_N 1 / 2

HCT TEST Report

Common Information

EUT:	SM-N981B/DS
Manufacturer:	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions:	5GHz WLAN MODE_N

FCC CLASS B_Exten Cable



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	54.1	9.000	Off	N	9.8	11.9	66.0
0.158000	53.0	9.000	Off	N	9.8	12.6	65.6
0.166000	52.1	9.000	Off	N	9.8	13.1	65.2
0.172000	51.8	9.000	Off	N	9.8	13.0	64.9
0.182000	51.2	9.000	Off	N	9.8	13.2	64.4
0.194000	50.0	9.000	Off	N	9.8	13.9	63.9
0.878000	20.9	9.000	Off	N	9.8	35.1	56.0
0.886000	21.6	9.000	Off	N	9.8	34.4	56.0
0.898000	21.2	9.000	Off	N	9.8	34.8	56.0
0.906000	21.3	9.000	Off	N	9.8	34.7	56.0
0.940000	20.8	9.000	Off	N	9.8	35.2	56.0
0.970000	19.8	9.000	Off	N	9.8	36.2	56.0
8.244000	26.2	9.000	Off	N	10.2	33.8	60.0
8.782000	28.1	9.000	Off	N	10.2	31.9	60.0
8.864000	28.1	9.000	Off	N	10.2	31.9	60.0
8.896000	28.0	9.000	Off	N	10.2	32.0	60.0
8.906000	28.1	9.000	Off	N	10.2	31.9	60.0
8.964000	27.7	9.000	Off	N	10.2	32.3	60.0

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Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	32.2	9.000	Off	N	9.8	23.8	56.0
0.154000	32.0	9.000	Off	N	9.8	23.7	55.8
0.158000	28.3	9.000	Off	N	9.8	27.3	55.6
0.166000	25.3	9.000	Off	N	9.8	29.8	55.2
0.172000	29.1	9.000	Off	N	9.8	25.8	54.9
0.182000	27.7	9.000	Off	N	9.8	26.7	54.4
0.888000	9.0	9.000	Off	N	9.8	37.0	46.0
0.898000	8.9	9.000	Off	N	9.8	37.1	46.0
0.906000	9.1	9.000	Off	N	9.8	36.9	46.0
0.916000	9.4	9.000	Off	N	9.8	36.6	46.0
0.952000	9.6	9.000	Off	N	9.8	36.4	46.0
0.970000	9.6	9.000	Off	N	9.8	36.4	46.0
8.244000	19.0	9.000	Off	N	10.2	31.0	50.0
8.746000	20.6	9.000	Off	N	10.2	29.4	50.0
8.782000	20.7	9.000	Off	N	10.2	29.3	50.0
8.846000	20.6	9.000	Off	N	10.2	29.4	50.0
8.864000	20.8	9.000	Off	N	10.2	29.2	50.0
8.896000	21.0	9.000	Off	N	10.2	29.0	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	09/11/2019	Annual	102245
Rohde & Schwarz	ESCI / Test Receiver	06/05/2020	Annual	100033
ESPAC	SU-642 /Temperature Chamber	03/18/2020	Annual	0093008124
Agilent	N9020A / Signal Analyzer	05/11/2020	Annual	MY51110085
Agilent	N9020A / Signal Analyzer	05/25/2020	Annual	MY52090906
Agilent	N9030A / Signal Analyzer	01/13/2020	Annual	MY49431210
Rohde & Schwarz	OSP 120 / Power Measurement Set	07/24/2019	Annual	101231
Agilent	N1911A / Power Meter	04/07/2020	Annual	MY45100523
Keysight	N1921A / Power Sensor	06/08/2020	Annual	MY57820067
Agilent	87300B / Directional Coupler	11/11/2019	Annual	3116A03621
Hewlett Packard	11667B / Power Splitter	05/25/2020	Annual	05001
Hewlett Packard	E3632A / DC Power Supply	06/12/2020	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

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
Audix	EM1000 / Controller	N/A	N/A	060520
Audix	Turn Table	N/A	N/A	N/A
Rohde & Schwarz	Loop Antenna	04/26/2019	Biennial	1513-175
Schwarzbeck	VULB 9168 / Hybrid Antenna	03/22/2019	Biennial	760
Schwarzbeck	VULB 9160 / TRILOG Antenna	08/09/2018	Biennial	9160-3368
Schwarzbeck	BBHA 9120D / Horn Antenna	04/29/2019	Biennial	9120D-937
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	11/29/2019	Biennial	BBHA9170541
Rohde & Schwarz	FSP(9 kHz ~ 30 GHz) / Spectrum Analyzer	04/27/2020	Annual	100854
Rohde & Schwarz	FSV40-N / Spectrum Analyzer	09/26/2019	Annual	101068-SZ
Agilent	N9020A / Signal Analyzer	05/11/2020	Annual	MY51110085
Wainwright Instruments	WRCJV2400/2483.5-2370/2520-60/12SS / Band Reject Filter	01/21/2020	Annual	2
Wainwright Instruments	WRCJV5100/5850-40/50-8EEK / Band Reject Filter	02/10/2020	Annual	1
Wainwright Instruments	WHK3.0/18G-10EF / High Pass Filter	03/02/2020	Annual	8
Wainwright Instruments	WHKX8-6090-7000-18000-40SS/ High Pass Filter	03/02/2020	Annual	25
Api tech.	18B-03 / Attenuator (3 dB)	03/02/2020	Annual	1
Agilent	8493C-10 / Attenuator(10 dB)	03/02/2020	Annual	08285
CERNEX	CBLU1183540 / Power Amplifier	03/02/2020	Annual	22964
CERNEX	CBL06185030 / Power Amplifier	03/02/2020	Annual	22965
CERNEX	CBL18265035 / Power Amplifier	12/26/2019	Annual	22966
CERNEX	CBL26405040 / Power Amplifier	03/23/2020	Annual	25956

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.
3. Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5(Version : 2017).

12. ANNEX A_ TEST SETUP PHOTO

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

No.	Description
1	HCT-RF-2006-FC085-P